LeeBoy

Operations, Service, and Parts Manual



LEEBOY MODEL 8515D CONVEYOR PAVER

Manual No. 1015239-01

This manual applies to
Serial Number 133074
and above.

SAFETY 1

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Disclaimer

All information, illustrations and specifications in this manual are based on the latest information available at the time of publishing. The illustrations used in this manual are intended as representative reference views only. Moreover, because of our continuous product improvement policy, we may modify information, illustrations and/or specifications to explain and/or exemplify a product, service or maintenance improvement. We reserve the right to make any change at any time without notice. VT LeeBoy, Inc., VT LeeBoy, LeeBoy, and Rosco are all the same entity and are used interchangeably.

Title 40, Code of Federal Regulations (CFR) 1068

This product meets certified-emission requirements set by the EPA (Environmental Protection Agency), governed by Title 40 CFR 1068, which specifies actions that are prohibited by law and lists civil penalties for noncompliance. As part of those regulations, modification or rendering inoperative any emission-related component can subject you to government penalties (and void your warranty). Tampering with emission controls is in violation of federal law, and can result in civil penalties of up to $3,750 each day an engine or piece of equipment is operated in violation.

Please be aware that you are responsible for maintaining the machine and the certified emission engine installation. Failure to comply to comply could result in penalties as listed above and void the warranty on this engine and this machine.

For more information, visit: https://www.epa.gov/laws-regulations/regulations

California Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Battery posts, terminals and other related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and other reproductive harm. Wash hands after handling.

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Thank you for purchasing the LeeBoy Model 8515D Conveyor Paver. We wish you many years of safe and efficient operation of your LeeBoy product.

READ THIS MANUAL PRIOR TO OPERATING the machine. It is an important part of the machine and should be kept with in the dedicated storage container provided at all times. Though you may be familiar with similar equipment, you MUST read and understand this manual before operating the machine to help prevent injury or damage.

This manual is intended as a guide for the safe and efficient use of your machine, including procedures for proper operation and maintenance. Use it with all related supplemental books, engine, transmission manuals, and any other manuals supplied by other manufacturers. Related Service Bulletins should also be reviewed to provide information regarding some of the recent changes. If any questions arise concerning this publication or to order a replacement manual, contact your authorized LeeBoy dealer.

This manual contains information that was available at the time of printing and is subject to change without notice.

Section 1 - Safety: Contains general and specific safety guidelines for product and safety label locations.

Section 2 - Information and Specifications: Contains warranty, contact information, machine specification tables, and machine dimensions.

Section 3 - Component Location: Contains overview of major component locations and functions.

Section 4 - Operation: Contains instructions for safe operation and information for optional equipment.

Section 5 - Maintenance: Contains routine maintenance procedures, mechanical adjustments, component replacement and troubleshooting charts for common problems and corrections. (For specific engine maintenance procedures, refer to the engine manufacturer manual.)

Section 6 - Schematics: Contains electrical and hydraulic schematics for product functionality.

Section 7 - Illustrated Parts List (IPL): Contains parts numbers and illustrations for serviceable components.

VT LeeBoy, Inc. is proud to be ISO 9001 certified. The International Standards Organization (ISO) establishes guidelines to ensure that products and services are safe, reliable and of good quality. ISO certifies companies who demonstrate compliance with all aspects of product safety, customer satisfaction, efficiency, environmental stewardship and social responsibility. Our teams work hard to deliver quality industrial machines that exceed customer expectations and we strive for continuous improvement in everything we do. The VT LeeBoy family of companies is committed to total quality management with a strong focus on meeting customer needs.

VT LeeBoy, Inc., is also proud to be an accredited ANAB manufacturer, which is a certification process comprised of quality standards established by the American National Standards Institute (ANSI) and the American Society for Quality (ASQ). The ANSI-ASQ National Accreditation Board plays an important role in ensuring the safety and quality of goods and services, along with protecting the environment.

NOTES

Section 1

SAFETY

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NOTES

This manual provides important information to familiarize you with safe operating and maintenance procedures. Even though you may be familiar with similar equipment, you MUST read and understand this manual before operating the LeeBoy Model 8515D Conveyor Paver and follow its instructions when operating the machine.

Safety is everyone's business and our top concern. Knowing the guidelines covered in this section will help ensure your safety, the safety of those around you, as well as proper paver operation.

Keep safety labels in good condition. If safety labels become missing or damaged, replace them with new matching labels. Replacement safety labels are available from your LeeBoy authorized dealer (see contact information in **Section 2**).

You can find more information about occupational health and safety in the paving industry on the internet. A few resources are listed below:

www.osha.gov

cdc.gov

www.asphaltpavement.org

www.safety.fhwa.dot.gov/

LOOK FOR THESE SYMBOLS THROUGHOUT THIS MANUAL. THESE ITEMS ARE EXTREMELY IMPORTANT FOR THE SAFETY OF YOU AND YOUR COWORKERS. READ AND UNDERSTAND THOROUGHLY. HEED THE WARNINGS AND FOLLOW THE INSTRUCTIONS.

DANGER Indicates a hazardous situation which, if not avoided, *will* result in death or serious injury.

WARNING Indicates a hazardous situation which, if not avoided, *could* result in death or serious injury.

CAUTION Indicates a hazardous situation which, if not avoided, *could* result in minor or moderate injury.

NOTICE Indicates a situation which can cause damage to the equipment, personal property and/or the environment, or cause the machine to operate improperly.

NOTE: Indicates a procedure, practice or condition that should be followed in order for the machine or component to function in the manner intended.

SAFETY PRECAUTIONS

⚠ CAUTION

The safety messages that follow have CAUTION level hazards.



Pre-Operation Hazard

Read and understand this Operation Manual before operating or servicing the engine to ensure that safe operating practices and maintenance procedures are followed.

- Never permit anyone to service or operate the machine without proper training.
- Safety signs and labels are additional reminders for safe operating and maintenance techniques.
- Contact LeeBoy or an authorized LeeBoy dealer for additional training.
- Make sure you are aware of all laws and regulations that are in effect for the location in which the paver is operated.
- Make sure you have all necessary licenses to operate the paver.

⚠ DANGER

The safety messages that follow have DANGER level hazards.

Power Lines Hazard



If your machine comes into contact with electric power lines, observe the following:

- Stay in the operators seat.
- Warn other workers to stay away and do not touch any control or any part of the machine.
- If contact can be broken, drive the machine away from the danger zone.
- If contact cannot be broken, stay in the operators seat until told that power is off.
- Failure to observe these directions could result in electrocution or death.

Electrocution Hazard

Disconnect the battery before welding anywhere on the machine.

Suffocation Hazard



Carbon monoxide poisoning is a serious condition that occurs as a result of improper ventilation.

- Never operate the internal combustion engine on this machine in an enclosed area with poor ventilation. Ensure proper ventillation to reduce risk of carbon monoxide poisoning or death.

Exhaust Hazard



All internal combustion engines create carbon monoxide gas during operation and special precautions are required to avoid carbon monoxide poisoning:

- Never block windows, vents or other means of ventilation.
- Always ensure that all connections are tightened to specifications after repair is made to the exhaust system.

⚠ WARNING

The safety messages that follow have WARNING level hazards.

Crush Hazard

Keep bystanders away from work area before and during operation.

Modification Hazard

Never modify the LeeBoy machine without the written consent of LeeBoy. Any modification can affect the safe operation of the paver and may cause personal injury or death.

Exposure Hazard



Operators of the paver must be aware of their work environment and the equipmnet needed to work safely.

- Always wear personal protective equipment, including appropriate clothing, gloves, work shoes, and protection for eyes and ears, as required by the task at hand.

Explosion Hazard



While the engine is running or the battery is charging, hydrogen gas is being produced and can be easily ignited. Keep the area around the battery well-ventilated and keep sparks, open flame, and any other form of ignition out of the area.

- Always disconnect the negative (-) battery cable before servicing the paver.
- Do not start the engine by shorting the starter circuit or any other starting method not stated in this manual. Only use the starting procedure as described in this manual to start the engine.
- Never charge a frozen battery. Always slowly warm the battery to room temperature before charging.

Fire and Explosion Hazard

- Diesel fuel is flammable and explosive under certain conditions.
- Never use a shop rag to catch fuel.
- Wipe up all spills immediately.
- Never refuel with the engine running.
- Store any containers containing fuel in a well-ventilated area, away from any combustibles or sources of ignition.

Fire Hazard



When operating machinery there is a risk for fire. Always have appropriate safety equipment available.

- Keep a charged fire extinguisher within reach when working in an environment where a fire may occur.
- Have all fire extinguishers checked periodically for proper operation and/or readiness.
- Always read and follow safety-related precautions found on containers of hazardous substances like parts cleaners, primers, sealants and sealant removers.
- Undersized wiring systems can cause electrical fires.

Entanglement/Sever Hazard



Verify there are no people, obstacles or other equipment near the machine before starting the engine. Sound the horn as a warning before starting the engine.



If the engine must be serviced while it is operating, remove all jewelry and tie back long hair before operating or servicing the machine.

- Keep hands, other body parts, and clothing away from moving/rotating parts.
- Always stop the engine before beginning service. Before maintenance, remove negative battery cable from battery post to ensure vehicle is not operated during maintenance.
- Verify that all guards and covers are properly attached before starting the engine. Do not start the engine if any guards or covers are not properly installed on the paver.
- If you must run the engine during maintenance procedures, make sure you have a helper to keep bystanders clear of the paver and make observations of moving parts as requested by the operator.
- Always turn the start switch to the OFF position after operation is complete and remove the key from the switch. Keep the key in your possession when the paver is not operating.
- Attach a “Do Not Operate” tag near the key switch while performing maintenance on the equipment.

- Never operate the engine while wearing a headset to listen to a radio or music because it will be difficult to hear the warning signals.
- Always start the engine and operate the controls while seated in the operators seat.
- Always turn the start switch to the OFF position after operation is complete and remove the key from the switch. Keep the key in your possession when the paver is not operating.
- Attach a “Do Not Operate” tag near the key switch while performing maintenance on the equipment.

Alcohol and Drug Hazard



Never operate the machine while under the influence of alcohol, drugs, or when ill.

Piercing Hazard



High-pressure hydraulic fluid or fuel can penetrate your skin and result in serious injury. Avoid skin contact with high-pressure hydraulic fluid or diesel fuel spray caused by a hydraulic or fuel system leak such as a broken hydraulic hose or fuel injection line.

- If you are exposed to high-pressure hydraulic fluid or fuel spray, obtain prompt medical treatment.
- Never check for a hydraulic fluid or fuel leak with your hands. Always use a piece of wood or cardboard. Have your authorized LeeBoy dealer or distributor repair the damaged parts.

Flying Object Hazard



Always wear eye protection when cleaning the machine with compressed air or high-pressure water.

Dust, flying debris, compressed air, pressurized water or steam may cause eye injury.

Coolant Hazard



Coolant must be handled properly to ensure operator safety.

- Wear eye protection and rubber gloves when handling engine coolant.
- If contact with the eyes occurs, flush eyes with clean water for 15 minutes.
- If contact with skin occurs, wash immediately with soap and clean water.

Burn Hazard



Some of the machine’s surfaces become very hot during operation and shortly after shutdown.

- Keep hands and other body parts away from hot machine surfaces.
- Handle hot components with heat-resistant gloves.

⚠ CAUTION

The safety messages that follow have CAUTION level hazards.

Poor Lighting Hazard

The work area must be well lit to ensure safe and proper operation.

- Ensure that the work area is adequately illuminated.
- Always install wire cages on portable safety lights.

Tool Hazard

Always use tools appropriate for the task at hand and use the correct size tool for loosening or tightening LeeBoy machine parts.

NOTICE

The safety messages that follow have NOTICE level hazards.

Any part that is found defective as a result of inspection or any part whose measured value does not satisfy the standard or limit must be replaced.

Always tighten components to the specified torque. Loose parts can cause damage to the machine or cause it to operate improperly.

Only use replacement parts approved by LeeBoy. Other replacement parts may affect warranty coverage.



Follow the guidelines of the EPA or other governmental agencies for the proper disposal of hazardous materials such as engine oil, diesel fuel, and engine coolant. Consult the local authorities or reclamation facility.

Dispose of hazardous materials in accordance with all applicable laws and regulations. Never dispose of hazardous materials by dumping them into a sewer, on the ground, or into groundwater or waterways.

Clean all accumulated dirt and debris away from the body of the paver and its components before you inspect the paver or perform preventive maintenance procedures or repairs. Operating a paver with accumulated dirt and debris will cause premature wear of paver components. Accumulated dirt and debris also hinders effective paver inspection.

Retrieve any tools or parts that may have dropped inside of the paver to avoid improper paver operation.

If any alert indicator illuminates during paver operation, stop the engine immediately. Determine the cause and repair the problem before continuing to operate the paver.

MACHINE PRECAUTIONS

Hot Material Precautions

- Wear protective gear for face, hands, feet, and body when operating the paver.
- Allow machine to cool before repairing or maintaining working components.
- If hot asphalt touches skin, flush area immediately with cold water. DO NOT apply ice to the affected area. DO NOT ATTEMPT TO REMOVE ASPHALT CEMENT with products containing solvents or ammonia. Natural separation will occur in about 48 to 72 hours. Get medical attention as soon as possible.
- DO NOT remove radiator cap, drain plugs, service grease fittings, or pressure taps while engine is hot. Add coolant to the radiator and perform other services only when the engine is stopped and fully cooled.

Hydraulic Systems Precautions

- Ensure all components are in good working condition. Replace any worn, cut, abraded, flattened or crimped hoses and metal lines.
- DO NOT attempt makeshift repairs using tape, clamps or cements. The hydraulic system operates under extremely high pressure and such repairs could cause serious injury.
- Wear proper hand and eye protection when checking for a high pressure leak. Use a piece of wood or cardboard as a back stop to isolate and identify leaks.

⚠WARNING **Hydraulic oil under pressure can cause serious personal injury. Check for oil leaks with a piece of cardboard. DO NOT expose hands to possible high-pressure oil. Turn off engine before attempting to tighten oil lines and fittings.**

- Escaping pressurized hydraulic fluid has force sufficient to penetrate the skin, which could cause serious personal injury. Ensure all pressure is relieved before disconnecting line, hoses or valves.
- If injury from concentrated high pressure steam or hydraulic fluid occurs, seek medical attention immediately. Injuries resulting from hydraulic fluid penetrating the skin's surface can result in serious infections or toxic reactions.

Refueling Precautions

- Do NOT overfill the fuel tank as overflow creates a fire hazard when spilled on hot components.
- DO NOT smoke when refueling and never refuel when the engine is running. Fuel is highly flammable and should be handled with care. Death or serious injury can occur due to explosion and/or fire.
- DO NOT fill tank to capacity. Allow room for expansion to reduce the risk of fuel expanding and spilling from the tank.
- Tighten fuel cap securely. Should fuel cap be lost, replace it with an original manufacturer's approved cap. Pressurization of the tank may result from use of non-approved cap.
- Prevent fires by keeping the machine clean of accumulated debris, grease, and spilled fuel.
- Use ultra-low sulfur diesel fuel (ULSD) only.

Battery Precautions

- Keep all sparks and flames away from batteries, as gas given off by electrolytes is explosive.
- Acid propelled by an explosion can cause blindness if it comes in contact with eyes. Always wear safety glasses when working near batteries.
- If you come in contact with battery electrolyte solution, wash off immediately. Chemicals can cause burns.
- Always disconnect the battery ground cable before working on the electrical system to avoid injury from spark or short circuit. Electrical shock and burns can occur.
- To avoid electrolyte loss, DO NOT tip batteries more than 45 degrees.

Starting and Stopping Precautions

- Check all around the paver to make sure there are no people working on the machine or in the path of the machine before starting. DO NOT start until area is clear. Death or serious injury can occur to bystanders from being crushed under a moving machine.
- Check brakes, steering and other control devices in accordance with instructions before starting. Be sure both steering levers (joysticks) are in neutral with the neutral lock engaged.
- DO NOT bypass the paver neutral-start system.

⚠WARNING **DO NOT operate the engine in an enclosed area without proper ventillation. Exhaust gasses are odorless and deadly.**

Parking Precautions

- Park paver on level ground whenever possible, set steering levers in neutral and lock. Apply the parking brake. Park the paver with wheels securely blocked on grades.
- Remove ignition key when leaving paver parked or unattended.

Operating Precautions

- Always comply with local regulations regarding moving equipment on public roads and highways.
- Know and use the hand signals required for a particular job. Know who has the responsibility for signaling.
- Make sure that all lights and reflectors comply with state and local regulations. Make sure that they are clean, in good working order, and can be seen clearly by all traffic.
- DO NOT stand between the equipment and the truck while the truck is being backed to the paver. Death or serious injury can result from being crushed between the two machines.
- DO NOT ride on attachments.
- Check all gauges and warning instruments for proper operation. If malfunctions are found, shut down the machine and report the problem for resolution. If the failure causes loss of steering control, loss of brake control, or loss of engine power, stop paver motion as quickly as possible. Apply parking brake (if equipped). Keep the machine securely parked until the failure is corrected or the machine can be safely towed.
- Drive the machine with care. Make sure speed is compatible with conditions. Use caution on rough ground, slopes, and while turning.
- Be alert for hazards and obstructions such as ditches, trees, cliffs, overhead power lines, and areas where there is danger of a slide.
- Be aware of and understand the job site traffic flow patterns.

- Obey flagmen, road signs, and signals.
- Watch for bystanders. Never allow anyone near the machine during operation. Never allow anyone to reach into the machine during use.
- Operator must know how to use signaling devices when roading with a paver. Operator must also understand which circumstances require use of each signal. Use tail lights, slow moving vehicle signs, and warning beacon as needed when traveling on public roads. It is recommended that you provide an escort on the road.
- DO NOT tow the paver, except to remove from road or to load on trailer.

Poor Visibility

Increasingly, asphalt maintenance equipment is used during less than ideal lighting conditions such as fog and smog or at night. These conditions present safety hazardss for workers, bystanders and passing traffic.

⚠WARNING **When operating under restricted light conditions, equip the machine with special lighting to prevent serious injury.**

While the machine is equipped with a beacon and a work light, contact your authorized LeeBoy dealer for additional lighting packages if working under these conditions.

Use reflective tape on the sides of machines when working at night. Ensure all workers wear reflective safety vests. Use impact barriers (movable or stationary) to protect workers and direct the traffic flow safely away from the work site.

Storage Precautions

- Store paver in an area away from human activity.
- DO NOT permit children to play on or around the stored machine. Serious injury or death can occur from improper/unauthorized use of the machine.
- Make sure the unit is stored on a surface that is firm, level, and free of debris.
- Store the machine inside a building or cover securely with a weatherproof tarpaulin.

Maintenance Precautions

- DO NOT attempt repairs unless trained to do so. Refer to manuals and experienced repair personnel for help.
- Before working on the machine, securely block the machine and any components that may fall. Block any working components to prevent unexpected movement while repairs are being made.
- Always wear safety glasses and other required safety equipment when servicing or making repairs.
- Disconnect battery before working on the electrical system.
- Avoid lubrication or mechanical adjustments while the paver is in motion or while engine is operating.
- If lubrication or mechanical adjustment is necessary, use extreme caution and complete the following steps:
  1. Place Forward/Reverse control in neutral.
  2. Apply neutral lock.
  3. Lower screed to ground.
  4. Shut off engine.
  5. Place equipment in a safe position.
  6. Securely block wheels and tracks.
- Never make repairs on pressurized components such as fluid lines, the gas system, or mechanical items until the pressure has been relieved.
- When servicing or replacing hardened pins, use a brass drift or other suitable material between the hammer and pin.
- Keep brake and steering systems in good operating condition.

SAFETY DECALS

If your machine is repainted, it is extremely important that you replace all the CAUTION, WARNING and DANGER safety decals in the proper locations. **(Figure 1-1)** For additional help, refer to the parts listing in **Section 7** and contact your authorized LeeBoy dealer to order a replacement kit.

NOTE: It is the responsibility of the owner and operator to make sure that all safety labels are readable and located on the paver as designated by LeeBoy.

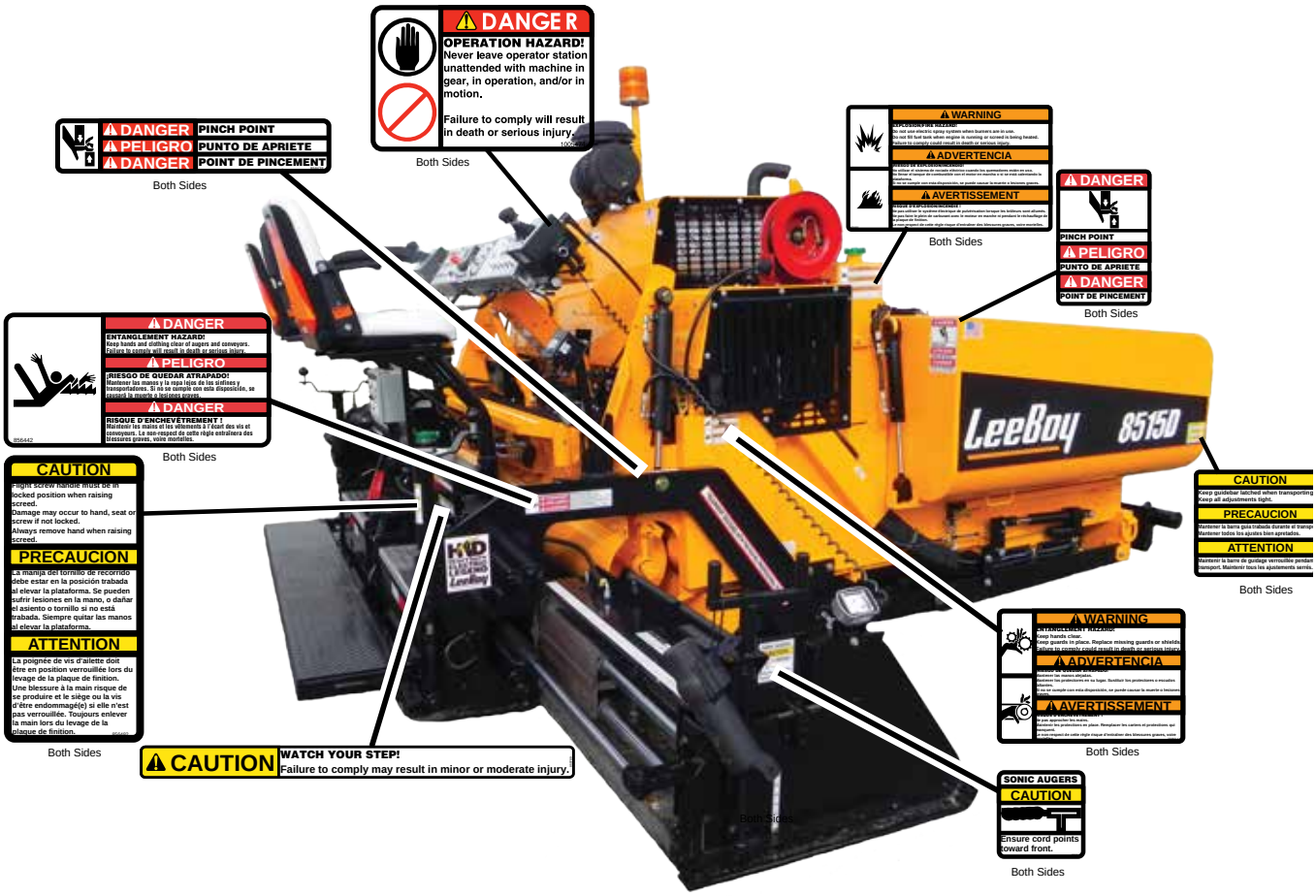


Figure 1-1. Safety Labels and Safety Label Locations

Safety Decals Care

1. Keep safety decals and signs clean and legible at all times.
2. Become familiar with the content and the position of each safety decal. Decals include important information.
3. Replace decals and signs that are missing or become impossible to read.
4. When replacing parts that display a safety decal, ensure that the new part is fitted with a decal as well.
5. Obtain replacement safety decals or signs from your authorized LeeBoy dealer.

Decal Installation (Sticker Type)

1. Be sure that the installation area is clean and dry. Use hot, soapy water to clean the surface where the decal will be applied.
2. Thoroughly dry the surface.
3. Measure and fit decal before removing the paper backing.
4. For decals with no top protection paper, remove the smallest split-backed paper.
5. Align decal over the specified area and carefully press exposed portion into place.
6. Slowly remove the remaining backing and carefully smooth the remaining portion of the decal into place.
7. Small air pockets can be pierced with a pin and smoothed using a piece of the decal backing.

Decal Installation (Top Protected)

1. If the decal has a protective top paper, use hot soapy water on the surface where the decal will be applied. Leave wet.
2. Determine the proper location, remove protective back paper and soak decal in clean soapy water before application. This will help to alleviate air bubbles in the applied decal.
3. Smooth decal into place with a squeegee and check for air bubbles.
4. Small air pockets can be pierced with a pin and smoothed out using a piece of the decal backing.
5. When decal is completely smoothed, carefully remove top paper.

NOTES

Section 2

INFORMATION AND SPECIFICATIONS

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LIMITED WARRANTY POLICY

Warranty

Subject to the limitations, exclusions, and claims procedures set forth herein, VT LeeBoy, Inc. warrants [to the first retail purchaser] that this product will be free from substantial defects in materials and workmanship during the warranty period.

If a defect in material or workmanship is found, your authorized LeeBoy Dealer is to be notified during the warranty period. LeeBoy and its authorized Dealer will repair or replace any part or component of the unit or part that fails to conform to the warranty during the warranty period.

The warranty period will begin on the initial start-up, training and delivery of the unit by the Dealer to the customer, and will expire after twelve (12) months following the delivery of the product to the first retail purchaser. (See Dealer for additional warranty.)

Manufacturers' Warranties: Engines are warranted by their manufacturers and may have warranty coverage that differs from that of LeeBoy. LeeBoy does not warrant any engine.

Replacement parts furnished by LeeBoy are covered for the remainder of the warranty period applicable to the unit or component in which such parts are installed.

LeeBoy has the right to repair any component or part before replacing it with a new one.

All new replacement parts purchased by a LeeBoy Dealer will carry a six-month warranty.

This Limited Warranty is governed by the laws of the State of North Carolina.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED, STATUTORY AND IMPLIED WARRANTIES APPLICABLE TO UNITS, ENGINES, OR PARTS INCLUDING WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE OR AGAINST INFRINGEMENT.

Items Not Covered

LeeBoy is not responsible for the following:

All used units or used parts of any kind.

Repairs due to normal wear and tear or brought about by abuse or lack of maintenance of the machine.

Attachments not manufactured or installed by LeeBoy.

Liability for incidental or consequential damages of any type including, but not limited to, lost profits or expenses of acquiring replacement equipment.

Limitations

VT LeeBoy , Inc. has no obligation for:

Any defects caused by misuse, misapplication, negligence, accident, or failure to maintain or use in accordance with the most current operating instructions.

Unauthorized alterations.

Defects or failures caused by any replacement parts or attachments not manufactured by or approved by LeeBoy.

Failure to conduct normal maintenance and operating service including, without limitation, providing lubricants, coolant, fuel, tune-ups, inspections, or adjustments.

Unreasonable delay, as established by LeeBoy, in making the applicable units or parts available upon notification of a service notice ordered by same.

Warranty Responsibility: The warranty responsibility on all engines rests with the manufacturer of the engine.

Warranty and Parts Support: LeeBoy may have support agreements with some engine manufacturers for warranty and parts support. However, LeeBoy does not warrant the engine.

This Limited Warranty sets forth your sole remedy in connection with the sale or use of the LeeBoy product covered by this Limited Warranty.

This Limited Warranty extends only to the first retail purchaser, and is not transferable.

In the event any portion of this Limited Warranty shall be determined to be invalid under any applicable law, such provision shall be deemed null and void and the remainder of the Limited Warranty shall continue in full force and effect.

Other Limitations

IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT OR WARRANTY OR ALLEGED NEGLIGENCE OR LIABILITY WITHOUT FAULT, SHALL LEEBOY BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, LOSS OF PROFIT OR REVENUE, COST OF CAPITAL, COST OF SUBSTITUTED EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME COSTS, LABOR COSTS OR CLAIMS OF CUSTOMERS, PURCHASERS OR LESSEES FOR SUCH DAMAGES. IN NO EVENT WILL WARRANTY COMPENSATION, OR OTHER DAMAGES AVAILABLE FROM LEEBOY EXCEED THE PURCHASE PRICE OF THE PRODUCT.

CONTACT INFORMATION

For information regarding parts and repairs about your LeeBoy product, contact your authorized LeeBoy dealer. If your dealer is unable to resolve the problem, contact LeeBoy directly.

Record dealer information in the space provided. For additional information about LeeBoy, please visit: www.leeboy.com.

Sales Representative: _____

Dealership Name: _____

Dealership Address: _____

Dealership Phone: _____

Record of Ownership

Please complete the following information for use if you need to contact LeeBoy for service, parts or literature.

Machine Model Number: _____

Product Serial Number: _____

Date of Purchase: _____

Nameplate

The nameplate contains the model and serial numbers used to identify the machine and its components for parts or service information. Refer to the Engine Operator's Manual for the location of the engine nameplate.

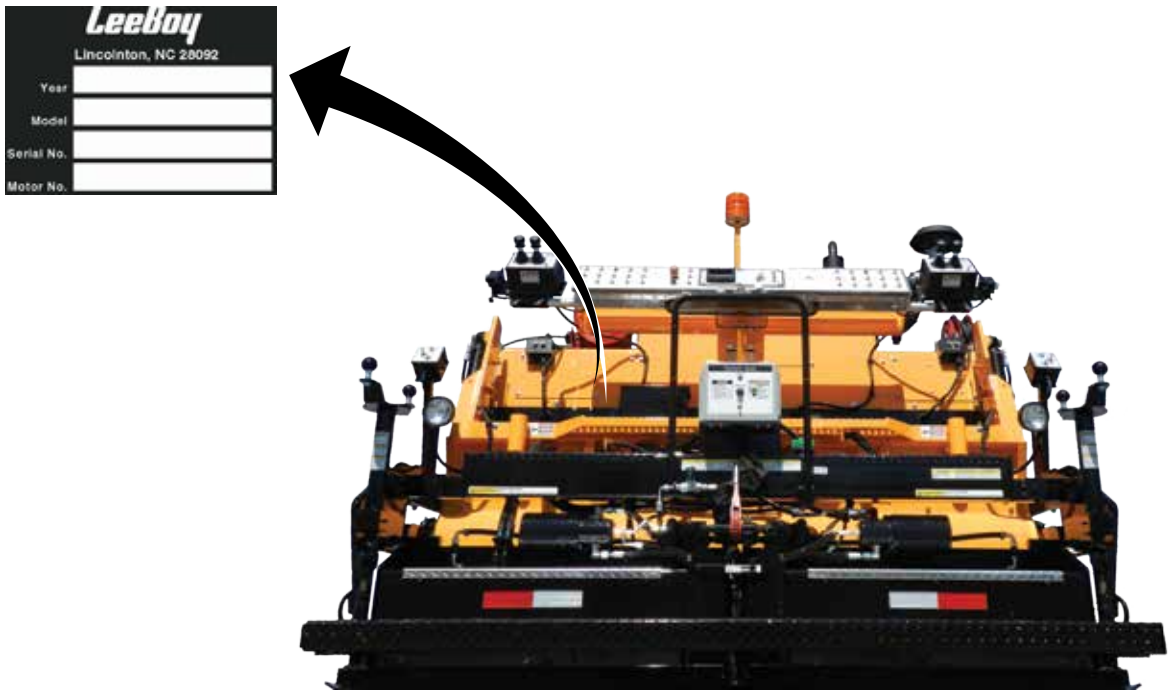


Figure 2-1. Nameplate Location

SPECIFICATION CHARTS

The specifications provided in this section include screed weights, dimensions, performance, and torque values for both metric and standard inch fastener.

⚠CAUTION **Replace original equipment only with components approved by your LeeBoy dealer.**



Table 2-1. Machine Dimensions

ITEM	SPECIFICATION
Overall Length	13 ft 3 in (4 m)
Overall Height	8 ft 6 in (2.6 m)
Overall Width (Hopper Wings In)	8 ft 6 in (2.6 m)
Overall Width (Hopper Wings Out)	10 ft (3 m)
Overall Weight	Standard Screed: 17,500 lb (7937 kg) HD Screed Option: 17,900 (8119 kg)
Paving Width	8 - 15 ft (2.4 - 4.6 m)
Extensions Length	3 ft 6 in (30 cm)
Main Screed Wear Plate	15” (38 cm)
Extension Width of Wear Plate	7” (17.8 cm)

Table 2-2. Engine Specifications

ITEM	SPECIFICATION
Manufacturer and Model	Kubota, V3800-CR-TE4B, Tier 4 (Final)
Engine Type	Vertical Liquid Cooled Diesel, 4-Cylinder
Bore, Stroke and Displacement	3.9 in (100 mm); 4.72 in (120 mm); 230 cu in (3.8 L)
Power Rating	74 HP (55.2 kW)
Intake and Combustion Systems	Turbo-Charged, Direct-Injection
Maximum Speed	2200 RPMs

Table 2-3. Performance Specifications

ITEM	SPECIFICATION
Travel Speed	0 - 230 feet per minute (FPM) [0 - 3.9 meters per minute (MPM)].
Paving Speed	0 - 140 FPM [0 - 2.4 MPM]

Table 2-5. Electrical Specifications

ITEM	SPECIFICATION
Battery	12 Vdc Maintenance Free, 12 Volts
Cold Cranking Amps (CCA)	1125 CCA
Alternator	12-Volt, Negative-Ground, 60 Amps
Alternator Fan Belt Tension	Manual belt tension mechanism keeps serpentine belt under tension at all times.
Starter Voltage and Type	12-Volt, Negative-Ground

Table 2-6. Lubricant Specifications

ITEM	SPECIFICATION
Engine Oil	15W-40, API, CH-4, CI-4
Hydraulic Oil	All-Weather 68
Torque Hub	50 WT Gear Oil
Grease	Shell Avania EP Grease or Equivalent
Chain Lube	Chain Lube Agent

Table 2-7. Machine System Capacity Specifications

ITEM	SPECIFICATION
Engine Lubrication Oil (Refill Capacity)	15 qts (14.2 L)
Hydraulic Oil Tank	40 gal (151.4 L)
Torque Hubs	32 oz (.35 L) each
Diesel Fuel	18 gal (68.1 L)
Propane	One (1) 20-lb Tank
Antifreeze	Glycol-Based, Extended Life; 3.6 gal (13.8 L)

Table 2-8. Hydraulic Pressures Specifications

ITEM	SPECIFICATION
Drive	3625 psi (249.9 Bar)
Conveyors and Cylinders	2500 - 2700 psi (172.3 - 179.2 Bar)
Augers	2800 - 3000 psi (193 - 206.8 Bar)
Track Tensioning Relief	1500 psi (103.4 Bar)
Charge Pressure	350 - 400 psi (24 - 27.6 Bar)

Table 2-9. Hopper Specifications

ITEM	SPECIFICATION
Size	7.5 Tons (6804 kg)
Height	23 in (584 mm)
Wings	3/8 in (10 mm)

Figure 2-10. Screed Specifications

ITEM	SPECIFICATION	
Screed Weight	**Standard Screed**	**815HD (Option)**
	3000 lbs (1360 kg)	3700 lbs (1678 kg)
Electric Heat (Option)	Two (2) 3412 BTU/hr electric heat elements on main screed. One (1) 3412 BTU/hr electric heat element on each extension.	Four (4) 3412 BTU/hr and one (1) 820 BTU/hr electric heat elements on main screed. One (1) 3412 BTU/hr electric heat element on each extension.
Propane Heat	Two (2) 54,000 BTU propane burners on main screed. One (1) 45,000 BTU propane burner on each extension.	
Extensions	Two (2) 44-inch Hydraulically-Operated	
Vibration	Two (2) hydraulic vibrators producing 2400 vpm.	
Crown/Valley	Adjustable, 2-inch crown, 1-1/2 inch of valley	

Table 2-11. Generator Specifications (Electric Heat Option)

ITEM	SPECIFICATION
Power	6.5 kW
Voltage	220 Volts
Frequency	60 Hz

TORQUE SPECIFICATIONS

The following tables list torque values for standard hardware. This is a guide for average application involving typical stresses and machined surfaces. Values are based upon physical limitations of clean, plated and lubricated hardware. Under more extreme conditions, individual torque value should be followed. Conversion formulas are provided below:

NOTICE **Never substitute fasteners of any kind that are not equal in size and grade to the original equipment.**

Conversion	Formula
ft-lb to N•m	[ft-lb]*1.3558 = [N•m)
ft-lb to in-lb	[ft-lb]*12 = [in-lb]
N•m to in-lb	[N•m]*8.8508 = [in-lb]

Standard Inch Fasteners

Table 2-13. Torque Specifications For Standard Inch Fasteners

SIZE	THREAD	CAPSCREWS: SAE GRADE 5				CAPSCREWS: SAE GRADE 8			
		TORQUE (ft lb)		TORQUE N•m		TORQUE (ft lb)		TORQUE N•m	
		Dry	Lubed	Dry	Lubed	Dry	Lubed	Dry	Lubed
1/4	20 UNC	8	6	11	8	12	9	16	12
	28 UNF	10	7	14	9	14	10	19	14
5/16	18 UNC	17	13	23	18	25	18	34	24
	24 UNF	19	15	26	20	27	20	37	27
3/8	16 UNC	31	23	42	31	44	33	60	45
	24 UNF	35	26	47	35	49	37	66	50
7/16	14 UNC	49	37	66	50	70	52	95	71
	20 UNF	55	41	75	56	78	58	106	79
1/2	13 UNC	75	57	102	77	106	80	144	108
	20 UNF	85	64	115	87	120	90	163	122
9/16	12 UNC	109	82	148	111	154	115	209	156
	18 UNF	121	91	164	123	171	128	232	174
5/8	11 UNC	150	113	203	153	212	159	287	216
	18 UNF	170	127	230	172	240	180	325	244
3/4	10 UNC	267	200	362	271	376	282	510	382
	16 UNF	297	223	403	302	420	315	569	427
7/8	9 UNC	429	322	582	437	606	455	822	617
	14 UNF	474	355	643	481	669	502	907	681
1	8 UNC	644	483	873	655	909	681	1232	923
	14 UNF	722	542	979	735	1020	765	1383	1037
1-1/4	7 UNC	1121	840	1520	1139	1817	1363	2464	1848
	12 UNF	1241	930	1683	1261	2012	1509	2728	2046
1-1/2	6 UNC	1950	1462	2644	1982	3162	2371	4287	3215
	12 UNF	2194	1645	2975	2230	3557	2668	4823	3617

Metric Fasteners

Table 2-14. Torque Specifications for Metric Fasteners

NOMINAL SIZE AND PITCH	CLASS 8.8 [GRADE 5 EQUIVALENT]				CLASS 10.9 [GRADE 8 EQUIVALENT]			
	TORQUE (ft lb)		TORQUE N•m		TORQUE (ft lb)		TORQUE N•m	
	Dry	Lubed	Dry	Lubed	Dry	Lubed	Dry	Lubed
M4 x 0.7	2	2	3	2	3	2	4	3
M5 x 0.8	5	3	7	4	7	5	9	7
M6 x 1	8	6	11	8	11	8	15	11
M8 x 1.25	19	14	26	19	27	20	37	27
M10 x 1.5	37	28	50	38	53	40	72	54
M12 x 1.75	65	49	88	66	93	70	126	95
M14 x 2	104	78	141	106	148	111	201	150
M16 x 2	161	121	218	164	230	173	312	235
M18 x 2.5	222	167	301	226	318	239	431	324
M20 x 2.5	314	236	426	320	449	337	609	457
M22 x 2.5	428	321	580	435	613	460	831	624
M24 x 3	543	407	736	552	777	582	1053	789
M27 x 3	796	597	1079	809	1139	854	1544	1158
M30 x 3.5	1079	809	1463	1097	1544	1158	2093	1570

Hydraulic Fittings

Tightening Flare-Type Tube Fittings

1. Check the flare and flare seat for defects that might cause leakage.
2. Align tube with fitting before tightening.
3. Lubricate connection.
4. Hand tighten swivel nut until snug.
5. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second to the torque shown in the following table:

NOTE: The torque values shown are based upon lubricated connections.

Table 2-15. Torque Specifications for Steel Flare Type Tube Fittings

TUBE SIZE OUTER DIAMETER	NUT SIZE ACROSS FLATS	TORQUE VALUE	
(IN)	(IN)	(LB FT)	(N•m)
3/16	7/16	8	11
1/4	9/16	12	16
5/16	5/8	16	22
3/8	11/16	23	31
1/2	7/8	38	52
5/8	1	54	73
3/4	1 1/4	75	102
7/8	1 3/8	83	113

Determining Proper Torque

The only reliable method of creating a consistently leak-free and long-lasting connection is to ensure the coupling is brought to the proper torque. Using a torque wrench with crowfoot is the best method, but the flats method can be used if a torque wrench is not available.

The most straightforward method of determining the correct torque setting is to multiply the desired torque by the length of the wrench from the center of the handle to the center of the drive (L); divided by the length of the wrench from the center of the handle to the crowfoot center (LA) as shown below:

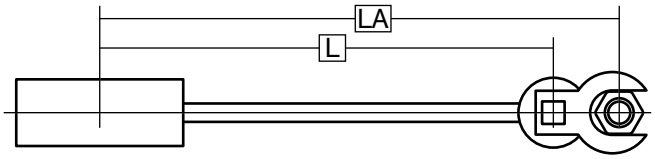


Figure 2-16. Torque Wrench - Crowfoot

NOTICE **The minimum torque values are adequate for sealing most applications. Maximum torque values should never be exceeded.**

There are several methods of determining the correct setting on the torque wrench when using a crowfoot. All of the methods involve making the setting proportional to the effective change in length of the wrench multiplied by the desired final torque. The equations and illustration below describe proper measurements.

Equations

- Torque setting if the crowfoot is placed in line with respect to the wrench:

  TS = TD * L / LA

  OR

  TS = TD * L / (L+E)

- Torque setting if the crowfoot is placed at 90° with respect to the wrench

  TS = TD * L / LH

  OR

  TS = TD * L / $\sqrt{(L^2 + E^2)}$

- To estimate the crowfoot size (E)

  E = Drive Size * 0.5 + Distance between Drive and Open End + Wrench Size * 0.5774

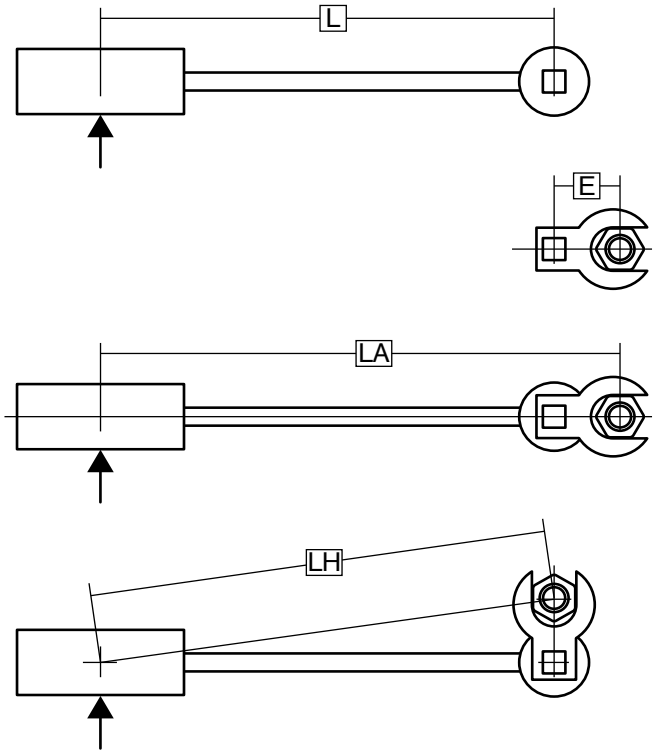


Figure 2-17. Measurements Needed

LEGEND

L = Distance from center of torque wrench handle to the center of socket drive

E = Distance from center of socket drive to the center of crowfoot

LA = Distance from center of torque wrench handle to the center of crowfoot

LH = Distance from center of torque wrench handle to the center of crowfoot, when mounted at 90°

TD = Desired torque at the fitting

TS = Torque setting indicated on wrench

Coupling Installation

Use the following steps for proper coupling installation:

1. Determine the correct torque value for your coupling.

NOTE: Only use the torque values specified from the manufacturer. DO NOT use SAE torque recommendations.

2. Ensure the seal face and threads are clean and in good condition. O-Rings should be lubricated with light oil, but threads should be completely dry unless making pipe thread connections (interference seal).

NOTE: Attach the male end of the hose onto the equipment first since it may be necessary to rotate the entire hose assembly to tighten the male threads. Then route the hose into position while avoiding twisting the hose.

3. Tighten the connection (by hand), bringing the seal face into contact and rotating the nut until it stops.
4. Mark a line across the coupling nut and backup hex for the flats method verification of coupling torque.
5. Apply a wrench to the backup hex to prevent the coupling and hose from moving while tightening the nut with a torque wrench.

NOTICE **Failure to retain the backup hex during installation will also result in additional clamp load force that could cause damage to the seal face.**

NOTE: The coupling nut must be in motion for an accurate torque reading. If the nut is stopped before final torque value is achieved, it must be loosened and retightened until the torque is attained while the nut is in motion.

If a torque wrench cannot fit into the coupling area or if it is unavailable, the flats method may be used to ensure that the coupling is properly tightened, as shown in the following figure.

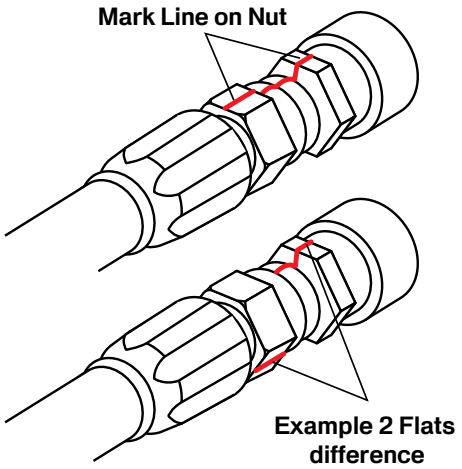


Figure 2-18. Flats Method Tightening

NOTE: The mark placed on the nut and backup hex after tightening by hand should rotate during final tightening according to the table below. The nut and backup hex can then be marked to indicate if the coupling loosens over time.

Table 2-19. Flats Method Values for Selected Terminations

FLATS METHOD VALUES		
Termination Type	**Dash Size**	**Flats**
JIC	-4	1.5 - 1.75
JIC	-6	1.0 - 1.5
JIC	-8	1.5 - 1.75
JIC	-10	1.0 - 1.5
JIC	-12	1.0 - 1.5
JIC	-16	.75 - 1.0
JIC	-20	.75 - 1.0
JIC	-24	.75 - 1.0
JIC	-32	.75 - 1.0
JIS	-4	.5 - 1.5

1. Seal faces must be in contact with the fitting fully tightened by hand before marking flats.
2. The flats method is most accurate for the first assembly cycle. For multiple disassembly and assembly cycles, torque values are more reliable.
3. Tightening two (2) flats or more may damage seal faces.

Table 2-20. Torque Specifications For US Style Coupling Terminations

JIC, SAE 45°, ORFS, O-RING BOSS, GATES ADAPTERLESS AND MEGASEAL										
DASH SIZE	JIC 37°, SAE 45° & Mega-Seal (Steel)		JIC 37°, SAE 45° & Mega-Seal (Brass)		Flat Face O-Ring Seal (Steel)		SAE O-Ring Boss (Steel) & Gates Adapterless ≤ 4000 PSI		SAE O-Ring Boss (Steel) & Gates Adapterless > 4000 PSI	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
-3									8	10
-4	10	11	5	6	10	12	14	16	14	16
-5	13	15	7	9					18	20
-6	17	19	12	15	18	20	24	26	24	26
-8	34	38	20	24	32	40	37	44	50	60
-10	50	56	34	40	46	56	50	60	72	80
-12	70	78	53	60	65	80	75	83	125	135
-14					65	80			160	180
-16	94	104	74	82	92	105	111	125	200	220
-20	124	138	75	83	125	140	133	152	210	280
-24	156	173	79	87	150	180	156	184	270	360
-32	219	243	158	175						

Table 2-21. Torque Specifications for DIN 24, DIN 60, and Inverted Cone Style Coupling Terminations

DIN 24, DIN 60, AND INVERTED CONE			
Size (mm)		Torque (lb ft)	
Light Series Tube OD	Heavy Series Tube OD	Min	Max
6		7	15
8		15	26
10	8	18	30
12	10	22	33
14	12	26	37
15	14	30	52
	16	30	52
18	20	44	74
22	25	59	89
28	30	74	111
	38	74	162
35		133	184
42		148	221

Table 2-22. Torque Specifications for 4-Bolt Flange Connections

4-BOLT FLANGES		
Dash Size	Bolt Size (in)	Torque (lb ft)
-8	0.31	17
-12	0.38	26
-16	0.44	43
-20	0.50	65
-24	0.63	130
-32	0.75	220

1. Align faces and tighten bolts (by hand) before applying final torque in a pattern. The seal faces must be parallel with an even bolt tension to seal properly.
2. Torque values apply to bolts that are plated or coated in light engine oil.
3. Before assembly, lubricate O-Ring with light oil (SAE 10W or 20W).

Table 2-23. Torque Specifications for NPTF Dry Seal Pipe Threads

NPTF	
Dash Size	**Max Torque (ft-lb)**
-2	20
-4	25
-6	35
-8	45
-12	55
-16	65
-20	80
-24	95
-32	120

1. The torque values obtained from tightening pipe threads can vary considerably depending upon thread condition. Adequate sealing can occur at values much lower than the maximum values listed above. Only enough torque to achieve adequate sealing should be used.
2. When using a male tapered pipe thread with a female straight or parallel pipe thread, maximum values are 50% of those listed in the table above.
3. If thread sealant is used, maximum values shown should be decreased by 25%.

Table 2-24. Torque Specifications for BSP 30° Inverted Cone and JIS Coupling Terminations

BSP 30° INVERTED CONE AND JIS		
Dash Size	**Torque (ft-lb)**	
	Min	**Max**
-2	7	9
-4	11	18
-6	19	28
-8	30	36
-10	37	44
-12	50	60
-16	79	95
-20	127	152
-24	167	190
-32	262	314

Section 3
COMPONENT LOCATION

3

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NOTES

COMPONENTS OVERVIEW

This section describes the major components for the LeeBoy 8515D Conveyor Paver. Become familiar with these components before operating the machine.



Engine

The LeeBoy Model 8515D Conveyor Paver is equipped with a Kubota, 74 HP (55.2 kW) diesel engine mounted on standard heavy-duty vibration isolators. It is accessible through several access doors on the engine cover, especially the front service door mounted with all fuel filter components for easier access. This paver features improved visibility with a low-profile engine cover along with easy access to engine relays and the fuse panel.

The air cleaner removes fine particles such as dust, sand, chaff and lint from the air. As air is taken into the air cleaner assembly, the cyclone action deposits some of the fine particles in the evacuator that is mounted on the bottom of the air cleaner housing. The evacuator is held closed during engine operation by suction. When the engine is shut off, the weight of the debris opens rubber flaps, allowing the debris to fall out. These flaps can also be squeezed open for cleaning.

The fuel filter removes contaminants from diesel fuel before it flows into the injection pump where it is injected into the engine combustion chamber.

The radiator mounted in front of the engine cools the engine. As coolant flows through the radiator, airflow from the engine-driven fan removes heat.

Refer to the Engine Operator's Manual accompanying your paver for additional engine information.

Hydraulic System

The hydraulic system includes hydraulic pumps, motor and cylinders that work together for optimum machine component control. Valves regulate the directional, pressure and fluid flow throughout the hydraulic system.

The LeeBoy 8515D Conveyor Paver now features a hydraulic test ports for ease and convenience in checking pressure for its five main functions.

Torque Hubs

The paver drive system contains two torque hubs that provide power to propel the tracks. Two-speed motors power tough planetary drives for smooth operation.

Hopper and Conveyors

The hopper wings are hydraulically controlled to raise and lower the hopper. When fully open, the hopper can hold a payload up to 7.5 tons.

Material in the hopper is moved toward the back of the paver to the screed by conveyors. The conveyor is activated at the operator platform. Its wide, automatic conveyors with a wide hopper design delivers asphalt more evenly and efficiently to produce a smooth asphalt mat.

The hopper's conveyor bed can be lifted hydraulically, allowing easy access to the paver undercarriage and tracks for service and cleaning.



Augers



Right and left augers rotate to move material from the conveyors to the screed. The auger can be manually controlled at the operator platform or by a screed operator on the screed using a remote control box.

The auger can also be controlled automatically using the auger sonic sensor system. The sensor is mounted on the screed endgates and used to monitor and control the pile height of material at the discharge end of the augers.

Operator Platform

The operator platform allows easy and convenient access for controls of most paver functions. The paver can be operated from the left or right side depending upon which control panel side is active and best suited to the working conditions. Controls can also be lowered to operate as a low deck or the high deck option with an assistant standing on the screed walkboard.



Screed

The screed is the last part of the paver that contacts the paving material. A screed operator usually operates the screed while the operator drives the machine. Paving material is fed from the hopper and conveyor to the augers to the front of the screed.

The screed has hydraulically-controlled extensions that move in and out to allow a paving base from 8 - 15 feet.

Screed heating is accomplished by either propane or the optional electric heating elements mounted directly to the wear plates.

Electrical System

The battery produces 12 volts DC and maintains 1,125 cold cranking amperes (CCA). An engine-mounted alternator with a minimum of 60 amperes charging capacity keeps the battery charged during normal operation. The battery charge rate can be monitored using the voltmeter on the center operator control panel.

Standard Equipment/Options

Component	
8 - 15 feet (2.44 - 4.57 m) Propane Screed	❖
Two-Speed Hydrostatic Drive	❖
Under Auger Cut-Off Gates	❖
Light and Safety Beacon Package	❖
12-inch (30.5 cm) Augers w/Sonic Control	❖
Dual Operator Stations	❖
Dual 2400 vpm Vibrators	❖
Citrus Tank	❖
Anti-Vandalism Package	❖
Legend Electric Screed	Option
Legend 815HD Electric Screed	Option
Dual Grade Control	Option
Dual Grade and Slope Control	Option
Truck Hitch	Option
Sloping Extensions	Option
Power Crown	Option
Steering Wheel	Option
Roll-Up Curb Attachment	Option
Heated End Gates	Option

MACHINE OVERVIEW



Figure 3-1. Machine Overview

ITEM NO.	CONTROL NAME	FUNCTION
1	Crown and Valley	Adjusts crown and valley while paving.
2	Main Screed Depth Screw	Controls depth of the asphalt (located on each side).
3	Operator Control Panel	Machine and operator controls.
4	Joysticks	Controls travel direction and speed (on each side of machine).
5	Beacon Light	Revolving amber safety light to alert traffic and others at the work site.
6	Spray Down Hose Reel	Sprays releasing agent to lubricate and prevent asphalt from hardening on machine surfaces.
7	Hopper	Hopper wings fold out to hold asphalt material.
8	Sonic Auger Sensor	Senses and automatically gauges the amount of material in the extensions.
9	Endgate Depth Screw	Controls depth of the screed endgate.
10	Screed Extension	Extends for a paving width from 8 - 15 feet.

LEFT CONTROL PANEL

The operator control console for the LeeBoy 8515D Conveyor Paver offers the convenience of operating from either side depending upon working conditions. The control panel has a cover for protection from the elements.

While operators typically pave on the left side of the machine, a complete set of controls on the right control panel allows operators the flexibility of working from either side.

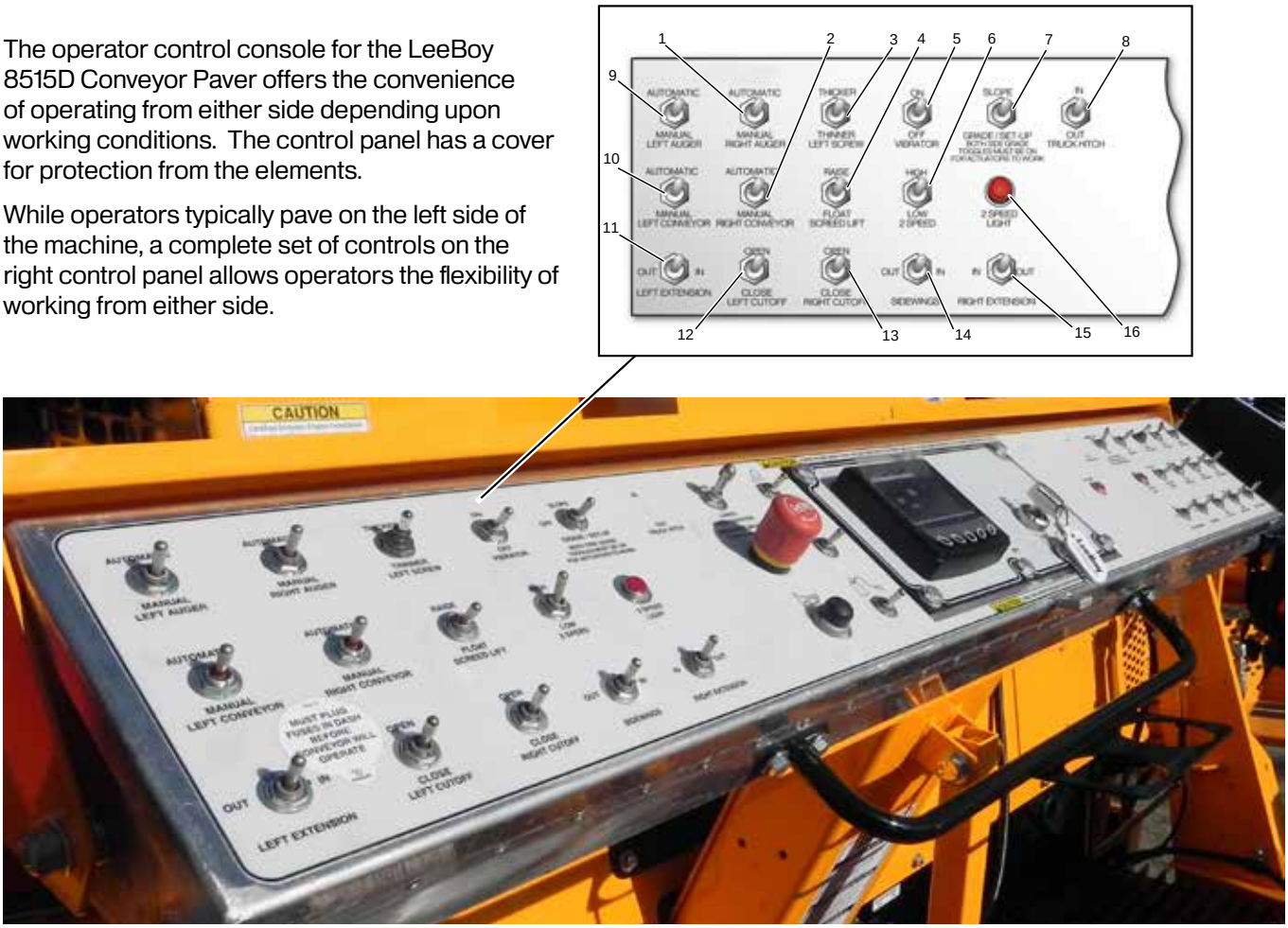


Figure 3-2. Operator Control Panel

ITEM NO.	CONTROL NAME	FUNCTION
1	Right Auger Switch	Selects ON or OFF for automatic operation of right auger. Center position is OFF. Selecting MANUAL position provides manual override. **NOTE: Set the left and right auger switches on the right control panel to the SLAVE position when operating from the left side. (Figure 3-3)** **NOTE: If using the sonic auger, ensure the left and right auger switches on the right control panel are in the SLAVE position; and the left and right Auger AUTOMATIC/MANUAL switches are set to the AUTO position (left control panel).** **NOTE: The Auger On/Off switch on both remote control boxes must be set to the ON position. (Page 4-26)**
2	Right Conveyor Switch	Selects automatic or manual mode for right conveyor. MANUAL position provides override. Conveyor can be operated from either side of the control panel in the MANUAL mode. The center position is OFF. For automatic operation, set switch to AUTOMATIC.
3	Left Screw Thicker/Thinner Switch	Sets the thickness of the asphalt. Operator can select either THICKER or THINNER as needed. The Grade Control switch must be set to GRADE on both sides of the control panel to turn power on for this feature.

ITEM NO.	CONTROL NAME	FUNCTION
4	Screed Lift/Float Switch	Raises or floats the screed. When released, switch automatically returns to the center to hold the screed in selected position. Flip switch to RAISE to raise the screed. Set the switch to FLOAT to float the screed (switch will lock in the FLOAT position). **NOTE: The screed will not raise if this switch is set to FLOAT on one side of the control panel and RAISE on the other.**
5	Vibrator Switch	Turns the screed vibrator on and off, but only functions when joysticks are in the forward position. The screed vibrator helps compact material.
6	High/Low 2-Speed Gear Switch	Used to change machine speed. Place switch in HIGH position for travel (High/Low Gear light will illuminate). Pave only in LOW speed. NEVER pave in high speed as serious injury can result. The High/Low Gear switch on both sides must be in the LOW position to function.
7	Grade Control Switch	When this switch is in the GRADE position, the power is ON regardless of the joystick position. The left control panel switch selects manual or automatic mode. The Grade Control switch on the right control panel must be in the ON position to operate.
8	Truck Hitch (Option)	Optional Component: Engages truck hitch function. Engages the truck hitch to the material truck wheels. Set switch to the IN position to engage the hitch. The OUT position disengages hitch from the material truck wheels. **NOTE: If equipped with truck hitch option, set the selector lever on the hitch component to the TRUCK HITCH position. (Page 4-33) (If this lever is set to CONVEYOR, it will raise and lower the conveyor bed.)**
9	Left Auger Switch	Selects ON or OFF for automatic operation of left auger. **NOTE: Set the left and right auger switches on the right control panel to the SLAVE position when operating from the left side. (Figure 3-3)** **NOTE: If using the sonic auger, ensure the left and right auger switches on the right control panel are in the SLAVE position and the left and right Auger AUTOMATIC/MANUAL switches are set to the AUTO position (left control panel).** **NOTE: The Auger On/Off switch on both remote control boxes must be set to the ON position. (Page 4-26)**
10	Left Conveyor Switch	Selects automatic or manual mode for left conveyor. MANUAL position provides override. Conveyor can be operated from either side of the control panel in the MANUAL mode. The center position is OFF. For automatic operation, set switch to AUTOMATIC.
11	Left Extension Switch	Extends or retracts left screed extension. (Switch also located on the remote box on left side of paver.) Push switch IN to retract left screed extension. Push switch to OUT to extend left screed extension.
12	Left Cut-Off Gate	Opens and closes left cut-off gate. The cut-off can be operated from either side of the control panel.
13	Right Cut-Off Gate	Opens and closes right cut-off gate. The cut-off can be operated from either side of the control panel.
14	Sidewings Switch	Opens and closes hopper sidewings. Push switch to the OUT position to open hopper wings. Push switch to the IN position to close hopper wings.
15	Right Extension Switch	Extends or retracts right screed extension. (Switch also located on the remote control box. **(Page 4-26)** Push switch IN to retract right screed extension. Push switch to OUT to extend right screed extension.
16	High Gear Light	Illuminates when paver is in high gear.

RIGHT CONTROL PANEL

The right side control panel contains the same paving component controls as the left side for operator convenience, i.e., conveyor, auger, hopper wings, etc. The switches are in reverse order from the left side of the control panel, with additional control features for auger operation. some switches work in conjunction with each other on both sides of the control panel, especially auger operation and the optional truck hitch component.

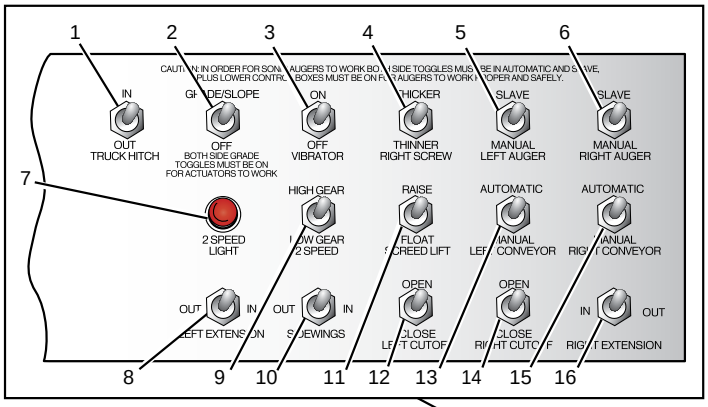




Figure 3-3. Right Control Panel

ITEM NO.	CONTROL NAME	FUNCTION
1	Truck Hitch (Option)	Optional Component: Engages truck hitch function. Engages the truck hitch to the material truck wheels. Set switch to the IN position to engage the hitch. The OUT position disengages hitch from the material truck wheels. **NOTE: If equipped with truck hitch option, set the selector lever on the hitch component to the TRUCK HITCH position. (Page 4-33) (If this lever is set to CONVEYOR, it will raise and lower the conveyor bed.)**
2	Grade Control Switch	Selects automatic or manual mode for right conveyor. MANUAL position provides override.
3	Vibrator Switch	Turns the screed vibrator on and off, but only functions when joysticks are in the forward position. The screed vibrator helps compact material.
4	Right Screw Thicker/ Thinner Switch	Sets the thickness of the asphalt. Operator can select either THICKER or THINNER as needed. The Grade Control switch must be set to GRADE on both sides of the control panel to turn power on for this feature.

ITEM NO.	CONTROL NAME	FUNCTION
5	Left Auger Manual/ Slave Switch	Selects ON or OFF for automatic operation of left auger. Center position is OFF. Selecting MANUAL position provides manual override. Select SLAVE for automatic operation. **NOTE: Set the left and right auger switches on the right control panel to the SLAVE position when operating from the left side. (Figure 3-3)** **NOTE: If using the sonic auger, ensure the left and right auger switches on the right control panel are in the SLAVE position; and the left and right Auger AUTOMATIC/MANUAL switches are set to the AUTO position.** **NOTE: The Auger On/Off switch on both remote control boxes must be set to the ON position. (Page 4-26)**
6	Right Auger Manual/ Slave Switch	Selects ON or OFF for automatic operation of right auger. Center position is OFF. Selecting MANUAL position provides manual override. Select SLAVE for automatic operation. **NOTE: Set the left and right auger switches on the right control panel to the SLAVE position when operating from the left side. (Figure 3-3)** **NOTE: If using the sonic auger, ensure the left and right auger switches on the right control panel are in the SLAVE position; and the left and right Auger AUTOMATIC/MANUAL switches are set to the AUTO position.NOTE: The Auger On/Off switch on both remote control boxes must be set to the ON position. (Page 4-26)**
7	High Gear Light	Illuminates when paver is in high gear.
8	Right Extension Switch	Extends or retracts right screed extension. (Switch also located on the remote control box. **(Page 4-26)** Push switch IN to retract right screed extension. Push switch to OUT to extend right screed extension.
9	High/Low 2-Speed Gear Switch	Used to change machine speed. Place switch in HIGH position for travel (High/Low Gear light will illuminate). Pave only in LOW speed. NEVER pave in high speed as serious injury can result. The High/Low Gear switch on both sides must be in the LOW position to function.
10	Sidewings Switch	Opens and closes hopper sidewings. Push switch to the OUT position to open hopper wings. Push switch to the IN position to close hopper wings.
11	Screed Lift/Float Switch	Raises or floats the screed. When released, switch automatically returns to the center to hold the screed in selected position. Flip switch to RAISE to raise the screed. Set the switch to FLOAT to float the screed (switch will lock in the FLOAT position). **NOTE: The screed will not raise if this switch is set to FLOAT on one side of the control panel and RAISE on the other.**
12	Left Cut-Off Gate	Opens and closes left cut-off gate. The cut-off can be operated from either side of the control panel.
13	Left Conveyor Switch	Selects automatic or manual mode for left conveyor. MANUAL position provides override. Conveyor can be operated from either side of the control panel in the MANUAL mode. The center position is OFF. For automatic operation, set switch to AUTOMATIC.
14	Right Cut-Off Gate	Opens and closes right cut-off gate. The cut-off can be operated from either side of the control panel.
15	Right Conveyor Switch	Selects automatic or manual mode for right conveyor. MANUAL position provides override. Conveyor can be operated from either side of the control panel in the MANUAL mode. The center position is OFF. For automatic operation, set switch to AUTOMATIC.
16	High Gear Light	Illuminates when paver is in high gear.

CENTER CONTROL PANEL

The center control panel contains general operating controls, i.e., emergency stop, horn, ignition, etc. The PV480 Digital Display controller features numerous controls for machine and paving operations. **(Page 4-5)**





Figure 3-4. Center Control Panel

ITEM NO.	CONTROL NAME	FUNCTION
1	E-Stop	Immediately stops the paver engine and all electronic functions. Turn clockwise to release E-Stop button.
2	Conveyor Raise/Lower	Controls raising and lowering conveyor.
3	Work Light Switch	Turns work lights on and off.
4	PV480 Digital Display	Displays paver setup and calibration information, engine operating information, and engine and paver system fault information. **(Page 4-5)**
5	Preheat Light	In cool weather, a preheat cycle will begin when ignition switch is turned to the RUN position. The preheat light will turn off when warm and engine start-up can resume.
6	Plus One Fault Light	Illuminates to alert operator a fault code is present in the Plus One system that needs attention. **(Page 5-31)**
7	Wait to Start Light	Illuminates for a few seconds during start-up. Starter will not engage until this light turns off.

ITEM NO.	CONTROL NAME	FUNCTION
8	Horn Button	Sounds horn.
9	Beacon Light Switch	Turns beacon light on and off. Always turn the beacon light on when paving to alert traffic and others of paving operations.
10	Spray Down Switch	Turns spray down system on and off.
11	Ignition Switch.	Turns machine on and off. Turn ignition switch left to warm the engine. The engine will not start unless the joysticks are in the neutral position as an additional safety feature.
12	Alternator Failure Light	Illuminates during start-up. Will illuminate when alternator senses no voltage supply, indicating alternator failure. (Refer to your Engine Operator's Manual or contact your authorized LeeBoy dealer for more information.)

STEERING AND SPEED CONTROL BOX



Figure 3-5. Steering and Speed Control Box

ITEM NO.	CONTROL NAME	FUNCTION
1	Left Steer Joystick	Joystick control speed and direction forward or reverse. The farther pushed in either direction, the faster the speed.
2	Right Steer Joystick	Joystick control speed and direction forward or reverse. The farther pushed in either direction, the faster the speed.
3	Run/Stop Switch	Controls stopping and activating/ deactivating operator control station. When set to STOP, control station is deactivated, parking brake applied, and machine will not move. When set to RUN, control station is activated, parking brake is released, and machine resumes previously set speed.
4	Neutral Lock	Locks the Forward/ Reverse joystick in neutral.

SCREED CONTROLS

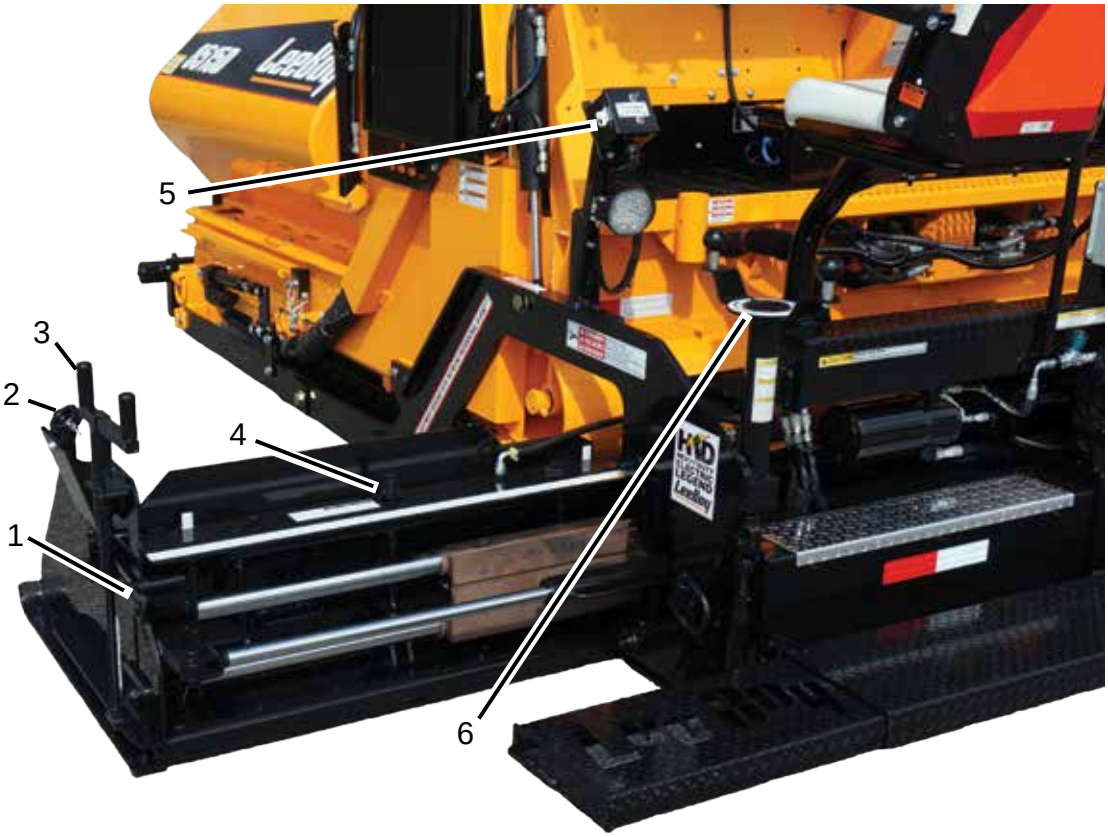


Figure 3-6. Screed Controls

ITEM NO.	CONTROL NAME	FUNCTION
1	Tilt Screw	Adjusts the tilt of the end gate.
2	Sonic Auger Sensor	The sonic auger senses the asphalt height and automatically adjusts the material flow to maintain an even pavement finish.
3	Endgate Depth Screw	Controls the depth of the endgate.
4	AOA Adjuster	Angle of Attack adjustment screw.
5	Remote Control Box	Remote controls for auger, screed extension and optional sloping extension.
6	Flight Screw	Controls the depth of the asphalt.

BURNER CONTROLS

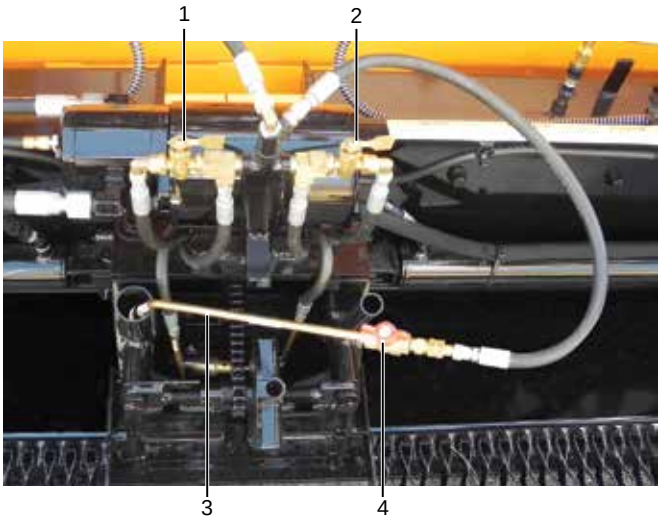


Figure 3-7. Main Screed Burner Controls

ITEM NO.	CONTROL NAME	FUNCTION
1	Left Burner Valve	Controls flow of propane to left screed burner.
2	Right Burner Valve	Controls flow of propane to right screed burner.
3	Burner Ignitor	Used to light burners.
4	Burner Ignitor Valve	Controls flow of propane to ignitor.

Propane Tank Controls



Figure 3-8. Propane Tank Controls

ITEM NO.	CONTROL NAME	FUNCTION
1	Propane Pressure Regulator Valve	Regulates propane line pressure.
2	Propane Pressure Regulator Gauge	Indicates propane line pressure.
3	Propane Tank Open/Close Valve	Opens and closes propane pressure.

ELECTRIC HEAT (OPTION)



Figure 3-9. Electric Heat Controls

ITEM NO.	CONTROL NAME	FUNCTION
1	Heat On Light	Illuminates and stays on as long as the element is heating the screed plates (approximately 20 minutes).
2	Start Heat Button	After turning on the power, press the Start Heat button. Once the heating function has been enabled, the distribution/control box will apply electrical power to the heating elements and the heating cycle will begin. The heating cycle is timed to optimize the heat generated at the screed plates. Press the button again to reheat the screed if needed.
3	Power Switch	Turns the electric heat system on and off.

STEERING WHEEL (OPTION)



Figure 3-10. Steering Wheel Option

ITEM NO.	CONTROL NAME	FUNCTION
1	Forward/Reverse Joystick	Controls forward and reverse movement and speed. The farther moved in either direction, the faster the speed. When joystick is centered, the machine is in neutral and the brake is engaged.
2	Steering Wheel	Controls the direction of travel right or left.
3	Neutral Lock	Locks the Forward/ Reverse joystick in neutral.
4	Run/Stop Switch	Controls stopping the machine and activating or deactivating the operator controls station.

Section 4
OPERATION

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GENERAL INFORMATION

The LeeBoy Model 8515D Conveyor Paver is equipped with steel hydrostatic-driven tracks that propel the paver using friction-controlled joysticks. Each track is powered by a single-speed motor directly coupled to torque hubs. Standard LeeBoy hydrostatic controls provide travel direction and steering capabilities from either side of the paver. An optional steering wheel is also available.

The two joysticks control the speed and direction of the paver in conjunction with the machine speed setting. The amount of steering is controlled by the amount of joystick movement and the speed of the paver. As the paver speed increases, steering will be reduced.

The two conveyors are the widest in the industry to deliver asphalt more evenly and efficiently to produce a smooth asphalt mat. Two propane burners on the main screed and a burner on each hydraulic screed extension provide seamless mats at paving widths up to 15 (4.6 m) feet. Electric screed heat is an additional option. Cut-off gates under the auger offers the operator precise control while paving and minimizes clean-up at the end of pulls.

Read this manual carefully before operating the machine. Only authorized personnel who are properly trained should operate the LeeBoy Model 8515D Conveyor Paver.

RECEIVING THE MACHINE

Although the machine has been checked thoroughly by the manufacturer, road hazards or other factors during transport may result in damage. Be sure to check the machine thoroughly before operating it:

1. Check engine oil. **(Page 5-12)**
2. Check hydraulic fluid level. **(Page 5-16)**
3. Check machine hoses for any damage or leaks.
4. Inspect machine for any damage during transport. Contact your authorized dealer immediately if any damage has occurred.

Hopper Lock Pins

This machine is provided with hopper lock pins (one on each side). **(Figure 4-1)** Extend the pins to prevent the hopper wing from inadvertently leaking down during transport. Retract the pin and lock down the thumb screw during operation.



Figure 4-1. Hopper Lock Pin

Initial and Daily Inspection

The following inspection is essential and should be performed before the initial start-up. Visually inspect the unit to check its general condition and for familiarization. Continue with a check of the systems and components shown in **Table 4-1** below:

⚠CAUTION **Only trained personnel should operate the LeeBoy 8515D Conveyor Paver.**

Table 4-1. Initial Inspection

INSPECT	PROCEDURE
Engine Oil Level	Maintain oil level between ADD and FULL marks on dipstick.
Fuel Tank	Check for adequate fuel supply. Fill if needed. Always fill tank at end of the day to prevent condensation in the tank.
Hydraulic Tank	Check the tank for oil level and leaks.
Radiator	Check coolant level.
Battery	Ensure all cables are tight and clean. Check for corrosion on the battery terminals.
Air Cleaner	Check the air filter element and hose connections. Air cleaner has both a primary and secondary filter.
Drain Plugs	Make sure plugs are inserted and tight.
Engine Belt	Check for proper belt tension.
Grease Fittings	Ensure fittings are greased and in good working order.

START-UP PROCEDURE

⚠ DANGER DO NOT leave the operator station unattended while the paver is in gear or in motion. Operator must return joysticks to the neutral position and turn the RUN/STOP switch to the STOP position before leaving the operator platform.

⚠ CAUTION Verify there are no people, obstacles or other equipment in the machine's path before starting the engine.

1. Clear auger and conveyors before starting engine.
2. Position joysticks to NEUTRAL (center).
3. Insert key into the ignition and turn clockwise to the START position. The "Wait to Start" light on the control panel will illuminate.
4. Wait for the "Wait to Start" light to turn off, then turn key to the RUN position to start.

NOTICE DO NOT hold the starter longer than 10 - 15 seconds. If the engine does not start, allow the starter to cool two or three minutes.

NOTICE Using starting additives, such as ether, is not recommended as severe engine damage can occur.

5. Allow engine to warm up a few minutes before moving paver for more efficient operation. In cold weather let hydraulic oil warm to 60° (16°C) before moving.
6. Set engine RPM using the throttle up and down buttons on the Engine Screen on the digital display screen.

Stopping the Engine

1. Move joysticks to the NEUTRAL position.
2. Reduce engine to 1300 RPMs
3. Turn ignition key on instrument panel counterclockwise to the OFF position and remove key.

NOTE: If for any reason the engine does not shut down when key is turned off, push in the E-Stop button.

DPF REGENERATION (REGEN)

When starting the engine, a sequence of screens will display on the PV480 digital display unit on the operator console. **(Page 4-5)** First you will see "booting" notated in the upper left corner, followed by a logo display, then the gauge screen is displayed. The lit status icons at the top of the screen will disappear momentarily.

This digital unit displays operational information, diagnostics and other controls for the machine. It is particularly important that the operator understand DPF regeneration.

DPF regeneration is the term given to the cleaning process where the exhaust temperature is raised in an attempt to safely burn off any soot and undesired combustion gas captured in the Diesel Particulate Filter (DPF) in the exhaust system. When the DPF filter reaches a soot saturation level between 25 - 45 percent, the onboard engine ECU (Engine Control Unit) will activate a regeneration cycle.

NOTICE To reduce the amount of particulate matter and maximize efficiency, use API-CJ4 (or ACEA-E9 European equivalent) engine oil. Running the engine at 1800 - 2000 RPMs will also provide more efficient operation and allow automatic regneration while paving.

During normal operation, the DPF is cleaned automatically. Under certain conditions, the operator may have to instruct the control system to perform the cleaning process.

The DPF icon indicates the level of soot build-up on a scale of Level 0 - 5 and changes color. Regeneration will occur automatically at Level 1 - 2.

It is important to perform a parked, manual regeneration BEFORE the engine reaches as high as Level 4. If the DPF reaches Level 4 - 5, non-warranty factory assistance from the engine manufacturer is required.

The engine speed will increase during regeneration and there may be a noticeable sound difference. Once regeneration is complete, the engine will return to normal idle speed.

Once the DPF cycle has been activated, it is important not to shut off the engine as the regeneration cycle will fail and could possibly damage the engine. If the regeneration cycle fails, the ECU may attempt a second regeneration depending upon how blocked the filter has become. If the system does not allow a second regeneration, this means the filter is blocked more than 80 percent and needs to be cleaned or replaced.

PV480 POWERVIEW DISPLAY

Gauge Screen

The gauge screen displays five (5) dial gauges and three (3) digital gauge options. **(Figure 4-2)**



Figure 4-2. Gauge Screen

The gauge screen displays five (5) dial gauges and three (3) digital gauge options:

1 - Engine Speed/RPM

2 - Engine Coolant Temperature

3 - After Treatment DPF Outlet Gas Temperature

4 - Electrical Potential Voltage

5 - Actual Engine Torque Percentage

6 - Oil Pressure - Lamp Only

7 - Fuel Level

8 - Engine Total Hours of Operation

Set Points and Throttle Speed

Used to select preset engine throttle speeds.

Use the first button to select set points while not in the menu. Select desired default throttle speed using buttons. The default speeds are: 1300 RPM, 1500 RPM, 1800 RPM, 2000 RPM and 2200 RPM, as shown in **Figure 4-3.**



Figure 4-3. Engine Throttle Speeds Screen

Use the second button to switch between DPF commands and Speed/Throttle to change functions of buttons 4 and 5 (manually adjusts engine throttle).

NOTE: LeeBoy sets the generator for optimum performance at the 2200 RPMs. It is recommended that you use the 2200 RPM preset. The generator will perform at other lower RPM levels, but not at peak levels.

DPF Commands

With “DPF commands” use button 5 to inhibit a Parked Regen Request.

⚠WARNING Parked Regen should be carried out as soon as possible after a Parked Regen Request has been given. Failure to do so may result in damage to the engine.

Soft Keys (Buttons)

Your Soft Key choices are associated with the throttle source. (Some throttle sources may not be present on your model.)

Table 4-2. Soft Key Choices

Status Icon	Description
	Set Points — Displays the engine-requested RPM/speed quick set points
	DPF Commands — Displays the Diesel Particulate Filter (DPF) command to access the Un-inhibit Regen and Inhibit Regen
	Request Regen — Sends message to Engine Control Unit (ECU) to start regenerating the DPF when prompted by engine ECU
	Stop Regen — Sends message to ECU to stop regenerating the DPF (should not be used unless necessary)
	Freeze Frame — Requests the freeze frame data from the ECU when faults are present
	Main Menu — Two full pages that list 5 action items to choose from: Gauges, Diagnostics, System Info, Lamp Info, User settings
	Down — Navigates the curser (>) downward through a list
	Up — Navigates the curser (>) upward through a list
	Select — Enters the action item next to the cursor in a list. Also used with the Main Menu soft key to get back to the Main Menu from any screen
	Deselect — Closes pop up messages
	Plus — Increase the engine requested speed
	Minus — Decrease the engine requested speed
	Speed/Throttle — Opens the speed/throttle adjustment command and enables the Plus and Minus soft keys (+/-)

Status Icons

The Status Icons are color-coded and light up when communicating to the operator. Pay close attention to any Status Icon and its color.

Table 4-3. Status Icons

Status Icon	Description
	Check Engine — When this lamp is illuminated, a fault exists within the control system. The engine may continue to operate, however, it is unable to perform DPF cleaning either automatically or manually. ⚠WARNING **Take action immediately to correct the fault.**
	Parking Break Switch — The park icon displays when the parking brake is applied. **NOTE: To perform a Parked REGEN, the "P" and "N" lamps must be illuminated.**
	Transmission Neutral — The neutral icon displays when the transmission is in neutral. **NOTE: To perform a Parked REGEN, the "P" and "N" lamps must be illuminated.**
	Engine Exhaust High Temperature Lamp — This lamp illuminates during the REGEN cycle to warn of high exhaust temperatures. This lamp will turn off when normal operating temperatures are reached after the REGEN cycle. ⚠WARNING **Be sure engine exhaust is away from any potentially combustible materials when this is illuminated.**
	Diesel Particulate Filter Lamp — A Solid Lamp is the initial warning that soot levels are rising in the DPF. A Flashing Lamp indicates a DPF REGEN is needed (on some systems, the lamp will become RED when flashing). The lamp will turn solid again when a REGEN is initiated. Any time the lamp begins flashing, the operator should increase the loading on the engine so that regeneration is possible. ⚠WARNING **If increased load does not cause an automatic REGEN to occur, the operator should immediately perform a Parked, Manual REGEN (see reverse side for instructions).**
	DPF Regeneration set to Inhibit — The user may choose to inhibit the REGEN if conditions are too hazardous for high exhaust temperatures. When this lamp is illuminated, a REGEN cannot be performed and soot levels will continue to rise. ⚠WARNING **Unless hazardous conditions exist, the REGEN Inhibit switch and this lamp should remain off.**

Glossary of Terms and Acronyms

CAN - Controller Area Network

DM1 - Diagnostic Message 1, Active Diagnostic Trouble Codes

DM2 - Diagnostic Message 2, Previously Active Diagnostic Trouble Codes

DM3 - Diagnostic Message 3, Diagnostic Data Clear/ Reset for Previously Active DTCs

DM4 - Freeze Frame Parameters

DPF - Diesel Particulate Filter

DTC - Diagnostic Trouble Code

ECU - Engine Control Unit

FMI - Failure Mode Identifier

PGN - Parameter Group Number

SPN - Suspect Parameter Number

Main Menu

Press the Main Menu ( ) soft key to view the menu action items. **(Figure 4-4)** Scroll through the Main Menu list using the UP/DOWN soft keys to maneuver the cursor (>) to the action item.

- Gauges (Main Menu default screen)
- Diagnostics
- System Info
- Lamp Info
- User Settings



Figure 4-4. Main Menu Screen

Gauges

The Gauge Screen **(Figure 4-5)** is the Main Menu default screen (home). Open it from any screen by pressing the Main Menu ( ) soft key and then the Select ( ) soft key.



Figure 4-5. Gauge Screen

Diagnostics

Scroll through the Main Menu list using the UP/DOWN soft keys and stop the cursor (>) next to the action item Diagnostics. Press the Select ( ) soft key. The screen **(Figure 4-6)** displays the following items:

- Active Diagnostics
- Logged Diagnostics



Figure 4-6. Diagnostics Screen

Active Diagnostics

Use the UP/DOWN soft keys and stop the cursor (>) next to the action item Active Diagnostics. **(Figure 4-7)** Press the select ( ) soft key .The screen displays active warnings or faults from the ECU. Each diagnostic is shown with the appropriate Suspect Parameter Number (SPN) and Failure Mode Indicator (FMI), Text Description (if available), and the ID/Name of the device that transmitted the DM1 message. Press the UP/DOWN soft keys to reach the next diagnostic in the list.



Figure 4-7. Active Diagnostics Screen

4

Logged Diagnostics

Use the UP/DOWN soft keys and stop the cursor (>) next to the action item Logged Diagnostics. **(Figure 4-8)** Press the select ( ) soft key. The screen displays the controller requests DM2 (stored trouble codes, not active), warning or faults from the ECU. Each diagnostic is shown with the appropriate information:

- Suspect Parameter Number (SPN)
- Failure Mode Indicator (FMI)
- Text Description (if available)
- ID/Name of the device that transmitted the DM1 message



Figure 4-8. Logged Diagnostics Screen

NOTE: Select the Freeze Frame Button to request the freeze frame data from the ECU when faults are present.

System Info

Scroll through the Menu list using the UP/DOWN soft keys and stop the cursor (>) next to the action item System Info. Press the select ( ) soft key. **(Figure 4-9)** The screen displays the following items:

- Engine Model
- Engine Serial Number
- ECU Software ID
- Fuel Rate
- Time since last active regen



Figure 4-9. System Info Screen

Press the UP/DOWN soft keys to display a screen with application and configuration information. **(Figure 4-10)**



Figure 4-10. Application and Configuration Information Screen

Lamp Info

Scroll through the Menu list using the UP/DOWN soft keys and stop the cursor (>) next to the action item Lamp Info. Press the select ( ) soft key

This screen shows the Diesel Particulate Filter (DPF) Lamp symbols and provides a description and cautionary information for each symbol. Use the UP/DOWN soft keys to scroll to each symbol. **(Figures 4-11 to 4-14)**



Figure 4-11. High Exhaust Temperature Due to DPF Regeneration Symbol Screen



Figure 4-12. Needs Regenerating Screen



Figure 4-13. Machine Inhibiting DPF Regeneration Screen



Figure 4-14. Parked Regeneration Overview Screen

User Settings

Scroll through the Menu list using the UP/DOWN soft keys and stop the cursor (>) next to the action item User Settings. Press the select ( ) soft key. The screen displays the following action items:

- Colors
- Brightness
- Language
- Units
- Date
- Time

Screen Color

Use the UP/DOWN soft keys and stop the cursor (>) next to the action item Colors. **(Figure 4-15 and 4-16)** Set your preference for day or night vision by using the +/- soft keys.



Figure 4-15. Set Night Vision Color Preferences Screen



Figure 4-16. Set Day Vision Color Preferences Screen

Screen Brightness

Use the UP/DOWN soft keys and stop the cursor (>) next to the action item Brightness. **(Figure 4-17)** Set the brightness of the backlight by using the +/- soft keys.



Figure 4-17. Set Brightness Of Backlight Screen

Language

Use the UP/DOWN soft keys and stop the cursor (..) next to the action item Language. **(Figure 4-18)** Set your language preference using the +/- soft keys.

- English
- French
- German
- Spanish
- Italian
- Japanese



Figure 4-18. Set Language Preferences Screen

Units

Use the UP/DOWN soft keys and stop the cursor (>) next to the action item Units. **(Figure 4-19)** Set your unit preference using the +/- soft keys.

- USA Standard
- Metric kPa
- Metric Bar



Figure 4-19. Set Unit Preferences Screen

Date and Time Setting

Use the UP/DOWN soft keys and stop the cursor (>) next to the action item Date or Time. **(Figure 4-20)** Press the select ( ) soft key to initiate change to the month value. Use the (+/-) soft keys to increment or decrement the number. Use the DOWN arrow to reach the day value and year value and the +/- soft keys to make changes.

NOTE: A reboot is required for changes to the Date Setting to take effect.



Figure 4-20. Time Setting Screen

Regeneration Messages

Parked Ready Regen

Machine is in an operating condition such that the DPF can regenerate. (A complete listing of Fault Codes is shown at the end of **Section 5**.)

Table 4-4. Parked Ready Regen

Action	Description
Cancel Regen	Communicates with the engine that Regen is not wanted or is unsafe to regenerate at this time.
Regen Mode Inhibit	Communicates with the engine that Regen is not wanted or is unsafe to regenerate at this time.
Request Regen	Communicates with the engine that Regen is safe to regenerate at this time.

Regen Screens and Messages

The operator may experience a Regen Caution message on the controller screen **(Figures 4-21)**. The message requires an active response by the operator, so it is important that the operator reads the entire message as it may display instructions.



Figure 4-21. Regen Caution Message Popup Screen Example

Some messages require using the UP/DOWN soft keys to maneuver through the entire message **(Figures 4-22 and 4-23)** .



Figure 4-22. Regen Caution Message Popup Screen Example Requiring Use of UP/DOWN Soft Keys



Figure 4-23. Parked Regeneration Instructions Screen

If the operator does not wish to complete a Parked Regeneration, click the X soft key. This action cancels Regen, removes the pop-up message, and takes the operator back to the Gauge Screen.

NOTE: The machine must be in park and neutral with a DPF level of 2 or higher to preform Parked Regeneration.

⚠CAUTION EXHAUST TEMPERATURES WILL BE EXTREMELY HIGH. BE SURE EXHAUST WILL NOT COME IN CONTACT WITH ANY COMBUSTIBLE MATERIALS.

If you want to perform regen:

- Ensure the machine is in neutral and parking brake applied. The coolant temperature must be in operating range (typically 155° -1 60 F°). Set the engine to low idle.
- Once these conditions are met, a blue screen message will appear. **(Figures 4-24 and 4-25)**.
- Using the Up/Down Arrow, scroll down through the entire message and press the Request Regen Button.



Figure 4-24. Parked Regeneration Blue Screen

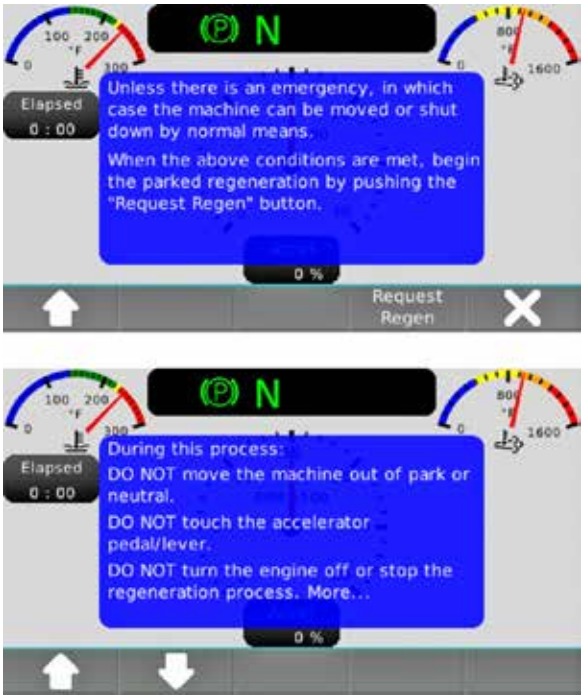


Figure 4-25. Parked Regeneration Message Screens

⚠CAUTION DO NOT ATTEMPT TO OPERATE THE UNIT, CHANGE ENGINE RPM OR MOVE FROM PARK/NEUTRAL WHILE REGEN IS OCCURRING. This will abort the Regeneration process and require you to start the process over.

During the regeneration, the Engine Speed will increase and there may be a noticeable sound difference. The HEST Lamp will appear during the process.



Figure 4-26. Stop Regen Screen

⚠CAUTION Continue to monitor surrounding areas during the process. If unsafe conditions develop, shut the unit off immediately.

4. Parked Regeneration is complete when the controller screen shows the following green popup message. **(Figures 4-26 and 4-27)** Click on the ✕ soft key to remove the popup message. Once the Parked Regeneration process is complete the engine will automatically return to normal idle speed. The machine can return to normal usage.



Figure 4-27. Parked Regeneration Green Popup Message Screen

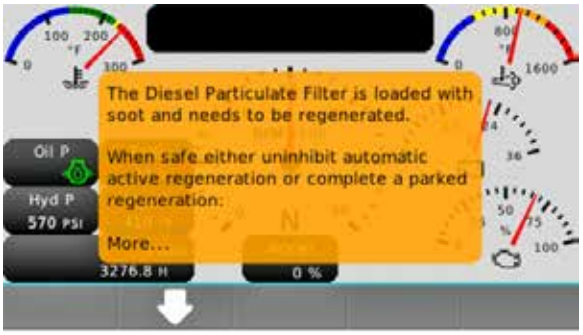
Messages, Cautions, Warnings

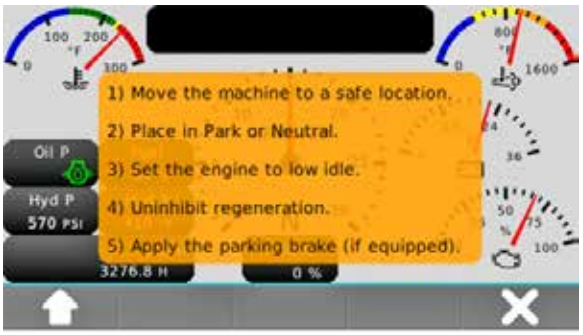
Please pay attention to all messages (shown below) on the controller for the safety of personnel and to prevent engine and property damage if DPF regeneration is needed.

Regen Level 1

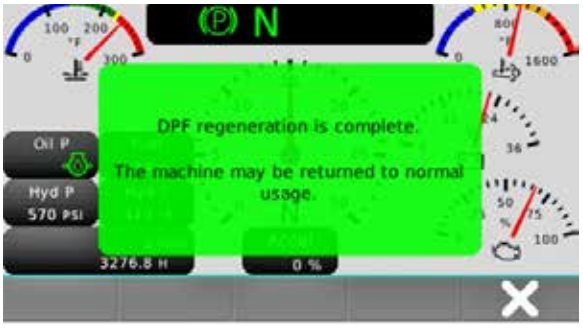


Regen Level 2



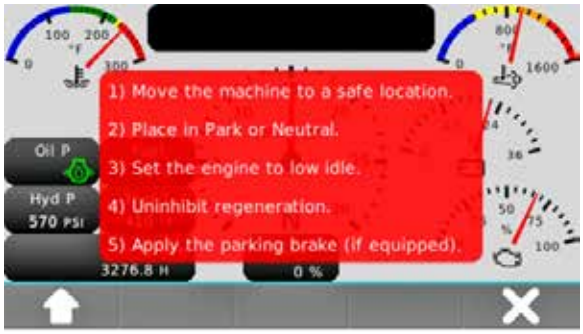


Regen Complete



Regen Level 3





Regen Level 4



Regen Level 5

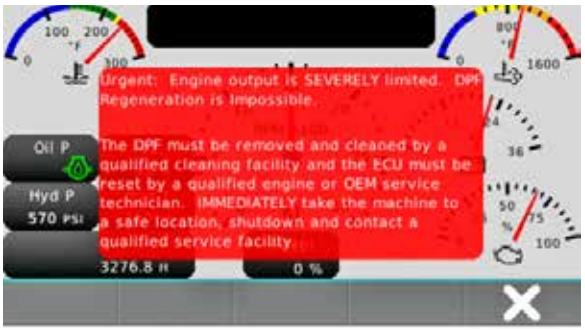


Figure 4-28. Controller Messages, Cautions and Warnings

DRIVING THE PAVER

The operator can operate the paver from either side of the operator platform. Multiple switches and dials allow the operators to control all paving functions. **(Pages 3-6 to 3-11)**

NOTE: The Emergency Stop button on the main operator console is used to shut down the engine and all paver functions in the event of an emergency.

DANGER DO NOT leave the operator station unattended while the paver is in gear or in motion. Operator must return joysticks to the neutral position and turn the RUN/STOP switch to the STOP position before leaving the operator platform.

Operator Control Station

The paver can be operated from either side for your convenience. A steering and speed control box with dual joysticks are located on each side of the platform. An optional steering wheel is also available.

NOTE: If equipped with the optional steering wheel control box: If the joystick steering function is not being used, the Run/Stop switch must be in the OFF position. (Figure 4-30)

The operator control panel contains paver function switches with main controls in the center. **(Figure 4-29)**



Figure 4-29. Operator Station

- Place both joysticks in the neutral position on the side being deactivated. **(Figure 4-30)**
- Move the RUN/STOP switch to the STOP position.
- Follow the start-up procedure. **(Page 4-4)**

WARNING Ensure there are no people, obstacles or other equipment in the path of the paver before moving in either direction.

Steering and Speed Control

Use the dual joysticks for steering and speed control. It is important to move the joysticks SLOWLY. The RUN/STOP switch applies parking brake when set to the STOP position. **(Figure 4-30)**

DANGER Rapid counter-rotation in either direction can result in the operator being thrown from the machine and suffer personal injury or death. Counter-rotation occurs if one joystick is in the extreme forward position and the other is in the extreme rear position while the machine is in gear and moving. Make only slow adjustments to joysticks or steering wheel to turn machine.



Figure 4-30. Steering and Speed Control Box

1 - Dual Joysticks

2 - RUN/STOP Switch

NOTE: To slow the paver, move joysticks closer to the neutral position.

NOTE: To stop the paver, pull joysticks back to the neutral position.

- To drive the paver forward, lift up on the joysticks and push forward to reach the desired speed.
- To move in reverse, lift up on the joysticks and move backwards to reach desired speed.
- Return joysticks to the neutral position to stop paver.
- To steer the unit to the left, SLOWLY push the right joystick farther forward than the left joystick. The farther the joystick is pushed, the more the paver turns. Slow and easy adjustments are required for safe operation.

- To steer the unit to the right, SLOWLY push the left joystick farther forward than the right joystick. The farther the joystick is pushed, the more the paver turns. Slow and easy adjustments are required for safe operation.

NOTE: If the joysticks are in the forward position and the Run/Stop switch is set to the STOP position, the system will time-out after 10 minutes. You must put joysticks back into neutral and toggle the Run/Stop switch from RUN to STOP and back to RUN again to regain control. (See Page 5-31 for more information about this safety feature.)

Stopping the Engine

1. Place joysticks to the neutral position.
2. Throttle back to idle using settings on the digital display screen.
3. Turn ignition key on the instrument panel counterclockwise to the OFF position and remove key.

NOTE: If the engine does not shut down when key is turned to OFF, press the E-Stop button on the control panel to terminate power.

NOTICE Before leaving the operator platform, the operator must return joysticks to the neutral position and switch the Run/Stop (on the Steering and Speed Control Box) to the STOP position.

PAVER OPERATION

Spray Down

Always spray down the LeeBoy Model 8515D Conveyor Paver before and after paving. Spray clean with solvent or release agent on any part of the paver that comes into contact with asphalt to prevent buildup that will damage the machine over time.

There is a spray down system on both sides of the Leeboy 8515D paver for your convenience. The wand is conveniently located on each side of the operator's station. **(Figure 4-31)** The hose reel is located inside the panel.

1. Turn the Spray Down switch on the control panel ON. **(Pages 3-6 to 3-7)**
2. Extend hose from the reel.
3. Squeeze the wand handle and spray area. Release the wand handle when finished.
4. Turns the Spray Down switch on the control panel OFF.

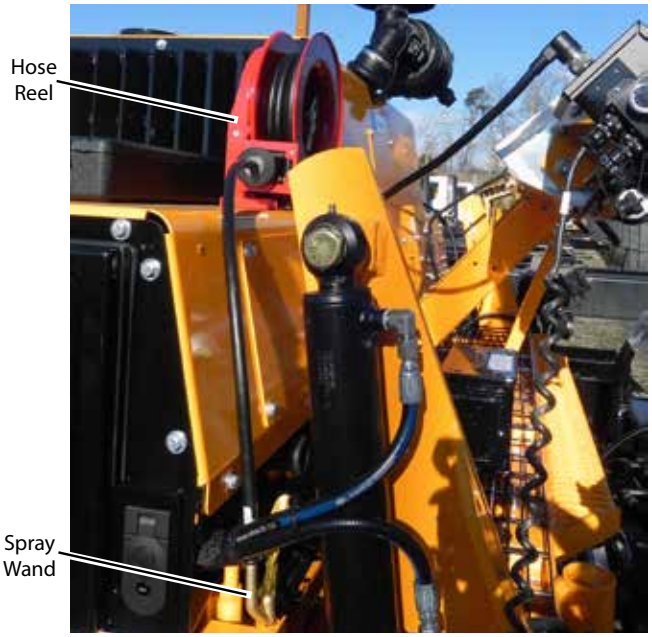


Figure 4-31. Spray Down Wand

⚠WARNING Never spray cleaning solvent or release agent near the screed heating element or near open flame. These agents are highly flammable and can ignite, causing serious personal injury.

NOTICE When using, consider the environment and DO NOT allow cleaning solvent to run onto the ground.

Heating the Screed

Heating the screed helps prevent hot mix from sticking to the cold screed plate and produces a smooth, tight mat surface. This should be performed before paving and if the paver is idle long enough for the screed to cool between loads.

Allow the screed (and screed extension) to heat 15 minutes before beginning to pave.

NOTE: Lower the screed two inches off the ground while heating to prevent cold air and wind from affecting the heating process.

NOTE: You can set the screed directly onto a fresh mat of hot asphalt while running the heating system, allowing the heat of the asphalt to help heat the screed plate.

NOTICE Overheating the screed can warp the screed plate and possibly cause damage. If screed extensions lock, allow the machine to cool before attempting to extend or retract. Replace a warped screed plate immediately.

The standard LeeBoy Model 8515D Conveyor Paver is equipped with two propane burners on the main screed and one burner on each screed extension. An electric heat option is also available. **(Page 4-21)** An optional 815HD (Heavy Duty) screed features additonal heating elements and heating options **(Page 4-35).**

Propane Burner Ignition

IT IS IMPORTANT TO OPEN PROPANE VALVES IN THE ORDER SHOWN BELOW. (Figures 4-32 and 4-34)

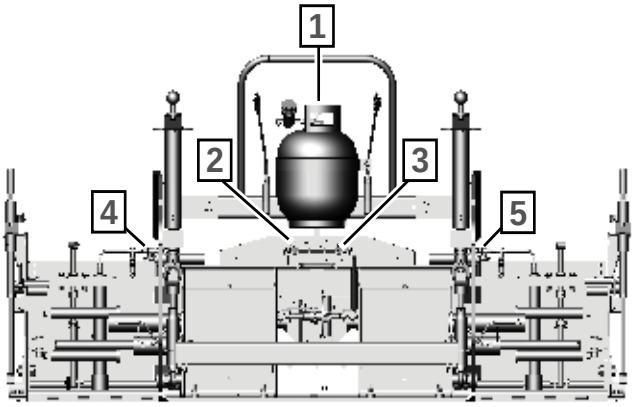


Figure 4-32. Propane Valve Order

⚠WARNING Never open a valve to a burner unless flame is present. A buildup of unburned gas could result in a gas explosion.

⚠WARNING Propane gas used to heat the screed is volatile and combustible. Use extreme care to prevent burns or other injury.

To light the burners:

1. Ensure ALL propane heat valves are closed by turning valves clockwise (propane tank, main burner valves, main ignitor valve, extension ignitor valves). **(Figures 4-32 and 4-34)**
2. Turn the propane tank Open/Close valve counterclockwise to open the propane gas flow. **(Figure 4-33)**



Figure 4-33. Propane Tank With Regulator

1 - Pressure Regulator Valve

2 - Pressure Regulator Gauge

3 - Open/Close Valve

3. Remove the main ignitor wand from its cradle and turn its valve counterclockwise to the OPEN position, then light the ignitor end using a torch striker. **(Figure 4-34)**

⚠DANGER NEVER use a match or other source of flame to light the ignitor for the burner.

4. Holding the lit ignitor wand in one hand beside the burner you are going to light, turn on the main burner valve and light the that burner just below the valve, then repeat with the other side. **(Figure 4-34)**

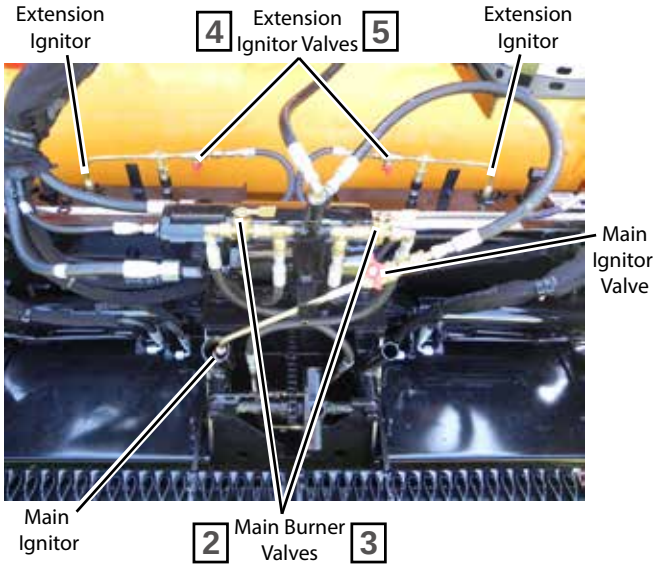


Figure 4-34. Screed Burner Valves

When using the screed extension(s), light the screed extension(s) after the main screed burner has been lit following these additional steps **(Figure 4-35)**:

5. Lift up on the burner coupler to release ignitor.
6. Lift ignitor wand, turn valve counterclockwise to the OPEN position and light the ignitor end with the torch striker.
7. Replace the lit ignitor wand into the burner cradle.
8. Push down on burner coupler back into place.

