OPERATIONS, SERVICE AND PARTS MANUAL

LEEBOY MODEL 8616 CONVEYOR PAVER

Manual No. 1008601-01

This manual applies to serial number and above: 84519

DISCLAIMER AND COPYRIGHT

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, and LeeBoy are all the same entity and are used interchangeably.

©2012 VT LeeBoy, Inc.

TABLE OF CONTENTS

Table Of Contents

Table Of Contents

Table Of Contents

Section 1
INTRODUCTION

Thank you for purchasing the LeeBoy Model 8616 Conveyor Paver. We wish you many years of safe and efficient operation of your paver.

READ THIS MANUAL PRIOR TO OPERATING the paver This manual is an important part of the paver and should be kept with the paver at all times in the dedicated storage container on the paver. Even though you may be familiar with similar equipment, you MUST read and understand this manual before operating this paver. Reading the manual will help you and others avoid injury and help prevent any damage to the paver. If this manual becomes lost or damaged, contact your authorized LeeBoy Dealer immediately to order a replacement, (see ***Contact Information*** in Section 3).

This manual is intended as a guide for the safe and efficient use of the paver. This manual covers the procedures for proper operation and maintenance of the paver. This manual contains information that was available at the time of printing and is subject to change without notice.

This manual should be used with all related supplemental books, engine and transmission manuals, and parts books. Related Service Bulletins should be reviewed to provide information regarding some of the recent changes.

If any questions arise concerning this publication or others, contact your local LeeBoy Dealer for the latest available information.

This manual provides information for use by the equipment operator under the following headings:

Safety—See Section 2 for important safety guidelines information.

General Information—See Section 3 for important warranty, contact, and nameplate information.

Specifications—See Section 4 for all major system specifications and typical torque value tables.

Component Location—See Section 5 for general overview of controls and major components.

Operation—See Section 6 for control functionality and normal equipment operation.

Maintenance—See Section 7 for basic preventive maintenance and repair procedures.

Troubleshooting—See Section 8 for problem descriptions and recommended solution tables.

Schematics—See Section 9 for schematic diagrams of electrical wiring.

Illustrated Parts List (IPL)—See Section 10 for illustrations, descriptions and part numbers of available service parts.

NOTES

Section 2
SAFETY

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 8616 Conveyor Paver and follow its instructions when operating the paver.

Safety is everyone's business and is our top concern. Knowing the guidelines covered in this section and in Section 1 will help ensure your safety, the safety of those around you and the paver's proper operation.

LOOK FOR THESE SYMBOLS WHICH POINT OUT ITEMS OF EXTREME IMPORTANCE TO THE SAFETY OF YOU AND YOUR COWORKERS. READ AND UNDERSTAND THOROUGHLY. HEED THE WARNING AND FOLLOW THE INSTRUCTIONS.

Keep safety labels in good condition. If safety labels become missing or damaged, replacement safety labels are available from your LeeBoy Dealer (see ***Contact Information*** in Section 3 and ***Safety Label Installation*** in Section 7).

⚠ 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 LeeBoy Model 8616 Conveyor Paver to operate improperly.

NOTE: Indicates a procedure, practice, or condition that should be followed in order for the paver 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 LeeBoy Model 8616 Conveyor Paver 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 where the paver is operated. Make sure you have all necessary licenses to operate the paver.

⚠ DANGER

The safety message that follows has a DANGER level hazard.

Electrocution Hazard

Always inspect all wires and cables for damage before operating the LeeBoy Model 8616 Conveyor Paver. Damaged wires and cables could cause an electrical shock that could result in serious injury or death.

⚠ 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 Model 8616 Conveyor Paver without written consent of LeeBoy. Any modification can affect the safe operation of the paver and may cause personal injury or death.

Exposure Hazard

Always wear personal protective equipment, including appropriate clothing, gloves, work shoes, and eye and hearing protection, 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 the 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

Have appropriate safety equipment available. 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 an electrical fire.

⚠ WARNING

The safety messages that follow have WARNING level hazards.

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 if the LeeBoy Model 8616 Conveyor Paver is operating in an enclosed area.
- Always ensure that all connections are tightened to specifications after repair is made to the exhaust system.

Entanglement/Sever Hazard

Verify there are no people, obstacles or other equipment near the LeeBoy Model 8616 Conveyor Paver 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, tie back long hair and keep hands, other body parts and clothing away from moving/rotating parts.

- Always stop the engine before beginning service.
- Verify that all paver guards and covers are attached properly to the paver 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 music or radio because it will be difficult to hear the warning signals.
- Always start the engine or operate the controls while you are seated in the operators seat.

Alcohol and Drug Hazard

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

Piercing Hazard

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. High-pressure hydraulic fluid or fuel can penetrate your skin and result in serious injury. 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 LeeBoy Model 8616 Conveyor Paver with compressed air or high-pressure water. Dust, flying debris, compressed air, pressurized water or steam may injure your eyes.

Coolant Hazard

Wear eye protection and rubber gloves when handling engine coolant. If contact with the eyes or skin should occur, flush eyes and wash immediately with clean water.

Burn Hazard

Some of the paver surfaces become very hot during operation and shortly after shutdown.

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

⚠ CAUTION

The safety messages that follow have CAUTION level hazards.

Poor Lighting Hazard

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 Model 8616 Conveyor Paver parts.

NOTICE

The safety messages that follow have NOTICE level hazards.

Any part which 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 LeeBoy Model 8616 Conveyor Paver damage 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.

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.

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.

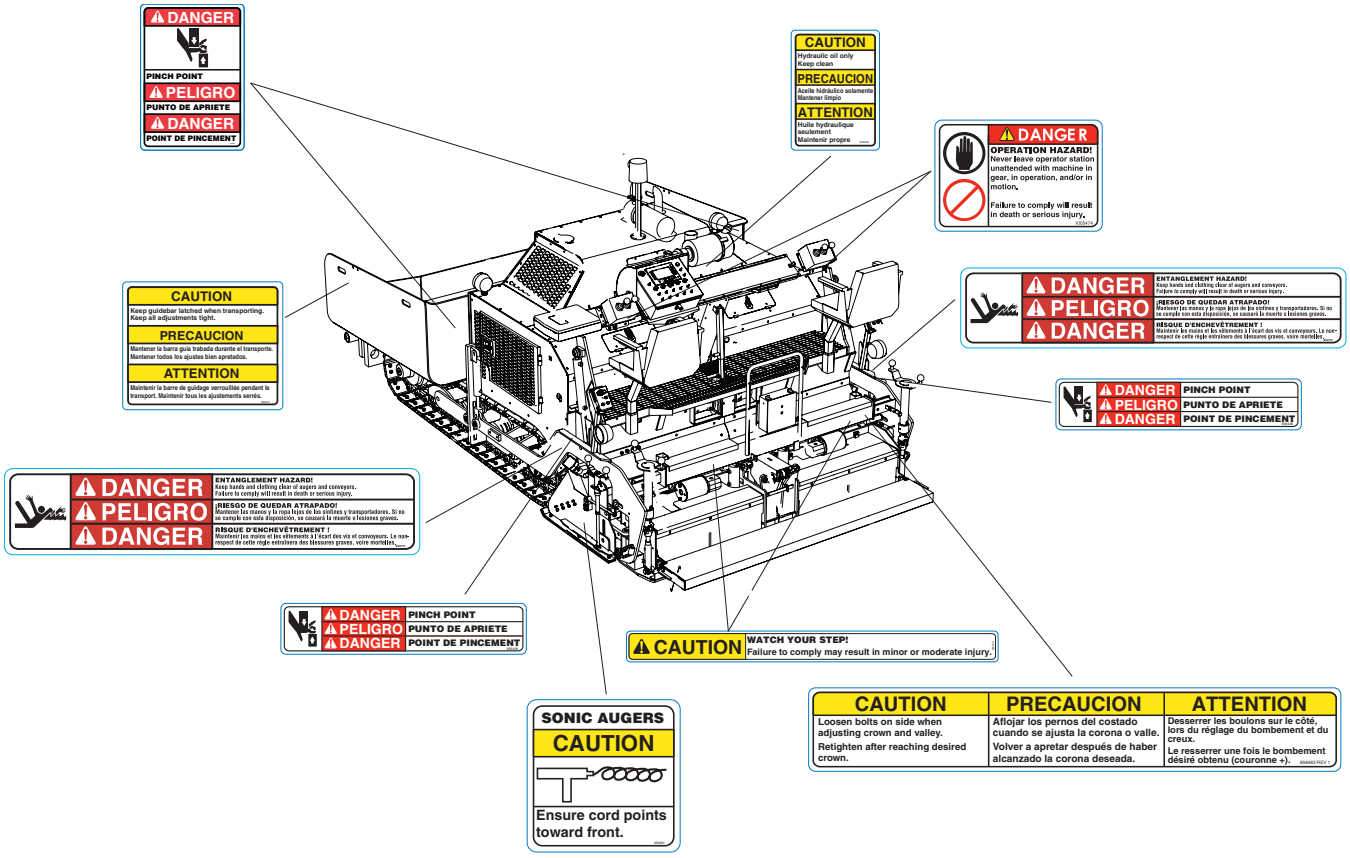
If any alert indicator illuminates during paver operation, stop the engine immediately. Determine the cause and repair the problem before continuing to operate the paver.

SAFETY LABEL LOCATIONS

If your LeeBoy Model 8616 Conveyor Paver has been repainted, it is extremely important that all the decals referring to CAUTION, WARNING, and DANGER be replaced in their proper locations. The illustrations on this page will aid you in determining the proper locations; for additional help, you should refer to the parts listing in the parts section of this manual and note the description column.

A description of location is provided below for each safety label. For additional instructions, contact your dealer (see ***Contact Information*** in Section 3).

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



8616 Conveyor Paver Safety Labels and Safety Label Locations

Figure 2-1

Section 3
GENERAL INFORMATION

3

LIMITED WARRANTY POLICY

Warranty

1. Subject to the limitations, exclusions, and claims procedures set forth herein, LeeBoy warrants [to the first retail purchaser] that this product will be free from [substantial] defects in materials and workmanship during the warranty period.
2. 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.
3. 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 paver to the first retail purchaser.
4. 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.
5. 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.
6. LeeBoy has the right to repair any component or part before replacing it with a new one.
7. All new replacement parts purchased by a LeeBoy Dealer will carry a six-month warranty.
8. 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.

Limitations

LeeBoy has no obligation for:

1. Any defects caused by misuse, misapplication, negligence, accident or failure to maintain or use in accordance with the most current operating instructions.
2. Unauthorized alterations.
3. Defects or failures caused by any replacement parts or attachments not manufactured by or approved by LeeBoy.
4. Failure to conduct normal maintenance and operating service including, without limitation, providing lubricants, coolant, fuel, tune-ups, inspections or adjustments.
5. Unreasonable delay, as established by LeeBoy, in making the applicable units or parts available upon notification of a service notice ordered by same.
6. Warranty Responsibility: The warranty responsibility on all engines rests with the manufacturer of the engine.
7. 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.
8. This Limited Warranty sets forth your sole remedy in connection with the sale or use of the LeeBoy product covered by this Limited Warranty.
9. This Limited Warranty extends only to the first retail purchaser, and is not transferable.
10. 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.

Items Not Covered

LeeBoy is not responsible for the following:

1. All used units or used parts of any kind.
2. Repairs due to normal wear and tear or brought about by abuse or lack of maintenance of the Machine.
3. Attachments not manufactured or installed by LeeBoy.
4. Liability for incidental or consequential damages of any type including, but not limited to, lost profits or expenses of acquiring replacement equipment.
5. Miscellaneous charges.

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, first contact the dealer you purchased your product from.

If you have a persistent problem your dealer is unable to resolve, 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 fill out the following information and use it when you need to contact LeeBoy for service, parts or literature.

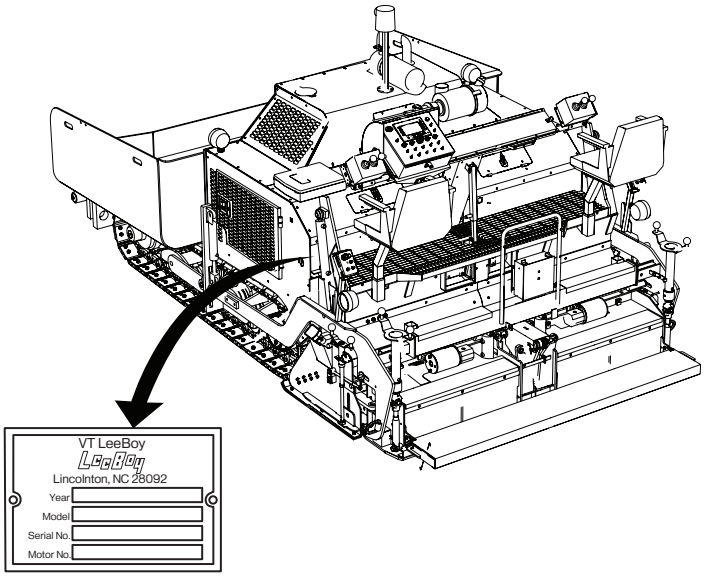
Paver Model Number: _____

Paver Serial Number: _____

Date of Purchase: _____

NAMEPLATE

Nameplate **(Figure 3-1)** contains the specific model number and serial number used to identify the components for any parts or service information.



Nameplate Location

Figure 3-1

Section 4
SPECIFICATIONS

GENERAL INFORMATION

The descriptions and specifications provided in this section are applicable to the LeeBoy Model 8616 Conveyor Paver.

This section contains a description of how the major components operate. It also includes specifications for the major system components. Included in this section are paver weights, dimensions, performance, and major system specifications for the paver.

MAJOR COMPONENTS

Engine

The LeeBoy Model 8616 Conveyor Paver uses a Kubota, 99 HP (74 kW) diesel engine to drive the hydraulic function pump and steering pump. The engine is mounted near the center of the paver and is accessible through several access doors in the engine cover.

A fuel lift pump mounted on the engine draws diesel fuel from the fuel tank. The fuel tank is mounted at the right side of the engine compartment.

An air cleaner is mounted at the back of the hood. 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, a cyclone type action deposits some of the fine particles in the evacuator 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 helps to open the rubber flaps allowing the debris to fall out. The rubber flaps can also be squeezed to open for cleaning.

A fuel filter removes contaminants from the diesel fuel before the fuel flows to the injection pump for injection into the engine combustion chamber.

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

Refer to the engine owner's Operation and Maintenance Manual for a complete description of the engine.

Hydraulic System

The hydraulic system includes four hydraulic pumps driven by the engine: 1) Left Drive Pump, 2) Right Drive Pump, 3) Load Sense Pump and 4) Charge Pump.

Torque Hubs

The paver drive system contains two torque hubs. The torque hubs provide power to propel the tracks.

Hopper

The hopper wings are hydraulically controlled to raise and lower. The hopper when fully open can hold a payload up to 9 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.

Augers

The RIGHT and LEFT augers rotate clockwise (CW) to assist in moving material from the conveyors to the screed. The auger can be manually controlled at the operator platform on the paver or by the screed operator on the screed.

The auger can also be controlled automatically when the sonic auger system is installed and active. The sonic auger sensor mounted on the screed endgates detect the amount of material present and control the auger to keep the material flow constant.

Operator Platform

The operator platform allows easy and convenient control of most all functions of the paver and screed. The paver can be operated from either the left-hand or right-hand side depending on which control panel side is active and best suited to the working conditions. Controls can also be lowered to run as a lowdeck or by standing on screed walkboard.

Screed

The screed is the last part of the paver that contacts the paved material. Operation of the screed is usually done by the screed operator. 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 wider paving base from 8.0 ft up to 15 ft.

Screed heating is accomplished by electric heating elements mounted directly to the wear plates.

The hydraulically driven vibrators mounted on the main screed frame can be used to increase paving material compaction.

Electrical System

The electrical system is powered by one 12-volt battery mounted in the engine compartment located next to the generator.

Each battery produces 12 volts DC and maintains 1,260 cold cranking amperes (CCA). An engine-mounted alternator capable of at least 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 dash panel.

Electrically heated pavers come equipped with a generator. The generator is mounted on left side of paver inside door under hydraulic manifolds.

The generator is hydraulically driven by the load sense pump on the engine pump stack. When the paver is at preset engine speed 1400 rpm, and the hydraulic system is at normal operating temperature, the generator should operate at a sufficient speed to produce between 220VAC and 240VAC.

All LeeBoy generators are equipped with an integrated generator speed control manifold. This manifold should not require adjustment, but if there is a need to fine tune the generator speed, there is an adjustment on the manifold (see ***Generator Speed Tuning*** in Section 7).

NOTICE **Generator speed tuning should only be done by an authorized LeeBoy Dealer.**

The paver has heating controls to provide the necessary connection and control of the output power from the generator to the heating elements. It is necessary to maintain all components of the heating controls system in good working order to maintain safe and efficient screed heating.

The heating control or distribution/control box is mounted near the middle of the screed and is easily accessible to the screed operator when a heating cycle is required.

There is a five second delay after the heat cycle is initiated before the actual electric load is sent to the heating elements from the generator. This delay is to allow the generator to reach optimal operating speed before the electrical load is required.

Once the heat cycle is started, a pre-programmed timer controls the amount of time for output power from the generator to go through the element connection supply plugs coming out of the bottom of the Heating Control Box to the heating elements.

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

Each element is sized to fit properly in your screed, and provide sufficient power to heat your screed plate to a temperature that mix will not drag or stick to the lower surface of the screed plate.

To know that the element is correct, you should read a resistance between 25 ohms and 35 ohms (see ***Element Resistance Testing*** in Section 7).

SPECIFICATIONS

The specifications provided in this section are applicable to the LeeBoy Model 8616 Conveyor Paver. Included in this section are screed weights, dimensions, performance, and torque values for both metric and standard inch fasteners.

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

Table 4-1. Dimension Specifications

ITEM	SPECIFICATION
Overall Length	15’ 4” (467 cm)
Overall Height	8’ 1” (246 cm)
Overall Width (hopper wings in)	8’ 6” (259 cm)
Overall Width (hopper wings out)	10’ (305 cm)
Weight (with screed)	20,080 lbs (9,108 kg)
Basic Paving Width	8’ (2.44 m)
Maximum Paving Width	15’ 6” (4.72 m)
Main Screed Wear Plate Material	.5” (12.7 mm) AR400 Steel
Main Screed Wear Plate Width	16.75” (425.45 mm)
Extensions Wear Plate Material	.375” (9.52 mm) AR400 Steel
Extensions Wear Plate Width	7.38” (1117.6 mm)
Extensions Length	44” (1,140 mm)

Table 4-2. Kubota Tier 3 Engine Specifications

ITEM	SPECIFICATION
Manufacturer and Model	Kubota, V3800T3 99 HP (74 kW)
Emission Regulation	Tier 3 / Stage III A
Type	Vertical 4-cycle Liquid Cooled Diesel
Number of Cylinders	4
Bore, Stroke, and Displacement	3.94” (100 mm); 4.72” (120 mm); 230 in ^{3} (3.77 L)
Combustion System	Direct Injection
Intake System	Turbocharged
Engine Oil	15W-40
Engine Oil Capacity	14 quarts (13.24 L)
Fuel Capacity	32 gal (121 L)
Fuel Filter Type	Kubota Diesel

Table 4-3. Electrical Specifications

ITEM	SPECIFICATION
Battery	One, Maintenance Free
Battery Ampere Hour Rating	1,260 CCA
Battery Voltage	12 Volts
Alternator Type and Voltage	12 Volt, negative ground
Alternator Output Amperage	60 Amps
Alternator Fan Belt Tension	Automatic belt tension mechanism keeps serpentine belt under tension at all times
Starter Manufacturer	See Kubota Starter plate
Starter Voltage and Type	12 Volt, negative ground
Starter Rating	3 kW

Table 4-4. Performance Specifications

ITEM	SPECIFICATION
Travel Speed	0 to 350 ft/min (0 to 0.107 k/min)
Paving Speed	0 to 108 ft/min (0 to 0.033 k/min)
Basic Screed Width	8' (244 cm)
Maximum Screed Width	15' (457 cm)

Table 4-5. Machine System Capacity Specifications

ITEM	SPECIFICATION
Fuel	32 gal (121 L)
Engine Lubrication Oil	14 quarts (13.24 L)
Hydraulic Oil Reservoir	41 gal (155 L)
Torque Hubs	96 oz. (2.84 L) each
Antifreeze	Glycol based, Red, Extended Life, 3.6 gal (13.8 L)

Table 4-6. Hydraulic Pressures Specifications

ITEM	SPECIFICATION
Drive	3,625 PSI (250 Bar)
Conveyors/Augers	3,000 PSI (207 Bar)
Cylinders	3,000 PSI (207 Bar)
Vibrator	3,000 PSI (207 Bar)
Track Tension Pressure Reducing	1200 PSI (83 Bar)
Track Tension Relieving	2300 PSI (159 Bar)
Standby Pressure	325 PSI (22 Bar)

Table 4-7. Hydraulic System Specifications

ITEM	SPECIFICATION
Drives	Variable volume hydraulic proportional pump for each
Vibrator/Conveyors/Augers	Load sense
All other Hydraulic Functions	Load sense pump
Hydraulic Oil Reservoir w/oil cooler	41 gallons (155 liters)

Table 4-8. Lubricant Specifications

ITEM	SPECIFICATION
Engine Oil	15W-40
Hydraulic Oil	All Weather 32
Torque Hub	80W-90 Gear Oil
Grease	Shell Avania EP Grease or Equivalent
Chain Lube	Chain Lube
Front Idler	90 WT Gear Oil

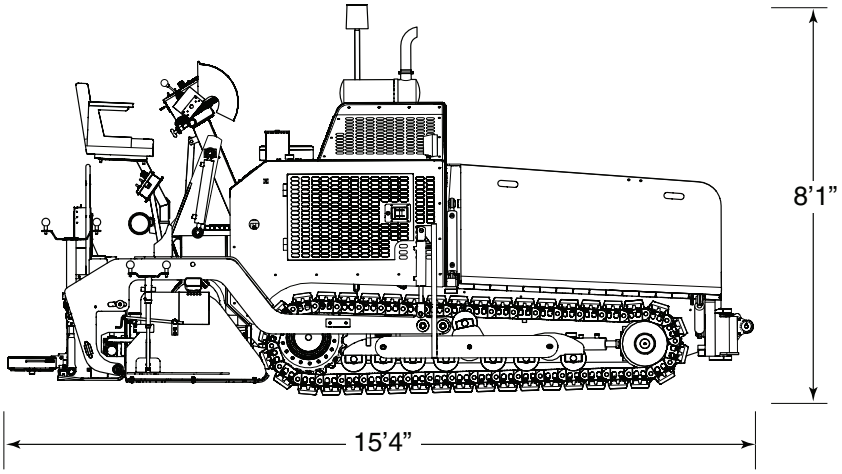
Table 4-9. Washdown

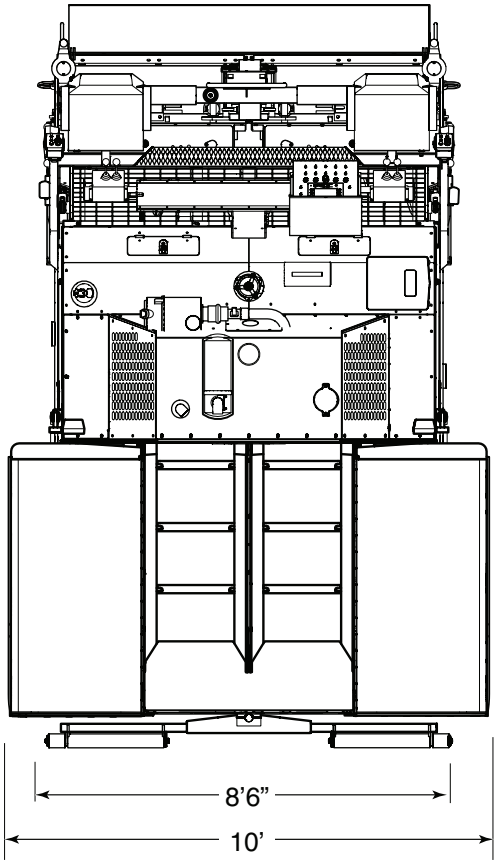
ITEM	SPECIFICATION
Components	Electric pump, two (2) hose reels with a 15'x 5/16" hose
Citrus Wash-down	6.62 gal (25 L)

Table 4-10. Electric Legend Screed Specifications

ITEM	SPECIFICATION
Heat	4 Electric Heat Strips (1500 W) on Main Screed 1 per ext. (1500 W @ 220 V)
Extensions	2 - 44 inch hydraulically operated extensions
Vibration	2 - hydraulic vibrators producing 3400 vibrations per minute
Crown/Invert	Adjustable, (at least) 2" crown, 1-1/2" of valley, with level indicator

DIMENSIONS





8616 Conveyor Paver Dimensions

Figure 4-1

TORQUE SPECS

Metric Fasteners

⚠WARNING **The following Table lists torque values for standard hardware and are intended as a guide for average application involving typical stresses and machined surfaces. Values are based on physical limitations of clean, plated and lubricated hardware. In all cases, when an individual torque value is specified, it should be followed instead of values given in this table.**

⚠CAUTION **Replace original equipment with hardware of equal grade.**

Table 4-11. Torque Specifications For Metric Fasteners

	CLASS 8.8 [GRADE 5 EQUIVALENT]				CLASS 10.9 [GRADE 8 EQUIVALENT]			
NOMINAL SIZE & PITCH	TORQUE FT. LBS.		TORQUE N•m		TORQUE FT. LBS.		TORQUE N•m	
	Dry	Lubed	Dry	Lubed	Dry	Lubed	Dry	Lubed
M4 x 0.7	2.27	1.70	3.07	2.30	2.27	2.31	4.17	3.13
M5 x 0.8	4.58	3.43	6.20	4.65	6.22	4.67	8.43	6.33
M6 x 1	7.75	5.83	10.5	7.90	10.60	7.97	14.3	10.8
M8 x 1.25	18.89	14.17	25.6	19.2	18.95	19.26	34.8	26.1
M10 x 1.25	39.11	29.52	53.0	40.1	53.87	40.59	73.0	55.0
M12 x 1.75	64.94	48.71	88.0	66.0	88.56	66.42	120.0	90.0
M14 x 2	103.32	77.49	140.0	105.0	140.22	107.01	190.0	145.0
M16 x 2	162.36	121.77	220.0	165.0	221.40	166.05	300.0	225.0
M20 x 2.5	317.34	236.16	430.0	320.0	428.04	321.03	580.0	435.0
M24 x 3	516.12	409.59	740.0	555.0	754.38	557.19	1010.0	755.0
M27 x 3	797.04	597.78	1080.0	810.0	1084.86	811.80	1470.0	1100.0
M30 x 3.5	1084.86	811.80	1470.0	1100.0	1476.00	1107.00	2000.0	1500.0

Inch Fasteners

⚠WARNING The following Table lists torque values for standard hardware and are intended as a guide for average application involving typical stresses and machined surfaces. Values are based on physical limitations of clean, plated and lubricated hardware. In all cases, when an individual torque value is specified, it should be followed instead of values given in this table.

⚠CAUTION Replace original equipment with hardware of equal grade.

Table 4-12. Torque Specifications For Standard Inch Fasteners

		CAPSCREWS: SAE GRADE 5				CAPSCREWS: SAE GRADE 8			
SIZE	THREAD	TORQUE FT. LBS.		TORQUE N•m		TORQUE FT. LBS.		TORQUE N•m	
		Dry	Lubed	Dry	Lubed	Dry	Lubed	Dry	Lubed
1/4	20 UNC	8	6	11	9	12	9	16	12
	28 UNF	10	7	13	10	14	10	19	14
5/16	18 UNC	17	13	24	18	25	18	33	25
	24 UNF	19	14	26	20	27	20	37	28
3/8	16 UNC	31	23	42	31	44	33	59	44
	24 UNF	35	26	47	36	49	37	67	50
7/16	14 UNC	49	37	67	50	70	52	95	71
	20 UNF	55	41	75	56	78	58	105	79
1/2	13 UNC	75	57	100	77	105	80	145	110
	20 UNF	85	64	115	86	120	90	165	120
9/16	12 UNC	110	82	145	110	155	115	210	155
	18 UNF	120	91	165	125	170	130	230	175
5/8	11 UNC	150	115	205	155	210	160	285	215
	18 UNF	170	130	230	175	240	180	325	245
3/4	10 UNC	265	200	360	270	375	280	510	380
	16 UNF	295	225	405	300	420	315	570	425
7/8	9 UNC	430	320	580	435	605	455	820	615
	14 UNF	475	355	640	480	670	500	905	680
1	8 UNC	645	485	875	655	910	680	1230	925
	14 UNF	720	540	980	735	1020	765	1380	1040
1-1/8	7 UNC	795	595	1080	805	1290	965	1750	1310
	12 UNF	890	670	1210	905	1440	1080	1960	1470
1-1/4	7 UNC	1120	840	1520	1140	1820	1360	2460	1850
	12 UNF	1240	930	1680	1260	2010	1500	2730	2050
1-3/8	6 UNC	1470	1100	1990	1490	2380	1780	3230	2420
	12 UNF	1670	1250	2270	1700	2710	2040	3680	2760
1-1/2	6 UNC	1950	1460	2640	1980	3160	2370	4290	3210
	12 UNF	2190	1650	2970	2230	3560	2670	4820	3620

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 and hand tighten swivel nut until snug.
4. To prevent twisting the tube(s), use two wrenches. Place one wrench on the connector body and with the second, tighten the swivel nut to the torque shown in **Table 4-13. Torque Specifications For Flare Type Tube Fittings**.

NOTE: The torque values shown are based on lubricated connections as in assembly.

Table 4-13. Torque Specifications For Flare Type Tube Fittings

TUBE SIZE OD	NUT SIZE (ACROSS FLATS)	TORQUE VALUE		RECOMMENDED TURNS TO TIGHTEN (AFTER FINGER TIGHTENING)	
(in)	(in)	(N•m)	(lb-ft)	(N•m)	(lb-ft)
3/16	7/16	8	6	1	1/6
1/4	9/16	12	9	1	1/6
5/16	5/8	16	12	1	1/6
3/8	11/16	24	15	1	1/6
1/2	7/8	46	34	1	1/6
5/8	1	62	46	1	1/6
3/4	1 1/4	102	75	3/4	1/8
7/8	1 3/8	122	90	3/4	1/8

Full Torque Nut Coupling Installation

The only completely reliable method of creating a consistent leak free, long lasting connection is to ensure that the coupling is brought to the proper torque.

The best method of ensuring a coupling is brought to the proper torque is to use a torque wrench with crowfoot. To ensure the proper torque is met, use the flats method of torque verification. Flats method may be used alone in situations where a torque wrench is inaccessible or unavailable.

There are seven steps involved in proper coupling installation:

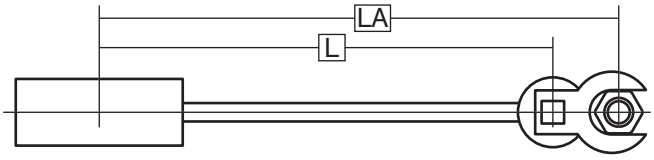
1. Determine the correct torque value for your coupling.

NOTE: Only use the torque values specified from the manufacturer, do not use SAE torque recommendations.

The minimum torque values are adequate for sealing in most applications, and the maximum torque values should never be exceeded.

2. Calculate the correct torque wrench setting (see ***Equations*** in Section 4).

NOTE: The most straight forward 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), (**Figure 4-2**).



Torque Wrench - Crowfoot

Figure 4-2

NOTE: Torque Wrench Setting = Desired Torque * L / LA

3. Ensure that the seal face and threads are clean and in good condition. Do not lubricate coupling threads.

NOTE: O-Rings should be lubricated with light oil, but threads should be completely dry unless making pipe thread connections (interference seal).

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.

4. Hand tighten the connection by bringing seal face in contact and rotating the nut by hand until it stops.

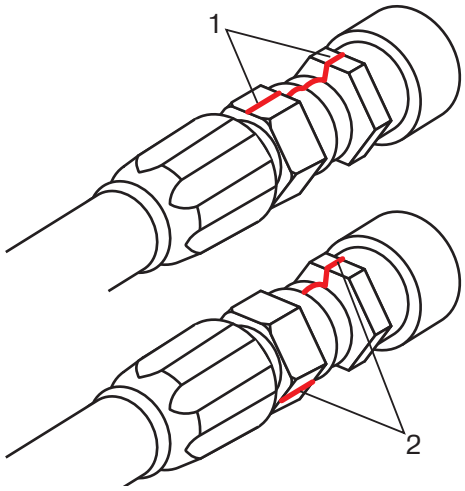
NOTE: By definition hand tight is 0.3-1 ft-lb or when the seal faces are touching and with the threads engaged the hex can no longer be rotated by hand.

5. Mark a line across the coupling nut and backup hex for flats method verification of coupling torque (**Figure 4-3**).

6. 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.



Flats Method Tightening

Figure 4-3

1 - Mark Line on Nut

2 - Example 2 Flats difference

7. If a torque wrench cannot fit into the coupling area or if it is unavailable, flats method may be used to ensure that the coupling is properly tightened, as shown in **Figure 4-3**.

NOTE: The mark placed on the nut and backup hex after hand tightening should have rotated 1 to 1.5 flats during final tightening. At this point in time, if desired, the nut and backup hex may be marked to indicate if the coupling loosens over time.

Table 4-14. Torque Specifications For US Style Coupling Terminations

JIC, SAE 45°, ORFS, O-Ring Boss, Gates Adapterless and MegaSeal										
Dash Size	JIC 37°, SAE 45° & MegaSeal (steel)		JIC 37°, SAE 45° & Mega-Seal (steel)		Flat Face O-Ring Seal (Steel)		SAE O-Ring Boss (Steel) & Gates Adapterless ≤ 4000 PSI		SAE O-Ring Boss (Steel) & Gates Adapterless > 4000 PSI	
1/16 Inch	ft-lb		ft-lb		ft-lb		ft-lb		ft-lb	
	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 4-15. Torque Specifications For DIN 24, DIN 60, and Inverted Cone Style Coupling Terminations

DIN 24, DIN 60, and Inverted Cone			
Size		Torque	
mm		ft-lb	
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 4-16. Torque Specifications For 4-Bolt Flange Connections

4-Bolt Flanges		
Dash Size	Bolt Size	Torque
1/16 Inch	Inch	ft-lb
-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 finger tighten bolts before applying final torque in a pattern. The seal faces must be parallel with even bolt tension to seal properly.
2. Torque values apply to bolts which are plated or coated in light engine oil.
3. Before assembly lubricate O-Ring with light oil (SAE 10W or 20W).

Table 4-17. Torque Specifications For SAE Male Flareless Assembly (MFA)

SAE Male Flareless Assembly (MFA)
After hand tight rotate nut one full turn (8 flats)

Table 4-18. Torque Specifications For NPTF Dry Seal Pipe Threads

NPTF	
Dash Size	Max Torque
1/16 Inch	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 on 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.
3. If thread sealant is used, maximum values shown should be decreased by 25%.

Table 4-19. Torque Specifications For BSP 30° Inverted Cone and JIS Coupling Terminations

BSP 30° Inverted Cone and JIS		
Dash Size	Torque	
mm	ft-lb	
1/16 Inch	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

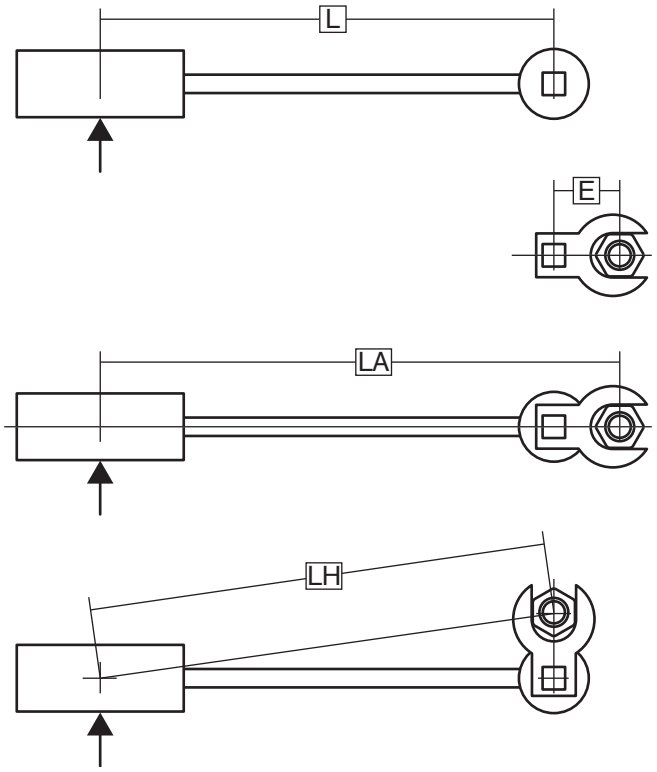
Table 4-20. Flats Method Values For Selected Terminations

Flats Method Values		
Termination Type	Dash Size	Flats
	1/16 Inch	
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 and the fitting fully hand tightened before marking flats.
2. Flats method is most accurate for the first assembly cycle, for multiple disassembly/ assembly cycles torque values are more reliable.
3. Tightening 2 flats or more is analogous to sever over torque and may damage seal faces.

Determining Torque Setting

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.



Measurements Needed

Figure 4-4

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

Equations

Equation 1

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

$$TS = TD * L / LA$$

or

$$TS = TD * L / (L+E)$$

Equation 2

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

$$TS = TD * L / LH$$

or

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

Equation 3

To estimate the crowfoot size (E)

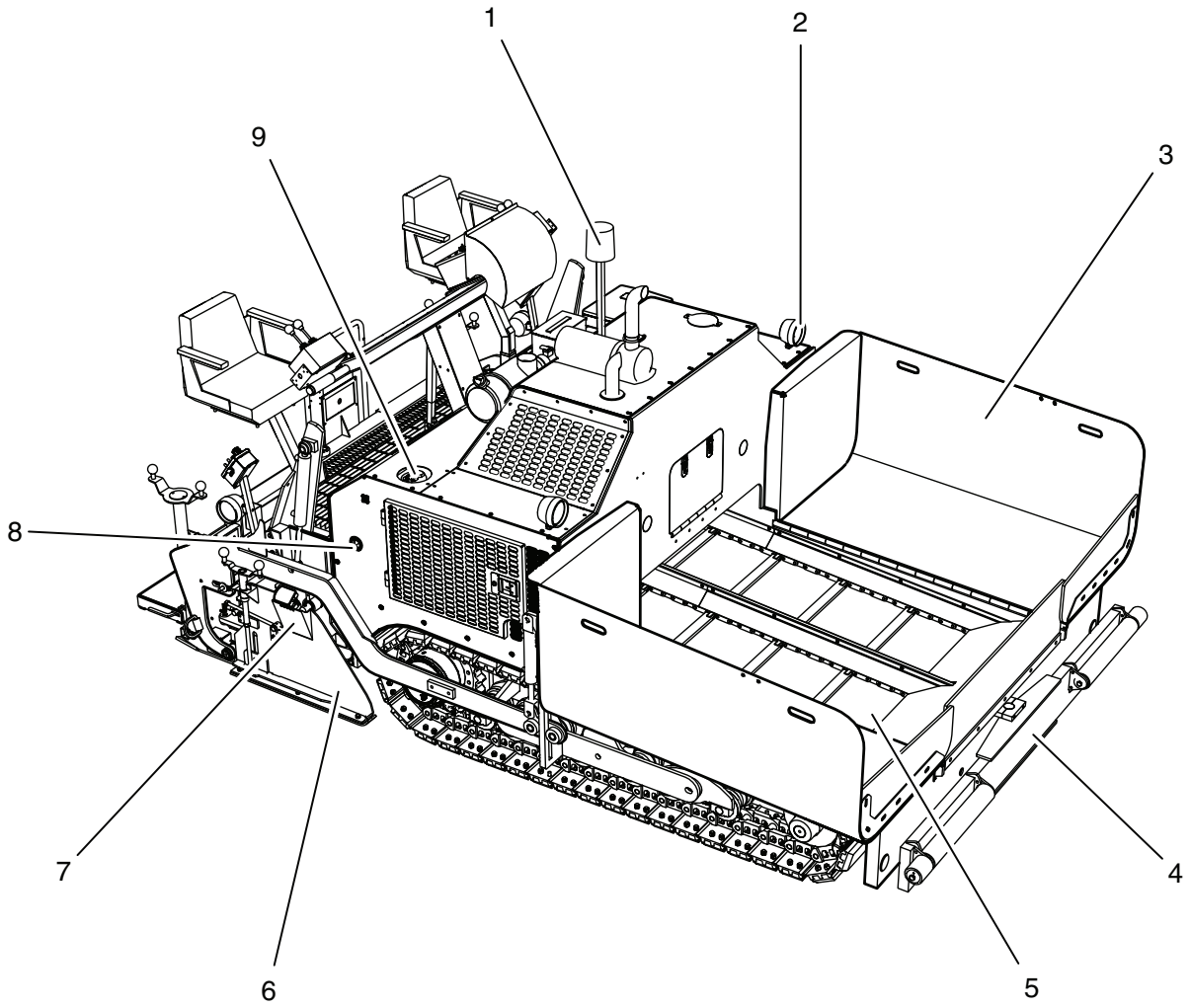
E = Drive Size * 0.5 + Distance between Drive & Open End + Wrench Size * 0.5774

Section 5
COMPONENT LOCATION

5

LOCATION OF OPERATION PANELS AND CONTROLS

8616 Conveyor Paver



8616 Conveyor Paver - View From Front

Figure 5-1

1 - Beacon Light

2 - Work Light

3 - Hopper

4 - Truck Rollers

5 - Conveyors

6 - Right Endgate

7 - Sonic Auger Sensor Bracket

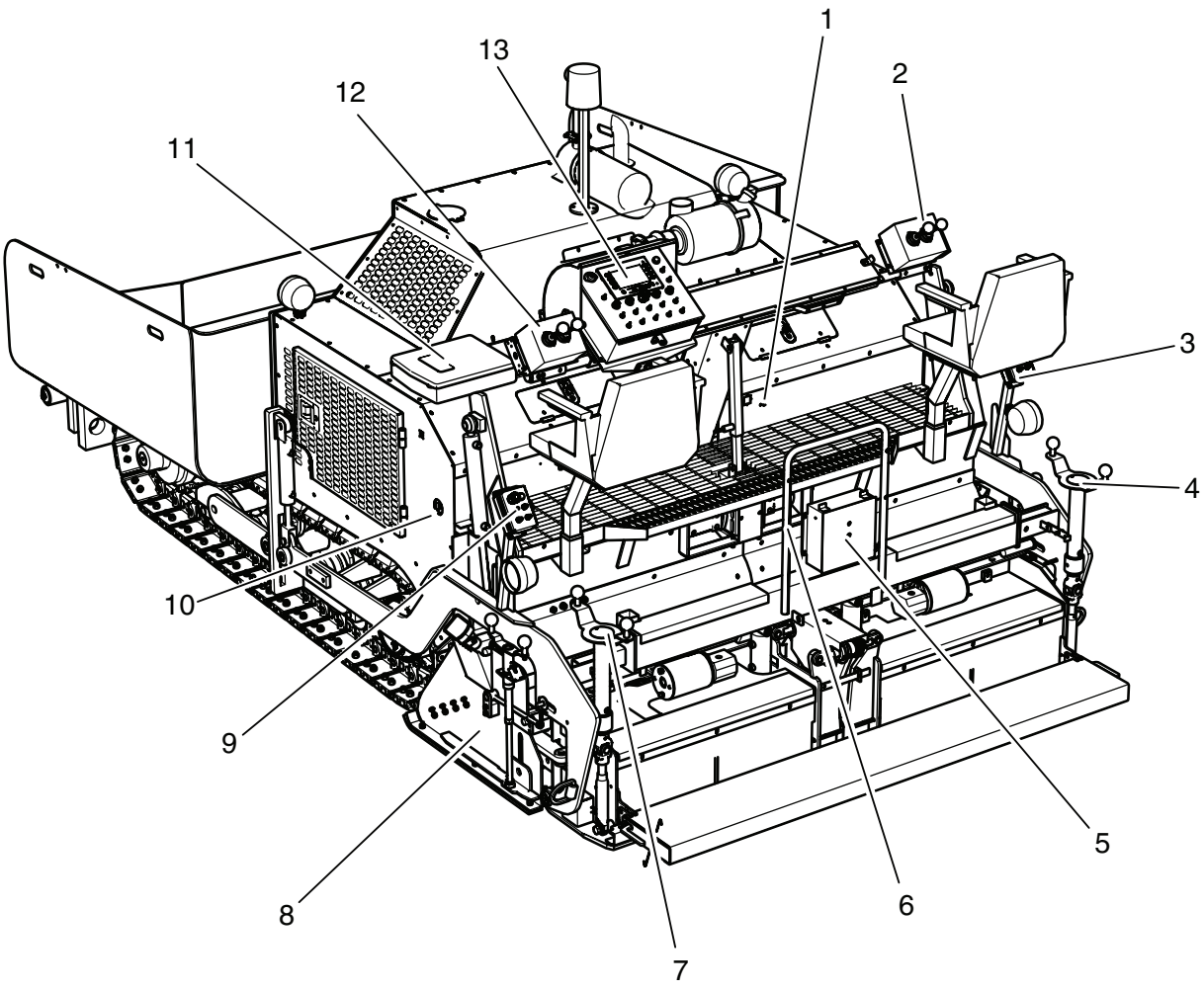
8 - Spray Down Hose

9 - Diesel Fill

Table 5-1. 8616 Conveyor Paver - View From Front

ITEM NO.	CONTROL NAME	FUNCTION
1	Beacon Light	Used to alert surrounding vehicles and pedestrians of the LeeBoy Model 8616 Conveyor Paver location.
2	Work Light	Used to illuminate path of the LeeBoy Model 8616 Conveyor Paver.
3	Hopper	Receives and holds paving mix load while conveyors move material mix to back of paver and screed.
4	Truck Rollers	Rests against the back tires of the dump truck unloading paving mix into hopper.
5	Conveyors	Drag bars and chains help pull material mix from hopper area to auger and screed. Right and Left sides can be controlled independently.
6	Right Endgate	Used to create a clean edge in the paved base. Has vertical and angle adjustments.
7	Sonic Auger Sensor Bracket	Holds the Sonic Auger Sensor in proper position to maintain the proper height of augered material. Connected to Sonic Auger Adjustment.
8	Spray Down Hose	Used to spray cleaning solvent or release agent on parts of the paver in preparation of paving.
9	Diesel Fill	Used to fuel the LeeBoy Model 8616 Conveyor Paver.

8616 Conveyor Paver (Continued)



8616 Conveyor Paver - View From Back

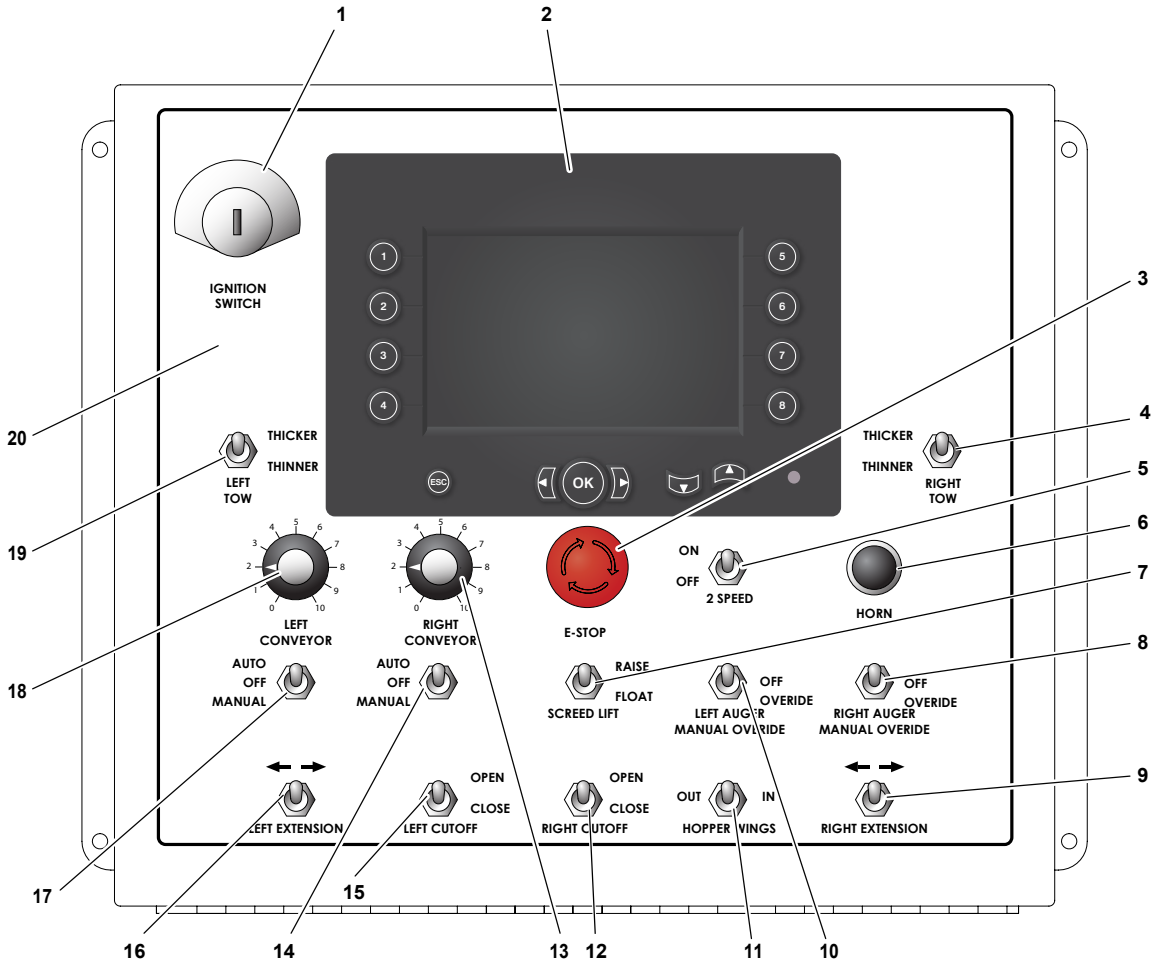
Figure 5-2

1 - Battery Disconnect Switch
2 - Right Steering and Speed Control Box
3 - Right Screed Control Box
4 - Right Flight Screw
5 - Electric Heat Control Box
6 - Power Crown Control (Option)
7 - Left Flight Screw
8 - Left Endgate
9 - Left Screed Control Box
10 - Left Spray Down Hose
11- Manual Holder Box
12 - Left Steering and Speed Control Box
13 - Control Panel

Table 5-2. 8616 Conveyor Paver - View From Back

ITEM NO.	CONTROL NAME	FUNCTION
1	Battery Disconnect Switch	Disconnects all electrical power from the batteries to the rest of the paver. Turn to the OFF position at the end of each day.
2	Right Steering and Speed Control Box	Contains various steering and screed controls for the right side.
3	Right Screed Control Box	Contains various screed controls for the right side.
4	Right Flight Screw	This screw controls the depth of the asphalt for the right side.
5	Electric Heat Control Box	Has a power switch (**Figure 6-11,1**), a START HEAT button **(Figure 6-11,2)**, and a heat cycle indicator light **(Figure 6-11,3)**. Houses element breakers.
6	Power Crown Control (Option)	Toggle switch up or down for power crown.
7	Left Flight Screw	This screw controls the depth of the asphalt for the left side.
8	Left Endgate	Used to create a clean edge in the paved base. Has vertical and angle adjustments.
9	Left Screed Control Box	Contains various screed controls for the left side.
10	Left Spray Down Hose	Used to spray cleaning solvent or release agent on parts of the paver in preparation of paving.
11	Manual Holder Box	Contains the LeeBoy Model 8616 Conveyor Paver manual.
12	Left Steering and Speed Control Box	Contains various steering and screed controls for the left side.
13	Control Panel	Contains major paver systems and controls.

Control Panel



Control Panel, Indicators and Gauges

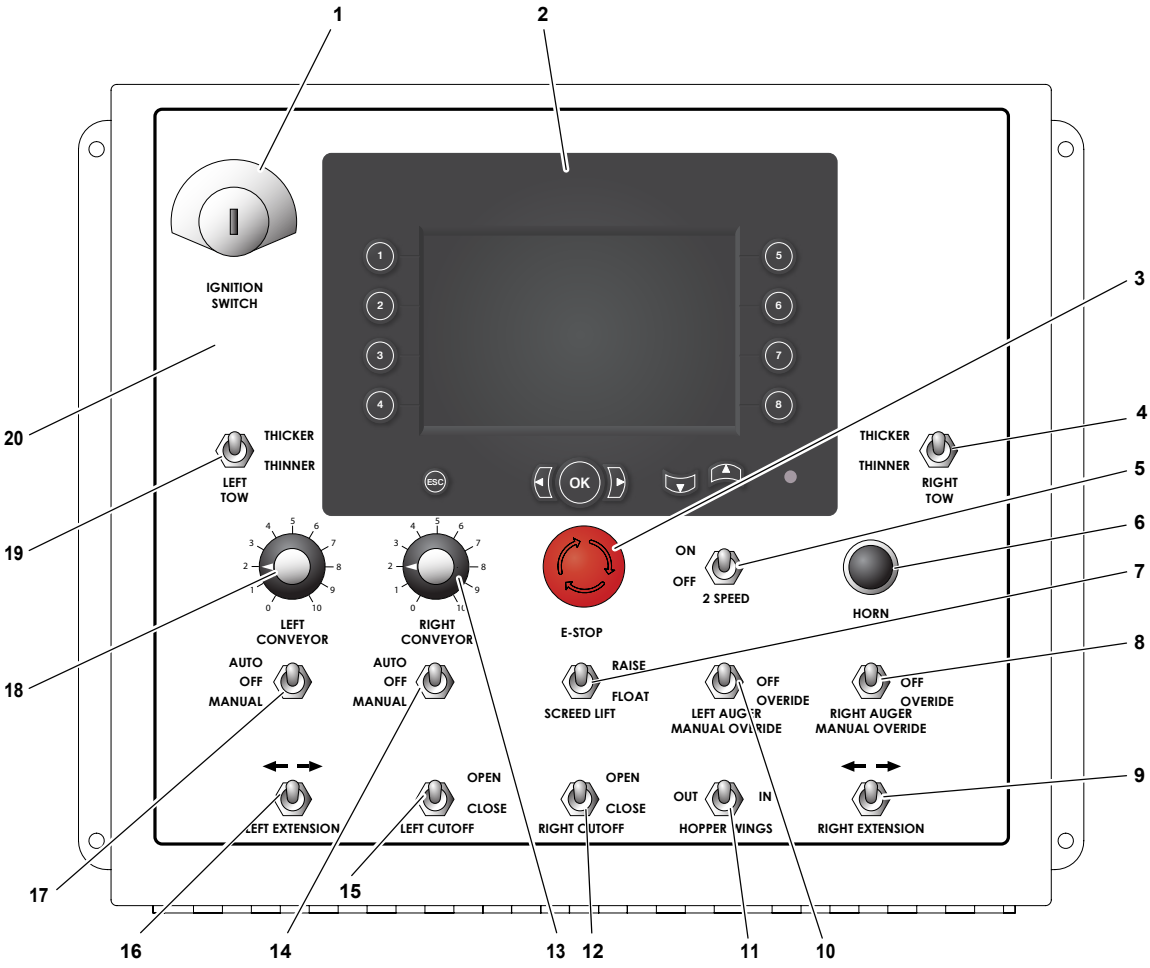
Figure 5-3

1 - Ignition Switch
2 - Display Unit
3 - E-Stop Button
4 - Right Tow/Thicker/Thinner Switch
5 - 2-Speed On/Off Switch
6 - Horn
7 - Screed Lift Raise/Float Switch
8 - Right Auger Manual Overide Off/Overide Switch
9 - Right Extension Switch
10 - Left Auger Manual Overide Off/Overide Switch
11 - Hopper Wings Out/In Switch
12 - Right Cutoff Open/Close Switch
13 - Right Conveyor Dial
14 - Right Conveyor Auto/Off/Manual Switch
15 - Left Cutoff Open/Close Switch
16 - Left Extension Switch
17 - Left Conveyor Auto/Off/Manual Switch
18 - Left Conveyor Dial
19 - Left Tow Thicker/Thinner Switch
20 - Control Panel

Table 5-3. Control Panel, Indicators and Gauges

ITEM NO.	CONTROL NAME	FUNCTION
1	Ignition Switch	Controls starting, stopping, and running of engine. Vertical position is OFF. Turn right one notch for power. Red light will illuminate until engine cranks. Far right is the START position. After engine starts, release switch, which will automatically return to the POWER position. Turn left to preheat engine. NOTE: Engine will not start unless joysticks are in NEUTRAL (**Figure 5-4**).
2	Display Unit	Displays paver setup and calibration information, engine operating information, and engine and paver system fault information.
3	E-Stop Button	Press the E-Stop button to IMMEDIATELY DISABLE the paver engine and all electronic functions. Turn clockwise to release E-Stop button. ***NOTICE*** **The E-Stop button remains in a locked down position until it is manually released. Unit will not restart until E-Stop is reset.**
4	Right Tow Thicker/Thinner Switch	Sets the thickness of the asphalt. Place switch in THICKER position for thicker asphalt. Place switch in THINNER position for thinner asphalt.
5	2-Speed On/Off Switch	Used to change machine speed. Place switch in OFF position for low speed. Place the switch in ON for high speed position. ***NOTICE*** **The ON position is only for traveling. Do not use the HIGH speed position for paving.** ⚠CAUTION **When machine is powered on, the 2-Speed On/Off switch will operate in its current position.**
6	Horn	Press and hold the button to sound the horn. The LED indicator on the keypad will light when the button is pressed.
7	Screed Lift Raise/Float Switch	Used to raise or float the screed. Center position is hold. When released, switch automatically returns to center position. Center holds the screed position. To raise the screed, set switch to RAISE position. To float the screed, set switch to FLOAT position. (Switch should lock in FLOAT position.)
8	Right Auger Manual Overide Off/Overide Switch	Center is OFF position. Pull switch down to manually overide right auger.
9	Right Extension Switch	Used to move the right extension in or out. Push switch to right arrow (→) position to move right extension out. Push switch to left arrow (←) position to move right extension in.
10	Left Auger Manual Overide Off/Overide Switch	Center is OFF position. Pull switch down to manually overide left auger.

Control Panel (Continued)



Control Panel, Indicators and Gauges

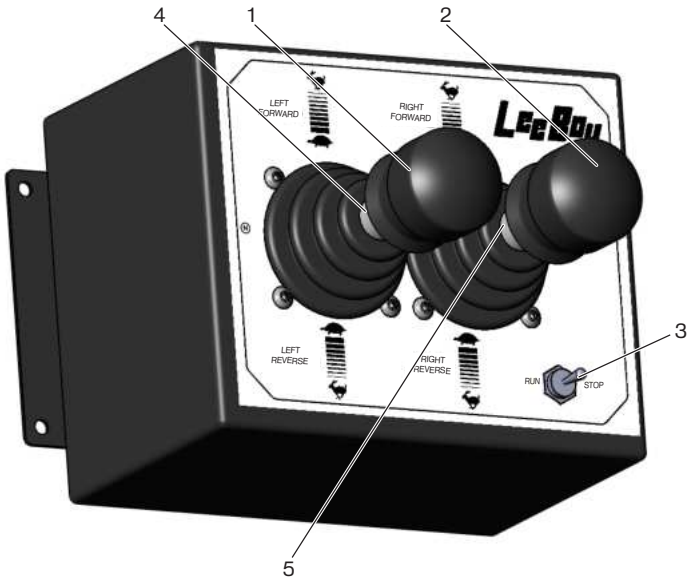
Figure 5-3 (Continued)

1 - Ignition Switch
2 - Display Unit
3 - E-Stop Button
4 - Right Tow/Thicker/Thinner Switch
5 - 2-Speed On/Off Switch
6 - Horn
7 - Screed Lift Raise/Float Switch
8 - Right Auger Manual Overide Off/Overide Switch
9 - Right Extension Switch
10 - Left Auger Manual Overide Off/Overide Switch
11 - Hopper Wings Out/In Switch
12 - Right Cutoff Open/Close Switch
13 - Right Conveyor Speed Dial
14 - Right Conveyor Auto/Off/Manual Switch
15 - Left Cutoff Open/Close Switch
16 - Left Extension Switch
17 - Left Conveyor Auto/Off/Manual Switch
18 - Left Conveyor Speed Dial
19 - Left Tow Thicker/Thinner Switch
20 - Control Panel

Table 5-3. Control Panel, Indicators and Gauges (Continued)

ITEM NO.	CONTROL NAME	FUNCTION
11	Hopper Wings Out/In Switch	Used to move the hopper wings in and out. Push switch to OUT position to open hopper wings. Push switch to IN position to close hopper wings.
12	Right Cutoff Open/Close Switch	Used to open or close the right cutoff. Push switch to the OPEN position to open right cutoff. Push switch to CLOSE position to close right cutoff.
13	Right Conveyor Dial	Controls right conveyor speed when Right Conveyor Switch is set to AUTO or MANUAL. Turning clockwise (CW) increases conveyor speed.
14	Right Conveyor Auto/Off/Manual Switch	Selects automatic or manual override for right conveyor. Center is OFF position. For automatic operation, set switch to AUTO position for conveyors to work with sonics. MANUAL position controls conveyors with paddles.
15	Left Cutoff Open/Close Switch	Used to open or close the left cutoff. Push switch to the OPEN position to open left cutoff. Push switch to CLOSE position to close left cutoff.
16	Left Extension Switch	Used to move the left extension in or out. Push switch to left arrow (←) position to move left extension out. Push switch to right arrow (→) position to move left extension in.
17	Left Conveyor Auto/Off/Manual Switch	Selects automatic or manual override for left conveyor. Center is OFF position. For automatic operation, set switch to AUTO position for conveyors to work with sonics. MANUAL position controls conveyors with paddles.
18	Left Conveyor Dial	Controls left conveyor speed when Left Conveyor Switch is set to AUTO or MANUAL. Turning clockwise increases conveyor speed.
19	Left Tow Thick/Thinner Switch	Sets the thickness of the asphalt. Place switch in THICKER position for thicker asphalt. Place switch in THINNER position for thinner asphalt.
20	Control Panel	Monitors and controls the major paver systems and controls.

Electronic Steering and Speed Control Box - Dual Joystick



Steering and Speed Control Box - Dual Joystick

Figure 5-4

1 - Left Steer Joystick

2 - Right Steer Joystick

3 - Run/Stop Switch

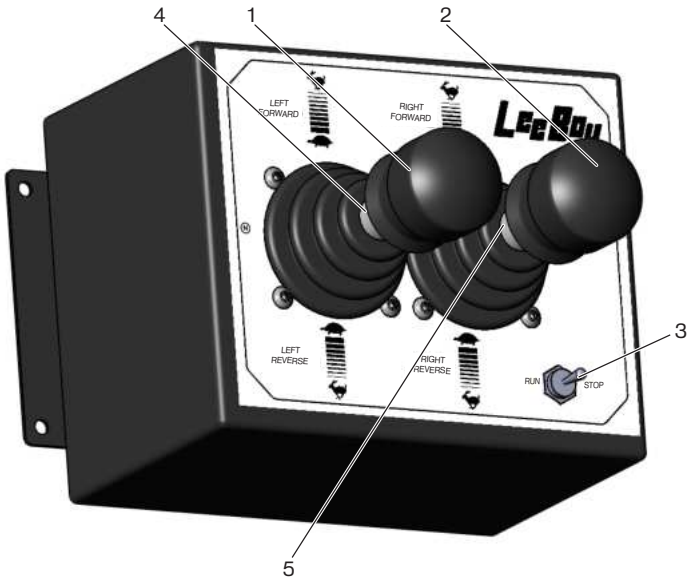
4 - Left Neutral Lock

5 - Right Neutral Lock

Table 5-4. Electronic Steering and Speed Control Box - Dual Joystick

ITEM NO.	CONTROL NAME	FUNCTION
1	Left Steer Joystick	Lever controls the speed and direction of travel forward and reverse. Pushing joystick forward moves machine forward. The farther forward, the faster the speed. Pulling joystick backward moves machine backward. The farther backward, the faster the speed. When joystick is centered, the machine is in neutral and brake comes on. Pushing left joystick farther forward than right joystick steers the paver to the right. The farther forward, the more the paver turns. ⚠WARNING **Before moving paver, verify there are no people, obstacles or other equipment in the path of the paver.** NOTE: Machine must be in neutral to start machine. NOTE: You can only use one steering control module at a time. When steering paver with control module the RUN/STOP Switch must be in RUN position on the module in use and STOP position on the other module not in use.
2	Right Steer Joystick	Lever controls the speed and direction of travel forward and reverse. Pushing joystick forward moves machine forward. The farther forward the faster the speed. Pulling joystick backward moves machine backward. The farther backward, the faster the speed. When joystick is centered, the machine is in neutral and brake comes on. Pushing right joystick farther forward than left joystick steers the paver to the left. The farther forward, the more the paver turns. ⚠WARNING **Before moving paver, verify there are no people, obstacles or other equipment in the path of the paver.** NOTE: Machine must be in neutral to start machine. NOTE: You can only use one steering control module at a time. When steering paver with control module, the RUN/STOP Switch must be in RUN position on the module in use and STOP position on the other module not in use.

Electronic Steering and Speed Control Box - Dual Joystick (Cont.)



Steering and Speed Control Box - Dual Joystick

Figure 5-4 (Continued)

1 - Left Steer Joystick

2 - Right Steer Joystick

3 - Run/Stop Switch

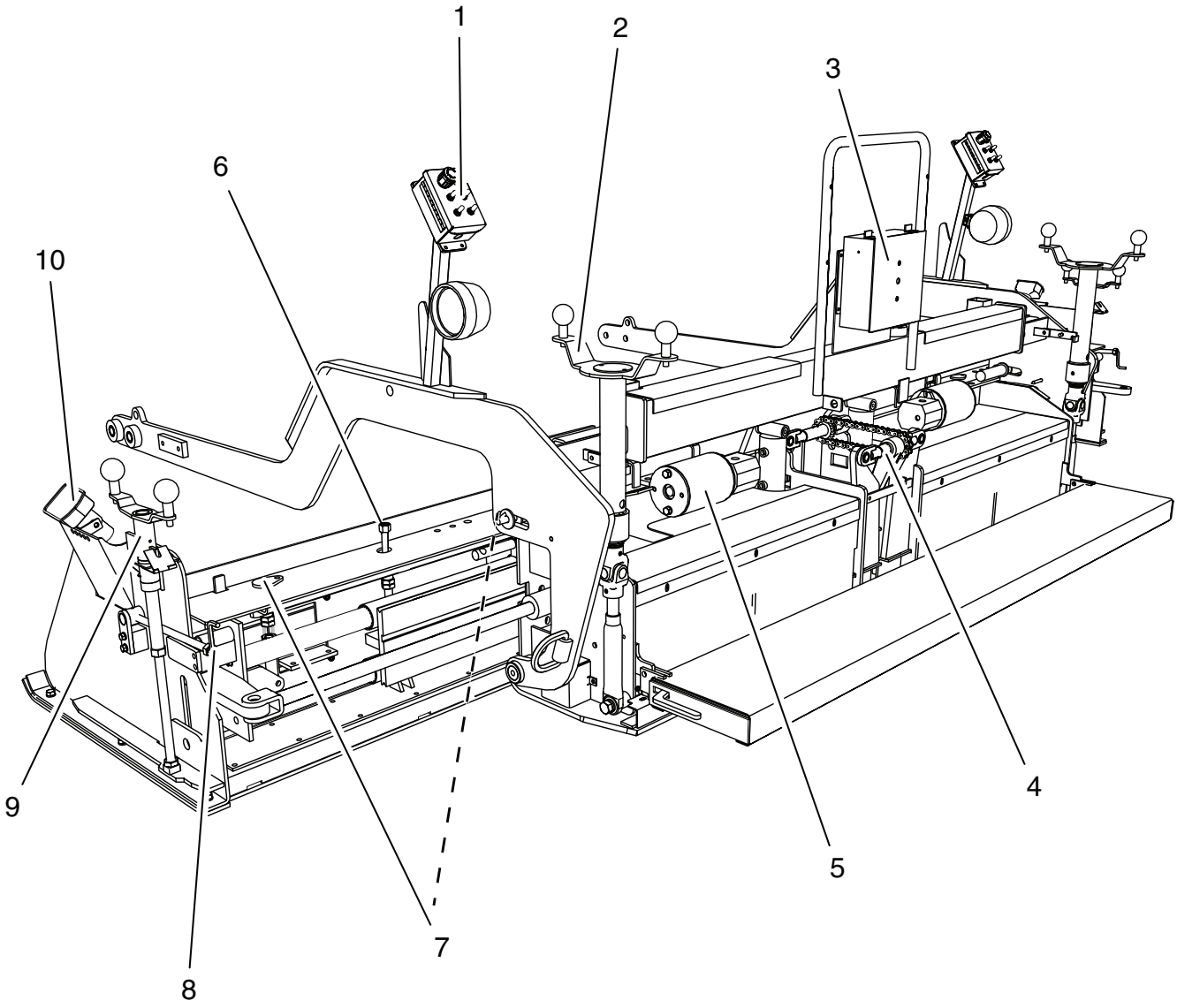
4 - Left Neutral Lock

5 - Right Neutral Lock

Table 5-4. Electronic Steering and Speed Control Box - Dual Joystick (Continued)

ITEM NO.	CONTROL NAME	FUNCTION
3	Run/Stop Switch	The Run/Stop switch controls stopping the machine and activating/deactivating the operator control station. When the switch is set to the STOP position, operator control station is deactivated, parking brake is applied, and machine will not move. When switch is set to RUN, operator control station is activated, parking brake is released, and machine resumes to previously set speed. ⚠ DANGER **Operation Hazard! Never leave machine operator station unattended with machine in gear and/or in motion. Operator station is defined as the platform area within arms reach of active control steering box. Operator must remain in operator's station at all times when machine is in gear and/or in motion. Before leaving machine operator station, operator must return joysticks to neutral position and move RUN/STOP switch to STOP position.** NOTE: The paver can operate using only one operator station at a time. Paver is typically operated from Left Operator Station (see ***Activating and Deactivating Operator Control Station*** in Section 6). NOTE: If the position of the joystick(s) has NOT changed from when the RUN/STOP switch is moved to the STOP position and then later switched to the RUN position, then paver will resume travel at the same speed of travel when the switch is set to the RUN position. If the position of the joystick(s) HAS changed from when the RUN/STOP switch is moved to the STOP position then later switched to the RUN position, the paver travel function will be temporarily disabled until joysticks are returned to the NEUTRAL position. Note: Set throttle to operating RPM's before starting to move. Once throttle is set and paver has been driven and stopped, machine will go back to idle in approximately 10 seconds. Once joysticks are moved again, machine will go back to operating RPMs.
4	Left Neutral Lock	Locks the left lever in neutral. Pull up on the bottom of the knob to unlock.
5	Right Neutral Lock	Locks the right lever in neutral. Pull up on the bottom of the knob to unlock.

