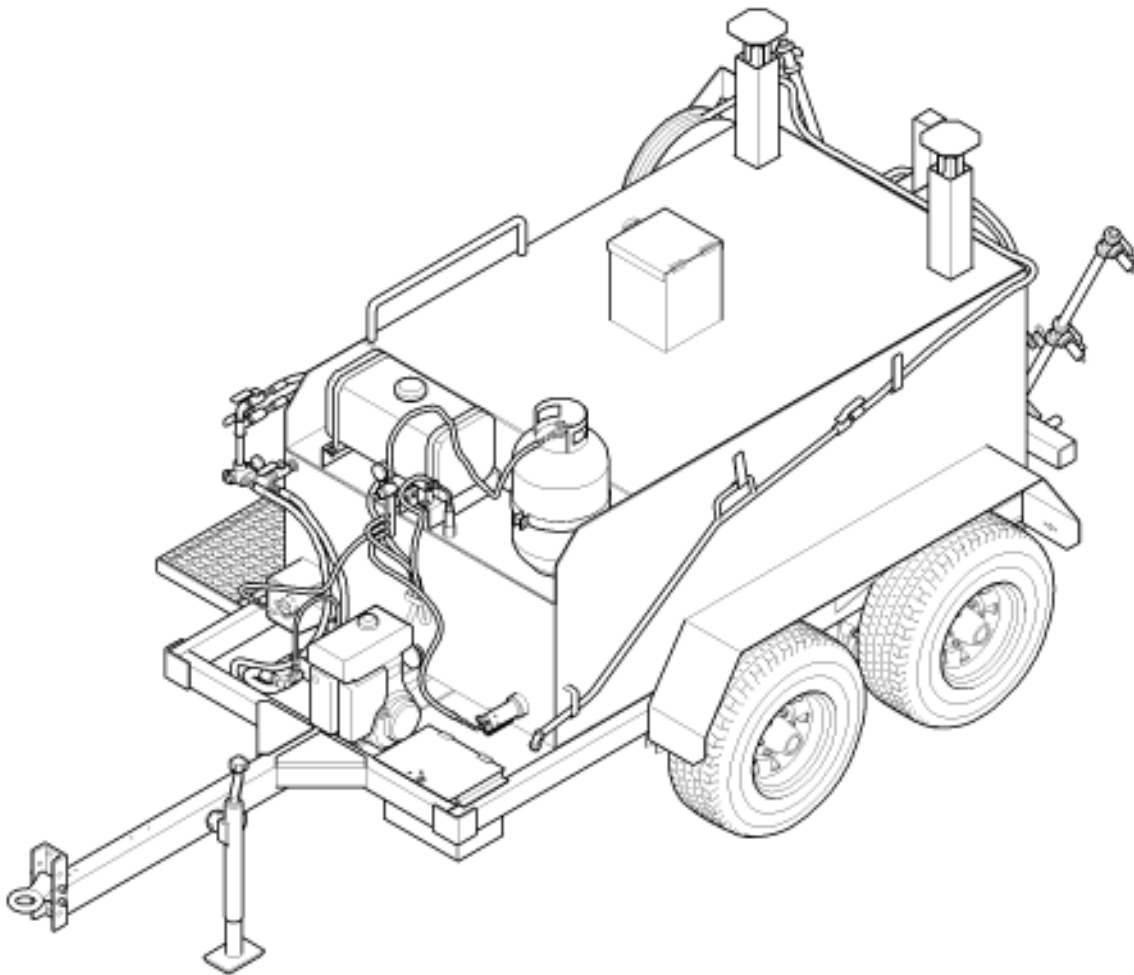


LeeBoy

OPERATIONS, SERVICE AND PARTS MANUAL



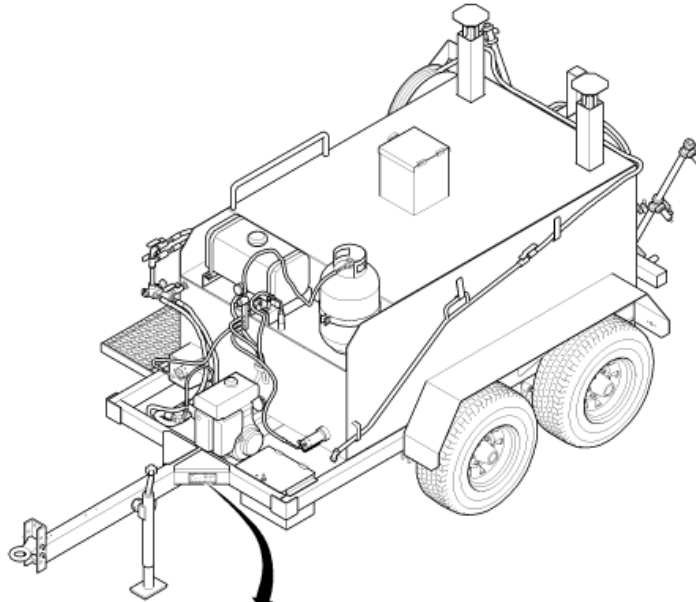
———— TACK TANK ASPHALT DISTRIBUTORS ————

Manual No. 125201-01

For Units with Serial No. 48560 and higher

Revised 12-31-07

USERS' REFERENCE GUIDE



DELIVERY DATE _____

UNIT SERIAL NUMBER _____

ENGINE TYPE _____

ENGINE NUMBER _____

DEALER'S NAME AND ADDRESS

PHONE NUMBER _____

EQUIPMENT HOURS _____

SERVICE MANAGER _____



LIMITED WARRANTY POLICY AND PROCEDURES

EFFECTIVE FOR UNITS SHIPPED AFTER JANUARY 1, 2008

A. WARRANTY

1. For warranty repairs on machines with less than fifty (50) hours in service, a FACTORY-TRAINED SERVICE REPRESENTATIVE will be reimbursed at a rate of \$1.50/mile, and three (3) hours at shop rate.
2. If a defect in material or workmanship is found and the authorized Dealer is notified during the warranty period, VT LeeBoy 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 date will begin upon online registration of the unit by the Dealer and will expire after twelve (12) months have passed. The unit must be registered by the Dealer within ten (10) days of being sold.
4. Manufacturers' Warranties:
For LeeBoy Dealers: Engines are warranted by their manufacturers and may have warranty coverage that differs from that of VT LeeBoy.
For Rosco Dealers: Engines and truck chassis are warranted by their manufacturers and may have warranty coverage that differs from that of VT LeeBoy.
5. Replacement parts furnished by VT LeeBoy are covered for the remainder of the warranty period applicable to the unit or component in which such parts are installed.
6. VT 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 VT LeeBoy Dealer will carry a six-month warranty.

B. LIMITATIONS

VT LeeBoy has no obligation under this warranty 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 VT 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 VT LeeBoy, in making the applicable units or parts available upon notification of a service notice ordered by same.

6. Warranty Responsibility:

For LeeBoy Dealers: The warranty responsibility on all engines rests with the respective manufacturer.

For Rosco Dealers: The warranty responsibility on all engines and/or truck chassis rests with the respective manufacturer.

7. Warranty and Parts Support:

For LeeBoy Dealers: VT LeeBoy may have support agreements with some engine manufacturers for warranty and parts support.

For Rosco Dealers: VT LeeBoy may have support agreements with some engine and/or truck chassis manufacturers for warranty and parts support.

C. ITEMS NOT COVERED

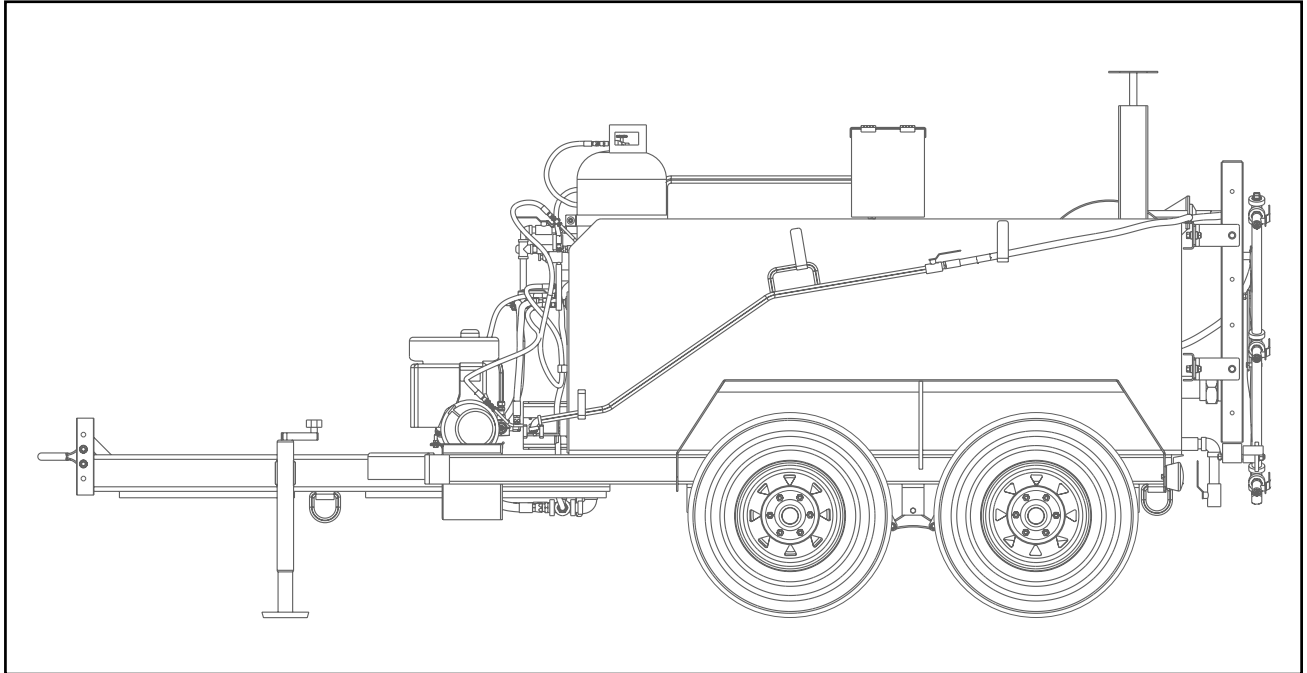
VT LeeBoy is not responsible for the following:

1. Costs related to travel time, mileage or overtime other than as covered under the Warranty Section, Item 1, of this document.
2. Costs related to transporting the product to and from the place at which warranty work is performed.
3. Air freight charges related to transporting repair parts to the place at which warranty work is performed.
4. All used units or used parts of any kind.
5. Repairs due to normal wear and tear or brought about by abuse or lack of maintenance of the equipment, except for premature failures, conveyor chains, poly-track pads, and track rails.
6. Attachments not manufactured or installed by VT LeeBoy.
7. Liability for incidental or consequential damages of any type including, but not limited to, lost profits or expenses of acquiring replacement equipment.
8. Miscellaneous charges.

D. OTHER WARRANTIES

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED, STATUTORY AND IMPLIED WARRANTIES APPLICABLE TO UNITS, ENGINES, OR PARTS WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE. IN NO EVENT, WHETHER AS A RESULT OF BREACH OF CONTRACT OR WARRANTY OR ALLEGED NEGLIGENCE OR LIABILITY WITHOUT FAULT, SHALL VT 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.

TACK DISTRIBUTOR OPERATIONS, SERVICE AND PARTS MANUAL

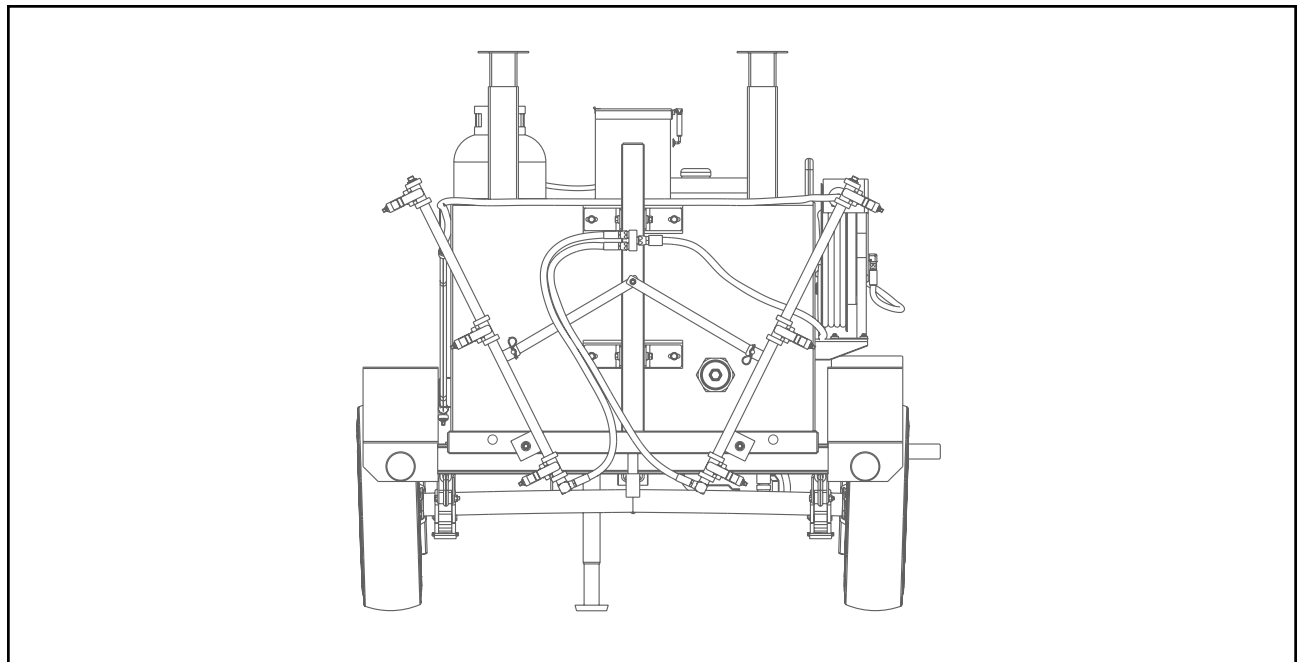


SIDE VIEW

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 Distributor for the latest available information.

Contents of this manual are based on information in effect at the time of publication and are subject to change without notice.



REAR VIEW

TACK DISTRIBUTOR





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TACK DISTRIBUTOR



NOTES:



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Section 1

INTRODUCTION & SAFETY



FORWARD

LeeBoy's Tack Distributors are designed to provide commercial pavers with an efficient and easy to operate unit for tack coating on commercial job sites. The tack distributor is a dependable, low maintenance addition to the contractor's fleet of equipment. The tack distributor is available in a skid-mount or trailer-mount version, with three tack tank sizes – 150, 250 or 500 gallons.

Units are equipped with a hose reel with 50 feet of hose, a 6-foot spray wand, and 2 propane burners. Trailer-mounted units include safety chains and 2-inch ball or pintle eye hitch (pintle eye is standard on L500T), and are pre-wired for towing. The L250T is equipped with single axle electric brakes and emergency break-away switches; the L500T is equipped with electric brakes on both axles and emergency break-away switches.

Optional engine packages include electric start with the standard Honda engine, or manual and electric start Hatz engines. The optional overnight emulsion heater is used to maintain the asphalt temperature during cold-weather applications, and prevent set-up of the material when stored overnight. An optional 8-foot spray bar adds versatility to the tack coating applications. Completing the option package is the in-truck control, which allows the operator to operate the spray bar from inside the towing vehicle.

This manual contains the correct operation and routine maintenance procedures needed by the owner/operator for the safe and efficient use of the Tack Distributor. In order to maximize the performance and efficiency of the machine, it is VERY IMPORTANT that the owner/operator and maintenance personnel read this manual thoroughly before operating or servicing the machine.

Always keep this manual in a convenient place for instant reference and NEVER attempt to make repairs or adjustments that you do not fully understand. If you require additional information or service, contact your authorized LeeBoy Dealer. Always give your dealer the Serial Number of your machine when ordering parts or when requesting service or other information.

The technical information found in this manual was correct at the time it was approved for publication. However, due to a continuous program of research and development, some procedures, specifications and parts may be altered in a constant effort to update and improve our products.

LeeBoy Manufacturing Company reserves the right to make design or specification changes without prior notification and to make improvements without incurring an obligation to add them to any machine in existence. Please contact your local authorized LeeBoy Dealer if you require further assistance.

RECEIVING THE TACK DISTRIBUTOR

The Tack Distributor was inspected thoroughly at the factory. However, road hazards or vandalism may occur during transport, and result in damage. Inspect the machine as outlined below and perform necessary repairs before placing the machine in service.

1. Check engine oil level as shown in the manufacturer's manual.
2. Read this manual and understand the contents.
3. Inspect all hoses for cracks and abrasion. Replace or repair as necessary. Have any repairs or adjustments performed by a qualified mechanic, or consult your local dealer.
4. Check all spraying components and repair or adjust as necessary. Have any repairs or adjustments performed by a qualified mechanic, or consult your local dealer.
5. Check for missing parts. If parts are missing or the machine is damaged, contact the local dealer.

OVERVIEW OF THE MANUAL

GENERAL INFORMATION

This manual contains Safety information, Specifications, Operation procedures, Maintenance and Troubleshooting guidelines, and an Illustrated Parts List for the Tack Distributor.

INTRODUCTION AND SAFETY


Important Safety precautions related to specific areas of the machine and workplace are included to insure your safety, the safety of those around you, and the correct operation of the machine.

SPECIFICATIONS

Refer to **Specifications**, Section 2 in this manual, for all major system specifications and detailed information on this machine's components and controls.


OPERATION

Refer to **Operation**, Section 3 in this manual, for information needed to operate the machine safely. The operator of this equipment should READ, UNDERSTAND, and FOLLOW all instructions and ALL Safety precautions found in Section 1 of this manual, as well as all Cautions and Warnings provided throughout all sections of this manual.

CAUTION:  Do not attempt to operate the Tack Distributor unless fully trained in the machine's operation. Only authorized personnel should operate this machine. All instructions provided in this manual and on the machine's operation and warning decals must be followed to prevent damage to the equipment and/or injury to operating personnel.

MAINTENANCE AND TROUBLESHOOTING

Refer to **Maintenance**, Section 4 of this manual, for all maintenance and repair procedures, as well as charts and tables containing important machine-specific information.

CAUTION:  All maintenance instructions provided in this manual should be followed to insure the safety of the personnel performing the maintenance and to prevent damage to the machine.

Section 1

INTRODUCTION & SAFETY



PRECAUTIONARY INSTRUCTIONS

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 this unit.

Safety is everyone's business and is one of your primary concerns. Knowing the guidelines covered in the following paragraphs and throughout Section 1 will help provide for your safety, the safety of those around you, and the machine's proper operation.

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

Note the use of the words **DANGER**, **WARNING**, **CAUTION** and **ATTENTION** with the message. The appropriate word for each message has been selected using the following guidelines:

DANGER: An immediate and specific hazard which **WILL** result in severe personal injury or death if the proper precautions are not taken.



WARNING: A specific hazard or unsafe practice which **COULD** result in severe personal injury or death if proper precautions are not taken.



CAUTION: Unsafe practices which **COULD** result in personal injury if proper practices are not taken, or as a reminder of good safety practices.



ATTENTION: Equipment on the machine could be damaged through improper performance of an operation, maintenance or repair procedure.



MATERIAL SAFETY DATA SHEETS

In addition, some machines use or contain hazardous chemicals which may require a specific Material Safety Data Sheet (MSDS). If such information is necessary for the safe operation of this machine, those MSDSs are included on the following pages.

Section 1

INTRODUCTION & SAFETY



SAFETY

PRE-START INSPECTION

INSPECT machine. Have any malfunctioning, broken or missing parts corrected or replaced before using the machine.

READ and UNDERSTAND the operator's manual as well as all decals pertaining to instructions and safety.

Have a FIRST AID KIT available. Know how to use it.

Have a charged FIRE EXTINGUISHER within reach.

Have the correct type for your situation:

TYPE A: Wood, paper, textile, rubbish.

TYPE B: Flammable liquid.

TYPE C: Electrical equipment.

CHECK hoses daily for wear and leaks. Replace if damaged.

CHECK engine oil levels. Fill to the correct level as necessary.

FILL the fuel tank with the engine off AND burners off. NEVER fill fuel tank near an open flame, or when smoking.

CHECK for frayed or worn electrical wires and loose or corroded connections.

CHECK tires for wear, cuts, and damage. CHECK air pressure.

INSPECT wheels for loose, damaged, or missing hardware. TIGHTEN as necessary.

MAKE SURE operator's compartment, steps and hand holds are free of grease and debris.

CHECK steps and supports for damage. Repair as necessary.

MAKE SURE all lights, reflectors and other protective devices are clean and operate correctly.

CHECK that all safety decals and signs are in place and readable. These are as important as any other equipment on the machine.

OPERATING SAFETY

WEAR OSHA required safety equipment when operating the machine.

WEAR appropriate ear protection when exposed to loud noise.

DO NOT wear loose fitting clothing, rings or wrist watches that could catch on moving parts.

DO NOT allow riders on the machine.

KNOW and UNDERSTAND the job site traffic flow patterns. Work SLOWLY in tight areas and when turning.

DRIVE at speeds compatible with road, weather, and job site conditions.

AVOID steep hills, rough terrain, and sharp turns if possible.

ALWAYS look BEFORE changing your direction of travel.

DO NOT run engine in a closed building for long periods of time.

DO NOT start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed.

DO NOT leave the engine running without operator present. Use wheel chocks when machine is left unattended.

DO NOT use seal coating without first contacting your LeeBoy dealer for product specifications. NEVER use fiber based seal coat. This can damage the pump and clog the spray wand and spray bar.

ALWAYS use a vehicle of adequate size when towing the distributor. Quick stops may not be possible when using an undersized towing vehicle.

NEVER remove the spray wand nozzle while the engine is running.

HOT MATERIAL PRECAUTIONS

Wear protective gear for face, hands, feet and body when working with hot material.

Allow machine to cool before repairing or servicing working components.

If hot asphalt touches skin, flush area immediately with cold water. Do not apply ice directly to affected area. Natural separation will occur in 48 to 72 hours. Get medical attention as soon as possible.

FIRE AND EXPLOSION PRECAUTIONS

Keep machine and asphalt material away from sparks, incandescent material and open flames. Do not smoke around the machine. Fumes are flammable and can ignite and explode.

DO NOT fill the fuel tank or the tack tank while engine is running or while burners are operating.

DO NOT fill the tack tank when there is water in the bottom of the tank. The hot material will turn the water into steam and can cause an explosion.

Keep the machine clean. Accumulated asphalt can ignite and explode.

BURNER SAFETY PRECAUTIONS

DO NOT perform maintenance procedures while burners are operating or while the engine is running.

DO NOT operate burner equipment while the vehicle is being loaded or is in transit.

Burner tubes must be covered with at least 3 inches of asphalt before burners are ignited. Do not exceed asphalt flash temperature. Hot fumes can explode. See **Material Considerations** in Section 3.

Stay away from burners and stacks when heating material in the tank.

Keep unauthorized personnel away from the machine when operating the burners.

Use a liquid draw system at 10-20 PSI when using propane-fired burners.

Use the igniter to light the burners. Do not use a match or cigarette lighter. Keep the igniter away from the fuel tank and other flammable material.

STOPPING SAFETY

ALWAYS park the machine on solid, level ground. If this is not possible, always park at a right angle to the slope and chock the wheels.

USE proper flags, barriers and warning devices especially when parking in areas of traffic.

GENERAL MAINTENANCE SAFETY

NEVER work on the machine with the engine running.

DO NOT change the engine governor settings.

DO NOT work under the machine unless the machine is supported by approved jacks and jack stands.

ALWAYS replace damaged or lost decals.

REINSTALL safety devices, guards or shields after servicing or adjusting the machine.

CLEAN the service area. KEEP tools and parts off the floor. BE SURE electrical outlets and tools are properly grounded. USE adequate light for the job.

BATTERY SAFETY

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 to observe correct battery polarity [negative (-) to negative (-) and positive (+) to positive (+)], when connecting a battery charger or jumper cable.