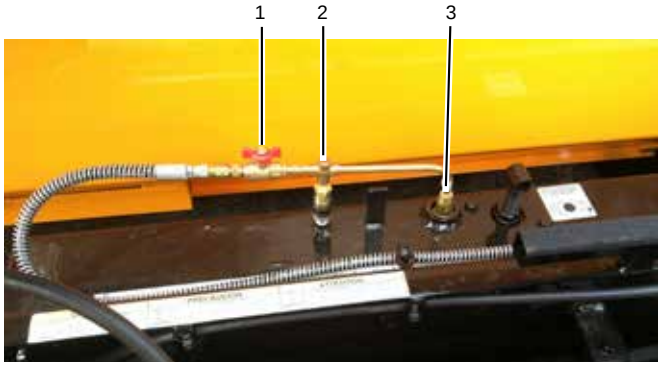


Figure 4-35. Extension Burner

1 - Extension Ignitor Wand Valve

2 - Burner Coupler

3 - Burner

NOTE: Adjust the pressure regulator valve IN or OUT until the propane pressure regulator gauge reads 15 pounds.

NOTE: It may be necessary to maintain low heat on the screed if paving on a cool, windy day. Reduce pressure on the propane pressure regulator gauge to two pounds (.14 bar) in these conditions. DO NOT attempt to regulate the burner with the burner valve.

After the main screed (and screed extension) has heated for 15 minutes:

1. Turn the propane tank valve clockwise to the CLOSE position to allow the propane system to burn off all the gas. **(Figure 4-33)**
2. When the flames extinguish, TURN OFF ALL burner valves clockwise to the OFF position. **(Figures 4-32 through 4-35)**

Electric Screed Heat (Option)

The LeeBoy 8515D Conveyor Paver offers an optional electric heat system to heat the screed, including the screed extensions, in lieu of the burner system. A hydraulically-driven generator powers the electric heat control box mounted in the center on the rear side of the machine. This control box is where you will select the heating function before you begin to pave. It is easily accessible to the screed operator when a heating cycle is needed. **(Figure 4-36)**.



Figure 4-36. Electric Heat Control Box

Once the heating function has been enabled, the distribution/control box will apply electrical power to the heating elements and the heating cycle will begin. The heating cycle is timed to optimize the heat generated at the screed plates.

NOTICE **Running the engine 2200 RPMs to heat the screed provides the best operating conditions. Running the engine at lower RPMs will not allow the screed to heat correctly and may damage the generator.**

To operate the electrtic screed heating system:

1. Start the paver and idle until the engine reaches normal operating temperature.
2. Set the throttle to normal operating speed (1800 to 2200 RPMs).
3. Raise the screed plate one or two inches off the ground.



Figure 4-37. Electric Heat Control Box

1 - Heat On Light

2 - Start Button

3 - Power Switch

4. Turn the electric heat control box power ON by flipping the power switch up. **(Figure 4-37)**
5. Press the Start Heat button.
6. The HEAT ON indicator light will illuminate and stay on as long as the element is heating the screed. (The factory-set heat cycle is 20 minutes, which should generate enough heat to begin the paving process. Operating in cold temperatures may affect the screed plate temperature slightly.)
7. If the heat cycle has completed but the screed plates still require heating, restart the cycle by repeating Step 4.

Hopper Wings

The hopper wings are hydraulically opened so the hopper can be filled with paving material. **(Figure 4-38)** Conveyor paddles in the bottom move the asphalt back to the auger, where the mix flows through the cut-off gates to the screed.

To operate the hopper wings:

1. Push the hopper wings switch to OUT on the operator control panel to fold out hopper wings. **(Pages 3-6 to 3-11)**
2. Be sure the hopper wings are completely extended before receiving paving material from the truck.
3. Push the hopper wings switch to IN to close the hopper wings.

⚠WARNING **DO NOT fold in the hopper wings when the hopper is full of asphalt. DO NOT fold in the hopper until the material truck has moved completely away from the paver. Never raise the conveyor bed with asphalt in the hopper.**

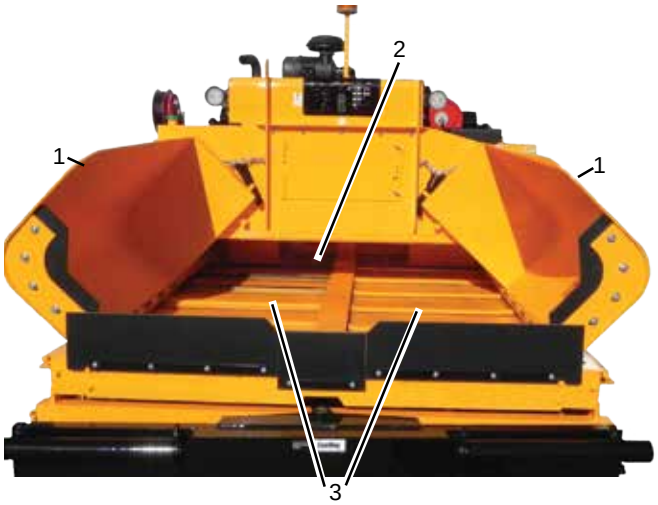


Figure 4-38. Hopper

1 - Hopper Wings

2 - Auger

3 - Conveyors

Conveyors

The LeeBoy Model 8515D Conveyor Paver is equipped with two automatic conveyors that deliver asphalt evenly to produce a smooth asphalt mat. **(Figure 4-39)**

The conveyor is a very important part of the paver that moves material from the hopper back to the auger and out of the cut-off gates to the screed. Pay close attention to integrating its operation into the total operation of the paver.

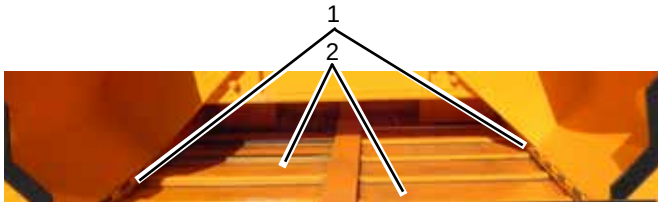


Figure 4-39. Conveyor Chains and Paddles

When operating the conveyor:

- Spray down the conveyor drive chains with cleaning solvent or release agent several times during the work day for optimum performance.
- Select AUTO or MANUAL mode for the left or right (or both) conveyor switch(es) on the control panel. **(Pages 3-6 to 3-11)**
- If the conveyors are running while the cut-off gates are closed, there will be spillage, which is normal. To help prevent this spillage, work conveyors manually when loading hopper and not paving.
- Irregular movement of the conveyor indicates that the conveyor chains need adjustment. **(See Section 5)**

NOTE: Check conveyor chain adjustment every 100 hours.

⚠CAUTION Never leave the paver unattended while the conveyor is operating. Do not leave paver running with conveyors set to AUTO for any length of time to prevent hydraulic oil overheating.

NOTICE Asphalt in the conveyors can fill tracks and cause damage to the machine.To prevent flight chains from sticking inside the conveyor pans, lubricate them daily for maximum operational efficiency.

Hydraulic Cut-Off Gates

The cut-off gates are another important function of the paver. The cut-off gates are used primarily to control the flow of asphalt to the screed and hydraulic screed extensions. Cut-offs can be used to limit material flow when making narrow passes at the beginning and ending of each pass or pull. Proper use of the cut-off gates minimizes clean-up at the end of pulls. **(Figure 4-40)**

- The right and left cut-off switches on the manifold open and close the cut-off gates.
- Holding the switch in the OPEN positions increases asphalt flow to the screed. Holding the switch in the CLOSED position decreases asphalt flow to the screed.

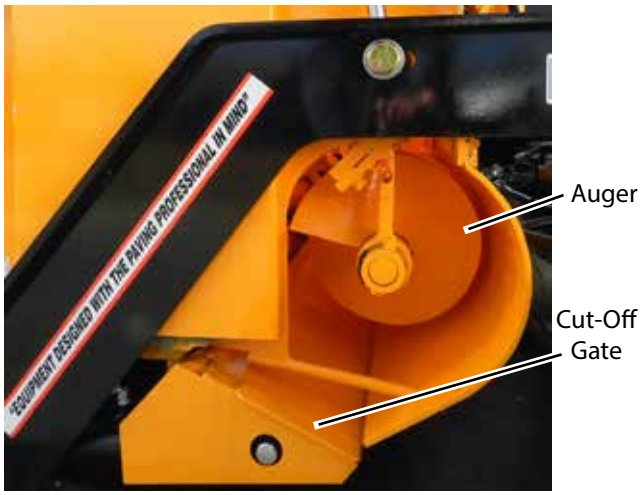


Figure 4-40. Cut-Off Gate

⚠CAUTION NEVER backup with the cut-off gates open. The cut-off gates are designed to break away from cylinders when hitting a manhole or other object when moving forward, but not in reverse.

Electric Flight Screw

The electric flight screw is an added convenience to the operator for making automatic, minor adjustments to mat thickness while paving. **(Figure 4-41)** A screed height gauge is located on both sides of the paver to provide the operator with a quick reference to the location of the electric screw.



Figure 4-41. Electric Flight Screw

1. Before paving, refer to the screed elevation gauge (located on both sides of the operator platform). **(Figure 4-41)**
2. Raise or lower the screed until the cable rod end is flush with “0”on the decal. **(Figure 4-42)**
3. Set the Grade/Slope switch to SLOPE on both sides of the control panel.
4. Place both joysticks forward slowly.
5. Use the Thicker/Thinner switch on both sides of the control panel to adjust mat thickness as you pave.
6. While paving, refer to both screed elevation gauges to make minor screed adjustments using the electric flight screw.

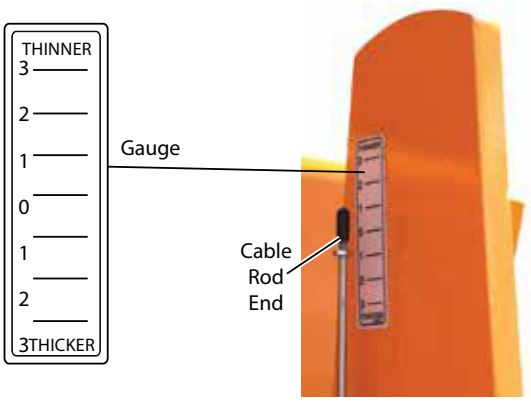


Figure 4-42. Gauge and Cable Rod End

Set the Screed Extension, Flight Screw and Endgate

Use the screed extensions when paving widths exceeding eight (8) feet. The screed extensions should be heated before making any adjustments. Use the wrench provided to make adjustments. When adjusted correctly, pressure on the rear edge of the extended screed is the same as the rear edge of the main screed, resulting in a smooth mat the length of the screed.

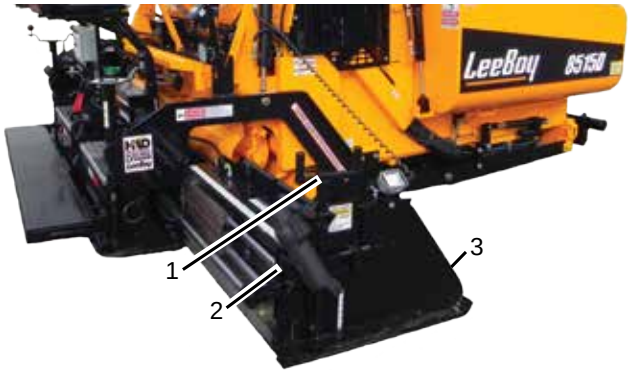


Figure 4-43. Screed, Flight Screw and Endgate

1 - Endgate Depth Screw

2 - Endgate Tilt Screw

3 - Endgate

You can extend or retract the screed extension using the extension switch on the control panel. **(Pages 3-6 to 3-11)** A remote control box is also provided on both sides of the paver with switches to extend or retract the screed, along with turning the auger on and off while paving. **(Figure 4-44)** If equipped with the optional sloping extensions, an additional switch for this feature is also located on the remote control box.



Figure 4-44. Remote Control Box

Adjust the screed extension while paving using the following procedures:

1. Move paver to the starting position for paving.
2. Extend the screed to the desired width.
3. To set the depth, you can place small starter blocks under the main screed while you make adjustments. **(Figure 4-45)**

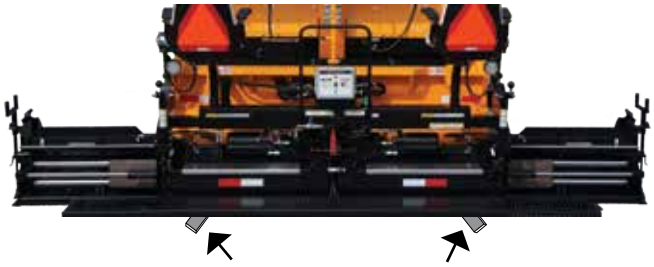


Figure 4-45. Starter Blocks Location

4. Level the screed using the electric flight screw gauge **(Figures 4-41 and 4-42).**
   - Refer to the elevation gauge (one on each side of the paver for your convenience). Raise or lower until the rod end of the cable is flush with "0" on the gauge.
   - While paving, refer to both gauges and make minor adjustments if needed.
5. On the first pass, turn the endgate depth screw to lower the endgate until it is about 1/4-inch (6.35 mm) below the screed. **(Figure 4-43)**
6. Turn the tilt screw so the front of the endgate tilts down slightly when the screed is lifted. This will allow the endgate to set itself to the grade. **(Figure 4-46)**

NOTE: Never allow the endgate to carry the weight of the screed to prevent uneven compaction.

7. If the endgate digs into the asphalt at the front, adjust the tilt screw until the endgate tilts back more.
8. When making a hot joint, the endgate must be set to where it fits flush with bottom of screed.
9. On the first pass, leave approximately six to eight inches (15 - 20 cm) of unrolled asphalt where the joint will be made.
10. When making a joint, the endgate must be set to where it fits flush with bottom of screed.



Figure 4-46. Endgate Tilt Screw Adjustment

NOTE: Keep runners clean. When making a joint, spray solvent on the runners.

11. If the joint looks too high or too low, adjust the flight screw on the screed one turn at a time and allow four to five feet (1.2 - 1.4 m) of travel to correct itself.

NOTE: Too much adjustment up or down may cause uneven pavement.

12. If making a cold joint, set the endgate down about 1/4 inch (6.35 mm) for a nice, even edge.

Sonic Auger Sensor

The sonic auger controls the amount of material flowing to the endgates, gauging the amount of paving material in the extensions. An operator can operate the sonic auger from either side of the paver. The sonic auger sensors are not used in the manual mode. **(Figure 4-47)**

A sonic auger sensor connects from the paver to the screed. It detects the material height and controls the auger height by automatically turning the auger on and off.

The sonic auger sensors are most often used when paving widths of nine to 15 feet (2.7 - 4.6 meters).

NOTE: The augers are not needed when paving under eight-feet wide (2.4 m).



Figure 4-47. Sonic Auger Sensor Option

To operate the sonic auger sensor

1. Set the left and right auger switches on the left side of the control panel to AUTO. **(Pages 3-6 to 3-9)**
2. Set the left and right auger switches on the right side of the control panel to the SLAVE position.
3. Set the left and right auger On/Off switch on the remote control box to ON. **(Figure 4-44)**
4. Adjust material height at the endgate using the auger dial beside the steering control box. **(Figure 4-48)**
   - The right and left auger dials controls material height. Turning the dial clockwise increases material height while turning counterclockwise decreases material height.
   - When the material height moves into the sonic range, the auger speed will slow down proportionately and turn off. It will turn back on when the material level drops.

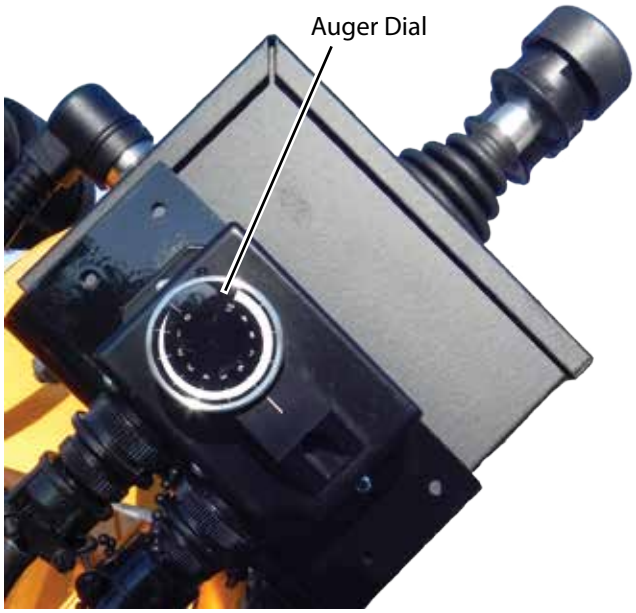


Figure 4-48. Auger Dials

STARTING TO PAVE

The LeeBoy 8515D Conveyor Paver provides superior paving for driveways, small to large parking lots, and secondary roads. The paver is equipped with electric and manual thickness controls, and can be operated from either side of the operator platform. It has a production rate of approximately 250 tons per hour.



Figure 4-49. Paving

This paver is capable of placing a mat thickness of six inches (20 centimeters) for:

- Bituminous base.
- Binder or surface course.
- Lime or Portland cement-stabilized sub-base.
- Graded aggregate materials.

Operators should be trained to operate the various machine components along with proper paving techniques before operating the machine.

Before starting to pave, keep these items in mind:

- Plan the project so you pave the most narrow passes first (the width of the paver), leaving the widest passes until last.
- Always pave in low range.
- It is the operator's job to guide the material truck back to the hopper and signal the driver when to stop dumping the asphalt into the hopper. The driver must maintain a light pressure on the brakes to prevent the truck from dumping asphalt onto the ground.

NOTE: If paver is equipped with the optional truck hitch, the truck driver will not be required to maintain brake pressure. (Page 4-33)

- Use a reference guide such as a curb, gutter, adjacent mat or string line.
- It is very important that the first pass be straight as it will serve as your guideline for the following passes.
- Extend the lower guide bar gauge to further assist you in paving a straight line from the operator's station. **(Page 4-50)**



Figure 4-50. Lower Guide Bar Gauge

⚠CAUTION Avoid low limbs, power lines, and other objects that can endanger crew or paver.

Basic Paving

1. Position paver at the starting point for the mat. (Operate the paver from one side only.)
2. Open cut-off gates under auger. **(Page 4-23)**
3. Adjust screed as needed. **(Page 4-24)**
4. Open hopper wings to accept asphalt from the material truck. **(Page 4-22)**

NOTE: Allow only a partial load of asphalt to enter the hopper when first starting to pave.

6. Turn the left and right conveyor switches to the AUTO position.
7. When the material begins to discharge from under the screed, set the screed lift switch to the FLOAT position. **(Pages 3-6 to 3-11)**
8. If paving a width more than eight feet, turn the left and right auger switches to AUTO to control the material height at the endgate. (Augers aren't needed when paving a basic eight-foot pull.) **(Pages 3-6 to 3-11)**

9. When the material starts moving into the sonic range, the sonic auger will automatically regulate the auger operation.

NOTE: The material height must be set to the highest point when the endgates are closed. When the endgates are open, the material height will lower to prevent material from pushing in front of the endgates.

10. Begin paving, moving slowly at first to adjust the screed if needed.
11. Make a paving pass until the asphalt level in the hopper is low.

⚠CAUTION Never back up with cut-off gates open.

NOTE: To prevent excessive handwork, set the left and right conveyor conveyor switches to the OFF position and set both cut-off switches to the CLOSE position about three feet from the end of the pull to prevent excessive handwork.

12. Return paver back to starting position to begin the next pull.
13. Position and set the screed endgate on the joint side back to “0” feet, or flush with bottom of the screed.
14. Repeat these steps as you continue to pave.

Setting the Crown

The screed can also be set to control the pavement slope, or crown. A pavement crown is the elevation of the middle in relation to the edges, and insures proper drainage of the pavement.

To adjust the crown:

1. Loosen the lock-down bolts in slotted bars before adjusting crown and valley mechanism. **(Figure 4-51)**



Figure 4-51. Loosen Lock-Down Bolts

2. Remove the crown handle and insert into adjuster. **(Figure 4-52)**
3. For increased positive crown push down on adjuster.
4. For increased negative crown pull up on adjuster.
5. Use the gauge at the center of the screed above the standing platform. If the needle is above the zero, you will have positive crown. If the needle is below the zero, you will have negative crown.
6. To get exact crown or valley, measure the distance between a flat level surface to the center bottom portion of screed. Make adjustments with crown and valley control.

NOTE: Maximum crown is two inches.

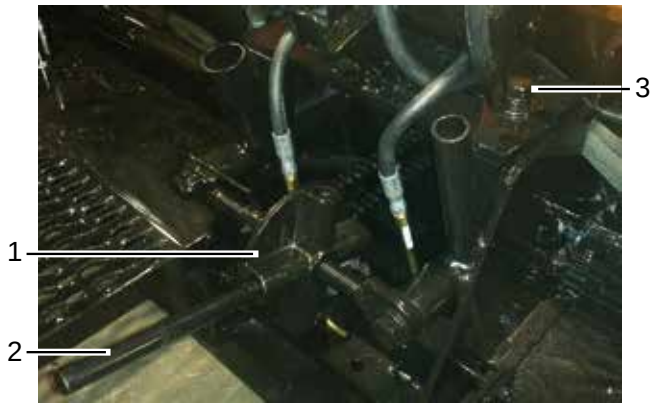


Figure 4-52. Crown Adjustment

1 - Adjuster

2 - Crown Handle

- Positive crown is when the middle of the mat is raised to permit water to drain to each side.
- Negative crown is the lower in the center of the screed plate, often used in an alley where drainage is necessary.

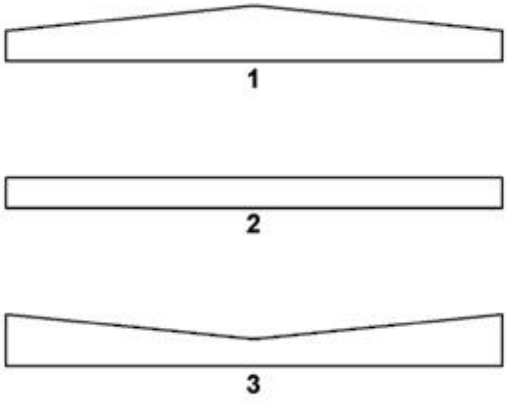


Figure 4-53. Crown Settings

1 - Positive (+)

2 - Zero (0)

3 - Negative (-)

NOTE: Crown may be placed in the leading edge and/or the trailing edge of the screed plate. Crown in the leading edge aids material flow under the screed plate only. Trailing edge crown puts a crown in the mat.

Example: The trailing edge crown is 0 and the leading edge crown is 1/8 inch. There will not be any crown in the mat, but the material flow under the screed plate will be improved.

Mat Texture Adjustment

Spray the bottom of the screed with cleaning solvent BEFORE heating the screed. The screed extension should be hot before making any adjustments. The screed can be adjusted for a smoother or coarser mat texture by using the Angle of Attack (AOA) adjustment screw. **(Figure 4-54)**

⚠CAUTION NEVER spray cleaning solvent or release agnet on or near a screed heating element that is hot or being heated. Do not spray near open flame or ignition source. Cleaning solvent and release agents are flammable and could cause serious personal injury.

NOTE: Consider the environment when using solvents and release agents. Do not allow these chemicals to run onto the ground.

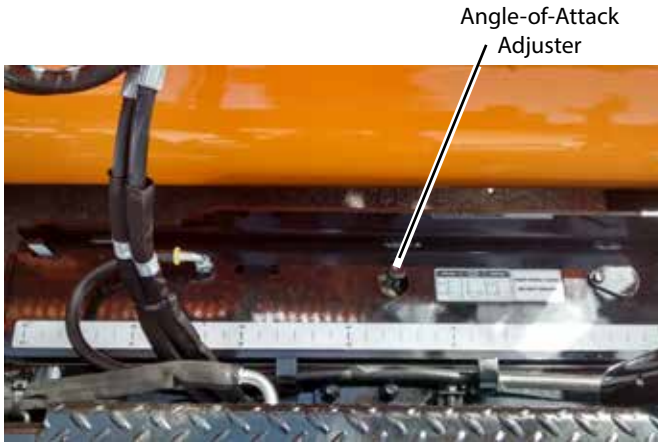


Figure 4-54. AOA Adjustment

There are three adjusters in each extension. The two adjusters at each end of the screed extensions are preset by the dealer and should not need adjustment. You can adjust the mat texture using the AOA adjustment screw in the center.

Increasing pressure on the back of the screed extension will result in a smoother, slicker finish. Decreasing pressure will result in a more coarse finish. Too much pressure on the back of the screed extension will take the weight off the screed wearplate and cause poor material compacting, resulting in a poor finish in the center of the main screed.

To make the AOA adjustment:

1. Spray down the screed.
2. Turn on the screed heat.
3. Turn the AOA adjuster in the direction for desired result:
   - Turning the AOA adjuster counterclockwise will increase the pressure on the back of the extension, which gives a smoother, slicker finish.
   - Turning the adjusters clockwise will decrease the pressure on the back of the extension, resulting in a coarser finish.

NOTE: Too much pressure on the back of the screed extension will take the weight off the screed wearplate and cause poor material compacting, resulting in a poor finish.

815HD Screed Extension Double Adjustment (Option)

There are also three adjusters on the optional 815HD screed extensions. **(Page 4-35)** If equipped with this option, the two covered adjusters on each extension (one on each side of the AOA adjuster) are for vertical adjustment. **(Figure 4-55)** The vertical adjusters are preset by the manufacturer and should not need adjustment.

Follow the same procedures for the AOA adjustment if equipped with the 815D screed extension option.

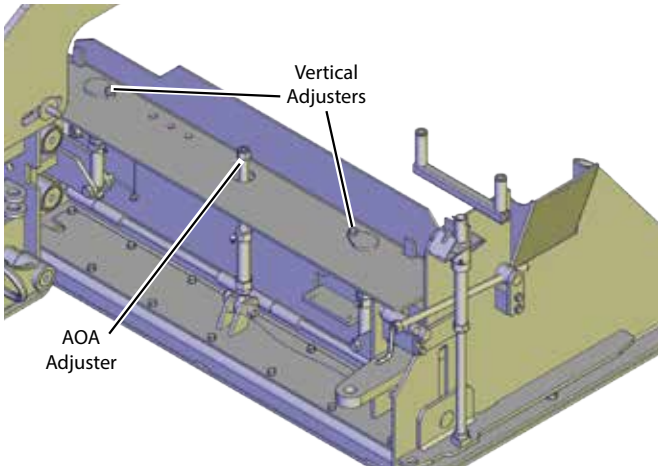


Figure 4-55. 815HD Screed Extension Option Double Adjustment

UNLOADING AND LOADING

Ensure the transport trailer has the capacity to carry the paver's weight. Park the trailer in a clear, level area when loading or unloading the machine.

⚠CAUTION ALWAYS position an assistant to be a ground guide when loading and unloading the paver.

⚠CAUTION Work slowly and carefully to avoid accidents. Keep the loading area clear.

Unloading

1. Remove tie-down equipment.
2. Start and warm up engine.
3. Set throttle at half the operating RPMs, but enough to ensure the hydraulic pump is providing sufficient flow to operate all functions properly.
4. Set steering control lever so paver moves very slowly.
5. BEFORE moving the machine, ensure:
   - The screed position is UP.
   - Auger extensions are removed.
   - The extendible screed is IN.
   - The cut-off gates below the augers are CLOSED.
6. Move paver forward down the ramp as shown on **Figure 4-56**.

NOTICE Never move the paver in reverse while the cut-off gates are open.

⚠CAUTION DO NOT allow the screed to strike the ramp as this can damage bearings on the thickness control screws or welds on the leveling arms. A longer ramp to reduce the loading angle may be needed.

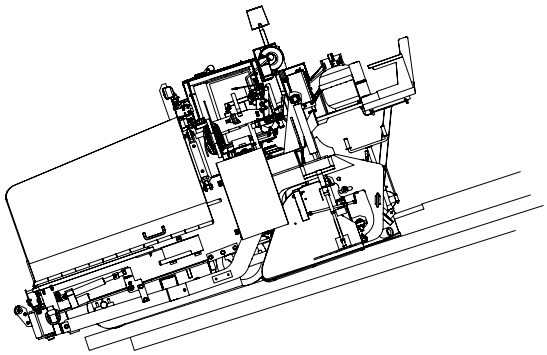


Figure 4-56. Correct Unloading Position

Loading

⚠CAUTION To prevent damage to the undercarriage and throughout the paver, reduce traveling speed before the paver tracks come into contact with loading ramps or any abrupt change in the surface. The track drive sprocket or other components can be damaged by excessive shock.

⚠CAUTION The paver must be loaded screed-end first to prevent damage.

1. Move paver to base of ramp. Line up tracks with the ramp.
2. BEFORE moving the machine, ensure:
   - The screed position is UP.
   - Auger extensions are removed.
   - The extendible screed is IN.
   - The cut-off gates below the augers are CLOSED.
3. Load the paver screed-end first. Set throttle at half the operating RPMs.
4. Set steering control lever so paver moves very slowly onto the ramp.
5. Using the steering control joysticks, SLOWLY guide paver up the ramp.
6. Position paver in center of trailer.
7. Lower the screed.
8. Shut down the engine.
9. Secure paver to transport using the following tie-down procedures.

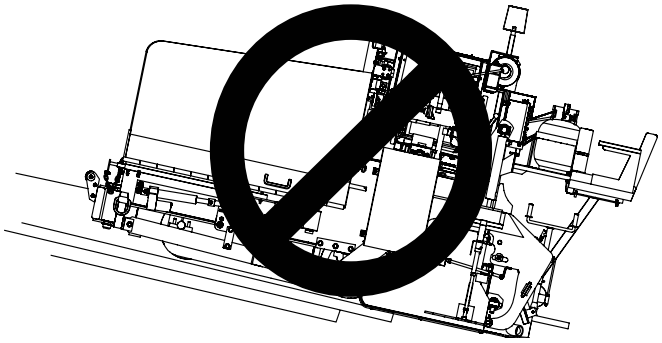


Figure 4-57. Incorrect Loading Position

Tie-Down Procedure

1. Position paver in center of the trailer. **(Figure 4-58)**

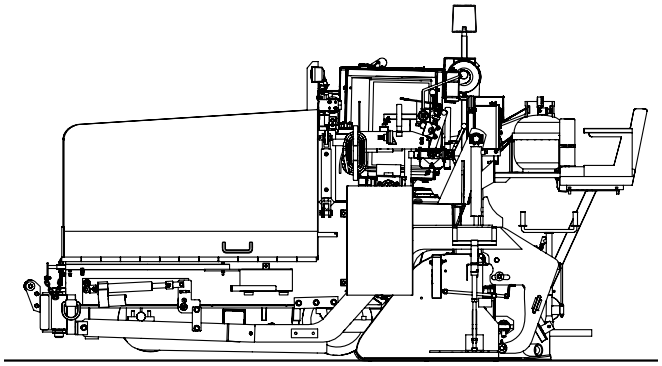


Figure 4-58. Paver on Transport

2. Attach tie-down chains to the front weight block and the D-Rings in front of the torque hubs. **(Figure 4-59)**.
3. Place chocks at wheels or tracks.
4. Ensure that all chains are tightly secured before transporting the paver.

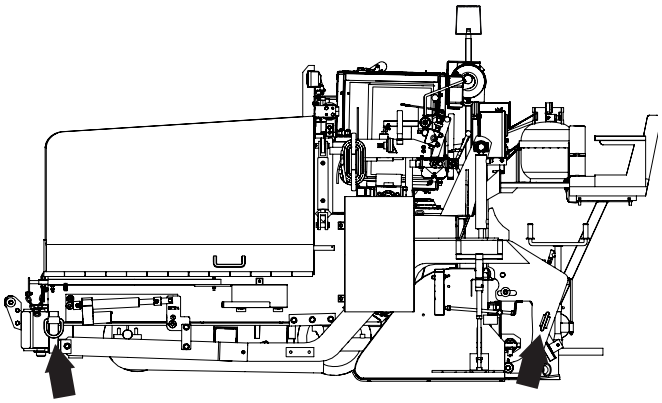


Figure 4-59. Tie-Down D-Ring Locations

OPTIONAL COMPONENTS

Auger Extensions Option

The auger extensions should be attached to the main auger to increase the flow of asphalt to the endgates and screed extensions when paving at widths wider than 15 feet (4.6 m). This makes it possible to lay asphalt at a higher rate. Auger extension options are 12-inch extensions for each side or 24-inch extensions with shields for each side.

NOTICE **Left and right auger extension covers or shields must be installed on the correct side of the machine.**

To attach the auger extensions proceed as follows:

1. Identify the right and left auger extensions by observing the left or right on the end of the auger extension shaft.
2. After identifying the right and left auger extensions, extend the screed extension fully as follows:
   - Set the left and right auger switches to the OFF position.
   - Set the left and right extension switches to the OUT position and extend fully.
3. Shut off engine.

⚠WARNING **Serious injury can result when attaching extensions if the engine is running.**

4. Remove bolt, nut cap on end of main auger.
5. Attach the correct side auger extension to the main auger with hardware just removed.
6. Secure end of extension auger to main auger.
7. Install guard. Make sure extension auger is running flat.
8. Repeat this procedure for opposite side.

Umbrella Option

The umbrella kit option provides shelter from sun and other weather conditions for the operator. The umbrella kit assembly includes the mounting bracket and umbrella frame assembly that can be mounted on either side of the screed handle.

Screed Sloping Extensions

The sloping extensions option provides the means of matching curb and gutter to reduce handwork while paving. **(Figure 4-60)** The hydraulic slope extensions provide 0 - 8 percent slope.



Figure 4-60. Screed Sloping Extensions

Steering Wheel Option

A steering wheel option is also available in lieu of joystick steering and direction/speed controls. **(Figure 4-61)** The Run/Stop switch on the steering panel controls running and stopping the machine.



Figure 4-61. Steering Wheel Option

1 - Forward/Reverse

2 - Steering Wheel

3 - Run/Stop Switch

Roll-Up Curb Attachments

Roll-up curb attachments are also available options for one or both sides of the paver. Roll-up curb attachments are available in length of 12 or 24 inches.

Truck Hitch Attachment Option

The truck hitch is an optional attachment that prevents excessive and uneven braking from the paving material truck. **(Figure 4-62)**

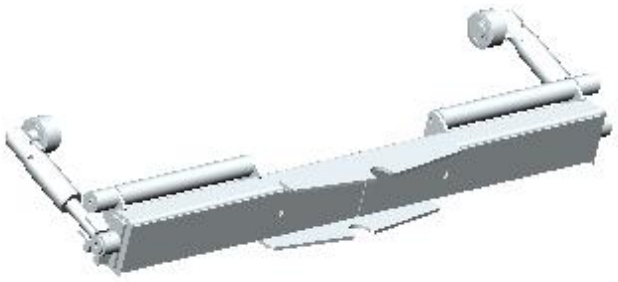


Figure 4-62. Truck Hitch Attachment Option

To engage the hitch with the rear wheels of the asphalt truck:

1. Set the Truck Hitch selector lever to TRUCK HITCH. **(Figure 4-63)** (If the lever is set on CONVEYOR, it will raise and lower the conveyor bed.)
2. Extend the arm extensions of the truck hitch by pushing and holding the Truck Hitch button in the OUT position.
3. The paving material truck then SLOWLY backs up to the paver until the hitch makes contact with the rear tires of the truck.
4. Retract the arm extension by pushing and holding the Truck Hitch switch in the IN position until both guide rollers are fully locked onto the truck wheel rims.

NOTE: It may be necessary to adjust the roller guides to the inside of the wheel rims.



Figure 4-63. Truck Hitch Lever

Electric Screed Options

The Legend Propane Screed is standard on the 8515D paver, complete with propane burners on the main screed and one burner on each screed extension.

Electric screed options are also available and include an electric heat control box powered by a hydraulically-driven generator. The Electric Legend Plus Screed features electrically-heated main and screed extensions and dual vibrators, and is equipped with replaceable wear shoes.

The Legend 815HD Electric Screed option offers numerous features for paving professionals. The main screed and screed extensions are electrically heated by six (6) 1000-watt and one (1) 1240-watt blade elements (four 1000-watt and one 1240-watt on the main screed and one 1000-watt on each screed extension). It is equipped with replaceable, heavy-duty wear plates. Dual vibrators, heavy-duty flight screws, heavy-duty crown and valley mechanism, and a 3-Adjuster screed system featuring AOA and vertical height adjustment add even more screed control. Other options available for this screed include heated endgates.

Power Crown Option

The Power Crown option automatically adjusts the positive or negative crown as needed. **(Figure 4-64)** The power crown option can only be used on the right screed extension. The selector valve is located on the right screed extension control cover. Move the selector valve to the left for crown and to the right for normal screed operation.



Figure 4-64. Power Crown Option

Topcon® Sonic and Dual Grade Control



Figure 4-65. Sonic Grade Control

Topcon® sonic grade control, dual grade control and slope options offer paving professionals screed control for improving smoothness along with assuring accurate slope and material thickness. These controllers send signals to the screed to precisely maintain mat thickness and slope as you pave.

Sonic trackers continuously measure the elevation over the surface, automatically averaging and adjusting the tow point cylinder on the paver. The LCD digital display is easy to see regardless of light conditions.

Choose from one of three options: Sonic Grade Control (one side); Dual Grade Control or Dual Grade Control and Slope (both Topcon P-32 systems). The dual grade controls automatically maintain a set depth on both ends of the screed. The Dual Grade and Slope controls maintain a set depth on one end of the screed and as et slope to the other end.

Most states require this technology for state road paving jobs to ensure smoothness and continuity on roadways.

Rubber or Steel Track Options

The LeeBoy 8515D paver is equipped with poly-pad tracks. However, steel or rubber track options are available in lieu of the poly-pad tracks.

815HD (Heavy Duty) Electric Screed

The optional 815 HD screed is sturdier, heavier and easier to rebuild. This enhanced screed option can include power crown, flight screws and electric heating system (with five heating elements on the main screed and one on each hydraulic extension). The sonic auger mount has adjustable positions. The 815 HD screed offers two options within this option for even more robust screed operation: Heated Endgates and Heated Edge Endgates.

Heated Endgates

The heated endgate also heats the edge of the endgate, producing a smoother joint as you pave. **(Figure 4-66)** (When the heated endgate is turned on, the leading heating element turns off on the side you're heating.) With the heated endgate option(s), additional switches are added to the electric heat control box.

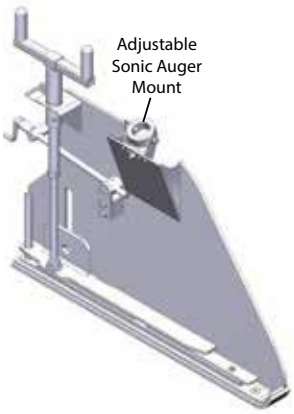


Figure 4-66. Heated Endgate

To operate the heated endgates:

1. Start the paver and idle until the engine reaches normal operating temperature.
2. Raise the screed plate one or two inches off the ground.
3. Turn the electric heat control box power ON by turning the power switch up. **(Figure 4-67)**
4. Press the Start Heat button. The HEAT ON indicator light will illuminate and stay on as long as the element is heating (approximately 20 minutes).
5. Turn the left or right endgate switch up to the ON position.
6. You can restart the cycle by repeating Step 4 if needed.



Figure 4-67. Electric Heat Controls with Endgate Switches

1 - Heat On Indicator Light

2 - Left Endgate Heat Switch

3 - Start Heat Button

4 - Power Switch

5 - Right Endgate Heat Switch

NOTES

Section 5
MAINTENANCE

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MAINTENANCE SCHEDULE

Before performing any maintenance procedures on the LeeBoy Model 8515D Conveyor Paver, review the safety information in **Section 1**.

⚠WARNING **Always use the appropriate and correct sized tools for the task at hand to prevent damage or possible injury.**

⚠WARNING **Always wear heat-resistant gloves when handling hot components.**

Following the maintenance schedules and procedures will maintain the paver in top operating condition and provide years of trouble-free operation. Refer to the Engine Operator's Manual accompanying your paver for more detailed engine service information.

When performing any routine maintenance, always include the previous routine maintenance hours in the higher hourly schedule.

NOTICE **Changing oil and cleaning the paver should only be done in a designated area where the oil and chemicals can be contained. These by-products should be discarded in accordance with environmental regulations.**

Table 5-1. Periodic Maintenance Schedule

SYSTEM	ITEM	Every 10 Hours Daily	Every 50 Hours Weekly	Every 100 Hours Monthly	Every 250 Hours Quarterly	Every 500 Hours Semi-Annually	Every 1000 Hours Annually
Paver	Lubricate paver.	X					
Engine	Check oil level.	X					
	Check coolant level.	X					
	Replace coolant.					X	
	Check air filter.		X				
	Change air filters.				X		
	Replace fuel filter.				X		
	Change oil and oil filter. **(Initial 50 Hours)**				X		
	Check main engine belt.			X			
Hydraulic	Check hydraulic oil level.	X					
	Change hydraulic oil.						X
	Change hydraulic filter.				X		
	Check torque hub oil.		X				
	Change torque hub oil.					X	
	Drain hydraulic tank. Replace strainer.						X
Mechanical	Adjust conveyor drive chains.			X			
	Adjust conveyor flight chains.			X			
	Adjust auger chains.			X			
	Adjust screed extension top guide.			X			

5

RAISING AND LOWERING CONVEYOR

The conveyor bed can be hydraulically lifted for easy access to the undercarriage and tracks for cleaning, maintenance and adjustments.



Figure 5-1. Hydraulic Conveyor Bed

NOTE: Engine must be running to raise the hydraulic conveyor bed, but can be turned off while unbolting the side wings.

Use the following procedures to raise and lower the conveyor:

1. Fold in the side wings by pushing the Side Wings In/Out switch to the IN position.
2. Remove bolts on side wings using the wrench provided with your machine. **(Figure 5-2)**



Figure 5-2. Remove Side Wing Bolts

3. Grasp top of the side wing with one hand and the handle with the other, and carefully pull out five to six inches (13-15 cm). Then pull bottom handle out until the side wing folds out from the bottom hinge. (**Figure 5-3**) Repeat for the other side.

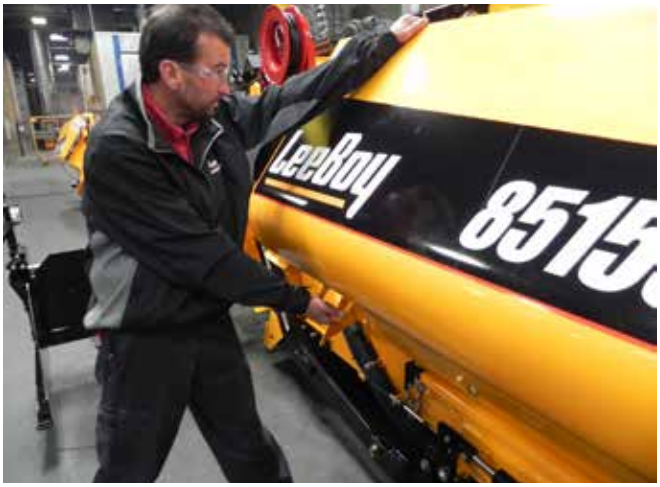


Figure 5-3. Fold Out Side Wings

4. Raise conveyor by pushing the Conveyor Raise/Lower switch to the RAISE position and hold until conveyor is fully raised. Immediately after raising the hopper, place the safety prop in position. **(Figure 5-4)**



Figure 5-4. Safety Prop in Position

⚠WARNING **Crush Hazard! Safety prop must be placed in position. Use extreme care when working under conveyors. Clear the area of untrained personnel.**

Lowering Conveyor

⚠CAUTION **Remove all tools or foreign objects before lowering and clear the area of untrained personnel.**

1. Before lowering the conveyor, make sure that the area under the conveyor is clear of tools or foreign objects.
2. Turn engine ON and raise conveyor off safety prop.
3. Release safety prop carefully.
4. Lower the conveyor by flipping the Conveyor Raise/Lower switch to the LOWER position and hold until conveyor is fully lowered.

ROUTINE MAINTENANCE

Preparing Paver for Maintenance

⚠WARNING **If any maintenance must be performed while the engine is running, DO NOT leave paver unattended.**

1. Park the paver on a flat surface.
2. Lower all attachments to ground level.
3. Place joysticks in neutral.
4. Run engine at 1/2 speed (RPMs) without load for three to five minutes., then reduce to slow idle.
5. Place ignition switch in the OFF position.
6. Follow the previous instructions for raising and lowering the conveyor bed for procedures requiring access to the undercarriage and tracks.

Every 10 Hours or Daily Routine Maintenance

1. Clean off paving material and spray cleaning solvent or release agent on the wearplate, extensions, and any other area that has been in contact with the paving material. Cleaning should be performed while the paver is hot.

NOTICE **If asphalt material is allowed to remain on the paver overnight, possible damage and increased maintenance costs can result upon start-up the next day. Poor housekeeping will increase maintenance costs.**

⚠WARNING **NEVER spray cleaning solvent on hot surfaces as serious injury can result.**

2. Raise conveyors and place safety prop into position. **(Page 5-4)** Clean any asphalt material off all flat surfaces. Remove any debris from screed and check for leaks.
3. Lubricate the required parts. **(Page 5-7)**
4. Check light bulbs and replace if needed.
5. Check battery cables and connections.
6. Check coolant level. Fill if needed.
7. Check for loose, worn or damaged hoses, tubes clamps. Tighten, repair or replace promptly.
8. Keep the fuel tank full to prevent condensation. Always fill at the end of the day.
9. Check engine oil level. **(Page 5-12)**
10. Check hydraulic oil level. **(Page 5-16)**
11. Perform any other engine preventive maintenance described in the Engine Operator's Manual.

NOTE: In cold weather, keep conveyor flight chains properly oiled with cleaning solvent or release agent. This will prevent conveyor bars from sticking. Neglect could result in conveyor bar damage or drive chain failure.

Every 50 Hours or Weekly Routine Maintenance

1. Check air filter. **(Page 5-13)**
2. The FIRST 50 HOURS, change engine oil and filters, then every 250 hours thereafter. **(Page 5-13)**
3. Check all battery connections and remove any corrosion present.
4. Drain water separator (if needed). **(Page 5-15)**
5. Check torque hub oil level. Refill if needed. **(Page 5-6)**
6. Lubricate grease fittings on the flight screw on both sides of the screed, the fitting on the depth screw, and the fittings on the flange bearings located on top of the extension screed. Grease nuts on extension screws. **(Page 5-7)**
7. Perform previous routine maintenance and any other engine preventive maintenance described in the Engine Operator's Manual.

Every 100 Hour or Monthly Maintenance

1. Check main engine belt. Adjust or replace if needed.
2. Check and adjust conveyor drive chains. **(Page 5-8)**
3. Check and adjust conveyor flight chains. **(Page 5-8)**
4. Check auger drive chains, lubricate and adjust. **(Page 5-9)**
5. Check and adjust screed extension top guide. **(Page 5-9)**
6. Perform previous routine maintenance and any other engine preventive maintenance described in the Engine Operator's Manual.

Every 250 Hours or Quarterly Routine Maintenance

1. Clean air filter.
2. Perform previous routine maintenance and any other engine preventive maintenance described in the Engine Operator's Manual.

Every 500 Hours or Semi-Annual Routine Maintenance

1. Replace coolant.
2. Change engine oil and filter. **(Page 5-13)**
3. Change air filter and replace if needed. **(Page 5-13)**
4. Change torque hub oil.
5. Replace fuel filter. **(Page 5-14)**
6. Clean water separator. **(Page 5-15)**
7. Change the hydraulic oil and filter. **(Page 5-16)**
8. Perform previous routine maintenance and any other engine preventive maintenance described in the Engine Operator's Manual.

Every 1000 Hours or Annual Routine Maintenance

1. Drain hydraulic tank and replace strainer.
2. Replace air filter. **(Page 5-13)**
3. Perform previous routine maintenance and any other engine preventive maintenance described in the Engine Operator's Manual.

LUBRICATION

Torque Hub Lubrication

1. Remove the plug in the 3 o'clock position. **(Figure 5-5)**
2. If oil comes out, no oil is needed. Reinsert the plug and tighten.
3. If oil does not come out, remove the top plug and fill with SAE 90 WT gear oil until oil starts to appear at the 3 o'clock plug.
4. Replace both plugs and repeat process on the other torque hub.

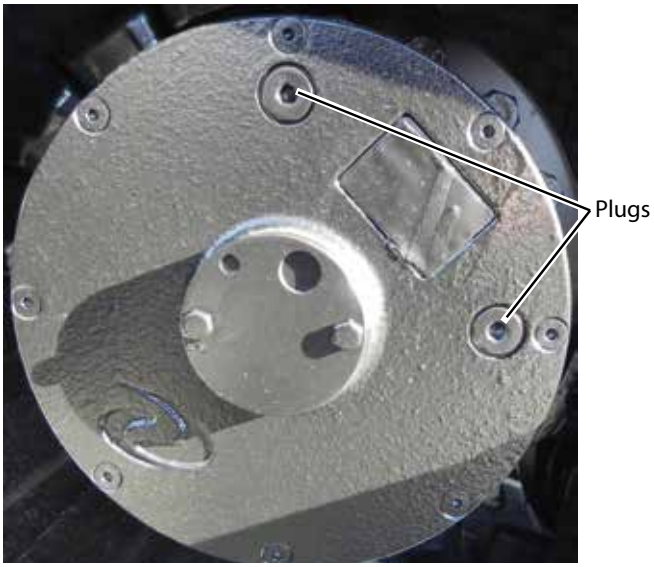


Figure 5-5. Torque Hub Plugs

NOTICE **Changing oil and cleaning the paver should only be done in a designated area where the oil and chemicals can be contained. DIscard these by-products in accordance with environmental regulations.**

Lubrication Points

Proper lubrication is necessary to maintain the LeeBoy Model 8515D Conveyor Paver at top efficiency. Refer to the lubrication information below:



Table 5-1. Lubrication Points Schedule

ITEM NO.	TYPE LUBE	DESCRIPTION AND LOCATION	INTERVAL
	A	Grease With Shell Avania EP Grease 2 or Equivalent	
	B	Spray with Release or Chain Lube Agent	
1	B	Screed crown on chain.	Weekly
2	A	Slope cylinder pivot.	Weekly
3	A	Flange bearing and fitting on flight screw and flange bearing on T-handle of extensions (both sides).	Weekly
4	A	Auger. Grease fitting on end mount daily for efficient operation (both sides).	Daily
5	A	Tilt screws (both sides).	Weekly
6	A	Depth screw (both sides). Grease first in locked position, unlock, and turn 180° to grease.	Weekly
7	A	Screed pivot.	Weekly
8	A	Main flight screws ball socket and nut.	Weekly
9	A	All screws and bearings on screed extensions (both sides).	Weekly
10	A	Conveyor pivot (under conveyor deck) on front of screed (both sides).	Monthly
11	B	Grease tracks between track pads daily for efficient operation.	Daily
12	B	Conveyor chains.	Daily
13	B	Auger (and auger chains).	Daily
14	B	Spray all parts of paver that come into contact with asphalt.	Daily

MAINTENANCE ADJUSTMENTS

Certain components of the paver need adjustments for optimum performance, operation and general maintenance.

⚠WARNING **Entanglement hazard! DO NOT run the engine while checking and servicing conveyor components. NEVER perform any adjustments while the engine is running.**

Conveyor Flight Chain

The conveyor flight chains must be adjusted every 100 hours. If irregular movement of the conveyor occurs, an adjustment is needed regardless of the time interval.



Figure 5-6 Conveyor Flight Chain Adjustment

1 - Adjustment Bolt

2 - Locking Nut

3 - Hold-Down Nut

There are four (4) adjustment bolts, two (2) for each conveyor. Use the following procedure to make this adjustment on both sides of the conveyor:

1. Raise conveyor bed and insert safety prop. **(Page 5-4)**
2. Loosen the hold-down nuts (one on each side of each adjustment bolt). **(Figure 5-6)**
3. Loosen each locking nut beside the adjustment bolt.
4. Turn each adjustment bolt alternately the same amount. For example, turn one bolt one half turn, then the other bolt one half turn, etc.
5. Continue alternating tightening until the flight chains are tight. (The pressure on the chain will be noticeable as the bolts are tightened.)
6. After the conveyor chain tension is set, retighten locknuts and bolts holding the flight chain assembly.

NOTE: If the adjustment bolt has reached its maximum adjustment level, remove two links in the conveyor chain and add a half link. This repair should bring the adjustment bolts back to full travel.

NOTICE **Keep conveyor flight chain properly oiled with cleaning solvent or release agent during cold weather to keep conveyors functioning smoothly.**

Conveyor Drive Chain

Keep chains clean, lubricated. and properly adjusted. Inspect both drive chains at the rear track. If the chains are loose, adjustment is necessary.

1. Shut off paver.
2. Open engine access door on the side to locate the conveyor drive chain bolts. **(Figure 5-7)**
3. Loosen the jam nuts on the chain adjuster.
4. Turn the chain adjuster to loosen or tighten the chain, leaving approximately 1/4-inch of slack. DO NOT overtighten.
5. Retighten jam nuts.
6. Repeat steps on the opposite conveyor drive chain.

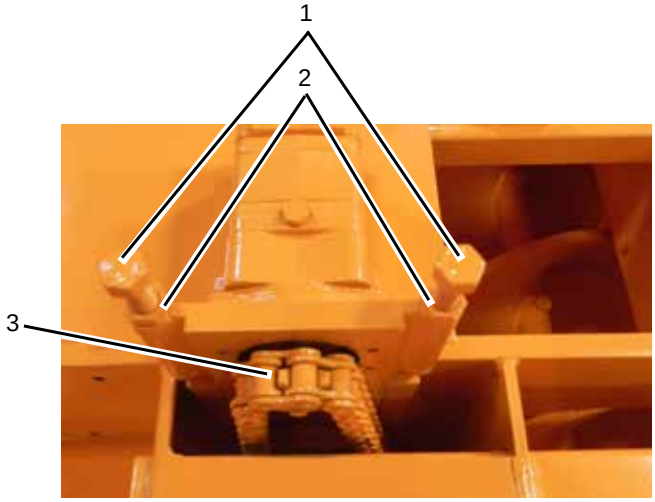


Figure 5-7. Conveyor Drive Chain Bolts

1 - Chain Adjuster

2 - Jam Nuts

3 - Conveyor Drive Chain

Auger Drive Chain Adjustment

The auger chains should be snug, not loose. If the chains need to be tightened, follow this procedure:

1. Raise conveyor bed and insert safety prop. **(Page 5-4)**
2. Loosen the motor bolts on the right and left auger chains. **(Figure 5-8)**
3. Loosen jam nuts and turn the tension adjusters counterclockwise to tighten chains.
4. Once adjusted, retighten motor bolts and jam nuts.

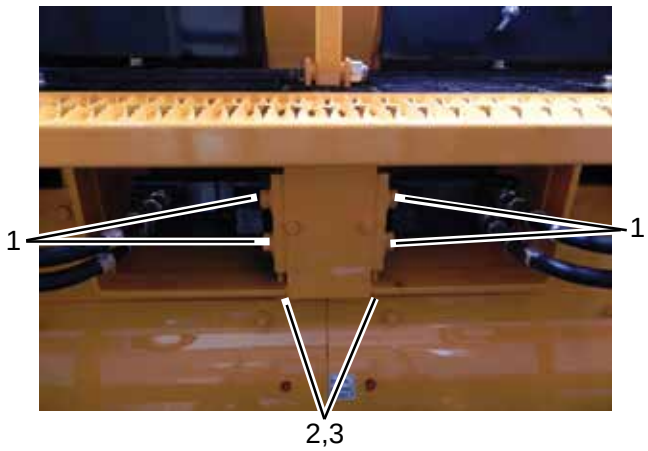


Figure 5-8. Auger Drive Chain Bolts

1 - Motor Bolts

2 - Jam Nuts

3 - Tension Adjuster

Screed Extension Top Guide Adjustment

1. Retract both screed extensions completely using the left and right extensions switches on the control panel. **(Pages 3-6 to 3-7)**
2. Loosen the top guide and hold-down bolts. **(Figure 5-9)**
3. Push guide down against the slide rail and tighten allen screws until snug, starting from the outside and working toward the center on each side of the slide rail.
4. Using a jack, raise extension up until it fits the bottom guide level.
5. Adjust top guide to allow for .008-inch clearance across top guide.
6. Grease slide with multipurpose grease.
7. Retighten the hold-down bolts, securing guides to specification.
8. Adjust allen screws until proper setting is achieved.
9. Tighten hold-down bolts to 90 ft. lbs.
10. Check operation and adjust if needed.

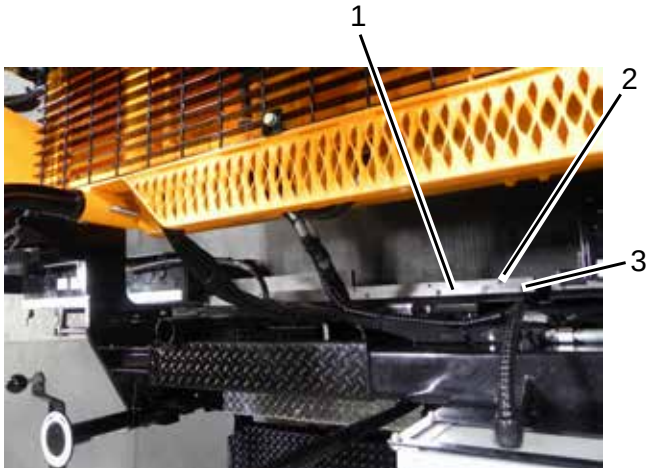


Figure 5-9. Screed Extension Top Guide Adjustment

1 - Screed Extension Top Guide

2 - Allen Screws

3 - Hold-Down Bolts

Track Tension Pressure Relief

The hydraulic adjustment cylinders are automatic and provide even tension on the tracks to prevent excessive wear to the paver's undercarraige. The track tension main manifold is mounted on the back side of the lower hydraulic tank in the conveyor bed.

The track hydraulic pressure is set at 1500 PSI at the track tension main manifold.

To check pressure, locate the track tension main manifold in the conveyor bed and perform the following procedures:

1. Raise conveyor bed. **(Page 5-4)**
2. Connect a 2000 PSI gauge inline with either Port A or Port B on the track tension main manifold. **(Figure 5-10)**
3. Place a Porta Power between the front idler and frame to release pressure on the idler.
4. Increase the Porta Power pressure until the front idler cylinder compresses.
5. Pressure should read 1500 PSI.
6. If the pressure is not correct, remove cap on the relief cartridge valve. Using an allen wrench, adjust the relief cartridge valve IN for more pressure or OUT for less pressure until the PSI gauge reads 1500 PSI.
7. When the pressure guage reads 1500 PSI, disconnect Porta Power and gauge.

NOTICE **Do not tamper with the adjustment part of the relief cartridge valve.**

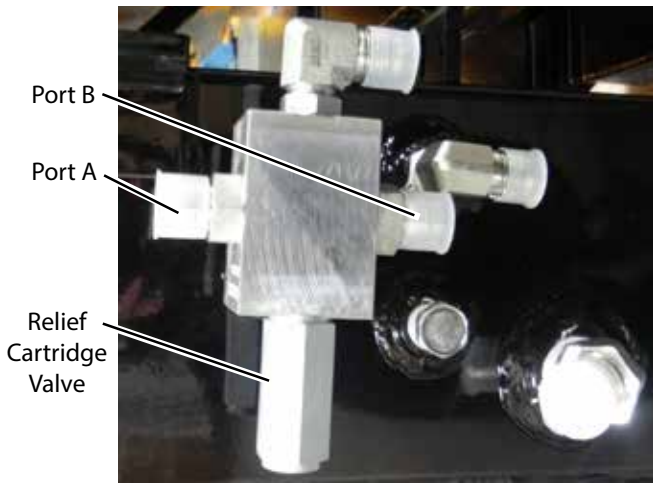


Figure 5-10. Track Tension Main Manifold

Conveyor Switch Adjustment

Small adjustments may be necessary to conveyor switch for optimum conveyor performance. **(Figure 5-11)**

There are two positions of the conveyor flap: One upper, shutting the conveyor OFF; and one lower, turning the conveyor ON.

Check Adjustment

1. Remove the upper walkboard grate.
2. Raise the conveyor flap 6-1/2 to 7 inches (16.5 to 17.8 cm) from the bottom of the tank mount support and insert the safety prop.

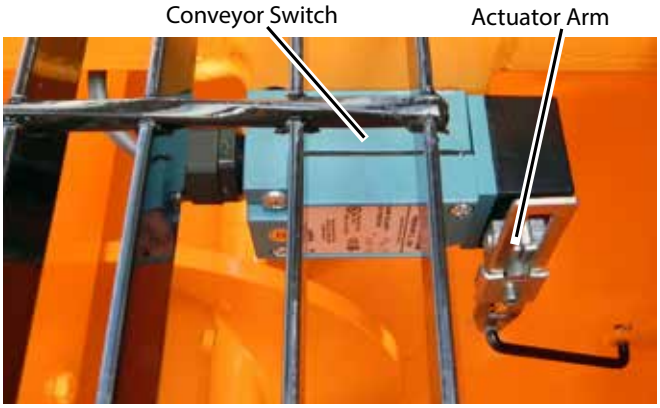


Figure 5-11. Conveyor Switch Location

3. Secure conveyor flap so it remains in this position.
4. Check the conveyor switch.
5. If the switch clicked OFF, no further adjustment is required to the upper flap.

Adjust Conveyor Switches

If the conveyor switch did not click OFF, adjustment is needed:

1. Remove the linkage attaching the actuator arm to the eyelet on the flap pivot housing.
2. Loosen Setscrew A on the actuator arm. **(Figure 5-12)**
3. Reposition this arm by either rotating it clockwise or counterclockwise, depending upon where the conveyor switch clicked OFF during the conveyor flap upward travel.
4. When the switch clicks OFF, tighten setscrew and reconnect linkage.

5. Repeat procedure for the lower flap.

If the lower flap switch did not click OFF:

1. Loosen Setscrew B. **(Figure 5-12)**
2. Slide the actuator arm IN or OUT bo bring the travel limits into tolerance.
3. This may require several adjustments before the correct position is obtained.
4. When the actuator arm is in the correct position, tighten Setscrew B.

NOTE: The factory setting is one inch (2.54 cm) from the center of Setscrew B to the eyelet on the actuator arm.

NOTE: The setting from the factory is 1 in. (2.54 cm) from the center of the setscrew "B" to the eyelet on the actuator arm.

5. To bring the travel limits into tolerance, slide the actuator arm in the direction desired. This may require several adjustments before the correct position is obtained. When the actuator arm is in the correct position, tighten setscrew "B". No further adjustment is necessary.

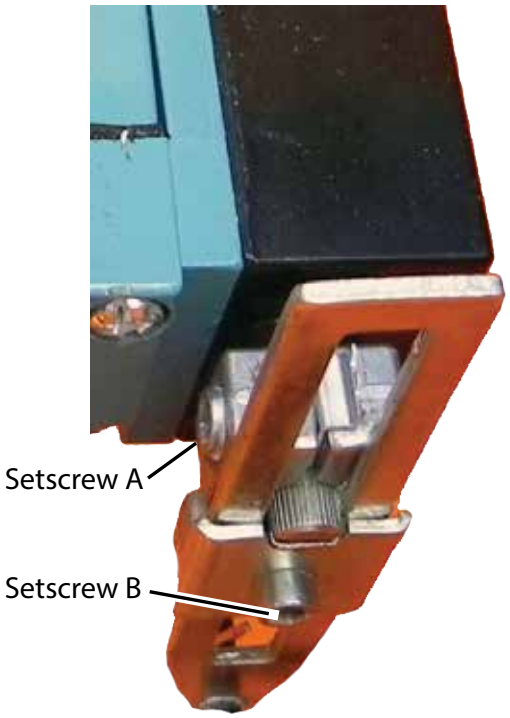


Figure 5-12. Actuator Arm - Setscrews A and B

Torque Hub Hydraulic Motor Gear Adjustments

NOTICE **Torque hub hydraulic motors are calibrated and set at the factory. These adjustment should only be performed by an authorized LeeBoy dealer. Work not performed by an authorized dealer can damage machine and void the warranty.**

The low gear adjustment must be made to the slow side drive motor only. The low gear adjustment screw is located on the bottom of the drive motor. Make only small adjustments at a time.

Your authorized LeeBoy dealer will perform the tracking adjustment on the high side gear by adjusting the screw on the top of the hydraulic motor. This adjustment on the motor for the fast track must be screwed in to equalize track speed.

Your LeeBoy dealer will perform the following procedure to adjust either gear:

1. With paver running, push the 2-Speed switch:
   - Set both 2-Speed switches on both sides of the control panel to the LOW position if adjusting low gear. (The red 2-Speed light should not illuminate.)
   - Set either 2-Speed switch to the HIGH position if adjusting high gear. (The red 2-Speed light will illuminate.)
2. Adjust screw (on bottom of the hydraulic motor for low gear; on top for high gear) until you feel back pressure on the adjustment screw. This indicates the correct adjustment is close.
3. Finalize adjustment by making a one-quarter (1/4) turn at a time until the correct adjustment is accomplished. Recheck tracking.

NOTE: If hydraulic motor has not been previously set, ten revolutions of the adjustment screw may be required before noticing any difference in travel.

ENGINE MAINTENANCE

The LeeBoy 8515D Conveyor Paver features the latest in engine technology. Tier 4 engines comply with emission requirements established by the U.S. Environmental Protection Agency (EPA) to reduce diesel particulate matter (DPM) and other toxins released into the air. As part of the Clean Air Rules of 2004, the EPA requires engine manufacturers to integrate controls into systems that reduce exhaust emissions by 90 percent.

Advanced emission-control devices and low-sulfur fuel requirements--only Ultra-Low Sulfur Diesel (ULSD) can be used in these engines--combine with new after-treatment methods such as Exhaust Gas Recirculation (EGR) and Diesel Particulate Filters (DPF). These general maintenance procedures are most often required for the engine. Refer to the Engine Operator's Manual for more specific maintenance information and procedures.

You can access the engine and other components via the access panel in the hopper **(Figure 5-13)** or via the operator platform. Some components can also be reached from either side of the machine.

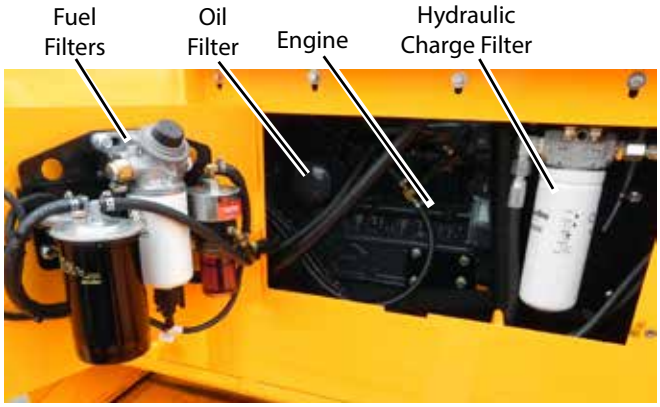


Figure 5-13. Engine Access Panel

Check Engine Lubrication Oil

The engine lubrication oil must be kept at a level above the ADD mark, but not above the FULL mark, on the engine lubrication oil dipstick. **(Figure 5-14)**

⚠WARNING DO NOT check the oil while the engine running. Hot oil can spew and cause serious personal injury.

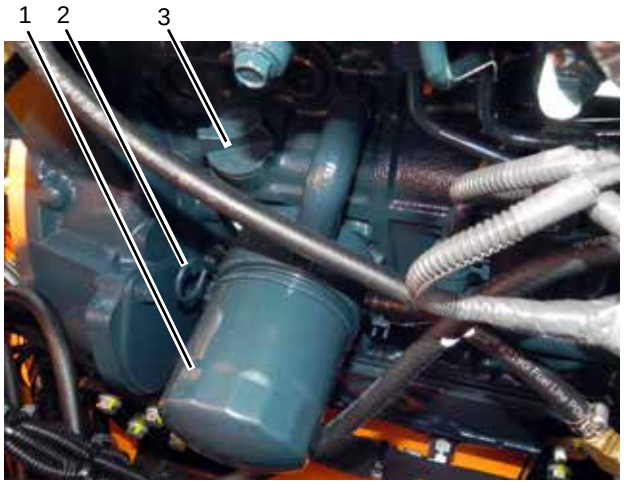


Figure 5-14. Engine Oil Dipstick and Oil Filter

1 - Oil Filter

2 - Oil Dipstick

3 - Oil Fill Cap

To check the engine lubrication oil level:

1. Park the machine on a level surface and turn off the engine.
2. Wait five minutes to allow the oil to return to the oil pan so you can obtain an accurate measurement of the engine oil level.
3. Clean the area around the engine oil dipstick before removing it from the engine.
4. Remove the dipstick from the engine and checking the oil level. The oil level should be above the ADD mark--but not above the FULL mark--on the dipstick.
5. Add oil if needed.

Change Engine Oil and Filter

The engine lubrication oil and oil filter must be changed at the same time. **(Figure 5-14)**

To change the engine lubrication oil:

1. Park the paver on a level surface and turn off the engine.

⚠WARNING Change the engine lubrication oil while the engine is WARM, not hot. Hot oil can cause serious personal injury.

2. If needed, wait until the engine lubrication oil has cooled a little. Oil should be warm, not hot.
3. Locate oil drain hose on right side of the paver.
4. Place a container large enough to hold 15 quarts (14.2 liters) of oil underneath the drain hose.
5. Remove cap on end of the hose and drain all engine oil into the container.
6. Reinstall cap back onto the hose and reinsert hose back into place.
7. Fill the engine with 15 quarts (14.2 liters) of oil at the oil fill cap.
8. Check oil level using the oil dipstick.
9. Dispose of used oil in accordance with local and federal environmental laws.

NOTICE DO NOT change the engine lubrication oil filter while the engine is running. Serious engine damage will occur.

Use the following procedures to change the oil filter:

1. Wipe the area around the oil filter and its mounting base with a clean cloth.
2. Place the empty container under the filter element.
3. Use a filter removal wrench to remove the filter, turning counterclockwise.
4. Drain and discard the oil filter in accordance with Step 9 above, including the rubber gasket.
5. Wipe inside the oil filter head using a clean, lint-free cloth.
6. Rub a little oil on the rubber gasket area of the new filter element.
7. Fill the new filter with fresh oil.
8. Install the new filter element onto the filter head. Carefully tighten the filter (by hand only).

Change Air Filter

NOTICE Never operate the engine without an air filter properly installed. Severe damage to the machine will occur.



Figure 5-15. Air Filter Cover

To change the air filter elements:

1. Unclamp and remove air filter cover. **(Figure 5-15)**
2. Remove the primary and secondary air filter elements. Discard.
3. Clean the inside of the air cleaner body with a clean cloth.
4. Install new air filter elements inside the canister.
5. Reclamp cap onto the air filter cover.
6. Check clamps to ensure filter elements are tight and filter elements are making proper contact.
7. Start engine. If engine does not run smoothly, recheck filter element contact.

NOTE: The air filter elements should be replaced every 100 service hours of normal paver operation, but more often if the paver is operated in severe conditions.

FUEL SYSTEM

Fuel Tank

The fuel level is indicated on the digital display fuel gauge. Use only low-sulfer diesel fuel and always fill the fuel tank at the end of the work day to prevent condensation. The green fuel cap is located on the right side of the paver in front of the spraydown hose reel. **(Figure 5-16)**

NOTICE **Fill up with low-sulfer diesel fuel at the end of the day to reduce condensation in the tank.**

⚠WARNING **Diesel fuel is highly FLAMMABLE. DO NOT smoke while filling the fuel tank. Fill the fuel tank in a designated area that provides proper ventilation with a fire extinguisher available.**

⚠WARNING **Explosion Hazard! Never fill the fuel tank near an open flame, or near equipment that can create sparks. Never check fuel level or fuel system components near an open flame.**



Figure 5-16. Fuel Cap

To fill the fuel tank:

1. Stop engine.
2. Remove fuel cap from fuel tank.
3. Fill with diesel fuel until full.
4. Replace fuel cap.

Change Fuel Filter

The fuel filter, water separator and fuel pump with bowl filter are conveniently located together on the engine access door in the hopper. **(Figure 5-17)**

⚠WARNING **DO NOT change the fuel filter while the engine is running.**

⚠WARNING **DO NOT smoke or change fuel filter near open flames as diesel fuel is highly combustible. Be careful not to spill fuel.**



Figure 5-17. Fuel Filters

1 - Fuel Filter

2 -Fuel/Water Separator

3 - Fuel Pump w/Bowl Filter

Replace the fuel filter using the following general procedure.

1. Stop the engine and allow it to cool.
2. Put a container under the filter before removing it.
3. Wipe the area around the fuel filter and mounting head using a clean, lint-free cloth.
4. Use a filter removal wrench to loosen and remove the filter by turning it clockwise.
5. Drain and discard the removed filter in compliance with local and federal environmental laws..
6. Wipe inside the filter head with a clean, lint-free cloth.
7. Fill the new fuel filter element with the diesel fuel.
8. Wipe a little fuel on the rubber gasket.
9. Install the new fuel filter element onto the filter head, carefully tightening the element by hand.

NOTICE **Tighten the fuel filter as directed on by the filter manufacturer. DO NOT overtighten the fuel filter element onto the filter head.**

10. Start the engine and check for any fuel leaks.

⚠WARNING **Explosion Hazard! Stop the engine immediately if any fuel leakage is noted. DO NOT start the engine until the leak has been corrected.**

Fuel Water Separator

Water and dirt that gets into fuel settles into the water separator. **(Figure 5-18)** As it collects, a red float rises. When the float reaches the line on the separator, an error code will appear on the PV480 digital display. It is important to drain it immediately.

NOTICE **If you run out of fuel, it is important to pump the water separator to prime fuel injection lines. Failure to do so can adversely affect performance.**

To drain the water separator:

1. Pull retainer clip from plug to disconnect the harness.
2. Unplug the harness, then unscrew the plug.
3. Drain and reinsert components.



Figure 5-18. Water Separator

1 - Pump

2 - Filter Body

3 - Plug

4 - Clip

To clean the water separator:

1. Follow the previous steps for draining the water separator.
2. Loosen and remove the filter body and clean it with light oil.
3. Reinsert and tighten.

HYDRAULIC SYSTEM

Check Hydraulic Oil

The hydraulic motors and hydraulic cylinders use the same hydraulic oil reservoir and hydraulic oil supply.

NOTICE Take care when working with the hydraulic system to ensure it is completely clean.

NOTICE Never allow the hydraulic oil level to fall too low. Pump damage will occur.

Check the hydraulic reservoir oil level daily using the sight gauge on the left side of the paver. **(Figure 5-19)**

Check the hydraulic oil level when the hydraulic oil is at normal operating temperature for an accurate reading.

If the hydraulic oil level falls below the black line, add more hydraulic oil.



Figure 5-19. Hydraulic Oil Cap and Sight Gauge

⚠WARNING DO NOT loosen or remove the hydraulic oil strainer fill cap when the hydraulic oil is hot. Always loosen the cap slowly to relieve any pressure in the hydraulic oil reservoir.

- Slowly unscrew the three wing nut to remove the hydraulic oil strainer fill cap and add hydraulic oil, replacing the wing nuts after filling the tank. **(Figure 5-19)**
- DO NOT use unfiltered hydraulic oil.
- Check the hydraulic oil level using the sight gauge.
- Keep the hydraulic oil filled to the correct level.

NOTICE DO NOT overfill the hydraulic oil reservoir.

NOTICE Leeboy uses a lead-detection dye that may turn the hydraulic oil a slight yellow tint.

Change Hydraulic Oil and Filter

Changing the hydraulic oil removes the accumulation of dirt, water and mechanical wear particles from the hydraulic oil system. Clean, filtered oil is critical to optimize hydraulic system operation. The hydraulic oil system holds approximately 41 gallons.

NOTICE Contaminated hydraulic oil can shorten the expected service life of components in the hydraulic system.

⚠WARNING DO NOT drain the hydraulic oil when it is hot. Hot hydraulic oil can cause serious personal injury.

⚠WARNING Protect your eyes by wearing safety glasses when working on hydraulic system components.

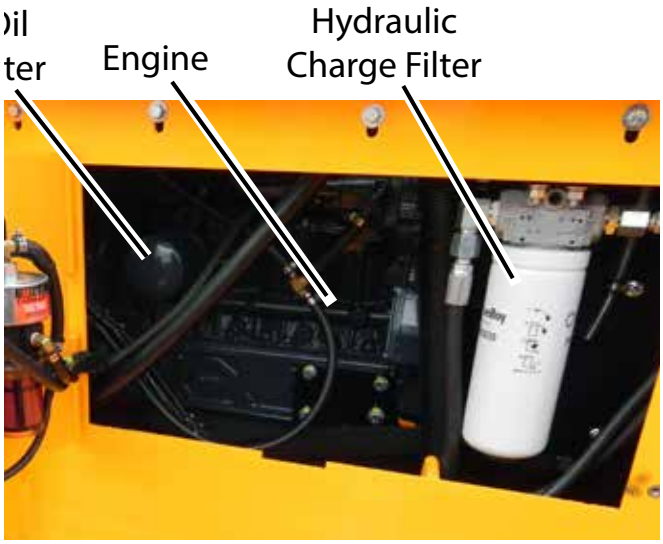


Figure 5-20. Hydraulic Charge Filter

Use the following procedures to change the hydraulic oil and charge filter:

1. Stop the engine.
2. Allow the hydraulic oil to cool until it is at a warm temperature.
3. Slowly remove the hydraulic oil strainer fill cap. Do not remove the strainer portion under the cap.
4. Place a clean, lint-free cloth over the reservoir fill tube opening and secure in place with tape.

5. Place a container sufficient to hold the hydraulic oil as it drains from the drain hose by the access panel on the right side of machine (close enough for the drain hose to reach).
6. Carefully remove the plugs from the hydraulic drain hose and open the valve over the container.
7. Allow all the hydraulic oil to drain from the hydraulic tank into the container.
8. Reinstall the hydraulic oil drain plug on the drain hose and tighten securely. Close valve.
9. Change the hydraulic oil filter by turning filter counterclockwise, then replace with new filter turning clockwise until snug (by hand only). **(Figure 5-20)**
10. Carefully remove the cloth from the hydraulic oil reservoir fill tube opening.
11. Remove the strainer. Replace if necessary.

NOTICE DO NOT fill the hydraulic oil reservoir with new hydraulic oil until the strainer inside the fill cap has been serviced.

12. Fill the hydraulic oil tank with filtered hydraulic oil. The cold oil level should be about 1/2-inch below the fill level black line on the sight gauge. **(Figure 5-20)**
13. Reinstall the hydraulic oil strainer filler cap and tighten the three wingnuts securely.
14. Start the engine and check the hydraulic system for possible leaks.

⚠WARNING DO NOT use your hands on any hydraulic hoses, fittings or system component when checking for leaks. Serious personal injury can result from an oil leak under high pressure. Oil can be injected under the skin by high pressure. Protect the eyes by wearing safety glasses.

⚠CAUTION Stop the engine immediately if any hydraulic leak is noted. DO NOT start the engine until any problem noted has been corrected.

ELECTRICAL SYSTEM

The electrical system is a 12-volt negative ground system. Connect the positive (+) cable to the positive (+) post of the battery. Connect the ground cable to the negative (-) post of the battery. It is advisable to disconnect the negative (-) cable first and connect it last. Reversed polarity can damage the electrical system.

⚠WARNING Fire and Explosion Hazard! Always observe battery polarity when connecting a battery charger or jumper cables to the battery: negative (-) to negative (-), positive (+) to positive (+). Failure to do so can produce sparks.

When connecting a booster battery, connect one end of the first jumper cable to the positive (+) terminal of the dead battery and the other end to the positive (+) terminal of the booster battery. Connect one end of the second jumper cable to the negative (-) terminal of the booster battery and the other end to the frame of the paver with the dead battery.

⚠WARNING Fire and Explosion Hazard! Be sure that the battery charger is in the OFF position before connecting it to the battery.

Be sure to keep the battery fully charged during cold weather to keep it from freezing. Freezing weather has little effect on a fully-charged battery. **(Figure 5-21)**

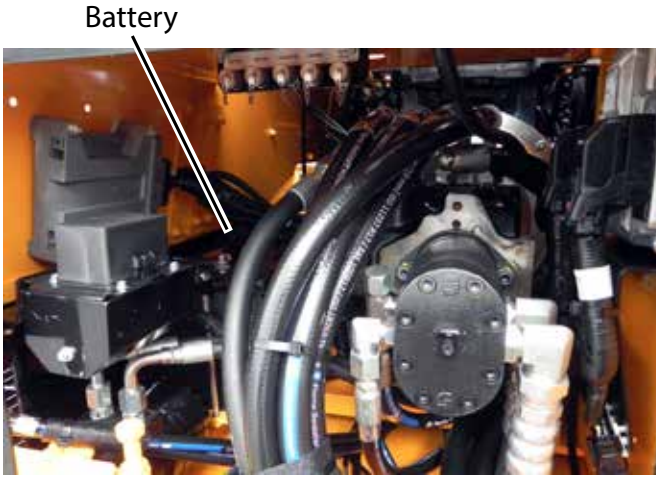


Figure 5-21. Battery Location

NOTICE ALWAYS turn the master battery switch off when working on the electrical system or welding anywhere on the machine. Damage to electrical components could result.

Battery Servicing

⚠WARNING Batteries contain sulfuric acid. ALWAYS wear safety goggles and protective clothing when servicing the battery.

⚠WARNING NEVER allow battery fluid to come into contact with clothing, skin or eyes. If battery fluid contacts the eyes or skin, immediately flush with clean water and obtain prompt medical treatment.

⚠WARNING Keep sparks and flames away from the batteries as electrolyte gas is highly flammable.

1. Open cover on left side of the paver to access battery.

NOTE: When replacing the battery, discard the old battery properly.

2. Before connecting the batteries, turn off the master switch, located under the operator control panel. **(Figure 5-22)**



Figure 5-22. Battery Master Switch

3. Be certain that battery terminals and posts are clean and that the battery cable terminals are tight.

NOTICE Dirty or loose battery connections can create high electrical resistance and permit arcing.

4. If corrosion is present around terminal connections, remove and wash with ammonia or a solution of 1/4-pound (.11 kg) baking soda added to one quart of warm water. Ensure the vent caps are tight to prevent solution from entering the cells.
5. Pour clean water over the battery and surrounding area to rinse away the solution.
6. Check vent cap breather openings to ensure they are clear.

Alternator

The alternator supplies electrical power to electronic controls and charges the battery. Its built-in regulator controls voltage output. **(Figure 5-23)**



Figure 5-23. Alternator

Use the following precautions to prevent damage to the alternator or regulator:

- Never polarize the alternator.
- Never ground any alternator terminals or circuits.
- Always disconnect the battery before disconnecting or connecting the alternator.
- Never disconnect the alternator while machine is operating.
- Ensure wiring is properly connected before connecting the battery.
- Always connect a booster battery in the proper polarity: negative (-) to negative (-) and positive (+) to positive (+).

SCREED ELECTRIC HEAT (OPTION)

Screed Electric Heat Elements

The electric heat control box contains the element breakers and main outputs for the screed heating system. Powered by 220VAC and 240VAC, each element has two breakers. **(Figure 5-24)**

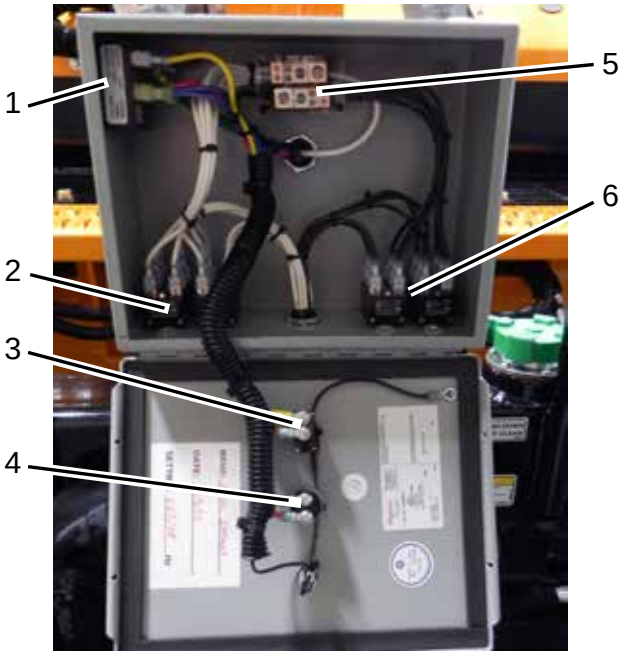


Figure 5-24. Electric Heat Elements

1 - Timer

2 - L-1 Circuit Breakers

3 - Power On Toggle

4 - Heat On Button

5 - Wire Junction Block

6 - L-2 Circuit Breaker

The control box consists of three major types of components:

- The system timer is located in the upper left hand corner of the box.
- The element breakers are located in the lower surface of the box.

The other block in the center is used as a wire junction block only. Refer to the wiring schematics in Section 6 to see where connections are made.

NOTE: Control boxes are manufactured to fit all screed and paver combinations. If not all plugs are connected to wires, it may be normal. Be sure to keep open plugs with the plug terminator(s).

Any element lead can be plugged into any supply plug under the heating control/distribution box. All six plugs are equally rated.

- Each element output consists of two wires--one connects to the L-1 circuit and the other to the L-2 circuit. **(Figure 5-24)**
- Each breaker has two terminals--one is connected to the main input and the other terminal to an element output wire.
- The L-1 circuit is the left bank of element breakers.
- The L-2 circuit is the right bank of element breakers and wired slightly different. Each leg goes from the main L-2 power lead through a breaker, then through one of the six contacts on the element relays.

It is these relays that “make” or “break” the circuit to each element to start or stop the heating cycles.

When the HEAT ON button is depressed, 12VDC is momentarily applied to this terminal to start the timer cycle. During the timer cycle, power will not be applied to this terminal unless the HEAT ON button is depressed again.

There are six terminals on the timer:

- The top two left terminals are the main 12VDC input terminals.
- The ground is on the left.
- The power is on the right.
- The top right terminal is the common terminal to the internal timer relay that controls the heat system. When power is applied to the input terminal, it is also jumped to the common (or COM) terminal on the timer.
- The lower right two terminals on the timer are the outputs of the internal timer relay.

Element Resistance Testing

The breakers are wired into each leg of each element. If an element has a fault, either in the wiring, or in the element itself, the breaker will trip and power will no longer be applied to that leg of the element.

When a breaker in the control box has "tripped," there may be a problem in the wiring or an element in the circuit.

The breakers can be manually reset by depressing the trip button back into place when they are extended. If the breaker still does not reset, you need to test or possibly replace an element.

If the element is functioning correctly, you should read a resistance between 25 and 35 ohms when testing. A faulty element will read "open" or show little resistance (less than one ohm), indicating a shortage through the element.

To test the element:

1. Disconnect elements one at a time from the connection point on the lower side of the control box.
2. Using an ohm meter, test the resistance through the element between the two pins in the plug. **(Figure 5-25)**

NOTE: You do not have to test the plug attached to the lower side of the control box.

3. Before replugging the element, check each wire pin with an ohm meter test lead, placing the lead on a steel section of the screed frame. If there is any continuity through the element to the frame, the element must be replaced.

⚠WARNING DO NOT operate an element with a known shortage. Replace faulty elements and wiring immediately.



Figure 5-25. Plug

Heating Elements

Each heating element is sized to fit properly and provide sufficient power to heat your screed plate to a temperature that prevents mix from sticking to the lower surface of the screed plate.

An element assembly consists of four main components:

- The element.
- The wire protector adapter.
- The wire protector.
- The two-pin wire plug at the end of the element protector.

Each element is covered by a thin strip of insulation to keep heat from escaping. A support bar and shield protects the element assembly.

Each element is clamped onto the screed plate to provide a positive and efficient connection. Enough pressure should be applied to the element assembly to sufficiently hold it securely against the screed plate surface.

To remove an element:

1. Remove top cover from the extension screed plate.
2. Loosen all the clamping studs over the element.
3. Remove and replace element.
4. After tightening the clamping stud, lock the clamp by tightening the stud jam nut.

Generator Voltage Testing

The generator is hydraulically-driven. When the hydraulic system is at normal operating temperature and the engine is running at maximum RPMs, the generator produces between 220 VAC and 240 VAC.

The generator voltage depends upon speed (RPMs), increasing voltage as RPMs increase and decreasing voltage as RPMs decrease. The voltage will decrease significantly if the generator speed is slower than 3000 RPMs.

NOTE: When testing the generator voltage ensure the paver engine is at 2200 RPMs and the hydraulic temperature is at normal operating levels.

Test the generator voltage at the generator and at the control box using the following procedure:

1. Use a volt meter to measure between the two main input wires L-1 (black wire) and L-2 (white wire) at the generator. **(Figure 5-26)** If you measure from L-1 to the frame of the paver, or ground, the voltage will be half the rated output of the generator.
2. Using the volt meter, measure between the black and white input wires inside the control box on the terminal block. The voltage should be the same as what you measured at the generator.

If the voltage is lower, make certain the generator is turning the correct speed by testing with a Hz meter or photo tachometer. If the voltage is still low, contact your authorized LeeBoy dealer for generator speed tuning (see next section).

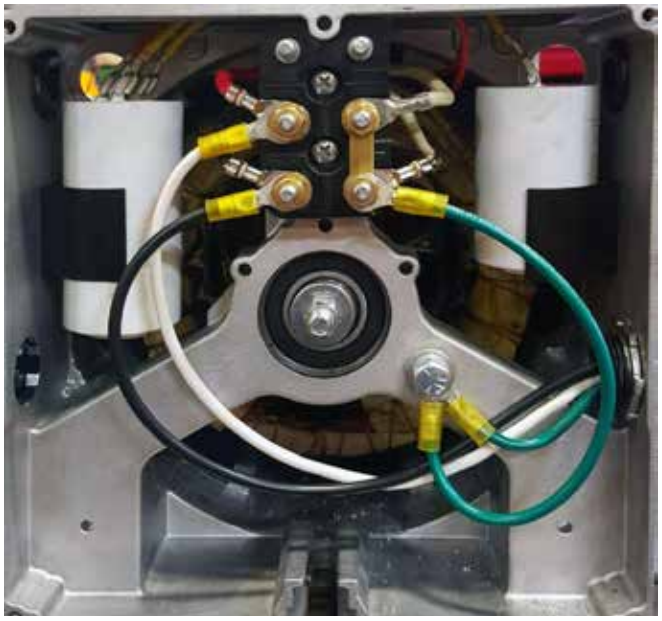


Figure 5-26. Generator

Generator Speed Tuning

NOTICE **This adjustment should only be performed by an authorized LeeBoy dealer. Work not performed by an authorized dealer can damage machine and void the warranty.**

A voltmeter set to read frequency (Hz) can be used to test generator speed. When the engine is running at 2200 RPMs, the generator should operate at 58 to 62 Hz, or a speed of 3480 to 3720 RPMs. If the generator speed drops below 3480 RPMs, the voltage output and performance of the heating system will decrease significantly. When testing the generator speed, make certain that the paver engine is at 2200 RPMs and the hydraulic temperature is at normal operating levels.

NOTICE **The generator should never be operated at a speed of 3800 RPMs or greater. Generator damage will occur and void your warranty.**

Your authorized LeeBoy dealer will perform the following procedure:

1. Raise the conveyor bed and insert safety prop.
2. Set voltmeter to read frequency (Hz), to measure between the two main input wires L1 and L2. **(Figure 5-27)** A photo tachometer may also be used to check the speed of the generator at the motor coupling by removing the motor coupling shield.
3. Note that 60 Hz is exactly 3600 RPMs. For every Hz above 60, an increase of 60 RPMs can be added to 3600 RPMs. For every Hz below 60, a decrease of 60 RPMs can be subtracted from 3600 RPMs.

Example: *60 Hz is 3600 RPMs. A reading of 62 Hz would be 3720 RPMs. A reading of 58 Hz would be 3480 RPMs.*

⚠CAUTION **Always replace shields and panels when finished testing.**

⚠CAUTION **Improper adjusting will overspeed and cause damage to the generator.**

NOTE: The integrated flow-control manifold is pre-set and will maintain the generator at it's proper speed if the correct amount of oil is supplied to the set. If the temperature of the hydraulic system rises above 160°F, some slippage may occur through the gear set of the generator motor, and the generator may slow slightly.



Figure 5-27. Generator Flow Control Adjuster

1 - Gauge Port

2 - Fine Tune Speed Adjuster

Adjusting the flow-control adjuster on the front of the manifold controls speed of the generator. **(Figure 5-27)**

To perform this adjustment:

- Locate the Flow Control Adjuster and turn to increase or decrease the speed as needed.
- Turning clockwise will decrease the generator speed. Turning counterclockwise will increase the generator speed.

If the generator will not operate at the correct speed, test the hydraulic flow from the pump or check the generator motor for excessive case drain flow. The case drain should not leak more than one gallon per minute. Replace the generator motor or paver pump if either are operating incorrectly.

Generator Capacitor

The generator capacitor controls and regulates voltage while the machine operates. If the capacitor fails, the voltage will drop below normal or no output at all. It's located in the rear of the generator controls.

If experiencing a drop in voltage, replacing the capacitor will help determine if the capacitor is at fault.

To perform this procedure:

1. Shut down the machine.
2. Detach the wires on top of the capacitor.
3. Remove the capacitor and replace with new one.
4. Reattach wires.

REPLACEMENT PROCEDURES

Front Idler

Follow this procedure for replacing the front idler **(Figure 5-28):**

1. Raise conveyor and insert safety prop. **(Page 5-6)**
2. Locate track tensions manifold and back the relief cartridge out of the aluminum block about three turns until you hear the tension pressure release.

NOTE: Perform this additional step for poly or steel tracks only: Rotate the track so the master pin is at the rear bottom of the front idler and back up the paver until the track clears the front idler.

3. Jack up the paver at least two feet (61 cm) off the ground for enough clearance under the undercarraige to perform this procedure.

DANGER Crush hazard! Always use safety blocks in addition to jack when working under the paver to prevent serious injury or even death.

4. Remove the clip pin from the cylinder rod and idler bracket. Idler will slide out.
5. Remove the idler bracket and bolt to the new idler.
6. Install idler, ensuring cylinder and clip pin are aligned properly.
7. Lower sprocket back down toward the track chain,ensuring the sprocket is about one (1) inch (2.54 cm) from the chain.

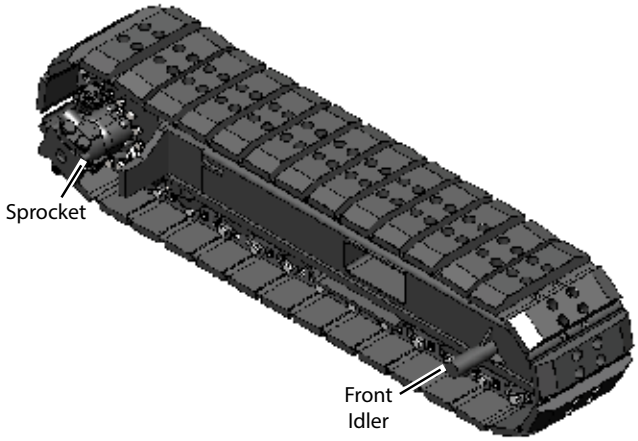


Figure 5-28. Front Idler

Perform these additional steps for poly or steel tracks only:

8. Check that the track chain is full seated with the drive sprocket and rollers are aligned with chain center.
9. Tighten the tension relief.
10. Lower paver to ground, remove jack and start machine. Track tensions will automatically adjust when the machine is started.
11. Ensure the track chain remains fully seated with the drive sprocket and rollers still aligned with the chain center.

Track Tension Cylinder

1. Follow **Steps 1 - 4** in the previous section. The track tension cylinder is located behind the front idler. **(Figure 5-28)**
2. Pull the track tension cylinder toward the front to remove the hose from the bottom of the cylinder.
3. Repack the seal kit or replace cylinder if worn, and reinstall.
4. Install idler, ensuring cylinder and clip pin are aligned properly.

NOTE: If equipped with poly or steel tracks, follow Steps 8 - 11 above.

Track Rollers

1. Raise conveyor and insert safety prop. **(Page 5-6)**
2. Release track tension by screwing the relief cartridge out of the manifold (about three turns or until you hear the pressure release).
3. Jack up the paver at least two feet (61 cm) off the ground for enough clearance under the undercarraige to perform this procedure.

DANGER Crush hazard! Always use safety blocks in addition to jack when working under the paver to prevent serious injury or even death.

4. Remove the faulty rollers and replace with new ones.
5. Torque bolts to 90 ft lbs (122 N•m).
6. Ensure the track chain is fully seated with the drive sprocket and rollers are alilgned with chain center.
7. Tighten tension relief.
8. Lower paver to the ground and start machine. Track tension will automatically adjust when machine is started.
9. Ensure the track chain remains fully seated with drive sprocket and rollers aligned with the chain center.

Track Sprocket (Steel or Poly)

1. Raise conveyor and insert safety prop. **(Page 5-6)**
2. Rotate the track master pin to the bottom of the sprocket.
3. Release track tension by screwing the relief cartridge out of the manifold (about three turns or until you hear the pressure release).
4. Remove track master pin at bottom rear of sprocket. Drive paver forward to disconnect track from the top of the sprocket.
5. Jack up the paver until the sprocket clears the track.

DANGER Crush hazard! Always use safety blocks in addition to jack when working under the paver to prevent serious injury or even death.

6. Remove bolts holding sprocket. **(Figure 5-29)**
7. Remove rear track roller.
8. Slide sprocket off and replace.
9. Slide sprocket back in place.
10. Place thread-locking adhesive on bolts and install bolts holding sprocket.
11. Lower paver so that sprocket goes back into track chain. Drive paver forward to rotate track onto top of the sprocket.
12. Place master pin back in track and place thread-locking adhesive on bolts.
13. Tighten relief cartridge in the manifold.

Rubber Track (Option)

1. Raise conveyor and insert safety prop. **(Page 5-6)**
2. Jack up the paver at least two feet (61 cm) off the ground for enough clearance under the undercarraige to perform this procedure.

DANGER **Crush hazard! Always use safety blocks in addition to jack when working under the paver to prevent serious injury or even death.**

3. Loosen the track tension cartridge at the manifold located at rear of the bottom hydraulic tank.
4. Label and disconnect the track tensions hoses from undercarriage at track tension manifold.
5. Cap and plug all hoses.

NOTE: Remove generator cord at generator if removing left undercarriage (electric heat screed only).

6. Remove the two (2) bolts holding the drive motor to the torque hub. **(Figure 5-28)** Support the undercarriage with a forklift or jack before lowering to the ground.
7. Unbolt the two (2) trunnions on the front of track undercarriage and stops at each side of the rear of the undercarriage.
8. Lower the track assembly.
9. Remove rubber track by prying from the idler end first.
10. If needed, replace idler, torque hub, sprocket, rollers and/or cylinder. Lower the undercarriage for replacing above components, except rollers.

Rear Conveyor Shaft, Bearings and Sprockets

1. Drive paver onto a ramp to access undercarraige.
2. Disconnect the main conveyor chains. **(Figure 5-29)**
3. Disconnect any link.
4. Rotate chains away from the assembly.
5. Remove chain from drive motor to the conveyor sprocket.
6. Remove bolt and washers holding the sprocket.
7. Remove the sprocket and bearing from the frame.
8. Remove bolts on the inner sprocket.
9. Slide out shaft and outer conveyor sprocket through frame side.

NOTE: Rear tube can be removed for changing the inner bearings.

NOTE: Remove the inner seals from replaced bearings in the tubes to allow grease to enter into the bearing area.

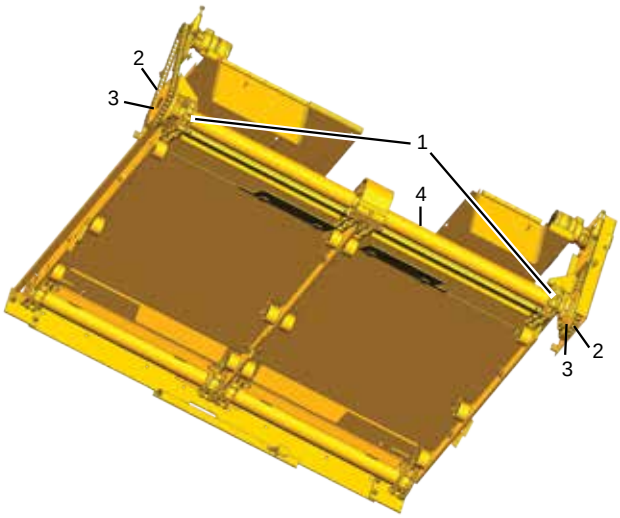


Figure 5-29. Rear Conveyor Shaft

1 - Main Conveyor Chains

2 - Conveyor Chains

3 - Conveyor Sprockets

4 - Conveyor Shaft (inside tubing)

10. Place conveyor shaft into the inner conveyor sprocket.
11. Insert bolt into shaft.

NOTE: The outer conveyor sprocket must be aligned with the inner sprocket.

12. Rotate the outer sprocket on the shaft until properly aligned.
13. Reinstall the outer bearing and outer sprocket.
14. Place thread-locking adhesive on the bolt and torque to 180 ft. lbs. (244 N.m).
15. Reinstall the conveyor and drive chains and adjust.
16. Grease bearings in the tubes by using grease blocks on each side below the hopper wing.

Conveyor Drive Motors

1. Remove hydraulic hoses from motor.
2. Remove four bolts holding hydraulic motor to slide mount. **(Figure 5-30)**
3. Slide drive motor out of slide mount.
4. Slide new or repaired drive motor into slide mount.
5. Secure with four bolts.
6. Reconnect hydraulic hoses to motor.
7. Check for leaks.

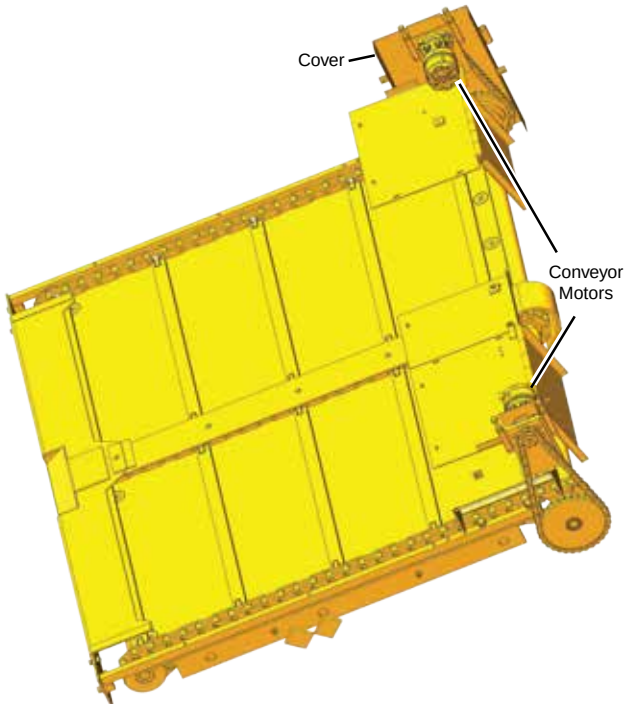


Figure 5-30. Conveyor Motors

Auger and Inner Bearings

1. Remove rear grating over auger assembly.
2. Extend the screed extensions completely.
3. Clean asphalt build up from around cover.

NOTE: Heating asphalt may be required.

4. Remove the two (2) nuts holding top cover on and pry cover apart.
5. Remove bottom portion of cover.
6. Rotate auger chains so that master link is centered at front.
7. Loosen auger chains by sliding auger motors down from backside after loosening the two (2) bolts securing mounting brackets.
8. Remove bottom clamps that hold auger bearings in.
9. Remove auger end mounts so that augers can be removed through opening in sides.
10. Remove augers and lay augers on the ground in the same position as removed. This will help insure proper installation of the new augers.
11. Check inner auger bearings and replace if faulty. **(Figure 5-31)**

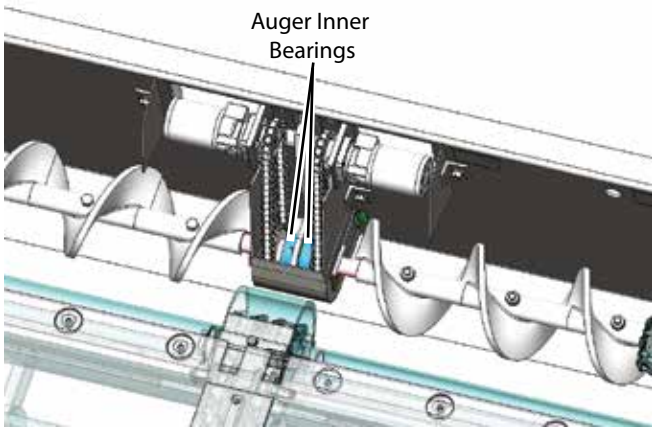


Figure 5-31. Auger Inner Bearings

NOTE: When installing the new augers, be sure to align augers the same as the removed augers. It is very easy to install augers backwards.

12. Install new augers making sure that they are on correct side to auger material outward.
13. Tighten bearing setscrew to help hold auger shaft from moving outward.

14. Slide auger collar onto the end of the auger shaft and bolt end mount back on. Torque mounting bolts to 78 ft. lbs. (106 N•m).
15. Push collar all the way in against end mount and attach with two (2) setscrews, one (1) on outside and one (1) on inside.
16. Replace bronze bushing in the end mounts.
17. Place auger chains back on and adjust auger motors up to tighten chains. Use adjusting bolt to tighten motor, then snug bottom motor mount bolts (make sure chains have approximately 1/4" of slack).
18. Make sure the motor bolts at top and bottom are tight and torque to 150 ft. lbs. (155 N•m). Do the same for the other side.
19. Lubricate chains.
20. Place grating back on over auger.
21. Operate augers and make sure everything is correct.

NOTE: Auger chains can be lubricated each day by spraying oil or chain lube through the slots where auger motor is adjusted.

Auger Motors

1. Extend screed extension completely.
2. Remove floor grating.
3. Clean asphalt buildup around cover.
4. Disconnect and label the hydraulic hoses. Plug fittings.
5. Remove the two nuts on the cover and pry the cover apart. **(Figure 5-32)**

NOTE: Heating asphalt may be required.

6. Loosen auger tension adjusters.
7. Loosen the the two bolts securing the auger motor mounting brackets.
8. Loosen the auger chains by sliding the auger motors out from backside.

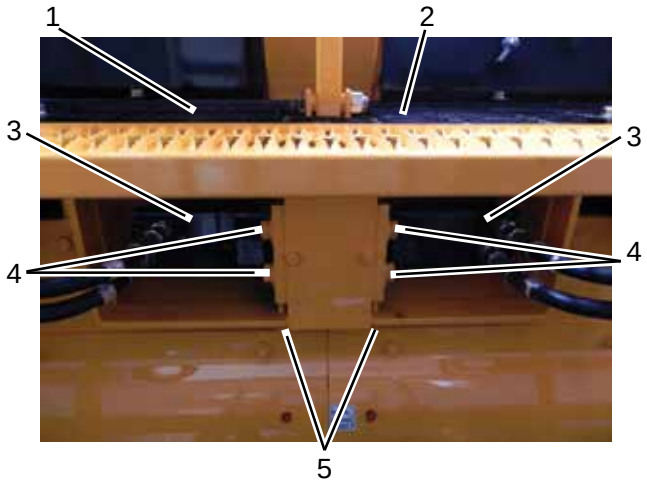


Figure 5-32. Auger Motors

1 - Floor Grating

2 - Front Auger Cover

3 - Auger Motors

4 - Auger Mounting Bolts

5 - Auger Tension Adjusters

9. Slide the long screw through the bolt side of the chain to prevent it from falling down into the cover. Once chain is secure, remove the bolt holding the sprocket.
10. Hold the sprocket at the chain as you slide out the motor.
11. Remove the sprocket from the chain.
12. Slide off the sprocket and remove the auger motor mount.
13. Place the new auger motor onto the mount.
14. Reinsert the sprocket back onto the chain.
15. Reinsert the motor.
16. Cover bolts with thread-locking adhesive, reinsert and tighten.
17. Adjust the chain for 1/4 inches of slack.
18. Lubricate with chain lube.
19. Reconnect the hydraulic hoses and check for leaks.

Main Screed Wear Plate

1. Retract screed extension completely.
2. Remove the cylinder covers on the walkboards, then the screed lids.

NOTE: If equipped with electric screed heat, remove all wiring and heating elements.

3. Remove all the bolts holding the wear plate to the screed frame on each side. (Figure 5-33)

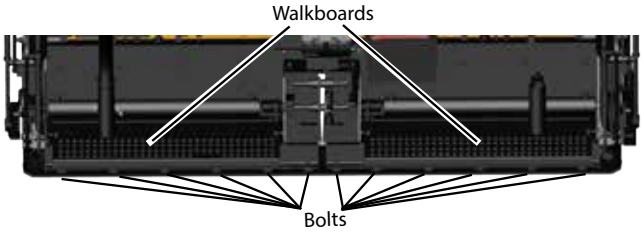


Figure 5-33. Wear Plate Mounting Bolts

4. Clamp the center portion of the screed frame to hold the frame in place when lifting it from the worn wear plate.
5. Raise the screed up and remove the worn wear plate.
6. Clean all material buildup on the screed frame.
7. Set new wear plate level on three blocks, placing one block in the center and one at each end. Ensure the extensions are completely raised to prevent misalignment.
8. Lower the screed frame down onto the new wear plate.