Electric Screed Operation Controls



Screed Operation Controls

Figure 5-5

1 - Screed Operator Control Panel

2 - Flight Screw

3 - Electric Heat Control Box

4 - Crown and Valley Adjuster

5 - Screed Vibrator

6 - Extension Angle of Attack Screw

7 - Extension Vertical Adjustment Screws (2)

8 - Tilt Screw

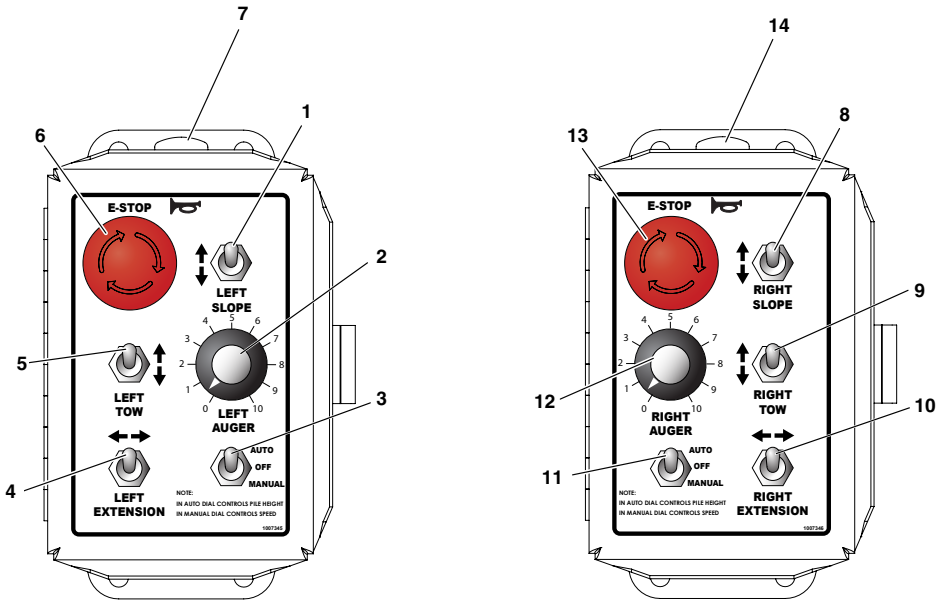
9 - Depth Screw

10 - Sonic Auger Sensor Bracket

Table 5-5. Electric Screed Operation Controls

ITEM NO.	CONTROL NAME	FUNCTION
1	Screed Operator Control Panel	Contains controls for screed functions.
2	Flight Screw	This screw controls the depth of the asphalt.
3	Electric Heat Control Box	Has a Power switch **(Figure 6-11,1)**, a Start Heat button **(Figure 6-11,2)**, and a Heat Cycle Indicator Light **(Figure 6-11,3)**. Houses element breakers.
4	Crown and Valley Adjuster	Adjusts for positive crown or negative valley in wear plate. NOTE: Manual Crown and Valley Adjuster shown. Powered adjustment option available.
5	Screed Vibrator	Provides vibration to the screed frame for better mat compaction.
6	Extension Angle of Attack Screw	Adjusts the back end of the extension wear plate. Tilt Rougher/Smoother.
7	Extension Vertical Adjustment Screws (2)	Adjusts the front of the extension wearplate to provide the best mat. Up or down and can level extension at wide widths.
8	Tilt Screw	Used to adjust the tilt on the Endgate.
9	Depth Screw	This controls the depth of the Endgate.
10	Sonic Auger Sensor Bracket	Holds the Sonic Auger Sensor in proper position to maintain the proper height of augered material. Connected to Sonic Auger Adjustment.

Screed Operator Control Box



Left and Right Screed Operator Control Boxes

Figure 5-6

1 - Left Slope Raise/Lower

2 - Left Auger Dial

3 - Left Auger Auto/Off/Manual Switch

4 - Left Extension In/Out

5 - Left Tow Up/Down

6 - Left E-Stop Button

7 - Horn (Located in Front)

8 - Right Slope Raise/Lower

9 - Right Tow Up/Down

10 - Right Extension In/Out

11 - Right Auger Auto/Off/Manual Switch

12 - Right Auger Dial

13 - Right E-Stop Button

14 - Horn (Located in Front)

Table 5-6. Screed Operator Control Box

ITEM NO.	CONTROL NAME	FUNCTION
1	Left Slope Raise/Lower	UP position raises left slope. DOWN position lowers left slope. Center position stops movement. NOTE: Optional.
2	Left Auger Dial	When Left Auger Auto/Off/Manual Switch is set to AUTO, the Left Auger Dial controls pile height. Turning clockwise increases pile height. When Left Auger Switch Auto/Off/Manual Switch is set to MANUAL, the Left Auger Dial controls speed. Turning clockwise increases speed.
3	Left Auger Auto/Off/ Manual Switch	Selects automatic or manual override for left auger. Center is OFF position. For automatic operation set switch to AUTO position. MANUAL position provides override. Also cuts off conveyor in auto.
4	Left Extension In/Out	IN position moves left extension in. OUT position moves left extension out. Center position stops movement.
5	Left Tow Up/Down	Tow UP adjusts left tow in the up direction. Tow DOWN adjusts left tow in the down direction.
6	Left E-Stop Button	Press the left E-Stop button to IMMEDIATELY DISABLE the paver engine and all electronic functions. Turn clockwise to release E-Stop button. ***NOTICE*** **The E-Stop button remains in a locked down position until it is manually released. Unit will not restart until E-Stop is reset.**
7	Horn	Press button to sound horn.
8	Right Slope Raise/ Lower	UP position raises right slope. DOWN position lowers right slope. Center position stops movement. NOTE: Optional.
9	Right Tow Up/Down	Tow UP adjusts right tow in the up direction. Tow DOWN adjusts right tow in the down direction.
10	Right Extension In/Out	IN position moves right extension in. OUT position moves right extension out. Center position stops movement.
11	Right Auger Auto/Off/ Manual Switch	Selects automatic or manual override for right auger. Center is OFF position. For automatic operation set switch to AUTO position. MANUAL position provides override. Also cuts off conveyor in auto.
12	Right Auger Dial	When Right Auger Auto/Off/Manual Switch is set to AUTO, the Right Auger Dial controls pile height. Turning clockwise increases pile height. When Right Auger Switch Auto/Off/Manual Switch is set to MANUAL, the Right Auger Dial controls speed. Turning clockwise increases speed.
13	Right E-Stop Button	Press the right E-Stop button to IMMEDIATELY DISABLE the paver engine and all electronic functions. Turn clockwise to release E-Stop button ***NOTICE*** **The E-Stop button remains in a locked down position until it is manually released. Unit will not restart until E-Stop is reset.**
14	Horn	Press button to sound horn.

NOTES

Section 6
OPERATION

6

GENERAL INFORMATION

Safety

Before operating the LeeBoy Model 8616 Conveyor Paver, you must read the following safety information and review ***Safety*** in Section 2.

⚠ DANGER Operation Hazard! Never allow anyone who is not properly trained to operate this paver. Only authorized personnel who are properly trained in the operation of the paver can operate the LeeBoy Model 8616 Conveyor Paver.

⚠ DANGER Operation Hazard! Never leave the LeeBoy Model 8616 Conveyor Paver operator station unattended with paver in gear and/or in motion. Operator station is defined as the platform area within arms reach of active control steering box. Operator must remain in operator's station at all times when machine is in gear and/or in motion. Before leaving machine operator station, operator must return joysticks to neutral position and move RUN/STOP switch to STOP position.

⚠ DANGER Operation Hazard! Do not operate a LeeBoy Model 8616 Conveyor Paver that requires repairs or scheduled maintenance. Put an information tag on the instrument panel that says "DO NOT OPERATE." Remove the key from the ignition switch. Repair all damage at once and perform routine maintenance. Minor damage can result in major system failure.

⚠ DANGER Electrocution Hazard! Do not operate a LeeBoy Model 8616 Conveyor Paver that has damaged wires and/or cables. Damaged wires and cables could cause an electrical shock that could result in serious injury or death. Inspect wires and cables to ensure that no damage has occurred before operating the LeeBoy Model 8616 Conveyor Paver.

⚠ DANGER Rapid counter-rotation in either direction, clockwise (CW) or counterclockwise (CCW) could result in operator being thrown from machine resulting in personal injury or death. Counter-rotation is defined as one joystick in extreme forward position and opposite joystick in extreme rear position while machine is in gear and moving forward or reverse. Make only slow adjustments to joysticks or steering wheel to turn machine.

⚠ WARNING Fire Hazard! Never spray cleaning solvent or release agent on or near a screed heating element that is hot or being heated or on or near any open flame or source of ignition. Cleaning solvent and release agent could ignite causing serious personal injury.

NOTE: When using spray down, consider the environment and do not allow cleaning solvent to run onto the ground.

⚠ CAUTION Verify there are no people, obstacles or other equipment near the LeeBoy Model 8616 Conveyor Paver before starting the engine.

NOTICE **The safety messages that follow have NOTICE level hazards.**

- Work slowly in tight areas.
- Avoid steep hills if possible.
- Always look before changing the direction of travel.
- Do not run engine in a closed building for long periods of time.
- Always park the paver on solid, level ground in low range. If this is not possible, always park the paver at a right angle to the slope. Lower screed when parked.
- Use proper flags, barriers and warning devices, especially when parking in areas of traffic.
- Never perform maintenance work on the paver with the engine running.
- Do not change the engine governor settings.
- Always replace damaged or lost decals.
- Disconnect battery cables when working on the electrical system or when welding on the unit.
- If battery needs a charge, be sure battery charger is off when making connections.
- Be sure the correct battery polarity is observed (negative [-] to negative [-] and positive [+] to positive [+]), when connecting a battery charger or jumper cable.

Description Of Operation

The LeeBoy Model 8616 Conveyor Paver has hydrostatic driven tracks that propel the paver. The hydrostatic assist feature can be engaged by the operator using a friction-controlled joystick. Two friction-held joysticks control the speed of the paver in conjunction with a maximum speed setting. Ramping for acceleration and deceleration are proportional to the movement of the joysticks.

The direction of the paver is controlled by using the dual joysticks. Multiple switches and dials positioned on the paver allow the operators to control all paving functions.

The operator can operate the paver from one of two identical control stations. Left and right sides are determined by sitting in the normal operation position facing straight ahead in the forward direction of travel.

Propel System

The propel system utilizes a dual path proportional system to control the tracks. In low speed, the inside track will be allowed to counter-rotate. In high speed, the inside track will not counter rotate.

Steering

Steering of the tracks is controlled by a hydraulic proportional pump. The amount of steering is controlled by the amount of joystick movement and the speed of the paver. As the paver speed increases, the amount of steering will be reduced.

Throttle

Engine RPM is set manually by using the throttle up and throttle down buttons located on the ENGINE and PAVER screens of the display unit. Engine RPM automatically increases to 1800 RPM when conveyor and/or augers are turned on. When generator is turned on, engine RPM automatically goes to 1400 RPM unless augers and/or conveyors are on, then engine will remain at 1800 RPM. While in motion, if the joysticks are set to neutral position for 10 seconds, the engine will go to idle. When the joysticks are taken out of neutral, the engine immediately returns to last set RPM.

OPERATING CONTROLS

Display Unit

The display unit is pre-loaded with the software to operate the LeeBoy Model 8616 Conveyor Paver. The display unit functions as a master unit that gathers operating information. It displays service information and settings when needed. During normal operation, the unit will display the ENGINE screen that contains engine information.

STARTUP Screen

The STARTUP screen will appear when the LeeBoy Model 8616 Conveyor Paver is started. Listed at the bottom of the STARTUP screen is the version of operating software installed in the unit. The STARTUP screen will flash when it first appears, then the ENGINE screen will appear.

Figure 6-1

ENGINE Screen

Figure 6-2

1 - Low Fuel Level Warning Light

2 - Oil Pressure Warning Light

The ENGINE screen displays engine information.

Items displayed on the ENGINE screen are:

- Fuel Gauge - Indicates the amount of fuel in the tank
- Voltmeter - Indicates battery voltage
- Water Temperature Gauge - Indicates engine coolant temperature
- Oil Pressure Gauge - Indicates engine oil pressure
- Hydraulic Oil Temperature - Indicates hydraulic system oil temperature
- Tachometer - Indicates engine speed

The two red icons displayed beside the tachometer will illuminate to alert the operator when the fuel level is low **(Figure 6-2,1)** or there is a problem with the engine oil pressure **(Figure 6-2,2)**.

Using buttons on the left side of the screen, the operator can review other display unit screens, such as:

- Button 1 - PAVER screen
- Button 3 - SETUP Screen
- Button 4 - FAULTS Screen

To review another screen, press the appropriate button.

If a fault occurs during operation, the “EXCLAMATION POINT” icon (Button 4) will flash. Press Button 4 to review fault information.

PAVER Screen

Figure 6-3

The PAVER screen displays the status of LeeBoy Model 8616 Conveyor Paver functions, maximum ground speed setting, steering position and whether a console is active, inactive or paused. There are indicators for the left and right auger and conveyor Auto or Manual mode, Material height setting (when in Auto mode), auger and conveyor speed, Grade Auto or Manual, Vibrator On or Off and Screed Hold.

The fuel level, battery voltage, coolant temperature, hydraulic oil temperature, engine oil pressure, park brake, work lights, beacon light, spray down and generator warning icons are also displayed.

The ground speed limit can be changed from this screen. To increase the ground speed limit, press the UP arrow.

Use the following Paver Screen buttons to access the following functions:

Button 1 - Beacon lights on/off

Button 2 - Work lights on/off

Button 3 - Spray down on/off

Button 4 - Fault codes- switches display to fault code screen

Button 5 - Grade Auto on/off

Button 6 - Vibrator on/off

Button 7 - Throttle up

Button 8 - Throttle down

Left/Right arrows - Truck Hitch In/Out (Option)

Up/Down arrows - Ground speed percentage, input from joysticks will be scaled between 0 and this maximum setting

SETUP Screen

Figure 6-4

The SETUP screen allows access to change various paver settings and calibrations. This area should only be accessed by Authorized LeeBoy Dealers.

- Button 1 - Joystick Optimization Screen
- Button 2 - Propel Threshold and Straight Tracking Screen
- Button 3 - TIME SET Screen
- Button 4 - HELP screen. Use the LEFT and RIGHT arrows to scroll through the HELP screens.
- ESC - Exit SETUP screen

FAULT Screens

Figure 6-5

Figure 6-6

The FAULT screens are used to inform the operator that a particular problem exists. A red box indicates a fault has been detected with that particular component.

- Output Fault - The output is on and no current is measured (open or short circuit).
- Input Sensor Fault - The sensor voltage is outside acceptable limits.
- Input Sensor Cal - The sensor has not been calibrated.
- Controller Offline - No CAN communication with controller

Use the RIGHT/LEFT arrows to scroll through the fault pages. To exit the screen, press ESC.

OPERATION

Pre-Start Inspection and Preparation

To prevent costly down time, the LeeBoy Model 8616 Conveyor Paver should be checked thoroughly before each use. Use the list below to assist in checking out the paver.

1. Inspect paver. Have any malfunctioning, broken or missing parts repaired or replaced before using, including:
   - Hydraulic hoses/fittings
   - Pumps
   - Motors
   - Electrical wires and connections
   - Steps, supports and covers
2. Check engine oil (refer to current engine operator's manual), hydraulic oil, torque hub oil and diesel fuel.
3. Check the engine safety switch (the engine should only start when all joysticks FORWARD/REVERSE levers are in the NEUTRAL position **(Figure 6-8,1,2)**.
4. Check all electrical functions before distributing asphalt.
5. Ensure operator's area is free of debris.
6. Ensure that all the instruction and safety labels are in place and readable. These are as important as any other equipment on the paver.
7. Read and follow all instruction and safety labels.
8. Ensure all covers and guards are in place.
9. Wear OSHA required safety equipment when running the paver.
10. Ensure paver is properly lubricated (see ***Lubrication Chart*** in Section 7).
11. Fill the fuel tank with the engine off.

⚠WARNING Explosion Hazard! Never fill fuel tank near an open flame, when smoking, when the engine is running or when screed heat is on.

12. Clear auger and conveyors before starting engine.
13. Spray cleaning solvent or release agent on any part of the paver that comes in contact with asphalt.

Starting The Engine

Preliminary

1. Check fuel level, fuel lines, and tank for leaks.
2. Check crankcase oil level.

NOTICE Failure to maintain correct engine oil level is the greatest single cause of engine failures.

3. Check hydraulic oil level in hydraulic oil tank sight gauge.
4. Make sure all joysticks **(Figure 6-8,1,2)** are in neutral position.
5. Refer to engine operator's manual for instructions when starting engine for the first time. Follow engine manufacturer's recommendations for fuel and oil.

Engine Start-Up

NOTE: Joysticks must be in neutral position to start engine.

1. Position joysticks **(Figure 6-8,1,2)** to neutral.
2. Insert key into the ignition switch on instrument panel and turn key clockwise (CW) to start position.

NOTICE Do not operate the starter longer than 10-15 seconds. If the engine does not start, allow the starter to cool 2-3 minutes.

NOTICE The use of starting additives, such as ether, is not recommended. Severe engine damage will occur.

NOTE: Allow engine to warm up for several minutes before moving paver. The warm up will give the hydraulic oil time to warm, providing for more efficient operation. In cold weather let hydraulic oil warm to 50°F (10°C) or 60°F (16°C) before moving.

3. Set engine RPM using the throttle up and down buttons by pressing ENGINE Screen Button 7 or PAVER Screen Button 7 (throttle up) and/ or ENGINE Screen Button 8 or PAVER Screen Button 8 (throttle down) located on the right side of the display screen. Engine RPM will automatically increase to 1800 RPM when conveyor and/or augers are turned on.

NOTE: When generator is turned on, engine RPM will automatically go to 1400 RPM unless augers and/or conveyors are on, then engine will remain at 1800 RPM.

NOTE: While in motion, if the joysticks are set to neutral position for 8 seconds, the engine will go to idle. When the joysticks are taken out of neutral, engine will return to last set RPM.

NOTE: For convenience, there is an extra key inside the switch box in case the original key is lost.

Stopping the Engine

1. Throttle back to idle by pressing ENGINE Screen Button 8 or PAVER Screen Button 8 located on the right side of the display screen or bring joysticks back to neutral.
2. Turn ignition key on instrument panel counterclockwise (CCW) to the OFF position and remove key.

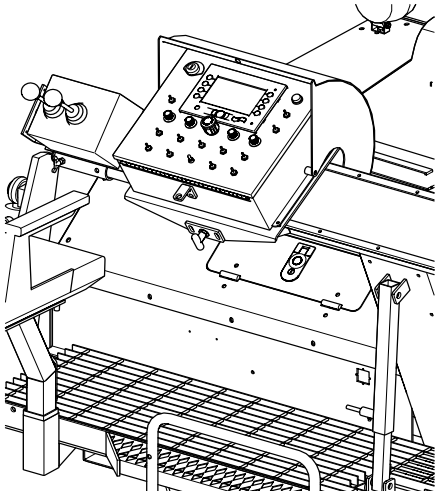
NOTE: If for any reason the engine does not shut down when key is turned to OFF, press the E-Stop button located on the control panel to terminate power to engine governor.

Activating and Deactivating Operator Control Station

⚠ DANGER Operation Hazard! Never leave machine operator station unattended with machine in gear and/or in motion. Operator station is defined as the platform area within arms reach of active control steering box. Operator must remain in operator's station at all times when machine is in gear and/or in motion. Before leaving machine operator station, operator must return joysticks to neutral position and move RUN/STOP switch to STOP position.

NOTE: The paver can operate using only one operator station at a time. Paver is typically operated from Left Operator Station.

1. If operator intends to change active operator station (e.g. from left side to right side), operator must first return joystick(s) to NEUTRAL position and move RUN/STOP switch to STOP position.
2. Operator can then move to other operator station and activate by moving RUN/STOP switch to RUN position.



Control Station Adjustment

Figure 6-7

Paver Driving Instructions

⚠ DANGER Operation Hazard! Never leave machine operator station unattended with machine in gear and/or in motion. Operator station is defined as the platform area within arms reach of active control steering box. Operator must remain in operator's station at all times when machine is in gear and/or in motion. Before leaving machine operator station, operator must return joysticks to neutral position and move RUN/STOP switch to STOP position.

⚠ DANGER Rapid counter-rotation in either direction, clockwise (CW) or counterclockwise (CCW) could result in operator being thrown from machine resulting in personal injury or death. Counter-rotation is defined as one joystick in extreme forward position and opposite joystick in extreme rear position while machine is in gear and moving forward or reverse. Make only slow adjustments to joysticks or steering wheel to turn machine.

Electronic Steering and Speed Control Box

NOTE: You can only use one steering and speed control box at a time. When steering paver with control box, the RUN/STOP Switch **(Figure 6-8,3)** must be in RUN position on the module in use and STOP position on the other module not in use.

NOTE: To slow the unit, move joysticks closer to NEUTRAL or from NEUTRAL to STOP on active console.

NOTE: To stop paver, pull joysticks back to the neutral position or use RUN/STOP switch on active console. When switch is set to RUN, paver resumes prior speed. **(Figure 6-8,3)**

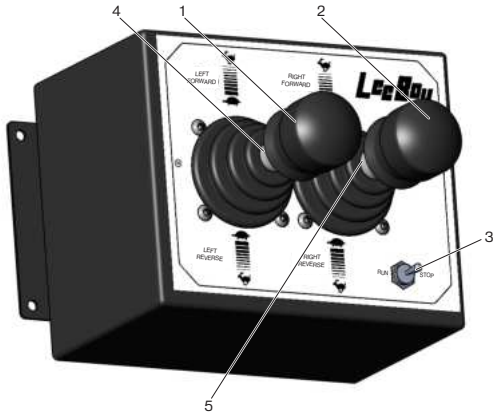
Dual Joystick

To drive the paver, push both joysticks **(Figure 6-8,1,2)** forward slowly to reach the desired speed. The more you move the joysticks, the faster the travel speed.

1. After the paver has been started and the engine is warmed up, paver movements may be made.

⚠WARNING Before starting forward with paver, verify there are no people, obstacles or other equipment in the path of the paver.

2. To drive paver forward, lift up on the neutral lock on joysticks **(Figure 6-8,1,2,4,5)** and push forward to reach desired speed. To move in reverse, lift up on the neutral lock on joysticks and pull joysticks backwards to reach desired speed.
3. Place joysticks in neutral to stop paver.
4. To steer the unit to the left, push the right joystick **(Figure 6-8,2)** farther forward than the left joystick. The farther the joystick is pushed, the more the paver turns. Slow and easy adjustments are required.



Dual Joystick

Figure 6-8

1 - Left Steer Joystick

2 - Right Steer Joystick

3 - RUN/STOP Switch

4 - Left Neutral Lock

5 - Right Neutral Lock

5. To steer the unit to the right, push the left joystick **(Figure 6-8,1)** farther forward than the right joystick. The farther the joystick is pushed, the more the paver turns. Slow and easy adjustments are required.
6. The RUN/STOP Switch **(Figure 6-8,3)** will apply parking brake and stop paver when set to the STOP position.

⚠WARNING Rapid paver deceleration will occur when E-STOP button or RUN/STOP switch is engaged when traveling at high speeds. Operators may be thrown from the paver causing personal injury.

7. Brakes automatically set when joysticks are in neutral or when the RUN/STOP switch is set to the STOP position on the active console.

NOTE: Ground speed percentage can be changed on the Paver Screen using the Up and Down arrows. The maximum travel speed is determined by set ground speed percentage.

PAVER OPERATION

Automatic Mode

1. Follow start-up procedures (see ***Starting The Engine*** in Section 6).
2. Position paver to start of mat.
3. Open cut-off gates under auger.
4. Adjust screed as needed (see ***Setting Screed To Pave*** in Section 6).
5. Open hopper wings into working position. When first starting to pave allow only a partial load of asphalt to enter the hopper.

NOTICE **Never fold hopper wings fully in when hopper is full of asphalt.**

6. Turn the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the AUTO position. Set speed.

NOTE: The conveyors will run at the selected speed but will turn off and on with the sonic augers.

NOTE: The conveyor speed can be adjusted while paving in Automatic mode.

7. Turn the LEFT AUGER AUTO/OFF/MANUAL and RIGHT AUGER AUTO/OFF/MANUAL switches and the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the AUTO position. This will turn on the augers at full speed. At this point, the LEFT AUGER and RIGHT AUGER dials control the pile height at the endgate. When the material starts getting into the sonic range, then the auger speed will start to slow down proportionately until the augers turn off. The augers will turn back on when material level drops.

NOTE: When endgates are completely closed, pile height must be set to the highest point. When the endgates are all the way out, the pile height will be lowered so that material will not push around the front of the endgates.

8. When material starts to discharge from under screed, the SCREED LIFT RAISE/FLOAT switch on the dash should be set to the FLOAT position).
9. Start paving. Move slowly at first so adjustments can be made to screed.

⚠CAUTION **Never backup with cut-off gates open.**

10. To prevent excessive handwork, about 2 to 3 ft. (0.6 to 0.9 m) from end of pull, set the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the OFF position and set LEFT CUTOFF OPEN/CLOSE and RIGHT CUTOFF OPEN/CLOSE switches to the CLOSE position. Return paver back to starting position to begin next pull. Position and set screed endgate on joint side back to 0 ft. or flush with bottom of main screed. Repeat process as done in first pull.
11. The paver can operate using one side only. However, material from opposite side cannot be augered to the working side. The auger center cover prevents this. It is possible to leave both cutoffs shut and open the endgates on screed. This method is generally used in doing potholes and patching.

Manual Mode

1. Follow start-up procedures (see ***Starting The Engine*** in Section 6).
2. Position paver to start of mat.
3. Open cut-off gates under auger.
4. Adjust screed as needed (see ***Setting Screed To Pave*** in Section 6).
5. Open hopper wings into working position. When first starting to pave allow only a partial load of asphalt to enter the hopper.
6. Turn the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the MANUAL position and slowly turn LEFT CONVEYOR and RIGHT CONVEYOR dials clockwise (CW) to reach desired speed.

NOTE: Start with the LEFT CONVEYOR and RIGHT CONVEYOR dials set to the mid range position, adjusting speed as needed to avoid overfilling augers.

7. Turn the LEFT AUGER AUTO/OFF/MANUAL and RIGHT AUGER AUTO/OFF/MANUAL switches to the MANUAL position and slowly turn LEFT AUGER and RIGHT AUGER dials clockwise (CW) to reach desired speed for paving width and depth.

NOTE: When in MANUAL mode, the sonic auger sensors are not used. The pile height is still controlled by the conveyor speed and auger speed but you must use the AUGER AUTO/OFF/MANUAL switch to manually control the conveyor and auger speeds.

8. When material starts to discharge from under screed, the SCREED LIFT RAISE/FLOAT switch on the dash should be set to the FLOAT position).
9. Start paving. Move slowly at first so adjustments can be made to screed.

⚠CAUTION Never backup with cut-off gates open. Cut-off gates are designed to break away from cylinders when hitting a manhole or other hard object. This only occurs going forward not in reverse.

10. To prevent excessive handwork, about 2 to 3 ft. (0.6 to 0.9 m) from end of pull, Set the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the OFF position and set LEFT CUTOFF OPEN/CLOSE and RIGHT CUTOFF OPEN/CLOSE switches to the CLOSE position. Slowly move to end of pull, raise screed up and then return paver back to starting position to begin next pull. Position and set screed endgate on joint side back to 0 ft. or flush with bottom of main screed. Repeat process as done in first pull.
11. The paver can operate using one side only. However, material from opposite side cannot be augered to the working side. The auger center cover prevents this. It is possible to leave both cutoffs shut and open the endgates on screed. This method is generally used in doing potholes and patching.

Conveyor Operation

Automatic Mode

The conveyor is a very important part of the paver and for this reason close attention should be given on integrating its operation into the total operation of the paver. Use the following procedure for operating the conveyor in automatic mode.

⚠WARNING Never work on paver with engine running.

1. Spray the conveyor drive chains periodically. Spray several times a day with cleaning solvent or release agent.
2. When conveyors are running and cutoff gates are shut, there will be spillage the full width of conveyors. This is normal. To help prevent this spillage, work conveyors manually when loading hopper and not paving.
3. Irregular movement of the conveyor indicates that a problem may exist with the conveyor chains. To eliminate this problem an adjustment to the conveyor chain may be necessary (see ***Conveyor Flight Chain Adjustment*** in Section 7).

NOTE: Check adjustments every 100 hours.

⚠CAUTION Never work on conveyors with engine running.

NOTICE Never let paver sit while conveyors are turning.

NOTICE To prevent flight chains from sticking, lubricate them sufficiently at the end of the day.

4. Turn the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the AUTO position.

NOTE: The conveyors will run at the selected speed but will turn off and on with the sonic augers.

NOTE: The conveyor speed can be adjusted while paving in Automatic mode.

Manual Mode

The conveyor is a very important part of the paver and for this reason close attention should be given on integrating its operation into the total operation of the paver. Use the following procedure for operating the conveyor manual mode.

⚠WARNING Never work on paver with engine running.

1. Spray the conveyor drive chains periodically. Spray several times a day with cleaning solvent or release agent.
2. When conveyors are running and cutoff gates are shut, there will be spillage the full width of conveyors. This is normal. To help prevent this spillage, work conveyors manually when loading hopper and not paving.
3. Irregular movement of the conveyor indicates that a problem may exist with the conveyor chains. To eliminate this problem an adjustment to the conveyor chain may be necessary (see ***Conveyor Flight Chain Adjustment*** in Section 7).

NOTE: Check adjustments every 100 hours.

⚠CAUTION Never work on conveyors with engine running.

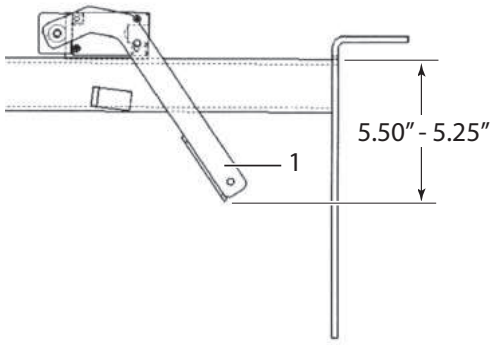
NOTICE Never let paver sit while conveyors are turning.

NOTICE To prevent flight chains from sticking, lubricate them sufficiently at the end of the day.

4. To run the conveyors in manual, turn the LEFT CONVEYOR AUTO/OFF/MANUAL and RIGHT CONVEYOR AUTO/OFF/MANUAL switches to the MANUAL position and slowly turn LEFT CONVEYOR and RIGHT CONVEYOR dials clockwise (CW) to reach desired speed.

NOTE: Start with the LEFT CONVEYOR and RIGHT CONVEYOR dials set to the mid-range position, adjusting speed as needed to avoid overfilling augers.

NOTE: Once desired speed is reached, the material will come back and hit the manual paddles **(Figure 6-9,1)** on each side of the conveyor assembly. This will raise the paddles and trigger the paddles to turn off. When material is needed, the paddles will drop down, triggering the conveyors to turn back on.



Conveyor Paddle

Figure 6-9

1 - Conveyor Paddle

NOTE: Conveyors can be run in manual mode and augers in automatic mode. This is the preferred way for running the LeeBoy Model 8616 Conveyor Paver.

Hydraulic Cutoff Gates Operation

The cutoff gates are one of the most important functions of the paver, when used properly. Cutoffs are used primarily to control the flow of asphalt to the screed. Cutoffs can be used when making narrow passes, at the beginning and ending of each pass or pull.

⚠CAUTION Never backup with cutoff gates open. Cutoff gates are designed to break away from cylinders when hitting a manhole or other hard object. This only occurs going forward not in reverse.

NOTE: The RIGHT CUTOFF OPEN/CLOSE switch and the LEFT CUTOFF OPEN/CLOSE switch control the right and left cutoffs.

1. Holding the switches to the OPEN positions increases asphalt flow to the screed. Holding the switches to the CLOSE positions decreases asphalt flow to the screed. CUTOFF switches are spring-loaded, to return to the "neutral" center position.

Sonic Augers Operation

The sonic augers are most often used when paving 9 ft. or 15 ft. (2.7 or 4.6 meters) where augers are capable of running material over top of endgates, causing extra handwork. The sonic auger gauges the amount of material that is in the extensions.

NOTE: An operator can operate the Auger from either side standing on or sitting in the Low Deck position.

1. Set the LEFT AUGER AUTO/OFF/MANUAL and RIGHT AUGER AUTO/OFF/MANUAL switches **(Figure 5-6,3,11)** located on the screed to the AUTOMATIC position.
2. Adjust height of material at endgate with the LEFT AUGER dial and RIGHT AUGER dial **(Figure 5-6,2,12).** Turn the dial to keep the extension full. Be careful not to over run the extension with the material.

NOTE: When running material through augers manually, try to pave so material flow to extension is adequate and maintained.

Operating Tow Point Cylinders

The tow point cylinders are an added convenience to the operator. A gauge is located on both sides of the LeeBoy Model 8616 Conveyor Paver. These gauges provide the operator with quick reference as to height of the tow cylinder.

1. Before paving, center the tow point by referring to the screed elevation gauge on each side of the paver. Raise or lower until the rod end is flush with 0 on the indicator.
2. While paving, refer to both gauges and make minor adjustment to the screed by using the tow point adjustment or flight screw.

NOTE: Mostly used with automatic grade controls. All LeeBoy Model 8616 Conveyor Pavers are prewired for grade controls.

NOTE: Tow point cylinders will not function manually when machine is in Automatic mode.

Sonic Auger Sensors

The sonic auger sensors control auger flow to endgates at basic width to 15 ft. (4.6 m) where augers are capable of running material over the top of the endgates, causing extra handwork.

The sonic auger sensors gauge the amount of material that is in front of the extensions.

When in AUTO mode, the sonic auger sensors control the amount of material that is fed to the endgates. The sensors detect the pile height and will control both the conveyor speed and auger speed by regulating the hydraulic pump output. The RIGHT AUGER dial and LEFT AUGER dial control pile height when RIGHT AUGER AUTO/OFF/MANUAL switch and LEFT AUGER AUTO/OFF/MANUAL switch are set to AUTO. Turning RIGHT AUGER dial and LEFT AUGER dial clockwise (CW) increases pile height. Turning RIGHT AUGER dial and LEFT AUGER dial counterclockwise (CCW) decreases pile height.

When the pile height is closer to the sensor, it will slow down the conveyor and auger until they stop. If the pile height drops to a certain point, it will slowly speed the augers and conveyors to full speed to fill material.

When in MANUAL mode, the sonic auger sensors are not used. The pile height is still controlled by the conveyor speed and auger speed but you must use the LEFT AUGER AUTO/OFF/MANUAL switch and RIGHT AUGER AUTO/OFF/MANUAL switch **(Figure 5-6,3,11)** located on the screed operator control boxes to manually control the auger speeds.

NOTE: Main control box will only let you override augers momentarily. Lower left and right screed operator control boxes control all auger functions.

Sonic Auger Sensor Adjustment

The sonic augers can be positioned accordingly to control the pile height.

NOTICE **The end of the sensor must be kept clean.**

Automatic Mode

1. Turn the LEFT AUGER AUTO/OFF/MANUAL switch and RIGHT AUGER AUTO/OFF/MANUAL switch to the AUTO position. This will turn on the augers at full speed. At this point, the LEFT AUGER dial and RIGHT AUGER dial control the pile height at the endgate. When the material starts getting into the sonic range, then the auger speed will slow down proportionately until they turn off. They will turn back on when material level drops proportionately.

NOTE: Speed is only adjusted on augers in manual mode. Conveyors can be adjusted separately in manual or auto modes.

Manual Mode

To operate the LeeBoy Model 8616 Conveyor Paver in MANUAL mode, turn the LEFT AUGER AUTO/OFF/MANUAL switch and RIGHT AUGER AUTO/OFF/MANUAL switch to the MANUAL position and slowly turn LEFT AUGER dial and RIGHT AUGER dial clockwise (CW) to reach desired speed for paving width and depth.

NOTE: When in MANUAL mode, the sonic auger sensors are not used. The pile height is still controlled by the conveyor speed and auger speed but you must use the LEFT AUGER AUTO/OFF/MANUAL switch and RIGHT AUGER AUTO/OFF/MANUAL switch **(Figure 5-6,3,11)** located on the screed operator control boxes to manually control the conveyor and auger speeds.

NOTE: When running material through the augers manually, try to pave so material flow to the endgates is adequate and constant. Be careful not to over-run the extension with material or material will spill out around front of the endgate and require more hand work.

Auger Extensions

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 ft (4.6 m). This makes it possible to lay asphalt at a higher rate. To attach the auger extensions proceed as follows:

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

1. Identify the right and left auger extensions by observing the L (left) or R (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:

   a. On screed operator control boxes, set LEFT AUGER AUTO/OFF/MANUAL and the RIGHT AUGER AUTO/OFF/MANUAL switches to the OFF position **(Figure 5-6,3,11)**.

   b. On screed operator control boxes, set LEFT EXTENSION IN/OUT switch and the RIGHT EXTENSION IN/OUT switch to the OUT position and extend fully **(Figure 5-6,4,10)**.

⚠WARNING **Engine must be shut off to prevent possible injury when attaching extensions.**

3. Shut off engine.
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.

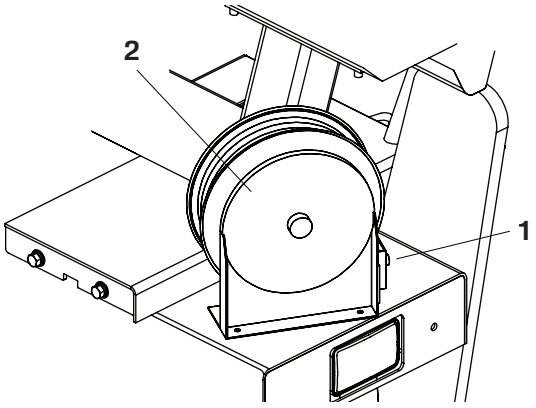
Spray Down

Always spray down the LeeBoy Model 8616 Conveyor Paver before using.

The spray down on your paver is used to spray cleaning solvent or release agent on any part of the paver that comes in contact with the asphalt. Buildup of asphalt will cause damage to components. Spray all areas of the paver that have direct contact with asphalt.

⚠WARNING **Fire Hazard! Never spray cleaning solvent or release agent on or near a screed heating element that is hot or being heated or on or near any open flame or source of ignition. Cleaning solvent and release agent could ignite causing serious personal injury.**

NOTE: When using spray down, consider the environment and do not allow cleaning solvent to run onto the ground.



Spray Down Hose And Wand

Figure 6-10

1 - Wand

2 - Hose Reel

1. Pull the amount of hose needed from hose reel and press PAVER Screen Button 3 located on the left side of the display screen to activate spray down system.

NOTE: LED light on keypad will illuminate when spray down system is active.

2. Squeeze the wand handle and spray. Release wand handle when done spraying.
3. After spraying, press PAVER Screen Button 3 again to turn OFF the spray down system and wind the hose.

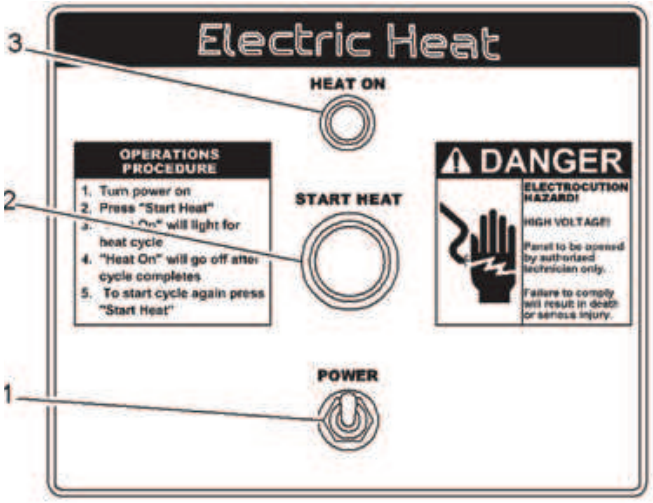
NOTE: The Spray Down System will automatically shut-off after 10 minutes of being idle. To restart the operation, press PAVER Screen Button 3 again.

Electric Heating Controls

LeeBoy Model 8616 Conveyor Paver consists of a hydraulically driven generator mounted on the paver, which feeds power to a distribution/control box mounted on the screed. This box is mounted near the middle of the screed and is easily accessible to the screed operator when a heating cycle is required.

The control box is where you will select the heating function before you begin to pave **(Figure 6-11)**.

The control box has a POWER switch **(Figure 6-11,1)**, a START HEAT button **(Figure 6-11,2)**, and a HEAT ON indicator light **(Figure 6-11,3)**. Under normal operation, the operator will only flip the power switch up to the POWER position, and depress the START HEAT button. During normal usage, there are no other controls for operating the heat system.



Electric Heat Control Box

Figure 6-11

1 - Power Switch

2 - Start Heat Button

3 - Heat On Indicator Light

To operate the screed heating system:

1. Start the paver and bring the engine to normal operating temperature.
2. Flip the POWER switch **(Figure 6-11,1)** to the ON position.
3. Press the START HEAT **(Figure 6-11,2)** button.

NOTE: Engine speed automatically increases to 1400 rpm when heat cycle is active.

4. The heating cycle will begin, and the HEAT ON **(Figure 6-11,3)** indicator light will illuminate.

NOTE: The HEAT ON indicator light **(Figure 6-11,3)** will stay on as long as the elements are heating the screed plates. Once the heating cycle is complete, the HEAT ON light will go out.

5. If the heat cycle has completed and the screed plates still require a higher temperature, restart the system by pressing the START HEAT **(Figure 6-11,2)** button again. The system will run for the set time once more.

NOTE: Engine speed automatically decreases to idle after heat cycle completes.

NOTE: If the heat system is running, and the operator presses the START HEAT **(Figure 6-11,2)** button during a heating cycle, the heat will continue to operate normally, and the time cycle will re-set to beginning of the cycle. This will not hurt the system, and may be useful on cooler days to make the screed heat system run longer than normal without stopping.

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.

NOTE: The factory time setting for the heating cycle is 30 minutes. This will be sufficient in most circumstances to generate enough heat to begin the paving process without screed heat problems.

NOTE: The temperature that the screed plates reach will depend in part on the outside ambient temperature.

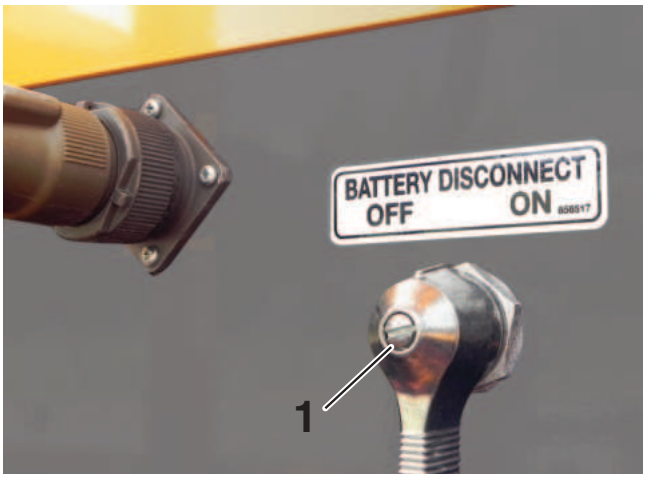
To help the screed heating system operate most efficiently:

- Raise screed plate approximately 1 to 2 inches off the ground when just heating screed at start of project.
- Do not raise screed fully, allowing more wind under the screed plate while heating.
- Set the screed directly on a fresh mat of hot asphalt while running the heating system, allowing the heat of the asphalt to help heat the screed plate.

Battery Disconnect Switch

The battery disconnect switch **(Figure 6-12,1)** is located in front of the right hand operator station. The switch disconnects all electrical power to the LeeBoy Model 8616 Conveyor Paver.

NOTICE **Always turn the battery disconnect switch off at the end of the day or any time machine is getting welded.**



Battery Disconnect Switch

Figure 6-12

1 - Battery Disconnect Switch

STARTING TO PAVE

The paver is capable of placing bituminous base, binder and surface courses, lime or Portland cement stabilized sub-base and graded aggregate materials up to a thickness of 6 inches (20 cm).

This paver has a production rate of approximately 250 tons per hour or greater.

This paver is equipped with electric and manual thickness controls and an 8 ft to 15 ft (2.4 m to 4.6 m) wide screed. The paver can handle everything such as driveways and small parking lots to large parking areas and secondary roads.

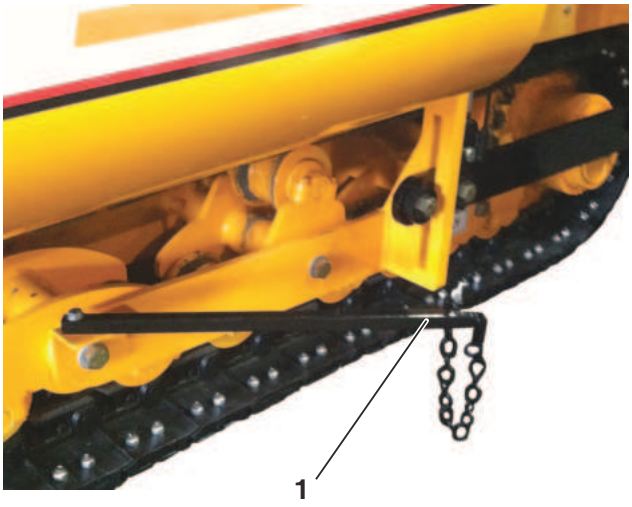
Before starting to pave, keep the following points in mind:

1. Plan the project so that the narrowest passes are first, (the basic width of the paver) leaving the widest pass until last.
2. Make sure to use a reference guideline. This can be a curb, gutter, adjacent mat or a string line. It is important that the first pass be straight. It will be the guideline for the following passes. Use the guide bar gauges (**Figure 6-13, Figure 6-14**).

Upper Guide Bar Gauge

Figure 6-13

1 - Upper Guide Bar Gauge



Lower Guide Bar Gauge

Figure 6-14

1 - Lower Guide Bar Gauge

NOTICE Never run the paver through a pile of mix that has been dumped in front of the machine. Not only will this effect the level of the mat being laid but damage may result.

3. It is the operator's job to guide the truck up to the paver and signal the driver when and how much to dump into the hopper. Truck drivers must maintain a light pressure on their brakes to keep truck from dumping material on the roadway.

NOTE: If the paver is equipped with a truck hitch, the truck driver will not be required to maintain pressure on the brake.

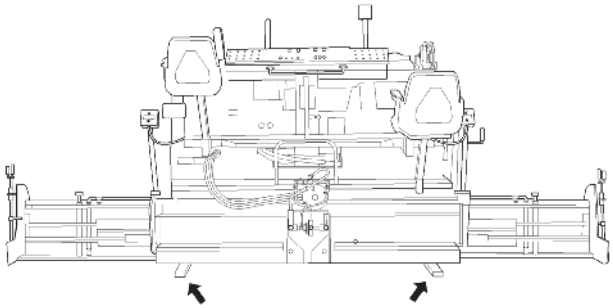
4. Always pave in low range.

⚠WARNING Before starting forward with paver make certain that no one is in front of the paver.

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

Setting Screed To Pave

1. Move to the starting position.
2. Extend the screed to the desired width.
3. To set depth, place screed on starter blocks **(Figure 6-15)**.



Starter Blocks

Figure 6-15

4. Level the screed with the flight screws **(Figure 5-5,2)** until neutral position is felt.

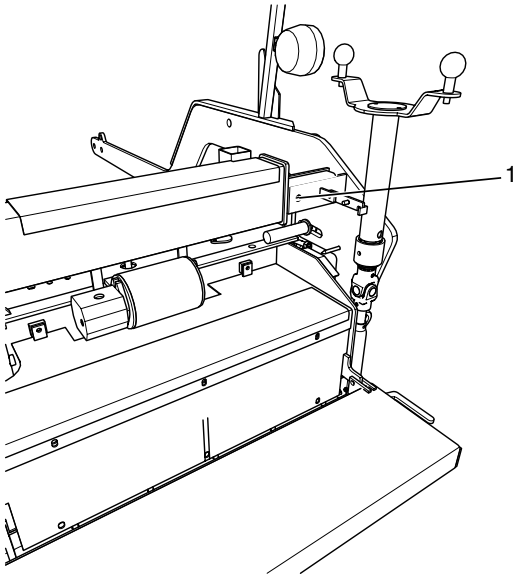
NOTE: Neutral position is when the pressure on the flight screw is the same when screwing either clockwise (CW) or counterclockwise (CCW).

5. Turn the flight screw about one complete turn clockwise (CW) to get started and adjust accordingly.

Setting Crown or Valley

NOTE: The screed plate is a one-piece unit that is flexed to provide the required crown setting.

1. Loosen lock down bolts **(Figure 6-16,1)** in slotted bars before adjusting crown and valley mechanism.
2. Use the gauge **(Figure 6-17,2)** located at the center of the screed above the standing platform. Set pointer rod for crown to zero on decal for level or flat screed. Place rod at desired numbers on decal for proper crown and valley. Decal is based off of a 10 ft. mat. Always check that proper crown or valley is achieved by using string or straight edge.



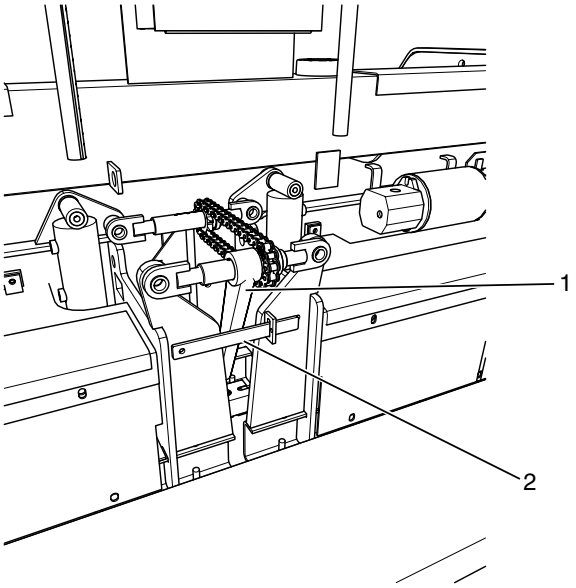
Lock Down Bolts

Figure 6-16

1 - Cross Tube Bolt

3. 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 2 in.



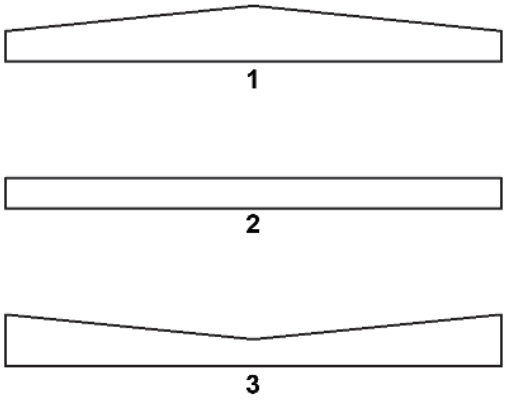
Crown Adjustment Location

Figure 6-17

1 - Adjuster

2 - Gauge

NOTE: Positive crown is when the middle of the mat is raised to permit water to drain to each side. Negative crown is the lowering of the center of the screed plate. Negative crown might be used in an alley where drainage down the center of the alley is necessary **(Figure 6-18)**.



Crown Settings

Figure 6-18

1 - Positive (+)

2 - Zero (0)

3 - Negative (-)

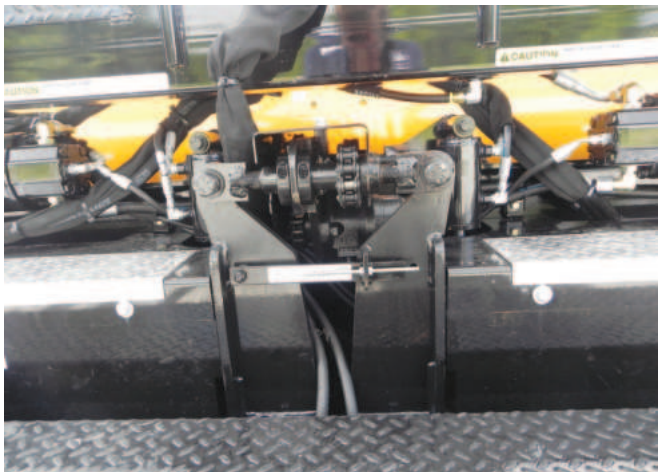
NOTE: Crown may be placed in the leading edge and/or the trailing edge of the screed plate. Crown in the leading edge aids material flow under the screed plate only. Trailing edge crown puts a crown in the mat.

Example: trailing edge crown is 0, leading edge crown is 1/8 in. With this setup, there will not be any crown placed in the mat laid by the LeeBoy Model 8616 Conveyor Paver; however, material flow under the screed plate will be improved.

NOTE: Leading edge crown is set at 0 when shipped from the factory. The chain connecting the leading and trailing edge crown control assures that the relationship of the edges remains constant as the trailing edge is changed to meet job conditions.

Power Crown (Option)

1. Use Power Crown Switch to adjust positive/negative crown as needed.



Power Crown Assembly

Figure 6-19

1 - Selector Valve

Setting Screed Endgates

1. On the first pass, turn the endgate depth screw **(Figure 6-20,1)** to lower the endgate until it is about 0.25 in. (6.35 mm) below the screed.

NOTE: Most operators run endgates within 0.25 in. (6.35 mm) of flush.

2. Turn the tilt screw **(Figure 6-20,2)** on the endgate so the front of the endgate tilts down slightly when the screed is lifted. This will allow the endgate to set itself to grade.

NOTE: When paving, never let the endgate carry the weight of the screed. This will cause screed compaction to vary.

3. During operation, if the endgate starts to dig in at front, adjust the tilt screw so the endgate tilts back.

4. When making a joint, the endgate must be set to where it fits flush with bottom of screed.

NOTE: Keep runners clean. When making a joint, spray cleaning solvent on runners **(Figure 6-20,4)**.

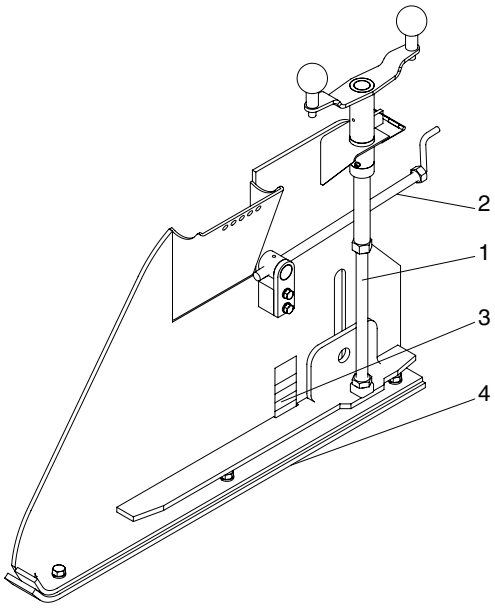
⚠WARNING Fire Hazard! Never spray cleaning solvent or release agent on or near a screed heating element that is hot or being heated or on or near any open flame or ignition source. Cleaning solvent and release agent could ignite causing serious personal injury.

5. On the first pass, leave about 6 - 8 in. (15 - 20 cm) of unrolled asphalt where the joint is being made.

6. In laying a joint, if the joint looks too high or too low, adjust the flight screw on the screed about one (1) turn at a time and allow 4 - 5 ft. (1.2 - 1.4 m) of travel to correct itself.

NOTE: Too much adjustment up or down may cause rising and falling effect in the paved material.

7. If making a cold joint, set endgate down about 1/4 in. (6.35 mm); this will give a nice, even edge.



Endgates

Figure 6-20

1 - Depth Screw

2 - Tilt Screw

3 - Depth Gauge

4 - Runner

Setting Screed Extensions

NOTE: Used when paving over 8 ft. (2.4 m).

The screed extensions should be heated with initial 30 minute heating cycle and paving on asphalt before making adjustments. Use the wrench provided to make adjustments. If correct adjustment is made, the pressure on the rear edge of extended screed is the same as on the rear edge of main screed. The result of making this adjustment will be a smooth mat the length of the screed.

NOTE: Make adjustments only while paving.

1. Heat the screed extension before making adjustment to extended width.
2. Adjust tilt on the rear edge of the extension by turning adjustment (**Figure 6-21,1)** counterclockwise (CCW). This is done to give the same amount of compaction and slickness on the extension and main screed.
3. If drag occurs in center of the screed, then too much pressure is on the screed extension and the extension is carrying all the weight. Correct this by turning the adjustment clockwise (CW) until both the screed and the screed extension produce the same mat texture.

Mat Texture Adjustment

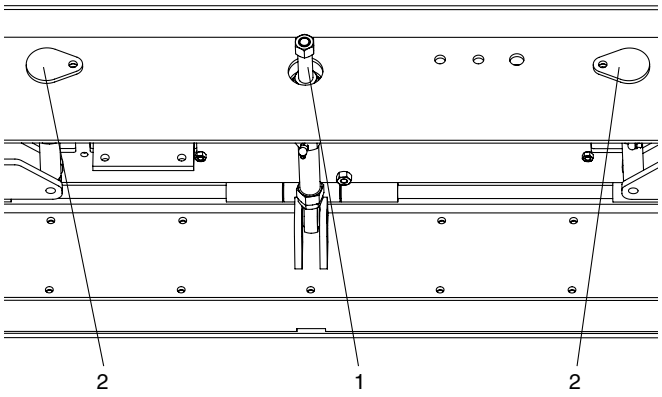
The screed should be hot and paving on asphalt before making any adjustments. The screed can be adjusted for a smoother or coarser mat texture by using the mat texture adjusting screws **(Figure 6-21)**. Make sure the bottom of the screed is sprayed down before making any texture adjustments (see **Spray Down**).

⚠WARNING Fire Hazard! Never spray cleaning solvent or release agent on or near a screed heating element that is hot or being heated or on or near any open flame or ignition source. Cleaning solvent and release agent could ignite causing serious personal injury.

NOTE: When using spray down, consider the environment and do not allow cleaning solvent to run onto the ground.

Screed extension double adjustment

1. Spray down the screed and then heat up the screed.
2. There are three adjusters in each extension. The two covered adjusters at each end of the screed extensions are for vertical adjustment.



Mat Texture Double Adjuster

Figure 6-21

1 - Vertical Adjuster

2 - Extension Angle of Attack (AOA) Adjuster

3. Turning the adjusters counterclockwise (CCW) will increase the pressure on the back of the extension. Turning the adjusters clockwise (CW) will decrease the pressure on the back of the extension.

NOTE: Increasing the pressure on the back of the extension will give you a smoother, slicker finish. Decreasing the pressure will give you a coarser finish. Putting too much pressure on the back of the extension will take the weight off of the screed wearplate and will cause poor material compacting, resulting in a poor finish in the middle of the main screed.

NOTE: Vertical Adjusters are preset by dealer and should not need adjustment.

6

UNLOADING AND LOADING

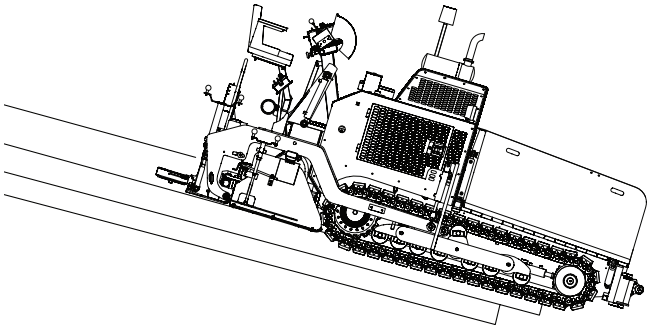
Trailers used to haul the paver should have ample capacity to carry the weight of the paver. Place the trailer in a clear, level area for loading or unloading.

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

Unloading

1. Remove tie down equipment.
2. Start and warm up engine.
3. Set throttle at 1/2 operating RPM. Set steering control lever so paver moves very slowly.
4. Make sure:
   a. Screed position - UP
   b. Auger extensions removed
   c. Extendible screed - IN
   d. Gates below augers - CLOSED

NOTICE Never back up with cutoff gates open.



Correct Unloading

Figure 6-22

NOTE: A man should always be on the ground to assist the operator in the unloading procedure.

⚠WARNING Make sure engine is operating at a high enough RPM so that the hydraulic pump is providing sufficient flow to operate all functions properly.

⚠CAUTION Do not let the screed strike the ramp when moving off the ramp. This can break the bearings on the thickness control screws or welds on the leveling arms. A longer ramp or blocks may be necessary to reduce the loading angle.

NOTE: If you have a problem unloading the paver - STOP - LOOK - THINK.

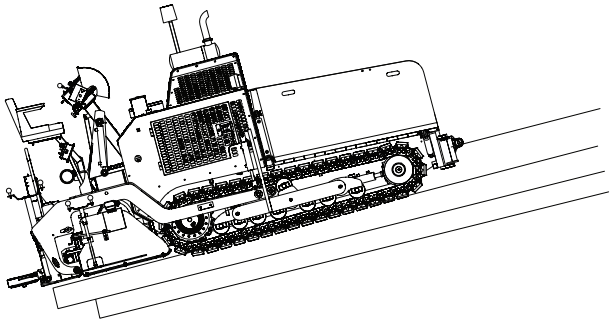
5. Move paver forward down the ramp as shown **(Figure 6-22)**.

Loading

⚠CAUTION Paver must be loaded screed end first to prevent damage (Figure 6-23).

1. Move paver to base of ramp. Line up tracks with the ramp.
2. Make sure:
   a. Screed position is - UP
   b. Extendable screed - IN
   c. Gates below auger - CLOSED

NOTICE Never back up with cutoff gates open.



Incorrect Loading Position

Figure 6-23

NOTE: Always have a helper on the ground that can assist the operator in moving the paver onto the transport.

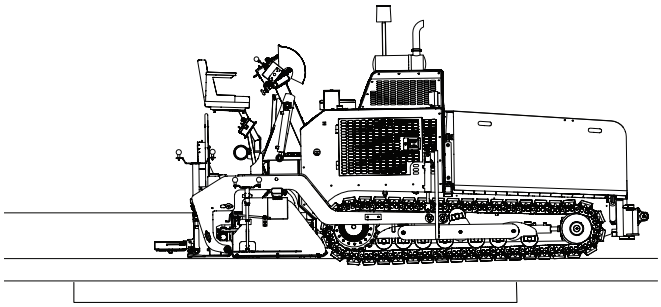
⚠CAUTION To prevent an excessive shock to the undercarriage and throughout the paver, reduce traveling speeds to a minimum before the paver tracks come in contact with loading ramps or an abrupt change in the surface. If encountered, the track drive sprocket or possible other components may be damaged because of the excessive shock.

3. Load paver screed end first. Set throttle at 1/2 operating RPM and steering control lever so paver moves very slowly onto the ramp.
4. With the steering control joysticks slowly guide the paver up the ramp.
5. Place paver in center of trailer or desired position.

6. Lower screed to deck.
7. Shut down engine.
8. Secure paver to transport as directed by regulations.

Tie-Down Procedure

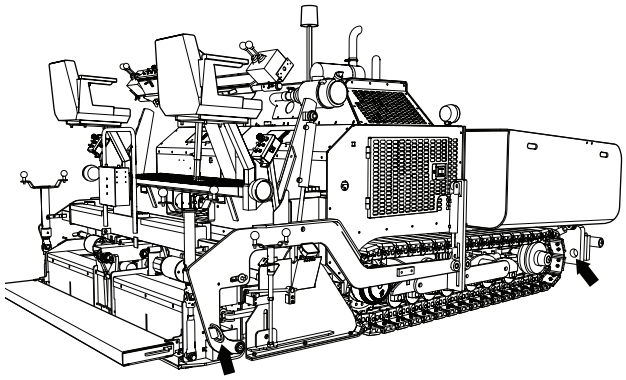
1. Position paver on trailer centered from side to side **(Figure 6-24)**.



Paver On Transport

Figure 6-24

2. Attach tie down chains to the screed end of paver at the D-rings **(Figure 6-25)**.
3. Place chocks at wheels or tracks.
4. Make sure all chains are tight before moving.

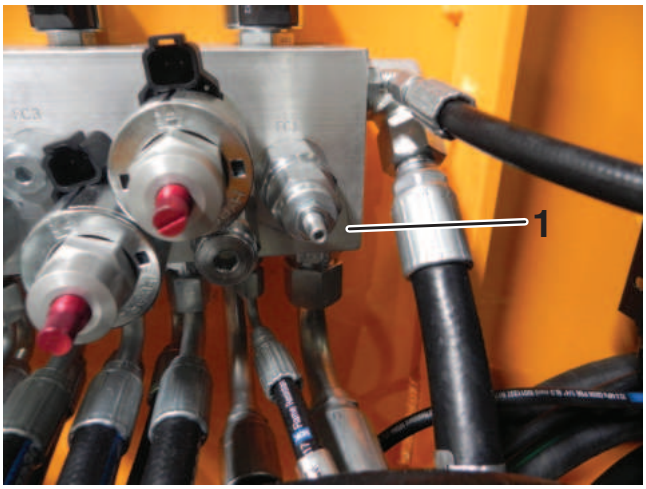


Tie-Down Points

Figure 6-25

GENERATOR OVERVIEW

The fine tune speed adjustment **(Figure 6-26,1)** is on the top of the manifold. The generator is provided oil for operation by a loadsense on the paver engine.

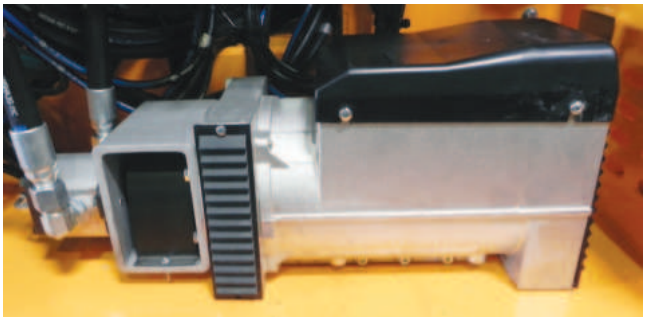


Generator Detail

Figure 6-26

1 - Fine Tune Speed Adjust (Dealer Only)

The entire generator is shown here **(Figure 6-27)**. The power cable to the generator is the cable that runs to the rear of your paver that supplies power to the screed. The power cable should be inspected regularly to ensure that no damage has occurred to the cable during normal operation.