DO NOT tip batteries more than 45 degrees. Electrolyte solution is caustic and explosive.

TIRE SAFETY

DO NOT change tires unless the machine is supported by approved jacks and jack stands.

DO NOT inflate tires beyond the maximum recommended pressure.

DO NOT hammer on rims with steel hammers. Use rubber, lead, plastic or brass faced mallets.

DO NOT mount a tire without the proper equipment and experience.

HANDLING FLUIDS SAFELY

NEVER fill the fuel tank with the engine running.

DO NOT smoke while refueling the machine.

DO NOT fill fuel tank to capacity. Allow room for expansion.

DO NOT use hands to find hydraulic leaks. High-pressure fluid can penetrate the skin, causing severe injury.

TRANSPORT

FOLLOW all local regulations regarding transporting equipment on public roads and highways.

KNOW and USE all required signal devices, including tail lights, slow moving vehicle signs, and warning beacons. Provide an escort when necessary.

BE SURE the lights and reflectors are clean, in good repair and can be seen clearly by all overtaking and oncoming traffic.

Refer to Section 3, **Operation**, for more detailed instructions.

STORAGE

STORE the machine in an area away from human activity.

BE SURE the unit is stored in an area that is firm, level and free of debris.

STORE the machine inside a building, or cover it with a weather-proof tarpaulin and support the wheels securely.

Refer to Section 4, **Maintenance**, for more detailed instructions.

Section 1
INTRODUCTION & SAFETY



NOTES



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Section 2

SPECIFICATIONS



GENERAL INFORMATION

The descriptions and specifications provided in this section are applicable to the LeeBoy Tack Distributor. 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 machine weights, dimensions, performance, and major system specifications.

ENGINE

The Tack Distributor uses a Honda four-stroke, overhead valve, single cylinder engine coupled to a Viking spur gear pump. The engine is mounted on a platform at the front of trailer-mounted units, and at the rear of skid-mounted units.

Refer to the engine manufacturer's manual for a complete description of the engine and engine components.

ELECTRICAL SYSTEM

For those units equipped with the optional electric start engines, a 12-volt battery provides the power source for the electric start. The battery produces 12-volt DC and maintains 725 cold cranking amperes (CCA).

ASPHALT DELIVERY SYSTEM

This system consists of an asphalt pump, a spray wand, hoses and valves for asphalt delivery, and an optional 8-foot (2.44 m) spray bar.

Asphalt Pump

A Viking spur gear pump, driven off the engine, supplies the pressure to spray the asphalt through the spray wand and the optional spray bar. A relief valve adjusts the pressure of the pump. Set the relief valve at 250 to 350 psi upon initial start-up. To prolong the pump life, use the minimum amount of pressure.

Spray Wand

The spray wand allows the operator to spray asphalt in small areas and along pavement edges. It has an on/off ball valve in the handle for control. A selector valve allows the tack material to flow to the spray wand.

Spray Bar (Optional)

The 8-foot (2.44 m) spray bar folds to a lockable position. The bar's height can be adjusted up or down in 6-inch (15 cm) increments. There is a separate cut-off valve to control each of the six spray nozzles. A selector valve allows the asphalt material to flow to the spray bar.

BURNER SYSTEM

The burner system consists of two 54,000 BTU propane-fired burners, double flues with 3-inch or 4-inch (8 to 10 cm) diameter tubing (depending on tank size), a 30-pound propane tank, an igniter, and a 32° to 580° F (0° to 300° C) dial thermometer.

CLEANOUT SYSTEM

Clean the nozzles and flush the line after each use. The tack distributor is equipped with a 7-gallon (26.5 l) flush tank containing solvent for flushing and cleaning out the asphalt delivery system. The flush valve controls the flow of the solvent out of the flush tank and into the asphalt delivery system.

TANK SYSTEM

The Tack Distributor is available with three tank capacities: 150, 250, and 500 gallons (568, 946, and 1893 liters). The tank is 1/4-inch (6 mm) steel plate, has a 10-inch (25 cm) square fill neck with a splash plate, and a 4-inch (10 cm) cleanout plug under the tank. Two exhaust stacks at the rear of the unit direct burner exhaust up and away from the operating area. An discharge valve at the rear of the tank facilitates draining tank contents into a bucket. A pipe plug is provided for the optional overnight emulsion heater.

SPECIFICATIONS

Tables 2-1 through 2-8 list major system specifications for the Tack Distributor. Additional maintenance tables are shown in Section 4, **Maintenance**.

TABLE 2-1. ENGINE SPECIFICATIONS

ITEM	SPECIFICATION
ENGINE - HONDA	
Type	4 Stroke, Air Cooled
Number of Cylinders	One
Bore & Stroke	2.7 in. (69 mm) x 1.8 in. (46 mm)
Displacement	9.9 cu. in. (163 cu. cm)
Power @2500 RPM	5.5 HP (4.1 kw)
Idle Speed	1400 RPM
Engine Oil Type	10W30
Oil Capacity	0.63 quarts (0.60 liters)
ENGINE FUEL	
Type	Gasoline
Capacity	0.82 gallons (3.1 liters)

TABLE 2-2. DRIVE SYSTEM SPECIFICATIONS (Trailer-Mount)

ITEM	SPECIFICATION
L150	
Axle	3500# Idler
Tires (2)	ST205/75D-14, 6-ply
L250	
Axle	5200# With Electric Brakes
Tires (2)	ST205/75D-15, 6-ply
L500	
Axle (2)	5200# With Electric Brakes
Tires (4)	ST205/75D-15, 6-ply

Section 2 SPECIFICATIONS



TABLE 2-3. MACHINE DIMENSIONS - L150 (Trailer-Mount)

ITEM	SPECIFICATION
Shipping Weight	1,380 lbs (626 kg)
Loaded Weight	2,655 lbs (1,204 kg)
Machine Length	10' 10" (3.3 m)
Machine Width	6' 5" (2.0 m)
Machine Height	7' 3" (2.2 m)
Tank Capacity	150 gallons (568 l)
Tank Length	42.25" (1.1 m)
Tank Width	34.5" (0.9 m)
Tank Height	30.5" (0.8 m)
Ground Clearance	11.5" (0.3 m)

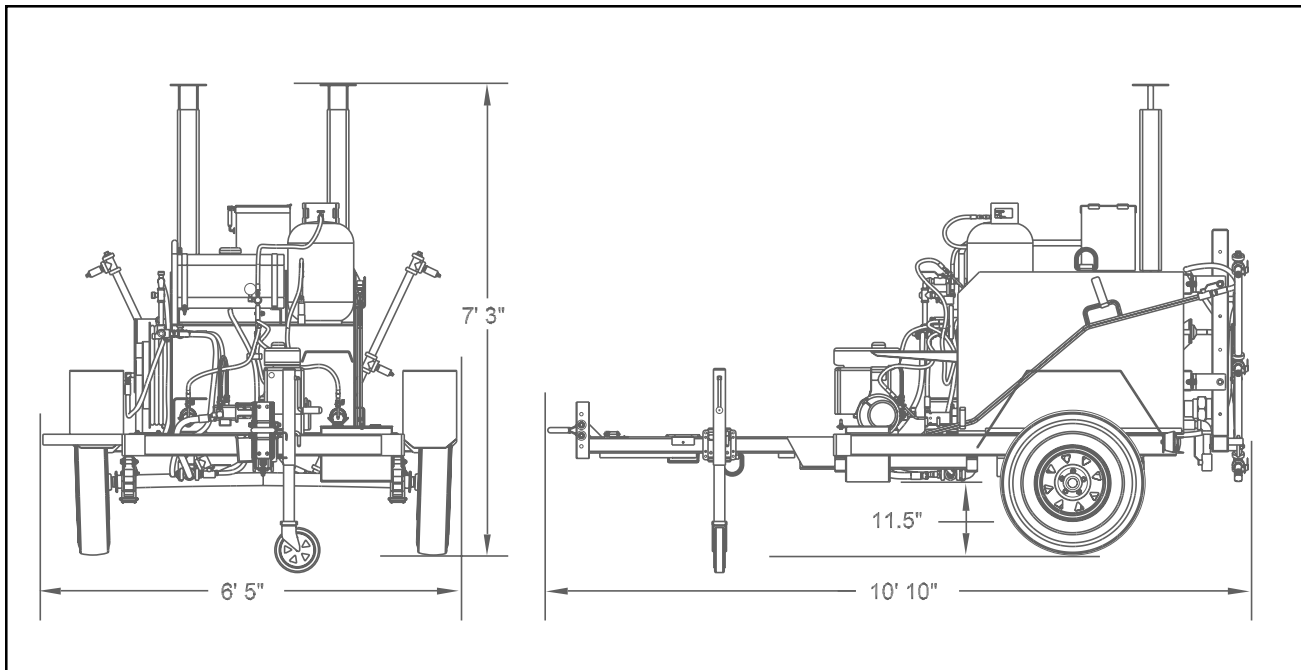


FIGURE 2-1. OUTLINE DIMENSIONAL DRAWING - L150T

TABLE 2-4. MACHINE DIMENSIONS - L150 (Skid-Mount)

ITEM	SPECIFICATION
Shipping Weight	1,320 lbs (600 kg)
Loaded Weight	2,595 lbs (1,177 kg)
Machine Length	5' 8" (1.7 m)
Machine Width	4' 0" (1.2 m)
Machine Height	6' 5" (2.0 m)
Tank Capacity	150 gallons (568 l)
Tank Length	42.25" (1.1 m)
Tank Width	34.5" (0.9 m)
Tank Height	30.5" (0.8 m)

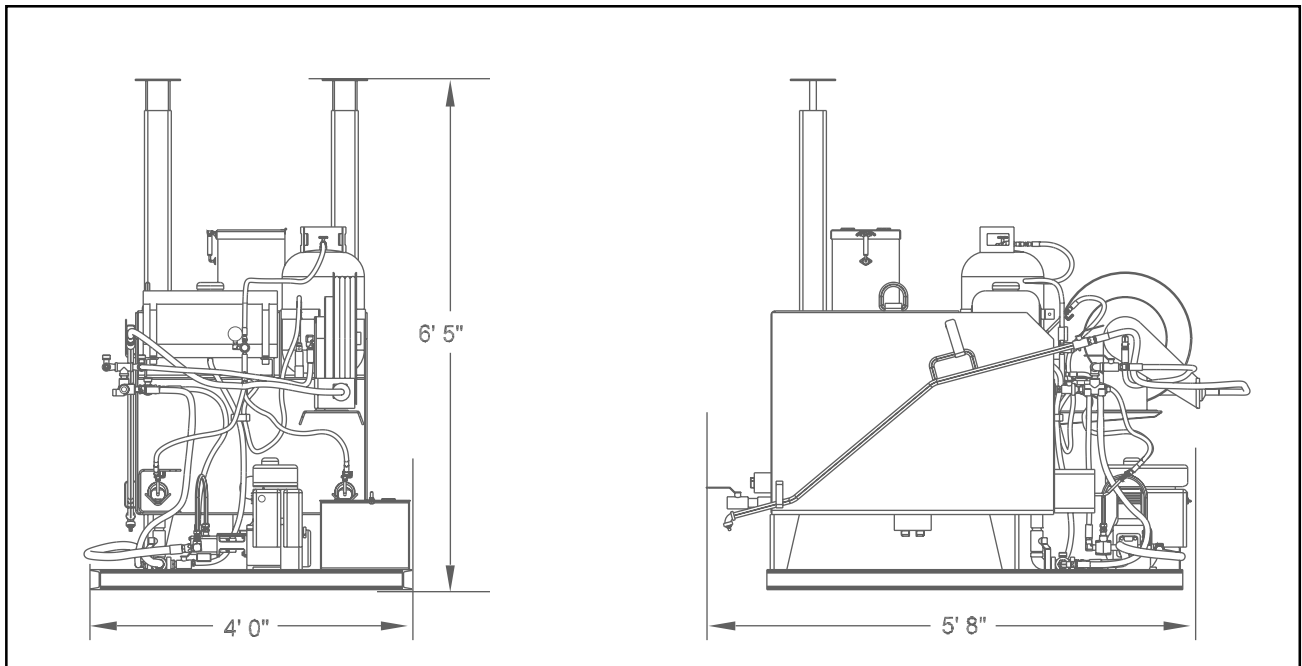


FIGURE 2-2. OUTLINE DIMENSIONAL DRAWING - L150S

Section 2 SPECIFICATIONS



TABLE 2-5. MACHINE DIMENSIONS - L250 (Trailer-Mount)

ITEM	SPECIFICATION
Shipping Weight	1,840 lbs (835 kg)
Loaded Weight	3,965 lbs (1,800 kg)
Machine Length	11' 0" (3.4 m)
Machine Width	6' 5" (2.0 m)
Machine Height	7' 7" (2.3 m)
Tank Capacity	250 gallons (946 l)
Tank Length	48.5" (1.2 m)
Tank Width	48.5" (1.2 m)
Tank Height	32.5" (0.8 m)
Ground Clearance	11.5" (0.3 m)

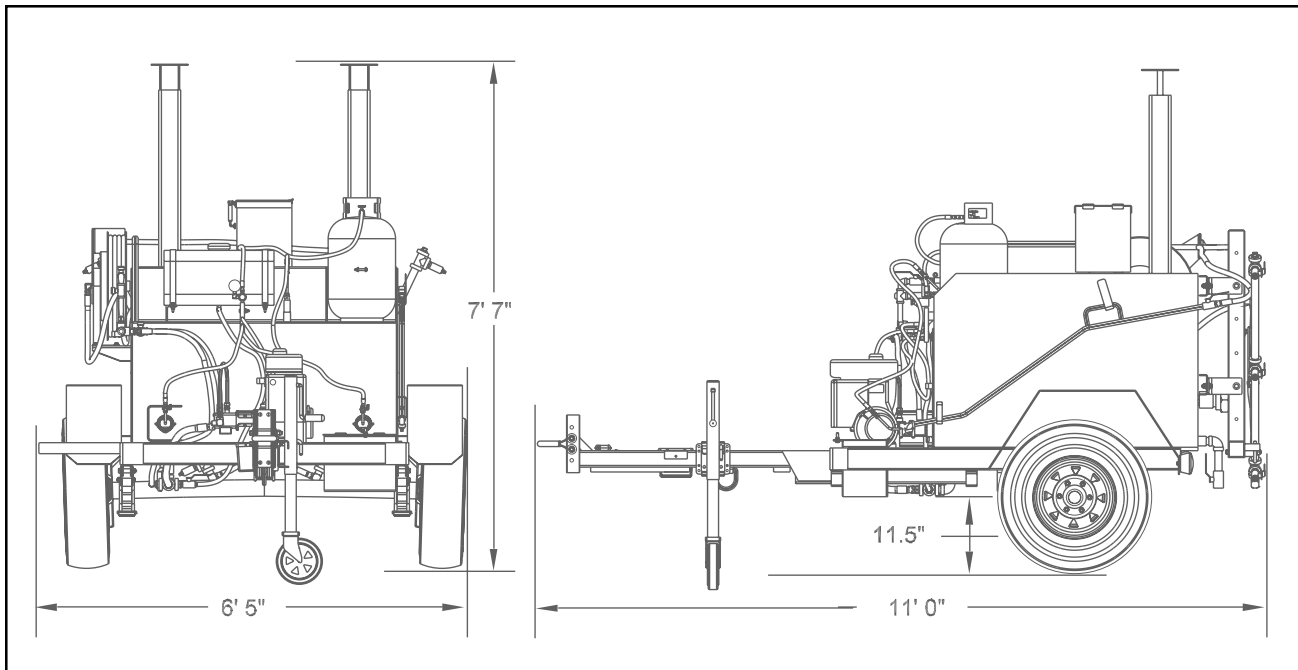


FIGURE 2-3. OUTLINE DIMENSIONAL DRAWING - L250T

TABLE 2-6. MACHINE DIMENSIONS - L250 (Skid-Mount)

ITEM	SPECIFICATION
Shipping Weight	1,660 lbs (753 kg)
Loaded Weight	3,785 lbs (1,717 kg)
Machine Length	6' 0" (1.8 m)
Machine Width	4' 6" (1.4 m)
Machine Height	6' 9" (2.1 m)
Tank Capacity	250 gallons (946 l)
Tank Length	48.5" (1.2 m)
Tank Width	48.5" (1.2 m)
Tank Height	32.5" (0.8 m)

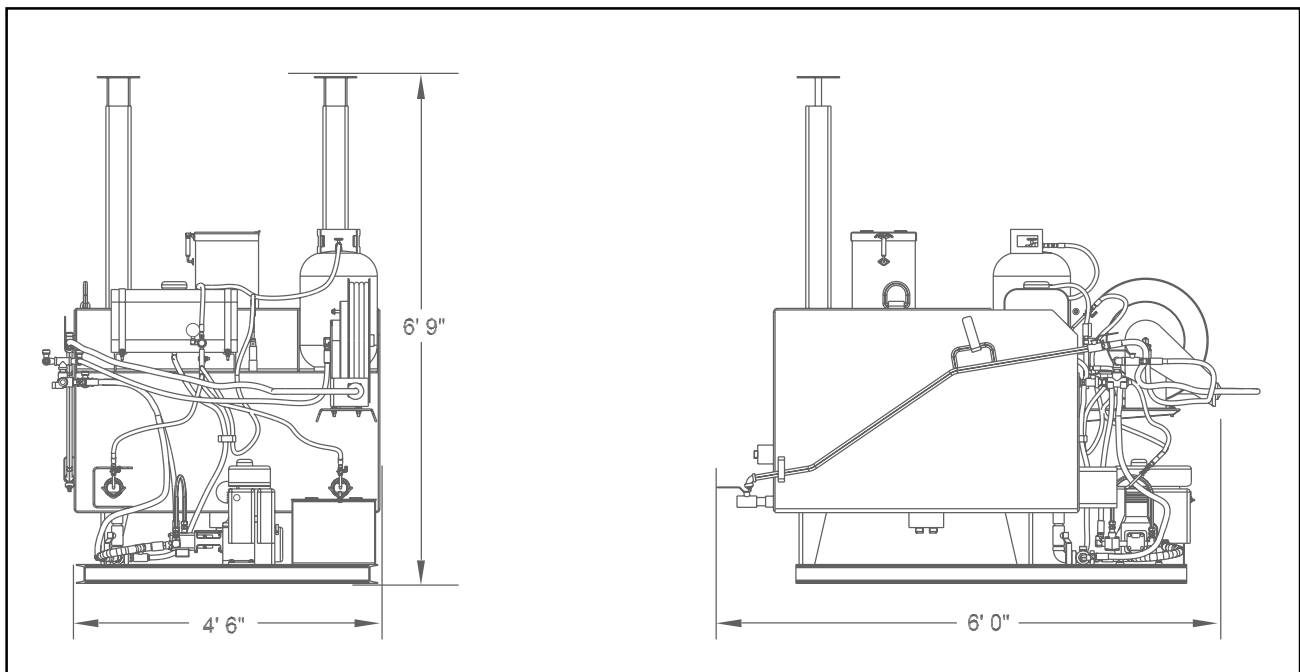


FIGURE 2-4. OUTLINE DIMENSIONAL DRAWING - L250S

Section 2 SPECIFICATIONS



TABLE 2-7. MACHINE DIMENSIONS - L500 (Trailer-Mount)

ITEM	SPECIFICATION
Shipping Weight	3,020 lbs (1,370 kg)
Loaded Weight	7,270 lbs (3,300 kg)
Machine Length	14' 1" (4.3 m)
Machine Width	6' 6" (2.0 m)
Machine Height	6' 3" (1.9 m)
Tank Capacity	500 gallons (1893 l)
Tank Length	84.25" (2.1 m)
Tank Width	48.5" (1.2 m)
Tank Height	32.5" (0.8 m)
Ground Clearance	11.5" (0.3 m)

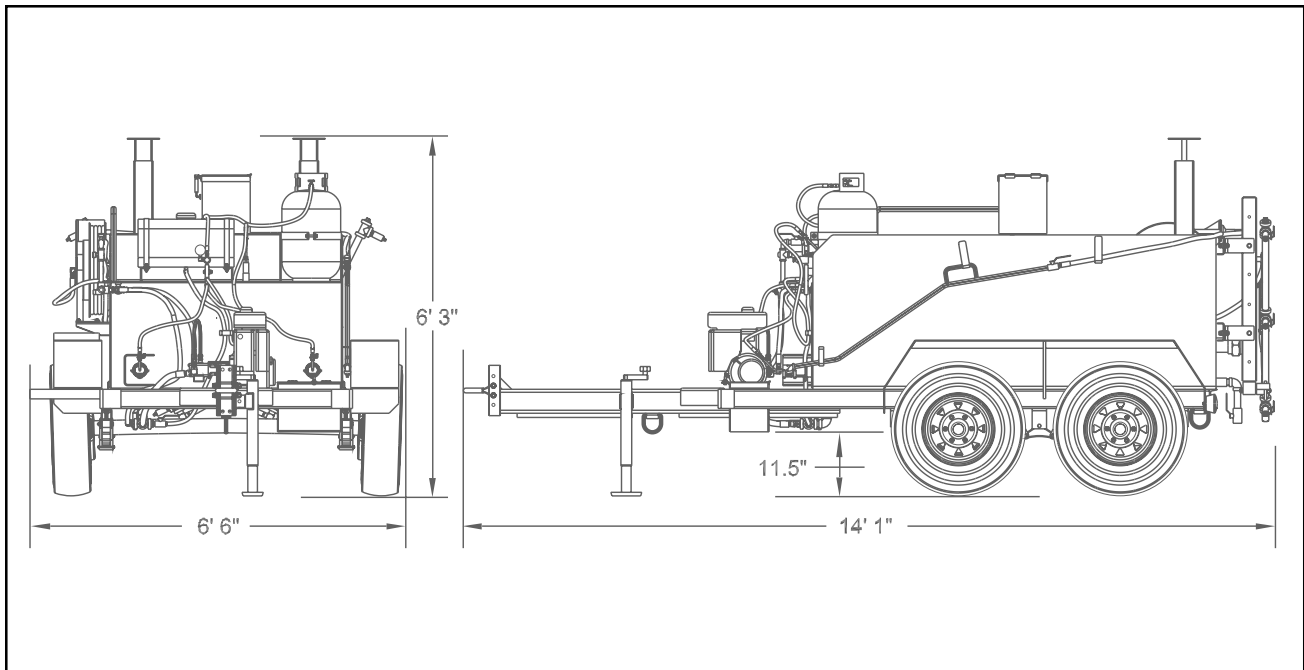


FIGURE 2-5. OUTLINE DIMENSIONAL DRAWING - L500T

TABLE 2-8. MACHINE DIMENSIONS - L500 (Skid-Mount)

ITEM	SPECIFICATION
Shipping Weight	2,300 lbs (1,043 kg)
Loaded Weight	6,550 lbs (2,971 kg)
Machine Length	9' 2" (2.8 m)
Machine Width	4' 6" (1.4 m)
Machine Height	5' 5" (1.6 m)
Tank Capacity	500 gallons (1893 l)
Tank Length	84.25" (2.1 m)
Tank Width	48.5" (1.2 m)
Tank Height	32.5" (0.8 m)

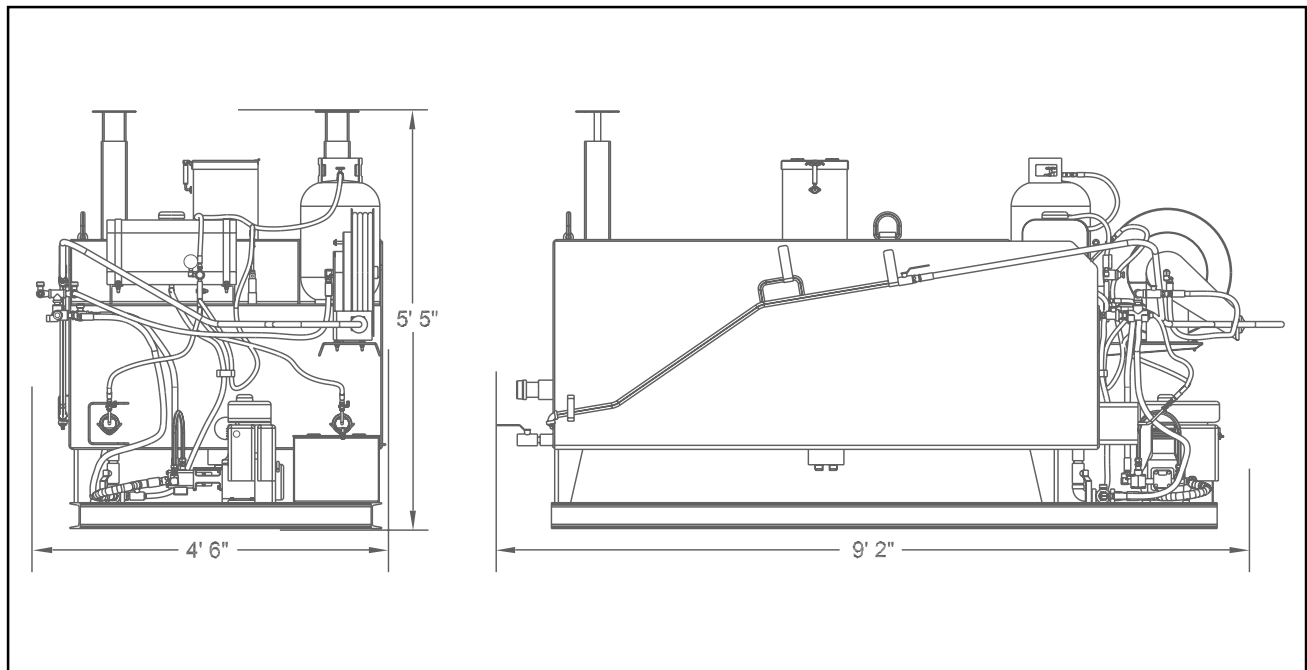


FIGURE 2-6. OUTLINE DIMENSIONAL DRAWING - L500S

Section 2
SPECIFICATIONS



NOTES:

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Section 3
OPERATION




GENERAL INFORMATION


This section provides the Operating instructions for the LeeBoy Tack Distributor. Before starting or operating the machine, it is important to READ, UNDERSTAND, and FOLLOW all Operating instructions, Danger, Warning, and Caution messages in this section, as well as all Safety information contained in Section 1 of this manual.