NOTE: DO NOT tighten the bolts in the next step until are bolts are installed.

9. Install five bolts in one side at the front to hold the wear plate in place.
10. Loosen the plate on the slotted side and adjust the crown. This will move the screed frame in and out on the wear plate to help align the bolts on the opposite side.
11. Install the remainder of the front bolts, then install the rear bolts, ensuring the screed frame and wear plate are flat.
12. Torque bolts to 55 ft lbs (74 N•m) starting inside, then moving outward by rotating from the left to the right side to keep the screed relaxed.

NOTE: Install all wiring and elements if equipped with electric screed heat option.

13. Reinstall the screed lids, walkboard and cylinder covers.

Screed Extension Wear Plate

1. Extend the screed completely.
2. Remove the endgate by removing the tilt screw and nut on each side of the tilt screw. The endgate will tilt forward and slide off the bolt.
3. Disconnect the extension AOA adjuster **(Figure 5-34)** on top of the wear plate by removing locknut, washer and shoulder bolt.
4. Remove the three bolts holding the front extension hinge shield.

NOTE: If equipped with electric screed heat option, remove all wiring and heating elements.

5. Carefully slide the hinge pin out. The wear plate will disconnect and fall to the ground.
6. Hold the new wear plate in place and slide the hinge pin back into place.
7. Fasten the AOA adjuster back to the wear plate with locknuet, washer and shoulder bolt.

NOTE: Reinstall all wiring and heating elements if equipped with electric screed heat option.

8. Reinstall the front hinge shield.
9. Reinstall the endgate and tilt screw.

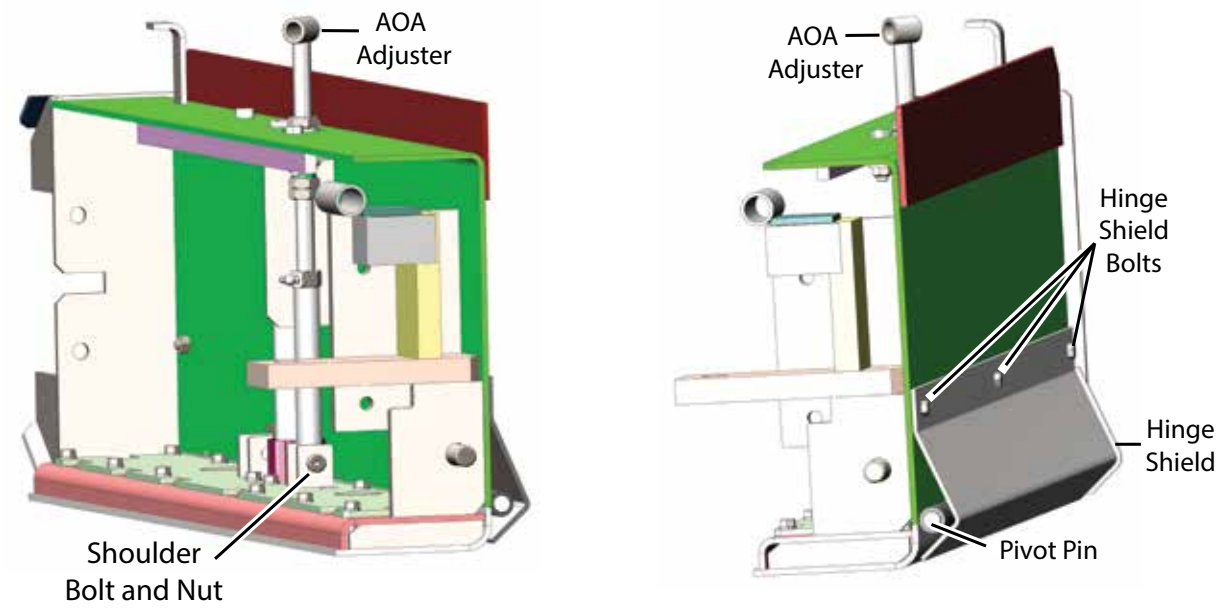


Figure 5-34 Wear Plate Replacement

Torque Hub

If the torque hub has been damaged or worn, use to following procedures for replacement:

1. Raise conveyor and insert safety prop. **(Page 5-6)**
2. Loosen the track tension valve on the track tension manifold to release pressure.
3. Remove master pin in the track chain behind the front idler (bottom side).
4. Back paver up until track lays flat on the ground.
5. Jack up the paver at least two feet (61 cm) off the ground for enough clearance under the undercarraige and place on sturdy jack stands.
6. Remove the two cap screws and lock washers attaching the drive motor to the torque hub drive.

NOTE: DO NOT disconnect hoses from the hydraulic drive motor. Hoses are long enough to slide the motor out. Clean hoses before reinstalling.

NOTE: Mark location of torque hub to the undercarriage before removing to ensure the drive motor is reinstalled in the same position.

NOTE: Sprocket can be removed before the torque hub by removing the rear track roller and bolts in the sprocket.

7. Remove bolts holding torque hub to track undercarriage. **(Figure 5-35)**

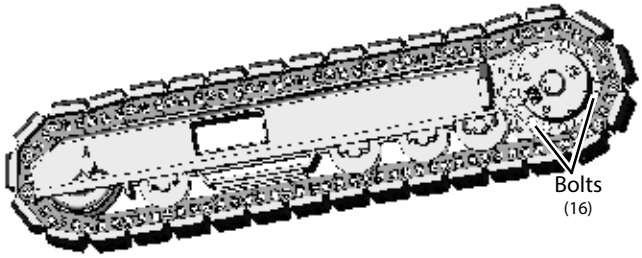


Figure 5-35. Torque Hub

8. Install torque hub in proper position to align with the drive motor.
9. Place thread-locking adhesive on torque hub bolts and torque bolts (see Torque Specifications in **Section 2**).
10. Check O-Ring on the drive motor and replace if worn.
11. Place thread-locking adhesive on sprocket bolts and torque bolts (see Torque Specifications in **Section 2**.)
12. Reinstall rear track roller if previously removed.
13. Fill torque hub with oil. **(Page 5-7)**
14. Lower paver to ground and reconnect track.

NOTE: Removing pad from chain where master pin is placed will make reconnecting track easier from top side at rear of the idler.

15. Retighten track tension valve.
16. Lower conveyor and bolt hopper wings.
17. Start paver and check for any leaks with engine running.

NOTICE **DO NOT use your bare hands when checking for hydraulic leaks as serious injury can result from an oil leak under high pressure. Always wear safety glasses and protective clothing.**

⚠WARNING **Stop the engine immediately if any hydraulic leak is noted. DO NOT start the engine until the leak has been repaired.**

5

Tandem Gear Pump

Hydraulic fluid is transmitted throughout the machine to motors and cylinders, becoming pressurized according to the resistance present. The fluid is controlled by valves and distributed through hoses and tubes. The tandem gear pump plays a significant role in producing hydraulic power as it supplies hydraulic fluid to system components. It is located directly in front of the hydraulic test ports on the right side of the machine. **(Figure 5-36)**

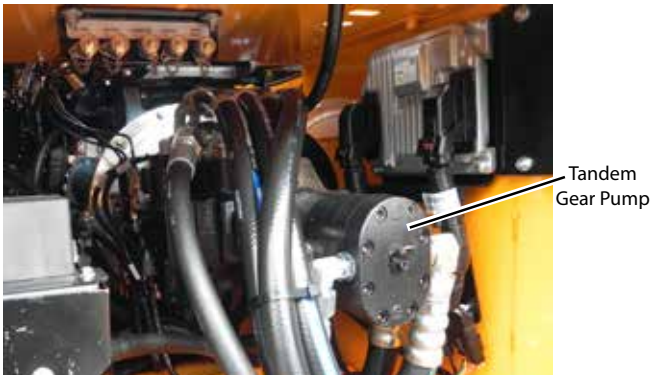


Figure 5-36. Tandem Gear Pump

To replace the tandem gear pump:

1. Remove the right side cover, right side access door cover and top right side cover to access the pump.
2. Label and disconnect the hoses to the tandem gear pump, plugging and capping the fitting on the pump.
3. Label, plug and cap the hoses.
4. Remove the two screws attaching the auxiliary pump to the pump plate cover.
5. Lift the auxiliary pump assembly out of the machine and place on a flat surface.
6. Remove the O-ring between the two pumps.
7. Put a small amount of hydrualic oil on the O-Ring and reinstall between the pumps.
8. Align the mounting holes in the auxiliary pump with the mounting on the pump.
9. Attach the pumps with the two mounting screws and torque to 89 ft. lbs. (12 N•).
10. Remove plugs and caps to reconnect hydraulic hoses to pumps as previously labeled.
11. Check hydrualic oil level. Add more if needed.
12. Reinstall covers.
13. Start the paver and check to be sure there are no hydraulic oil leaks.
14. Let machine idle approximately 10 minutes to allow the pump and motor cases to fill with hydraulic oil and ensure pumps are not damaged.

Two-Speed Hydraulic Motors

1. Move paver onto a ramp where you can access the undercarraige.
2. Disconnect, label and plug fittings on hydraulic hoses to the hydraulic motors. **(Figure 5-37)**

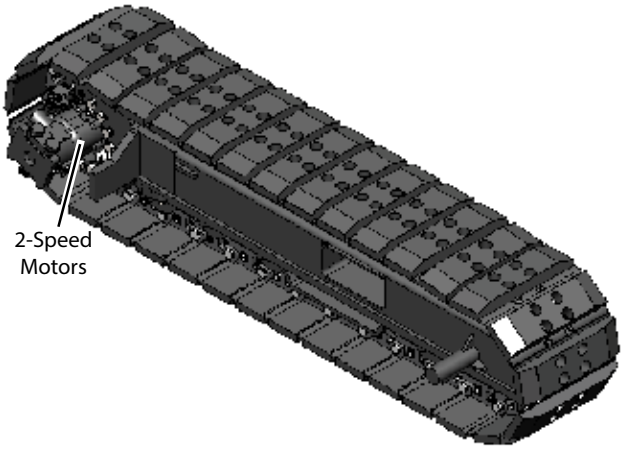


Figure 5-37. Two-Speed Hydraulic Motors

3. Place blocks sufficient to support the hydraulic motors underneath them.
4. Remove the two screws and lockwashers attaching the hydraulic motor to the torque hub and carefully separate motor from the torque hub.
5. Remove the O-Ring and drain hydraulic oil from the motor. Discard or repair the motor as appropriate.
6. Lubricate a new O-ring with hydraulic oil and install onto the torque hub.
7. Reattach new or rebuilt hydraulic motor to torque hub and torque screws to 120 ft. lbs. (163 N•
8. Reconnect hydraulic hoses.
9. Start the engine and let machine idle for 10 minutes to work air out of the hydraulic system.
10. Check for any leaks.

Conveyor Switch Replacement

If you need to replace the conveyor switches, follow these instructions, using the color codes for wiring **(Figure 5-38)** to ensure the conveyor switches on the conveyor flap are wired correctly:

1. Raise the conveyor flap 6-1/2 to 7 inches (16.5 to 17.8 cm) from the bottom of the tank mount support.
2. With the switch installed and the conveyor paddle hanging down:
   - Using a multimeter, measure the ohms across the black and white wires.
   - Using a multimeter, measure the ohms across the red and green wires.

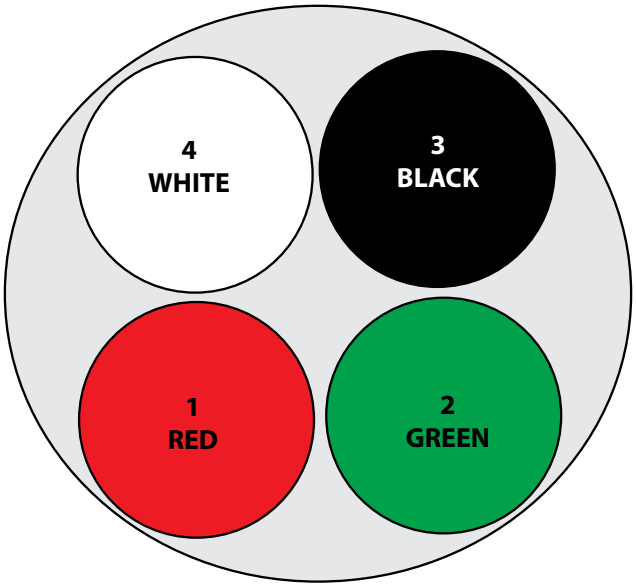


Figure 5-38. Conveyor Switch Wiring

3. Wire the switch using the wires that show continuity.
4. Repeat Steps 2 - 3 for the second switch.

NOTE: The switches are sealed and potted, therefore, they are not serviceable.

WELDMENT



Figure 5-39. Welding

If the machine has been damaged or metal parts worn due to extensive use, minor welding may be necessary for repair. Welding is very dangerous. Only individuals who are properly trained should weld in a dedicated area away from others as even looking at ultraviolet light from the flame can cause serious eye injury.

Welding hazards include toxic fumes, harmful dust, light radiation, burns, combustion from sparks and the potential for extensive damage to the eye. There is also a danger of electric shock. If combustible or flammable materials are nearby, the heat and sparks produced by welding can cause fires or explosions.

TURN THE BATTERY SWITCH OFF AND DISCONNECT BATTERY TERMINALS BEFORE WELDING ON THE MACHINE.

Electrical current can ignite fire or cause an explosion, therefore it is critical to turn off power to the machine. It is also important to grind off the paint to ensure proper ground on the area being welded.

DO NOT MAKE MODIFICATIONS TO THE MACHINE. ONLY weld if needed for repair purposes. Weldment modifications to the machine can void your warranty.

TROUBLESHOOTING

Plus One

The Plus One is a 50-pin controller that monitors paver control systems and alerts the operator in the event of a fault. The Plus One status light on the control panel **(Figure 5-40)** illuminates red and blinks continuously or blinks, then pauses, then blinks again according to the blink code numbers listed in **Table 5-5.** For example, code 29 will show two blinks, then a pause, then nine blinks.

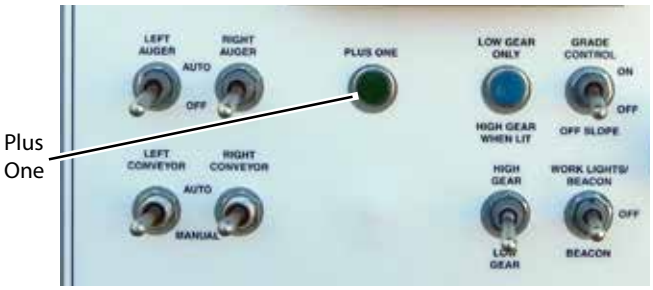


Figure 5-40. Plus One

When the key is turned on, the status light will illuminate red for approximately three seconds while the Plus One controller powers up, then turn off when the machine is ready to start. The light will stay on and the Plus One will not allow the engine to start if any joystick is out of netural or more than one Run/Stop switch is in the RUN position.

If the joysticks are in the forward position and the Run/Stop switch is in the RUN position, the Plus One will disable the control box after a set period of time. This is a safety measure in the event the operator leaves the station with the control box still active and the joysticks accidentally moved. The operator must then toggle the Run/Stop switch from RUN to STOP and back to RUN again to regain control.

These faults will also prevent machine movement:

- Steering control box not detected.
- Joysticks not optimized.
- Pump control coil fault.
- Brake valve/pump neutral bypass coil fault.
- There is only one steering control box present.
- The fault happens in the steering control box that has control (Run/Stop switch in the RUN position).
- The fault occurs when neither steering control box is in control.

Table 5-5. Plus One Fault Codes

Blink Sequence	Fault / Corrective Action
Continuous at Start-Up.	Joysticks not in neutral. Must be placed in neutral at start-up.
Continuous while running.	Joysticks out of neutral. Return joysticks on both control boxes to neutral.
Continuous while in neutral.	Joysticks in neutral too long with Run/Stop switch in RUN position. Toggle Run/Stop switch from RUN to STOP, then back to RUN.
Continuous rapid blink.	Calibration Mode. Open control panel and unplug the Optimize/Calibrate plug from the Calibrate receptacle.
Continuous slow blink.	Optimize Mode. Open control panel and unplug the Optimize/Calibrate plug from the Optimize receptacle.
21	Left steering control box not optimized.
22 or 27	Left joystick fault. Check wires to left joystick.
23 or 28	Right joystick or steering. Check wires to right joystick or steering wheel fault.
24	Right steering control box not optimized.
25 or 37	Left joystick fault. Check wires to left joystick.
26 or 38	Right joystick or steering wheel fault. Check wires to right joystick or steering wheel.
29	Controller has not received an updated J1939 CAN message. Check J1939 connection and ECM is intact.
31	Brake release/pump neutral bypass valve coil. Output is open or short-circuited. Check the coil and wires.
32	Right pump FWD or REV output fault. Output is open or short-circuited. Check coil and wires.
33	Left pump FWD or REV output fault. Output is open or short-circuited. Check coil and wires.
35	Sensor power fault. Check sensor wiring for power and ground.
36	Vibrator/electric actuator relay fault. Output open or short-circuited. Check relay and wires.

Test Ports

The hydraulic test ports provide an easy and convenient means of checking pressure for the five main functions of the paver: Forward drive (left and right sides), conveyor, charge pressure and the main manifold valve. The test ports are located together just under the hose reel on the right side of the paver. **(Figure 5-41)**

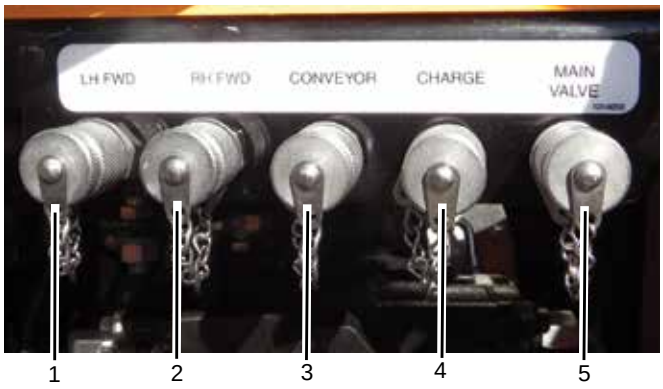


Figure 5-41. Test Port

Item No.	Function	PSI Relief / Gauge
1	Left Forward	Relief set at 3625 PSI. Use 4000 PSI gauge.
2	Right Forward	Relief set at 3625 PSI. Use 4000 PSI gauge.
3	Conveyor	Relief set at 2600 PSI. Use
4	Charge	Relief set at Use 320 PSI gauge.
5	Main Valve	Relief set at 2900 PSI. Use 3000 PSI gauge.

To check pressure:

1. Using the table above, connect the appropriate gauge to the port being tested.
2. Start the engine, then check gauge for the proper pressure reading.
3. If adjustment is needed, locate the pressure-reducing valve on left side of main manifold.
4. Remove valve cap with an allen wrench.
5. Adjust the pressure-reducing valve clockwise for more tension or counterclockwise for less tension.

PV480 Digital Display

Under certain conditions, the PV480 digital display can become inoperable. If the display screen is completely black, it must be replaced. If the gauges on the screen become gray **(Figure 5-42)**, the display panel is not receiving communication over the CANbus. If this occurs, check the connector. If the gauges are still gray, check the ECU powering up.



Figure 5-42. Gauges Grayed on Screens

Check PV480 Connector

1. Ensure the ignition switch is in the OFF position before starting the machine.
2. Remove the main connector from the rear of the PV480 digital display controller.
3. Inspect the terminals in positions 14 (green) and 26 (yellow) for the CANbus communication.
4. If terminals are properly seated, carefully “unlock” the red retaining clip and slide away from the wires. **(Figure 5-43)**



Figure 5-43. PV480 Main Connector

5. Ensure all the other terminals are locked into the connector shell.
6. Push the red retaining clip back into the locked position and ensure terminals are flush with the red retaining clip.



Figure 5-44. Terminal Seat

7. Reinstall connector on to the PV480 panel, making sure the connector shell locks into its mate on the display panel.

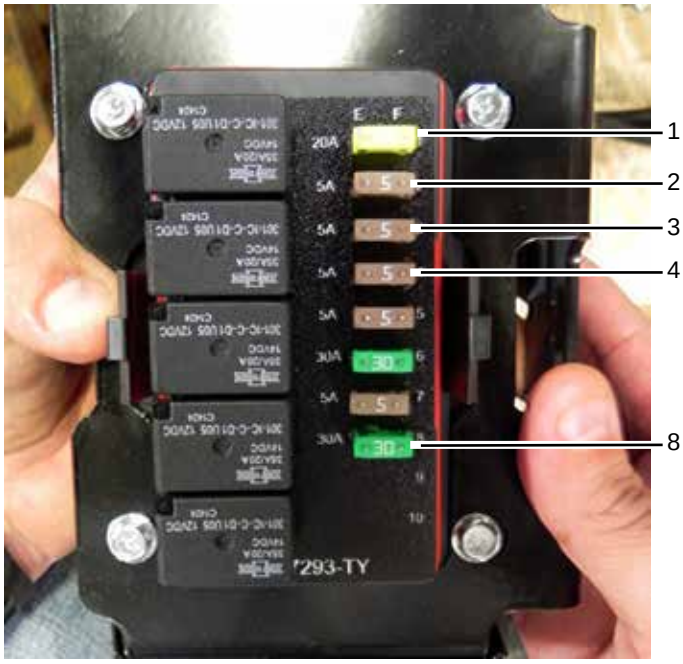


Figure 5-45. Power Distribution Box (PDB)

Check ECU Powering Up

Each engine has a power distribution block (PDB) on the main engine harness that provides power to the ECU through the ECU control relay; main relay; and fuses in Positions 1, 2, 3, 4 and 8. **(Figure 5-45)**

To check the ECU powering up:

1. Locate the PDB on the right side of the paver inside the engine access door.
2. Fuses can be checked by removing the fuse and using a continuity tester OR checking for +12VDC on each pin on the back of the fuse.
3. Confirm operation of ECU and main relays:
   - If the ECU relay is not energizing, starter will not operate.
   - If the main relay is not energizing, the fuel pump will not operate.

If none of these procedures correct the problem, contact your authorized LeeBoy dealer for assistance.

Troubleshooting Chart

The troubleshooting chart below identifies the most common symptoms of mechanical problems. Fault codes are also shown on the PV480 Digital Display unit on the Operator Control Panel.

Contact your authorized LeeBoy dealer for assistance, service or repair.

Table 5-1. Paver Troubleshooting

SYMPTOM	CAUSE	REMEDY
Engine does not start.	Defective battery or low battery charge.	Replace or charge battery as applicable
	Master switch is not set at the ON position.	Set switch to the ON position
	Insufficient fuel supply.	Fill fuel tank
	Safety switch is faulty.	Replace
	Solenoid doesn't function properly.	Ensure wires are tight. Clean solenoid plunger. Replace solenoid coil. Replace or rebuild starter or solenoid.
	Switch box unplugged.	Replug switch box.
	Neutral switch defective.	Replace.
	Engine starter relay faulty.	Replace.
	E-Stop engaged.	Disengage E-Stop.
Engine turns over but does not start.	Low fuel.	Add fuel to fuel tank.
Low battery.	Faulty alternator.	Replace or rebuild
	Indicator light, bad bulb	Replace
Machine will not move.	RUN/STOP switch faulty	Check RUN/STOP switch
Machine does not steer straight.	One of the hydraulic drive motors needs adjustment.	Readjust motor(s).
	Steering control is not centered.	Center steering control.
	Travel pump defective.	Replace or rebuild travel pump.
Machine does not change speed when the 2-Speed switch is engaged.	Defective relay.	Replace relay.
	Defective solenoid.	Replace solenoid.
	Defective drive motor.	Replace drive motor.
Conveyor does not function on one or both sides.	Defective Automatic/Manual switch.	Replace switch.
	Solenoid defective.	Replace.
	Feeder drive chain broken.	Repair or replace chain.
	Defective conveyor motor.	Replace.
	Rear conveyor shaft broken.	Replace.

SYMPTOM	CAUSE	REMEDY
Tracks don't operate smoothly.	Tracks too loose.	Tighten track pad bolts.
	Engine RPM is too low to hold track tension.	Rev engine to 1400 RPMs then throttle back to 700 RPMs.
	Track rollers worn.	Replace.
	Track tension pressure.	Check tension pressure and relieve or adjust.
Machine will not pull on one or both sides.	Faulty hydraulic motor.	Replace.
	Pump pressure too low.	Check pump pressure and relieve or adjust.
	Faulty torque hub.	Rebuild or replace.
Engine runs but there is no hydraulic pressure.	Pump drive coupling faulty.	Replace.
	Defective pump.	Replace.
Auger not turning properly.	Drive chain is too loose.	Adjust.
	Drive chain broken.	Replace.
	Faulty motor.	Replace.
	Solenoid valve defective.	Replace solenoid.
	Asphalt buildup.	Clean thoroughly and grease.
	Overload of material to augers.	Set conveyor to proper speed in AUTO or use paddles in MANUAL position.
Screed extensions binding.	Asphalt buildup.	Keep clean and greased.
Screed extension loose.	Out of adjustment.	Adjust hold-downs on extensions.
Screed leaving streak down center of pavement.	No lead crown in screed	Crown leading edge of screed.
	Screed worn out or damaged.	Replace.
	Extensions set too low.	Adjust extension. Always begin operation with extensions extended up with no down pressure.
	Screed not heated properly.	Check elements and heat control box.
Screed leaving ripples in pavement.	Extension set too low.	Readjust extensions.
	Extensions work up and down.	Adjust top guide.
	Extension rod bushings worn.	Replace bushings.
Flight screw locking up.	Twisting screed too far.	Give screed time to react.
	Screw seized.	Replace screw.
Flight screw bearing damage.	Twisting screed too far.	Give screed time to react.
	Loading and unloading.	Check ramps for easy access.
Hydraulic oil leaking from breather cap.	Hydraulic oil tank overfilled.	Drain to proper fill level.
	Oil overheated.	Slow paver down.
		Check oil cooler and thermostat.
Hydraulic pump cavitation or lost power.	Low level in hydraulic tank.	Refill to proper level.
	Clogged filters.	Replace filters.
	Suction hose loose.	Retighten.
	Charge pump worn.	Rebuild or replace charge pump.

SYMPTOM	CAUSE	REMEDY
Feeder does not work on one or both sides.	Defective switch	Replace switch.
	Solenoid defective	Replace solenoid.
	Feeder drive chain broken	Adjust or repair chain.
	Defective conveyor motor	Replace motor.
	Rear conveyor shaft broken	Replace conveyor shaft.
Feeder flight bars don't function properly.	Flight chains too loose	Adjust.
	Feeder drive chain too loose	Adjust.
Loss of power to drives.	Relief out of adjustment.	Check pressure and adjust if needed.
	Piston groups worn.	Replace.
	No charge pressure.	Check that charge pressure is 320 PSI.
Electric screed heating system will not operate.	Control box power switch not in ON position	Ensure that the screed operator control box Power switch is ON.
	Breakers are in a "tripped position."	Ensure all element breakers are in the proper set position.
	Generator malfunction.	Ensure generator is "spinning." Check voltage and frequency. Rebuild or replace if needed.
Only part of the electric screed heats.	Screed section not plugged into bottom of the control box..	Replug.
	Element breakers for screed section in a "tripped" condition.	Ensure the element breakers for that screed section are not "tripped."
Electric screed heat system doesn't start, or starts and doesn't run very long.	Heating system timed out.	Check timing relay. Adjust or replace.
Electric Screed is heating, but never gets hot enough to pave.	Elements improperly clamped.	Ensure elements are clamped properly.
	Generator malfunction.	Ensure generator is "spinning." Check voltage and frequency. Rebuild or replace if needed.
Electric heating system functions but the HEAT ON light isn't illuminated.	Indicator light bulb.	Replace the HEAT ON indicator light bulb.
Elements have been tested, but the breaker still trips.	Faulty element wiring.	Inspect and test element wiring.

PV480 DIAGNOSTIC TROUBLE CODE (DTC) CHART

LEGEND

SPN: Suspect Parameter Number
DPF: Diesel Particulate Filter
FMI: Failure Mode Identifier
EGR: Exhaust Gas Recirculation
ECU: Engine Control Unit
CPU: Central Processing Unit
NE-G: Negative Ground
NE: Neutral
G: Ground
SCV: Selective Control Valve
MAF: Mass Air Flow
PM: Particulate Matter
DC: Direct Current
IC: Integrated Circuit
EBC: Electronic Brake Control
PLV: Pressure Limiting Valve
CAN: Controller Area Network
CM: Control Module
DDC: Direct Digital Control
SW: Switch
TSC: Torque Speed Control
ETC: Electronic Throttle Control
CCVS: Current Controlled Voltage Source
MPROP: Manifold Pressure Rail Operating Pressure
EEPROM: Electrically Erasable Programmable Read-Only Memory

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
29	3	Accelerator position sensor 2: High	Battery short circuit out of sensor/ harness. Voltage of accelerator position sensor 2 is 4.8V or less.	Forced idle. (Accelerator = 0%) Diagnostic counter = zero
29	4	Accelerator position sensor 2: Low	Ground short circuit or open circuit of sensor/harness. Voltage of accelerator position sensor 2 is 0.3V or less.	Forced idle. (Accelerator = 0%) Diagnostic counter = zero
91	2	Accelerator position sensor correlation error	Deviation from designed correlation in two sensors. Voltage of accelerator position sensor 1 is 4.8V or less.	Forced idle. (Accelerator = 0%) Diagnostic counter = zero
91	3	Accelerator position sensor 1: High	Battery short circuit or open circuit of sensor/harness. Voltage of accelerator position sensor 1 is 4.8V or less.	Forced idle. (Accelerator = 0%) Diagnostic counter = zero
91	4	Accelerator position sensor 1: Low	Ground short circuit or open circuit of sensor/harness. Voltage of accelerator position sensor 1 is 0.3 or less.	Forced idle. (Accelerator = 0%) Diagnostic counter = zero
100	1	Oil pressure error.	Engine oil pressure.	Key switch turn OFF.
102	3	Boost pressure sensor: High	Failure of sensor. Voltage of boost pressure sensor is 4.9V or above.	Key switch turn OFF. (Default value is set in consideration with high altitude usage. Engine power drops.)
102	4	Boost pressure sensor: Low	Failure of sensor. Voltage of boost pressure sensor is 0.2V or below.	Key switch turn OFF. (Default value is set in consideration with high altitude usage. Engine power drops.)
108	3	Barometric pressure sensor error: High	Barometric voltage 4.4V or more.	Diagnostic counter = zero (Default value is set in consideration with high altitude usage. Engine power drops.)

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
108	4	Barometric pressure sensor error: Low	Barometric voltage 1.6V or less.	Diagnostic counter = zero (Default value is set in consideration with high altitude usage. Engine power drops.)
110	0	Engine overheat.	Overheat of engine temperature greater than 248° F (120° C)	Diagnostic counter = zero Output limitation: approximately 75% of normal condition. EGR stop. Intake throttle 100% open.
110	3	Coolant temperature sensor: High	Open circuit or +B short circuit of sensor/harness. Voltage of coolant temperature sensor is 4.9V or above.	Key switch turn OFF. (White smoke increases at low temperature.)
110	4	Coolant temperature sensor: Low	Ground short circuit of sensor/ harness. Voltage of coolant temperature sensor is 0.1V or less.	Key switch turn OFF. (White smoke increases at low temperature.)
132	1	Intake air volume: Low	Engine inlet air mass flow rate tacking. (Disconnect turbo blower intake hose.)	Key switch turn OFF.
132	3	MAF sensor: High	Engine inlet air mass flow rate less than half of target value. MAF sensor voltage: 4.9V or more at normal operating condition.	Key switch turn OFF. **Engine is not forcibly stopped by ECU. STRONGLY recommend operator stop engine promptly.**
132	4	MAF sensor: Low	Open circuit or ground short circuit of sensor/harness. MAF sensor voltage: 0.1V or less.	Key switch turn OFF. **Engine is not forcibly stopped by ECU. STRONGLY recommend operator stop engine promptly.**
132	15	Boost pressure: Low	Boost pressure sensor output is below target level in high air flow operating conditions.	Key switch turn OFF. EGR stop. Engine power is restricted by boost pressure signal accordingly.
157	0	High rail pressure.	Actual pressure exceeds the command pressure. Actual pressure ≥ 197MPa (28600 psi or 2010 kgf/cm^2	Diagnostic counter = zero EGR stop.
157	3	Rail pressure sensor: High	Open circuit or +B short circuit of sensor/harness. Failure of sensor. Voltage or rail pressure sensor is 4.9V or above.	Key switch turn OFF. Engine running noise and white smoke increases. Engine forcibly stopped.
157	4	Rail pressure sensor: Low	Ground short circuit of sensor/ harness. Failure of sensor. Voltage of rail pressure sensor is 0.7V or less.	Key switch turn OFF. Engine running noise and white smoke increases. Engine forcibly stopped.
168	3	Battery voltage: High	Open circuit, short circuit or damage to harness. Failure of battery. ECU recognition of battery voltage is above 16V in 12V system. Faulty starting.	Key switch turn OFF. EGR stop.
168	4	Battery voltage: Low	Open circuit, short circuit or damage to harness. Failure of battery. ECU recognition of battery voltage is below 8V in 12V system. Faulty starting or engine may stop completely. (Not monitored during cranking.)	Diagnostic counter = zero EGR stop.

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
171	3	Intake air temperature built-in MAF sensor: High	Open circuit or +B short circuit of sensor/harness. Intake air temperature built-in MAF sensor voltage: 4.9V or more.	Diagnostic counter = zero
171	4	Intake air temperature built-in MAF sensor: Low	Ground short circuit of sensor/ harness. Intake air temperature built-in MAF sensor voltage: 0.1V or less.	Diagnostic counter = zero
172	0	Intake air temperature: High	Intake air temperature higher than 140° F (60° C).	Key switch turn OFF.
172	3	Intake air temperature error: High	Open circuit or +B short circuit of sensor/harness. Intake air temperature sensor is 4.9V or above.	Diagnostic counter = zero (White smoke increases at low temperature.)
172	4	Intake air temperature error: Low	Ground short circuit of sensor/ harness. Intake air temperature sensor is 0.05V or less.	Diagnostic counter = zero (White smoke increases at low temperature.)
174	0	Fuel temperature high.	Fuel temperature higher than 194° F (90° C).	Diagnostic counter = zero
174	3	Fuel temperature sensor: High	Open circuit or +B short circuit of sensor/harness. Voltage of temperature sensor in supply pump is 4.9V or above.	Diagnostic counter = zero
174	4	Fuel temperature sensor: Low	Ground short circuit of sensor/ harness. Voltage of temperature sensor in supply pump is 0.1V or less.	Diagnostic counter = zero
190	0	Engine speed.	Engine speed exceeds threshold speed. Engine speed ≥ 3500 min-1 (rpm).	Diagnostic counter = zero
628	2	Program memory.	Check-Sum error.	Key switch turn OFF. Engine stopped without delay.
633	7	Pressure limiter emergency open.	Combination of fuel leak and one of conditions below: 1. Rail pressure exceeds 191MPa (27700 psi or 1950 kgf/cm^2). 2. Within one second after the rail pressure goes below temperature in #1, it increases above.	Key switch turn OFF. EGR stop. (Engine speed may go down due to lack of fuel pressure.)
636	2	Crank position sensor pulse number error.	Open circuit or short circuit of sensor/ harness. Failure of sensor. Pulse rotation is not 56 teeth. Faulty starting. Engine vibration increases slightly.	Diagnostic counter = zero
636	7	NE-G phase shift. NE: Crankshaft position sensor. G: Camshaft position sensor.	Large phase shift between NE and G pulses within +/- 15 degrees. Engine hesitates at start-up.	Diagnostic counter = zero
636	8	No input of NE sensor pulse.	Open circuit or short circuit of sensor/ harness. Failure of sensor. No recognition of NE sensor pulse. Faulty starting. Engine vibration increases slightly.	Diagnostic counter = zero

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
651	3	Open circuit of harness/ coil in 1st cylinder injector.	Open circuit of harness or injector coil. Engine vibration increases. Injectors that have no error are operated.	Key switch turn OFF.
652	3	Open circuit of harness/ coil in 2nd cylinder injector.	Open circuit of harness or injector coil. Engine vibration increases. Injectors that have no error are operated.	Key switch turn OFF.
653	3	Open circuit of harness/ coil in 3rd cylinder injector.	Open circuit of harness or injector coil. Engine vibration increases. Injectors that have no error are operated.	Key switch turn OFF.
654	3	Open circuit of harness/ coil in 4th cylinder injector.	Open circuit of harness or injector coil. Engine vibration increases. Injectors that have no error are operated.	Key switch turn OFF.
676	0	Glow heater relay driving circuit overheat.	Glow relay coil resistance or load is too high. Faulty starting. White smoke increases.	Key switch turn OFF.
676	5	Open circuit of glow relay driving circuit.	Open circuit of harness or relay coil. Faulty starting. White smoke increases.	Key switch turn OFF.
679	7	Pressure limiter not open.	Rail pressure value is sticking or not enough engine power to open PLV forcibly.	Key switch turn OFF.
723	2	G sensor pulse number error.	After fault opening PLV, rail pressure is above 160 MPa.	Diagnostic counter = zero Engine stops.
723	8	No input of G sensor pulse.	Open circuit or short circuit of sensor/ harness. Failure of sensor. No recognition of G sensor pulse. Engine hesitates at start-up.	Diagnostic counter = zero
1077	2	Failure of CPU.	CPU fatal error. Engine stops.	Key switch turn OFF.
1239	1	Fuel leak in high-pressured fuel system.	Fuel consumption is calculated from the difference of fuel pressure of, before and after the injection. Error is detected when excess fuel consumption is found. Engine could stop.	Key switch turn OFF.
1347	3	+B short circuit of SCV.	EGR stops.	Key switch turn OFF.
1347	4	SVC drive system error.	Open circuit or ground short circuit of SCV.	Key switch turn OFF. EGR stops, engine forcibly stops later.
1347	5	Open circuit of SCV (MPROP)	Open circuit short of SVC.	Key switch turn OFF. EGR stops, engine forcibly stops later.
1347	7	SCV stuck in open position.	Actual rail pressure continuously exceeds the command rail pressure. Discharge request of supply pump goes below 0 mm^3/st and the actual rail pressure is 10 MPa for 26 seconds or more. engine may stop.	Key switch turn OFF.
1485	2	Main relay locked in closed position.	Failure of main relay. Stays active longer than one second without command. Battery goes dead.	Diagnostic counter = zero

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
3242	0	Emergency exhaust gas temperature sensor 1: High	DPF inlet temperature higher than 1319° F (715° C). Engine stops. Inhibit starter relay activation until exhaust temperatures reduces down to 572° F (300° C).	Under 572° F (300° C) and key switch turn OFF.
3242	3	Exhaust gas temperature sensor 1: High	Open circuit or +B short circuit of sensor/harness. DPF inlet temperature sensor voltage 4.92V or more.	Key switch turn OFF.
3242	4	Exhaust gas temperature sensor 1: Low	Ground short circuit of sensor/ harness. DPF inlet temperature sensor voltage 0.08V or less.	Key switch turn OFF.
3246	0	Emergency exhaust gas temperature sensor 2: High	DPF outlet temperature 1508° F (820° C) or more.	Under 572° F (300° C) and key switch turn OFF. Inhibit starter relay activation until exhaust temperature reduces down to 572° F (300° C).
3246	3	Exhaust gas temperature sensor 2: High	Open circuit or +B short circuit of sensor/harness. DPF outlet temperature sensor voltage 4.92V or more.	Key switch turn OFF.
3246	4	Exhaust gas temperature sensor 2: Low	Ground short circuit of sensor/ harness. DPF outlet temperature sensor voltage 0.08V or less.	Key switch turn OFF.
3251	3	Differential pressure sensor 1: High	Open circuit or +B short circuit of sensor/harness. DPF differential pressure sensor voltage 4.7V or more.	Key switch turn OFF.
3251	4	Differential pressure sensor 1: Low	Ground short circuit of sensor/ harness. DPF differential pressure sensor voltage 0.21V or less.	Key switch turn OFF.
3252	0	Emission deterioration.	DOC is heated due to unburned fuel. Output and accelerator limitation 50%. EGR stops.	Key switch turn OFF to minimize emission to DPF.
3509	3	Sensor supply voltage 1: High	Voltage to sensor is above 5.625V. EGR stops. Faulty starting. Engine may stop. Emission related.	Key switch turn OFF.
3509	4	Sensor supply voltage 1: Low	Voltage to sensor is below 4.375V. EGR stops. Faulty starting. Engine may stop. Emission related.	Key switch turn OFF.
3510	3	Sensor supply voltage 2: High	Voltage to sensor is above 5.625V. Faulty starting. Emission related.	Key switch turn OFF.
3510	4	Sensor supply voltage 2: Low	Voltage to sensor is below 4.375V. Faulty starting. Emission related.	Key switch turn OFF.
3511	3	Sensor supply voltage 3: High	Voltage to sensor is above 5.25V. Faulty starting.	Key switch turn OFF.
3511	4	Sensor supply voltage 3: Low	Voltage to sensor is below 4.75V. Faulty starting.	Key switch turn OFF.

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
3701	0	Excessive PM 5.	PM accumulation more than trigger level. Regeneration Level = 5.	Key switch turn OFF. **Engine not forcibly stopped by ECU. STRONGLY recommend operator to stop engine promptly.** Must be reset by Kubota service tool.
3701	15	Excessive PM 3.	PM accumulation more than trigger level. Regeneration Level = 3.	Diagnostic counter = 0
3701	16	Excessive PM 4.	PM accumulation more than trigger level. Regeneration Level = 4.	Diagnostic counter = 0
4765	0	Emergency exhaust gas temperature sensor 0: High	DOC inlet temperature 1292° F (700° C) or more. Engine stops.	Key switch turn OFF. Inhibit starter relay activation until exhaust temperature reduces down to 527° F (300° C).
4765	3	Exhaust gas temperature sensor 0: High	Open circuit or +B short circuit of sensor/harness. DOC inlet temperature sensor voltage 4.92V or more.	Key switch turn OFF.
4765	4	Exhaust gas temperature sensor 0: Low	Open circuit or +B short circuit of sensor/harness. DOC inlet temperature sensor voltage 0.08V or less.	Key switch turn OFF.
523523	2	Injector drive circuit open in Nos. 1 & 4 cylinder simultaneously.	Wiring harness open circuit. Injectors that have no DTC are operated. Engine vibration increases and may stop.	Key switch turn OFF.
523523	3	Nos. 1 & 4 cylinder injector short to +B at power supply side, or all cylinder injectors short to +B.	Wiring harness short to +B. Injectors that have no DTC are operated. Engine vibration increases and may stop.	Key switch turn OFF.
523523	4	Nos. 1 & 4 cylinder injector short to ground at power supply side, or all cylinder injectors short to ground.	Wiring harness short to ground. Injectors that have no DTC are operated. Engine vibration increases and may stop.	Key switch turn OFF.
523524	2	Injector drive circuit open in Nos. 2 & 3 cylinder simultaneously.	Wiring harness open circuit. Injectors that have no DTC are operated. Engine vibration increases and may stop.	Key switch turn OFF.
523524	3	Nos. 2 & 3 cylinder injector short to +B at power supply side, or all cylinder injectors short to +B.	Wiring harness short to +B. Injectors that have no DTC are operated. Engine vibration increases and may stop.	Key switch turn OFF.
523524	4	Nos. 2 & 3 cylinder injector short to ground at power supply side, or all cylinder injectors short to ground.	Wiring harness short to ground. Injectors that have no DTC are operated. Engine vibration increases and may stop.	Key switch turn OFF.
523525	1	Injector charge voltage low.	Injector charge voltage low. Failure of charge circuit of ECU. Engine may stop.	Key switch turn OFF.

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
523527	2	ECU monitoring error.	Failure of monitoring IC of CPU. Engine stops.	Key switch turn OFF.
523535	0	Injector charge voltage: High	EGR stops. Engine forcibly stops 60 seconds later.	Key switch turn OFF.
523536	2	EGR feedback error.	DC motor feedback control error. During wrong duty feedback, activation of restoration will repeat 30 times. If the restoration was not successfully completed, it will be judged as a feedback error. EGR stops.	Diagnostic counter = zero
523537	2	EGR DC motor temperature error.	Estimated temperature is 113° F (45° C) or above. EGR stops.	Diagnostic counter = zero
523538	2	QR data error.	QR data read error from EEPROM. Nozzle correction is not executed.	Key switch turn OFF.
523539	2	Pump seizing 1.	Rail pressure of 230 MPa (33400 psi or 2350 kgf/cm^2) or more continues one second under the condition of above 800 min-1 (rpm). Under 800 min-1 (rpm) condition, rail pressure of 220 MPa (31900 psi or 2250 kgf/cm^2) or more continues one second under the condition of below 800 min-1 (rpm). [Threshold changes depending upon the engine speed. 700 min-1 (rpm) should be used as a reference.	Key switch turn OFF to minimize PM emission to DPF and avoid extremely high pressure in injection system.
523540	2	Pump seizing 2.	Rail pressure of 197MPa (28600 psi or 2010 kgf/cm^2) or more continues one second under the condition of above 800 min-1 (rpm). Under 800 min-1 (rpm) condition, rail pressure of 220 MPa (31900 psi or 2250 kgf/cm^2) or more continues one second under the condition of below 800 min-1 (rpm). [Threshold changes depending upon the engine speed. 700 min-1 (rpm) should be used as a reference.	Key switch turn OFF.
523541	3	EGR lift sensor: High	+B short circuit of sensor/harness. Failure of sensor. Voltage of ECR lift sensor is 4.5V or above. EGR stops.	Key switch turn OFF.
523541	4	EGR lift sensor: Low	Open circuit or short circuit of sensor/ harness. Failure of sensor. Voltage of ECR lift sensor is 0.3V or less. EGR stops.	Key switch turn OFF.
523543	2	Accelerator position sensor error (CAN).	Accelerator position sensor signal error (sensor/harness open circuit, ground short circuit, etc.).	Diagnostic counter = zero. CAN signal recovers.
523544	3	+B short of air heater relay driving circuit.	+B short circuit of harness. Faulty starting. White smoke increases.	Key switch turn OFF.

SPN	FMI	DTC	SYMPTOM/CAUSE	RECOVERY FROM ERROR
523544	4	Ground short of air heater relay driving circuit.	Ground short or open circuit of harness.	Key switch turn OFF.
523547	2	CAN2 bus off.	CAN2 bus off.	Key switch turn OFF.
523548	2	CAN-KBT frame error.	CAN-KBT frame open circuit error.	Key switch turn OFF.
523572	4	EGR position sensor failure.	EGR position sensor error signal received via CAN. EGR stops.	Key switch turn OFF.
523574	3	EGR actuator open circuit.	EGR actuator open error signal received via CAN. EGR stops.	Key switch turn OFF.
523575	7	EGR actuator valve stuck.	EGR actuator valve stuck error received via CAN. EGR stops.	Key switch turn OFF.
523576	2	EGR (DC motor) overheat.	EGR (DC motor) temperature error signal received via CAN (exceeds 257° F or 125° C). EGR stops.	Key switch turn OFF.
523577	2	EGR (DC motor) temperature sensor failure.	EGR (DC motor) temperature sensor error signal received via CAN. EGR stops.	Key switch turn OFF.
523578	2	No communication with EGR.	Interruption of CAN. EGR stops.	Key switch turn OFF.
523580	2	Intake throttle feedback error.	Deviation of throttle position is not corrected in 20 times of duty error recovery action.	Key switch turn OFF.
523582	3	Intake throttle lift sensor: High	Intake throttle lift sensor voltage 4.89V or more.	Key switch turn OFF.
523582	4	Intake throttle lift sensor: Low	Intake throttle lift sensor voltage 0.1V or less.	Key switch turn OFF.
523589	17	Low coolant temperature in parked regeneration.	During regeneration mode, engine warm-up condition is not satisfied because coolant temperature is too low (below 149° F or 65° C).	Diagnostic counter = zero Leaving from Parked active regeneration status.
523590	16	Parked regeneration timed out.	Regeneration incomplete due to low temperature of DPF.	Diagnostic counter = zero Leaving from Parked active regeneration status.
523591	2	CAN CCVS (parking and vehicle speed) frame error.	CAN CCVS frame time-out error. Parking SW = off. Vehicle speed = 0	Key switch turn OFF.
523592	2	CAN CM1 (Regen SW) frame error.	CAN CM1 frame time-out error. Regeneration inhibit = on. Parked regeneration SW = off.	Key switch turn OFF.
523593	2	CAN DDC1 (transmission) frame error.	CAN DDC1 frame time-out error.	Key switch turn OFF.
523594	2	CAN ETC2 (neutral SW) frame error.	CAN ETC2 frame time-out error	Key switch turn OFF.
523595	2	CAN ETC5 (neutral SW) frame error.	CAN ETC5 frame time-out error.	Key switch turn OFF.
523596	2	CAN TSC1 frame error.	No request to “TSC1 buffer” continues three times after over-ride control request (other than 0x00).	Diagnostic counter = zero

NOTES

Section 6

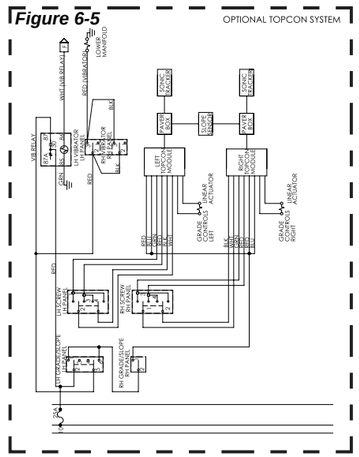
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ELECTRICAL SYSTEM (1 OF 11)

Schematic # 1014864



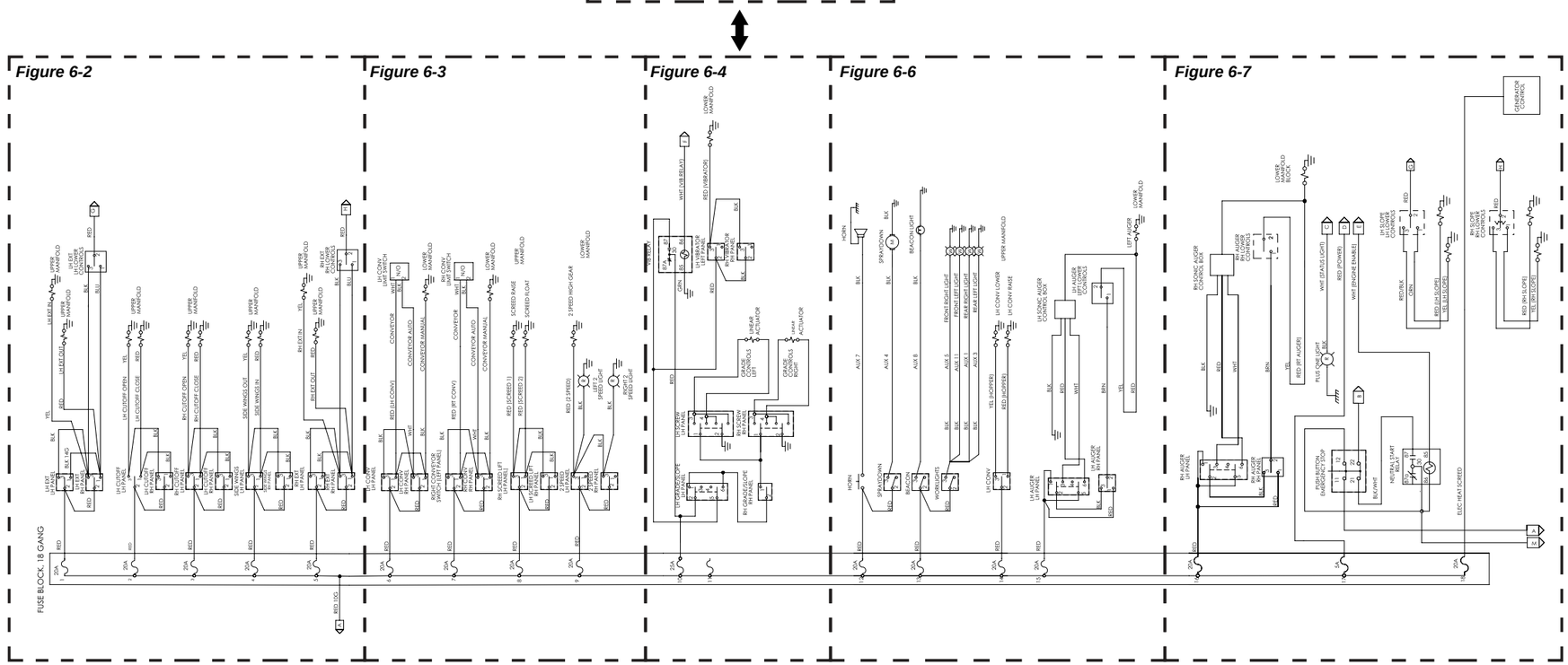


Figure 6-1. Electrical System (1 of 11)

NOTES

ELECTRICAL SYSTEM (2 OF 11)

Schematic # 1014864

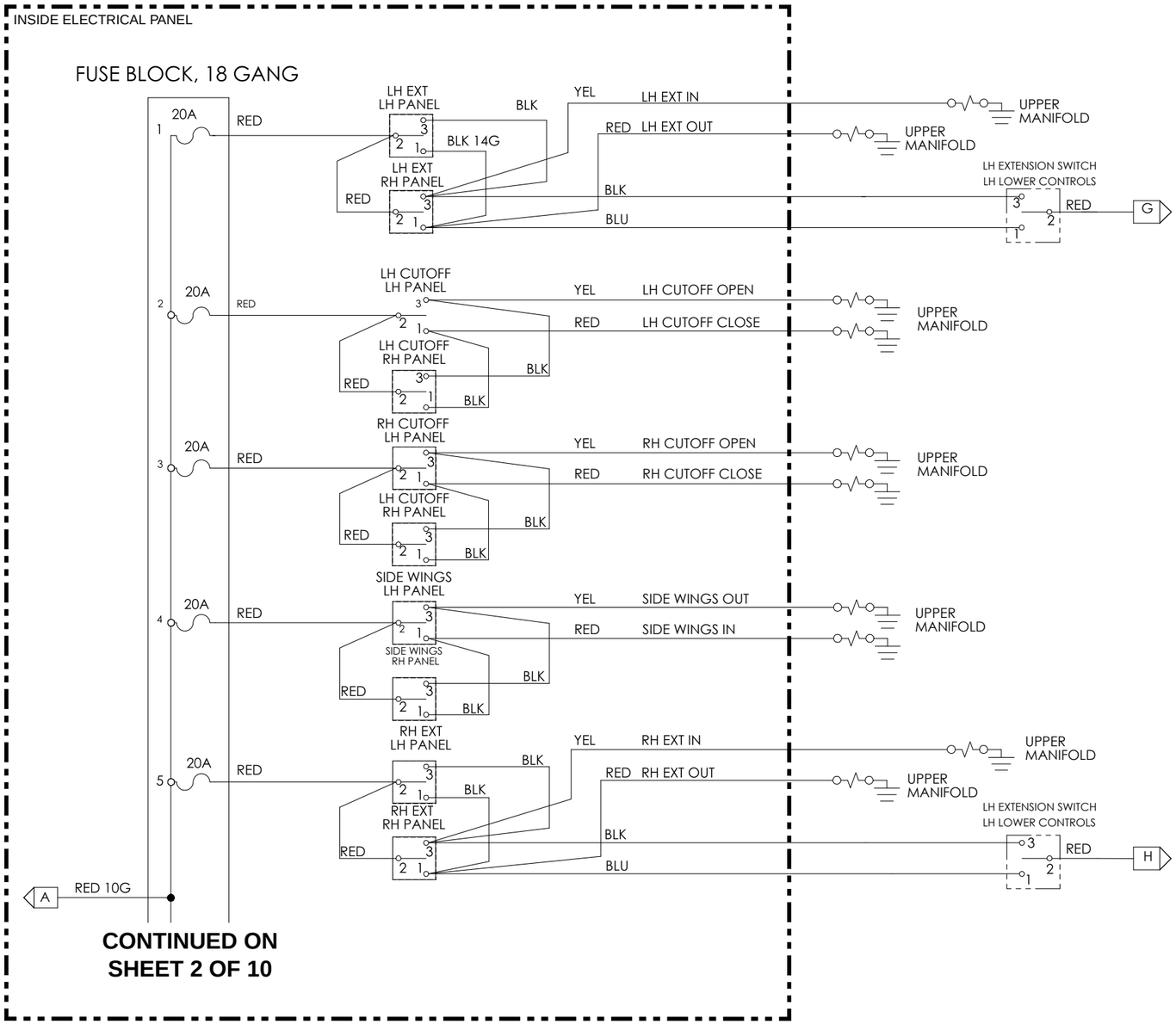


Figure 6-2. Electrical System (2 of 11)

NOTES

ELECTRICAL SYSTEM (3 OF 11)

Schematic # 1014864

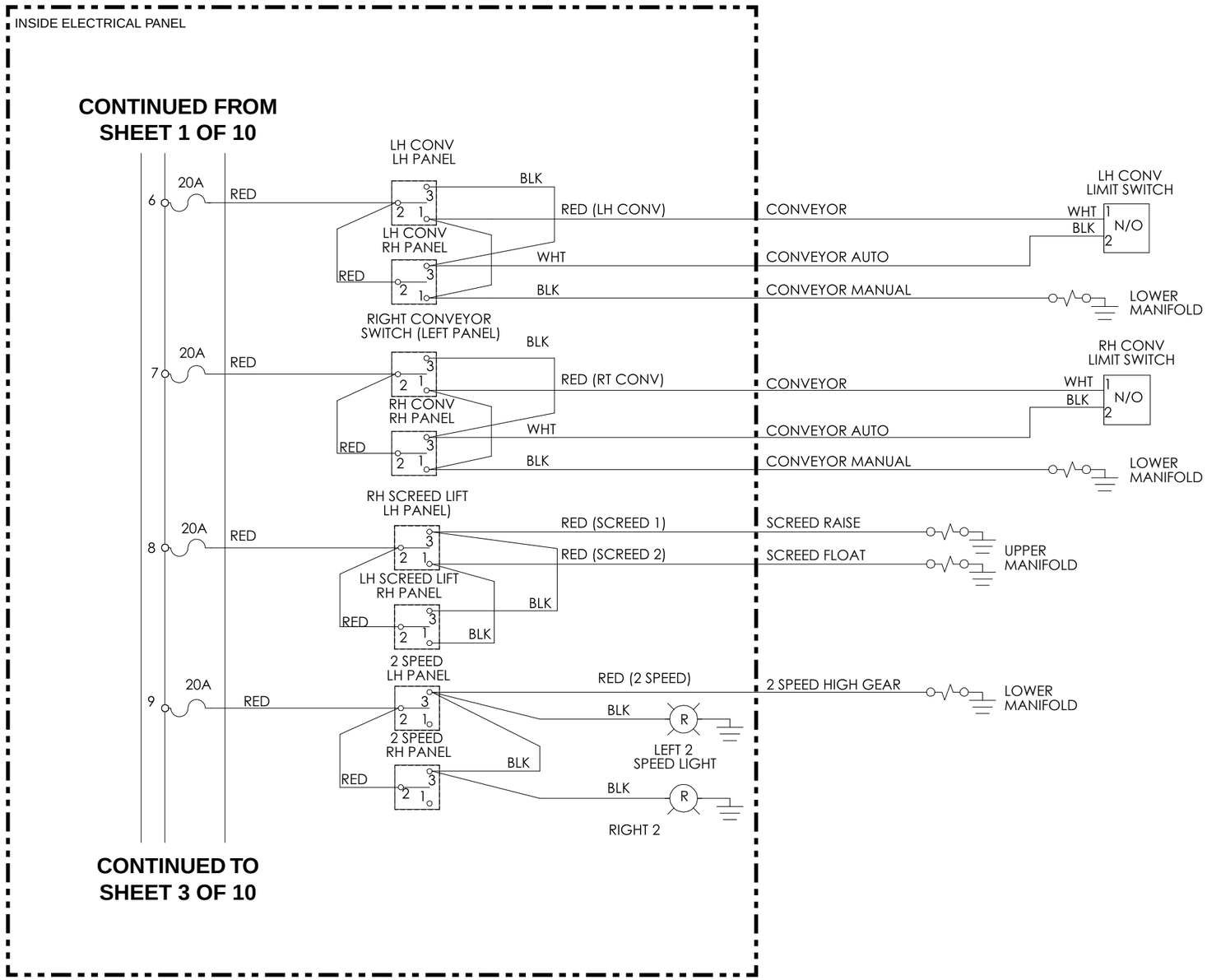


Figure 6-3. Electrical System (3 of 11)

NOTES

ELECTRICAL SYSTEM (4 OF 11)

Schematic # 1014864

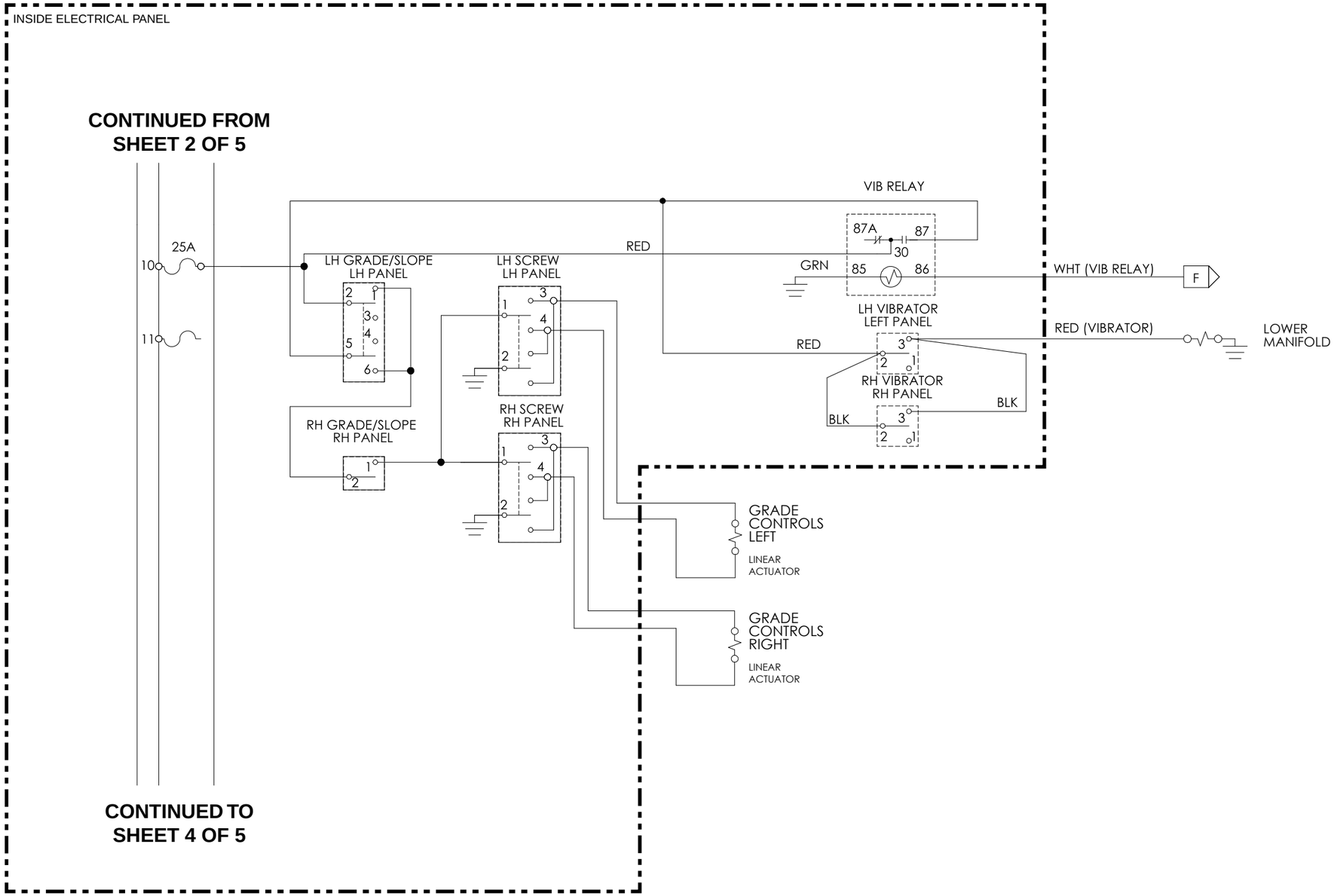


Figure 6-4. Electrical System (4 of 11)

NOTES

ELECTRICAL SYSTEM (5 OF 11)

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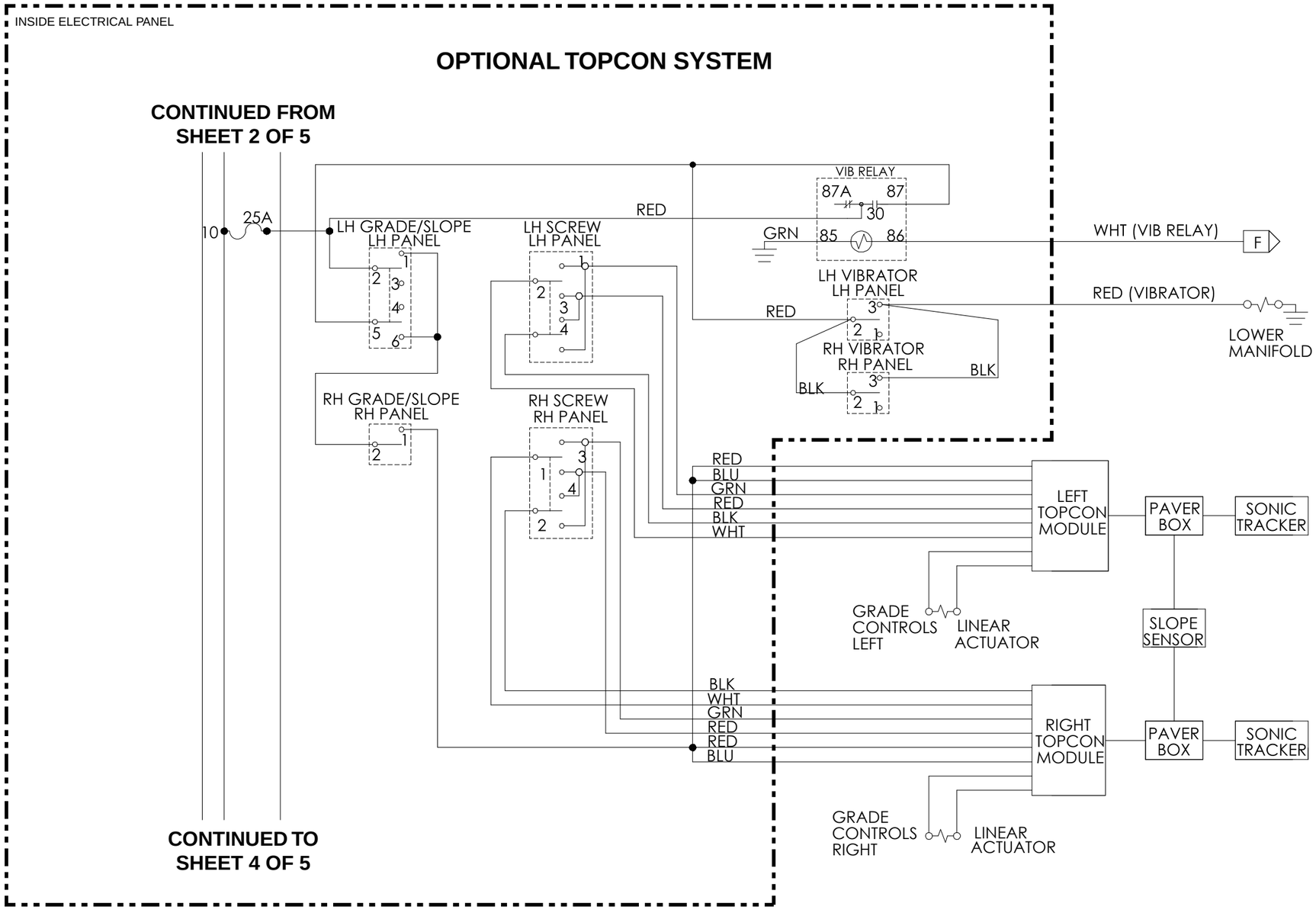


Figure 6-5. Electrical System (5 of 11)

NOTES

ELECTRICAL SYSTEM (6 OF 11)

Schematic # 1014864

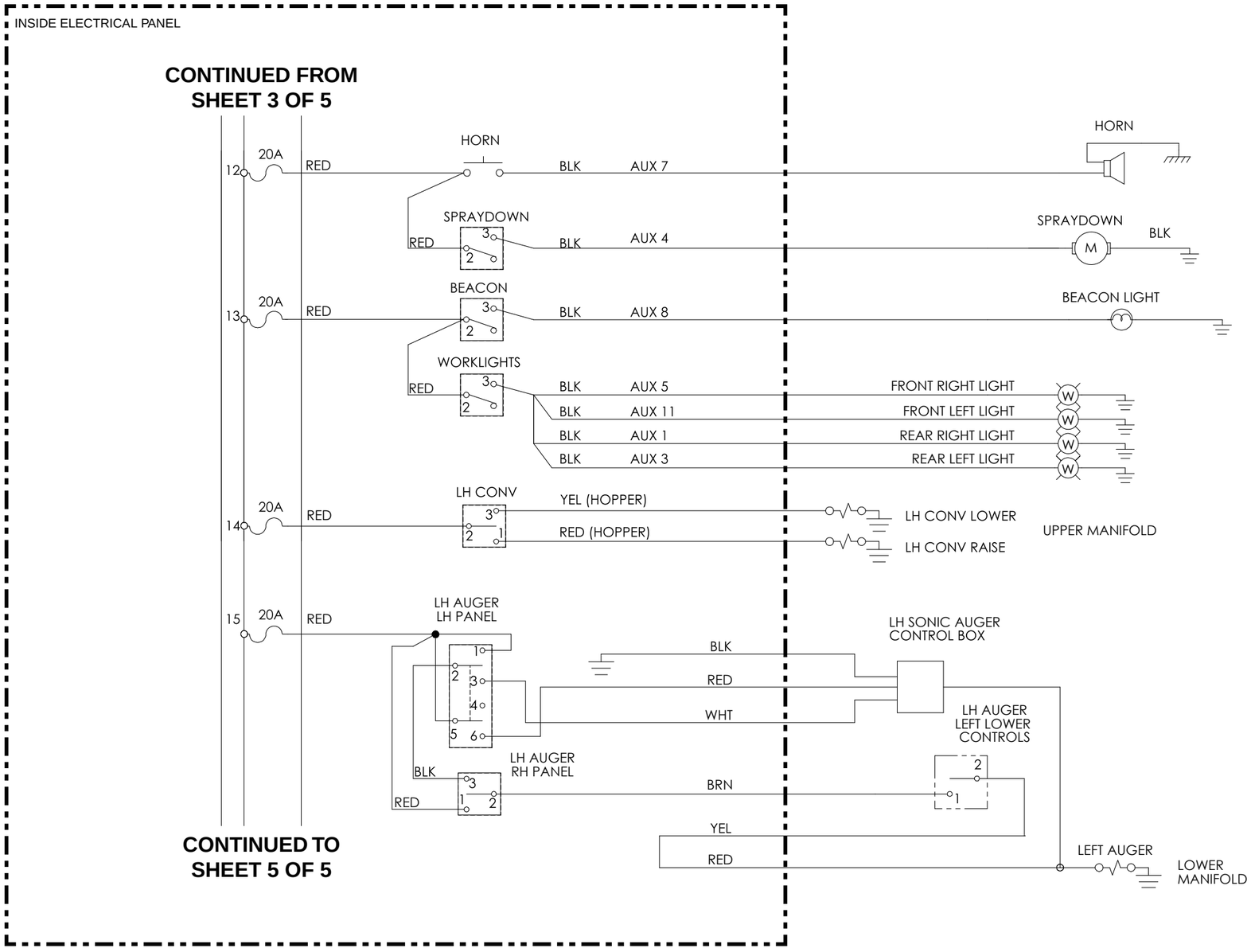


Figure 6-6. Electrical System (6 of 11)

NOTES

ELECTRICAL SYSTEM (7 OF 11)

Schematic # 1014864

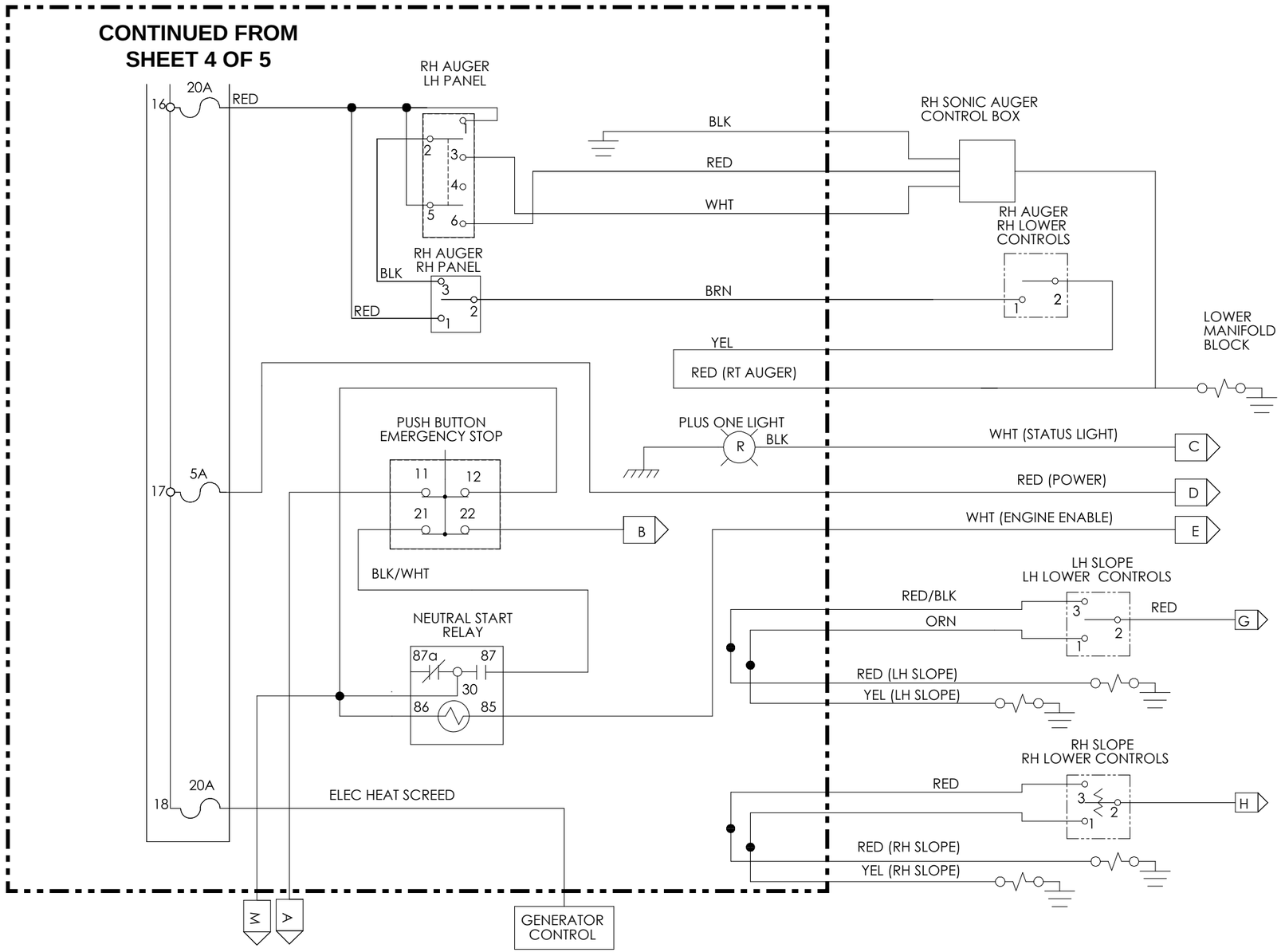


Figure 6-7. Electrical System (7 of 11)

NOTES

ELECTRICAL SYSTEM (8 OF 11)

Schematic # 1014864

Figure 6-10

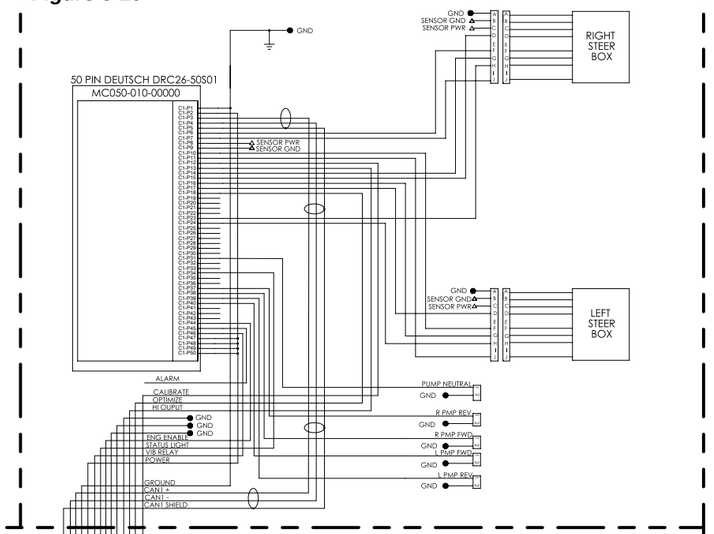


Figure 6-9

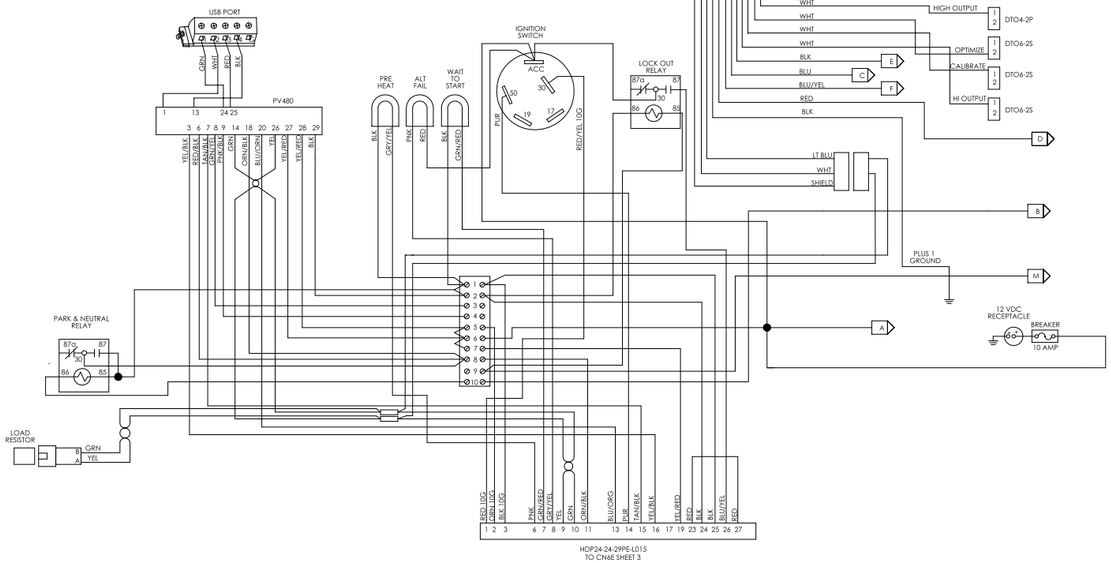


Figure 6-8. Electrical System (8 of 11)

NOTES

ELECTRICAL SYSTEM (9 OF 11)

Schematic # 1014864

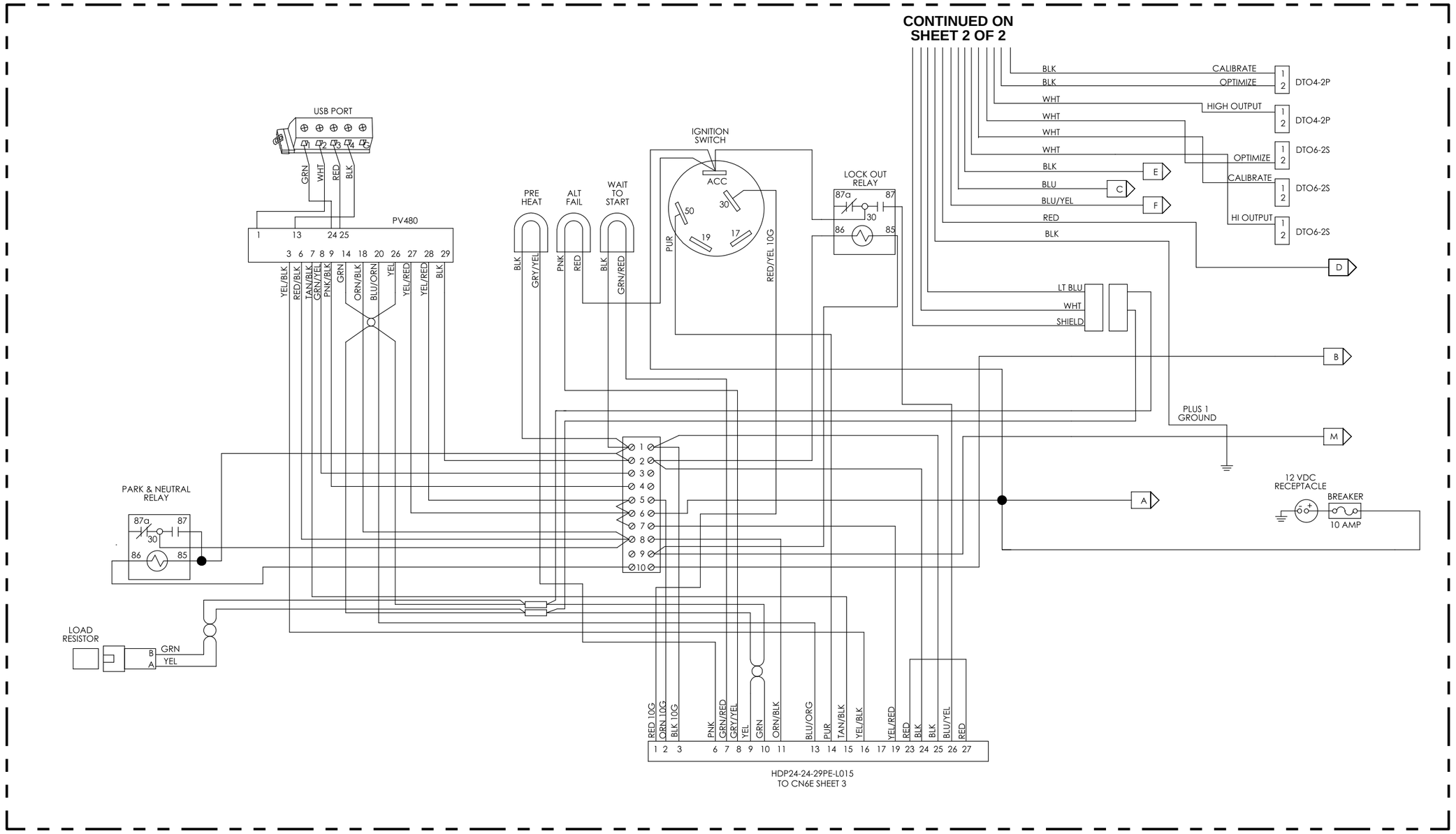


Figure 6-9. Electrical System (9 of 11)

NOTES

ELECTRICAL SYSTEM (10 OF 11)

Schematic # 1014864

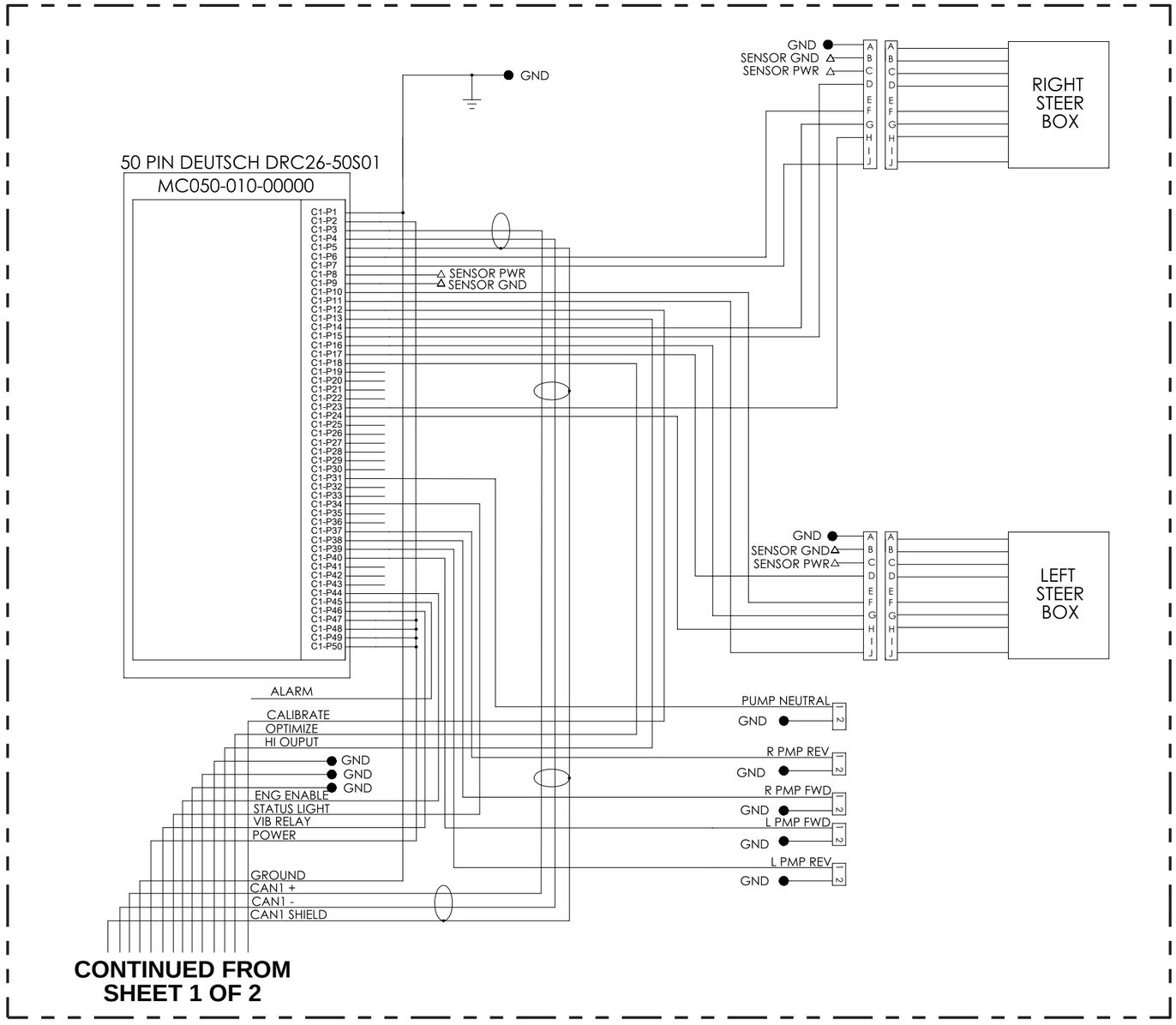


Figure 6-10. Electrical System (10 of 11)

NOTES

ELECTRICAL SYSTEM (11 OF 11)

Schematic # 1014864

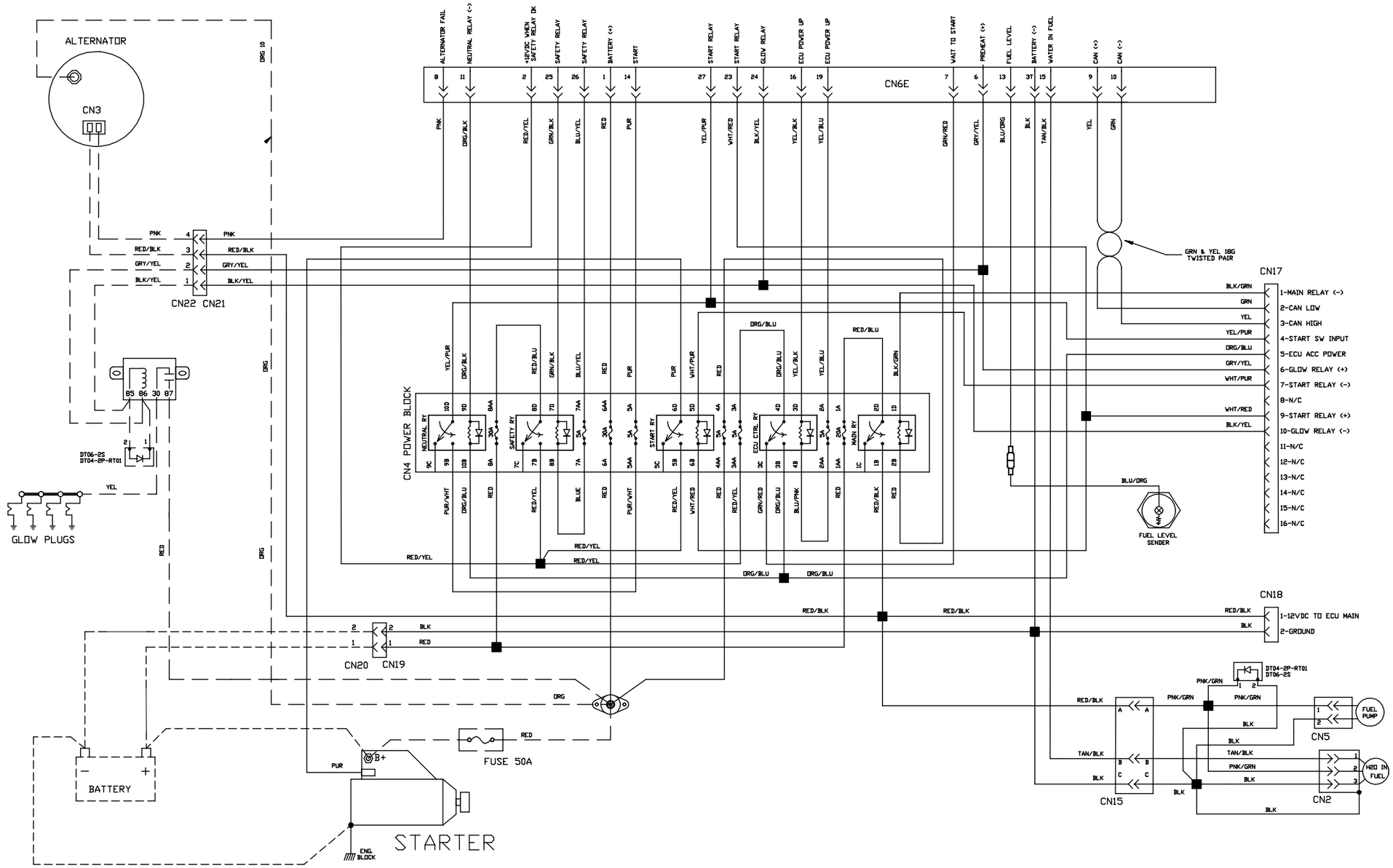


Figure 6-11. Electrical System (11 of 11)

NOTES

LOWER CONTROL, SLOPING (LEFT)

Schematic # 984534L

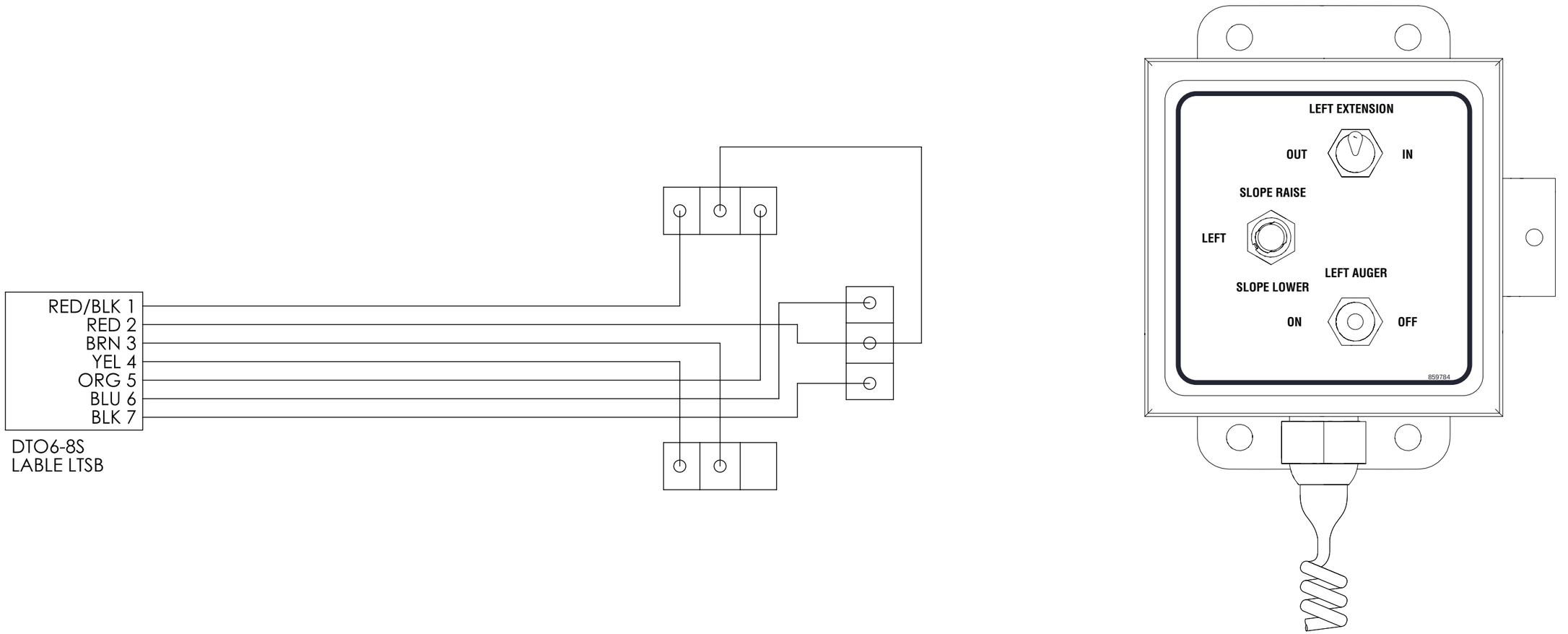
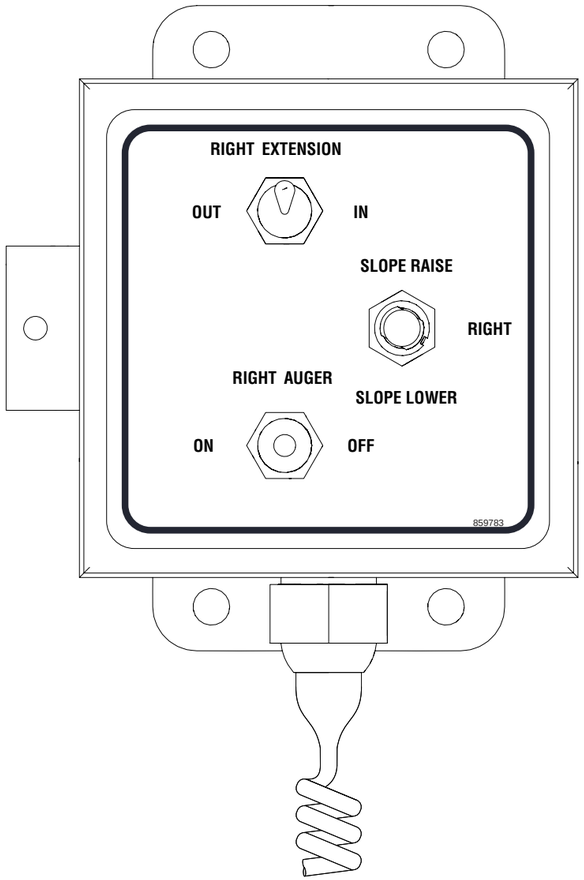


Figure 6-12. Lower Control, Sloping (Left)

NOTES

LOWER CONTROL, SLOPING (RIGHT)

Schematic # 984534R



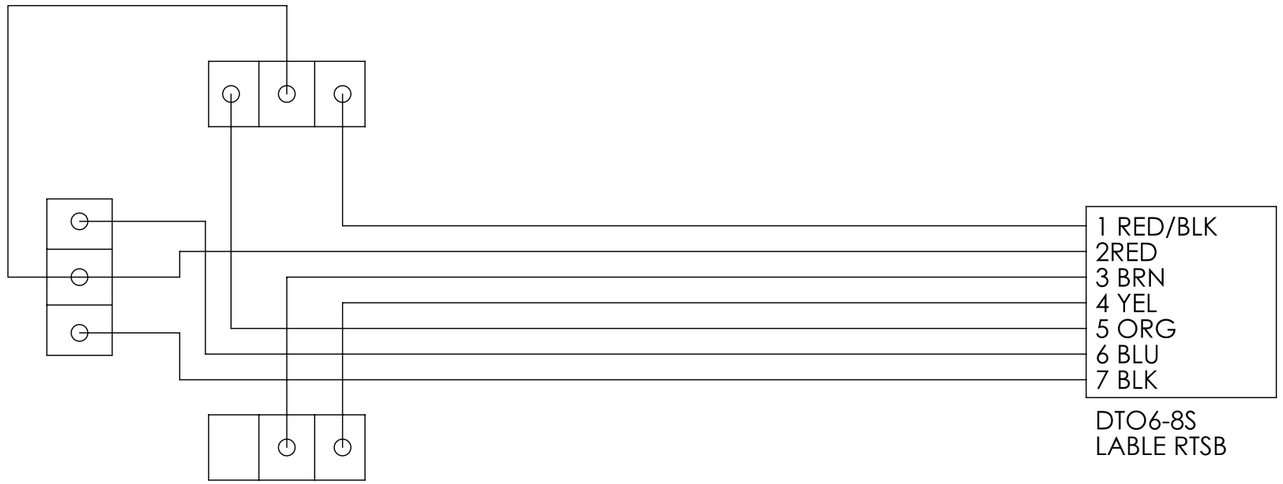


Figure 6-13. Lower Control, Sloping (Right)

NOTES

LOWER CONTROL, NON-SLOPING (LEFT)

Schematic # 984535L

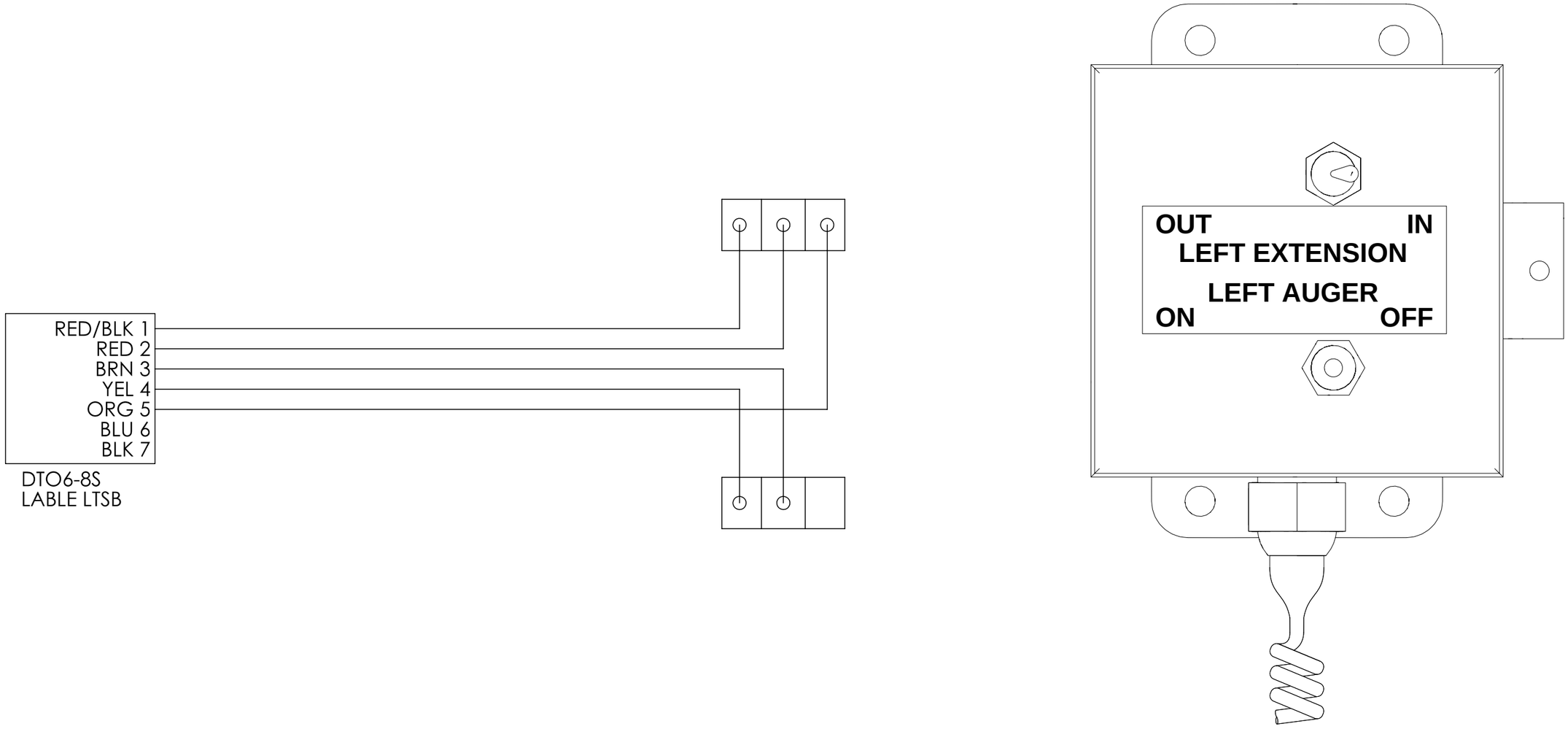


Figure 6-14. Lower Control, Non-Sloping (Left)

NOTES

LOWER CONTROL, NON-SLOPING (RIGHT)

Schematic # 984535R

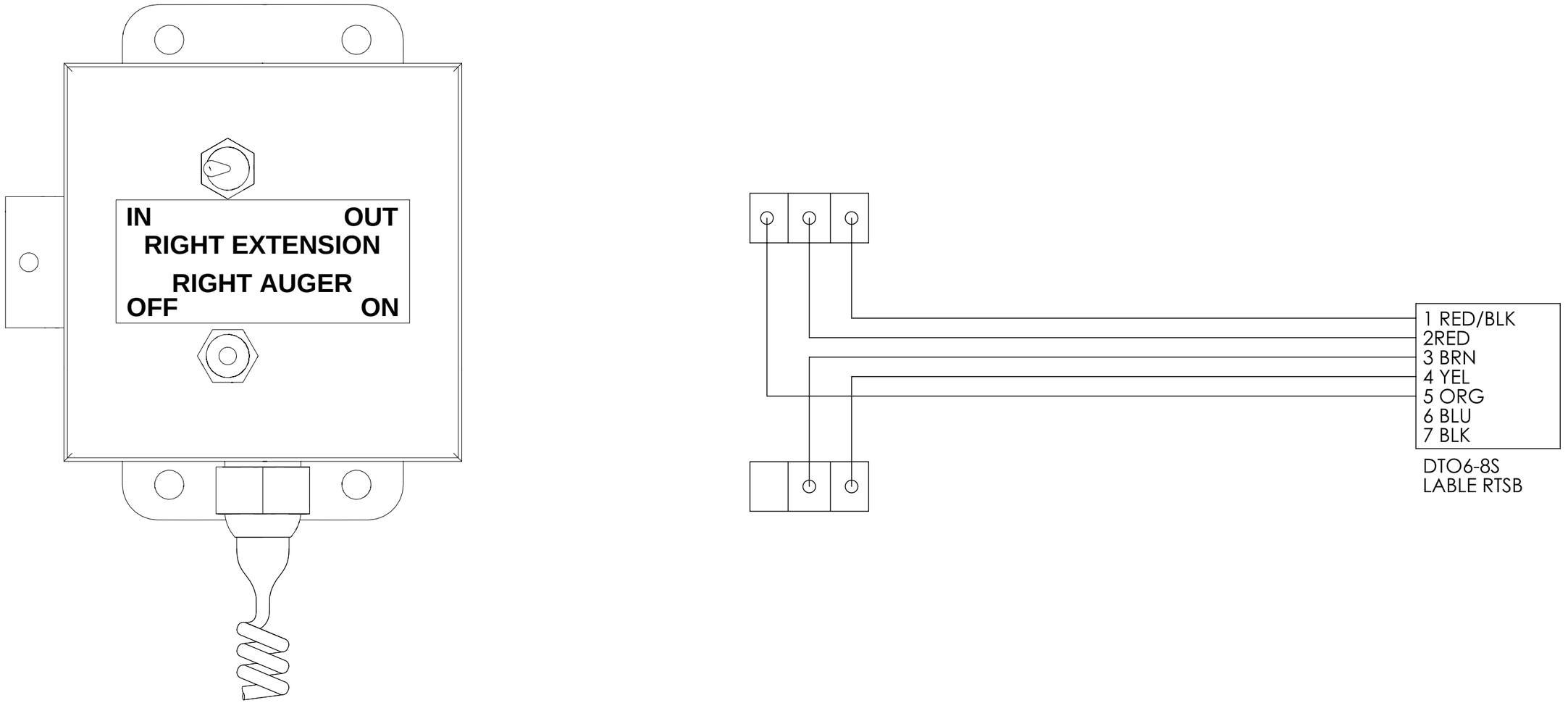
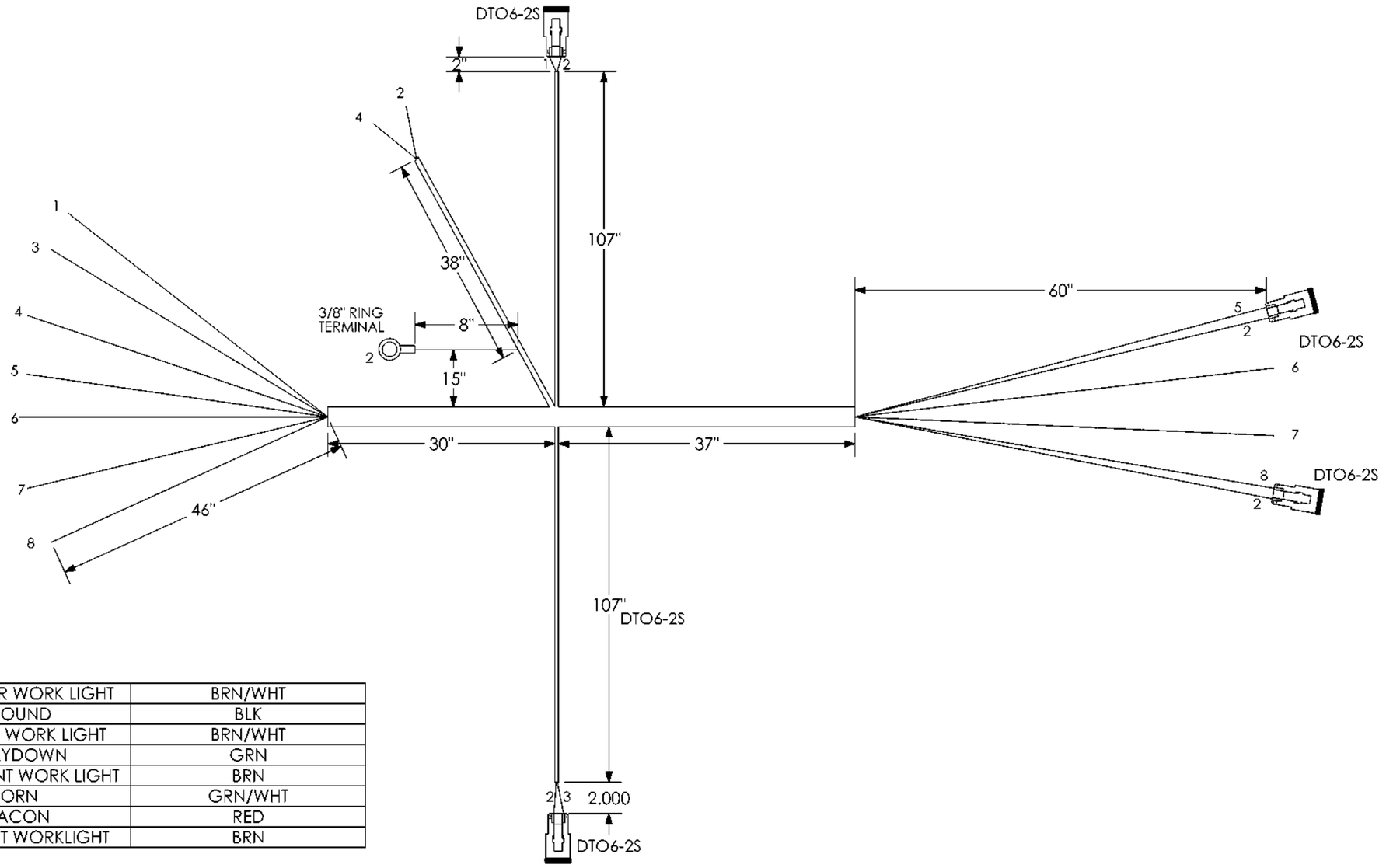


Figure 6-15. Lower Control, Non-Sloping (Right)

NOTES

AUXILLIARY HARNESS

Schematic # 984376



1	RIGHT REAR WORK LIGHT	BRN/WHT
2	GROUND	BLK
3	LEFT REAR WORK LIGHT	BRN/WHT
4	SPRAYDOWN	GRN
5	RIGHT FRONT WORK LIGHT	BRN
6	HORN	GRN/WHT
7	BEACON	RED
8	LEFT FRONT WORKLIGHT	BRN

1. ALL WIRES 16 AWG UNLESS NOTED OTHERWISE
2. ALL WIRES GXL OR TXL
3. BRAIDED SLEEVE STANDARD PET SIZES 1/2" AND 1/8"
4. USE HEAT SHRINK, WRAP AROUND OR HOT STAMP WIRE LABELS