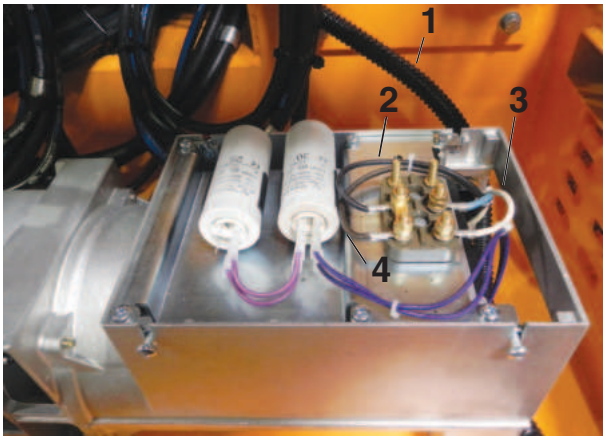


Generator

Figure 6-27

⚠ DANGER Electrocution Hazard! Do not operate a LeeBoy Model 8616 Conveyor Paver that has a damaged power cable. A damaged power cable could cause an electrical shock that could result in serious injury or death. Inspect the power cable to ensure that no damage has occurred to it before operating the LeeBoy Model 8616 Conveyor Paver.

⚠ DANGER Electrocution Hazard! If there is no heat on any screed when screed heat system is turned on, a screed wiring fault should be assumed. A wiring fault could cause an electrical shock that could result in serious injury or death. Do not operate the LeeBoy Model 8616 Conveyor Paver until wiring fault is corrected. (See "Maintenance" on page 7-1.)



Generator Rear View

Figure 6-28

1 - Power Cable

2 - L1 (Black Wire)

3 - L2 (White Wire)

4 - Generator Winding Wire

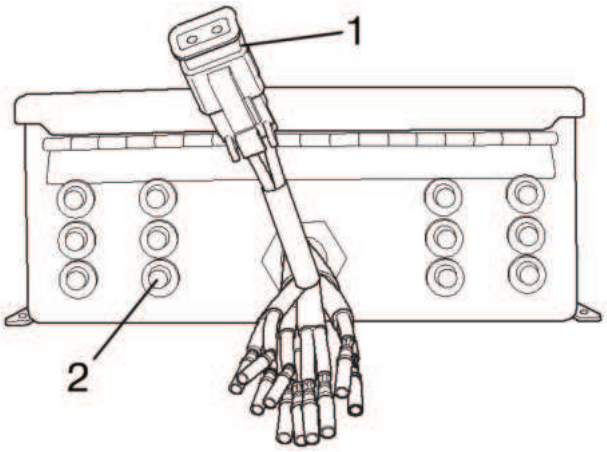
The rear of the generator is shown here **(Figure 6-28).** You can see the power cable **(Figure 6-28, 1)** coming into the generator case at the top right. Just below the generator case is the voltage capacitor. The capacitor controls the output voltage of the generator, and may need to be changed if no voltage is generated by the set (see ***Generator Voltage Testing*** in Section 7).

The main output of the generator is located in the lower left of the picture. You will see two main wires attached to the generator, a black wire **(Figure 6-28,2**), and a white wire **(Figure 6-28,3)**. The other two wires **(Figure 6-28,4)** are generator winding wires, and should not need to be serviced under normal circumstances.

Element Connections

The bottom of the control box contains the system element breakers, and the 6 main outputs for the screed heating elements **(Figure 6-29)**. Since the heating elements are powered by 220VAC to 240VAC, each element has two breakers **(Figure 6-29,2**). There is one breaker for each leg of each element. Also shown is one of the two pin plugs that supplies power to the screed elements.

Any element lead can be plugged into any supply plug **Figure 6-29,1)** under the heating control/distribution box. All six plugs are equally rated.



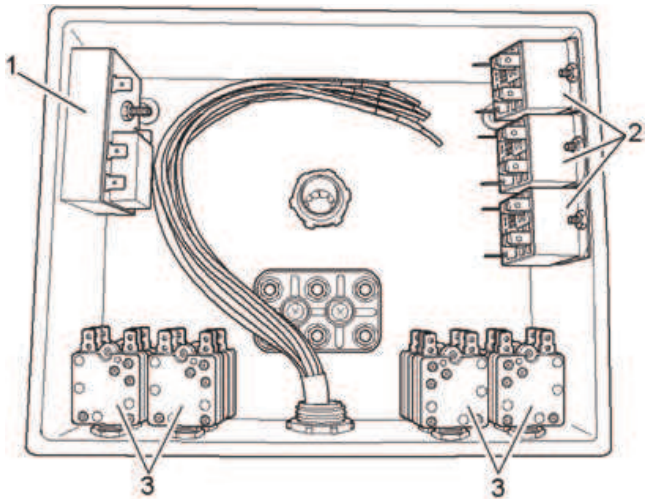
Electric Heat Control Box Bottom and Breakers

Figure 6-29

1 - Element Lead

2 - Breaker

NOTE: All control boxes are manufactured the same to fit all screed and paver combinations. If your screed does not have enough element wires to fill all the plugs on the bottom of the control box, it may be normal. Any plugs that are not filled should be capped with appropriate plug terminator.



Electric Heat Control Box Before Wiring Completed

Figure 6-30

1 - System Timer

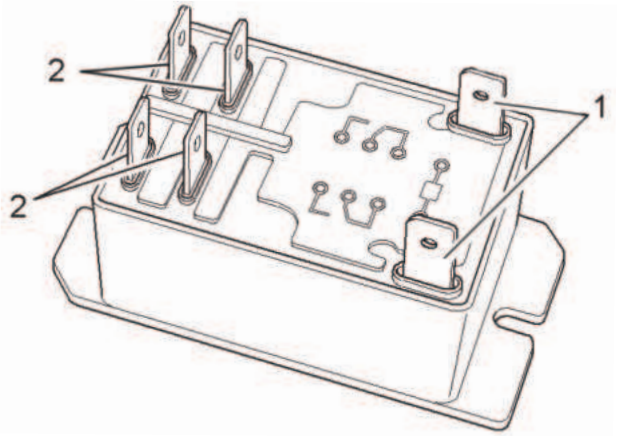
2 - Element Relays

3 - Element Breakers

The control box consists of three major types of components. The system timer **(Figure 6-30,1)** is located in the upper left hand corner of the box. The element relays **(Figure 6-30,2)** are located in the upper right hand corner of the box, and the element breakers **(Figure 6-30,3)** 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 schematic at the end of this manual, and you will note how the following connections are made.

Each element output from the bottom of the box consists of two wires. One wire will connect to the L1 circuit, and the other wire will connect to the L2 circuit. The L1 circuit is the left bank of element breakers. Each breaker has two terminals. One terminal is connected to the main input, and the other terminal is connected directly to an element output wire. The L2 circuit is the right bank of element breakers. This bank is wired slightly different, in that each leg not only goes from the main L2 power lead through a breaker, but each leg then goes 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.

An element relay is shown here **(Figure 6-31)**. There are three relays in the control box. Each relay has two separate sets of contacts operated by one coil.



Element Relay

Figure 6-31

1 - Coil Terminals

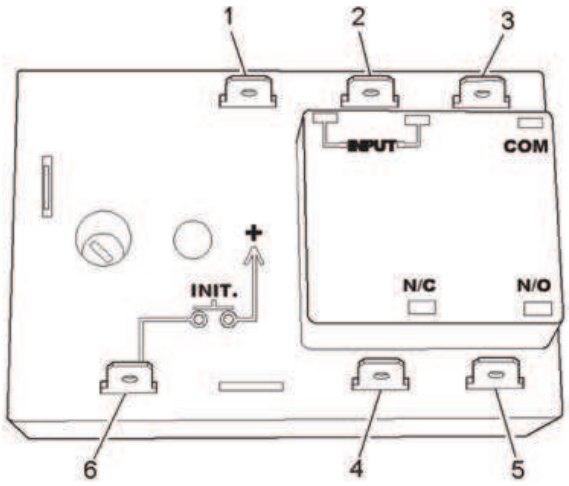
2 - Contact Terminals

The coil contacts on the relay shown are at the top and bottom of the right hand side of the relay **(Figure 6-31, 1)**. One set of contacts are the two terminals at the top left of the relay, and the other set of contacts **(Figure 6-31,2)** are at the bottom left of the relay shown. When the coil is energized, both sets of contacts will close. All the relays used are "normally open" (see ***Testing Element Relays*** in Section 7).

A heat system timer is shown **(Figure 6-32)**. There are six terminals on the timer. The top two left terminals are the main 12VDC input terminals for the timer. The ground **(Figure 6-32,1)** is on the left and the power **(Figure 6-32,2)** is on the right.

The top right terminal is the common terminal **(Figure 6-32,3)** 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.

The left of these two is the normally closed terminal **(Figure 6-32,4),** which is not used in this system, and the lower right terminal **(Figure 6-32,5)** is the normally open terminal. The normally open terminal is used as the output terminal to "turn" the heating system on. The lower left hand terminal **(Figure 6-32,6)** is the "initiate" contact. 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. Keep in mind, if this happens, the timer will re-start.



Heat System Timer Terminals

Figure 6-32

1 - Ground Input

2 - Power Input

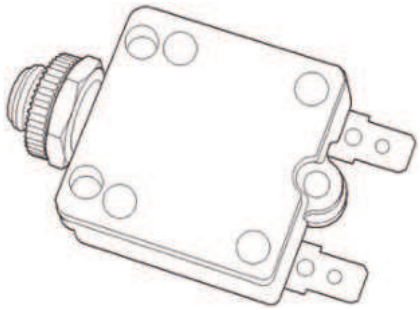
3 - Common (COM)

4 - Terminal Output

5 - Terminal Output

6 - Initiate Terminal

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. The breakers can be manually reset by depressing the trip button back in when they are extended. If by depressing the breaker re-set, the breaker will not reset, there may be a need to replace the breaker, or diagnose the element, or element wiring, it is connected to.

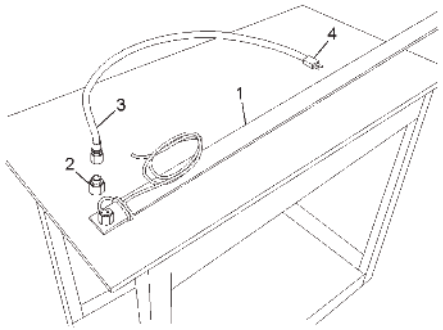


Element Breaker

Figure 6-33

Heating Elements

Next in your system are the screed heating elements themselves. Each element is sized to fit properly in your screed, and provide sufficient power to heat your screed plate to a temperature that mix will not drag or stick to the lower surface of the screed plate.



Heating Element Assembly

Figure 6-34

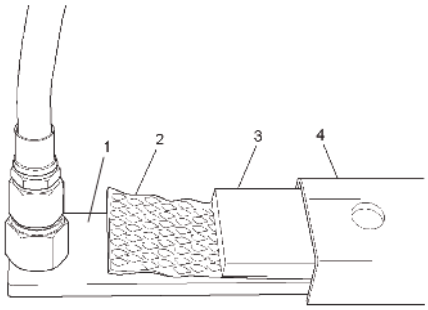
1 - Element

2 - Wire Protector Adapter

3 - Wire Protector

4 - Two Pin Wire Plug

An element assembly consists of four main components. The element **(Figure 6-34,1),** the wire protector adapter **(Figure 6-34,2)**, the wire protector **(Figure 6-34,3)**, and the two pin wire plug **(Figure 6-34,4)** at the end of the element protector **(Figure 6-34)**.



Heating Element Assembly Detail

Figure 6-35

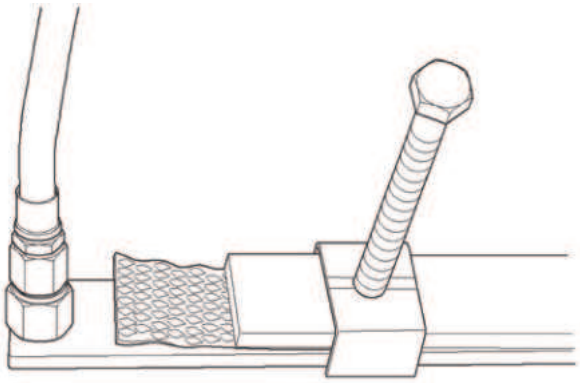
1 - Element

2 - Insulation

3 - Support Bar

4 - Shield

Each element **(Figure 6-35,1)** used has a thin strip of insulation **(Figure 6-35,2)** over it to keep the heat of the element from escaping. A support bar **(Figure 6-35,3)** is then laid over the element, and a shield **(Figure 6-35,4)** protects the element assembly **(Figure 6-35)**. Each element is clamped down to the screed plate so as to provide a positive and efficient connection between the element and the screed plate.



Typical Heating Element Clamp

Figure 6-36

A typical element clamp assembly is shown **(Figure 6-36)**. The clamp setup may vary slightly depending on your screed size, or whether you are working on the extension or main screed plates. The principle is the same with all of the clamps.

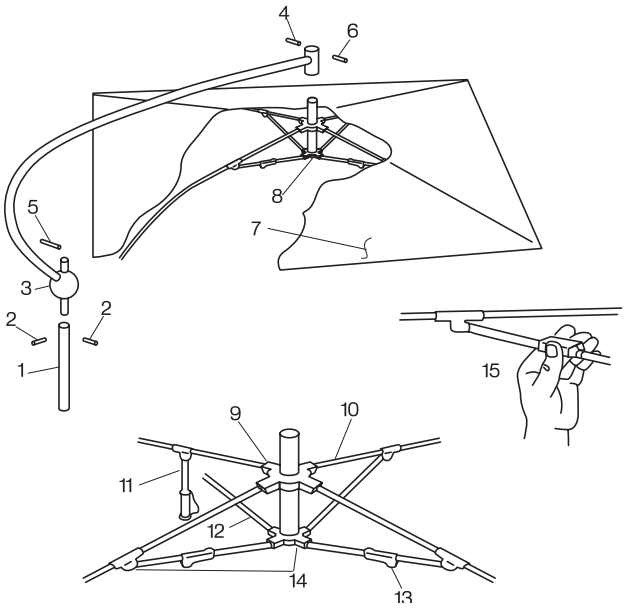
Enough pressure should be applied to the element assembly to sufficiently hold the element tight against the screed plate surface. All clamp setups are lockable with a jam nut on the adjustment screw. After tightening the clamping stud, lock the clamp by tightening the stud jam nut. To remove an element, loosen all the clamping studs over the element, and then the element can be removed from the frame through the access provided at the outer end of the screed. The extension elements are accessed by removing the top cover from the extension screed plate. The extension elements are accessed by removing the top cover from the extension screed plate.

UMBRELLA (OPTION)

Assembly Instructions

1. Install Umbrella Mounting bracket (see bracket mounting instructions furnished with each bracket).
2. Insert ball stud **(Figure 6-37,3)** on curved shaft into umbrella support shaft **(Figure 6-37,1)**, align holes,and drive 3/16" X 1" **(Figure 6-37,2)** spiral spring pins into position. Install locking handle **(Figure 6-37)**.
3. Place canvas cover **(Figure 6-37,7)** over umbrella frame assembly **(Figure 6-37,8)** and hook corners to bows - tie each bow securely with tie straps.
4. Insert umbrella frame assembly **(Figure 6-37,8)** with canvas in place into tube on curved shaft **(Figure 6-37,3)** and insert bolt (**Figure 6-37,6)**. Tighten snugly with nut **(Figure 6-37,4).**

Install complete umbrella into clamp on umbrella mounting bracket. Each bow may be raised individually until locked into open position **(Figure 6-37,15)** Each bow has two positions in which it can be locked open. This is to allow for arc stretch in canvas.



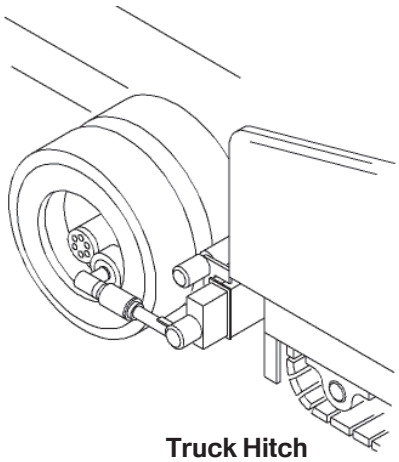
Umbrella Illustration

Figure 6-37

TRUCK HITCH ATTACHMENT (OPTION)

The truck hitch **(Figure 6-38)** is an optional attachment. It was designed to improve the asphalt laying process. This is mainly accomplished by keeping the truck driver off his brakes, preventing excessive and uneven braking. To engage the hitch with the rear wheels of the asphalt truck, proceed as follows:

1. Extend the arm extensions of the truck hitch by pushing and holding the TRUCK HITCH OUT button.



Truck Hitch

Figure 6-38

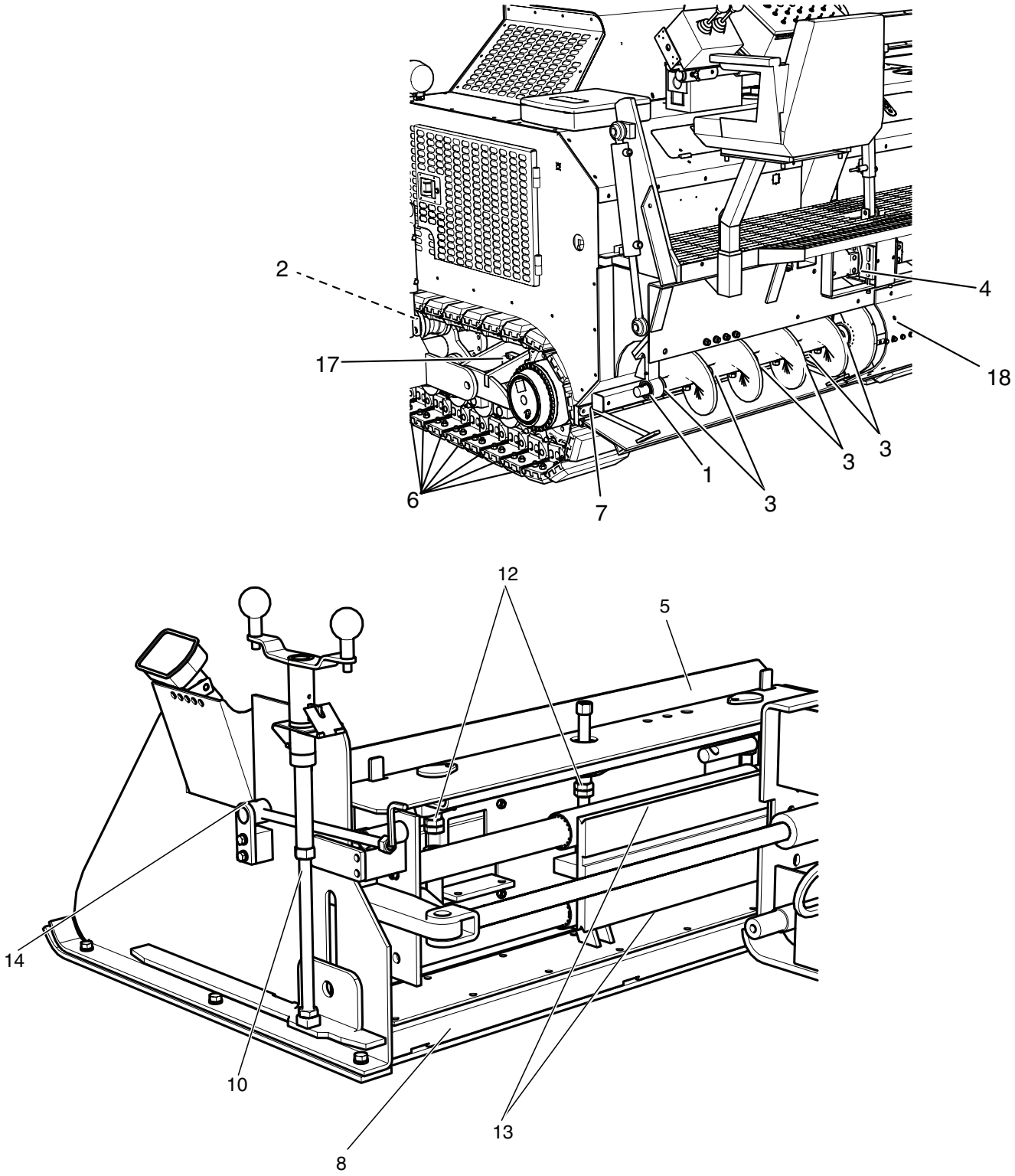
2. Slowly back rear of truck until roll on hitch makes contact with the rear tires of the truck.
3. Retract the arm extension by pushing and holding the TRUCK HITCH IN button until both guide rollers are fully locked into the truck wheel rims.
4. It may be necessary to adjust the roller guides to the inside of the wheel rims, initially.

Section 7
MAINTENANCE

Table 7-1. Periodic Maintenance Schedule

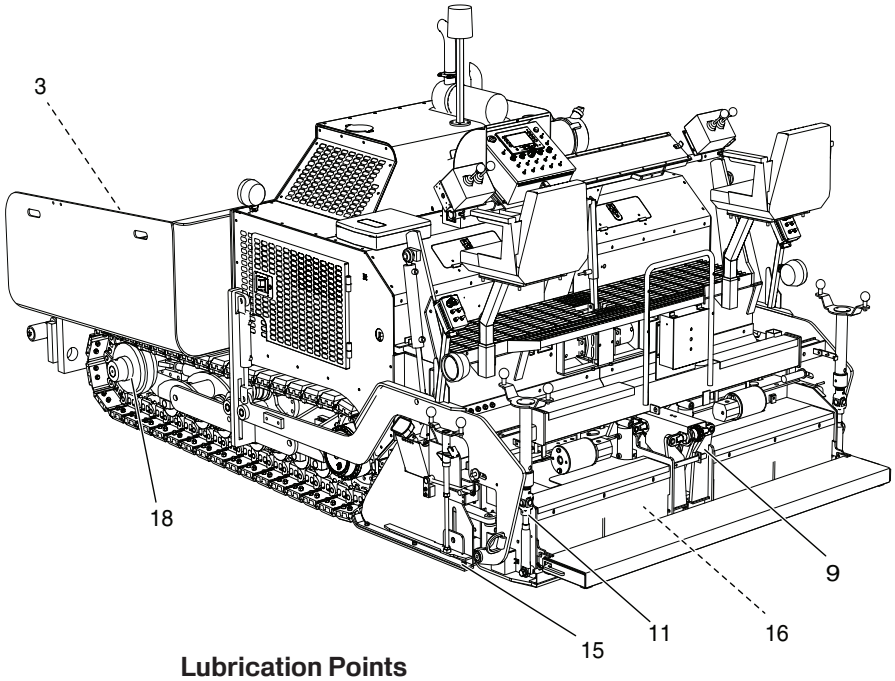
SYSTEM	ITEM	10 Hours Daily	First 50 Hours Weekly	100 Hours Monthly	250 Hours Quarterly	500 Hours Semi-Annually
Paver	Lubricate paver (**Figure 7-1, Table 7-2**)	X				
Engine	Check Oil Level	X				
	Check Coolant	X				
	Replace Coolant					X
	Check Air Filter		X		X	
	Replace Fuel Filter (Main)		X		X	
	Replace Oil		X		X	
	Replace Oil Filter		X		X	
	Check Belt			X		
Hydraulic	Check Oil Level	X				
	Replace Filter (Charge)		X			
	Check Torque Hubs		X			
	Replace Oil		X			X
	Cleaner Strainer		X			
	Replace Strainer					X
Mechanical	Adjust conveyor drive chains			X		
	Adjust conveyor flight chains			X		
	Adjust auger chains			X		
	Screed extension top guide adjustment			X		

LUBRICATION CHART



Lubrication Points

Figure 7-1



Lubrication Points

Figure 7-2

Table 7-2. Lubrication Points Schedule

ITEM NO.	TYPE LUB	DESCRIPTION AND LOCATION	INTERVAL
Legend	**A**	**Grease With Shell Avania EP Grease 2 Or Equivalent**	
	B	**Spray With An Approved Release Agent or Chain Lube**	
1	A	Auger, grease fitting on end mount (end of day)	Daily
2	A	Conveyor Chain, left and right side	Daily
3	B	Conveyor and Auger	Daily
4	B	Auger Chain, middle of paver	Daily
5	B	Screed Extensions, left and right (clean surface)	Daily
6	B	Tracks, between track pads	Weekly
7	B	Cutoff Pivot at Augers	Daily
8	B	Spray any part of paver that contacts asphalt	Daily
9	A / B	Screed Crown, on chain	Weekly
10	A	Depth Screw (grease first in lock position, unlock and turn 180° and grease)	Weekly
11	A	Main Flight Screws Ball Socket and Nut	Weekly
12	A	All Screws on Extension and Bearing	Weekly
13	A	V Grease Slides	Weekly
14	A	Tilt Screws	Weekly
15	A	Screed Pivot	Weekly
16	A	Slope Cylinder Pivot	Weekly
17	A	Grease Fitting on Rear Auger Bearings	250 Hrs
18	A	Idle Oil, check level	Daily
19	B	Front and Rear Conveyor Idler and Drive Tubes (Not Shown)	Monthly

GENERAL INFORMATION

Before performing any maintenance procedures on the LeeBoy Model 8616 Conveyor Paver, read the following safety information and review ***Safety*** in Section 2.

⚠WARNING Tool Hazard! ALWAYS use tools appropriate for the task at hand and use the correct size tool for loosening or tightening screed parts.

⚠WARNING Burn Hazard! ALWAYS handle hot components with heat-resistant gloves.

This section gives the necessary procedures for routine and general maintenance on the LeeBoy Model 8616 Conveyor Paver. Follow all the Maintenance Schedules and Maintenance Procedures to maintain the paver in top operating order.

MAINTENANCE SCHEDULE

General Information

The Maintenance Schedule lists the recommended time intervals between LeeBoy Model 8616 Conveyor Paver maintenance inspections and lubrication procedures.

The **Lubrication Chart** gives inspection and lubrication information for the LeeBoy Model 8616 Conveyor Paver.

The "Hour" and "Periodic" time periods list most service intervals. The maintenance schedule begins with 10-hour, or daily, maintenance intervals and continues through the 1000-hour, or annual, maintenance schedule intervals.

NOTE: If the paver is operated more than 10 hours per day, follow the "Hour" schedule. If the paver is operated less than 10 hours per day, follow the "Periodic" schedules, where they apply.

Preventive maintenance on the LeeBoy Model 8616 Conveyor Paver will provide years of trouble-free operation. Adjustment can be performed in the field with ordinary hand tools. Engine preventive maintenance, other than oil, air and fuel filter changes, is not covered in this section. Refer to engine operator's manual for engine service information.

NOTE: For convenience there is an oil drain hose located inside of the right-hand door on the paver.

NOTICE The changing of oil and cleaning of the LeeBoy Model 8616 Conveyor Paver should only be done in a designated area that can contain the oil and chemicals involved in any maintenance requirement. These by-products should be discarded in accordance with environmental regulations.

NOTICE Do not substitute fasteners of any kind unless the fasteners are equal in size and grade as original equipment.

NOTE: When performing any routine maintenance such as 50, 100, 250, and 500 hours, always include previous routine maintenance hours in the higher hourly schedule.

Preparing Paver for Maintenance

When performing maintenance, perform the following steps before leaving the operator's position, unless the maintenance procedure instructs otherwise.

1. Park the paver on a flat even surface.
2. Lower all attachments to ground level.
3. Place joysticks in neutral.
4. Run engine at 1/2 speed (RPM) without load for 3 to 5 minutes.
5. Reduce engine speed (RPM) to slow idle.
6. Place ignition switch in the OFF position.

⚠WARNING If maintenance must be performed with engine running, do not leave paver unattended.

Paver Lubrication

Proper lubrication is necessary to maintain the LeeBoy Model 8616 Conveyor Paver at top efficiency. Refer to the lubrication information in **Table 7-2. Lubrication Points Schedule.** All lubrication points are shown in **(Figure 7-1 and Figure 7-2)**.

10-Hour or Daily Routine Maintenance

NOTE: If the paver is operated more than ten hours per day, follow the “Hour” schedule. If the paver is operated less than ten hours per day, follow the “Periodic” schedules, where they apply.

1. Scrape off mix and spray cleaning solvent or release agent on the LeeBoy Model 8616 Conveyor Paver wearplate, extensions, and any place that has come in contact with the mix. All cleaning should be performed while the paver is hot.

⚠WARNING Fire Hazard! Never spray cleaning solvent or release agent on or near a screed heating element that is hot or being heated or on or near any open flame or ignition source. Cleaning solvent and release agent could ignite causing serious personal injury.

NOTICE If mix is allowed to remain on the screed overnight, possible damage can result on start-up the next day. Poor housekeeping will increase maintenance costs.

2. Remove any debris from screed and check for leaks.

⚠WARNING Pierce Hazard! Avoid skin contact with high-pressure hydraulic fluid spray caused by a hydraulic system leak such as a broken hydraulic hose line. High-pressure hydraulic fluid can penetrate your skin and result in serious injury. If you are exposed to high-pressure hydraulic fluid spray, obtain prompt medical treatment.

⚠WARNING Pierce Hazard! Never check for a hydraulic fluid leak with your hands. Always use a piece of wood or cardboard. Have your authorized LeeBoy Dealer or distributor repair the damage.

3. Tighten fittings as necessary. Replace hoses and fittings as needed.

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.

NOTICE If mix is allowed to remain in the paver overnight, possible damage can result upon start-up the next day. Poor housekeeping will increase maintenance costs.

4. Keep the fuel tank full to keep condensation from forming. Fill at end of day.
5. Perform engine preventive maintenance as described in your engine operator’s manual. Any engine preventive maintenance should always begin with an oil check.
6. Lubricate thickness control screws with grease or anti-seize to keep the control screws working smoothly.
7. Check for damaged, or loose element wires and harness connections. Repair or replace as required.
8. Check air intake hoses from the engine to the air cleaner assembly. Check for cracked, dry rotted, loose, worn, or damaged hoses, tubes, and clamps. Tighten, repair, or replace parts as needed.
9. Check for loose, damaged, missing or corroded parts. Repair or replace as required.

50-Hour (Initial) or Weekly Routine Maintenance

1. Check hydraulic oil and add if necessary.

- To fill, remove top of return filter, located on top of reservoir, and pour through. If you have an air or hydraulic pump, you can fill at charge filter. (Remove cap and fill.)

NOTICE **The LeeBoy Model 8616 Conveyor Paver hydraulic system requires clean, contaminant-free oil (see *Specifications* in Section 4). Take care when working with the hydraulic system to ensure it is completely clean.**

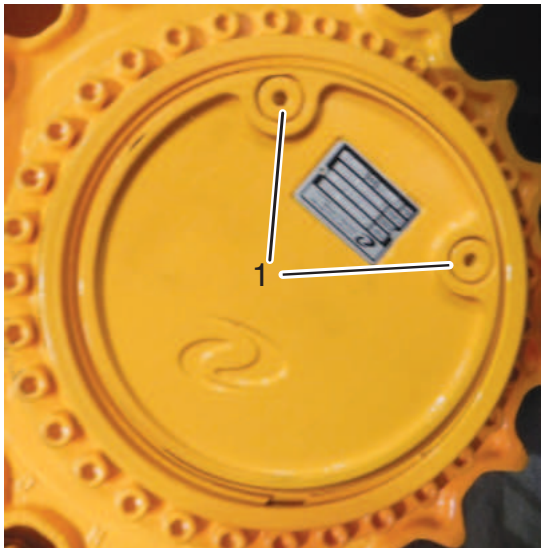
2. Adjust conveyor chains (see ***Conveyor Drive Chain Adjustment*** in Section 7). After adjustment, drag chains should be about 1/2" (13 mm) from rear square tubing of main frame. Do not let chains run more than 2" (51 mm) below main frame sides.
3. Check auger chains, lubricate and adjust.
4. Check all battery connections and remove any corrosion that is present. (Check cables daily.)
5. Check air cleaner, if the engine is equipped with a dry type element.

NOTICE **Improperly serviced air cleaners quickly wear out engines. In just a few hours a small amount of dirt will wear out a set of piston rings. Refer to your engine operator's manual for service information.**

6. Perform any other engine preventive maintenance as described in the engine operator's manual.
7. Change engine oil and filters. Use drain hose on right side of paver where access hole is located.
8. For both sides of the screed, lubricate all grease fittings on the flight screw, the fitting on the depth screw, and the fittings on the flange bearings located on top of the extension screed **(Figure 7-1)**. Grease nuts on extension screws.
9. Blow dust from generator unit.
10. Anytime the LeeBoy Model 8616 Conveyor Paver has been repainted or the safety labels have been removed, damaged or can not be read, a new set of labels should be ordered and reinstalled (see ***Safety Label Installation*** in Section 7) for safe operation.

100-Hour or Monthly Routine Maintenance

1. Position the torque hub so that either of the plugs are at the 3 o'clock position. Remove the plug at the 3 o'clock position **(Figure 7-4,1)**. If oil comes out, no oil is needed. Insert plug and tighten. If oil does not come out, remove the plug at the 12 o'clock position and fill torque hub with 80W-90 gear oil until oil starts to appear at the other hole. Replace both plugs and repeat process on other torque hub.



Torque Hub Location

Figure 7-4

1 - Plugs

2. Replace dry type air filter, if equipped. Refer to your engine operator's manual for service information.
3. Change engine oil. To assure complete removal of contaminants in the oil, perform the oil change while engine is warm.
4. After draining used oil, clean and reinstall drain plug and fill crankcase to the full mark with manufacturer's recommended oil. Change oil filter at every other oil change (15W-40 Motor Oil).
5. Change engine oil and filters. Use the drain hose stored on the right hand side of the machine.
6. Perform any other engine preventive maintenance as described in the engine operator's manual.
7. Check and adjust all chains, as required (see ***Maintenance Adjustments*** in Section 7).

250-Hour or Quarterly Routine Maintenance

1. Perform the 250-hour preventive maintenance as described in the engine operator's manual.
2. Change charge filter between charge pump and main pump.
3. Change return filter on hydraulic tank.

500-Hour or Semi-Annual Routine Maintenance

1. All bearings are sealed and have grease fittings. These should be greased with multipurpose grease using a hand grease gun. Be careful to avoid blowing the seals.
2. Perform the 500-hour preventive maintenance as described in the engine operator's manual.
3. Change oil in drive torque hubs; use 80W-90.

1000-Hour or Annual Routine Maintenance

1. Drain the hydraulic tank. A drain hose is located on the bottom of the tank for this purpose. Refill with clean AW #32 Hydraulic Oil.
2. Perform the 1000-hour preventive maintenance as described in the engine operator's manual..
3. Change oil in drive torque hubs; use 80W-90.

MAINTENANCE ADJUSTMENTS

Conveyor Flight Chain Adjustment

NOTICE **For cold weather, keep conveyor flight chain properly oiled with cleaning solvent or release agent. This will prevent conveyors from sticking.**

NOTE: The conveyor should run smooth when conveyor chain is properly adjusted. These chains should be adjusted every 100 hours to maintain smooth operations. If irregular movement of the conveyor occurs, this is generally a sign that an adjustment is needed.

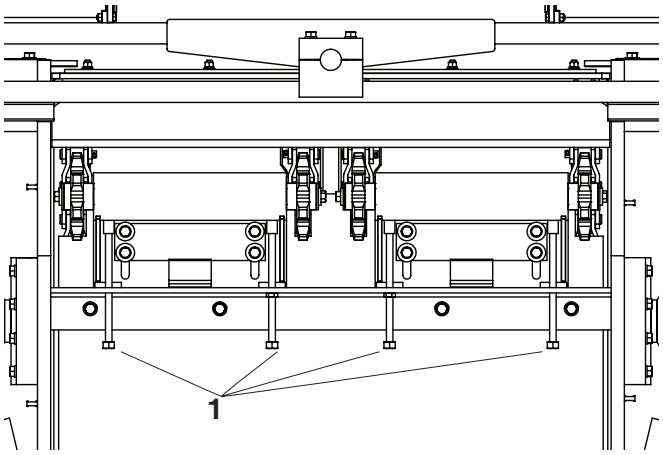
Use the following procedure to make adjustment:

NOTE: Front of paver must be run up on ramps to perform this adjustment.

1. Loosen the locknut **(Figure 7-7,2)** and bolt holding the Adjustment Roller Assembly.
2. Turn adjustment bolts **(Figure 7-5,1)** alternately on both sides of the conveyor. Turn one bolt one half turn, then the other bolt one half turn. Continue alternating tightening until chains are tight. (The pressure on the chain will be noticeable as the bolts are tightened.)

NOTE: Drag chains should be 1/2" away from rear frame channel.

3. After the conveyor chain tension is set, tighten locknut **(Figure 7-7,2)** and bolt holding assembly.
4. If the adjustment bolts **(Figure 7-5,1)** have been run out, it will be necessary to remove a link in the conveyor chains and add a half link. This repair should bring the adjustment bolts back to full travel.
5. Repeat steps 1 through 4 for the opposite side.
6. Grease front and rear conveyor tubes at grease blocks on each side of conveyor. This will grease between the two bearings on each side of tube.



Conveyor Flight Chain From Below

Figure 7-5

1 - Adjustment Bolt

Automatic Track Adjustment

NOTE: Failure to maintain adequate throttle setting may cause improper adjustment to track.

⚠CAUTION When backing this paver with load, maintain at least a three-quarter throttle setting. Failure to do so may cause improper track tension, resulting in poor performance and damage.

Hydraulic adjustment cylinders are automatic and provide even tension on track that prevents excessive wear to paver undercarriage. This feature requires the operator, when backing with load, to maintain at least three-quarter throttle setting. Hydraulic pressure below three-quarter throttle is not adequate to maintain track adjustment.

- Track Tension Pressure: 1200 psi
- Track Tension Relieving: 2300 psi

Conveyor Paddle Adjustment

For left conveyor paddle adjustment:

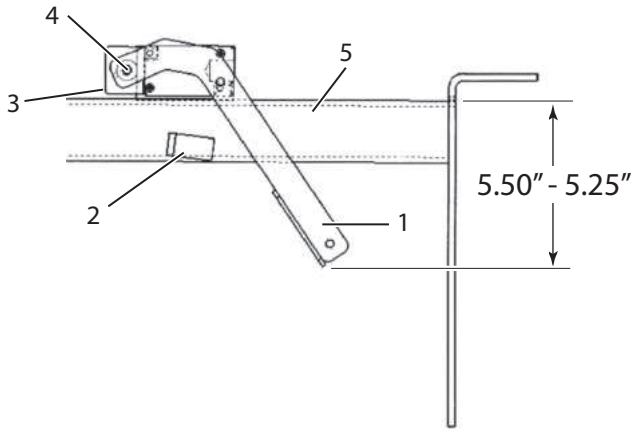
1. Loosen conveyor paddle bolt **(Figure 7-6,3)**. (Paddle will rest against conveyor paddle stop.)
2. Turn limit switch shaft **(Figure 7-6,4)** counter-clockwise (CCW) until conveyors cutoff.
3. Turn limit switch shaft **(Figure 7-6,4)** clockwise (CW) until conveyors come back on, then turn about 1/16" (1.59 mm) more.
4. Tighten conveyor paddle bolt **(Figure 7-6,3)**.
5. When adjusted correctly, paddle should be approximately 5 1/2" - 5 1/4" (14 cm - 13.3 cm) from top of tubing (that limit switch mounts to) **(Figure 7-6,5)** to lowest edge of conveyor paddle **(Figure 7-6,1).**

NOTE: Repeat if necessary to get proper adjustment.

For right conveyor paddle adjustment:

1. Loosen conveyor paddle bolt **(Figure 7-6,3)**. (Paddle will rest against conveyor paddle stop.)
2. Turn limit switch shaft **(Figure 7-6,4)** clockwise (CW) until conveyors cutoff.
3. Turn limit switch shaft **(Figure 7-6,4)** counter-clockwise (CCW) until conveyors come back on, then turn about 1/16" (1.59 mm) more.
4. Tighten conveyor paddle bolt **(Figure 7-6,3)**.
5. When adjusted correctly, paddle should be approximately 5 1/2" - 5 1/4" (14 cm - 13.3 cm) from top of tubing (that limit switch mounts to) **(Figure 7-6,5)** to lowest edge of conveyor paddle **(Figure 7-6,1).**

NOTE: Repeat if necessary to get proper adjustment.



Conveyor Paddle Adjustment

Figure 7-6

1 - Conveyor Paddle

2 - Conveyor Paddle Stop

3 - Conveyor Paddle Bolt

4 - Limit Switch Shaft

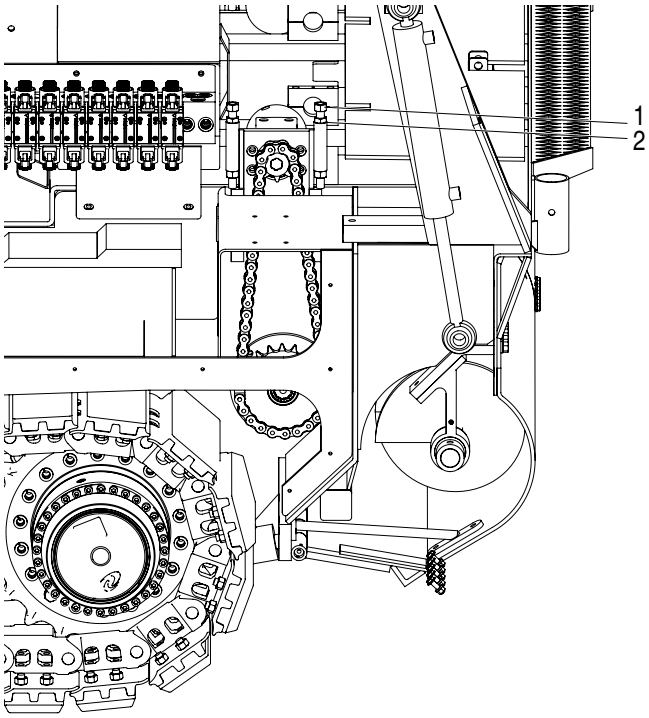
5 - Tubing

Conveyor Drive Chain Adjustment

1. Operate conveyors.
2. Look at drive chain from side of paver at rear track. If drive chain has excessive loose motion in it, adjustment is necessary.

⚠WARNING Entanglement / Sever Hazard! Make sure the paver is shut off and the key is taken out the key switch. Never perform any adjustments on the paver when it is running.

3. Shut off paver if adjustment is necessary. Loosen the jam nuts **(Figure 7-7,2)** on the chain adjuster. Turn the chain adjuster **(Figure 7-7,1)** to loosen or tighten the chain. Do not overtighten; leave about 1/4" (6.35 mm) of slack in chain.
4. Retighten jam nuts **(Figure 7-7,2)** when adjustment is made.
5. Perform the same check on the opposite conveyor drive chain.
6. Keep chains clean from buildup, adjusted properly and lubricated.



Conveyor Drive Chain Bolts

Figure 7-7

1 - Chain Adjuster

2 - Locknut

High Gear

NOTE: The high gear adjustment screw is located on bottom of drive motor.

NOTICE Adjustment should only be done by an authorized LeeBoy Dealer.

Tracking adjustment on the high side gear is performed by adjusting the screw on bottom of hydraulic motor. The adjustment on the motor for the fast track must be screwed in to equalize track speed.

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

NOTE: High gear operation requires the 2-SPEED ON/OFF switch to be in the ON position.

1. With paver running, push the 2-SPEED ON/OFF switch to ON to activate the HIGH gear.
2. Adjust screw on bottom of hydraulic motor until back pressure from spool is felt on adjustment screw. This indicates adjustment is close.
3. Finalize adjustment by making one quarter (1/4) turn at a time until correct adjustment is made.

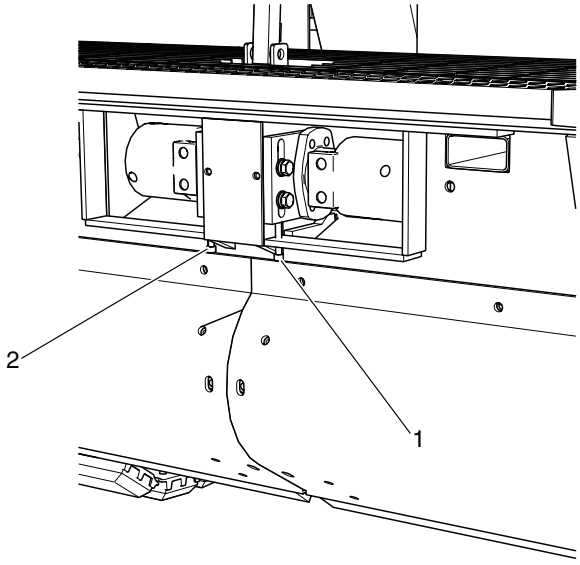
Torque Hub Lubrication

NOTE: See also 100-Hour or Monthly Routine Maintenance.

1. Check oil level in the torque hub, by removing the plug at the 3 o'clock position. If oil comes out, no oil is needed. Insert plug and tighten.
2. If oil does not come out, remove the plug at the 12 o'clock position and fill torque hub with 80W-90 gear lubricant until oil starts to appear at the other hole.
3. Replace both plugs and repeat process on other torque hub.

Auger Drive Chain Adjustment

1. The auger chains should be just snug, not loose. To tighten chains, loosen horizontal bolts **(Figure 7-8,1,2)** in slots provided for taking play out of forward and rear motion.
2. To adjust chains for the right auger, use bolts on right side **(Figure 7-8,1)**. For left auger adjustment use bolts on left side **(Figure 7-8,2)**. Loosen jam nuts and turn adjuster counterclockwise (CCW) to tighten chain.
3. Use bolt to adjust tension on chain.
4. Once adjusted, tighten jam nuts on adjustment bolts. Once chain adjusters are tight, tighten hold-down bolts (verticle).



Auger Chain Adjusting Bolts

Figure 7-8

1 - Right Auger Chain Adjuster Bolts

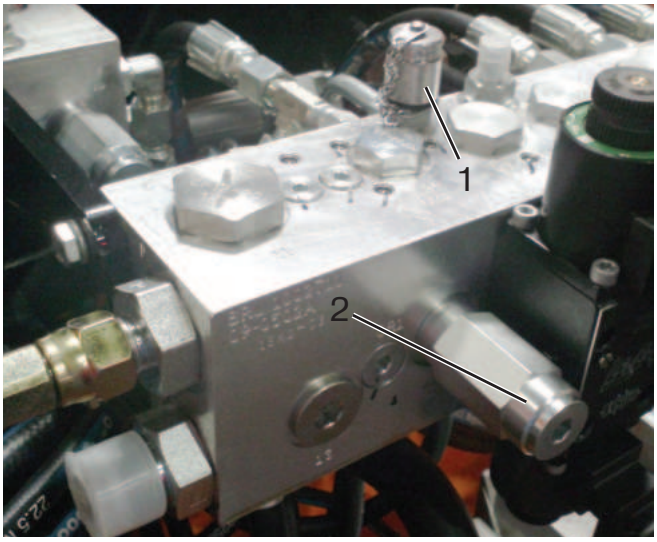
2 - Left Auger Chain Adjuster Bolts

Track Tension Pressure

Pressure Check

NOTE: Track pressure is set at 1200 PSI at track tension manifold.

1. To check pressure, connect a 3000 PSI gauge at one of the hoses going to the track tension cylinder or use gauge port **(Figure 7-9,1)** for track tension in cylinder manifold.



Main Manifold

Figure 7-9

1 - Gauge Port

2 - Pressure Reducing Valve

2. Start engine, set engine to 1400 rpm and observe gauge. Pressure should go to 1200 PSI.
3. If pressure is not correct, adjust as needed (see ***Track Tension Adjustment*** in Section 7).

Track Tension Adjustment

NOTICE **Adjustment should only be done by an authorized LeeBoy Dealer.**

1. Locate main hydraulic valve on left side of paver, inside door.

NOTE: Track tension is set on the main manifold which is located at hopper end of electrical valve manifold.

NOTE: The following adjustment should only be performed if track jumps in reverse.

2. Tension pressure is set to 1200 PSI. If adjustment is needed, locate pressure reducing valve **(Figure 7-9,2)** on left side of main manifold facing outside.
3. Remove valve cap with allen head screw driver.

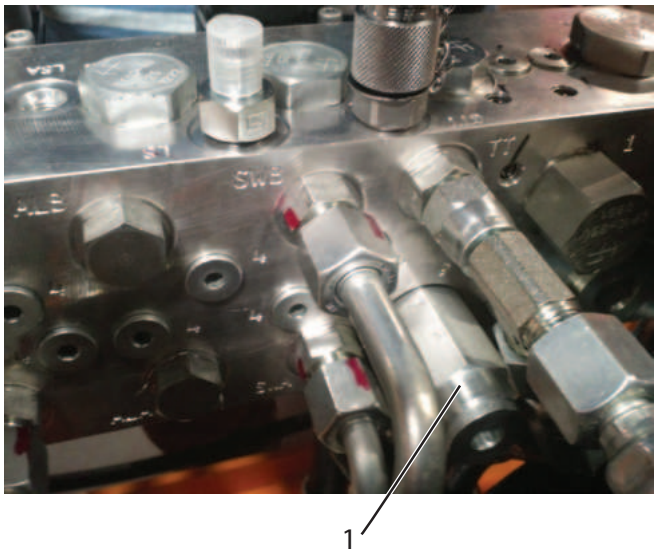
NOTICE **Do not screw valve adjuster out below 900 PSI or all pressure will be lost to tank, causing a heat problem.**

NOTICE **Too much track tension pressure will cause premature wear on the chains, idler and sprockets.**

4. Adjust exposed socket IN (CW) for more tension and OUT (CCW) for less tension.

Track Tension Release Adjustment

1. Relieving pressure is set to 2300 PSI. The pressure relief valve **(Figure 7-10,1)** is located on opposite side of pressure reducing valve.



Main Manifold

Figure 7-10

1 - Pressure Relief Valve

2. Remove valve cap with allen head screw driver.

NOTICE **Do not screw valve adjuster out below 1200 PSI or all pressure will be lost to tank, causing a heat problem.**

NOTICE **Too much track tension pressure will cause premature wear on the chains, idler and sprockets.**

3. Adjust exposed socket IN (CW) for more tension and OUT (CCW) for less tension.

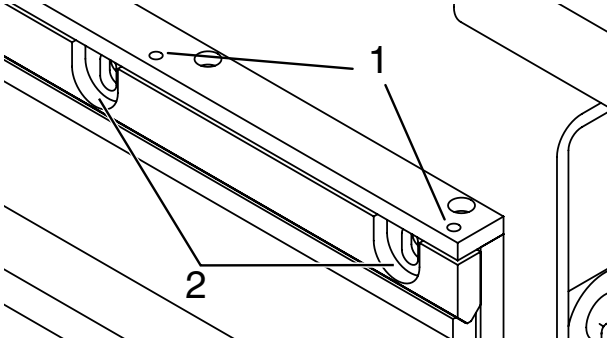
NOTE: Track tension is controlled by a load sense pump. The pump is operating all cylinders.

Screed Extension Top Guide Adjustment

1. Using the screed LEFT EXTENSION and RIGHT EXTENSION IN/OUT switches, run the screed extension out by setting switches to the out position.
2. Locate the bolts (**Figure 7-11)** that hold top guide on.
3. Loosen bolts holding guide and push guide down snug against slide by using allen head screws. Using a jack, raise extension up so that it fits the bottom guide level. Adjust top guide.
4. Run extension out and grease slide with multipurpose grease before working.

NOTE: Slide should be greased daily to prevent wear.

5. Tighten the bolts, securing guides to specification. Adjust allen screws until proper setting is completed. Then tighten hold down bolts to 90 ft. lbs.



Screed Extension Top Guide Adjustment

Figure 7-11

1 - Allen Screws

2 - Hold Down Bolts

ELECTRICAL SYSTEM

Battery Servicing

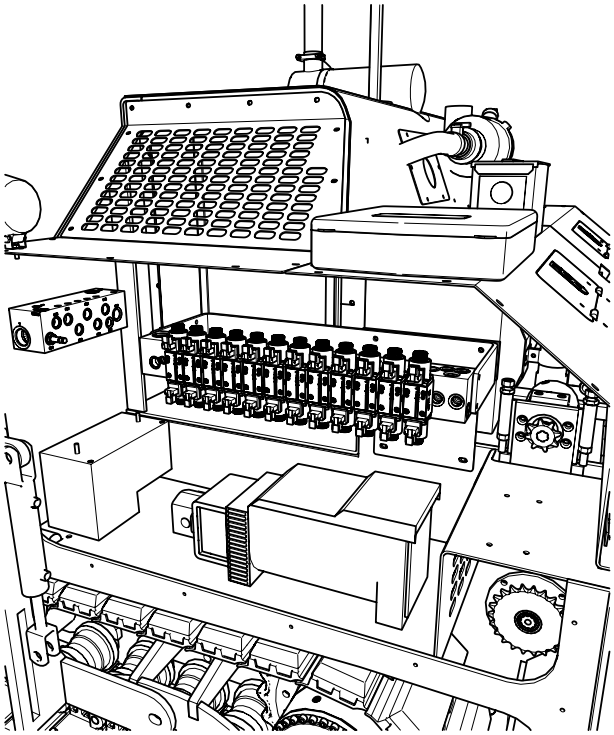
⚠WARNING Burn Hazard! Batteries contain sulfuric acid.

• NEVER allow battery fluid to come in contact with clothing, skin or eyes. Severe burns could result.

• ALWAYS wear safety goggles and protective clothing when servicing the battery.

• If battery fluid contacts the eyes and/or skin, immediately flush the affected areas with a large amount of clean water and obtain prompt medical treatment.

1. Open cover on left hand side of paver to access battery (**Figure 7-12**).



Left Hand Side Battery Access

Figure 7-12

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

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

NOTICE Always turn the master battery switch off when working on the electrical system or welding on the LeeBoy Model 8616 Conveyor Paver. Damage to electrical components could result.

2. Before connecting the batteries, turn off the master switch, located underneath the main dash panel.
3. Be certain that the terminals and battery posts are thoroughly cleaned and that the battery cable terminals are tight.
4. Keep the battery clean by washing it off whenever dirt build-up is excessive.
5. If corrosion is present around terminal connections, remove them and wash with ammonia solution or a solution consisting of 1/4 lb. (0.11 kg) baking soda added to one quart of warm water.
6. Make certain the vent caps are tight to prevent solution from entering the cells.
7. After cleaning, pour clean water over the battery and surrounding area to wash the solution away.
8. Check vent cap breather openings to make sure they are open.

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

NOTE: 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! 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.

⚠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 could 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.

The alternator supplies electrical current for charging the battery and ample electrical power to the electronic controls. The built-in regulator in the alternator controls the voltage output. If for any reason the wires must be disconnected from the alternator, mark them so that they can be reconnected properly. Use the following precautions to prevent damage to the alternator and/or regulator:

1. An alternator is never to be polarized. Never ground any alternator terminals or circuits.
2. Always disconnect the battery before disconnecting or connecting the alternator. Never disconnect the alternator with it operating. Be certain the wiring is properly connected before connecting the battery.
3. Always connect a booster battery in the proper polarity: negative (-) to negative (-) and positive (+) to positive (+).

⚠WARNING When finished using the paver at the end of the day, ALWAYS turn the DISCONNECT switch to the OFF position. This will eliminate the possibility of fire due to battery or cable shorting.

Generator Voltage Testing

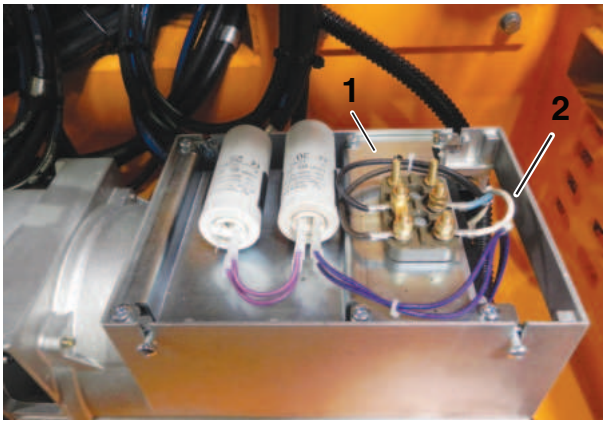
The LeeBoy Model 8616 Conveyor Paver generator is hydraulically driven. When the paver engine is at 1400 rpm and the hydraulic system at normal operating temperature, the generator should produce between 220VAC and 240VAC.

The voltage of the generator depends on speed (rpm). The voltage increases as rpm increases, and decreases as rpm decreases. The voltage will decrease significantly if generator speed is slower than 3480 rpm.

NOTE: When testing the generator voltage ensure the paver engine is at 1400 rpm and the hydraulic temperature is at normal operating levels.

To test the generator voltage at the generator:

1. Use volt meter to measure between the two main input wires L1 and L2 **(Figure 7-13,1,2)**. If you measure from L1 to the frame of the paver, or ground, the voltage will be half of the rated output of the generator. The voltage should be the same as measured at the control box.



Generator Testing View

Figure 7-13

1 - L1 (Black Wire)

2 - L2 (White Wire)

To test the generator voltage at the control box:

1. Use volt meter to measure between the two main black and white input wires located inside the control box on the terminal block similar to one in **Figure 7-13**. The voltage should be the same as measured at the generator.

If your voltage at this point is lower, make certain the generator is turning the correct speed by testing with a Hz meter or photo tachometer as described in the next section, ***Generator Speed Tuning***.

Generator Speed Tuning

NOTICE **Generator speed tuning should only be done by an authorized LeeBoy Dealer.**

A volt meter set to read frequency (Hz) can be used to test the speed of the generator. When the paver engine is at 1400 rpm, the generator should operate at **58 Hz to 62 Hz**, or a speed of 3480 rpm to 3720 rpm. If generator speed drops below 3480 rpm, then voltage output and performance of the heating system will also decrease significantly.

NOTICE **The generator should never be allowed to operate at a speed of 3800 rpm or greater. Generator damage will occur and may void your existing warranty. If your speed is above 3800 rpm, stop the set immediately.**

NOTE: The generator and electrical system is designed to work within the range of 58 Hz to 62 Hz. It does not need to be set to exactly 60 Hz.

NOTE: When testing the generator speed, make certain that the paver engine is at 1400 rpm and the hydraulic temperature is at normal operating levels.

To Measure Generator Speed:

1. Remove back panel from generator housing to access the rear of the generator.
2. Use volt meter, set to read frequency (Hz), to measure between the two main input wires L1 and L2 **(Figure 7-13)**.

NOTE: A photo tachometer may also be used to check the speed of the generator at the motor coupling by removing the motor coupling shield.

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

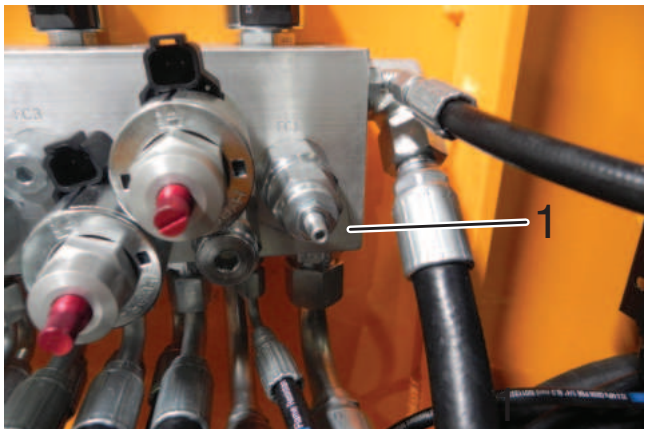
3. Note that 60 Hz is exactly 3600 rpm. For every single Hz above 60 an increase of 60 rpm can be added to 3600 rpm. For every single Hz below 60 Hz a decrease of 60 rpm can be subtracted from 3600 rpm.

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

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.

There is a flow control adjuster **(Figure 7-14,1)** provided on the front of the manifold. This adjustment controls speed of the generator and should only be made by an authorized LeeBoy dealer.

⚠CAUTION Improper adjusting will overspeed generator.



Generator Flow Control Adjuster

Figure 7-14

1 - Flow Control Adjuster

To Fine Tune Generator Speed:

NOTICE Over adjustment will cause damage to the generator and void the warranty.

NOTE: Generator Speed should only be adjusted by an authorized LeeBoy dealer.

- Locate the Flow Control Adjuster **(Figure 7-14,1)** and turn to increase or decrease the speed as needed.

NOTE: Clockwise (CW) adjustment will slow the generator down.

Counter Clockwise (CCW) adjustment will speed the generator up.

If your generator will not operate at the correct speed it may be necessary to test the hydraulic flow from the pump, or check the generator motor for excessive case drain flow. The case drain of the motor should not leak more than 1 gallon per minute. Replace the generator motor or paver pump if either are found to be operating incorrectly.

Generator Capacitor Replacement

The capacitor located in the rear of the generator controls and regulates the voltage in the generator while in operation. If this capacitor fails, the voltage will drop to little or no output at all.

Replacing this capacitor with one of the same type and value will help determine if the capacitor is at fault.

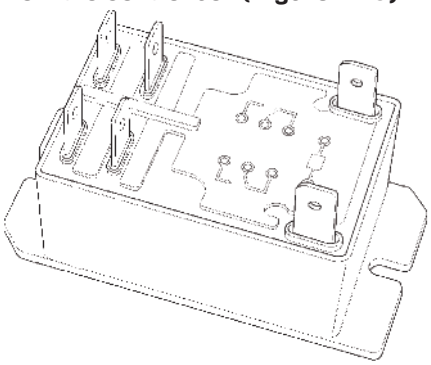
1. Ensure that the paver and generator engines are off.
2. Detach the wires at the top of the capacitor.
3. Remove the capacitor and replace with a new one of the same type and value.
4. Re-attach the leads at the top of the capacitor.

There are no other voltage adjustments that can be made to the generator.

Testing Element Relays

The element relays are 12VDC controlled, and have dual contacts rated for 240VAC.

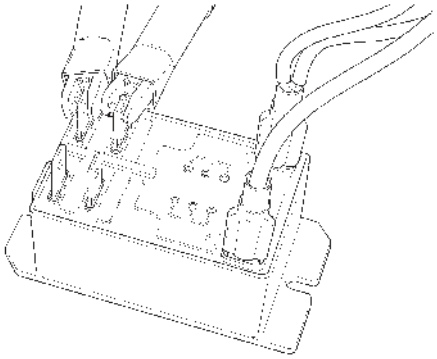
1. Disconnect any wires to the relay, or completely remove it from the control box **(Figure 7-15)**.



Relay

Figure 7-15

2. Place the leads of an ohm meter, or continuity tester across the contact terminals (2 to 4) or (6 to 8) as shown in **Figure 7-16**.



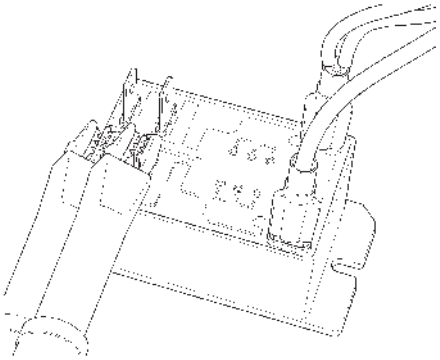
First Terminal Set Testing

Figure 7-16

NOTE: Without 12VDC applied to the coil of the relay, the contact terminals should have no continuity through them. The contacts should be “open”. If the contacts are closed, and you do not have 12VDC applied to the coil of the relay, your contacts are not correct, and the relay should be replaced.

3. With the ohm meter still on the contact terminals, apply 12VDC to the coil terminals of the relay **(Figure 7-17)**.

NOTE: The contact terminals should now close and show a path through them for the power to be applied to the electrical elements. If the relay does not work as described above, it may be faulty, and should be replaced.



Second Terminal Set Testing

Figure 7-17

Element Resistance Testing

When a breaker in the control box has tripped, it must be assumed that there may be a problem with wiring or an actual element in the circuit.

Elements used to heat the screed are sized depending on how much area and material they are required to heat. The actual resistance of the element will vary depending on what wattage the element is in the specific application.

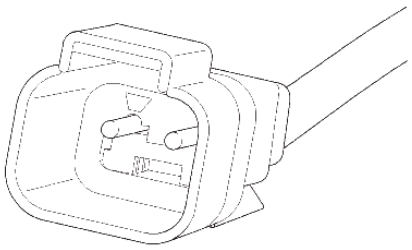
To know that the element is correct, you should read a resistance between **25 and 35 ohms**. If the element is bad, the reading will be very different from this range. The element that is bad will most likely read “open” or it will read very little resistance (less than 1 ohm) and will indicate a short through the element.

1. Disconnect element one at a time from the connection point on the lower side of the control box.
2. Use an ohm meter and test the resistance through the element between the two pins in the plug at the end of the element cable **(Figure 7-18)**.

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

3. Test between the two pins shown here with an ohm meter.
4. Test plug at end of element wires.
5. Before the element is plugged back in, check each wire (pin) with an ohm meter test lead, and place the other lead on a bare steel section of the screed frame. If there is any continuity through the element to the frame, the element is bad and must be left disconnected or replaced.

⚠WARNING Fire Hazard! Do not attempt to operate an element with a known short. Replace faulty elements and wiring before using.



Element Plug End

Figure 7-18

ENGINE MAINTENANCE

General Information

The following engine maintenance information will cover the engine general maintenance procedures most often required.

For additional, very specific, engine maintenance information, see the current engine operator's manual.

Engine Lubrication Oil

Checking the Engine Lubrication Oil Level

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.

To accurately check the engine lubrication oil level:

1. Park the LeeBoy Model 8616 Conveyor Paver in a level position and stop the engine.
2. Clean the area around the engine lubrication oil dipstick before removing the dipstick from the engine.

⚠WARNING **Stop the engine before checking the engine lubrication oil level. With the engine running, hot oil can be thrown causing serious personal injury.**

3. Wait five minutes, after engine shutdown, before removing the dipstick from the engine and checking the oil level.

NOTE: This time will allow the engine lubrication oil to return to the oil pan and will give a more accurate measure of the engine oil.

Changing the Engine Lubrication Oil

The engine lubrication oil must be changed according to the interval given in the current Kubota diesel engine operator's manual.

NOTE: The color of the engine lubrication oil can not be used as an indication of the need for a engine lubrication oil change. The use of an engine lubrication oil "analysis service" is the only alternate reason for not following the required engine lubrication oil change schedule.

⚠WARNING **Do not change the engine lubrication oil when the engine and lubrication oil are hot. Change when warm only. Hot oil can cause serious personal injury.**

NOTICE **Do not change the engine lubrication oil filter with the engine running. Serious engine damage, or failure, will occur. Clean the area around the engine lubrication oil dipstick and oil filler cap before removing the dipstick, or oil filler cap.**

With the engine stopped, and the engine lubrication oil is "warm", proceed as follows:

1. Locate oil drain hose on right side.
2. Remove cap on end of hose and drain all engine oil into container having a capacity sufficient to hold the drained oil.
3. Install cap back on hose and slide hose back inside.
4. Fill the engine with 14 qts (13.24 liters) of oil, using the correct engine lubrication oil.

NOTE: See this section for the correct amount of lubrication oil. For the correct type of lubrication oil see the current engine operator's manual for the Kubota diesel engine.

5. Install the engine lubrication oil dipstick.

NOTICE **Do not start the engine before changing the engine lubrication oil filter. Follow the Kubota diesel engine operator's manual.**

Changing The Engine Lubrication Oil Filter

The engine lubrication oil filter must be changed when the engine lubrication oil is changed.

⚠WARNING Do not change the engine lubrication oil when the engine and lubrication oil are hot. Change when warm only. Hot oil can cause serious personal injury.

NOTICE Do not change the engine lubrication oil filter with the engine running. Serious engine damage, or failure, will occur.

With the engine "stopped" and filled with new engine lubrication oil, proceed as follows:

1. Wipe the area around the engine lubrication oil filter element and its mounting base, with a clean cloth.
2. Place a container under the filter element.
3. Use a filter removal wrench to loosen and remove the filter element by turning it in a counterclockwise (CCW) direction of rotation. Drain and discard the removed filter element.

NOTE: Be sure the used rubber gasket is removed and discarded with the filter element.

4. Wipe the inside area of the lubrication oil filter head using a clean lint free cloth.
5. Put clean engine lubrication oil on the rubber gasket area of the new filter element. Fill the new filter element with correct, new, and clean oil.
6. Install the new filter element onto the filter head. Carefully tighten the filter element, by hand only.

NOTE: Tighten the filter element as directed on the filter element, by the filter manufacturer.

FUEL SYSTEM

Fuel Tank

The fuel level is indicated on the digital display FUEL gauge and indicates the amount of fuel in the tank. Fill the fuel tank FULL..

To fill fuel tank:

NOTICE Fill the tank to FULL before the paver is stored for the night to reduce the accumulation of moisture in the tank from condensation.

⚠WARNING The operator must be off of the paver while fuel is added. No smoking while filling the fuel tank. All fuels for internal combustion engines are flammable. Fill the fuel tank only in a designated area with good ventilation. Have a fire extinguisher available.

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

1. Stop engine.
2. Remove cap from fuel tank.

NOTE: Use only DIESEL FUEL.

3. Fill with diesel fuel till FULL. Replace cap.

Engine Fuel Filters

The fuel filter element must be replaced as directed in the current Kubota diesel engine manual. Replace the fuel filter using the following “general” procedure and very specific information given in the current engine manual.