DANGER:  Failure to observe the Operating instructions, Danger, Warning, and Caution messages in this manual can cause serious injury or death. Only authorized personnel, who are fully trained in the machine operation, can operate the Tack Distributor.

This machine should be kept in good mechanical condition at all times.

WARNING:  Do not operate a machine needing repair. Put an information tag on the machine that says DO NOT OPERATE. Repair all damage at once. Minor damage can result in major system failures.

OPERATING CONTROLS, INDICATORS, AND GAUGES

WARNING:  Do not start or operate the Tack Distributor before reading, understanding and following all information given in this section and shown on the machine. The operator must read and understand the function of all controls, indicators, and gauges before starting the engine. Serious injury or death can result if these procedures are not followed.

Major components for the Tack Distributor are shown in Figures 3-1 through 3-4, and described in Table 3-1.

Section 3 OPERATION



TABLE 3-1. MAJOR COMPONENTS

FIGURE	ITEM	CONTROL NAME	FUNCTION
3-1	1	Spray Wand	6-foot aluminum wand with ON/OFF valve and removable tip sprays the tack material.
3-1	2	Propane Tank with Regulator Valve	30# tank supplies fuel for the LPG burner. Maintain tank pressure at 8 to 15 psi.
3-1	3	Igniter	Used to light the burners when heating the tack. Has a manual-ignite feature, with optional auto-ignite.
3-1	4	Burners and Flues	Two 54,000 BTU propane burners heat the tack, using double flues with 3 or 4 inch (8 or 10 cm) diameter tubing, depending on tank size.
3-1	5	Battery and Battery Box (option)	12-volt DC, provided with those units equipped with electric start engines.
3-1	6	Engine	Drives the asphalt pump and supplies power to the battery for those units equipped with optional electric start.
3-1	7	Jack Stand	Supports the unit when it is hooked and unhooked from the truck.

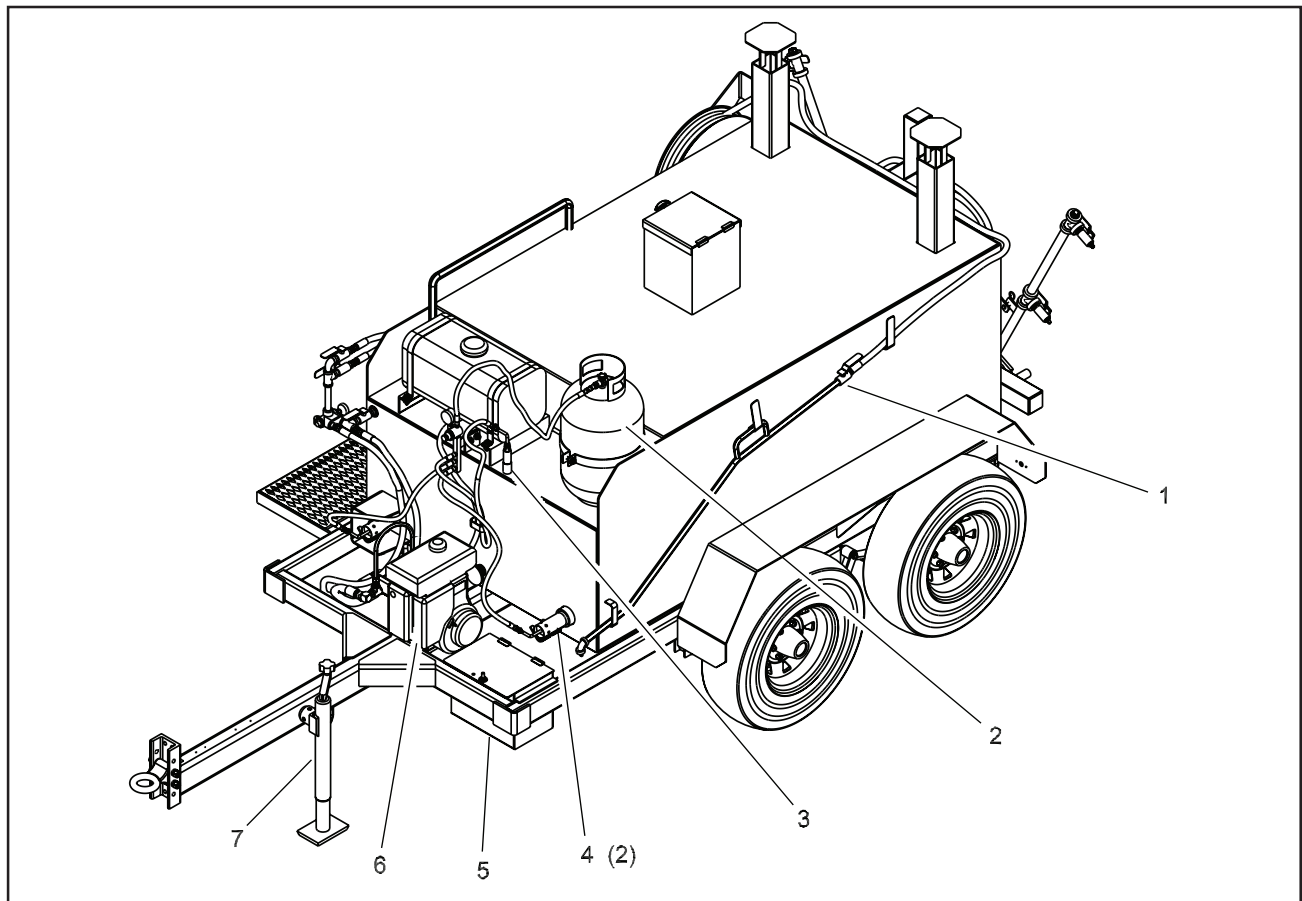


FIGURE 3-1. MAJOR COMPONENTS

TABLE 3-1. MAJOR COMPONENTS (Continued)

FIGURE	ITEM	CONTROL NAME	FUNCTION
3-2	8	8-Foot Spray Bar (option)	Mounted at the rear of the unit, used to distribute tack material over a road or driveway surface. Equipped with a separate cut-off valve at each of the 6 spray nozzles, and ½" heavy-duty hose rated at 3000 psi.
3-2	9	Overnight Tank Heater (option)	2-1/2 inch (6.4 cm) plug provides the opening for the optional electric cold-weather emulsion heater.
3-2	10	Discharge Valve	Allows tack tank contents to be drained into a bucket or other receptacle.
3-2	11	Cleanout Plug	4-inch (10 cm) pipe plug at bottom of tack tank, used to drain tank contents.

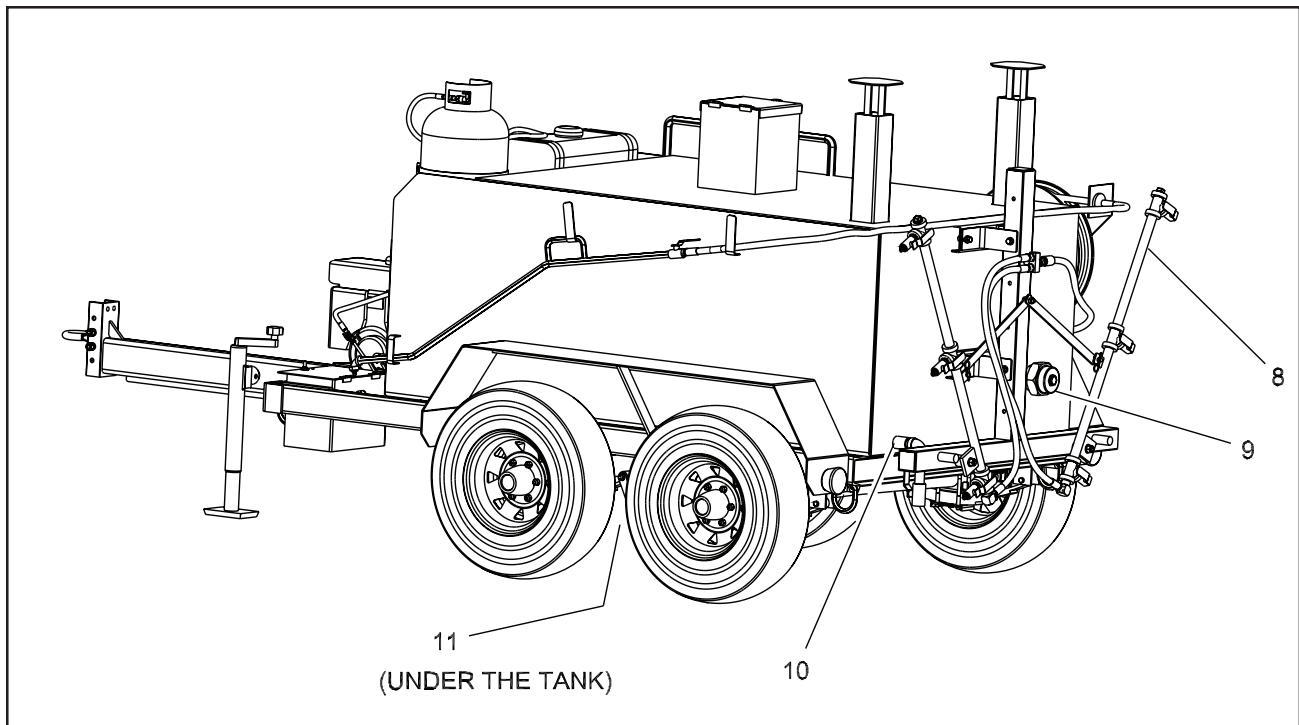


FIGURE 3-2. MAJOR COMPONENTS

Section 3 OPERATION



TABLE 3-1. MAJOR COMPONENTS (Continued)

FIGURE	ITEM	CONTROL NAME	FUNCTION
3-3	12	Tack Tank	¼" steel plate; tanks are 150, 250 or 500 gallons.
3-3	13	Flush Tank	7-gallon tank contains solvent for internal cleanout of the circulating system.
3-3	14	Fill Neck	10" square opening for filling the tack tank.
3-3	15	Exhaust Stack	Directs burner exhaust up the rear of the tank and away from the operating area.
3-3	16	Hose Reel and Hose	50 feet of heavy-duty ½" hose, with heavy-duty re-coil reel. Hose is rated at 2325 psi.

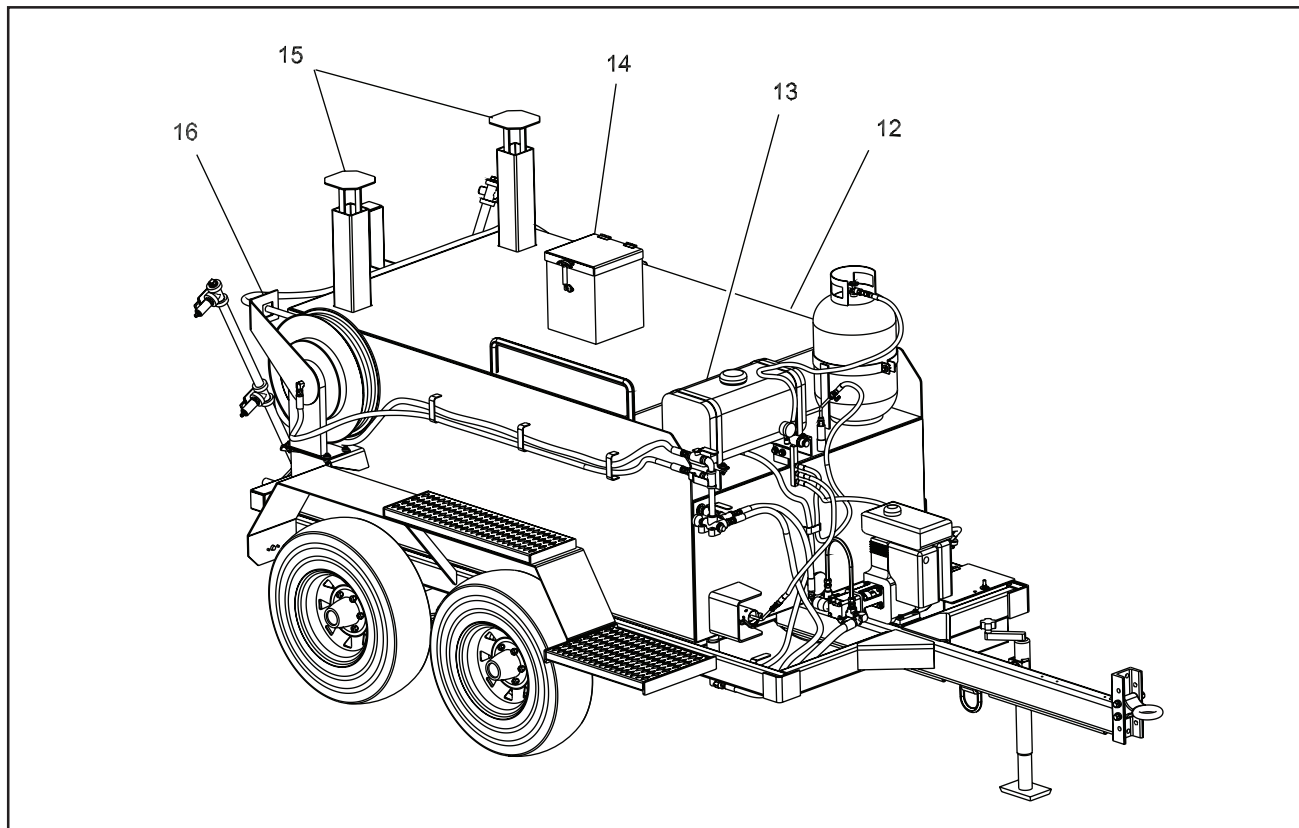


FIGURE 3-3. MAJOR COMPONENTS

TABLE 3-1. MAJOR COMPONENTS (Continued)

FIGURE	ITEM	CONTROL NAME	FUNCTION
3-4	17	Asphalt Pump with Relief Valve	Viking spur gear pump, driven off the engine, supplies the pressure to spray the asphalt through the spray wand and the optional spray bar.
3-4	18	Dial Thermometer	32° to 580° F (0° to 300° C). Measures the temperature inside the tack tank.
3-4	19	Flush Valve	Allows the solvent material to flow out of the flush tank and into pump system during cleanout.
3-4	20	Liquid Asphalt Valve	Allows liquid asphalt to be pumped out of the tack tank and into the spray wand or spray bar.
3-4	21	Selector Valve	In/Out valve allows tack through the system during spray operations, and solvent during cleanout. Push the valve in to retrieve tack from the system during back-flush.
3-4	22	Circulate Valve	Open the valve to relieve pump pressure when engine is running but tack is not being sprayed. Open the valve during back-flush. Asphalt will return to the tack tank. Close the valve when using the spray bar or spray wand to distribute asphalt, and during cleanout.
3-4	23	Spray Bar Select Valve (option)	Allows the tack material to flow to the spray bar.
3-4	24	Spray Wand Select Valve	Allows the tack material to flow to the spray wand.

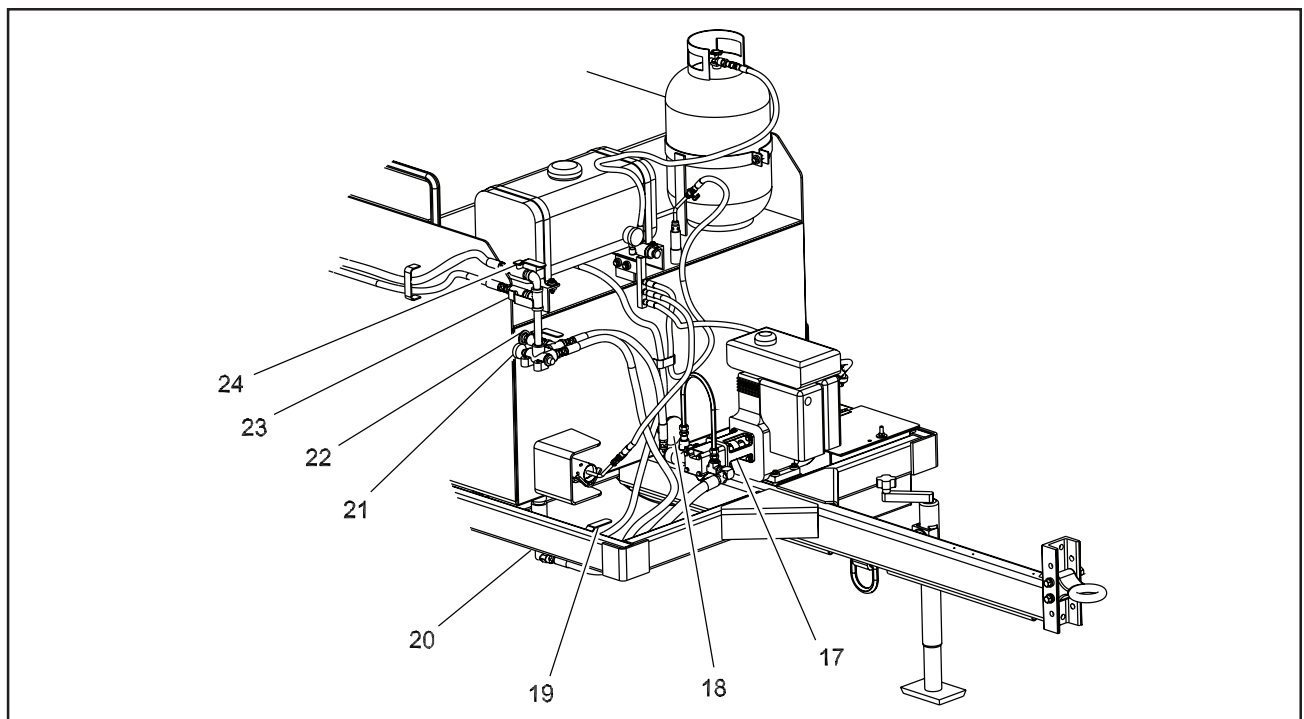


FIGURE 3-4. MAJOR COMPONENTS

Section 3 OPERATION



PRELIMINARY PROCEDURES

Before starting or operating the machine, it is important to READ, UNDERSTAND, and FOLLOW all Operating instructions, Danger, Warning, and Caution messages in this manual as well as all Safety information contained in Section 1 of this manual.

Recommended fluid types and required quantities are listed in **Specifications**, Section 2 of this manual.

BREAK-IN PROCEDURES

NOTE: Make every effort to become familiar with the feel and sound of the machine.

1. Observe engine operation carefully.
2. Check the engine oil frequently.
3. Operate engine at normal loads.
4. Check indicators and gauges frequently during operation.
5. Avoid excessive engine idling.
6. Perform 10 hour or daily service.
7. Watch for fluid leaks and repair immediately.
8. Perform service intervals as indicated in **Maintenance**, Section 4 of this manual.
9. Check engine manufacturer's manual for additional information on engine break-in.

PRE-START INSPECTION

INSPECT machine. Have any malfunctioning, broken or missing parts repaired or replaced before using the Distributor.

CHECK hydraulic hoses daily for wear and leaks. Replace if damaged.

CHECK that all the instruction and safety labels are in place and readable. These are as important as any other equipment on the machine.

READ and FOLLOW all instruction decals.

WEAR OSHA required safety equipment when running the Distributor.

CHECK engine, and hydraulic oil levels. Fill to the correct level as necessary.

FILL the fuel tank with the engine off. NEVER fill fuel tank near an open flame or when smoking.

CHECK for frayed or worn electrical wires and loose or corroded connections.

CHECK tires for wear and damage. Remove any debris lodged between the tires. Maintain tire pressure at recommended levels.

CHECK controls for freedom of movement.

CHECK supports for damage. Repair as necessary.

ENGINE OPERATION

Before starting the engine:

1. Check the fuel level. Fill fuel tank daily to avoid condensation.
2. Check the fuel lines and tank for leaks.
3. Check the engine oil level.

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



Refer to engine manufacturer's manual for instructions when starting engine for the first time. Follow engine manufacturer's recommendations for fuel and oil.

DISTRIBUTOR COMPONENTS

Tack tank and attaching components:

1. Check tack level and fill if needed. Tack level must be at least 3" above the burner flues.
2. Remove any contamination on surface of tack. Refer to **Back Flush and Clean Out**, later in this section.
3. Check spray wand valve to make sure it works freely.
4. Check propane level.
5. Check flow valves to make sure they are working freely.
6. Check flush tank level.
7. Check for cracked, broken or worn parts.
8. Check wheel lugs.
9. Check tire pressure.

ATTENTION: Never start the engine unless there is tack material or flush material circulating in the system. Running a dry pump will cause pump failure, and void the warranty.



Before driving on public roads, check state and local laws that may apply to construction equipment. Additional lights, mirrors, SMV emblems, or reflectors may be required.

MATERIAL CONSIDERATIONS

The liquid asphalt most commonly used in the LeeBoy Tack Distributor is emulsified asphalt .

LIQUID ASPHALT SELECTION

General Guidelines

Recommendations for liquid asphalt are given below. Laboratory evaluations are strongly recommended to determine the compatibility of given asphalt grades with an aggregate. For more information on selecting, storing, and handling liquid asphalt, obtain a copy of the following manuals:

“A Basic Asphalt Emulsion Manual”
Manual Series No. 19 (MS-19) and

“Storing and Handling Emulsified Asphalt” (CL-21)
from

The Asphalt Institute

Research Park Drive, P.O. Box 14052

Lexington, KY, USA 40512-4052

Telephone: (606) 288-4960 Fax: (606) 288-4999

The selection of liquid asphalt is generally dependent on the following considerations:

1. Availability of various types of aggregate.
2. Availability of various liquid asphalt grades.
3. Climate conditions anticipated during application.
4. Traffic conditions during application.

The information given in this section is based on industry standards. It is important to note that some asphalt product manufacturers have grades or mixtures that do not conform to industry standards. These materials are often tailored to local geographic conditions and may provide superior performance to the standard grades.