Figure 6-16. Auxillary Harness

NOTES

GENERATOR CONTROL TO BULKHEAD HARNESS

Schematic # 1007253

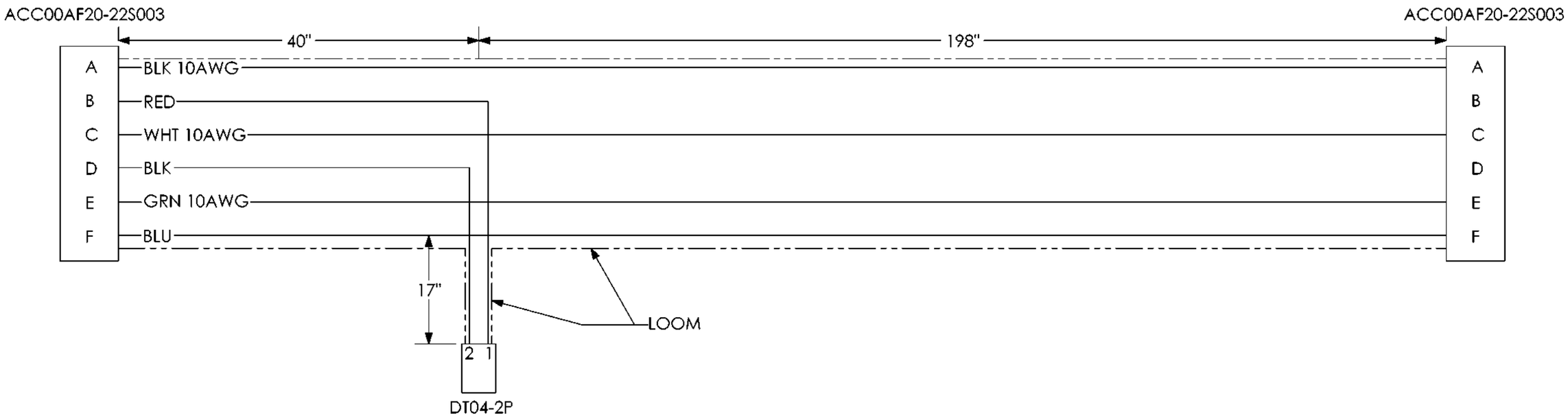
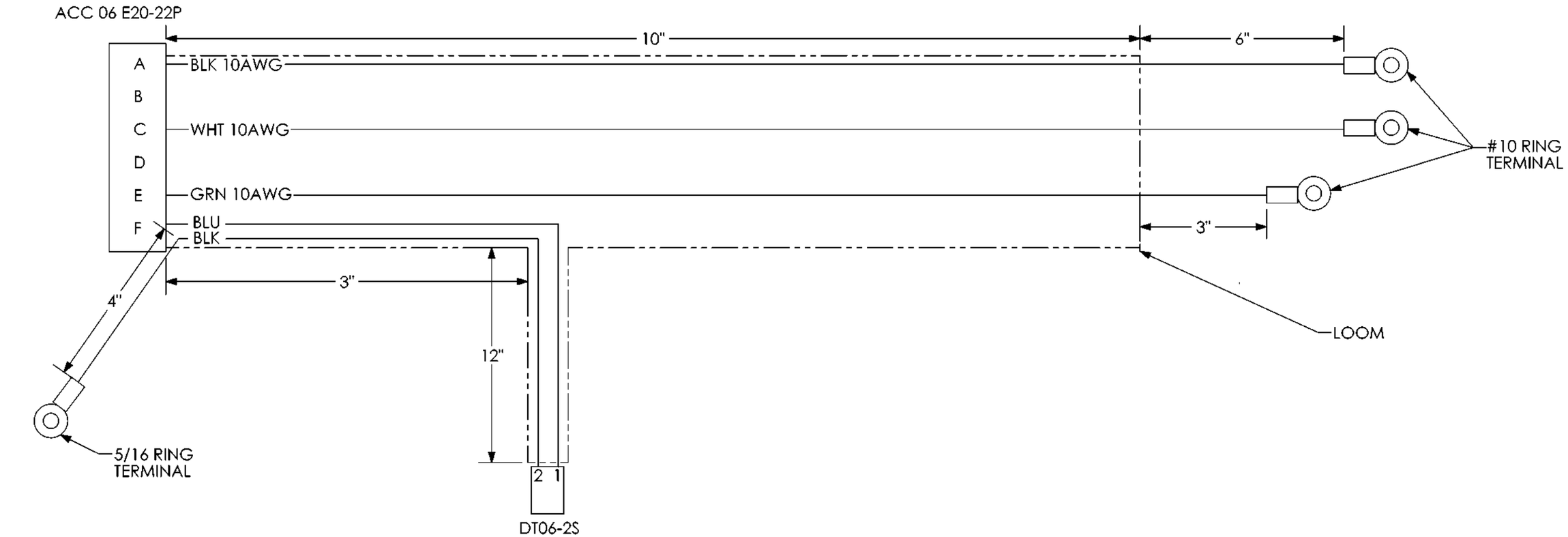


Figure 6-17. Generator Control to Bulkhead Harness

NOTES

BULKHEAD TO GENERATOR HARNESS

Schematic # 1007254



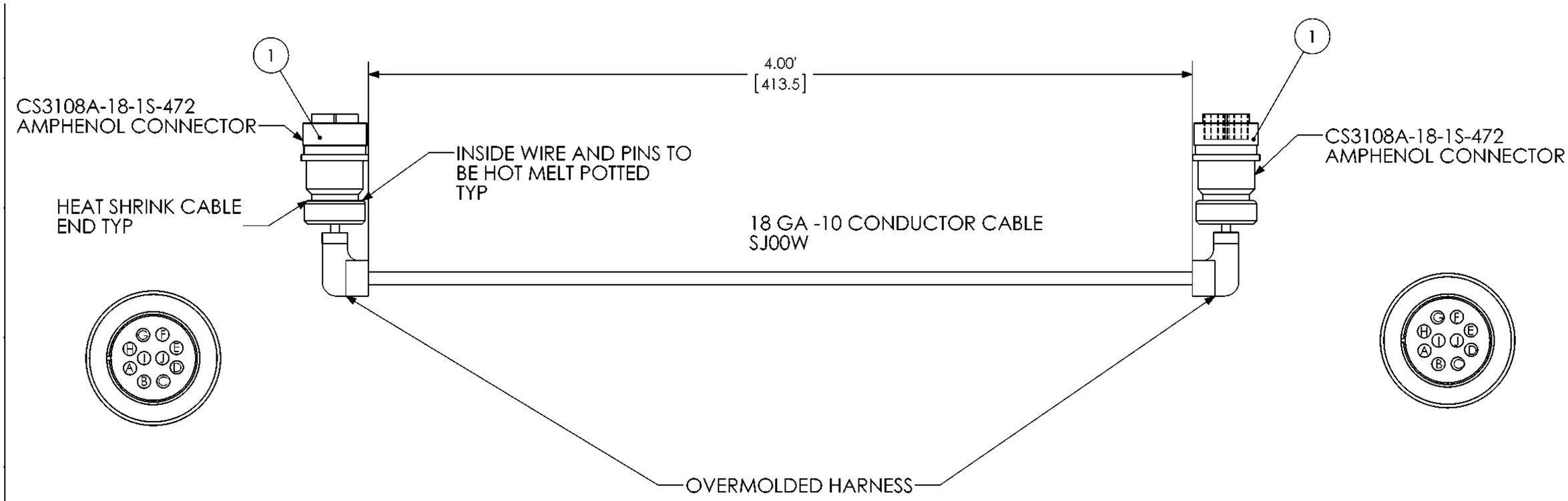
NOTES:
1. USE CONVOLUTED SPLIT LOOM
2. ALL WIRES 16AWG UNLESS NOTED OTHERWISE
3. WIRE TYPE GXL OR TXL
4. RING TERMINALS ARE 3/8

Figure 6-18. Generator Control to Bulkhead Harness

NOTES

ELECTRIC STEERING CORD, 4 FEET

Schematic # 851548-04



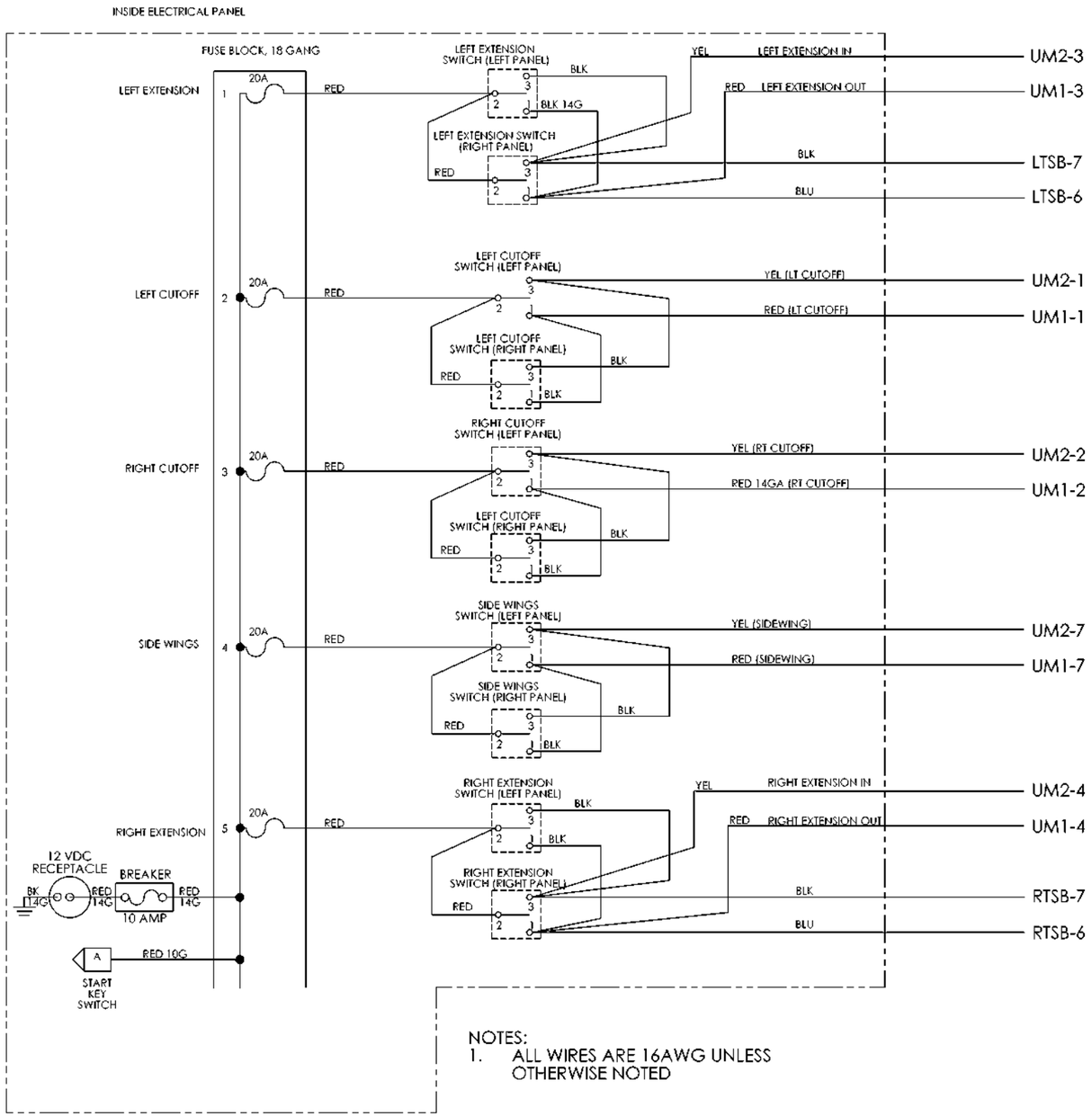
CONTACT-TO-CONTACT	
A	A
B	B
C	C
D	D
E	E
F	F
G	G
H	H
I	I
J	J

Figure 6-19. Electric Steering Cord, 4 Feet

NOTES

DASH ASSEMBLY (1 OF 5)

Schematic # 1013630



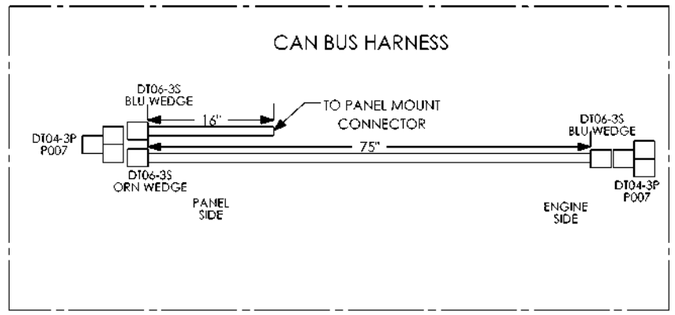


Figure 6-20. Dash Assembly (1 of 5)

NOTES

DASH ASSEMBLY (2 OF 5)

Schematic # 1013630

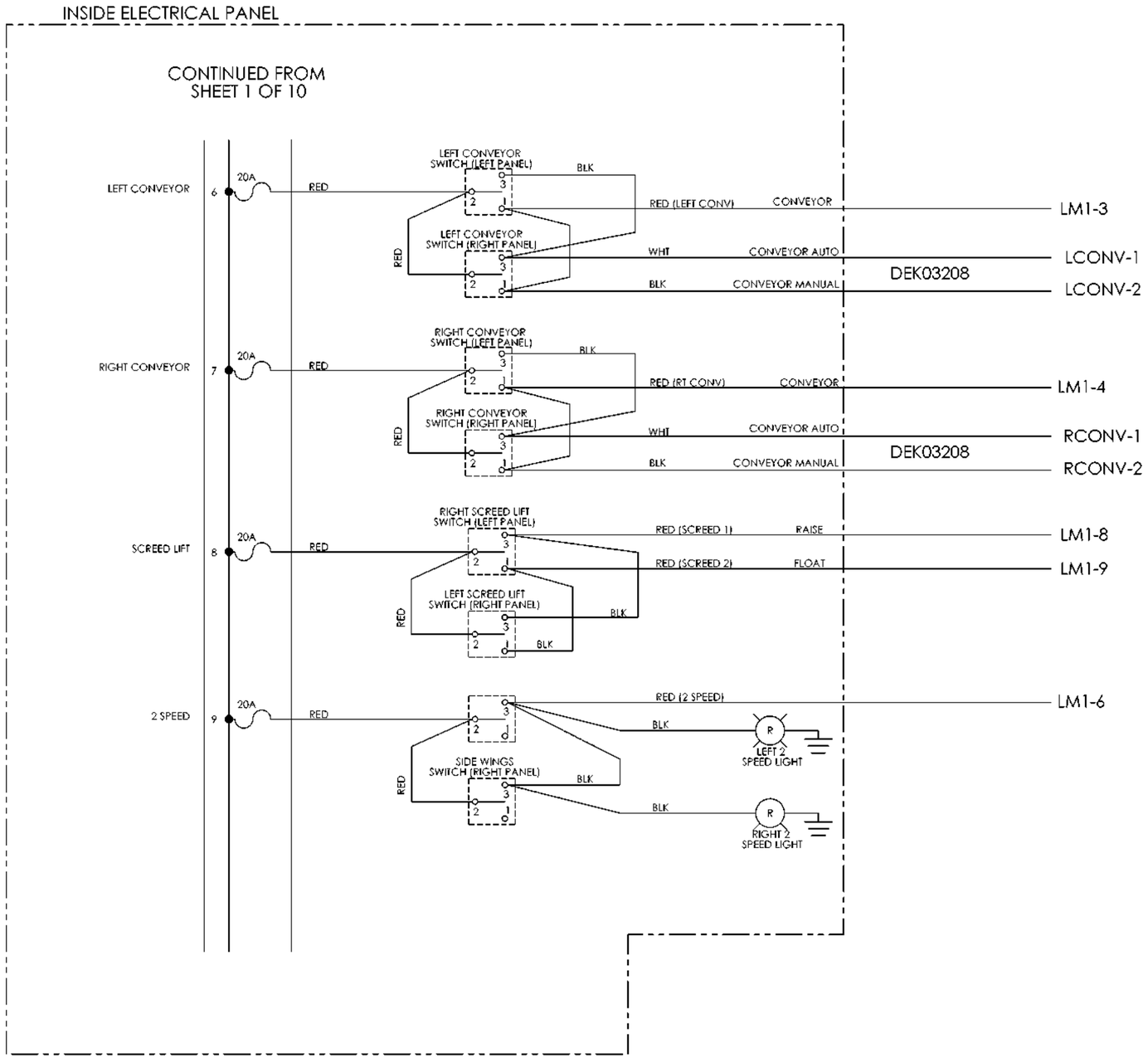


Figure 6-21. Dash Assembly (2 of 5)

NOTES

DASH ASSEMBLY (3 OF 5)

Schematic # 1013630

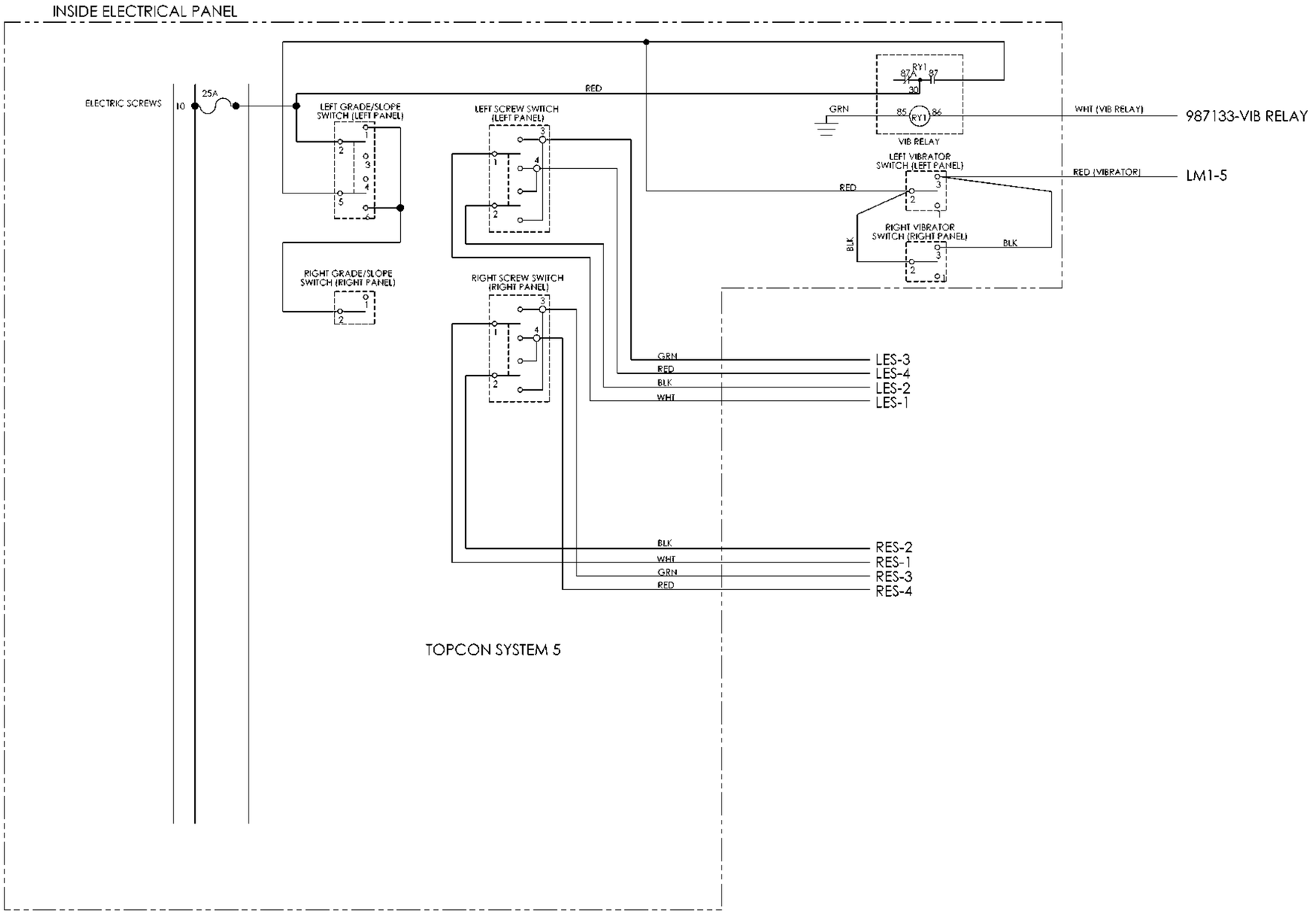


Figure 6-22. Dash Assembly (3 of 5)

NOTES

DASH ASSEMBLY (4 OF 5)

Schematic # 1013630

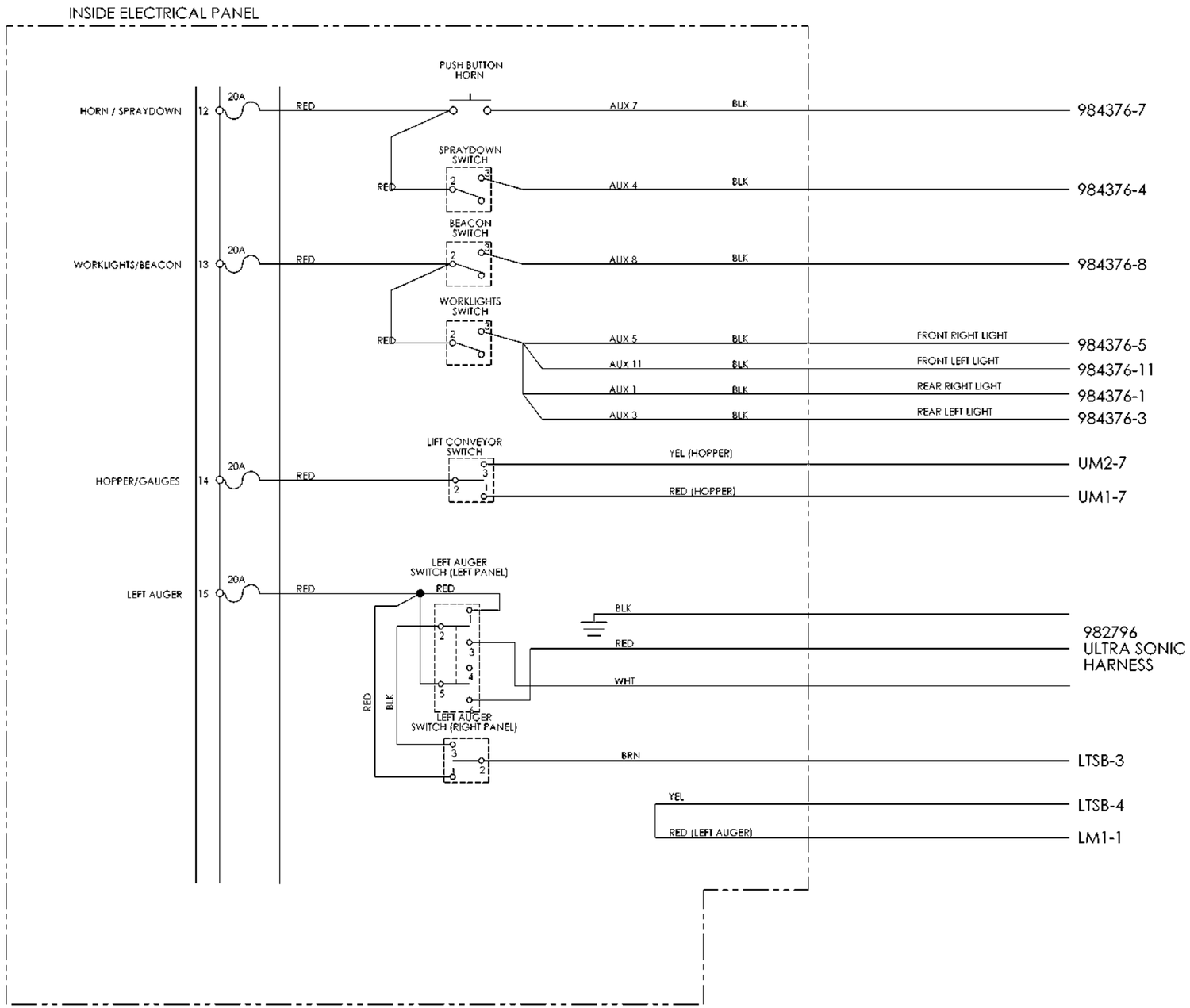


Figure 6-23. Dash Assembly (4 of 5)

NOTES

DASH ASSEMBLY (5 OF 5)

Schematic # 1013630

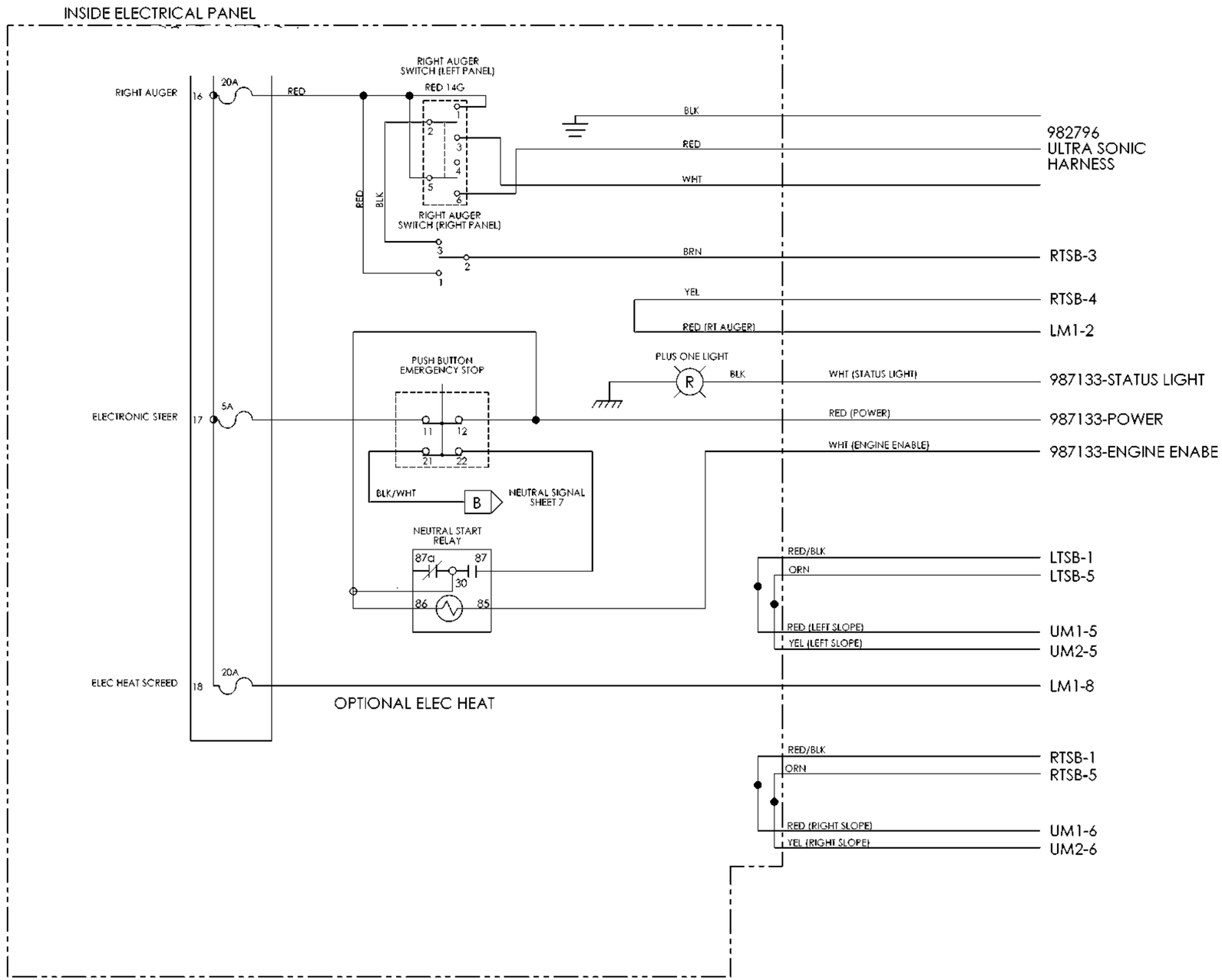


Figure 6-24. Dash Assembly (5 of 5)

NOTES

GAUGE PANEL (1 OF 2)

Schematic # 1013631

PIN	COLOR	FUNCTION
1	WHT	USB DATA(-)
3	YEL/BLK	ECU PWR
6	RED/BLK	PARK BRAKE(-)
7	BRN/YEL	WATER IN FUEL
13	BLK	USB GROUND
14	GRN	CAN(-)
18	ORN/BLK	NEUTRAL SWITCH(-)
20	BLU/YEL	FUEL LEVEL
24	GRN	USB DATA(+)
25	RED	USB POWER
26	YEL	CAN(+)
27	YEL/RED	AC POWER KEYSWITCH
28	YEL/RED	BATTERY(+)
29	BLK	BATTERY(-)

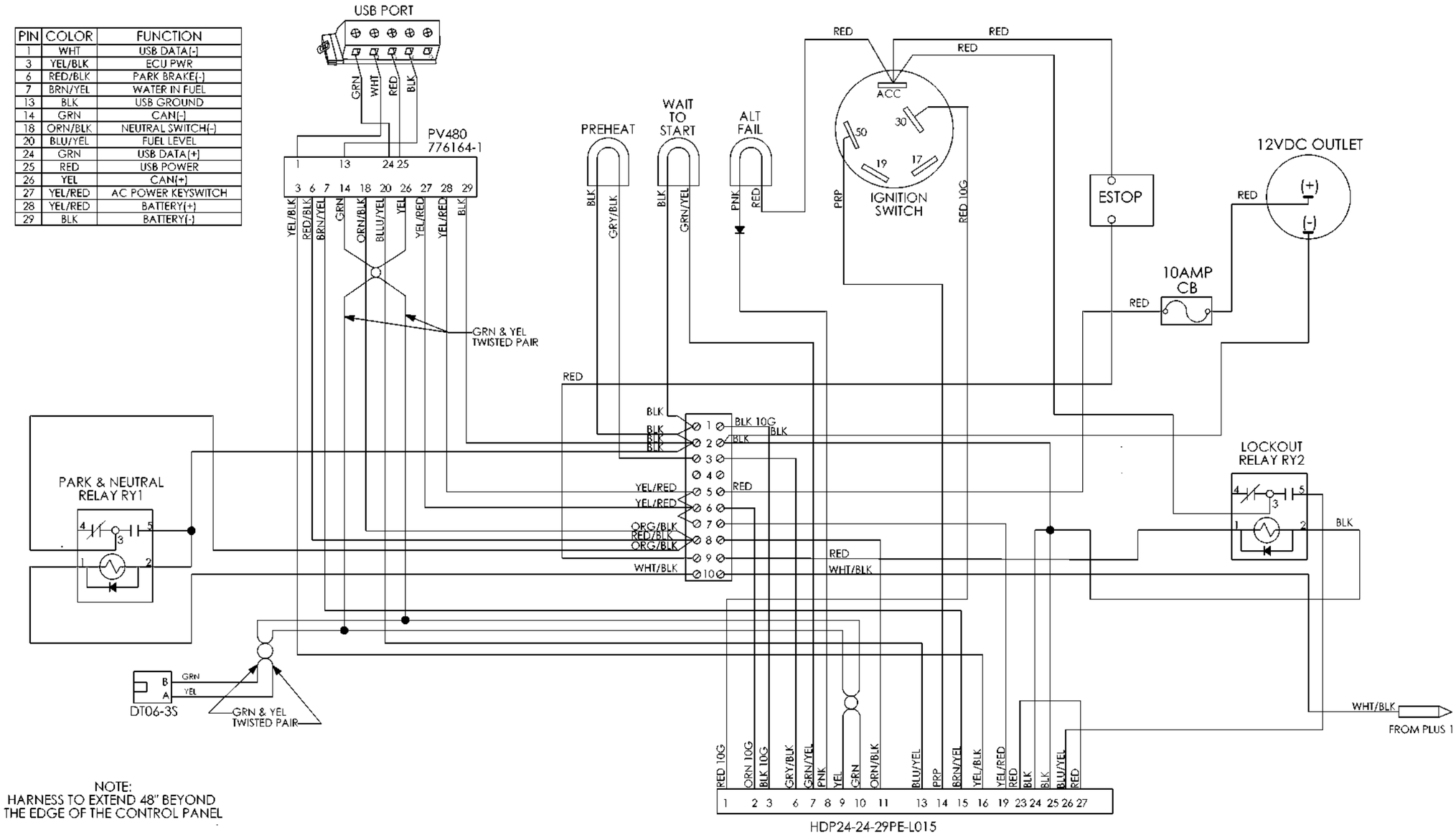


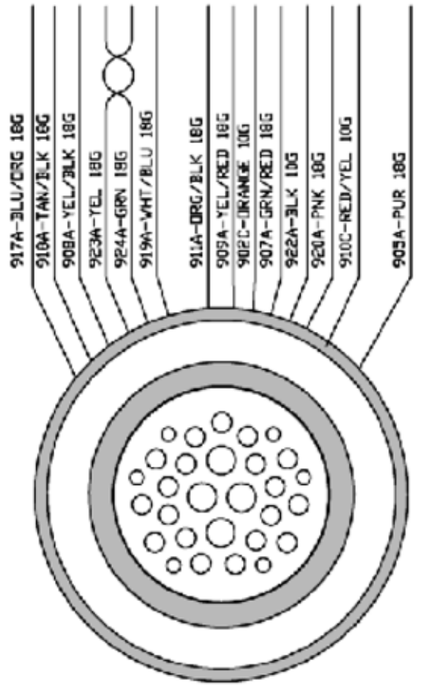
Figure 6-25. Gauge Panel (1 of 2)

NOTES

GAUGE PANEL (2 OF 2)

Schematic # 1013631

NOTES:
1. Signal polarities shown in chart.
2. If indicator lamps are installed for signals from Pins 6, 7 & 8 (CKTS 919A, 907A & 920A respectively), the lamps can NOT be LED; must be incandescent.
3. Power up sequence is as follows:
   3.1. +12VDC to Pin 17/CKT 909A;
   3.2. GND to Pin 16/CKT 908A ONLY AFTER main control system has completed boot-up and is broadcasting over J1939;
   3.3. WAIT TO START Pin 7/CKT 907A will remain at +12VDC until step 3.2 completed.
4. NEUTRAL signal must be sent to Pin 11/CKT 911A to allow engine start on Pin 14/CKT 905A.
5. Both PARK and NEUTRAL signals should be sent over J1939 (PGNs 65265 & 65219) to engine ECU when machine E-Stop is activated.



B

CUSTOMER CONNECTOR DETAILS				
CIRCUIT	PIN	TERMINAL	WIRE	FUNCTION
910C	1	1060-12-0222	RED/YEL 10G	BATTERY (+)
922A	3	1060-12-0222	BLK 10G	BATTERY (-)
902C	4	1060-12-0222	ORG 10G	+12VDC WHEN ENGINE RUNNING
919A	6	0460-202-1631	WHT/BLUE 18G	PREHEAT (+)
907A	7	0460-202-1631	GRN/RED 18G	WAIT TO START (+)
920A	8	0460-202-1631	PNK 18G	ALTERNATOR FAIL (-)
923A	9	0460-202-1631	YEL 18G	CANBUS (+)
924A	10	0460-202-1631	GRN 18G	CANBUS (-)
911A	11	0460-P0P-16141	ORG/BLK 18G	NEUTRAL SAFETY SWITCH (-)
917A	13	0460-202-1631	BLU/ORG 18G	FUEL LEVEL SENSOR (ANALOG)
905A	14	0460-P0P-16141	PUR 18G	STARTER SOLENOID (+)
910A	15	0460-202-1631	TAN/BLK 18G	WATER IN FUEL SENSOR (+)
908A	16	0460-P0P-16141	YEL/BLK 18G	ECU POWER UP SIGNAL (-)
909A	17	0460-202-16141	YEL/RED 18G	ACC POWER FROM KEYSWITCH (+)
-	-	CN21	-	CONNECTOR BACKSHELL
-	-	SRN21	-	CONNECTOR CONDUIT SEAL
-	-	114017	-	SEALING PLUG 12G
-	-	0460-204-2005	-	SEALING PLUG 18G

Figure 6-26. Gauge Panel (2 of 2)

NOTES

PLUS ONE HARNESS (1 OF 2)

Schematic # 987133

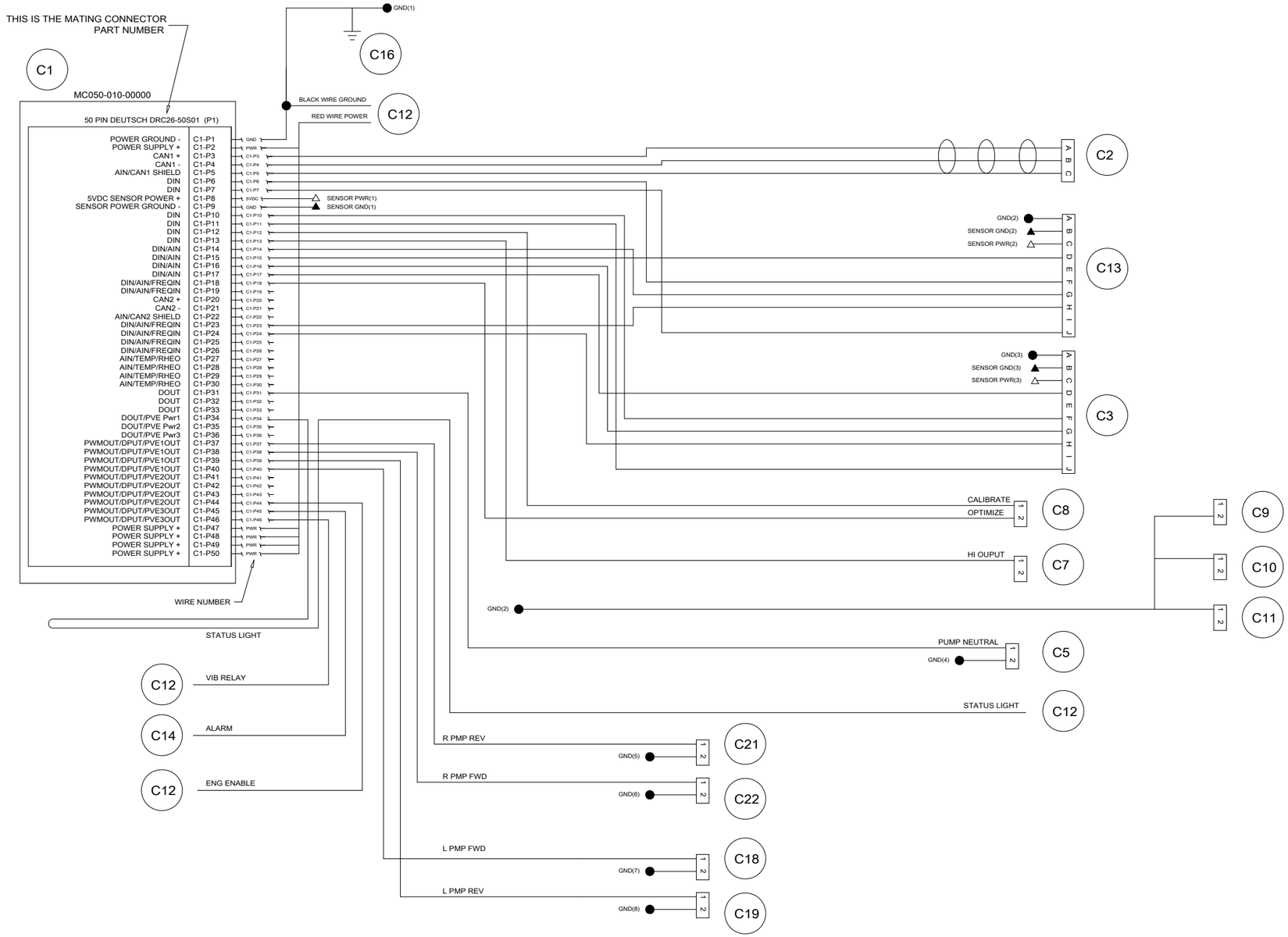


Figure 6-27. Plus One Harness (1 of 2)

NOTES

PLUS ONE HARNESS (2 OF 2)

Schematic # 987133

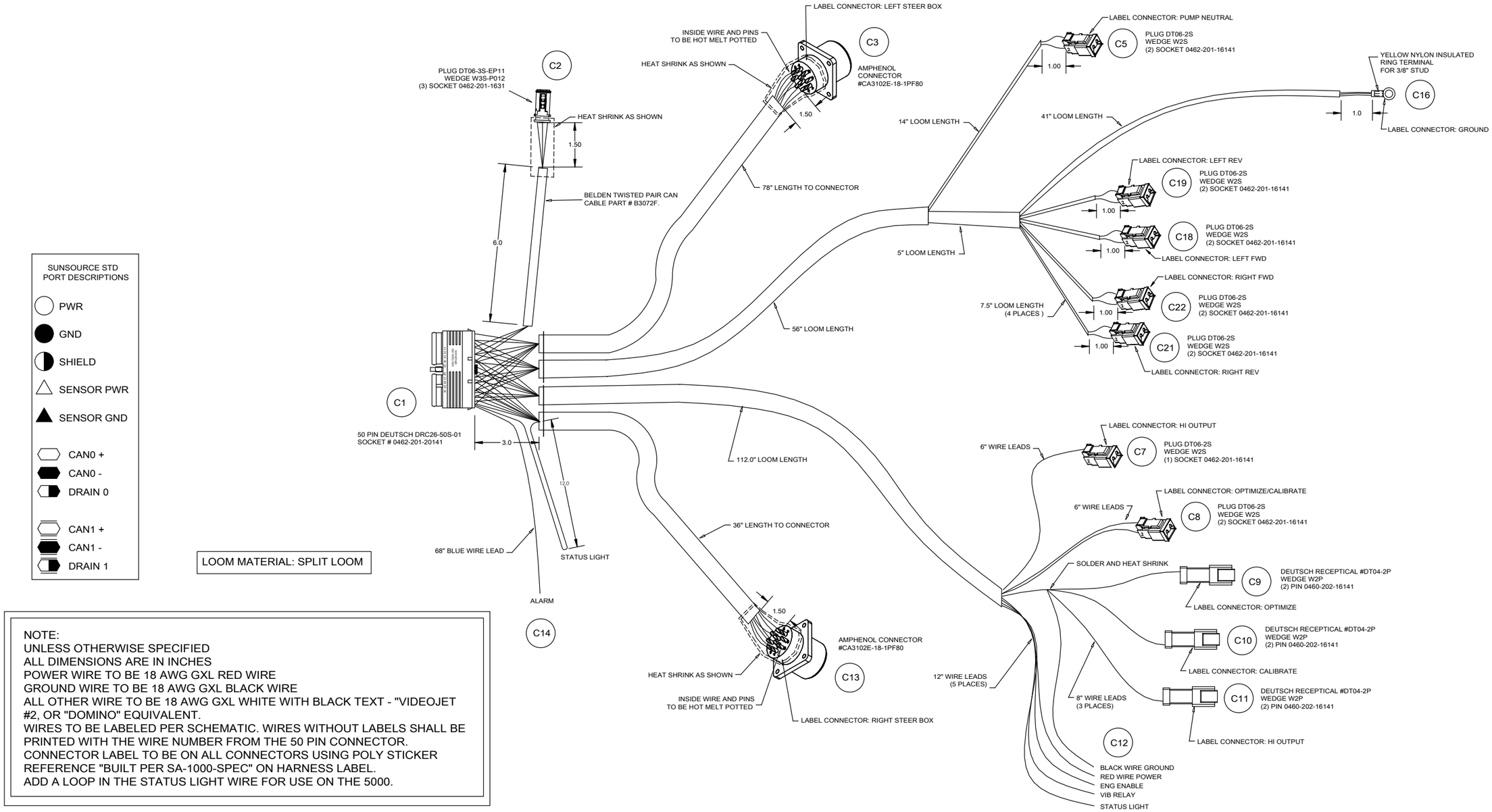


Figure 6-28. Plus One Harness (2 of 2)

NOTES

ULTRASONIC POWER HARNESS

Schematic # 1010680

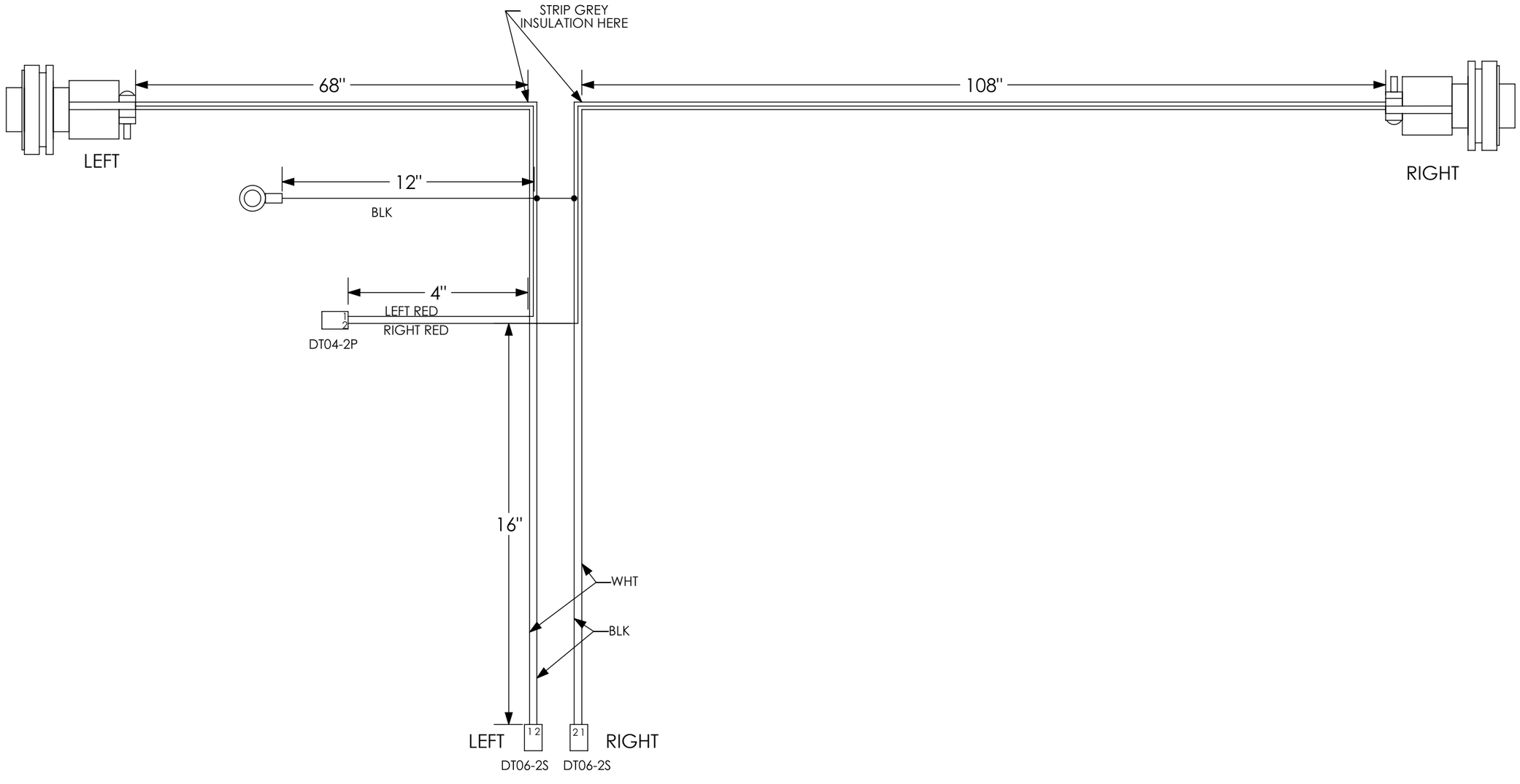


Figure 6-29. Ultrasonic Power Harness

NOTES

STEERING WHEEL BOX (OPTION)

Schematic # 1000708

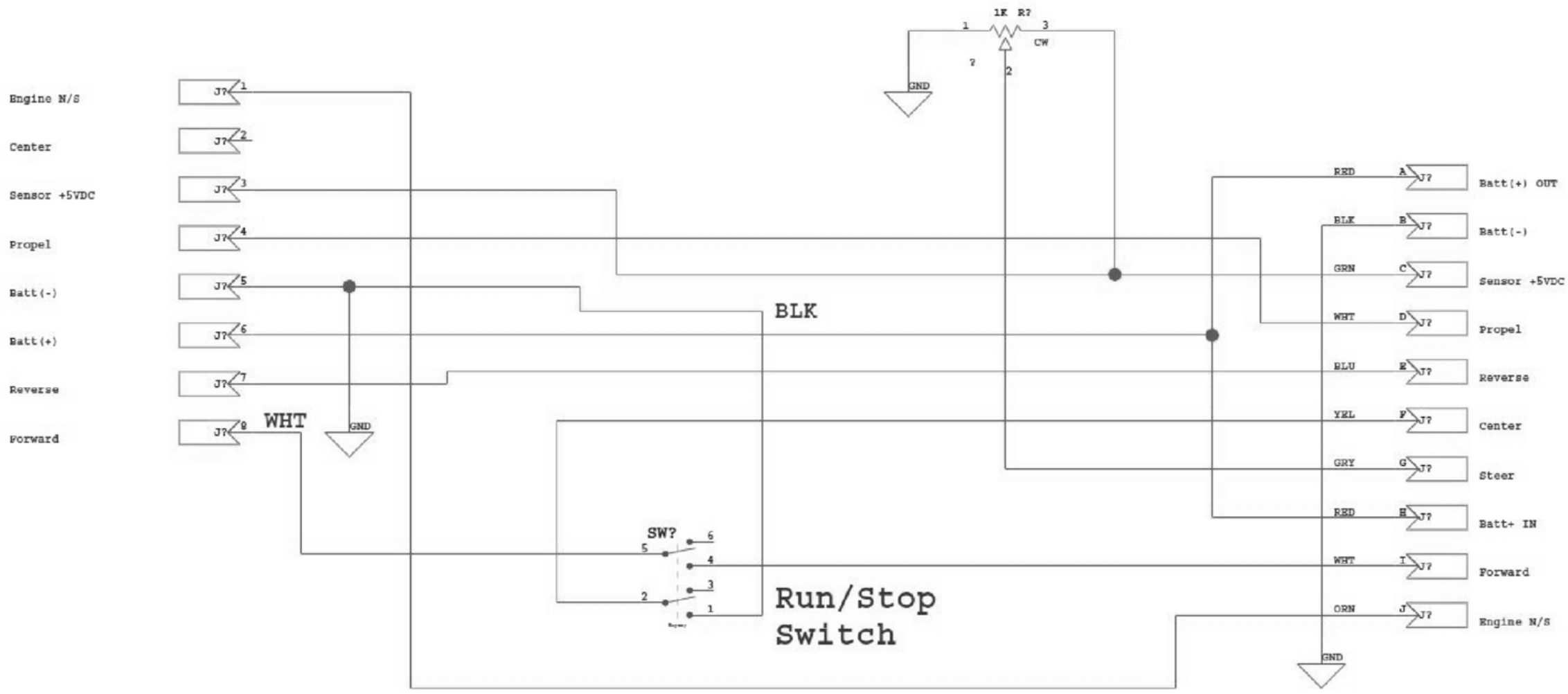
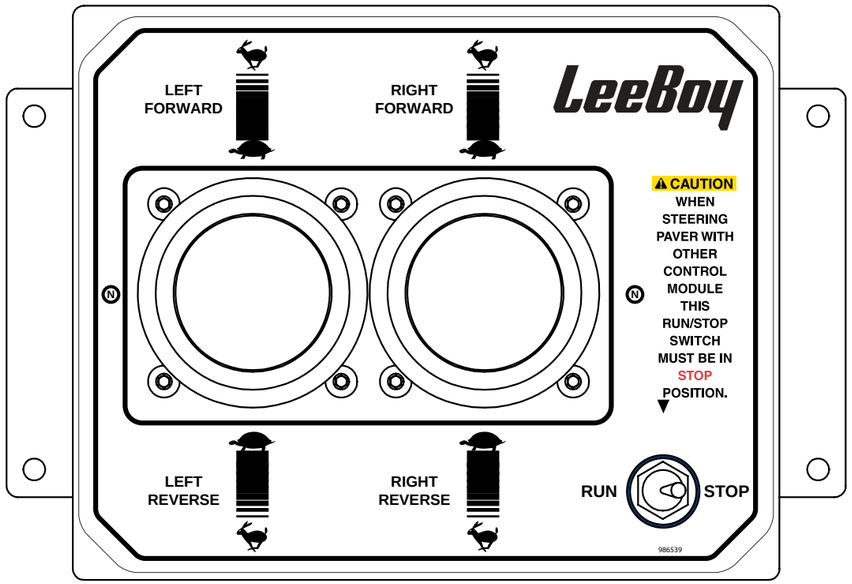


Figure 6-30. Steering Wheel Box (Option)

NOTES

DUAL JOYSTICK CONTROL BOX (OPTION)

Schematic # 1008904



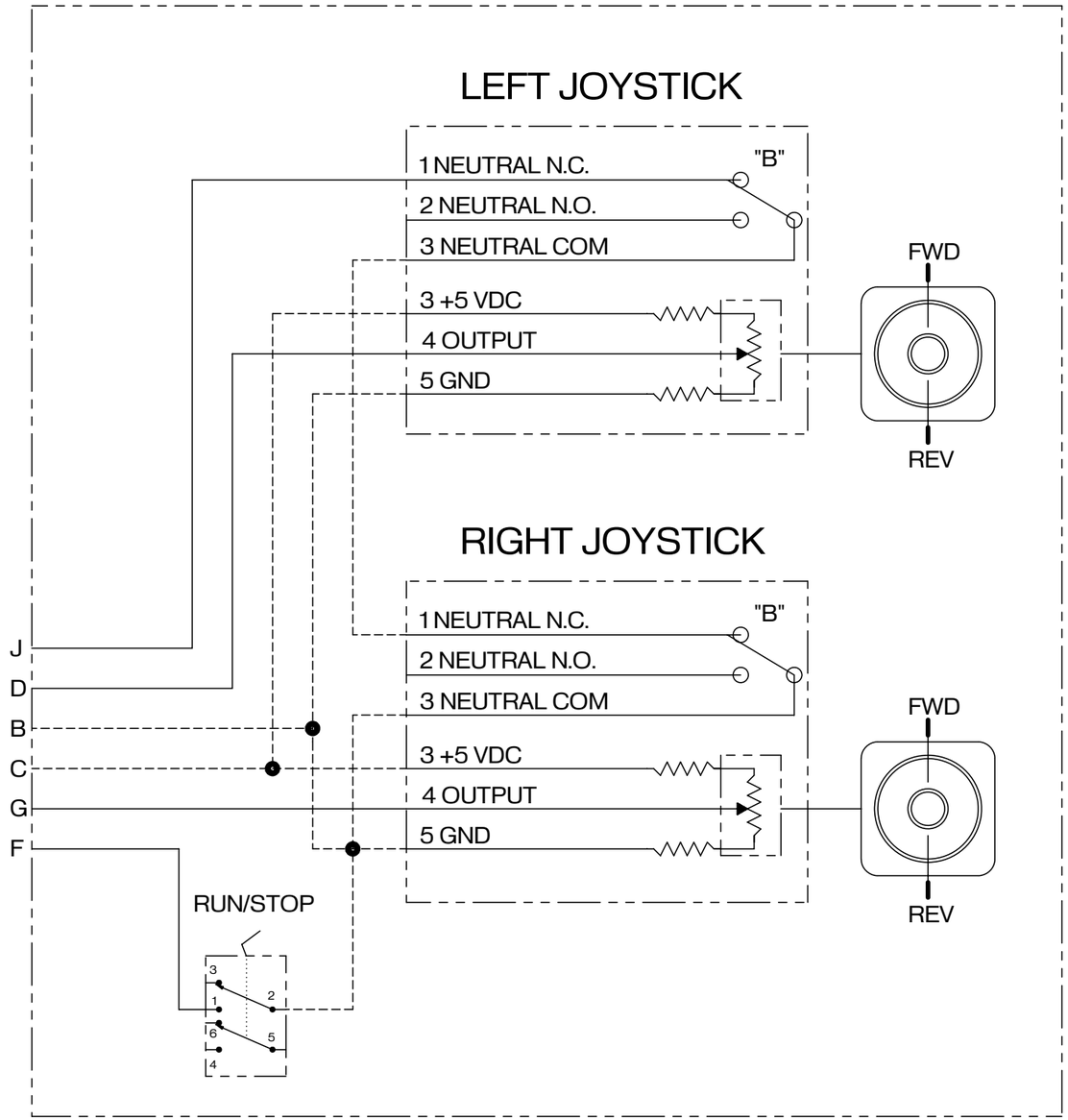


Figure 6-31. Dual Joystick Control Box (Option)

6

NOTES

ELECTRIC HEAT CONTROL (OPTION)

Schematic # 1010397

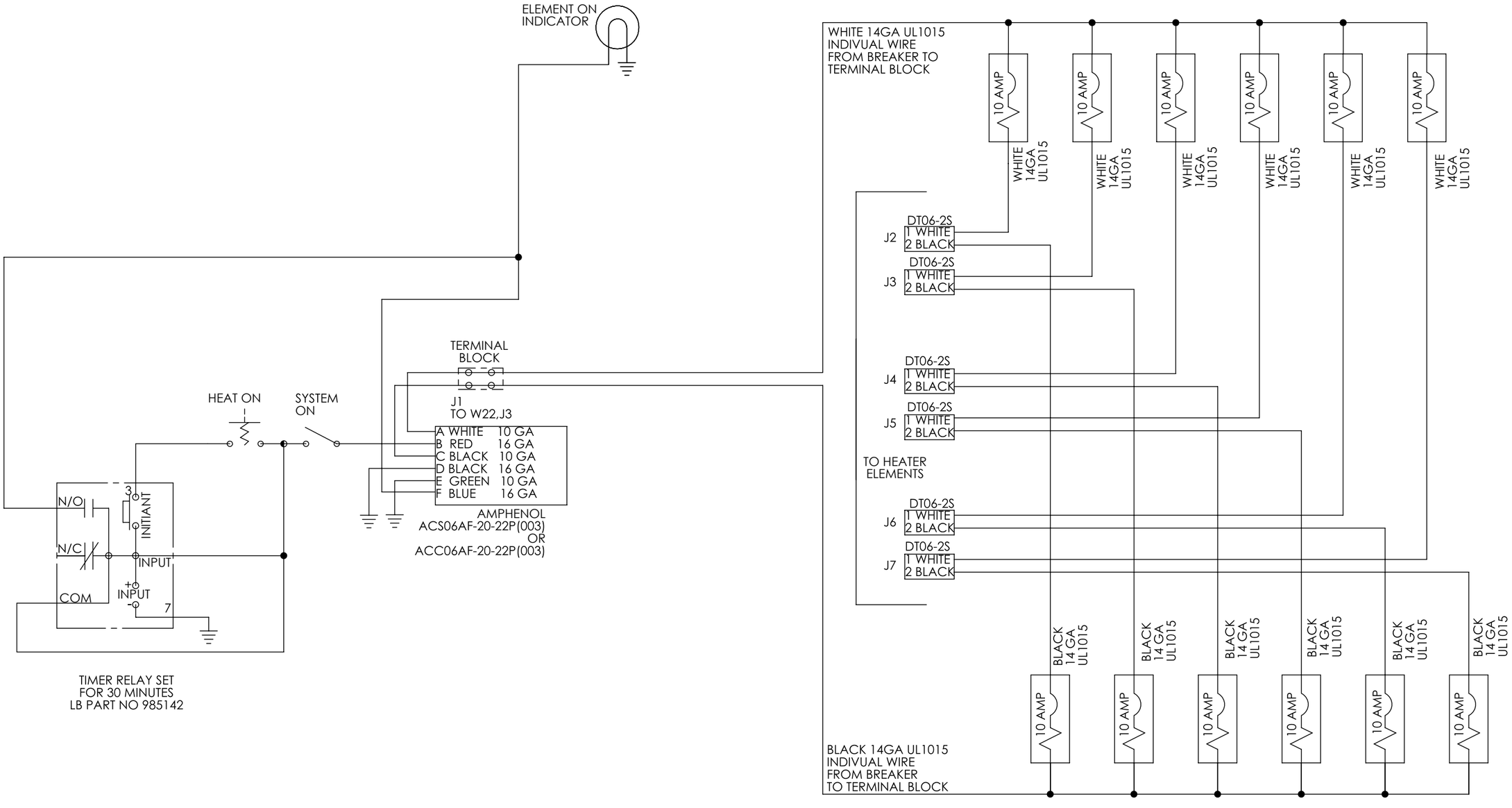


Figure 6-32. Electric Heat Control (Option)

NOTES

ELECTRIC HEAT CONTROL - HEATED ENDGATES (OPTION)

Schematic # 1011311

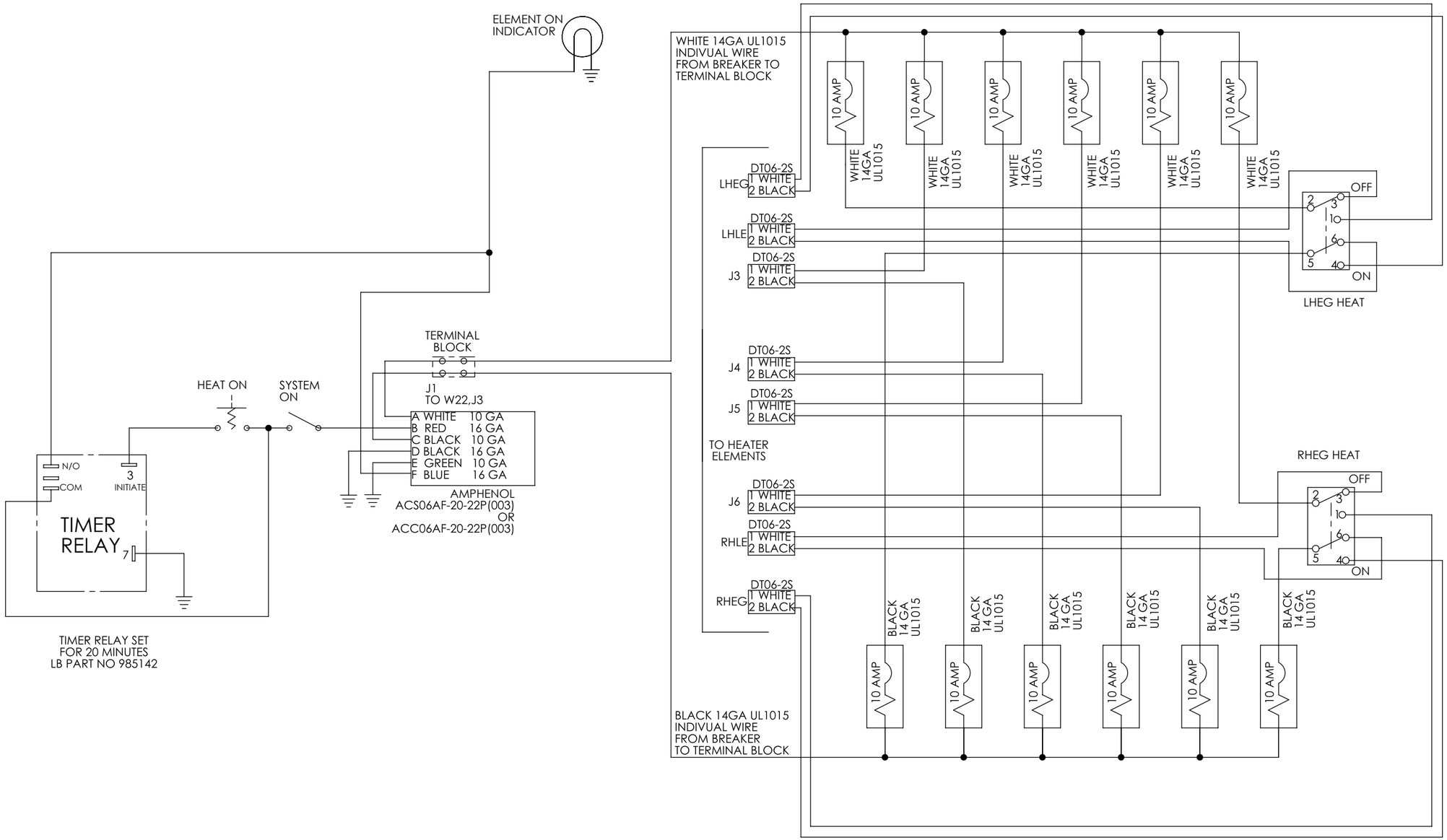


Figure 6-33. Electric Heat Control - Heated Endgates (Option)

NOTES

HYDRAULIC SCHEMATIC (1 OF 4)

Schematic # 1014996

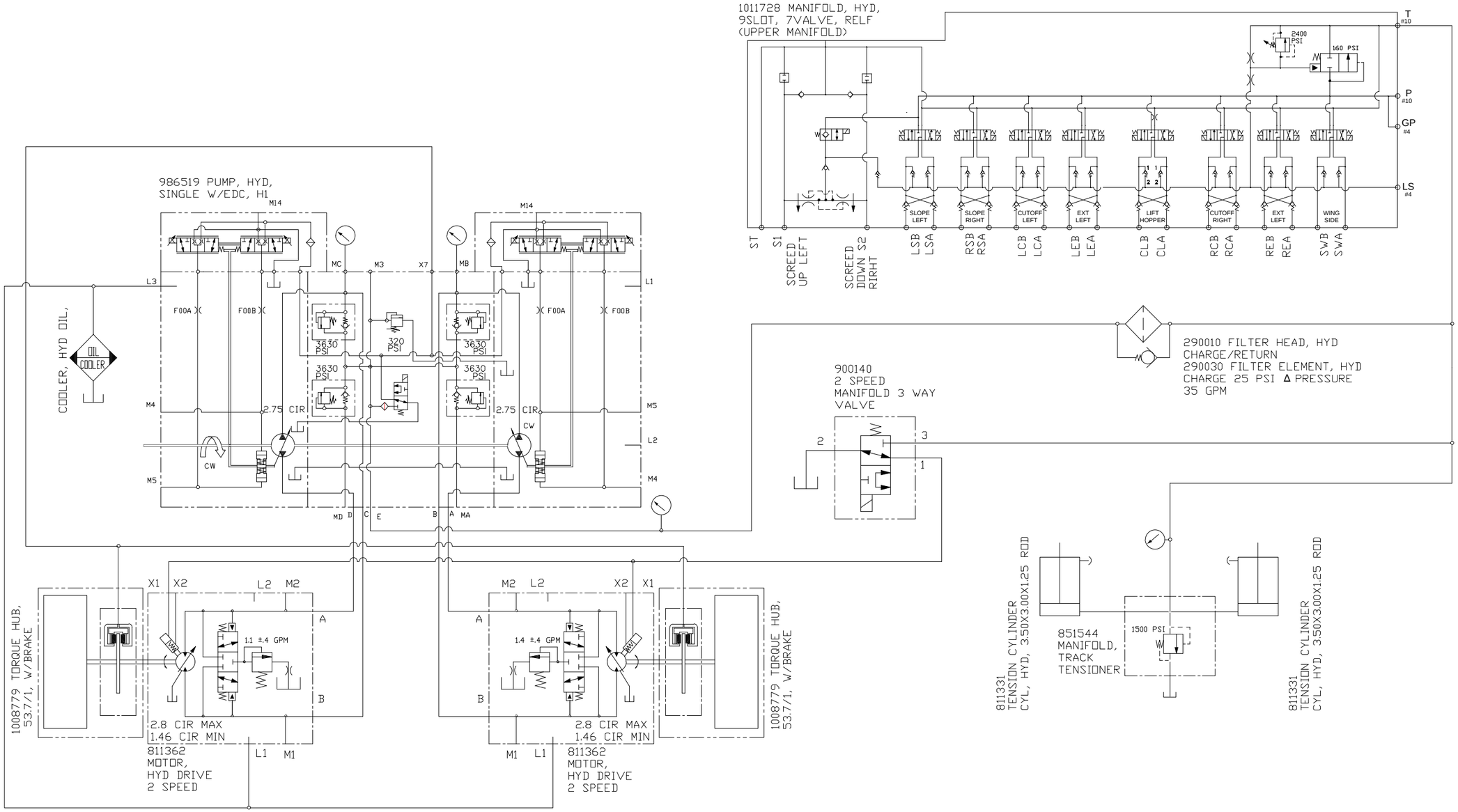


Figure 6-34. Hydraulic Schematic (1 of 4)

NOTES

HYDRAULIC SCHEMATIC (2 OF 4)

Schematic # 1014996

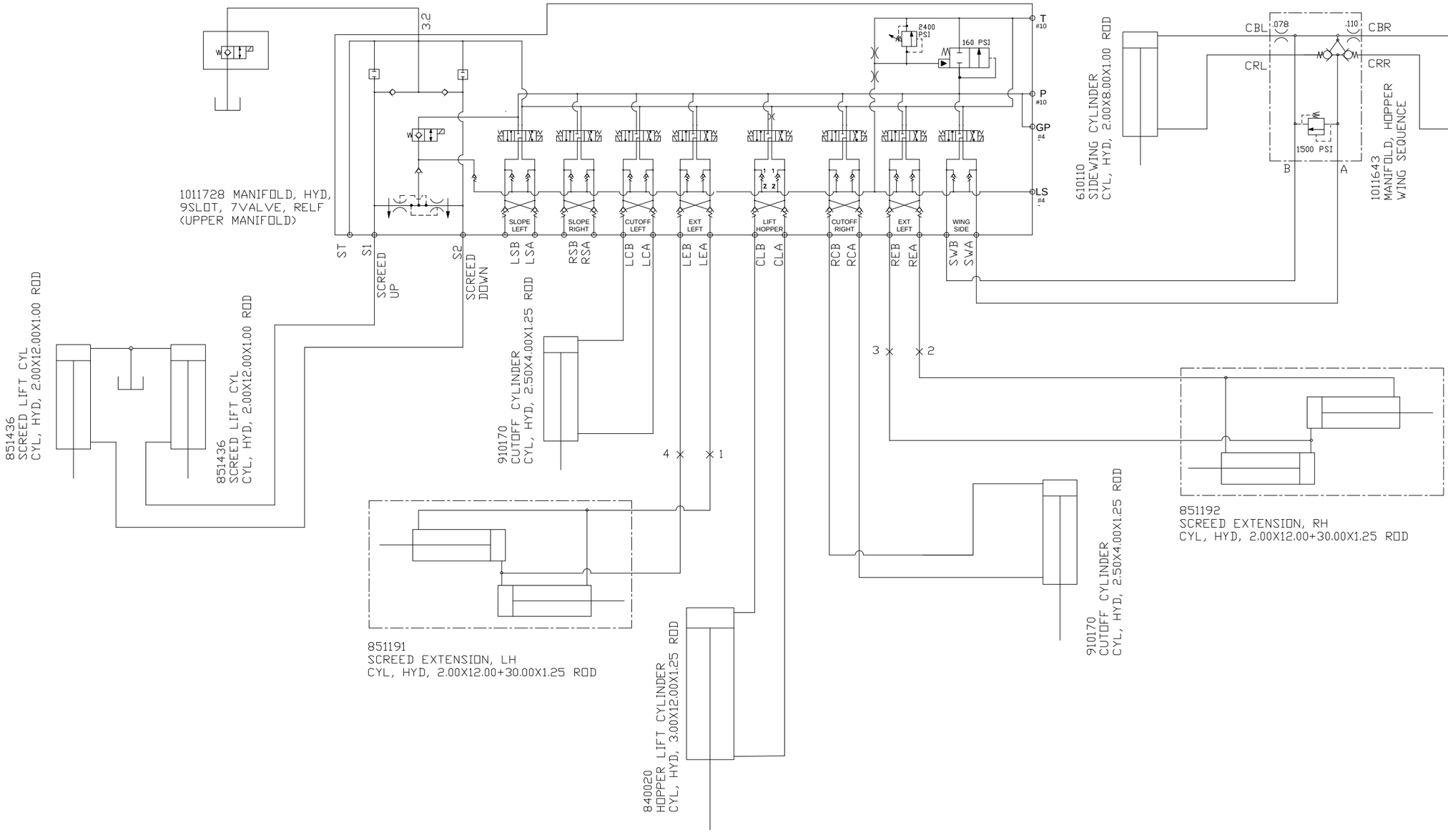


Figure 6-35. Hydraulic Schematic (2 of 4)

NOTES

HYDRAULIC SCHEMATIC (3 OF 4)

Schematic # 1014996

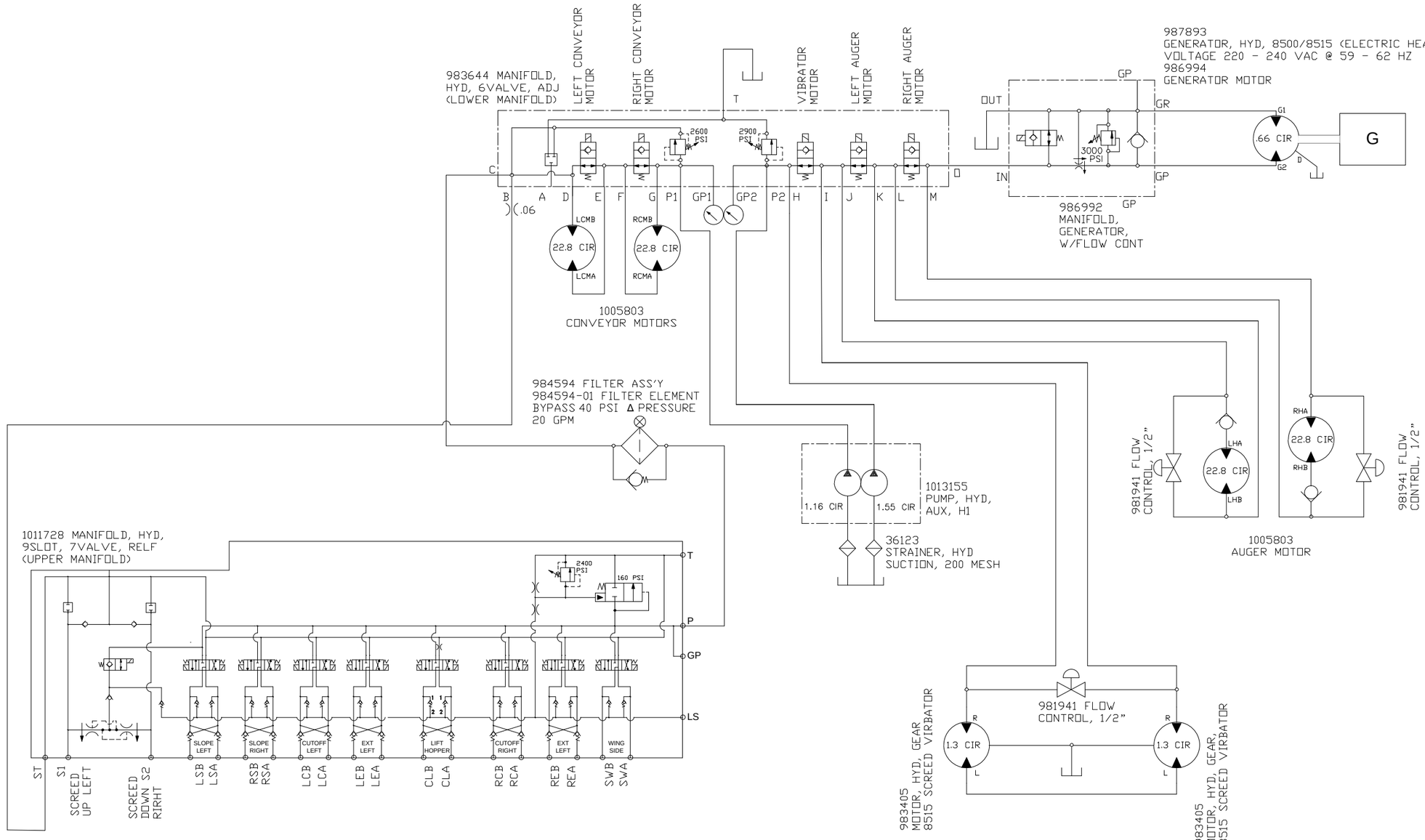


Figure 6-36. Hydraulic Schematic (3 of 4)

NOTES

HYDRAULIC SCHEMATIC (4 OF 4)

Schematic # 1014996

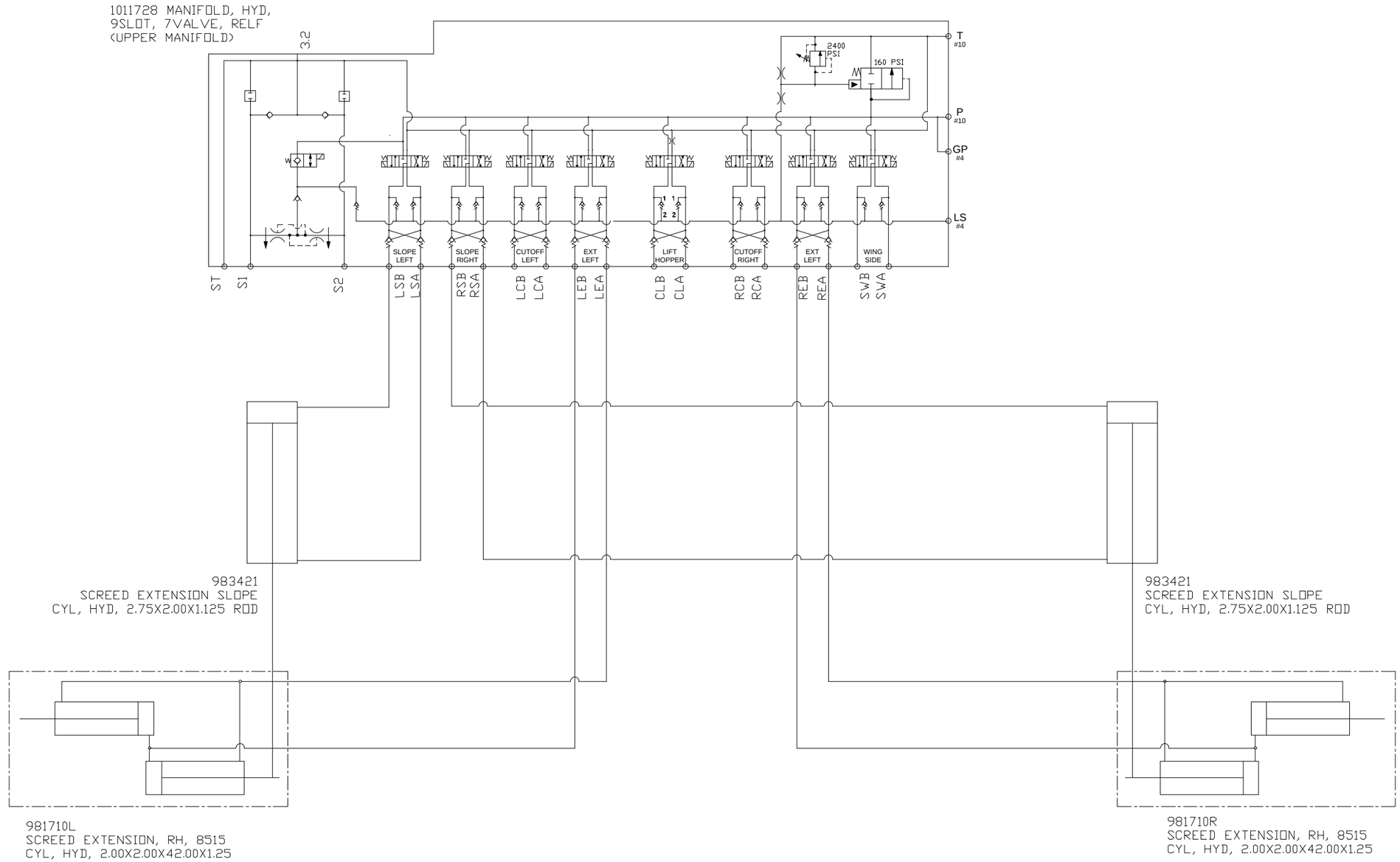


Figure 6-37. Hydraulic Schematic (4 of 4)

NOTES

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QUICK REFERENCE

FILTERS/STRAINERS		
Engine	**Description**	**Part #**
	Oil Filter	986537-03
	Fuel/Water Separator Filter	1009253-19
	Fuel Filter	1009253-18
	Air Cleaner, Primary	1009253-17
	Air Cleaner, Secondary	1009253-16
Hydraulic		
	Hydraulic Filter	36123
	Charge/Return Filter	290030
	Charge/Return Filter Head	290010
Spray Down		
	Pump and Strainer Kit	1011738

ENGINE COMPONENTS		
Engine	**Description**	**Part #**
	Engine Belt	1009253-20
	Alternator	1009253-21
	Starter	1001166-03

ELECTRICAL COMPONENTS		
	Description	**Part #**
	5A Fuse (1)	36746
	10A Fuse (3)	36340
	15A Fuse (1)	36341
	20A Fuse (5)	36342
	30A Fuse (1)	36218
	Breaker, 10 Amp	986546

TRACK ASSEMBLIES		
	Description	**Part #**
	Track Assembly w/Poly Pads	851101P
	Rubber Track Assembly	982585

WEAR PLATES		
	Description	**Part #**
	Screed, Main - LP, 1-Adjust	981724SRV
	Screed Extension - LP, 1-Adjust	851182SRV
	Screed, Main - LP, 2-Adjust	981724SRV
	Screed Extension - LP, 4-Adjust	988318SRV
	Screed Base - Electric	985547SRV
	Screed Extension - Electric, 1-Adjust	987872SRV
	Screed Base - Electric	985547SRV
	Screed Extension - Electric, 4-Adjust	988319SRV
	Screed, Main - 815HD	1007089SRV
	Screed Extension - 815HD	1006380SRV

Specifications and designs may change without prior notice. These illustrations do not necessarily show the standard versions.

SPROCKET DRIVE TRACK SYSTEM - 4 ROLLER UNDERCARRIAGE

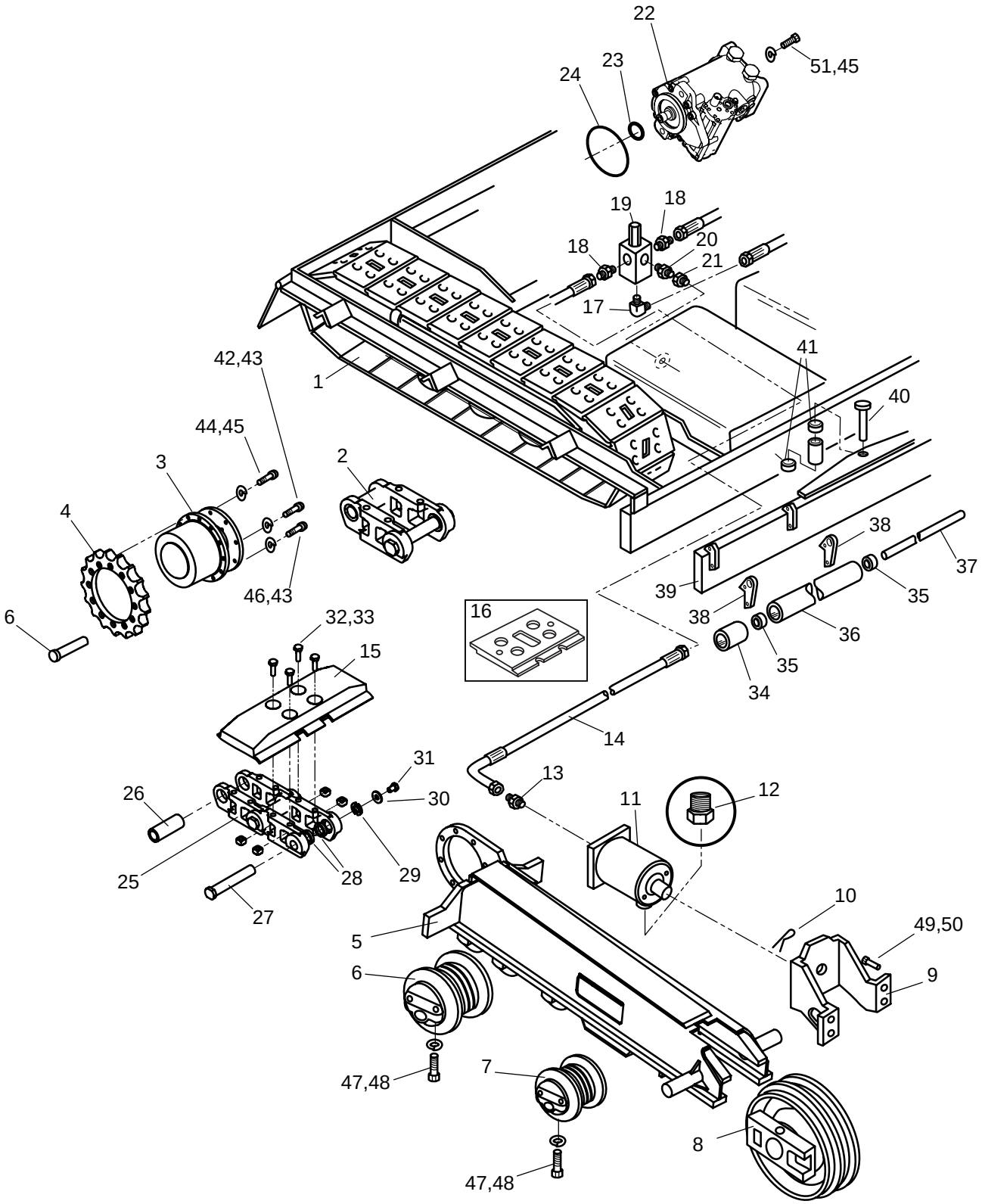


Figure 7-1 Sprocket Drive Track System (1 of 2)

Sprocket Drive Track System - 4 Roller Undercarriage (1 of 2)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1009869		Group, Drive Poly Track, Comer	
1	851101P	1	Assembly, Track, One Side, w/Poly Pads	Includes 3 & 15
2	851102	1	Chain Rail, Track Drive	(1) Link Shown for Reference
3	1008779	1	Torque Hub, 47.6:1, w/Brake	
4	1006737	1	Sprocket, Track Drive	
5	1008788	1	Weldment, Undercarriage, Comer (Right)	
REF	1008789	1	Weldment, Undercarriage, Comer (Left)	Not Shown
6	851566	1	Track Roller, B/1	
7	811326	3	Track Roller, B/O	
8	1001589	1	Idler, Track Front	
9	811329ASRV	1	Yoke, Track Idler	
10	870307	1	Hair Pin Cotter, .177	
11	811331	1	Cylinder, Hydraulic, Track Tensioner	
REF	811331-01	1	Seal Kit, Hydraulic Cylinder	
12	851644	1	Breather, Track Tensioner Cylinder	
13	2404-10-8	1	Adapter, Hydraulic Hose	
14	8550B	1	Assembly, Hose, Track Tensioner (Right)	
15	851104	A/R	Track Pad, Poly	
16	811304	A/R	Track Pad, Cast	Option
17	6801-10-8	1	Fitting, 90°, 10MJ-08MB	
18	6400-10-8	2	Fitting Straight, 10MJ-08MB	
19	851544	1	Manifold, Track Tensioner	
20	6401-8-8-O	1	Fitting, Straight, 08MP-08MB	
21	5406-12-8	1	Adapter, Reducer, Pipe, -12 / -8	
22	811362	1	Motor, Hydraulic, Drive, 2-Speed	
23	59941203	A/R	Seal, Hydraulic Motor/Pump	
24	811366	A/R	O-Ring, Hydraulic Motor	
25	811312	A/R	Link Kit, Track Repair	
26	851460	A/R	Bushing, Track Link, Short	
27	811307	A/R	Pin, Track Link, Plain	
28	811310	A/R	Spacer, Track Link Bushing	
29	811305	A/R	Washer, Track Chain Master Pin	
30	80474	A/R	Washer, Flat, M10	
31	989272-50	A/R	CSHH, M10x1.50 x 16mm	
32	811308	A/R	CSHH, Track Pad	
33	811309	A/R	Nut, Track Pad Cap Screw	
34	980035	2	Roller, Extension Bumper	

SPROCKET DRIVE TRACK SYSTEM - 4 ROLLER UNDERCARRIAGE

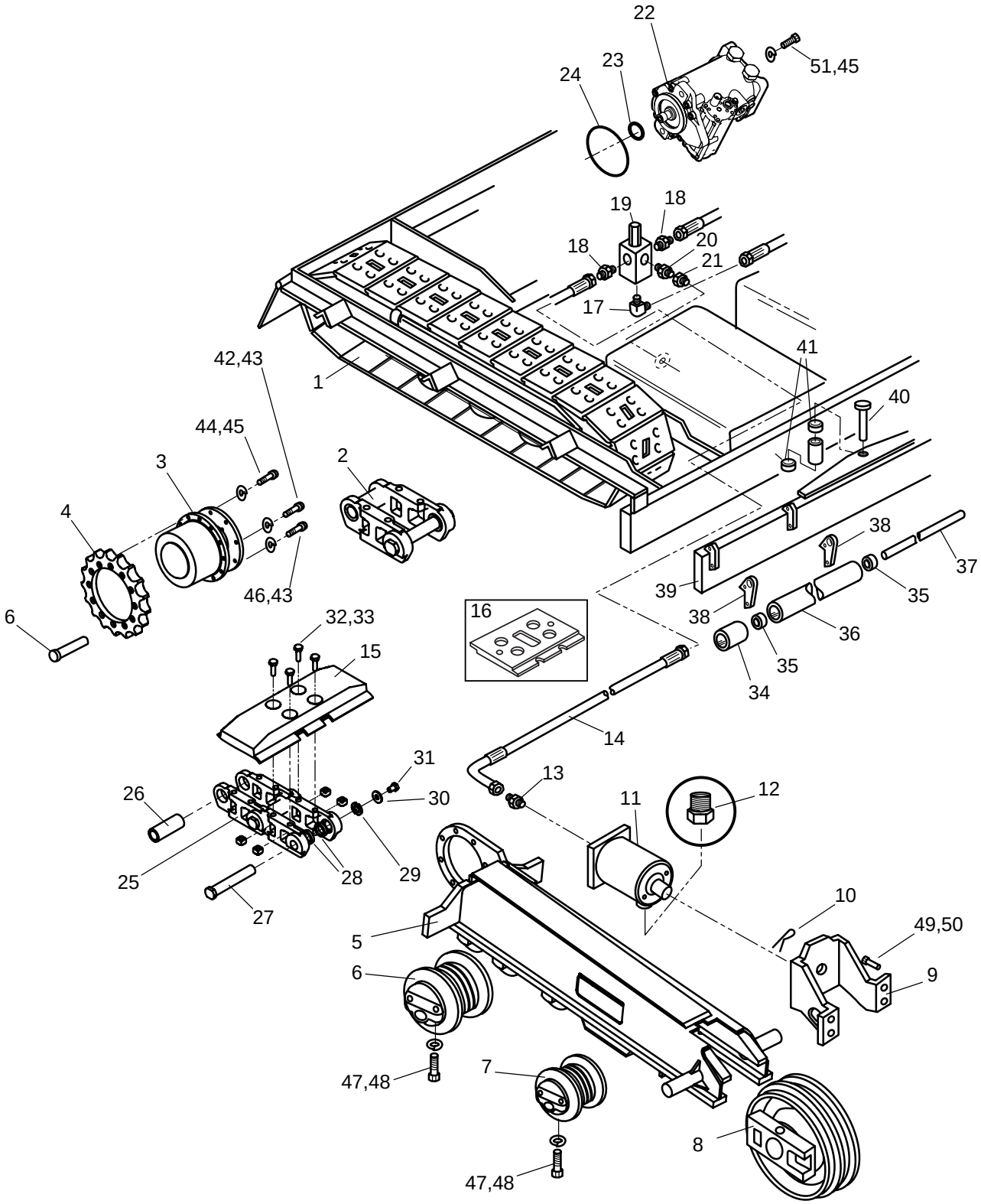


Figure 7-1 Sprocket Drive Track System (2 of 2)

Sprocket Drive Track System - 4 Roller Undercarriage (2 of 2)

Item No.	Part Number	Qty.	Description	Remarks
35	850130	4	Bearing, Auger, Axle, Idler	
36	980032	2	Assembly, Roller, Push Bar, w/Bearings / Shaft	
37	980034	2	Shaft, Push Bar Roller	
38	852664	2	Extension, Front Bumper	
39	984283SRV	1	Assembly, Push Roller, Swivel	
40	810081SRV	1	Pin, Push Bar Swivel	
41	810070	2	Bushing, 2.00 ID x 2.50 OD x 2.50	
42	1008903	1	CSLS, M16x2 x 45mm	
43	307-10	5	Washer, Lock, Hi-Collar, 5/8	
44	100-M16-2-65-8.8F	9	CSHH, M16x2 x 65mm, C8.8, FT	
45	302-10	11	Washer, Lock, 5/8	
46	1008895	4	CSLS, M16x2 x 35mm	
47	100-M12-1.75-50-8.8F	16	CSHH, M12x1.75 x 50mm, C8.8, FT	
48	300-8	16	Washer, Flat, 1/2	
49	100-4-20-16-5F	4	CSHH, 1/4-20 x 1.00, GR5, FT	
50	302-4	4	Washer, Flat, 1/4	
51	100-M12-1.75-45-8.8F	4	CSHH, M12x1.75 x 45mm, C8.8, FT	
REF	1006286	4	Mount, Push Roller, Extended	Not Shown

RUBBER TRACK UNDERCARRIAGE - 5 ROLLER UNDERCARRIAGE

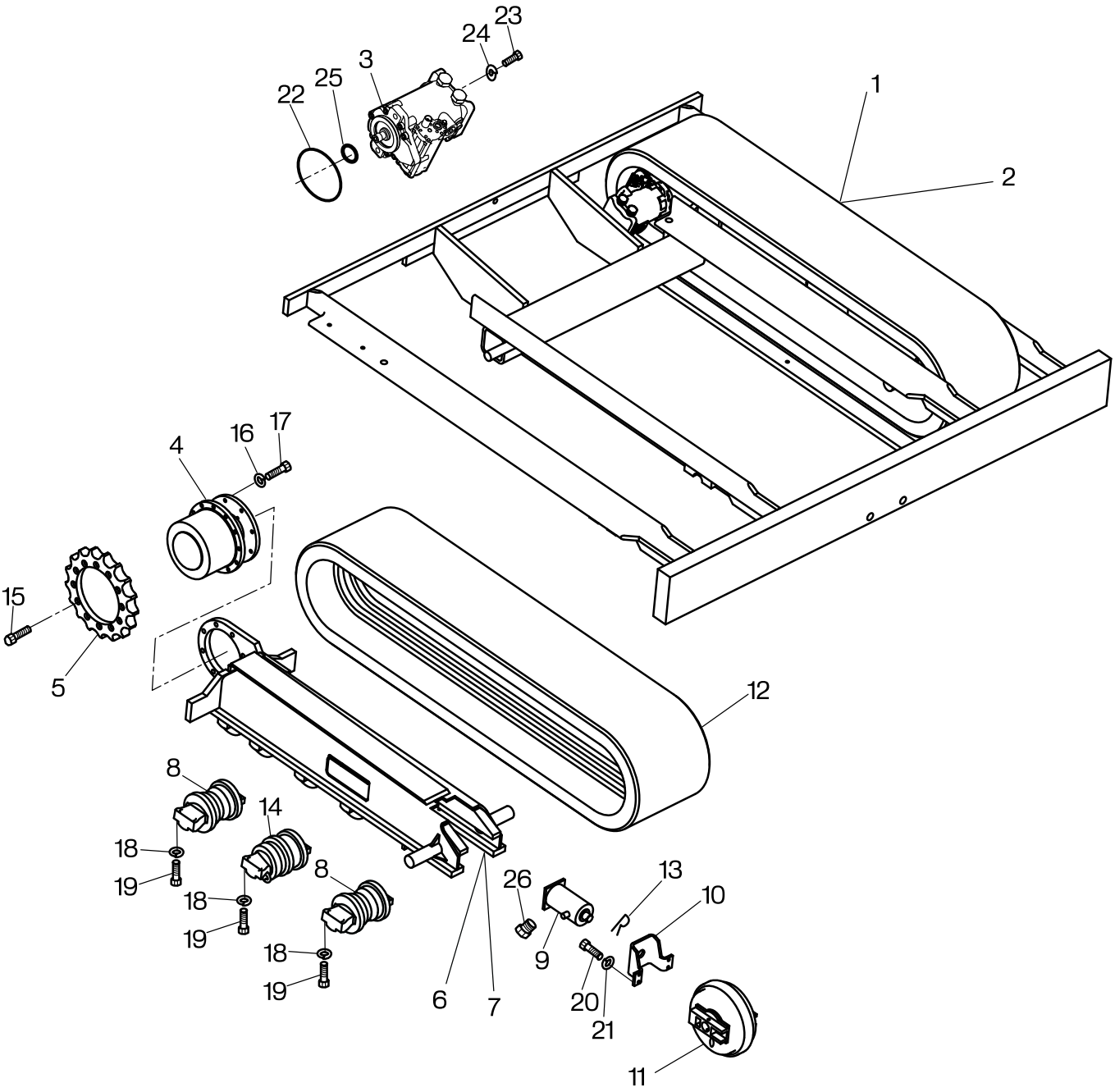


Figure 7-2 Rubber Track Undercarriage

Rubber Track Undercarriage - 5 Roller Undercarriage

Item No.	Part Number	Qty.	Description	Remarks
1	1009873	1	Under Carriage, 8515, Rubber (Left)	
2	1009874	1	Under Carriage, 8515, Rubber (Right)	
3	811362	1	Motor, Hydraulic, Drive, 2 Speed	
4	1008779	1	Torque Hub, 47.6:1, w/Brake	
5	1009464	1	Sprocket, Track Drive, 17 Tooth	Rubber Track Only
6	1009466	1	Weldment, Undercarriage (Right)	Rubber Track Only
7	1009465	1	Weldment, Undercarriage (Left)	Rubber Track Only
8	851566	2	Track Roller, B/1	Rubber Track Only
9	811331	2	Cylinder, Hydraulic, Track Tensioner	Rubber Track Only
REF	811331-01	A/R	Seal Kit	Not Shown
10	811329ASRV	2	Yoke, Track Idler	
11	983530	2	Idler, Track Front	Rubber Track Only
12	982585	2	Track, Rubber, Continuous	
13	870307	2	Hair Pin Cotter, .177	
14	983588	3	Track Roller, B-1, Inner Flange	Rubber Track Only
15	100-10-11-20-8F	12	CSHH, 5/8-11 x 1.25, GR8, FT	
16	81201	7	Washer, Flat, SAE, 5/8	
17	100-10-11-32-8	7	CSHH, 5/8-11 x 2.00, GR8	
18	811328	20	Washer, Lock, M12	
19	811330A	12	CSHH, M12x1.50 x 50mm	
20	989272-36	4	CSHH, M10x1.50 x 30mm	
21	320142	4	Washer, Lock, M10	
22	811366	A/R	O-Ring, Hydraulic Motor	
23	100-8-13-28-5	2	CSHH, 1/2-13 x 1.75, GR5	
24	302-8	2	Washer, Lock, 1/2	
25	59941203	A/R	Seal, Hydraulic Motor/Pump	
26	851644	1	Breather, Track Tensioner Cylinder	
REF	983166	A/R	Assembly, Track, One Side	30 Pads per side
REF	987694	A/R	Spacer, Roller, 8515	Not Shown, (2) Per Roller
REF	983166-02	A/R	Track Pad, Poly, Heavy Duty	Not Shown *
REF	983166-03	A/R	Chain Rail, Track Drive, Heavy Duty	Not Shown *
REF	983166-04	A/R	Pin, Track Link, Master, Heavy Duty	Not Shown *
REF	983166-05	A/R	Kit, Track, Heavy Link	Not Shown *
REF	983166-06	A/R	CSHH, 135mm, Track Pad Bolt	Not Shown *

*Used only in place of rubber tracks.