⚠WARNING Diesel fuel is very flammable. Use extra caution.

Do not change the fuel filter with the paver running.

Do not change the fuel filter in an area near an open flame. Do not smoke while changing the fuel filter.

Do not spill fuel.

1. Stop the engine and allow it to cool.
2. Put a container under the fuel filter, before removing the filter element.
3. Wipe the area around the fuel filter element and the element mounting head, using a clean lint free cloth.
4. Use a filter removal wrench to loosen and remove the element, by turning the element in a clockwise direction. Drain and discard the removed element.
5. Wipe the inside area of the filter head with a clean lint free cloth. Fill the new fuel filter element completely full with the clean diesel fuel. Put clean fuel on the element rubber gasket.
6. Install the new fuel filter element onto the filter head. Carefully tighten the element by hand only.

NOTICE Tighten the fuel strainer or the fuel filter element as directed on the filter element, by the filter manufacturer. Do not overtighten the fuel filter element onto the filter head.

7. 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 leakage problem is corrected.

Engine Air Filter

The engine inlet air filter assembly uses a replaceable filter element.

NOTICE The air filter element should be replaced one time for each 100 hours of paver operation, or monthly, for a paver which is operated under normal conditions, or more often for a paver that is operated under severe conditions. Never operate the engine without an air cleaner element installed.

NOTICE Do not service the air cleaner element while the engine is running.

To service the air cleaner element:

1. Remove the rear cover air filter.
2. Remove the primary and secondary air filter elements and discard.
3. Clean the inside of the air cleaner body with a clean cloth.

NOTICE Severe engine damage can occur if engine is operated without air filter properly installed.

4. Carefully install the new air filter elements into the canister.
5. Install the rear covers on the canister.
6. Check all the clamps for intake air at filter and turbo to make sure everything is tight and in contact.
7. Start the engine using all the correct starting procedures given in ***Operation*** section of this manual. Check that engine runs smoothly.

HYDRAULIC SYSTEM

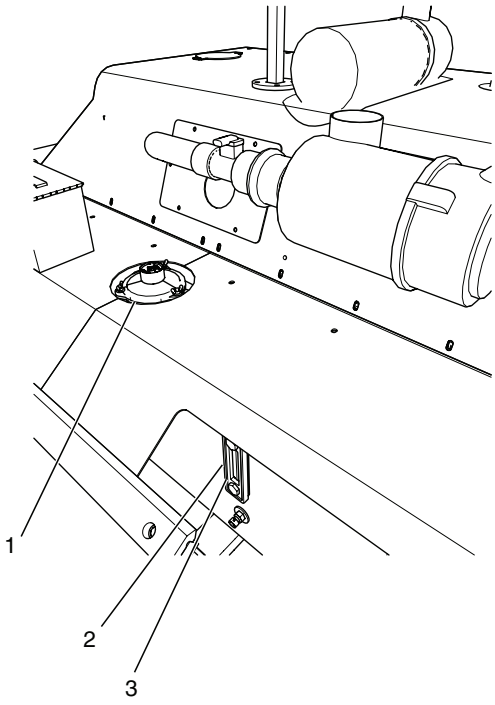
The hydraulic motors and the hydraulic cylinders use the same hydraulic oil reservoir and hydraulic oil supply.

Checking The Hydraulic Oil Level

Check the hydraulic reservoir oil level, one time each day, by the sight glass on the reservoir as seen on the left side of the paver. Check the oil level when the hydraulic oil is at normal operating temperature only.

Adding Hydraulic Oil To The Hydraulic Oil Reservoir

The hydraulic reservoir oil level must be visible in the sight glass to be at the correct level. If the hydraulic oil level is below the red line (**Figure 7-19**,**3**) or not visible in the sight glass, the correct, filtered hydraulic oil (see ***Specifications*** in Section 4) must be added to the hydraulic oil reservoir until the oil level is correct.



Hydraulic Oil Tank Fill

Figure 7-19

1 - Oil Fill Fitting

2 - Black Line

3 - Red Line

⚠WARNING Do not loosen, or remove, the hydraulic oil reservoir filler cap when the hydraulic oil is hot. Only loosen the filler cap when the oil is at a warm temperature. Always loosen the filler cap slowly to relieve any pressure in the hydraulic oil reservoir.

1. Locate and remove cap on top of hydraulic oil reservoir (**Figure 7-19**,**1**).

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

NOTE: Do not use unfiltered hydraulic oil. The new hydraulic oil must be filtered before it enters the hydraulic oil reservoir.

NOTE: Keep the oil level of the hydraulic oil reservoir, at the correct level. An air space is designed into the hydraulic oil reservoir and allows for oil expansion, at warm temperatures. The hydraulic oil reservoir will have a low pressure in it at system operating temperatures.

NOTICE **Do not over fill the hydraulic oil reservoir.**

2. Add filtered hydraulic oil through opening until oil is seen in the hydraulic oil sight glass and is approximately 1/2” below the black line near the top (**Figure 7-19**,**2**). Do not overfill.
3. Replace cap.

Changing The Hydraulic Oil

Changing the hydraulic oil removes the accumulation of dirt, water and mechanical wear particles from the hydraulic oil reservoir and system. The chemical structure of the hydraulic oil also changes after continuous use in the system and new, clean, and filtered oil is a must to help insure further correct operation of the hydraulic system.

NOTICE Hydraulic oil which has oxidized or which contains contamination, of any type, can shorten the expected service life of any, or all, of the components in the hydraulic system.

Use the following procedures to change the hydraulic oil in the hydraulic oil tank:

1. Stop the engine. Allow the hydraulic oil to cool, until it is at a warm temperature only.
2. Slowly loosen, and then remove, the hydraulic oil reservoir filler cap **(Figure 10-10,9)**.
3. Put a CLEAN, lint free cloth over the reservoir fill tube opening and secure in place with tape.

⚠WARNING Do not drain the hydraulic oil from the reservoir when it is hot. Hot hydraulic oil can cause serious personal injury. Drain at a warm temperature only.

NOTE: All reservoir tanks together plus hoses hold approximately 41 gallons.

4. Carefully remove the plugs from the hydraulic tanks. Use a drain collection device, of sufficient capacity to collect the hydraulic oil. Allow all of the hydraulic oil to drain from the reservoirs and into the container.

NOTICE Do not fill the hydraulic oil reservoir with new hydraulic oil until the strainer has been serviced.

5. Install the hydraulic oil reservoir drain plug, and tighten securely.
6. Carefully remove the cloth from the hydraulic oil reservoir fill tube opening.
7. Remove the strainer on the tank.
8. Fill hydraulic oil tank with the correct, filtered hydraulic oil until tank is full.

NOTICE Do not overfill the hydraulic oil reservoir with oil.

NOTE: Cold oil level should be about 1/2” to 3/4” below full level on sight gauge.

NOTICE Never let tank run dry. Pump damage will occur.

9. Install the hydraulic oil reservoir filler cap onto the reservoir filler neck and tighten securely.
10. Start the engine using the correct procedures given in OPERATION section of this manual. Check the hydraulic system for any leaks.

⚠WARNING Do not use hands on any hydraulic hose, fitting or system component to check the system for possible 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.

Changing The Hydraulic Oil Strainer

The oil strainer is mounted in the oil filler opening under the filler cap.

⚠WARNING Do not remove the hydraulic oil cap from the reservoir when it is hot. Hot hydraulic oil can cause serious personal injury. Allow hydraulic oil to cool down to a warm temperature .

1. Remove the hydraulic oil filler cap.
2. Remove the three screws securing the strainer, then remove the strainer and the gasket.
3. Install the new element. Place the spring in the head.
4. Fill the hydraulic oil reservoir with the correct, filtered hydraulic oil until proper level is in sight gauge before fill cover is placed on.

NOTICE Do not overfill the hydraulic oil reservoir with oil.

5. Check the oil level in the hydraulic oil reservoir again. Add oil if needed.
6. Install the hydraulic oil reservoir filler cap onto the reservoir filler neck and tighten securely.

REMOVAL AND INSTALLATION PROCEDURES

2-Speed Motor Replacement

Removal

1. Drive paver on to ramp to access underside.
2. Label and disconnect all hydraulic hoses. Plug and cap fittings.
3. Remove two bolts holding motor to torque hub.
4. Slide motor out of torque hub.

Installation

1. Lubricate O-ring and install on motor.
2. Slide motor into torque hub.
3. Attach motor to torque hub with two bolts. Torque bolts to 120 ft. lbs. (162 N.m).
4. Clean all hoses and fitting and reconnect hoses.
5. Fill oil tank through the charge filter fill port. This will charge motor back with oil.
6. Start engine and let run for about 10 minutes before moving the paver. This will prevent damage to the new motor due to a dry start.
7. After completing installation, check hydraulic oil level.

Drive Torque Hub Replacement

Removal

1. Drive paver on to ramp in order to access underside.
2. Remove track master pin at bottom rear of sprocket.
3. Release track tension by screwing relief cartridge out of manifold about three turns.
4. Drive paver forward to disconnect track from the top of the sprocket.
5. Follow directions for ***2-Speed Motor Replacement***.
6. Jack paver sprocket up out of track for removal.
7. Remove bolts holding sprocket on.
8. Slide sprocket off out of the way.
9. Use a hoist to hold torque hub to keep it from falling.
10. Remove bolts from rear of torque hub.
11. Slide torque hub out with hoist.

Installation

1. Use hoist to place torque hub back to frame.
2. Place thread-locking adhesive on bolts and install bolts for holding torque hub in place. Torque bolts to 180 ft. lbs. (244 N.m).
3. Slide sprocket on to torque hub.
4. Place thread-locking adhesive on bolts and install bolts holding sprocket on. Torque bolts to 180 ft. lbs. (244 N.m).
5. Follow directions on installing ***2-Speed Motor Replacement***.
6. Lower paver so that sprocket goes back into track chain. Drive paver forward to rotate track onto top of the sprocket.
7. Place master pin back in track.
8. Place thread-locking adhesive on bolt.
9. Tighten relief cartridge in manifold.
10. Rotate torque hub so that either of the plugs are at 3 o'clock position. Remove the plug at the 3 o'clock position **(Figure 7-4,2)**. If oil comes out, no oil is needed. Insert plug and tighten. If oil does not come out, remove the plug at the 12 o'clock position and fill torque hub with 80W-90 gear oil until oil starts to appear at the other hole. Replace both plugs and repeat process on other torque hub.

Track Sprocket Replacement

Removal

1. Rotate track master pin to bottom of sprocket.
2. Release track tension by screwing relief cartridge out of manifold about three turns.
3. Remove track master pin at bottom rear of sprocket. Drive paver forward to disconnect track from the top of the sprocket.
4. Jack paver sprocket up out of track for removal.
5. Remove bolts holding sprocket.
6. Slide sprocket off and replace.

Installation

1. Slide sprocket back in place.
2. Place thread-locking adhesive on bolts and install bolts holding sprocket.
3. Lower paver so that sprocket goes back into track chain. Drive paver forward to rotate track onto top of the sprocket.
4. Place master pin back in track and place thread-locking adhesive on bolts.
5. Tighten relief cartridge in manifold.

Front Idler Or Bushing Replacement

Removal

NOTE: Idler can be removed without taking the track apart. Use winch to hold the track forward. Remove tension cylinder top guide and idler.

1. Rotate track so that master pin is at rear bottom of front idler.
2. Loosen track by screwing tension relief cartridge out about three turns.
3. Remove master pin.
4. Back paver up so that track does not lay on idler.
5. Remove complete idler by removing top guide on slide and disconnect cylinder.
6. Lift idler out and replace or install new bushing.

NOTE: Rebuild of bushing and seals can be done without taking idler off paver.

7. Remove hub cap at end and slide idler wheel off. Repair and reinstall.

Front Idler Installation After Bushing Replacement

1. Slide idler wheel back on to idler shaft.
2. Place hub cap back on by using a bolt screwed into idler axle to act like a press. Align roll pin hole in cap and axle.
3. Drive roll pin in.
4. Fill with 90 WT gear oil.
5. Place master pin back in track.
6. Tighten track tension relief cartridge.

New Front Idler Installation

1. Place new idler with slide block back in bottom guide.
2. Lubricate slide.
3. Place top guide against idler slide snug. Snug bolts then tap guide down. Once snug, torque bolts to 180 ft. lbs. (244 N.m).
4. Connect cylinder.
5. Place master pin back in track.
6. Tighten track tension relief cartridge.
7. Check oil level in torque hub.

Rear Conveyor Shaft, Bearings, And Sprockets Replacement

Removal

1. Place paver over a pit or on a ramp.
2. Disconnect main conveyor chains underneath the equipment. Disconnect any link. Rotate chains out of the way of the assembly.
3. Remove chain from drive motor to conveyor sprocket.
4. Remove bolt and washers holding sprocket on.
5. Remove sprocket and bearing from frame side.
6. Remove bolts at inner sprockets.
7. Shaft and outer conveyor sprocket should slide out through frame side.

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

NOTE: Replaced bearings in tubes must have inner seals removed so that grease can enter into the bearing area from grease fitting.

8. Replace bad or damaged parts.

Installation

1. Place conveyor shaft into inner conveyor sprocket.
2. Place bolt into shaft.

NOTE: Outer conveyor sprocket must be aligned with inner sprocket.

3. Rotate outer sprocket on shaft until properly aligned.
4. Reinstall outer bearing and outer sprocket.
5. Place thread-locking adhesive on bolt and torque to 180 ft. lbs. (244 N.m).
6. Place conveyor and drive chains back on and adjust.
7. Grease bearings in tubes by using grease blocks on each side below hopper wing.

Front Conveyor Shaft, Bearings, And Sprockets Replacement

Removal

1. Place paver over a pit or on a ramp.
2. Disconnect main conveyor chains underneath the equipment. Disconnect any link. Rotate chains out of the way of the assembly.
3. Loosen idler adjust bolts and remove hold down bolts. Assembly will come out at this time.
4. Remove damaged or worn parts and reinstall.

NOTE: Replaced bearings in tubes must have inner seals removed so that grease can enter into the bearing area from grease fitting.

Installation

1. Reverse removal procedure and place back in paver.
2. Connect main conveyor chains and adjust tension. Make sure all hold down bolts are torqued to 180 ft. lbs. (244 N.m). Tighten jam nuts on adjuster bolts.
3. Grease bearings by using grease blocks on each side below hopper wing.

NOTE: Right hand side grease block greases every bearing on the right hand side of conveyor. Left hand side grease block does the same for left hand side.

Conveyor Wear Plate Replacement

Removal

1. Place paver over a pit or on a ramp.
2. Remove all guards over conveyor floor and front lip panel.
3. Remove main conveyor chains from paver.
4. Remove front conveyor idlers from paver.
5. Remove bolts from rear tube assemblies and let assembly be held only by outer bearing.
6. Remove 24 bolts that hold floor into frame.
7. Lift wear plate out of paver with hoist.

Installation

1. Clean frame where conveyor plate lays.
2. Place new conveyor plate in frame.
3. Place thread-locking adhesive on the twenty-four 5/8” bolts and tighten conveyor plate to frame. Torque bolts to 180 ft. lbs. (244 N.m).
4. Place rear drive assembly back in place.
5. Place thread-locking adhesive on bolts and torque to 180 ft. lbs. (244 N.m).
6. Tighten adjuster against assembly to keep from slipping.
7. Place front idler assemblies back in place.
8. Place main conveyor chains in and adjust chain tension. Once adjusted, torque all idler hold down bolts to 180 ft. lbs. (244 N.m).
9. Adjust tension bolts tight against assembly when done and lock jam nuts.
10. Place all guards over conveyor chains and front lip panel.
11. Grease bearings by using grease blocks on each side below hopper wing.

NOTE: Replaced bearings in tubes must have inner seals removed so that grease can enter into the bearing area from grease fitting.

Conveyor Drive Motor Replacement

Removal

1. Remove hydraulic hoses from motor.
2. Remove four bolts holding hydraulic motor to slide mount.
3. Slide drive motor out of slide mount.

Installation

1. Slide new or repaired drive motor into slide mount.
2. Secure with four bolts.
3. Reconnect hydraulic hoses to motor.
4. Check for leaks.

Cutoff Assembly Replacement

Removal

1. Remove clevis pin that connects the cutoff cylinder to the cutoff.
2. Remove roll pin out of outer cutoff hinge.
3. Insert a 3/8” bolt in the end of the hinge pin to use to remove pin.
4. Cutoff will slide down.

Installation

1. Clean area around cutoff hinge.
2. Align cutoff hinge.
3. Grease and insert hinge pin.
4. Insert roll pin into outer cutoff hinge.
5. Connect cylinder back to cutoff.

Auger And Inner Bearing Replacement

1. Remove rear grating over auger assembly.
2. Run screed extension all the way out.

NOTE: This provides room to stand in behind auger back to remove top portion of auger cover.

3. Remove two (2) nuts holding top cover on and pry cover apart.
4. Clean asphalt build up from around cover.

NOTE: Heating asphalt may be required.

5. Remove bottom portion of cover by laying on conveyor under engine [six (6) bolts].
6. Rotate augers 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.

NOTE: Roll pin is used to line up bearing grease hole with the grease fitting hole. If installed improperly, no grease will get to bearing.

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 bearing and replace at this time if faulty.

Installation

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.

NOTE: When installing auger, make sure roll pin is aligning grease fitting hole with grease fitting before tightening clamps on inner auger bearings.

1. Install new augers making sure that they are on correct side to auger material outward.
2. Tighten bearing setscrew to help hold auger shaft from moving outward.
3. Slide auger collar on end of auger shaft and bolt end mount back on. Torque mounting screws to 78 ft. lbs. (106 N•m)
4. Push collar all the way in against end mount and attach with two (2) setscrews, one (1) on outside and one (1) on inside.
5. Replace bronze bushing in the end mounts.
6. 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).
7. Make sure motor is level then tighten top and bottom bolts to a torque of 150 ft. lbs. (155 N•m). Do the same for the other side.
8. Lubricate chains.
9. Place grating back on over auger.
10. Run augers and make sure everything is correct.

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

Replacing Auger Motor

Removal

1. Run screed extension all the way out.
2. Remove four nuts holding cover on and pry cover apart.
3. Clean asphalt build up from around cover.

NOTE: Heating asphalt may be required.

4. Loosen auger chains by sliding auger motors down from backside after loosening the two (2) bolts, securing mounting brackets.
5. Slide long screw through bolt side of chain to keep it from falling down into bottom of cover. Once chain is secure, remove 1/4" bolt that holds sprocket on.
6. Hold sprocket at chain and slide motor out.
7. Remove sprocket from chain.
8. Label and disconnect hydraulic hoses and plug fittings.
9. Auger motor mount with motor will slide out for motor replacement or repair.
10. Slide sprocket off and remove mount.

Installation

1. Place auger motor mount on to motor.
2. Place sprocket back in chain then place motor back in through sprocket place bolt back into hold sprocket on.
3. Place thread-locking adhesive on bolts and tighten.
4. Adjust for 1/4" slack in chain and lubricate with chain lube.
5. Connect hydraulic hoses and check for leaks.

Rear Hopper Wing Cylinders Replacement

Removal

1. Fold hopper wing all the way in.
2. Secure wing closed so that wing will not fall open after cylinder is disconnected.
3. Open front cover on hood to access round cover at bolt location at rod end of cylinder.
4. Remove top bolt through opening.
5. Fold cylinder out and disconnect hoses.
6. Disconnect mount at blind end of cylinder and slide cylinder off.

Installation

1. Slide cylinder on bottom mount.
2. Place thread-locking adhesive on bolts and attach cylinder to mount.
3. Clean hydraulic hoses and connect to cylinder.
4. Extend cylinder so that bolt in rod end lines up with mount.
5. Place thread-locking adhesive on bolt and tighten.
6. Attach round cover in hole with bolt and close hood.

Front Hopper Wing Cylinders Replacement

Removal

1. Fold hopper wing all the way in.
2. Secure wing closed so that wing will not fall open after cylinder is disconnected.
3. Disconnect hose.
4. Remove clevis pin and bolt from cylinder mount.
5. Slide cylinder off.

Installation

1. Slide cylinder on bottom mount.
2. Attach bolt to cylinder mount.
3. Clean hydraulic hoses and connect the cylinder.
4. Extend cylinder so that hole in rod lines up with upper mount.
5. Attach clevis pin.

Hood And Pumps Replacement

Removing Hood

1. Disconnect air breather from turbo.
2. Remove front, rear, and side bolts attaching hood.
3. Unplug front work lights and beacon.

Removing Pumps

1. Turn all valves off on hydraulic tank.
2. Tag and disconnect hydraulic hoses on pumps that are to be removed.
3. Disconnect wires at EDC's if removing drive pump.

⚠WARNING Pumps are very heavy. Use hoist to lift pumps.

4. Attach hoist to pump being removed.
5. Remove bolts holding main pump to engine and slide out faulty pump.

Removing Inner Drive Coupling

1. Any time pump is removed, check drive coupling for wear or damage.
2. Remove all bolts and pull coupling out of flywheel.

Installing Drive Coupling

1. Clean flywheel and threaded bolt holes with ether. This will provide a clean surface for thread-locking adhesive to seal.
2. Install new drive coupling in flywheel.
3. Place thread-locking adhesive on bolts and torque to specifications located in manual.
4. Insert grease in coupling splines and on pump splines.

Installing Pumps

1. Grease splines on pump.
2. Place thread-locking adhesive on bolts and torque pump bolts to specifications in manual.

Installing Load Sense/Charge Pumps

1. Check O-rings and place charge pump into main pumps.
2. Torque bolts to specification in manual.
3. Connect all wires to proper locations as marked.
4. Be sure hoses and fittings are clean then reconnect all hoses.
5. When all hoses are connected, turn all valves back on.

NOTE: Before starting engine and checking for leaks, drive and conveyor pumps must be charged with oil to prevent damage from dry startup.

6. Fill oil tank through the charge filter fill port. This will charge pumps back with oil.

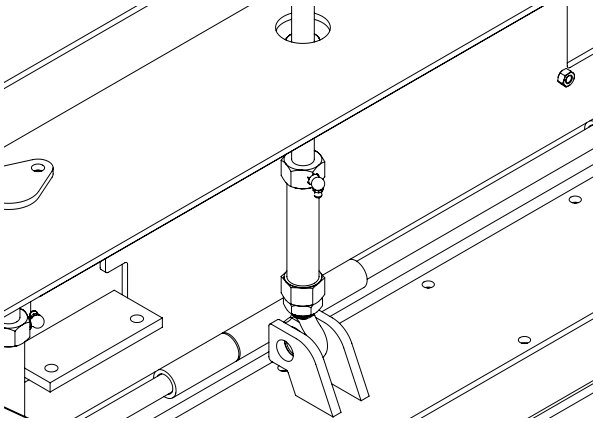
Installing Hood

1. Lift hood into position then bolt hood back onto paver.
2. Connect lights and beacon wires.
3. Connect air breather to turbo and tighten.
4. Start engine and let run for about 10 minutes before moving the paver. This will prevent damage to the new pump due to a dry start.
5. After completing installation, check hydraulic oil level.

Replacing Screed Extension Wear Plates

Removal

1. Run extension out fully.
2. Remove endgate by disconnecting tilt screw and loosen the 7/8” jam nut.
3. Remove nut.
4. Remove two 3/8” bolts from endgate bracket.
5. Slide endgate off of stud.

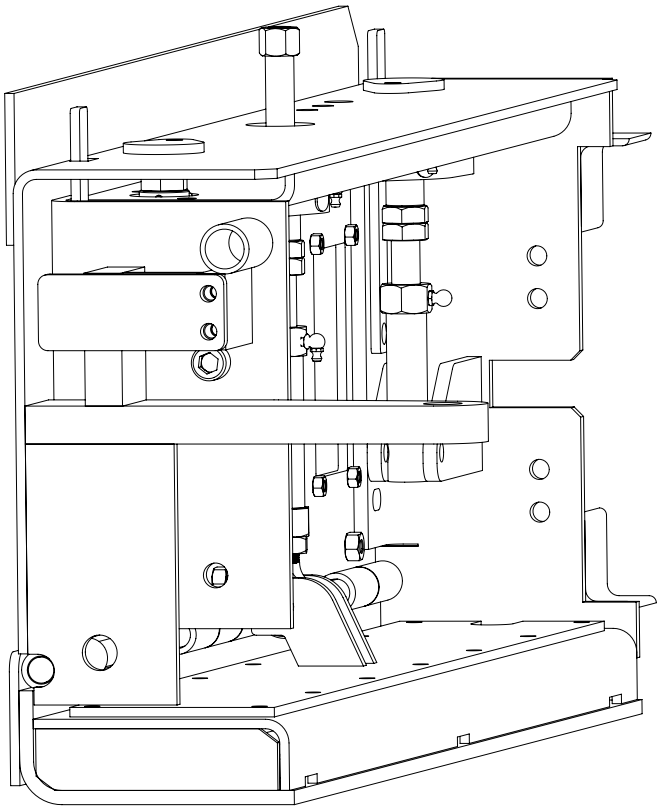


Wear Plate Anchor Bolts

Figure 7-20

6. Remove bolt out of angle of attack adjuster on top of wear plate **(Figure 7-20)**.

7. Locate and unplug the element power wire. Make certain the wire running into the extension screed is loose and will drop away when the screed plate is removed with interference.
8. Closely inspect all plugs, pins, and wires for damage. Replace if needed.
9. Lower screed to ground and drive front pivot pin out, or insert bolt into tip and pull out tapped pivot rod.



Threaded Pivot Rod

Figure 7-21

10. Lift screed and wearplate should be disconnected.

Installation

1. Clean all areas where new wearplate will be attached.
2. Place new wearplate in position with floor jack or by lowering screed to floor and slide pivot pin in.
3. Reconnect the element power wire and re-tie the power cable to the attachment point provided.

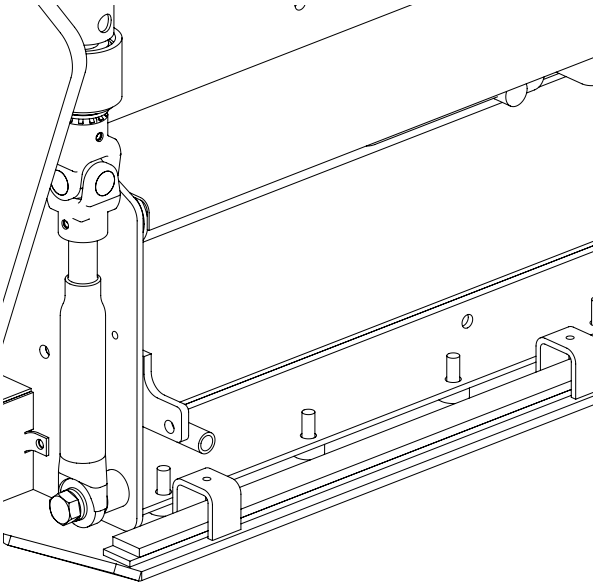
NOTE: Do not tie the power cable so that it is tight. A small amount of slack in the cable where it enters the protective hose fitting is required.

4. Attach adjustment screw to new wearplate.
5. Place endgate back on.
6. Place endgate bracket back on using two 3/8” bolts.
7. Adjust 7/8” nut so that endgate will move up and down freely, then lock in place with jam nut.
8. Connect tilt screw.

Replacing Screed Main Wear Plates

Removal

1. Remove walkboards.
2. Remove screed lids.
3. Remove the twenty-four (24) nuts **(Figure 7-22)** holding wearplate to screed frame.



Wear Plate Mounting Bolts

Figure 7-22

4. Under the heating control/distribution box, locate the element attachment plugs. Remove the protective cover, and unplug the main screed elements so that the main element power wires can be lowered with the wearplate.
5. Closely inspect all plugs, pins, and wires for damage. Replace if needed.
6. Before raising screed off of wearplate, clamp center of crown gussets so that screed frame stays flat.
7. Raise screed off of wearplate.

Installation

1. Clean screed frame.
2. Set screed frame down on to new wearplate letting cylinders carry most of weight. This will allow wearplate to be moved to align with bolts.
3. Place six (6) nuts in front left side first, then right side.

NOTE: You may need to clamp or pry around or rotate crown in and out so that six (6) nuts in right side line up.

4. Once these bolts are in place, bolt rear of wearplate up to frame assembly.
5. Once bolts are started, lift screed and set on three 2” x 4” boards to hold flat. Place one board at each end and one in the center.
6. Let screed all the way down and torque bolts from center out, 2 on left side then 2 on right side to 50 ft lbs. (67 N•m).
7. Install screed lids and walkboards.
8. Reconnect all element wires that were unplugged.

Safety Label Installation

Anytime the LeeBoy Model 8616 Conveyor Paver has been repainted or the safety labels have been removed, damaged or can't be read, a new set of labels should be ordered and reinstalled for safe operation (see ***Safety Label Locations*** in Section 2).

1. Be sure that the installation area is clean and dry. Use hot soapy water and dry the area thoroughly before installing decals.
2. Determine the exact position by taking measurements and test fitting before you remove the backing paper.
3. For decals with no top protection paper, determine the decal location and remove the smallest portion of the split backing paper.
4. Align the decal over the specified area and carefully press the small portion with the exposed adhesive backing into place.
5. Peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
6. Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.
7. If the decal has a protective top paper, use hot soapy water on the surface to which the decal is being applied. Leave wet. After determining the location, remove the backing paper and soak the decal in clean soapy water before application. This will help prevent air bubbles in the finished decal.
8. Smooth the decal into place with a sponge and check for air bubbles. Small air pockets may be pierced with a pin and smoothed out. When the decal is completely smoothed out, carefully remove the top paper.

Section 8
TROUBLESHOOTING

8

TROUBLESHOOTING CHART

Before performing any troubleshooting procedures on the LeeBoy Model 8616 Paver, review ***Safety*** in Section 2.

The troubleshooting chart below identifies the most common symptoms of failure. Use this chart to help identify the failed component. There will be a separate troubleshooting guide which will cover the fault codes shown on the display unit. If the problem persists, see your authorized LeeBoy Dealer (see ***Contact Information*** in Section 3).

Table 8-1. Paver Troubleshooting

SYMPTOM	CAUSE	REMEDY
Engine does not start	Defective battery or low battery charge	Replace or charge battery as applicable
	MASTER switch not in ON position	Set switch to the ON position
	Insufficient fuel supply	Fill fuel tank
	Fault in engine	Refer to engine manual
	Safety switch faulty	Replace
	Wires not making good connection on solenoid	Make sure wires are tight
	Plug in switch box unplugged	Plug back in
	Solenoid plunger sticking	Clean plunger
	Fuel solenoid coil defective	Replace coil
	Starter or solenoid faulty	Replace or rebuild
	Neutral switch defective	Replace
	Engine starter relay faulty	Replace
	E-Stop pushed	Reset E-Stop
Engine cuts off and will not start (Turns over but will not start)	Low fuel	Add fuel to fuel tank
	Faulty fuel solenoid	Replace solenoid
	E-Stop pushed	Reset E-Stop
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 will not run straight	One of the hydraulic drive motors is out of adjustment	Readjust motors
	Steering control not centered	Center steering control
	Travel pump defective	Replace pump or rebuild
Machine does not change speed when 2-Speed ON/OFF button is pushed	Defective relay	Replace relay
	Defective solenoid	Replace solenoid
	Defective drive motor	Replace drive motor

Table 8-1. Paver Troubleshooting (Continued)

SYMPTOM	CAUSE	REMEDY
Tracks not running smooth	Tracks too loose	Tighten track pad bolts
	Too low engine rpm to hold track tension	Rev engine to 1400 RPM and throttle back to one-half
	Track rollers worn	Replace
	Track tension pressure	Check pressure NOTE: Pressure should be set to 1200 PSI
Machine will not pull on one or both sides	Faulty hydraulic motor	Replace
	Pump pressure too low	Pump pressure should be 3000 PSI
	Faulty torque hub	Rebuild or replace
Engine runs but no hydraulics	Pump drive coupling faulty	Replace
	Defective pump	Replace
Auger hanging up or will not turn	Chain too loose	Adjust
	Chain broken	Replace
	Faulty motor	Replace
	Solenoid valve defective	Replace solenoid
	Asphalt set up around auger	Keep clean and oiled
	Overload of material to augers	Set conveyor to proper speed in Auto or use paddles in Manual position
Screed extensions binding	Asphalt set up around extension	Keep clean and oiled
Screed extension loose (work up and down)	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	Replace
	Extensions set too low	Adjust extension. Always start out in the morning with extensions all the way up, no down pressure
	Screed not heated properly	Check elements and heat control box
Screed leaving ripples	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 running out of breather cap	Hydraulic oil tank overfilled	Drain
	Oil over-heated	Slow paver down about 10% to 15%
		Check oil cooler and thermostat
Hydraulic pump cavitation or lost power	Low level in hydraulic tank	Fill
	Clogged filters	Replace
	Suction hose loose	Retighten
	Charge pump worn	Rebuild

Table 8-1. Paver Troubleshooting (Continued)

SYMPTOM	CAUSE	REMEDY
Feeder does not work on one or both sides	Defective switch	Replace switch
	Solenoid defective	Replace solenoid
	Feeder drive chain broken	Repair chain
	Defective conveyor motor	Replace motor
	Rear conveyor shaft broken	Replace conveyor shaft
Feeder flight bars hang up	Flight chains too loose	Adjust. If adjusted all the way and a link is removed you must install a 1/2 link
	Feeder drive chain too loose	Adjust every 100 hours
Loss of power to drives	Relief out of adjustment	Check pressure. Conveyors, augers, cylinders, generator pressure = 3,000 PSI, Standby load sense = 325 PSI
	Piston groups worn out	Replace
	No charge pressure	Check charge pressure. Charge pressure = 320 PSI
Electric Screed heating system will not operate at all.	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 with no breakers showing a tripped condition	Ensure all element breakers are in their “set” position with no breakers showing a tripped condition
	Generator malfunction	See “Generator Voltage Testing” on page 7-16
Electric Screed heats, but one screed section does not.	Screed section not plugged into bottom of control box out puts	Ensure the screed not heating is plugged into the bottom of the control box out puts
	Element breakers for screed section in a tripped condition	Ensure the element breakers for that screed section are not tripped
	Faulty element relay	See “Testing Element Relays” on page 7-17, or “Element Resistance Testing” on page 7-18
When starting the electric heat system, it will not stay running long, or at all.	Heat system timed out	See “Element Connections” on page 6-24
Electric Screed is heating, but never gets hot enough to pave.	Elements improperly clamped	Go over proper element installation procedures, and ensure elements are clamped properly
	Generator malfunction	See “Generator Speed Tuning” on page 7-16 See “Generator Voltage Testing” on page 7-16
Electric heating system seems to be working, but the light isn’t on.	HEAT ON indicator light is burned out	Replace the HEAT ON indicator light
Elements have been tested but the breaker still trips.	Faulty element wiring	Test or inspect element wiring

PLUS ONE FAULTS

FAULT Screens

Figure 8-1

Figure 8-2

The FAULT screens are used to inform the operator that a particular problem exists. A red box indicates a fault has been detected with that particular component.

- Output Fault - The output is on and no current is measured (open or short circuit).
- Input Sensor Fault - The sensor voltage is outside acceptable limits.
- Input Sensor Cal - The sensor has not been calibrated.
- Controller Offline - No CAN communication with controller

Use the RIGHT/LEFT arrows to scroll through the fault pages. To exit the screen, press ESC.

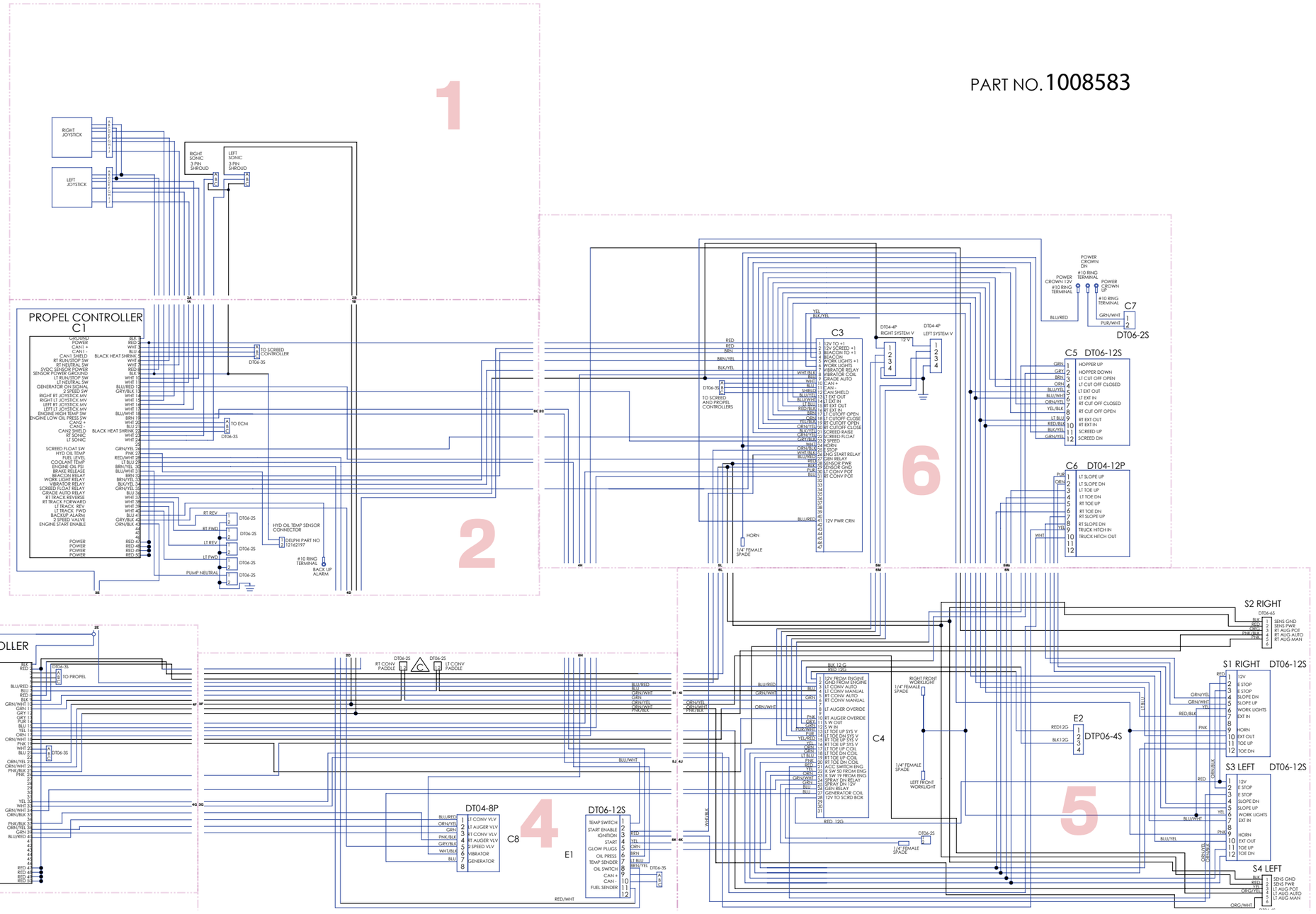
8

NOTES

Section 9
SCHEMATICS

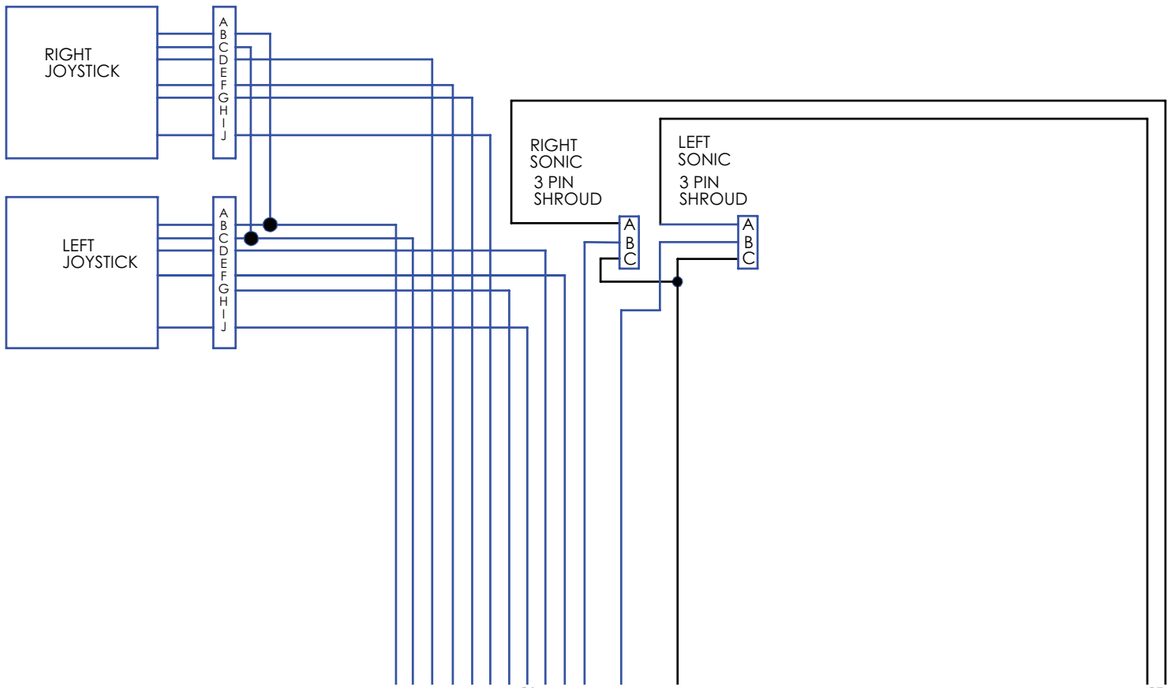
Harness, Main (Sheet 1)

PART NO. 1008583



NOTES

Harness, Main (Sheet 2)

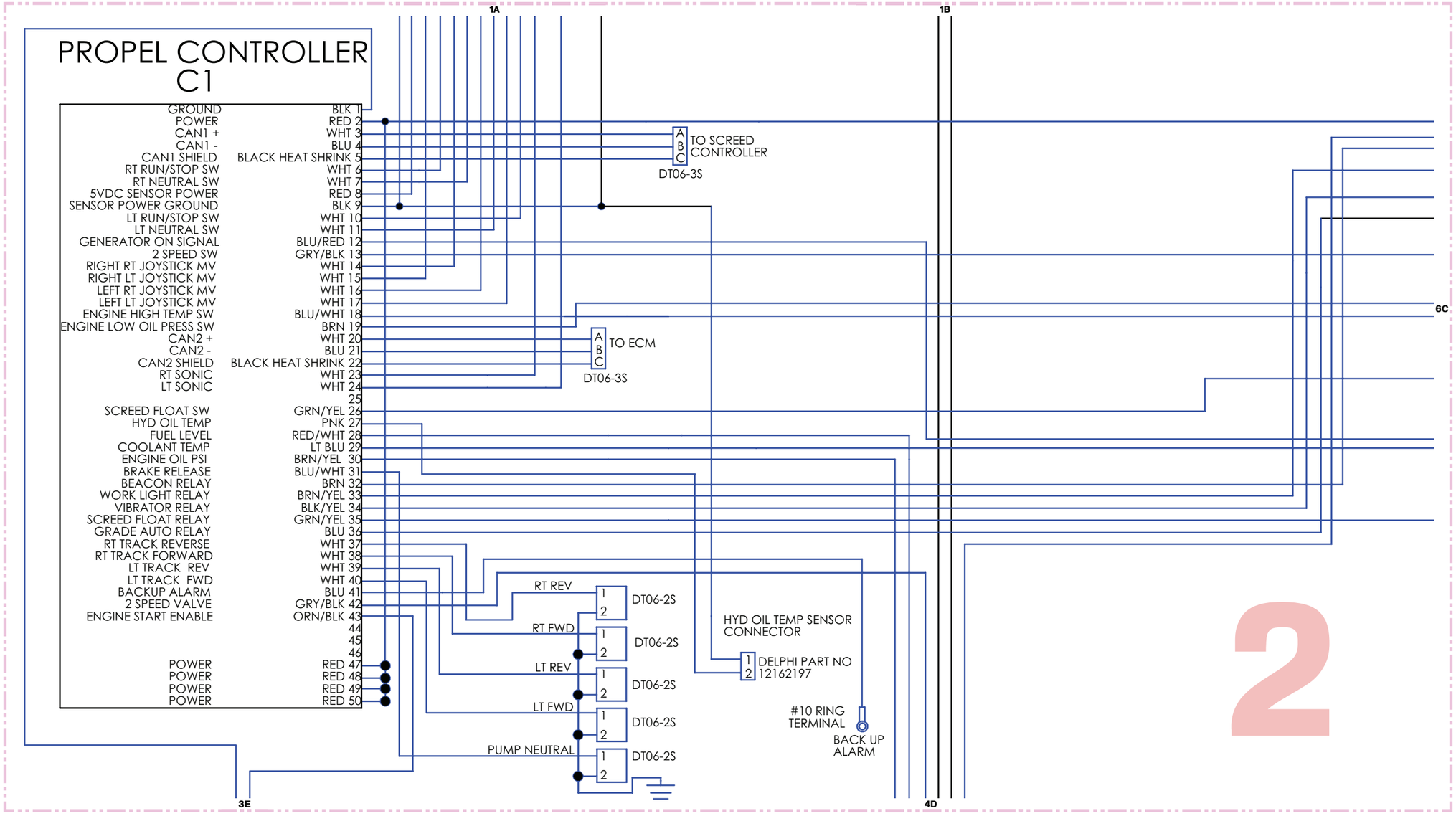


1

9

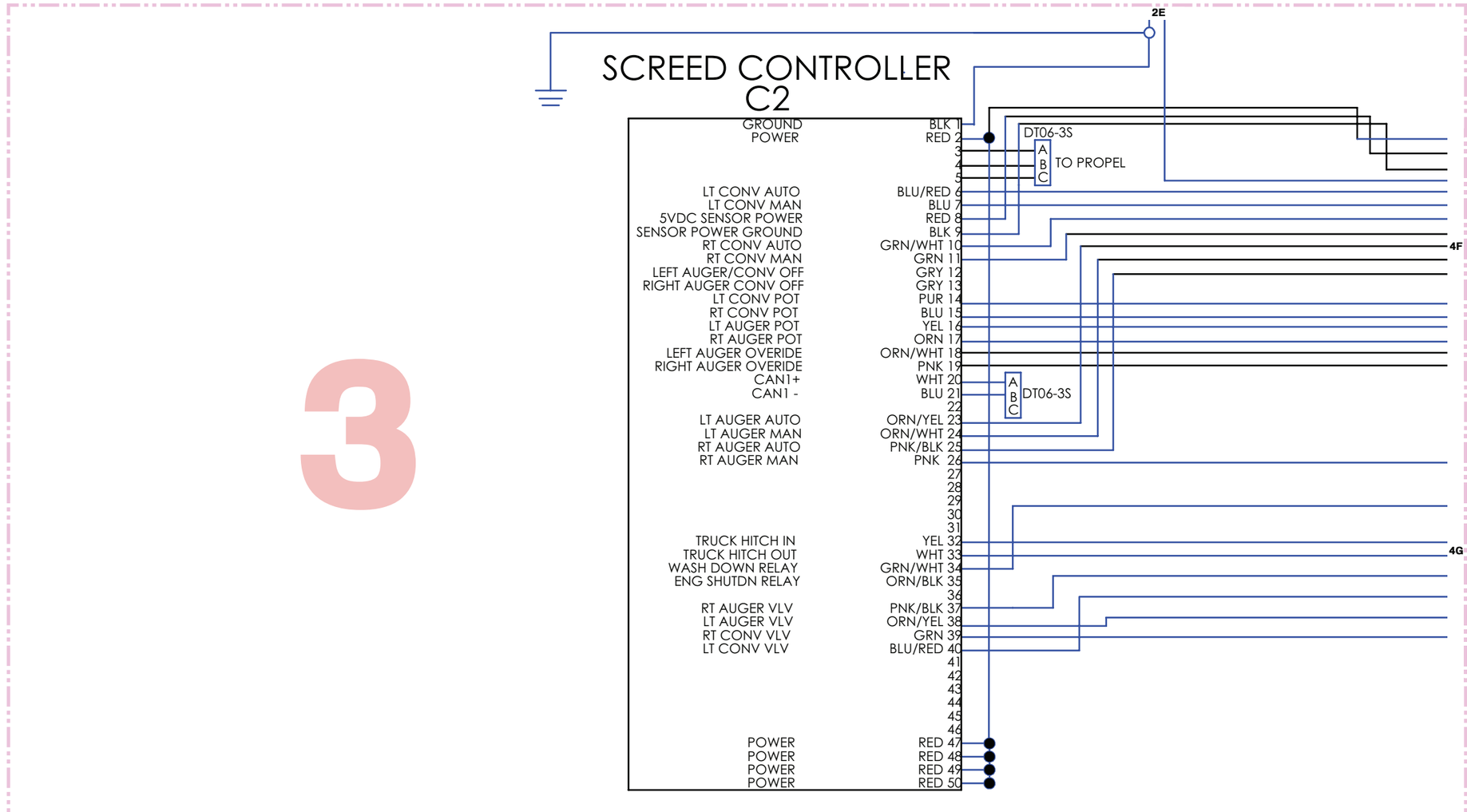
NOTES

Harness, Main (Sheet 3)



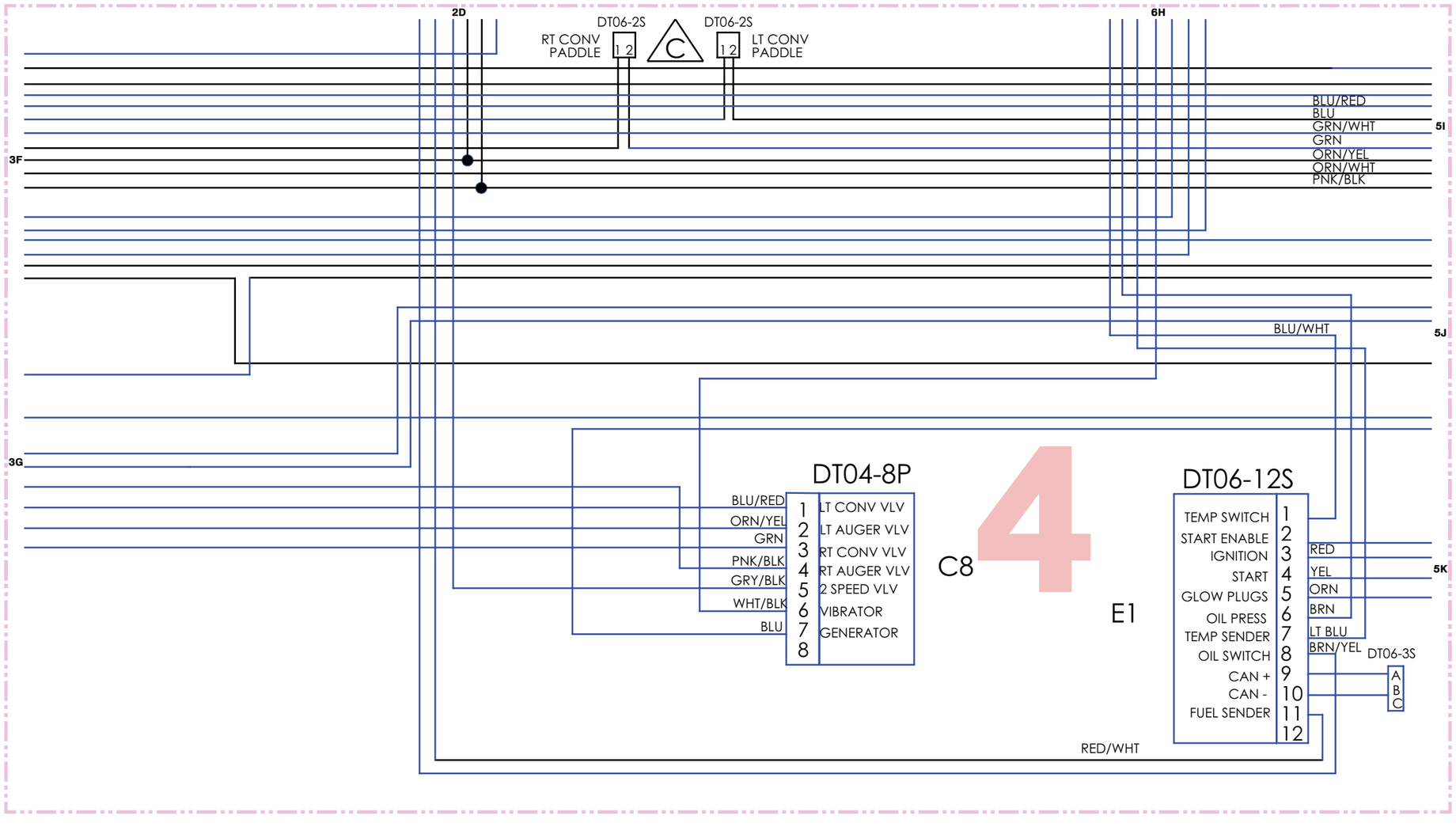
NOTES

Harness, Main (Sheet 4)



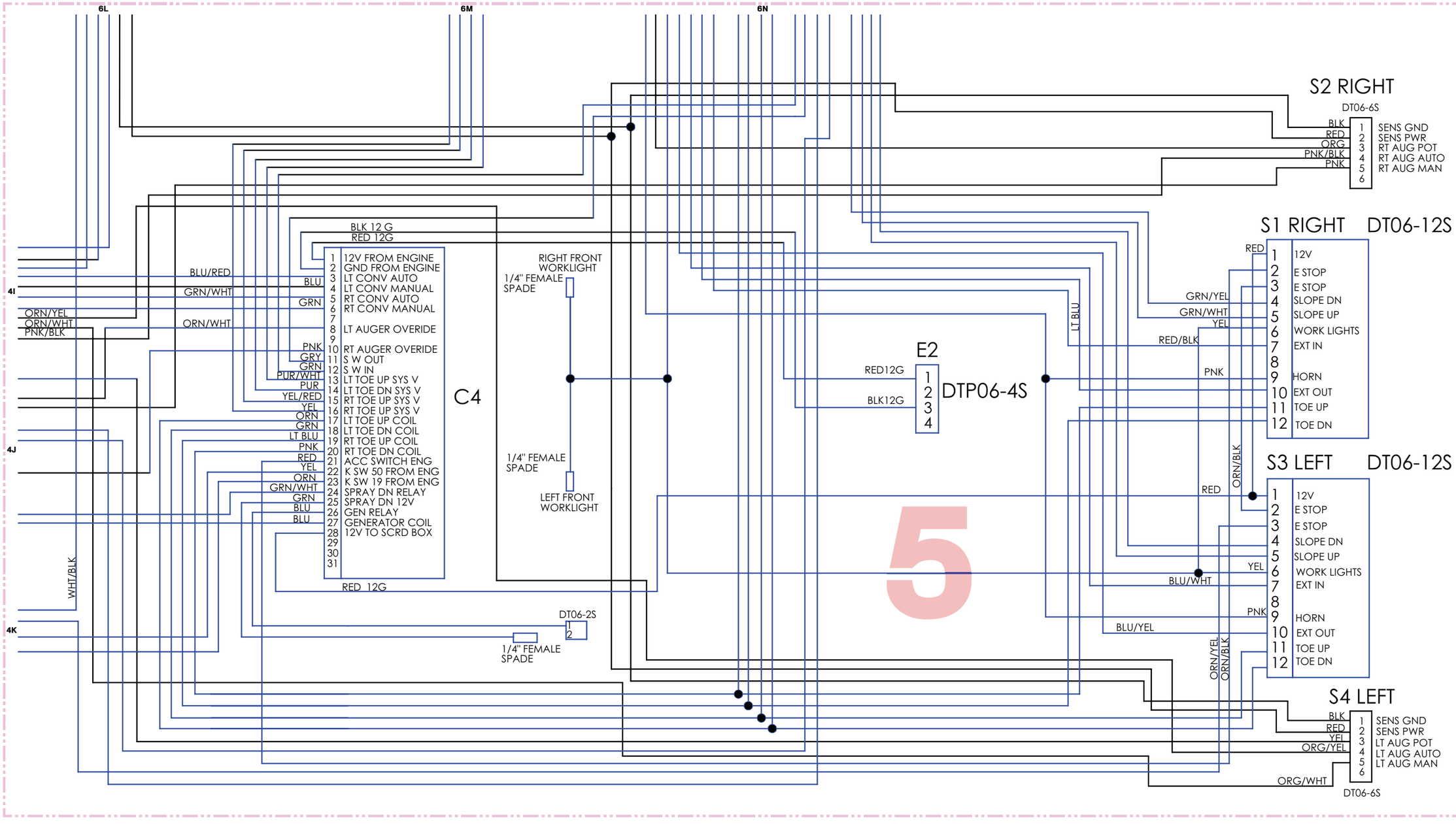
NOTES

Harness, Main (Sheet 5)



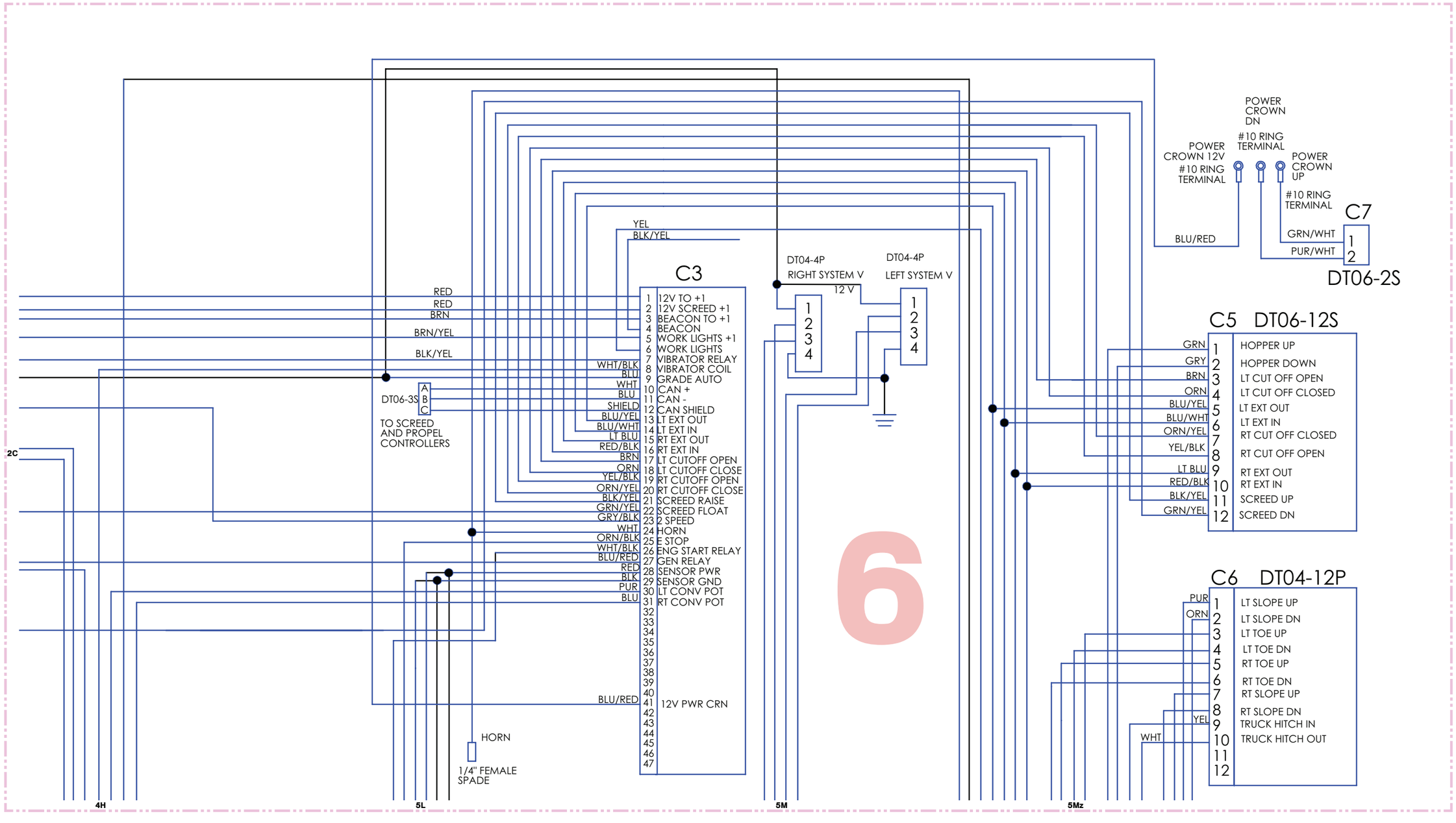
NOTES

Harness, Main (Sheet 6)



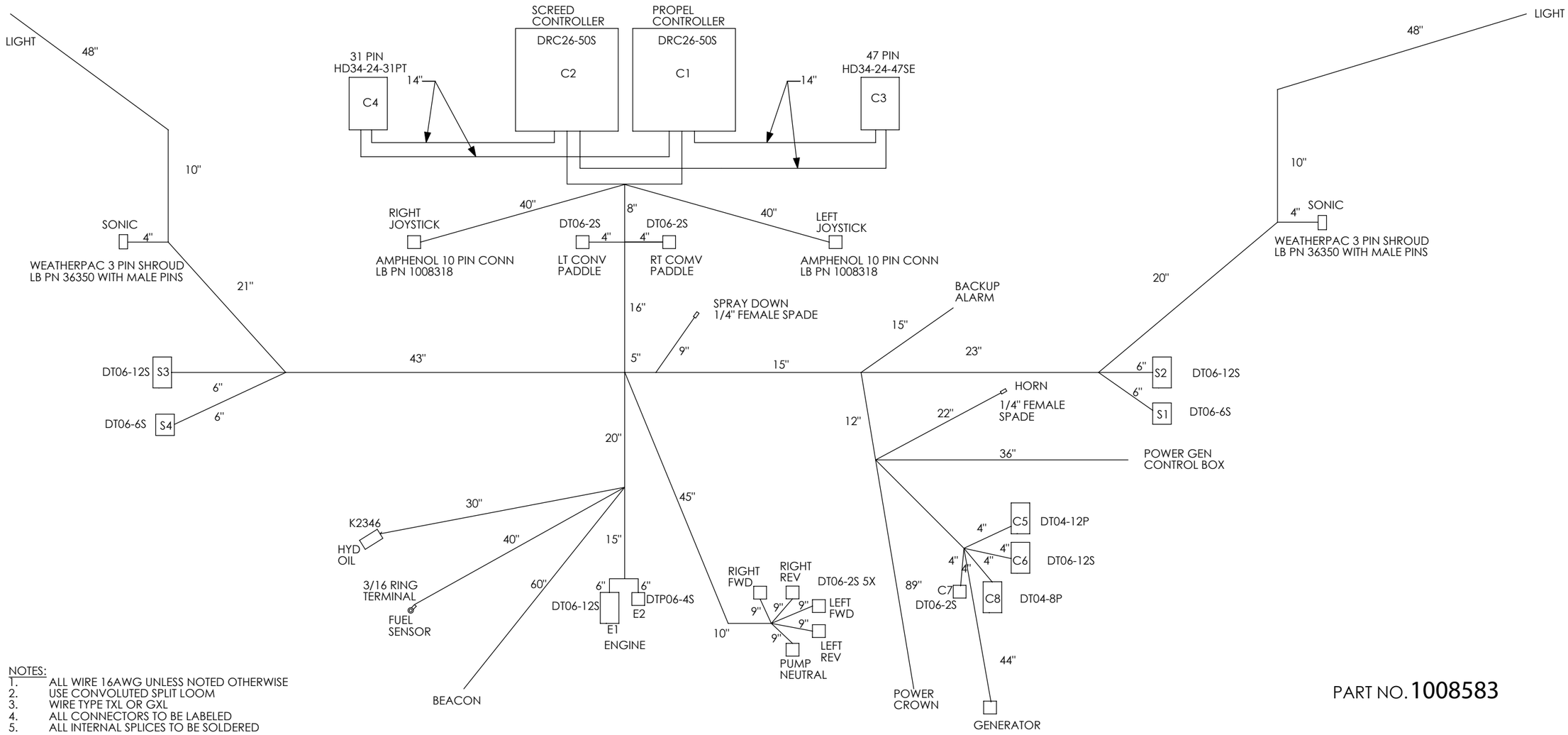
NOTES

Harness, Main (Sheet 7)



NOTES

Harness, Main (Sheet 8)



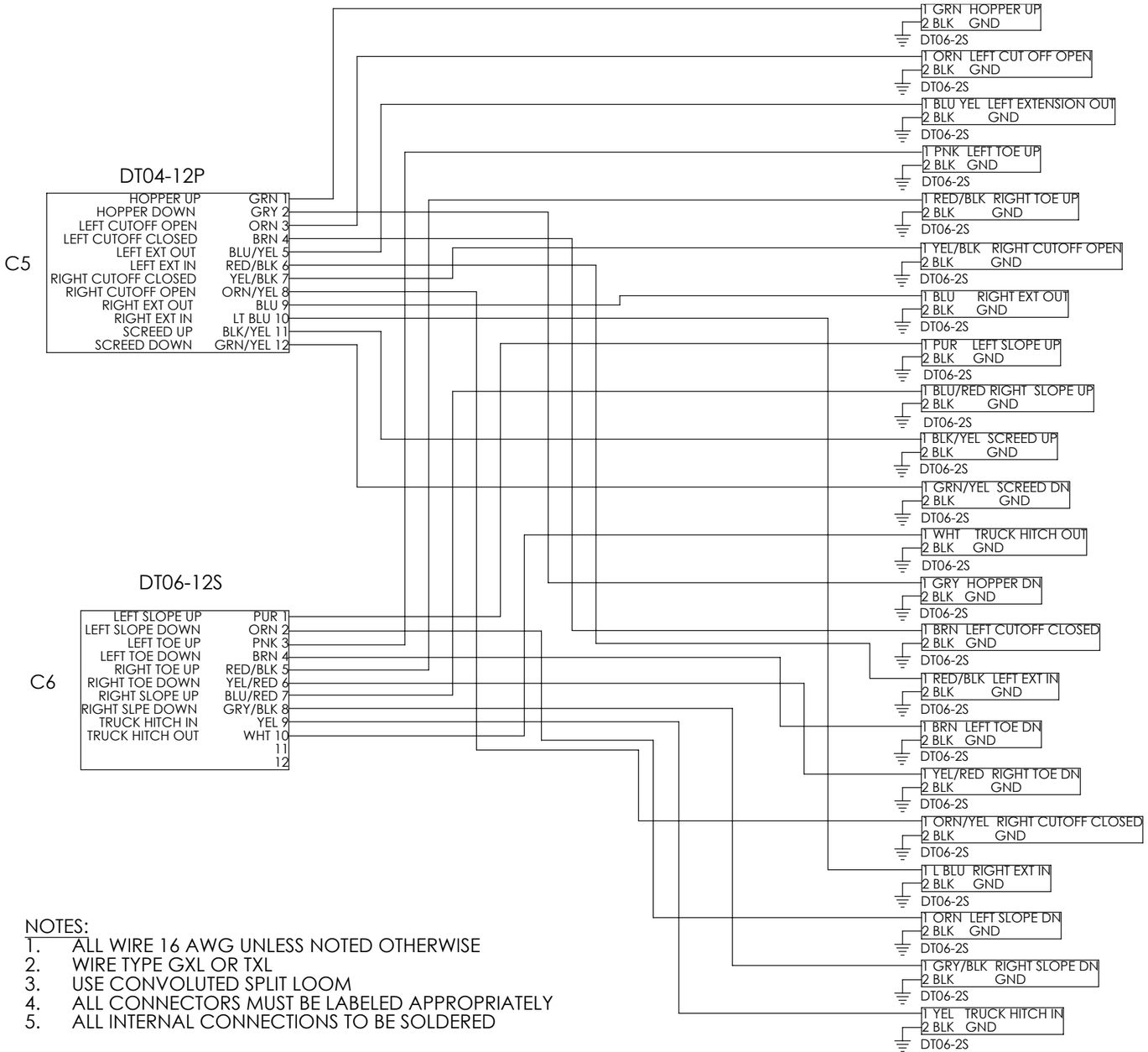
NOTES:
1. ALL WIRE 16AWG UNLESS NOTED OTHERWISE
2. USE CONVOLUTED SPLIT LOOM
3. WIRE TYPE TXL OR GXL
4. ALL CONNECTORS TO BE LABELED
5. ALL INTERNAL SPLICES TO BE SOLDERED