There are many types and grades of asphalt products. The best results can be obtained by trying several different types of asphalt and aggregates. The following classifications and grades of asphalts are provided to help in the selection.

Electrical Charge Of Emulsions

The Asphalt Emulsion Manufacturers Association manual states:

1. Anionic emulsions (with a negative (-) charge on the asphalt droplets) perform best with aggregates having positive (+) surface charges, such as limestone and dolomite.
2. Cationic emulsions (with a positive (+) charge on the asphalt droplets) perform best with aggregates having negative (-) surface charges, such as siliceous or granite aggregates.

ATTENTION: Do not mix emulsion types, especially anionic with cationic.



Emulsified Asphalt

Asphalt product made fluid by emulsifying asphalt cements with water and an emulsifier. On exposure to the atmosphere, the water evaporates, leaving the asphalt cement to perform its function. The current primary uses of emulsified asphalts are surface treatments, fog seal, prime coat, cold mix patching, road mix, and tack coats.

Standard Grades of Emulsified Asphalt:

1. Anionic (negative (-) charge): RS-1, RS-2, MS-1, HFMS-1, MS-2, HFMS-2, MS-2h, HFMS-2h, HFMS-2s, SS-1, SS-1h.
2. Cationic (positive (+) charge): CRS-1, CRS-2, CMS-2, CMS-2h, CSS-1, CSS-1.

RS, MS, SS: Indicate the emulsion setting rate. (Rapid Set, Medium Set, Slow Set)

h, s: Indicate if a hard or soft base asphalt is used in the mix.

HF: Indicates High-Float which means chemicals have been added to permit a thicker film of asphalt on the aggregate particles to prevent drain off of asphalt from the aggregate.

C: Indicates cationic asphalt. The absence of the letter “C” means it is anionic asphalt.

Anionic emulsions work best with aggregates having positive (+) surface charges such as limestone and dolomite.

Cationic emulsions work best with aggregates having negative (-) surface charges such as siliceous or granite aggregates.

Section 3

OPERATION



Cutback Asphalt

Asphalt products made by blending asphalt cement with gasoline or naphtha for rapid cure grades, with kerosene for medium cure grades, or with non-volatile liquids such as fuel oil for slow curing grades. Upon exposure to the atmosphere, the diluents evaporate, leaving the asphalt cement to perform its function. Cold mix patching and road mix are the main uses of cutback asphalt.

WARNING: Do not use cutback asphalts in the LeeBoy Tack Distributor. These asphalt solutions are highly flammable. Serious injury can occur from burns.



Asphalt Cements

Basic asphalt refined from petroleum by fractional distillation. Hot mixes and surface treatments are the most common uses.

ATTENTION: Do not use asphalt cements in the LeeBoy Tack Distributor. The Tack Distributor is not capable of heating liquid asphalts to a high enough temperature. Highly viscous asphalts or asphalts that must be heated higher than 200° F to become thin enough to pump cannot be used in the Tack Distributor. These asphalts will plug hoses or piping and will be extremely difficult to remove. Consult the factory for clean out suggestions if such materials have been loaded into the tack distributor.



LIQUID ASPHALT STORAGE & HANDLING

General Guidelines

The Asphalt Institute has published a leaflet entitled "Storing and Handling Emulsified Asphalt" (CL-21). Portions of the guidelines contained in the leaflet are listed below.

Storing Emulsified Asphalt

Store emulsified asphalts at 50° F to 185° F (10° C to 85° C), depending on the grade of emulsion and its intended use.

Store emulsified asphalts at the temperature specified for the particular grade. High viscosity rapid-set spray grades are stored at 125° F to 185° F (52° C to 85° C) since they are usually applied in this temperature range.

ATTENTION: Do not heat emulsified asphalt above 185° F (85° C). Elevated temperatures evaporate the water, increasing viscosity, and producing an asphalt layer in the tank. The material can no longer be used, and it will be difficult to empty the tank.



ATTENTION: Do not allow emulsified asphalt to freeze. Freezing breaks the emulsion, separating the asphalt from the water. The result will be two layers in the tank, neither suited for the intended use, and the tank will be difficult to clean.



DO NOT allow the temperature of the heating surface to exceed 205° F (96° C). This will cause premature breakdown of the asphalt on the heating surface.

CONTAMINATION

It is very important to remember that when you are loading a new material into the Tack Distributor, you must be sure that the new material is compatible with the residual material in the tank. The safest thing to do is to completely clean out the tank and the entire system. Total clean out is essential if you are not sure of the last material that was used in the unit.

Failure to follow these guidelines can cause several problems. When materials are mixed it can increase the possibility that the material will not meet the specifications of the job. More importantly, mixing materials can increase the risk of fire or explosion. For example, light hydrocarbons may be present in a tank from previous loads or from diesel oil or solvents used in cleaning the tank.

DANGER: Be sure there is no water in the tank before loading. Hot material will turn water into steam and can cause an explosion.





LOADING THE TANK


1. Before starting this procedure, refer to **Pre-Start Inspection** earlier in this section.
2. Be sure the unit is sitting on a level area.


DANGER:  **Do not put your head in the tank. Serious injury or death could result from breathing poisonous fumes.**

3. With a flashlight, look into the tank from the top and check that there is no water or condensation in the bottom of the tank. If there is, drain the tank to an approved container. Dispose of material and water according to local, state and federal regulations.


DANGER:  **Be sure there is no water or condensation in the bottom of the tank. Hot material will turn water into steam and can cause an explosion.**

WARNING:  **Fumes from asphalt materials can be poisonous. When filling the tank, the operator should stand up-wind and to one side to avoid hot gases, fumes or hot asphalt spray.**


DANGER:  **DO NOT SMOKE around the machine. Fuel, asphalt material and the fumes from both can explode when exposed to flame or heat.**

DANGER:  **Check that the material being loaded is compatible with the previously used asphalt. Some asphalt material can be vaporized by high temperature materials and can explode. If material is not compatible, clean out the tank.**

4. Move the machine to the storage tank or transfer vehicle.

DANGER:  **Never operate the burners while the machine is being loaded, unloaded, in transit, or during spraying operations. The flue tubes can become exposed and cause an explosion inside the tank, or ignite the material being sprayed.**

5. Make sure all valves on the machine are closed or OFF.
6. Carry the loading hose to the top of the tank and remove the splash plate.
7. Lay the end of the hose in the strainer and start the pump on the storage tank or transfer vehicle to load the tank.
8. Fill until the tank is 80% to 90% full.
9. Reverse the storage tank pump to draw excess material out of the loading hose.
10. Remove the hose and replace the splash plate.

CAUTION:  **Some residue will remain in line. Beware of hot asphalt. Wear protective clothing, gloves and a face shield. Contact with hot asphalt can cause severe burns.**

11. Remove the hose from the storage tank and stow as appropriate.

Section 3 OPERATION



SYSTEM OVERVIEW

The circulating system and the burner system are the main systems on the Tack Distributor. Read these sections so you understand the functions and capabilities of the unit and its systems.

CIRCULATING SYSTEM

The circulating system has an engine driven pump to circulate material through the spray wand and spray bar, and draw material back to the tank from the spray bar or spray wand.

The Tack Distributor delivers a volume of asphalt that is regulated by a number of variables, including the temperature of the asphalt, nozzle size, and psi setting at the relief valve. The spray wand and spray bar must have a constant and uniform pressure for uniform output.

The Tack Distributor is factory equipped with 1/4" nozzles at the spray wand tip, and at each nozzle on the spray bar. The nozzle is manufactured to deliver a 95° spray. To maintain an accurate spray pattern, use only LeeBoy parts.

If the nozzles are too small, the liquid will atomize, the spray pattern will distort and the result will be excessive over-spray or inconsistent application rate.

If the nozzles are too large, the result will be streaking caused by low pressure.

BURNER SYSTEM

The burners have a very high heat output that must be dissipated through the asphalt. Asphalt is an excellent insulator and resists the conduction of heat. If the asphalt is heated too hot or too quickly, hot spots will be created near the flue tubes. This will damage the flue tubes and cause the material to break down.

If it is necessary to heat asphalt that has cooled more than 20 to 30 degrees below the recommended 120° F (49° C) spraying temperature, use extreme care when reheating the material.

The amount of time necessary to heat the asphalt material to a sufficient temperature for spraying will vary depending on the type of material, the tank size, the amount of material in the tank, and the ambient temperature. If you have any doubts about the proper way to heat cooled asphalt, contact your asphalt supplier or equipment manufacturer.

DANGER:



Never operate the burners while the machine is being loaded, unloaded, in transit, or during spraying operations. The flue tubes can become exposed and cause an explosion inside the tank, or ignite the material being sprayed.

DANGER:



Never operate the burners if the flue tubes are not covered with at least 3 inches (7.6 cm) of material. The flue tubes can become red hot and ignite the vapors causing an explosion.

DANGER:



Always park the machine so the burners are up wind. Some asphalt materials emit flammable vapors that can be ignited by the burner flames, causing an explosion.

DANGER:



Never operate the burners in a confined area such as a building or shed. Vapor build-up could cause an explosion.

DANGER:



Do not operate the burners if the tank is leaking or a spill has occurred. Fire and explosion can occur.

DANGER:



Do not operate the burners with splash plate open. Fire and explosion can occur.

DANGER:



Do not operate the burners while cleaning the system with solvent, or when solvent has recently been used. Solvent and solvent vapors can ignite and explode.

DANGER:



Be sure to read, understand and follow all precautions for the solvent material you are using.

Burner Operation

The burners are located at the front of the distributor. The flame from the burner is directed through the flue tubes along the bottom of the tank.

Before operating the propane burner system, become familiar with the position, function and operation of each control in the system.

1. **Burner Valve:** Controls the flow of fuel to the burner. Turn counterclockwise to open the valve to provide fuel to the burner. Turn clockwise to close the valve and extinguish the burner.
2. **Tank Valve:** Controls the flow of the fuel from the tank. Turn counterclockwise to open and clockwise to close.

Never operate the burners without first reviewing the burner instructions listed below.

Burner Ignition

ATTENTION: Before heating asphalt material, refer to **System Overview, Burner System**, earlier in this section for further information and precautions.



DANGER: **DO NOT SMOKE** around the machine. Fuel, asphalt material, and the fumes from both can explode when exposed to flame or heat.



1. Be sure that flue tubes are covered with at least 3 inches (7.6 cm) of material. If the amount in the tank is less than the recommended amount, do not use the burners. Using the burners without enough material in the tank will cause damage to the flue tubes and could cause an explosion.

DANGER: Never operate the burners if the flue tubes are not covered with at least 3 inches (7.6 cm) of material. The flue tubes can ignite asphalt vapors causing an explosion.



2. Do not load, unload, transport or spray while burners are operating.

WARNING: Inspect the area to be sure there is no fuel or flush solvent on the machine or on the ground. A fire or explosion can occur.



3. Open the tank valve to start the flow of propane. Set the pressure at 8 to 15 psi.
4. Open the valve on the igniter a little to allow a small amount of fuel to flow to the igniter.

DANGER: Never use a match or other source of flame to light the igniter. An explosion can occur.



5. Use a wick-type torch to light the igniter. Do not use a match or other source of flame.
6. Open the valve on the igniter to allow enough flow for operation.
7. Hold the igniter in front of the burner valve and open the burner valve a little to allow a small amount of fuel to flow to the burner.
8. Light the burner using the igniter. Never use a match or other source of flame.
9. Repeat the previous two steps to light the second burner.
10. When the burners are lit, close igniter valve to extinguish the igniter.
11. Return igniter to its storage bracket.

DANGER: Use extreme caution when using the igniter near the burner flames. Always direct the igniter flame away from the burner when lighting the second burner. An explosion can occur.



12. Open the burner valves completely, and heat the asphalt, monitoring the thermometer to be sure asphalt does not get too hot.

CAUTION: The recommended temperature is 120° F (49° C). Do not heat the asphalt beyond 190° F (88° C). Burners and flues can become damaged. Hot asphalt can cause severe burns.



Burner Extinguishing

1. Close the tank valve and allow the fuel to flow to the burners until they go out.
2. Close the burner valves in the lines.
3. Wait 5 minutes before relighting to insure there are no fumes in the flue.

Section 3 OPERATION



OPERATING THE TACK DISTRIBUTOR

COMBATING POOR VISIBILITY

Increasingly, asphalt maintenance equipment is being used during less than ideal light conditions such as fog, smog and at night. Using the equipment during these and similar conditions presents safety hazards to workers, bystanders and passing traffic. People can be injured or killed by the equipment, passing traffic, driving into ditches, holes, other obstructions, or down embankments.

WARNING: When operating the machine under restricted light conditions, equip the unit with special lighting. This will help prevent serious injury and death, and prevent damage to the machine and property.



Use reflective tape on the sides of all machines that may be used at night. Be sure all personnel wear reflective vests. Use impact barriers (movable or stationary) to protect the workers from traffic and to direct the traffic flow away from road hazards.

PREPARING TO PATCH

DANGER: When using a skid-mounted distributor, be sure it has been secured to the transporting vehicle so the distributor does not shift or dislodge during operation. Severe injury or death can occur if the distributor pins or crushes operators or bystanders.



DANGER: When using a trailer-mounted distributor, be sure the ball or pintle latch is securely fastened to the towing vehicle. Attach the towing-package's electrical wires, and connect the emergency breakaway system. Severe injury or death can occur if the distributor pins or crushes operators or bystanders.



1. Make sure all valves are closed or OFF.
2. Check asphalt level in tank. It must be at least 3 inches (7.6 cm) above flue before lighting burners. Refer to **Loading The Tank**, earlier in this section, before filling the tank.

DANGER: Review the information in **Burner System**, earlier in this section. Severe injury and death can occur from fire and explosion caused by improper use of the burner system.



3. Open the valve on the propane tank. Remove the igniter from its stowed position. Open the valve on the igniter and light it with a wick-type lighter.
4. Maintain the propane pressure at 8 to 15 psi by adjusting the tank valve.
5. To light the burners, hold igniter flame in front of burner before opening the burner valve.
6. Bring the liquid asphalt temperature to 120° F (49° C). Do not exceed 190° F (88° C).
7. Monitor the temperature by referring to temperature gauge.

ATTENTION: Be sure asphalt temperature has reached a minimum of 80° F (27° C) before starting the engine. The pump cannot spray cold asphalt. Trying to spray the asphalt before it is warmed will damage the pump.



8. After asphalt is at recommended temperature of 120° F (50° C), open the liquid asphalt valve.

ATTENTION: Never start the engine unless there is tack material or flush material circulating in the system. Running a dry pump will cause pump failure, and void the warranty.



9. Start the engine according to the engine manufacturer's manual.
10. Set the relief valve for desired pressure (250 to 350 psi).
11. Pull out the selector valve knob.

ATTENTION: When allowing the machine to run for short periods of time without spraying, open the circulating valve to relieve excess pump pressure.



USING THE SPRAY WAND

1. Unroll hose and remove the spray wand from the brackets.
2. Open the spray wand select valve.
3. Open the valve on the spray wand and begin spraying.

ATTENTION: When allowing the machine to run for short periods of time without spraying, open the circulating valve to relieve excess pump pressure.



USING THE OPTIONAL SPRAY BAR

CAUTION: Open the nozzle valves before opening the spray bar select valve. The line can become pressurized and spray tack on the operator or bystanders. Hot tack can cause severe burns.



1. Open the valves at the individual nozzles, as desired, on the spray bar.
2. Open the spray bar select valve.

ATTENTION: When allowing the machine to run for short periods of time without spraying, open the circulating valve to relieve excess pump pressure.



NOTE: When moving from one job site to another, turn the individual spray bar nozzle valves OFF to prevent dripping.

Using The Optional In-Truck Control

The optional in-truck control is a simple ON/OFF toggle switch mounted on a handgrip that allows the operator to spray tack through the optional spray bar from inside the cab of the truck. The option is available for both trailer-mounted and skid-mounted units.

1. Be sure the in-truck control is OFF (in the forward position).

CAUTION: Open the nozzle valves before opening the spray bar select valve. The line can become pressurized and spray tack on the operator or bystanders. Hot tack can cause severe burns.



2. Open the valves at the individual nozzles, as desired, on the spray bar.
3. Open the spray bar select valve.
4. From inside the truck cab, turn the in-truck control ON, and move the truck across the area to be tack coated.
5. Turn the in-truck control OFF.

CAUTION: Be sure the in-truck control is OFF and the spray bar select valve is closed when the spraying operation is complete. The line can become pressurized and spray tack on the operator or bystanders. Hot tack can cause severe burns.



ATTENTION: When allowing machine to run for short periods of time without spraying, open circulating valve to relieve excess pump pressure.



BACK FLUSH AND CLEAN OUT

DANGER: Do not operate the burners while cleaning the system with solvent, or when solvent has recently been used. Solvent and solvent vapors can ignite and explode.



ATTENTION: Failure to back flush and clean out the system at the end of each operation will cause the asphalt to set up in the circulating system and will damage the pump.



At the end of each operation, back flush and clean out the circulating system. This will prevent the asphalt from setting up in the circulating system.

Because the Tack Distributor is designed to spray asphalt at lower temperatures, the emulsion is more viscous and will set up more quickly than those emulsions that are heated to higher temperatures.

NOTE: When cleaning out the tack tank and circulating system, do so only in an area designed to contain the chemicals involved in performing any maintenance procedure. Discard these by-products in accordance with environmental regulations.

Section 3

OPERATION



Back Flushing The Circulating System

DANGER: Do not operate the burners while cleaning the system with solvent, or when solvent has recently been used. Solvent and solvent vapors can ignite and explode.



WARNING: Never clean or remove the spray wand nozzle or spray bar nozzles while the machine is running. The line can become pressurized and spray tack on the operator or bystanders. Hot tack can cause severe burns.



1. Open the circulating valve to allow the material to flow back into the tack tank.
2. Close the liquid asphalt valve at bottom of tank.
3. Push in the selector valve knob to retrieve material from hose.

Back Flushing The Spray Wand

1. Open the spray wand select valve.
2. Open the spray wand valve on the handle.
3. Allow 30 seconds for asphalt to be retrieved from the spray wand.
4. Close the spray wand select valve.

Back Flushing The Spray Bar

1. Open the spray bar select valve.
2. Open the individual spray nozzle valves.
3. Allow 30 seconds for asphalt to be retrieved from the spray bar.
4. Close nozzle valves, beginning with the nozzle closest to the center of the spray bar.
5. Allow 10 seconds, then close the next nozzle valve towards outside of the spray bar.
6. Repeat until all nozzles are flushed, allowing 10 seconds at each nozzle.

Cleaning Out The Circulating System

WARNING: Never clean or remove the spray wand nozzle or spray bar nozzles while the machine is running. The line can become pressurized and spray tack on the operator or bystanders. Hot tack can cause severe burns.



1. Close the circulating valve.
2. Open the flush valve at the bottom of the tack tank.
3. Pull out the selector valve knob to allow solvent to flow into the circulating system.

Cleaning Out The Spray Wand

1. Open the spray wand select valve.
2. Open the valve on the spray wand and flush until you see flush material.
3. Close the valve on the spray wand, and store the spray wand in its bracket.
4. Close the spray wand select valve.

Cleaning Out The Spray Bar

1. Open spray bar select valve to let flush material flow to the spray bar.
2. Flush the spray bar nozzles one at a time, until flush material is visible.
3. Close the spray bar select valve.
4. Turn off the engine and make sure all valves are closed or OFF.

ADJUSTING THE SPRAY BAR HEIGHT

Adjust the height of the spray bar by removing the two bolts on the upright bracket, and raising or lowering the bar to the desired height.

OPERATING IN COLD CLIMATES

The Tack Distributor is designed for normal operation at temperatures of 40° F (4° C) or higher. The machine can be used successfully at colder temperatures with special considerations to the following items:


Freezing Asphalt

The operator may need to park the machine inside a warm building to prevent the asphalt from freezing.


Patch Quality

Patches made below freezing are subject to conditions that lower the quality of the patch.

If the Tack Distributor will be used frequently in colder climates, it is recommended that the unit be equipped with the optional overnight emulsion heater. The heater will bring the emulsion to a temperature of 100° F (38° C) and hold it constant. This allows the operator to arrive at a job site with the emulsion near the recommended spraying temperature of 120° F (49° C), and can save valuable time on the job.


DANGER:  **Never operate the burners while the machine is being loaded, unloaded, in transit, or during spraying operations. The flue tubes can become exposed and cause an explosion inside the tank, or ignite the material being sprayed.**

PREPARING THE MACHINE FOR TRAILER TRANSPORT

WARNING:  **When transporting the Tack Distributor on a trailer, use a trailer that is large and heavy enough to handle the distributor in all driving situations.**

1. Clean the machine using a pressure washer. Remove all loose gravel, mud or debris from wheels and frame.
2. Empty the tack tank.
3. Make sure the combined height of the truck, trailer and loaded distributor meet height restrictions for the local area, including bridges, overpasses, and overhead obstructions.

4. Park the transfer vehicle or trailer on a level surface with transmission in park and engine off.
5. Engage the transfer vehicle's emergency brake and use wheel chocks in both directions.
6. Use a ramp or loading dock. Make sure the ramp weight capacity will support the machine and has a low angle of rise to the trailer bed.

WARNING:  **Be sure loading dock and trailer are the same height. Do not bounce the distributor or force the distributor to climb over edge. This could cause the distributor to slide off or damage the machine.**

7. Load the machine on the trailer bed by driving straight on, centered on the trailer. The distributor centerline must be over the centerline of the trailer.

NOTE: **The distributor should be positioned to insure even distribution of load between trailer axles and trailer hitch.**

8. Block distributor tires to prevent distributor from moving forward or backward.
9. Secure the distributor to the trailer at the distributor's tie-down points, using chains rated in excess of distributor weight.

NOTE: **L150T and L250T units have one D-ring on the trailer's tongue. Secure the distributor to the trailer-bed frame using the D-ring, and across the leaf springs on the axle of the distributor.**

NOTE: **L500T units have three D-rings, one on the trailer's tongue, and two on each side at bottom corners of the asphalt tank.**

NOTE: **For skid-mounted units, secure the unit using the two D-rings at each side on top of the asphalt tank, and at the skid frame.**

Section 3 OPERATION



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Section 4 MAINTENANCE



GENERAL INFORMATION

This section gives the necessary procedures for routine and general maintenance on the LeeBoy Tack Distributor. Before starting any Maintenance program on the machine, it is important to READ, UNDERSTAND, and FOLLOW all Maintenance instructions, Danger, Warning, and Caution messages in this section, as well as all Safety information contained in Section 1 of this manual.

DANGER: Failure to observe the Maintenance instructions, Danger, Warning, and Caution messages in this manual can cause serious injury or death.



NOTE: By following a careful service and maintenance program for your machine, you will insure many years of trouble free operation.

PROPERLY MAINTAINED EQUIPMENT IS SAFE EQUIPMENT! The user of this product is responsible for inspecting the machine daily, and for having parts replaced or repaired when continued use would cause damage or excessive wear to other parts. General daily inspection of the machine should include inspection for missing guards, loose bolts, fluid leaks, worn or damaged hoses and debris or dirt accumulations which could cause a potential service or safety problem.

ROUTINE MAINTENANCE

GENERAL INFORMATION

Maintenance must be a planned program that includes periodic machine inspection and lubrication procedures.

The maintenance program must be done based on the machine's "Operating Hours" recorded on the hour meter, or on a "Periodic Schedule" which is done at daily, weekly, monthly or yearly intervals.

ATTENTION: When performing any routine maintenance such as 50, 100, 250, or 500 hours, always include previous routine maintenance hours to the higher hourly schedule.



Table 4-1, Maintenance Interval Chart, lists recommended maintenance procedures and time intervals between machine maintenance inspections and lubrication procedures.

MACHINE LUBRICATION

Proper lubrication is necessary to maintain the machine at top efficiency. Refer to the lubrication information in Table 4-1, Maintenance Interval Chart.