CONVEYOR DRIVE ASSEMBLY (1 OF 2)

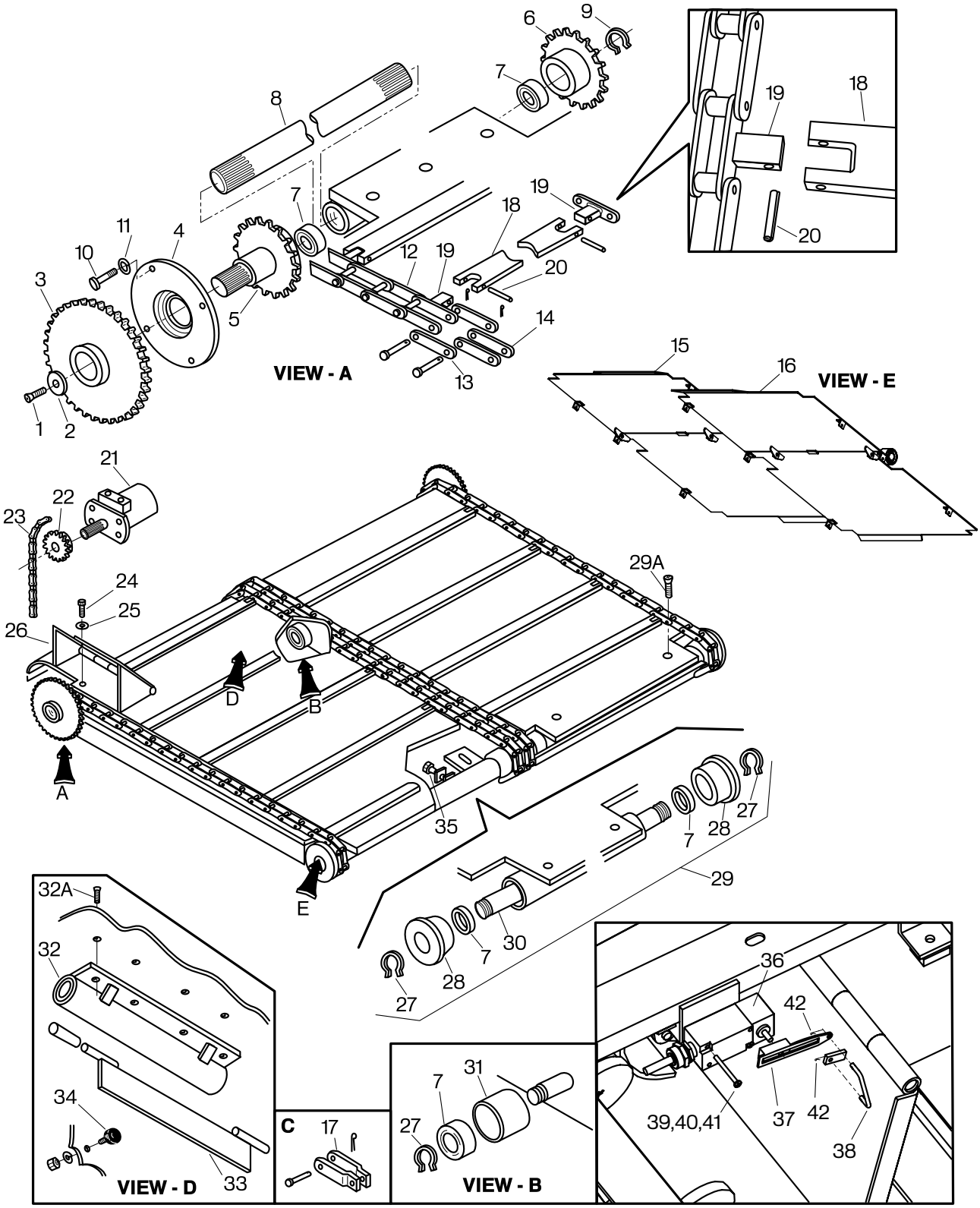


Figure 7-3 Conveyor Drive Assembly

Conveyor Drive Assembly (1 of 2)

Item No.	Part Number	Qty.	Description	Remarks
REF	851626SRV	1	Assembly, Conveyor, Complete	Not include 1,2,3,4,10,11
REF	851627SRV	1	Assembly, Bed, 8500 Conveyor	Not Shown
1	100-8-13-32-5	2	CSHH, 1/2-13 x 2.00, GR5	
2	851112	2	Washer, Counter Sunk, .500	
3	851473	2	Sprocket, Outer Drive	
4	851483SRV	2	Conveyor Mounting Plate w/Bearing	
5	851474SRV	2	Sprocket, Outer Drive C-188	
6	850030	2	Sprocket, Inner Drive C-188	
7	850130	20	Bearing, Auger, Axle, Idler	
8	851116	2	Drive Shaft, Conveyor	
9	850040	2	Snap Ring, Conveyor Drive Shaft	
10	100-8-13-16-5F	A/R	CSHH, 1/2-13 x 1.00, GR5, FT	
11	302-8	2	Washer, Lock, 1/2	
12	851117ASRV	A/R	Assembly, Conveyor Chain	
13	850070A	4	Link, Master w/Pins	
14	850080A	A/R	Block Link	
15	851127LSRV	A/R	Belly Pan (Left)	
16	851127RSRV	A/R	Belly Pan (Right)	
17	850215A	A/R	Half Link, Conveyor Chain w/Pin, Cotter	
18	851118A	A/R	Bar, Conveyor Flight Bar (Quick Change)	Thick side towards screed
19	850080B	A/R	Link w/Tab Conveyor Chain Inner	
REF	851118-2	A/R	Tab, Conveyor Chain Weld On	Replacement, Not Shown
20	851118-1	2	Pin, Roll Pin (3/8 x 2.00)	
21	1005803	2	Hydraulic Motor, Conveyor Main	
REF	1001027-01	A/R	Seal Kit, Hydraulic Motor	Not Shown
22	851120	2	Sprocket, Conveyor Drive Motor	
23	851121	2	Chain, Conveyor Drive (#80)	
24	100-10-11-20-5F	A/R	CSHH, 5/8-11 x 1.25, GR5, FT	
25	302-10	A/R	Washer, Lock, 5/8	
26	850038LSRV	A/R	Deflector, Left Side (High Deck)	
REF	850038RSRV	4	Deflector, Right Side (High Deck)	Not Shown
27	850040	4	Snap Ring, Conveyor Drive Shaft	
28	850120	4	Idler, Conveyor Chain Front	
29	851123	2	Assembly, Tube, Conveyor Front Chain Guide	
29A	100-10-11-32-5	4	CSHH, 5/8-11 x 2.00, GR5	
30	851124	2	Shaft, Conveyor Front Idler	
31	850162	4	Roller, Conveyor Chain Guide, w/ Bearing	

CONVEYOR DRIVE ASSEMBLY (2 OF 2)

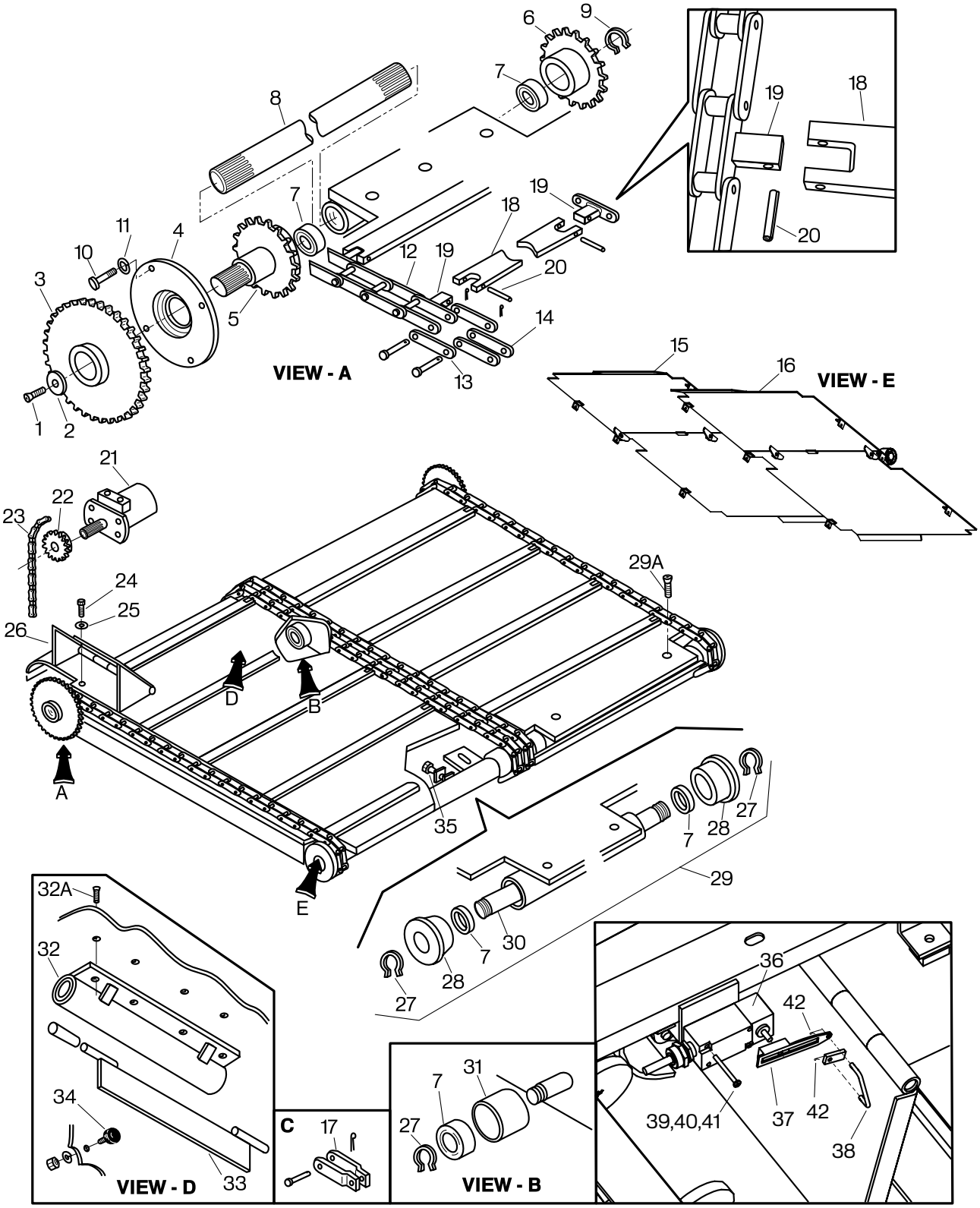


Figure 7-3 Conveyor Drive Assembly

Conveyor Drive Assembly (2 of 2)

Item No.	Part Number	Qty.	Description	Remarks
32	851651	2	Assembly, Tube, Conveyor Rear Drive	
32A	100-10-11-16-5F	8	CSHH, 5/8-11 x 1.00, GR5, FT	
33	851128SRV	2	Scraper, Conveyor	
34	410070	2	Stop Rubber, (Scraper)	
35	850170	4	Set Screw, 5/8-11 x 3.00, Square, Head	
36	900050SRV	2	Micro Switch, Automatic	
37	900060-1	2	Arm, Automatic Conveyor Switch	
38	900075	2	Rod, Conveyor, Switch Linkage	
39	900076	2	Machine Screw, Phillips Head, #10-32 x 2.25	
40	900077	2	Washer, Lock, #10	Not Shown
41	900078	2	Nut, Lock, #10-32	Not Shown
42	900079	2	Pin, Cotter .094 x .375	
REF	850100A	A/R	T-Pin, Casted Conveyor Chain	Not Shown

HOPPER COMPONENTS (1 OF 2)

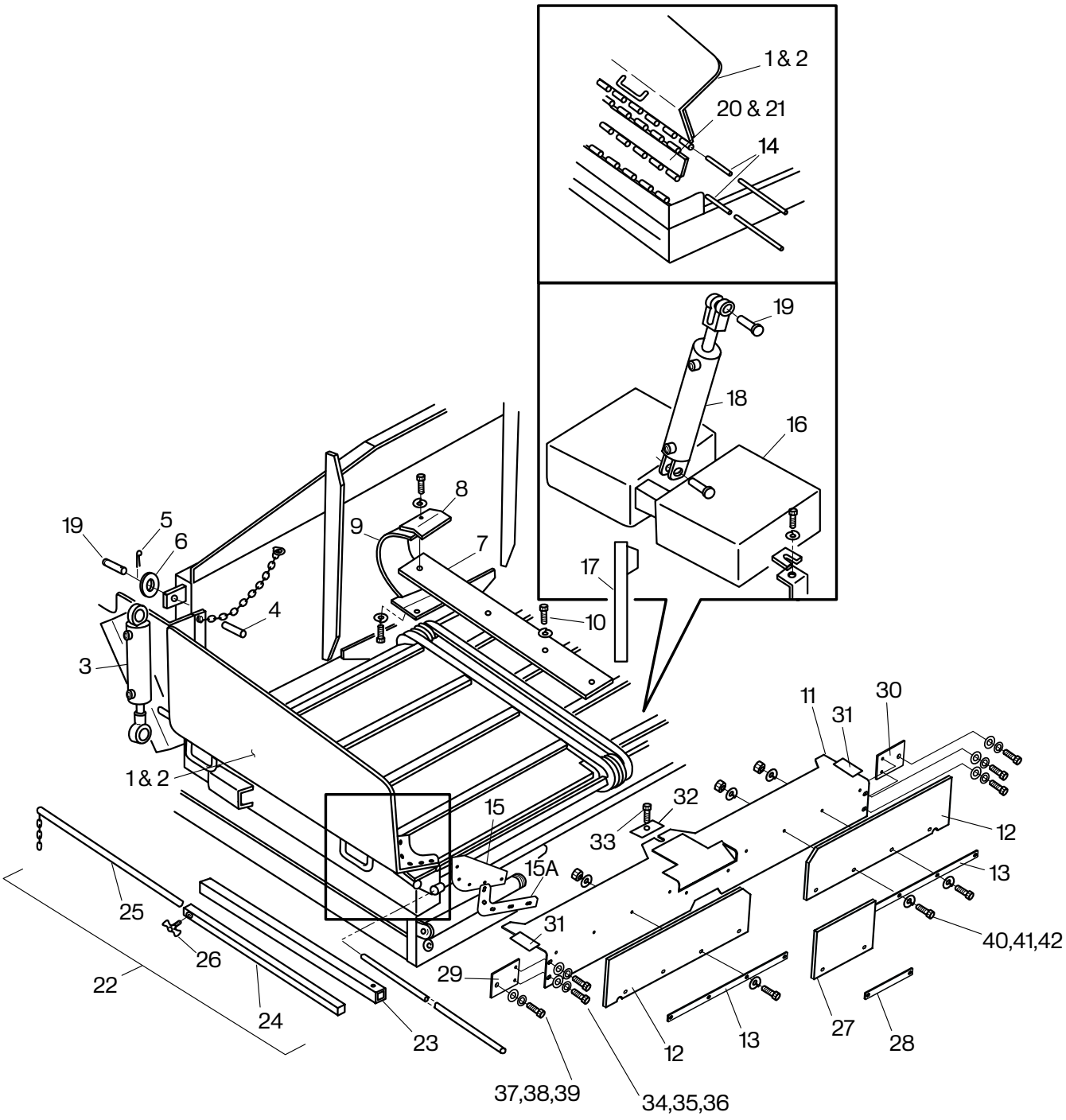


Figure 7-4 Hopper Components

Hopper Components (1 of 2)

Item No.	Part Number	Qty.	Description	Remarks
1	980703SRV	1	Assembly, Side Wing, 8515 (Right)	
2	980702SRV	1	Assembly, Side Wing, 8515 (Left)	
3	610110	2	Cylinder, Hydraulic, 2.00 x 8.00	
REF	910145-01	A/R	Seal Kit	Not Shown
REF	930041	A/R	Side Wing Cylinder Bushing	Not Shown
4	851132	2	Pin	
5	870307	4	Hair Pin, Cotter, .177	
6	300-16	2	Washer, Flat, SAE, 1	
7	851133SRV	1	Shield, 8500 Center Conv.	
8	802112SRV	1	Hold Down	
9	840162	1	Center Shield, Conveyor Rear	
10	100-6-16-12-5F	6	CSHH, 3/8-16 x .75, GR5, FT	
11	985669SRV	1	Shield, Front Support	
12	985057	2	Shield, Front Hard Rubber	
13	985062SRV	1	Clamp, Hopper Front Flashing	
14	854084SRV	4	Pin, Pivot Side Panel	
15	851147A	2	Shield, Corner Rubber	
15A	854076-1	2	Plate, Side Wing Rubber Shield	
16	988049	1	Bottom Tank	
17	987264SRV	1	Safety Prop, Hopper	
18	840020	1	Cylinder, Hopper Lift	
REF	38549-01	A/R	Seal Kit, Hopper Wing	Not Shown
19	240030	2	Pin, Hydraulic Cylinder	
20	840157SRV	1	Hinged Panel (Left)	
21	840156SRV	1	Hinged Panel (Right)	
REF	100-10-11-20-8F	A/R	CSHH, 5/8-11 x 1.25, GR8, FT	Hold down for item 20,21
REF	301-10	A/R	Washer, Flat, USS, 5/8	Hold down for item 20,21
22	920032SRV	2	Assembly, Guide Bar	
23	920041SRV	2	Bar, Guide (Outer)	
24	920051SRV	2	Housing, Guide Bar (Inner)	
25	920061SRV	2	Rod & Chain, Guide Bar	
26	920070	4	Thumb Screw, 3/8-16 x 1.00	
27	985058	1	Rubber, Front Lip, Center	
28	985063SRV	1	Flashing, Center, Front Lip	
29	1013152	1	Weldment, Lip, Right, Front	
30	1013153	1	Weldment, Lip, Left, Front	
31	853595	2	Bar, 125 x 1.50 x 9.50	

HOPPER COMPONENTS (2 OF 2)

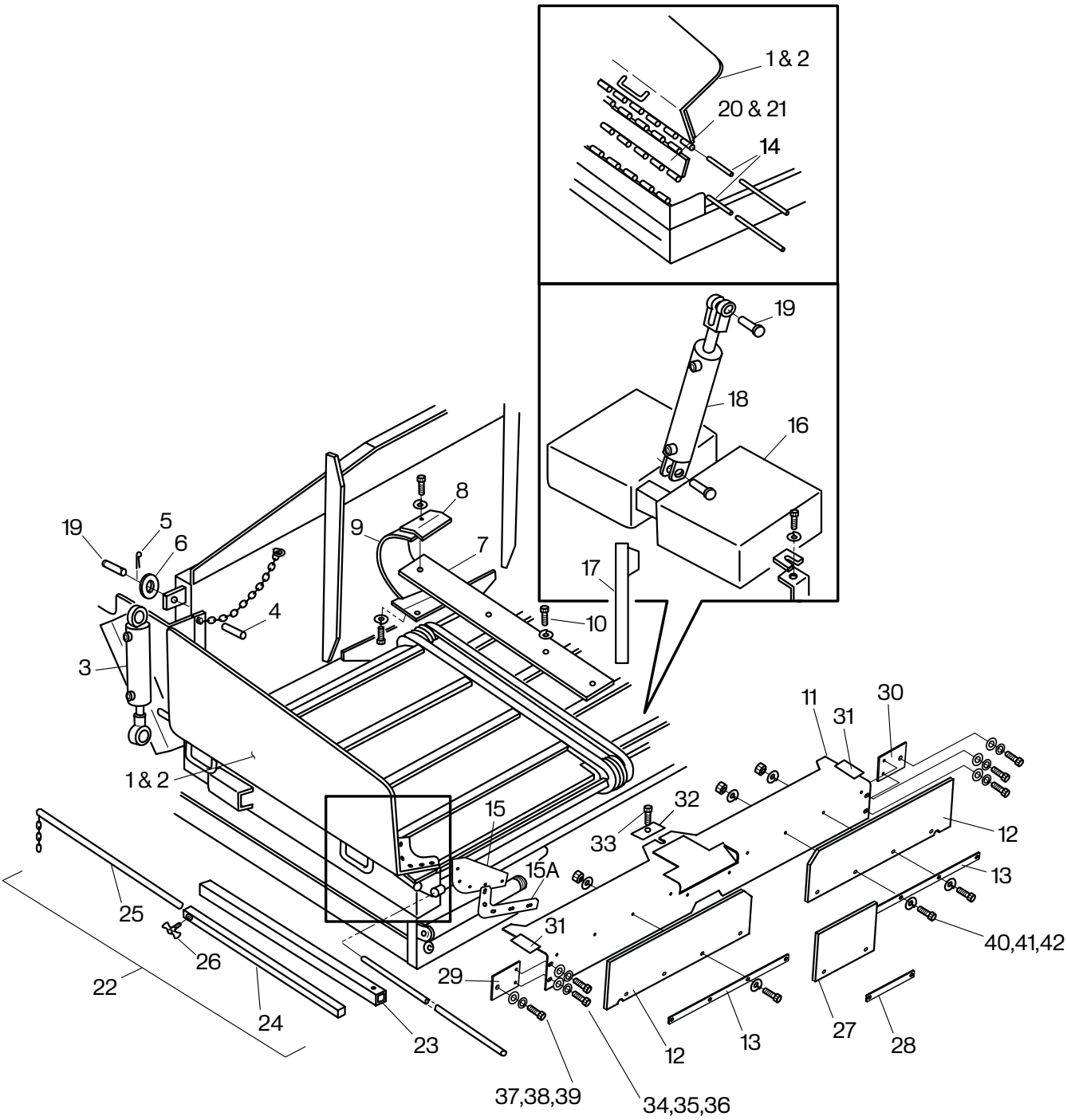


Figure 7-4 Hopper Components

Hopper Components (2 of 2)

Item No.	Part Number	Qty.	Description	Remarks
32	985581	1	Front Lip Clamp	
33	100-8-13-32-5F	1	CSHH, 1/2-13 x 2.00, GR5, FT	
34	100-8-13-24-5F	4	CSHH, .1/2-13 x 1.50, GR5, FT	
35	302-8	4	Washer, Lock, 1/2	
36	300-8	4	Washer, Flat, SAE, 1/2	
37	100-10-11-24-5F	2	CSHH, 5/8-11 x 1.50, GR5, FT	
38	302-10	2	Washer, Lock, 5/8	
39	300-10	2	Washer, Flat, SAE, 5/8	
40	100-6-16-32-5	10	CSHH, 3/8-16 x 2.00, GR5	
41	300-6	20	Washer, Flat, SAE, 3/8	
42	204-6-16-5	10	Nut, Lock, Stover, 3/8-16, GR5	
43	1013877	2	Pin, Hopper Wing Lock	Not Shown

AUGER ASSEMBLY

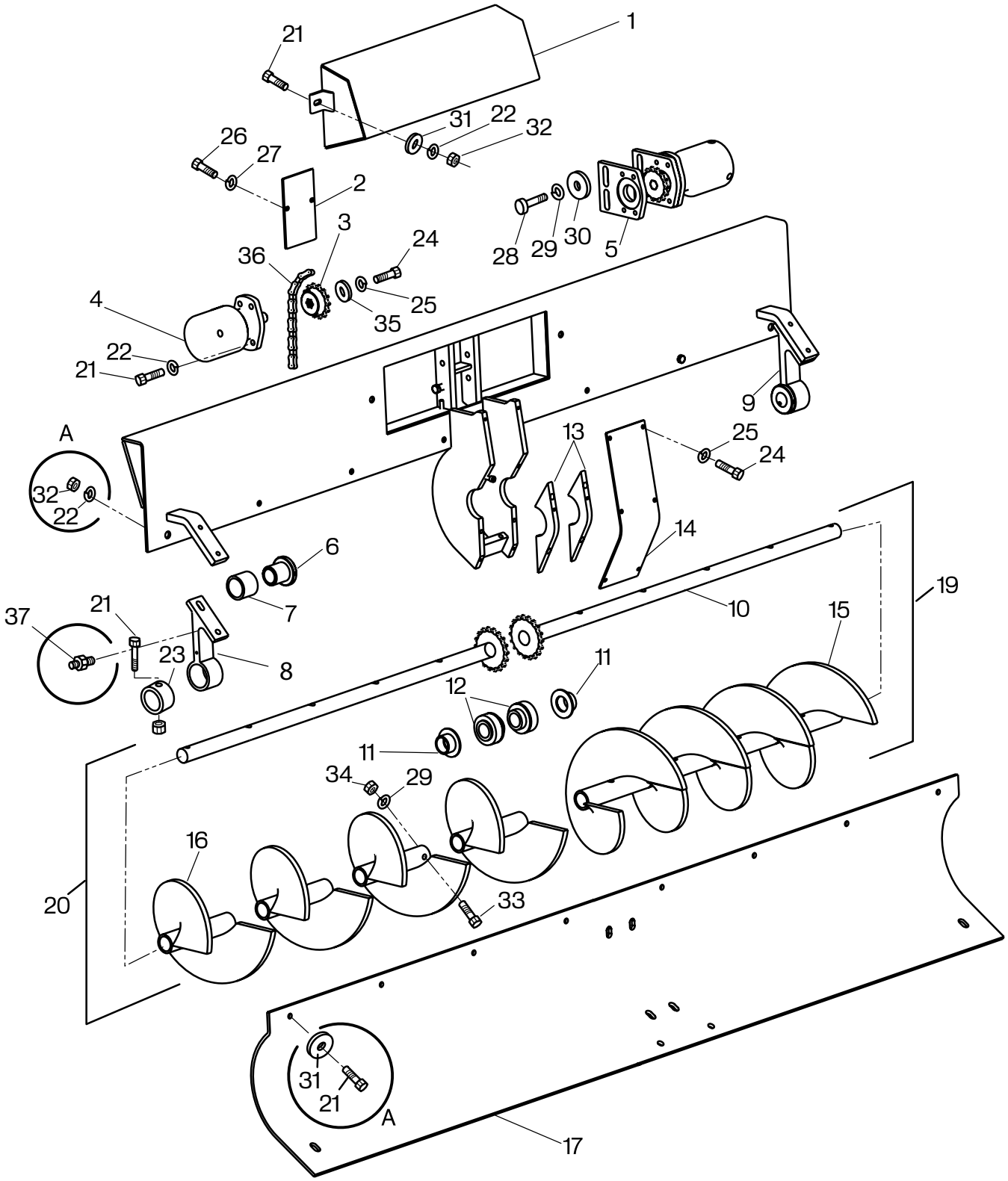


Figure 7-5 Auger Assembly

Auger Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	981685	1	Assembly, Auger Motor Cover, 8515	
2	981688SRV	1	Chain Cover, 8515	
3	860030	2	Sprocket, 800/8500 Auger	
4	1005803	2	Hydraulic Motor, Conveyor Main	
5	981696	2	Mount, Motor, 8515	
6	851645	2	Collar, Auger End Mount	
7	810070	2	Bushing, 2.00 ID x 2.50 OD x 2.50	
8	1011441	1	Auger End Mount, 8000/8500 (Right)	
9	1011441*	1	Auger End Mount, 8000/8500 (Left)	*Move Grease Zerk to Outside
10	981691	2	Auger Shaft w/Sprocket, Spacer & Bearing	
11	982945	2	Assembly, Spacer Auger Shaft	
12	850130	2	Bearing, Auger, Axle, Idler	
13	981683	2	Clamp, Auger 12”	
14	981695SRV	1	Cover, Auger Support, 8515	
15	981700R	4	Auger Flight, 12”, 8515 (Right)	
16	981700L	4	Auger Flight, 12”, 8515 (Left)	
17	981699SRV	1	Plate, Wear, 12” Auger, 8515	
19	981692L	1	Assembly, Auger, 8515 (Left)	
20	981692R	1	Assembly, Auger, 8515 (Right)	
21	100-8-13-24-5	44	CSHH, 1/2-13 x 1.50, GR5	
22	302-8	14	Washer, Lock, 1/2	
23	851647	2	End Cap, Auger Shaft	
24	100-5-18-12-5F	8	CSHH, 5/16-18 x .75, GR5, FT	
25	302-5	8	Washer, Lock, 5/16	
26	100-6-16-12-5F	2	CSHH, 3/8-16 x .75, GR5, FT	
27	302-6	2	Washer, Lock, 3/8	
28	100-10-11-24-5F	4	CSHH, 5/8-11 x 1.50, GR5, FT	
29	302-10	12	Washer, Lock, 5/8	
30	301-10	4	Washer, Flat, USS, 5/8	
31	301-8	14	Washer, Flat, USS, 1/2	
32	200-8-13-5	10	Nut, Hex, 1/2-13, GR5	
33	100-10-11-44-5	8	CSHH, 5/8-11 x 2.75, GR5	
34	204-10-11-5	8	Nut, Lock, Stover, 5/8-11, GR5	
35	308-6-24	2	Washer, Fender, 3/8 x 1.50	
36	985815	2	Chain, Auger Drive	
37	140610	2	Fitting, Lube, Straight, 1/4-28	
REF	853411	A/R	Link, Master	Not Shown
REF	985796	1	Extension, 12" Auger (Right)	Not Shown
REF	985795	1	Extension, 12" Auger (Left)	Not Shown

CONVEYOR DRIVE CUTOFF / SCREED LIFT CYLINDERS

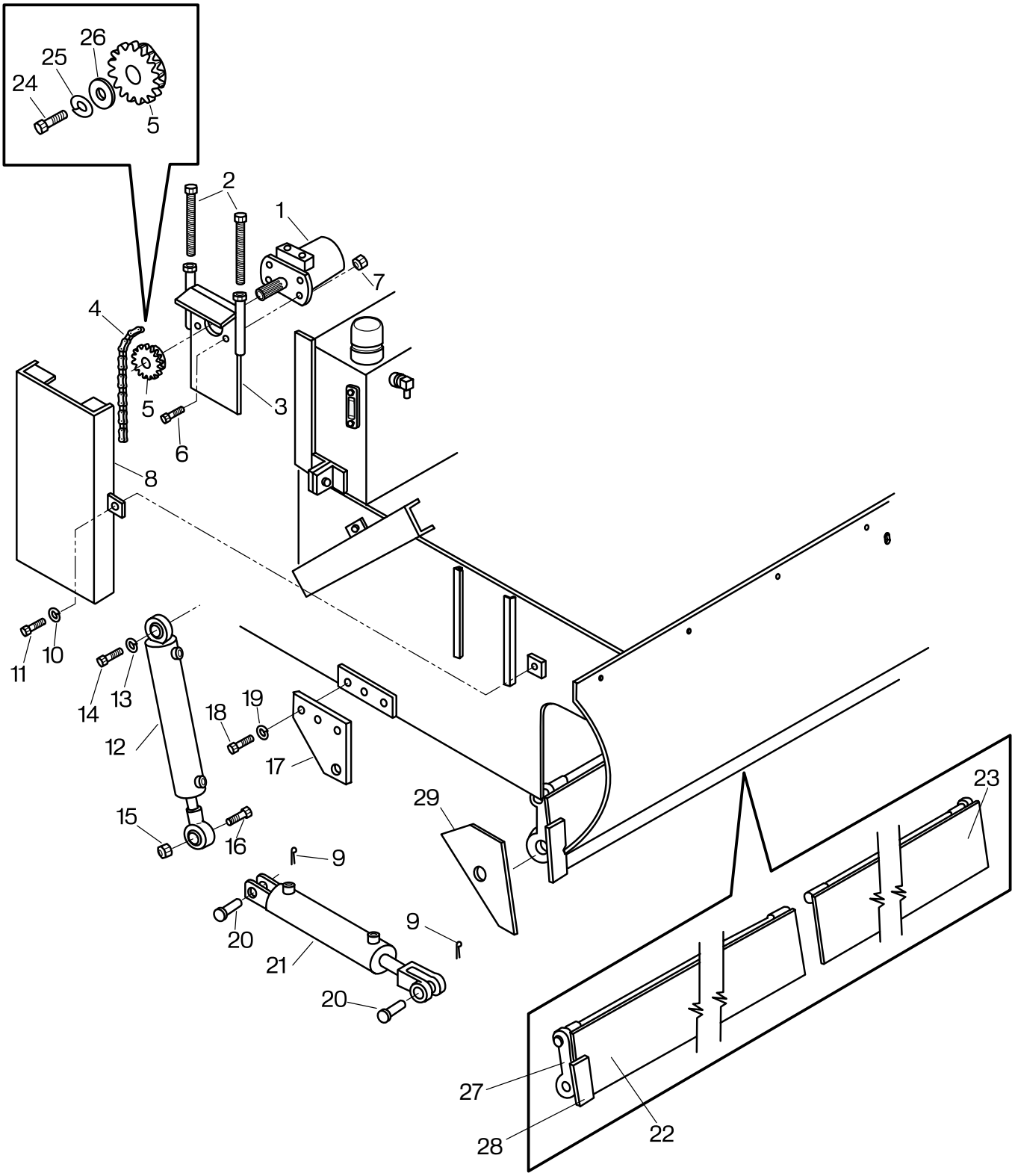


Figure 7-6 Conveyor Drive Cutoff / Screed Lift Cylinders

Conveyor Drive Cutoff / Screed Lift Cylinders

Item No.	Part Number	Qty.	Description	Remarks
1	1005803	2	Hydraulic Motor, Conveyor Main	
2	851148SRV	4	Bolt, Conveyor Drive Chain Adjuster	
3	851149SRV	2	Mount, Conveyor Drive Motor	
4	851121	2	Chain, Conveyor Drive (#80)	
5	851120	2	Sprocket, Conveyor Drive Motor	
6	100-8-13-32-5	8	CSHH, 1/2-13 x 2.00, GR5	
7	200-8-13-5	8	Nut, Hex, 1/2-13, GR5	
8	854532SRV	1	Chain Guard, Conveyor Drive (Left)	
REF	853572SRV	1	Chain Guard, Conveyor Drive (Right)	Not Shown
9	80338	4	Cotter Pin, .188 x 2.00 Long	
10	302-6	6	Washer, Lock, 3/8	
11	100-6-16-12-5F	6	CSHH, 3/8-16 x .75, GR5, FT	
12	851436SRV	2	Hydraulic Cylinder, Screed Lift	
REF	910145-01	A/R	Seal Kit, 2.00 Cylinder	Not Shown
13	302-16	2	Washer, Lock, 1	
14	100-16-14-48-8	2	CSHH, 1-14 x 3.00, GR8	
15	204-16-14-5	2	Nut, Lock, Stover,1-14, GR5	
16	100-16-14-56-5	2	CSHH, 1-14 x 3.50 GR5	
17	851152	2	Plate, Cut Off Cylinder Mount	
18	100-10-11-24-5F	6	CSHH, 5/8-11 x 1.50, GR5, FT	
19	302-10	6	Washer, Lock, 5/8	
20	240030	2	Pin, Hydraulic Cylinder	
21	910170	2	Hydraulic Cylinder, Cutoff	
REF	910170-01	A/R	Seal Kit, 2.50 Cylinder	Not Shown
22	851153SRV	1	Cutoff (Left)	
23	851154SRV	1	Cutoff (Right)	
24	100-4-20-16-5F	2	CSHH, 1/4-20 x 1.00, GR5,FT	
25	302-4	2	Washer, Lock, 1/4	
26	860036	2	Washer, Fender, 1/4 x 1	
27	853497	2	Plate, 8000-8500, Cut Off Cylinder Mount	
28	853593SRV	2	Bar, .250 x 2.00 x 7.00	
29	853596	2	Plate, Cut Off Gusset	

HYDRAULIC COMPONENTS / (LEFT) SIDE FUEL TANK

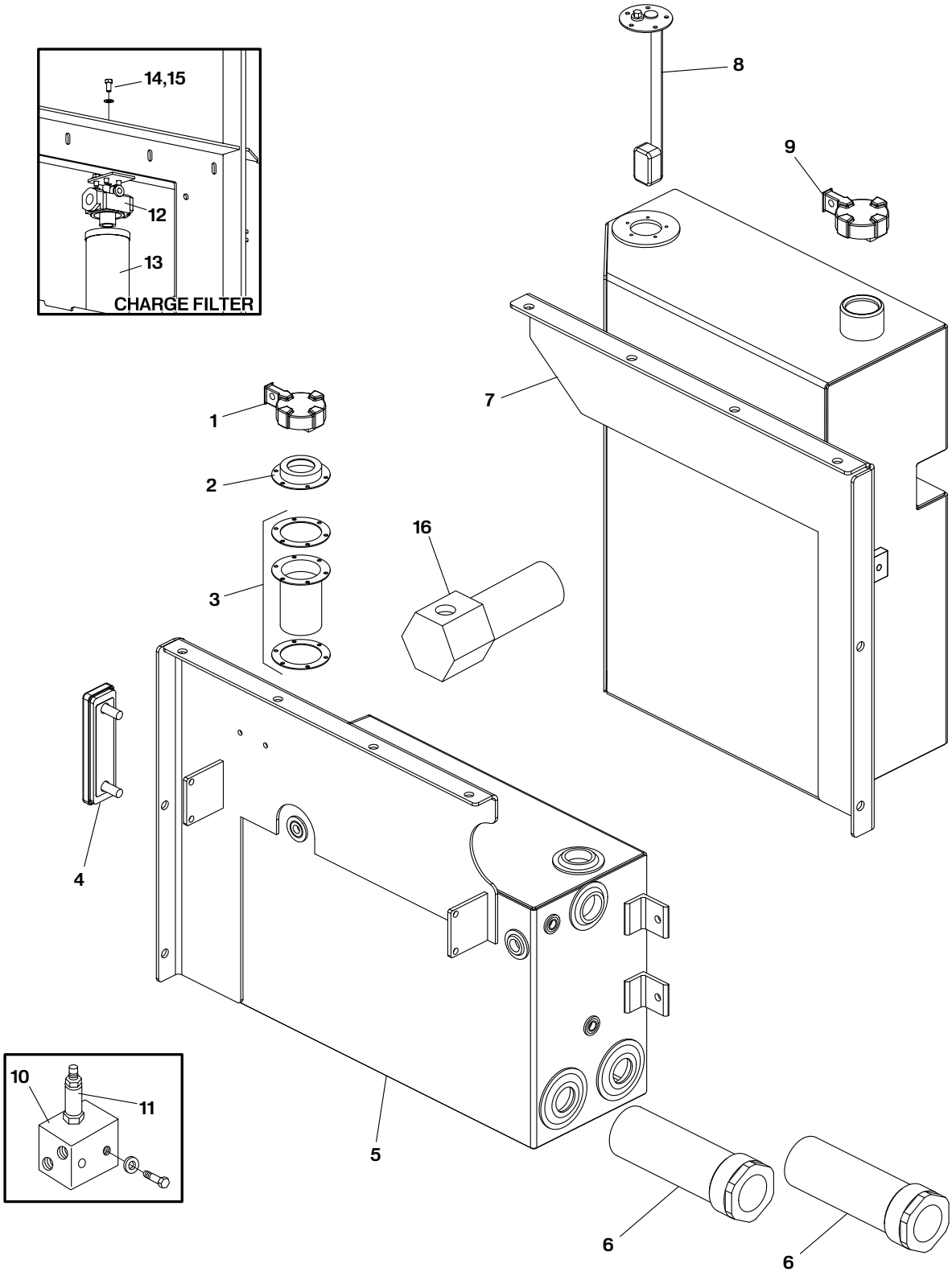


Figure 7-7 Hydraulic Components / Fuel Tank

Hydraulic Components / (Left) Side Fuel Tank

Item No.	Part Number	Qty.	Description	Remarks
1	140030HL	1	Cap, Hydraulic Tank, Lockable	
2	140030FN	1	Filler Neck	
3	140030GK	1	Strainer & Gasket Kit	
4	500070	1	Sight Gauge, Hydraulic Oil Temp/Level	
5	1003410SRV	1	Assembly, Tank, Hydraulic, 8515	
6	36123	2	Filter, Hydraulic	
7	1009361	1	Assembly, Tank, Fuel, 8515	Includes Item 8, 9
8	140040	1	Sending Unit, Fuel Tank	
9	140030FL	1	Cap, Fuel Tank, Lockable	
10	910122	1	Manifold, Side Wing	
11	910122-1	1	Relief Valve, Side Wing Manifold	
12	290010	1	Filter, Head, Charge/Return	
13	290030	1	Filter, Element, Charge/Return	
14	100-6-16-16-5F	4	CSHH, 3/85-16 x 1.00, GR5, FT	
15	302-6	4	Washer, Lock, 3/8	
16	984594-01	1	Filter, Element Hydraulic	

HYDRAULIC TEST PORT ASSEMBLY

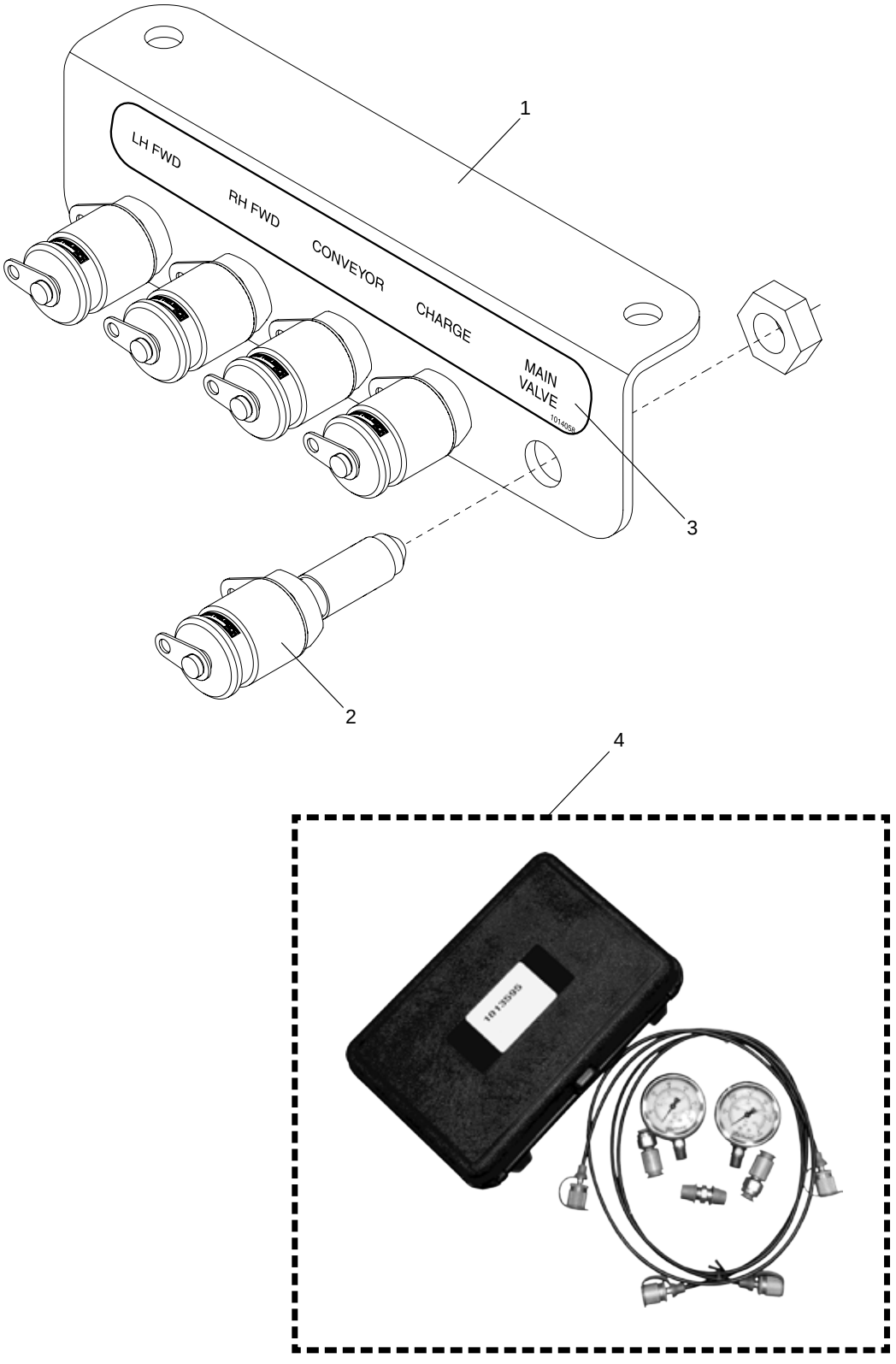


Figure 7-8 Hydraulic Test Port Assembly

Hydraulic Test Port Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	1013805	1	Plate, Bracket, Common Test Port	
2	1013583	5	Test Port, Hydraulic, To #4 JIC Bulkhead	
3	1014058	1	Decal, Info, Test Port	
4	1013595	1	Kit, Pressure Test, Hydraulic	Option
REF	1013588-24	3	SMS Test Hose Assembly w/#4 Female JIC - 24”	Not Shown
REF	1013588-96	2	SMS Test Hose Assembly w/#4 Female JIC - 96”	Not Shown

H1 PUMP & CONTROLS

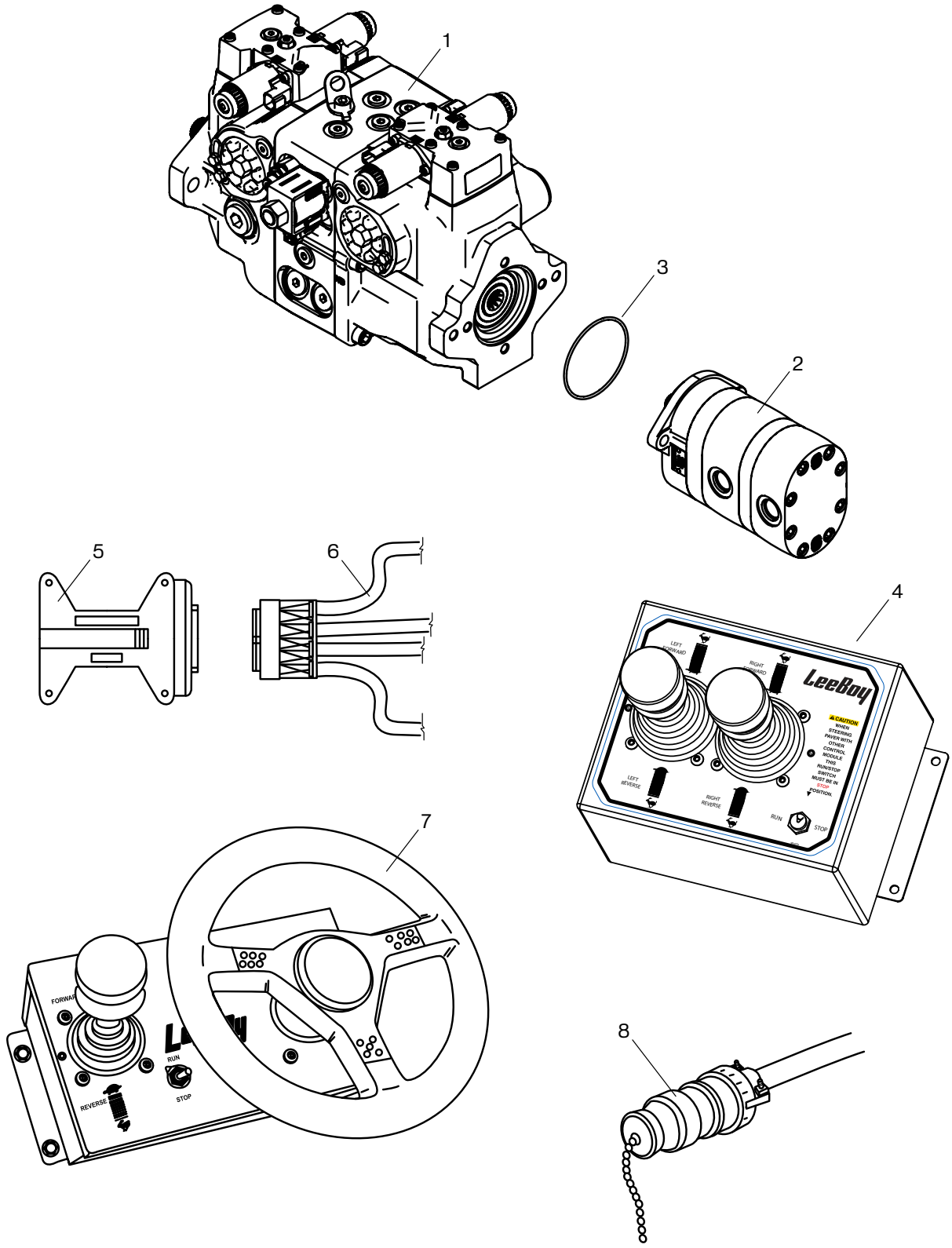


Figure 7-9 H1 Pump & Controls

H1 Pump & Controls

Item No.	Part Number	Qty.	Description	Remarks
1	986519	1	Pump, Hydraulic Single w/EDC (H-1 Pump)	
REF	986519-01	A/R	Coil, Control Bypass H-1 Pump	Not Shown
REF	986519-02	A/R	Nut, Plastic, H-1 Pump	Not Shown
REF	986519-03	A/R	Kit, Shaft, H-1 Pump	Not Shown
2	1013155	1	Pump, Hydraulic, 25.4 CC/19 CC	
3	36808	1	O-Ring, Piggyback to Main	
4	1008904SRV	2	Dual Joysticks, Control Box, Plus One	
5	1012975	1	Controller, 50 DIN, Plus One	
6	987133	1	Harness, Plus One to Pumps	
7	1000708	2	Steering Wheel, Control Box, Plus One	
8	851548-04	2	Cord, 4 FT , Electronic Steering	
REF	160320	1	Horn, Backup Alarm	Not Shown
REF	490010	A/R	Handle Grip for Steering Box Handle	Not Shown
REF	851540	A/R	Potentiometer, Steering Box	Not Shown
REF	72026-01	A/R	Switch, Limit SPDT	Not Shown
REF	851391	A/R	Switch, Toggle,SPST, 2-Position	Not Shown

KUBOTA T4F ENGINE ASSEMBLY (1 OF 3)

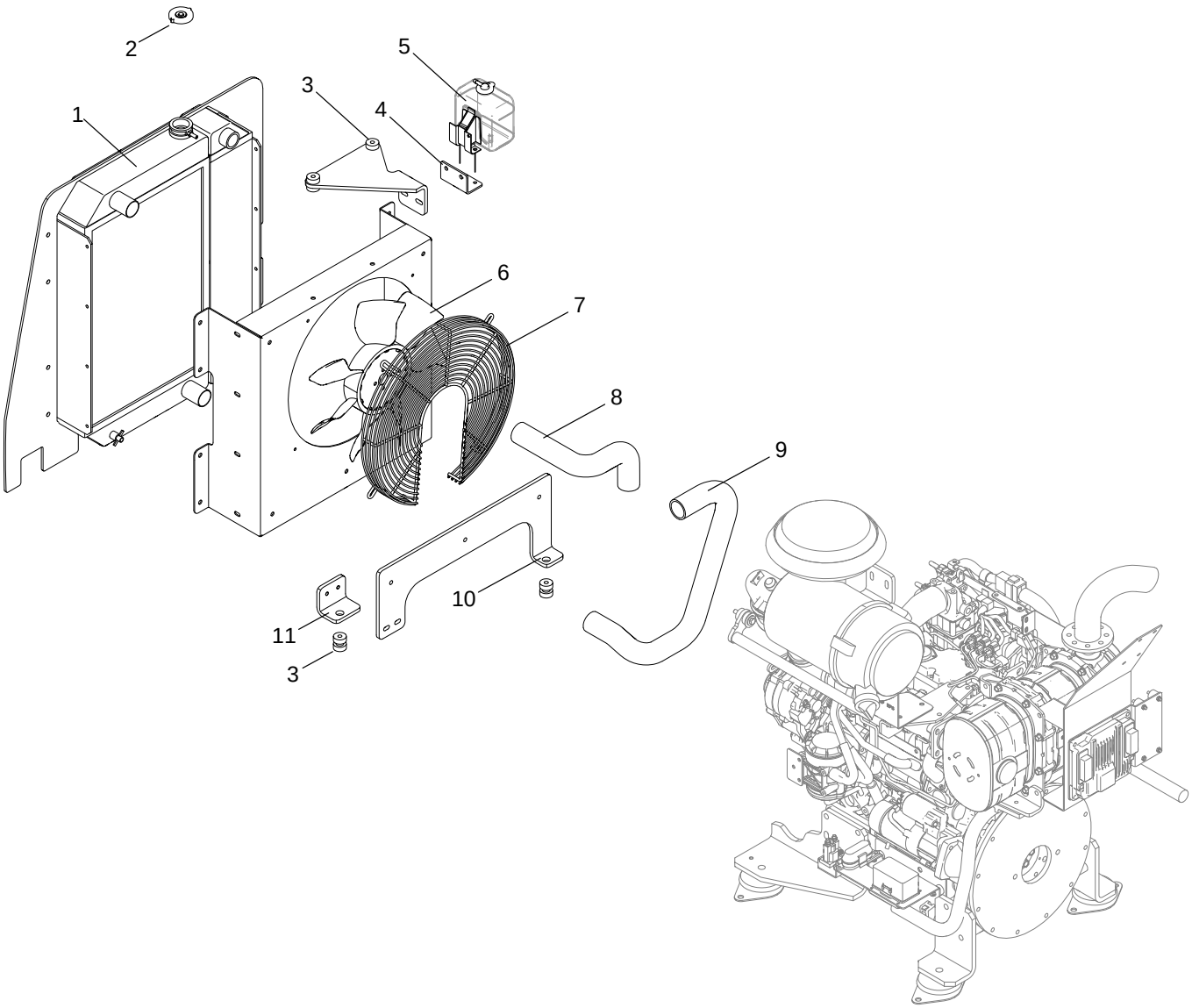


Figure 7-10 Kubota T4F Engine Assembly (1 of 3)

Kubota T4F Engine Assembly (1 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1013154		Engine, Kubota, T4F, 74HP, 8515	
1	988673-13	1	Assembly, Radiator/Cooler, Kubota	
2	1002184-04	1	Cap, Radiator, 13.5 PSI, 2.25 Neck	
3	1001166-57	4	Isolator, Radiator, Upper Mount	
4	1009384-08	1	Bracket, Recovery Bottle	
5	986537-46	1	Tank, Coolant Recovery, Kubota	
6	1009253-23	1	Fan, Radiator 8515	
7	1005365-23	1	Guard, Fan, Maintainer	
8	986537-21	1	Hose, Radiator, Upper	
9	1001166-15	1	Hose, Radiator, Lower	
10	1009384-12	1	Mount, Lower Radiator	
11	1009384-18	1	Bracket, Radiator Support	

KUBOTA T4F ENGINE ASSEMBLY (2 OF 3)

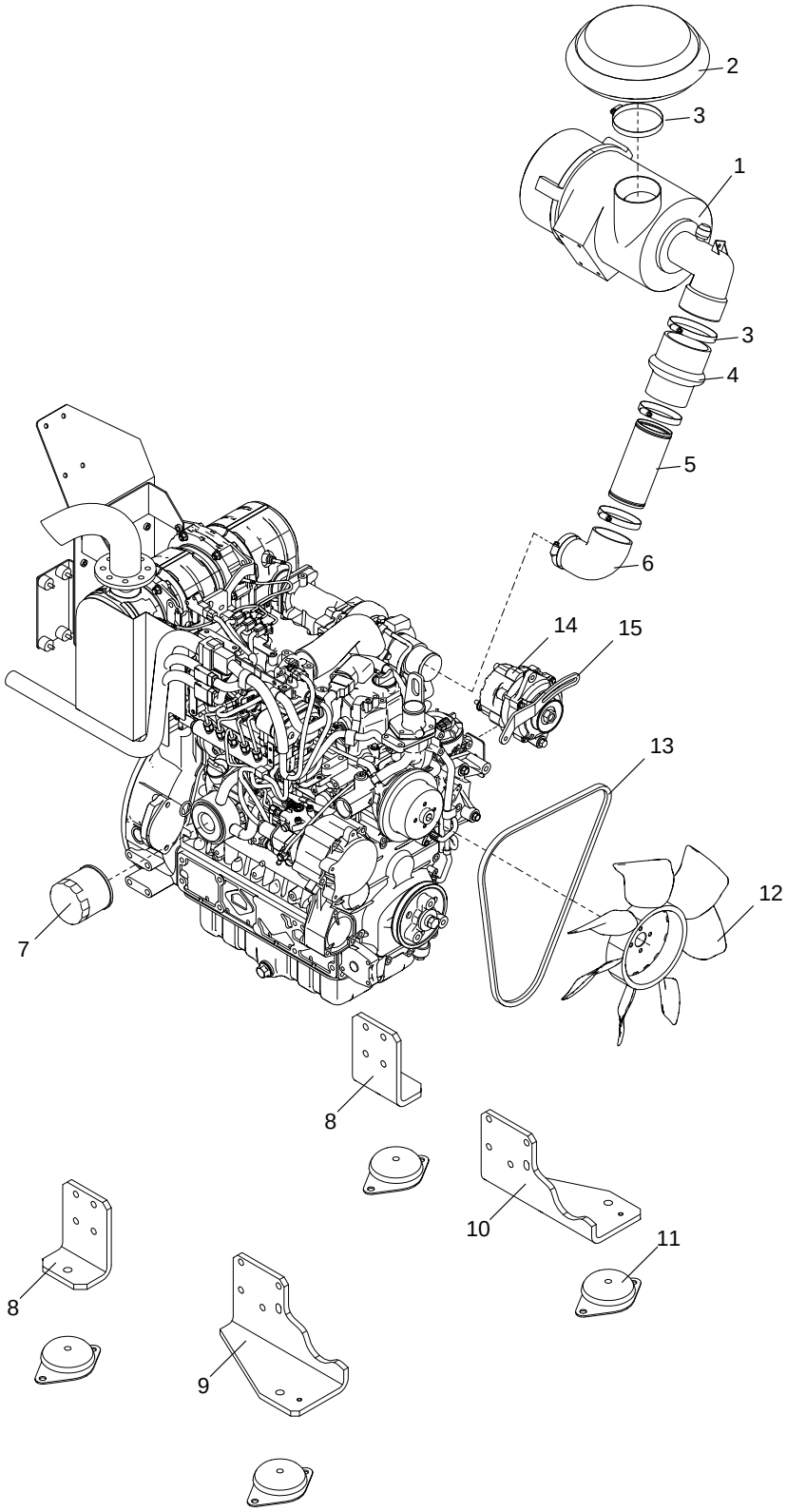


Figure 7-11 Kubota T4F Engine Assembly (2 of 3)

Kubota T4F Engine Assembly (2 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1013154		Engine, Kubota, T4F, 74HP, 8515	
1	1010255	1	Assembly, Air Breather	
REF	1009253-17	1	Filter, Air, Primary	Not Shown
REF	1009253-19	1	Filter, Air, Secondary	Not Shown
2	1002917-29	1	Hood, Air Inlet, 3.75	
3	35567	5	Clamp, Hose, #60	
4	1009253-25	1	Sleeve, Rubber, Intake Reducer	
5	1009384-44	1	Tube, Intake, Kubota	
6	1009384-02	1	Elbow, Reducing	
7	986537-03	1	Filter, Oil	
REF	1009253-18	1	Filter, Fuel	
REF	1009253-19	1	Filter, Fuel/Water Separator	
8	988673-14	2	Mount, Engine, Rear	
9	986537-16	1	Mount, Engine, Front (Left)	
10	986537-17	1	Mount, Engine, Front, (Right)	
11	986537-14	4	Isolator, Engine	
12	1009253-23	1	Fan, Radiator	
13	1009253-20	1	Belt, Fan	
14	1009253-21	1	Alternator	
15	1009253-31	1	Bracket, Alternator	

KUBOTA T4F ENGINE ASSEMBLY (3 OF 3)

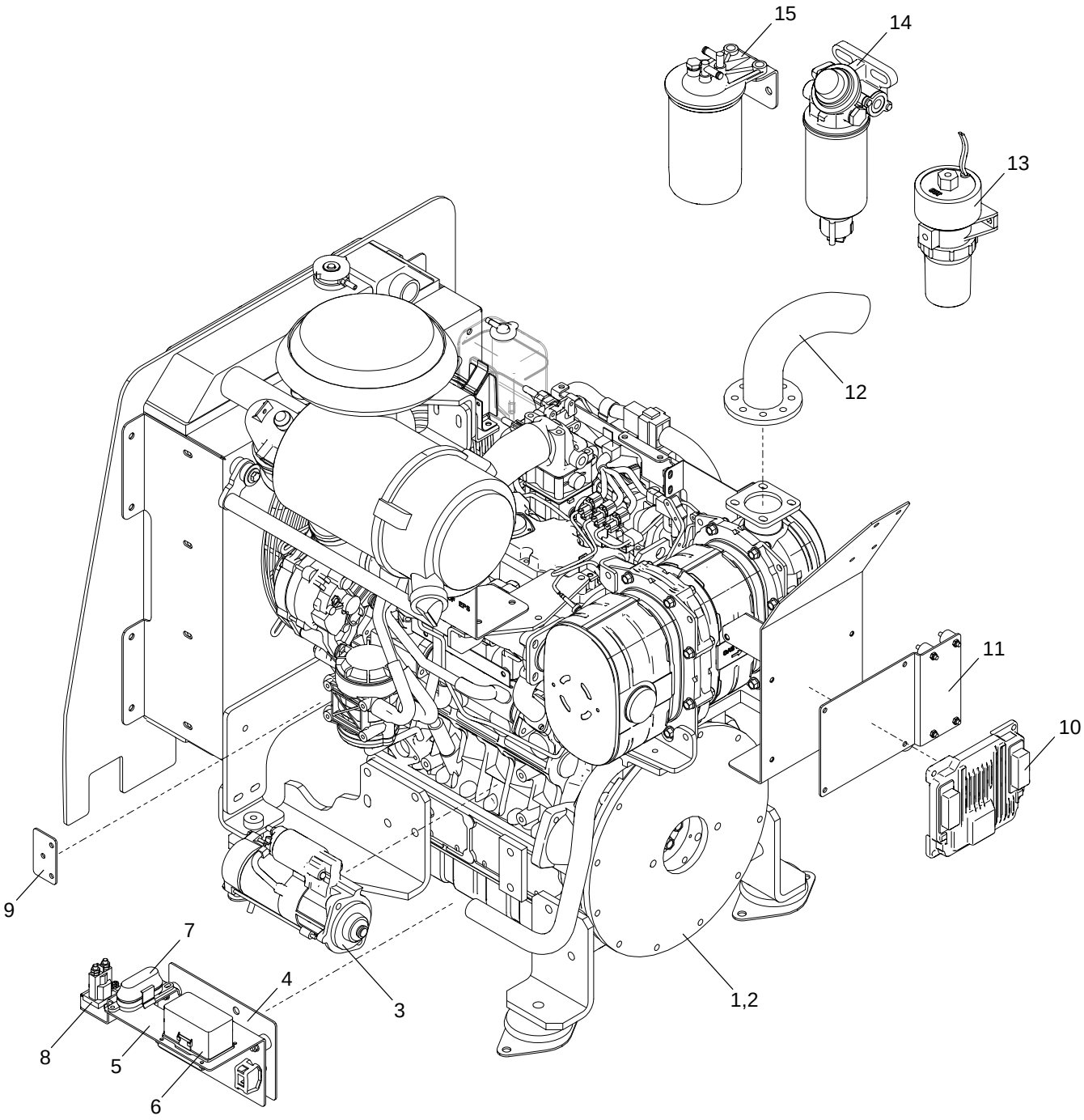


Figure 7-12 Kubota Engine Assembly (3 of 3)

Kubota T4F Engine Assembly (3 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1013154		Engine, Kubota, T4F, 74HP, 8515	
1	1002676-02	1	Assembly, Drive Plate	
2	1002676-03	1	Coupling, Drive Plate	
3	1001166-03	1	Starter, Kubota, 100A	
4	1009253-30	1	Plate, Mounting	
5	1009253-26	1	Plate, Fuse Mounting	
6	1009253-28	1	Relay/Fuse Block	
7	1009253-27	1	Fuse Holder	
8	985751	1	Relay, 12VDC, SPST, 100A, Heavy Duty	
9	1009253-29	1	Bracket, Harness	
10	1009253-24	1	ECU, Kubota	
11	1009253-01	1	Bracket, ECU Mounting	
12	1011364	1	Tail Pipe, Tier 4, Kubota	
13	1010471	1	Pump, Fuel w/Filter, Facet	
14	1009253-19	1	Filter, Fuel/Water Separator	
15	1009253-18	1	Filter, Fuel	

KUBOTA SHEET METAL COVERS

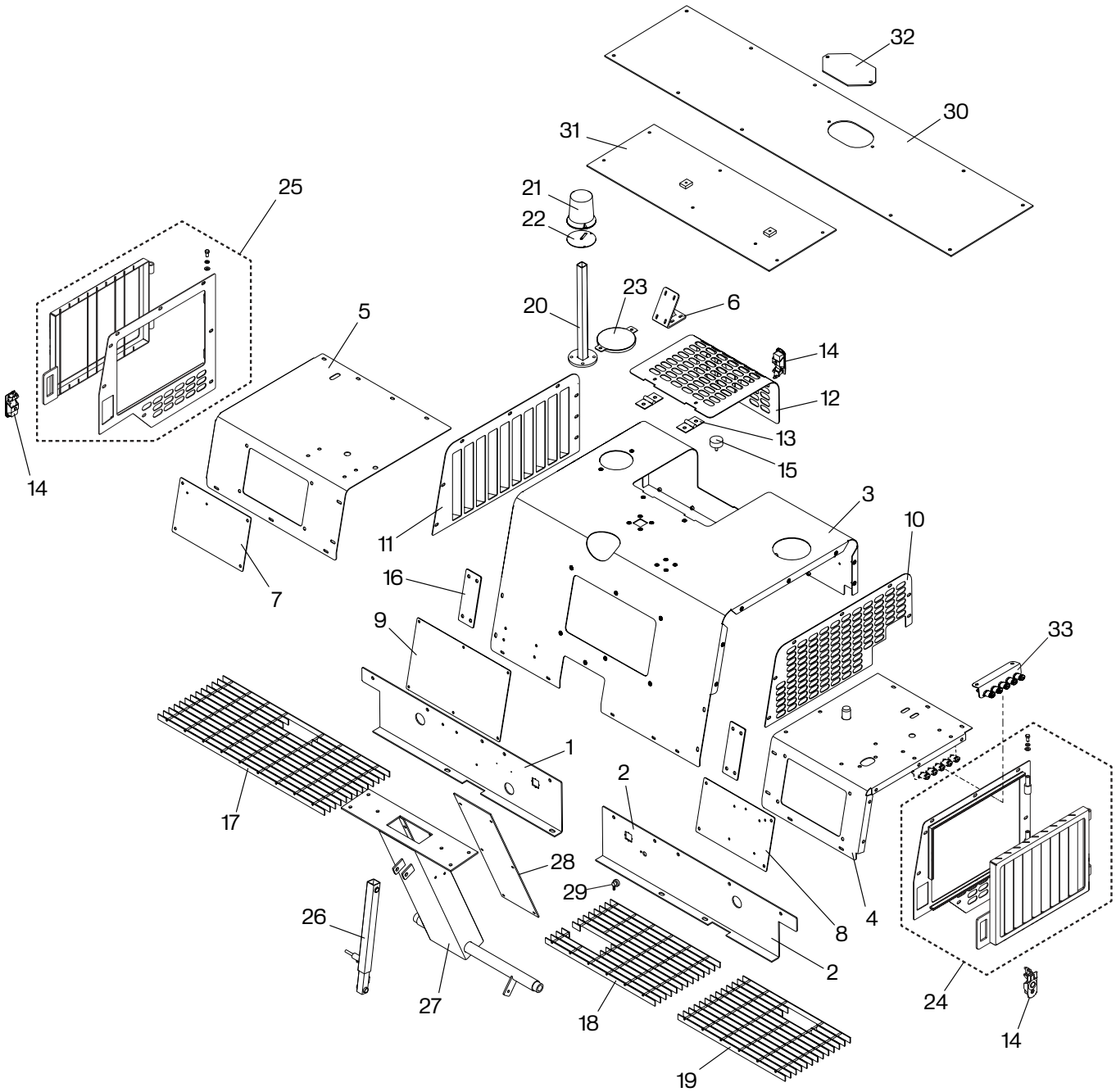


Figure 7-13 Kubota Sheet Metal Covers

Kubota Sheet Metal Covers

Item No.	Part Number	Qty.	Description	Remarks
1	987621	1	Toeboard, Driver Side	
2	987616	1	Toeboard, Passenger Side	
3	1010449SRV	1	Weldment Cover, Center, Tier 4I	
4	1009347	1	Cover, Right Side SM	
5	987623	1	Cover, Drivers Side	
6	1011395	1	Weldment, Air Breather Mount	
7	987620	1	Cover, Access Hole (Left)	
8	987633	1	Cover, Access Hole (Right)	
9	987629	1	Cover, Access Hole, Top	
10	1009351	1	Cover, Vent, Top, Tier 4I (Right)	
11	1011954	1	Cover, Upper, Vent, With Louvers (Left)	
12	1009349	1	Door, Engine Access	
13	987639	2	Hinge, (2) Thru Holes	
14	980460	3	Lever Latch	
REF	35560	2	Key, Vandalism Lock	Not Shown
15	410070	1	Bumper, Water Tank/Conveyor	
16	988226	2	Bracket For SM	
17	987862	1	Grating, Left Side	
18	987863	1	Grating, Middle	
19	987864	1	Grating, Right Side	
20	989469SRV	1	Assembly, Beacon Light Post	
21	1013231	1	Beacon Light, Amber, Strobe, LED	
22	1013234	1	Weldment, Mount, LED Beacon	
23	1010105	1	Radiator Cover	
24	1011030	1	Assembly, Side Access Door (Right)	Includes 14
25	1011029	1	Assembly, Side Access Door (Left)	Includes 14
26	854592SRV	1	Support, Elite III Dash	
27	987850	1	Support, Dash Assembly	
28	855373	1	Cover, Dash Channel	
29	SW29	1	Switch, Battery Disconnect	
30	1014239	1	Plate, Conveyor Flap	
31	1014240	1	Plate, 8500 Engine Bottom	
32	980751	1	Plate, Cover	
REF	5804	1	Cable, Battery	Switch to Bat. Neg or Gnd Post
REF	986804	1	Cable, Battery	Battery Post to Jump Start Post
33	REF	1	Assembly, Test Port	See Figure 7-8

SPRAY DOWN

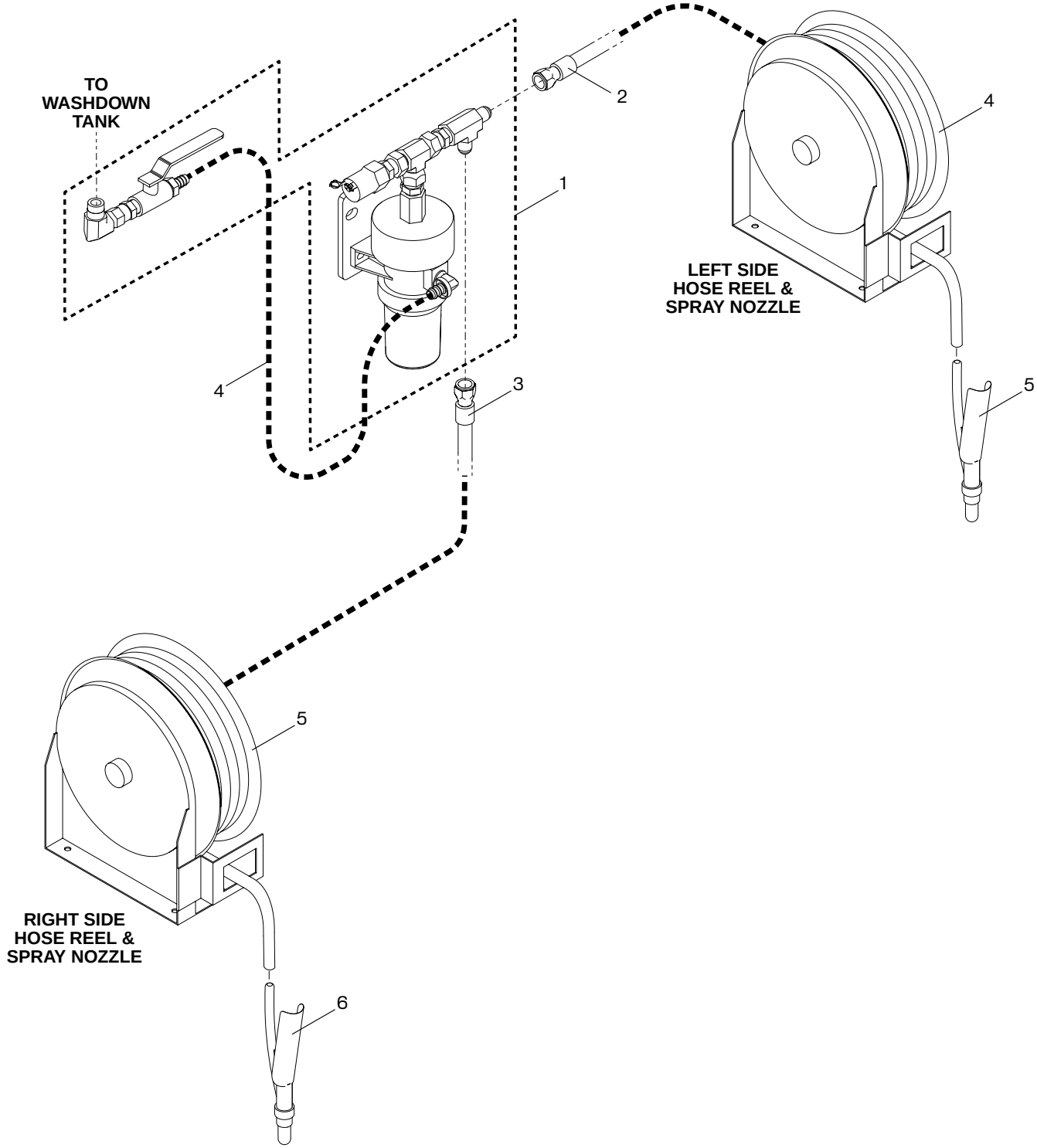


Figure 7-14 Spray Down

Spray Down

Item No.	Part Number	Qty.	Description	Remarks
1	1011885	1	Kit, Spray Down Pump w/Cut Off	
2	1008061	1	Hose, Spraydown, 4 Ft., 5LOLOA-JFJX-OPEN-108	To Left Hose Reel
3	1008060	1	Hose Spraydown, 9 Ft., 5LOLA-JFJX-OPRN-48	To Right Hose Reel
4	38579	A/R	Hose, 06, Low Pressure Push-On	To Tank
5	920200	1	Reel, w/Hose, Spraydown, .312 Diameter Hose	
REF	2501-6-6	2	Adapter, Elbow, 90°, -6 JIC/-6 NPTF	(1) Per Reel
REF	5LOC-6RFJX	2	Fitting, Push Lok, -5 LOC/-6 RFJX	(1) Per Reel
6	920220	2	Handle & Nozzle, Fuel	
REF	901210A	A/R	Nozzle, Spraydown	

SCREED ARM ASSEMBLY WITH TOE POINT

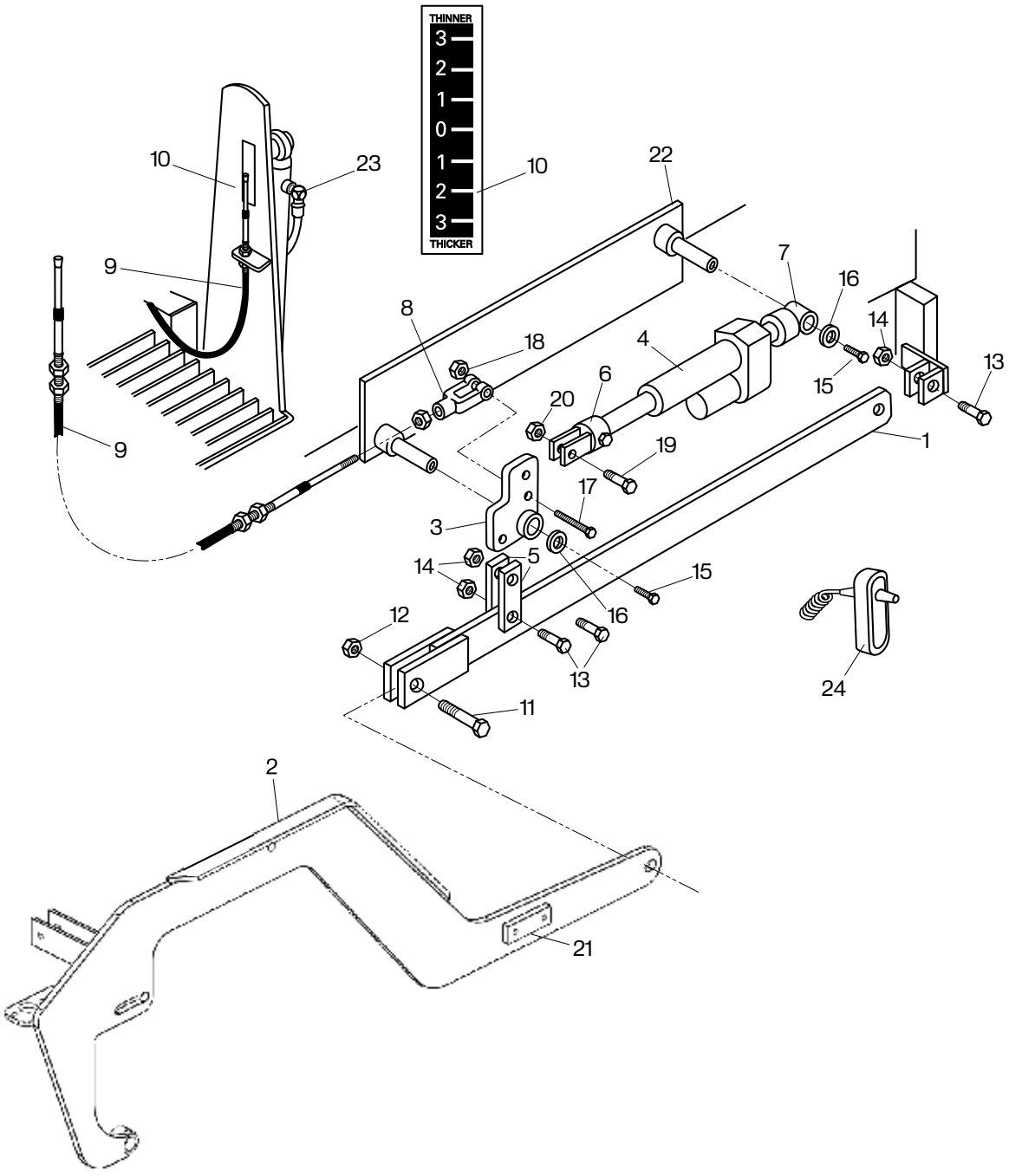


Figure 7-15 Screed Arm Assembly w/Toe Point

Screed Arm Assembly With Toe Point

Item No.	Part Number	Qty.	Description	Remarks
1	851206SRV	1	Extension, Screed Arm	
2	984896SRV	1	Assembly, Screed Arm, 8515 (Right)	
REF	984897SRV	1	Assembly, Screed Arm, 8515 (Left)	Not Shown
3	851209SRV	1	Mount, Pivot	
4	851518	2	Screw, Electric (6.00")	
REF	35193	2	Connector, Sealed, Tower, 2-Pin	Not Shown
REF	36165	4	Terminal, Sealed Connector, 16-14 GA, Female	Not Shown
REF	36166	4	Seal, Cable, 18-16 GA, Green	Not Shown
5	851210	2	Ears, Pivot	
6	851211	1	End, Rod End of Screw	
7	851212	1	End, Motor End of Screw	
8	851213	1	Clevis, .188 x .250	
9	851520	1	Cable, Height Locator .188 x 90 w/5.00" Stroke	
10	851215	1	Decal, Height	
11	100-16-8-40-5	1	CSHH, 1-8 x 2.50, GR5	
12	204-8-13-5	1	Nut, Lock Stover, 1-8, GR5	
13	100-10-11-40-5	3	CSHH, 5/8-11 x 2.50, GR5	
14	204-10-11-5	3	Nut, Lock, Stover, 5/8-11, GR5	
15	100-6-16-12-5F	2	CSHH, 3/8-16 x .75, GR5, FT	
16	308-6-24	2	Washer, Flat, Fender, 3/8 x 1.50	
17	100-4-20-32-5	1	CSHH, 1/4-20 x 2.00, GR5	
18	204-4-20-5	1	Nut, Lock, Stover, 1/4-20, GR5	
19	100-8-13-28-5	2	CSHH, 1/2-13 x 1.75, GR5	
20	204-8-13-5	2	Nut, Lock, Stover, 1/2-13, GR5	
21	855568	1	Bracket, Grade Control	
22	853586SRV	1	Mounting Plate 6" Electric Screw, RH	
REF	853585SRV	1	Mounting Plate 6" Electric Screw, (Left)	Not Shown
23	987909	1	Fitting, 90° 06MJ-06MP, .078 Orifice	

PROPANE HEATER AND AUTOMATIC IGNITORS

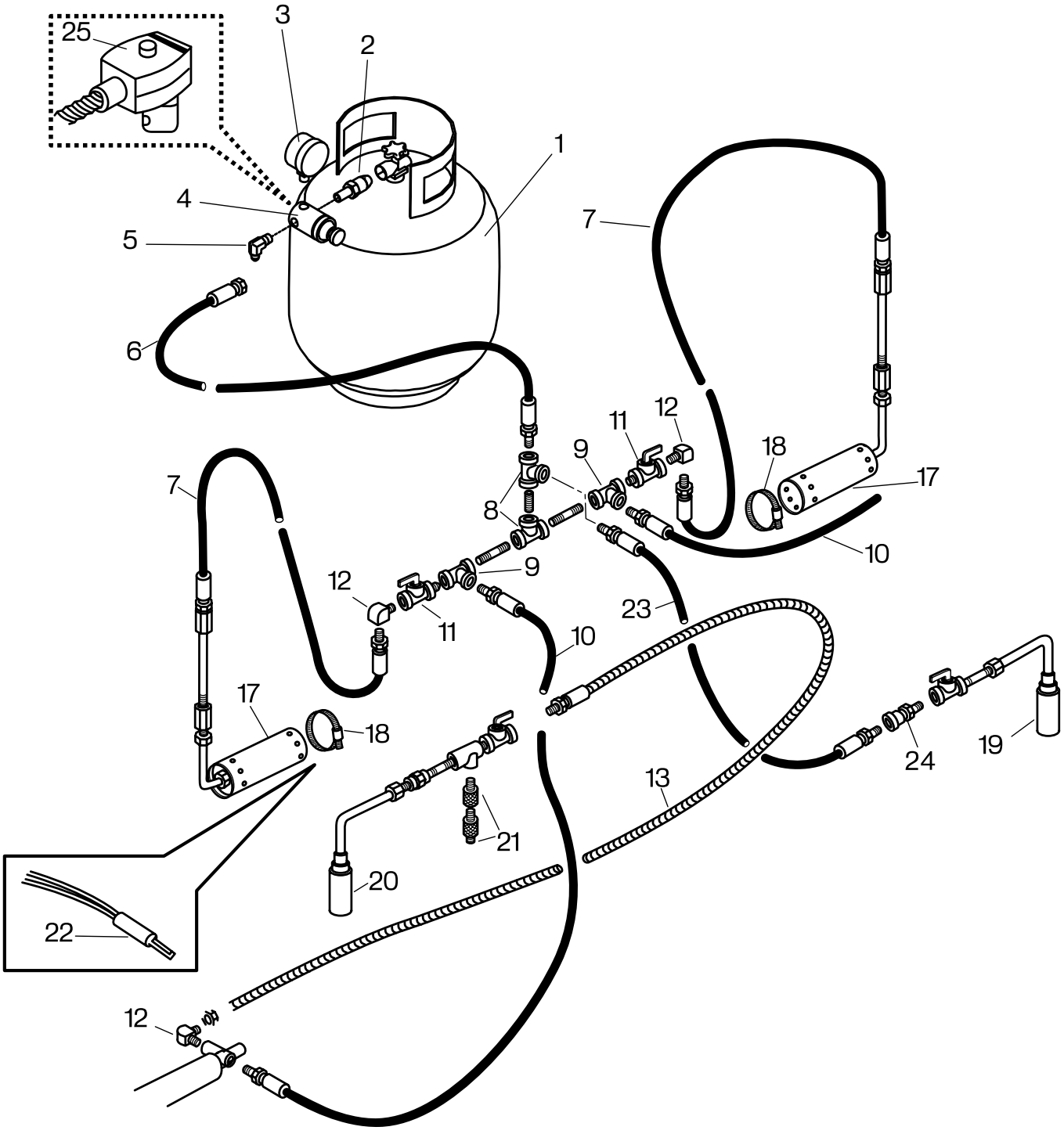


Figure 7-16 Propane Heaters and Igniters

Propane Heater And Automatic Ignitors

Item No.	Part Number	Qty.	Description	Remarks
1	230010	1	LPG Tank, 20 lbs.	
REF	982515	1	Regulator, 0 - 60 PSI, LP	Includes 2 - 5
2	230030	1	Adapter, POL	
3	230110	1	Gauge, LPG Pressure	
4	230100-A	1	Body, Regulator, LPG	
5	71822	1	Adapter, Elbow, 90°, -4 JIC / -4 NPTF	
6	230032	1	Hose, LPG Regulator to Tee	
7	230034	2	Hose, Ignitor Burner	
8	230080	2	Tee, .250 Pipe	
9	230081	2	Tee, .250 Street	
10	230038	2	Hose, Screed Extension Burner	
11	1008544	5	Valve, Selector (Cutoff)	
12	230069	3	Adapter, Hose to Pipe (90°)	
13	851225	2	Hose, Screed Extension Burner	
17	982504	2	Burner, Screed Extension	
18	230240	2	Hose Clamp, 2.125 (Size 28)	
19	1008652SRV	A/R	Burner Nozzle, Ignitor	
20	1008654SRV	2	Burner Nozzle, Screed Extension	
21	230084	2	Quick Disconnect Coupling	
22	230024	2	Ignitor, Ceramic, Hot Surface	
23	230034	1	Hose, Ignitor Burner	
24	1009358	1	Adaptor 9/16-18 UNF-2B (Left) X 4 JIC Male	
25	230300	1	Solenoid Valve, 12V LPG	

CONTROL VALVE ASSEMBLY

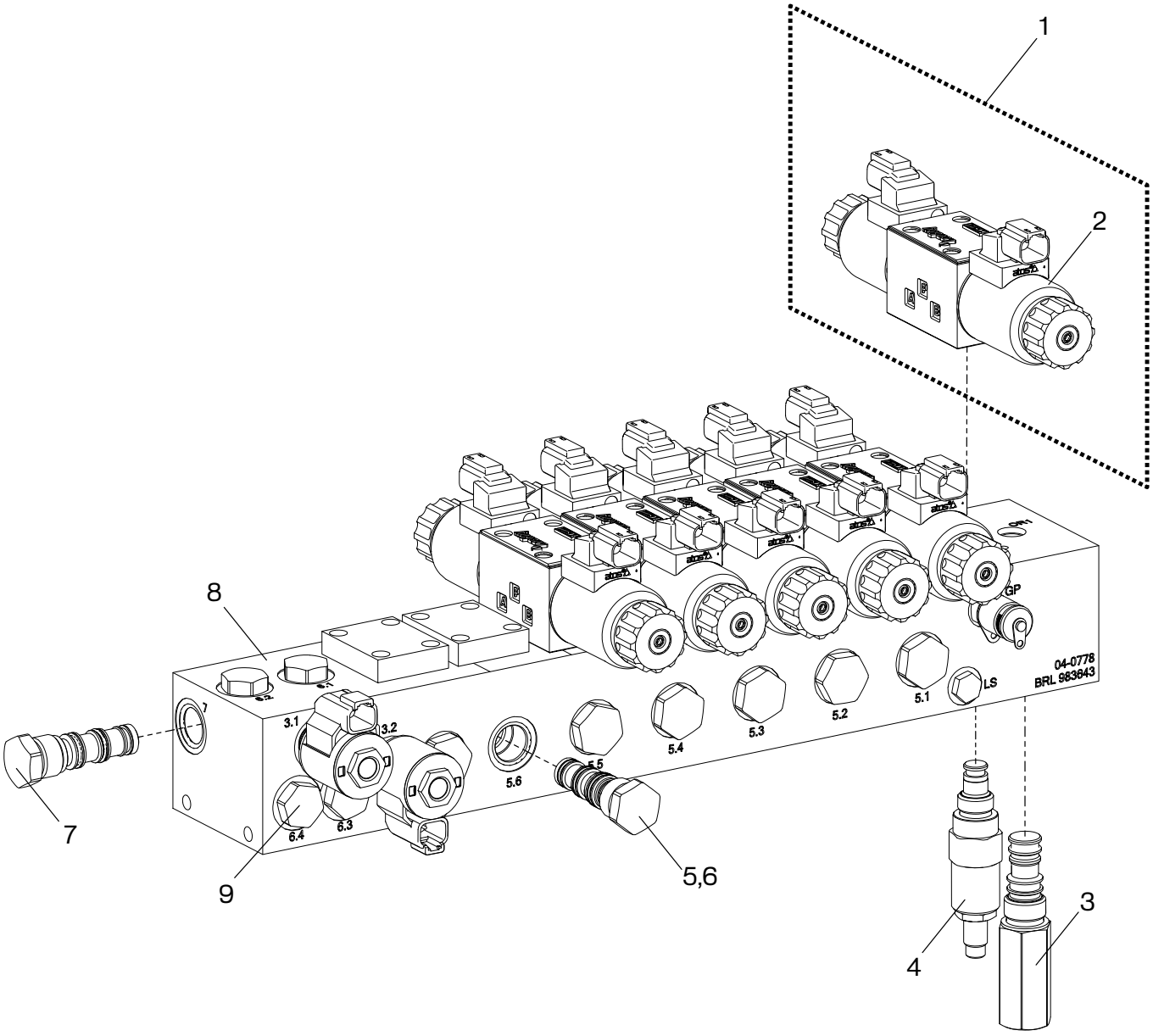


Figure 7-17 Control Valve Assembly

Control Valve Assembly

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011728		Manifold, Hydraulic, 9 Station, 7 Valve	
1	1011728-01	A/R	Valve, Directional Solenoid	
2	1011728-02	A/R	Coil, 12VDC w/Deutsch Connector	
3	983643-06	A/R	Valve, Piloted Logic Element	
4	983643-07	A/R	Valve, Relief RVO8	
5	983643-05	A/R	Dual Pilot Operated Check Valve	
6	983643-09	A/R	Valve, Check CVO8	Not Shown
7	983643-10	A/R	Flow Divider FD10	
8	983643-13	A/R	Manifold, 9-Station Upper	
REF	984594-01	A/R	Filter, Element Hydraulic	Not Shown
REF	900140	A/R	Valve, Solenoid 2 Speed	Not Shown
9	983643-08	A/R	Valve, Check CV04	Not Shown

LOWER HYDRAULIC MANIFOLD - 6 VALVE

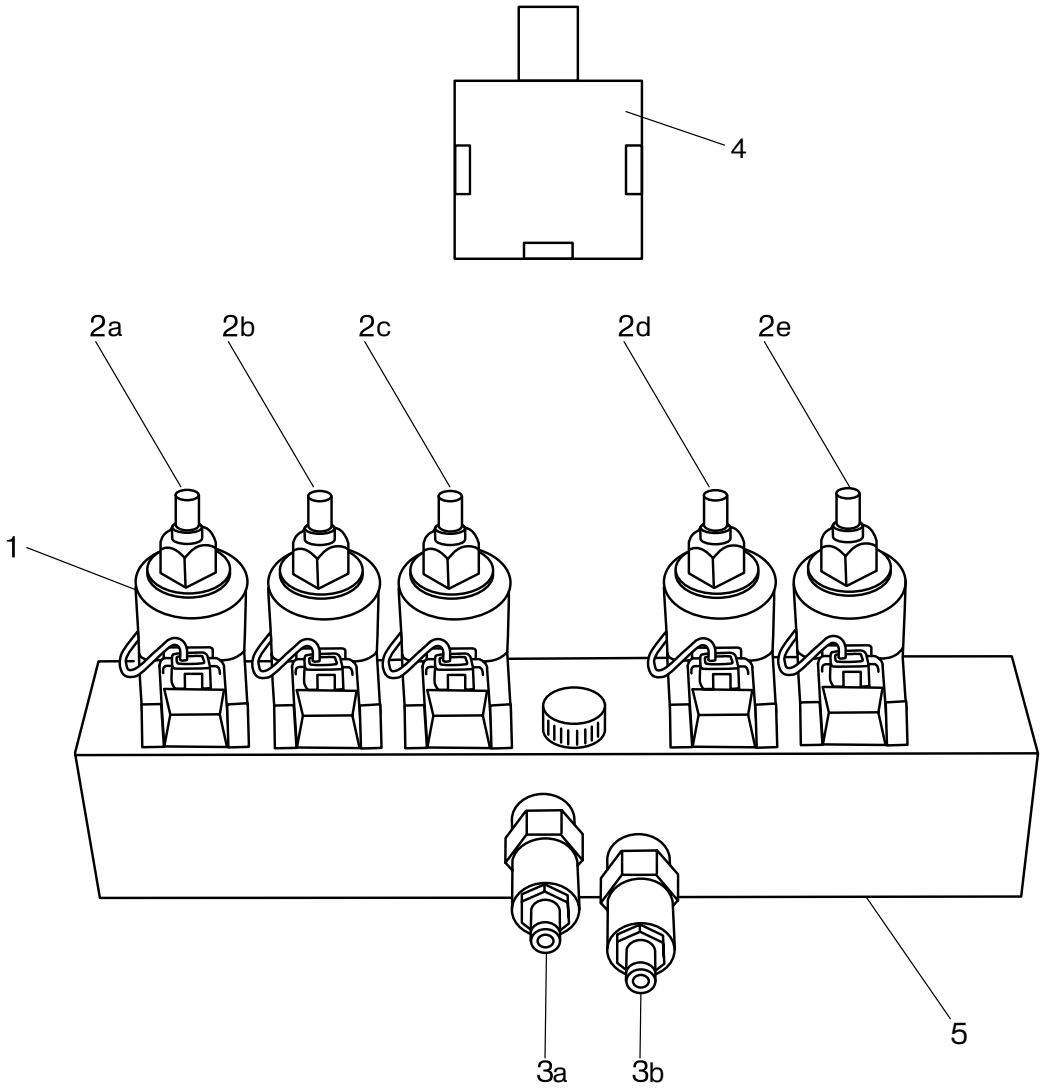


Figure 7-18 Lower Hydraulic Manifold - 6 Valve

Lower Hydraulic Manifold- 6 Valve

Item No.	Part Number	Qty.	Description	Remarks
GRP	983644		Manifold, Hydraulic, 6 Valve, Adjustable Relief	
1	983644-01	A/R	Coil, 12VDC SV12, Generator	
2a	983644-02	A/R	Valve, Cartridge SV12	Right Auger
2b	983644-02	A/R	Valve, Cartridge SV12	Left Auger
2c	983644-02	A/R	Valve, Cartridge SV12	Vibrator
2d	983644-02	A/R	Valve, Cartridge SV12	Right Conveyor
2e	983644-02	A/R	Valve, Cartridge SV12	Left Conveyor
3a	983644-03	A/R	Valve, Relief RV10	Auger Relief
3b	983644-03	A/R	Valve, Relief RV10	Conveyor Relief
4	900140	1	Valve, Solenoid, 2 Speed	Located at upper manifold end
5	983644-07	A/R	Manifold, Lower	
REF	983644-06	A/R	Harness, Wiring Lower	Not Shown

DASH ASSEMBLY

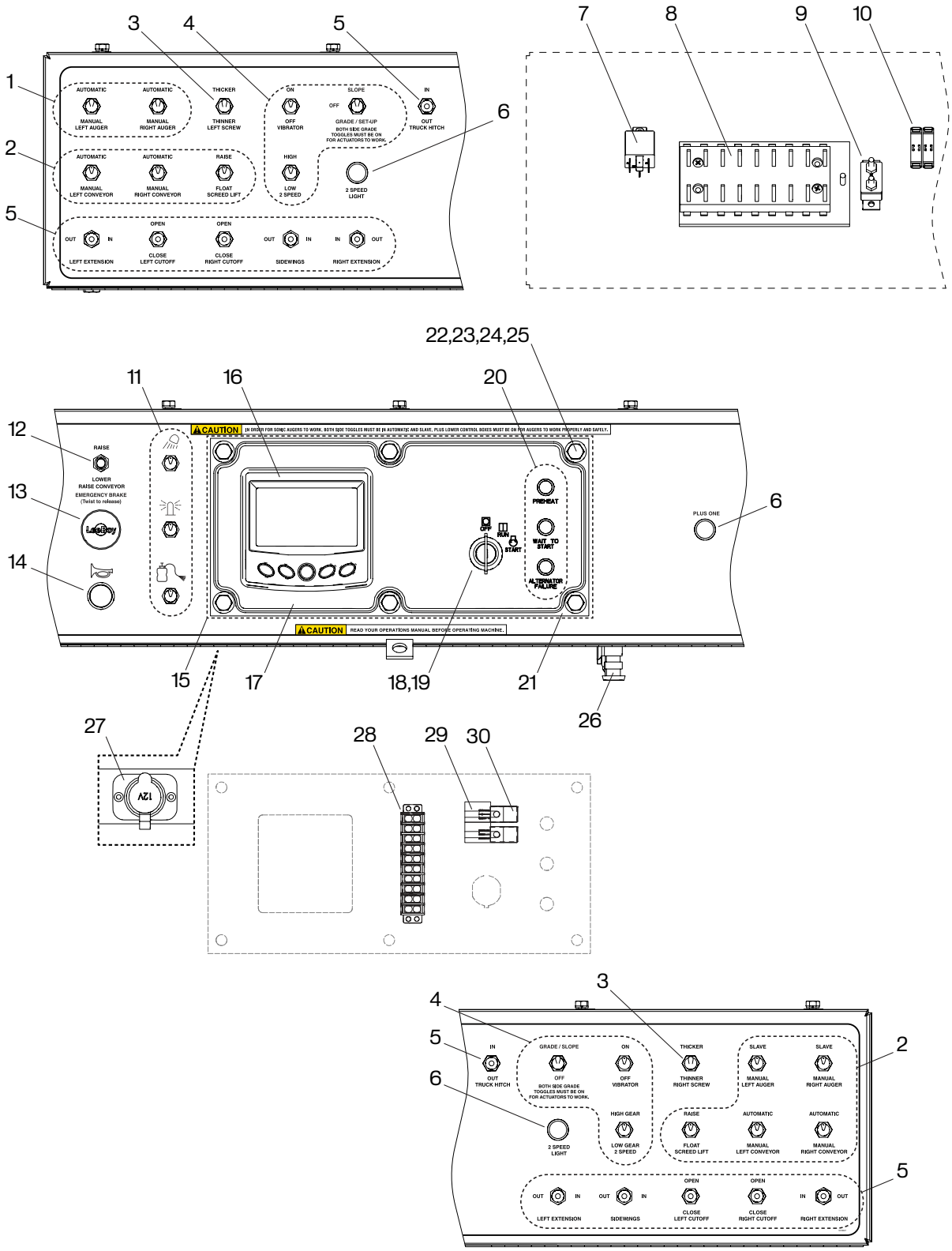


Figure 7-19 Dash Assembly

Dash Assembly

Item No.	Part Number	Qty.	Description	Remarks
GRP	1013630		Assembly, Dash 8515D T4F	
1	851390	2	Switch, Toggle	(Left) Auto Augers
2	900030	8	Switch, Toggle	
3	900080	2	Switch, Toggle	
4	851391	6	Switch, Toggle, SPST, 2-Position	
5	851392	12	Switch, Toggle	
6	900120	3	Light, Red, Indicator	
7	36085	1	Relay, 12VDC, SPDT, 40A, 5-Pin	
8	685060	1	Fuse Block, 18 Gang, ATC	
9	986546	1	Circuit Breaker, 10A	
10	1010692	2	Contact Block, 1-NC, Eaton	
11	500040	3	Switch, Toggle	
12	851393	1	Switch, Toggle	
13	988924-03SRV	1	Emergency Brake Switch	
14	982249	1	Switch, Push Button	
15	1013631	1	Assembly, Gauge Panel T4F	Includes 16 - 21, 28 - 30
16	1013632	1	Gauge, Murphy, T4F	
17	1009253-06	1	Decal, Display Panel, 8515 T4F	
18	39146-14	1	Switch, Ignition,W/Heat St | Kubota	
19	982008-04	2	Ignition Key, Replacement	
20	1009253-07	3	Light,Indicator,Red	
21	1009253-03	1	Plate, Display Panel	
22	100-6-16-16-5F	6	CSHH, 3/8-16 x 1.00, GR5, FT	
23	300-6	6	Washer, Flat, SAE, 3/8	
24	302-6	6	Washer, Lock, 3/8	
25	200-6-16-5	6	Nut, Hex, 3/8-16, GR5	
26	989179	1	Connector, 3-Pin, Plug w/120 ohm	
27	1011147	1	Outlet, 12V, Cigarette Lighter	
28	1009993	1	Terminal Strip, 10 Pole	
29	1009253-09	2	Socket, Relay, 5-Pin	
30	1009253-08	2	Relay, 35A	
REF	1010027	A/R	Decal, Control Panel, Tier 4	
REF	1007678	A/R	Kit, Decals, 8515 Safety & Ops	Not Shown
REF	1010091	A/R	Decal, Certified Emission Engine Installation	Not Shown
REF	1010089	A/R	Decal, CJ-4 Oil Only	Not Shown
REF	1010090	A/R	Decal, Ultra Low Sulfur Fuel Only	Not Shown

SCREED SLOPING OVERVIEW

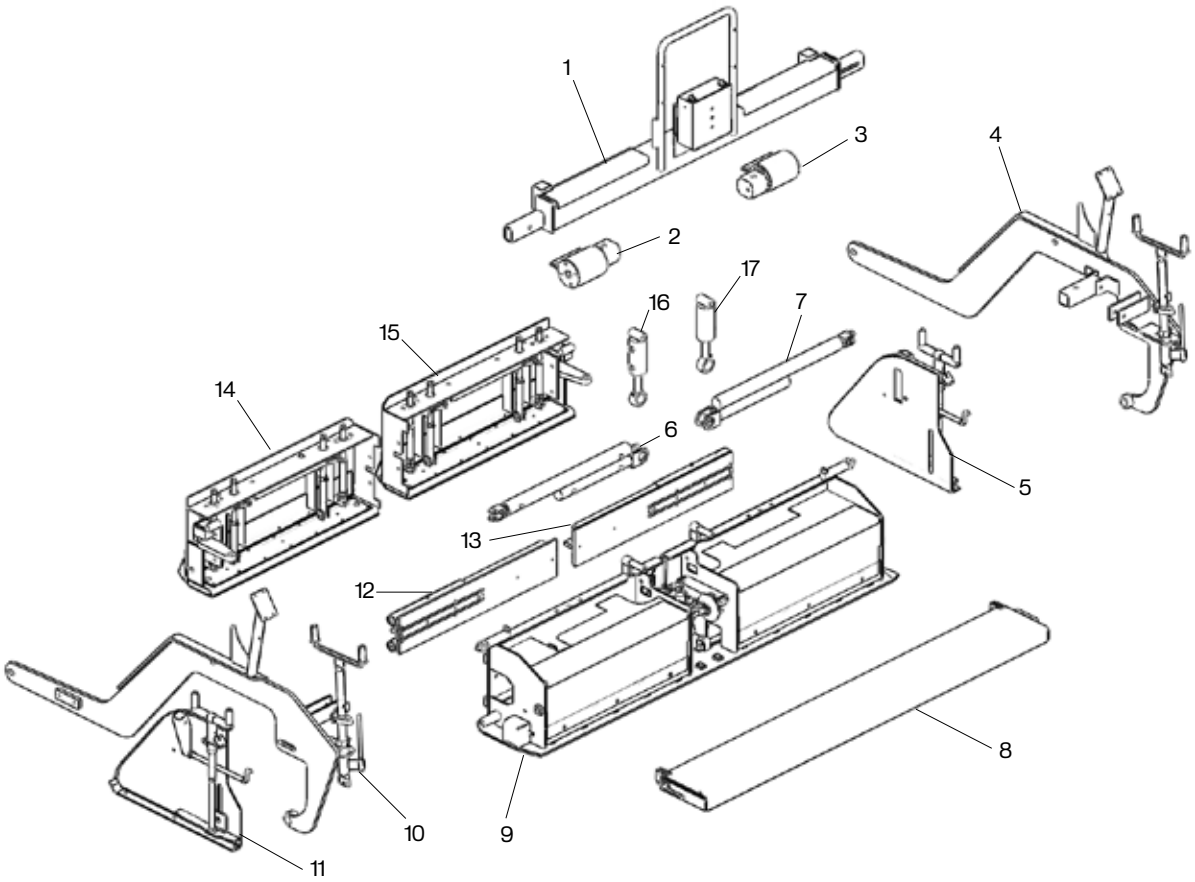


Figure 7-20 Screed Sloping Overview

Screed Sloping Overview

Item No.	Ref. Figure	Description	Remarks
1	7-38	Screed Citrus Tank and Electric Heat Control Box	
2	7-39	Screed Vibrator Assembly (Left)	
3	7-39	Screed Vibrator Assembly (Right)	
4	7-37	Screed Pull Arm and Remote Control Box (Right)	Sloping & Non-Sloping
5	7-35	Screed Endgate Assembly (Right)	
6	7-42	Screed Miscellaneous Components	
7	7-42	Screed Miscellaneous Components	
8	7-40	Screed Walk Board Assembly	
9	7-22	Screed Frame Sloping	See 7-28 for Electric Screed
10	7-36	Screed Pull Arm and Remote Control Box (Left)	Sloping & Non-Sloping
11	7-34	Screed Endgate Assembly (Left)	
12	7-41	Screed Slide Plate Assembly	
13	7-41	Screed Slide Plate Assembly	
14	7-26	Screed Extension Double Adjuster (Left)	See 7-32 for Electric Screed
15	7-27	Screed Extension Double Adjuster (Right)	See 7-33 for Electric Screed
16	7-42	Screed Miscellaneous Components	
17	7-42	Screed Miscellaneous Components	

SCREED NON-SLOPING OVERVIEW

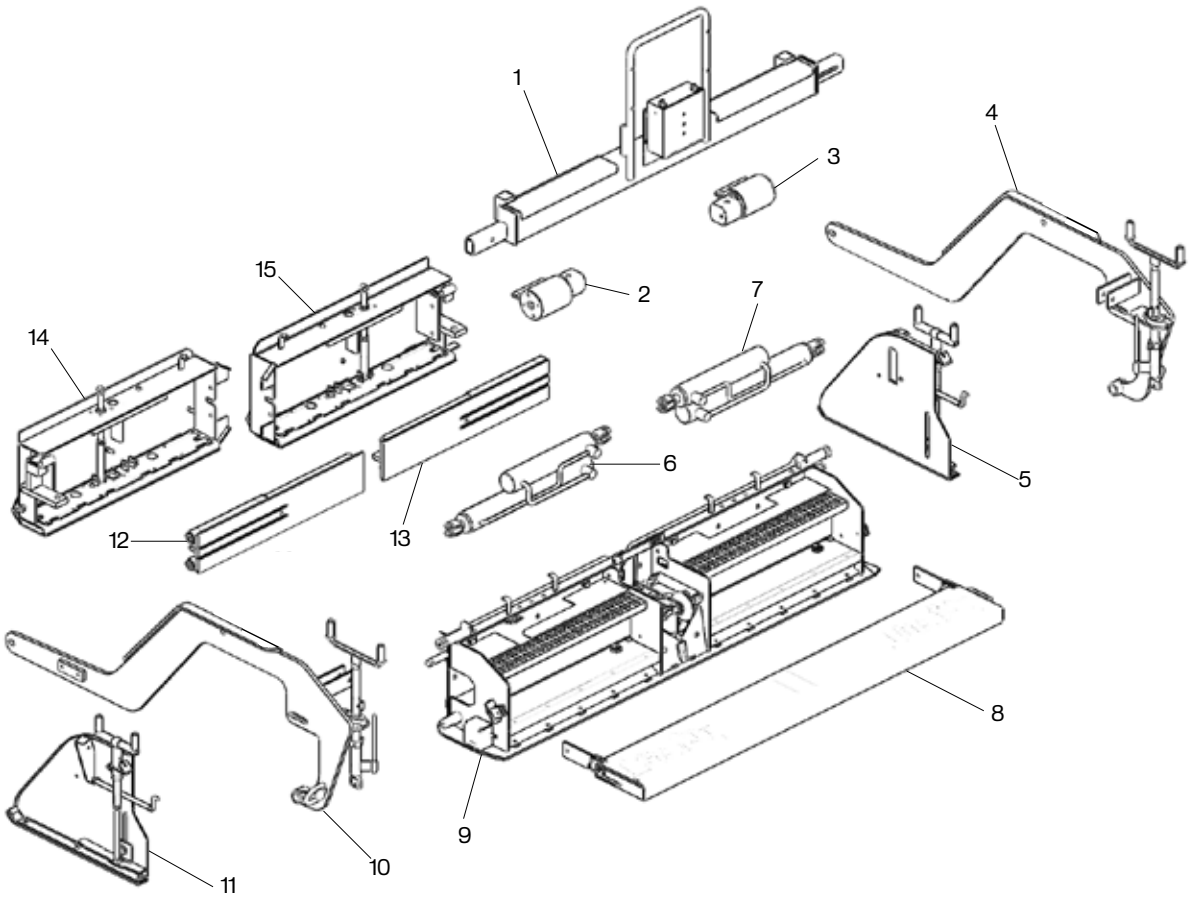


Figure 7-21 Screed Non-Sloping Overview

Screed Non-Sloping Overview

Item No.	Ref. Figure	Description	Remarks
1	7-38	Screed Citrus Tank and Electric Heat Control Box	
2	7-39	Screed Vibrator Assembly (Left)	
3	7-39	Screed Vibrator Assembly (Right)	
4	7-37	Screed Pull Arm and Remote Control Box (Right)	Sloping & Non-Sloping
5	7-35	Screed Endgate Assembly (Right)	
6	7-42	Screed Miscellaneous Components	
7	7-42	Screed Miscellaneous Components	
8	7-40	Screed Walk Board Assembly	
9	7-23	Screed Frame Non-Sloping	See 7-29 for Electric
10	7-36	Screed Pull Arm and Remote Control Box (Left)	Sloping & Non-Sloping
11	7-34	Screed Endgate Assembly (Left)	
12	7-41	Screed Slide Plate Assembly	
13	7-41	Screed Slide Plate Assembly	
14	7-24	Screed Extension Single Adjuster (Left)	See 7-30 for Electric
15	7-25	Screed Extension Single Adjuster (Right)	See 7-31 for Electric

SCREED FRAME SLOPING - PROPANE

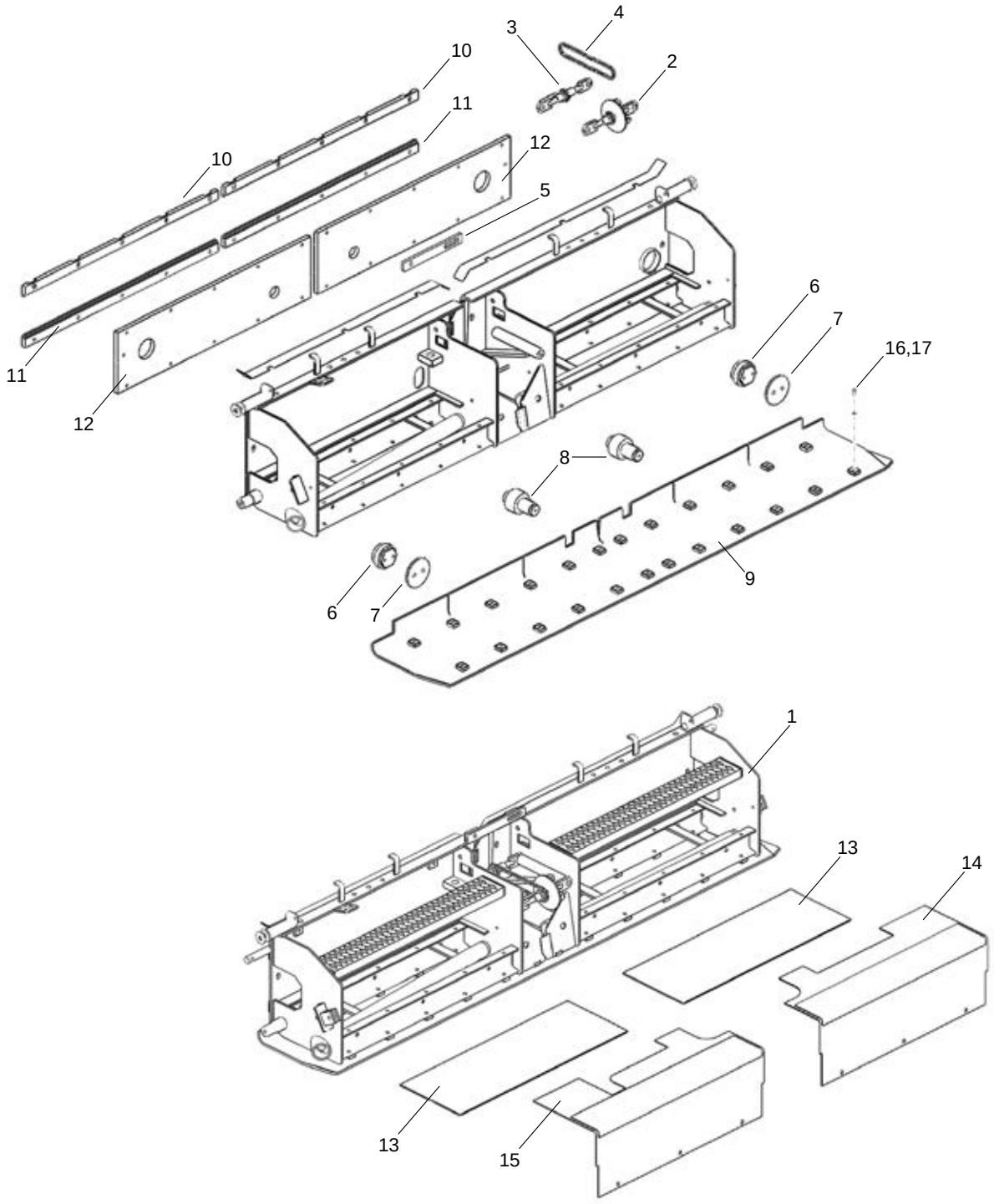


Figure 7-22 Screed Frame Sloping - Propane

Screed Frame Sloping - Propane

Item No.	Part Number	Qty.	Description	Remarks
1	1004969SRV	1	Screed Base, 8515 Propane Slope	Includes item 18, 19, 20
2	870182	1	Assembly, Crown & Valley, Rear	
3	870172	1	Assembly, Crown & Valley, Front	
4	870190	1	Chain, Roller, 40 x 52 Pitch	
5	988376	1	Locking Bar, Crown And Valley	
6	981659	2	Bar, Pivot	
7	981711	2	Plate, Pivot Cover	
8	981661	2	Pin, Cylinder Mount	
9	981724SRV	1	Assembly, Wear Plate, Propane	
10	981657	2	Bar, Top Rail	
11	981658	2	Bar, Bottom Rail	
12	981656	2	Plate, Rail Mount	
13	985149	2	Cover, Screed Lid	
14	985147	1	Plate, Screed Cover, (Right)	
15	985148	1	Plate, Screed Cover, (Left)	
16	100-6-24-16-5F	24	CSHH, 3/8-24 x 1.00, GR5, FT	
17	302-6	24	Washer, Lock, 3/8	

SCREED FRAME NON-SLOPING - PROPANE

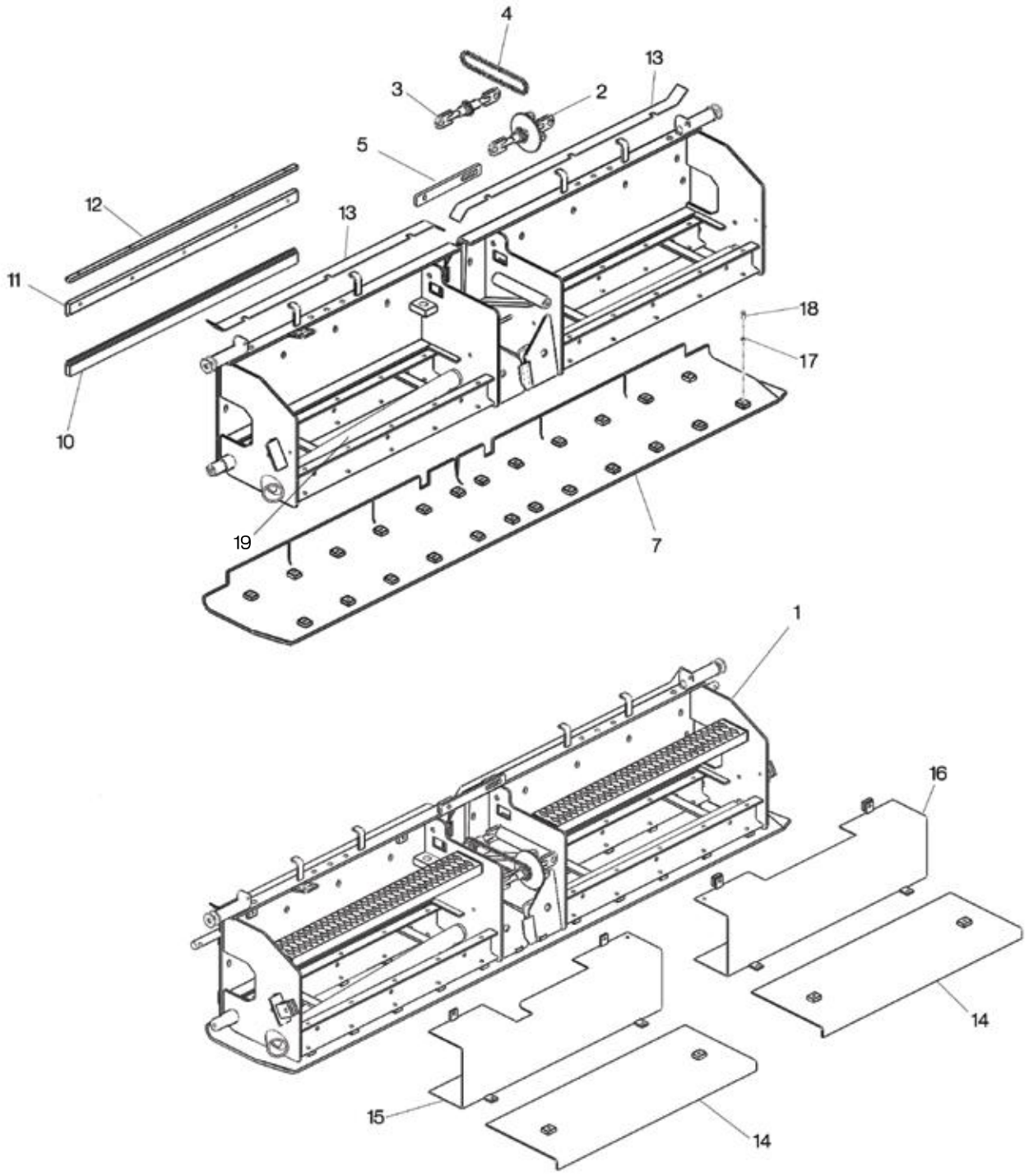


Figure 7-23 Screed Frame Non-Sloping - Propane

Screed Frame Non-Sloping - Propane

Item No.	Part Number	Qty.	Description	Remarks
1	1000251SRV	1	Group, Screed Base 8500 Series Prop	Includes item 14, 15, 16
2	870182	1	Assembly, Crown & Valley, Rear	
3	870172	1	Assembly, Crown & Valley, Front	
4	870190	1	Chain, Roller, 40 x 52 Pitch	
5	988376	1	Locking Bar, Crown And Valley	
7	981724SRV	1	Wear Plate, 8' Bullnose	
10	855783	1	Bottom Rail, 8500 Screed Extension	
11	855784	1	Top Rail, 8500 Screed Extension	
12	988556	1	Bar Jack, Screed Slide	
13	855562	1	Bar, .125 x 2.00 x 44.50, Notches	RH or (Left)
14	851201SRV	2	Cover, Screed Plate Access	
15	851204SRV	1	Cover, Screed Extension Cylinder (Left)	
16	851203SRV	1	Cover, Screed Extension Cylinder (Right)	
17	302-6	24	Washer, Lock, 3/8	
18	100-6-24-16-5F	24	CSHH, 3/8-24 x 1.00, GR5, FT	
19	851197-1SRV	2	Pipe, Screed Burner, Med	
REF	1004918	1	Screed, 8515 LP, 4 Adjusters Extensions	Option