PART NO. 1008583

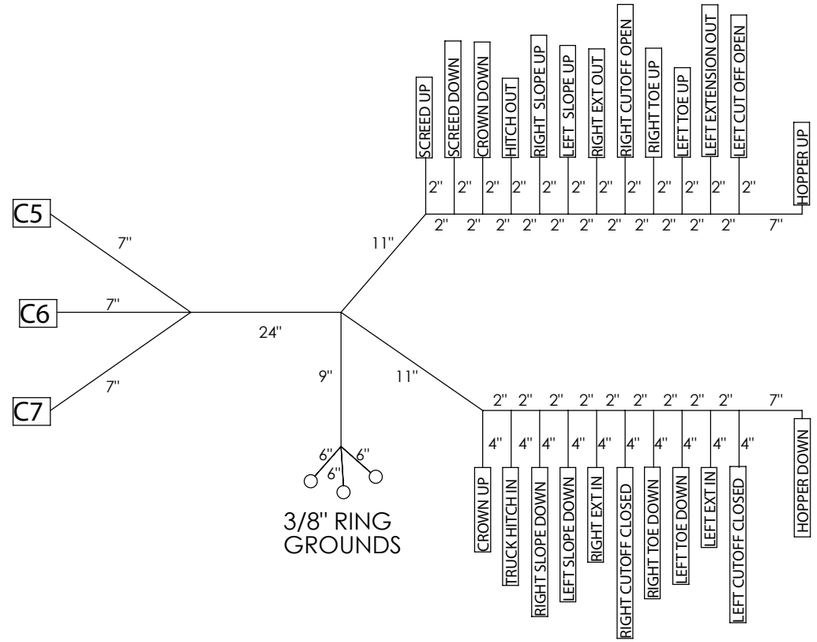
9

NOTES

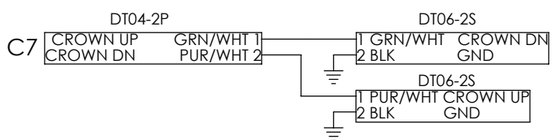
Harness, Manifold



NOTES:
1. ALL WIRE 16 AWG UNLESS NOTED OTHERWISE
2. WIRE TYPE GXL OR TXL
3. USE CONVOLUTED SPLIT LOOM
4. ALL CONNECTORS MUST BE LABELED APPROPRIATELY
5. ALL INTERNAL CONNECTIONS TO BE SOLDERED



MANIFOLD CROWN

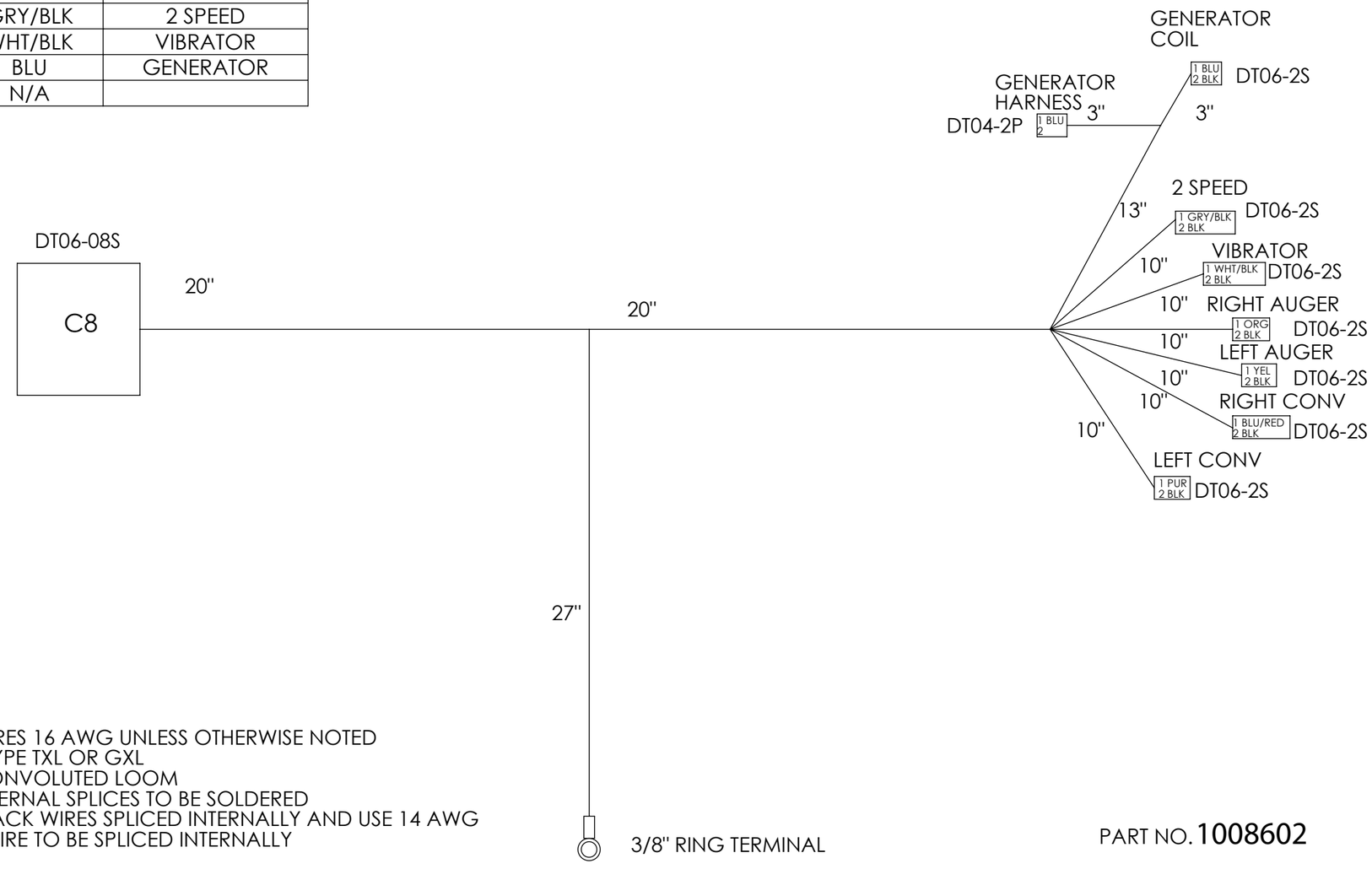


PART NO. 1008585

NOTES

Harness, Manifold Front

PIN	COLOR	FUNCTION
1	PUR	LEFT CONV
2	YEL	LEFT AUGER
3	BLU/RED	RIGHT CONV
4	ORG	RIGHT AUGER
5	GRY/BLK	2 SPEED
6	WHT/BLK	VIBRATOR
7	BLU	GENERATOR
8	N/A	



NOTES:
1. ALL WIRES 16 AWG UNLESS OTHERWISE NOTED
2. WIRE TYPE TXL OR GXL
3. USE CONVOLUTED LOOM
4. ALL INTERNAL SPLICES TO BE SOLDERED
5. ALL BLACK WIRES SPLICED INTERNALLY AND USE 14 AWG
6. BLUE WIRE TO BE SPLICED INTERNALLY

PART NO. 1008602

NOTES

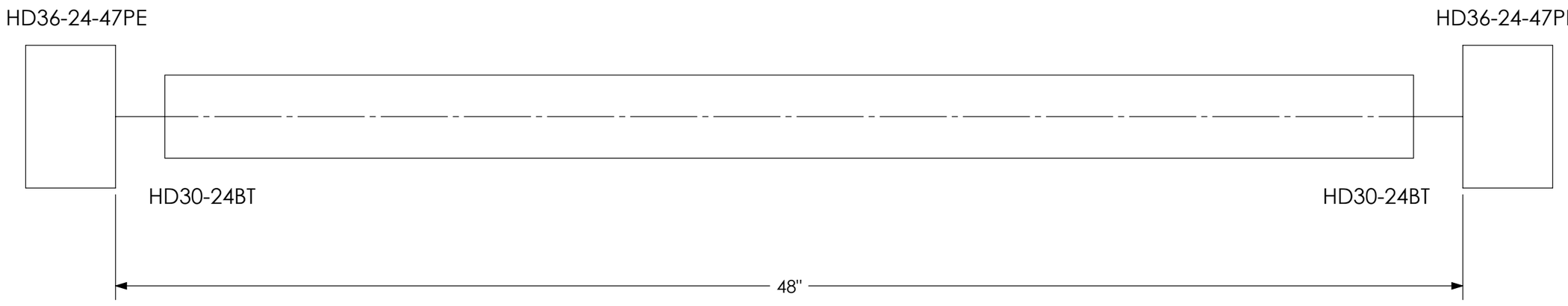
Harness, Jumper 47Pin Dash to Pedestal

PIN	COLOR	FUNCTION
1	RED	12V PROPEL
2	RED	12V SCREED
3	BRN	BEACON RELAY
4	YEL/BLK	BEACON
5	BRN/YEL	WL RELAY
6	YEL	WORK LIGHT
7	BLK/YEL	VIB RELAY
8	WHT/BLK	VIBRATOR
9	BLU	GRADE CONTROL
10	CAN+ WHT	CAN BUS
11	CAN- BLU	CAN BUS
12	SHIELD	CAN BUS
13	BLU/YEL	L EXT OUT
14	BLU/WHT	L EXT IN
15	LTBLU	R EXT OUT
16	RED/BLK	R EXT IN
17	BRN	L CUTOFF OPEN
18	ORG	L CUTOFF CLOSE
19	YEL/BLK	R CUTOFF OPEN
20	ORG/YEL	R CUTOFF CLOSE
21	BLK/YEL	SCREED RAISE
22	GRN/YEL	SCREED FLOAT
23	GRY/BLK	2 SPEED
24	WHT	HORN
25	ORG/BLK	E STOP
26	ORG/BLK	ESTOP
27	BLU/RED	GEN RELAY
28	RED	SENSOR PWR
29	BLK	SENSOR GND
30	PRP	L CONV POT
31	BLU	R CONV POT
32	YEL	L AUGER POT
33	ORG	R AUGER POT
34	N/A	
35	N/A	
36	N/A	
37	N/A	
38	N/A	
39	N/A	
40	N/A	
41	BLU/RED	POWER CROWN
42	N/A	
43	N/A	
44	N/A	
45	N/A	
46	N/A	
47	N/A	

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

PART NO. 1008582

PIN	COLOR	FUNCTION
1	RED	12V PROPEL
2	RED	12V SCREED
3	BRN	BEACON RELAY
4	YEL/BLK	BEACON
5	BRN/YEL	WL RELAY
6	YEL	WORK LIGHT
7	BLK/YEL	VIB RELAY
8	WHT/BLK	VIBRATOR
9	BLU	GRADE CONTROL
10	CAN+ WHT	CAN BUS
11	CAN- BLU	CAN BUS
12	SHIELD	CAN BUS
13	BLU/YEL	L EXT OUT
14	BLU/WHT	L EXT IN
15	LTBLU	R EXT OUT
16	RED/BLK	R EXT IN
17	BRN	L CUTOFF OPEN
18	ORG	L CUTOFF CLOSE
19	YEL/BLK	R CUTOFF OPEN
20	ORG/YEL	R CUTOFF CLOSE
21	BLK/YEL	SCREED RAISE
22	GRN/YEL	SCREED FLOAT
23	GRY/BLK	2 SPEED
24	WHT	HORN
25	ORG/BLK	E STOP
26	ORG/BLK	ESTOP
27	BLU/RED	GEN RELAY
28	RED	SENSOR PWR
29	BLK	SENSOR GND
30	PRP	L CONV POT
31	BLU	R CONV POT
32	YEL	L AUGER POT
33	ORG	R AUGER POT
34	N/A	
35	N/A	
36	N/A	
37	N/A	
38	N/A	
39	N/A	
40	N/A	
41	BLU/RED	POWER CROWN
42	N/A	
43	N/A	
44	N/A	
45	N/A	
46	N/A	
47	N/A	



NOTES

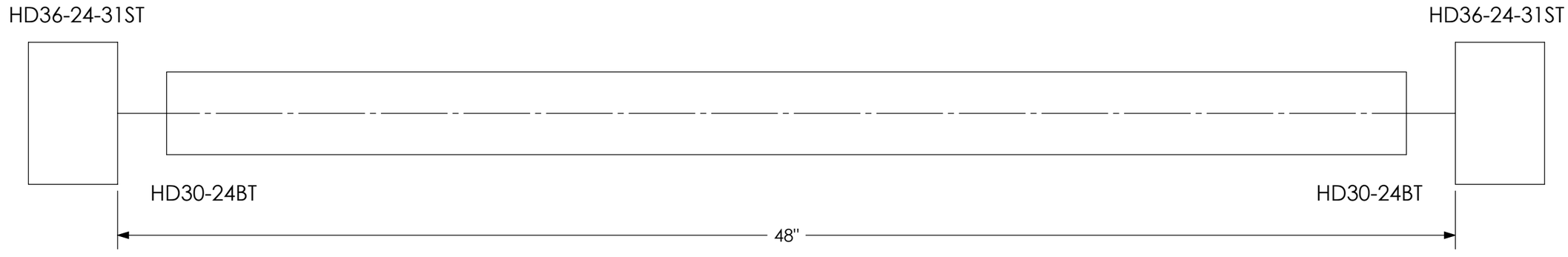
Harness, Jumper 31Pin Dash to Pedestal

PIN	COLOR	FUNCTION
1	RED 12G	12V ENGINE
2	BLK 12G	GND ENGINE
3	BLU/RED	L CONV AUTO
4	BLU	L CONV MAN
5	GRN/WHT	R CONV AUTO
6	GRN	R CONV MAN
7	ORG/YEL	L AUGER AUTO
8	ORG/WHT	L AUGER MAN
9	PNK/BLK	R AUGER AUTO
10	PNK	R AUGER MAN
11	GRY	SW OUT
12	GRN	SW IN
13	PRP/WHT	L TOW UP SYS5
14	PRP	L TOW DN SYS5
15	YEL/RED	R TOW UP SYS5
16	YEL	R TOW DN SYS5
17	ORG	L TOW UP
18	GRN	L TOW DN
19	LTBLU	R TOW UP
20	PNK	R TOW DN
21	RED	ACC PWR ENG
22	YEL	IGN SW 50
23	ORG	GLOW PLUGS
24	GRN/WHT	SPRAY DN RELAY
25	GRN	SPRAY DN PMP
26	BLU	GEN RELAY
27	BLU	GEN COIL
28	RED 12G	SCREED BX 12V
29	BLK 12G	SPARE
30	N/A	
31	N/A	

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

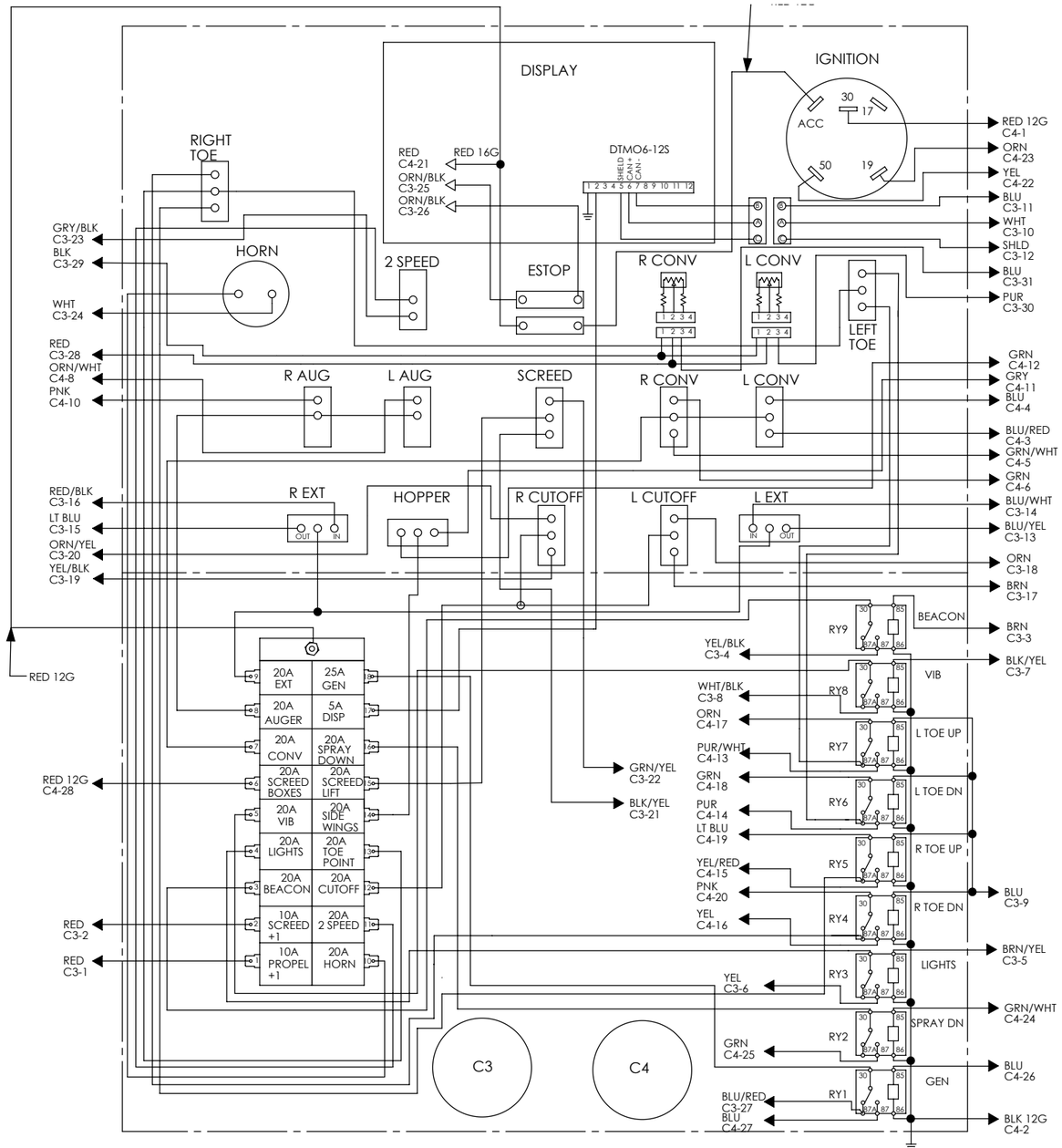
PART NO. 1008581

PIN	COLOR	FUNCTION
1	RED 12G	12V ENGINE
2	BLK 12G	GND ENGINE
3	BLU/RED	L CONV AUTO
4	BLU	L CONV MAN
5	GRN/WHT	R CONV AUTO
6	GRN	R CONV MAN
7	ORG/YEL	L AUGER AUTO
8	ORG/WHT	L AUGER MAN
9	PNK/BLK	R AUGER AUTO
10	PNK	R AUGER MAN
11	GRY	SW OUT
12	GRN	SW IN
13	PRP/WHT	L TOW UP SYS5
14	PRP	L TOW DN SYS5
15	YEL/RED	R TOW UP SYS5
16	YEL	R TOW DN SYS5
17	ORG	L TOW UP
18	GRN	L TOW DN
19	LTBLU	R TOW UP
20	PNK	R TOW DN
21	RED	ACC PWR ENG
22	YEL	IGN SW 50
23	ORG	GLOW PLUGS
24	GRN/WHT	SPRAY DN RELAY
25	GRN	SPRAY DN PMP
26	BLU	GEN RELAY
27	BLU	GEN COIL
28	RED 12G	SCREED BX 12V
29	BLK 12G	SPARE
30	N/A	
31	N/A	



NOTES

Control Box



C3

PIN	COLOR	FUNCTION
1	RED	12V TO C1-2 PR +1
2	RED	12V TO C2-2 SC +1
3	BRN	RY9-85 TO C1-32
4	YEL/BLK	RY9-87 BEACON
5	BRN/YEL	RY3-85 TO C1-33
6	YEL	RY3-87 W LIGHTS
7	BLK/YEL	RY8-85 TO C1-34
8	WHT/BLK	RY8-87 VIB
9	BLU	GRADE AUTO TO C1-36
10	WHT	CAN + TO C1-3
11	BLU	CAN - TO C1-4
12	SHLD	CAN SHLD TO C1-5
13	BLU/YEL	L EXT OUT
14	BLU/WHT	L EXT IN
15	LT BLU	R EXT OUT
16	RED/BLK	R EXT IN
17	BRN	L CUT OFF OPEN
18	ORN	L CUTOFF CLOSE
19	YEL/BLK	R CUTOFF OPEN
20	ORN/YEL	R CUTOFF CLOSE
21	BLK/YEL	SCREED RAISE
22	GRN/YEL	SCREED FLOAT
23	GRY/BLK	2 SPEED
24	WHT	HORN
25	ORN/BLK	E STOP IN TO C1-46
26	ORN/BLK	ESTOP ENG START RELAY
27	BLU/RED	RY1-87A TO C1-12 GEN
28	RED	12V FROM C2-8
29	BLK	GND FROM C2-9
30	PUR	L CONV FROM C2-14
31	BLU	R CONV FROM C2-15
32	YEL	L AUG FROM C2-16
33	ORN	R AUG FROM C2-17
34	N/A	
35	N/A	
36	N/A	
37	N/A	
38	N/A	
39	N/A	
40	N/A	
41	BLU/RED	12V TO PWR CROWN
42	N/A	
43	N/A	
44	N/A	
45	N/A	
46	N/A	
47	N/A	

C4

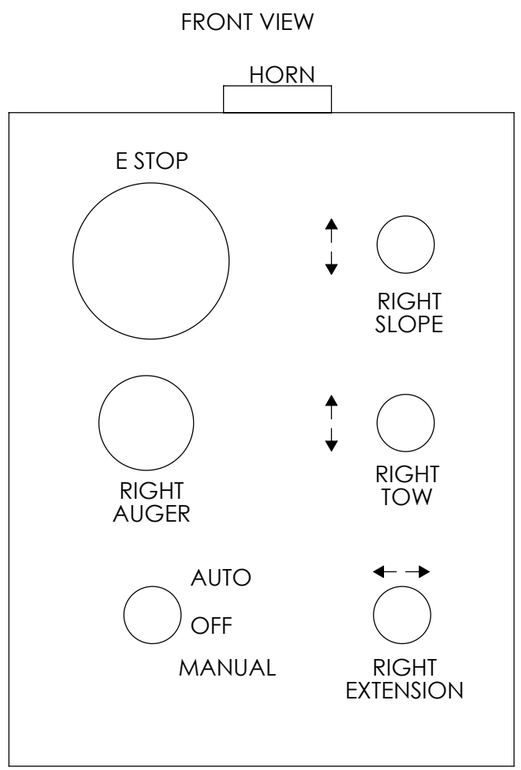
PIN	COLOR	FUNCTION
1	RED 12G	12V FROM E2-1
2	BLK 12G	GND FROM E2-3
3	BLU/RED	L CONV AUTO
4	BLU	L CONV MAN
5	GRN/WHT	R CONV AUTO
6	GRN	R CONV MAN
7	N/A	
8	ORN/WHT	L AUG OVERIDE
9	N/A	
10	PNK	R AUG OVERIDE
11	GRY	SW OUT
12	GRN	SW IN
13	PUR/WHT	L TOE UP SYS V
14	PUR	L TOE DN SYS V
15	YEL/RED	R TOE UP SYS V
16	YEL	R TOE DN SYS V
17	ORN	L TOE UP COIL
18	GRN	L TOE DN COIL
19	LT BLU	R TOE UP COIL
20	PNK	R TOE DN COIL
21	RED	FUSE/ESTOP E1-3
22	YEL	K SW 50 FROM E1-4
23	ORN	K SW 19 FROM E1-5
24	GRN/WHT	RY2-85 TO C2-34
25	GRN	RY2-87 SPRAY DN
26	BLU	RY1-85 FROM HT BX
27	BLU	RY1-87 - GEN COIL
28	RED 12G	12V TO SCREED BX
29	N/A	
30	N/A	
31	N/A	

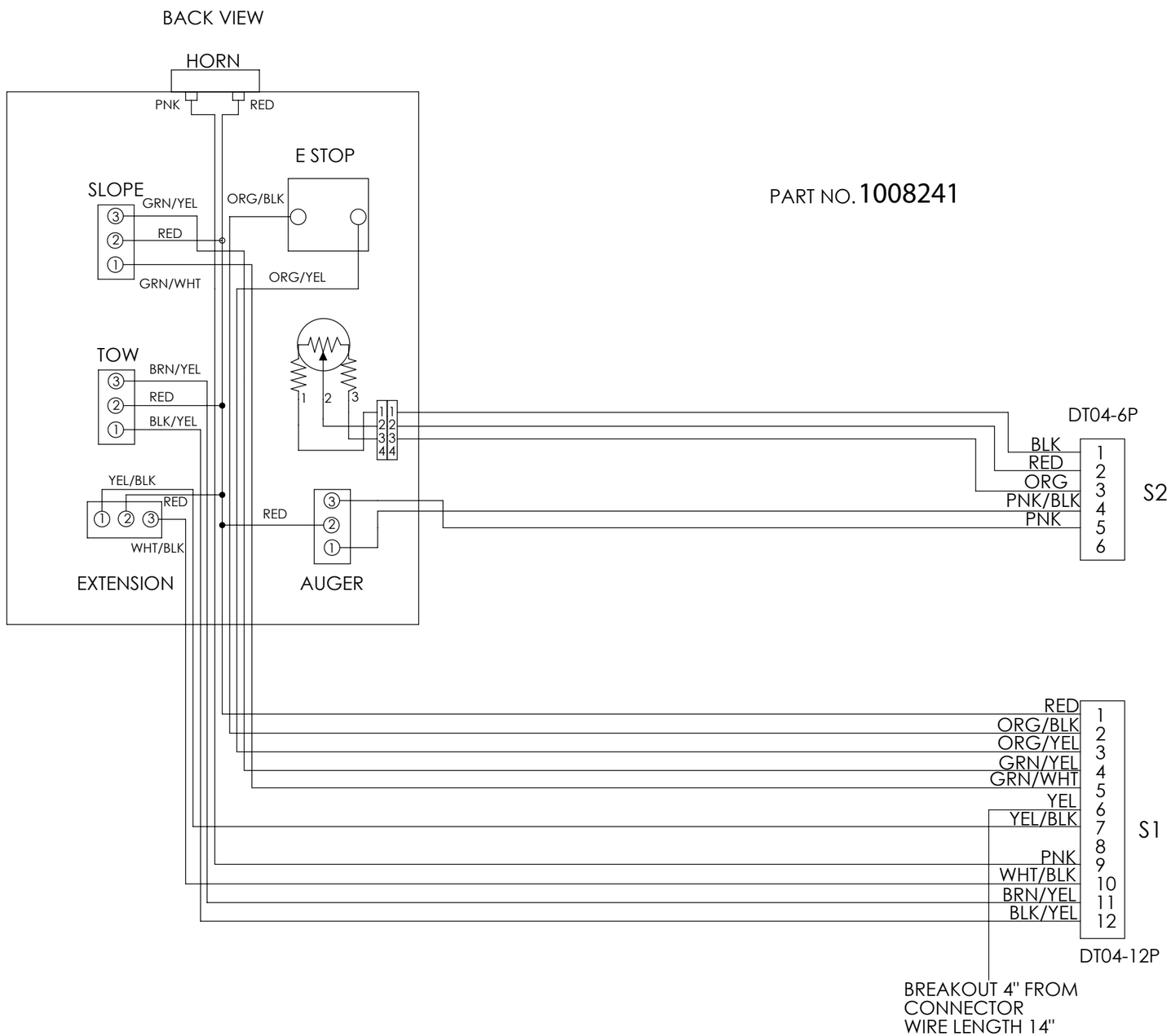
PART NO. 1008458

NOTES:
1. ALL WIRES 16AWG UNLESS NOTED OTHERWISE
2. WIRE TYPE GXL OR TXL

NOTES

Screed Control Box RH



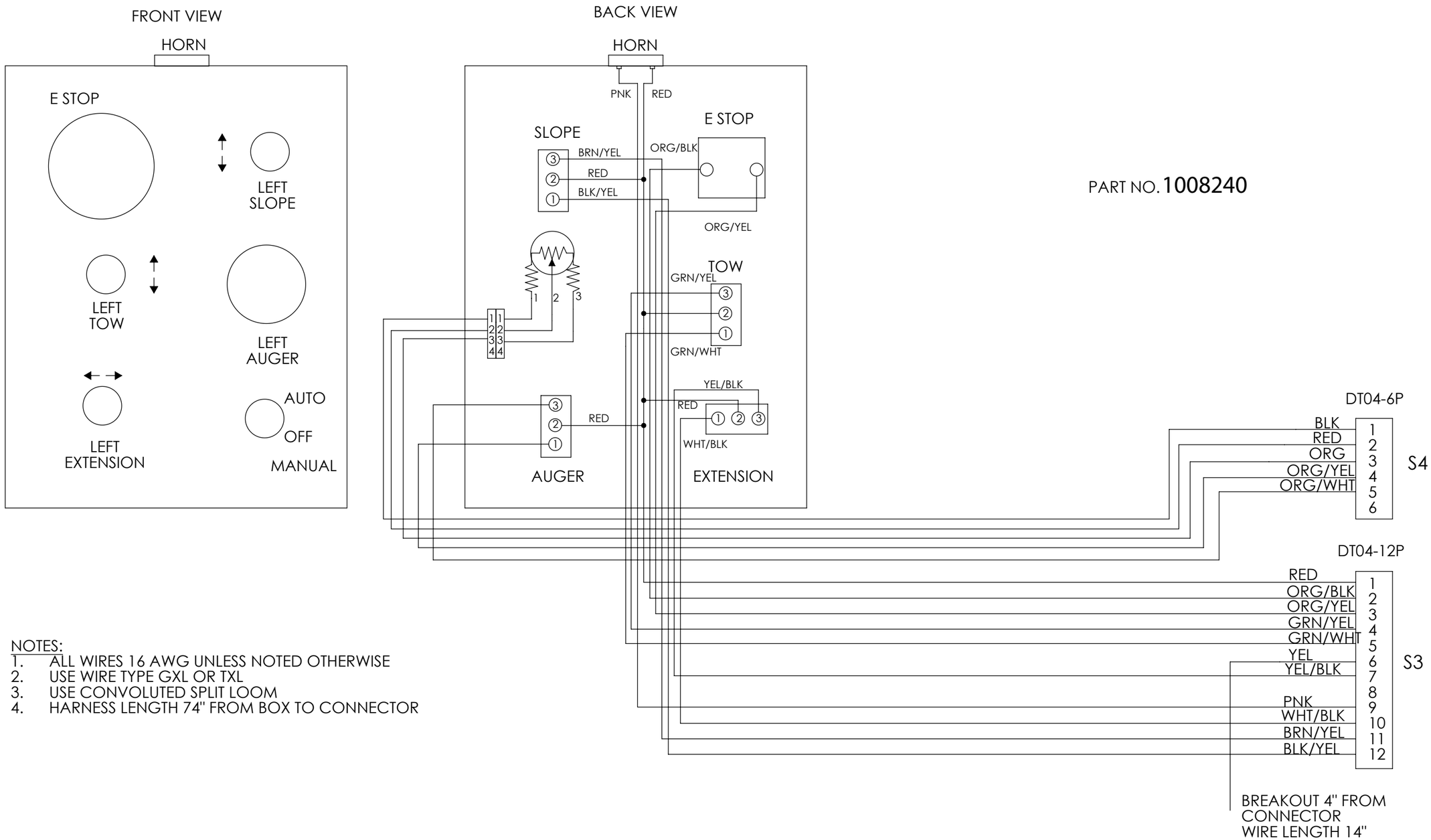


NOTES:
1. ALL WIRES 16 AWG UNLESS NOTED OTHERWISE
2. USE WIRE TYPE GXL OR TXL
3. USE CONVOLUTED SPLIT LOOM
4. HARNESS LENGTH 74" FROM BOX TO CONNECTOR

9

NOTES

Screed Control Box LH



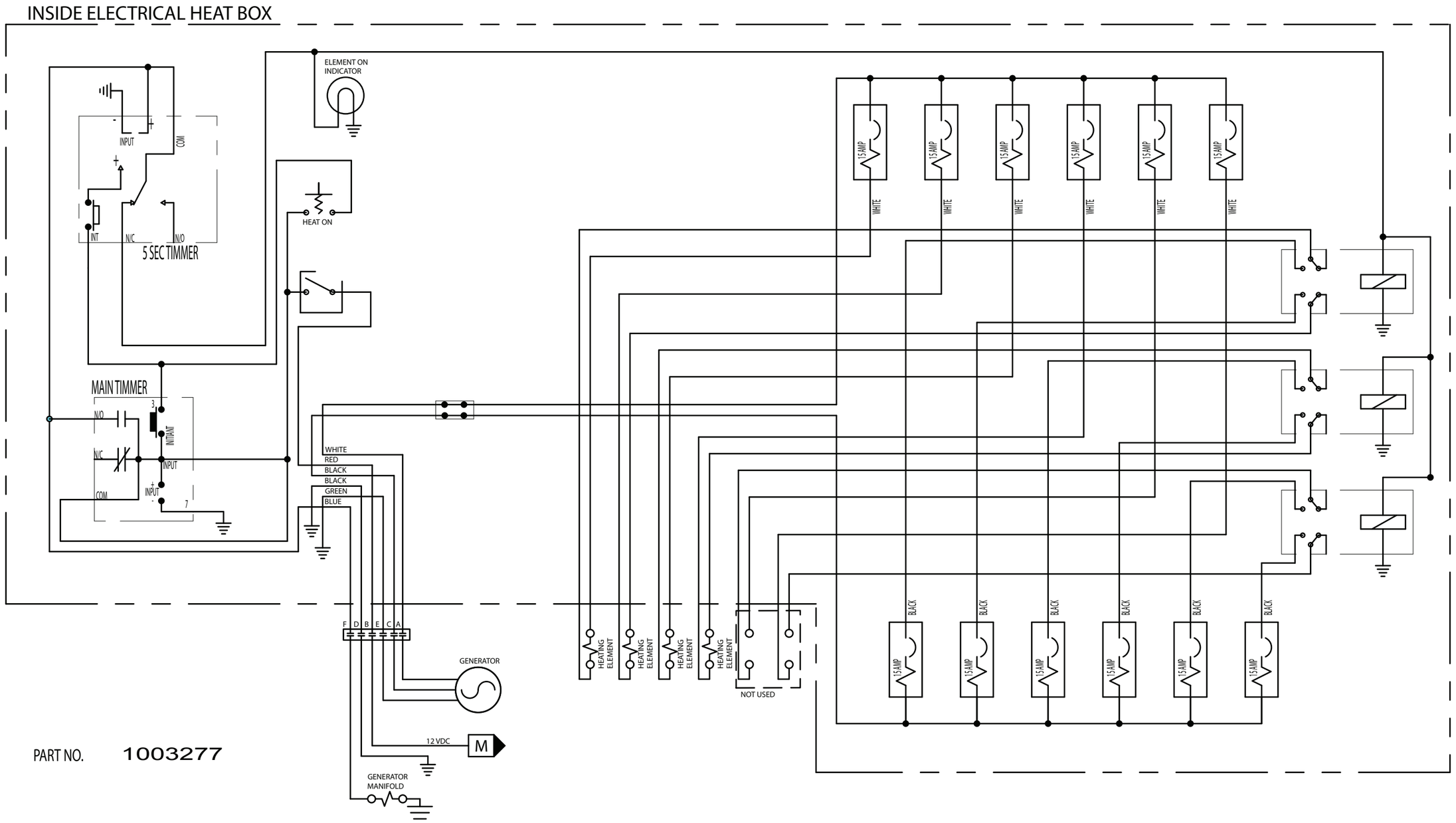
NOTES:
1. ALL WIRES 16 AWG UNLESS NOTED OTHERWISE
2. USE WIRE TYPE GXL OR TXL
3. USE CONVOLUTED SPLIT LOOM
4. HARNESS LENGTH 74" FROM BOX TO CONNECTOR

PART NO. 1008240

9

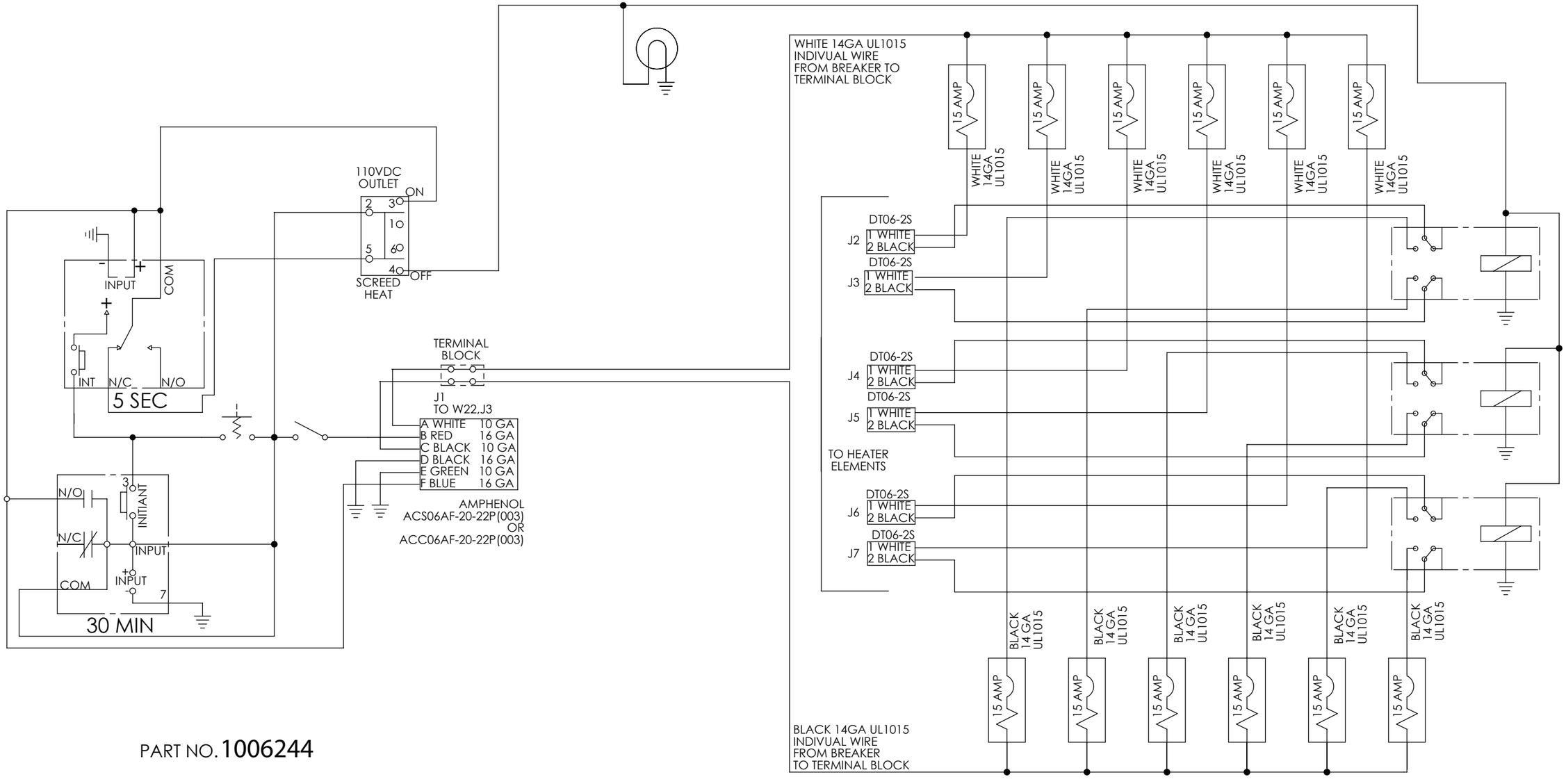
NOTES

Screed Heat Box Schematic



NOTES

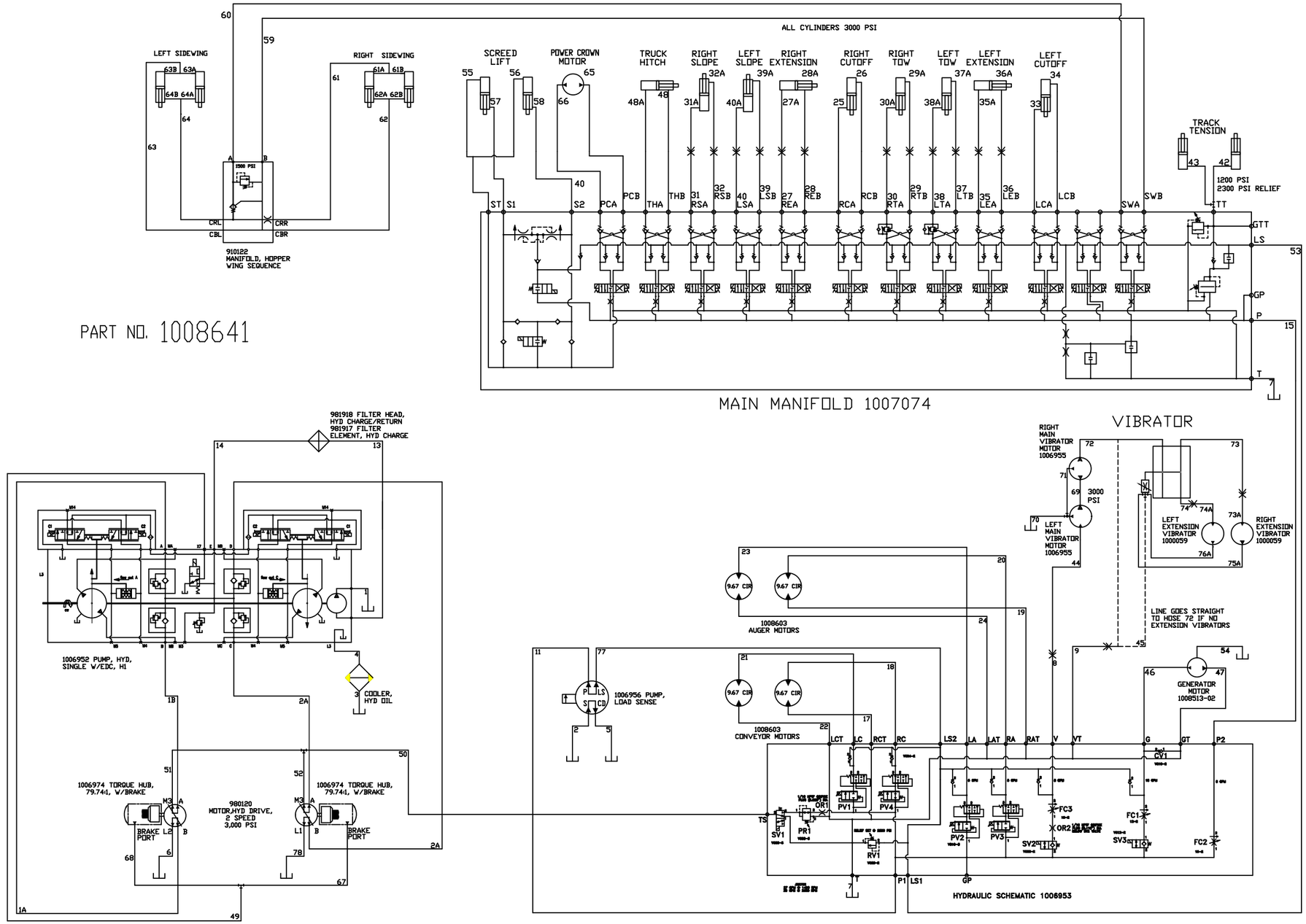
Screed Heat Box With 110VAC Schematic



PART NO. 1006244

NOTES

Hydraulic Schematic



NOTES

Section 10

ILLUSTRATED PARTS LIST (IPL)

Quick Reference Guide - Filters

Part Number	Description	Maint. Interval	Figure Ref.
38385-02	Kubota, Air Filter, Secondary	250 Hours	Figure 10-7
38385-01	Kubota, Air Primary Filter	250 Hours	Figure 10-7
1001166-12	Kubota, In-line Filter	250 Hours	Figure 10-7
982080-01	Kubota, Oil Filter	250 Hours	Figure 10-7
982080-02	Kubota, Fuel Secondary Filter	250 Hours	Figure 10-7
980560	Hydraulic, Suction Strainer	250 Hours	Figure 10-10
290030	Hydraulic, Element Charge	250 Hours	Figure 10-10
36926	Spray Down Pump, Strainer	250 Hours	Figure 10-13

Quick Reference Guide - Harness

Part Number	Description
1008240	Harness, 816 Screed Control Box, LH
1008241	Harness, 816 Screed Control Box, RH
1008458	Harness, 816 Control Box, Without DPI610
1008581	Harness, Jumper, 31 Pin Dash To Pedastel
1008582	Harness, Jumper, 47 Pin Dash To Pedastel
1008583	Harness, Main
1008585	Harness, Manifold
1008602	Harness, Manifold, Front

Track Assembly - Poly Pads LH

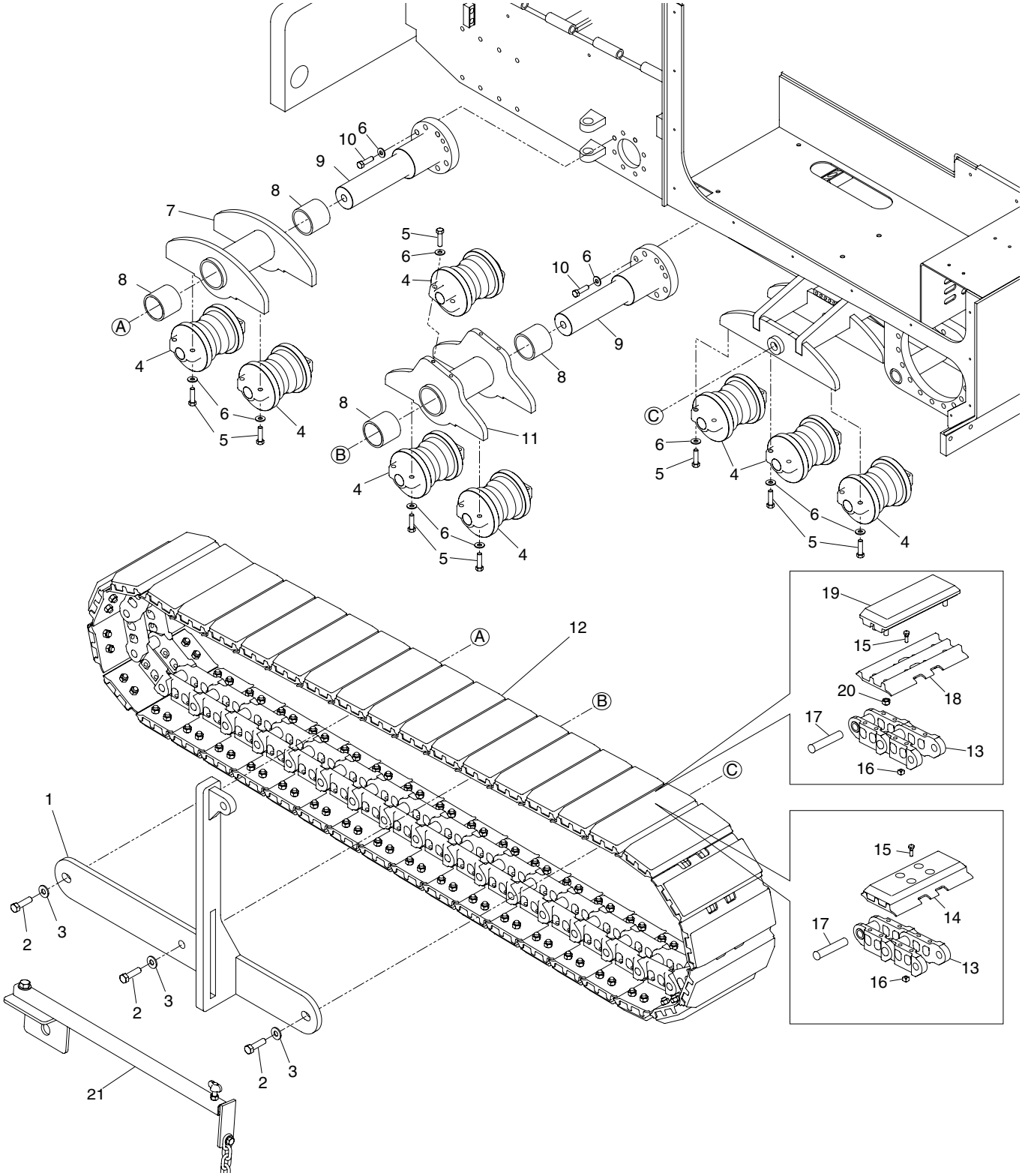


Figure 10-1

Track Assembly - Poly Pads LH Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1007024SRV	1	Assy, Screed Arm Mnt, LH	
-	1007025SRV	1	Assy, Screed Arm Mnt, RH	Not Shown
-		2		
2	100-16-14-40-5F	3	CSHH, 1.00-14 X 2.50	
3	986836	3	Wasrher, Lock, 1.00, Nord Wedge	
4	851566	8	Track Roller	
-	1007656	A/R	Bar, Roller Spacer, 1/4”	Not Shown
5	100-M12-1.75-70-8.8	12	CSHH, M12 X 70 X 30	
6	302-10	32	Washer, Lock, .625	
7	1006693	1	W/M, Front Bogie Roller	
8	1006691	4	Bushing, Bogie Roller	
9	1006686	2	W/M, Bogie Shaft w/Flang	
10	100-10-18-32-5	20	CSHH, .625-18 X 2.00	
11	1006692	1	W/M, Idler Bogie Roller	
12	1007003	2	Track Assy, Poly Pads, 140mm, 1 side	Optional Complete Assy
—	1008900	2	Track, Poly, 14"Molded, 40 Links, 140mm	Standard Complete Assy
13	1007003-04	A/R	Chain, 140mm, 40 Links	
14	1007003-05	1	Pad, molded with poly, 140mm chain	
15	1007003-08	160	Grouser Bolt	
16	1007003-09	160	Grouser Nut	
17	1007003-07	1	Pin, Chain 140mm	
18	1007003-06	A/R	Grouser without Pad	
19	1007003-01	A/R	Pad, Poly, Bolt on Replacement	Option
20	1007003-10	160	Nut, Poly Pad	
21	1008730SRV	A/R	Assembly, Guide Bar, LH	
-	1008724	A/R	Plate, Guide Bar Mount	
-	1008728	A/R	Rod, Guide Bar	
-	1008727	A/R	Weldment, Rod, Guide Bar	
-	920070	A/R	Thumb Screw, .375-16 X 1.00	
-	858206	A/R	Chain, Proof Coil, .250 X 10 Link	

Track Assembly - Tension and Propel LH

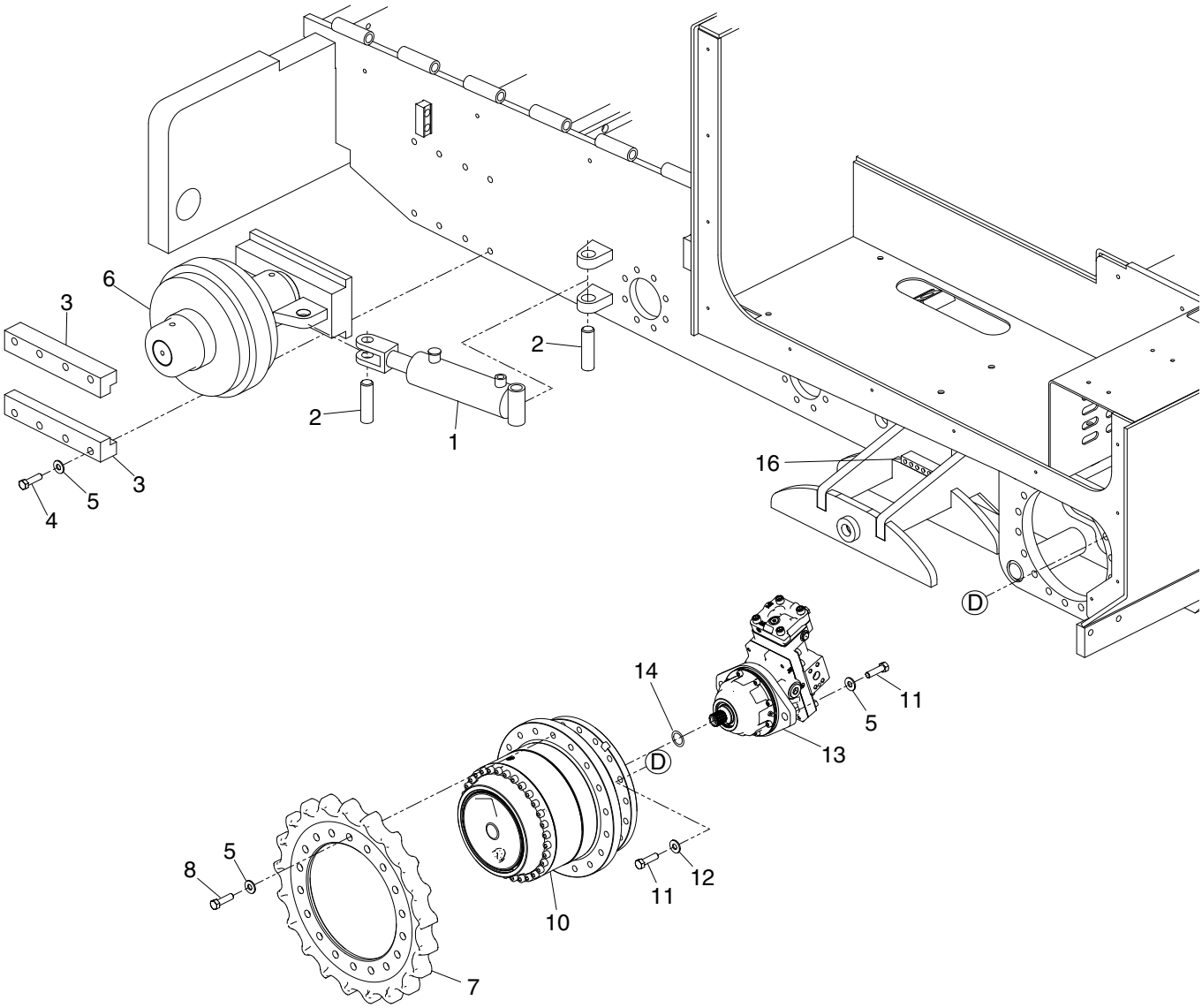


Figure 10-2

Track Assembly - Tension and Propel LH Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	980150	1	Hydraulic Cylinder, Track Tension	
–	980150-01	1	Seal Kit	Not Shown
2	980167SRV	2	Pin, Clevis	
–	81019	4	Pin, Cotter	Not Shown
3	1006699	2	Bar, Idler Side Tapped	
4	100-10-11-52-5	8	CSHH, 625-11 x 325	
5	302-10	26	Washer, Lock, 625	
6	1006965SRV	1	W/M, Front Idler w/slide	
7	1006987	1	Sprocket, Track 1556mm Pitch	
8	100-613-1A	18	CSHH, 625-11 x 300	
10	1006974	1	Torque Hub, Track Drive	
11	1003611	20	CSHH, M16 x 55mm	
12	302-8	20	Washer, Lock, .500	
13	980120	1	Hydraulic Motor, Propulsion	
14	982457	2	O-ring	
16	1003174	2	Kit, Grease Manifold, 8816	Grease Fittings/Hoses, 1 per side

Conveyor Assembly

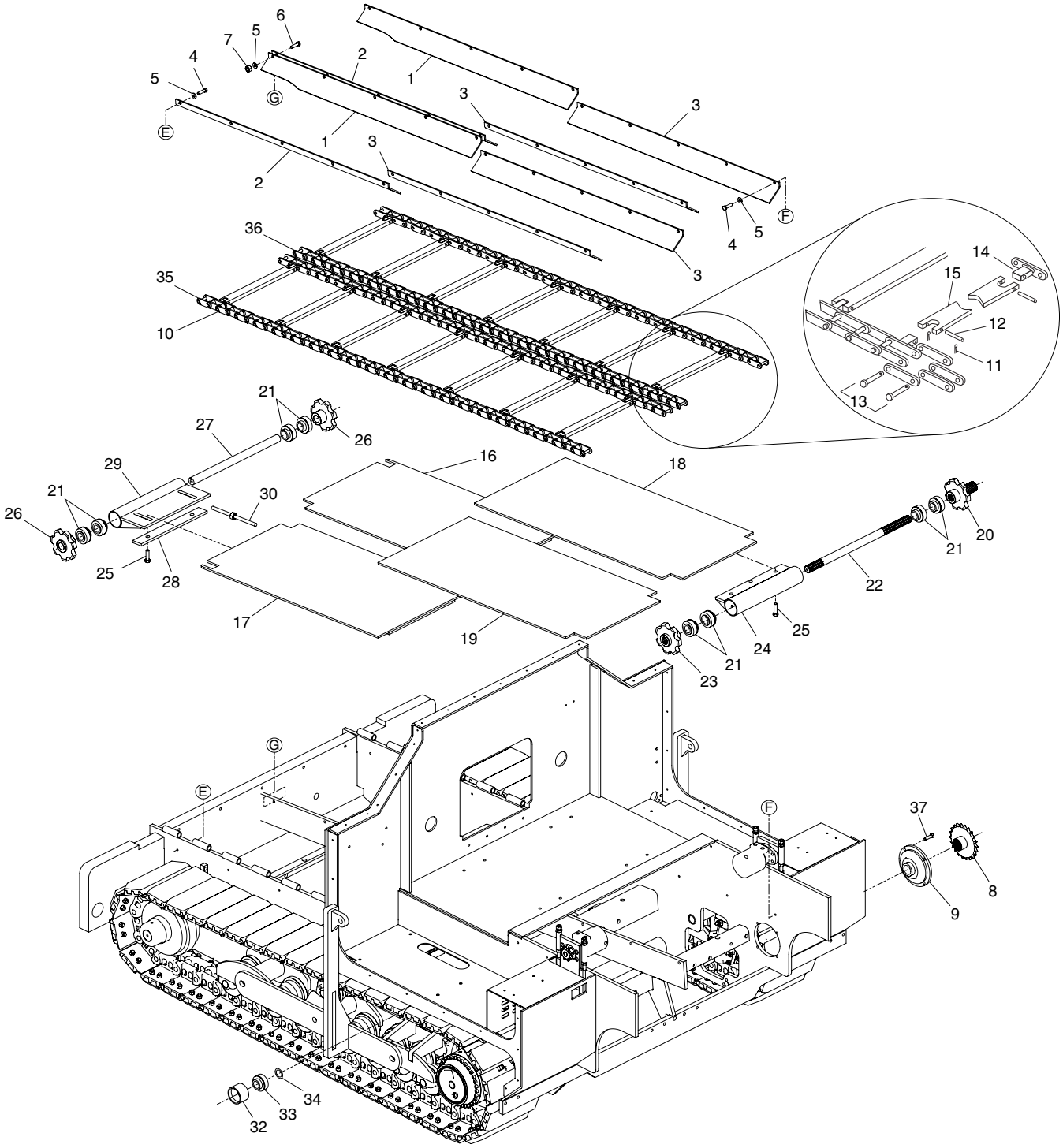


Figure 10-3

Conveyor Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006674	2	Chain Guard, Front, RH	
2	1006673	2	Chain Guard, Front, LH	
3	1006675	4	Chain Guard, Rear	
4	102-410-1A	20	CSHH, 500-13 x 225	
5	119-5	30	Washer, Flat, 500	
6	102-408-1A	10	CSHH, 500-13 x 175	
7	116-5	10	Nut, .500-13	
8	1007048SRV	2	Sprocket, Conveyor, Rear	
9	851483	2	Plate, Conveyor Mount, w/Brg.	
10	1007052SRV	2	Chain Assembly, Conveyor	Includes 35,36,15,12
11	850100A	A/R	T-Pin	
12	851118-1	A/R	Rollpin	
13	850070A	A/R	Link, Master, Conveyor Chain	
14	850080B	A/R	Link, w/Tab, Conveyor Chain	
-	851118-2	A/R	Tab, Conveyor Chain, weld-on	
15	1007052-01	A/R	Drag Bar	
16	1008612SRV	1	Weldment, Conveyor , Front Right	
17	1008611SRV	1	Weldment, Conveyor , Front Left	
18	1008614SRV	1	Weldment, Conveyor , Rear Right	
19	1008613SRV	1	Weldment, Conveyor , Rear Left	
20	1007060SRV	2	Sprocket, Rear Axle Housing	
21	850130	16	Bearing, Insert, 1.50	
22	1007061	2	Drive Shaft, Rear Axle Housing	
23	1007062SRV	2	Sprocket, Rear Axle Housing	
24	1007057	2	Rear Axle Housing	Includes item 21
25	102-608-1A	10	CSHH, 625-11 x 175	
26	1008923SRV	4	Sprocket, Front Axle Housing	
27	980511	2	Drive Shaft, Front Axle Housing	
28	1007051	2	Plate, Front Axle Housing	
29	1008919SRV	2	Assembly, Conveyor Idler	Includes item 21
30	983589SRV	2	Rod, Threaded, 625-11	
32	850162	6	Roller, Conveyor Chain Idler (w/bearing)	
33	850130	6	Bearing, Insert, 1.50	
34	850040	6	Snap Ring	
35	1007052-02	2	Chain, Conveyor, 87 Pitches w/Master, LH	
36	1007052-03	2	Chain, Conveyor, 87 Pitches w/Master, RH	
37	1009055	4	Bolt, Conveyor Bearing	

Pushbar Assembly

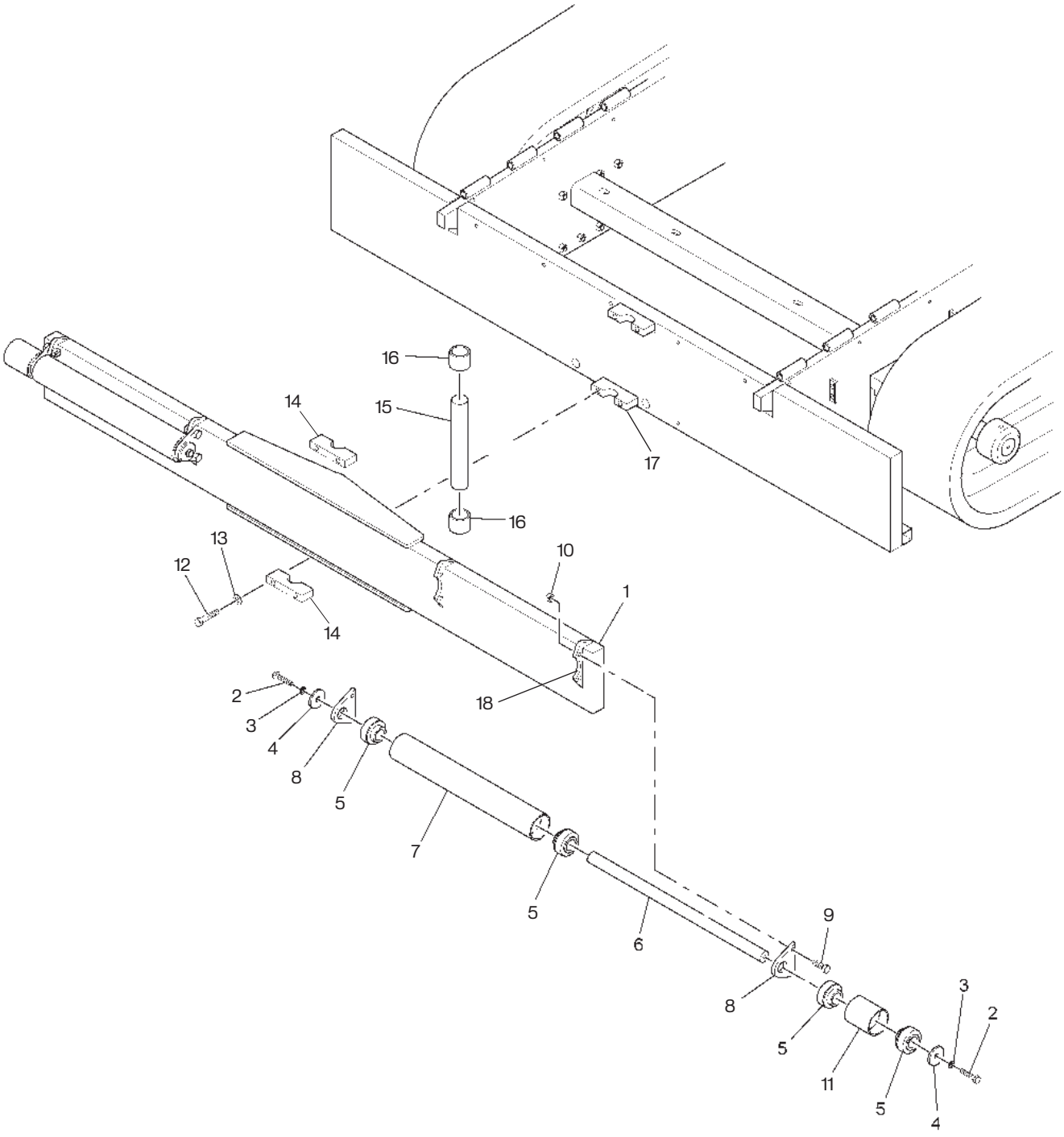


Figure 10-4

Pushbar Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	980027	1	Assembly, Push Bar	
2	102-410-1A	4	CSHH, 500-13 x 225	
3	118-5	8	Washer, Lock, 500	
4	240391	4	Washer, Screed Swivel Mount	
5	850130	4	Bearing	
6	980034	2	Shaft, Pushbar Roller	
7	980033	1	Roller Assy, Push Bar, 24.00 Lg	
8	980787	2	Arm, Push Block	
9	102-608-1A	2	CSHH, 625-11 x 175	
10	143-7	2	Nut, Lock, 625-11	
11	980036	1	Pipe, Pushbar Roller Ext	
12	102-613-1A	4	CSHH, 625-11 x 300	
13	119-7	4	Washer, Flat, 625	
14	852827	2	Mounting Block	
15	856954	1	Bar, Push Bar Pin	
16	810070	2	Bearing, Push Bar Pin	
17	852825	2	Clamp Half, w/ Tapped Holes	
18	980786	4	Push Block Bracket	

Truck Hitch Assembly

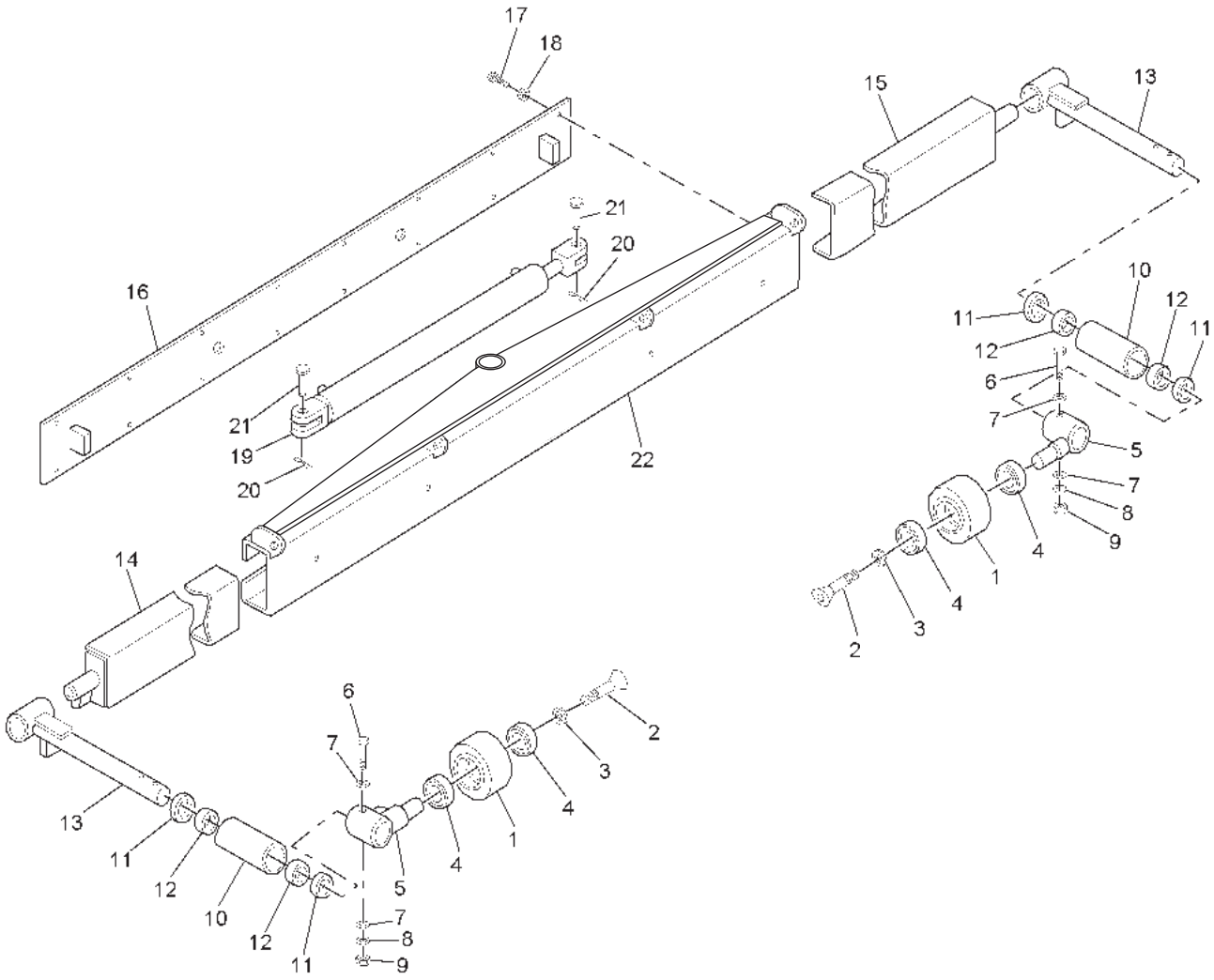


Figure 10-5

Truck Hitch Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
-	9821078SRV		Truck Hitch, Assy, Option	Complete Assy
1	930055	2	Guide Wheel, Truck Hitch	
2	851111	1	CSHH, .500-13 x 2.00	
3	851112	1	Washer, Flat, .500	
4	930050	4	Bearing, Truck Hitch Roller	
5	930045SRV	2	Axle, Guide Wheel	
6	102-615-1A	1	CSHH, .625-11 x 3.50	
7	120-7	2	Washer, Flat, .625	
8	118-7	1	Washer, Flat, .625 Lock	
9	116-7	1	Nut, Hex, .625-11	
10	930040	2	Roller	
11	620400	2	Collar, Lock	
12	810070	2	Bushing, Track Idler/Truck Hitch	
13	930030SRV	2	Guide, Wheel Pivot Arm	
14	930020SRV	1	Arm Extension, LH	
15	930025SRV	1	Arm Extension, RH	
16	930065	1	Cover, Back Panel	
17	102-203-1A	16	CSHH, .375-16 x .500	
18	118-3	16	Washer, Flat, .375	
19	930070	1	Cylinder, Arm Extension	
—	930070-01	1	Seal Kit	Not Shown
20	80338	2	Pin, Cotter	
21	210060	2	Pin, Clevis	
22	982178SRV	1	Weldment, Truck Hitch	
—	980440-04	1	Section, Valve Assy, Multifunction	Not Shown