Section 4 MAINTENANCE

TABLE 4-1. MAINTENANCE INTERVAL CHART

8 HOURS or DAILY		
Burners		
Mounting System	Check	Tighten as Necessary
Fuel Tank	Check	Fill as Necessary
Asphalt Delivery System		
Spray Wand	Check	Clean Nozzle and Components
Spray Bar (if equipped)	Check	Clean Nozzles and Valves
Electrical Systems	Check	Clean and Repair as Necessary
50 HOURS or WEEKLY		
Wheel Lug Nuts	Check	Tighten as Necessary
100 HOURS or MONTHLY		
General Exterior	Clean	Power Wash to Remove Excess Tack
250 HOURS or QUARTERLY		
Basic Engine Maintenance	Check	Refer to Engine Manufacturer's Manual
500 HOURS or SEASONALLY		
Wheel Bearings	Re-Pack	Wheel Bearing Grease

Section 4 MAINTENANCE



MAINTENANCE SCHEDULE

GENERAL INFORMATION

Preventive maintenance on the LeeBoy Tack Distributor will provide years of trouble-free operation. Adjustments can be performed in the field with ordinary hand tools. Engine preventive maintenance is not covered in this section. Refer to the engine manufacturer's manual for engine service information.

NOTE: When cleaning out the tack tank and circulating system, do so only in an area designed to contain the chemicals involved in performing any maintenance procedure. Discard these by-products in accordance with environmental regulations.

CAUTION: Do not substitute fasteners of any kind unless the fasteners are equal in size and grade to original equipment.



ATTENTION: When performing routine maintenance such as 50, 100, 250, or 500 hours, always include previous routine maintenance hours to the higher hourly schedule.



PREPARING THE MACHINE FOR MAINTENANCE

1. Park the machine on a flat even surface.
2. If you are performing maintenance on a trailer-mounted unit, block the wheels of the trailer to prevent the unit from moving.
3. If you are performing maintenance on a skid-mounted unit, set the park brake of the transport vehicle.
4. Turn the engine off and close all valves.

WARNING: If maintenance must be performed with engine running, do not leave machine unattended.



CHECKS AND ADJUSTMENTS

1. Check for loose, damaged, missing or corroded parts. Repair or replace as required.
2. Check for damaged, loose, or missing decals. Replace decals as required.

CHECKING HOSES AND FITTINGS

1. Refer to **Preparing The Machine For Maintenance** and park the machine.
2. Check the machine for indications of oil leakage around oil lines, hoses, and fittings.
3. Tighten fittings as necessary.
4. Check pressure hoses for wear or cracking.
5. Replace hoses and fittings as needed.

ENGINE MAINTENANCE

GENERAL INFORMATION

Refer to the engine manufacturer's manual for information on engine service. Use manufacturer's recommendations for engine oil, fuel, and filter replacement.

BATTERY MAINTENANCE

WARNING: Batteries contains sulfuric acid and normally produce explosive gases that can cause serious injury. Therefore, do not allow flames or sparks to come near the battery. When charging or working near a battery, always shield your face and protect your eyes. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.



WARNING: When servicing battery, always remove the battery's ground cable first followed by the positive cable. Generally, if the negative cable is grounded during removal, sparks will not occur. If the positive cable is grounded during removal, sparks will occur and could ignite explosive gases.



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

ATTENTION: When servicing the electrical system or welding on the machine, always turn the engine OFF and disconnect the ground (-) cable from the battery to prevent damage to the machine's electrical system.



ATTENTION: The electrical system is a negative ground system. Connect the positive (+) cable to the positive (+) post of battery. Connect the ground cable to the negative (-) post of battery. Disconnect the negative (-) cable first and connect it last. Reversed polarity can damage the electrical system.



The Tack Distributor's electrical system is a 12-volt negative ground system. To access the battery, remove the wing nut on the lid of the battery box mounted at the front corner of the frame.

Be certain that the terminals and battery posts are clean and that the battery cable terminals are tight. Dirty or loose connections can create high electrical resistance and permit arcing, which will quickly burn and pit terminals and posts.

Keep the battery clean by washing it off whenever dirt build-up is excessive. 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. Make certain the vent caps are tight to prevent solution from entering the cells. After cleaning, pour clean water over the battery and surrounding area to wash the solution away. Check vent cap breather openings to make sure they are open.

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.

CLEAN AND TIGHTEN BATTERY TERMINALS

1. Disconnect battery clamps, grounded clamp first.
2. Clean terminals with a stiff brush or battery service tool.
3. Apply contact grease at the base of the battery terminal to prevent gas from escaping.
4. Install and tighten battery clamps, grounded clamp last.

Section 4 MAINTENANCE



ELECTRICAL SYSTEM

1. Inspect the electrical systems daily for proper operation of lights, brakes, and emergency break away switches.
2. If an electrical system does not function:
 - a. Examine all visible wiring connections, making sure that they are securely fastened.
 - b. If the lights still do not work, remove the lens from the light and inspect the bulb(s), replacing any that appear damaged or discolored.
 - c. Check the mounts for proper grounding.
 - d. If the trouble is not located, inspect the wiring harnesses for damage. Wiring schematics are provided in the **Illustrated Parts List** to assist in troubleshooting the machine's electrical system.
3. If broken wires are found, solder the wires together and cover them with a shrink wrap type of plastic covering (preferred), or electrician's tape, to prevent contamination of the solder joint by moisture.
4. After making repairs to a wiring harness on the machine, always replace or repair the protective loom which covers the wiring to prevent future damage to the wiring harness. Examine the routing of the harness and make sure it is not subjected to the type of excessive movement which causes broken wiring.

ASPHALT DELIVERY SYSTEM

SPRAY WAND

CAUTION: Always wear protective clothing. Contact with hot asphalt can cause severe burns.



WARNING: DO NOT SMOKE around the machine. Fuel, asphalt material and the fumes from both can explode when exposed to flame or heat.



1. At the end of each operation, back flush and clean out the circulating system. Refer to **Back Flush And Clean Out** in Section 3. Keep internal components clean to prevent material from clogging components or setting up in the hoses and nozzle.

NOTE: Some residue will always be left on the inner surfaces of the plumbing, but it will reliquefy when the hot asphalt flows through the system.

2. Clean all spray wand components at the end of each working day or more frequently if required.
3. Clean all joints and pivots of the spray wand to prevent caked dirt or asphalt from interfering with their function.
4. After cleaning, visually check all hoses, fittings and clamps for leaks or loose components. Leaks can affect the performance and function of the machine by causing uneven asphalt application and wasted asphalt.

CAUTION: Do not operate the unit with leaking or damaged parts. Leaks can result in hot asphalt spilling on the machine or on the operator, and can create a hazardous condition.



SPRAY BAR

The spray bar is mounted on the back of the Tack Distributor. Its purpose is to distribute asphalt over a driveway or road surface

CAUTION: Always wear protective clothing. Contact with hot asphalt can cause severe burns.



ATTENTION: DO NOT use any citrus solvent, technical name is Terpene Hydrocarbon, to clean out the spray bar. It destroys the Viton seals.



WARNING: DO NOT SMOKE near the machine. Fuel, asphalt material and the fumes from both can explode when exposed to flame or heat.



1. At the end of each operation, back flush and clean out the circulating system. Refer to **Back Flush And Clean Out** in Section 3. Keep internal components clean to prevent material from clogging components or setting up in the hoses and nozzles.

NOTE: Some residue will always be left on the inner surfaces of the plumbing, but it will reliquefy when the hot asphalt flows through the system.

2. Clean all spray bar components at the end of each working day or more frequently if required.
3. Clean all joints and pivots of the spray bar to prevent caked dirt or asphalt from interfering with their function.
4. After cleaning, visually check all hoses, fittings and clamps for leaks or loose components. Leaks can affect the performance and function of the machine by causing uneven asphalt application and wasted asphalt.

CAUTION: Do not operate the unit with leaking or damaged parts. Leaks can result in hot asphalt spilling on the machine or on the operator, and can create a hazardous condition.



CHASSIS AND RUNNING GEAR

WARNING: Do not service the machine while it is in motion or while the engine is running. If the engine must be running to service a component, block the wheels, and use extreme caution.



Proper lubrication is necessary to maintain the machine at top efficiency. Refer to the lubrication information in Table 4-1, Maintenance Interval Chart. All lubrication points are shown in Figure 4-1.

Use only good clean lubricants. Do not induce contaminants into the system by using open or dirty containers.

TIRES AND WHEELS

1. Check tires for excessive wear, correct tire pressure, and objects embedded in the tires.

ATTENTION: Never exceed tire manufacturer's maximum recommended inflation pressure.



2. Protect tires from contact with petroleum products and chemicals.
3. Check tires and wheels for cuts, bubbles, damaged rims, or missing wheel bolts or nuts.
4. Wheel lug nuts should be checked for tightness weekly. Torque to 85 ft. lbs (115 Nm).

CHANGING THE TIRES

1. Park the distributor on a flat surface. Turn off the engine and set the park brake of the towing vehicle.
2. Loosen and remove the lug nuts.
3. Remove bolts and tire.
4. Install repaired or replacement tire on the machine; tighten lug nuts alternately in a star pattern to 85 ft. lbs (115 Nm).

AXLES AND BRAKES

WARNING: Securely support chassis when removing the wheels. Do not lie under the machine while it is supported only by a jack. Use jackstands on a solid surface to prevent tipping of the machine when it is raised. Block the remaining wheels to prevent rolling of the machine when it is raised.



Wheel bearings should be removed, inspected, and repacked with a high quality wheel bearing grease after every 500 service hours or seasonally.

To reinstall bearings and hub, tighten the retaining nut until the wheel drags during hand rotation. Then back off the nut 1/8 turn and bend over the locking tab or install the cotter pin, depending on the design configuration.

Section 4 MAINTENANCE



BURNER SYSTEM

The LPG Burners are located at the rear of the Tack Distributor. Check the burner operation on a daily basis.

WARNING: **DO NOT SMOKE near the machine. Fuel, asphalt material and the fumes from both can explode when exposed to flame or heat.**



1. Visually inspect the burner and mounting system on a daily basis. Tighten, repair or replace components as required.
2. Check the fuel level in the tank daily.
3. Check the tank valve, burner valves, and fuel lines before lighting the burners. If a leak is suspected, use soapy water to identify the source.
4. Use a wrench to tighten the burner mounting hardware before using the burners.
5. Visually inspect the flue tubes for cracks or other damage.

WARNING: **Never operate burners if flue tubes are damaged. Asphalt material coming through the cracked tube could ignite when the burner is lit. Consult your LeeBoy Dealer for repair procedures.**



DAILY EXTERIOR MAINTENANCE

Clean the steps and railings to prevent accidents during operation. Clean the instruction plates, decals, gauges and other information plaques so they can be seen and read by the operator at all times. Replace any decals or information plates that are damaged or illegible.

STORAGE

PREPARING FOR LONG TERM STORAGE

A stored machine requires as much periodic maintenance as a machine at work. Stored units must receive periodic scheduled maintenance.

1. Clean the machine. Paint chipped or rusty areas to prevent rusting.
2. Inspect the machine thoroughly and repair worn or damaged parts.
3. Coat with grease or rust inhibitor all exposed cylinder rods, seals, and o-rings to prevent cracking.

ATTENTION: **Some rust inhibitors can destroy painted surfaces. Do not spray rust inhibitor on painted surfaces.**



4. Lubricate all pivot points. Make sure all grease cavities are filled with grease. See Table 4-1, Maintenance Interval Chart.
5. If unit is equipped with an electric-start engine, remove the battery and store in a cool, dry place.
6. Top up all fluid levels to minimize condensation forming inside the tanks.
7. Check engine oil level and fill as necessary.
8. Inspect all hoses, couplers, fittings and cylinders. Tighten any loose fittings and replace any hoses that are worn.
9. Drain the tack tank and flush the asphalt delivery lines.

NOTE: **When cleaning out the tack tank and circulating system, do so only in an area designed to contain the chemicals involved in performing any maintenance procedure. Discard these by-products in accordance with environmental regulations.**

10. Check all safety decals. Replace any decals that are damaged or illegible. Refer to Decal Installation in this section.
11. Place a DO NOT OPERATE tag on the machine.
12. Store machine in a dry, protected area. If stored outside, cover with waterproof material.

PERIODIC MAINTENANCE DURING STORAGE

If a unit will not be used for more than two months, refer to Table 4-1, Maintenance Interval Chart, and follow procedures for 100-Hours interval.

REMOVING THE MACHINE FROM STORAGE

1. Follow steps above in **Periodic Maintenance During Storage**.
2. Refer to Table 4-1, Maintenance Interval Chart. Check all fluid levels, belt tensions, and bolt torques.
3. Replace battery. Refer to **Battery Maintenance** earlier in this section for additional instructions.
4. Clean grease or rust inhibitor from all exposed cylinder rods, seals, and o-rings.

DECAL INSTALLATION

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 into place.
5. Peel the remaining backing paper and carefully smooth the decal into 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 4 MAINTENANCE



TROUBLESHOOTING

GENERAL INFORMATION

The troubleshooting charts below identify the most common symptoms of failure. Use these charts to help identify the failed component.

For specific engine and pump problems not covered here, see the engine or pump manufacturer's manual.

ATTENTION: Do not attempt to service or repair major components such as the engine or pump unless authorized to do so by your LeeBoy dealer. **ANY UNAUTHORIZED REPAIR WILL VOID THE WARRANTY.**



TROUBLESHOOTING CHART

SYMPTOM	CAUSE	REMEDY
Pump squeals.	Liquid asphalt valve closed. Cold asphalt is clogging pump and circulating system, causing excessive pressure. Pump pressure is too high.	Open liquid asphalt valve. Heat asphalt to proper temperature as recommended by asphalt supplier. Adjust relief valve.
Asphalt application is inconsistent, or too light.	Inconsistent asphalt temperature and viscosity between tank loads. Ground speed is too fast or too slow for desired application rate. Nozzles are too large or too small. Nozzles are clogged.	Monitor asphalt temperature and reheat when needed. Monitor ground speed, and adjust accordingly. Use only LeeBoy parts supplied with machine. Clean the nozzles.
Spray bar section or spray wand not coming on.	Asphalt temperature is too low. Asphalt feed hoses or nozzles are plugged or collapsed. Key has sheared at the pump shaft.	Heat asphalt to proper temperature. Clean or replace asphalt hose(s) or nozzles. Replace the key on the pump shaft.
No fuel to the burner.	No fuel in the LPG tank. Faulty fuel regulator.	Fill fuel tank. Repair or replace.
Igniter not working properly.	Low fuel pressure.	Check fuel pressure. Must be set at 8 to 15 psi.
Burner has fluttering and blow back.	Fuel pressure is too high or too low. Fuel tank contents are too high or too low.	Check fuel pressure. Must be set at 8 to 15 psi. Check tank contents. Fill the tank, or bleed off some of the contents. Fluttering can occur if LPG tank is filled too full or is nearly empty.



Section 4 MAINTENANCE

NOTES:

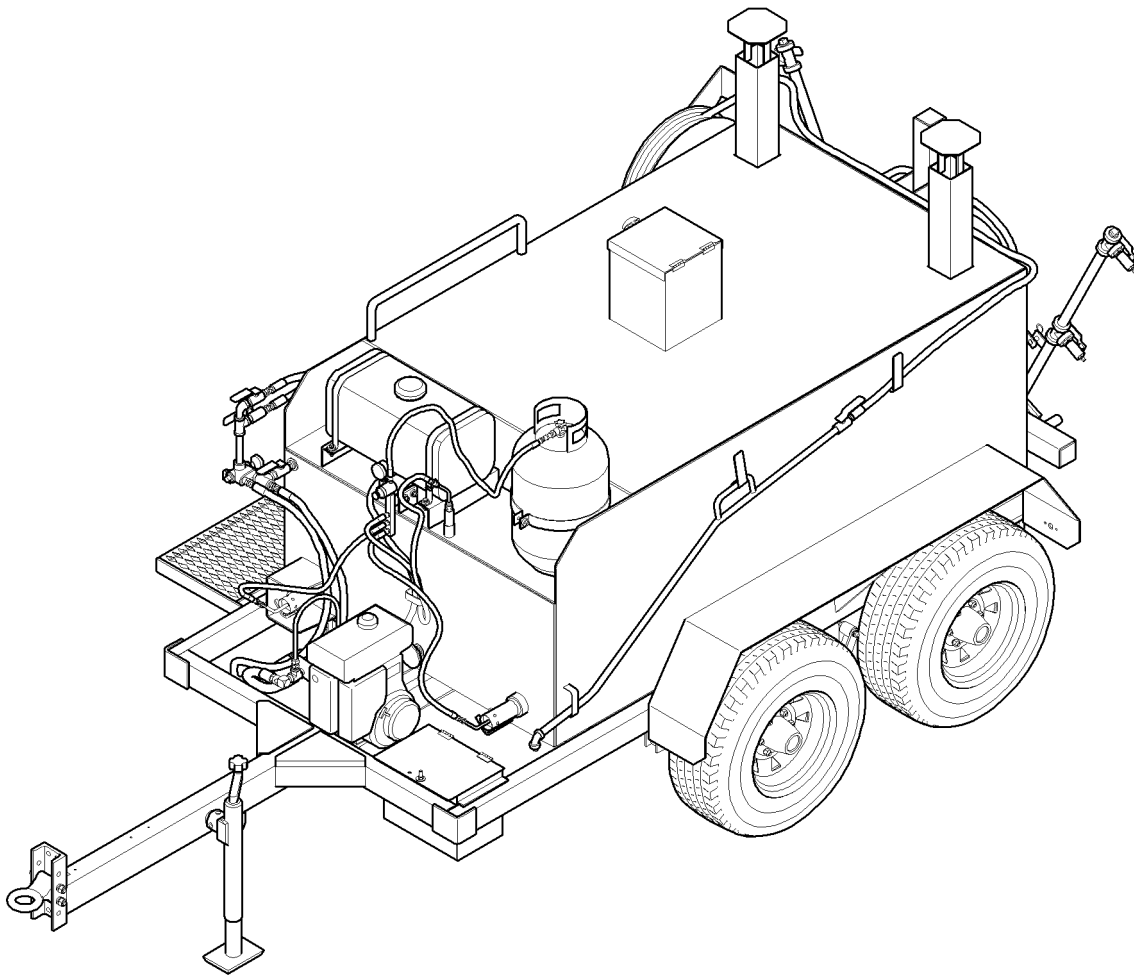
**Section 4
MAINTENANCE**



NOTES:



ILLUSTRATED PARTS LIST



———— TACK TANK ASPHALT DISTRIBUTOR ————

L150, L250, L500

Manual No. 125201-01

For Units with Serial No. 48560 and higher

Revised 12-31-07

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ILLUSTRATED PARTS LIST

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ILLUSTRATED PARTS LIST





ILLUSTRATED PARTS LIST

INTRODUCTION

This Illustrated Parts List (IPL) is intended for use in identifying and requisitioning replacement parts.

ILLUSTRATED PARTS LIST

HOW TO USE THE IPL

In column 1, FIG refers to the corresponding illustration, and ITEM refers to the item number for the referenced illustration.

Parts with a dash preceding the ITEM number are not illustrated.

In column 2, PART NUMBER refers to the associated FIG or ITEM in column 1.

In column 3, NOMENCLATURE refers to the description of the associated PART NUMBER. Bullets preceding the description are explained in **General System Of Assembly Order**, in following paragraphs.

In the case of sub-assemblies, parts are captioned ATTACHING PARTS and are listed immediately following the attached part(s). The -----*----- symbol follows the last item of the attached parts group.

In column 4, UNITS PER ASSY refers to the quantity required to assemble the item illustrated in the associated FIG. Unit of measure may be EACH, FT, LBS or other.

In the case of sub-assemblies, the quantities listed for the attaching parts are the quantity required to attach one item.

NHA notations at item descriptions refer to Next Higher Assembly.

On the associated illustrations, numbers in parentheses next to the item number, refer to the quantities used at that assembly location.

EXPLANATION OF PART NUMBERS

If standard parts (those with AN, MS, NAF, NAS prefixes) are used, the standard part number is listed in the PART NUMBER column.

If a company other than LeeBoy is referred to as the original manufacturer, these parts may carry the original manufacturer's part number or a LeeBoy part number. These manufacturers are identified by an appropriate vendor code following the nomenclature. If the part number is a LeeBoy part number, the original manufacturer's part number is given after his vendor code. Vendor codes are in accordance with the current issue of Cataloguing Handbook, "Commercial and Government Entity" (H4-1 and H4-2) and are preceded by the capital letter "V".

When a vendor code cannot be obtained from the H4-1 and H4-2 Cataloguing Handbook, the manufacturer's full name and address are included in the parts list. Government standard parts such as AN, MS, NAF and NAS parts are not identified with a vendor code.

GENERAL SYSTEM OF ASSEMBLY ORDER

The indenture system used in the Illustrated Parts List shows relationship of parts and assemblies to the next higher assembly or installation as follows:

1 2 3 4 5 6 7

Installation

- Detail parts for installation
- Assembly
- Attaching parts for assembly
- *-----
- Detail parts for assembly
- Sub-assembly
- Attaching parts for sub-assembly
- *-----
- Detail parts for sub-assembly
- Sub-sub-assembly
- Attaching parts for sub-sub-assembly
- *-----
- Detail parts for sub-sub-assembly

ALPHABETICAL INDEX

An Alphabetical Index is provided as a supplement at the end of the Illustrated Parts List.

EQUIPMENT DESIGNATOR INDEX

If equipment designators are used in place of part numbers at any place in the IPL, an Equipment Designator Index is provided, listing all equipment designators listed in the Illustrated Parts List.