EXTENSION SINGLE ADJUST ASSEMBLY - PROPANE (LEFT)

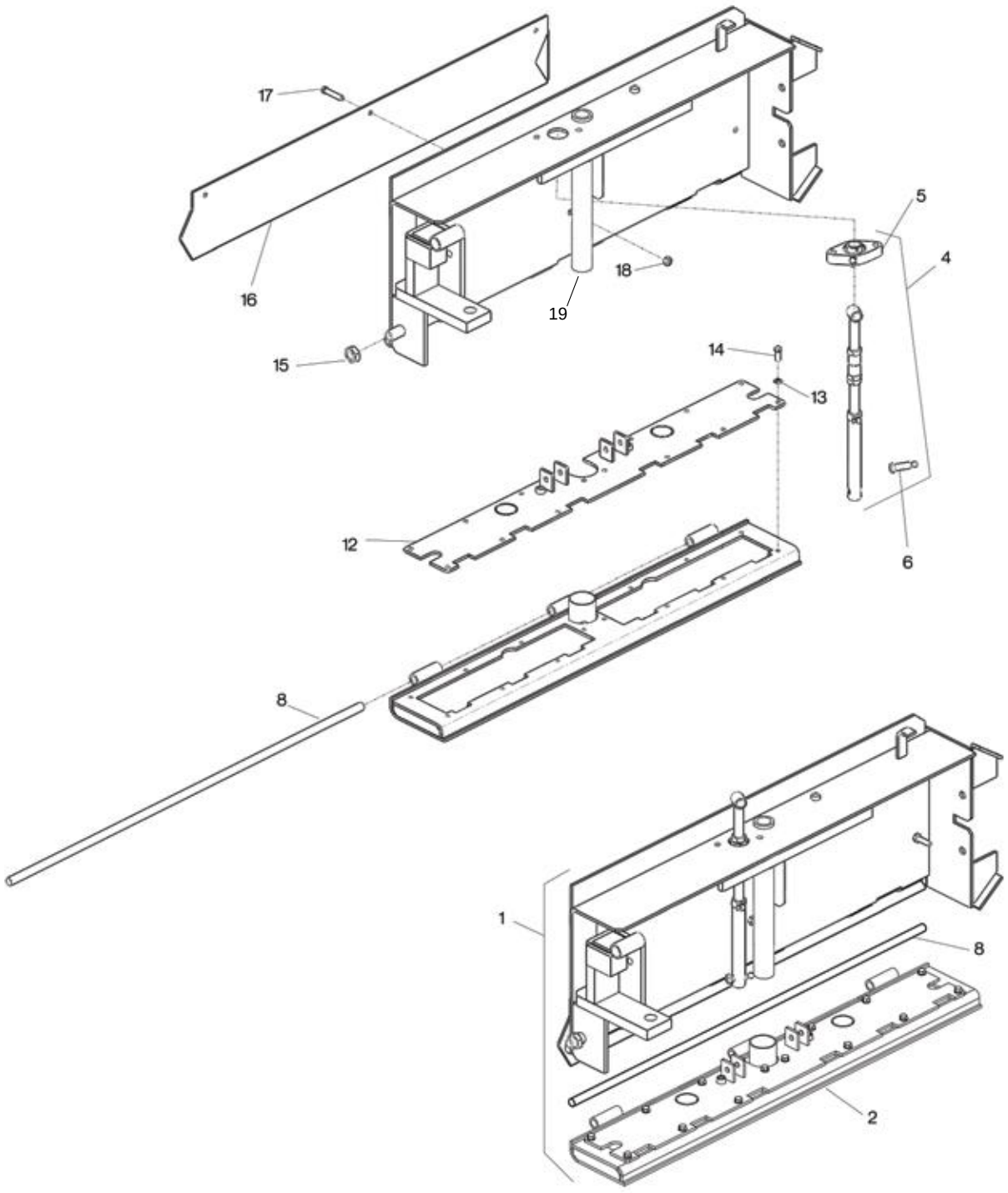


Figure 7-24 Extension Single Adjust Assembly - Propane (Left)

Extension Single Adjust Assembly - Propane (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	859394SRV	1	Assembly, Insert, Propane, 8500, (Left)	
2	851182SRV	1	Assembly, Heat Box, Propane, Single Adjust	
4	851185SRV	1	Assembly Extension Adjusting Screw	
5	870030	1	Bearing, Screed Flight Screw	
6	870279	1	CSSH, 3/8-16 Shoulder Socket	
8	854447SRV	1	Round, .688 x 43.50, CRS	
12	988291	1	Assembly, Heat Box Cover, Single Adjusting	
13	302-6	22	Washer, Lock, 3/8	
14	100-6-24-16-8F	22	CSHH, 3/8-24 x 1.00, GR8, FT	
15	987396	1	Nut, Lock, Nylon, 7/8-9 UNC-2B	
16	851180LSRV	1	Guard, Screed Extension Hinge (Left)	
17	100-7-14-20-5	3	CSHH, 7/16-14 x 1.25, GR5	
18	200-7-14-5	3	Nut, Hex, 7/16-14, GR5	
19	854571SRV	A/R	Extension Burner Pipe	

EXTENSION SINGLE ADJUST ASSEMBLY - PROPANE (RIGHT)

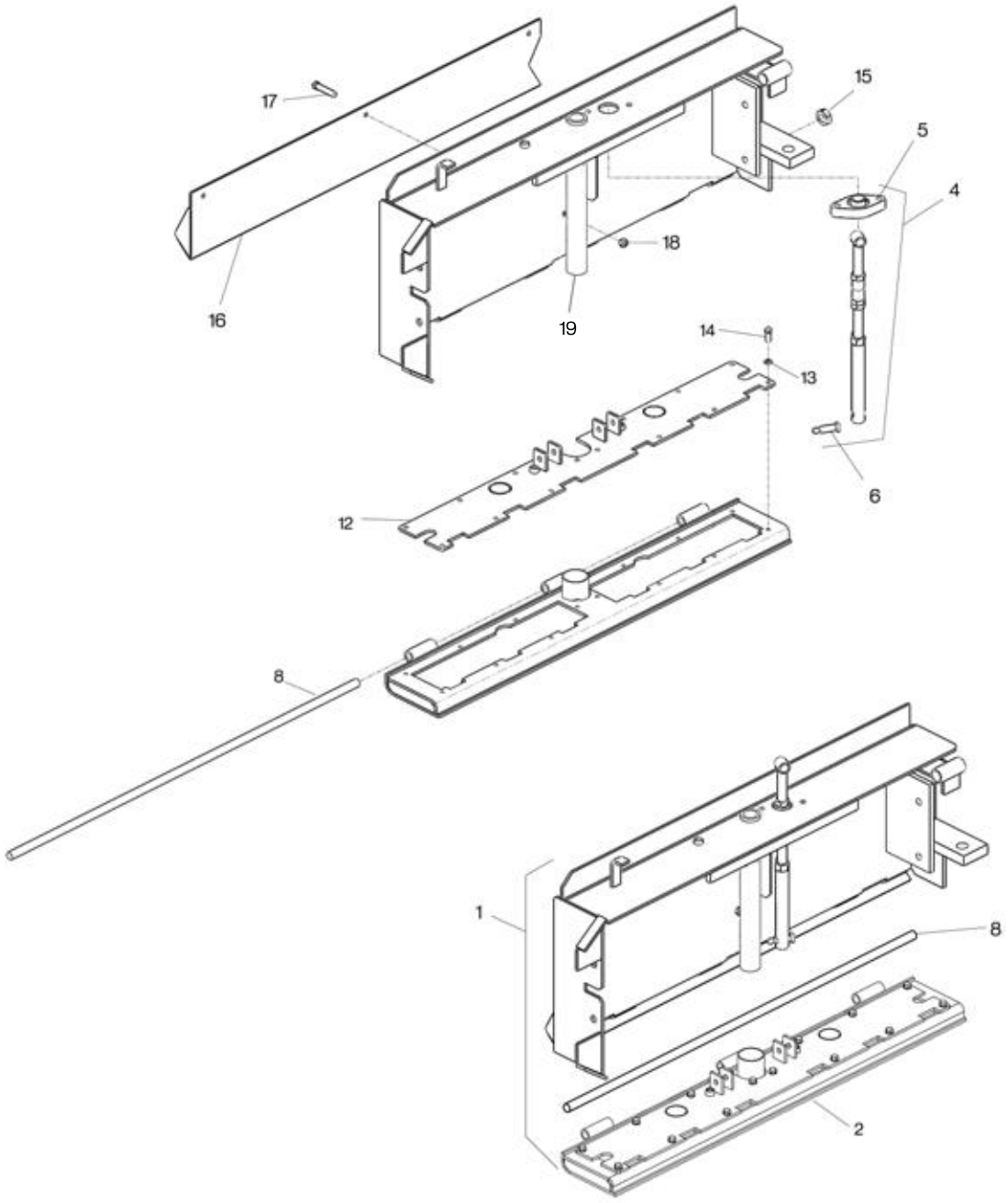


Figure 7-25 Extension Single Adjust Assembly - Propane (Right)

Extension Single Adjust Assembly - Propane (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	859395SRV	1	Assembly, Insert, Propane, 8500 (Right)	
2	851182SRV	1	Assembly, Heat Box, Propane, Single Adjusting	
4	851185SRV	1	Assembly, Extension Adjusting Screw	
5	870030	1	Bearing, Screed Flight Screw	
6	870279	1	CSSH, 3/8-16 Shoulder Socket	
8	854447	1	Round, .688 x 43.50, CRS	
12	988291	1	Assembly, Heat Box Cover, Single Adjusting	
13	302-6	22	Washer, Lock, 3/8	
14	100-6-24-16-8F	22	CSHH, 3/8-24 x 1.00, GR8, FT	
15	987396	1	Nut, Lock, Nylon, 7/8-9 UNC-2B	
16	851180RSRV	1	Guard, Screed Extension Hinge (Right)	
17	100-7-14-20-5	3	CSHH, 7/16-14 x 1.25, GR5	
18	200-7-14-5	3	Nut, Hex, 7/16-14, GR5	
19	854571SRV	A/R	Extension Burner Pipe	

EXTENSION DOUBLE ADJUST ASSEMBLY - PROPANE (LEFT)

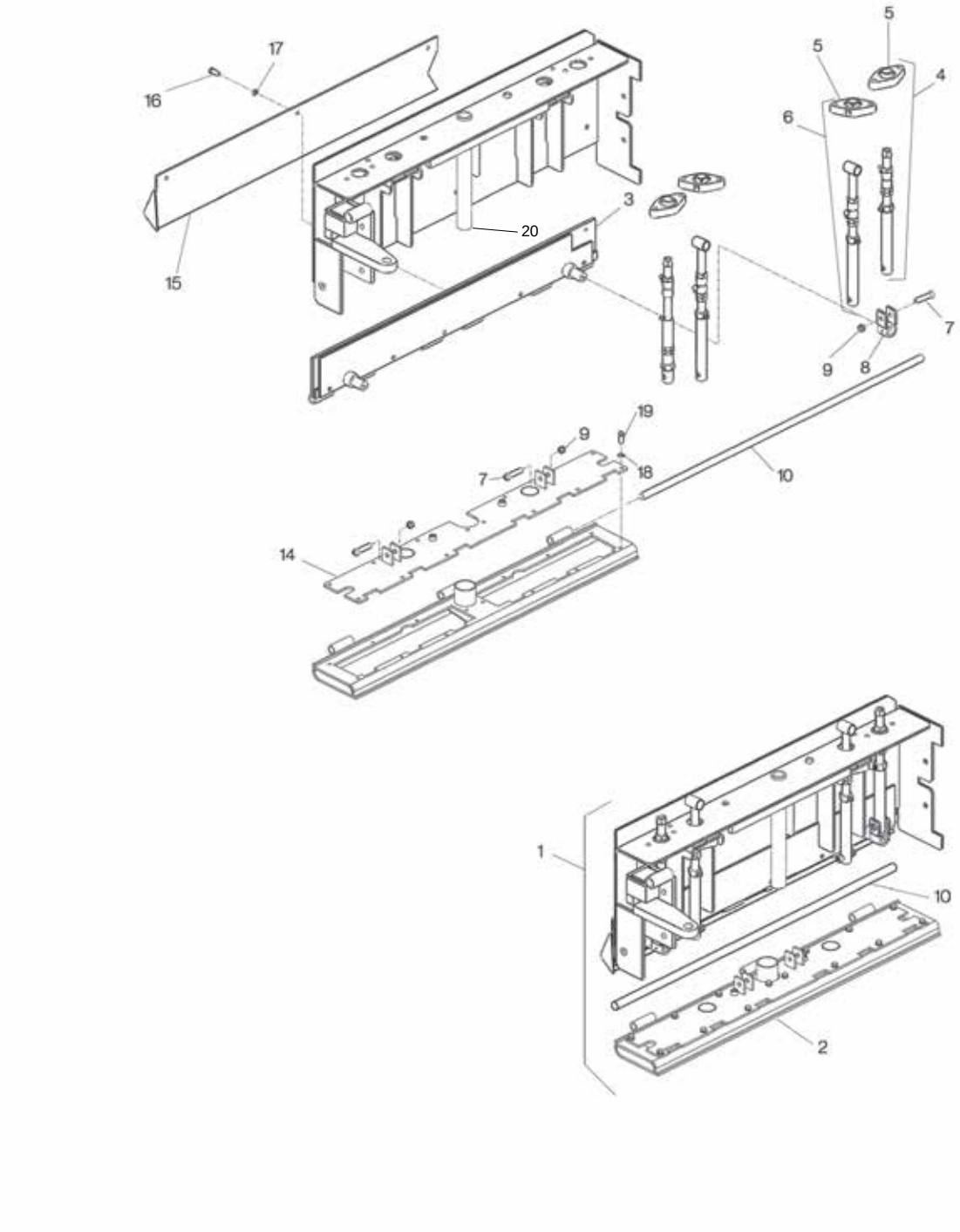


Figure 7-26 Extension Double Adjust Assembly - Propane (Left)

Extension Double Adjust Assembly - Propane (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	983410SRV	1	Assembly, Insert, Slope, Prop (Left)	With Slope
REF	983409-1SRV	1	Assembly, Insert, Propane (Left)	(Not Shown) Without Slope
2	988318SRV	1	Assembly, Heat Box, Propane, 4 Adjust	
3	1002735	1	Assembly, Hinge	
4	985556SRV	1	Assembly, Slide Adjust	
5	870030	4	Bearing, Screed Flight Screw	
6	851185SRV	1	Assembly, Extension Adjusting Screw	
7	870279	4	CSSH, 3/8-16 Shoulder Socket	
8	1002715	1	Adjuster Mount	
9	204-6-16-5	4	Nut, Lock, Stover 3/8-16, GR5	
10	854447SRV	1	Round, .688 x 43.50, CRS	
14	988292SRV	1	Assembly, Heat Box Cover, 4 Adjust	
15	851180LSRV	1	Guard, Screed Extension Hinge (Left)	
16	100-6-16-32-5	3	CSHH, 3/8-16 x 2.00, GR5	
17	302-6	3	Washer, Lock, 3/8	
18	302-4	22	Washer, Lock, 1/4	
19	100-4-20-16-5F	22	CSHH, 1/4-20 x 1.00, GR5, FT	
20	854571SRV	A/R	Pipe, Screed Extension Burner	

EXTENSION DOUBLE ADJUST ASSEMBLY - PROPANE (RIGHT)

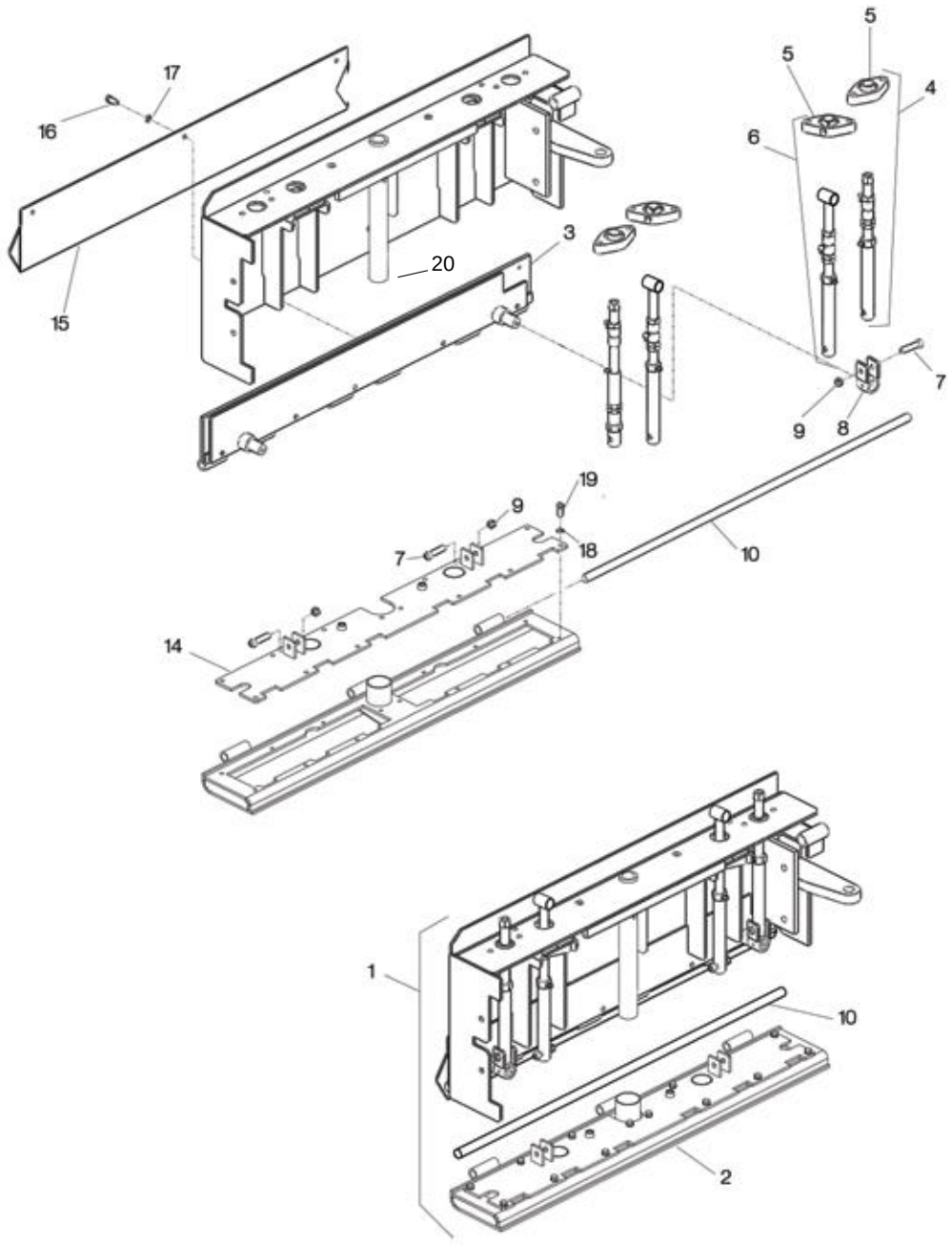


Figure 7-27 Extension Double Adjust Assembly - Propane (Right)

Extension Double Adjust Assembly - Propane (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	983409SRV	1	Assembly, Insert, Slope, Prop (Right)	With Slope
REF	983410-1SRV	1	Assembly, Insert, Propane (Right)	(Not Shown) Without Slope
2	988318SRV	1	Assembly, Heat Box, Propane, 4 Adjust	
3	1002736	1	Assembly, Hinge	
4	985556SRV	1	Assembly, Slide Adjust	
5	870030	4	Bearing, Screed Flight Screw	
6	851185SRV	1	Assembly, Extension Adjusting Screw	
7	870279	4	CSSH, 3/8-16 Shoulder Socket	
8	1002715	1	Adjuster Mount	
9	204-6-16-5	4	Nut, Lock, Stover, 3/8-16, GR5	
10	854447SRV	1	Round, .688 x 43.50, CRS	
14	988292SRV	1	Assembly, Heat Box Cover, 4 Adjust	
15	851180RSRV	1	Guard, Screed Extension Hinge (Right)	
16	100-6-16-32-5	3	CSHH, 3/8-16 x 2.00, GR5	
17	302-6	3	Washer, Lock, 3/8	
18	302-4	22	Washer, Lock, 1/4	
19	100-4-20-16-5F	22	CSHH, 1/4-20 x 1.00, GR5, FT	
20	854571SRV	A/R	Pipe, Screed Extension Burner	

SCREED FRAME SLOPING - ELECTRIC

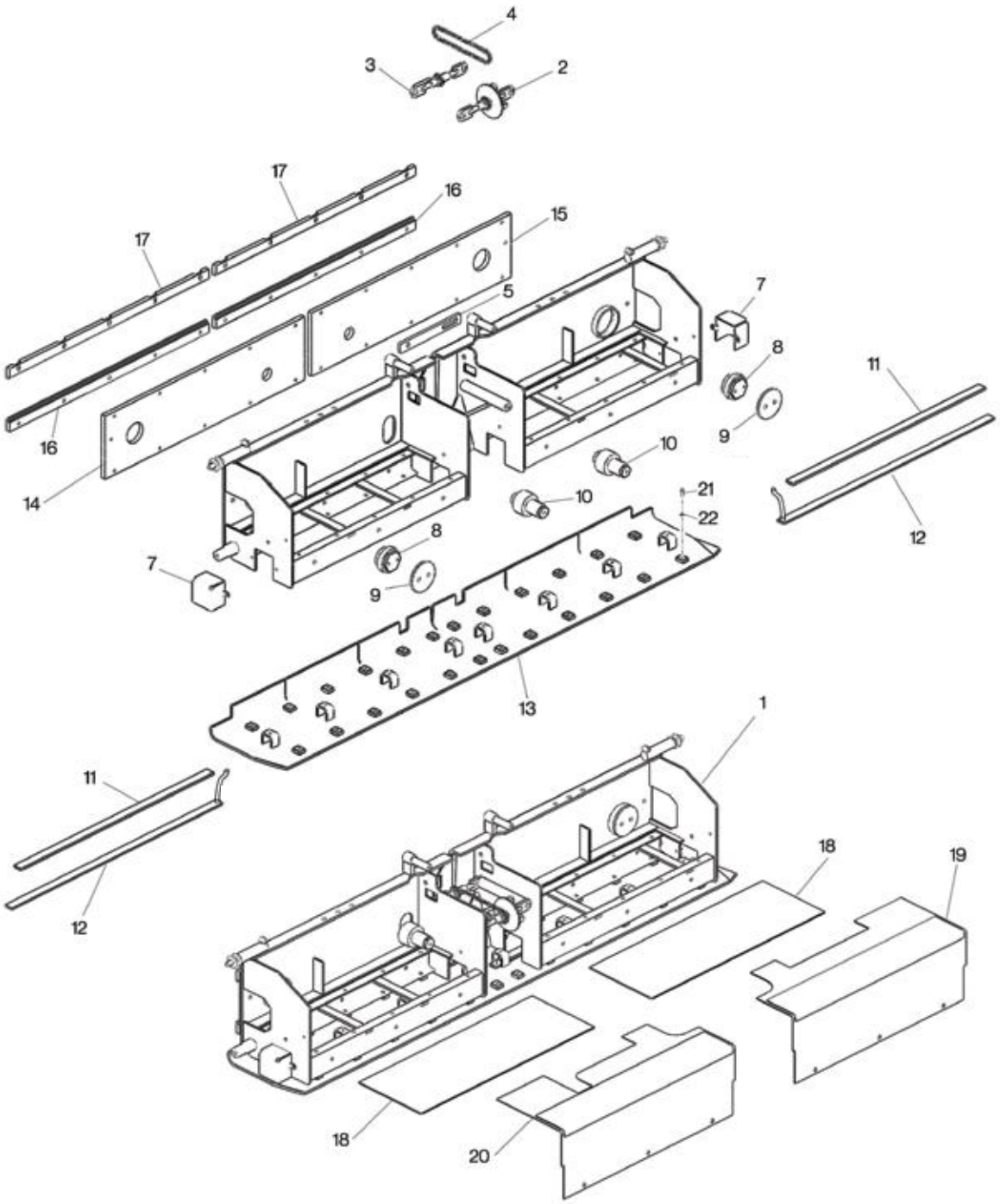


Figure 7-28 Screed Frame Sloping - Electric

Screed Frame Sloping - Electric

Item No.	Part Number	Qty.	Description	Remarks
1	985547SRV	1	Screed Base, 8515 Electric Slope	Includes item 18, 19, 20
2	870182	1	Assembly, Crown & Valley, Rear	
3	870172	1	Assembly, Crown & Valley, Front	
4	870190	1	Chain, Roller, 40 x 52 Pitch	
5	988376	1	Locking Bar, Crown And Valley	
7	985124	2	Cover, Elements, Screed Base	
8	981659	2	Bar, Pivot	
9	981711	2	Plate, Pivot Cover	
10	981661	2	Pin, Cylinder Mount	
11	985121	2	Bar, .375 x 1.50 x 42	
12	987886SRV	2	Element, Heater, Screed, 46”	
13	987216SRV	1	Assembly, Wear Plate, Electric	
14	981656	1	Plate, Rail Mount	
15	981656	1	Plate, Rail Mount	
16	981658	2	Bar, Bottom Rail	
17	981657	2	Bar, Top Rail	
18	985149	2	Cover, Screed Lid	
19	985147	1	Plate, Screed Cover, (Right)	
20	985148	1	Plate, Screed Cover, (Left)	
21	100-6-24-16-5F	24	CSHH, 3/8-24 x 1.00, GR5, FT	
22	302-6	24	Washer, Lock, 3/8	

SCREED FRAME NON-SLOPING - ELECTRIC

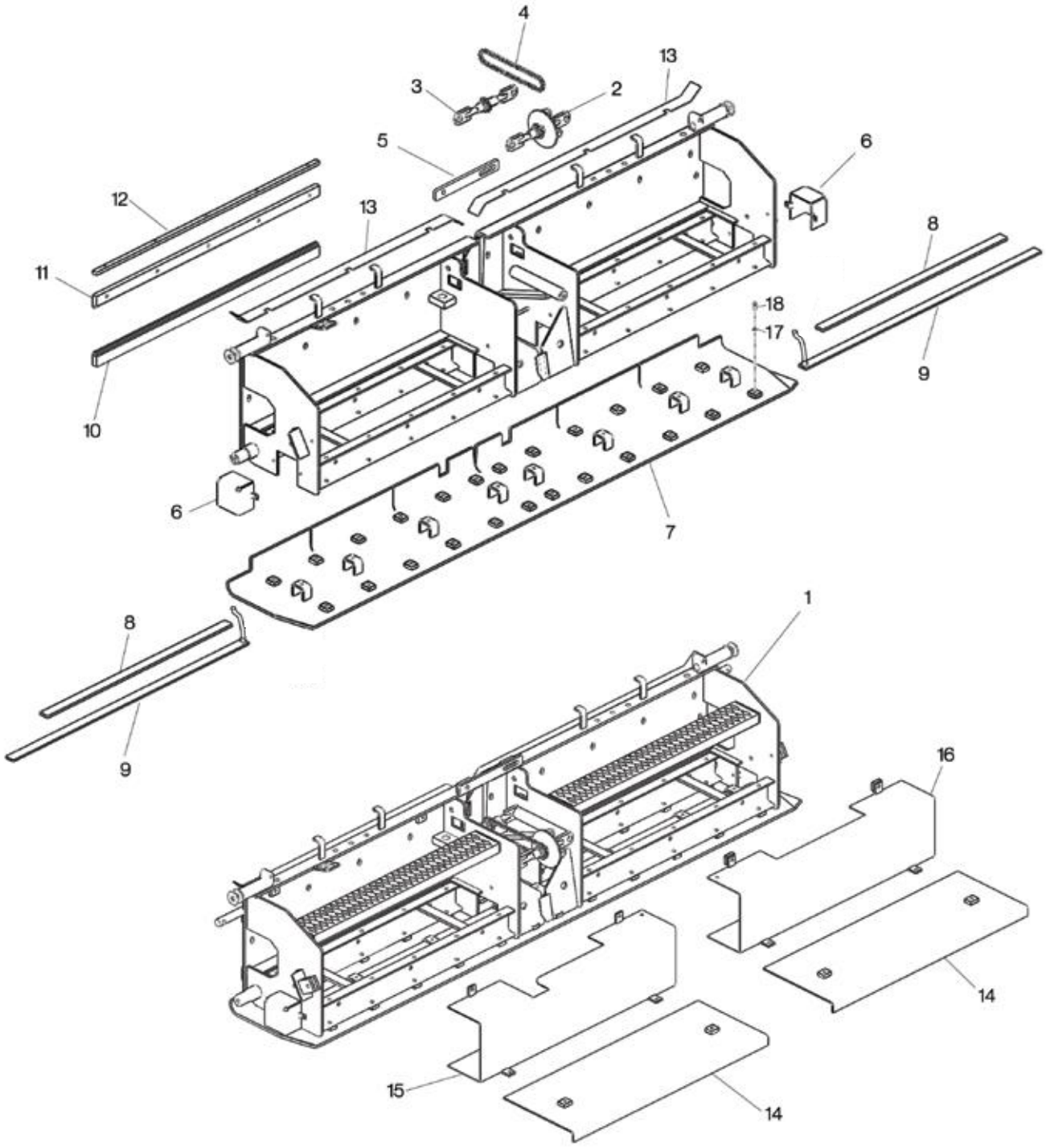


Figure 7-29 Screed Frame Non-Sloping - Electric

Screed Frame Non-Sloping - Electric

Item No.	Part Number	Qty.	Description	Remarks
1	989377SRV	1	Group, Screed Base 8500 Series Electric	Includes item 14, 15, 16
2	870182	1	Assembly, Crown & Valley, Rear	
3	870172	1	Assembly, Crown & Valley, Front	
4	870190	1	Chain, Roller, 40 x 52 Pitch	
5	988376	1	Locking Bar, Crown And Valley	
6	985124	2	Cover, Elements, Screed Base	
7	987216SRV	1	Assembly, Wear Plate, Electric	
8	985121	2	Bar, .375 x 1.50 x 42	
9	987886SRV	2	Element, Heater, Screed, 46”	
10	855783	1	Bottom Rail, 8500 Screed Extension	
11	855784	1	Top Rail, 8500 Screed Extension	
12	988556	1	Bar Jack, Screed Slide	
13	855562	1	Bar, .125 x 2.00 x 44.50, Notches	RH or (Left)
14	851201SRV	2	Cover, Screed Plate Access	
15	851204SRV	1	Cover, Screed Extension Cylinder	
16	851203SRV	1	Cover, Screed Extension Cylinder	
17	302-6	24	Washer, Lock, 3/8	
18	100-6-24-16-5F	24	CSHH, 3/8-24 x 1.00, GR5, FT	

EXTENSION SINGLE ADJUST ASSEMBLY - ELECTRIC (LEFT)

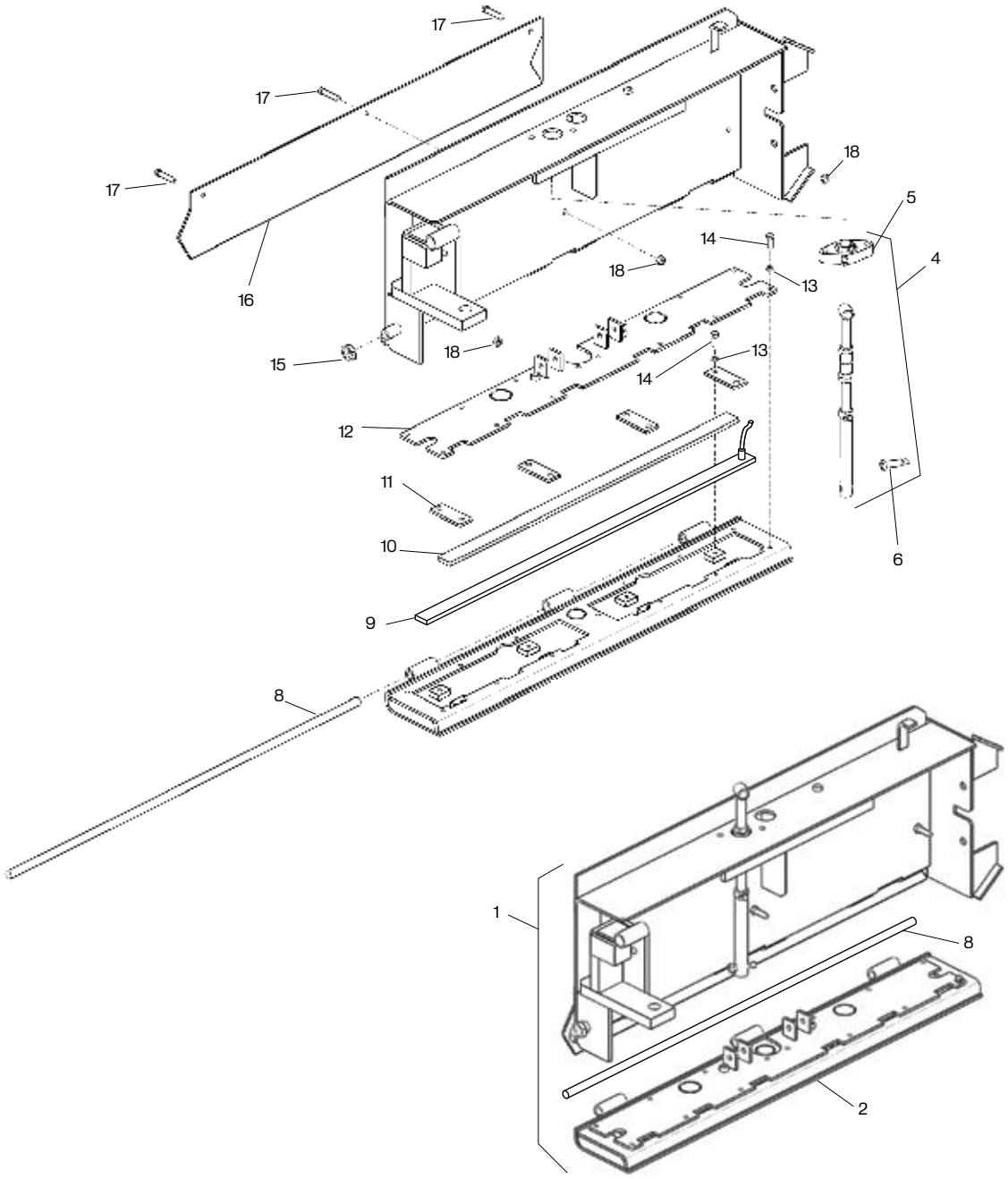


Figure 7-30 Extension Single Adjust Assembly - Electric (Left)

Extension Single Adjust Assembly - Electric (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	985561SRV	1	Assembly, Insert, Electric, 8500 (Left)	
2	987872SRV	1	Assembly, Heat Box, Electric, Single Adjust	
4	851185SRV	1	Assembly, Extension Adjust Screw	
5	870030	1	Bearing, Screed Flight Screw	
6	870279	1	CSSH, 3/8-16 Shoulder Socket	
8	854447SRV	1	Round, .688 x 43.50, CRS	
9	987890SRV	1	Element, Heater, Screed, 40”	
10	985120	1	Bar, .250 x 1.50 x 36	
11	985123	4	Clamp, Element, Screed Extension	
12	988291	1	Assembly, Heat Box Cover, Single Adjust	
13	302-6	22	Washer, Lock, 3/8	
14	100-6-24-16-8F	22	CSHH, 3/8-24 x 1.00, GR8, FT	
15	987396	1	Nut, Nylon Lock, 7/8-9 UNC-2B	
16	851180LSRV	1	Guard, Screed Extension Hinge (Left)	
17	100-5-18-20-5	3	CSHH, 5/16-18 x 1.25, GR5	
18	200-5-18-5	3	Nut, Hex, 5/16-18, GR5	

EXTENSION SINGLE ADJUST ASSEMBLY - ELECTRIC (RIGHT)

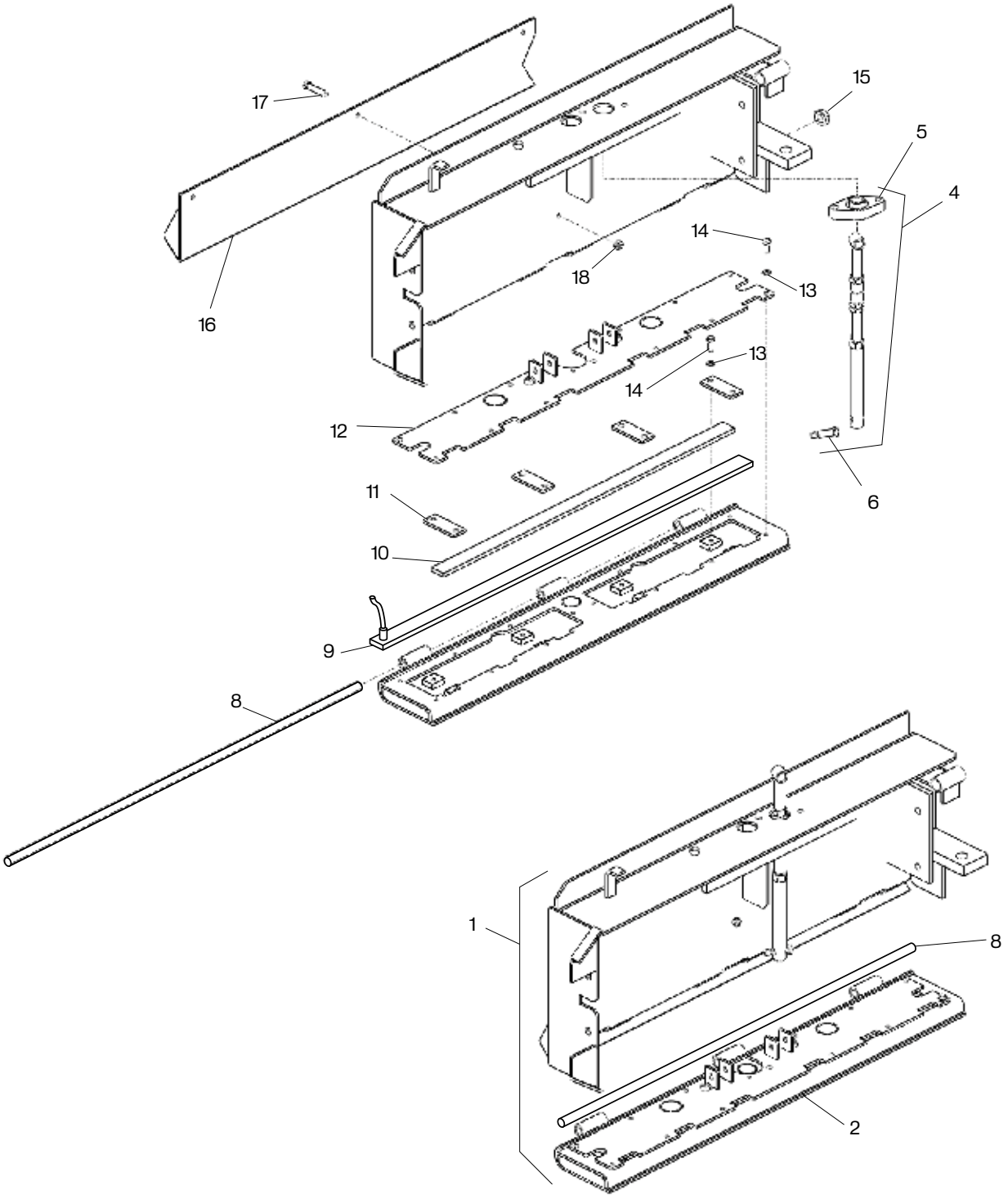


Figure 7-31 Extension Single Adjust Assembly - Electric (Right)

Extension Single Adjust Assembly - Electric (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	985562SRV	1	Assembly, Insert, Electric, 8500 (Right)	
2	987872SRV	1	Assembly, Heat Box, Electric, Single Adjust	
4	851185SRV	1	Assembly, Extension Adjust Screw	
5	870030	1	Bearing, Screed Flight Screw	
6	870279	1	CSSH, 3/8-16 Shoulder Socket	
8	854447	1	Round, .688 x 43.50, CRS	
9	987890SRV	1	Element, Heater, Screed, 40”	
10	985120	1	Bar, .250 x 1.50 x 36	
11	985123	4	Clamp, Element, Screed Extension	
12	988291	1	Assembly, Heat Box Cover, Single Adjust	
13	302-6	22	Washer, Lock, 3/8	
14	100-6-24-16-8F	22	CSHH, 3/8-24 x 1.00, GR8, FT	
15	987396	1	Nut, Nylon Lock, 7/8-9 UNC-2B	
16	851180RSRV	1	Guard, Screed Extension Hinge (Right)	
17	100-5-18-20-5	3	CSHH, 5/16-18 x 1.25, GR5	
18	200-5-18-5	3	Nut, Hex, 5/16-18, GR5	

EXTENSION DOUBLE ADJUST ASSEMBLY - ELECTRIC (LEFT)

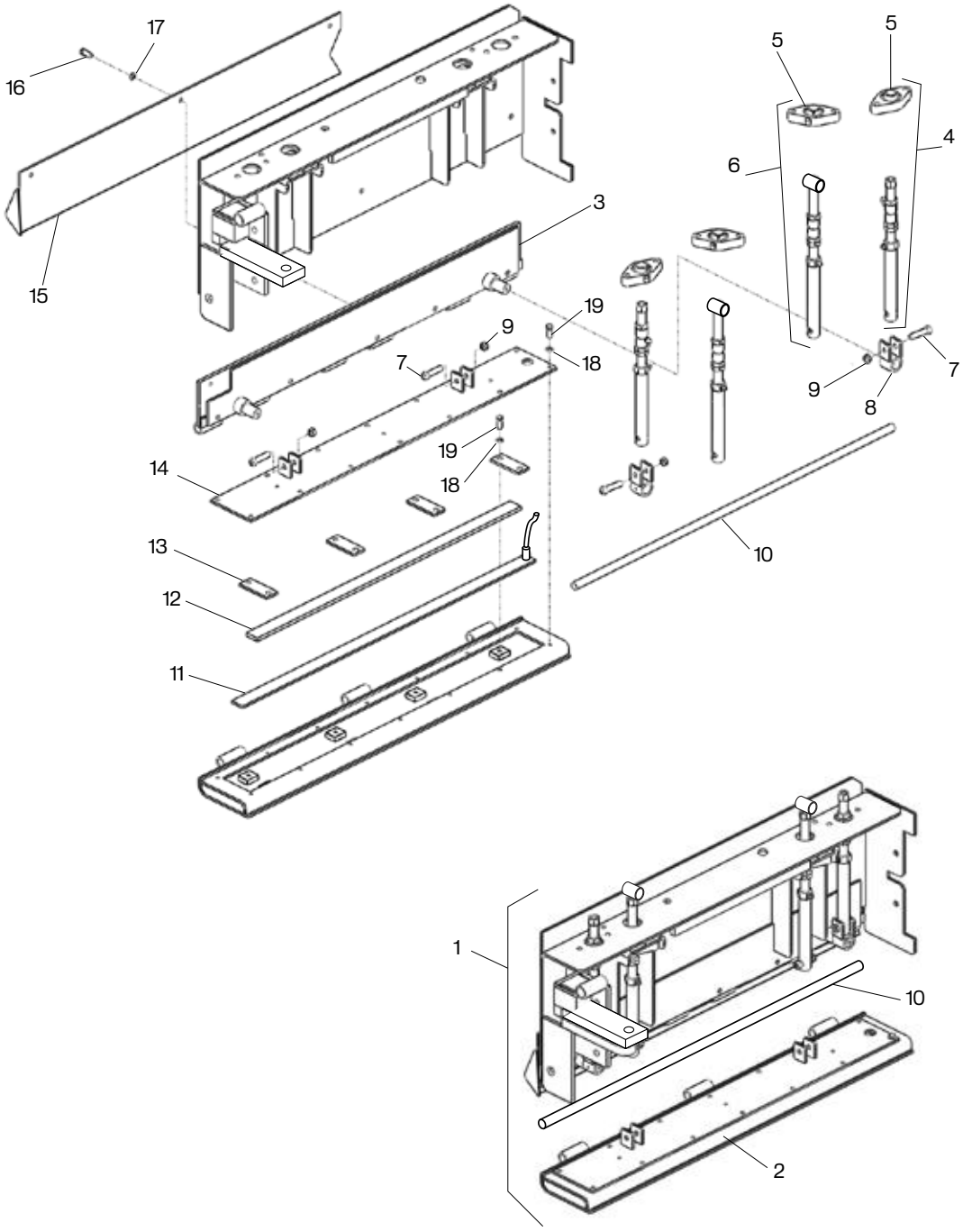


Figure 7-32 Extension Double Adjust Assembly - Electric (Left)

Extension Double Adjust Assembly - Electric (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	984305SRV	1	Assembly, Insert, Slope, Electric (Left)	With Slope
REF	984305-1SRV	1	Assembly, Insert, Electric (Left)	(Not Shown) Without Slope
2	988319SRV	1	Assembly, Heat Box, Electric, 4 Adjust	
3	1002735SRV	1	Hinge Assembly	
4	985556SRV	1	Assembly, Slide Adjust	
5	870030	4	Bearing, Screed Flight Screw	
6	851185SRV	1	Assembly, Extension Adjust Screw	
7	870279	4	CSSH, 3/8-16 Shoulder Socket	
8	1002715SRV	1	Adjuster Mount	
9	204-6-16-5	4	Nut, Lock, Stover, 3/8-16, GR5	
10	854447SRV	1	Round, .688 x 43.50, CRS	
11	987890SRV	1	Element, Heater, Screed, 40”	
12	985120	1	Bar, .250 x 1.50 x 36	
13	985123	4	Clamp, Element, Screed Extension	
14	988292SRV	1	Assembly, Heat Box Cover, 4 Adjust	
15	851180LSRV	1	Guard, Screed Extension Hinge (Left)	
16	100-6-16-32-5	3	CSHH, 3/8-16 x 2.00, GR5	
17	302-6	3	Washer, Lock, 3/8	
18	302-4	22	Washer, Lock, 1/4	
19	100-4-20-16-5F	22	CSHH, 1/4-20 x 1.00, GR5, FT	

EXTENSION DOUBLE ADJUST ASSEMBLY - ELECTRIC (RIGHT)

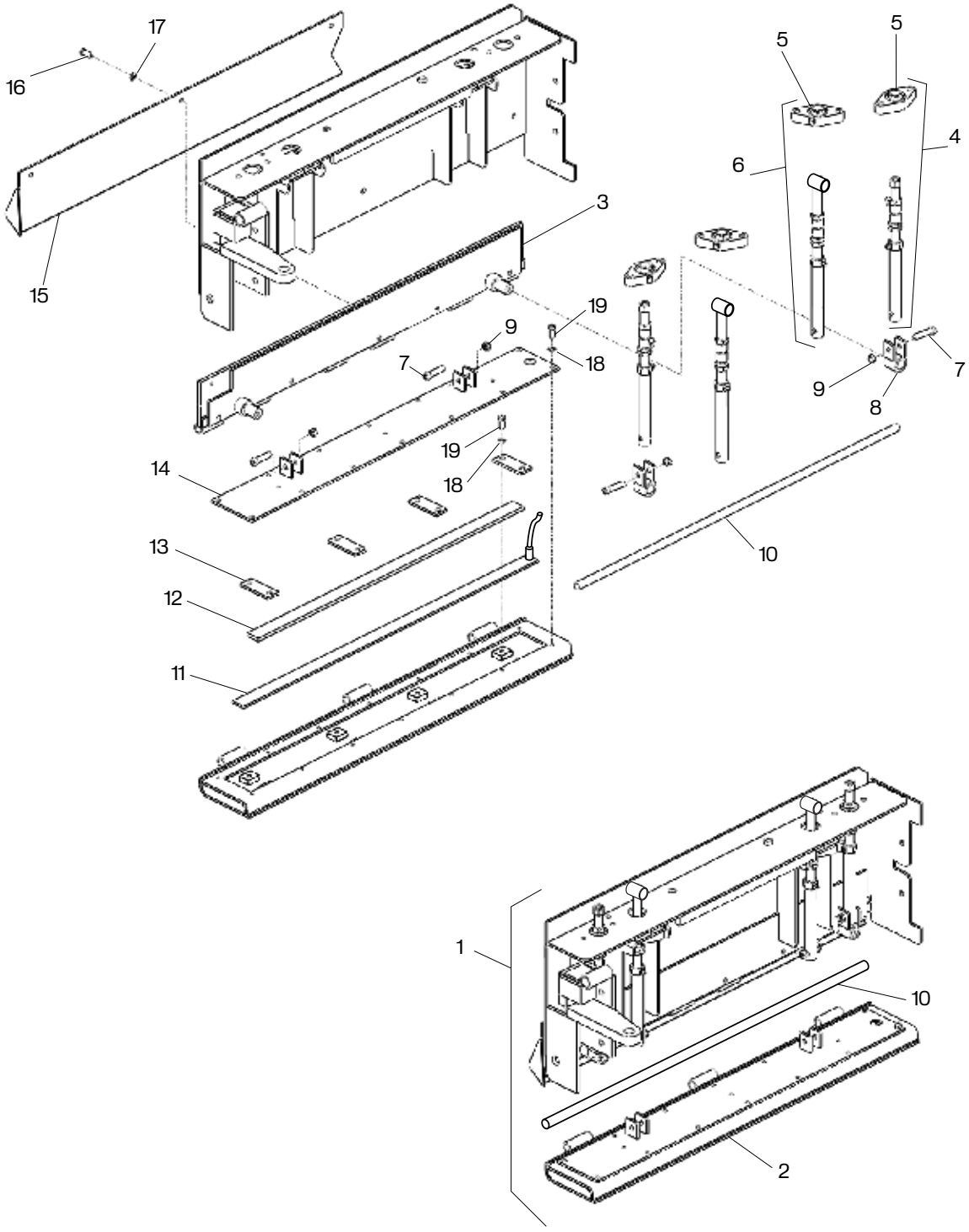


Figure 7-33 Extension Double Adjust Assembly - Electric (Right)

Extension Double Adjust Assembly - Electric (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	984306SRV	1	Assembly, Insert, Slope, Electric (Right)	With Slope
REF	984306-1SRV	1	Assembly, Insert, Electric (Right)	(Not Shown) Without Slope
2	988319SRV	1	Assembly, Heat Box, Electric, 4 Adjust	
3	1002736SRV	1	Hinge Assembly	
4	985556SRV	1	Assembly, Slide Adjust	
5	870030	4	Bearing, Screed Flight Screw	
6	851185SRV	1	Assembly, Extension Adjust Screw	
7	870279	4	CSSH, 3/8-16 Shoulder Socket	
8	1002715SRV	1	Adjuster Mount	
9	204-6-16-5	4	Nut, Lock, Stover, 3/8-16, GR5	
10	854447SRV	1	Round, .688 x 43.50, CRS	
11	987890SRV	1	Element, Heater, Screed, 40”	
12	985120	1	Bar, .250 x 1.50 x 36	
13	985123	4	Clamp, Element, Screed Extension	
14	988292SRV	1	Assembly, Heat Box Cover, 4 Adjust	
15	851180RSRV	1	Guard, Screed Extension Hinge (Right)	
16	100-6-16-32-5	3	CSHH, 3/8-16 x 2.00, GR5	
17	302-6	3	Washer, Lock, 3/8	
18	302-4	22	Washer, Lock, 1/4	
19	100-4-20-16-5F	22	CSHH, 1/4-20 x 1.00, GR5, FT	

ENDGATE ASSEMBLY (LEFT)

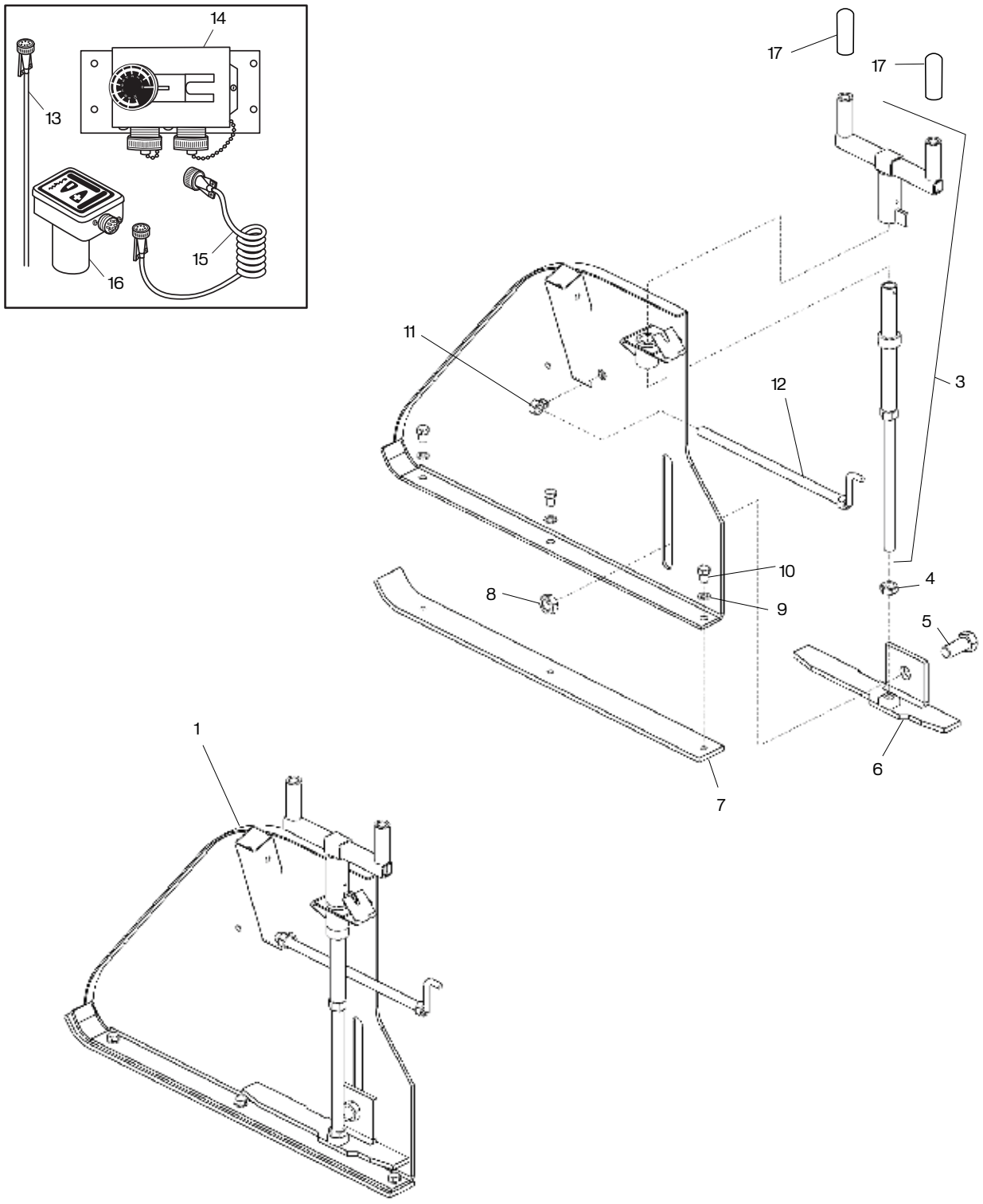


Figure 7-34 Endgate Assembly (Left)

Endgate Assembly (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	983308SRV	1	Assembly, Jointer, 8515 (Left)	
3	890092SRV	1	Assembly, Depth Screw, Screed	
4	202-12-10-5	1	Nut, Hex, Jam 3/4-10, GR5	
5	100-14-9-32-5F	1	CSHH, 7/8-9 x 2.00, GR5, FT	
6	890132LSRV	1	Bracket, Depth Screw Control (Left)	
7	982963SRV	1	Bar, End Gate Skid 8515	
8	987396	1	Nut, Nylon Lock. 7/8-9 UNC-2B	
9	302-8	3	Washer, Lock, 1/2	
10	100-8-13-12-5F	3	CSHH, 1/2-13 x .75, GR5, FT	
11	890070	1	Assembly, Adjusting Swivel Nut	
12	890081SRV	1	Assembly, Tilt Screw, Jointer	
13	982796	1	Cable, Power, Ultrasonic	
14	982795	1	Remote Pod, Ultra Sonic	
15	983050	1	Coil Cord, 6s/6s 1.5 to 7.5 FT	
16	982794	1	Sensor, Ultra Sonic	
17	870276	2	Hand Grip, Flight/Depth Screw	

ENDGATE ASSEMBLY (RIGHT)

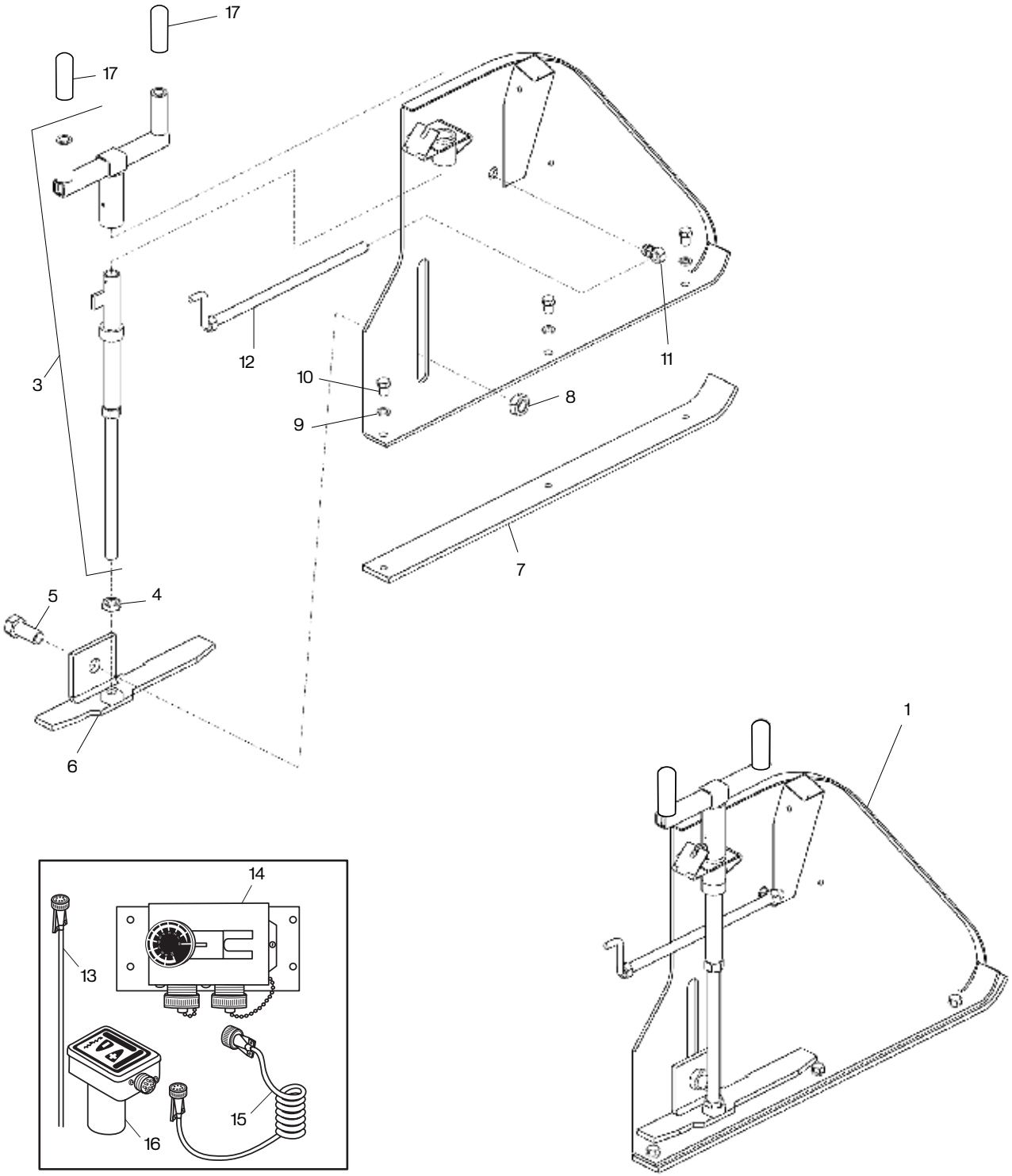


Figure 7-35 Endgate Assembly (Right)

Endgate Assembly (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	983309SRV	1	Assembly, Jointer, 8515 (Right)	
3	890092SRV	1	Assembly, Depth Screw, Screed	
4	202-12-10-5	1	Nut, Hex Jam, 3/4-10, GR5	
5	100-14-9-32-5F	1	CSHH, 7/8-9 x 2.00, GR5, FT	
6	890132RSRV	1	Bracket, Depth Screw Control (Right)	
7	982963SRV	1	Wear Plate, End Gate, 8515	
8	987396	1	Nut, Nylon Lock, 7/8-9 UNC-2B	
9	302-8	3	Washer, Lock, 1/2	
10	100-8-13-12-5F	3	CSHH, 1/2-13 x .75, GR5, FT	
11	890070	1	Assembly, Adjusting Swivel Nut	
12	890081SRV	1	Assembly, Tilt Screw, Jointer	
13	982796	1	Cable, Power, Ultrasonic	
14	982795	1	Remote Pod, Ultra Sonic	
15	983050	1	Coil Cord, 6s/6s 1.5 to 7.5 FT	
16	982794	1	Sensor, Ultra Sonic	
17	870276	2	Hand Grip, Flight/Depth Screw	

SCREED PULL ARM ASSEMBLY (LEFT)

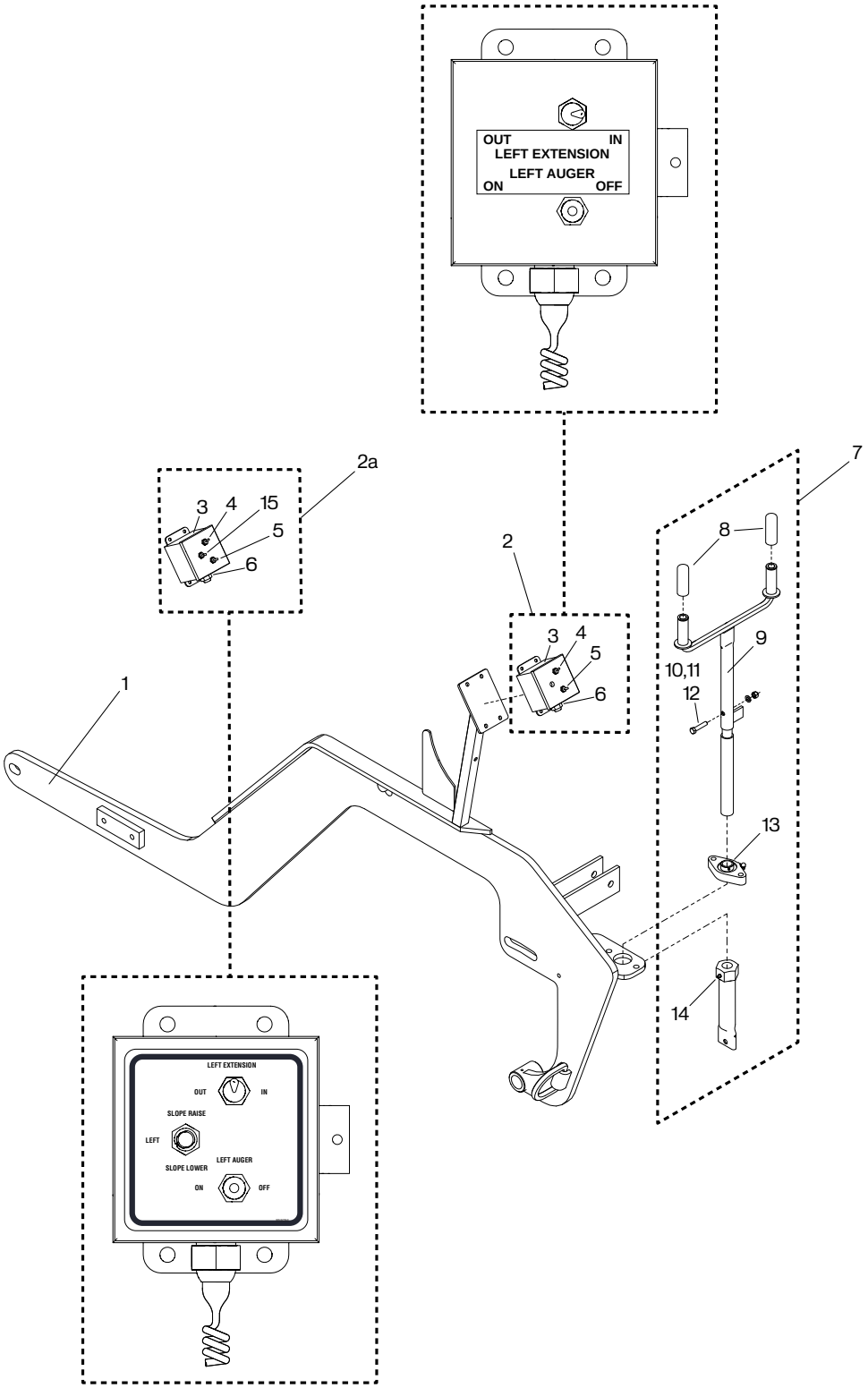


Figure 7-36 Screed Pull Arm Assembly (Left)

Screed Pull Arms Assembly (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	984897SRV	1	Assembly, Screed Arm, 8515 (Left)	
2	984535L	1	Enclosure, Electric 2 SW, LW Control (Left)	Non-Sloping Extension
2a	984534L	1	Enclosure, Electric 3 SW, LW Control (Left)	Sloping Extension
3	984533-03L	1	Enclosure, Electric, 4x4x3, 3 Holes (Left)	
4	851391	1	Switch, Toggle, SPST, 2-Position	
5	851392	1	Switch, Toggle, SPDT, 3-Position, MOM	
6	3200DI	1	Strain Relief, 1/2	
7	851370SRV	1	Assembly, Flight Screw	
8	870276	2	Hand Grip, Flight/Depth Screw	
9	859365	1	Sub-Assembly, Flight Screw	
10	100-6-16-28-5	1	CSHH, 3/8-16 x 1.75, GR5	
11	302-6	1	Washer, Lock, 3/8	
12	200-6-16-5	1	Nut, Hex, 3/8-16, GR5	
13	870030	1	Bearing, Screed Flight Screw	
14	140610	1	Fitting, Lube, Straight, 1/4-28	
15	851393	1	Switch, Toggle, SPDT, 3-Position, MOM, LK	

SCREED PULL ARM ASSEMBLY (RIGHT)

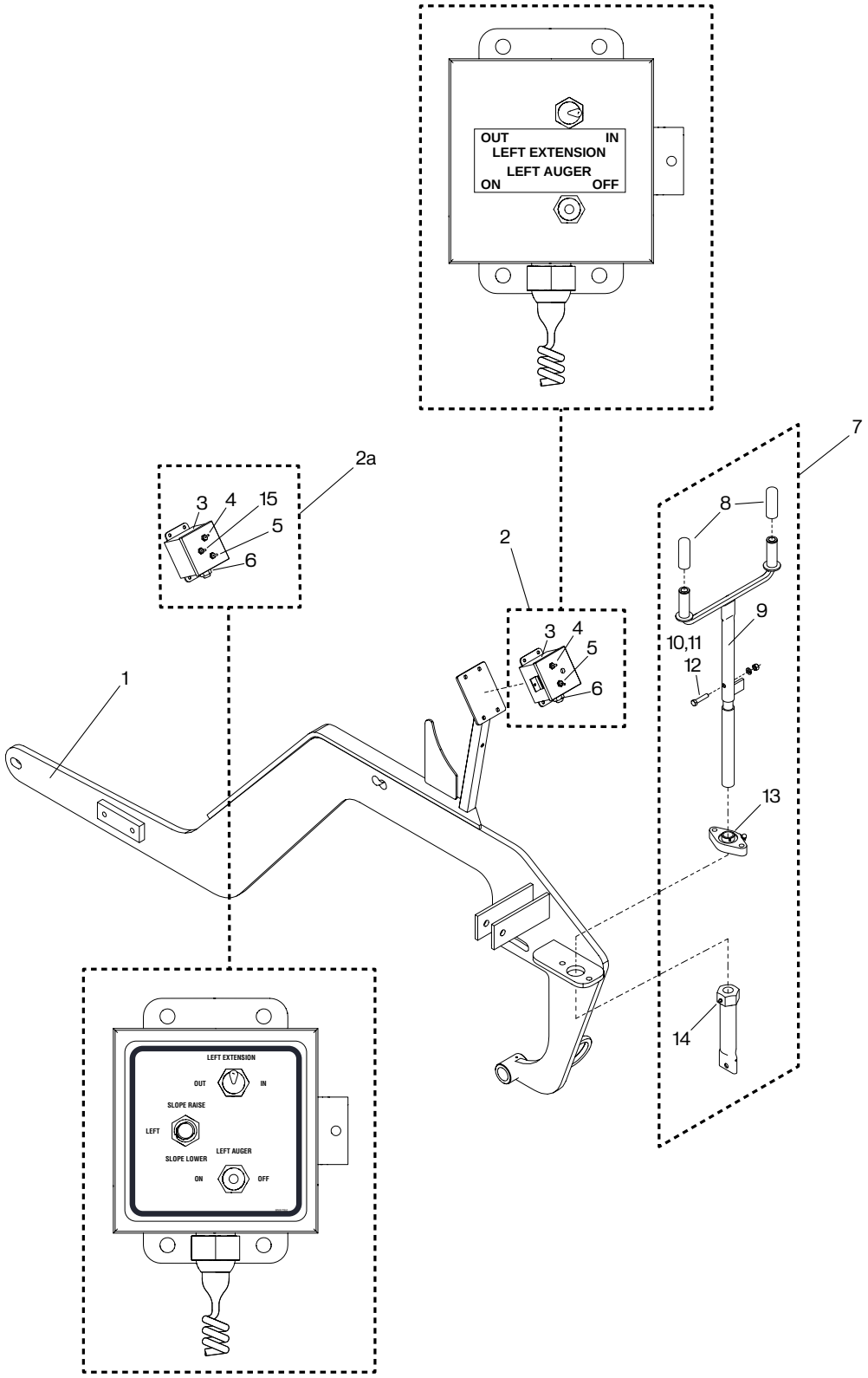


Figure 7-37 Screed Pull Arm Assembly (Right)

Screed Pull Arms Assembly (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	984896SRV	1	Assembly, Screed Arm, 8515 (Right)	
2	984535R	1	Enclosure, Electric, 2 SW, LW Control (Right)	Non-Sloping Extension
2a	984534R	1	Enclosure, Electric, 3 SW, LW Control (Right)	Sloping Extension
3	984533-03R	1	Enclosure, Electric, 4x4x3, 3 Holes (Right)	
4	851391	1	Switch, Toggle, SPST, 2-Position	
5	851392	1	Switch, Toggle, SPDT, 3-Position, MOM	
6	3200DI	1	Strain Relief, 1/2	
7	851370SRV	1	Assembly, Flight Screw	
8	870276	2	Hand Grip, Flight/Depth Screw	
9	859365	1	Sub-Assembly, Flight Screw	
10	100-6-16-28-5	1	CSHH, 3/8-16 x 1.75, GR5	
11	302-6	1	Washer, Lock, 3/8	
12	200-6-16-5	1	Nut, Hex, 3/8-16, GR5	
13	870030	1	Bearing, Screed Flight Screw	
14	140610	1	Fitting, Lube, Straight, 1/4-28	
15	851393	1	Switch, Toggle, SPDT, 3-Position, MOM, LK	

CITRUS TANK & HEAT CONTROL BOX

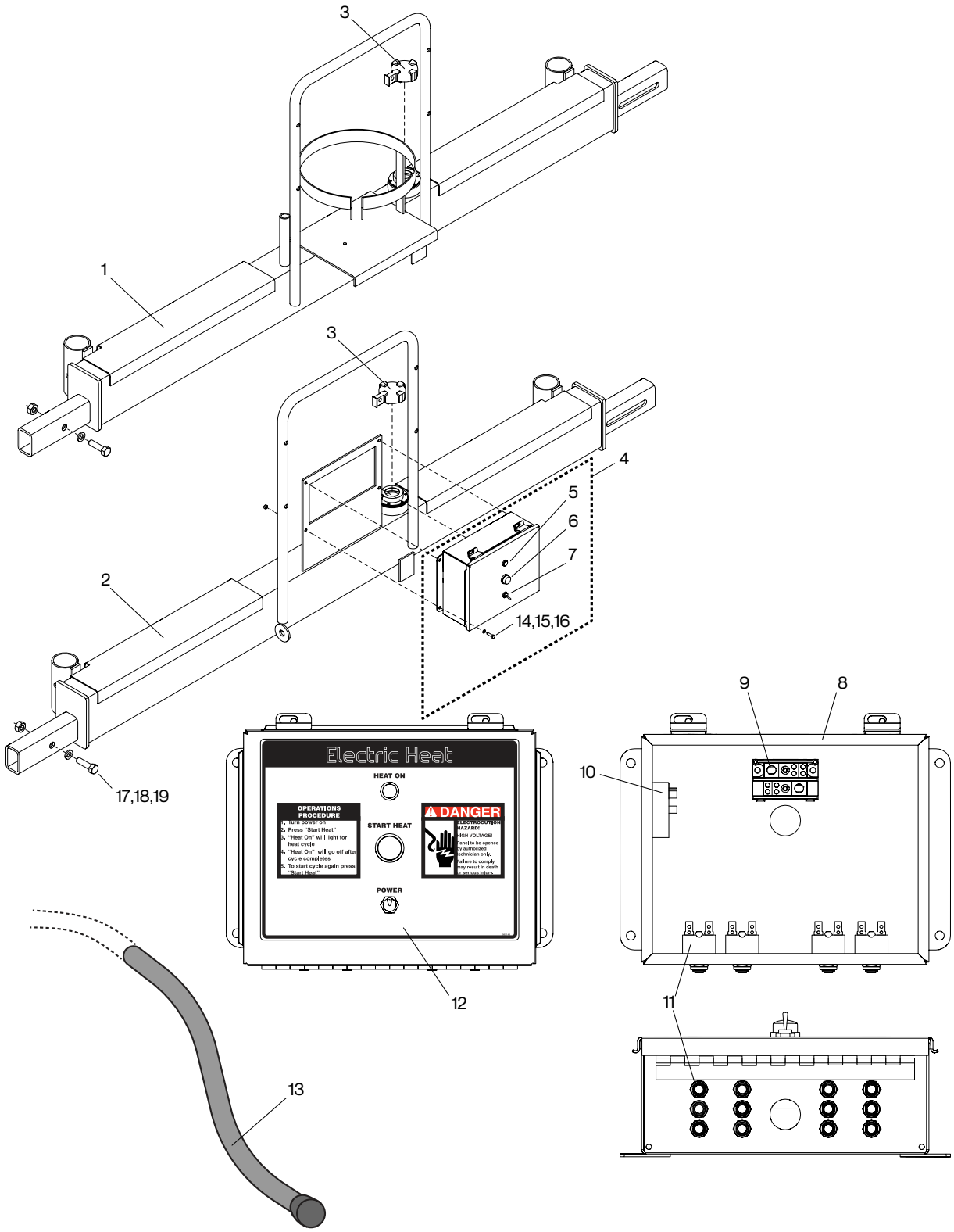


Figure 7-38 Citrus Tank & Heat Control Box

Citrus Tank & Heat Control Box

Item No.	Part Number	Qty.	Description	Remarks
1	985777SRV	1	Assembly, Screed, Citrus, Tank, Propane	Includes Item 3
2	1008862SRV	1	Assembly, Screed, Citrus, Tank, Electric	Includes Item 3
3	140030FL	1	Cap, Fuel Tank, Lockable	
REF	140030GK	1	Strainer & Gasket Kit	Not Shown
4	1010397	1	Assembly, Electric Heat Control	
5	31983	1	Light, Red, Dash, .500 Hole	
6	982249	1	Switch, Push Button	
7	851391	1	Switch, Toggle, SPST, 2-Position	
8	1010397-01	1	Enclosure, Electric Heat w/Holes	
9	985138-04	1	Block, Terminal	
10	985142	1	Timer, Electric, .06 - 60 minute	
11	1009228	12	Circuit Breaker, 10A	
12	985143	1	Decal, Electric Heat	
13	985138-03	1	Power Cord, Bulkhead to Control Box	
14	100-5-18-8-5F	4	CSHH, 5/16-18 x .50, GR5, FT	
15	302-5	4	Washer, Lock, 5/16	
16	200-5-18-5	4	Nut, Hex, 5/16-18, GR5	
17	100-10-11-56-5	2	CSHH, 5/8-11 x 3.50, GR5	
18	302-10	2	Washer, Lock, 5/8	
19	200-10-11-5	2	Nut, Hex, 5/8-11, GR5	

VIBRATOR ASSEMBLY (LEFT)

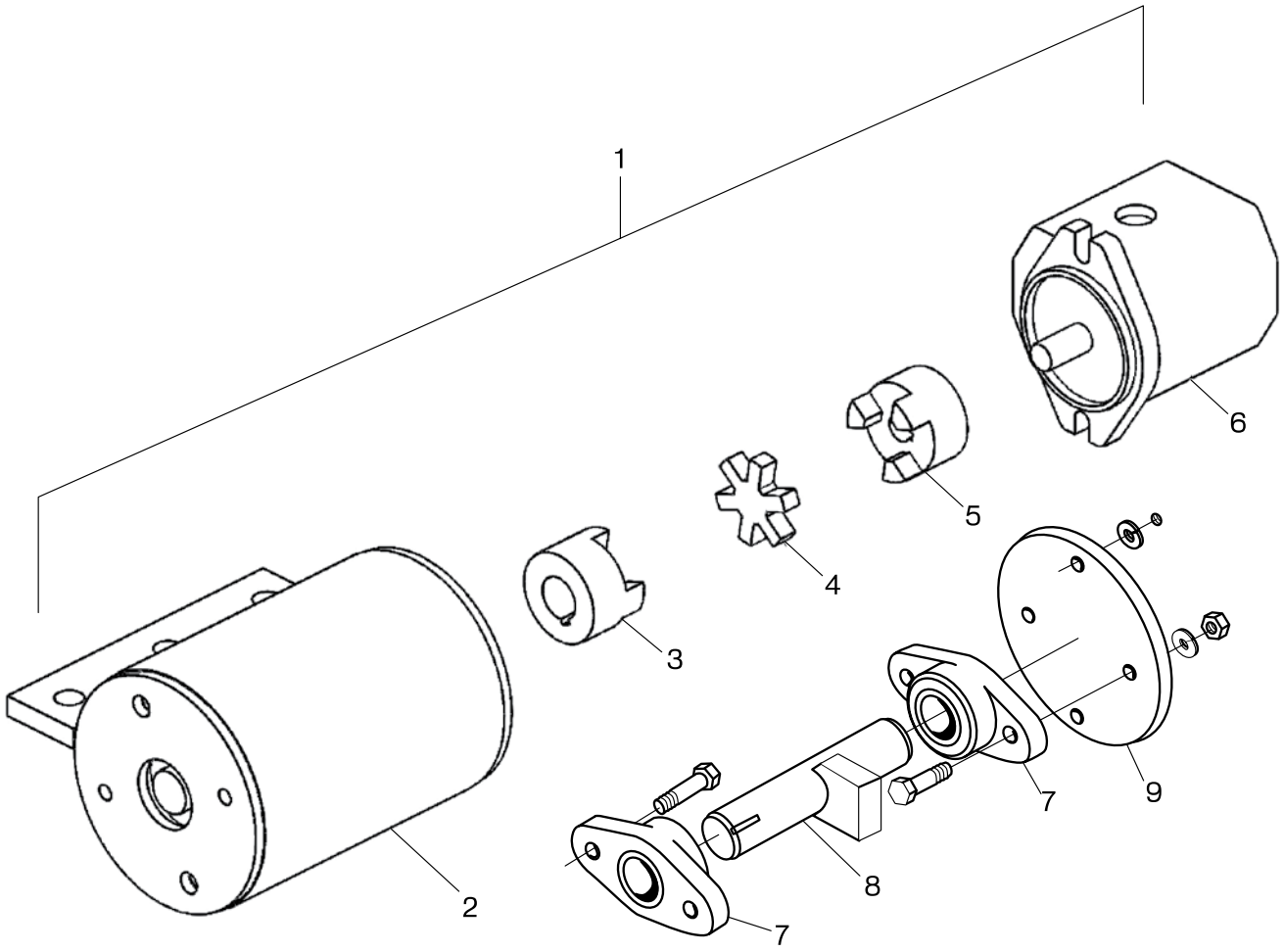


Figure 7-39 Vibrator Assembly (Left)

Vibrator Assembly (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	982965LSRV	1	Assembly, Vibrator (Left)	
2	982965L-1	1	Vibrator Housing (Left)	
3	880030	1	Coupling Half, 1.00, Vibrator Shaft	
4	280040	1	Insert, 3-Jaw Coupling	
5	280030	1	Coupling Half, Tack Pump Motor	
6	983405	1	Hydraulic Motor, Screed Vibrator	
7	250150	2	Bearing, Conveyor Pulley/Vibrator Shaft	
8	880062	1	Shaft, Vibrator Eccentric	
9	880071	1	Plate, Vibrator Housing	
REF	982965RSRV	1	Assembly, Vibrator (Right)	
REF	982965R-1	1	Vibrator Housing (Right)	

WALK BOARD ASSEMBLY

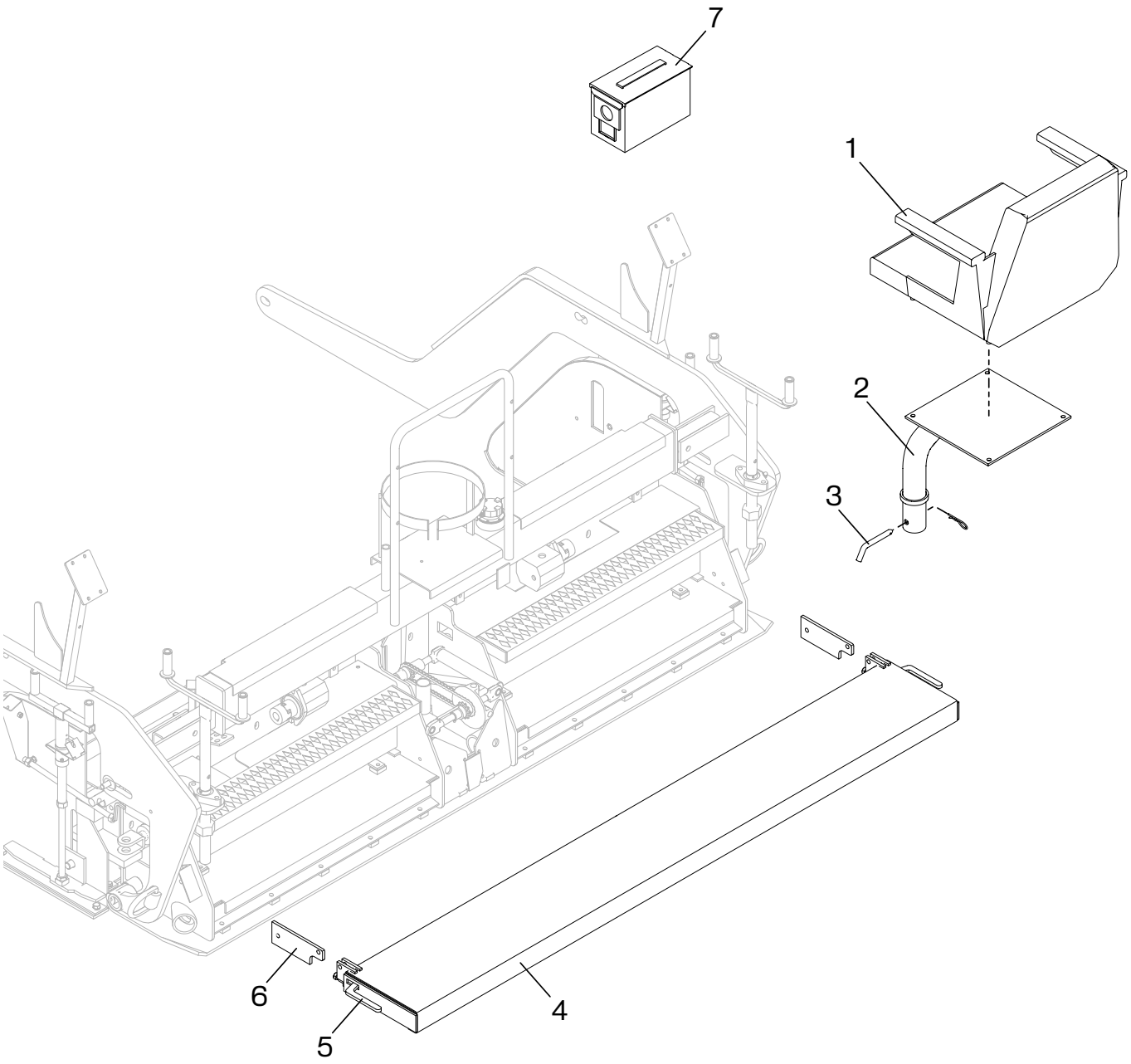


Figure 7-40 Walk Board Assembly

Walk Board Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	360010	1	Assembly, Seat w /Armrest, White	
2	988640SRV	1	Assembly, New Style Seat Post, Short	
3	72836	1	Pin, .50 x 3.00 w/Cotter Hairpin	
4	987056SRV	1	Assembly, Walk Board, Long	Includes item 5 & 6
5	985163	2	Plate, Walkboard Hinge	
6	985549	2	Latch, Walkboard	
7	851169	1	Tool Box	
REF	920235	A/R	Umbrella	Option, Not Shown

SLIDE PLATE ASSEMBLY

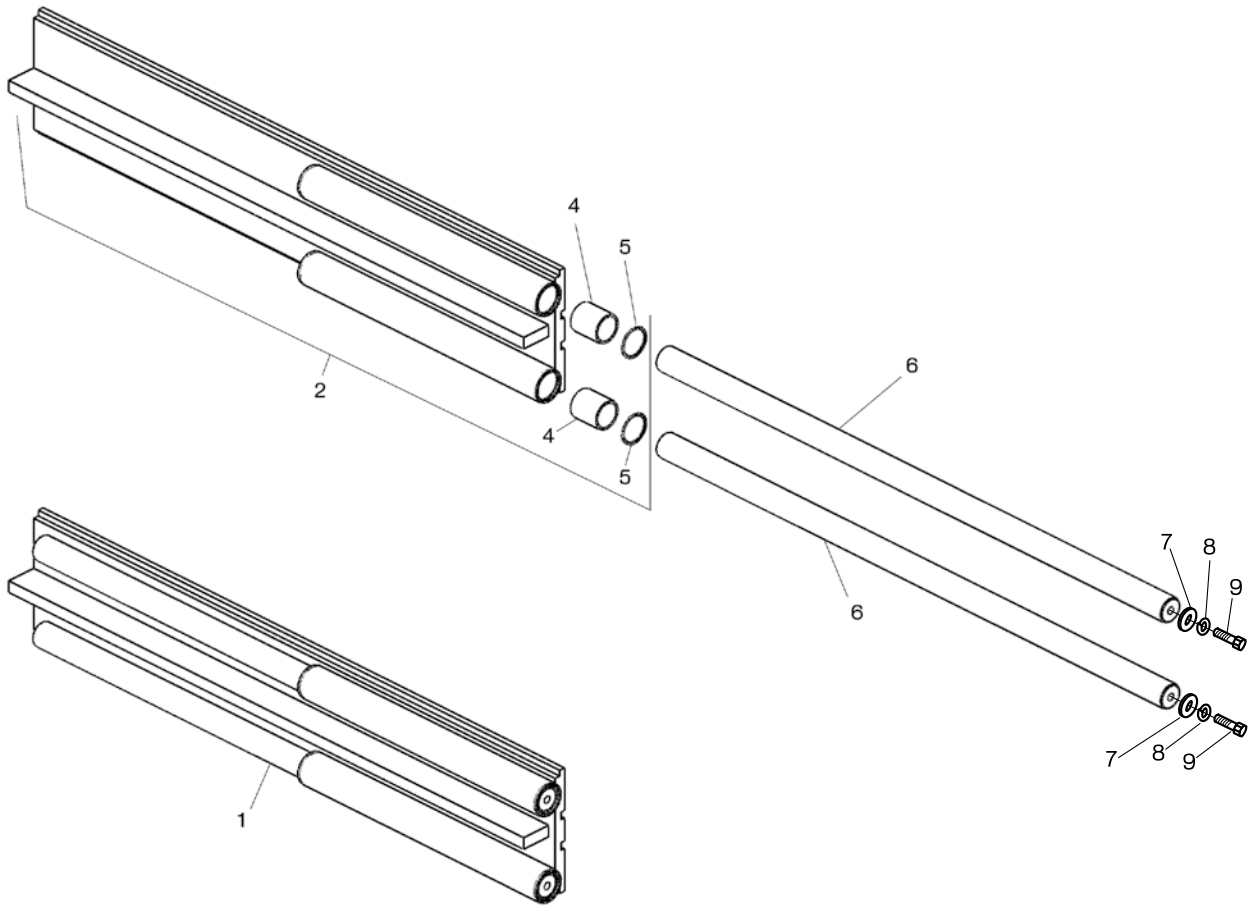


Figure 7-41 Slide Plate Assembly

Slide Plate Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	1002186	1	Assembly, Slide Plate, w/Chrome Rods	
2	1002181	1	Assembly, Slide Plate	
4	988588	4	Bushing	
5	851256	4	Snap Ring	
6	988601	2	Chrome Rod	
7	300-8	4	Washer, Flat, SAE,1/2	
8	302-8	4	Washer, Lock, 1/2	
9	100-8-20-24-5	4	CSHH, 1/2-20 x 1.50, GR5	

SCREED MISCELLANEOUS COMPONENTS

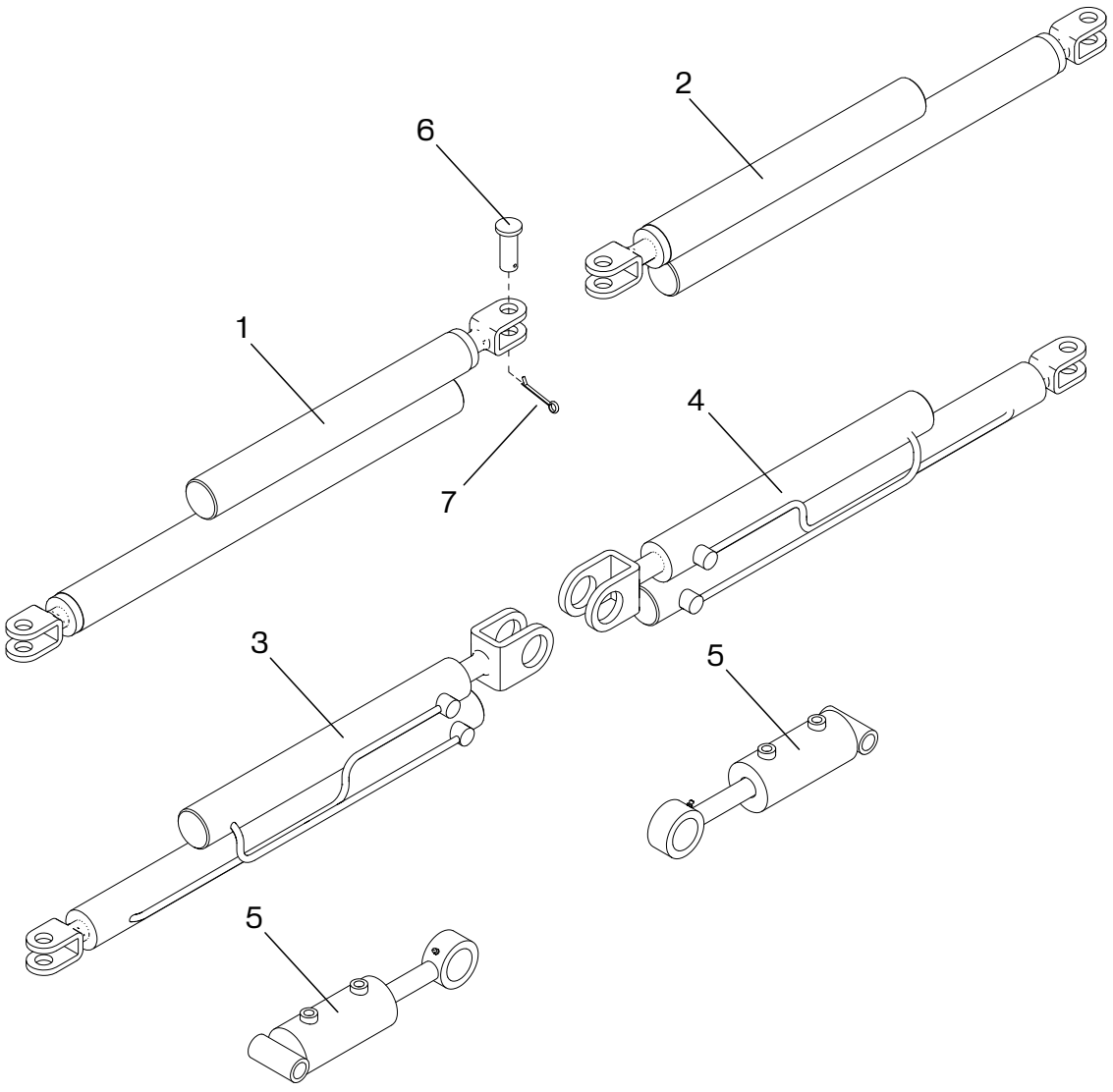


Figure 7-42 Screed Miscellaneous Components

Screed Miscellaneous Components

Item No.	Part Number	Qty.	Description	Remarks
1	851191	1	Cylinder, Hydraulic, 2.00 x 12.00/30.00 x 1.25 (Left)	Non Sloping Screed
2	851192	1	Cylinder, Hydraulic, 2.00 x 12.00/30.00 x 1.25 (Right)	Non Sloping Screed
REF	851191-01	A/R	Seal Kit, Cylinder, Hydraulic, 2.00 x 12.00/30.00 x 1.25	Not Shown
3	981710L	1	Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25 (Left)	Sloping Screed
4	981710R	1	Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25 (Right)	Sloping Screed
REF	981710-1	A/R	Seal Kit, Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	Not Shown
5	983421	2	Cylinder, Hydraulic, 2.75 x 2.00 x 1.125 Rod	
REF	983421-01	A/R	Seal Kit, Cylinder, Hydraulic, 2.75 x 2.00 x 1.125 Rod	Not Shown
6	210060	2	Pin, Clevis, 1.00 x 2.63 x 1.50 Head	
7	80338	2	Pin, Cotter, .188 x 2.00	

GENERATOR

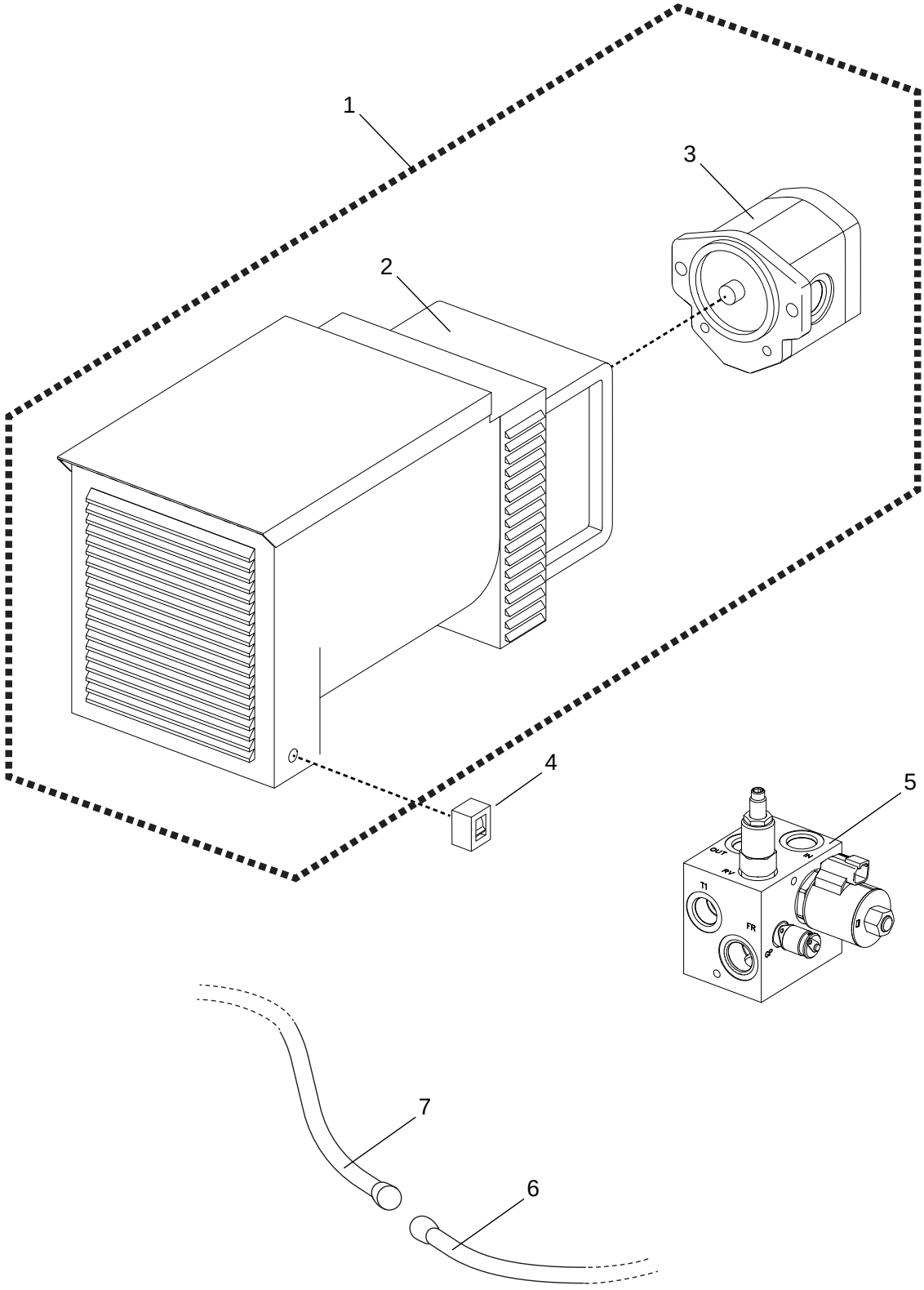


Figure 7-43 Generator

Generator

Item No.	Part Number	Qty.	Description	Remarks
1	987893SRV	1	Assembly, Generator, Hydraulic	
2	988176SRV	1	Generator	
3	986994SRV	1	Motor, Hydraulic, Generator	
4	985880	1	Breaker, Main	
5	986992	1	Manifold, Generator, w/Flow Control	
6	1007253	1	Power Cord, Bulkhead to Control Box	
7	1007254	1	Harness, Electric Heat, Gen. to Bulkhead	
REF	986658	1	Capacitor, Generator, 40 uF	Not Shown
REF	1011838	1	Capacitor, Generator, 35 uF	Not Shown
REF	1002148	1	Capacitor, Generator, 30 uF	Not Shown
REF	1002147	1	Capacitor, Generator, 25 uF	Not Shown
REF	1002146	1	Capacitor, Generator, 20 uF	Not Shown
REF	987894	1	Coupling Assembly, Motor/Generator, 28 mm	Not Shown
REF	1002454	1	Coupling Half, 3 Jaw, 24 mm	Not Shown

POWER CROWN (OPTION)

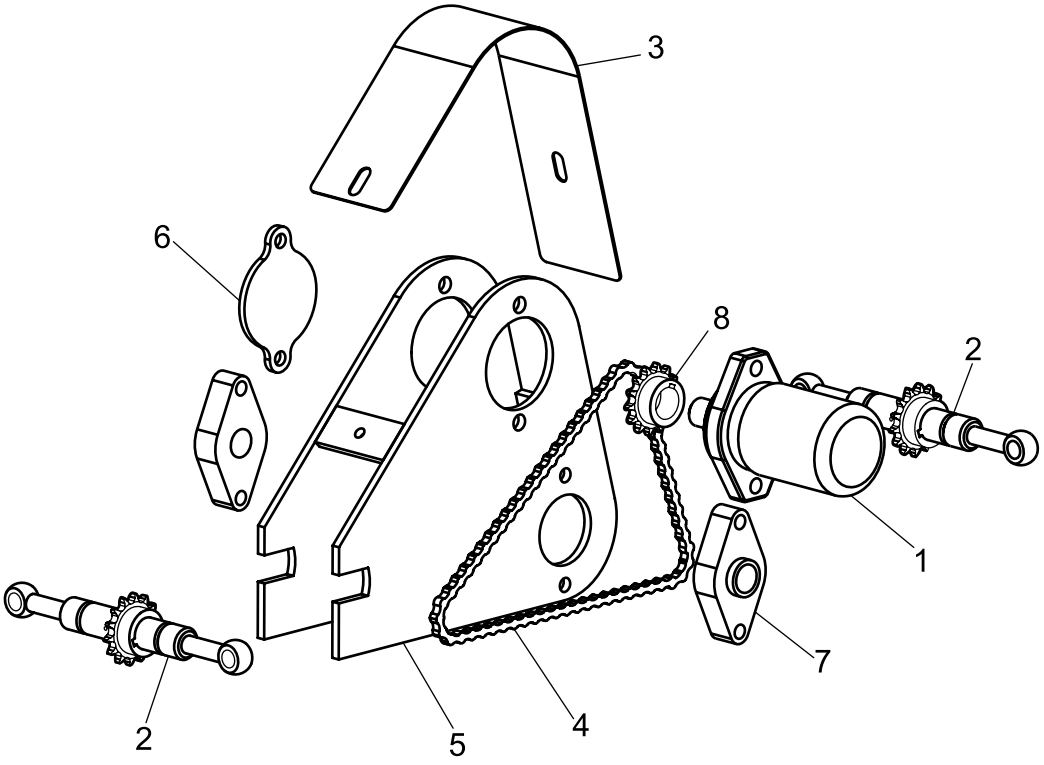


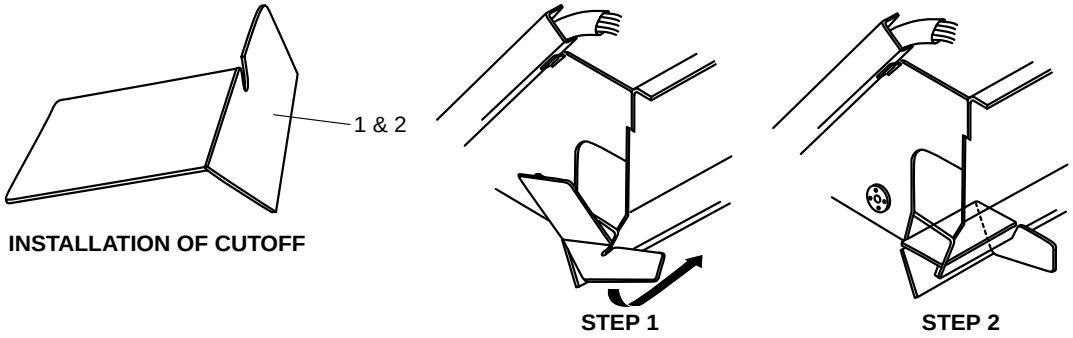
Figure 7-44 Power Crown (Option)

Power Crown (Option)

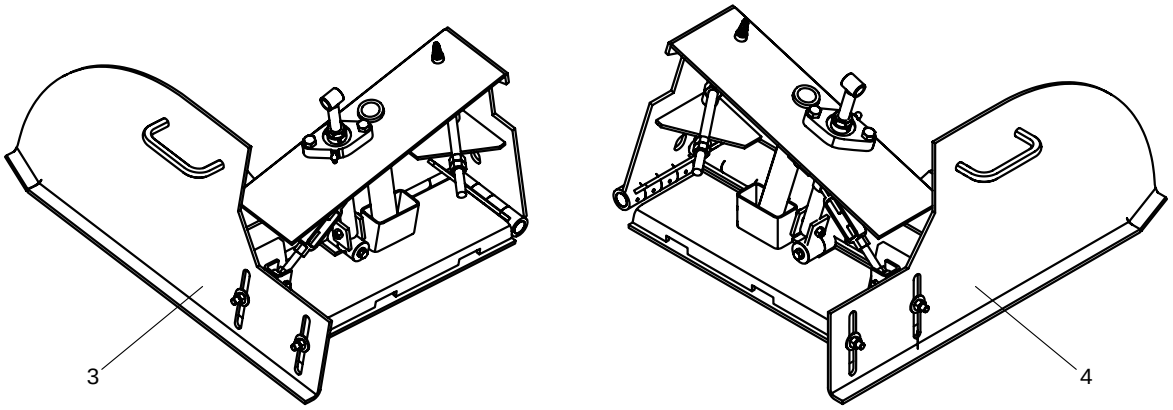
Item No.	Part Number	Qty.	Description	Remarks
1	986640	1	Motor, Power Crown	
2	986637SRV	2	Assembly, Crown Adjustment	Both Left and Right
2a	986636	1	Rod Extension (Right)	
2b	986650	1	Rod Extension (Left)	
3	986643	1	Cover, Power Crown	
4	986639SRV	1	Chain Turnbuckle	
5	986645	1	Power Crown Support	
6	986644	1	Motor Mount Cover	
7	986657	1	Bearing	
8	986641	1	Sprocket	

STRIKE OFFS AND EXTENSIONS (OPTION)

STRIKE OFF PLATE OPTIONS



ROLL-UP CURB ATTACHMENT - 24”



EXTENSION - 6”

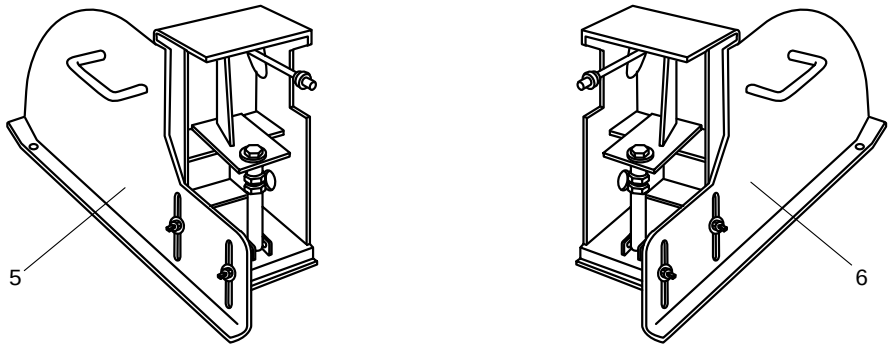


Figure 7-45 Strike Offs & Extension - Option

Strike Offs And Extensions (Option)

Item No.	Part Number	Qty.	Description	Remarks
1	860091LSRV	A/R	Strike Off, 12” (Left)	
2	860091RSRV	A/R	Strike Off, 12” (Right)	
REF	860095LSRV	A/R	Strike Off, 24” (Left)	Not Shown
REF	860095RSRV	A/R	Strike Off, 24” (Right)	Not Shown
3	851636LSRV	A/R	Roll Up Curb Attachment, 24” (Left)	Standard
4	851636RSRV	A/R	Roll Up Curb Attachment, 24” (Right)	Standard
REF	851635LSRV	A/R	Roll Up Curb Attachment, 12” (Left)	Not Shown
REF	851635RSRV	A/R	Roll Up Curb Attachment, 12” (Right)	Not Shown
5	851634LSRV	A/R	Extension, 6” (Left)	
6	851634RSRV	A/R	Extension, 6” (Right)	

PAVER LEVELING CONTROL TOPCON SYSTEM 4 (OPTION)