Drive Conveyor

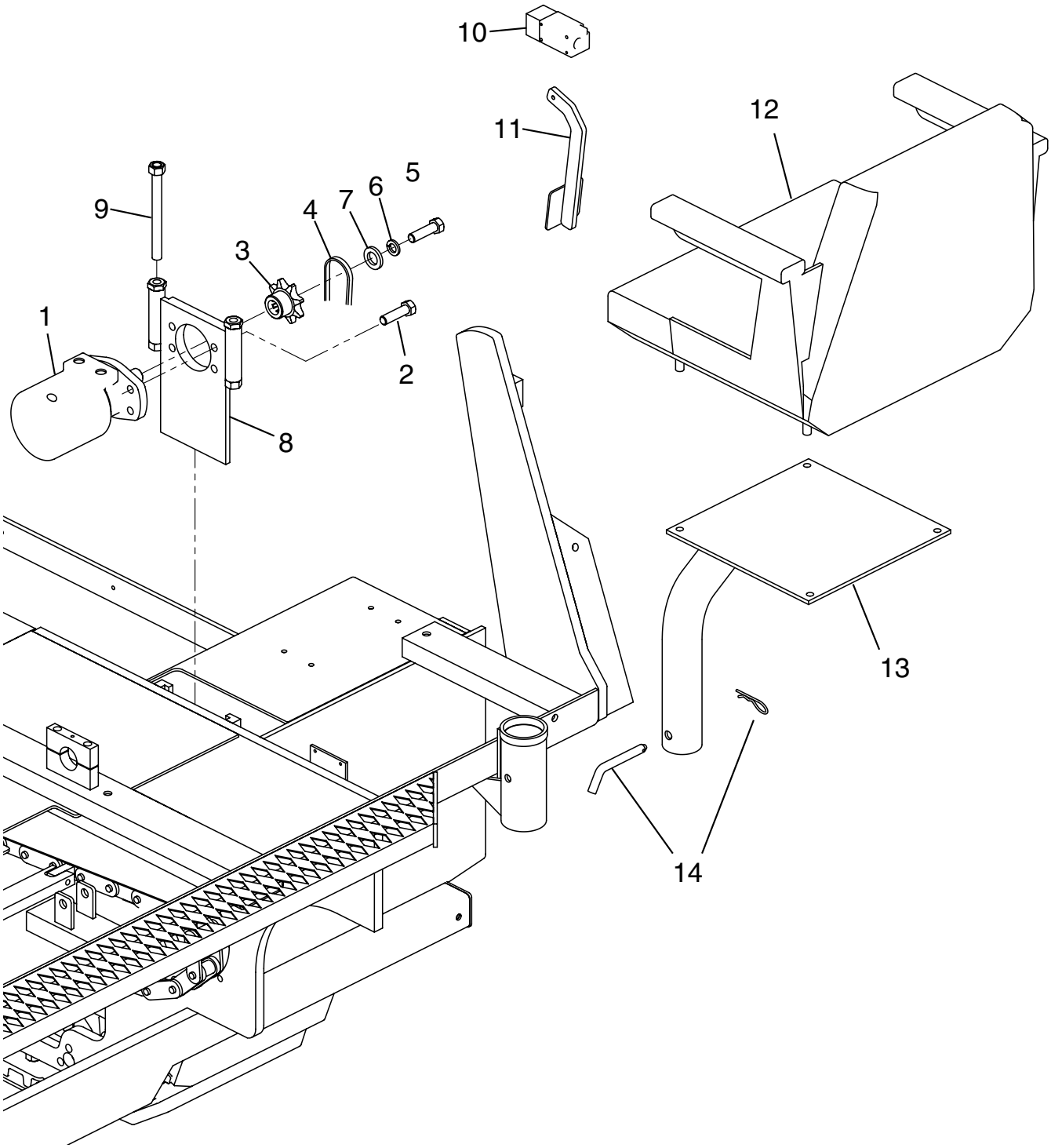


Figure 10-6

Drive Conveyor Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008603	2	Hyd. Motor, Conveyor Main	
2	100-406-1A	2	CSHH, 500-13 x 125	
3	851120	2	Sprocket, Conveyor Drive	
4	980220	2	Chain, Roller, 80H X 60 And 1/2 Links	
5	100-5-18-12-5F	2	CSHH, .313-18 X .750	
6	302-5	2	Washer, Lock, .313	
7	300-5	2	Washer, Flat, .313	
8	851149SRV	2	Mnt, Conveyor Drive Motor Assy	
9	980106	4	Assembly, Conveyor Drive Adjustment	
10	900050	A/R	Mirco Switch, Auto. Conveyors	
11	1008952	A/R	Weldment, Conveyor Paddle, 8616	
12	360010	2	Seat Assy, White, w/Armrest	
13	988640SRV	2	Assy, New Style Seat Post,Short	
14	72836	2	Pin,. 50 X 3.00, W/Hairpin Cotter	

Engine Components - Kubota

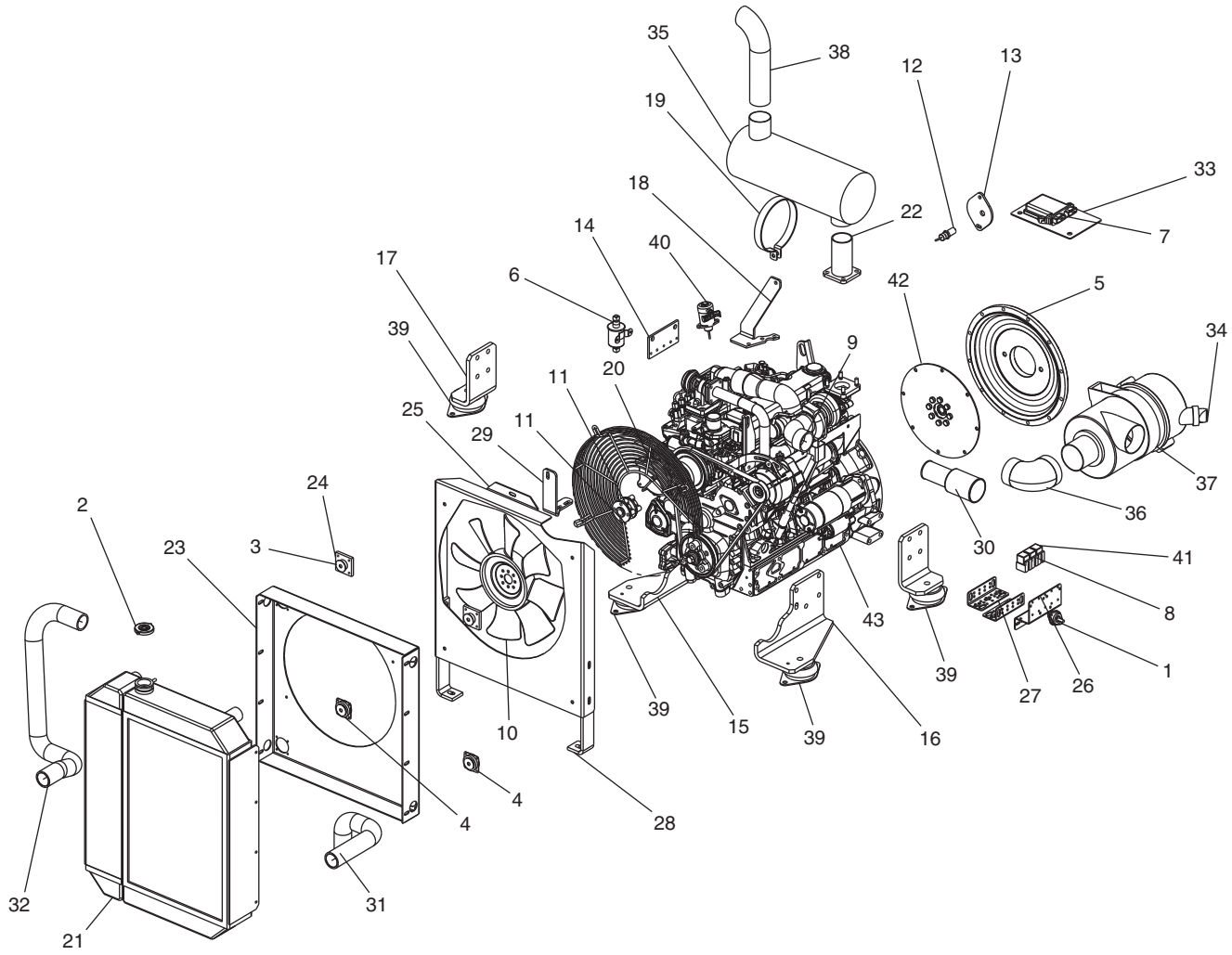


Figure 10-7

Engine Components - Kubota Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006963-01	1	Stud, Isolated Terminal, .313-18	
2	1002184-04	1	Cap, Radiator, 13.5PSI, 2.25" Neck	
3	1001166-57	2	Isolator, Rad Lower Mnt	
4	986537-41	2	Radiator Isolator	
5	1006963-02	1	Plate, Pump Mount Kit	
6	986537-39	1	Pump, Fuel, 12VDC, Kubota 8515	
7	1008171	1	Governer, Kubota Engine	
8	36085	3	Relay, 12VDC, Spdt, 40 Amp, 5 Pin	
9	1006963-04	1	Hose, Air Intake, Elbow	
10	1006963-05	1	Fan, Engine, Kubota, V3800T	
11	1006963-06	2	Spacer, Engine Fan, 27mm	
12	1006963-07	1	Sensor, Speed, .750-16	
13	1006963-08	1	Plate, Speed Sensor	
14	1002184-17	1	Plate, Fuel Pump Brkt, Chalvkub	
15	986537-17	1	Mount, Motor RF Kubota	
16	986537-16	1	Mount, Motor LF Kubota	
17	986537-15	2	Mount, Motor Rear 8515 Kubota	
18	988673-10	1	Muffler Brace, Kubota Engine	
19	986537-30	1	Muffler Strap, Engine	
20	986537-44	1	Fan Guard	
21	988673-13	1	Radiator/Cooler Assy, Kub	
22	988673-16	1	Exhaust, Nipple, Kub	
23	1006963-22	1	Fan Shroud	
24	1001166-58	2	Plate, Rad Isolator Mnt	
25	1006963-09	1	Plate, Rad Support, 8616	
26	1006963-10	1	Bracket, Relay Mount	
27	1006963-11	2	Mount, Relay Isolator	
28	1006963-12	2	Bar, Rad Support, 8616	
29	1006963-13	1	Brkt, Radiator Brace, 8616	
30	1006963-14	1	Tube, Reducer, 3.00-2.25 OD	
31	1006963-15	1	Hose, Radiator, Upper	
32	1006963-16	1	Hose, Radiator, Lower	
33	1006963-17	1	Plate, Governor Mount	
34	38385	1	Air Cleaner Assy	

Engine Components (Cont.)

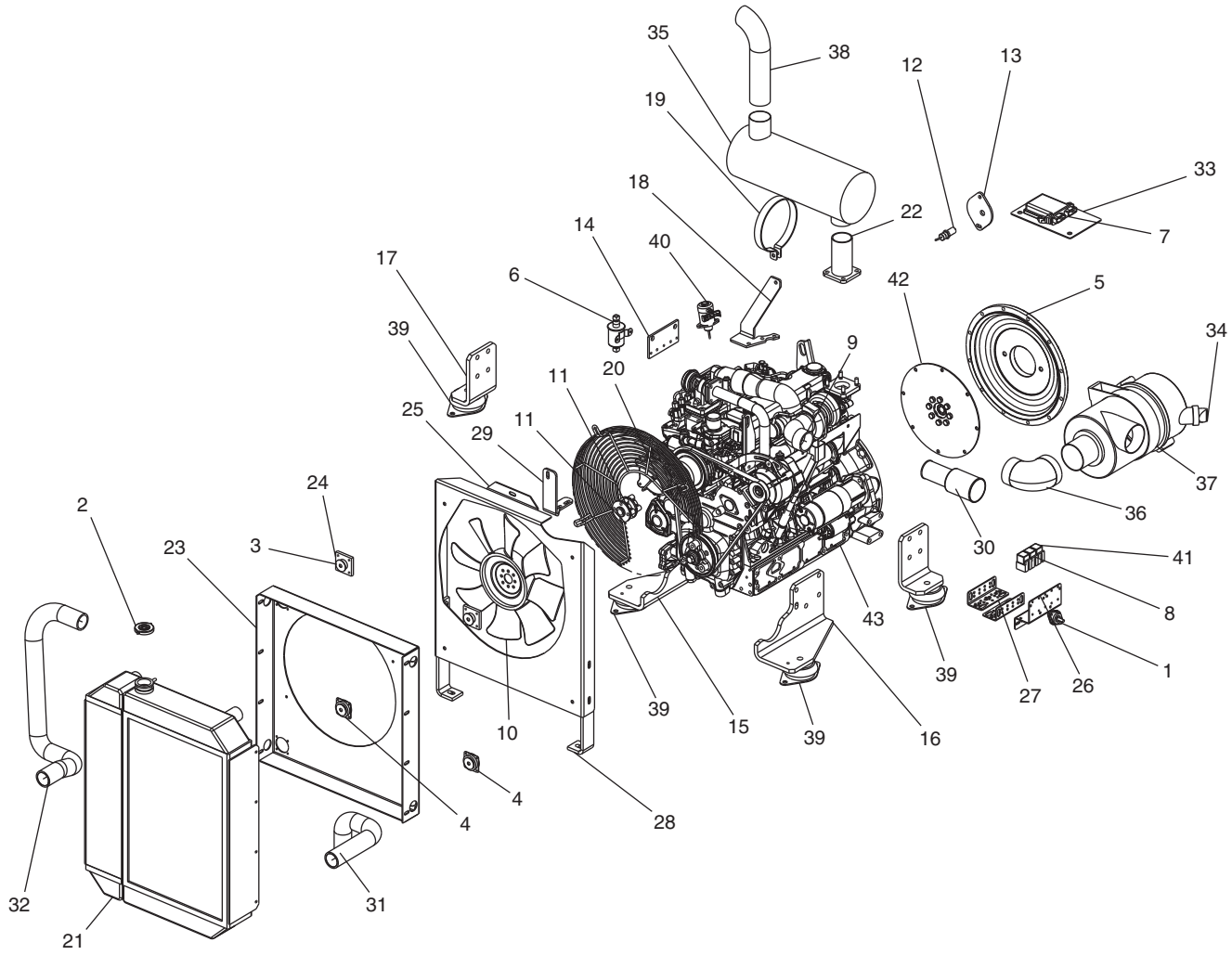


Figure 10-8

Engine Components (Cont.) Parts List Parts List (Cont.)

Item No.	Part Number	Qty.	Description	Remarks
35	986537-35	1	Muffler	
36	171170	1	Elbow, Rubber, 90, 3.50 X 3.00 ID	
37	38385-05	1	Bracket, Air Cleaner Mount	
38	986537-26	1	Exhaust, Tip 90	
39	986537-14	4	Isolator	
40	1006963-18	1	Actuator, Linear, 12V, Prop, 12mm	
41	36086	3	Bracket, Relay Mount	
42	1006963-03	1	Flex Plate & Coupling, Sae C 14T	
-	1006963-19	1	Belt, Engine, Kub, Tier3, V3800T	
-	1006963-20	1	Harness, Engine, V3900T Kub	
-	988169	1	Kit, Hose Oil Drain Kubota	
-	986537-46	1	Tank, Coolant Recovery, Kubota	
-	1002184-27	1	Sender, Press, 0-100 Psi, 02MP	
-	1002184-28	1	Sender, Temp, 100-250 F, 06 MP	
-	986537-49	1	Switch, Temp Kubota	
-	982008-09	1	Sending Unit, Eng Oil Press	
-	1001166-12	1	Pre-Filter, Fuel, Kub, T3, V3600TB	
-	982080-01	1	Filter Element, Oil	
-	982080-02	1	Filter Element, Fuel	
43	1006963	1	Engine, Kubota, 99HP, Tier 3	
-	1006963-21	A/R	Engine Baffle	

Tanks

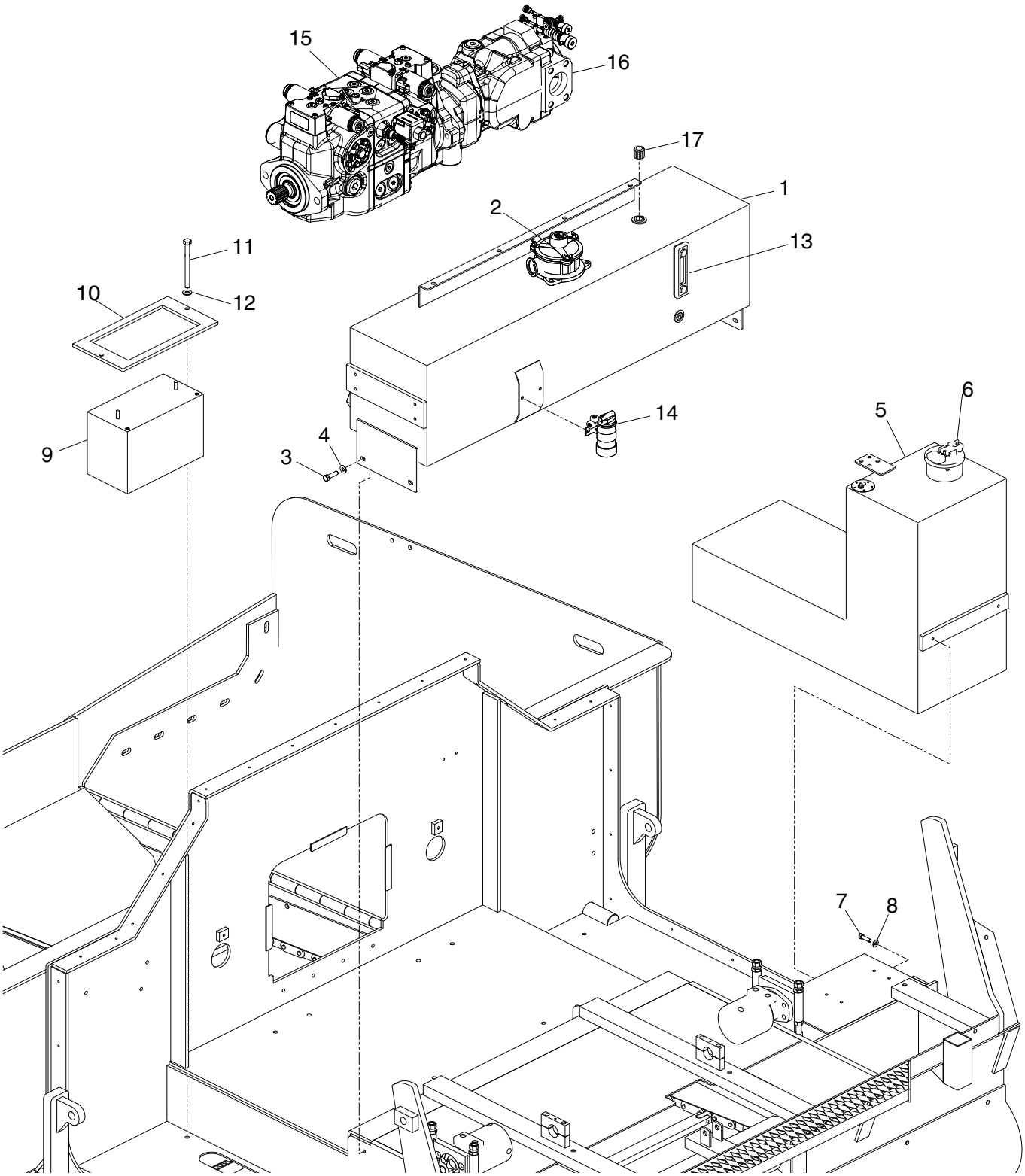


Figure 10-9

Tanks Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1007083	1	Assembly, Hydraulic Tank	
2	982940	1	Filter Housing, Hyd.	
3	100-6-16-20-5	4	CSHH, .375-16 x 1.25	
4	300-6	4	Washer, Flat, .375	
5	1007084	1	Assy, Fuel Tank	
6	982033	1	Cap, Fuel	
7	100-5-24-12-5F	4	CSHH, .313-24 x 0.75	
8	300-5	4	Washer, Flat, .313	
9	-	2	Battery, 12V, 1260CCA	Buy Local
10	72313	1	Hold Down, Battery	
11	100-8-13-140-5	2	CSHH, .500-13 X 9	
12	300-8	4	Washer, Flat,	
-	200-8-13-5	2	Nut, .500-13	Not Shown
13	500070	1	Gauge, Sight Level/Temp, Hyd Oil	
14	984381	1	Assy, Spraydown Pump	
-	1001542	A/R	Pump, Spraydown	
15	1006952	A/R	Pump, Hyd, Tandem, H1 W/Edc	
-	986519-01	A/R	Coil, Control Bypass,H1 Pump	
-	986519-02	A/R	Nut, Coil Hold Down, H1 Pump	
-	986519-03	A/R	Repair Kit, Hyd Pump Shaft, H1	
-	1006952-01	A/R	O-Ring, .103 X 3.737 FKM/Viton, 75D, SAE	
16	1006956	A/R	Pump, Hyd, L/S, 4.58 Cir, RH	
17	620050	A/R	Breather	

Hydraulic Components

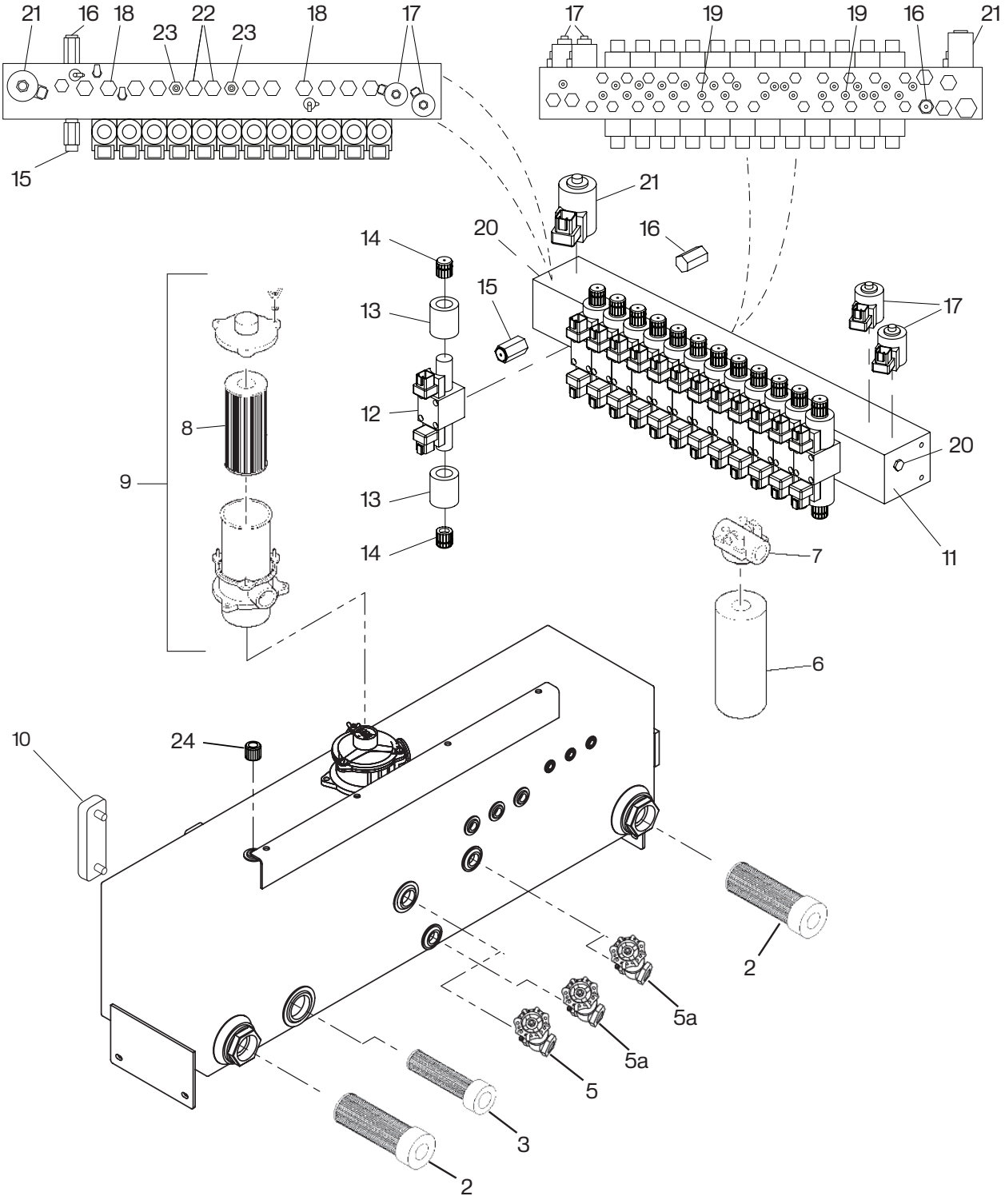


Figure 10-10

Hydraulic Components Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	980174	1	Hydraulic Tank	
2	72243	2	Strainer, Hydraulic Suction	
3	980560	1	Strainer, Hydraulic Suction	
4	981605	1	Bracket, Wireholder	
5	981940	1	Valve, Gate, 1.50	
5a	140640	2	Valve, Gate, 1.25	
6	981917	1	Filter Element, Hydraulic Charge	
7	981918	1	Head, Hydraulic Charge/Return Filter	
8	980350-01	1	Hydraulic Filter Element	
9	982940	1	Filter Housing Assembly, Hydraulic	
10	500070	1	Gauge, Sight Level/Temp, Hyd Oil	
11	1007074	1	Valve Manifold	
12	983643-01	1	Solenoid Valve	Side Wing
–	983643-01	1	Solenoid Valve	Auger Lift
–	983643-01	1	Solenoid Valve	Left Cutoff
–	983643-01	1	Solenoid Valve	Left Ext
–	983643-01	1	Solenoid Valve	Left Tow
–	983643-01	1	Solenoid Valve	Right Tow
–	983643-01	1	Solenoid Valve	Right Cutoff
–	983643-01	1	Solenoid Valve	Right Ext
–	983643-01	1	Solenoid Valve	Left Slope
–	983643-01	1	Solenoid Valve	Right Slope
13	983643-02A	20	Coil, 12 VDC	
14	983643-03	20	Nut, Coil	
15	987220-04	1	Valve, Reducing	
16	987220-05	1	Valve, Relief	
17	983643-04	2	Solenoid Valve	Screed Raise/Lower
18	983643-05	8	Valve, Dual Check	
19	983643-08	23	Valve, Check	
20	983643-10	1	Flow Divider	
21	987220-06	1	Solenoid Valve	Generator Function
22	986992-03	2	Valve, Check	Toe Point Only

Hydraulic Components (Cont.)

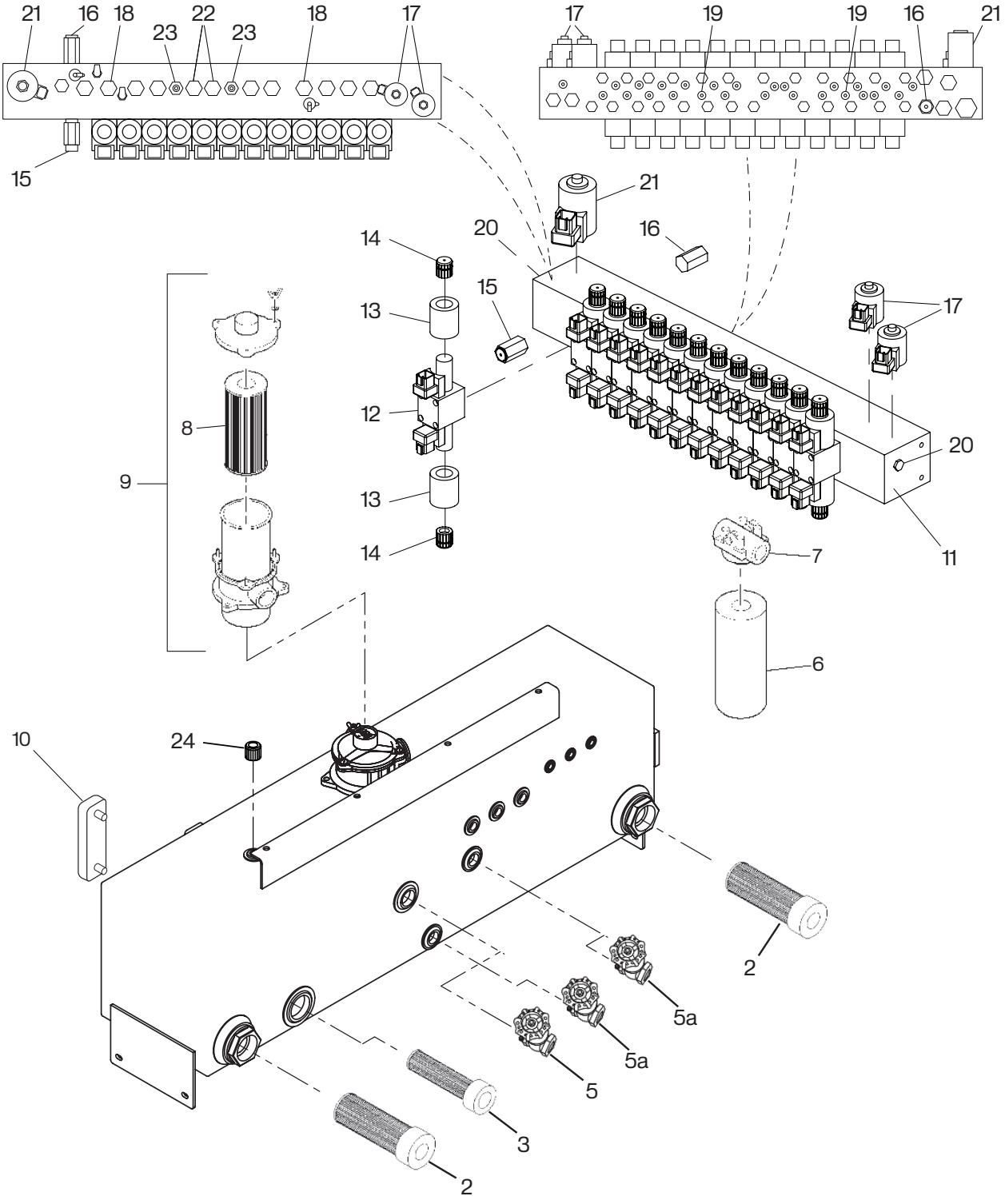


Figure 10-11

Hydraulic Components Parts List (Cont.)

Item No.	Part Number	Qty.	Description	Remarks
23	987220-07	2	Valve, Counterbalance	Toe Point Cylinder
–	983643-11	A/R	Cover Plate, Valve	Not Shown
–	987220-01	A/R	Plug	Not Shown
–	987220-02	A/R	Plug	Not Shown
–	987220-03	A/R	Valve, Check	Not Shown
–	988657-01	A/R	Valve, Check	Not Shown
–	980286	1	Plate, Hydraulic Output	Not Shown
24	620050	1	Breather Cap, 1/4”	
–	910122	1	Manifold, Hopper Wing Sequence	Not Shown
–	910122-1	A/R	Valve, Relief	Not Shown

Secondary Valve

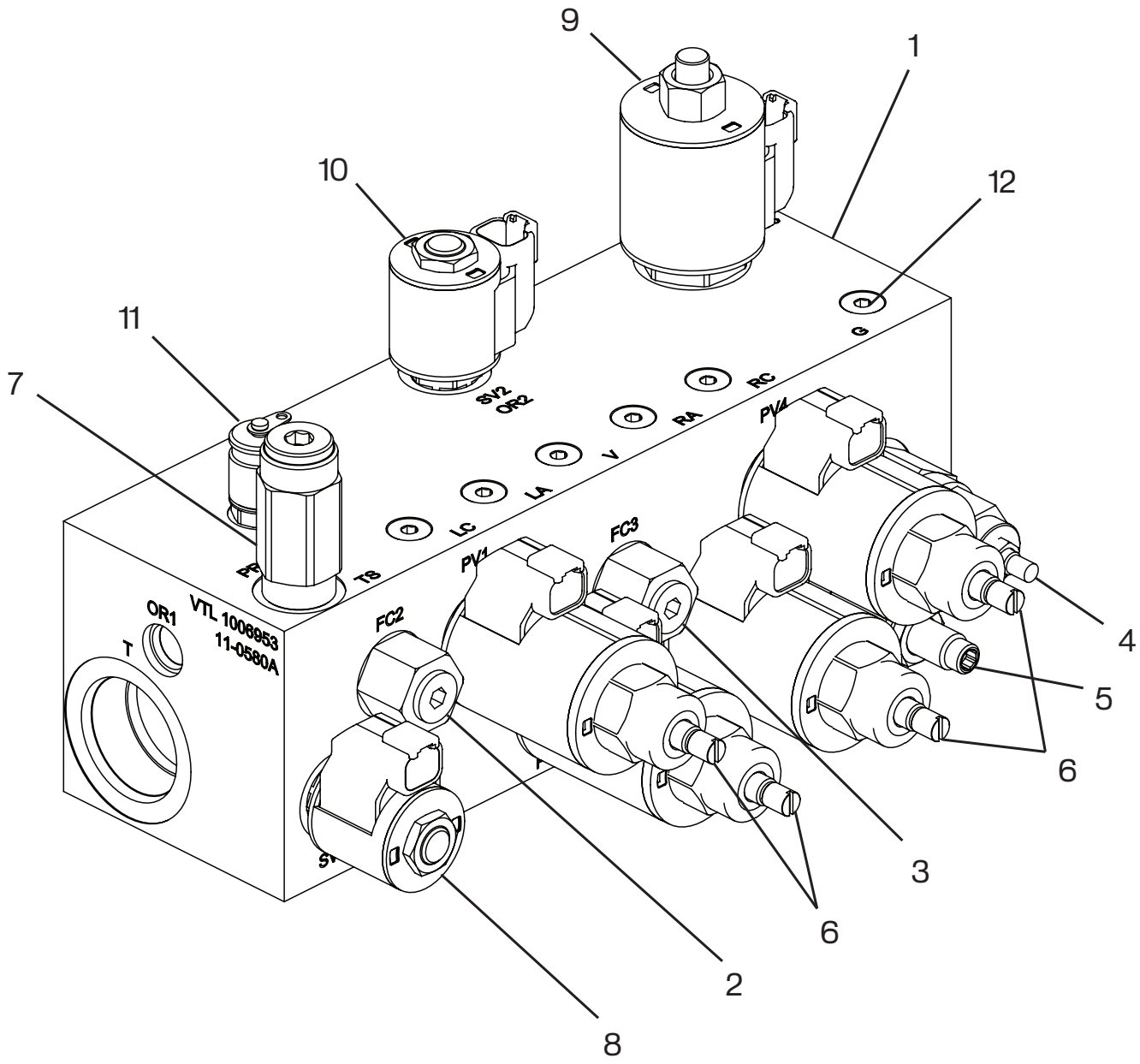


Figure 10-12

Secondary ValveMain Valve And Spray Down Parts List

Item No.	Part Number	Qty.	Description	Remarks
—	1006953	1	Manifold, Hyd, Motor Control, 8616	
1	1006953-01	1	Manifold, Block, 06-0774	Manifold
2	1006953-02	1	Flow Regulator, Cartridge	FC2
3	1006953-03	1	Flow Regulator, Cartridge	FC3
4	1006953-04	1	Flow Regulator, Cartridge	FC1
5	1005963-05	1	Valve, Relief, Rv08-22H-O-N-26/28	RV3
6	1005963-06	4	Valve, Pv70-30Am-O-N-00	PV1,PV2,PV3,PV4
—	1005963-07	4	Coil, 4303212	PV1,PV2,PV3,PV4
7	1006953-08	1	Valve, Pressure Reducing	PR1
8	1005963-09	1	Valve, Sv08-30-0-N-00	SV1
—	983644-05	2	Coil, 12Vdc Sv08 4303612	SV1,SV2
9	1006953-10	1	Valve, Sv12-20M-0-N-00	SV3
—	983644-01	1	Coil, 12Vdc	SV3
10	1006953-11	1	Valve, Sv08-20-0-N-12Er	SV2
11	1002711-02	1	Test Port W/Cap	GP
—	37113-04	1	Cartridge,Check, 12Gpm	CV1
12	983643-08	6	Valve, Check Cv04	LC,LA,V,RA,RC,G

Main Valve And Spray Down

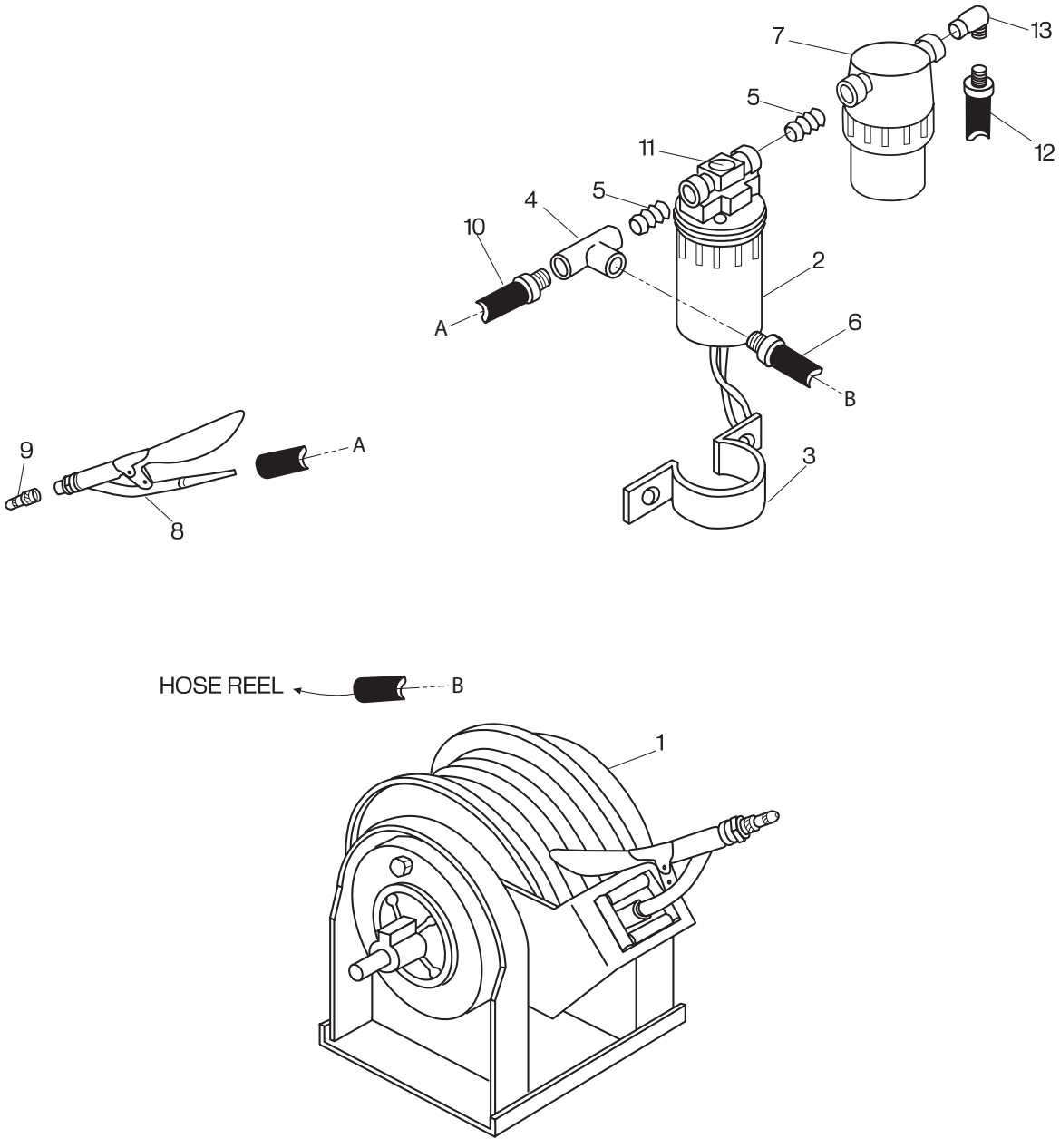


Figure 10-13

Main Valve And Spray Down Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	920200	1	Hose Reel, Machine Washdown	
2	1001542	1	Pump, Spraydown	
3	480260	1	Bracket, Water/Fuel Pump Mount	
4	920222	1	Tee, .375	
5	99638	1	Nipple, .375	
6	-	1	Hose, Pump to Hose Reel, 5’	
7	36926	1	Strainer	See item 2
8	920220	2	Handle & Nozzle, Spraydown	
9	901210A	A/R	Nozzle, Spraydown Handle	
10	-	2	Hose, 15’	to Spraydown Handle
11	851448	A/R	Pressure Switch (Flowjet Pump)	
12	-	1	Hose, 15’	to Tank
—	1001428SRV	A/R	Kit, Spraydown Pump and Strainer	Replaces 900010
13	34536	1	FITT, 90 06MJ-08MP	

Hopper Wings

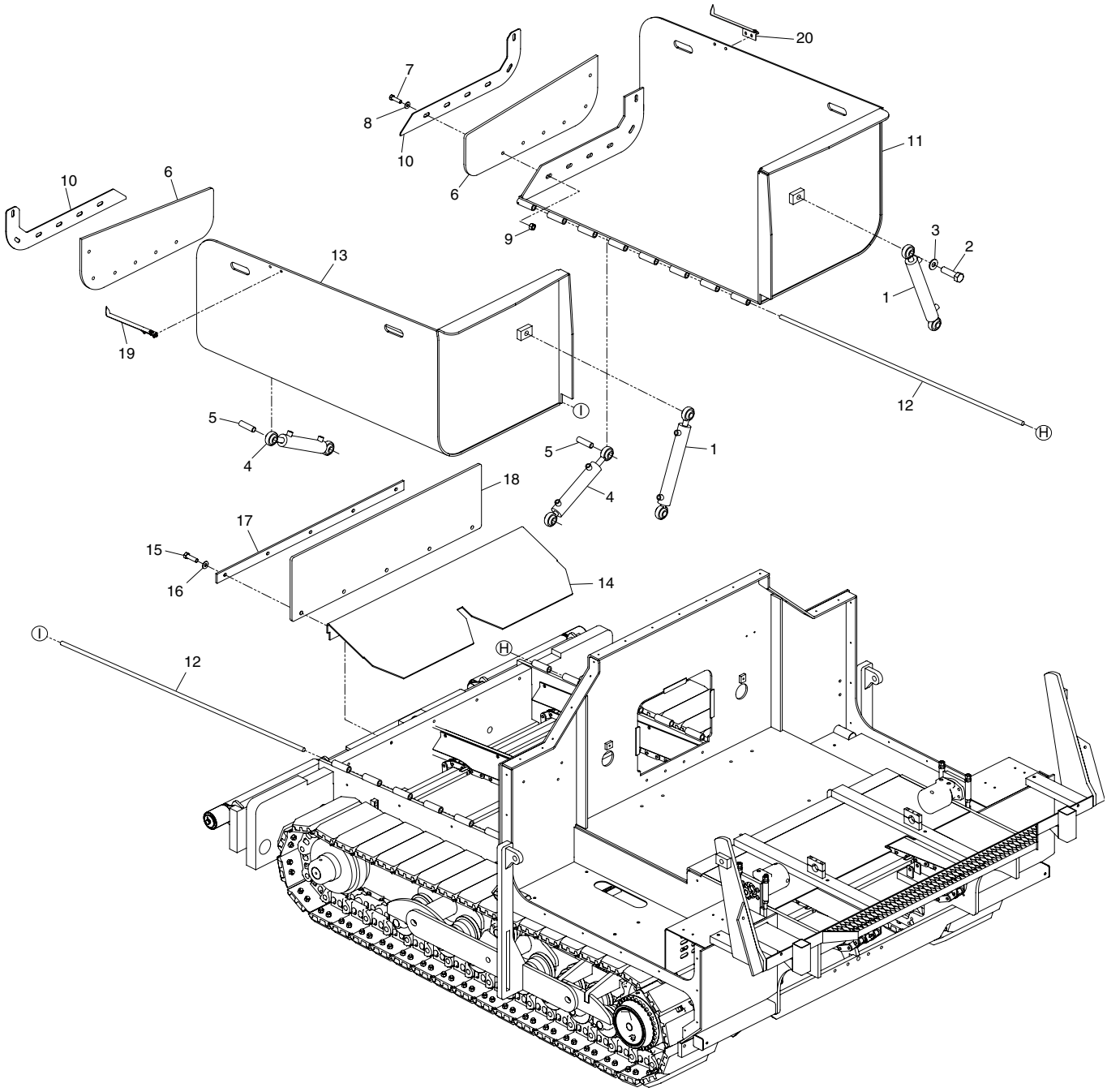


Figure 10-14

Hopper Wings Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	851436	2	Hydraulic Cylinder	
–	851484	A/R	Seal Kit	Not Shown
2	102-807-1A	1	CSHH, 875-9 x 150	
3	81059	2	Washer, Lock, 875	
4	1008618	2	Cylinder,Hydraulic, 2.00 X 7.00 X 1.00 Rod	
5	980166	2	Pin, Cylinder	
–	81019	4	Pin, Cotter	Not Shown
6	1007103	2	Rubber, Hopper Wing Gusset	
7	102-609-1A	14	CSHH, 625-11 x 200	
8	119-7	14	Washer, Flat, 625	
9	116-7	14	Nut, Hex, 625	
10	1007104	2	Plate, Side Wing Rubber Shield	
11	1006970	1	Side Wing, Hopper RH	
12	1007336	2	Bar, Round Side Wing Hinge	
13	1006971	1	Side Wing, Hopper LH	
14	1006672	1	Chain Guard, Front	
15	102-410-1A	5	CSHH, 500-13 x 225	
16	116-5	5	Nut, Hex, 500-13	
17	980278	1	Bar, Front Rubber Mount	
18	1007101	1	Flashing, Hopper Front	
19	1000806	1	Guide Assy, Hopper Wing, LH	
20	1000801	1	Guide Assy, Hopper Wing, RH	

Hoods and Covers

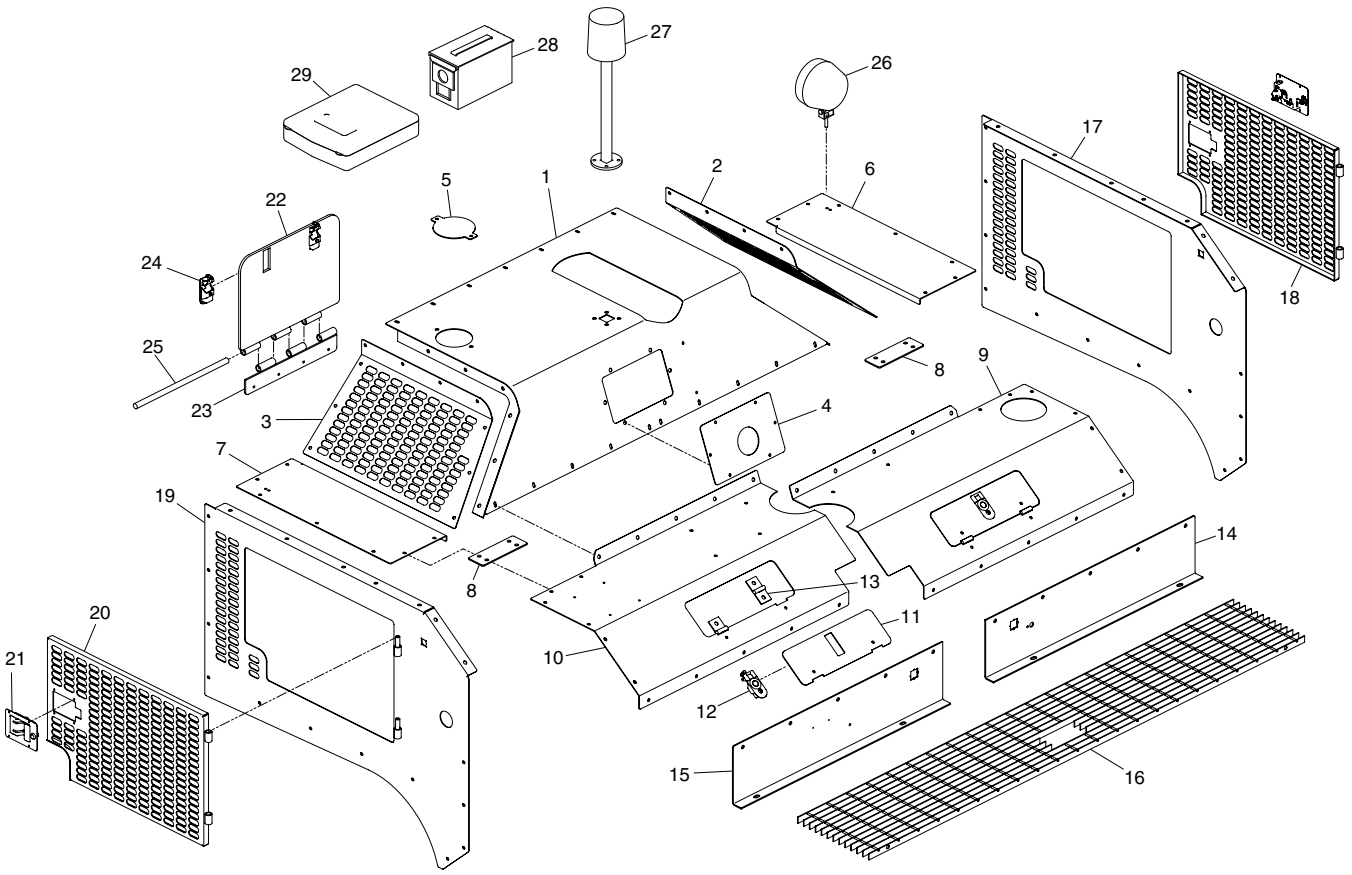


Figure 10-15

Hoods and Covers Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008891	1	Weldment, Main Engine Cover, Tier 3	
2	1007034	1	Plate, Right Top Cover	
3	1007017	1	Plate, Radiator Vent	
4	1007100	1	Plate, Engine Hood Cover	
5	987635	2	Radiator Cover	
6	1007034	1	Plate, Right Top Cover	
7	1007015	1	Plate, LH Top Manifold Cover	
8	1007016	2	Plate, Hood Support	
9	1007014	1	Plate, Hyd Cover ,RH	
10	1007013	1	Plate, Hyd Cover, LH	
11	1007088	2	Lid, Access Door	
12	980460	2	Lever Latch	
-	35560	2	Key, Vandalism Locks	Not Shown
13	987639	4	Hinge, (2) Thru Holes	
14	1007019	1	Toe Board, Right Side	
15	1007018	1	Toe Board, Left Side	
16	1007011	1	Grating, Floorboard, Center	
17	1008893	1	Weldment. RH Side Cover, Fuel Tank	
18	1007039	1	Assy, Access Door ,RH	
19	1008892	1	Weldment, LH Side Cover, Generator/Battery	
20	1007038	1	Assy, Access Door ,LH	
21	160460	2	Latch, Radiator Access Panel	
22	1006981	1	W/M, Front Access Door	
23	1006983	1	W/M, Access Door Hinge	
24	980460	2	Lever Latch	
-	35560	A/R	Key, Vandalism Locks	Not Shown
25	1007044	1	Rod, Hinge Access Door	
26	1007968	2	Light, Led, 4.5” Worklight	
27	211748-02	1	Beacon Light	
-	989469SRV	1	Assy, Beacon Light Post	
28	853963	1	Tool Box, W/Mounting Holes	
29	985234-01	1	Manual-Pak Case, 10.5 X 13.5 X 2.5	
-	1007677	A/R	Decal, Kit, HD Screed	
-	1007679	A/R	Decal, Kit, 8616 Dec/Saf/Ops	
-	1007679-02	A/R	Decal, 8616, Wing, LH	
-	1007679-03	A/R	Decal, 8616, Wing, RH	

Dash Assembly

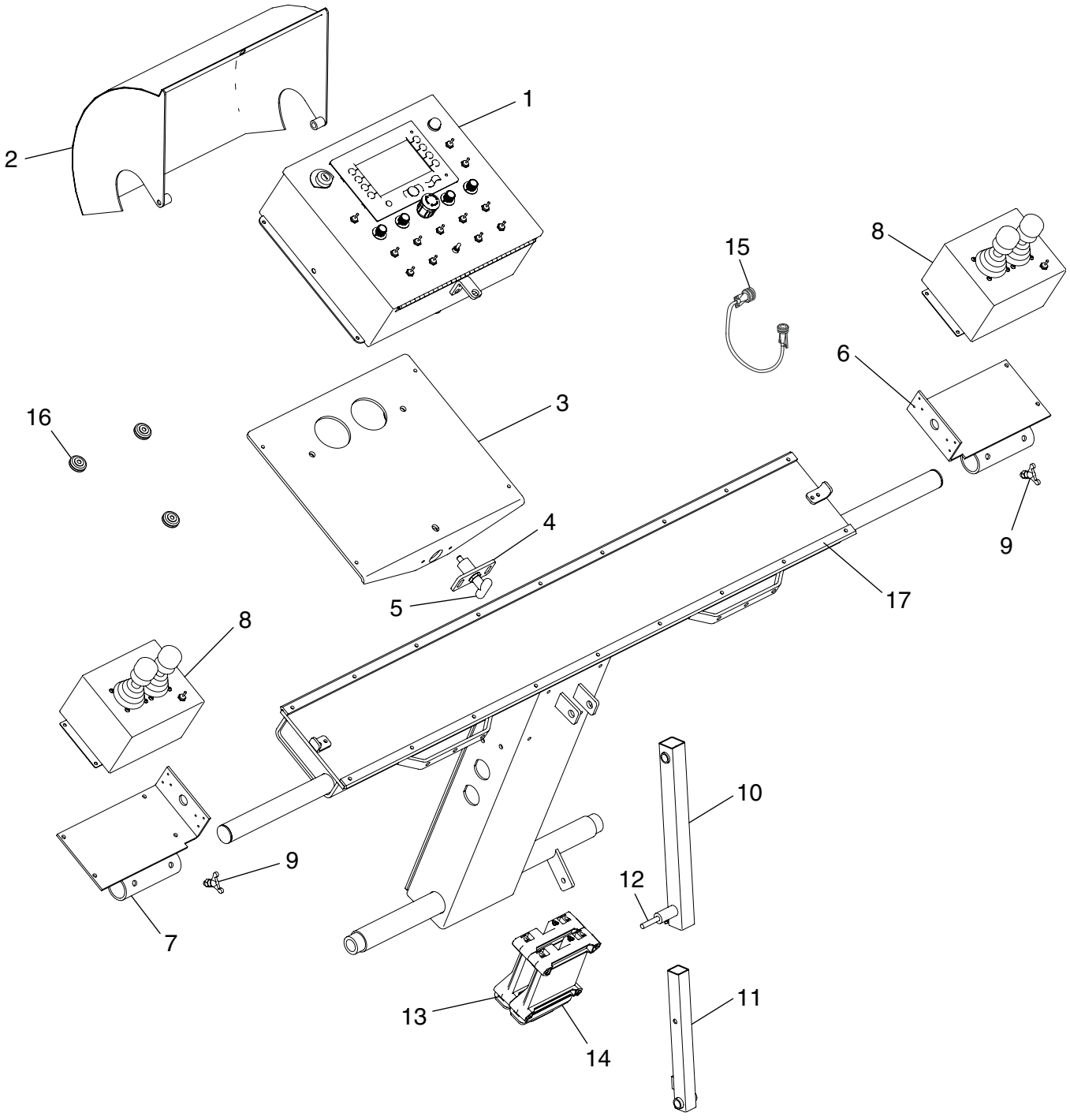


Figure 10-16

Dash Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1007229	1	Assembly,8616, Control Box, With Dp610	
2	1007339	1	Assembly, Vandalism Cover	
3	1007263	1	Plate, Enclosure Mount	
4	1007333	1	Plate, Dash Pin Lock	
5	1000835	1	Pull Pin Spring Loaded	
6	855401L	1	Elec Steering Box Mount, 8500	
7	855401R	1	Elec Steering Box Mount, 8500	
8	1008904	2	Dual-Joystick, Cont,Box, (+)One	
9	120-6-24	2	Screw, Wing, .375-16 X 1	
-	200-60-16-5	2	Nut, Hex, .375-16	
10	854695	1	Tube, Dash Outer Support	
-	854693	1	Tube, Dash Support	
11	854694	1	Tube, Dash Inner Support	
-	854693	1	Tube, Dash Support	
12	1000835	1	Pull Pin Spring Loaded	
13	1008124	1	Controller, 50 Pin, Propel, 8616	
14	1008123	1	Controller, 50 Pin, Screed, 8616	
-	981916-01	2	Conn, Nut, 24 Shell	
-	981916-02	2	Conn, Lockwasher, 24 Shell	
15	851548-04	2	Cord, 4 Ft , Electronic Steering	
16	1007266	A/R	Wheel, 45mm, V-Guide	
17	1007332	2	Rail, Dash Slide w/Holes	

Dash Control Box Assembly

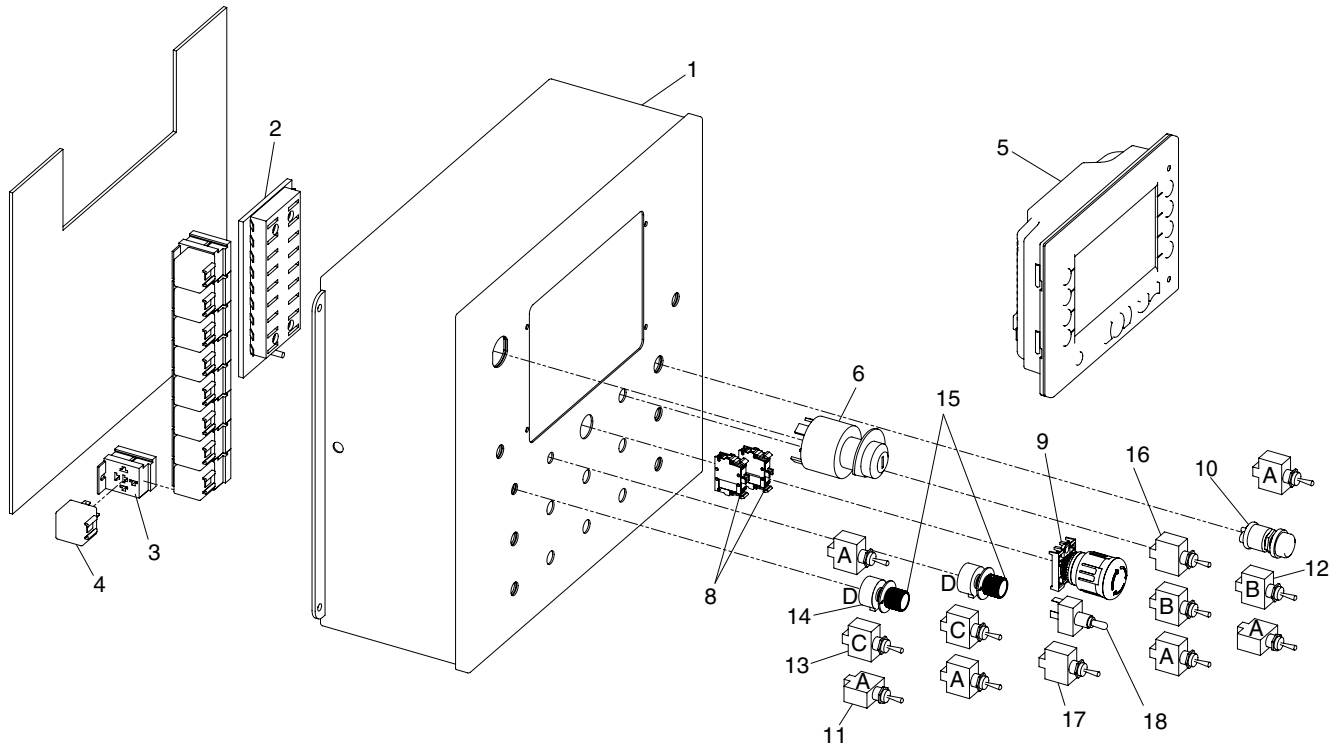


Figure 10-17

Dash Control BoxDash Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
-	1007229	A/R	Assembly, 8616, Control Box, With Dp610	
1	1007228	1	Enclosure, Control Panel 8616 W/Holes	
2	685060	1	Fuse Block, 18 Gang, Atc	
3	36086	9	Bracket, Relay Mount	
4	36085	9	Relay, 12Vdc, Spdt, 40 Amp, 5 Pin	
5	1008316	1	Display, Dp610, 8616	
6	39146-14	1	Switch, Ignition, W/Heat St	
-	982008-04	2	Key	
8	988924-03SRV	A/R	Switch, Emer Stop, N/C Contact	
9	988924-03SRV	1	Switch, Emer Stop, Assy, NC/NC	
10	982249	1	Switch, Push Button	
11	851392	6	Switch, Toggle, 3-Pos, Spdt, Mom	
12	72884	2	Switch, Toggle, Spst, 2-Pos, Mom	
13	851090613	2	Switch, Toggle, Spdt, 3-Pos	
14	1001822-05	2	Potentiometer, Rear Pump Speed, Plus1	
15	35049	2	Knob, .25 Shaft	
16	851391	1	Switch, Toggle, Spst, 2-Pos	
17	851392	1	Switch, Toggle, 3-Pos, Spdt, Mom	
18	900030	1	Switch, Toggle, Auto Conveyor	
-	1008240	A/R	Harness, 816 Screed Control Box, LH	
-	1008241	A/R	Harness, 816 Screed Control Box, RH	
-	1008458	A/R	Harness, 816 Control Box, Without DPI610	
-	1008581	A/R	Harness, Jumper, 31 Pin Dash To Pedastel	
-	1008582	A/R	Harness, Jumper, 47 Pin Dash To Pedastel	
-	1008583	A/R	Harness, Main	
-	1008585	A/R	Harness, Manifold	
-	1008602	A/R	Harness, Manifold, Front	

Rear Auger Assembly

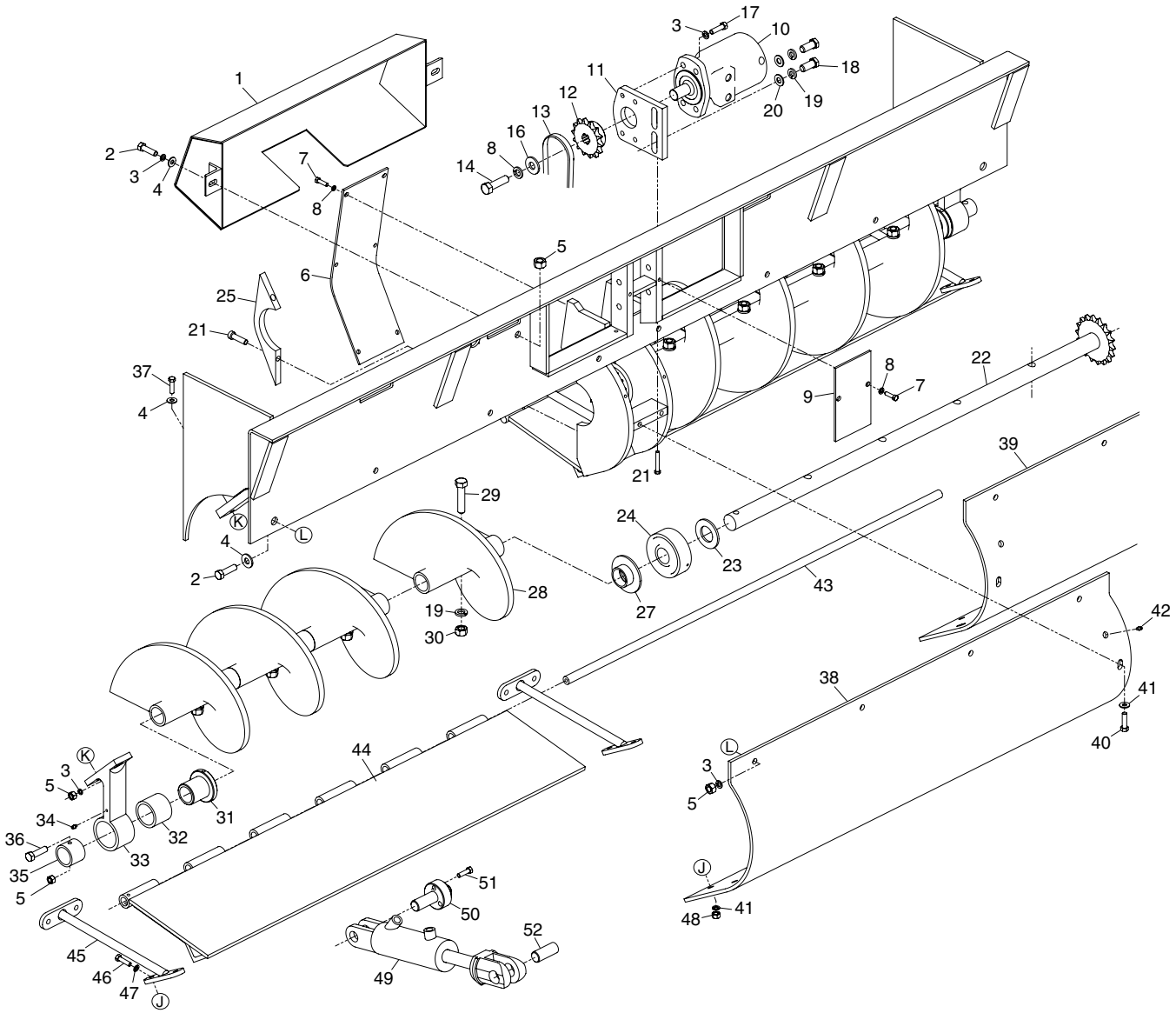


Figure 10-18

Rear Auger Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	981685	1	Assy, Auger Motor Cover	
2	100-8-13-16-5F	10	CSHH, .500-13 X 1.000	
3	302-8	22	Washer, Lock, .500	
4	300-8	14	Washer, Flat, .500	
5	200-8-13-5	16	Nut, Hex, .500-13	
6	981695	1	Cover, Auger Support	
7	100-5-18-16-5	8	CSHH, .313-18 X 1.000	
8	302-5	10	Washer, Lock, .313	
9	981688	1	Chain Cover	
10	1008603	2	Motor, Hyd, Gear, 9.76 CIR, 4Bolt	
11	981696	2	Mount, Motor	
12	240350	2	Sprocket, 60B 12 X 1.00-6 Spline	
13	985815	2	Chain, Roller, 60H X 51 Pitch	
14	100-5-18-12-5F	2	CSHH, .313-18 X .750	
16	300-5	2	Washer, Flat, .313	
17	100-8-13-20-5F	8	CSHH, .500-13 X 1.250	
18	100-10-11-22-5F	4	CSHH, .625-11 X 1.375	
19	302-10	12	Washer, Lock, .625	
20	300-10	4	Washer, Flat, .625	
21	102-6-16-24-F	6	CSSH, .375-16 X 1.500	
22	1007270SRV	2	Shaft With Sprocket, 12" Auger	Include 23, 24
23	1007323	2	Washer, Auger Bearing Spacer	
24	1007267	2	Bearing, Auger, 8616	
25	1007269	2	Clamp, Auger, 12"	
27	1007306	2	Assy, Spacer, Auger Shaft	
28	981700L	4	Auger Flight, LH, 12"	
-	981700R	4	Auger Flight, RH, 12"	
-	1007304	A/R	Complete Auger Assy, LH	
-	1007305	A/R	Complete Auger Assy, RH	
29	100-10-11-22-5F	8	CSHH, .625-11 X 1.375	
30	200-10-11-5	8	Nut, Hex, .625-11	
-	860051HDLSRV	1	Auger Moun,LH	Include 31, 32, 33
-	860051HDRSRV	1	Auger Moun,RH	Include 31, 32, 33
31	851645	A/R	Collar, Auger Shaft End	
32	810070	A/R	Bushing, 2.00 ID X 2.50 OD X 2.50 Idler	
33	860051L	A/R	Auger End Mount Left	
-	860051R	A/R	Auger End Mount Right	

Rear Auger Assembly (Cont.)

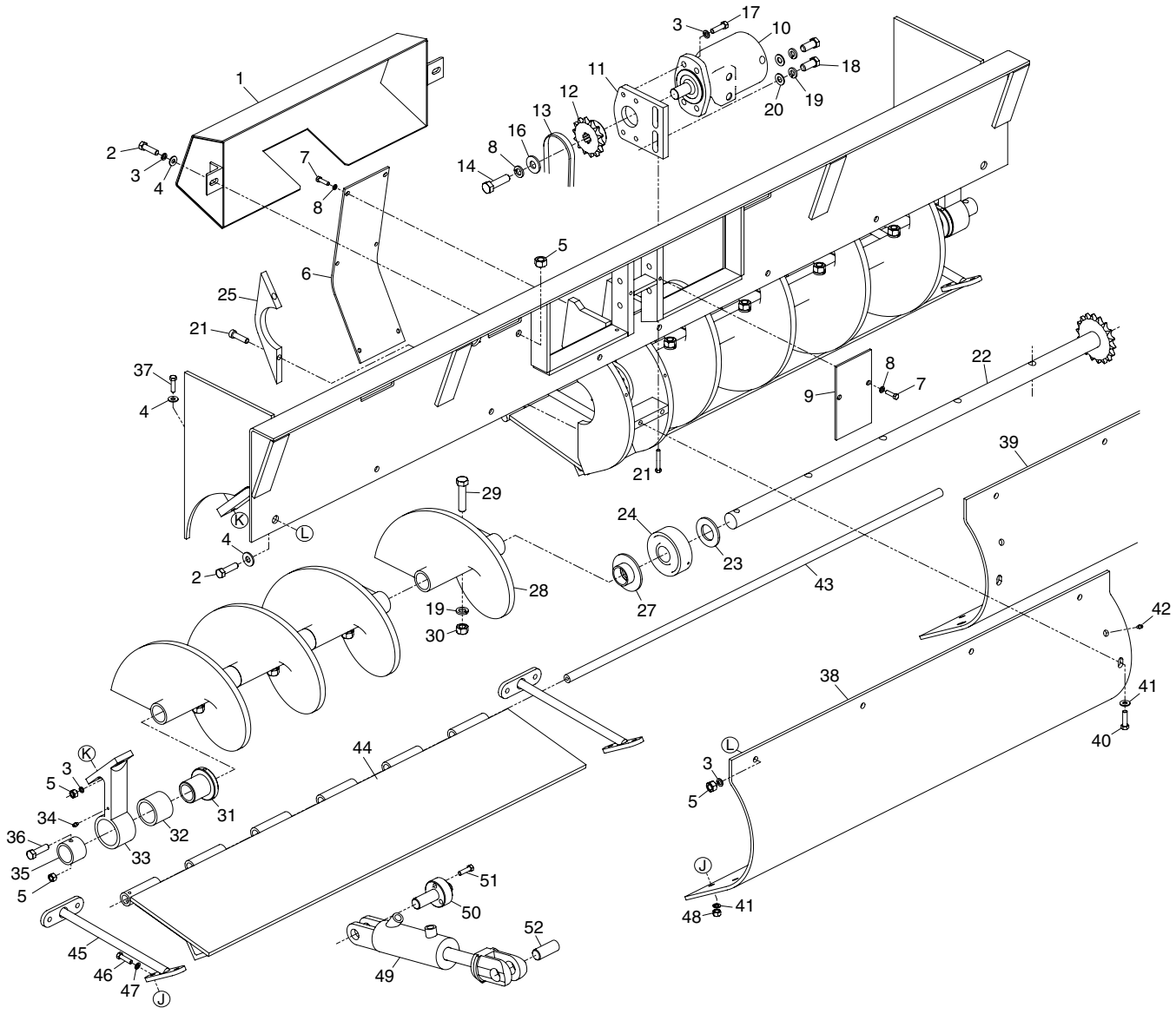


Figure 10-18

Rear Auger Assembly Parts List (Cont.)

Item No.	Part Number	Qty.	Description	Remarks
34	140610	1	Grease Fitting	
35	851647	2	End Cap, Auger Shaft	
36	100-8-13-40-5	2	CSHH, .500-13 X 2.5	
37	100-8-13-24-5	4	CSHH, .500-13 X 1.500	
38	1007068	1	Plate, Auger Back Wear Plate, LH	
39	1007069	1	Plate, Auger Back Wear Plate, RH	
40	100-6-16-16-5F	2	CSHH, .375-16 X 1.000	
41	302-6	10	Washer, Lock, .375	
42	1008949	2	Grease Fitting, Long	
43	1007064	1	Bar, Cutoff Hinge	
44	1006665	1	Cutoff Assy, LH	
-	1006666	1	Cutoff Assy, RH	
45	1007072	4	Assy, Auger To Back Brace	
46	100-6-16-22-5	8	CSHH, .375-16 X 1.375	
47	300-6	8	Washer, Flat, .375	
48	200-6-16-5	8	Nut, Hex, .375-16	
49	910170	2	Cyl, Hyd, 2.50 X 4.00 X 1.25 Rod	
-	910170-01	A/R	Seal Kit	
50	1006988	2	Shaft, Cutoff Cyl Mnt	
51	100-8-13-28-5	6	CSSH, .500-13 X 1.750	
52	240030	2	Pin, Clevis, 1.00 X 3.25 W/1.5HD	

Screed Overview Assembly

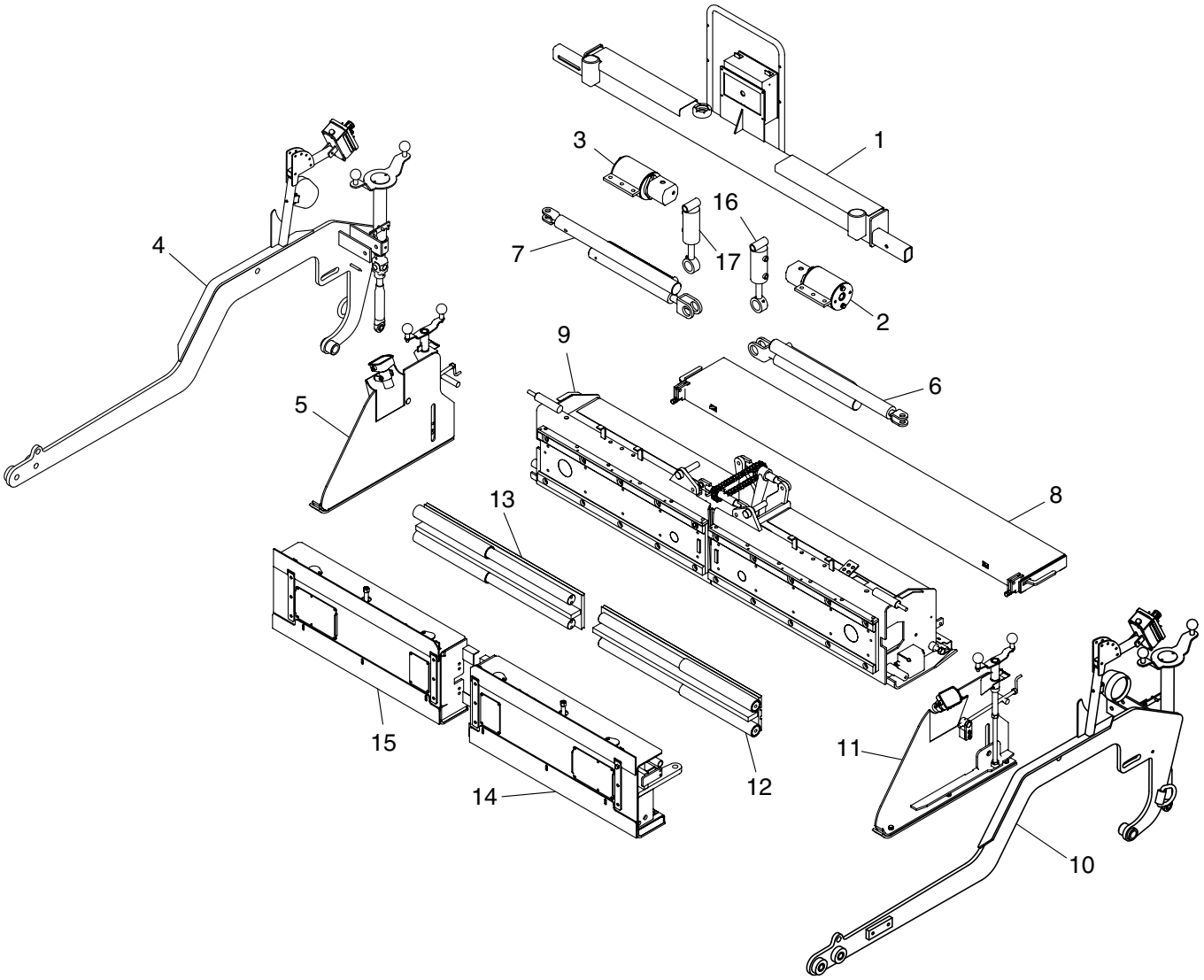


Figure 10-19

Screed Overview Figure List

Item No.	Reference Figure	Description	Remarks
1	10-30	Citrus Tank and Electric Heat Control Box	
2	10-22	Vibrator Assembly LH	
3	10-22	Vibrator Assembly RH	
4	10-29	Pull Arm and Remote Control Box RH	
5	10-27	Endgate Assembly RH	
6	10-20	Extension Cylinder LH	
7	10-20	Extension Cylinder RH	
8	10-21	Walk Board Assembly	
9	10-20	Frame Sloping	
10	10-28	Pull Arm and Remote Control Box LH	
11	10-26	Endgate Assembly LH	
12	10-23	Slide Plate Assembly	
13	10-23	Slide Plate Assembly	
14	10-24	Extension LH	
15	10-25	Extension RH	
16	10-20	Slope Cylinder LH	
17	10-20	Slope Cylinder RH	

Screed Frame Assembly - Electric

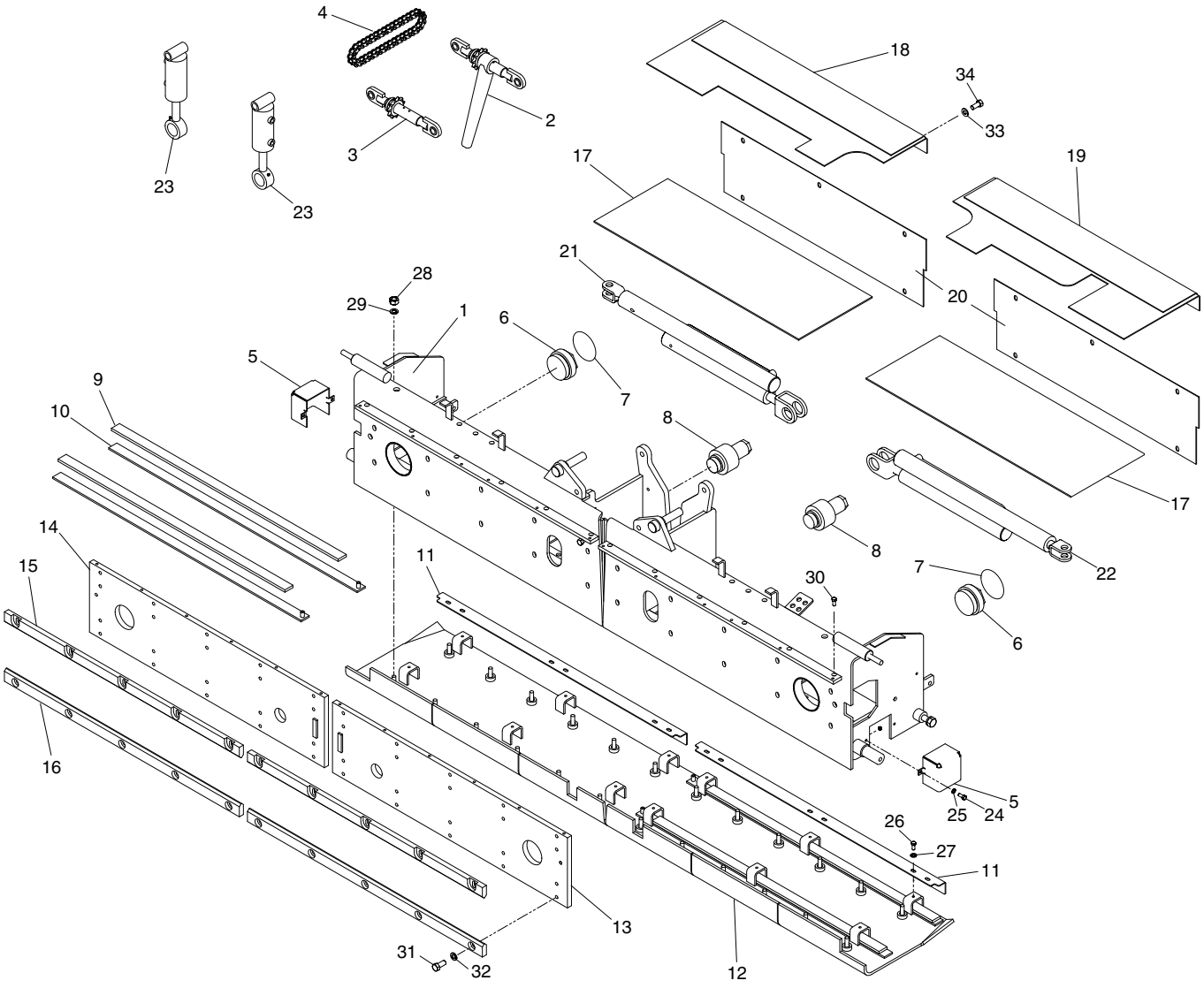


Figure 10-20

Screed Frame Assembly - Electric Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1007195	1	Group, Screed Frame, 815HD	
2	983157	1	Assy, Turnbuckle W/Ratchet	
3	980182	1	Assy, Crown & Valley, Rear	
4	1008047	1	Chain, Roller, 60H X 39 Pitches	
5	985125	2	Cover, Elements, Screed Base	
6	981659	2	Pin, Slope	
7	981711	2	Plate, Pivot Cover	
8	981661	2	Pin, Cyl Mount	
9	985121	4	Bar, Element Hold Down	
10	1007276SRV	4	Element, Heater, 46	1500W"
11	1007002	2	Cover, Rear Elements	
12	1008056SRV	1	Wearplate, 1/2 Wear Plate With Studs	Include 28, 29; Not 9, 10, 11
13	1008663	1	Weldment, Rail Mount, LH	
14	1008662	1	Weldment, Rail Mount, RH	
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	Assy, Upper Screed Cover, RH	
19	1008757	1	Assy, Upper Screed Cover, LH	
20	1007000	1	Cover, Screed Lower, LH/RH	
21	981710R	1	Cyl, Hyd, 200 X 200 X 4200 X 125	
22	981710L	1	Cyl, Hyd, 200 X 200 X 4200 X 125	
23	983421	1	Cyl, Hyd, 275 X 200 X 1125 Rod	
24	102-102-1A	4	Cshh, 312-18 X 50, Gr5	
25	118-2	4	Washer, Lock, 312	
26	102-107-1A	6	Cshh, 312-18 X 150, Gr5	
27	118-2	6	Washer, Lock, 312	
28	116-5	24	Nut, Hex, 500-13	
29	118-2	24	Washer, Lock, 312	
30	102-5-18-24-F	12	Cssh, 312-18 X 150, Gr5	
31	102-305-1A	20	Cshh, 437-14 X 100, Gr5	
32	118-4	20	Washer, Lock, 437	
33	102-409-1A	12	Cshh, 500-13 X 200, Gr5	
34	116-5	12	Nut, Hex, 500-13	

Walk Board Assembly

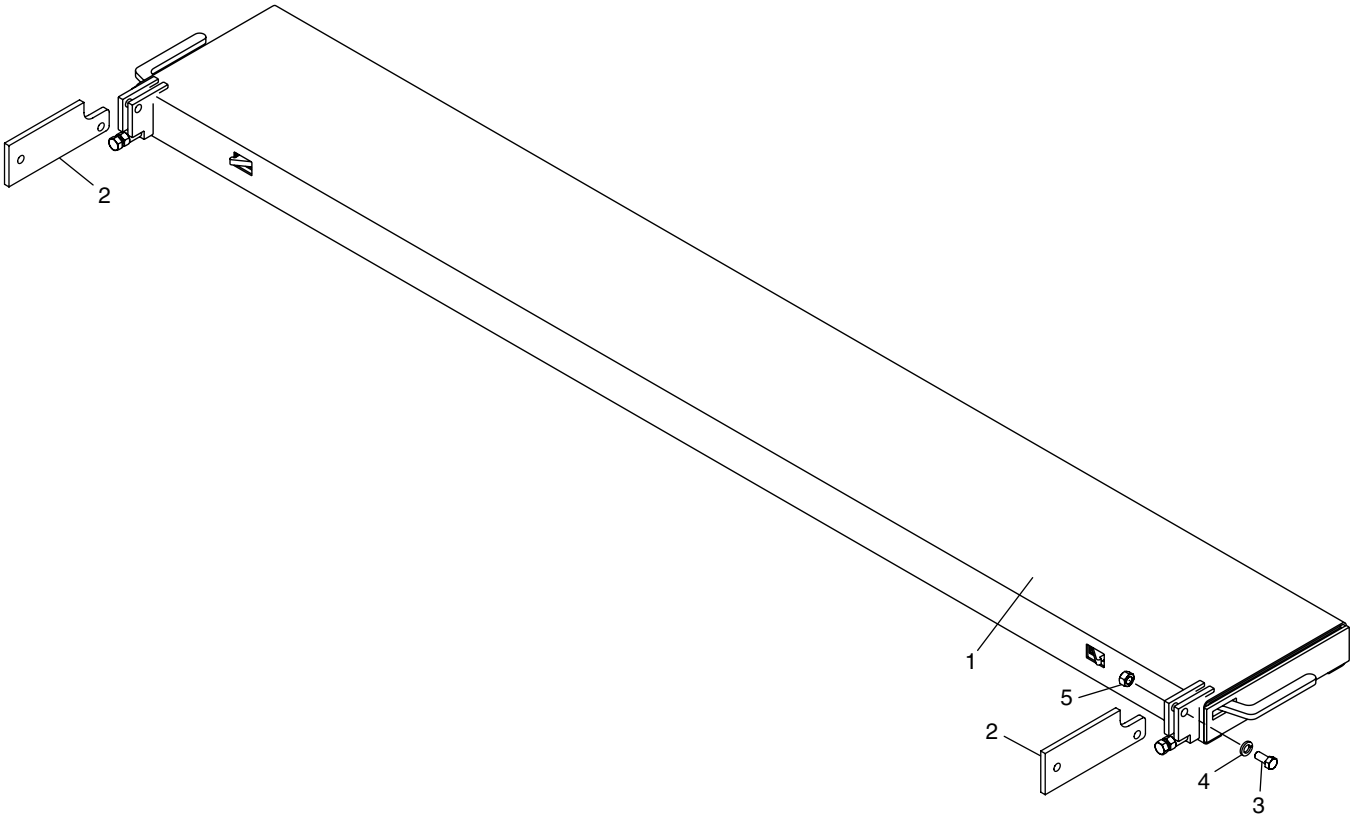


Figure 10-21

Walk Board Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	987056SRV	1	Walkboard, Ass'y-Long	
2	985163	2	Plate, Walkboard Hinge	
3	102-406-1A	2	Cshh, 500-13 X 125, Gr5	
4	118-5	2	Washer, Lock, 500	
5	116-5	2	Nut, Hex, 500-13	

Screed Vibrator Assembly

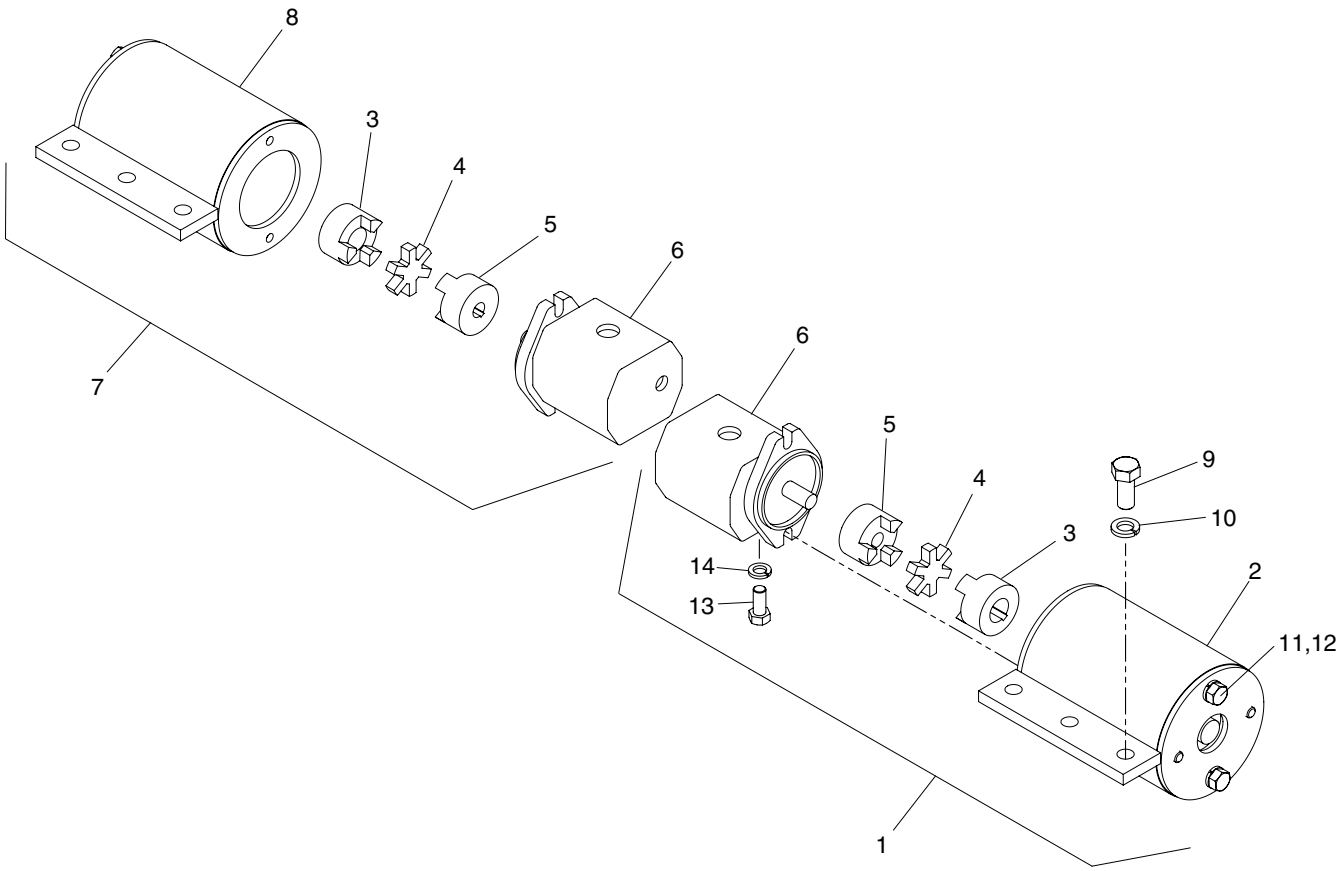


Figure 10-22

Screed Vibrator Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008449SRV	1	Assy, Vibrator, LH	
2	982965L-1	1	Housing, Vibrator LH	
3	880030	1	Cplg Half, 3 Jaw, 1"	
4	280040	1	Insert, 3-Jaw Coupling	
5	280030	1	Cplg Half, 3 Jaw, 5/8"	
6	1006955	1	Motor, Hyd, Gear, 117 Cir, A" "	
7	1008448SRV	1	Assy, Vibrator, RH	
8	982965R-1	1	Housing,Vibrator RH	
9	102-605-1A	3	Cshh, 625-11 X 100, Gr5	
10	118-7	3	Washer, Lock, 625	
11	102-103-1A	2	Cshh, 312-18 X 75, Gr5	
12	118-2	2	Washer, Lock, 312	
13	102-405-1A	2	Cshh, 500-13 X 100, Gr5	
14	118-5	2	Washer, Lock, 500	

Screed Slide Plate

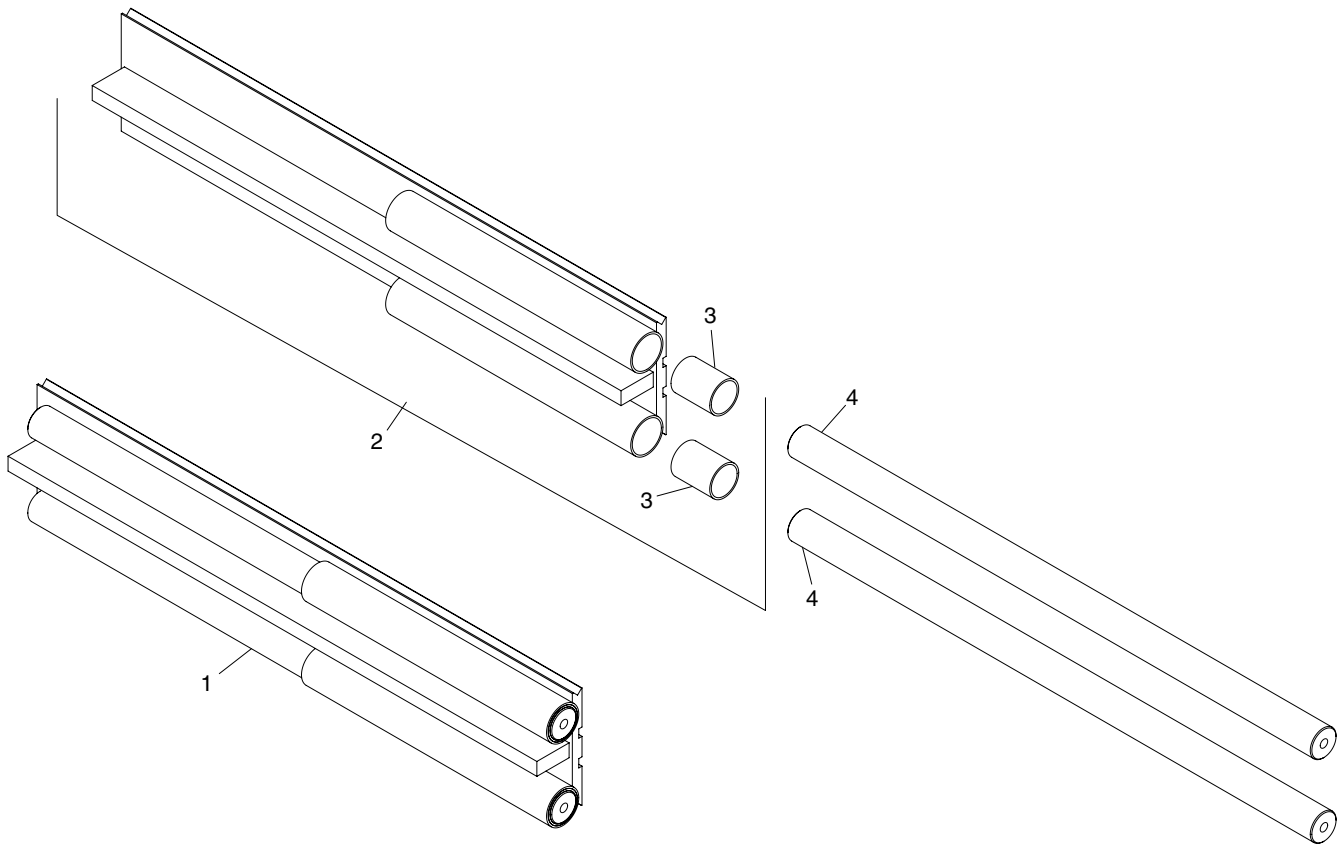


Figure 10-23

Screed Slide Plate Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006416	1	Assy, Slide W/Shafts, HD	
2	1006445	1	Assy, Slide W/O Shafts	
3	1006417	4	Bushing, Fiber, 225 OD / 200 ID	
4	1006415	2	Shaft, Screed Ext, Chromed, HD	

Screed Extension LH Assembly

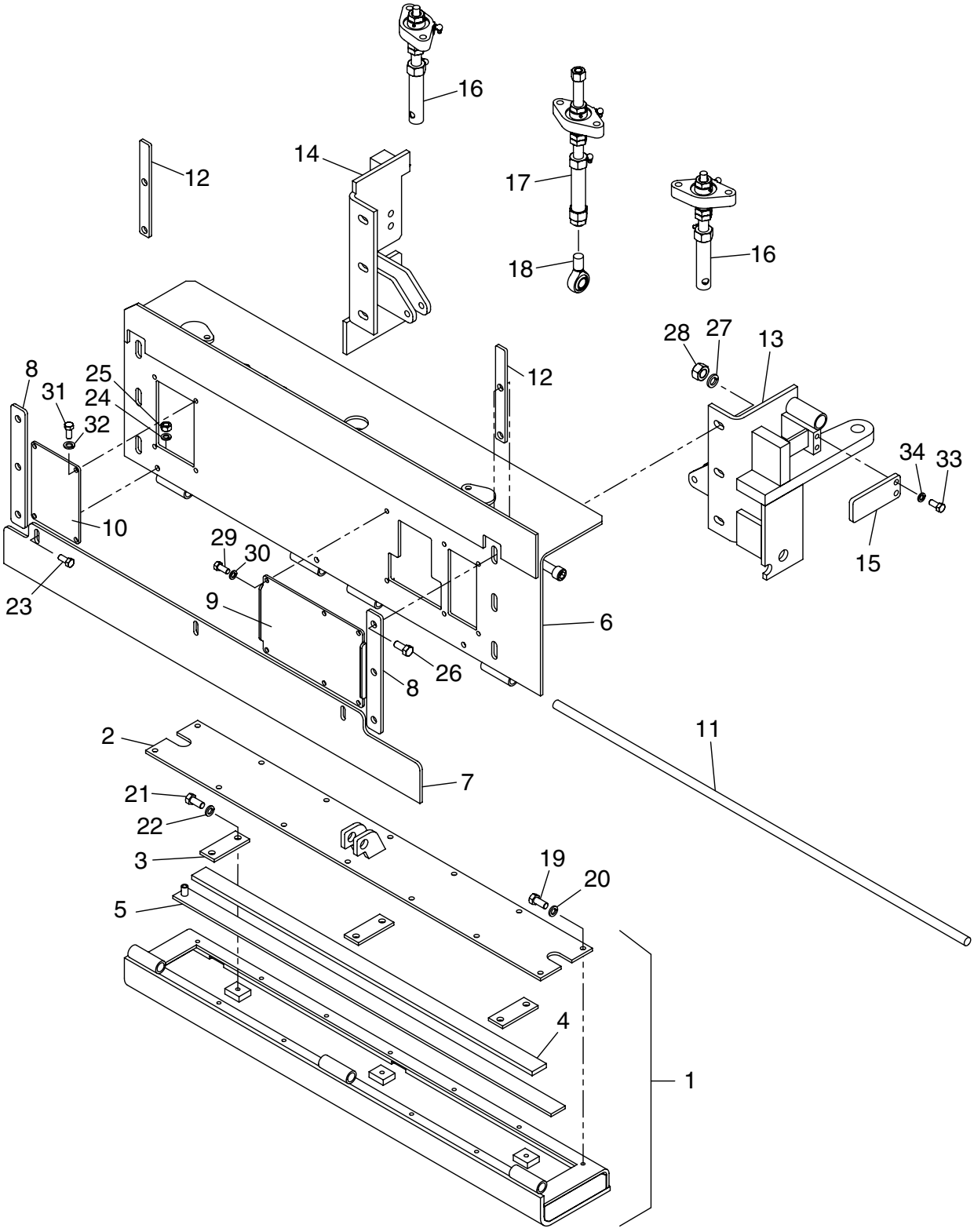


Figure 10-24

Screed Extension LH Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006380SRV	1	Assy, Ext Heatbox	Not Include 4, 5
2	1008665	1	Weldment, Heatbox Cover	
3	985123	3	Clamp, Element, Screed Ext	
4	985120	1	Bar, 25 X 15 X 36	
5	1007278SRV	1	Element, Heater, Screed, 41"	
6	1006378SRV	1	Assy, Screed Ext, Lh, Slp	Includes all items
7	1006400	1	Plate, Ext Strikeoff	
8	1006395	2	Bar, Vertical Lift	
9	1008664	1	Weldment,Extension Vibrator Cover	
10	1006398	1	Plate, Ext Access Cover	
11	854447SRV	1	Rnd, 688 X 4350 CRS	
12	1006397	2	Bar, Vertical Lift Gauge	
13	1007096	1	Assembly, Outer Ext Mount, LH	
14	1007097	1	Assembly, Inner, Ext Mount, LH	
15	1006536	1	Plate, Endgate Brkt W/Holes	
16	1006390	2	Assy, Vertical Lift Adj	
17	1006401	1	Assy, AOA Adjuster	
18	1000947	1	Ball Joint, 750, Male	
19	102-111-1A	14	Cshh, 312-18 X 250, Gr5	
20	118-2	14	Washer, Lock, 312	
21	102-205-1A	6	Cshh, 375-16 X 100, Gr5	
22	118-3	6	Washer, Lock, 375	
23	102-307-1A	3	Cshh, 437-14 X 150, Gr5	
24	118-4	3	Washer, Lock, 437	
25	116-4	3	Nut, Hex, 437-14	
26	102-205-1A	6	Cshh, 375-16 X 100, Gr5	
27	118-3	6	Washer, Lock, 375	
28	116-3	6	Nut, Hex, 375-16	
29	102-103-1A	6	Cshh, 312-18 X 75, Gr5	
30	118-2	6	Washer, Lock, 312	
31	102-103-1A	4	Cshh, 312-18 X 75, Gr5	
32	118-2	4	Washer, Lock, 312	
33	102-205-1A	2	Cshh, 375-16 X 100, Gr5 X 1 Hex	
34	118-3	2	Washer, Lock, 375	

Screed Extension RH Assembly

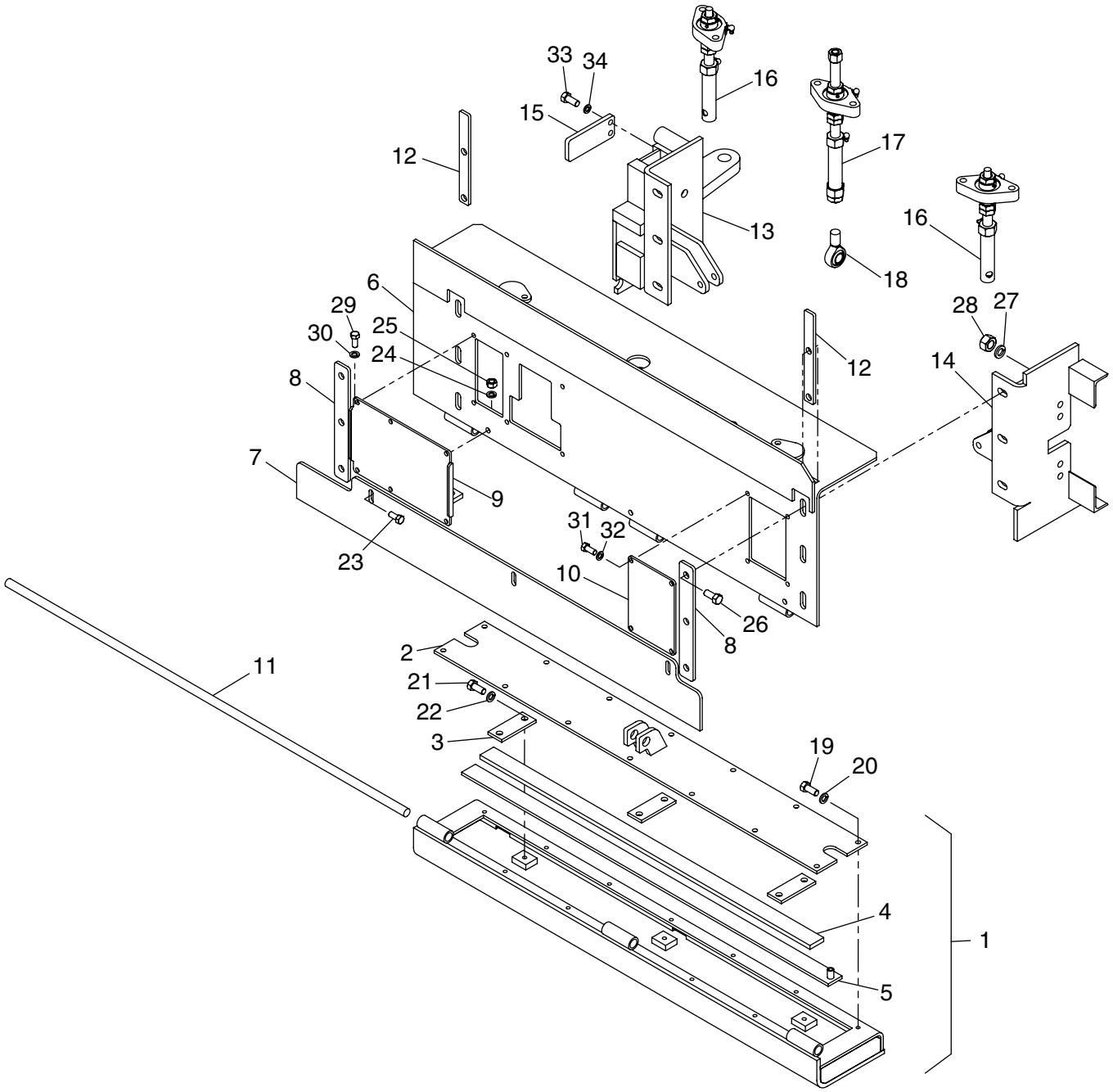


Figure 10-25

Screed Extension RH Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006380SRV	1	Assy, Ext Heatbox	Not Include 4, 5
2	1008665	1	Weldment, Heatbox Cover	
3	985123	3	Clamp, Element, Screed Ext	
4	985120	1	Bar, 25 X 15 X 36	
5	1007278SRV	1	Element, Heater, Screed, 41"	
6	1006379SRV	1	Assy, Screed Ext, RH, Slp	Includes all items
7	1006400	1	Plate, Ext Strikeoff	
8	1006395	2	Bar, Vertical Lift	
9	1008664	1	Weldment, Extension Vibrator Cover	
10	1006398	1	Plate, Ext Access Cover	
11	854447SRV	1	Rnd, 688 X 4350 CRS	
12	1006397	2	Bar, Vertical Lift Gauge	
13	1007098	1	Assembly, Outer Ext Mount, RH	
14	1007099	1	Assembly, Inner Ext Mount, RH	
15	1006536	1	Plate, Endgate Brkt W/Holes	
16	1006390	2	Assy, Vertical Lift Adj	
17	1006401	1	Assy, AOA Adjuster	
18	1000947	1	Ball Joint, 750, Male	
19	102-111-1A	14	Cshh, 312-18 X 250, Gr5	
20	118-2	14	Washer, Lock, 312	
21	102-205-1A	6	Cshh, 375-16 X 100, Gr5	
22	118-3	6	Washer, Lock, 375	
23	102-307-1A	3	Cshh, 437-14 X 150, Gr5	
24	118-4	3	Washer, Lock, 437	
25	116-4	3	Nut, Hex, 437-14	
26	102-205-1A	6	Cshh, 375-16 X 100, Gr5	
27	118-3	6	Washer, Lock, 375	
28	116-3	6	Nut, Hex, 375-16	
29	102-103-1A	6	Cshh, 312-18 X 75, Gr5	
30	118-2	6	Washer, Lock, 312	
31	102-103-1A	4	Cshh, 312-18 X 75, Gr5	
32	118-2	4	Washer, Lock, 312	
33	102-205-1A	2	Cshh, 375-16 X 100, Gr5	
34	118-3	2	Washer, Lock, 375	

Screed Endgate LH Assembly

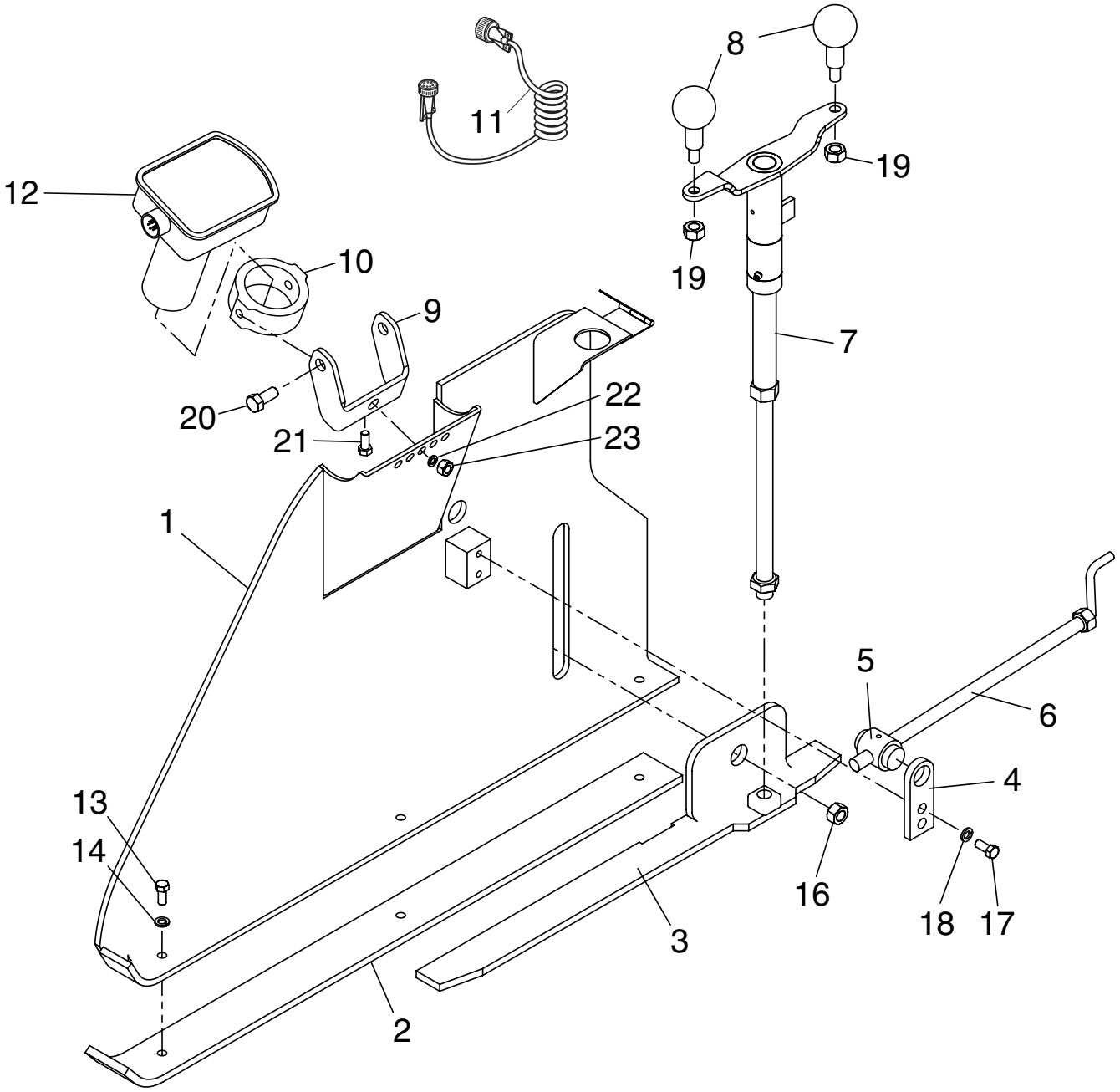


Figure 10-26

Screed Endgate LH Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006443SRV	1	Assembly, Endgate, LH, HD	Not Include items 9, 10, 11, 12
2	1006442	1	Plate, Endgate	
3	1006571	1	Brkt, LH Depth Screw Bottom Mount	
4	980458	1	Bar, Tilt Screw Hold Down	
5	980457	1	Shaft, Tilt Screw Swivel	
6	890081SRV	1	Tilt Screw, Endgate Assy	
7	1006453	1	Assy, Depth Screw, Endgate	
8	981574	2	Knob, Revolving Ball, M12 X 175	
9	1006451	1	Brkt, Sonic Sensor	
10	1008905	1	Mount, Sonic Sensor	
11	980550	1	Cable, Power, Ultrasonic	
12	980540	1	Sensor, Ultrasonic, Sauer	
13	102-405-1A	3	Cshh, 500-13 X 100, Gr5	
14	118-5	3	Washer, Lock, 500	
16	987396	1	Nut, Lock, .875-20	
17	102-205-1A	2	Cshh, 375-16 X 100, Gr5	
18	118-3	2	Washer, Lock, 375	
19	116-5-A	2	Nut, Hex, .500-13	
20	102-102-1A	2	Cshh, 312-18 X 50, Gr5	
21	102-303-1A	1	Cshh, 437-14 X 75, Gr5	
22	118-4	1	Washer, Lock, 437	
23	116-4	1	Nut, Hex, 437-14	

Screed Endgate RH Assembly

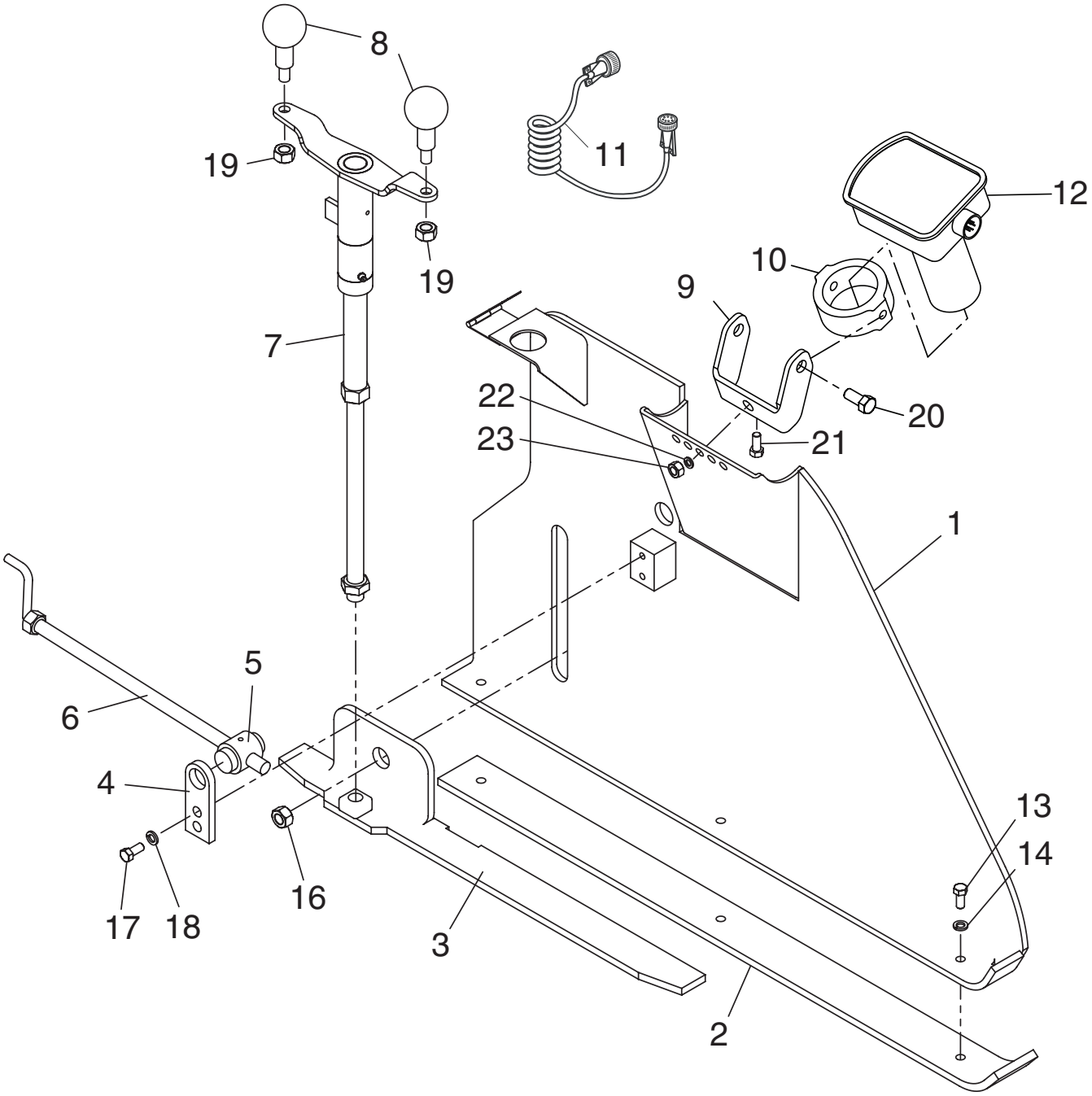


Figure 10-27

Screed Endgate RH Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006560SRV	1	Assembly, Endgate, RH, HD	Not Includes items 9, 10, 11, 12
2	1006442	1	Plate, Endgate	
3	1006452	1	Brkt, RH Depth Screw Bottom Mount	
4	980458	1	Bar, Tilt Screw Hold Down	
5	980457	1	Shaft, Tilt Screw Swivel	
6	890081SRV	1	Tilt Screw, Endgate Assy	
7	1006453	1	Assy, Depth Screw, Endgate	
8	981574	2	Knob, Revolving Ball, M12 X 175	
9	1006451	1	Brkt, Sonic Sensor	
10	1008905	1	Mount, Sonic Sensor	
11	980550	1	Cable, Power, Ultrasonic 5	
12	980540	1	Sensor, Ultrasonic, Sauer	
12	102-405-1A	3	Cshh, 500-13 X 100, Gr5	
14	118-5	3	Washer, Lock, 500	
16	987396	1	Nut, Lock, .875-20	
17	102-205-1A	2	Cshh, 375-16 X 100, Gr5	
18	118-3	2	Washer, Lock, 375	
19	116-5-A	2	Nut, Hex, .500-13	
20	102-102-1A	2	Cshh, 312-18 X 50, Gr5	
21	102-303-1A	1	Cshh, 437-14 X 75, Gr5	
22	118-4	1	Washer, Lock, 437	
23	116-4	1	Nut, Hex, 437-14	

Screed Pull Arm LH Assembly

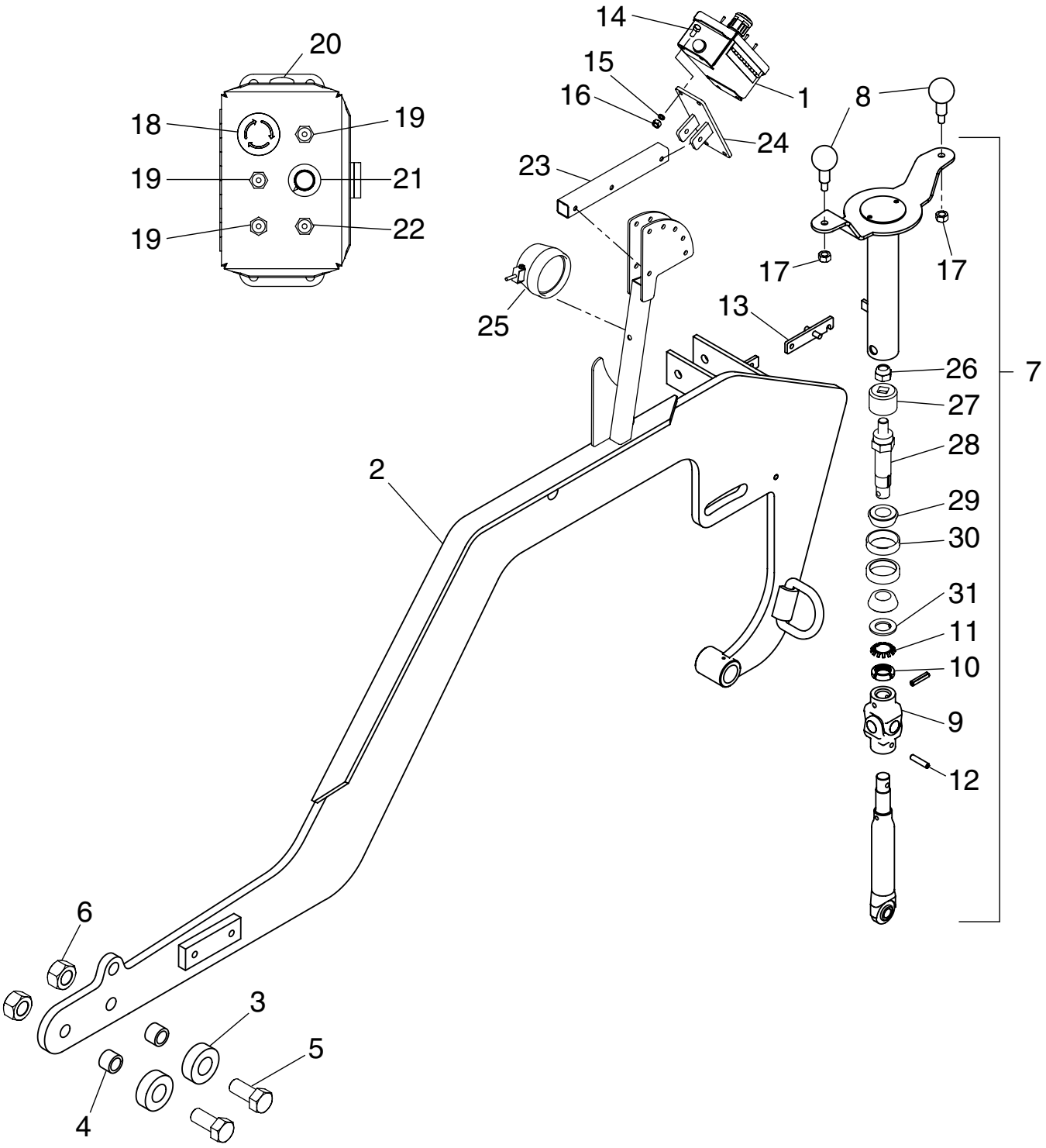


Figure 10-28

Screed Pull Arm LH Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008240	1	Enclosure, Elec 3 Sw, Lwr Cont	
2	1006437	1	Assy, Screed Arm, LH, Slp	
3	980439	2	Bushing, Screed Arm	
4	980441	2	Bushing, Arm Inner Roller	
5	102-911-1A	2	CSHH, 1.00-8 X 2.50, GR5	
6	200-16-8-5	2	Nut, Hex, 1.00-8	
7	1006427SRV	1	Flight Screw Assembly	
8	981574	2	Knob, Revolving Ball, M12 X 175	
9	21426507	1	Universal Joint	
10	95200879	1	Locknut	
11	95200978	1	Lockwasher	
12	20160644	2	Pin, Spirol, 3/8 Dia X 1-3/4	
13	851373SRV	1	Lock Arm, Flight Screw	
14	102-202-1A	4	Cshh, 375-16 X 50, Gr5	
15	118-3	4	Washer, Lock, 375	
16	116-3	4	Nut, Hex, 375-16	
17	116-5-A	2	Nut, Hex, .500-13	
18	988924-03SRV	1	Switch, Emer Stop, Assy, N.C. N.C.	
19	851392	1	Switch, Toggle, 3-Pos, Spdt, Mom	
20	982249	1	Switch, Push Button	
21	35049	1	Knob, .25 Shaft	
-	1001822-05	1	Potentiometer, Rear Pump Speed, Plus1	
22	851090613	1	Switch, Toggle, Spdt, 3-Pos	
23	1008917	1	Tube, Screed Box Pivot	
24	1008928SRV	1	Weldment, Screed Control Box Pivot	
-	1008934	1	Screed Plate Asm, Main, 150-Wle	
-	851156	1	Knob, Round Ball, 1.375 X .375-16	
25	1007968	1	Light, Led, 4.5” Worklight	
-	981503	1	Cyl, Hyd, Toe Point	Not Shown
-	981503-01	A/R	Seal Kit	Not Shown
-	851436	1	Cyl, Hyd, 2.00 X 12.00 X 1.00 Rod	Not Shown
-	851436-01	A/R	Seal Kit	Not Shown
26	95998936	1	Lock Nut Ptorq 3/4-16	
27	1007231	1	Socket, 3/4” Drive, 1 1/2”	
28	1008809	1	Shaft, Screed Flight Screw	
29	20930244	2	Bearing Cone	
30	20930566	2	Bearing Cup	
31	20931333	1	Tongued Washer 1.21ID X 1.86OD	

Screed Pull Arm RH Assembly

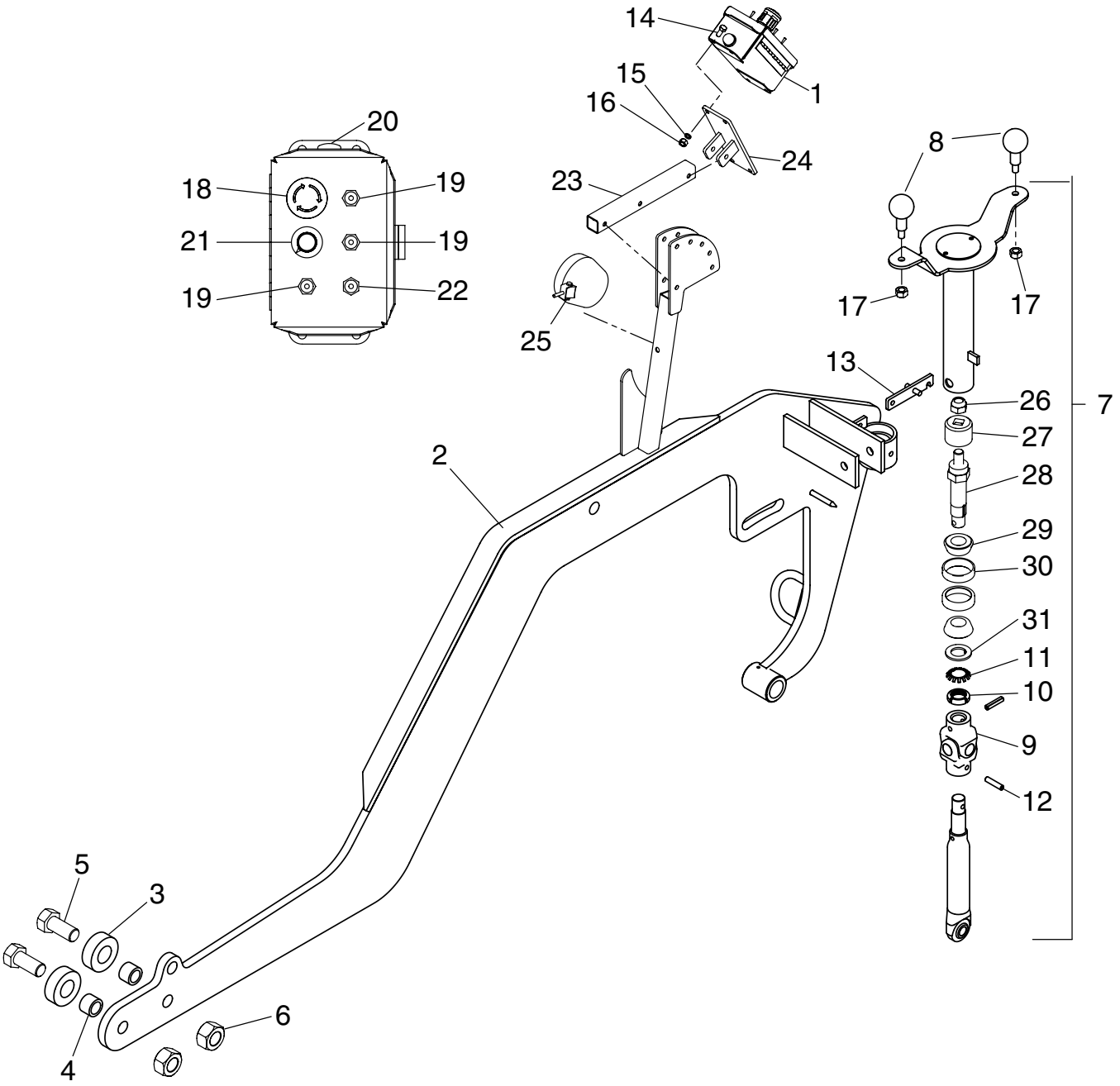


Figure 10-29

Screed Pull Arm RH Assembly Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008241	1	Enclosure, Elec 3 Sw, Lwr Cont	
2	1006438	1	Assy, Screed Arm, RH, Slp	
3	980439	2	Bushing, Screed Arm	
4	980441	2	Bushing, Arm Inner Roller	
5	102-911-1A	2	CSHH, 1.00-8 X 2.50, GR5	
6	200-16-8-5	2	Nut, Hex, 1.00-8	
7	1006427SRV	1	Flight Screw Assembly	
8	981574	2	Knob, Revolving Ball, M12 X 175	
9	21426507	1	Universal Joint	
10	95200879	1	Locknut	
11	95200978	1	Lockwasher	
12	20160644	2	Pin, Spirol, 3/8 Dia X 1-3/4	
13	851373SRV	1	Lock Arm, Flight Screw	
14	102-202-1A	4	Cshh, 375-16 X 50, Gr5	
15	118-3	4	Washer, Lock, 375	
16	116-3	4	Nut, Hex, 375-16	
17	116-5-A	2	Nut, Hex, .500-13	
18	988924-03	1	Switch, Emer Stop, Assy, N.C. N.C.	
19	851392	1	Switch, Toggle, 3-Pos, Spdt, Mom	
20	982249	1	Switch, Push Button	
21	35049	1	Knob, .25 Shaft	
	1001822-05	1	Potentiometer, Rear Pump Speed, Plus1	
22	851090613	1	Switch, Toggle, Spdt, 3-Pos	
23	1008917	1	Tube, Screed Box Pivot	
24	1008928	1	Weldment, Screed Control Box Pivot	
-	1008934	1	Screed Plate Asm, Main, 150-Wle	
-	851156	1	Knob, Round Ball, 1.375 X .375-16	
25	1007968	1	Light, Led, 4.5” Worklight	
-	981503	1	Cyl, Hyd, Toe Point	Not Shown
-	981503-01	A/R	Seal Kit	Not Shown
-	851436	1	Cyl, Hyd, 2.00 X 12.00 X 1.00 Rod	Not Shown
-	851436-01	A/R	Seal Kit	Not Shown
26	95998936	1	Lock Nut Ptorq 3/4-16	
27	1007231	1	Socket, 3/4” Drive, 1 1/2”	
28	1008809	1	Shaft, Screed Flight Screw	
29	20930244	2	Bearing Cone	
30	20930566	2	Bearing Cup	
31	20931333	1	Tongued Washer 1.21ID X 1.86OD	

Screed Heat Control Box

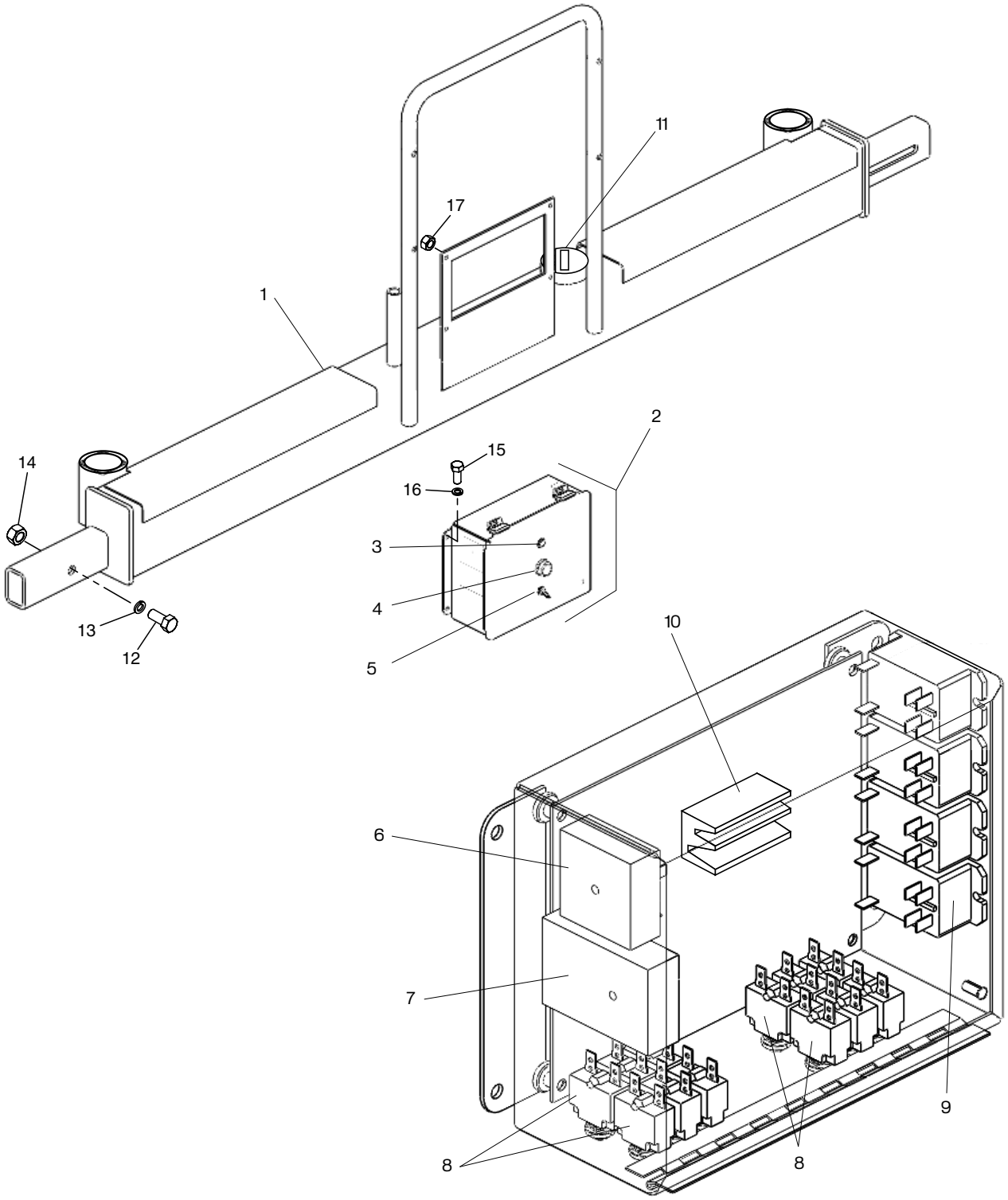
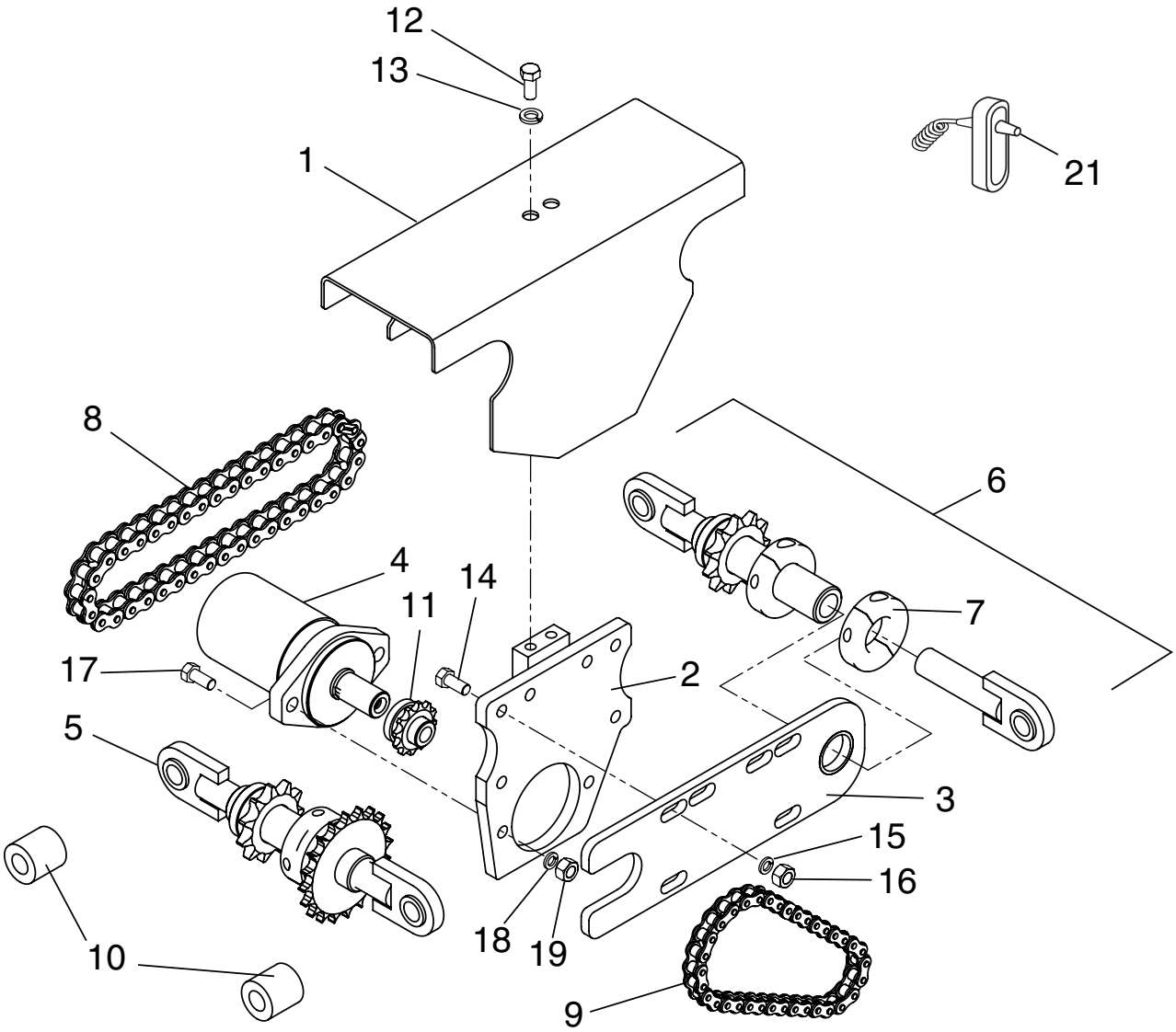