ILLUSTRATED PARTS LIST

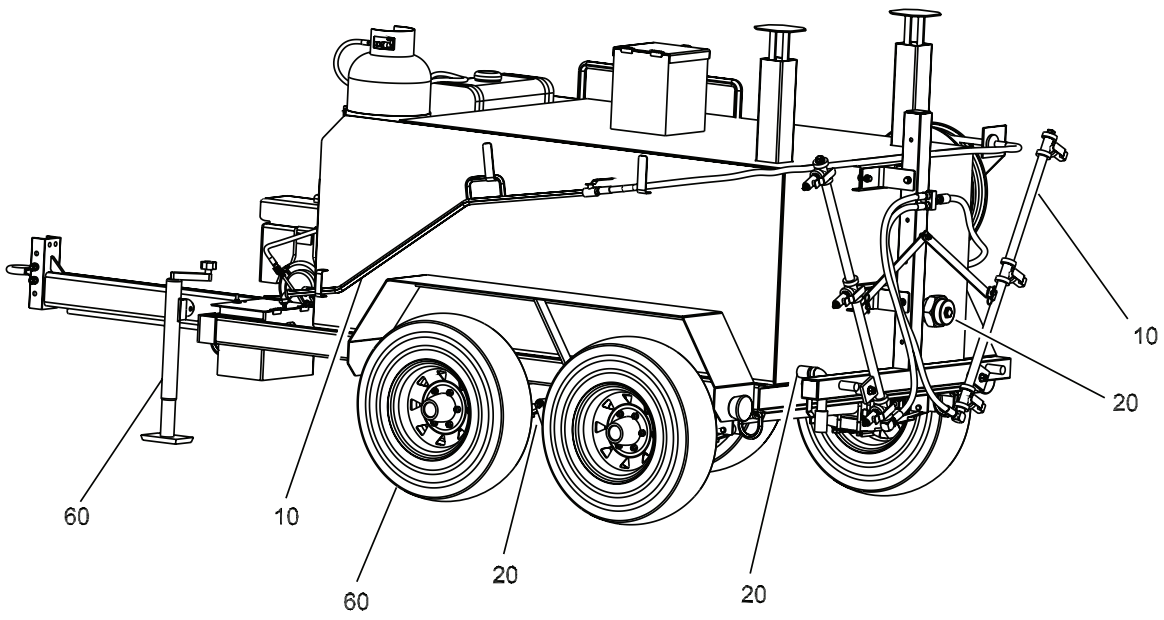
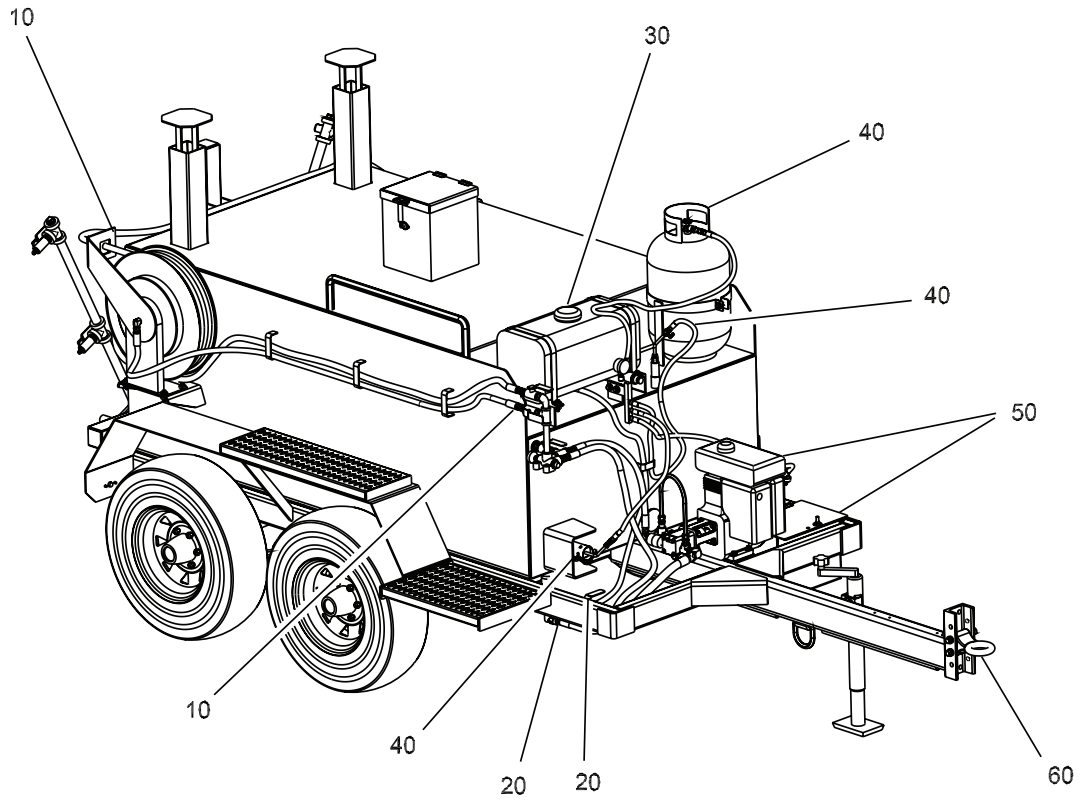


FIGURE 1. TOP ASSEMBLY



ILLUSTRATED PARTS LIST

FIGURE 1. TOP ASSEMBLY

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
1		TOP ASSEMBLY	
10	TBD	CIRCULATING SYSTEMS (See Fig 2 thru 7 for Breakdown)	1
20	TBD	TACK TANK & COMPONENTS (See Fig 8 & 9 for Breakdown)	1
30	TBD	FLUSH SYSTEM (See Fig 10 for Breakdown)	1
40	TBD	BURNER SYSTEM (See Fig 11 for Breakdown)	1
50	TBD	ENGINE & PUMP GRPS (See Fig 12 for Breakdown)	1
60	TBD	CHASSIS & FRAME GRPS (See Fig 13 thru 15 for Breakdown)	1

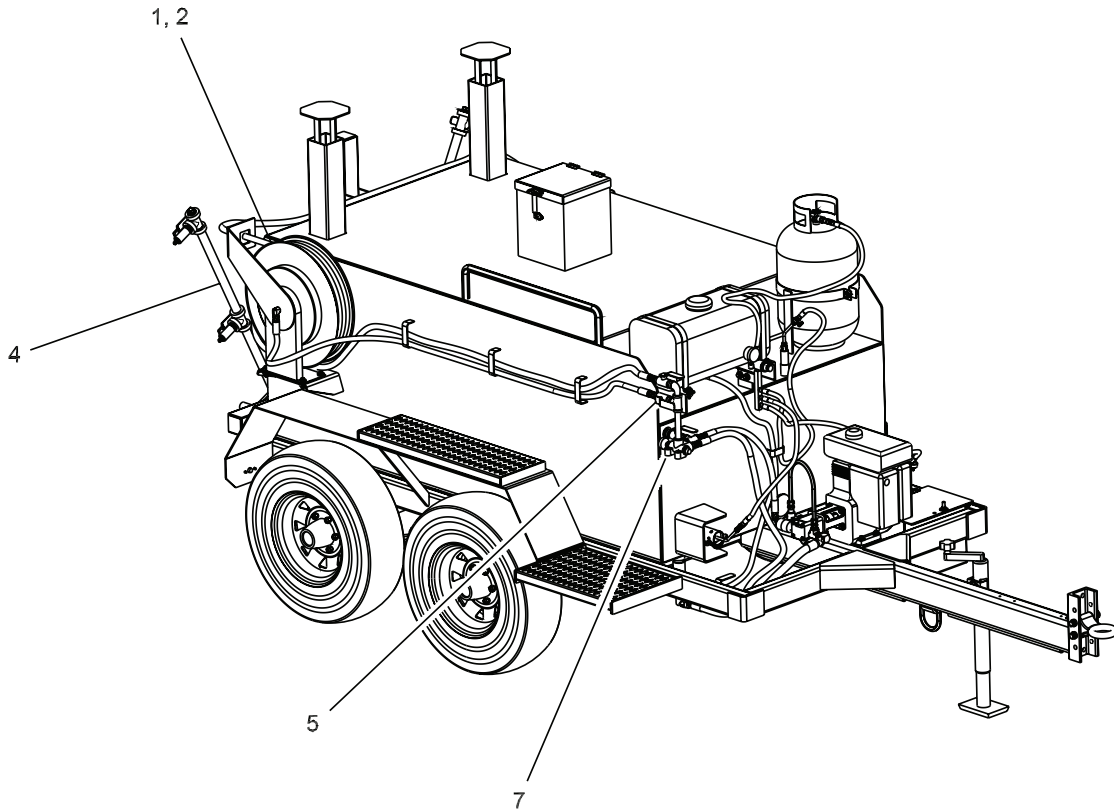


FIGURE 2. CIRCULATING SYSTEM



ILLUSTRATED PARTS LIST

FIGURE 2. CIRCULATING SYSTEM

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
2	TBD	CIRCULATING SYSTEM (See Figure 1 for NHA)	1
1	150020	REEL, WITH HOSE, 1/2" X 50'	1
2	280110	HOSE ONLY	1
-3	280302	WAND, TACK SPRAY, ALUMINUM (See Fig 3 for Breakdown)	1
4	150010	SPRAYBAR ASSY, 8FT (See Fig 4 for Breakdown)	1
5	851941	SPRAY SELECT VLV ASSY, TRLR (See Fig 5 for Breakdown)	1
-6	851967	SPRAY SELECT VLV ASSY, SKID (See Fig 6 for Breakdown)	1
7	851957	SELECTOR VALVE ASSY (See Fig 7 for Breakdown)	1

- ITEM NOT ILLUSTRATED

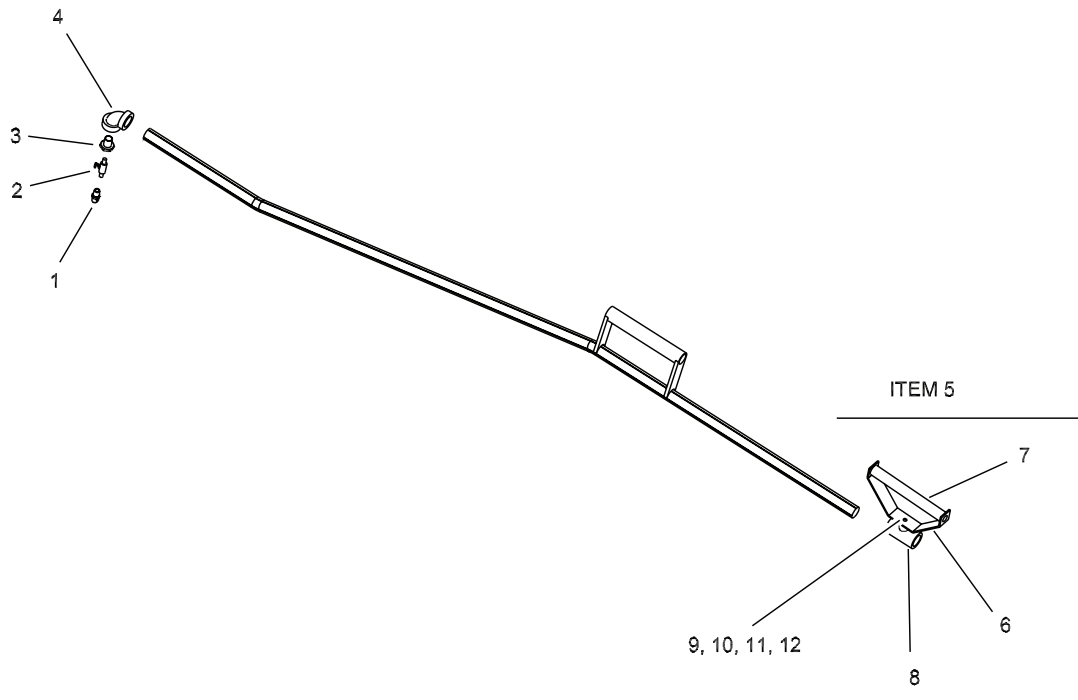


FIGURE 3. SPRAY WAND,TACK SPRAY

FIGURE 3. SPRAY WAND,TACK SPRAY

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
3	280302	SPRAY WAND,TACK SPRAY (See Figure 2 for NHA)	1
1	280310	NOZZLE, TACK SPRAY	1
2	230070	VALVE,PETCOCK,.250	1
3	280320	RED BUSHING,1/2MPT X 1/4FPT	1
4	99512	ELBOW,PIPE,90,.500,MI	2
5	982483	HANDLE,SPRAY WAND,ASSY	1
6	857055	•EXTENSION, SPRAY WAND (Part of item 5)	REF
7	857056	•HANDLE, SPRAY WAND (Part of item 5)	REF
8	859478	•VALVE,BALL,.500,SS SHAFT (Part of item 5)	REF
9	102-227-1A	•CSHH,.375-16X6.50,GR5 (Part of item 5)	REF
10	116-3	•NUT,HEX,.375-16 (Part of item 5)	REF
11	118-3	•WASHER,LOCK,.375 (Part of item 5)	REF
12	119-3	•WASHER,FLAT,SAE,.375 (Part of item 5)	REF

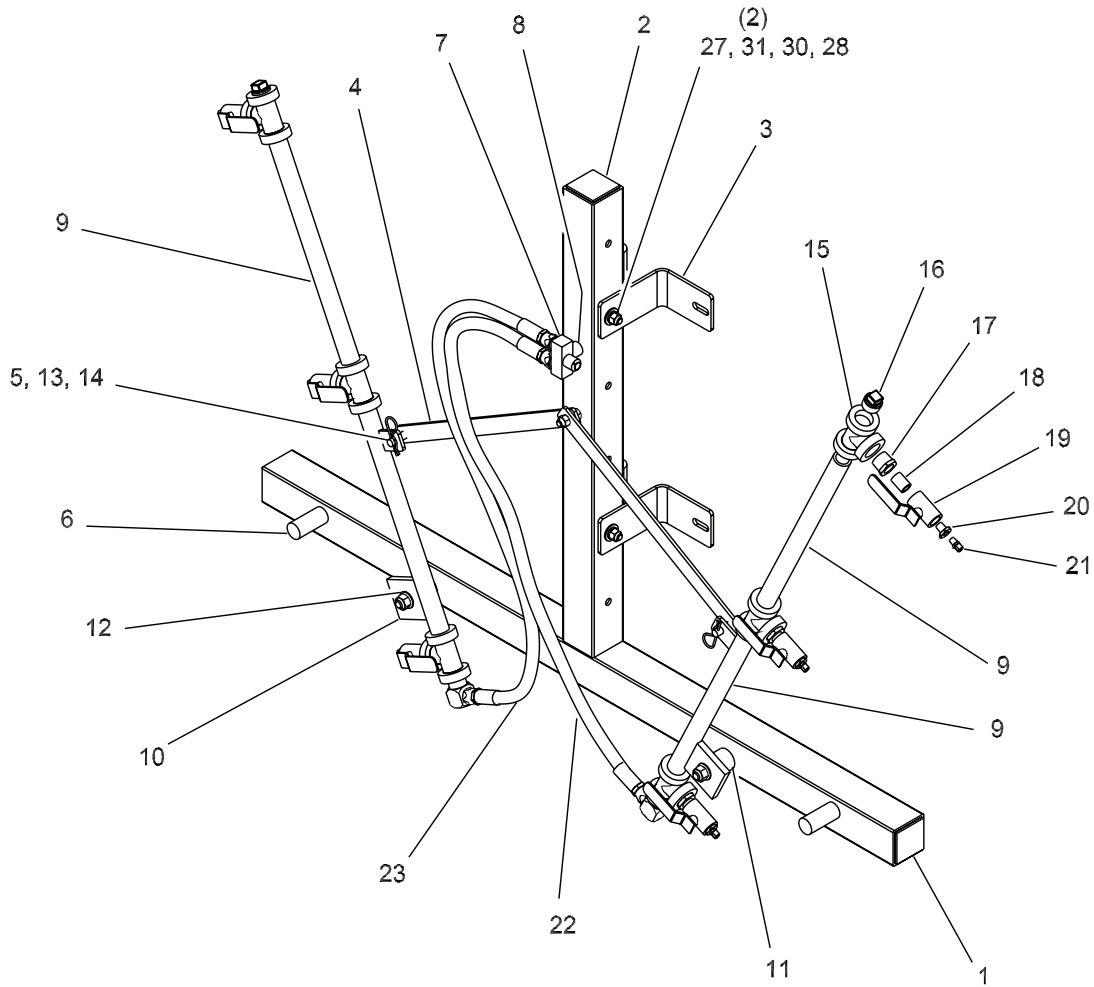


FIGURE 4. OPTIONAL SPRAY BAR ASSEMBLY, 8 FT

FIGURE 4. OPTIONAL SPRAY BAR ASSEMBLY, 8 FT

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
4	150010	SPRAY BAR ASSEMBLY, 8 FT (See Figure 2 for NHA)	1
1	851925	SQ TUBE, SPRAY BAR HORIZONTAL	1
2	851926	SQ TUBE, SPRAY BAR VERTICAL	1
3	851932	BRACKET, SPRAY BAR MOUNT	4
4	851931	FLAT BAR, SPRAY BAR ARM LOCK	2
5	851933	MOUNT, SPRAY BAR ARM LOCK	2
6	851935	RND, 1.250X2.75, CRS	2
7	550201	Y-BLOCK	1
8	851934	RND, 1.000X1.00, CRS	1
9	150781	PIPE, NIPPLE, 1.00X18.00	4
10	851929	MOUNT, SPRAY BAR ARM SWIVEL	2
11	851928	SPACER, SPRAYBAR ARM	2
12	490080	SPRING WASHER, .625 ID	2
13	240030	PIN, CLEVIS, 1.00X3.25 W/1.5HD	2
14	80338	PIN, COTTER, .188X2.00	2
15	150810	PIPE, TEE, 1.00	6
16	99539	PIPE, PLUG, 16MP, SQ HEAD, MI	2
17	99990	PIPE, BUSH, 1.00MP X .500FP	6
18	280270	PIPE, NIPPLE, .500XCLOSE, SCH 80	6
19	32874	VALVE, BALL, .500 (BRASS)	6
20	280320	RED BUSHING, 1/2MPT X 1/4FPT	6
21	280310	NOZZLE, TACK SPRAY	6
22	150025	HOSE ASSY, RH SPRAY BAR TO MANIFOLD	1
23	150023	HOSE ASSY, LH SPRAY BAR TO MANIFOLD	1
24	2501-8-16	ADAPTER, HYD HOSE, 90, 1" MPT X 1/2" MJIC	2
25	102-406-1A	CSHH, .500-13X1.25, GR5	1
26	102-407-1A	CSHH, .500-13X1.50, GR5	4
27	102-419-1A	CSHH, .500-13X4.50, GR5	2
28	117-7	NUT, HEX, HEAVY, .625-11	2
29	143-7	NUT, LOCK, .625-11	2
30	118-5	WASHER, LOCK, .500	6
31	119-5	WASHER, FLAT, SAE, .500	12

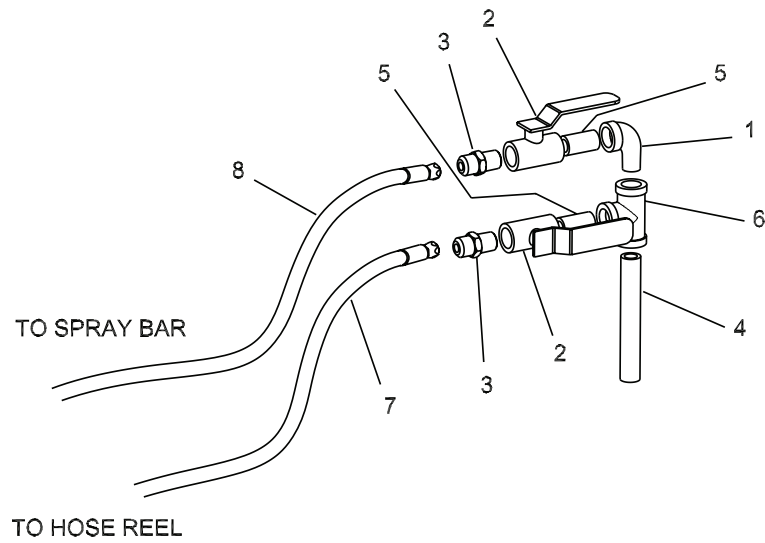


FIGURE 5. SPRAY SELECT VALVE ASSEMBLY, TRAILER

FIGURE 5. SPRAY SELECT VALVE ASSEMBLY, TRAILER

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
5	851941	SPRAY SELECT VLV ASSY,TRLR (See Figure 2 for NHA)	1
1	99526	ELBOW,PIPE,90,.500,STREET	1
2	32874	VALVE,BALL,.500,BRASS	2
3	2404-8-8	ADAPTER,HYD HOSE	2
4	280090	PIPE,NIPPLE,.500X5.50,LG	1
5	280270	PIPE,NIPPLE,.500X CLOSE	2
6	99569	PIPE,TEE,08FP,MI	1
7	150021	HOSE ASSY,VALVE TO HOSE REEL	1
8	150022	HOSE ASSY,VALVE TO SPRAY BAR	1

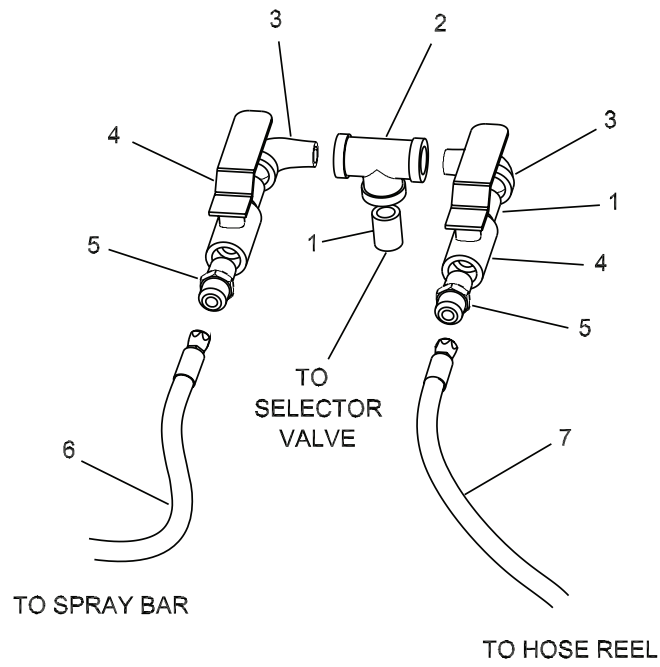


FIGURE 6. SPRAY SELECT VALVE ASSEMBLY, SKID

FIGURE 6. SPRAY SELECT VALVE ASSEMBLY, SKID

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
6	851967	SPRAY SELECT VLV ASSY, SKID (See Figure 2 for NHA)	1
1	280270	PIPE,NIPPLE,.500X CLOSE	3
2	99569	PIPE,TEE,.08FP,MI	1
3	99526	ELBOW,PIPE,90,.500,STREET	2
4	32874	VALVE,BALL,.500,BRASS	2
5	2404-8-8	ADAPTER,HYD HOSE	2
6	150022	HOSE ASSY,VALVE TO SPRAY BAR	1
7	150030	HOSE ASSY,UPPER VALVE TO HOSE REEL	1
-8	2501-8-8	ADAPTER,HYD HOSE TO HOSE REEL	1

- ITEM NOT ILLUSTRATED

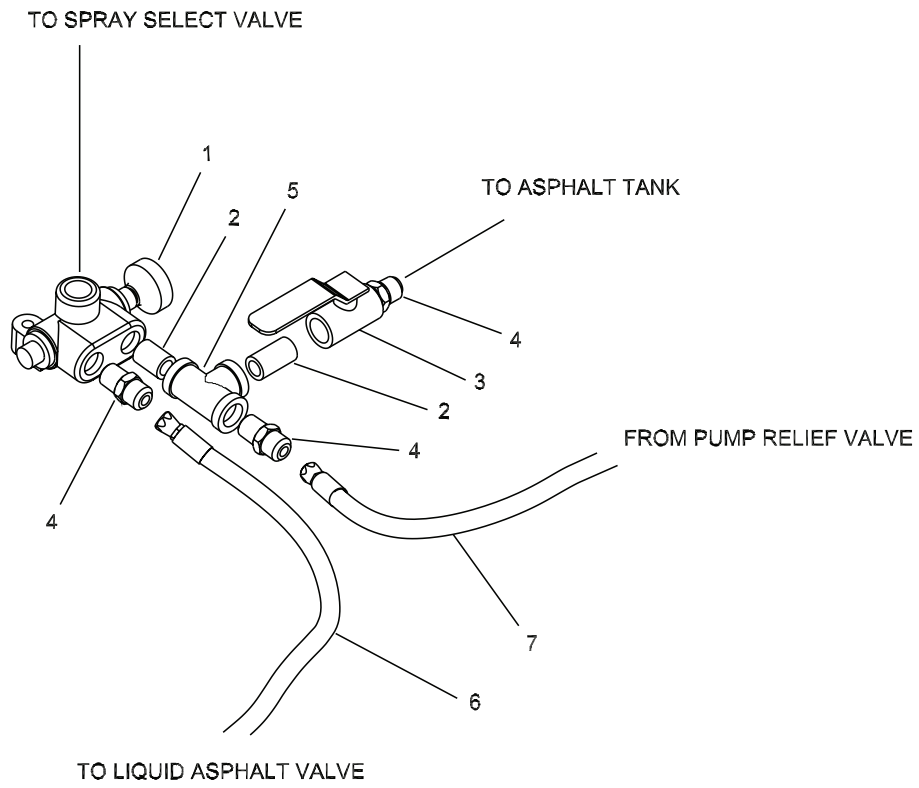


FIGURE 7. SELECTOR VALVE ASSEMBLY

FIGURE 7. SELECTOR VALVE ASSEMBLY

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
7	851957	SELECTOR VALVE ASSY (See Figure 2 for NHA)	1
1	910080	VALVE,SELECTOR	1
2	280270	PIPE,NIPPLE,.500X CLOSE	2
3	32874	VALVE,BALL,.500,BRASS	1
4	2404-8-8	ADAPTER,HYD HOSE	3
5	99569	PIPE,TEE,08FP,MI	2
6	150026	HOSE ASSY,TANK VLV. RET. TO LIQ. ASPHALT	1
7	150027	HOSE ASSY,RELIEF VALVE TO TANK VALVE	1