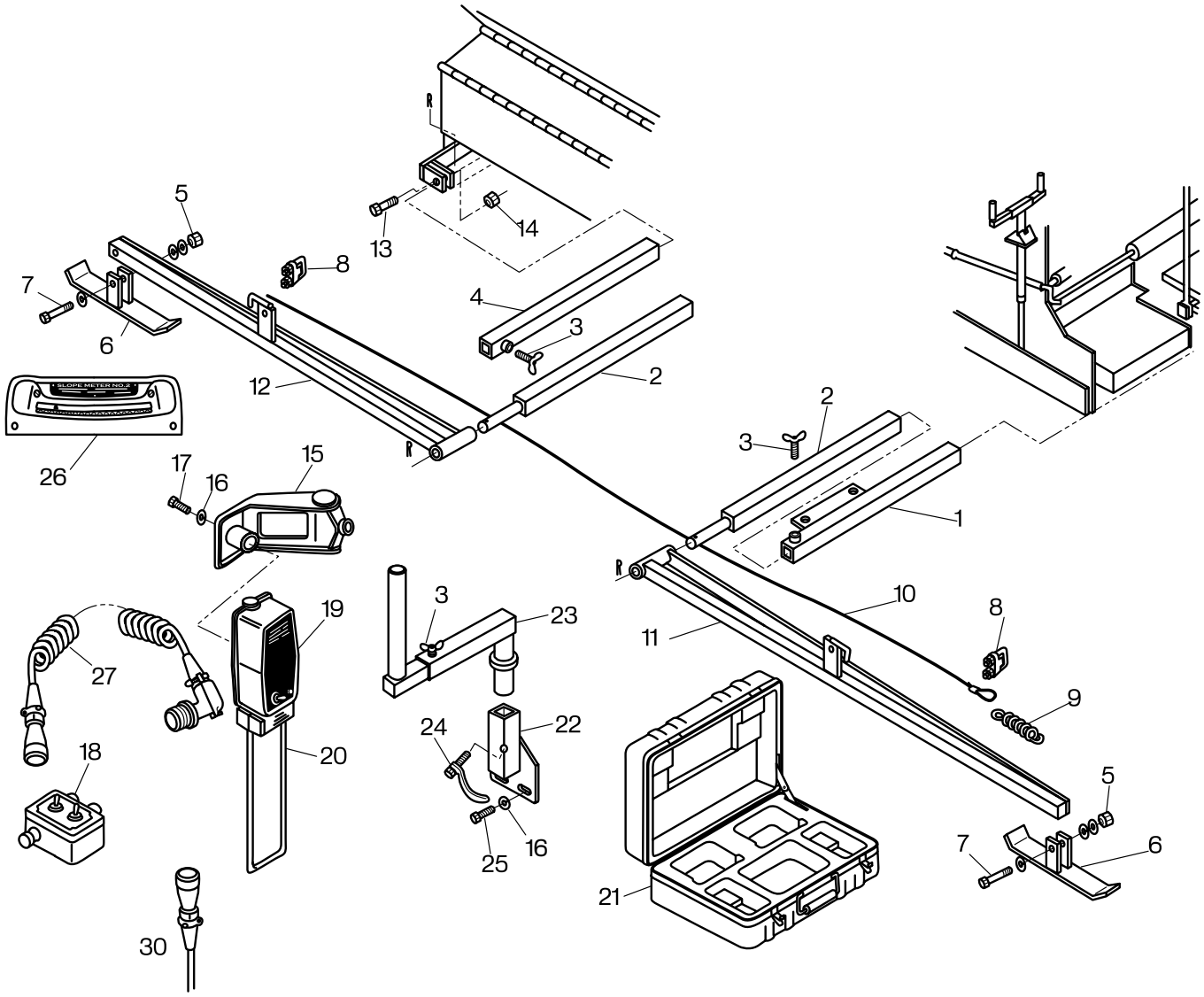


Figure 7-46 Paper Leveling Control TopCon System 4

Paver Leveling Control TopCon System 4 (Option)

Item No.	Part Number	Qty.	Description	Remarks
1	851241SRV	2	Housing, Rear Slide Bar	
2	851242SRV	2	Bar, Adjustable Slide	
3	920070	2	Thumb Screw, 3/8-16 x 1.00	
4	851243SRV	2	Housing, Front Slide Bar	
5	204-8-13-5	2	Nut, Lock, Stover, 1/2-13, GR5	
6	851249SRV	2	Skid	
7	100-8-13-40-5	2	CSHH, 1/2-13 x 2.50, GR5	
8	981981	2	Aluminum Cable Sleeve .0625	
9	851245	1	Spring, Tension	
10	851246	1	Cable 1.0625	
11	851247SRV	1	Arm, Skid Support (Rear)	
12	851248SRV	1	Arm, Skid Support (Front)	
13	100-10-11-40-5	1	CSHH, 5/8-11 x 2.50, GR5	
14	204-10-11-5	1	Nut, Lock, Stover, 5/8-11, GR5	
15	851578	1	Bracket, Sonic Tracker	
16	300-10	2	Washer, Flat, SAE, 5/8	
17	100-10-11-64-5	1	CSHH, 5/8-11 x 4.00, GR5	
18	987053SRV	1	AM Module/Cable Assembly, w/Base Plate	
REF	985866-01	1	AM Module Only	Not Shown
REF	985866-02	1	Cable, AM Module Only	Not Shown
REF	984596	1	Assembly, Cord Remote	Not Shown
19	851579	1	Sonic Tracker	
20	851581	1	Wire Bail, Temperature	
21	851265	1	Case, Sonic Tracker	
22	851575SRV	2	Pivot Mount, TopCon/Spectra Physics	
23	9090-1125SRV	1	Bracket, Z Arm, TopCon	
24	300060	1	Handle, Bolt, 5/8-11	
25	100-10-11-20-5F	1	CSHH, 5/8-11 x 1.25, GR5, FT	
26	851421	A/R	Slope Meter	
27	851574	A/R	Coiled Cord, TopCon Tracker/Slope	
REF	851584SRV	1	Assembly, 20 FT. Kit	Not Shown
REF	851585SRV	1	Assembly, 30 FT. to 40 FT. Kit	Not Shown
30	984596	1	Assembly, Cable Remote	Plugs into item 18

PAVER LEVELING CONTROL TOPCON SYSTEM P-32 (OPTION)

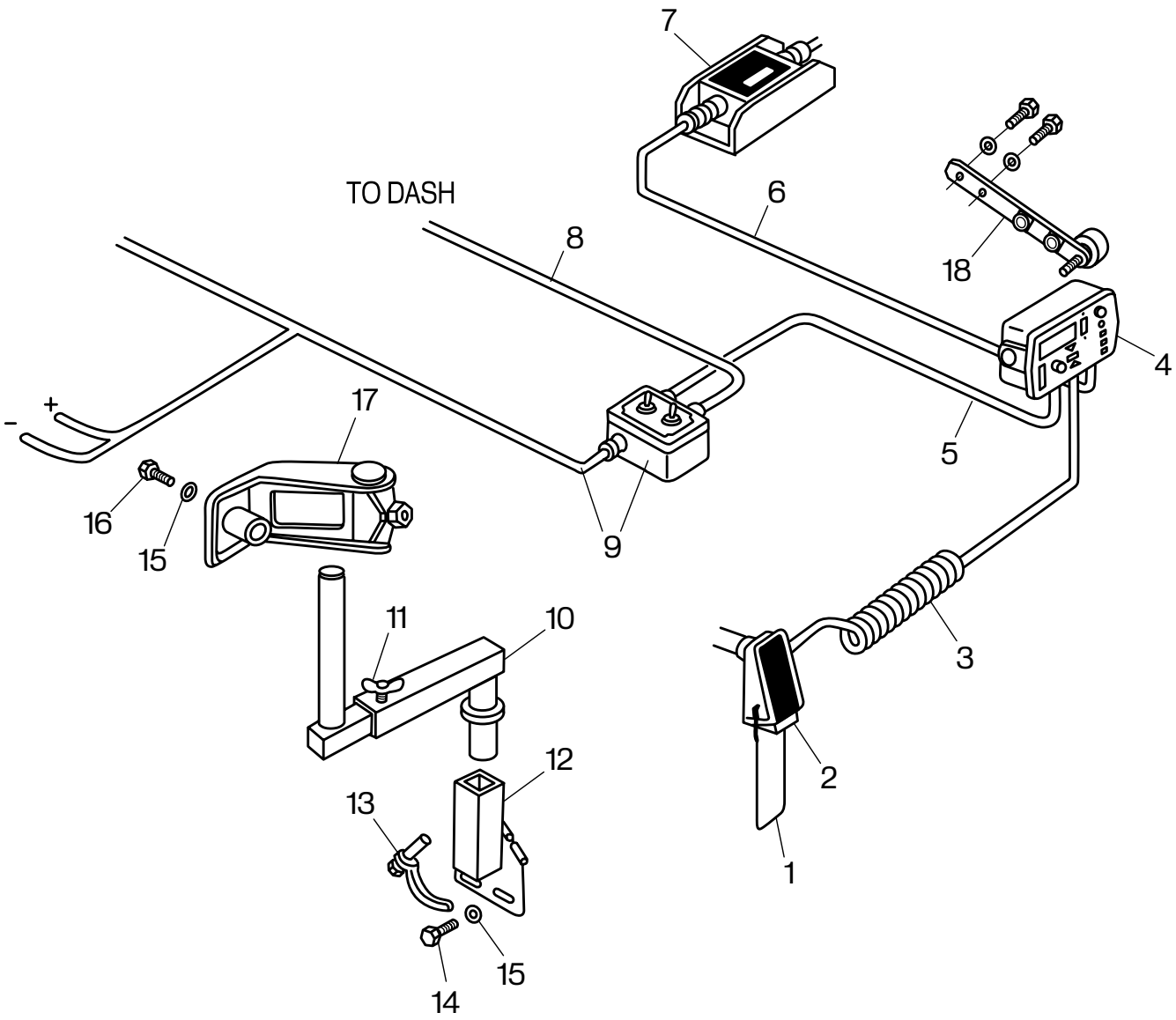


Figure 7-47 Paver Leveling Control TopCon System P-32 (Option)

Paver Leveling Control TopCon System P-32 (Option)

Item No.	Part Number	Qty.	Description	Remarks
1	983414-10	2	Assembly Temp. Bail w/Sleeves	
2	983414-01	2	TSD Sonic Tracker II	
3	983414-08	2	Coil Cord, 15 FT. CA to Tracker	
4	983414-02	2	TSD 3 Conn SS Paver Box	
5	983416-01	2	Cable Junction Box to Control Box	
6	1010499-10	2	Slope Cable 5 Foot	
7	1010499-09	2	Slope Sensor	
8	984596	2	Assembly, Cord Remote	
9	987053SRV	2	Assembly, AM Module & Cable	
10	9090-1125SRV	2	Bracket, Z Arm, TopCon	
11	920070	2	Thumb Screw, 3/8-16 x 1.00	
12	851575SRV	2	Pivot Mount, TopCon/Spectra Physics	
13	300060	2	Handle, Bolt, 5/8-11	
14	100-10-11-20-5F	4	CSHH, 5/8-11 x 1.25, GR5, FT	
15	300-10	6	Washer, Flat, SAE, 5/8	
16	100-10-11-64-5	2	CSHH, 5/8-11 x 4.00, GR5	
17	851578	2	Bracket, Sonic Tracker	
18	1010499-05	2	Assembly, CB Bracket	
REF	1014915SRV	1	Dual Grade & Slope	P-32 Kit, Not Shown
REF	1014914SRV	1	Dual Grade Control	P-32 Kit, Not Shown

TRUCK HITCH ASSEMBLY (OPTION)

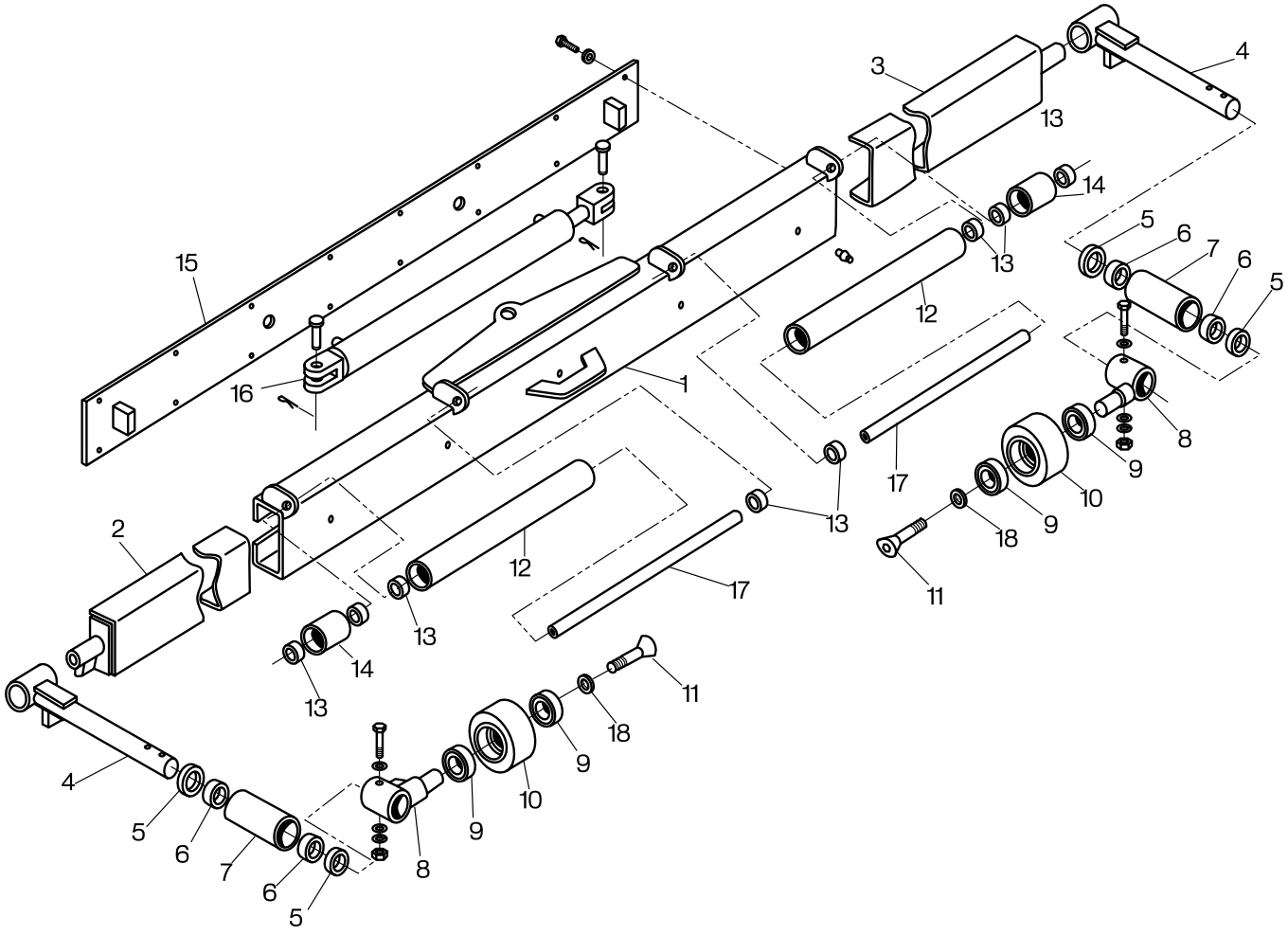


Figure 7-48 Truck Hitch Assembly (Option)

Truck Hitch Assembly (Option)

Item No.	Part Number	Qty.	Description	Remarks
REF	1000253SRV	1	Assembly, Truck Hitch	Not Shown
1	930015	1	Support, Pivot Bar	
2	930020SRV	1	Arm Extension (Right)	
3	930025SRV	1	Arm Extension (Left)	
4	930030SRV	2	Arm, Assembly, Truck Hitch Wheel Pivot	
5	620400	4	Collar, Lock	
6	810070	4	Bushing, 2.00 ID x 2.50 OD x 2.50	
7	930040	2	Roller	
8	930045SRV	2	Assembly, Axle, Guide Wheel	
9	930050	2	Bearing, Truck Hitch Roller	
10	930055	2	Guide Wheel, Truck Hitch	
11	100-8-13-32-5	2	CSHH, 1/2-13 x 2.00, GR5	
12	810102	2	Push Roller, Truck Wheel	
13	810110	8	Bearing, Push Roller (1.25)	
14	930060	2	Roller Extension, Bumper	
15	930065	1	Cover, Back Panel	
16	930070	1	Cylinder, Arm Extension	
REF	930070-01	1	Seal Kit	Not Shown
REF	852250	1	Valve Truck Hitch	Not Shown
17	930075	2	Shaft, Bumper Roller	
18	851112	2	Washer, Counter Sunk, 1/2	
REF	984399	1	Hose Kit 8515 Truck Hitch	Not Shown
REF	852250	1	Selector Valve, Conveyor	Not Shown

815HD SERIES SCREED 8515 SLOPING OVERVIEW

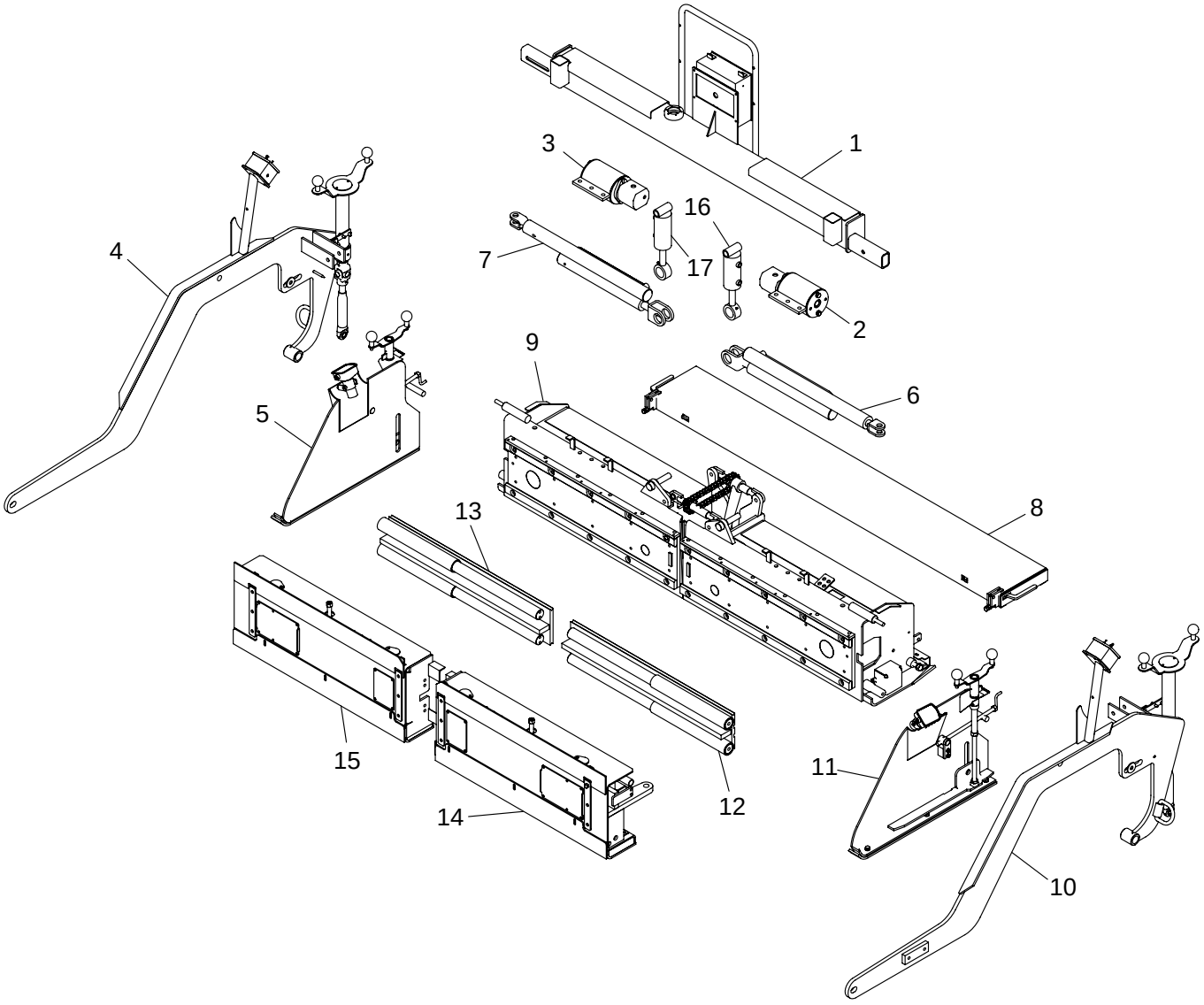


Figure 7-49 815HD Series Screed - 8515 Sloping Figure List

815HD Series Screed 8515 Sloping Overview

Item No.	Ref. Figure	Description	Remarks
1	7-62	Screed Citrus Tank and Electric Heat Control Box	
2	7-53	Screed Vibrator Assembly (Left)	
3	7-53	Screed Vibrator Assembly (Right)	
4	7-61	Screed Pull Arm and Remote Control Box (Right)	Sloping & Non-Sloping
5	7-59	Screed Endgate Assembly (Right)	
6	7-42	Screed Miscellaneous Components	
7	7-42	Screed Miscellaneous Components	
8	7-54	Screed Walk Board Assembly	
9	7-51	Screed Frame Sloping	
10	7-60	Screed Pull Arm and Remote Control Box (Left)	Sloping & Non-Sloping
11	7-58	Screed Endgate Assembly (Left)	
12	7-55	Screed Slide Plate Assembly	
13	7-55	Screed Slide Plate Assembly	
14	7-56	Screed Extension Assembly (Left)	
15	7-57	Screed Extension Assembly (Right)	
16	7-42	Screed Miscellaneous Components	
17	7-42	Screed Miscellaneous Components	

815HD SERIES SCREED 8515 NON-SLOPING OVERVIEW

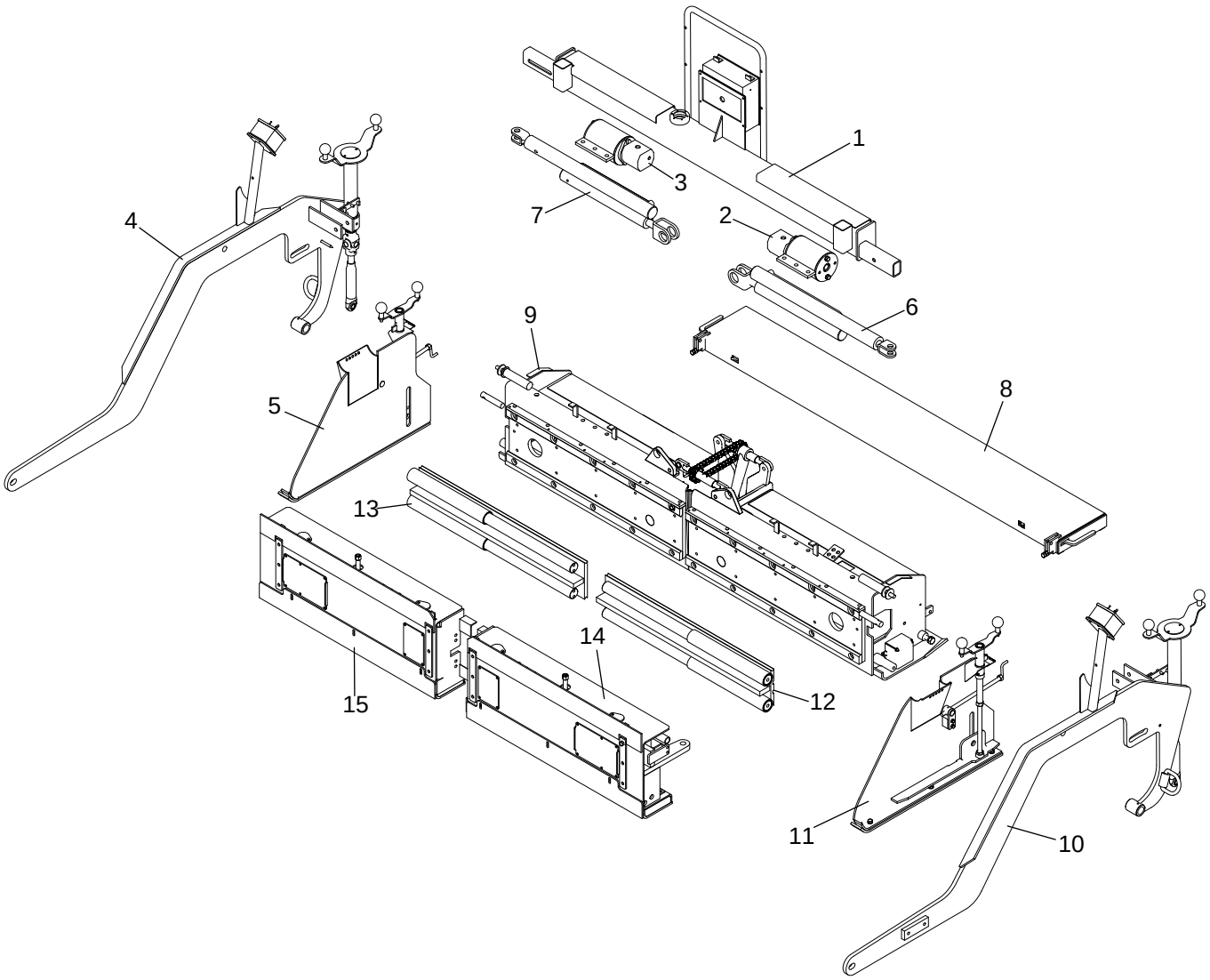


Figure 7-50 815HD Series Screed - 8515 Non-Sloping Figure List

815HD Series Screed 8515 Non-Sloping Overview

Item No.	Ref. Figure	Description	Remarks
1	7-62	Screed Citrus Tank and Electric Heat Control Box	
2	7-53	Screed Vibrator Assembly (Left)	
3	7-53	Screed Vibrator Assembly (Right)	
4	7-61	Screed Pull Arm and Remote Control Box (Right)	Sloping & Non-Sloping
5	7-59	Screed Endgate Assembly (Right)	
6	7-42	Screed Miscellaneous Components	
7	7-42	Screed Miscellaneous Components	
8	7-54	Screed Walk Board Assembly	
9	7-52	Screed Frame Non-Sloping	
10	7-60	Screed Pull Arm and Remote Control Box (Left)	Sloping & Non-Sloping
11	7-58	Screed Endgate Assembly (Left)	
12	7-55	Screed Slide Plate Assembly	
13	7-55	Screed Slide Plate Assembly	
14	7-56	Screed Extension Assembly (Left)	
15	7-57	Screed Extension Assembly (Right)	

815HD SERIES SCREED FRAME SLOPING

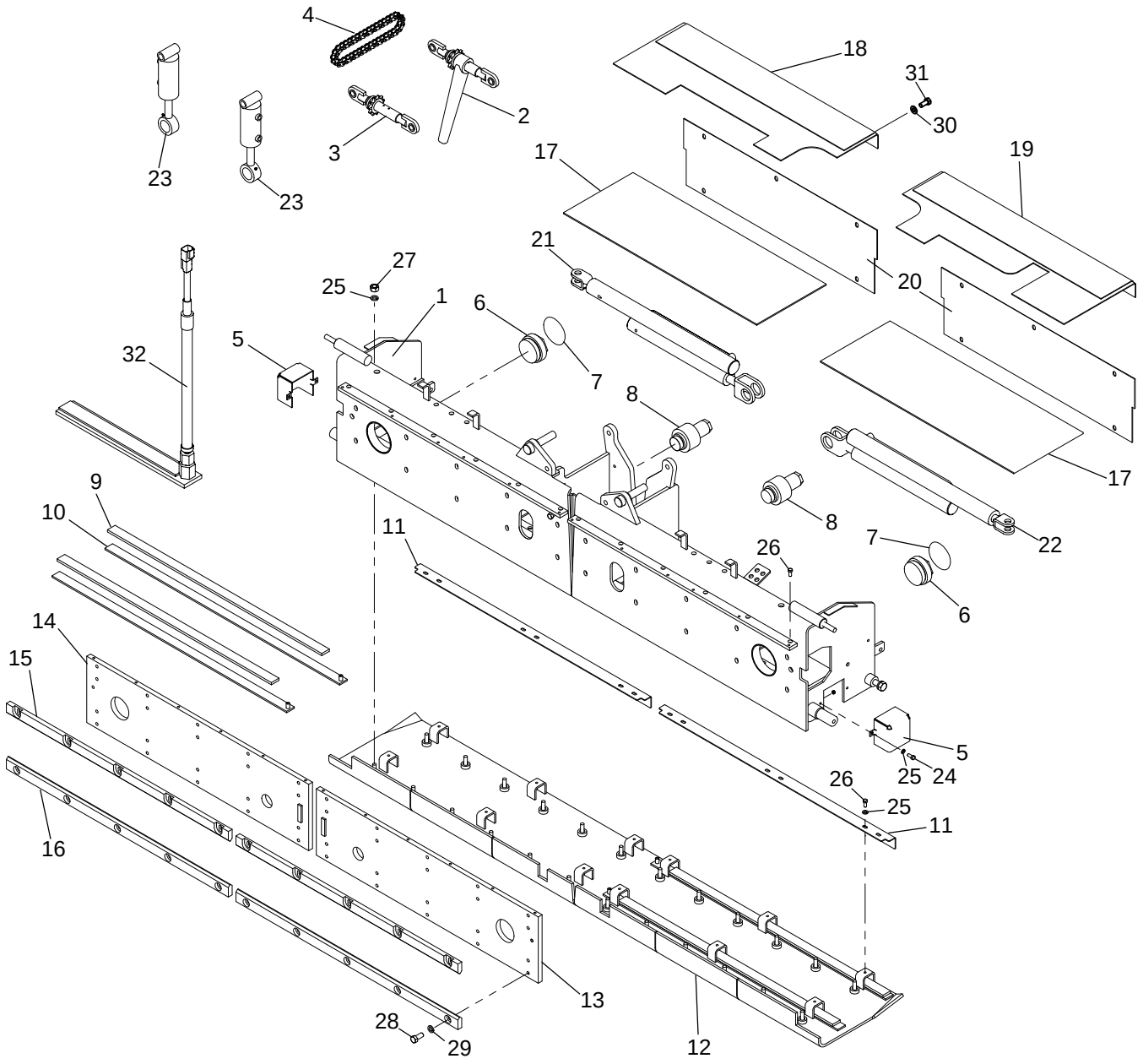


Figure 7-51 815HD Series Screed Frame Sloping

815HD Series Screed Frame Sloping

Item No.	Part Number	Qty.	Description	Remarks
1	1007195	1	Group, Screed Frame, 815HD	
2	983157	1	Assembly, Turnbuckle W/Ratchet	
3	980182	1	Assembly, Crown & Valley, Rear	
4	1008047	1	Chain, Roller, 60H x 39 Pitches	
REF	853411	1	Link, Master, #60 Chain	
5	985125	2	Cover, Elements, Screed Base	
6	981659	2	Pin, Slope	
7	981711	2	Plate, Pivot Cover	
8	981661	2	Pin, Cylinder Mount	
9	985121	4	Bar, Element Hold Down	
10	1007275SRV	4	Element, Heater, 46", 1000W	
11	1007002	2	Cover, Rear Elements	
12	1007089SRV	1	Wearplate, 3/8" Wear Plate With Studs	Not Include 9, 10, 11, 27,28
13	1008663	1	Weldment, Rail Mount (Left)	
14	1008662	1	Weldment, Rail Mount (Right)	
15	1006425	2	Bar, V-Groove Top Rail	
16	1006426	2	Bar, V-Groove Bottom Rail	
17	985149	2	Cover, Screed Elements	
18	1008758	1	Assembly, Upper Screed Cover (Right)	
19	1008757	1	Assembly, Upper Screed Cover (Left)	
20	1007000	1	Cover, Screed Lower (Left/Right)	
21	981710R	1	Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	
22	981710L	1	Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	
23	983421	2	Cylinder, Hydraulic, 2.75 x 2.00 x 1.125 Rod	
24	100-5-18-8-5F	4	CSHH, 5/16-18 x .50, GR5, FT	
25	302-5	34	Washer, Lock, 5/16	
26	100-5-18-24-5	18	CSHH, 5/16-18 x 1.50, GR5	
27	200-8-13-5	36	Nut, Hex, 1/2-13, GR5	
28	100-7-14-16-5F	20	CSHH, 7/16-14 x 1.00, GR5, FT	
29	302-7	20	Washer, Lock, 7/16	
30	100-8-13-32-5	12	CSHH, 1/2-13 x 2.00, GR5	
31	200-8-13-5	12	Nut, Hex, 1/2-13, GR5	
32	1015015SRV	1	Element, Heating, 250W/240V, 11” Complete	

815HD SERIES SCREED FRAME NON-SLOPING

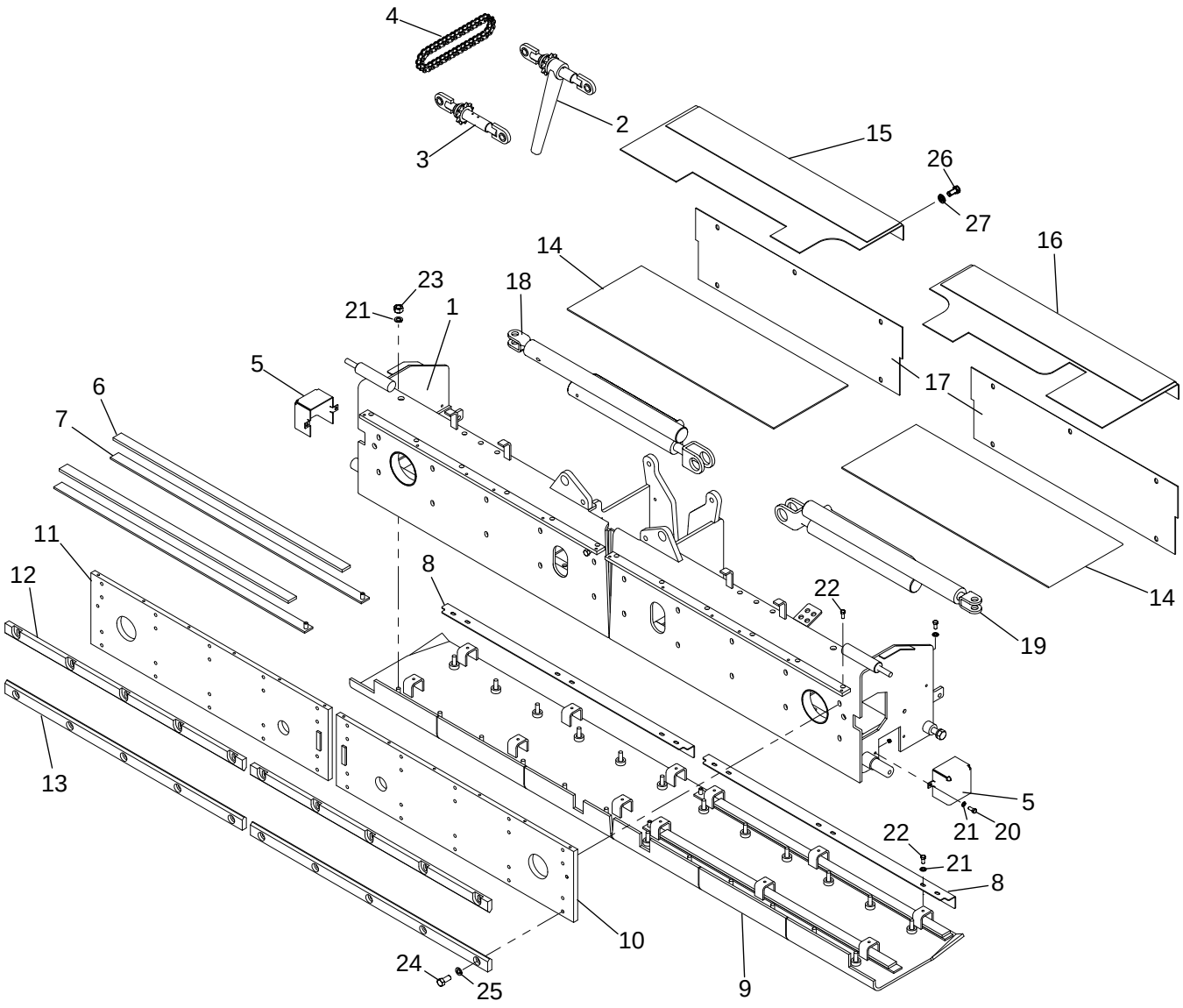


Figure 7-52 815HD Series Screed Non-Sloping

815HD Series Screed Frame Non-Sloping

Item No.	Part Number	Qty.	Description	Remarks
1	1007195SRV	1	Group, Screed Frame, 815HD	
2	983157	1	Assembly, Turnbuckle W/Ratchet	
3	980182	1	Assembly, Crown & Valley, Rear	
4	1008047	1	Chain, Roller, 60H X 39 Pitches	
REF	853411	1	Link, Master, #60 Chain	
5	985125	2	Cover, Elements, Screed Base	
6	985121	4	Bar, Element Hold Down	
7	1007275SRV	4	Element, Heater, 46", 1000W	
8	1007002	2	Cover, Rear Elements	
9	1007089SRV	1	Wearplate, 3/8" Wear Plate With Studs	Not Include 9, 10, 11. 24, 25
10	1008663SRV	1	Weldment, Rail Mount (Left)	
11	1008662SRV	1	Weldment, Rail Mount (Right)	
12	1006425	2	Bar, V-Groove Top Rail	
13	1006426	2	Bar, V-Groove Bottom Rail	
14	985149	2	Cover, Screed Elements	
15	1008758	1	Assembly, Upper Screed Cover (Right)	
16	1008757	1	Assembly, Upper Screed Cover (Left)	
17	1007000	1	Cover, Screed Lower (Left/Right)	
18	981710R	1	Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	
19	981710L	1	Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	
20	100-5-18-8-5F	4	CSHH, 5/16-18 x .50, GR5, FT	
21	302-5	34	Washer, Lock, 5/16	
22	100-5-18-24-5	18	CSHH, 5/16-18 x 1.50, GR5	
23	200-8-13-5	36	Nut, Hex, 1/2-13	
24	100-7-14-16-5F	20	CSHH, 7/16-14 x 1.00, GR5, FT	
25	302-7	20	Washer, Lock, 7/16	
26	100-8-13-32-5	12	CSHH, 1/2-13 x 2.00, GR5	
27	302-8	12	Washer, Lock, 1/2	

815HD SERIES VIBRATOR ASSEMBLY

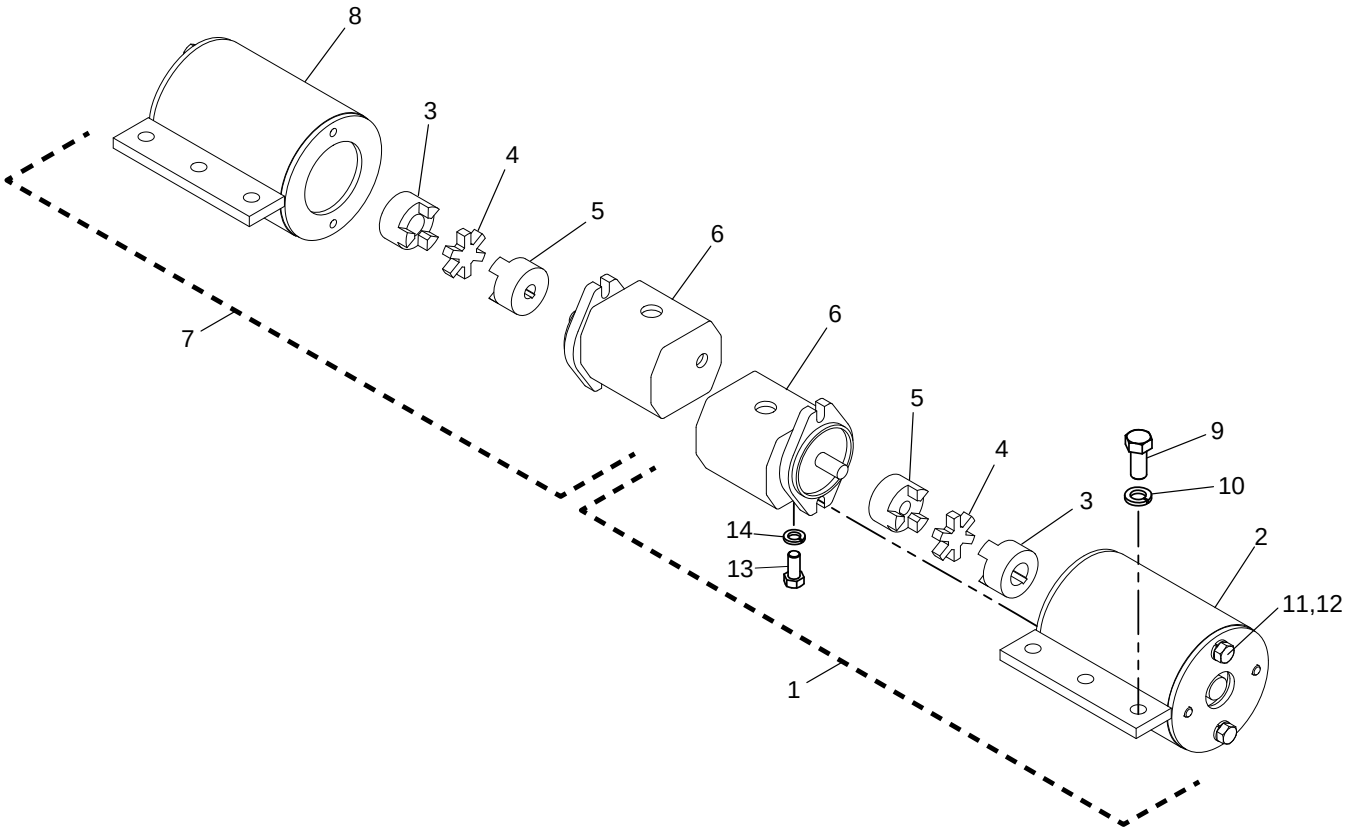


Figure 7-53 815HD Series Vibrator Assembly

815HD Series Vibrator Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	982965LSRV	1	Assembly, Vibrator (Left)	
2	982965L-1	1	Housing, Vibrator (Left)	
3	880030	1	Coupling Half, 3 Jaw, 1"	
4	280040	1	Insert, 3-Jaw Coupling	
5	280030	1	Coupling Half, 3 Jaw, 5/8"	
6	983405	1	Motor, Hydraulic, Gear, 1.17 Cir, "A"	
7	982965RSRV	1	Assembly, Vibrator (Right)	
8	982965R-1	1	Housing, Vibrator (Right)	
9	100-10-11-16-5F	3	CSHH, 5/8-11 x 1.00, GR5, FT	
10	302-10	3	Washer, Lock, 5/8	
11	100-5-18-12-5F	2	CSHH, 5/16-18 x .75, GR5, FT	
12	302-5	2	Washer, Lock, 5/16	
13	100-8-13-16-5F	2	CSHH, .1/2-13 x 1.00, GR5, FT	
14	302-8	2	Washer, Lock, 1/2	

815HD SERIES WALK BOARD ASSEMBLY

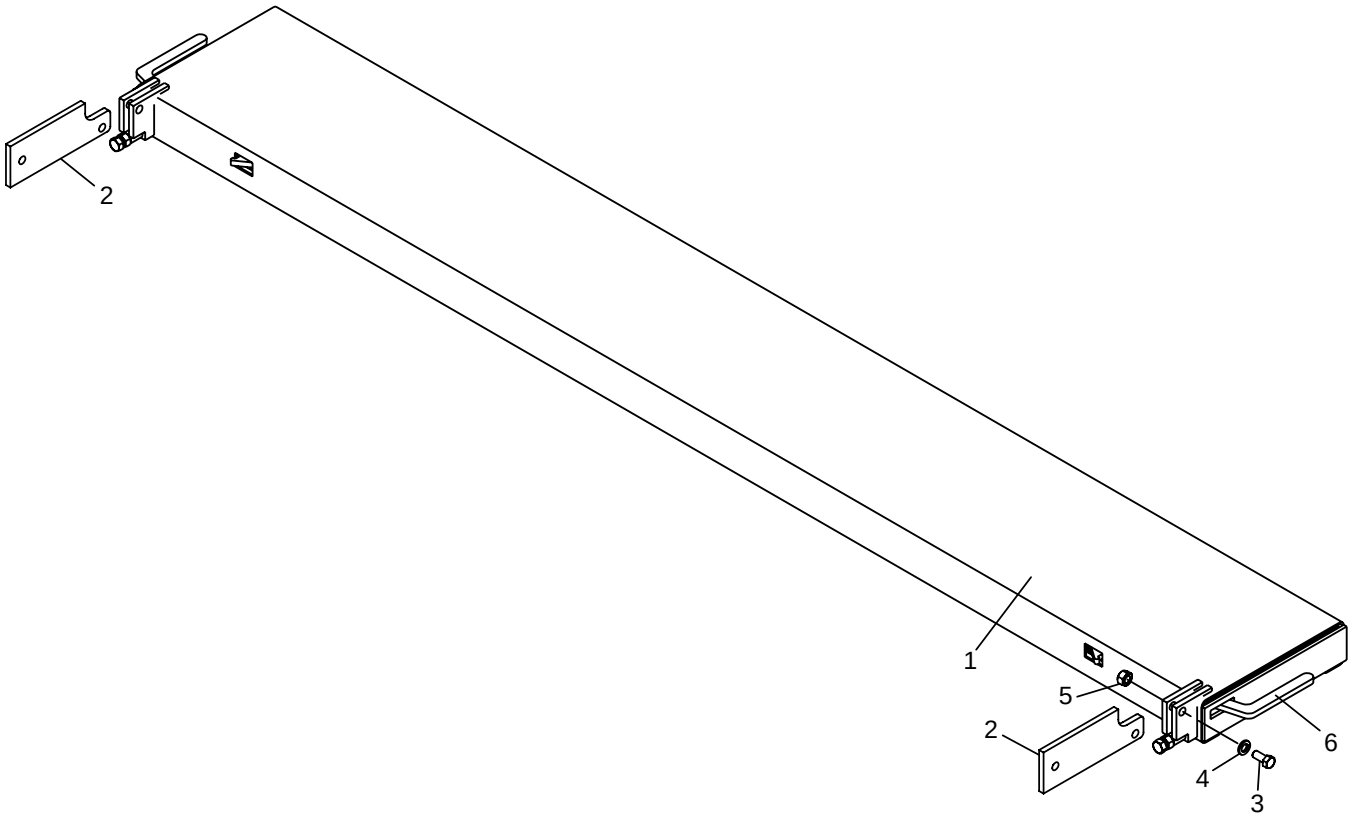


Figure 7-54 815HD Series Walk Board Assembly

815HD Series Walk Board Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	987056SRV	1	Assembly, Walkboard - Long	
2	985163	2	Plate, Walkboard Hinge	
3	100-8-13-20-5F	2	CSHH, 1/2-13 X 1.25, GR5, FT	
4	302-8	2	Washer, Lock, 1/2	
5	200-8-13-5	2	Nut, Hex, 1/2-13, GR5	
6	985549	2	Latch, Walkboard	
REF	250170	2	Spring, Extension	Use with Item 6

815HD SERIES SLIDE PLATE ASSEMBLY

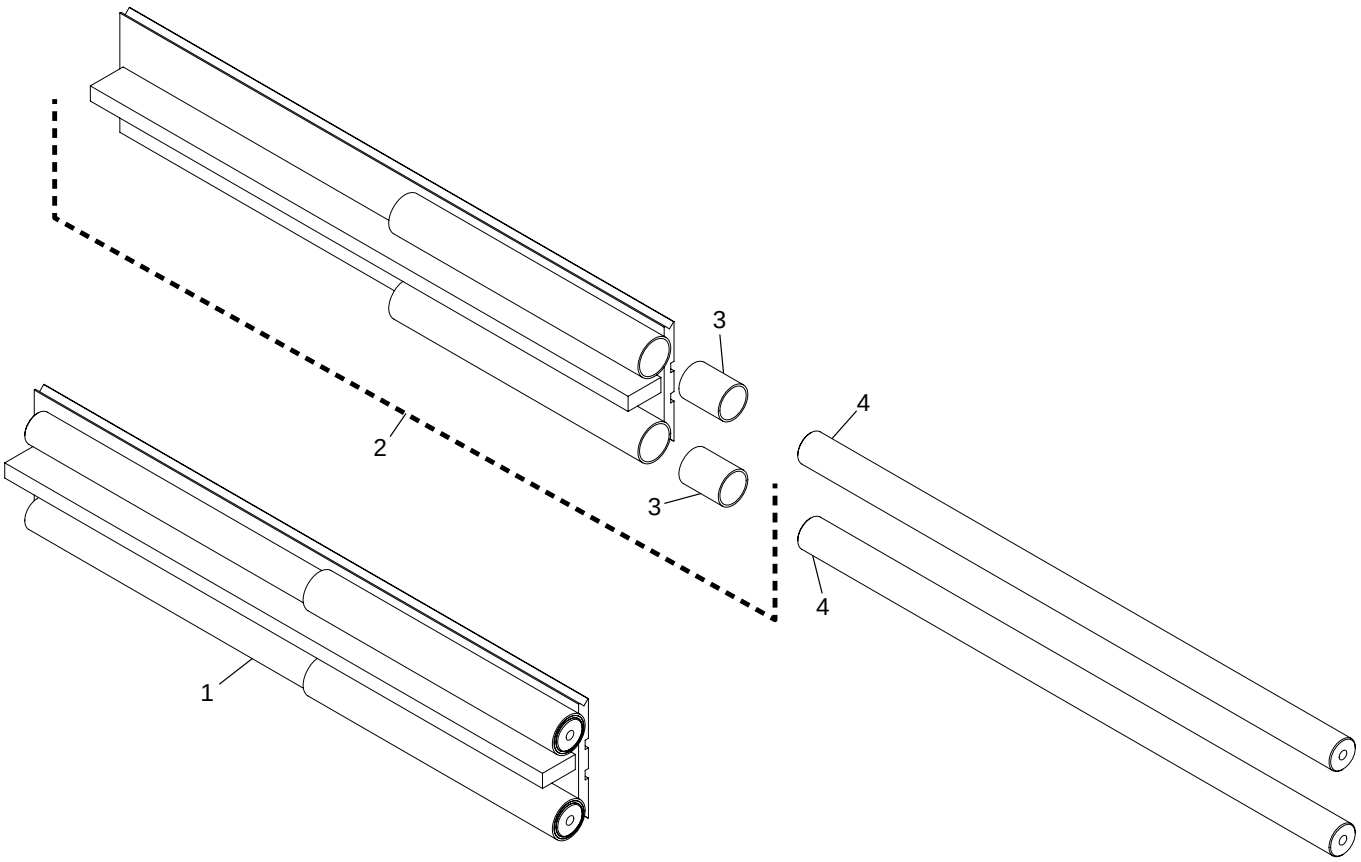


Figure 7-55 815HD Series Slide Plate Assembly

815HD Series Slide Plate Assembly

Item No.	Part Number	Qty.	Description	Remarks
1	1006416	1	Assembly, Slide w/Shafts, HD	
2	1006445	1	Assembly, Slide w/o Shafts	
3	1006417	4	Bushing, Fiber, 2.25 OD / 2.00 ID	
4	1006415	2	Shaft, Screed Extension, Chromed, HD	

815HD SERIES EXTENSION ASSEMBLY (LEFT)

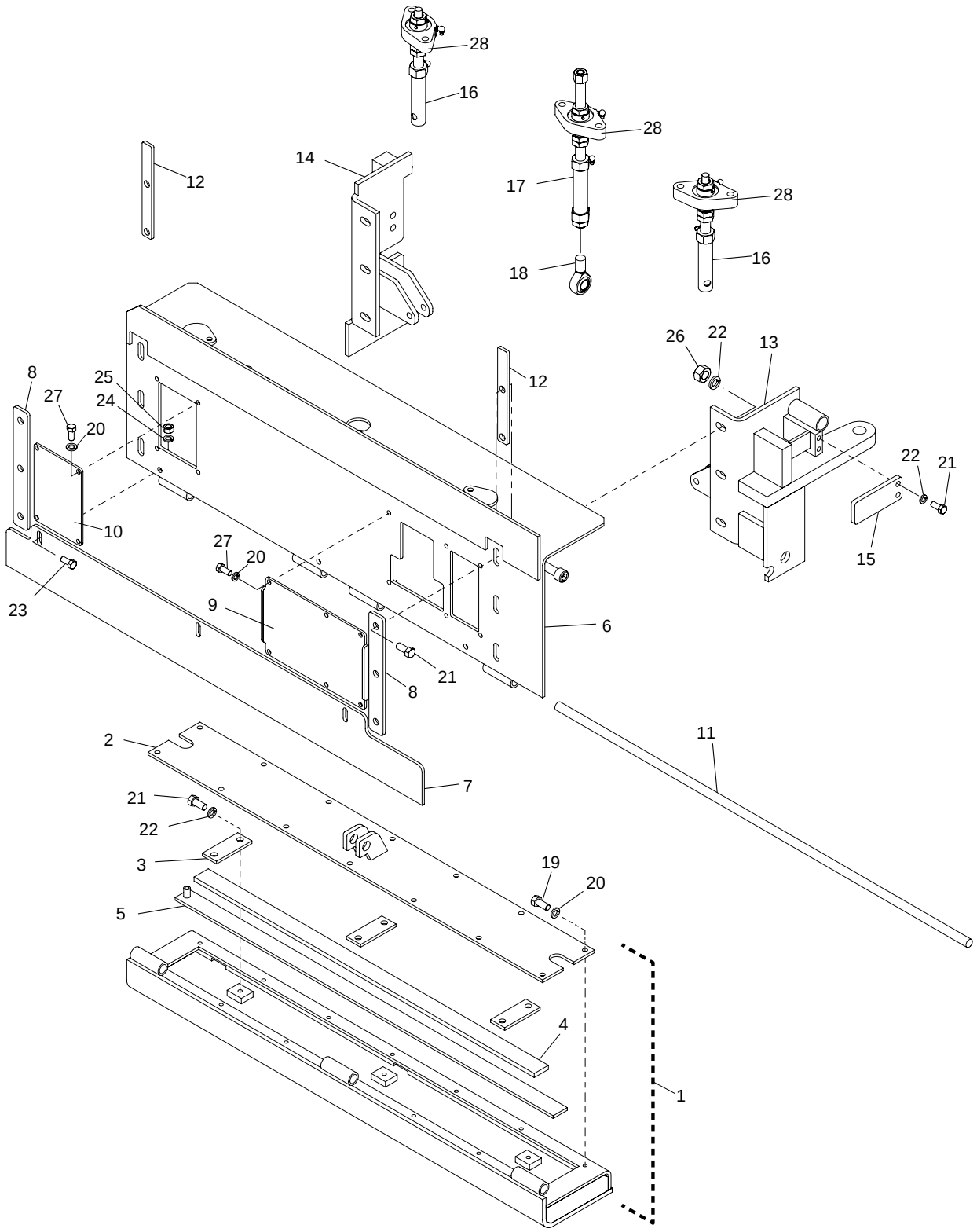


Figure 7-56 815HD Series Extension Assembly (Left)

815HD Series Extension Assembly (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	1006380SRV	1	Assembly, Extension Heatbox	Not Include 4, 5
2	1008665SRV	1	Weldment, Heatbox Cover	
3	985123	3	Clamp, Element, Screed Extension	
4	985120	1	Bar, .25 x 1.5 x 36	
5	987890SRV	1	Element, Heater, Screed, 41"	
6	1006378SRV	1	Assembly, Screed Extension, Slope (Left)	Includes all items
7	1006400	1	Plate, Extension Strikeoff	
8	1006395	2	Bar, Vertical Lift	
9	1008664	1	Weldment, Extension Vibrator Cover	
10	1006398	1	Plate, Extension Access Cover	
11	854447SRV	1	Round, .688 x 43.50 CRS	
12	1006397	2	Bar, Vertical Lift Gauge	
13	1007096	1	Assembly, Outer Extension Mount (Left)	
14	1007097	1	Assembly, Inner, Extension Mount (Left)	
15	1006536	1	Plate, Endgate Bracket w/Holes	
16	1006390	2	Assembly, Vertical Lift Adjust	
17	1006401	1	Assembly, AOA Adjuster	
18	1000947	1	Ball Joint, .750, Male	
19	100-5-18-40-5	14	CSHH, 5/16-18 x 2.50, GR5	
20	302-5	24	Washer, Lock, 5/16	
21	100-6-16-16-5F	14	CSHH, 3/8-16 x 1.00, GR5, FT	
22	302-6	14	Washer, Lock, 3/8	
23	100-7-14-20-5	3	CSHH, 7/16-14 x 1.50, GR5	
24	302-7	3	Washer, Lock, 7/16	
25	200-7-14-5	3	Nut, Hex, 7/16-14, GR5	
26	200-6-16-5	6	Nut, Hex, 3/8-16, GR5	
27	100-5-18-12-5F	10	CSHH, 5/16-18 x .75, GR5, FT	
28	870030	3	Bearing, Screed Flight Screw	

815HD SERIES EXTENSION ASSEMBLY (RIGHT)

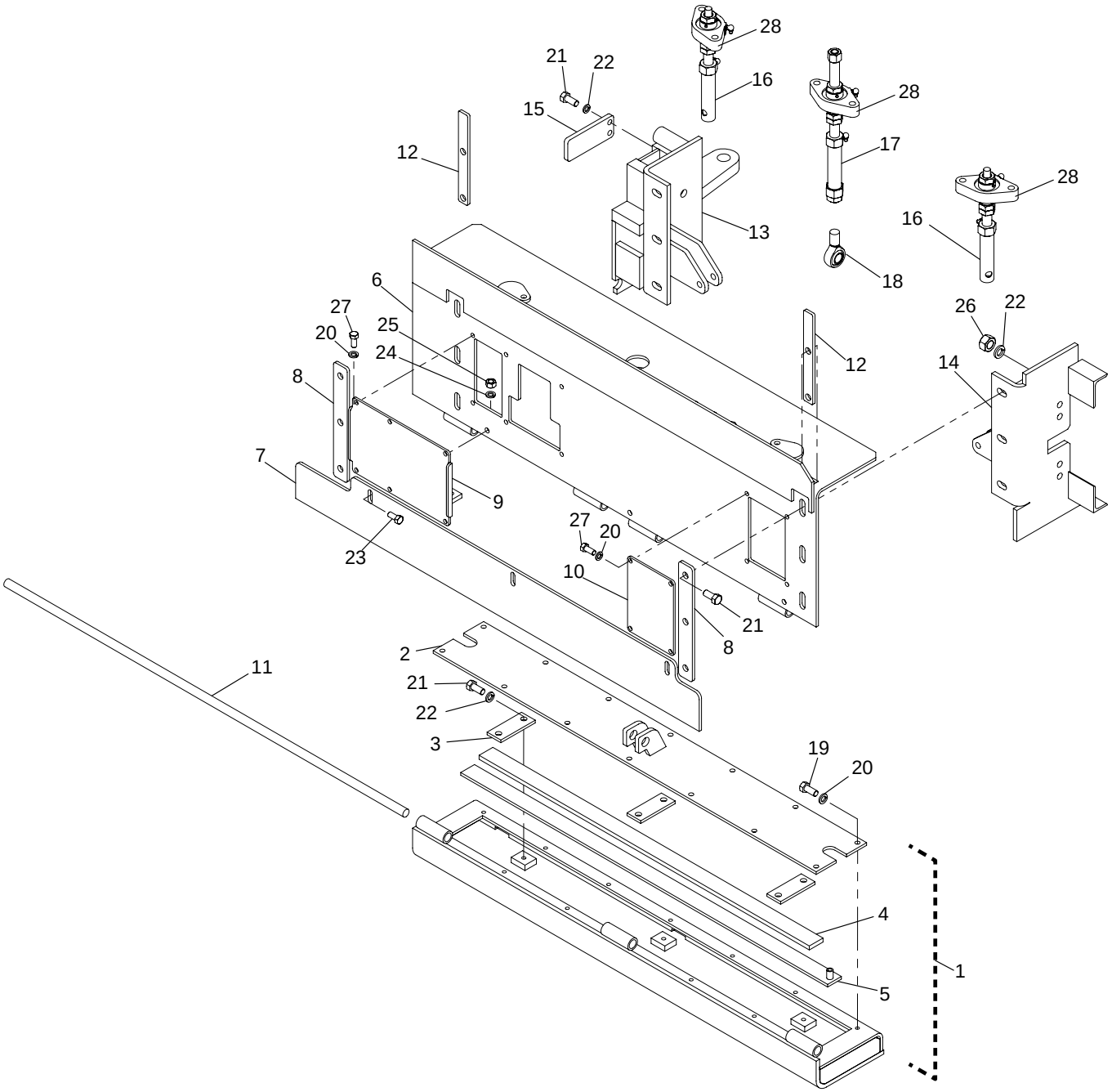


Figure 7-57 815HD Series Extension Assembly (Right)

815HD Series Extension Assembly (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	1006380SRV	1	Assembly, Extension Heatbox	Not Include 4, 5
2	1008665SRV	1	Weldment, Heatbox Cover	
3	985123	3	Clamp, Element, Screed Extension	
4	985120	1	Bar, .25 x 1.5 x 36	
5	987890SRV	1	Element, Heater, Screed, 41"	
6	1006379SRV	1	Assembly, Screed Extension, Slope (Right)	Includes all items
7	1006400	1	Plate, Extension Strikeoff	
8	1006395	2	Bar, Vertical Lift	
9	1008664	1	Weldment, Extension Vibrator Cover	
10	1006398	1	Plate, Extension Access Cover	
11	854447SRV	1	Round, .688 x 43.50 CRS	
12	1006398	2	Bar, Vertical Lift Gauge	
13	1007098	1	Assembly, Outer Extension Mount (Right)	
14	1007099	1	Assembly, Inner, Extension Mount (Right)	
15	1006536	1	Plate, Endgate Bracket w/Holes	
16	1006390	2	Assembly, Vertical Lift Adjust	
17	1006401	1	Assembly, AOA Adjuster	
18	1000947	1	Ball Joint, .750, Male	
19	100-5-18-40-5	14	CSHH, 5/16-18 x 2.50, GR5	
20	302-5	24	Washer, Lock, 5/16	
21	100-6-16-16-5F	14	CSHH, 3/8-16 x 1.00, GR5, FT	
22	302-6	14	Washer, Lock, 3/8	
23	100-7-14-20-5	3	CSHH, 7/16-14 x 1.50, GR5	
24	302-7	3	Washer, Lock, 7/16	
25	200-7-14-5	3	Nut, Hex, 7/16-14, GR5	
26	200-6-16-5	6	Nut, Hex, 3/8-16, GR5	
27	100-5-18-12-5F	10	CSHH, 5/16-18 x .75, GR5, FT	
28	870030	3	Bearing, Screed Flight Screw	

815HD SERIES ENDGATE ASSEMBLY (LEFT)

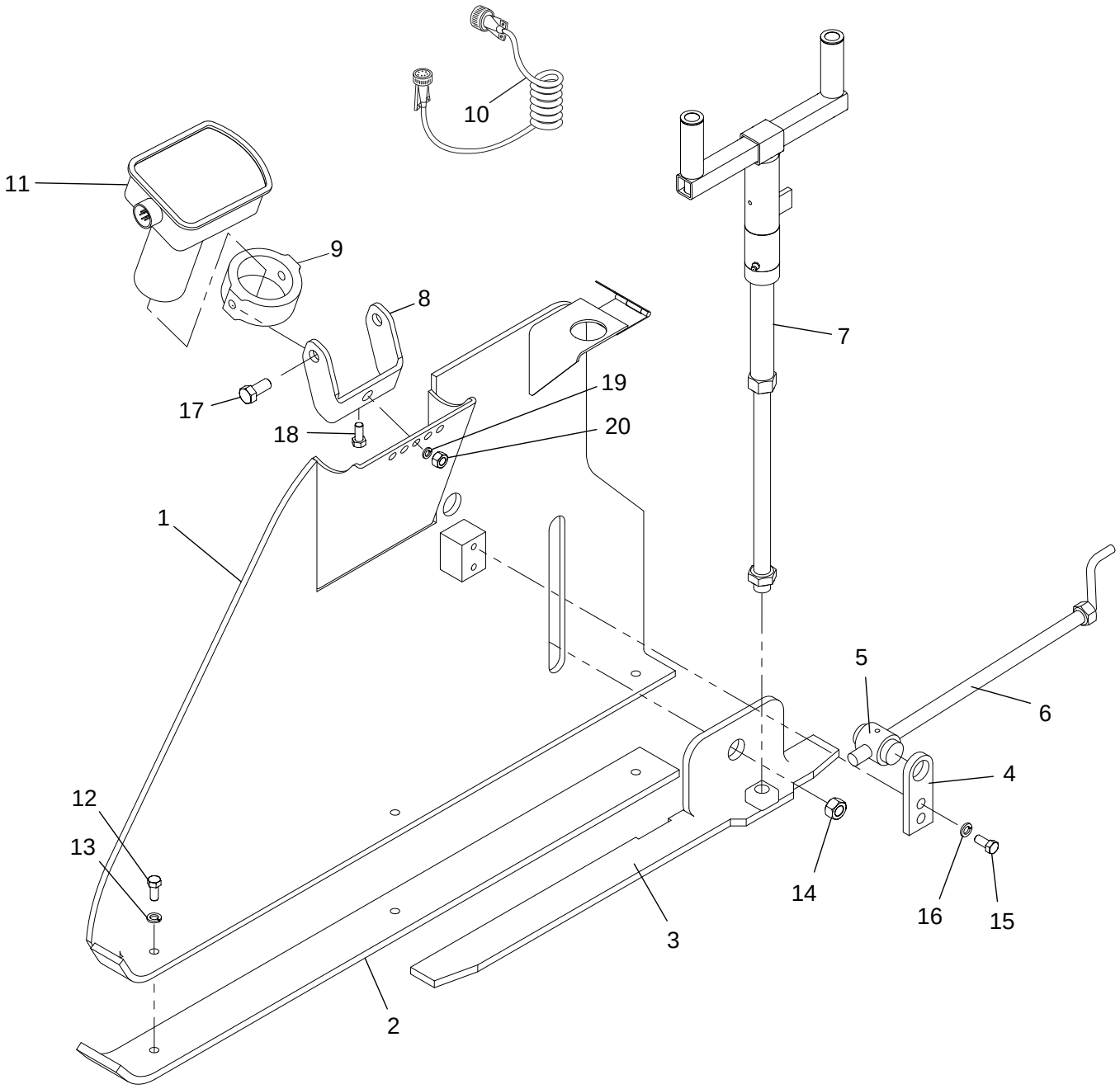


Figure 7-58 815HD Series Endgate Assembly (Left)

815HD Series Endgate Assembly (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	1006443SRV	1	Assembly, Endgate, HD (Left)	Does Not Include items 8 - 11
2	1006442	1	Plate, Endgate	
3	1006571	1	Bracket, Depth Screw Bottom Mount (Left)	
4	980458	1	Bar, Tilt Screw Hold Down	
5	980457	1	Shaft, Tilt Screw Swivel	
6	890081SRV	1	Assembly, Tilt Screw, Endgate	
7	890092SRV	1	Assembly, Depth Screw, Endgate	
8	1006451	1	Bracket, Sonic Sensor	
9	1008905	1	Mount, Sonic Sensor	
10	980550	1	Cable, Power, Ultrasonic	
11	980540	1	Sensor, Ultrasonic, Sauer	
12	100-8-13-16-5F	3	CSHH, 1/2-13 x 1.00, GR5, FT	
13	302-8	3	Washer, Lock, 1/2	
14	204-14-14-8	1	Nut, Lock, Stover, 7/8-14, GR8	
15	100-6-16-16-5F	2	CSHH, 3/8-16 x 1.00, GR5, FT	
16	302-6	2	Washer, Lock, 3/8	
17	100-5-18-8-5F	2	CSHH, 5/16-18 x .50, GR5, FT	
18	100-7-14-12-5F	1	CSHH, 7/16-14 x .75, GR5, FT	
19	302-7	1	Washer, Lock, 7/16	
20	200-7-14-5	1	Nut, Hex, 7/16-14, GR5	

815HD SERIES ENDGATE ASSEMBLY (RIGHT)

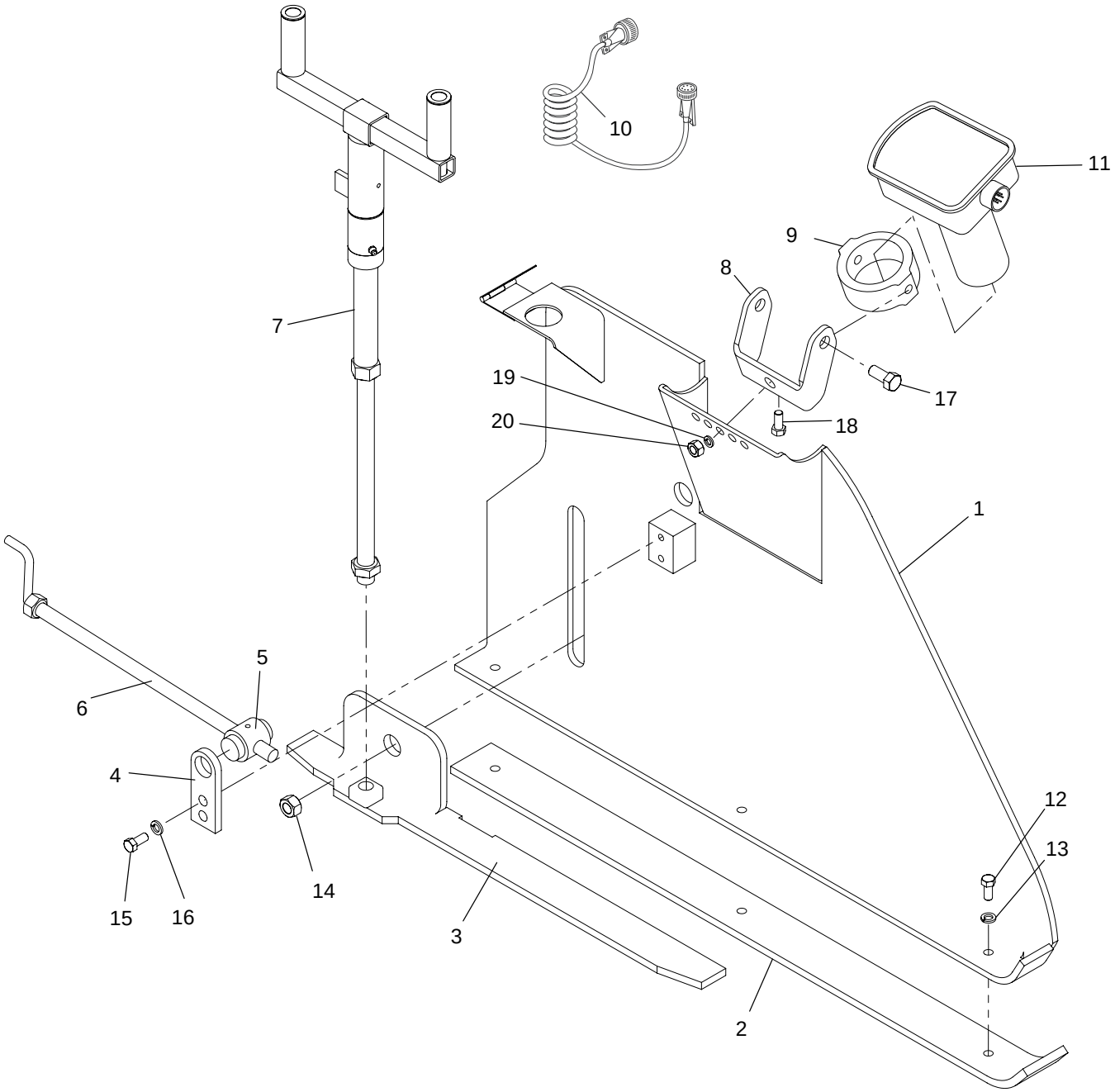


Figure 7-59 815HD Series Endgate Assembly (Right)

815HD Series Endgate Assembly (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	1006560SRV	1	Assembly, Endgate, HD Right)	Does Not Include items 8 - 11
2	1006442	1	Plate, Endgate	
3	1006452	1	Bracket, Depth Screw Bottom Mount Right)	
4	980458	1	Bar, Tilt Screw Hold Down	
5	980457	1	Shaft, Tilt Screw Swivel	
6	890081SRV	1	Assembly, Tilt Screw, Endgate	
7	890092SRV	1	Assembly, Depth Screw, Endgate	
8	1006451	1	Bracket, Sonic Sensor	
9	1008905	1	Mount, Sonic Sensor	
10	980550	1	Cable, Power, Ultrasonic	
11	980540	1	Sensor, Ultrasonic, Sauer	
12	100-8-13-16-5F	3	CSHH, 1/2-13 x 1.00, GR5, FT	
13	302-8	3	Washer, Lock, 1/2	
14	204-14-14-8	1	Nut, Lock, Stover, 7/8-14, GR8	
15	100-6-16-16-5F	2	CSHH, 3/8-16 x 1.00, GR5, FT	
16	302-6	2	Washer, Lock, 3/8	
17	100-5-18-8-5F	2	CSHH, 5/16-18 x .50, GR5, FT	
18	100-7-14-12-5F	1	CSHH, 7/16-14 x .75, GR5, FT	
19	302-7	1	Washer, Lock, 7/16	
20	200-7-14-5	1	Nut, Hex, 7/16-14, GR5	

815HD SERIES SCREED PULL ARM ASSEMBLY (LEFT)

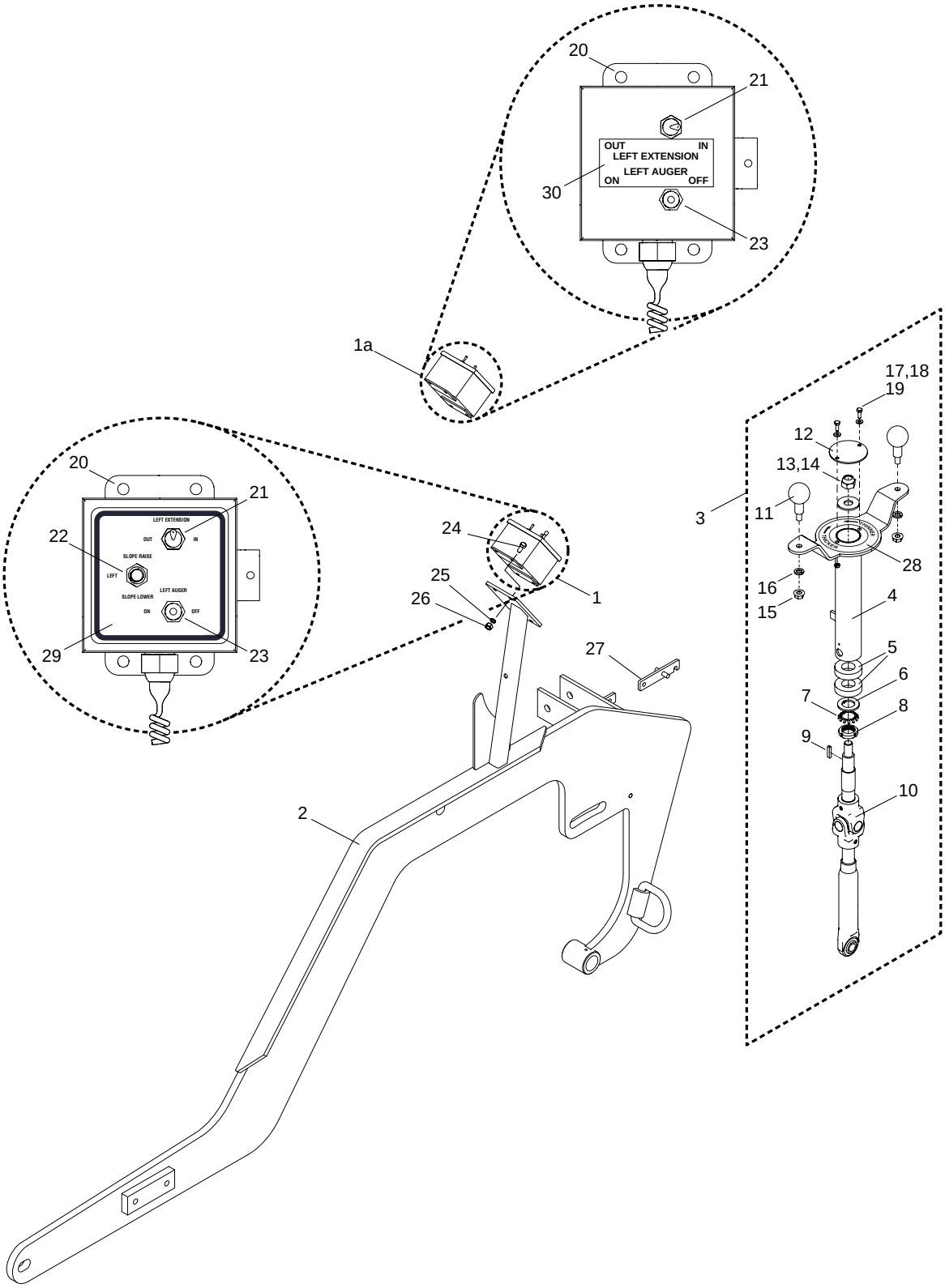


Figure 7-60 815HD Series Screed Pull Arm Assembly (Left)

815HD Series Screed Pull Arms Assembly (Left)

Item No.	Part Number	Qty.	Description	Remarks
1	984534L	1	Enclosure, Electric 3 Switch, Lower Control (Left)	Sloping Extenion
1a	984535L	1	Enclosure, Electric 2 Switch, Lower Control (Left)	Non-Sloping Extension
2	1006437SRV	1	Assembly, Screed Arm, Slope (Left)	
3	1011374SRV	1	Assembly, Thickness	
4	1011375	1	Weldment, Thickness Adjuster Handle	
5	810110	2	Bearing Roller, 1-1/4”	
6	20931333	1	Washer, 13/16	
7	95200978	1	Washer, Lock, Thin Series	
8	95200879	1	Nut, Lock	
9	1011309	1	Key, .25 x .25 x 1.25	
10	1011373	1	Assembly, Lower Thickness Adjuster	
11	981574	2	Knob, Revolving Ball, M12x1.75	
12	1006434	1	Cap, Adjuster Handle	
13	95998936	1	Locknut, PTORQ, 3/4-16	
14	301-12	1	Washer, Flat, 3/4	
15	200-M12-1.75-8.8	2	Nut, Hex, M12x1.75, C 8.8	
16	302-M12	2	Washer, Lock, M12	
17	100-4-20-12-5F	2	CSHH, 1/4-20 x .75, GR5, FT	
18	300-4	2	Washer, Flat, SAE, 1/4	
19	200-4-20-5	2	Nut, Hex, 1/4-20, GR5	
20	984533-03L	1	Enclosure, Electric, 4x4x3, 3 Holes (Left)	
21	851391	1	Switch, Toggle, SPST, 2-Position	
22	851393	1	Switch, Toggle, SPDT, 3-Position, MOM LK	
23	851392	1	Switch, Toggle, SPDT, 3-Position, MOM	
24	100-6-16-8-5F	4	CSHH, 3/8-16 x .50, GR5, FT	
25	302-6	4	Washer, Lock, 3/8	
26	200-6-16-5	4	Nut, Hex, 3/8-16, GR5	
27	851373SRV	1	Lock Arm, Flight Screw	
28	1007677-01	1	Decal, Thicker/Thinner	
29	859784	1	Decal, Auger Extension (Left)	
30	856647	1	Decal, Elite III Dash (Left)	

815HD SERIES SCREED PULL ARM ASSEMBLY (RIGHT)

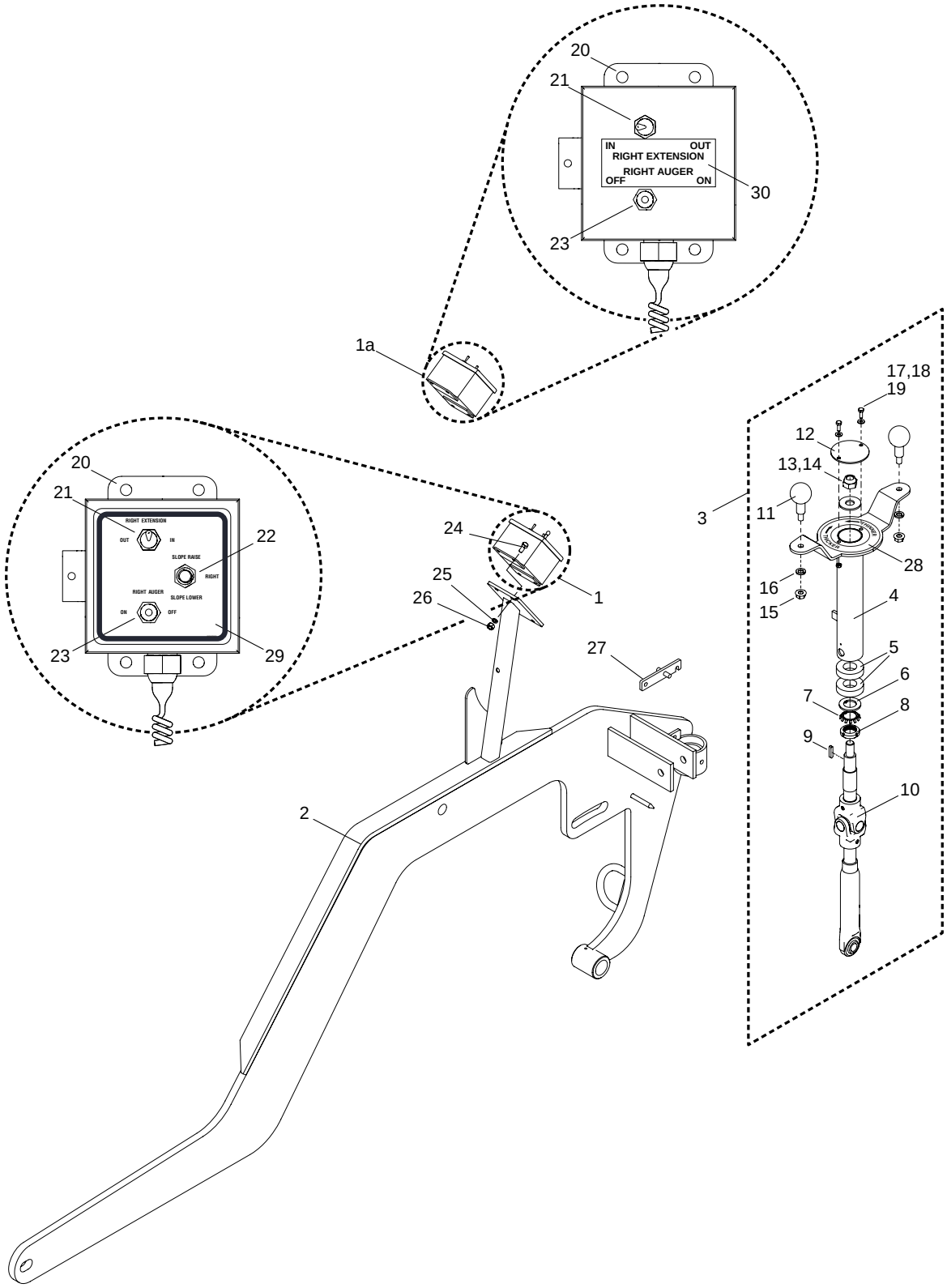


Figure 7-61 815HD Series Screed Pull Arm Assembly (Right)

815HD Series Screed Pull Arms Assembly (Right)

Item No.	Part Number	Qty.	Description	Remarks
1	984534R	1	Enclosure, Electric 3 Switch, Lower Control (Right)	Sloping Extenion
1a	984535R	1	Enclosure, Electric 2 Switch, Lower Control (Right)	Non-Sloping Extension
2	1006438SRV	1	Assembly, Screed Arm, Slope (Right)	
3	1011374SRV	1	Assembly, Thickness	
4	1011375	1	Weldment, Thickness Adjuster Handle	
5	810110	2	Bearing Roller, 1-1/4”	
6	20931333	1	Washer, 13/16	
7	95200978	1	Washer, Lock, Thin Series	
8	95200879	1	Nut, Lock	
9	1011309	1	Key, .25 x .25 x 1.25	
10	1011373	1	Assembly, Lower Thickness Adjuster	
11	981574	2	Knob, Revolving Ball, M12x1.75	
12	1006434	1	Cap, Adjuster Handle	
13	95998936	1	Locknut, PTORQ, 3/4-16	
14	301-12	1	Washer, Flat, 3/4	
15	200-M12-1.75-8.8	2	Nut, Hex, M12x1.75, C 8.8	
16	302-M12	2	Washer, Lock, M12	
17	100-4-20-12-5F	2	CSHH, 1/4-20 x .75, GR5, FT	
18	300-4	2	Washer, Flat, SAE, 1/4	
19	200-4-20-5	2	Nut, Hex, 1/4-20, GR5	
20	984533-03L	1	Enclosure, Electric, 4x4x3, 3 Holes (Left)	
21	851391	1	Switch, Toggle, SPST, 2-Position	
22	851393	1	Switch, Toggle, SPDT, 3-Position, MOM LK	
23	851392	1	Switch, Toggle, SPDT, 3-Position, MOM	
24	100-6-16-8-5F	4	CSHH, 3/8-16 x .50, GR5, FT	
25	302-6	4	Washer, Lock, 3/8	
26	200-6-16-5	4	Nut, Hex, 3/8-16, GR5	
27	851373SRV	1	Lock Arm, Flight Screw	
28	1007677-01	1	Decal, Thicker/Thinner	
29	859783	1	Decal, Auger Extension (Right)	
30	856648	1	Decal, Elite III Dash (Right)	

815HD SERIES CITRUS TANK & HEAT CONTROL BOX

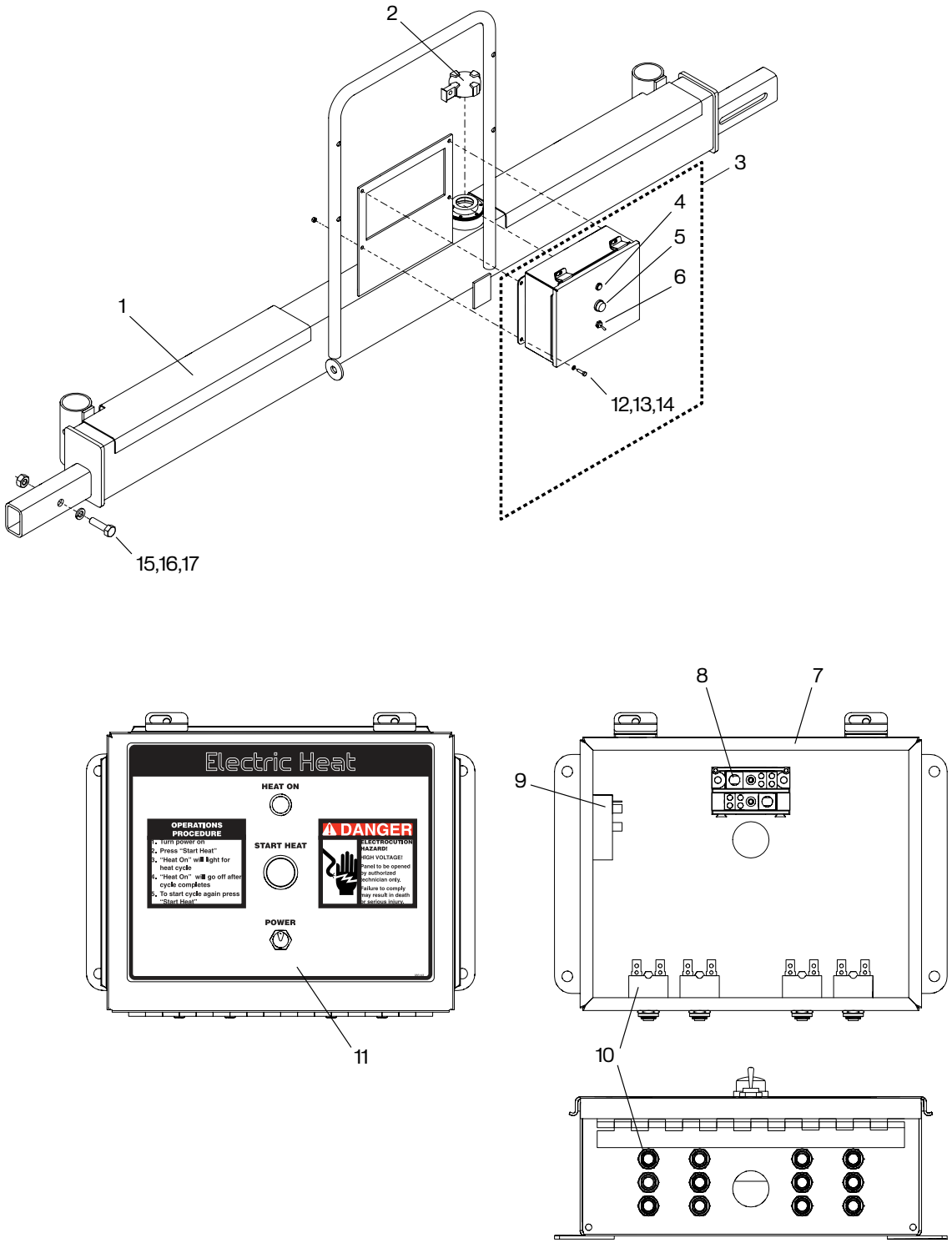


Figure 7-62 815HD Series Citrus Tank & Heat Control Box

815HD Series Screed Citrus Tank & Heat Control Box

Item No.	Part Number	Qty.	Description	Remarks
1	1008862SRV	1	Assembly, Screed, Citrus, Tank, Electric	Includes Item 3
2	140030FL	1	Cap, Fuel Tank, Lockable	
REF	140030GK	1	Strainer & Gasket Kit	Not Shown
3	1010397	1	Assembly, Electric Heat Control	
4	31983	1	Light, Red, Dash, .500 Hole	
5	982249	1	Switch, Push Button	
6	851391	1	Switch, Toggle, SPST, 2-Position	
7	1010397-01	1	Enclosure, Electric Heat w/Holes	
8	985138-04	1	Block, Terminal	
9	985142	1	Timer, Electric, .06 - 60 minute	
10	1009228	12	Circuit Breaker, 10A	
11	985143	1	Decal, Electric Heat	
12	100-5-18-8-5F	4	CSHH, 5/16-18 x .50, GR5, FT	
13	302-5	4	Washer, Lock, 5/16	
14	200-5-18-5	4	Nut, Hex, 5/16-18, GR5	
15	100-10-11-56-5	2	CSHH, 5/8-11 x 3.50, GR5	
16	302-10	2	Washer, Lock, 5/8	
17	200-10-11-5	2	Nut, Hex, 5/8-11, GR5	

815HD SERIES SCREED OPTIONAL COMPONENTS

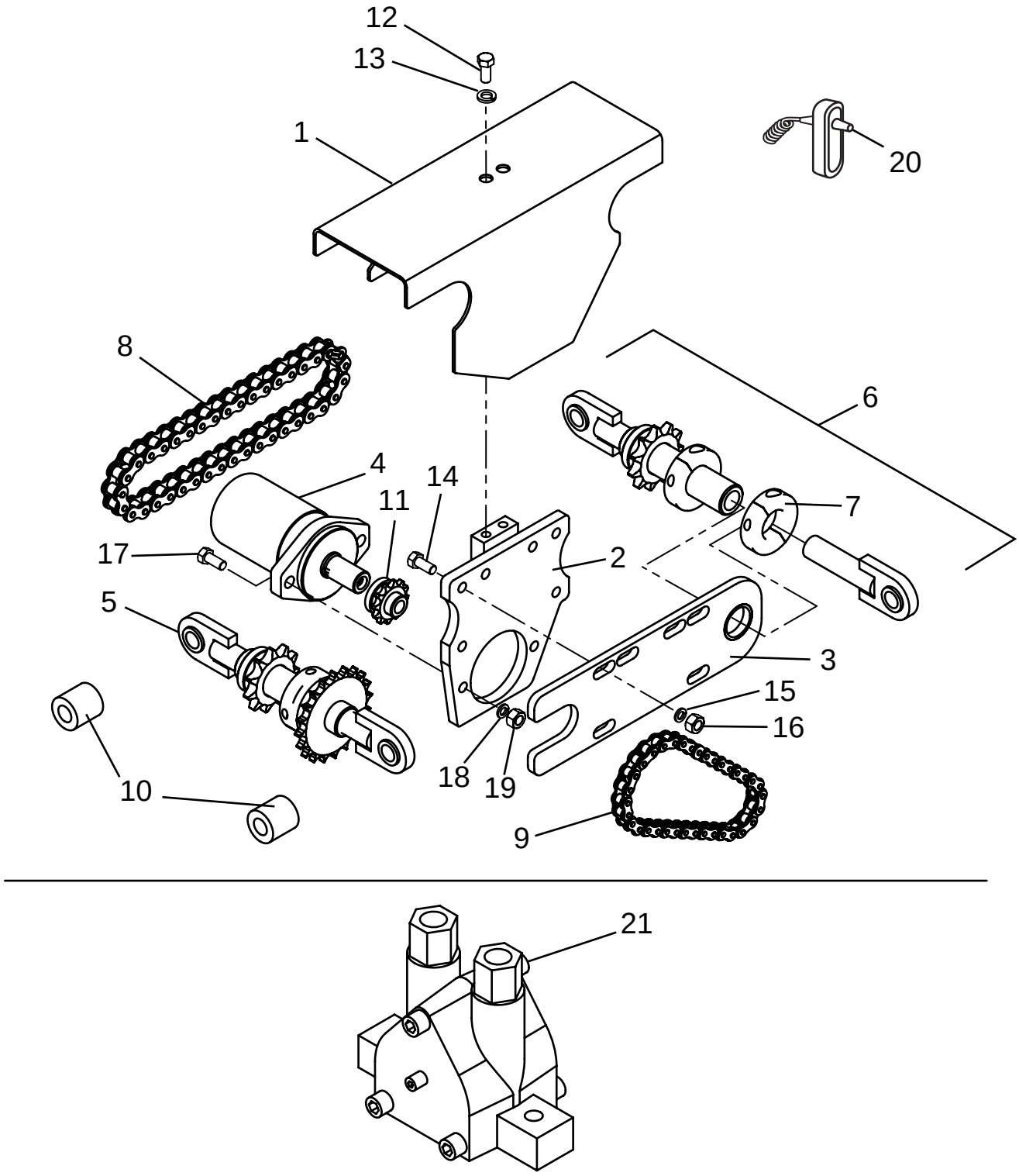


Figure 7-63 815HD Series Screed Optional Components

815HD Series Screed Optional Components

Item No.	Part Number	Qty.	Description	Remarks
1	1008168	1	Cover, Power Crown	
2	1008667	1	Weldment, Power Crown Center	
3	1008600	1	Plate, Power Crown Adjuster	Not include bushing
REF	1000960	1	Bushing, Composite, Power Crown	
4	986640	1	Motor, Hydraulic, Danfoss	
5	1008668SRV	1	Assembly, Crown And Valley Front	
6	980182	1	Assembly, Crown & Valley, Rear	Not include item # 7
7	1000798	2	Collar, Power Crown Locking	
8	1008047	1	Chain, Roller, 60H x 39 Pitches	
9	1000958	1	Chain, Roller, 50 x 18	
10	1006419	2	Spacer, Crown Mount	
11	1000799	1	Sprocket, #50 Roller Chain	
12	100-6-16-16-5F	2	CSHH, 3/8-16 x 1.00, GR5, FT	
13	302-6	2	Washer, Lock, 3/8	
14	100-8-13-16-5F	6	CSHH, 1/2-13 x 1.00, GR5, FT	
15	302-8	6	Washer, Lock, 1/2	
16	200-8-13-5	6	Nut, Hex, 1/2-13, GR5	
17	100-8-13-20-5F	2	CSHH, 1/2-13 x 1.25, GR5, FT	
18	302-8	2	Washer, Lock, 1/2	
19	200-8-13-5	2	Nut, Hex, 1/2-13, GR5	
REF	920238-3	A/R	Cover, 3/4” Condulet	
REF	920238-2	A/R	Condulet, 3/4” Aluminum	
REF	920238-4	A/R	Gasket, Condulet Box, 3/4”	
REF	920238-5	A/R	Aluminum Plug, 3/4” Condulet	
REF	3400DI	A/R	Water Tight Connection, 3/4” X 3/4”	
20	1000059	2	Vibrator, Hydraulic	
21	72884	A/R	Switch, Toggle, SPST, 2-Position, MOM	

HD HEATED ENDGATE ASSEMBLY - OPTION (1 OF 3)

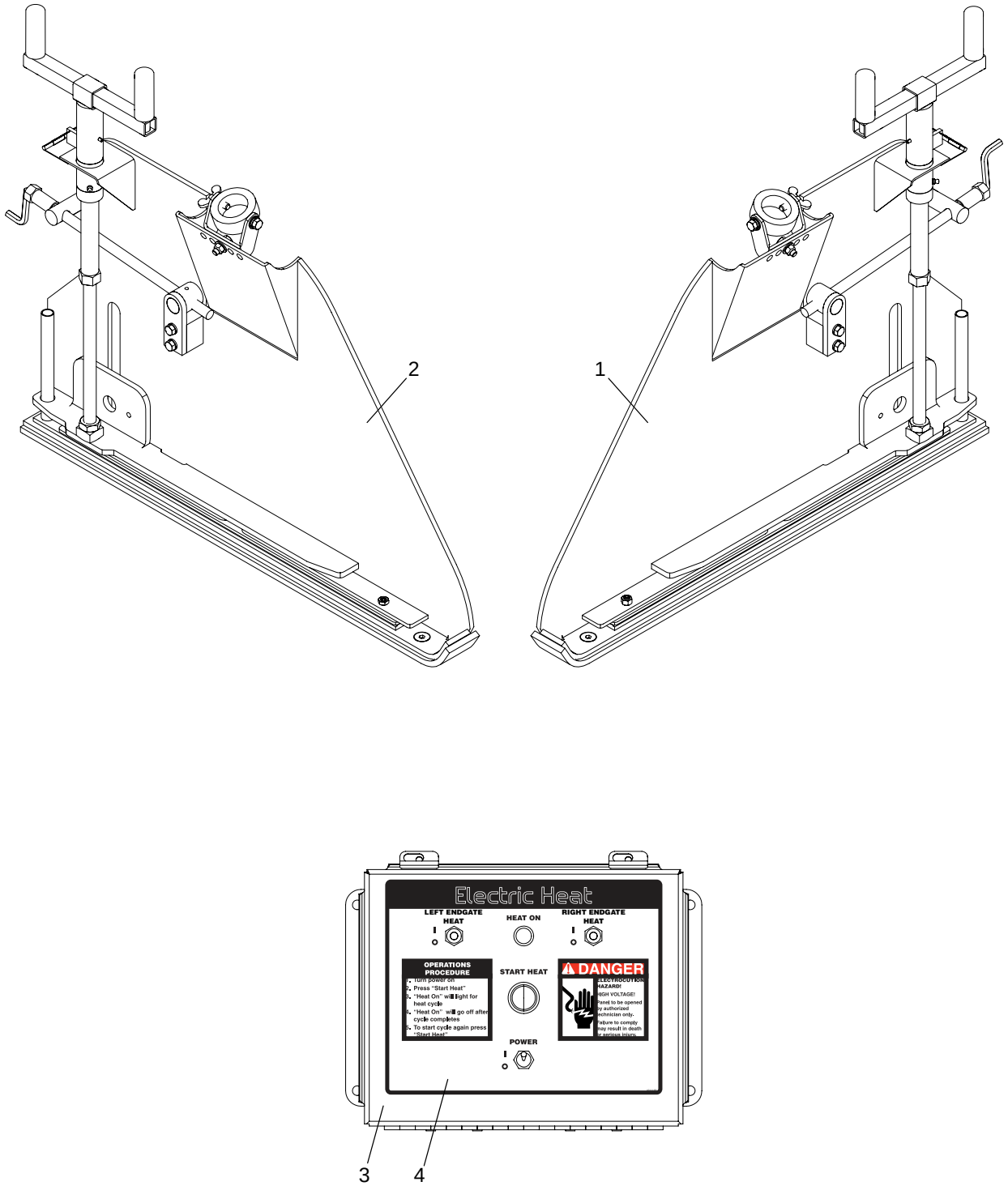


Figure 7-64 HD Heated Endgate Assembly - Option (1 of 3)

HD Heated Endgate Assembly - Option (1 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011211SRV		Option, HD Heated Endgates	
1	1011143SRV	1	Assembly, Heated HD Endgate (Left)	See Figure 7-65
2	1011144SRV	1	Assembly, Heated HD Endgate (Right)	See Figure 7-66
3	1011311	1	Assembly, Electric Heat Control	See Figure 7-70
4	1011180	1	Decal, Electric Heat	See Figure 7-70
5	1011315	1	Kit, Extension Element Hose/Wiring	Not Shown
REF	1011315-01	2	Hose, 8LOLA, Lock On, 300 PSI, Black, 40”	Not Shown
REF	1011315-02	2	Hose, 8LOLA, Lock On, 300 PSI, Black, 50”	Not Shown
REF	1010528	6	Fitting, 8LOC - 8RFJX90	Not Shown
REF	983199	2	Connector, 2-Pin, Plug, DT06-2S Deutsch	Not Shown
REF	983198	2	2-Pin Socket, DT04-2P Deutsch	Not Shown
REF	982448	4	Terminal, Socket, Deutsch, 14-16 AWG	Not Shown
REF	983209	2	Wedge, Socket, 2P Deutsch	Not Shown
REF	983208	2	Connector, Wedge, Plug, 2P Deutsch	Not Shown
REF	982456	4	Pin, Deutsch, 14-16 AWG	Not Shown

HD HEATED ENDGATE ASSEMBLY - OPTION (2 OF 3)

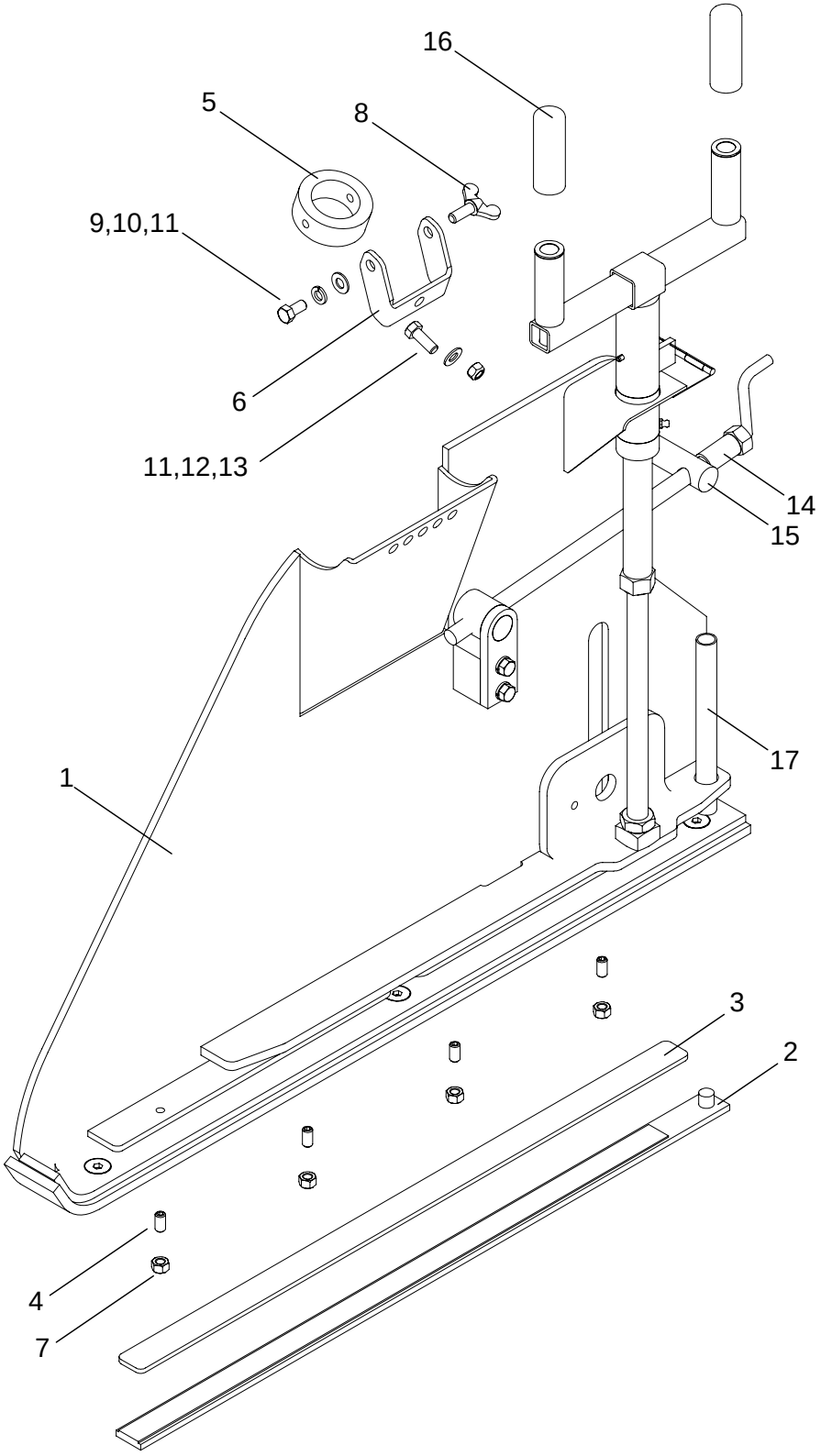


Figure 7-65 HD Heated Endgate Assembly - Option (2 of 3)

Heated Endgate Assembly - Option (2 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011143SRV		Assembly, Heated HD Endgate (Left)	
1	1011148	1	Assembly, Heated HD Endgate (Left)	
2	1011158	1	Element, Heating, 500W/220V, 30” Long	
3	1011155	1	Bar, Element, Backup	
4	113-6-16-12	4	Set Screw, Hex Socket, Cup, 3/8-16 x .75	
5	1008905	1	Mount, Sonic Sensor	
6	1006451	1	Bracket, Sonic Sensor	
7	200-6-16-5	4	Nut, Hex, 3/8-16, GR5	
8	120-6-16-16	1	Screw, Wing, 3/8-16 x 1.00	
9	100-6-16-12-5F	1	CSHH, 3/8-16 x .75, GR5, FT	
10	302-6	1	Washer, Lock, 3/8	
11	300-6	2	Washer, Flat, 3/8	
12	100-6-16-16-5F	1	CSHH, 3/8-16 x 1.00, GR5, FT	
13	204-6-16-5	1	Nut, Lock, Stover, 3/8-16, GR5	
14	1011235	1	Tube, Endgate Adjustment Spacer	
15	855579	1	Shaft, Endgate Mount	
16	870276	2	Hand Grip, Driver Lever	
17	1011491	1	Tube, Element, Wire Routing	

HD HEATED ENDGATE ASSEMBLY - OPTION (3 OF 3)

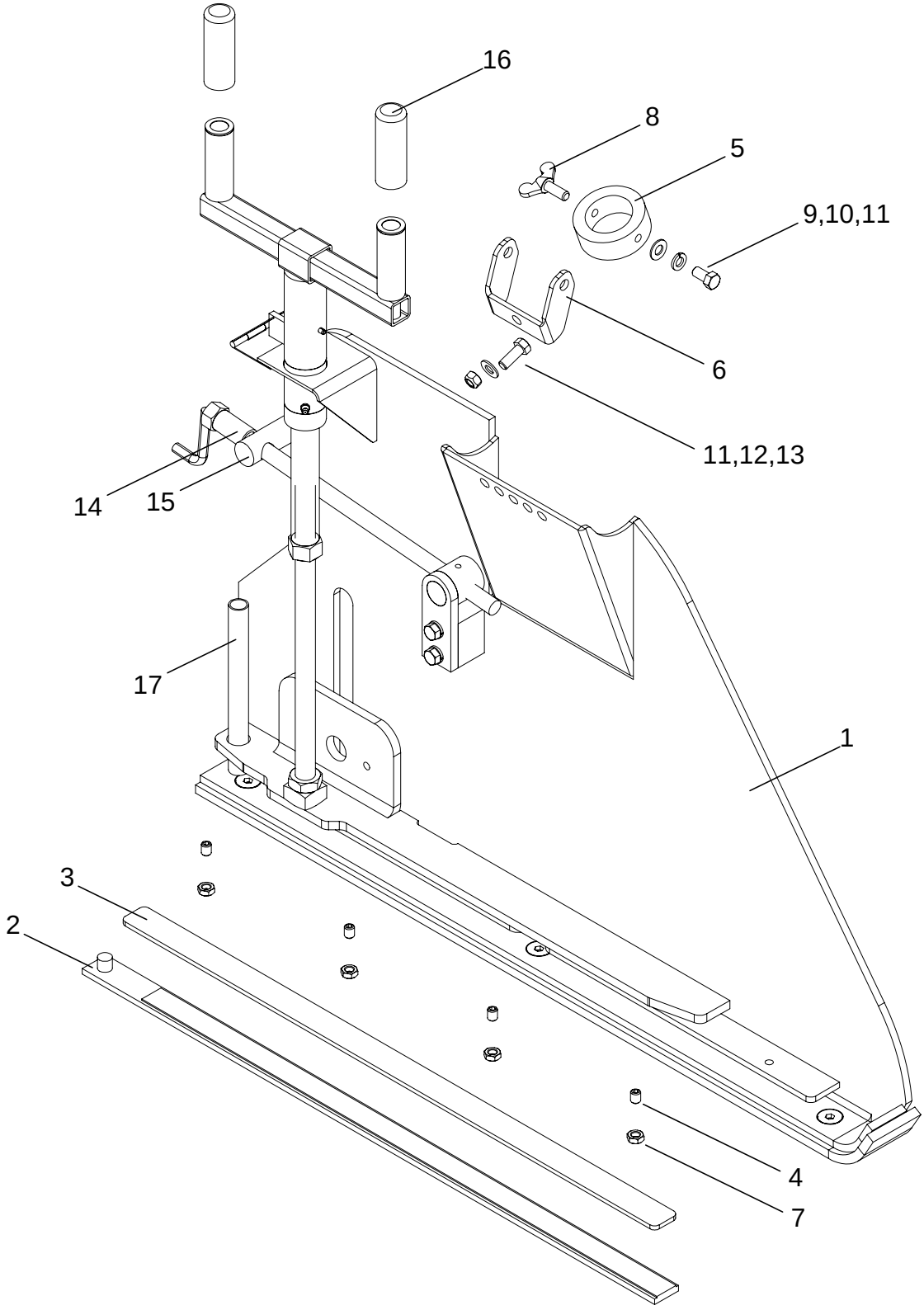


Figure 7-66 HD Heated Endgate Assembly - Option (3 of 3)

HD Heated Endgate Assembly - Option (3 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011144SRV		Assembly, Heated HD Endgate (Right)	
1	1011149	1	Assembly, Heated HD Endgate (Right)	
2	1011158	1	Element, Heating, 500W/220V, 30" Long	
3	1011155	1	Bar, Element, Backup	
4	113-6-16-12	4	Set Screw, Hex Socket, Cup, 3/8-16 x .75	
5	1008905	1	Mount, Sonic Sensor	
6	1006451	1	Bracket, Sonic Sensor	
7	200-6-16-5	4	Nut, Hex, 3/8-16, GR5	
8	120-6-16-16	1	Screw, Wing, 3/8-16 x 1.00	
9	100-6-16-12-5F	1	CSHH, 3/8-16 x .75, GR5, FT	
10	302-6	1	Washer, Lock, 3/8	
11	300-6	2	Washer, Flat, 3/8	
12	100-6-16-16-5F	1	CSHH, 3/8-16 x 1.00, GR5, FT	
13	204-6-16-5	1	Nut, Lock, Stover, 3/8-16, GR5	
14	1011235	1	Tube, Endgate Adjustment Spacer	
15	855579	1	Shaft, Endgate Mount	
16	870276	2	Hand Grip, Driver Lever	
17	1011491	1	Tube, Element, Wire Routing	