Figure 10-30

Screed Heat Control Box Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1006552SRV	1	Assy, Screed, Citrus, Tank Elec	Includes Item No 11
-	1006244	A/R	Control, Box, Asm w/110VAC Switch	Optional
2	985138	1	Assy ,Electric Heat Control	
3	31983	1	Light, Red, Dash, 50 Hole	
4	982249	1	Switch, Push Button	
5	851391	1	Switch, Toggle, Spst, 2-Pos	
6	985142	1	Timer, Elec	
7	988231	1	Relay, Time Delay, Off,10 Amp	
8	985140	12	Breaker, 15 Amp	
9	985141	4	Relay, 12VDC, DPST, 25 Amp, N/O	
10	985138-04	1	Block, Teriminal	
11	140030FL	1	Cap, Fuel Tank, Lockable	
12	102-615-1A	2	Cshh, 625-11 X 350, Gr5	
13	118-7	2	Washer, Lock, 625	
14	116-7	2	Nut, Hex, 625-11	
15	102-102-1A	4	Cshh, 312-18 X 50, Gr5	
16	118-2	4	Washer, Lock, 312	
17	116-2	4	Nut, Hex, 312-18	

Screed Optional Components



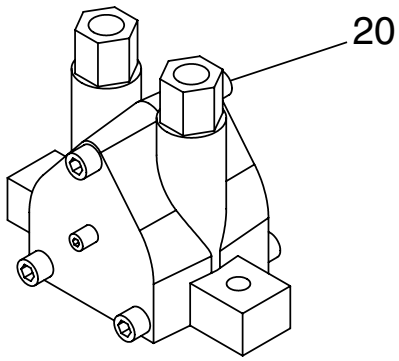


Figure 10-31

Screed Heat Control Box Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008168SRV	1	Cover, Power Crown	
2	1008667SRV	1	Weldment, Power Crown Center	
3	1008600	1	Plate, Power Crown Adjuster	Not include bushing
-	1000960	1	Bushing, Composite, Power Crown	
4	986640	1	Motor, Hyd, Danfoss	
5	1008668SRV	1	Assembly, Crown And Valley Front	
6	980182	1	Assy, 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 r	
10	1006419	2	Spacer, Crown Mnt	
11	1000799	1	Sprocket, #50 Roller Chain	
12	102-205-1A	2	Cshh, 375-16 X 100, Gr5	
13	118-3	2	Washer, Lock, 375	
14	102-405-1A	6	Cshh, 500-13 X 100, Gr5	
15	118-5	6	Washer, Lock, 500	
16	116-5	6	Nut, Hex, 500-13	
17	102-406-1A	2	Cshh, 500-13 X 125, Gr5	
18	118-5	2	Washer, Lock, 500	
19	116-5	2	Nut, Hex, 500-13	
-	920238-3	A/R	Cover, 3/4" Condulet	
-	920238-2	A/R	Condulet, 3/4" Aluminum	
-	920238-4	A/R	Gasket, Condulet Box, 3/4"	
-	920238-5	A/R	Aluminum Plug, 3/4" Coondulet	
-	3400DI	A/R	Water Tight Conn, 3/4" X 3/4"	
20	1000059	2	Vibrator, Hydraulic	
21	72884	A/R	Switch, Toggle, Spst, 2-Pos, Mom	

Generator

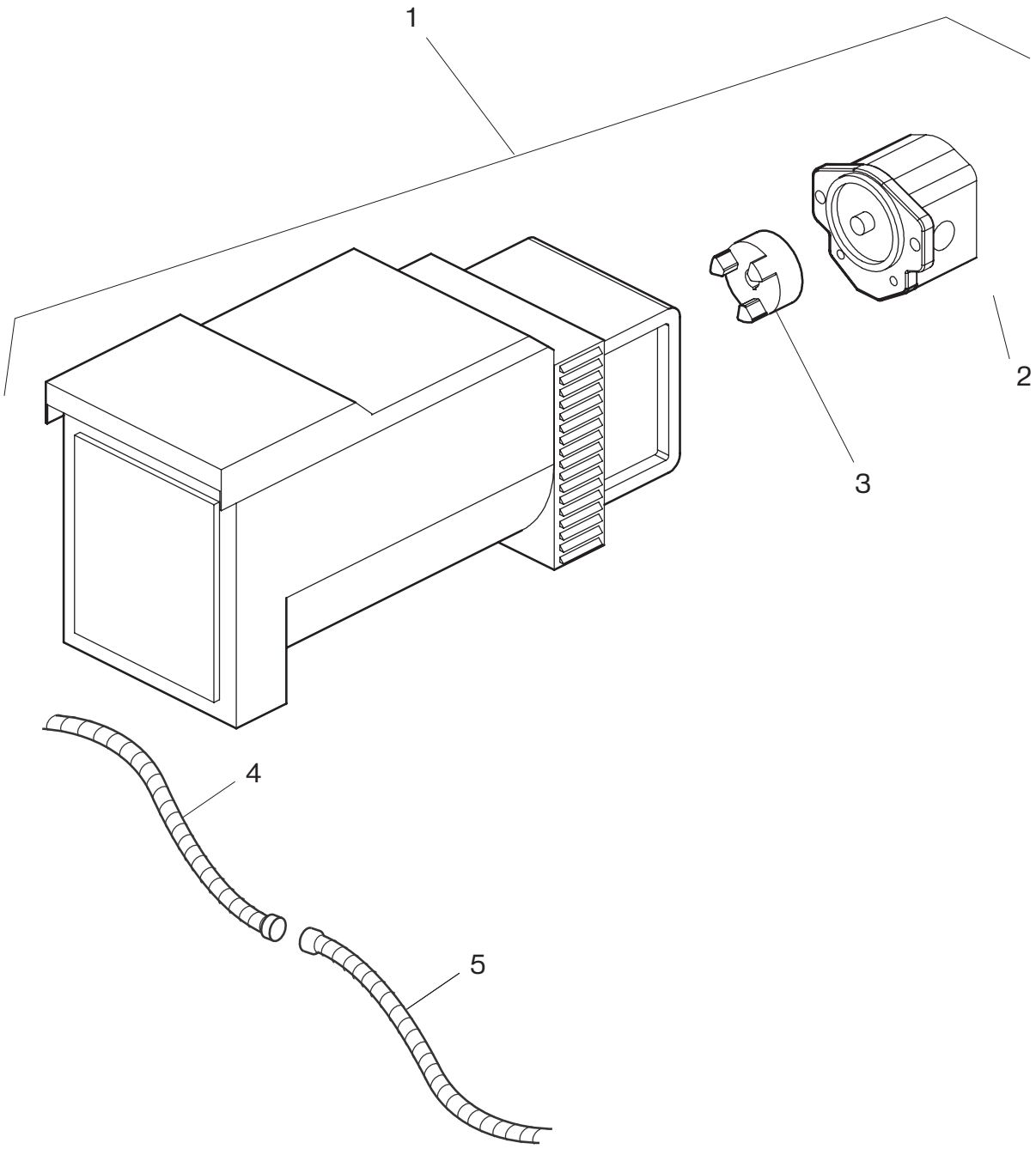


Figure 10-32

Generator Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	1008513	1	Generator, Hyd, Assy	
2	1008513-02	1	Motor	
3	1002454	1	Coupling Half, 3 Jaw, 24 mm	
–	987894SRV	1	Coupling Assy, Motor To Generator, 28 mm	Not Shown
4	985138-03	1	Power Cord, Bulkhead to Control Box	
5	985825	1	Harness, Electric Heat, Gen to Bulkhead	
–	986658	1	Capacitor, Generator, 40 uF	Not Shown
–	1002148	1	Capacitor, Generator, 30 uF	Not Shown
–	1002147	1	Capacitor, Generator, 25 uF	Not Shown
–	1002146	1	Capacitor, Generator, 20 uF	Not Shown
–	989259	1	Kit, Extension Harness	Not Shown

Paver Leveling 20’-40’ Ski

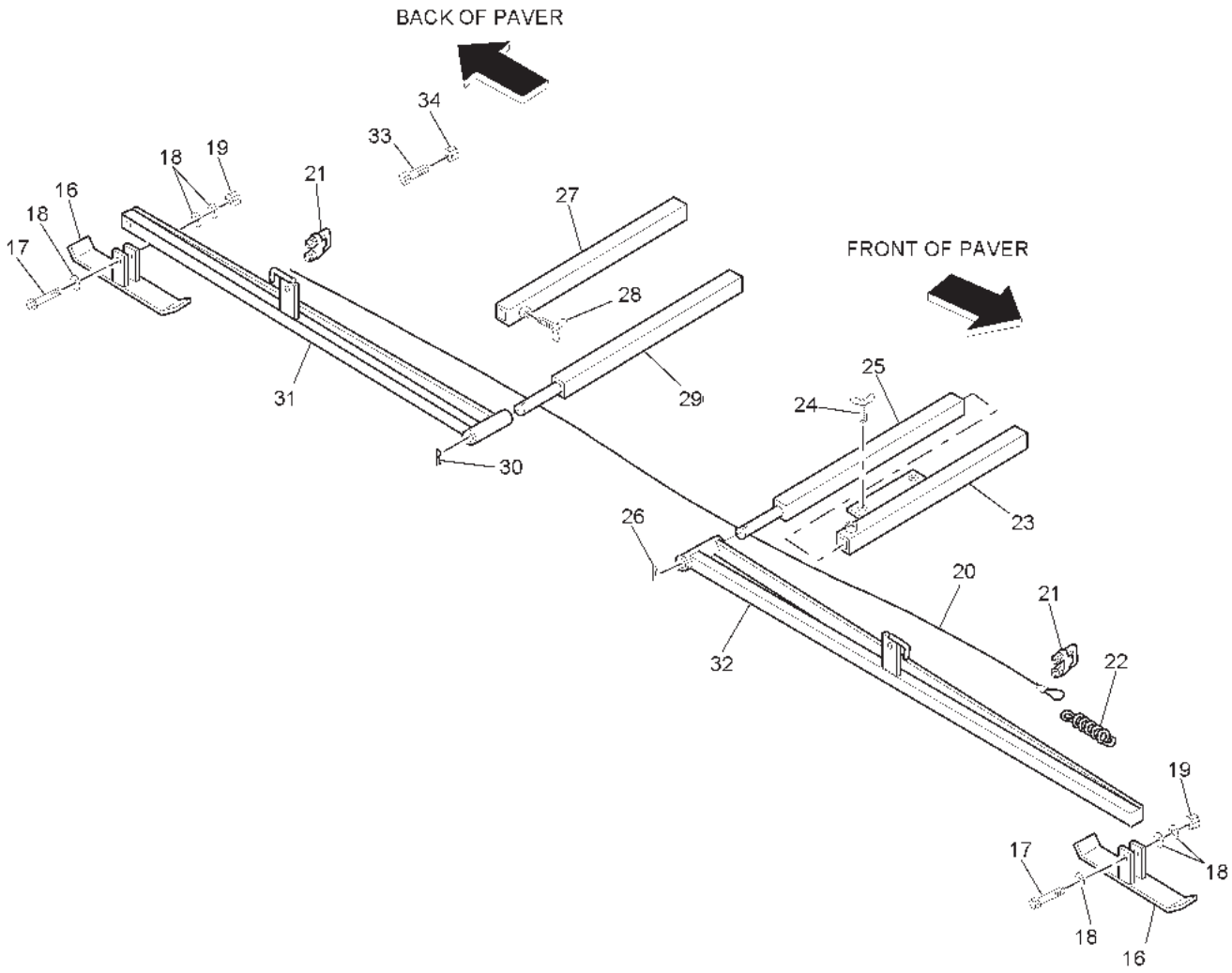


Figure 10-33

Paver Leveling 20'-40' Ski Parts List

Item No.	Part Number	Qty.	Description	Remarks
16	851249SRV	2	Skid	
17	102-411-1A	1	CSHH, .500-13 x 2.50	
18	119-5	3	Washer, Flat, .500	
19	143-5	1	Nut, Lock, .500	
20	851246	1	Cable 1.063	
21	981981	2	Clamp U-Bolt	
22	851245	1	Spring, Tension	
23	851241	2	Housing, Rear Slide Bar	
24	920070	1	Thumb Screw, .375-16 x 1.00	
25	851242	1	Bar, Adjustable Slide	
26	80338	1	Pin, Cotter	
27	851243	1	Housing, Front Slide Bar	
28	920070	1	Thumb Screw, .375-16 x 1.00	
29	851242	1	Bar, Adjustable Slide	
30	80338	1	Pin, Cotter	
31	851248	1	Support, Arm Skid (Front)	
32	851247	1	Support, Arm Skid (Rear)	
33	102-709-1A	1	CSHH, .750-15 x 2.00	
34	119-8	1	Washer, Flat, .750	
–	851584SRV	1	Opt, 20Ft Ski	Option
–	851585SRV	1	30' To 40' Ski Assy	Option

Paver Leveling Control (TOPCON) System 5

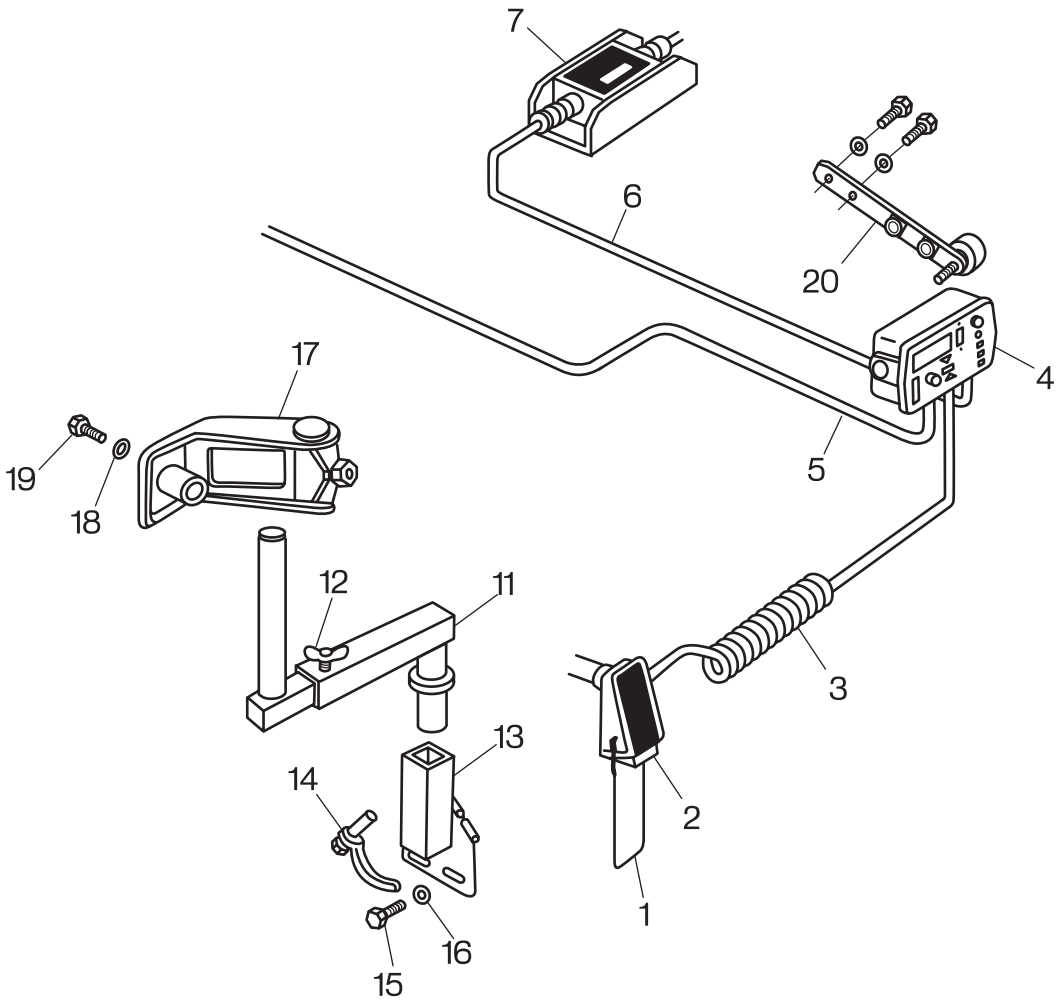


Figure 10-34

Paver Leveling Control (TOPCON) System 5 Parts List

Item No.	Part Number	Qty.	Description	Remarks
1	983414-10	2	Assy Temp. Bail w/Sleeves	
2	983414-01	2	TSD Sonic Tracker II	
3	983414-08	2	Coil Cord, 15ft CA to Tracker	
4	983414-02	2	TSD 3 Conn SS Paver Box	
5	983414-17	2	Cable Power, (+1) to Topcon 5, 8616	Grey Power Cord
6	983414-14	2	Slope Cable 5 Foot	
7	983414-13	1	Slope Sensor	
11	9090-1125SRV	2	Bracket, Z Arm, TOPCON	
12	920070	2	Thumb Screw, .375-16 x 1.00	
13	851575SRV	2	Pivot Mount, TOPCON/Spectra Physics	
14	300060	2	Handle, Bolt, .625-11	
15	102-606-1A	4	CSHH, .625-11 x .250 GR5	
16	119-7	4	Washer, Flat, SAE, .625	
17	851578	2	Bracket, Sonic Tracker	
18	119-7	2	Washer, Flat, SAE, .625	
19	102-617-1A	2	CSHH, .625-11 x 4.00 GR8	
20	983414-09	2	Assy CB Bracket	
—	1008955SRV		Topcon Sys5 Dual Grade	Dose Not Include 6, 7
—	1008954SRV		Topcon Sys5 Dual Grade and Slope	Includes All

ALPHABETICAL PARTS INDEX

Description	Part Number	Figure Number	Item Number
30' To 40' Ski Assy	851585SRV	10-33	—
Actuator, Linear, 12V, Prop, 12mm	1006963-18	10-8	40
Air Cleaner Assy	38385	10-7	34
Aluminum Plug, 3/4" Coondulet	920238-5	10-31	-
Arm Extension, LH	930020SRV	10-5	14
Arm Extension, RH	930025SRV	10-5	15
Arm, Push Block	980787	10-4	8
Assembly, 8616, Control Box, With Dp610	1007229	10-17	-
Assembly, 8616, Control Box, With Dp610	1007229	10-16	1
Assembly, Conveyor Drive Adjustment	980106	10-6	9
Assembly, Conveyor Idler	1008919SRV	10-3	29
Assembly, Crown And Valley Front	1008668SRV	10-31	5
Assembly, Endgate, LH, HD	1006443SRV	10-26	1
Assembly, Endgate, RH, HD	1006560SRV	10-27	1
Assembly, Guide Bar, LH	1008730SRV	10-1	21
Assembly, Hydraulic Tank	1007083	10-9	1
Assembly, Inner Ext Mount, RH	1007099	10-25	14
Assembly, Inner, Ext Mount, LH	1007097	10-24	14
Assembly, Outer Ext Mount, LH	1007096	10-24	13
Assembly, Outer Ext Mount, RH	1007098	10-25	13
Assembly, Push Bar	980027	10-4	1
Assembly, Vandalism Cover	1007339	10-16	2
Assy ,Electric Heat Control	985138	10-30	2
Assy CB Bracket	983414-09	10-34	20
Assy Temp. Bail w/Sleeves	983414-10	10-34	1
Assy, Access Door ,LH	1007038	10-15	20
Assy, Access Door ,RH	1007039	10-15	18
Assy, AOA Adjuster	1006401	10-24	17
Assy, AOA Adjuster	1006401	10-25	17
Assy, Auger Motor Cover, 8515	981685	10-18	1
Assy, Auger To Back Brace	1007072	10-18	45
Assy, Beacon Light Post	989469SRV	10-15	-
Assy, Crown & Valley, Rear	980182	10-20	3
Assy, Crown & Valley, Rear	980182	10-31	6
Assy, Depth Screw, Endgate	1006453	10-26	7
Assy, Depth Screw, Endgate	1006453	10-27	7
Assy, Ext Heatbox	1006380SRV	10-24	1
Assy, Ext Heatbox	1006380SRV	10-25	1

Description	Part Number	Figure Number	Item Number
Assy, Fuel Tank	1007084	10-9	5
Assy, New Style Seat Post,Short	988640SRV	10-6	13
Assy, Screed Arm Mnt, LH	1007024SRV	10-1	1
Assy, Screed Arm Mnt, RH	1007025SRV	10-1	—
Assy, Screed Arm, LH, Slp	1006437	10-28	2
Assy, Screed Arm, RH, Slp	1006438	10-29	2
Assy, Screed Ext, Lh, Slp	1006378SRV	10-24	6
Assy, Screed Ext, RH, Slp	1006379SRV	10-25	6
Assy, Screed, Citrus, Tank Elec	1006552SRV	10-30	1
Assy, Slide W/O Shafts	1006445	10-23	2
Assy, Slide W/Shafts, HD	1006416	10-23	1
Assy, Spacer, Auger Shaft	1007306	10-18	27
Assy, Spraydown Pump	984381	10-9	14
Assy, Turnbuckle W/Ratchet	983157	10-20	2
Assy, Upper Screed Cover, LH	1008757	10-20	19
Assy, Upper Screed Cover, RH	1008758	10-20	18
Assy, Vertical Lift Adj	1006390	10-24	16
Assy, Vertical Lift Adj	1006390	10-25	16
Assy, Vibrator, LH	1008449SRV	10-22	1
Assy, Vibrator, RH	1008448SRV	10-22	7
Auger End Mount Left	860051L	10-18	33
Auger End Mount Right	860051R	10-18	-
Auger Flight, LH, 12"	981700L	10-18	28
Auger Flight, RH, 12"	981700R	10-18	-
Auger Moun,LH	860051HDLSRV	10-18	-
Auger Moun,RH	860051HDRSRV	10-18	-
Axle, Guide Wheel	930045SRV	10-5	5
Ball Joint, 750, Male	1000947	10-24	18
Ball Joint, 750, Male	1000947	10-25	18
Bar, 25 X 15 X 36	985120	10-24	4
Bar, 25 X 15 X 36	985120	10-25	4
Bar, Adjustable Slide	851242	10-33	25
Bar, Adjustable Slide	851242	10-33	29
Bar, Cutoff Hinge	1007064	10-18	43
Bar, Element Hold Down	985121	10-20	9
Bar, Front Rubber Mount	980278	10-14	17
Bar, Idler Side Tapped	1006699	10-2	3
Bar, Push Bar Pin	856954	10-4	15
Bar, Rad Support, 8616	1006963-12	10-7	28
Bar, Roller Spacer, 1/4”	1007656	10-1	—

Description	Part Number	Figure Number	Item Number
Bar, Round Side Wing Hinge	1007336	10-14	12
Bar, Tilt Screw Hold Down	980458	10-26	4
Bar, Tilt Screw Hold Down	980458	10-27	4
Bar, Vertical Lift	1006395	10-24	8
Bar, Vertical Lift	1006395	10-25	8
Bar, Vertical Lift Gauge	1006397	10-24	12
Bar, Vertical Lift Gauge	1006397	10-25	12
Bar, V-Groove Bottom Rail	1006426	10-20	16
Bar, V-Groove Top Rail	1006425	10-20	15
Battery, 12V, 1260CCA	-	10-9	9
Beacon Light	211748-02	10-15	27
Bearing	850130	10-4	5
Bearing, Auger, 8616	1007267	10-18	24
Bearing Cone	20930244	10-28	29
Bearing Cone	20930244	10-29	29
Bearing Cup	20930566	10-28	30
Bearing Cup	20930566	10-29	30
Bearing, Insert, 1.50	850130	10-3	21
Bearing, Insert, 1.50	850130	10-3	33
Bearing, Push Bar Pin	810070	10-4	16
Bearing, Truck Hitch Roller	930050	10-5	4
Belt, Engine, Kub, Tier3, V3800T	1006963-19	10-8	-
Block, Teriminal	985138-04	10-30	10
Bolt, Conveyor Bearing	1005590	10-3	37
Bracket, Air Cleaner Mount	38385-05	10-8	37
Bracket, Relay Mount	1006963-10	10-7	26
Bracket, Relay Mount	36086	10-8	41
Bracket, Relay Mount	36086	10-17	3
Bracket, Sonic Tracker	851578	10-34	17
Bracket, Water/Fuel Pump Mount	480260	10-13	3
Bracket, Wireholder	981605	10-10	4
Bracket, Z Arm, TOPCON	9090-1125SRV	10-34	11
Breaker, 15 Amp	985140	10-30	8
Breather	620050	10-9	17
Breather Cap, 1/4”	620050	10-11	24
Brkt, LH Depth Screw Bottom Mount	1006571	10-26	3
Brkt, Radiator Brace, 8616	1006963-13	10-7	29
Brkt, RH Depth Screw Bottom Mount	1006452	10-27	3
Brkt, Sonic Sensor	1006451	10-26	9
Brkt, Sonic Sensor	1006451	10-27	9

Description	Part Number	Figure Number	Item Number
Bushing, 2.00 ID X 2.50 OD X 2.50 Idler	810070	10-18	32
Bushing, Arm Inner Roller	980441	10-28	4
Bushing, Arm Inner Roller	980441	10-29	4
Bushing, Bogie Roller	1006691	10-1	8
Bushing, Composite, Power Crown	1000960	10-31	-
Bushing, Fiber, 225 OD / 200 ID	1006417	10-23	3
Bushing, Screed Arm	980439	10-28	3
Bushing, Screed Arm	980439	10-29	3
Bushing, Track Idler/Truck Hitch	810070	10-5	12
Cable 1.063	851246	10-33	20
Cable Power, (+1) to Topcon 5, 8616	983414-17	10-34	5
Cable, Power, Ultrasonic	980550	10-26	11
Cable, Power, Ultrasonic 5	980550	10-27	11
Cap, Fuel	982033	10-9	6
Cap, Fuel Tank, Lockable	140030FL	10-30	11
Cap, Radiator, 13.5PSI, 2.25" Neck	1002184-04	10-7	2
Capacitor, Generator, 20 uF	1002146	10-32	–
Capacitor, Generator, 25 uF	1002147	10-32	–
Capacitor, Generator, 30 uF	1002148	10-32	–
Capacitor, Generator, 40 uF	986658	10-32	–
Cartridge,Check, 12Gpm	37113-04	10-12	–
Chain Assembly, Conveyor	1007052SRV	10-3	10
Chain Cover	981688	10-18	9
Chain Guard, Front	1006672	10-14	14
Chain Guard, Front, LH	1006673	10-3	2
Chain Guard, Front, RH	1006674	10-3	1
Chain Guard, Rear	1006675	10-3	3
Chain, 140mm, 40 Links	1007003-04	10-1	13
Chain, Conveyor, 87 Pitches w/Master, LH	1007052-02	10-3	35
Chain, Conveyor, 87 Pitches w/Master, RH	1007052-03	10-3	36
Chain, Proof Coil, .250 X 10 Link	858206	10-1	-
Chain, Roller, 50 X 18 r	1000958	10-31	9
Chain, Roller, 60H X 39 Pitches	1008047	10-20	4
Chain, Roller, 60H X 39 Pitches	1008047	10-31	8
Chain, Roller, 60H X 51 Pitch	985815	10-18	13
Chain, Roller, 80H X 60 And 1/2 Links	980220	10-6	4
Clamp Half, w/ Tapped Holes	852825	10-4	17
Clamp U-Bolt	981981	10-33	21
Clamp, Auger, 12"	1007269	10-18	25
Clamp, Element, Screed Ext	985123	10-24	3

Description	Part Number	Figure Number	Item Number
Clamp, Element, Screed Ext	985123	10-25	3
Coil Cord, 15ft CA to Tracker	983414-08	10-34	3
Coil, 12 VDC	983643-02A	10-10	13
Coil, 12Vdc	983644-01	10-12	—
Coil, 12Vdc Sv08 4303612	983644-05	10-12	—
Coil, 4303212	1005963-07	10-12	—
Coil, Control Bypass,H1 Pump	986519-01	10-9	-
Collar, Auger Shaft End	851645	10-18	31
Collar, Lock	620400	10-5	11
Collar, Power Crown Locking	1000798	10-31	7
Complete Auger Assy, LH	1007304	10-18	-
Complete Auger Assy, RH	1007305	10-18	-
Condulet, 3/4” Aluminum	920238-2	10-31	-
Conn, Lockwasher, 24 Shell	981916-02	10-16	-
Conn, Nut, 24 Shell	981916-01	10-16	-
Control, Box, Asm w/110VAC Switch	1006244	10-30	-
Controller, 50 Pin, Propel, 8616	1008124	10-16	13
Controller, 50 Pin, Screed, 8616	1008123	10-16	14
Cord, 4 Ft , Electronic Steering	851548-04	10-16	15
Coupling Assy, Motor To Generator, 28 mm	987894SRV	10-32	—
Coupling Half, 3 Jaw, 24 mm	1002454	10-32	3
Cover Plate, Valve	983643-11	10-11	—
Cover, 3/4” Condulet	920238-3	10-31	-
Cover, Auger Support	981695	10-18	6
Cover, Back Panel	930065	10-5	16
Cover, Elements, Screed Base	985125	10-20	5
Cover, Power Crown	1008168SRV	10-31	1
Cover, Rear Elements	1007002	10-20	11
Cover, Screed Elements	985149	10-20	17
Cover, Screed Lower, LH/RH	1007000	10-20	20
Cplg Half, 3 Jaw, 1"	880030	10-22	3
Cplg Half, 3 Jaw, 5/8"	280030	10-22	5
CSHH, .313-18 X .750	100-5-18-12-5F	10-6	5
CSHH, .313-18 X .750	100-5-18-12-5F	10-18	14
CSHH, .313-18 X 1.000	100-5-18-16-5	10-18	7
CSHH, .313-24 x 0.75	100-5-24-12-5F	10-9	7
CSHH, .375-16 x .500	102-203-1A	10-5	17
CSHH, .375-16 X 1.000	100-6-16-16-5F	10-18	40
CSHH, .375-16 x 1.25	100-6-16-20-5	10-9	3
CSHH, .375-16 X 1.375	100-6-16-22-5	10-18	46

Description	Part Number	Figure Number	Item Number
CSHH, .500-13 X 1.000	100-8-13-16-5F	10-18	2
CSHH, .500-13 X 1.250	100-8-13-20-5F	10-18	17
CSHH, .500-13 X 1.500	100-8-13-24-5	10-18	37
CSHH, .500-13 x 2.00	851111	10-5	2
CSHH, .500-13 X 2.5	100-8-13-40-5	10-18	36
CSHH, .500-13 x 2.50	102-411-1A	10-33	17
CSHH, .500-13 X 9	100-8-13-140-5	10-9	11
CSHH, .625-11 x .250 GR5	102-606-1A	10-34	15
CSHH, .625-11 X 1.375	100-10-11-22-5F	10-18	18
CSHH, .625-11 X 1.375	100-10-11-22-5F	10-18	29
CSHH, .625-11 x 3.50	102-615-1A	10-5	6
CSHH, .625-11 x 4.00 GR8	102-617-1A	10-34	19
CSHH, .625-18 X 2.00	100-10-18-32-5	10-1	10
CSHH, .750-15 x 2.00	102-709-1A	10-33	33
CSHH, 1.00-14 X 2.50	100-16-14-40-5F	10-1	2
CSHH, 1.00-8 X 2.50, GR5	102-911-1A	10-28	5
CSHH, 1.00-8 X 2.50, GR5	102-911-1A	10-29	5
Cshh, 312-18 X 150, Gr5	102-107-1A	10-20	26
Cshh, 312-18 X 250, Gr5	102-111-1A	10-24	19
Cshh, 312-18 X 250, Gr5	102-111-1A	10-25	19
Cshh, 312-18 X 50, Gr5	102-102-1A	10-20	24
Cshh, 312-18 X 50, Gr5	102-102-1A	10-30	15
Cshh, 312-18 X 50, Gr5	102-102-1A	10-26	20
Cshh, 312-18 X 50, Gr5	102-102-1A	10-27	20
Cshh, 312-18 X 75, Gr5	102-103-1A	10-22	11
Cshh, 312-18 X 75, Gr5	102-103-1A	10-24	31
Cshh, 312-18 X 75, Gr5	102-103-1A	10-24	29
Cshh, 312-18 X 75, Gr5	102-103-1A	10-25	29
Cshh, 312-18 X 75, Gr5	102-103-1A	10-25	31
Cshh, 375-16 X 100, Gr5	102-205-1A	10-24	21
Cshh, 375-16 X 100, Gr5	102-205-1A	10-25	21
Cshh, 375-16 X 100, Gr5	102-205-1A	10-25	26
Cshh, 375-16 X 100, Gr5	102-205-1A	10-27	17
Cshh, 375-16 X 100, Gr5	102-205-1A	10-24	26
Cshh, 375-16 X 100, Gr5	102-205-1A	10-25	33
Cshh, 375-16 X 100, Gr5	102-205-1A	10-26	17
Cshh, 375-16 X 100, Gr5	102-205-1A	10-31	12
Cshh, 375-16 X 100, Gr5 X 1 Hex	102-205-1A	10-24	33
Cshh, 375-16 X 50, Gr5	102-202-1A	10-28	14
Cshh, 375-16 X 50, Gr5	102-202-1A	10-29	14

Description	Part Number	Figure Number	Item Number
Cshh, 437-14 X 100, Gr5	102-305-1A	10-20	31
Cshh, 437-14 X 150, Gr5	102-307-1A	10-24	23
Cshh, 437-14 X 150, Gr5	102-307-1A	10-25	23
Cshh, 437-14 X 75, Gr5	102-303-1A	10-26	21
Cshh, 437-14 X 75, Gr5	102-303-1A	10-27	21
Cshh, 500-13 X 100, Gr5	102-405-1A	10-22	13
Cshh, 500-13 X 100, Gr5	102-405-1A	10-26	13
Cshh, 500-13 X 100, Gr5	102-405-1A	10-27	12
Cshh, 500-13 X 100, Gr5	102-405-1A	10-31	14
CSHH, 500-13 x 125	100-406-1A	10-6	2
Cshh, 500-13 X 125, Gr5	102-406-1A	10-21	3
Cshh, 500-13 X 125, Gr5	102-406-1A	10-31	17
CSHH, 500-13 x 175	102-408-1A	10-3	6
Cshh, 500-13 X 200, Gr5	102-409-1A	10-20	33
CSHH, 500-13 x 225	102-410-1A	10-3	4
CSHH, 500-13 x 225	102-410-1A	10-4	2
CSHH, 500-13 x 225	102-410-1A	10-14	15
Cshh, 625-11 X 100, Gr5	102-605-1A	10-22	9
CSHH, 625-11 x 175	102-608-1A	10-3	25
CSHH, 625-11 x 175	102-608-1A	10-4	9
CSHH, 625-11 x 200	102-609-1A	10-14	7
CSHH, 625-11 x 300	100-613-1A	10-2	8
CSHH, 625-11 x 300	102-613-1A	10-4	12
CSHH, 625-11 x 325	100-10-11-52-5	10-2	4
Cshh, 625-11 X 350, Gr5	102-615-1A	10-30	12
CSHH, 875-9 x 150	102-807-1A	10-14	2
CSHH, M12 X 70 X 30	100-M12-1.75-70-8.8	10-1	5
CSHH, M16 x 55mm	1003611	10-2	11
CSSH, .375-16 X 1.500	102-6-16-24-F	10-18	21
CSSH, .500-13 X 1.750	100-8-13-28-5	10-18	51
Cssh, 312-18 X 150, Gr5	102-5-18-24-F	10-20	30
Cutoff Assy, LH	1006665	10-18	44
Cutoff Assy, RH	1006666	10-18	-
Cyl, Hyd, 2.50 X 4.00 X 1.25 Rod	910170	10-18	49
Cyl, Hyd, 200 X 200 X 4200 X 125	981710R	10-20	21
Cyl, Hyd, 200 X 200 X 4200 X 125	981710L	10-20	22
Cyl, Hyd, 275 X 200 X 1125 Rod	983421	10-20	23
Cylinder, Arm Extension	930070	10-5	19
Cylinder,Hydraulic, 2.00 X 7.00 X 1.00 Rod	1008618	10-14	4
Decal, 8616, Wing, LH	1007679-02	10-15	-

Description	Part Number	Figure Number	Item Number
Decal, 8616, Wing, RH	1007679-03	10-15	-
Decal, Kit, 8616 Dec/Saf/Ops	1007679	10-15	-
Decal, Kit, HD Screed	1007677	10-15	-
Display, Dp610, 8616	1008316	10-17	5
Drag Bar	1007052-01	10-3	15
Drive Shaft, Front Axle Housing	980511	10-3	27
Drive Shaft, Rear Axle Housing	1007061	10-3	22
Dual-Joystick, Cont,Box, (+)One	1008904	10-16	8
Elbow, Rubber, 90, 3.50 X 3.00 ID	171170	10-8	36
Elec Steering Box Mount, 8500	855401L	10-16	6
Elec Steering Box Mount, 8500	855401R	10-16	7
Element, Heater, 46	1007276SRV	10-20	10
Element, Heater, Screed, 41"	1007278SRV	10-24	5
Element, Heater, Screed, 41"	1007278SRV	10-25	5
Enclosure, Control Panel 8616 W/Holes	1007228	10-17	1
Enclosure, Elec 3 Sw, Lwr Cont	1008240	10-28	1
Enclosure, Elec 3 Sw, Lwr Cont	1008241	10-29	1
End Cap, Auger Shaft	851647	10-18	35
Engine, Kubota, 99HP, Tier 3	1006963	10-8	43
Exhaust, Nipple, Kub	988673-16	10-7	22
Exhaust, Tip 90	986537-26	10-8	38
Fan Guard	986537-44	10-7	20
Fan Shroud	1006963-22	10-7	23
Fan, Engine, Kubota, V3800T	1006963-05	10-7	10
Filter Element, Fuel	982080-02	10-8	-
Filter Element, Hydraulic Charge	981917	10-10	6
Filter Element, Oil	982080-01	10-8	-
Filter Housing Assembly, Hydraulic	982940	10-10	9
Filter Housing, Hyd.	982940	10-9	2
FITT, 90 06MJ-08MP	34536	10-13	13
Flashing, Hopper Front	1007101	10-14	18
Flex Plate & Coupling, Sae C 14T	1006963-03	10-8	42
Flight Screw Assembly	1006427SRV	10-28	7
Flight Screw Assembly	1006427SRV	10-29	7
Flow Divider	983643-10	10-10	20
Flow Regulator, Cartridge	1006953-02	10-12	2
Flow Regulator, Cartridge	1006953-03	10-12	3
Flow Regulator, Cartridge	1006953-04	10-12	4
Fuse Block, 18 Gang, Atc	685060	10-17	2
Gasket, Condulet Box, 3/4”	920238-4	10-31	-

Description	Part Number	Figure Number	Item Number
Gauge, Sight Level/Temp, Hyd Oil	500070	10-9	13
Gauge, Sight Level/Temp, Hyd Oil	500070	10-10	10
Generator, Hyd, Assy	1008513	10-32	1
Governer, Kubota Engine	1008171	10-7	7
Grating, Floorboard, Center	1007011	10-15	16
Grease Fitting	140610	10-18	34
Grease Fitting, Long	1008949	10-18	42
Group, Screed Frame, 815HD	1007195	10-20	1
Grouser Bolt	1007003-08	10-1	15
Grouser Nut	1007003-09	10-1	16
Grouser without Pad	1007003-06	10-1	18
Guide Assy, Hopper Wing, LH	1000806	10-14	19
Guide Assy, Hopper Wing, RH	1000801	10-14	20
Guide Wheel, Truck Hitch	930055	10-5	1
Guide, Wheel Pivot Arm	930030SRV	10-5	13
Handle & Nozzle, Spraydown	920220	10-13	8
Handle, Bolt, .625-11	300060	10-34	14
Harness, 816 Control Box, Without DPI610	1008458	10-17	-
Harness, 816 Screed Control Box, LH	1008240	10-17	-
Harness, 816 Screed Control Box, RH	1008241	10-17	-
Harness, Electric Heat, Gen to Bulkhead	985825	10-32	5
Harness, Engine, V3900T Kub	1006963-20	10-8	-
Harness, Jumper, 31 Pin Dash To Pedastel	1008581	10-17	-
Harness, Jumper, 47 Pin Dash To Pedastel	1008582	10-17	-
Harness, Main	1008583	10-17	-
Harness, Manifold	1008585	10-17	-
Harness, Manifold, Front	1008602	10-17	-
Head, Hydraulic Charge/Return Filter	981918	10-10	7
Hinge, (2) Thru Holes	987639	10-15	13
Hold Down, Battery	72313	10-9	10
Hose Reel, Machine Washdown	920200	10-13	1
Hose, 15’	-	10-13	10
Hose, 15’	-	10-13	12
Hose, Air Intake, Elbow	1006963-04	10-7	9
Hose, Pump to Hose Reel, 5’	-	10-13	6
Hose, Radiator, Lower	1006963-16	10-7	32
Hose, Radiator, Upper	1006963-15	10-7	31
Housing, Front Slide Bar	851243	10-33	27
Housing, Rear Slide Bar	851241	10-33	23
Housing, Vibrator LH	982965L-1	10-22	2

Description	Part Number	Figure Number	Item Number
Housing,Vibrator RH	982965R-1	10-22	8
Hyd. Motor, Conveyor Main	1008603	10-6	1
Hydraulic Cylinder	851436	10-14	1
Hydraulic Cylinder, Track Tension	980150	10-2	1
Hydraulic Filter Element	980350-01	10-10	8
Hydraulic Motor, Propulsion	980120	10-2	13
Hydraulic Tank	980174	10-10	1
Insert, 3-Jaw Coupling	280040	10-22	4
Isolator	986537-14	10-8	39
Isolator, Rad Lower Mnt	1001166-57	10-7	3
Key	982008-04	10-17	-
Key, Vandalism Locks	35560	10-15	-
Key, Vandalism Locks	35560	10-15	-
Kit, Extension Harness	989259	10-32	—
Kit, Grease Manifold, 8816	1003174	10-2	16
Kit, Hose Oil Drain Kubota	988169	10-8	-
Kit, Spraydown Pump and Strainer	1001428SRV	10-13	—
Knob, .25 Shaft	35049	10-17	15
Knob, .25 Shaft	35049	10-28	21
Knob, .25 Shaft	35049	10-29	21
Knob, Revolving Ball, M12 X 175	981574	10-26	8
Knob, Revolving Ball, M12 X 175	981574	10-27	8
Knob, Revolving Ball, M12 X 175	981574	10-28	8
Knob, Revolving Ball, M12 X 175	981574	10-29	8
Knob, Round Ball, 1.375 X .375-16	851156	10-28	-
Knob, Round Ball, 1.375 X .375-16	851156	10-29	-
Latch, Radiator Access Panel	160460	10-15	21
Lever Latch	980460	10-15	12
Lever Latch	980460	10-15	24
Lid, Access Door	1007088	10-15	11
Light, Led, 4.5” Worklight	1007968	10-15	26
Light, Led, 4.5” Worklight	1007968	10-28	25
Light, Led, 4.5” Worklight	1007968	10-29	25
Light, Red, Dash, 50 Hole	31983	10-30	3
Link, Master, Conveyor Chain	850070A	10-3	13
Link, w/Tab, Conveyor Chain	850080B	10-3	14
Lock Arm, Flight Screw	851373SRV	10-28	13
Lock Arm, Flight Screw	851373SRV	10-29	13
Locknut	95200879	10-28	10
Locknut	95200879	10-29	10

Description	Part Number	Figure Number	Item Number
Lock Nut Ptorq 3/4-16	95998936	10-28	26
Lock Nut Ptorq 3/4-16	95998936	10-29	26
Lockwasher	95200978	10-28	11
Lockwasher	95200978	10-29	11
Manifold, Block, 06-0774	1006953-01	10-12	1
Manifold, Hopper Wing Sequence	910122	10-11	—
Manifold, Hyd, Motor Control, 8616	1006953	10-12	—
Manual-Pak Case, 10.5 X 13.5 X 2.5	985234-01	10-15	29
Mirco Switch, Auto. Conveyors	900050	10-6	10
Mnt, Conveyor Drive Motor Assy	851149SRV	10-6	8
Motor	1008513-02	10-32	2
Motor, Hyd, Danfoss	986640	10-31	4
Motor, Hyd, Gear, 117 Cir, A" "	1006955	10-22	6
Motor, Hyd, Gear, 9.76 CIR, 4Bolt	1008603	10-18	10
Mount, Motor	981696	10-18	11
Mount, Motor LF Kubota	986537-16	10-7	16
Mount, Motor Rear 8515 Kubota	986537-15	10-7	17
Mount, Motor RF Kubota	986537-17	10-7	15
Mount, Relay Isolator	1006963-11	10-7	27
Mount, Sonic Sensor	1008905	10-26	10
Mount, Sonic Sensor	1008905	10-27	10
Mounting Block	852827	10-4	14
Muffler	986537-35	10-8	35
Muffler Brace, Kubota Engine	988673-10	10-7	18
Muffler Strap, Engine	986537-30	10-7	19
Nipple, .375	99638	10-13	5
Nozzle, Spraydown Handle	901210A	10-13	9
Nut, Coil	983643-03	10-10	14
Nut, Coil Hold Down, H1 Pump	986519-02	10-9	-
Nut, Hex .500-13	116-5	10-3	7
Nut, Hex .500-13	200-8-13-5	10-9	-
Nut, Hex, .375-16	200-60-16-5	10-16	-
Nut, Hex, .375-16	200-6-16-5	10-18	48
Nut, Hex, .500-13	200-8-13-5	10-18	5
Nut, Hex, .500-13	116-5-A	10-26	19
Nut, Hex, .500-13	116-5-A	10-27	19
Nut, Hex, .500-13	116-5-A	10-28	17
Nut, Hex, .500-13	116-5-A	10-29	17
Nut, Hex, .625-11	116-7	10-5	9
Nut, Hex, .625-11	200-10-11-5	10-18	30

Description	Part Number	Figure Number	Item Number
Nut, Hex, 1.00-8	200-16-8-5	10-28	6
Nut, Hex, 1.00-8	200-16-8-5	10-29	6
Nut, Hex, 312-18	116-2	10-30	17
Nut, Hex, 375-16	116-3	10-24	28
Nut, Hex, 375-16	116-3	10-25	28
Nut, Hex, 375-16	116-3	10-28	16
Nut, Hex, 375-16	116-3	10-29	16
Nut, Hex, 437-14	116-4	10-24	25
Nut, Hex, 437-14	116-4	10-25	25
Nut, Hex, 437-14	116-4	10-26	23
Nut, Hex, 437-14	116-4	10-27	23
Nut, Hex, 500-13	116-5	10-20	28
Nut, Hex, 500-13	116-5	10-20	34
Nut, Hex, 500-13	116-5	10-21	5
Nut, Hex, 500-13	116-5	10-31	16
Nut, Hex, 500-13	116-5	10-31	19
Nut, Hex, 500-13	116-5	10-14	16
Nut, Hex, 625	116-7	10-14	9
Nut, Hex, 625-11	116-7	10-30	14
Nut, Lock, .500	143-5	10-33	19
Nut, Lock, .875-20	987396	10-26	16
Nut, Lock, .875-20	987396	10-27	16
Nut, Lock, 625-11	143-7	10-4	10
Nut, Poly Pad	1007003-10	10-1	20
Opt, 20Ft Ski	851584SRV	10-33	—
O-ring	982457	10-2	14
O-Ring, .103 X 3.737 FKM/Viton, 75D, SAE	1006952-01	10-9	-
Pad, molded with poly, 140mm chain	1007003-05	10-1	14
Pad, Poly, Bolt on Replacement	1007003-01	10-1	19
Pin, Chain 140mm	1007003-07	10-1	17
Pin, Clevis	980167SRV	10-2	2
Pin, Clevis	210060	10-5	21
Pin, Clevis, 1.00 X 3.25 W/1.5HD	240030	10-18	52
Pin, Cotter	81019	10-2	—
Pin, Cotter	80338	10-5	20
Pin, Cotter	81019	10-14	—
Pin, Cotter	80338	10-33	26
Pin, Cotter	80338	10-33	30
Pin, Cyl Mount	981661	10-20	8
Pin, Cylinder	980166	10-14	5

Description	Part Number	Figure Number	Item Number
Pin, Slope	981659	10-20	6
Pin, Spirol, 3/8 Dia X 1-3/4	20160644	10-28	12
Pin, Spirol, 3/8 Dia X 1-3/4	20160644	10-29	12
Pin,. 50 X 3.00, W/Hairpin Cotter	72836	10-6	14
Pipe, Pushbar Roller Ext	980036	10-4	11
Pivot Mount, TOPCON/Spectra Physics	851575SRV	10-34	13
Plate, Auger Back Wear Plate, LH	1007068	10-18	38
Plate, Auger Back Wear Plate, RH	1007069	10-18	39
Plate, Conveyor Mount, w/Brg.	851483	10-3	9
Plate, Dash Pin Lock	1007333	10-16	4
Plate, Enclosure Mount	1007263	10-16	3
Plate, Endgate	1006442	10-26	2
Plate, Endgate	1006442	10-27	2
Plate, Endgate Brkt W/Holes	1006536	10-24	15
Plate, Endgate Brkt W/Holes	1006536	10-25	15
Plate, Engine Hood Cover	1007100	10-15	4
Plate, Ext Access Cover	1006398	10-24	10
Plate, Ext Access Cover	1006398	10-25	10
Plate, Ext Strikeoff	1006400	10-24	7
Plate, Ext Strikeoff	1006400	10-25	7
Plate, Front Axle Housing	1007051	10-3	28
Plate, Fuel Pump Brkt, Chalvkub	1002184-17	10-7	14
Plate, Governor Mount	1006963-17	10-7	33
Plate, Guide Bar Mount	1008724	10-1	-
Plate, Hood Support	1007016	10-15	8
Plate, Hyd Cover ,RH	1007014	10-15	9
Plate, Hyd Cover, LH	1007013	10-15	10
Plate, Hydraulic Output	980286	10-11	–
Plate, LH Top Manifold Cover	1007015	10-15	7
Plate, Pivot Cover	981711	10-20	7
Plate, Power Crown Adjuster	1008600	10-31	3
Plate, Pump Mount Kit	1006963-02	10-7	5
Plate, Rad Isolator Mnt	1001166-58	10-7	24
Plate, Rad Support, 8616	1006963-09	10-7	25
Plate, Radiator Vent	1007017	10-15	3
Plate, Right Top Cover	1007034	10-15	2
Plate, Right Top Cover	1007034	10-15	6
Plate, Side Wing Rubber Shield	1007104	10-14	10
Plate, Speed Sensor	1006963-08	10-7	13
Plate, Walkboard Hinge	985163	10-21	2

Description	Part Number	Figure Number	Item Number
Plug	987220-01	10-11	—
Plug	987220-02	10-11	—
Potentiometer, Rear Pump Speed, Plus1	1001822-05	10-17	14
Potentiometer, Rear Pump Speed, Plus1	1001822-05	10-28	-
Potentiometer, Rear Pump Speed, Plus1	1001822-05	10-29	
Power Cord, Bulkhead to Control Box	985138-03	10-32	4
Pre-Filter, Fuel, Kub, T3, V3600TB	1001166-12	10-8	-
Pressure Switch (Flowjet Pump)	851448	10-13	11
Pull Pin Spring Loaded	1000835	10-16	5
Pull Pin Spring Loaded	1000835	10-16	12
Pump, Fuel, 12VDC, Kubota 8515	986537-39	10-7	6
Pump, Hyd, L/S, 4.58 Cir, RH	1006956	10-9	16
Pump, Hyd, Tandem, H1 W/Edc	1006952	10-9	15
Pump, Spraydown	1001542	10-9	-
Pump, Spraydown	1001542	10-13	2
Push Block Bracket	980786	10-4	18
Radiator Cover	987635	10-15	5
Radiator Isolator	986537-41	10-7	4
Radiator/Cooler Assy, Kub	988673-13	10-7	21
Rail, Dash Slide w/Holes	1007332	10-16	17
Rear Axle Housing	1007057	10-3	24
Relay, 12VDC, DPST, 25 Amp, N/O	985141	10-30	9
Relay, 12VDC, Spdt, 40 Amp, 5 Pin	36085	10-7	8
Relay, 12Vdc, Spdt, 40 Amp, 5 Pin	36085	10-17	4
Relay, Time Delay, Off,10 Amp	988231	10-30	7
Repair Kit, Hyd Pump Shaft, H1	986519-03	10-9	-
Rnd, 688 X 4350 CRS	854447SRV	10-24	11
Rnd, 688 X 4350 CRS	854447SRV	10-25	11
Rod, Guide Bar	1008728	10-1	-
Rod, Hinge Access Door	1007044	10-15	25
Rod, Threaded, 625-11	983589SRV	10-3	30
Roller	930040	10-5	10
Roller Assy, Push Bar, 24.00 Lg	980033	10-4	7
Roller, Conveyor Chain Idler (w/bearing)	850162	10-3	32
Rollpin	851118-1	10-3	12
Rubber, Hopper Wing Gusset	1007103	10-14	6
Screed Plate Asm, Main, 150-Wle	1008934	10-28	-
Screed Plate Asm, Main, 150-Wle	1008934	10-29	-
Screw, Wing, .375-16 X 1	120-6-24	10-16	9
Seal Kit	910170-01	10-18	-

Description	Part Number	Figure Number	Item Number
Seal Kit	980150-01	10-2	–
Seal Kit	930070-01	10-5	–
Seal Kit	851484	10-14	–
Seat Assy, Leeboy Logo	1006343	10-6	12
Section, Valve Assy, Multifunction	980440-04	10-5	–
Sender, Press, 0-100 Psi, 02MP	1002184-27	10-8	-
Sender, Temp, 100-250 F, 06 MP	1002184-28	10-8	-
Sending Unit, Eng Oil Press	982008-09	10-8	-
Sensor, Speed, .750-16	1006963-07	10-7	12
Sensor, Ultrasonic, Sauer	980540	10-26	12
Sensor, Ultrasonic, Sauer	980540	10-27	12
Shaft With Sprocket, 12" Auger	1007270SRV	10-18	22
Shaft, Cutoff Cyl Mnt	1006988	10-18	50
Shaft, Pushbar Roller	980034	10-4	6
Shaft, Screed Ext, Chromed, HD	1006415	10-23	4
Shaft, Screed Flight Screw	1008809	10-28	28
Shaft, Screed Flight Screw	1008809	10-29	28
Shaft, Tilt Screw Swivel	980457	10-26	5
Shaft, Tilt Screw Swivel	980457	10-27	5
Side Wing, Hopper LH	1006971	10-14	13
Side Wing, Hopper RH	1006970	10-14	11
Skid	851249SRV	10-33	16
Slope Cable 5 Foot	983414-14	10-34	6
Slope Sensor	983414-13	10-34	7
Snap Ring	850040	10-3	34
Solenoid Valve	983643-01	10-10	12
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-01	10-10	–
Solenoid Valve	983643-04	10-10	17
Solenoid Valve	987220-06	10-10	21
Socket, 3/4” Drive, 1 1/2”	1007231	10-28	27
Socket, 3/4” Drive, 1 1/2”	1007231	10-29	27
Spacer, Crown Mnt	1006419	10-31	10

Description	Part Number	Figure Number	Item Number
Spacer, Engine Fan, 27mm	1006963-06	10-7	11
Spring, Tension	851245	10-33	22
Sprocket, #50 Roller Chain	1000799	10-31	11
Sprocket, 60B 12 X 1.00-6 Spline	240350	10-18	12
Sprocket, Conveyor Drive	851120	10-6	3
Sprocket, Conveyor, Rear	1007048SRV	10-3	8
Sprocket, Front Axle Housing	1008923SRV	10-3	26
Sprocket, Rear Axle Housing	1007060SRV	10-3	20
Sprocket, Rear Axle Housing	1007062SRV	10-3	23
Sprocket, Track 1556mm Pitch	1006987	10-2	7
Strainer	36926	10-13	7
Strainer, Hydraulic Suction	72243	10-10	2
Strainer, Hydraulic Suction	980560	10-10	3
Stud, Isolated Terminal, .313-18	1006963-01	10-7	1
Support, Arm Skid (Front)	851248	10-33	31
Support, Arm Skid (Rear)	851247	10-33	32
Switch, Emer Stop, Assy, N.C. N.C.	988924-03SRV	10-28	18
Switch, Emer Stop, Assy, N.C. N.C.	988924-03	10-29	18
Switch, Emer Stop, Assy, NC/NC	988924-03SRV	10-17	9
Switch, Emer Stop, N/C Contact	988924-03SRV	10-17	8
Switch, Ignition, W/Heat St	39146-14	10-17	6
Switch, Push Button	982249	10-17	10
Switch, Push Button	982249	10-28	20
Switch, Push Button	982249	10-29	20
Switch, Push Button	982249	10-30	4
Switch, Temp Kubota	986537-49	10-8	-
Switch, Toggle, 3-Pos, Spdt, Mom	851392	10-17	11
Switch, Toggle, 3-Pos, Spdt, Mom	851392	10-17	17
Switch, Toggle, 3-Pos, Spdt, Mom	851392	10-28	19
Switch, Toggle, 3-Pos, Spdt, Mom	851392	10-29	19
Switch, Toggle, Auto Conveyor	900030	10-17	18
Switch, Toggle, Spdt, 3-Pos	851090613	10-17	13
Switch, Toggle, Spdt, 3-Pos	851090613	10-28	22
Switch, Toggle, Spdt, 3-Pos	851090613	10-29	22
Switch, Toggle, Spst, 2-Pos	851391	10-17	16
Switch, Toggle, Spst, 2-Pos	851391	10-30	5
Switch, Toggle, Spst, 2-Pos, Mom	72884	10-17	12
Switch, Toggle, Spst, 2-Pos, Mom	72884	10-31	21
Tab, Conveyor Chain, weld-on	851118-2	10-3	-
Tank, Coolant Recovery, Kubota	986537-46	10-8	-

Description	Part Number	Figure Number	Item Number
Tee, .375	920222	10-13	4
Test Port W/Cap	1002711-02	10-12	11
Thumb Screw, .375-16 X 1.00	920070	10-1	-
Thumb Screw, .375-16 x 1.00	920070	10-33	24
Thumb Screw, .375-16 x 1.00	920070	10-33	28
Thumb Screw, .375-16 x 1.00	920070	10-34	12
Tilt Screw, Endgate Assy	890081SRV	10-27	6
Tilt Screw, Endgate Assy	890081SRV	10-26	6
Timer, Elec	985142	10-30	6
Toe Board, Left Side	1007018	10-15	15
Toe Board, Right Side	1007019	10-15	14
Tongued Washer 1.21ID X 1.86OD	20931333	10-28	31
Tongued Washer 1.21ID X 1.86OD	20931333	10-29	31
Tool Box, W/Mounting Holes	853963	10-15	28
Topcon Sys5 Dual Grade	1008955SRV	10-34	—
Topcon Sys5 Dual Grade and Slope	1008954SRV	10-34	—
Torque Hub, Track Drive	1006974	10-2	10
T-Pin	850100A	10-3	11
Track Assy, Poly Pads, 140mm, 1 side	1007003	10-1	12
Track Roller	851566	10-1	4
Track, Poly, 14"Molded, 40 Links, 140mm	1008900	10-1	—
Truck Hitch, Assy, Option	9821078SRV	10-5	-
TSD 3 Conn SS Paver Box	983414-02	10-34	4
TSD Sonic Tracker II	983414-01	10-34	2
Tube, Dash Inner Support	854694	10-16	11
Tube, Dash Outer Support	854695	10-16	10
Tube, Dash Support	854693	10-16	-
Tube, Dash Support	854693	10-16	-
Tube, Reducer, 3.00-2.25 OD	1006963-14	10-7	30
Tube, Screed Box Pivot	1008917	10-28	23
Tube, Screed Box Pivot	1008917	10-29	23
Universal Joint	21426507	10-28	9
Universal Joint	21426507	10-29	9
Valve Manifold	1007074	10-10	11
Valve, Check	983643-08	10-10	19
Valve, Check	986992-03	10-10	22
Valve, Check	987220-03	10-11	—
Valve, Check	988657-01	10-11	—
Valve, Check Cv04	983643-08	10-12	12
Valve, Counterbalance	987220-07	10-11	23

Description	Part Number	Figure Number	Item Number
Valve, Dual Check	983643-05	10-10	18
Valve, Gate, 1.25	140640	10-10	5a
Valve, Gate, 1.50	981940	10-10	5
Valve, Pressure Reducing	1006953-08	10-12	7
Valve, Pv70-30Am-O-N-00	1005963-06	10-12	6
Valve, Reducing	987220-04	10-10	15
Valve, Relief	987220-05	10-10	16
Valve, Relief	910122-1	10-11	–
Valve, Relief, Rv08-22H-O-N-26/28	1005963-05	10-12	5
Valve, Sv08-20-0-N-12Er	1006953-11	10-12	10
Valve, Sv08-30-0-N-00	1005963-09	10-12	8
Valve, Sv12-20M-0-N-00	1006953-10	10-12	9
Vibrator, Hydraulic	1000059	10-31	20
W/M, Access Door Hinge	1006983	10-15	23
W/M, Bogie Shaft w/Flang	1006686	10-1	9
W/M, Front Access Door	1006981	10-15	22
W/M, Front Bogie Roller	1006693	10-1	7
W/M, Front Idler w/slide	1006965SRV	10-2	6
W/M, Idler Bogie Roller	1006692	10-1	11
Walkboard, Ass'y-Long	987056SRV	10-21	1
Washer, Auger Bearing Spacer	1007323	10-18	23
Washer, Flat,	300-8	10-9	12
Washer, Flat, .313	300-5	10-6	7
Washer, Flat, .313	300-5	10-9	8
Washer, Flat, .313	300-5	10-18	16
Washer, Flat, .375	118-3	10-5	18
Washer, Flat, .375	300-6	10-9	4
Washer, Flat, .375	300-6	10-18	47
Washer, Flat, .500	851112	10-5	3
Washer, Flat, .500	300-8	10-18	4
Washer, Flat, .500	119-5	10-33	18
Washer, Flat, .625	300-10	10-18	20
Washer, Flat, .625	120-7	10-5	7
Washer, Flat, .625 Lock	118-7	10-5	8
Washer, Flat, .750	119-8	10-33	34
Washer, Flat, 500	119-5	10-3	5
Washer, Flat, 625	119-7	10-4	13
Washer, Flat, 625	119-7	10-14	8
Washer, Flat, SAE, .625	119-7	10-34	16
Washer, Flat, SAE, .625	119-7	10-34	18

Description	Part Number	Figure Number	Item Number
Washer, Lock, .313	302-5	10-6	6
Washer, Lock, .313	302-5	10-18	8
Washer, Lock, .375	302-6	10-18	41
Washer, Lock, .500	302-8	10-2	12
Washer, Lock, .500	302-8	10-18	3
Washer, Lock, .625	302-10	10-18	19
Washer, Lock, .625	302-10	10-1	6
Washer, Lock, 1.00, Nord Wedge	986836	10-1	3
Washer, Lock, 312	118-2	10-20	27
Washer, Lock, 312	118-2	10-25	32
Washer, Lock, 312	118-2	10-30	16
Washer, Lock, 312	118-2	10-20	25
Washer, Lock, 312	118-2	10-20	29
Washer, Lock, 312	118-2	10-22	12
Washer, Lock, 312	118-2	10-24	20
Washer, Lock, 312	118-2	10-24	30
Washer, Lock, 312	118-2	10-24	32
Washer, Lock, 312	118-2	10-25	20
Washer, Lock, 312	118-2	10-25	30
Washer, Lock, 375	118-3	10-24	22
Washer, Lock, 375	118-3	10-24	27
Washer, Lock, 375	118-3	10-24	34
Washer, Lock, 375	118-3	10-25	22
Washer, Lock, 375	118-3	10-25	27
Washer, Lock, 375	118-3	10-25	34
Washer, Lock, 375	118-3	10-26	18
Washer, Lock, 375	118-3	10-27	18
Washer, Lock, 375	118-3	10-28	15
Washer, Lock, 375	118-3	10-29	15
Washer, Lock, 375	118-3	10-31	13
Washer, Lock, 437	118-4	10-20	32
Washer, Lock, 437	118-4	10-24	24
Washer, Lock, 437	118-4	10-25	24
Washer, Lock, 437	118-4	10-26	22
Washer, Lock, 437	118-4	10-27	22
Washer, Lock, 500	118-5	10-4	3
Washer, Lock, 500	118-5	10-21	4
Washer, Lock, 500	118-5	10-22	14
Washer, Lock, 500	118-5	10-26	14
Washer, Lock, 500	118-5	10-27	14

Description	Part Number	Figure Number	Item Number
Washer, Lock, 500	118-5	10-31	15
Washer, Lock, 500	118-5	10-31	18
Washer, Lock, 625	118-7	10-22	10
Washer, Lock, 625	302-10	10-2	5
Washer, Lock, 625	118-7	10-30	13
Washer, Lock, 875	81059	10-14	3
Washer, Screed Swivel Mount	240391	10-4	4
Water Tight Conn, 3/4" X 3/4"	3400DI	10-31	-
Wearplate, 1/2 Wear Plate With Studs	1008056SRV	10-20	12
Weldment, Conveyor , Front Left	1008611SRV	10-3	17
Weldment, Conveyor , Front Right	1008612SRV	10-3	16
Weldment, Conveyor , Rear Left	1008613SRV	10-3	19
Weldment, Conveyor , Rear Right	1008614SRV	10-3	18
Weldment, Conveyor Paddle, 8616	1008952	10-6	11
Weldment, Extension Vibrator Cover	1008664	10-25	9
Weldment, Heatbox Cover	1008665	10-24	2
Weldment, Heatbox Cover	1008665	10-25	2
Weldment, LH Side Cover, Generator/Battery	1008892	10-15	19
Weldment, Main Engine Cover, Tier 3	1008891	10-15	1
Weldment, Power Crown Center	1008667SRV	10-31	2
Weldment, Rail Mount, LH	1008663	10-20	13
Weldment, Rail Mount, RH	1008662	10-20	14
Weldment, Rod, Guide Bar	1008727	10-1	-
Weldment, Screed Control Box Pivot	1008928SRV	10-28	24
Weldment, Screed Control Box Pivot	1008928	10-29	24
Weldment, Truck Hitch	982178SRV	10-5	22
Weldment,Extension Vibrator Cover	1008664	10-24	9
Weldment. RH Side Cover, Fuel Tank	1008893	10-15	17
Wheel, 45mm, V-Guide	1007266	10-16	16

500 Lincoln County Parkway Ext.

Lincolnton, North Carolina 28092

Phone: (704) 966-3300 - Fax Sales: (704) 483-5802

www.leeboy.com

Printed in the U.S.A.