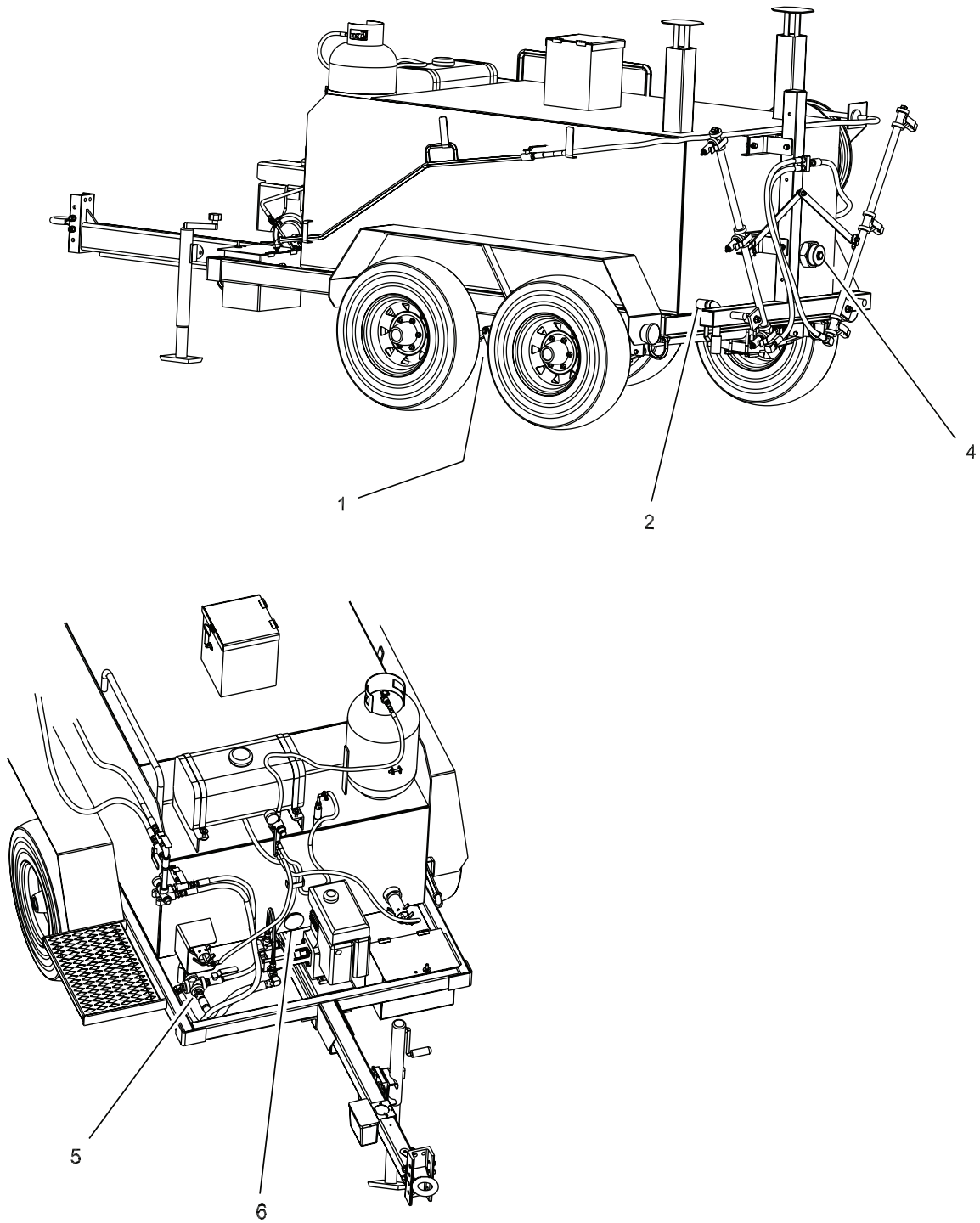


FIGURE 8. TACK TANK & COMPONENTS

FIGURE 8. TACK TANK & COMPONENTS

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
8	TBD	TACK TANK & COMPONENTS (See Figure 1 for NHA)	1
1	280300	PIPE,PLUG,4.00MP,BAR HEAD	1
2	280210	VALVE,BALL,1.00,(DISCHARGE)	1
-3*	280301	PLUG,PIPE,2.0,SQ HEAD	1
4	150710	HEATER,IMMERSION,120V,1500W	1
-4A	99990	•PIPE,BUSH,1.00MP X .500FP	1
-4B	33782	•PLUG,ELEC,MALE,15A,125V	1
-4C	33783	•CORD,ELEC,3WIRE,14GA,300V	1
-4D	3200DI	•WATER TIGHT CONN, 1/2 X 1/2	1
5	851898	LOWER LIQUID ASPHALT VLV,ASSY (See Fig 9 for Breakdown)	1
6	330040	GAUGE, TACK TEMP/HYD OIL TEMP	1

* Item 3 is used in place of item 4 (Optional Immersion Heater).

- ITEM NOT ILLUSTRATED

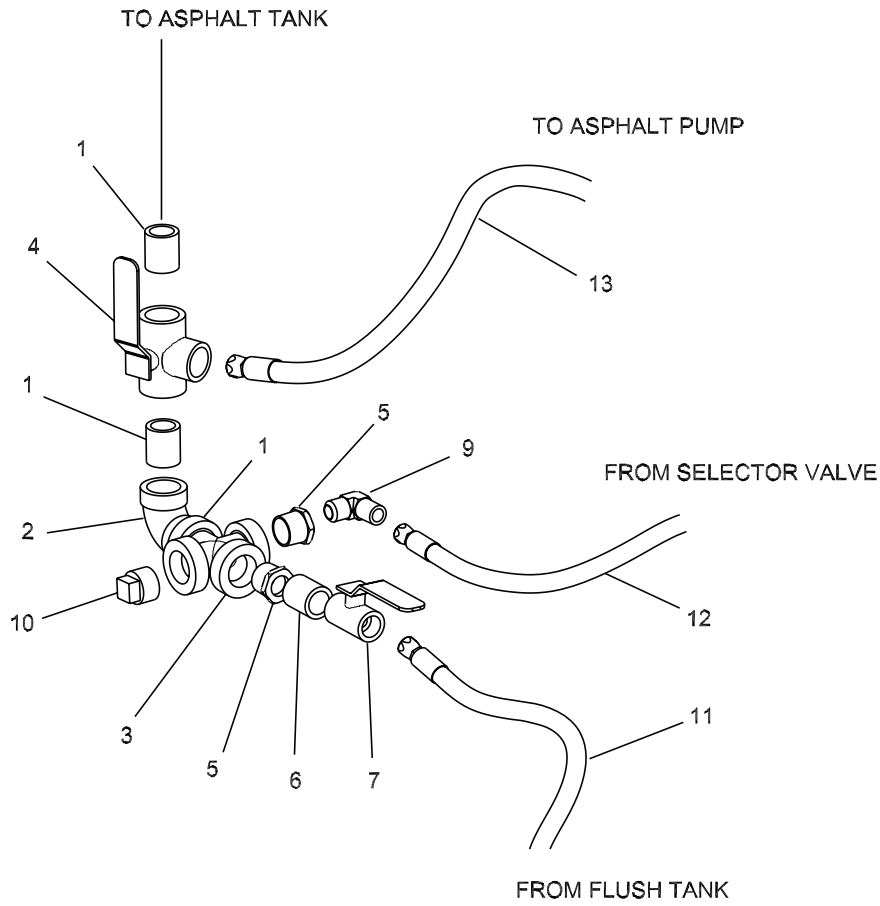


FIGURE 9. LOWER LIQUID ASPHALT VALVE



ILLUSTRATED PARTS LIST

FIGURE 9. LOWER LIQUID ASPHALT VALVE

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
9	851898	LOWER LIQUID ASPHALT VLV,ASSY (See Figure 8 for NHA)	1
1	280200	PIPE,NIPPLE,1.00XCLOSE,SCH 80	3
2	99514	ELBOW,PIPE,90,1.00,MI	1
3	280230	CROSS,1.00,FPT	1
4	853720	VALVE,BALL,3-WAY,1.00	1
5	99990	PIPE,BUSH,1.00MP X .500FP	2
6	280270	PIPE,NIPPLE,.500XCLOSE,SCH 80	1
7	32874	VALVE,BALL,.500,BRASS	1
-8	2404-12-16	ADAPTER,HYD HOSE	1
9	2501-8-8	ADAPTER,HYD HOSE	1
10	99539	PIPE,PLUG,16MP,SQ HEAD,MI	1
11	230290	HOSE ASSY,FLUSH TANK TO LIQUID VALVE	1
12	150026	HOSE ASSY,TANK VLV RETURN TO LIQUID ASPHALT	1
13	150028	HOSE ASSY,TACK PUMP FEED	1

- ITEM NOT ILLUSTRATED

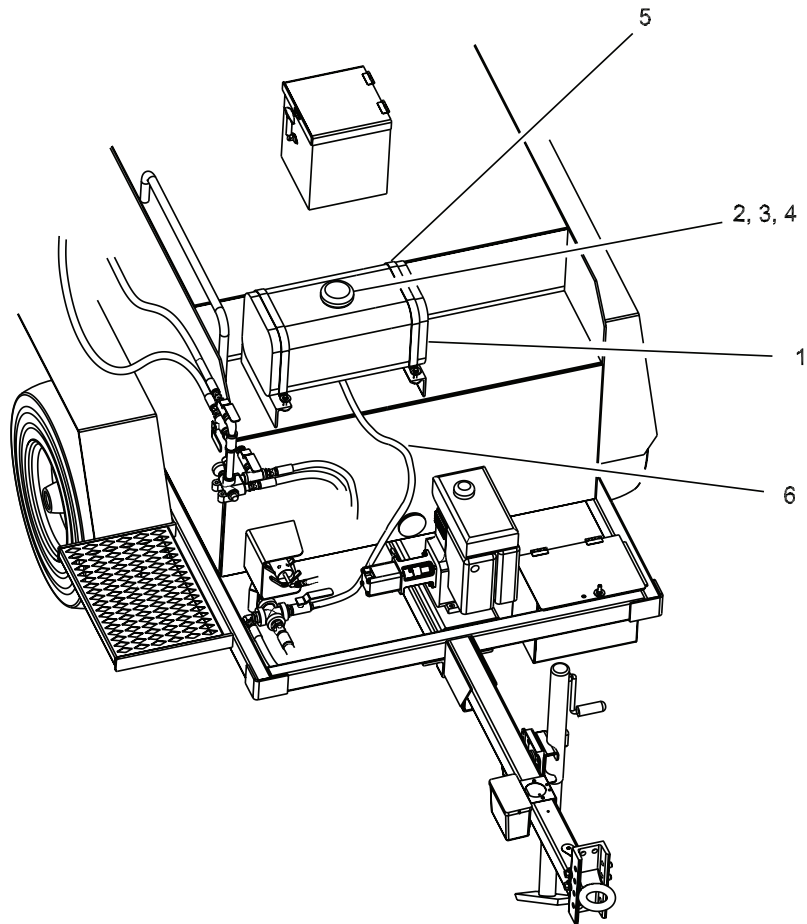


FIGURE 10. FLUSH SYSTEM



ILLUSTRATED PARTS LIST

FIGURE 10. FLUSH SYSTEM

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
10	TBD	FLUSH SYSTEM (See Figure 1 for NHA)	1
1	988731	TANK,CITRUS,8 GAL,POLY	1
2	140030FL	CAP,FUEL TANK,LOCKABLE	1
3	140030FN	FILLER NECK,HYD OIL/FUEL CAP	1
4	853930	GASKET,FILLER BREATHER CAP	1
5	851879	STRAP,FLUSH TANK	2
6	230290	HOSE ASSY,FLUSH TANK TO LIQUID VALVE	1

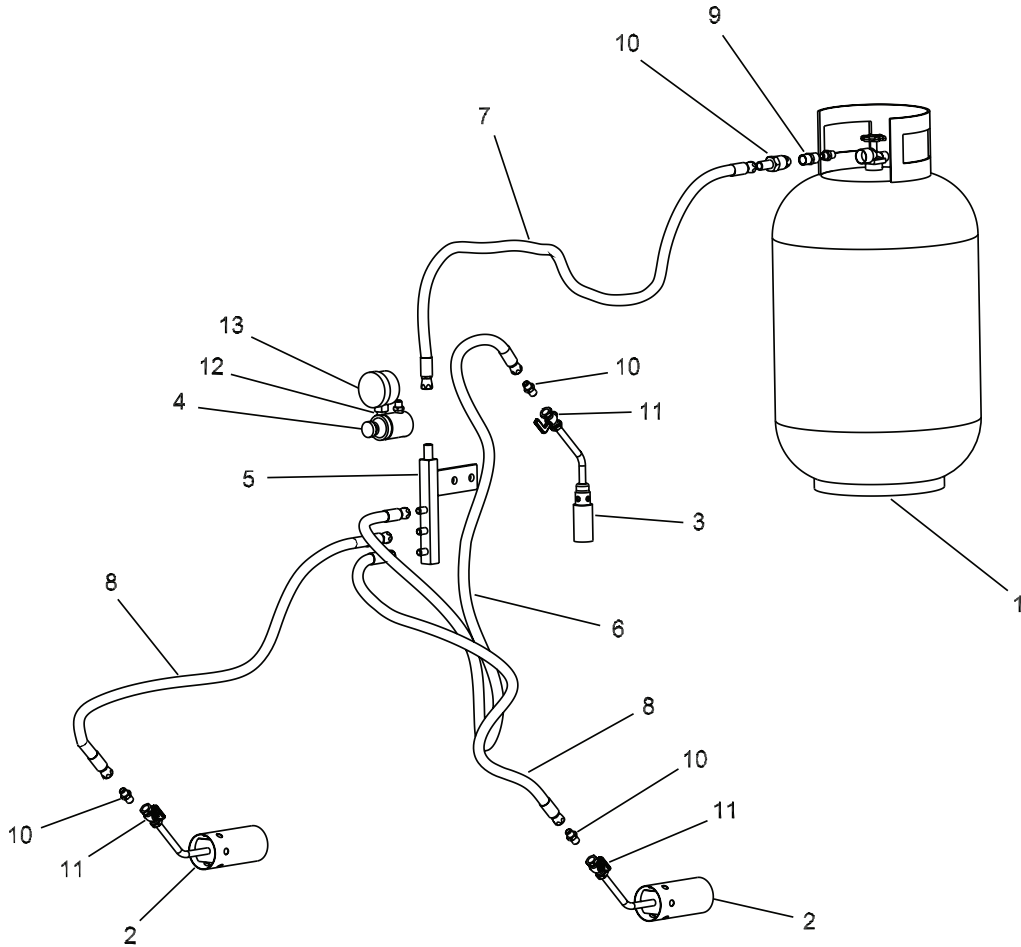


FIGURE 11. BURNER SYSTEM

FIGURE 11. BURNER SYSTEM

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
11	TBD	BURNER SYSTEM (See Figure 1 for NHA)	1
1	230010-30	TANK,LPG,30LB	1
2	982505	BURNER,WAND ASSY,ST6WV	2
-2A	982514	•BODY,BURNER,ST6WV	1
-2B	982508	•BURNER TIP,LG,ST6TE	1
3	982501	BURNER,WAND ASSY,ST3WV	1
-3A	982510	•BODY,BURNER,ST3WV	1
-3B	982506	•BURNER TIP,SMALL,ST4TE	1
-3C	982509	•MIXER,BURNER WAND	1
4	982516	REGULATOR,SIDE MOUNT,MRLP2	1
5	150230	MANIFOLD,LPG,L150/L250/L500	1
6	230260	HOSE ASSY,LPG IGNITER,67"	1
7	230270	HOSE ASSY,LPG TANK TO REGULATOR,23/5"	1
8	230280	HOSE ASSY,LPG MANIFOLD TO BURNER NOZZLE,52"	2
9	230030	POL ADAPTER, LPG TANK	1
10	230250	ADAPTER, PIPE TO HOSE,.250	4
11	230180	VALVE,PETCOCK,.250	3
12	230101	ELBOW,PIPE X FLARE,90,.250 (Part of item 4)	REF
13	230110	GAUGE,PRESS,LPG (Part of item 4)	REF

- ITEM NOT ILLUSTRATED

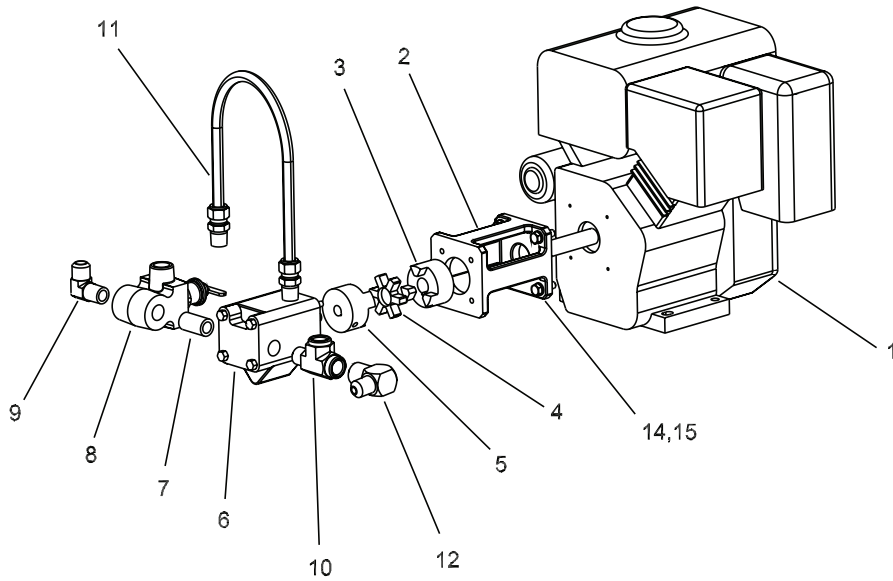


FIGURE 12. ENGINE, PUMP, AND OPTIONAL BATTERY GROUP

FIGURE 12. ENGINE, PUMP, AND OPTIONAL BATTERY GROUP

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
12	TBD	ENGINE & PUMP (See Figure 1 for NHA)	1
1	150200H	ENGINE,HONDA,5.5 HP	1
-1A	150200HE	ENGINE,HONDA,5.5 HP,ELEC START	1
2	150160	ADAPTER,PUMP/ENG	1
3	150150A	CPLG HALF,3 JAW,3/4"	1
4	280040	INSERT, 3-JAW COUPLING	1
5	280050	CPLG HALF,3 JAW,1/2"	1
6	280020A	PUMP,TACK SPRAY (7 GPM)	1
7	280075	PIPE,NIPPLE, .500X2.50	1
8	280100	VALVE,RELIEF,250 PSI	1
9	2501-8-8	ADAPTER,HYD HOSE	1
10	5602-8-8-8	TEE ADAPTER,HYD HOSE	1
11	851945	BYPASS ASSEMBLY	1
12	2501-12-8	ADAPTER,HYD HOSE	1
-13	280020-1	SEAL KIT,TACK PUMP	1
14	102-105-1A	CSHH,.312-18X1.00,GR5	4
15	118-2	WASHER,LOCK,.312	4
-16	280020-2	BUSHING/BEARING KIT,TACK PUMP	1
*	TBD	OPTIONAL BATTERY GROUP	
-1	920152	BATTERY,12 V 725CCA GROUP 24	1
-2	800076	CABLE,BATTERY,NEG,26",EYE/EYE	1
-3	851465	CABLE,BATTERY,POS,36",EYE/POST	1
-4	920152A	RUBBER MAT,BATTERY TRAY	1
-5	150042	STRAP, BATTERY HOLD DOWN	1

* Optional Battery Group is used with item 1A, Optional Electric Start Engine.

- ITEM NOT ILLUSTRATED

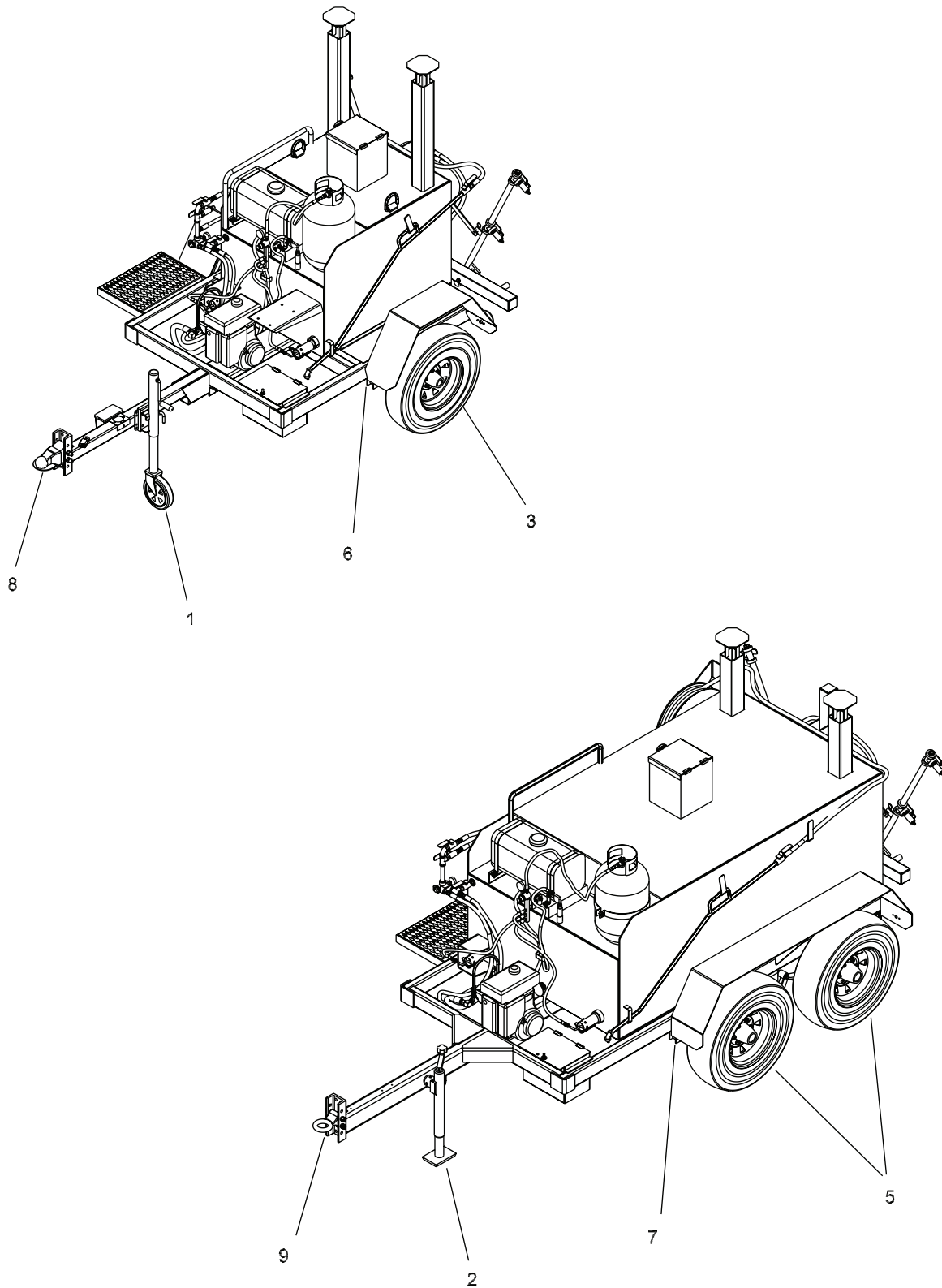


FIGURE 13. CHASSIS, AXLE, WHEEL & TIRE GROUPS

FIGURE 13. CHASSIS, AXLE, WHEEL & TIRE GROUPS

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
13	TBD	CHASSIS, AXLES, WHEELS & TIRES (See Figure 1 for NHA)	1
1	150220	FOLDING JACK, TOWING TONGUE (L150T & L250T)	1
2	150220A	FOLDING JACK, TOWING TONGUE (L500T)	1
3	150090	TIRE & WHEEL ASSY,5 LUG (L150T)	2
-4	150090A	TIRE & WHEEL ASSY,6 LUG (L250T)	2
5	150090A	TIRE & WHEEL ASSY,6 LUG (L500T)	4
6	150040	AXLE ASSY,3500LB IDLER (L150T) (See Figure 14)	1
7	150040B	AXLE ASSY,5200LB W/BRAKES (L250T & L500T) (See Fig 15)	1
8	985101	GROUP,COUPLER,2.0" (L150T & L250T)	1
-8A	150210C	GUSSET, 3 POS CHANNEL IRON (Part of item 8)	1
-8B	150210B	CHANNEL,3 POSITION PINTLE/BALL (Part of item 8)	1
-8C	510200A	COUPLER,2.00 BALL,ADJ (Part of item 8)	1
9	985102	GROUP,PINTLE,2 1/2" (L500T)	1
-9A	150210C	GUSSET, 3 POS CHANNEL IRON (Part of item 9)	1
-9B	150210B	CHANNEL,3 POSITION PINTLE/BALL (Part of item 9)	1
-9C	510200	PINTLE EYE, 2 1/2" (Part of item 9)	1