HD HEATED LEEBOY EDGE ENDGATE ASSEMBLY - OPTION (1 OF 3)

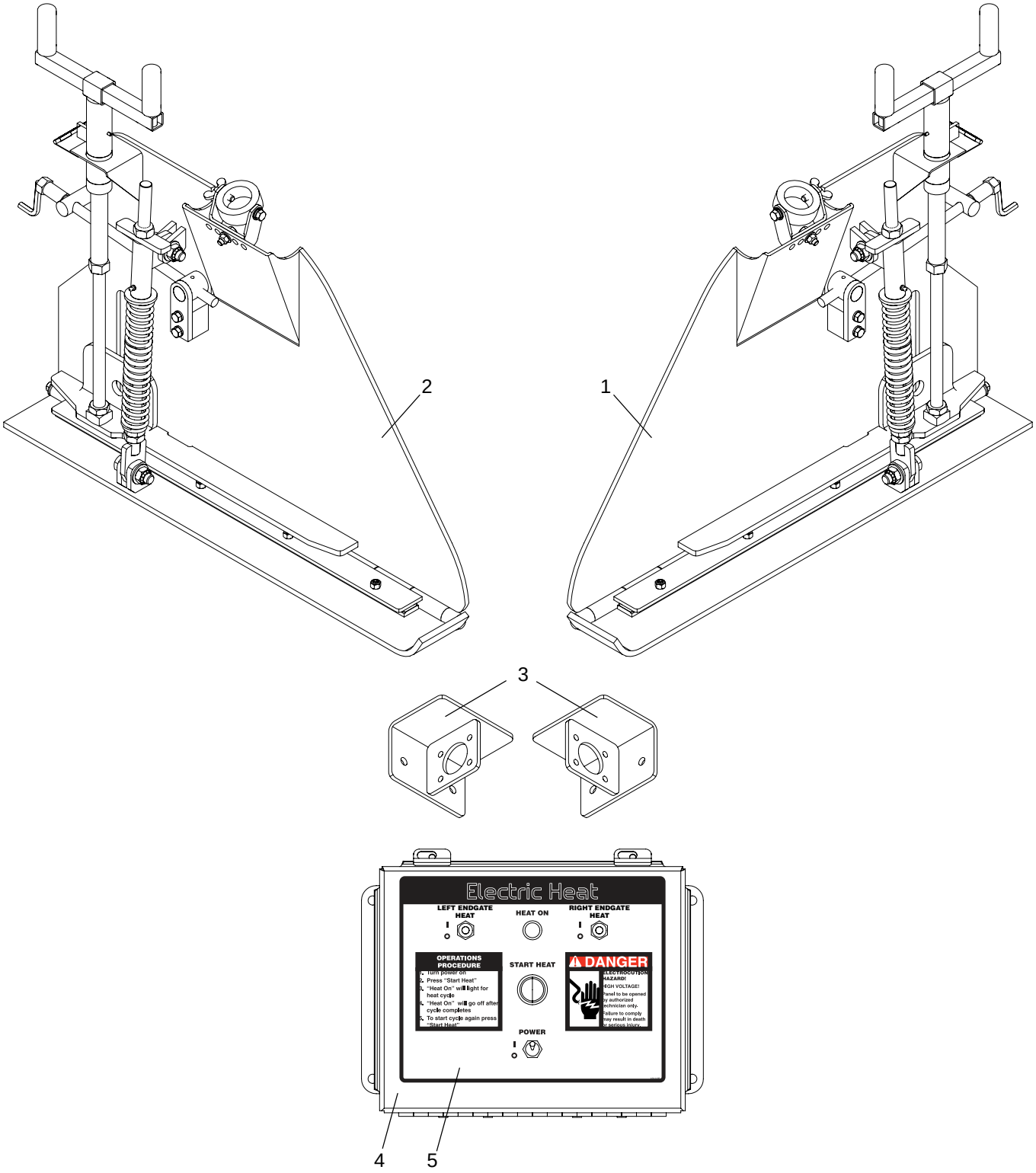


Figure 7-67 HD Heated LeeBoy Edge Endgate Assembly - Option (1 of 3)

HD Heated LeeBoy Edge Endgate Assembly - Option (1 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011312SRV		Option, HD Heated Endgates and LeeBoy Edge	
1	1011187SRV	1	Assembly, Heated LeeBoy Edge HD Endgate (Left)	See Figure 7-68
2	1011156SRV	1	Assembly, Heated LeeBoy Edge HD Endgate (Right)	See Figure 7-69
3	1011239	2	Weldment, Bulkhead Mount, Heated Endgates	
4	1011311	1	Assembly, Electric Heat Control	See Figure 7-70
5	1011180	1	Decal, Electric Heat	See Figure 7-70
6	1011315	1	Kit, Extension Element Hose/Wiring	Not Shown
REF	1011315-01	2	Hose, 8LOLA, Lock On, 300 PSI, Black, 40”	Not Shown
REF	1011315-02	2	Hose, 8LOLA, Lock On, 300 PSI, Black, 50”	Not Shown
REF	1010528	6	Fitting, 8LOC - 8RFJX90	Not Shown
REF	983199	2	Connector, 2-Pin, Plug, DT06-2S Deutsch	Not Shown
REF	983198	2	2-Pin Socket, DT04-2P Deutsch	Not Shown
REF	982448	4	Terminal, Socket, Deutsch, 14-16 AWG	Not Shown
REF	983209	2	Wedge, Socket, 2P Deutsch	Not Shown
REF	983208	2	Connector, Wedge, Plug, 2P Deutsch	Not Shown
REF	982456	4	Pin, Deutsch, 14-16 AWG	Not Shown

HD HEATED LEEBOY EDGE ENDGATE ASSEMBLY - OPTION (2 OF 3)

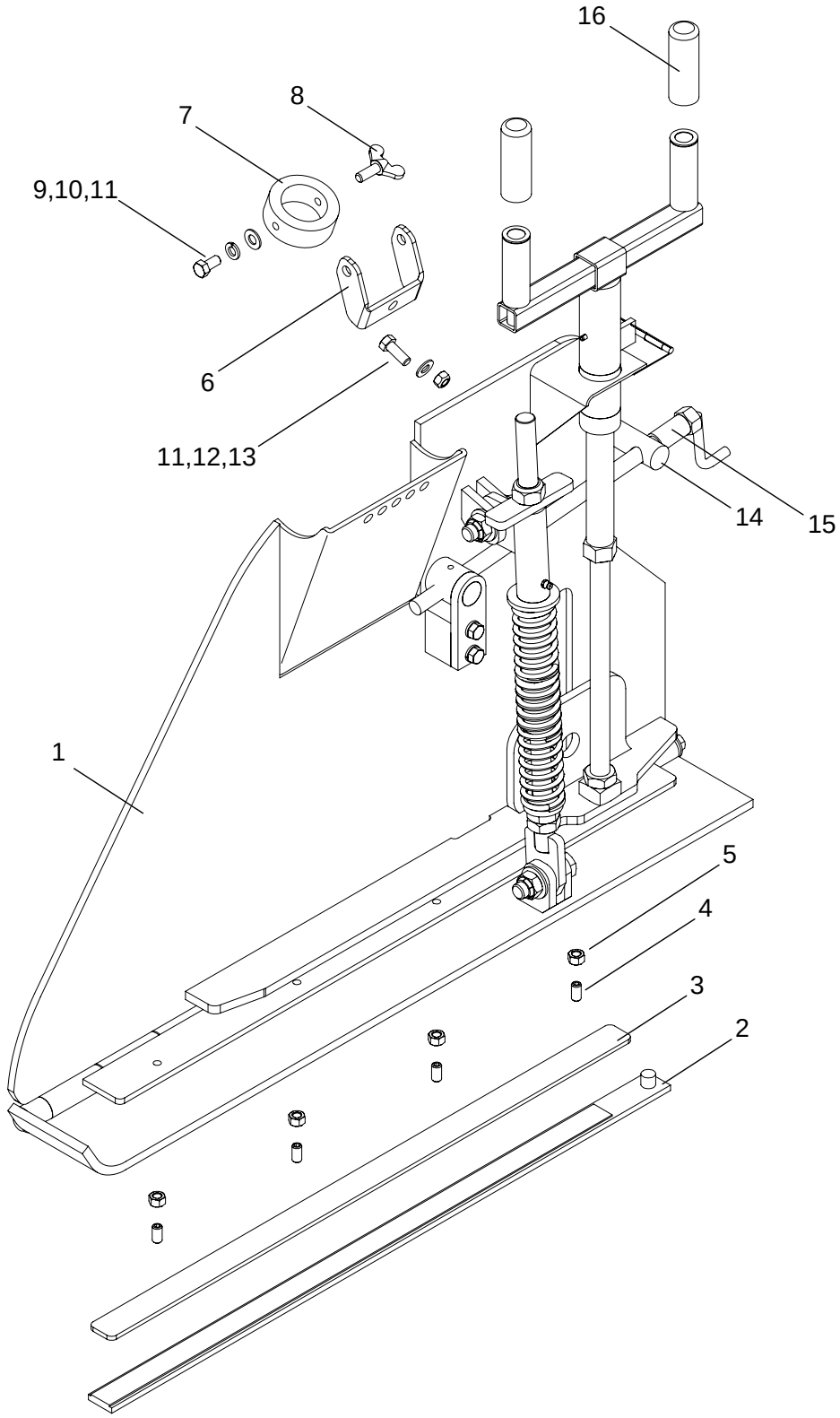


Figure 7-68 HD Heated LeeBoy Edge Endgate Assembly - Option (2 of 3)

HD Heated LeeBoy Edge Endgate Assembly - Option (2 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011187SRV	1	Assembly, Heated LeeBoy Edge HD Endgate (Left)	
1	1011188	1	Assembly, Heated Edge Endgate (Left)	
2	1011158	1	Element, Heating, 500W/220V, 30” Long	
3	1011155	1	Bar, Element, Backup	
4	113-6-16-12	4	Set Screw, Hex Socket, Cup, 3/8-16 x .75	
5	200-6-16-5	4	Nut, Hex, 3/8-16, GR5	
6	1006451	1	Bracket, Sonic Sensor	
7	1008905	1	Mount, Sonic Sensor	
8	120-6-16-16	1	Screw, Wing, 3/8-16 x 1.00	
9	100-6-16-12-5F	1	CSHH, 3/8-16 x .75, GR5, FT	
10	302-6	1	Washer, Lock, 3/8	
11	300-6	2	Washer, Flat, 3/8	
12	100-6-16-16-5F	1	CSHH, 3/8-16 x 1.00, GR5, FT	
13	204-6-16-5	1	Nut, Lock, Stover, 3/8-16, GR5	
14	855579	1	Shaft, Endgate Mount	
15	1011235	1	Tube, Endgate Adjustment Spacer	
16	870276	2	Hand Grip, Driver Lever	

HD HEATED LEEBOY EDGE ENDGATE ASSEMBLY - OPTION (3 OF 3)

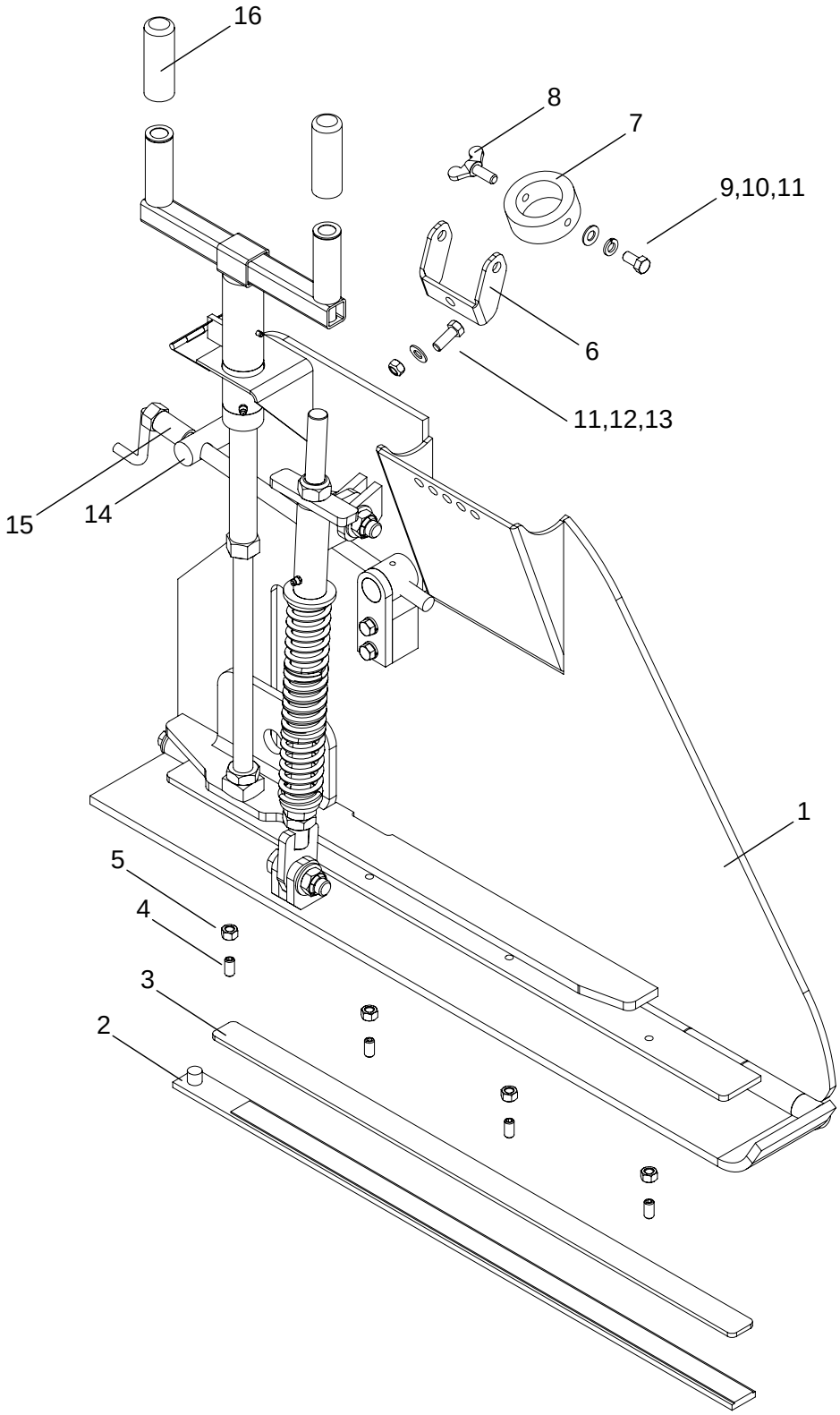


Figure 7-69 HD Heated LeeBoy Edge Endgate Assembly - Option (3 of 3)

HD Heated LeeBoy Edge Endgate Assembly - Option (3 of 3)

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011156SRV	1	Assembly, Heated LeeBoy Edge Endgate (Right)	
1	1011146	1	Assembly, Heated Edge Endgate (Right)	
2	1011158	1	Element, Heating, 500W/220V, 30” Long	
3	1011155	1	Bar, Element, Backup	
4	113-6-16-12	4	Set Screw, Hex Socket, Cup, 3/8-16 x .75	
5	200-6-16-5	4	Nut, Hex, 3/8-16, GR5	
6	1006451	1	Bracket, Sonic Sensor	
7	1008905	1	Mount, Sonic Sensor	
8	120-6-16-16	1	Screw, Wing, 3/8-16 x 1.00	
9	100-6-16-12-5F	1	CSHH, 3/8-16 x .75, GR5, FT	
10	302-6	1	Washer, Lock, 3/8	
11	300-6	2	Washer, Flat, 3/8	
12	100-6-16-16-5F	1	CSHH, 3/8-16 x 1.00, GR5, FT	
13	204-6-16-5	1	Nut, Lock, Stover, 3/8-16, GR5	
14	855579	1	Shaft, Endgate Mount	
15	1011235	1	Tube, Endgate Adjustment Spacer	
16	870276	2	Hand Grip, Driver Lever	

HD HEATED ENDGATE ASSEMBLY - OPTION

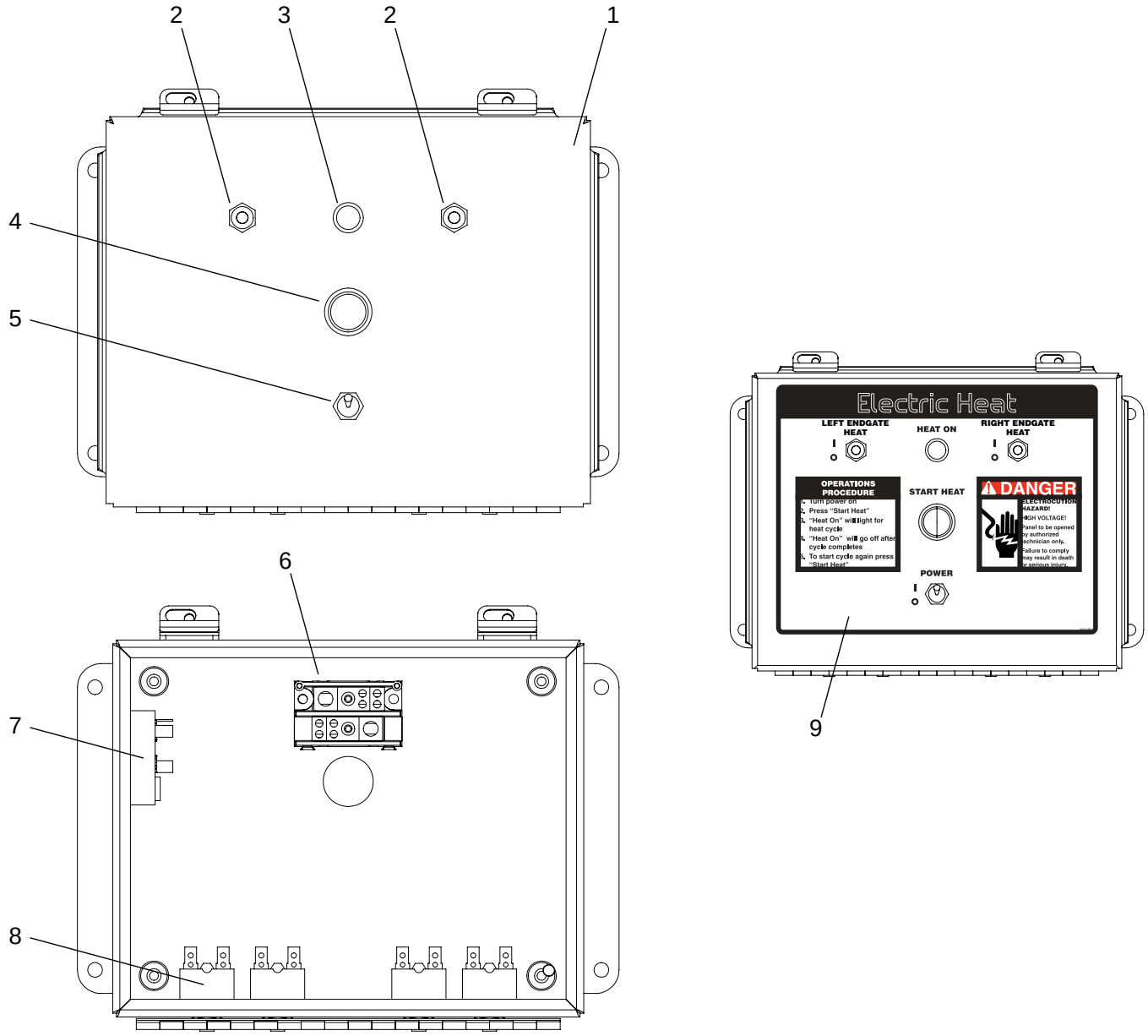


Figure 7-70 HD Heated Endgate Assembly - Option

HD Heated Endgate Assembly - Option

Item No.	Part Number	Qty.	Description	Remarks
GRP	1011311		Assembly, Electric Heat Control	
1	1011311-01	1	Enclosure, Electric Heat and Heated Endgates	
2	72086	2	Switch, Toggle, DPDT, 2-Position	
3	31983	1	Light, Red, Dash, .50 Hole	
4	982249	1	Switch, Push Button	
5	851391	1	Switch, Toggle, SPST, 2 -Position	
6	985138-04	1	Block, Terminal	
7	985142	1	Timer, Electric, .06 - 60 Minute	
8	1009228	12	Circuit Breaker, 10A	
9	1011180	1	Decal, Electric Heat	

ALPHABETICAL PARTS INDEX

Description	Part No.	Figure No.	Item No.
2-Pin Socket, DT04-2P Deutsch	983198	7-64	REF
2-Pin Socket, DT04-2P Deutsch	983198	7-67	REF
-A-			
Adapter, Elbow, 90°, -4 JIC / -4 NPTF	71822	7-16	5
Adapter, Elbow, 90°, -6 JIC/-6 NPTF	2501-6-6	7-14	REF
Adapter, Hose to Pipe (90°)	230069	7-16	12
Adapter, Hydraulic Hose	2404-10-8	7-1	13
Adapter, POL	230030	7-16	2
Adapter, Reducer, Pipe, -12 / -8	5406-12-8	7-1	21
Adaptor 9/16-18 UNF-2B (Left) X 4 JIC Male	1009358	7-16	24
Adjuster Mount	1002715	7-26	8
Adjuster Mount	1002715	7-27	8
Adjuster Mount	1002715SRV	7-32	8
Adjuster Mount	1002715SRV	7-33	8
Alternator	1009253-21	7-11	14
Aluminum Cable Sleeve .0625	981981	7-46	8
Aluminum Plug, 3/4” Condulet	920238-5	7-63	REF
AM Module Only	985866-01	7-46	REF
AM Module/Cable Assembly, w/Base Plate	987053SRV	7-46	18
Arm Extension (Left)	930025SRV	7-48	3
Arm Extension (Right)	930020SRV	7-48	2
Arm, Assembly, Truck Hitch Wheel Pivot	930030SRV	7-48	4
Arm, Automatic Conveyor Switch	900060-1	7-3	37
Arm, Skid Support (Front)	851248SRV	7-46	12
Arm, Skid Support (Rear)	851247SRV	7-46	11
Assembly Extension Adjusting Screw	851185SRV	7-24	4
Assembly Temp. Bail w/Sleeves	983414-10	7-47	1
Assembly, 20 FT. Kit	851584SRV	7-46	REF
Assembly, 30 FT. to 40 FT. Kit	851585SRV	7-46	REF
Assembly, Adjusting Swivel Nut	890070	7-34	11
Assembly, Adjusting Swivel Nut	890070	7-35	11
Assembly, Air Breather	1010255	7-11	1
Assembly, AM Module & Cable	987053SRV	7-47	9
Assembly, AOA Adjuster	1006401	7-56	17
Assembly, AOA Adjuster	1006401	7-57	17
Assembly, Auger Motor Cover, 8515	981685	7-5	1

Description	Part No.	Figure No.	Item No.
Assembly, Auger, 8515 (Left)	981692L	7-5	19
Assembly, Auger, 8515 (Right)	981692R	7-5	20
Assembly, Axle, Guide Wheel	930045SRV	7-48	8
Assembly, Beacon Light Post	989469SRV	7-13	20
Assembly, Bed, 8500 Conveyor	851627SRV	7-3	REF
Assembly, Cable Remote	984596	7-46	30
Assembly, CB Bracket	1010499-05	7-47	18
Assembly, Conveyor Chain	851117ASRV	7-3	12
Assembly, Conveyor, Complete	851626SRV	7-3	REF
Assembly, Cord Remote	984596	7-46	REF
Assembly, Cord Remote	984596	7-47	8
Assembly, Crown & Valley, Front	870172	7-22	3
Assembly, Crown & Valley, Front	870172	7-23	3
Assembly, Crown & Valley, Front	870172	7-28	3
Assembly, Crown & Valley, Front	870172	7-29	3
Assembly, Crown & Valley, Rear	870182	7-22	2
Assembly, Crown & Valley, Rear	870182	7-23	2
Assembly, Crown & Valley, Rear	870182	7-28	2
Assembly, Crown & Valley, Rear	870182	7-29	2
Assembly, Crown & Valley, Rear	980182	7-51	3
Assembly, Crown & Valley, Rear	980182	7-63	6
Assembly, Crown & Valley, Rear	980182	7-52	3
Assembly, Crown Adjustment	986637SRV	7-44	2
Assembly, Crown And Valley Front	1008668SRV	7-63	5
Assembly, Dash 8515D T4F	1013630	7-19	GRP
Assembly, Depth Screw, Endgate	890092SRV	7-58	7
Assembly, Depth Screw, Endgate	890092SRV	7-59	7
Assembly, Depth Screw, Screed	890092SRV	7-34	3
Assembly, Depth Screw, Screed	890092SRV	7-35	3
Assembly, Drive Plate	1002676-02	7-12	1
Assembly, Electric Heat Control	1010397	7-38	4
Assembly, Electric Heat Control	1010397	7-62	3
Assembly, Electric Heat Control	1011311	7-64	3
Assembly, Electric Heat Control	1011311	7-67	4
Assembly, Electric Heat Control	1011311	7-70	GRP
Assembly, Endgate, HD (Left)	1006443SRV	7-58	1
Assembly, Endgate, HD Right)	1006560SRV	7-59	1
Assembly, Extension Adjust Screw	851185SRV	7-30	4
Assembly, Extension Adjust Screw	851185SRV	7-31	4
Assembly, Extension Adjust Screw	851185SRV	7-32	6

Description	Part No.	Figure No.	Item No.
Assembly, Extension Adjust Screw	851185SRV	7-33	6
Assembly, Extension Adjusting Screw	851185SRV	7-25	4
Assembly, Extension Adjusting Screw	851185SRV	7-26	6
Assembly, Extension Adjusting Screw	851185SRV	7-27	6
Assembly, Extension Heatbox	1006380SRV	7-56	1
Assembly, Extension Heatbox	1006380SRV	7-57	1
Assembly, Flight Screw	851370SRV	7-36	7
Assembly, Flight Screw	851370SRV	7-37	7
Assembly, Gauge Panel T4F	1013631	7-19	15
Assembly, Generator, Hydraulic	987893SRV	7-43	1
Assembly, Guide Bar	920032SRV	7-4	22
Assembly, Heat Box Cover, 4 Adjust	988292SRV	7-26	14
Assembly, Heat Box Cover, 4 Adjust	988292SRV	7-27	14
Assembly, Heat Box Cover, 4 Adjust	988292SRV	7-32	14
Assembly, Heat Box Cover, 4 Adjust	988292SRV	7-33	14
Assembly, Heat Box Cover, Single Adjust	988291	7-30	12
Assembly, Heat Box Cover, Single Adjust	988291	7-31	12
Assembly, Heat Box Cover, Single Adjusting	988291	7-24	12
Assembly, Heat Box Cover, Single Adjusting	988291	7-25	12
Assembly, Heat Box, Electric, 4 Adjust	988319SRV	7-32	2
Assembly, Heat Box, Electric, 4 Adjust	988319SRV	7-33	2
Assembly, Heat Box, Electric, Single Adjust	987872SRV	7-30	2
Assembly, Heat Box, Electric, Single Adjust	987872SRV	7-31	2
Assembly, Heat Box, Propane, 4 Adjust	988318SRV	7-26	2
Assembly, Heat Box, Propane, 4 Adjust	988318SRV	7-27	2
Assembly, Heat Box, Propane, Single Adjust	851182SRV	7-24	2
Assembly, Heat Box, Propane, Single Adjusting	851182SRV	7-25	2
Assembly, Heated Edge Endgate (Left)	1011188	7-68	1
Assembly, Heated Edge Endgate (Right)	1011146	7-69	1
Assembly, Heated HD Endgate (Left)	1011143SRV	7-64	1
Assembly, Heated HD Endgate (Left)	1011143SRV	7-65	GRP
Assembly, Heated HD Endgate (Left)	1011148	7-65	1
Assembly, Heated HD Endgate (Right)	1011144SRV	7-64	2
Assembly, Heated HD Endgate (Right)	1011144SRV	7-66	GRP
Assembly, Heated HD Endgate (Right)	1011149	7-66	1
Assembly, Heated LeeBoy Edge Endgate (Right)	1011156SRV	7-69	GRP
Assembly, Heated LeeBoy Edge HD Endgate (Left)	1011187SRV	7-67	1
Assembly, Heated LeeBoy Edge HD Endgate (Left)	1011187SRV	7-68	GRP
Assembly, Heated LeeBoy Edge HD Endgate (Right)	1011156SRV	7-67	2
Assembly, Hinge	1002735	7-26	3

Description	Part No.	Figure No.	Item No.
Assembly, Hinge	1002736	7-27	3
Assembly, Hose, Track Tensioner (Right)	8550B	7-1	14
Assembly, Inner, Extension Mount (Left)	1007097	7-56	14
Assembly, Inner, Extension Mount (Right)	1007099	7-57	14
Assembly, Insert, Electric (Left)	984305-1SRV	7-32	REF
Assembly, Insert, Electric (Right)	984306-1SRV	7-33	REF
Assembly, Insert, Electric, 8500 (Left)	985561SRV	7-30	1
Assembly, Insert, Electric, 8500 (Right)	985562SRV	7-31	1
Assembly, Insert, Propane (Left)	983409-1SRV	7-26	REF
Assembly, Insert, Propane (Right)	983410-1SRV	7-27	REF
Assembly, Insert, Propane, 8500 (Right)	859395SRV	7-25	1
Assembly, Insert, Propane, 8500, (Left)	859394SRV	7-24	1
Assembly, Insert, Slope, Electric (Left)	984305SRV	7-32	1
Assembly, Insert, Slope, Electric (Right)	984306SRV	7-33	1
Assembly, Insert, Slope, Prop (Left)	983410SRV	7-26	1
Assembly, Insert, Slope, Prop (Right)	983409SRV	7-27	1
Assembly, Jointer, 8515 (Left)	983308SRV	7-34	1
Assembly, Jointer, 8515 (Right)	983309SRV	7-35	1
Assembly, Lower Thickness Adjuster	1011373	7-60	10
Assembly, Lower Thickness Adjuster	1011373	7-61	10
Assembly, New Style Seat Post, Short	988640SRV	7-40	2
Assembly, Outer Extension Mount (Left)	1007096	7-56	13
Assembly, Outer Extension Mount (Right)	1007098	7-57	13
Assembly, Push Roller, Swivel	984283SRV	7-1	39
Assembly, Radiator/Cooler, Kubota	988673-13	7-10	1
Assembly, Roller, Push Bar, w/Bearings / Shaft	980032	7-1	36
Assembly, Screed Arm, 8515 (Left)	984897SRV	7-15	REF
Assembly, Screed Arm, 8515 (Left)	984897SRV	7-36	1
Assembly, Screed Arm, 8515 (Right)	984896SRV	7-15	2
Assembly, Screed Arm, 8515 (Right)	984896SRV	7-37	1
Assembly, Screed Arm, Slope (Left)	1006437SRV	7-60	2
Assembly, Screed Arm, Slope (Right)	1006438SRV	7-61	2
Assembly, Screed Extension, Slope (Left)	1006378SRV	7-56	6
Assembly, Screed Extension, Slope (Right)	1006379SRV	7-57	6
Assembly, Screed, Citrus, Tank, Electric	1008862SRV	7-38	2
Assembly, Screed, Citrus, Tank, Electric	1008862SRV	7-62	1
Assembly, Screed, Citrus, Tank, Propane	985777SRV	7-38	1
Assembly, Seat w /Armrest, White	360010	7-40	1
Assembly, Side Access Door (Left)	1011029	7-13	25
Assembly, Side Access Door (Right)	1011030	7-13	24

Description	Part No.	Figure No.	Item No.
Assembly, Side Wing, 8515 (Left)	980702SRV	7-4	2
Assembly, Side Wing, 8515 (Right)	980703SRV	7-4	1
Assembly, Slide Adjust	985556SRV	7-26	4
Assembly, Slide Adjust	985556SRV	7-27	4
Assembly, Slide Adjust	985556SRV	7-32	4
Assembly, Slide Adjust	985556SRV	7-33	4
Assembly, Slide Plate	1002181	7-41	2
Assembly, Slide Plate, w/Chrome Rods	1002186	7-41	1
Assembly, Slide w/o Shafts	1006445	7-55	2
Assembly, Slide w/Shafts, HD	1006416	7-55	1
Assembly, Spacer Auger Shaft	982945	7-5	11
Assembly, Tank, Fuel, 8515	1009361	7-7	7
Assembly, Tank, Hydraulic, 8515	1003410SRV	7-7	5
Assembly, Test Port	REF	7-13	33
Assembly, Thickness	1011374SRV	7-60	3
Assembly, Thickness	1011374SRV	7-61	3
Assembly, Tilt Screw, Endgate	890081SRV	7-58	6
Assembly, Tilt Screw, Endgate	890081SRV	7-59	6
Assembly, Tilt Screw, Jointer	890081SRV	7-34	12
Assembly, Tilt Screw, Jointer	890081SRV	7-35	12
Assembly, Track, One Side	983166	7-2	REF
Assembly, Track, One Side, w/Poly Pads	851101P	7-1	1
Assembly, Truck Hitch	1000253SRV	7-48	REF
Assembly, Tube, Conveyor Front Chain Guide	851123	7-3	29
Assembly, Tube, Conveyor Rear Drive	851651	7-3	32
Assembly, Turnbuckle W/Ratchet	983157	7-51	2
Assembly, Turnbuckle W/Ratchet	983157	7-52	2
Assembly, Upper Screed Cover (Left)	1008757	7-51	19
Assembly, Upper Screed Cover (Left)	1008757	7-52	16
Assembly, Upper Screed Cover (Right)	1008758	7-51	18
Assembly, Upper Screed Cover (Right)	1008758	7-52	15
Assembly, Vertical Lift Adjust	1006390	7-56	16
Assembly, Vertical Lift Adjust	1006390	7-57	16
Assembly, Vibrator (Left)	982965LSRV	7-39	1
Assembly, Vibrator (Left)	982965LSRV	7-53	1
Assembly, Vibrator (Right)	982965RSRV	7-39	REF
Assembly, Vibrator (Right)	982965RSRV	7-53	7
Assembly, Walk Board, Long	987056SRV	7-40	4
Assembly, Walkboard - Long	987056SRV	7-54	1
Assembly, Wear Plate, Electric	987216SRV	7-28	13

Description	Part No.	Figure No.	Item No.
Assembly, Wear Plate, Electric	987216SRV	7-29	7
Assembly, Wear Plate, Propane	981724SRV	7-22	9
Auger End Mount, 8000/8500 (Left)	1011441*	7-5	9
Auger End Mount, 8000/8500 (Right)	1011441	7-5	8
Auger Flight, 12", 8515 (Left)	981700L	7-5	16
Auger Flight, 12", 8515 (Right)	981700R	7-5	15
Auger Shaft w/Sprocket, Spacer & Bearing	981691	7-5	10
-B-			
Ball Joint, .750, Male	1000947	7-56	18
Ball Joint, .750, Male	1000947	7-57	18
Bar Jack, Screed Slide	988556	7-23	12
Bar Jack, Screed Slide	988556	7-29	12
Bar, .125 x 2.00 x 44.50, Notches	855562	7-23	13
Bar, .125 x 2.00 x 44.50, Notches	855562	7-29	13
Bar, .25 x 1.5 x 36	985120	7-56	4
Bar, .25 x 1.5 x 36	985120	7-57	4
Bar, .250 x 1.50 x 36	985120	7-30	10
Bar, .250 x 1.50 x 36	985120	7-31	10
Bar, .250 x 1.50 x 36	985120	7-32	12
Bar, .250 x 1.50 x 36	985120	7-33	12
Bar, .250 x 2.00 x 7.00	853593SRV	7-6	28
Bar, .375 x 1.50 x 42	985121	7-28	11
Bar, .375 x 1.50 x 42	985121	7-29	8
Bar, 125 x 1.50 x 9.50	853595	7-4	31
Bar, Adjustable Slide	851242SRV	7-46	2
Bar, Bottom Rail	981658	7-22	11
Bar, Bottom Rail	981658	7-28	16
Bar, Conveyor Flight Bar (Quick Change)	851118A	7-3	18
Bar, Element Hold Down	985121	7-51	9
Bar, Element Hold Down	985121	7-52	6
Bar, Element, Backup	1011155	7-65	3
Bar, Element, Backup	1011155	7-66	3
Bar, Element, Backup	1011155	7-68	3
Bar, Element, Backup	1011155	7-69	3
Bar, End Gate Skid 8515	982963SRV	7-34	7
Bar, Guide (Outer)	920041SRV	7-4	23
Bar, Pivot	981659	7-22	6
Bar, Pivot	981659	7-28	8
Bar, Tilt Screw Hold Down	980458	7-58	4

Description	Part No.	Figure No.	Item No.
Bar, Tilt Screw Hold Down	980458	7-59	4
Bar, Top Rail	981657	7-22	10
Bar, Top Rail	981657	7-28	17
Bar, Vertical Lift	1006395	7-56	8
Bar, Vertical Lift	1006395	7-57	8
Bar, Vertical Lift Gauge	1006397	7-56	12
Bar, Vertical Lift Gauge	1006398	7-57	12
Bar, V-Groove Bottom Rail	1006426	7-51	16
Bar, V-Groove Bottom Rail	1006426	7-52	13
Bar, V-Groove Top Rail	1006425	7-51	15
Bar, V-Groove Top Rail	1006425	7-52	12
Beacon Light, Amber, Strobe, LED	1013231	7-13	21
Bearing	986657	7-44	7
Bearing Roller, 1-1/4”	810110	7-60	5
Bearing Roller, 1-1/4”	810110	7-61	5
Bearing, Auger, Axle, Idler	850130	7-1	35
Bearing, Auger, Axle, Idler	850130	7-3	7
Bearing, Auger, Axle, Idler	850130	7-5	12
Bearing, Conveyor Pulley/Vibrator Shaft	250150	7-39	7
Bearing, Push Roller (1.25)	810110	7-48	13
Bearing, Screed Flight Screw	870030	7-24	5
Bearing, Screed Flight Screw	870030	7-25	5
Bearing, Screed Flight Screw	870030	7-26	5
Bearing, Screed Flight Screw	870030	7-27	5
Bearing, Screed Flight Screw	870030	7-30	5
Bearing, Screed Flight Screw	870030	7-31	5
Bearing, Screed Flight Screw	870030	7-32	5
Bearing, Screed Flight Screw	870030	7-33	5
Bearing, Screed Flight Screw	870030	7-36	13
Bearing, Screed Flight Screw	870030	7-37	13
Bearing, Screed Flight Screw	870030	7-56	28
Bearing, Screed Flight Screw	870030	7-57	28
Bearing, Truck Hitch Roller	930050	7-48	9
Belly Pan (Left)	851127LSRV	7-3	15
Belly Pan (Right)	851127RSRV	7-3	16
Belt, Fan	1009253-20	7-11	13
Block Link	850080A	7-3	14
Block, Terminal	985138-04	7-38	9
Block, Terminal	985138-04	7-62	8
Block, Terminal	985138-04	7-70	6

Description	Part No.	Figure No.	Item No.
Body, Regulator, LPG	230100-A	7-16	4
Bolt, Conveyor Drive Chain Adjuster	851148SRV	7-6	2
Bottom Rail, 8500 Screed Extension	855783	7-23	10
Bottom Rail, 8500 Screed Extension	855783	7-29	10
Bottom Tank	988049	7-4	16
Bracket For SM	988226	7-13	16
Bracket, Alternator	1009253-31	7-11	15
Bracket, Depth Screw Bottom Mount (Left)	1006571	7-58	3
Bracket, Depth Screw Bottom Mount Right)	1006452	7-59	3
Bracket, Depth Screw Control (Left)	890132LSRV	7-34	6
Bracket, Depth Screw Control (Right)	890132RSRV	7-35	6
Bracket, ECU Mounting	1009253-01	7-12	11
Bracket, Grade Control	855568	7-15	21
Bracket, Harness	1009253-29	7-12	9
Bracket, Radiator Support	1009384-18	7-10	11
Bracket, Recovery Bottle	1009384-08	7-10	4
Bracket, Sonic Sensor	1006451	7-58	8
Bracket, Sonic Sensor	1006451	7-59	8
Bracket, Sonic Sensor	1006451	7-65	6
Bracket, Sonic Sensor	1006451	7-66	6
Bracket, Sonic Sensor	1006451	7-68	6
Bracket, Sonic Sensor	1006451	7-69	6
Bracket, Sonic Tracker	851578	7-46	15
Bracket, Sonic Tracker	851578	7-47	17
Bracket, Z Arm, TopCon	9090-1125SRV	7-46	23
Bracket, Z Arm, TopCon	9090-1125SRV	7-47	10
Breaker, Main	985880	7-43	4
Breather, Track Tensioner Cylinder	851644	7-1	12
Breather, Track Tensioner Cylinder	851644	7-2	26
Bumper, Water Tank/Conveyor	410070	7-13	15
Burner Nozzle, Ignitor	1008652SRV	7-16	19
Burner Nozzle, Screed Extension	1008654SRV	7-16	20
Burner, Screed Extension	982504	7-16	17
Bushing	988588	7-41	4
Bushing, 2.00 ID x 2.50 OD x 2.50	810070	7-1	41
Bushing, 2.00 ID x 2.50 OD x 2.50	810070	7-5	7
Bushing, 2.00 ID x 2.50 OD x 2.50	810070	7-48	6
Bushing, Composite, Power Crown	1000960	7-63	REF
Bushing, Fiber, 2.25 OD / 2.00 ID	1006417	7-55	3
Bushing, Track Link, Short	851460	7-1	26

Description	Part No.	Figure No.	Item No.
-C-			
Cable 1.0625	851246	7-46	10
Cable Junction Box to Control Box	983416-01	7-47	5
Cable, AM Module Only	985866-02	7-46	REF
Cable, Battery	5804	7-13	REF
Cable, Battery	986804	7-13	REF
Cable, Height Locator .188 x 90 w/5.00" Stroke	851520	7-15	9
Cable, Power, Ultrasonic	982796	7-34	13
Cable, Power, Ultrasonic	982796	7-35	13
Cable, Power, Ultrasonic	980550	7-58	10
Cable, Power, Ultrasonic	980550	7-59	10
Cap, Adjuster Handle	1006434	7-60	12
Cap, Adjuster Handle	1006434	7-61	12
Cap, Fuel Tank, Lockable	140030FL	7-7	9
Cap, Fuel Tank, Lockable	140030FL	7-38	3
Cap, Fuel Tank, Lockable	140030FL	7-62	2
Cap, Hydraulic Tank, Lockable	140030HL	7-7	1
Cap, Radiator, 13.5 PSI, 2.25 Neck	1002184-04	7-10	2
Capacitor, Generator, 20 uF	1002146	7-43	REF
Capacitor, Generator, 25 uF	1002147	7-43	REF
Capacitor, Generator, 30 uF	1002148	7-43	REF
Capacitor, Generator, 35 uF	1011838	7-43	REF
Capacitor, Generator, 40 uF	986658	7-43	REF
Case, Sonic Tracker	851265	7-46	21
Center Shield, Conveyor Rear	840162	7-4	9
Chain Cover, 8515	981688SRV	7-5	2
Chain Guard, Conveyor Drive (Left)	854532SRV	7-6	8
Chain Guard, Conveyor Drive (Right)	853572SRV	7-6	REF
Chain Rail, Track Drive	851102	7-1	2
Chain Rail, Track Drive, Heavy Duty	983166-03	7-2	REF
Chain Turnbuckle	986639SRV	7-44	4
Chain, Auger Drive	985815	7-5	36
Chain, Conveyor Drive (#80)	851121	7-3	23
Chain, Conveyor Drive (#80)	851121	7-6	4
Chain, Roller, 40 x 52 Pitch	870190	7-22	4
Chain, Roller, 40 x 52 Pitch	870190	7-23	4
Chain, Roller, 40 x 52 Pitch	870190	7-28	4
Chain, Roller, 40 x 52 Pitch	870190	7-29	4
Chain, Roller, 50 x 18	1000958	7-63	9
Chain, Roller, 60H x 39 Pitches	1008047	7-51	4

Description	Part No.	Figure No.	Item No.
Chain, Roller, 60H X 39 Pitches	1008047	7-52	4
Chain, Roller, 60H x 39 Pitches	1008047	7-63	8
Chrome Rod	988601	7-41	6
Circuit Breaker, 10A	986546	7-19	9
Circuit Breaker, 10A	1009228	7-38	11
Circuit Breaker, 10A	1009228	7-62	10
Circuit Breaker, 10A	1009228	7-70	8
Clamp, Auger 12”	981683	7-5	13
Clamp, Element, Screed Extension	985123	7-30	11
Clamp, Element, Screed Extension	985123	7-31	11
Clamp, Element, Screed Extension	985123	7-32	13
Clamp, Element, Screed Extension	985123	7-33	13
Clamp, Element, Screed Extension	985123	7-56	3
Clamp, Element, Screed Extension	985123	7-57	3
Clamp, Hopper Front Flashing	985062SRV	7-4	13
Clamp, Hose, #60	35567	7-11	3
Clevis, .188 x .250	851213	7-15	8
Coil Cord, 15 FT. CA to Tracker	983414-08	7-47	3
Coil Cord, 6s/6s 1.5 to 7.5 FT	983050	7-34	15
Coil Cord, 6s/6s 1.5 to 7.5 FT	983050	7-35	15
Coil, 12VDC SV12, Generator	983644-01	7-18	1
Coil, 12VDC w/Deutsch Connector	1011728-02	7-17	2
Coil, Control Bypass H-1 Pump	986519-01	7-9	REF
Coiled Cord, TopCon Tracker/Slope	851574	7-46	27
Collar, Auger End Mount	851645	7-5	6
Collar, Lock	620400	7-48	5
Collar, Power Crown Locking	1000798	7-63	7
Condulet, 3/4” Aluminum	920238-2	7-63	REF
Connector, 2-Pin, Plug, DT06-2S Deutsch	983199	7-64	REF
Connector, 2-Pin, Plug, DT06-2S Deutsch	983199	7-67	REF
Connector, 3-Pin, Plug w/120 ohm	989179	7-19	26
Connector, Sealed, Tower, 2-Pin	35193	7-15	REF
Connector, Wedge, Plug, 2P Deutsch	983208	7-64	REF
Connector, Wedge, Plug, 2P Deutsch	983208	7-67	REF
Contact Block, 1-NC, Eaton	1010692	7-19	10
Controller, 50 DIN, Plus One	1012975	7-9	5
Conveyor Mounting Plate w/Bearing	851483SRV	7-3	4
Cord, 4 FT , Electronic Steering	851548-04	7-9	8
Cotter Pin, .188 x 2.00 Long	80338	7-6	9
Coupling Assembly, Motor/Generator, 28 mm	987894	7-43	REF

Description	Part No.	Figure No.	Item No.
Coupling Half, 1.00, Vibrator Shaft	880030	7-39	3
Coupling Half, 3 Jaw, 1"	880030	7-53	3
Coupling Half, 3 Jaw, 24 mm	1002454	7-43	REF
Coupling Half, 3 Jaw, 5/8"	280030	7-53	5
Coupling Half, Tack Pump Motor	280030	7-39	5
Coupling, Drive Plate	1002676-03	7-12	2
Cover, 3/4" Condulet	920238-3	7-63	REF
Cover, Access Hole (Left)	987620	7-13	7
Cover, Access Hole (Right)	987633	7-13	8
Cover, Access Hole, Top	987629	7-13	9
Cover, Auger Support, 8515	981695SRV	7-5	14
Cover, Back Panel	930065	7-48	15
Cover, Dash Channel	855373	7-13	28
Cover, Drivers Side	987623	7-13	5
Cover, Elements, Screed Base	985124	7-28	7
Cover, Elements, Screed Base	985124	7-29	6
Cover, Elements, Screed Base	985125	7-51	5
Cover, Elements, Screed Base	985125	7-52	5
Cover, Power Crown	986643	7-44	3
Cover, Power Crown	1008168	7-63	1
Cover, Rear Elements	1007002	7-51	11
Cover, Rear Elements	1007002	7-52	8
Cover, Right Side SM	1009347	7-13	4
Cover, Screed Elements	985149	7-52	14
Cover, Screed Elements	985149	7-51	17
Cover, Screed Extension Cylinder	851204SRV	7-29	15
Cover, Screed Extension Cylinder	851203SRV	7-29	16
Cover, Screed Extension Cylinder (Left)	851204SRV	7-23	15
Cover, Screed Extension Cylinder (Right)	851203SRV	7-23	16
Cover, Screed Lid	985149	7-22	13
Cover, Screed Lid	985149	7-28	18
Cover, Screed Lower (Left/Right)	1007000	7-51	20
Cover, Screed Lower (Left/Right)	1007000	7-52	17
Cover, Screed Plate Access	851201SRV	7-23	14
Cover, Screed Plate Access	851201SRV	7-29	14
Cover, Upper, Vent, With Louvers (Left)	1011954	7-13	11
Cover, Vent, Top, Tier 4I (Right)	1009351	7-13	10
CSHH, .1/2-13 x 1.00, GR5, FT	100-8-13-16-5F	7-53	13
CSHH, .1/2-13 x 1.50, GR5, FT	100-8-13-24-5F	7-4	34
CSHH, 1/2-13 x .75, GR5, FT	100-8-13-12-5F	7-34	10

Description	Part No.	Figure No.	Item No.
CSHH, 1/2-13 x .75, GR5, FT	100-8-13-12-5F	7-35	10
CSHH, 1/2-13 x 1.00, GR5, FT	100-8-13-16-5F	7-3	10
CSHH, 1/2-13 x 1.00, GR5, FT	100-8-13-16-5F	7-58	12
CSHH, 1/2-13 x 1.00, GR5, FT	100-8-13-16-5F	7-59	12
CSHH, 1/2-13 x 1.00, GR5, FT	100-8-13-16-5F	7-63	14
CSHH, 1/2-13 X 1.25, GR5, FT	100-8-13-20-5F	7-54	3
CSHH, 1/2-13 x 1.25, GR5, FT	100-8-13-20-5F	7-63	17
CSHH, 1/2-13 x 1.50, GR5	100-8-13-24-5	7-5	21
CSHH, 1/2-13 x 1.75, GR5	100-8-13-28-5	7-2	23
CSHH, 1/2-13 x 1.75, GR5	100-8-13-28-5	7-15	19
CSHH, 1/2-13 x 2.00, GR5	100-8-13-32-5	7-3	1
CSHH, 1/2-13 x 2.00, GR5	100-8-13-32-5	7-6	6
CSHH, 1/2-13 x 2.00, GR5	100-8-13-32-5	7-48	11
CSHH, 1/2-13 x 2.00, GR5	100-8-13-32-5	7-51	30
CSHH, 1/2-13 x 2.00, GR5	100-8-13-32-5	7-52	26
CSHH, 1/2-13 x 2.00, GR5, FT	100-8-13-32-5F	7-4	33
CSHH, 1/2-13 x 2.50, GR5	100-8-13-40-5	7-46	7
CSHH, 1/2-20 x 1.50, GR5	100-8-20-24-5	7-41	9
CSHH, 1/4-20 x .75, GR5, FT	100-4-20-12-5F	7-60	17
CSHH, 1/4-20 x .75, GR5, FT	100-4-20-12-5F	7-61	17
CSHH, 1/4-20 x 1.00, GR5, FT	100-4-20-16-5F	7-1	49
CSHH, 1/4-20 x 1.00, GR5, FT	100-4-20-16-5F	7-26	19
CSHH, 1/4-20 x 1.00, GR5, FT	100-4-20-16-5F	7-27	19
CSHH, 1/4-20 x 1.00, GR5, FT	100-4-20-16-5F	7-32	19
CSHH, 1/4-20 x 1.00, GR5, FT	100-4-20-16-5F	7-33	19
CSHH, 1/4-20 x 1.00, GR5,FT	100-4-20-16-5F	7-6	24
CSHH, 1/4-20 x 2.00, GR5	100-4-20-32-5	7-15	17
CSHH, 1-14 x 3.00, GR8	100-16-14-48-8	7-6	14
CSHH, 1-14 x 3.50 GR5	100-16-14-56-5	7-6	16
CSHH, 135mm, Track Pad Bolt	983166-06	7-2	REF
CSHH, 1-8 x 2.50, GR5	100-16-8-40-5	7-15	11
CSHH, 3/8-16 x .50, GR5, FT	100-6-16-8-5F	7-60	24
CSHH, 3/8-16 x .50, GR5, FT	100-6-16-8-5F	7-61	24
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-4	10
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-5	26
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-6	11
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-15	15
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-65	9
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-66	9
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-68	9

Description	Part No.	Figure No.	Item No.
CSHH, 3/8-16 x .75, GR5, FT	100-6-16-12-5F	7-69	9
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-19	22
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-56	21
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-57	21
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-58	15
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-59	15
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-65	12
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-66	12
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-68	12
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-69	12
CSHH, 3/8-16 x 1.00, GR5, FT	100-6-16-16-5F	7-63	12
CSHH, 3/8-16 x 1.75, GR5	100-6-16-28-5	7-36	10
CSHH, 3/8-16 x 1.75, GR5	100-6-16-28-5	7-37	10
CSHH, 3/8-16 x 2.00, GR5	100-6-16-32-5	7-4	40
CSHH, 3/8-16 x 2.00, GR5	100-6-16-32-5	7-26	16
CSHH, 3/8-16 x 2.00, GR5	100-6-16-32-5	7-27	16
CSHH, 3/8-16 x 2.00, GR5	100-6-16-32-5	7-32	16
CSHH, 3/8-16 x 2.00, GR5	100-6-16-32-5	7-33	16
CSHH, 3/8-24 x 1.00, GR5, FT	100-6-24-16-5F	7-22	16
CSHH, 3/8-24 x 1.00, GR5, FT	100-6-24-16-5F	7-23	18
CSHH, 3/8-24 x 1.00, GR5, FT	100-6-24-16-5F	7-28	21
CSHH, 3/8-24 x 1.00, GR5, FT	100-6-24-16-5F	7-29	18
CSHH, 3/8-24 x 1.00, GR8, FT	100-6-24-16-8F	7-24	14
CSHH, 3/8-24 x 1.00, GR8, FT	100-6-24-16-8F	7-25	14
CSHH, 3/8-24 x 1.00, GR8, FT	100-6-24-16-8F	7-30	14
CSHH, 3/8-24 x 1.00, GR8, FT	100-6-24-16-8F	7-31	14
CSHH, 3/85-16 x 1.00, GR5, FT	100-6-16-16-5F	7-7	14
CSHH, 5/16-18 x .50, GR5, FT	100-5-18-8-5F	7-38	14
CSHH, 5/16-18 x .50, GR5, FT	100-5-18-8-5F	7-51	24
CSHH, 5/16-18 x .50, GR5, FT	100-5-18-8-5F	7-52	20
CSHH, 5/16-18 x .50, GR5, FT	100-5-18-8-5F	7-62	12
CSHH, 5/16-18 x .50, GR5, FT	100-5-18-8-5F	7-58	17
CSHH, 5/16-18 x .50, GR5, FT	100-5-18-8-5F	7-59	17
CSHH, 5/16-18 x .75, GR5, FT	100-5-18-12-5F	7-5	24
CSHH, 5/16-18 x .75, GR5, FT	100-5-18-12-5F	7-53	11
CSHH, 5/16-18 x .75, GR5, FT	100-5-18-12-5F	7-56	27
CSHH, 5/16-18 x .75, GR5, FT	100-5-18-12-5F	7-57	27
CSHH, 5/16-18 x 1.25, GR5	100-5-18-20-5	7-30	17
CSHH, 5/16-18 x 1.25, GR5	100-5-18-20-5	7-31	17
CSHH, 5/16-18 x 1.50, GR5	100-5-18-24-5	7-51	26

Description	Part No.	Figure No.	Item No.
CSHH, 5/16-18 x 1.50, GR5	100-5-18-24-5	7-52	22
CSHH, 5/16-18 x 2.50, GR5	100-5-18-40-5	7-56	19
CSHH, 5/16-18 x 2.50, GR5	100-5-18-40-5	7-57	19
CSHH, 5/8-11 x 1.00, GR5, FT	100-10-11-16-5F	7-3	32A
CSHH, 5/8-11 x 1.00, GR5, FT	100-10-11-16-5F	7-53	9
CSHH, 5/8-11 x 1.25, GR5, FT	100-10-11-20-5F	7-3	24
CSHH, 5/8-11 x 1.25, GR5, FT	100-10-11-20-5F	7-46	25
CSHH, 5/8-11 x 1.25, GR5, FT	100-10-11-20-5F	7-47	14
CSHH, 5/8-11 x 1.25, GR8, FT	100-10-11-20-8F	7-2	15
CSHH, 5/8-11 x 1.25, GR8, FT	100-10-11-20-8F	7-4	REF
CSHH, 5/8-11 x 1.50, GR5, FT	100-10-11-24-5F	7-4	37
CSHH, 5/8-11 x 1.50, GR5, FT	100-10-11-24-5F	7-5	28
CSHH, 5/8-11 x 1.50, GR5, FT	100-10-11-24-5F	7-6	18
CSHH, 5/8-11 x 2.00, GR5	100-10-11-32-5	7-3	29A
CSHH, 5/8-11 x 2.00, GR8	100-10-11-32-8	7-2	17
CSHH, 5/8-11 x 2.50, GR5	100-10-11-40-5	7-15	13
CSHH, 5/8-11 x 2.50, GR5	100-10-11-40-5	7-46	13
CSHH, 5/8-11 x 2.75, GR5	100-10-11-44-5	7-5	33
CSHH, 5/8-11 x 3.50, GR5	100-10-11-56-5	7-38	17
CSHH, 5/8-11 x 3.50, GR5	100-10-11-56-5	7-62	15
CSHH, 5/8-11 x 4.00, GR5	100-10-11-64-5	7-46	17
CSHH, 5/8-11 x 4.00, GR5	100-10-11-64-5	7-47	16
CSHH, 7/16-14 x .75, GR5, FT	100-7-14-12-5F	7-58	18
CSHH, 7/16-14 x .75, GR5, FT	100-7-14-12-5F	7-59	18
CSHH, 7/16-14 x 1.00, GR5, FT	100-7-14-16-5F	7-51	28
CSHH, 7/16-14 x 1.00, GR5, FT	100-7-14-16-5F	7-52	24
CSHH, 7/16-14 x 1.25, GR5	100-7-14-20-5	7-24	17
CSHH, 7/16-14 x 1.25, GR5	100-7-14-20-5	7-25	17
CSHH, 7/16-14 x 1.50, GR5	100-7-14-20-5	7-56	23
CSHH, 7/16-14 x 1.50, GR5	100-7-14-20-5	7-57	23
CSHH, 7/8-9 x 2.00, GR5, FT	100-14-9-32-5F	7-34	5
CSHH, 7/8-9 x 2.00, GR5, FT	100-14-9-32-5F	7-35	5
CSHH, M10x1.50 x 16mm	989272-50	7-1	31
CSHH, M10x1.50 x 30mm	989272-36	7-2	20
CSHH, M12x1.50 x 50mm	811330A	7-2	19
CSHH, M12x1.75 x 45mm, C8.8, FT	100-M12-1.75-45-8.8F	7-1	51
CSHH, M12x1.75 x 50mm, C8.8, FT	100-M12-1.75-50-8.8F	7-1	47
CSHH, M16x2 x 65mm, C8.8, FT	100-M16-2-65-8.8F	7-1	44
CSHH, Track Pad	811308	7-1	32
CSLS, M16x2 x 35mm	1008895	7-1	46

Description	Part No.	Figure No.	Item No.
CSLS, M16x2 x 45mm	1008903	7-1	42
CSSH, 3/8-16 Shoulder Socket	870279	7-24	6
CSSH, 3/8-16 Shoulder Socket	870279	7-25	6
CSSH, 3/8-16 Shoulder Socket	870279	7-26	7
CSSH, 3/8-16 Shoulder Socket	870279	7-27	7
CSSH, 3/8-16 Shoulder Socket	870279	7-30	6
CSSH, 3/8-16 Shoulder Socket	870279	7-31	6
CSSH, 3/8-16 Shoulder Socket	870279	7-32	7
CSSH, 3/8-16 Shoulder Socket	870279	7-33	7
Cutoff (Left)	851153SRV	7-6	22
Cutoff (Right)	851154SRV	7-6	23
Cylinder, Arm Extension	930070	7-48	16
Cylinder, Hopper Lift	840020	7-4	18
Cylinder, Hydraulic, 2.00 x 12.00/30.00 x 1.25 (Left)	851191	7-42	1
Cylinder, Hydraulic, 2.00 x 12.00/30.00 x 1.25 (Right)	851192	7-42	2
Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	981710R	7-51	21
Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	981710R	7-52	18
Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	981710L	7-51	22
-D-			
Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	981710L	7-52	19
Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25 (Left)	981710L	7-42	3
Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25 (Right)	981710R	7-42	4
Cylinder, Hydraulic, 2.00 x 8.00	610110	7-4	3
Cylinder, Hydraulic, 2.75 x 2.00 x 1.125 Rod	983421	7-42	5
Cylinder, Hydraulic, 2.75 x 2.00 x 1.125 Rod	983421	7-51	23
Cylinder, Hydraulic, Track Tensioner	811331	7-1	11
Cylinder, Hydraulic, Track Tensioner	811331	7-2	9
Decal, Auger Extension (Left)	859784	7-60	29
Decal, Auger Extension (Right)	859783	7-61	29
Decal, Certified Emission Engine Installation	1010091	7-19	REF
Decal, CJ-4 Oil Only	1010089	7-19	REF
Decal, Control Panel, Tier 4	1010027	7-19	REF
Decal, Display Panel, 8515 T4F	1009253-06	7-19	17
Decal, Electric Heat	985143	7-38	12
Decal, Electric Heat	985143	7-62	11
Decal, Electric Heat	1011180	7-64	4
Decal, Electric Heat	1011180	7-67	5
Decal, Electric Heat	1011180	7-70	9
Decal, Elite III Dash (Left)	856647	7-60	30

Description	Part No.	Figure No.	Item No.
Decal, Elite III Dash (Right)	856648	7-61	30
Decal, Height	851215	7-15	10
Decal, Info, Test Port	1014058	7-8	3
Decal, Thicker/Thinner	1007677-01	7-60	28
Decal, Thicker/Thinner	1007677-01	7-61	28
Decal, Ultra Low Sulfur Fuel Only	1010090	7-19	REF
Deflector, Left Side (High Deck)	850038LSRV	7-3	26
Deflector, Right Side (High Deck)	850038RSRV	7-3	REF
Door, Engine Access	1009349	7-13	12
Drive Shaft, Conveyor	851116	7-3	8
Dual Grade & Slope	1014915SRV	7-47	REF
Dual Grade Control	1014914SRV	7-47	REF
Dual Joysticks, Control Box, Plus One	1008904SRV	7-9	4
Dual Pilot Operated Check Valve	983643-05	7-17	5
-E-			
Ears, Pivot	851210	7-15	5
ECU, Kubota	1009253-24	7-12	10
Elbow, Reducing	1009384-02	7-11	6
Element, Heater, 46", 1000W	1007275SRV	7-51	10
Element, Heater, 46", 1000W	1007275SRV	7-52	7
Element, Heater, Screed, 40”	987890SRV	7-30	9
Element, Heater, Screed, 40”	987890SRV	7-31	9
Element, Heater, Screed, 40”	987890SRV	7-32	11
Element, Heater, Screed, 40”	987890SRV	7-33	11
Element, Heater, Screed, 41"	987890SRV	7-56	5
Element, Heater, Screed, 41"	987890SRV	7-57	5
Element, Heater, Screed, 46”	987886SRV	7-28	12
Element, Heater, Screed, 46”	987886SRV	7-29	9
Element, Heating, 250W/240V, 11” Complete	1015015SRV	7-51	32
Element, Heating, 500W/220V, 30” Long	1011158	7-65	2
Element, Heating, 500W/220V, 30” Long	1011158	7-66	2
Element, Heating, 500W/220V, 30” Long	1011158	7-68	2
Element, Heating, 500W/220V, 30” Long	1011158	7-69	2
Emergency Brake Switch	988924-03SRV	7-19	13
Enclosure, Electric 2 SW, LW Control (Left)	984535L	7-36	2
Enclosure, Electric 2 Switch, Lower Control (Left)	984535L	7-60	1a
Enclosure, Electric 2 Switch, Lower Control (Right)	984535R	7-61	1a
Enclosure, Electric 3 SW, LW Control (Left)	984534L	7-36	2a
Enclosure, Electric 3 Switch, Lower Control (Left)	984534L	7-60	1

Description	Part No.	Figure No.	Item No.
Enclosure, Electric 3 Switch, Lower Control (Right)	984534R	7-61	1
Enclosure, Electric Heat and Heated Endgates	1011311-01	7-70	1
Enclosure, Electric Heat w/Holes	1010397-01	7-38	8
Enclosure, Electric Heat w/Holes	1010397-01	7-62	7
Enclosure, Electric, 2 SW, LW Control (Right)	984535R	7-37	2
Enclosure, Electric, 3 SW, LW Control (Right)	984534R	7-37	2a
Enclosure, Electric, 4x4x3, 3 Holes (Left)	984533-03L	7-36	3
Enclosure, Electric, 4x4x3, 3 Holes (Left)	984533-03L	7-60	20
Enclosure, Electric, 4x4x3, 3 Holes (Left)	984533-03L	7-61	20
Enclosure, Electric, 4x4x3, 3 Holes (Right)	984533-03R	7-37	3
End Cap, Auger Shaft	851647	7-5	23
End, Motor End of Screw	851212	7-15	7
End, Rod End of Screw	851211	7-15	6
Engine, Kubota, T4F, 74HP, 8515	1013154	7-10	GRP
Engine, Kubota, T4F, 74HP, 8515	1013154	7-11	GRP
Engine, Kubota, T4F, 74HP, 8515	1013154	7-12	GRP
Extension Burner Pipe	854571SRV	7-24	19
Extension Burner Pipe	854571SRV	7-25	19
Extension, 12" Auger (Left)	985795	7-5	REF
Extension, 12" Auger (Right)	985796	7-5	REF
Extension, 6” (Left)	851634LSRV	7-45	5
Extension, 6” (Right)	851634RSRV	7-45	6
Extension, Front Bumper	852664	7-1	38
Extension, Screed Arm	851206SRV	7-15	1
-F-			
Fan, Radiator	1009253-23	7-11	12
Fan, Radiator 8515	1009253-23	7-10	6
Filler Neck	140030FN	7-7	2
Filter, Air, Primary	1009253-17	7-11	REF
Filter, Air, Secondary	1009253-19	7-11	REF
Filter, Element Hydraulic	984594-01	7-7	16
Filter, Element Hydraulic	984594-01	7-17	REF
Filter, Element, Charge/Return	290030	7-7	13
Filter, Fuel	1009253-18	7-11	REF
Filter, Fuel	1009253-18	7-12	15
Filter, Fuel/Water Separator	1009253-19	7-11	REF
Filter, Fuel/Water Separator	1009253-19	7-12	14
Filter, Head, Charge/Return	290010	7-7	12
Filter, Hydraulic	36123	7-7	6

Description	Part No.	Figure No.	Item No.
Filter, Oil	986537-03	7-11	7
Fitting Straight, 10MJ-08MB	6400-10-8	7-1	18
Fitting, 8LOC - 8RFJX90	1010528	7-64	REF
Fitting, 8LOC - 8RFJX90	1010528	7-67	REF
Fitting, 90° 06MJ-06MP, .078 Orifice	987909	7-15	23
Fitting, 90°, 10MJ-08MB	6801-10-8	7-1	17
Fitting, Lube, Straight, 1/4-28	140610	7-5	37
Fitting, Lube, Straight, 1/4-28	140610	7-36	14
Fitting, Lube, Straight, 1/4-28	140610	7-37	14
Fitting, Push Lok, -5 LOC/-6 RFJX	5LOC-6RFJX	7-14	REF
Fitting, Straight, 08MP-08MB	6401-8-8-O	7-1	20
Flashing, Center, Front Lip	985063SRV	7-4	28
Flow Divider FD10	983643-10	7-17	7
Front Lip Clamp	985581	7-4	32
Fuse Block, 18 Gang, ATC	685060	7-19	8
Fuse Holder	1009253-27	7-12	7
-G-			
Gasket, Condulet Box, 3/4”	920238-4	7-63	REF
Gauge, LPG Pressure	230110	7-16	3
Gauge, Murphy, T4F	1013632	7-19	16
Generator	988176SRV	7-43	2
Grating, Left Side	987862	7-13	17
Grating, Middle	987863	7-13	18
Grating, Right Side	987864	7-13	19
Group, Drive Poly Track, Comer	1009869	7-1	GRP
Group, Screed Base 8500 Series Electric	989377SRV	7-29	1
Group, Screed Base 8500 Series Prop	1000251SRV	7-23	1
Group, Screed Frame, 815HD	1007195	7-51	1
Group, Screed Frame, 815HD	1007195SRV	7-52	1
Guard, Fan, Maintainer	1005365-23	7-10	7
Guard, Screed Extension Hinge (Left)	851180LSRV	7-24	16
Guard, Screed Extension Hinge (Left)	851180LSRV	7-26	15
Guard, Screed Extension Hinge (Left)	851180LSRV	7-30	16
Guard, Screed Extension Hinge (Left)	851180LSRV	7-32	15
Guard, Screed Extension Hinge (Right)	851180RSRV	7-25	16
Guard, Screed Extension Hinge (Right)	851180RSRV	7-27	15
Guard, Screed Extension Hinge (Right)	851180RSRV	7-31	16
Guard, Screed Extension Hinge (Right)	851180RSRV	7-33	15
Guide Wheel, Truck Hitch	930055	7-48	10

Description	Part No.	Figure No.	Item No.
-H-			
Hair Pin Cotter, .177	870307	7-1	10
Hair Pin Cotter, .177	870307	7-2	13
Hair Pin, Cotter, .177	870307	7-4	5
Half Link, Conveyor Chain w/Pin, Cotter	850215A	7-3	17
Hand Grip, Driver Lever	870276	7-65	16
Hand Grip, Driver Lever	870276	7-66	16
Hand Grip, Driver Lever	870276	7-68	16
Hand Grip, Driver Lever	870276	7-69	16
Hand Grip, Flight/Depth Screw	870276	7-34	17
Hand Grip, Flight/Depth Screw	870276	7-35	17
Hand Grip, Flight/Depth Screw	870276	7-36	8
Hand Grip, Flight/Depth Screw	870276	7-37	8
Handle & Nozzle, Fuel	920220	7-14	6
Handle Grip for Steering Box Handle	490010	7-9	REF
Handle, Bolt, 5/8-11	300060	7-46	24
Handle, Bolt, 5/8-11	300060	7-47	13
Harness, Electric Heat, Gen. to Bulkhead	1007254	7-43	7
Harness, Plus One to Pumps	987133	7-9	6
Harness, Wiring Lower	983644-06	7-18	REF
Hinge Assembly	1002735SRV	7-32	3
Hinge Assembly	1002736SRV	7-33	3
Hinge, (2) Thru Holes	987639	7-13	13
Hinged Panel (Left)	840157SRV	7-4	20
Hinged Panel (Right)	840156SRV	7-4	21
Hold Down	802112SRV	7-4	8
Hood, Air Inlet, 3.75	1002917-29	7-11	2
Horn, Backup Alarm	160320	7-9	REF
Hose Clamp, 2.125 (Size 28)	230240	7-16	18
Hose Kit 8515 Truck Hitch	984399	7-48	REF
Hose Spraydown, 9 Ft., 5LOLA-JFJX-OPRN-48	1008060	7-14	3
Hose, 06, Low Pressure Push-On	38579	7-14	4
Hose, 8LOLA, Lock On, 300 PSI, Black, 40”	1011315-01	7-64	REF
Hose, 8LOLA, Lock On, 300 PSI, Black, 40”	1011315-01	7-67	REF
Hose, 8LOLA, Lock On, 300 PSI, Black, 50”	1011315-02	7-64	REF
Hose, 8LOLA, Lock On, 300 PSI, Black, 50”	1011315-02	7-67	REF
Hose, Ignitor Burner	230034	7-16	7
Hose, Ignitor Burner	230034	7-16	23
Hose, LPG Regulator to Tee	230032	7-16	6
Hose, Radiator, Lower	1001166-15	7-10	9

Description	Part No.	Figure No.	Item No.
Hose, Radiator, Upper	986537-21	7-10	8
Hose, Screed Extension Burner	230038	7-16	10
Hose, Screed Extension Burner	851225	7-16	13
Hose, Spraydown, 4 Ft., 5LOLOA-JFJX-OPEN-108	1008061	7-14	2
Housing, Front Slide Bar	851243SRV	7-46	4
Housing, Guide Bar (Inner)	920051SRV	7-4	24
Housing, Rear Slide Bar	851241SRV	7-46	1
Housing, Vibrator (Left)	982965L-1	7-53	2
Housing, Vibrator (Right)	982965R-1	7-53	8
Hydraulic Cylinder, Cutoff	910170	7-6	21
Hydraulic Cylinder, Screed Lift	851436SRV	7-6	12
Hydraulic Motor, Conveyor Main	1005803	7-3	21
Hydraulic Motor, Conveyor Main	1005803	7-5	4
Hydraulic Motor, Conveyor Main	1005803	7-6	1
Hydraulic Motor, Screed Vibrator	983405	7-39	6
-I, J, K, L-			
Idler, Conveyor Chain Front	850120	7-3	28
Idler, Track Front	1001589	7-1	8
Idler, Track Front	983530	7-2	11
Ignition Key, Replacement	982008-04	7-19	19
Ignitor, Ceramic, Hot Surface	230024	7-16	22
Insert, 3-Jaw Coupling	280040	7-39	4
Insert, 3-Jaw Coupling	280040	7-53	4
Isolator, Engine	986537-14	7-11	11
Isolator, Radiator, Upper Mount	1001166-57	7-10	3
Key, .25 x .25 x 1.25	1011309	7-60	9
Key, .25 x .25 x 1.25	1011309	7-61	9
Key, Vandalism Lock	35560	7-13	REF
Kit, Decals, 8515 Safety & Ops	1007678	7-19	REF
Kit, Extension Element Hose/Wiring	1011315	7-64	5
Kit, Extension Element Hose/Wiring	1011315	7-67	6
Kit, Pressure Test, Hydraulic	1013595	7-8	4
Kit, Shaft, H-1 Pump	986519-03	7-9	REF
Kit, Spray Down Pump w/Cut Off	1011885	7-14	1
Kit, Track, Heavy Link	983166-05	7-2	REF
Knob, Revolving Ball, M12x1.75	981574	7-60	11
Knob, Revolving Ball, M12x1.75	981574	7-61	11
Latch, Walkboard	985549	7-40	6
Latch, Walkboard	985549	7-54	6

Description	Part No.	Figure No.	Item No.
Lever Latch	980460	7-13	14
Light, Red, Dash, .50 Hole	31983	7-70	3
Light, Red, Dash, .500 Hole	31983	7-38	5
Light, Red, Dash, .500 Hole	31983	7-62	4
Light, Red, Indicator	900120	7-19	6
Light,Indicator,Red	1009253-07	7-19	20
Link Kit, Track Repair	811312	7-1	25
Link w/Tab Conveyor Chain Inner	850080B	7-3	19
Link, Master	853411	7-5	REF
Link, Master w/Pins	850070A	7-3	13
Link, Master, #60 Chain	853411	7-51	REF
Link, Master, #60 Chain	853411	7-52	REF
Lock Arm, Flight Screw	851373SRV	7-60	27
Lock Arm, Flight Screw	851373SRV	7-61	27
Locking Bar, Crown And Valley	988376	7-22	5
Locking Bar, Crown And Valley	988376	7-23	5
Locking Bar, Crown And Valley	988376	7-28	5
Locking Bar, Crown And Valley	988376	7-29	5
Locknut, PTORQ, 3/4-16	95998936	7-60	13
-M-			
Locknut, PTORQ, 3/4-16	95998936	7-61	13
LPG Tank, 20 lbs.	230010	7-16	1
Machine Screw, Phillips Head, #10-32 x 2.25	900076	7-3	39
Manifold, 9-Station Upper	983643-13	7-17	8
Manifold, Generator, w/Flow Control	986992	7-43	5
Manifold, Hydraulic, 6 Valve, Adjustable Relief	983644	7-18	GRP
Manifold, Hydraulic, 9 Station, 7 Valve	1011728	7-17	GRP
Manifold, Lower	983644-07	7-18	5
Manifold, Side Wing	910122	7-7	10
Manifold, Track Tensioner	851544	7-1	19
Micro Switch, Automatic	900050SRV	7-3	36
Motor Mount Cover	986644	7-44	6
Motor, Hydraulic, Danfoss	986640	7-63	4
Motor, Hydraulic, Drive, 2 Speed	811362	7-2	3
Motor, Hydraulic, Drive, 2-Speed	811362	7-1	22
Motor, Hydraulic, Gear, 1.17 Cir, "A"	983405	7-53	6
Motor, Hydraulic, Generator	986994SRV	7-43	3
Motor, Power Crown	986640	7-44	1
Mount, Conveyor Drive Motor	851149SRV	7-6	3

Description	Part No.	Figure No.	Item No.
Mount, Engine, Front (Left)	986537-16	7-11	9
Mount, Engine, Front, (Right)	986537-17	7-11	10
Mount, Engine, Rear	988673-14	7-11	8
Mount, Lower Radiator	1009384-12	7-10	10
Mount, Motor, 8515	981696	7-5	5
Mount, Pivot	851209SRV	7-15	3
Mount, Push Roller, Extended	1006286	7-1	REF
Mount, Sonic Sensor	1008905	7-58	9
Mount, Sonic Sensor	1008905	7-59	9
Mount, Sonic Sensor	1008905	7-65	5
Mount, Sonic Sensor	1008905	7-66	5
Mount, Sonic Sensor	1008905	7-68	7
Mount, Sonic Sensor	1008905	7-69	7
Mounting Plate 6” Electric Screw, (Left)	853585SRV	7-15	REF
Mounting Plate 6” Electric Screw, RH	853586SRV	7-15	22
-N-			
Nozzle, Spraydown	901210A	7-14	REF
Nut, Hex Jam, 3/4-10, GR5	202-12-10-5	7-35	4
Nut, Hex, 1/2-13	200-8-13-5	7-52	23
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-5	32
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-6	7
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-51	27
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-51	31
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-54	5
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-63	16
Nut, Hex, 1/2-13, GR5	200-8-13-5	7-63	19
Nut, Hex, 1/4-20, GR5	200-4-20-5	7-60	19
Nut, Hex, 1/4-20, GR5	200-4-20-5	7-61	19
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-19	25
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-36	12
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-37	12
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-56	26
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-57	26
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-60	26
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-61	26
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-65	7
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-66	7
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-68	5
Nut, Hex, 3/8-16, GR5	200-6-16-5	7-69	5

Description	Part No.	Figure No.	Item No.
Nut, Hex, 5/16-18, GR5	200-5-18-5	7-30	18
Nut, Hex, 5/16-18, GR5	200-5-18-5	7-31	18
Nut, Hex, 5/16-18, GR5	200-5-18-5	7-38	16
Nut, Hex, 5/16-18, GR5	200-5-18-5	7-62	14
Nut, Hex, 5/8-11, GR5	200-10-11-5	7-38	19
Nut, Hex, 5/8-11, GR5	200-10-11-5	7-62	17
Nut, Hex, 7/16-14, GR5	200-7-14-5	7-24	18
Nut, Hex, 7/16-14, GR5	200-7-14-5	7-25	18
Nut, Hex, 7/16-14, GR5	200-7-14-5	7-56	25
Nut, Hex, 7/16-14, GR5	200-7-14-5	7-57	25
Nut, Hex, 7/16-14, GR5	200-7-14-5	7-58	20
Nut, Hex, 7/16-14, GR5	200-7-14-5	7-59	20
Nut, Hex, Jam 3/4-10, GR5	202-12-10-5	7-34	4
Nut, Hex, M12x1.75, C 8.8	200-M12-1.75-8.8	7-60	15
Nut, Hex, M12x1.75, C 8.8	200-M12-1.75-8.8	7-61	15
Nut, Lock	95200879	7-60	8
Nut, Lock	95200879	7-61	8
Nut, Lock Stover, 1-8, GR5	204-8-13-5	7-15	12
Nut, Lock, #10-32	900078	7-3	41
Nut, Lock, Nylon, 7/8-9 UNC-2B	987396	7-24	15
Nut, Lock, Nylon, 7/8-9 UNC-2B	987396	7-25	15
Nut, Lock, Stover 3/8-16, GR5	204-6-16-5	7-26	9
Nut, Lock, Stover, 1/2-13, GR5	204-8-13-5	7-15	20
Nut, Lock, Stover, 1/2-13, GR5	204-8-13-5	7-46	5
Nut, Lock, Stover, 1/4-20, GR5	204-4-20-5	7-15	18
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-4	42
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-27	9
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-32	9
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-33	9
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-65	13
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-66	13
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-68	13
Nut, Lock, Stover, 3/8-16, GR5	204-6-16-5	7-69	13
Nut, Lock, Stover, 5/8-11, GR5	204-10-11-5	7-5	34
Nut, Lock, Stover, 5/8-11, GR5	204-10-11-5	7-15	14
Nut, Lock, Stover, 5/8-11, GR5	204-10-11-5	7-46	14
Nut, Lock, Stover, 7/8-14, GR8	204-14-14-8	7-58	14
Nut, Lock, Stover, 7/8-14, GR8	204-14-14-8	7-59	14
Nut, Lock, Stover,1-14, GR5	204-16-14-5	7-6	15
Nut, Nylon Lock, 7/8-9 UNC-2B	987396	7-30	15

Description	Part No.	Figure No.	Item No.
Nut, Nylon Lock, 7/8-9 UNC-2B	987396	7-31	15
Nut, Nylon Lock, 7/8-9 UNC-2B	987396	7-35	8
Nut, Nylon Lock. 7/8-9 UNC-2B	987396	7-34	8
Nut, Plastic, H-1 Pump	986519-02	7-9	REF
Nut, Track Pad Cap Screw	811309	7-1	33
-O, P-			
Option, HD Heated Endgates	1011211SRV	7-64	GRP
Option, HD Heated Endgates and LeeBoy Edge	1011312SRV	7-67	GRP
O-Ring, Hydraulic Motor	811366	7-1	24
O-Ring, Hydraulic Motor	811366	7-2	22
O-Ring, Piggyback to Main	36808	7-9	3
Outlet, 12V, Cigarette Lighter	1011147	7-19	27
Pin	851132	7-4	4
Pin, .50 x 3.00 w/Cotter Hairpin	72836	7-40	3
Pin, Clevis, 1.00 x 2.63 x 1.50 Head	210060	7-42	6
Pin, Cotter .094 x .375	900079	7-3	42
Pin, Cotter, .188 x 2.00	80338	7-42	7
Pin, Cylinder Mount	981661	7-22	8
Pin, Cylinder Mount	981661	7-28	10
Pin, Cylinder Mount	981661	7-51	8
Pin, Deutsch, 14-16 AWG	982456	7-64	REF
Pin, Deutsch, 14-16 AWG	982456	7-67	REF
Pin, Hopper Wing Lock	1013877	7-4	43
Pin, Hydraulic Cylinder	240030	7-4	19
Pin, Hydraulic Cylinder	240030	7-6	20
Pin, Pivot Side Panel	854084SRV	7-4	14
Pin, Push Bar Swivel	810081SRV	7-1	40
Pin, Roll Pin (3/8 x 2.00)	851118-1	7-3	20
Pin, Slope	981659	7-51	6
Pin, Track Link, Master, Heavy Duty	983166-04	7-2	REF
Pin, Track Link, Plain	811307	7-1	27
Pipe, Screed Burner, Med	851197-1SRV	7-23	19
Pipe, Screed Extension Burner	854571SRV	7-26	20
Pipe, Screed Extension Burner	854571SRV	7-27	20
Pivot Mount, TopCon/Spectra Physics	851575SRV	7-46	22
Pivot Mount, TopCon/Spectra Physics	851575SRV	7-47	12
Plate, 8000-8500, Cut Off Cylinder Mount	853497	7-6	27
Plate, 8500 Engine Bottom	1014240	7-13	31
Plate, Bracket, Common Test Port	1013805	7-8	1

Description	Part No.	Figure No.	Item No.
Plate, Conveyor Flap	1014239	7-13	30
Plate, Cover	980751	7-13	32
Plate, Cut Off Cylinder Mount	851152	7-6	17
Plate, Cut Off Gusset	853596	7-6	29
Plate, Display Panel	1009253-03	7-19	21
Plate, Endgate	1006442	7-58	2
Plate, Endgate	1006442	7-59	2
Plate, Endgate Bracket w/Holes	1006536	7-56	15
Plate, Endgate Bracket w/Holes	1006536	7-57	15
Plate, Extension Access Cover	1006398	7-56	10
Plate, Extension Access Cover	1006398	7-57	10
Plate, Extension Strikeoff	1006400	7-56	7
Plate, Extension Strikeoff	1006400	7-57	7
Plate, Fuse Mounting	1009253-26	7-12	5
Plate, Mounting	1009253-30	7-12	4
Plate, Pivot Cover	981711	7-22	7
Plate, Pivot Cover	981711	7-28	9
Plate, Pivot Cover	981711	7-51	7
Plate, Power Crown Adjuster	1008600	7-63	3
Plate, Rail Mount	981656	7-22	12
Plate, Rail Mount	981656	7-28	14
Plate, Rail Mount	981656	7-28	15
Plate, Screed Cover, (Left)	985148	7-22	15
Plate, Screed Cover, (Left)	985148	7-28	20
Plate, Screed Cover, (Right)	985147	7-22	14
Plate, Screed Cover, (Right)	985147	7-28	19
Plate, Side Wing Rubber Shield	854076-1	7-4	15A
Plate, Vibrator Housing	880071	7-39	9
Plate, Walkboard Hinge	985163	7-40	5
Plate, Walkboard Hinge	985163	7-54	2
Plate, Wear, 12” Auger, 8515	981699SRV	7-5	17
Potentiometer, Steering Box	851540	7-9	REF
Power Cord, Bulkhead to Control Box	985138-03	7-38	13
Power Cord, Bulkhead to Control Box	1007253	7-43	6
Power Crown Support	986645	7-44	5
Pump, Fuel w/Filter, Facet	1010471	7-12	13
Pump, Hydraulic Single w/EDC (H-1 Pump)	986519	7-9	1
Pump, Hydraulic, 25.4 CC/19 CC	1013155	7-9	2
Push Roller, Truck Wheel	810102	7-48	12

Description	Part No.	Figure No.	Item No.
-Q, R-			
Quick Disconnect Coupling	230084	7-16	21
Radiator Cover	1010105	7-13	23
Reel, w/Hose, Spraydown, .312 Diameter Hose	920200	7-14	5
Regulator, 0 - 60 PSI, LP	982515	7-16	REF
Relay, 12VDC, SPDT, 40A, 5-Pin	36085	7-19	7
Relay, 12VDC, SPST, 100A, Heavy Duty	985751	7-12	8
Relay, 35A	1009253-08	7-19	30
Relay/Fuse Block	1009253-28	7-12	6
Relief Valve, Side Wing Manifold	910122-1	7-7	11
Remote Pod, Ultra Sonic	982795	7-34	14
Remote Pod, Ultra Sonic	982795	7-35	14
Rod & Chain, Guide Bar	920061SRV	7-4	25
Rod Extension (Left)	986650	7-44	2b
Rod Extension (Right)	986636	7-44	2a
Rod, Conveyor, Switch Linkage	900075	7-3	38
Roll Up Curb Attachment, 12" (Left)	851635LSRV	7-45	REF
Roll Up Curb Attachment, 12" (Right)	851635RSRV	7-45	REF
Roll Up Curb Attachment, 24" (Left)	851636LSRV	7-45	3
Roll Up Curb Attachment, 24" (Right)	851636RSRV	7-45	4
Roller	930040	7-48	7
Roller Extension, Bumper	930060	7-48	14
Roller, Conveyor Chain Guide, w/ Bearing	850162	7-3	31
Roller, Extension Bumper	980035	7-1	34
Round, .688 x 43.50 CRS	854447SRV	7-56	11
Round, .688 x 43.50 CRS	854447SRV	7-57	11
Round, .688 x 43.50, CRS	854447SRV	7-24	8
Round, .688 x 43.50, CRS	854447	7-25	8
Round, .688 x 43.50, CRS	854447SRV	7-26	10
Round, .688 x 43.50, CRS	854447SRV	7-27	10
Round, .688 x 43.50, CRS	854447SRV	7-30	8
Round, .688 x 43.50, CRS	854447	7-31	8
Round, .688 x 43.50, CRS	854447SRV	7-32	10
Round, .688 x 43.50, CRS	854447SRV	7-33	10
Rubber, Front Lip, Center	985058	7-4	27
-S-			
Safety Prop, Hopper	987264SRV	7-4	17
Scraper, Conveyor	851128SRV	7-3	33
Screed Base, 8515 Electric Slope	985547SRV	7-28	1

Description	Part No.	Figure No.	Item No.
Screed Base, 8515 Propane Slope	1004969SRV	7-22	1
Screed, 8515 LP, 4 Adjusters Extensions	1004918	7-23	REF
Screw, Electric (6.00")	851518	7-15	4
Screw, Wing, 3/8-16 x 1.00	120-6-16-16	7-65	8
Screw, Wing, 3/8-16 x 1.00	120-6-16-16	7-66	8
Screw, Wing, 3/8-16 x 1.00	120-6-16-16	7-68	8
Screw, Wing, 3/8-16 x 1.00	120-6-16-16	7-69	8
Seal Kit	811331-01	7-2	REF
Seal Kit	910145-01	7-4	REF
Seal Kit	930070-01	7-48	REF
Seal Kit, 2.00 Cylinder	910145-01	7-6	REF
Seal Kit, 2.50 Cylinder	910170-01	7-6	REF
Seal Kit, Cylinder, Hydraulic, 2.00 x 12.00/30.00 x 1.25	851191-01	7-42	REF
Seal Kit, Cylinder, Hydraulic, 2.00 x 2.00 x 42.00 x 1.25	981710-1	7-42	REF
Seal Kit, Cylinder, Hydraulic, 2.75 x 2.00 x 1.125 Rod	983421-01	7-42	REF
Seal Kit, Hopper Wing	38549-01	7-4	REF
Seal Kit, Hydraulic Cylinder	811331-01	7-1	REF
Seal Kit, Hydraulic Motor	1001027-01	7-3	REF
Seal, Cable, 18-16 GA, Green	36166	7-15	REF
Seal, Hydraulic Motor/Pump	59941203	7-1	23
Seal, Hydraulic Motor/Pump	59941203	7-2	25
Selector Valve, Conveyor	852250	7-48	REF
Sending Unit, Fuel Tank	140040	7-7	8
Sensor, Ultra Sonic	982794	7-34	16
Sensor, Ultra Sonic	982794	7-35	16
Sensor, Ultrasonic, Sauer	980540	7-58	11
Sensor, Ultrasonic, Sauer	980540	7-59	11
Set Screw, 5/8-11 x 3.00, Square, Head	850170	7-3	35
Set Screw, Hex Socket, Cup, 3/8-16 x .75	113-6-16-12	7-65	4
Set Screw, Hex Socket, Cup, 3/8-16 x .75	113-6-16-12	7-66	4
Set Screw, Hex Socket, Cup, 3/8-16 x .75	113-6-16-12	7-68	4
Set Screw, Hex Socket, Cup, 3/8-16 x .75	113-6-16-12	7-69	4
Shaft, Bumper Roller	930075	7-48	17
Shaft, Conveyor Front Idler	851124	7-3	30
Shaft, Endgate Mount	855579	7-65	15
Shaft, Endgate Mount	855579	7-66	15
Shaft, Endgate Mount	855579	7-68	14
Shaft, Endgate Mount	855579	7-69	14
Shaft, Push Bar Roller	980034	7-1	37
Shaft, Screed Extension, Chromed, HD	1006415	7-55	4

Description	Part No.	Figure No.	Item No.
Shaft, Tilt Screw Swivel	980457	7-58	5
Shaft, Tilt Screw Swivel	980457	7-59	5
Shaft, Vibrator Eccentric	880062	7-39	8
Shield, 8500 Center Conv.	851133SRV	7-4	7
Shield, Corner Rubber	851147A	7-4	15
Shield, Front Hard Rubber	985057	7-4	12
Shield, Front Support	985669SRV	7-4	11
Side Wing Cylinder Bushing	930041	7-4	REF
Sight Gauge, Hydraulic Oil Temp/Level	500070	7-7	4
Skid	851249SRV	7-46	6
Sleeve, Rubber, Intake Reducer	1009253-25	7-11	4
Slope Cable 5 Foot	1010499-10	7-47	6
Slope Meter	851421	7-46	26
Slope Sensor	1010499-09	7-47	7
SMS Test Hose Assembly w/#4 Female JIC - 24”	1013588-24	7-8	REF
SMS Test Hose Assembly w/#4 Female JIC - 96”	1013588-96	7-8	REF
Snap Ring	851256	7-41	5
Snap Ring, Conveyor Drive Shaft	850040	7-3	9
Snap Ring, Conveyor Drive Shaft	850040	7-3	27
Socket, Relay, 5-Pin	1009253-09	7-19	29
Solenoid Valve, 12V LPG	230300	7-16	25
Sonic Tracker	851579	7-46	19
Spacer, Crown Mount	1006419	7-63	10
Spacer, Roller, 8515	987694	7-2	REF
Spacer, Track Link Bushing	811310	7-1	28
Spring, Extension	250170	7-54	REF
Spring, Tension	851245	7-46	9
Sprocket	986641	7-44	8
Sprocket, #50 Roller Chain	1000799	7-63	11
Sprocket, 800/8500 Auger	860030	7-5	3
Sprocket, Conveyor Drive Motor	851120	7-3	22
Sprocket, Conveyor Drive Motor	851120	7-6	5
Sprocket, Inner Drive C-188	850030	7-3	6
Sprocket, Outer Drive	851473	7-3	3
Sprocket, Outer Drive C-188	851474SRV	7-3	5
Sprocket, Track Drive	1006737	7-1	4
Sprocket, Track Drive, 17 Tooth	1009464	7-2	5
Starter, Kubota, 100A	1001166-03	7-12	3
Steering Wheel, Control Box, Plus One	1000708	7-9	7
Stop Rubber, (Scraper)	410070	7-3	34

Description	Part No.	Figure No.	Item No.
Strain Relief, 1/2	3200DI	7-36	6
Strain Relief, 1/2	3200DI	7-37	6
Strainer & Gasket Kit	140030GK	7-7	3
Strainer & Gasket Kit	140030GK	7-38	REF
Strainer & Gasket Kit	140030GK	7-62	REF
Strike Off, 12" (Left)	860091LSRV	7-45	1
Strike Off, 12" (Right)	860091RSRV	7-45	2
Strike Off, 24" (Left)	860095LSRV	7-45	REF
Strike Off, 24" (Right)	860095RSRV	7-45	REF
Sub-Assembly, Flight Screw	859365	7-36	9
Sub-Assembly, Flight Screw	859365	7-37	9
Support, Dash Assembly	987850	7-13	27
Support, Elite III Dash	854592SRV	7-13	26
Support, Pivot Bar	930015	7-48	1
Switch, Battery Disconnect	SW29	7-13	29
Switch, Ignition,W/Heat St | Kubota	39146-14	7-19	18
Switch, Limit SPDT	72026-01	7-9	REF
Switch, Push Button	982249	7-19	14
Switch, Push Button	982249	7-38	6
Switch, Push Button	982249	7-62	5
Switch, Push Button	982249	7-70	4
Switch, Toggle	851390	7-19	1
Switch, Toggle	900030	7-19	2
Switch, Toggle	900080	7-19	3
Switch, Toggle	851392	7-19	5
Switch, Toggle	500040	7-19	11
Switch, Toggle	851393	7-19	12
Switch, Toggle, DPDT, 2-Position	72086	7-70	2
Switch, Toggle, SPDT, 3-Position, MOM	851392	7-36	5
Switch, Toggle, SPDT, 3-Position, MOM	851392	7-37	5
Switch, Toggle, SPDT, 3-Position, MOM	851392	7-60	23
Switch, Toggle, SPDT, 3-Position, MOM	851392	7-61	23
Switch, Toggle, SPDT, 3-Position, MOM LK	851393	7-60	22
Switch, Toggle, SPDT, 3-Position, MOM LK	851393	7-61	22
Switch, Toggle, SPDT, 3-Position, MOM, LK	851393	7-36	15
Switch, Toggle, SPDT, 3-Position, MOM, LK	851393	7-37	15
Switch, Toggle, SPST, 2 -Position	851391	7-70	5
Switch, Toggle, SPST, 2-Position	851391	7-19	4
Switch, Toggle, SPST, 2-Position	851391	7-36	4
Switch, Toggle, SPST, 2-Position	851391	7-37	4

Description	Part No.	Figure No.	Item No.
Switch, Toggle, SPST, 2-Position	851391	7-38	7
Switch, Toggle, SPST, 2-Position	851391	7-60	21
Switch, Toggle, SPST, 2-Position	851391	7-61	21
Switch, Toggle, SPST, 2-Position	851391	7-62	6
Switch, Toggle, SPST, 2-Position, MOM	72884	7-63	21
Switch, Toggle,SPST, 2-Position	851391	7-9	REF
-T-			
Tab, Conveyor Chain Weld On	851118-2	7-3	REF
Tail Pipe, Tier 4, Kubota	1011364	7-12	12
Tank, Coolant Recovery, Kubota	986537-46	7-10	5
Tee, .250 Pipe	230080	7-16	8
Tee, .250 Street	230081	7-16	9
Terminal Strip, 10 Pole	1009993	7-19	28
Terminal, Sealed Connector, 16-14 GA, Female	36165	7-15	REF
Terminal, Socket, Deutsch, 14-16 AWG	982448	7-64	REF
Terminal, Socket, Deutsch, 14-16 AWG	982448	7-67	REF
Test Port, Hydraulic, To #4 JIC Bulkhead	1013583	7-8	2
Thumb Screw, 3/8-16 x 1.00	920070	7-4	26
Thumb Screw, 3/8-16 x 1.00	920070	7-46	3
Thumb Screw, 3/8-16 x 1.00	920070	7-47	11
Timer, Electric, .06 - 60 minute	985142	7-38	10
Timer, Electric, .06 - 60 minute	985142	7-62	9
Timer, Electric, .06 - 60 Minute	985142	7-70	7
Toeboard, Driver Side	987621	7-13	1
Toeboard, Passenger Side	987616	7-13	2
Tool Box	851169	7-40	7
Top Rail, 8500 Screed Extension	855784	7-23	11
Top Rail, 8500 Screed Extension	855784	7-29	11
Torque Hub, 47.6:1, w/Brake	1008779	7-1	3
Torque Hub, 47.6:1, w/Brake	1008779	7-2	4
T-Pin, Casted Conveyor Chain	850100A	7-3	REF
Track Pad, Cast	811304	7-1	16
Track Pad, Poly	851104	7-1	15
Track Pad, Poly, Heavy Duty	983166-02	7-2	REF
Track Roller, B/1	851566	7-1	6
Track Roller, B/1	851566	7-2	8
Track Roller, B/O	811326	7-1	7
Track Roller, B-1, Inner Flange	983588	7-2	14
Track, Rubber, Continuous	982585	7-2	12

Description	Part No.	Figure No.	Item No.
TSD 3 Conn SS Paver Box	983414-02	7-47	4
TSD Sonic Tracker II	983414-01	7-47	2
Tube, Element, Wire Routing	1011491	7-65	17
Tube, Element, Wire Routing	1011491	7-66	17
Tube, Endgate Adjustment Spacer	1011235	7-65	14
Tube, Endgate Adjustment Spacer	1011235	7-66	14
Tube, Endgate Adjustment Spacer	1011235	7-68	15
Tube, Endgate Adjustment Spacer	1011235	7-69	15
Tube, Intake, Kubota	1009384-44	7-11	5
-U, V-			
Umbrella	920235	7-40	REF
Under Carriage, 8515, Rubber (Left)	1009873	7-2	1
Under Carriage, 8515, Rubber (Right)	1009874	7-2	2
Valve Truck Hitch	852250	7-48	REF
Valve, Cartridge SV12	983644-02	7-18	2a
Valve, Cartridge SV12	983644-02	7-18	2b
Valve, Cartridge SV12	983644-02	7-18	2c
Valve, Cartridge SV12	983644-02	7-18	2d
Valve, Cartridge SV12	983644-02	7-18	2e
Valve, Check CV04	983643-08	7-17	9
Valve, Check CVO8	983643-09	7-17	6
Valve, Directional Solenoid	1011728-01	7-17	1
Valve, Piloted Logic Element	983643-06	7-17	3
Valve, Relief RV10	983644-03	7-18	3a
Valve, Relief RV10	983644-03	7-18	3b
Valve, Relief RVO8	983643-07	7-17	4
Valve, Selector (Cutoff)	1008544	7-16	11
Valve, Solenoid 2 Speed	900140	7-17	REF
Valve, Solenoid, 2 Speed	900140	7-18	4
Vibrator Housing (Left)	982965L-1	7-39	2
Vibrator Housing (Right)	982965R-1	7-39	REF
Vibrator, Hydraulic	1000059	7-63	20
-W-			
Washer, 13/16	20931333	7-60	6
Washer, 13/16	20931333	7-61	6
Washer, Counter Sunk, .500	851112	7-3	2
Washer, Counter Sunk, 1/2	851112	7-48	18
Washer, Fender, 1/4 x 1	860036	7-6	26

Description	Part No.	Figure No.	Item No.
Washer, Fender, 3/8 x 1.50	308-6-24	7-5	35
Washer, Flat, 1/2	300-8	7-1	48
Washer, Flat, 1/4	302-4	7-1	50
Washer, Flat, 3/4	301-12	7-60	14
Washer, Flat, 3/4	301-12	7-61	14
Washer, Flat, 3/8	300-6	7-65	11
Washer, Flat, 3/8	300-6	7-66	11
Washer, Flat, 3/8	300-6	7-68	11
Washer, Flat, 3/8	300-6	7-69	11
Washer, Flat, Fender, 3/8 x 1.50	308-6-24	7-15	16
Washer, Flat, M10	80474	7-1	30
Washer, Flat, SAE, 1	300-16	7-4	6
Washer, Flat, SAE, 1/2	300-8	7-4	36
Washer, Flat, SAE, 1/4	300-4	7-60	18
Washer, Flat, SAE, 1/4	300-4	7-61	18
Washer, Flat, SAE, 3/8	300-6	7-4	41
Washer, Flat, SAE, 3/8	300-6	7-19	23
Washer, Flat, SAE, 5/8	81201	7-2	16
Washer, Flat, SAE, 5/8	300-10	7-4	39
Washer, Flat, SAE, 5/8	300-10	7-46	16
Washer, Flat, SAE, 5/8	300-10	7-47	15
Washer, Flat, SAE,1/2	300-8	7-41	7
Washer, Flat, USS, 1/2	301-8	7-5	31
Washer, Flat, USS, 5/8	301-10	7-4	REF
Washer, Flat, USS, 5/8	301-10	7-5	30
Washer, Lock, #10	900077	7-3	40
Washer, Lock, 1	302-16	7-6	13
Washer, Lock, 1/2	302-8	7-2	24
Washer, Lock, 1/2	302-8	7-3	11
Washer, Lock, 1/2	302-8	7-4	35
Washer, Lock, 1/2	302-8	7-5	22
Washer, Lock, 1/2	302-8	7-34	9
Washer, Lock, 1/2	302-8	7-35	9
Washer, Lock, 1/2	302-8	7-41	8
Washer, Lock, 1/2	302-8	7-52	27
Washer, Lock, 1/2	302-8	7-63	15
Washer, Lock, 1/2	302-8	7-63	18
Washer, Lock, 1/2	302-8	7-53	14
Washer, Lock, 1/2	302-8	7-54	4
Washer, Lock, 1/2	302-8	7-58	13

Description	Part No.	Figure No.	Item No.
Washer, Lock, 1/2	302-8	7-59	13
Washer, Lock, 1/4	302-4	7-6	25
Washer, Lock, 1/4	302-4	7-26	18
Washer, Lock, 1/4	302-4	7-27	18
Washer, Lock, 1/4	302-4	7-32	18
Washer, Lock, 1/4	302-4	7-33	18
Washer, Lock, 3/8	302-6	7-5	27
Washer, Lock, 3/8	302-6	7-6	10
Washer, Lock, 3/8	302-6	7-7	15
Washer, Lock, 3/8	302-6	7-19	24
Washer, Lock, 3/8	302-6	7-22	17
Washer, Lock, 3/8	302-6	7-23	17
Washer, Lock, 3/8	302-6	7-24	13
Washer, Lock, 3/8	302-6	7-25	13
Washer, Lock, 3/8	302-6	7-26	17
Washer, Lock, 3/8	302-6	7-27	17
Washer, Lock, 3/8	302-6	7-28	22
Washer, Lock, 3/8	302-6	7-29	17
Washer, Lock, 3/8	302-6	7-30	13
Washer, Lock, 3/8	302-6	7-31	13
Washer, Lock, 3/8	302-6	7-32	17
Washer, Lock, 3/8	302-6	7-33	17
Washer, Lock, 3/8	302-6	7-36	11
Washer, Lock, 3/8	302-6	7-37	11
Washer, Lock, 3/8	302-6	7-56	22
Washer, Lock, 3/8	302-6	7-57	22
Washer, Lock, 3/8	302-6	7-58	16
Washer, Lock, 3/8	302-6	7-59	16
Washer, Lock, 3/8	302-6	7-60	25
Washer, Lock, 3/8	302-6	7-61	25
Washer, Lock, 3/8	302-6	7-63	13
Washer, Lock, 3/8	302-6	7-65	10
Washer, Lock, 3/8	302-6	7-66	10
Washer, Lock, 3/8	302-6	7-68	10
Washer, Lock, 3/8	302-6	7-69	10
Washer, Lock, 5/16	302-5	7-5	25
Washer, Lock, 5/16	302-5	7-38	15
Washer, Lock, 5/16	302-5	7-51	25
Washer, Lock, 5/16	302-5	7-52	21
Washer, Lock, 5/16	302-5	7-62	13

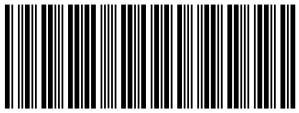
Description	Part No.	Figure No.	Item No.
Washer, Lock, 5/16	302-5	7-53	12
Washer, Lock, 5/16	302-5	7-56	20
Washer, Lock, 5/16	302-5	7-57	20
Washer, Lock, 5/8	302-10	7-1	45
Washer, Lock, 5/8	302-10	7-3	25
Washer, Lock, 5/8	302-10	7-4	38
Washer, Lock, 5/8	302-10	7-5	29
Washer, Lock, 5/8	302-10	7-6	19
Washer, Lock, 5/8	302-10	7-38	18
Washer, Lock, 5/8	302-10	7-53	10
Washer, Lock, 5/8	302-10	7-62	16
Washer, Lock, 7/16	302-7	7-51	29
Washer, Lock, 7/16	302-7	7-52	25
Washer, Lock, 7/16	302-7	7-56	24
Washer, Lock, 7/16	302-7	7-57	24
Washer, Lock, 7/16	302-7	7-58	19
Washer, Lock, 7/16	302-7	7-59	19
Washer, Lock, Hi-Collar, 5/8	307-10	7-1	43
Washer, Lock, M10	320142	7-2	21
Washer, Lock, M12	811328	7-2	18
Washer, Lock, M12	302-M12	7-60	16
Washer, Lock, M12	302-M12	7-61	16
Washer, Lock, Thin Series	95200978	7-60	7
Washer, Lock, Thin Series	95200978	7-61	7
Washer, Track Chain Master Pin	811305	7-1	29
Water Tight Connection, 3/4” X 3/4”	3400DI	7-63	REF
Wear Plate, 8’ Bullnose	981724SRV	7-23	7
Wear Plate, End Gate, 8515	982963SRV	7-35	7
Wearplate, 3/8" Wear Plate With Studs	1007089SRV	7-51	12
Wearplate, 3/8" Wear Plate With Studs	1007089SRV	7-52	9
Wedge, Socket, 2P Deutsch	983209	7-64	REF
Wedge, Socket, 2P Deutsch	983209	7-67	REF
Weldment Cover, Center, Tier 4I	1010449SRV	7-13	3
Weldment, Air Breather Mount	1011395	7-13	6
Weldment, Bulkhead Mount, Heated Endgates	1011239	7-67	3
Weldment, Extension Vibrator Cover	1008664	7-56	9
Weldment, Extension Vibrator Cover	1008664	7-57	9
Weldment, Heatbox Cover	1008665SRV	7-56	2
Weldment, Heatbox Cover	1008665SRV	7-57	2
Weldment, Lip, Left, Front	1013153	7-4	30

Description	Part No.	Figure No.	Item No.
Weldment, Lip, Right, Front	1013152	7-4	29
Weldment, Mount, LED Beacon	1013234	7-13	22
Weldment, Power Crown Center	1008667	7-63	2
Weldment, Rail Mount (Left)	1008663	7-51	13
Weldment, Rail Mount (Left)	1008663SRV	7-52	10
Weldment, Rail Mount (Right)	1008662	7-51	14
Weldment, Rail Mount (Right)	1008662SRV	7-52	11
Weldment, Thickness Adjuster Handle	1011375	7-60	4
Weldment, Thickness Adjuster Handle	1011375	7-61	4
Weldment, Undercarriage (Left)	1009465	7-2	7
Weldment, Undercarriage (Right)	1009466	7-2	6
Weldment, Undercarriage, Comer (Left)	1008789	7-1	REF
Weldment, Undercarriage, Comer (Right)	1008788	7-1	5
Wire Bail, Temperature	851581	7-46	20
-X, Y, Z-			
Yoke, Track Idler	811329ASRV	7-1	9
Yoke, Track Idler	811329ASRV	7-2	10





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