- ITEM NOT ILLUSTRATED

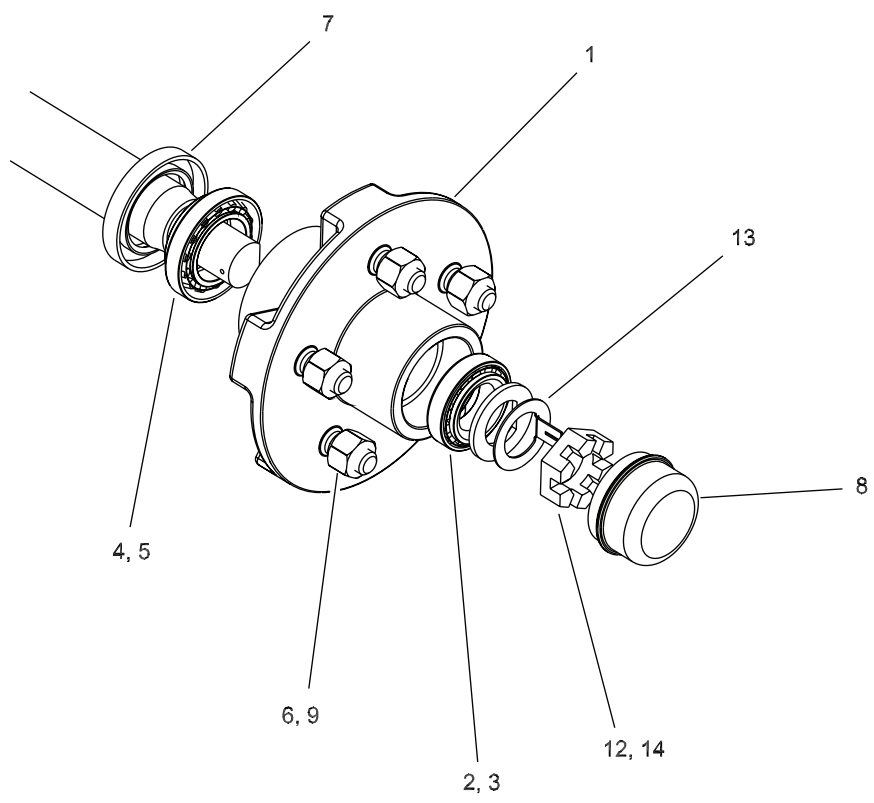
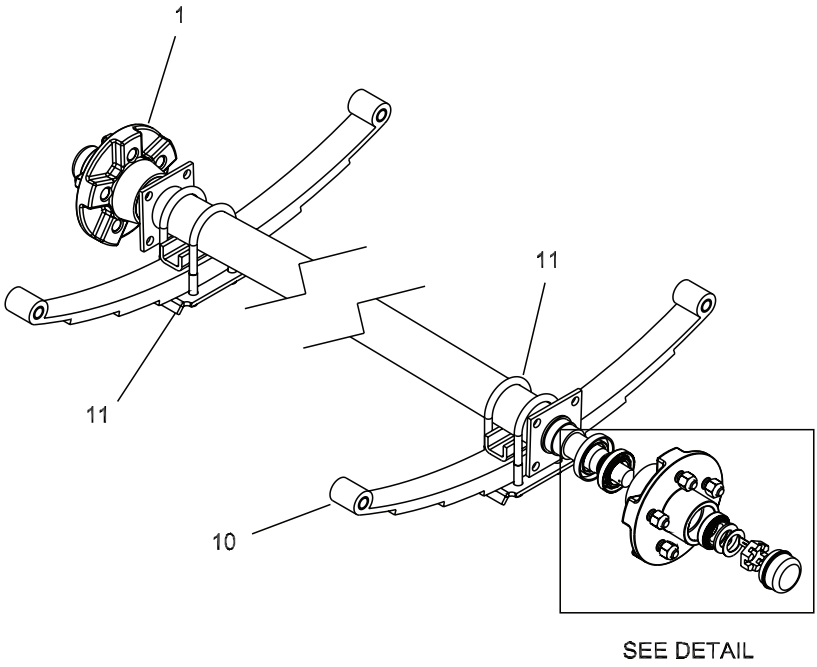


FIGURE 14. AXLE ASSEMBLY, 3500LB IDLER

FIGURE 14. AXLE ASSEMBLY, 3500LB IDLER

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
14	150040	AXLE ASSY,3500LB IDLER (See Figure 13 for NHA)	1
1	150040-1	WHEEL HUB,5 LUG,3500#	2
2	150830	•BEARING CUP,WHEEL HUB,OUTER	1
3	150840	•BEARING CONE,WHEEL HUB,OUTER	1
4	150430	•BEARING CUP,WHEEL HUB,INNER	1
5	150440	•BEARING CONE,WHEEL HUB,INNER	1
6	620510	•STUD,WHEEL	5
7	150420	•SEAL,WHEEL HUB,3500#	1
8	150850	•DUST CAP,WHEEL HUB	1
9	620520	•NUT,LUG,.500-20	5
10	150060	LEAF SPRING,L150T AXLE	2
11	150050	U-BOLT KIT,L150T AXLE	2
12	610260	NUT,SPINDLE	2
13	610250-1	WASHER,FLAT,FRONT SPINDLE	2
14	610250	WASHER,LOCK,FRONT SPINDLE	2

ILLUSTRATED PARTS LIST

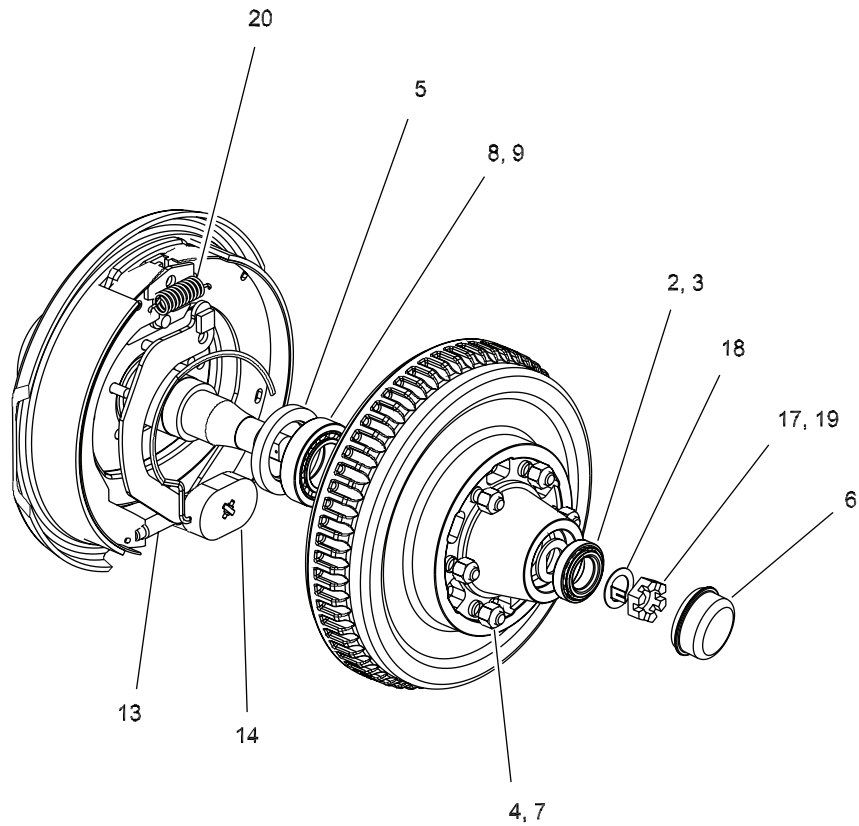
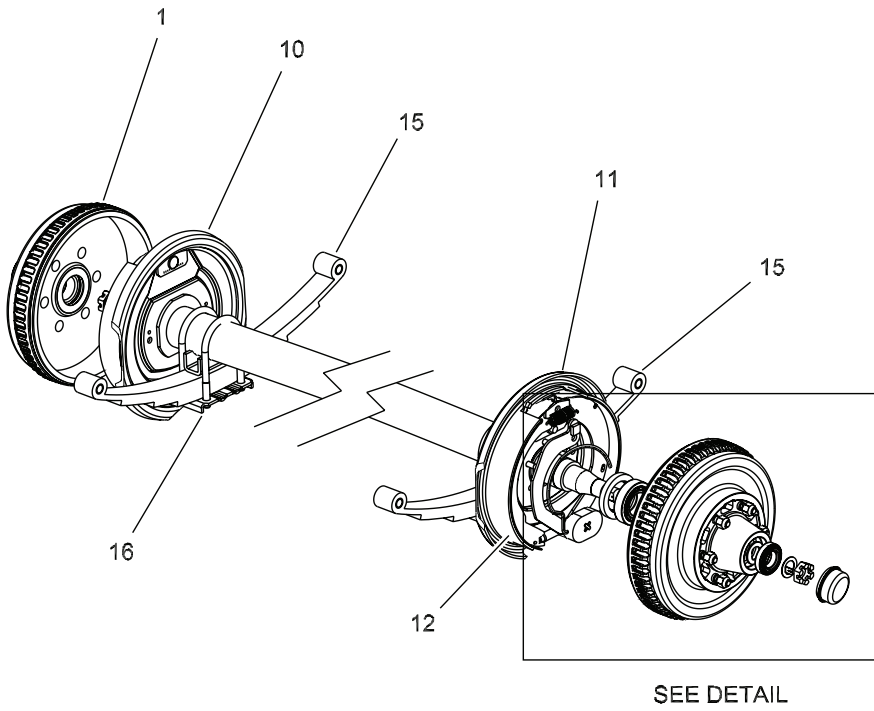


FIGURE 15. AXLE ASSEMBLY, 5200LB WITH BRAKES

FIGURE 15. AXLE ASSEMBLY, 5200LB WITH BRAKES

FIG ITEM	PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	UNITS PER ASSY
15	150040B	AXLE ASSY,5200LB W/BRAKES (See Figure 13 for NHA)	1
1	317030	HUB & DRUM ASSY,6 ON 5.50	2
2	610230	•BEARING CUP,WHEEL HUB,OUTER	1
3	610240	•BEARING CONE,WHEEL HUB,OUTER	1
4	620510	•STUD,WHEEL	6
5	610190	•SEAL,WHEEL HUB,5200#	1
6	340040	•DUST CAP,WHEEL HUB,5200#	1
7	620520	•NUT,LUG,.500-20	6
8	610200	•BEARING CUP,WHEEL HUB,INNER	1
9	610210	•BEARING CONE,WHEEL HUB,INNER	1
10	340060R	BRAKE ASSY,12VDC,2"X12",RH	1
11	340060L	BRAKE ASSY,12VDC,2"X12",LH	1
12	340070	•BRAKE SHOE,W/LINING,12"X2"	2
13	340110	•ADJUSTER & SPRING ASSY	1
14	340100	•MAGNET KIT,ELECTRIC BRAKE	1
15	150060A	LEAF SPRING,5200# AXLE	2
16	150050A	U-BOLT KIT,5200# AXLE	2
17	610260	NUT,SPINDLE	2
18	610250-1	WASHER,FLAT,FRONT SPINDLE	2
19	610250	WASHER,LOCK,FRONT SPINDLE	2
20	340130	SPRING KIT,BRAKE SHOE RETURN	2

ILLUSTRATED PARTS LIST





ILLUSTRATED PARTS LIST

ALPHABETICAL INDEX FOR ALL STANDARD AND OPTIONAL PARTS

ALPHABETICAL INDEX



ITEM NUMBER	PART NUMBER	NOMENCLATURE	IPL PAGE NUMBER
		A	
10	230250	ADAPTER, PIPE TO HOSE, .250	25
3	2404-8-8	ADAPTER, HYD HOSE	13
4	2404-8-8	ADAPTER, HYD HOSE	17
5	2404-8-8	ADAPTER, HYD HOSE	15
8	2404-12-16	ADAPTER, HYD HOSE	21
9	2501-8-8	ADAPTER, HYD HOSE	21, 27
12	2501-12-8	ADAPTER, HYD HOSE	27
8	2501-8-8	ADAPTER, HYD HOSE TO HOSE REEL	15
24	2501-8-16	ADAPTER, HYD HOSE, 90, 1" MPT X 1/2" MJI	11
2	150160	ADAPTER, PUMP/ENG	27
13	340110	ADJUSTER & SPRING ASSY	33
6	150040	AXLE ASSY, 3500LB IDLER (L150T)	29
7	150040B	AXLE ASSY, 5200LB W/BRAKES (L250T & L50)	29
		B	
1	920152	BATTERY, 12 V 725CCA GROUP 24	27
5	150440	BEARING CONE, WHEEL HUB, INNER	31
9	610210	BEARING CONE, WHEEL HUB, INNER	33
3	150840	BEARING CONE, WHEEL HUB, OUTER	31
3	610240	BEARING CONE, WHEEL HUB, OUTER	33
4	150430	BEARING CUP, WHEEL HUB, INNER	31
8	610200	BEARING CUP, WHEEL HUB, INNER	33
2	150830	BEARING CUP, WHEEL HUB, OUTER	31
2	610230	BEARING CUP, WHEEL HUB, OUTER	33
3A	982510	BODY, BURNER, ST3WV	25
2A	982514	BODY, BURNER, ST6WV	25
3	851932	BRACKET, SPRAY BAR MOUNT	11
11	340060L	BRAKE ASSY, 12VDC, 2"X12", LH	33
10	340060R	BRAKE ASSY, 12VDC, 2"X12", RH	33
12	340070	BRAKE SHOE, W/LINING, 12"X2"	33
40	TBD	BURNER SYSTEM	5
2B	982508	BURNER TIP, LG, ST6TE	25
3B	982506	BURNER TIP, SMALL, ST4TE	25
3	982501	BURNER, WAND ASSY, ST3WV	25
2	982505	BURNER, WAND ASSY, ST6WV	25
16	280020-2	BUSHING/BEARING KIT, TACK PUMP	27
11	851945	BYPASS ASSEMBLY	27



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ITEM NUMBER	PART NUMBER	NOMENCLATURE	IPL PAGE NUMBER
C			
2	800076	CABLE,BATTERY,NEG,26",EYE/EYE	27
3	851465	CABLE,BATTERY,POS,36",EYE/POST	27
2	140030FL	CAP,FUEL TANK,LOCKABLE	23
8B	150210B	CHANNEL,3 POSITION PINTLE/BALL	29
9B	150210B	CHANNEL,3 POSITION PINTLE/BALL	29
60	TBD	CHASSIS & FRAME GRPS	5
10	TBD	CIRCULATING SYSTEMS	5
4C	33783	CORD,ELEC,3WIRE,14GA,300V	19
8C	510200A	COUPLER,2.00 BALL,ADJ	29
5	280050	CPLG HALF,3 JAW,1/2"	27
3	150150A	CPLG HALF,3 JAW,3/4"	27
3	280230	CROSS,1.00,FPT	21
14	102-105-1A	CSHH,,312-18X1.00,GR5	27
9	102-227-1A	CSHH,,375-16X6.50,GR5	9
25	102-406-1A	CSHH,,500-13X1.25,GR5	11
26	102-407-1A	CSHH,,500-13X1.50,GR5	11
27	102-419-1A	CSHH,,500-13X4.50,GR5	11
D			
8	150850	DUST CAP,WHEEL HUB	31
6	340040	DUST CAP,WHEEL HUB,5200#	33
E			
12	230101	ELBOW,PIPE X FLARE,90,.250	25
4	99512	ELBOW,PIPE,90,.500,MI	9
1	99526	ELBOW,PIPE,90,.500,STREET	13
3	99526	ELBOW,PIPE,90,.500,STREET	15
2	99514	ELBOW,PIPE,90,1.00,MI	21
50	TBD	ENGINE & PUMP GRPS	5
1	150200H	ENGINE,HONDA,5.5 HP	27
1A	150200HE	ENGINE,HONDA,5.5 HP,ELEC START	27
6	857055	EXTENSION, SPRAY WAND	9
F			
3	140030FN	FILLER NECK,HYD OIL/FUEL CAP	23
4	851931	FLAT BAR, SPRAY BAR ARM LOCK	11
30	TBD	FLUSH SYSTEM	5
1	150220	FOLDING JACK, TOWING TONGUE (L150T & L2	29
2	150220A	FOLDING JACK, TOWING TONGUE (L500T)	29

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		G	
4	853930	GASKET,FILLER BREATHER CAP	23
6	330040	GAUGE, TACK TEMP/HYD OIL TEMP	19
13	230110	GAUGE,PRESS,LPG	25
8	985101	GROUP,COUPLER,2.0" (L150T & L250T)	29
9	985102	GROUP,PINTLE,2 1/2"	29
8A	150210C	GUSSET, 3 POS CHANNEL IRON	29
9A	150210C	GUSSET, 3 POS CHANNEL IRON	29
		H	
7	857056	HANDLE, SPRAY WAND	9
5	982483	HANDLE,SPRAY WAND,ASSY	9
4	150710	HEATER,IMMERSION,120V,1500W	19
11	230290	HOSE ASSY,FLUSH TANK TO LIQUID VALVE	21
6	230290	HOSE ASSY,FLUSH TANK TO LIQUID VALVE	23
23	150023	HOSE ASSY,LH SPRAY BAR TO MANIFOLD	11
6	230260	HOSE ASSY,LPG IGNITER,67"	25
8	230280	HOSE ASSY,LPG MANIFOLD TO BURNER NOZZLE	25
7	230270	HOSE ASSY,LPG TANK TO REGULATOR,23/5"	25
7	150027	HOSE ASSY,RELIEF VALVE TO TANK VALVE	17
22	150025	HOSE ASSY,RH SPRAY BAR TO MANIFOLD	11
13	150028	HOSE ASSY,TACK PUMP FEED	21
12	150026	HOSE ASSY,TANK VLV RETURN TO LIQUID AS	21
6	150026	HOSE ASSY,TANK VLV. RET. TO LIQ. ASPHAL	17
7	150030	HOSE ASSY,UPPER VALVE TO HOSE REEL	15
7	150021	HOSE ASSY,VALVE TO HOSE REEL	13
6	150022	HOSE ASSY,VALVE TO SPRAY BAR	15
8	150022	HOSE ASSY,VALVE TO SPRAY BAR	13
2	280110	HOSE ONLY	7
1	317030	HUB & DRUM ASSY,6 ON 5.50	33
		I	
4	280040	INSERT, 3-JAW COUPLING	27
		L	
15	150060A	LEAF SPRING,5200# AXLE	33
10	150060	LEAF SPRING,L150T AXLE	31
5	851898	LOWER LIQUID ASPHALT VLV,ASSY	19



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		M	
14	340100	MAGNET KIT,ELECTRIC BRAKE	33
5	150230	MANIFOLD,LPG,L150/L250/L500	25
3C	982509	MIXER,BURNER WAND	25
5	851933	MOUNT, SPRAY BAR ARM LOCK	11
10	851929	MOUNT, SPRAY BAR ARM SWIVEL	11
		N	
1	280310	NOZZLE, TACK SPRAY	9
21	280310	NOZZLE, TACK SPRAY	11
10	116-3	NUT,HEX,.375-16	9
28	117-7	NUT,HEX,HEAVY,.625-11	11
29	143-7	NUT,LOCK,.625-11	11
7	620520	NUT,LUG,.500-20	33
9	620520	NUT,LUG,.500-20	31
12	610260	NUT,SPINDLE	31
17	610260	NUT,SPINDLE	33
		P	
13	240030	PIN,CLEVIS,1.00X3.25 W/1.5HD	11
14	80338	PIN,COTTER,.188X2.00	11
9C	510200	PINTLE EYE, 2 1/2"	29
17	99990	PIPE,BUSH,1.00MP X .500FP	11
4A	99990	PIPE,BUSH,1.00MP X .500FP	19
5	99990	PIPE,BUSH,1.00MP X .500FP	21
1	280270	PIPE,NIPPLE,.500X CLOSE	15
2	280270	PIPE,NIPPLE,.500X CLOSE	17
5	280270	PIPE,NIPPLE,.500X CLOSE	13
7	280075	PIPE,NIPPLE,.500X2.50	27
4	280090	PIPE,NIPPLE,.500X5.50,LG	13
18	280270	PIPE,NIPPLE,.500XCLOSE,SCH 80	11
6	280270	PIPE,NIPPLE,.500XCLOSE,SCH 80	21
9	150781	PIPE,NIPPLE,1.00X18.00	11
1	280200	PIPE,NIPPLE,1.00XCLOSE,SCH 80	21
10	99539	PIPE,PLUG,16MP,SQ HEAD,MI	21
16	99539	PIPE,PLUG,16MP,SQ HEAD,MI	11
1	280300	PIPE,PLUG,4.00MP,BAR HEAD	19
2	99569	PIPE,TEE,08FP,MI	15
5	99569	PIPE,TEE,08FP,MI	17
6	99569	PIPE,TEE,08FP,MI	13

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15	150810	PIPE,TEE,1.00	11
4B	33782	PLUG,ELEC,MALE,15A,125V	19
3	280301	PLUG,PIPE,2.0,SQ HEAD	19
9	230030	POL ADAPTER, LPG TANK	25
6	280020A	PUMP,TACK SPRAY (7 GPM)	27
		R	
3	280320	RED BUSHING,1/2MPT X 1/4FPT	9
20	280320	RED BUSHING,1/2MPT X 1/4FPT	11
1	150020	REEL,WITH HOSE,1/2" X 50'	7
4	982516	REGULATOR,SIDE MOUNT,MRLP2	25
8	851934	RND,1.000X1.00,CRS	11
6	851935	RND,1.250X2.75,CRS	11
4	920152A	RUBBER MAT,BATTERY TRAY	27
		S	
13	280020-1	SEAL KIT,TACK PUMP	27
7	150420	SEAL,WHEEL HUB,3500#	31
5	610190	SEAL,WHEEL HUB,5200#	33
7	851957	SELECTOR VALVE ASSY	7
11	851928	SPACER,SPRAYBAR ARM	11
6	851967	SPRAY SELECT VLV ASSY,SKID	7
5	851941	SPRAY SELECT VLV ASSY,TRLR	7
4	150010	SPRAYBAR ASSY,8FT	7
20	340130	SPRING KIT,BRAKE SHOE RETURN	33
12	490080	SPRING WASHER,.625 ID	11
1	851925	SQ TUBE, SPRAY BAR HORIZONTAL	11
2	851926	SQ TUBE, SPRAY BAR VERTICAL	11
5	150042	STRAP, BATTERY HOLD DOWN	27
5	851879	STRAP,FLUSH TANK	23
4	620510	STUD,WHEEL	33
6	620510	STUD,WHEEL	31
		T	
20	TBD	TACK TANK & COMPONENTS	5
1	988731	TANK,CITRUS,8 GAL,POLY	23
1	230010-30	TANK,LPG,30LB	25
10	5602-8-8-8	TEE ADAPTER,HYD HOSE	27
3	150090	TIRE & WHEEL ASSY,5 LUG (L150T)	29
4	150090A	TIRE & WHEEL ASSY,6 LUG (L250T)	29
5	150090A	TIRE & WHEEL ASSY,6 LUG (L500T)	29

ILLUSTRATED PARTS LIST



NOTES: