



SPARTAN

758 Water Jet

Owner's Manual

Record the VIN Number of your

Model 758

and give the number to the factory
when ordering parts.

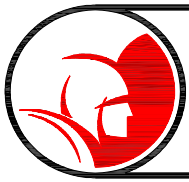
Serial Number



Spartan Tool L.L.C.

800.435.3866

www.spartantool.com



Warning



— Read the safety and operating instructions before using any Spartan Tool product. Drain and sewer cleaning can be dangerous if proper procedures are not followed and appropriate safety gear is not utilized. Read the engine owner's manual for instruction and safety precautions on engine operation.

— Gasoline is extremely flammable and is explosive under certain conditions.

- Refuel in a well ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.

— Before starting unit, be sure to wear personal protective equipment such as safety goggles or face shield and protective clothing such as gloves, coveralls or raincoat, rubber boots with metatarsal guards, and hearing protection.

— Carbon monoxide exhaust and/or gasoline fumes from this equipment can create a hazardous atmosphere in confined spaces (which may include, but are not limited to, manholes and septic tanks), closed garages or other areas which may not be properly ventilated. In particular, excess gasoline fumes can create an explosion hazard. Such hazardous atmospheres can cause death or severe injury. Do not operate this equipment in any confined space or area with inadequate ventilation. Operate this equipment only when located outdoors or in an open, well ventilated area.

— Insure the jet hose has been placed in the pipe (minimum of 6 feet suggested) before engaging the water pressure to prevent the hose from coming out of the pipe prematurely and causing injury.

— Always shut the water pressure off before pulling the hose out of the pipe. Mark the hose a minimum of 6 feet from the end to help insure the hose is not accidentally pulled out of the pipe while still under pressure. Shut off the water pressure when the hose mark is encountered. **WARNING:** Portions of the system can still be under pressure even if the unit is not operating.

— Never point the wash gun at anyone while operating the unit. Injury may result.

— Drains and sewer can carry bacteria and other infectious micro-organisms or materials which can cause death or severe illness. Avoid exposing eyes, nose, mouth, ears, hands and cuts and abrasions to waste water or other potentially infectious materials during drain and sewer cleaning operations. To further help protect against exposure to infectious materials, wash hands, arms and other areas of the body, as needed, with hot, soapy water and, if necessary, flush mucous membranes with water. Also, disinfect potentially contaminated equipment by washing such surfaces with a hot soapy wash using a strong detergent.

— For any questions contact the company at the address shown below.

“California Prop. 65: This product may contain an extremely small amount of lead in the coating. Lead is a material known to the State of California to cause cancer or reproductive toxicity.”

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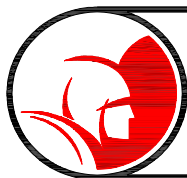
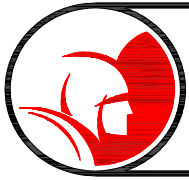


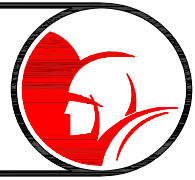
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Model 758 Water Jet Specifications



General

— Pipe Sizes	Up to 12" in Diameter
— Max Water Delivery	12 GPM
— Max Pressure Delivery	3000 PSI

Trailer

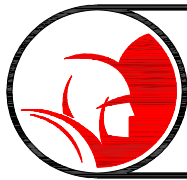
— Gross Trailer Weight (GTW)	2430 lbs.
— Trailer Weight (Empty)	1180 lbs.
— Max Tongue Weight	75 lbs.
— Trailer Length	120"
— Trailer Width	57"
— Trailer Height	48"
— Hitch	2" Ball Type (Class II)
— Tank Capacity	150 Gal.
— Wheels	13"
— Tires	ST175-80-R13, Blackwall

Engine

— Horsepower	27 HP
— Cylinders	2
— Bore & Stroke	3.07" x 3.07"
— Fuel / Tank Capacity	Gasoline / 8.25 Gal.
— Cooling / Capacity	Water Cooled / 2.9 qts.
— Oil Capacity (w/filter)	2.1 qts.
— Starter	Electric
— Alternator	20 Amp
— Battery	12 VDC

Pump

— Max Pressure	3000 PSI
— Max Water Output	12.6 GPM
— Max Temperature	140°F
— RPM	1420
— Plungers	3

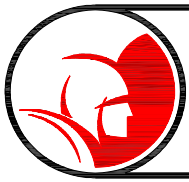


Model 758 Water Jet Features

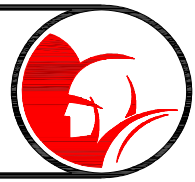


Features

- Equipped with 3/8" x 250' high pressure jetting hose
- Open and Closed nozzles for 3/8 inch hose
- Easily accessible pump inlet filter assembly
- Axles are torsion design with fully independent wheel suspension
- Pre-Wired lighting with standard 5-Pole plug
- Pivoting hitch jack with caster wheel provided on trailer tongue
- Low water shut off
- Pulsation
- Unloader pressure control
- 100' of 5/8 water supply hose
- Foot pedal valve for reel rewind control
- Powered hose rewind
- Rear mounted operator's controls
- Low engine oil protection
- High engine temperature protection
- Locking tool box
- Quick connect washdown gun & spray lance
- Manhole hose protection
- Air purge system for cold weather protection
- 1/4" x 50' Drain Hose



Jet Applications Areas



There are a wide variety of uses for the Spartan Model 758 Water Jet. Here are just a few:

— ***Apartments/Hotels***

Mains and garage drains, remove all grease and debris from main lines under the buildings.

— ***Factories***

Food processing plants and foundries have frequent drain and sewer blockages. Set up preventive maintenance contracts to avoid risk of total plant shutdown.

— ***Farms, Rural***

Clean and spray barns, pens and heavy farm equipment, revitalize drain field in septic systems and field tile. Clear blockages in liquid manure system.

— ***Housing Authorities***

Any drains, laundry lines, garbage chutes, clean-outs and many grease-removing applications.

— ***Institutions***

Clean-running drains and sewer lines are a “must” in hospitals, schools, prisons. Use in kitchens, remove lime deposits on buildings and clean parking lot drains.

— ***Municipals***

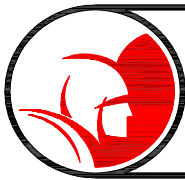
Open culverts for proper flood control, wash down manholes, clean lines in wastewater treatment plants.

— ***Residential***

Clean drain lines, septic lines, field tiles, culverts, swimming pools, surface cleaning and sandblasting.

— ***Restaurants***

Grease in drains is always a problem - Your Spartan Water Jet actually removes grease from the lines instead of simply punching a hole through the blockage, risking reaccumulation downstream.



Uncrating and Prep



If you received your machine crated, position crate so that your truck can be backed up to “front” side. Now remove end of crate marked “front”. Remove hitch assembly from under machine. Connect and tape wire plugs and attach hitch to frame with bowmalloy bolts provided. These bolts **must be torqued to 74 ft.-lbs. (see Fig. 1).** *It is the uncraters responsibility to torque the hitch.* Support the hitch and remove vertical supports under frame. Hook up jet to truck and pull from crate. Remove packing materials from jet. Door and engine keys are packed in a bag in the toolbox. Remove the contents.

If you receive your machine uncrated.

Upon receiving your machine double check the torque of all 7 hitch bolts. (See Fig. 1.)

Battery

Prior to shipping, the battery cables are disconnected from the terminals of the battery. The battery cables will need to be reconnected to the battery before operating.

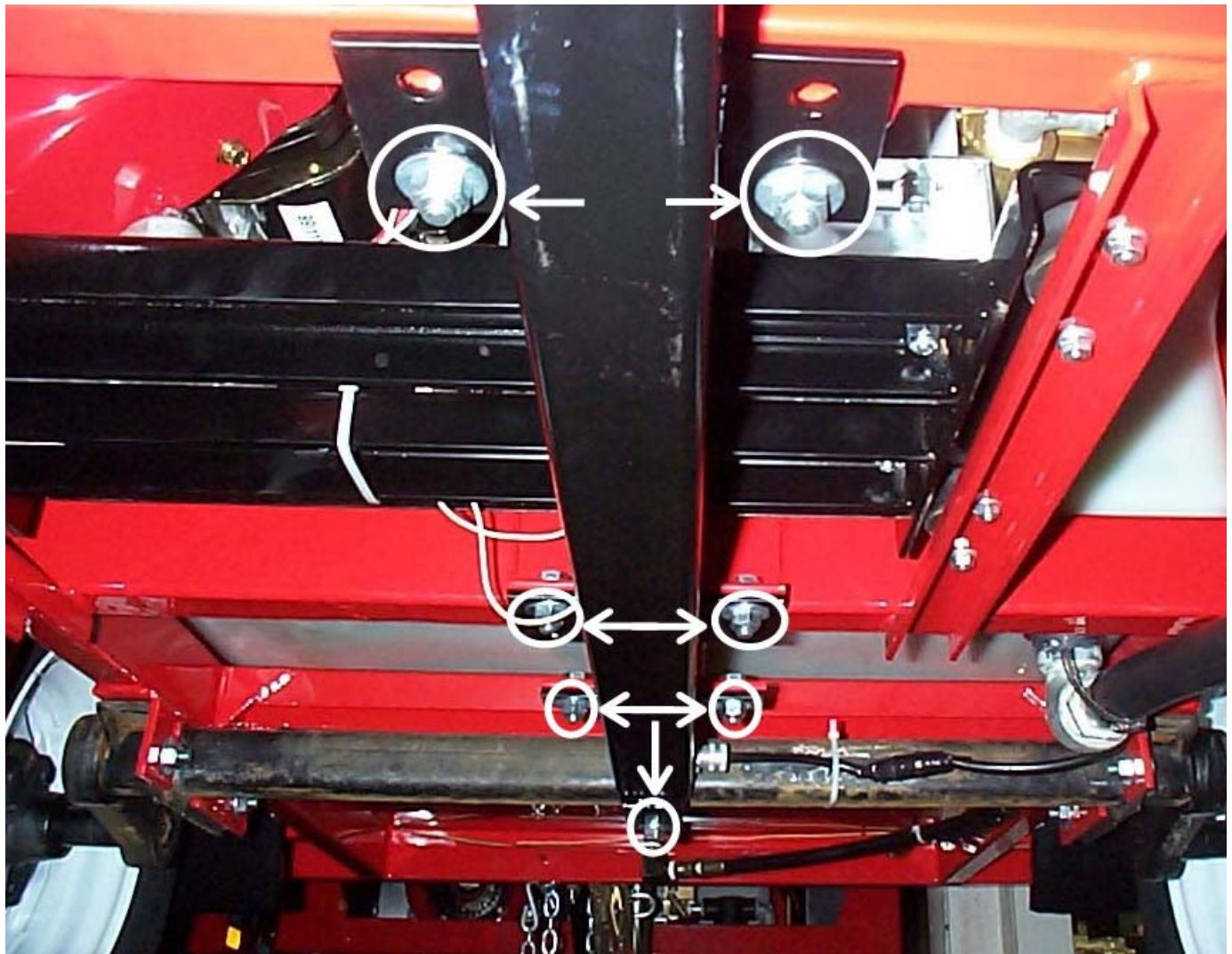
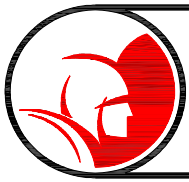
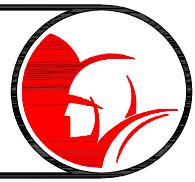


Fig. 1



Towing Instructions



Before hitching and towing on public roads, check that the tow vehicle uses a 2" ball on a hitch rated class II minimum, make sure keeper engages ball to secure hitch. Adjust if necessary.

Because of the inherent water tank sloshing when towing, pull your jet empty at all times.

The following 2 rules may limit your vehicles towing capacity and the tank fill level when towed. Determine towing capacity as described below and follow guidelines in using the *lowest* value from the 2 rules.

Trailer Hitch

- Check rating of vehicles trailer hitch -

WARNING: Class 1 hitches often uses 1 7/8 ball which is unsafe to couple with a 2" hitch.

Class 2 - 3,500 lbs. Towing capacity is required.

Vehicle GCWR (Gross Combined Weight Rating)

- Towing capacity = GCWR minus vehicle weight minus cargo weight minus passenger weight.

NOTE: GCWR is provided on your vehicle or in vehicle manual.

Vehicle Towing Capacity

- Refer to your vehicle owners manual for listed trailer towing capacity.
- Trailer towing capacity should equal GCWR (gross combined weight rating) minus vehicle weight, cargo weight, people weight and (vehicle) fluids weight.
- Check axle load ratings.

Wire the plug receptacle to your vehicle as shown below. Note: The wire colors used on the jet running lights are also indicated in Fig. 2 for re-wiring to a different plug design.



- **Always** use safety chains.
- **Always** use trailer lights.

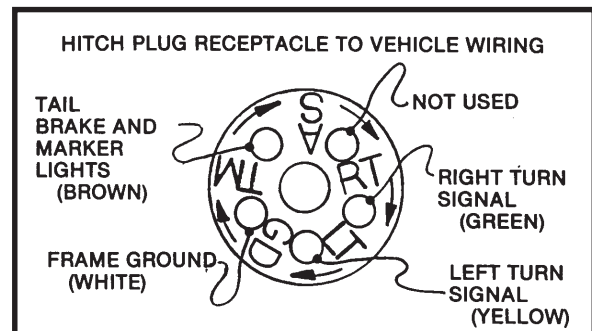
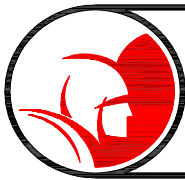


Fig. 2

The hitch jack should always be tilted up when towing to avoid damage to the caster wheel. Pin jack clamp securely.



Pump and Pressure System



The pump and relief valve are the heart of your jet. They have been specially designed for use with water temperatures up to 140°F for pipe jetting, but can provide useful water flow for many other cleaning jobs using the optional wash down gun and special attachments. The positive displacement pump (each crankshaft revolution has to move a certain amount of water) uses 3 plungers (similar to pistons in an engine) to create water flow. Pressure is not created until the pump outlet is restricted with a valve or nozzle. The pump, valving and hoses can support pressures to 3000 psi.



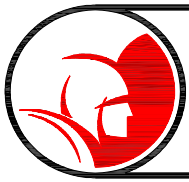
The regulator valve acts to direct the water flow to the water tank when the hose reel and gun valves are off or if nozzles provide too much restriction for total flow. Always use clean water to keep the regulator valve operating properly. The hose and nozzle are designed to allow **full** flow at 3000 psi (at 3200 engine rpm) and the wash down gun operates at 1600 PSI max pressure. If leaks develop in the system between the relief valve and hose reel valve (or gun valve) you will hear intermittent engine surges in bypass as the bypass pressure gradually drops and is built up again by the pump. Tighten or otherwise repair the leaks for smooth running. Always stop engine and release pressure before any plumbing changes or repairs.



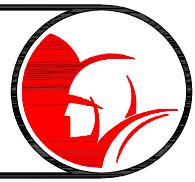
Because of the inherent hazards with high pressure, use only Spartan high pressure hoses and components when repairing your machine.

If the nozzles become worn or if the gun is used with the jet hose, the regulator valve allows the same total flow but at lower pressure because the restriction is lower. To maintain desired PSI - replace nozzles.

If nozzles become plugged, the regulator valve will direct some of the flow back to the water tank while providing pressures over 3000 psi. If these pressures are seen with normal engine speed (3200 rpm), check and clean the nozzles. When using optional lengths of 1/4" hose the operating pressure can also be over 3000 psi at full gpm. Reducing engines rpm will produce lower pressures to prevent regulator valve from bypassing off and on. Continued operation at pressures over 3000 psi can cause engine overheat and reduce engine life.



High Pressure Water Jetting



High pressure water jetting is the utilization of high pressure water combined with sufficient water flow to remove debris in drain/sewer pipes. High pressure water alone cannot do the job. You need proper flow to wash the debris downstream where it can be collected and removed. High pressure water jetting can also be used to remove debris on surfaces.

A high pressure water jet consists of a pump, a motor or engine, a hose reel, a given length of hose and a various assortment of nozzles.

A pipe is cleaned with a high pressure water jet by directing water pressure and flow through a nozzle. Controlled water pressure and flow propels a water jet through the sewer pipe allowing it to remove and wash away the obstruction. (See Fig. 3.)

Ideally, a sewer pipe is cleaned from the lower end of the pipe and the hose propels itself to the higher end of the pipe. By slowly withdrawing the jet hose, the water pressure and flow cleans the line most effectively. When it is impossible to clean from the lower end of the pipe, the pipe must be water jetted several times to remove all the debris. A skilled operator can effectively clean a drain/sewer regardless of the obstacles in his way.

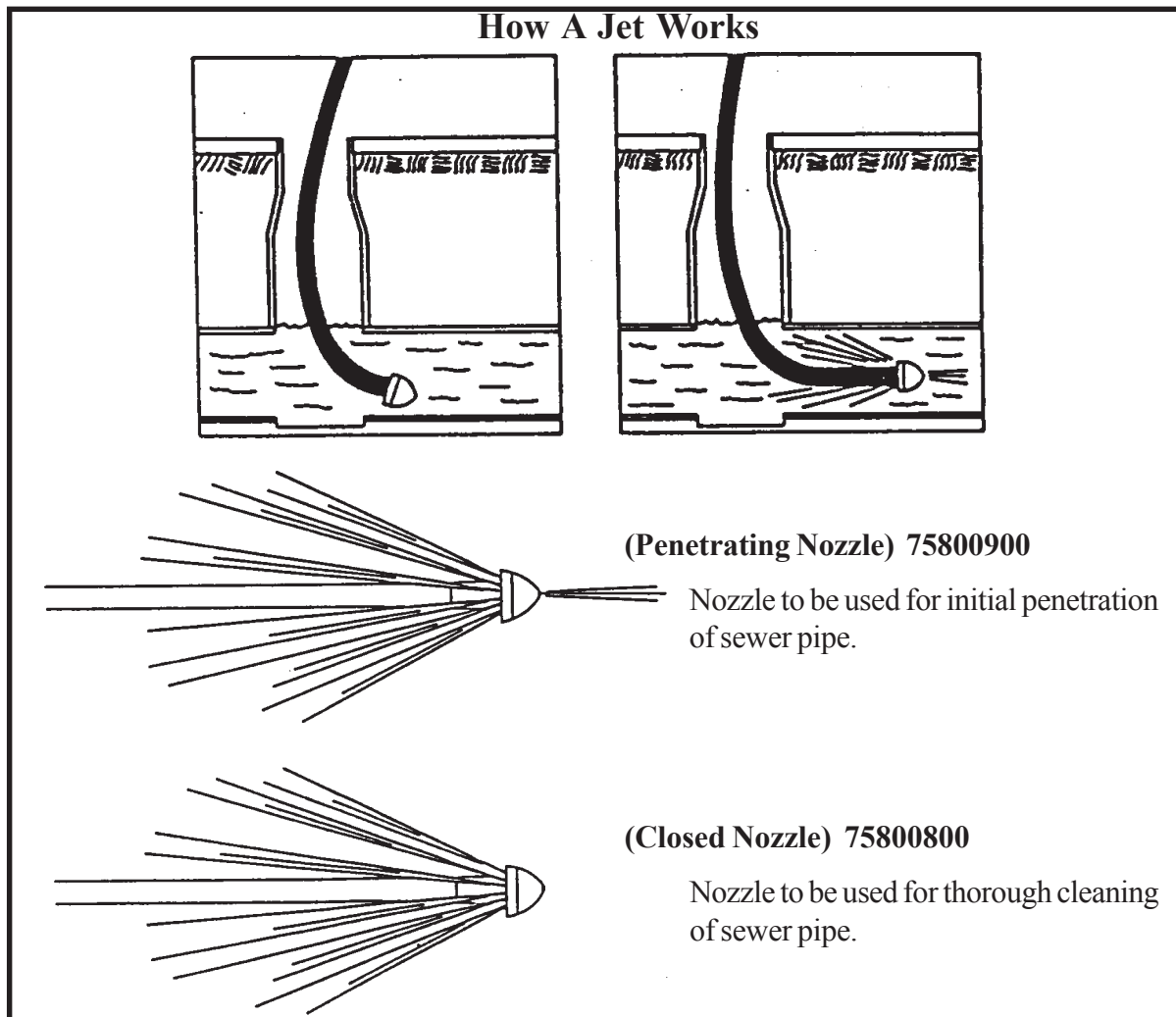
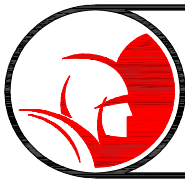


Fig. 3



Water Tank Filling



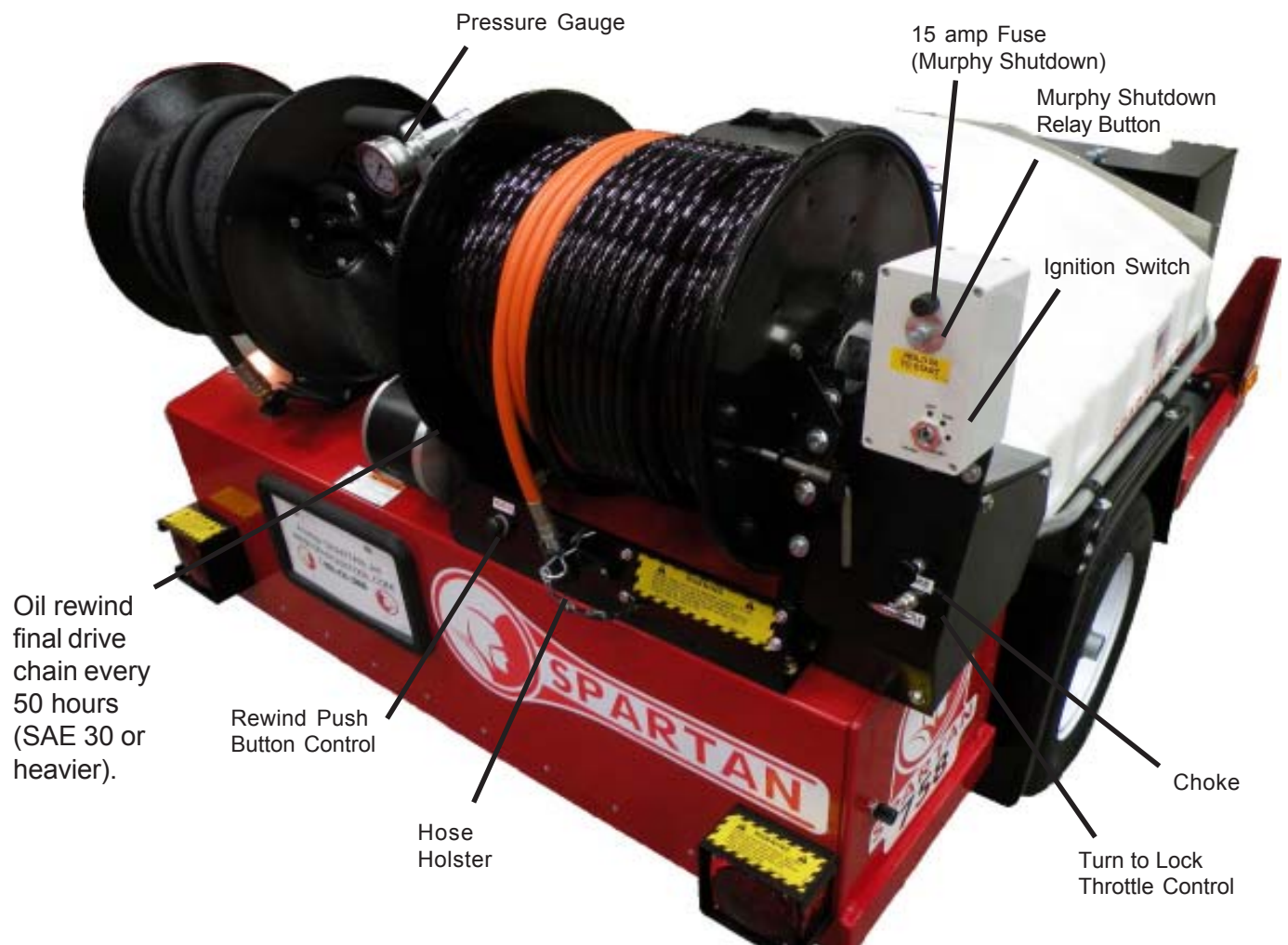
Fill the water tank from a clean water source. Always flush rust out of hydrants before connecting fill hose (with garden hose fitting) to top fill valve. Your water supply hose may remain connected for further filling by controlling water flow at fill valve.

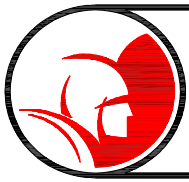
Important Note: (If the next 4 items are not followed, cavitation of the pump could occur and reduce operating efficiency and severely damage the pump.)

- Use water temperatures under 140°F.
- Ensure that water strainer is clean (check daily or as needed).
- Make sure the strainer valve (between the tank and the pump) is fully open during operations. This valve stops tank flow to allow strainer service.
- The pump drain valve must be closed. It must not drip when engine is off and strainer valve is open.

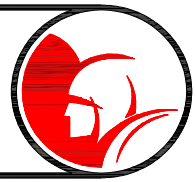


Operator Controls





Operator Controls (cont.)



Pulsation Control
(See Pulsation
section of
manual)

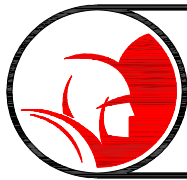


Air Blow
Out



Water Supply
Valve

Inlet
Filter



Operator Controls (cont.)



Drain Valve



Engine Operating Procedure

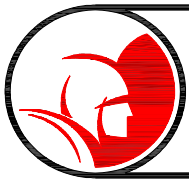


Start Up

- Check water tank level. This water jet is equipped with a **Low Water Shut-Off** switch that will prevent the engine from starting at low water levels.
- Check fuel level.
Note: Also Check engine and pump oil levels per manufacturer specifications (attached).
- Turn high pressure reel supply valve “off”.
- Hold in red relay button and key start the engine. Choke as necessary.
- Allow the engine to warm up at idle for 3 to 5 minutes before putting engine under load.

Engine Shut-Down

- Turn high pressure reel supply valve “off”.
- Allow engine to idle for 1 to 2 minutes
- Turn the engine key switch **OFF**. (The engine key switch must be OFF when the engine is not running to avoid battery draining.)



Setting up for Operation



Always locate the jet in the driest and safest place possible. Avoid high traffic areas and use flashers and safety cones. Position the jet so that hose can be pulled directly off of the reel for use. Remember that jetting is most effective when you jet against the water flow. See Fig. 4 for the recommended positioning of the jet for best visibility during manhole work. Note that loose hose and damaging corners are minimized when the jet is parked as shown. (See pages 15 and 16 for instructions on using upper and lower manhole guides.)

When operating upon unlevel ground, position trailer with the hitch (tanksump) end at the downhill side.



Warning: Trailer must be level for low water shutdown to operate correctly. When trailer is on an incline with hitch end at the down hill side and tank is empty, enough water can be held in the lower front corner of tank to keep float switch in the operating position.

For non-manhole use, allow extra space for handling the hose before it is wound back on the reel or run the hose directly to the pipe inlet using extra hose guards to protect the hose from cutting when going around corners.



Warning: Do not unhitch or operate trailer jet unhitched upon unlevel ground.

When unhitching the machine from towing vehicle, always follow these steps:

- Place wheel chocks around trailer jet wheels.
- Lower hitch jack, pin clamp securely.
- Disconnect ball hitch by raising lever and jacking hitch up. Disconnect safety chains and light cord before driving away.

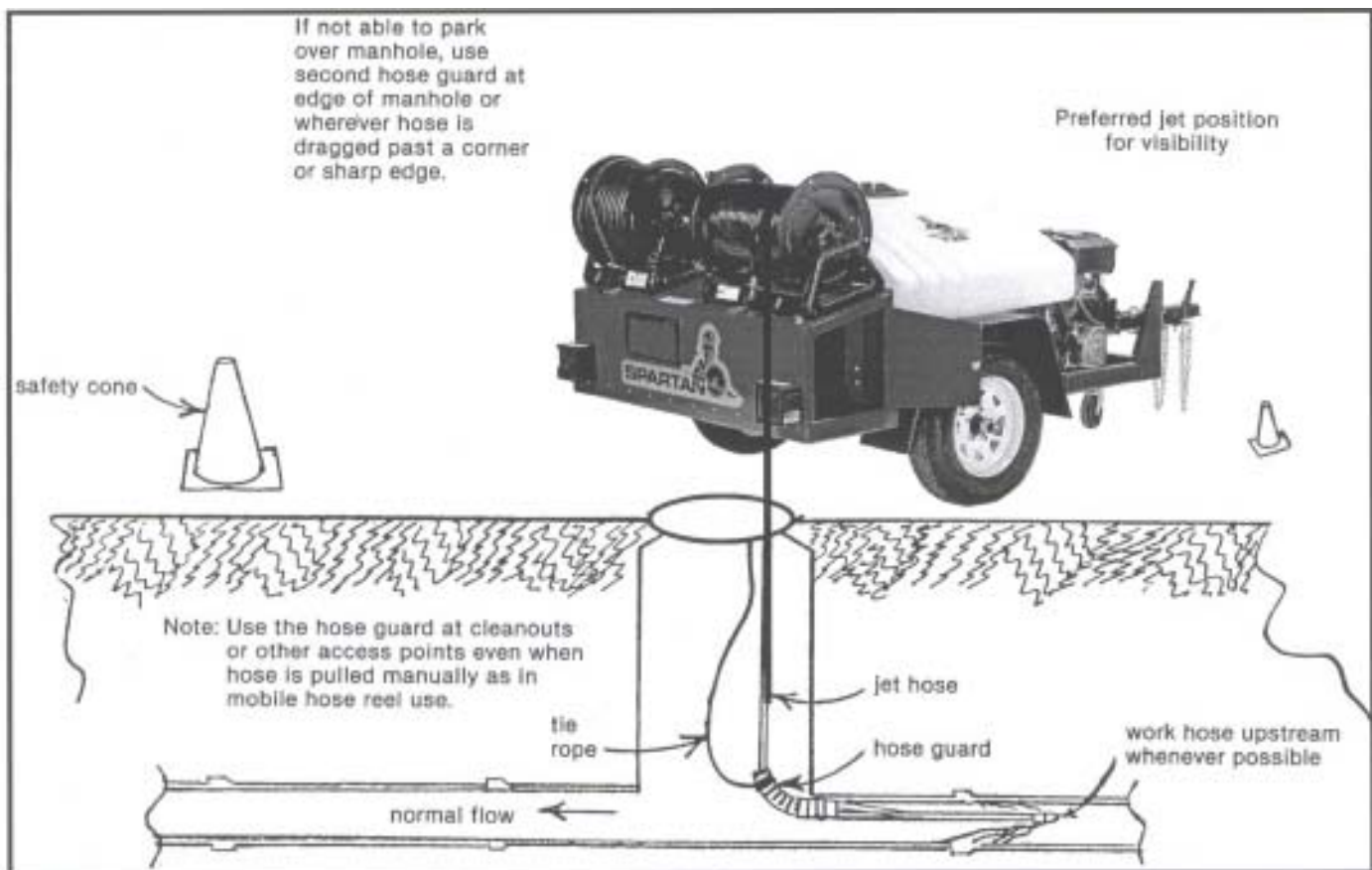


Fig. 4
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Power Rewind Operating Instructions

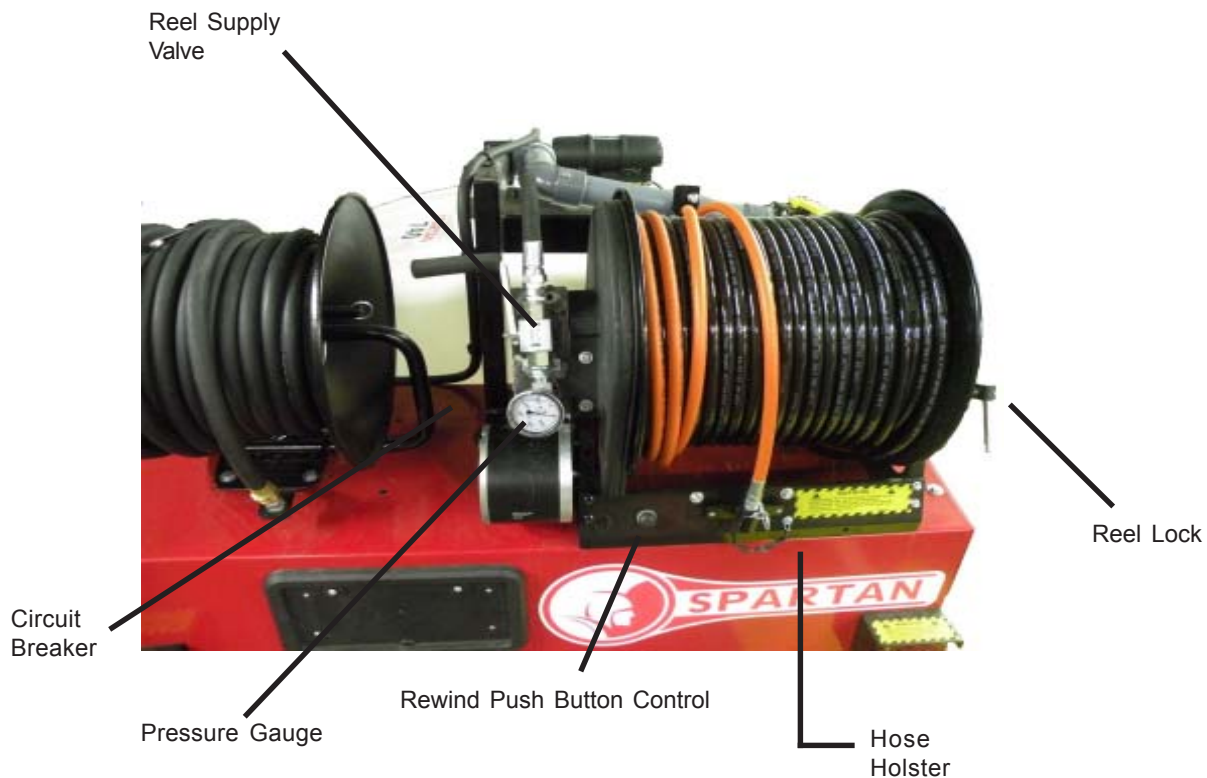


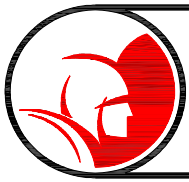
To Rewind Hose on Reel

- Release reel lock.
- Use panel mounted push button switch to energize rewind motor.



NOTE: Avoid pushbutton switch when rewind is not in use to avoid accidentally activating rewind.

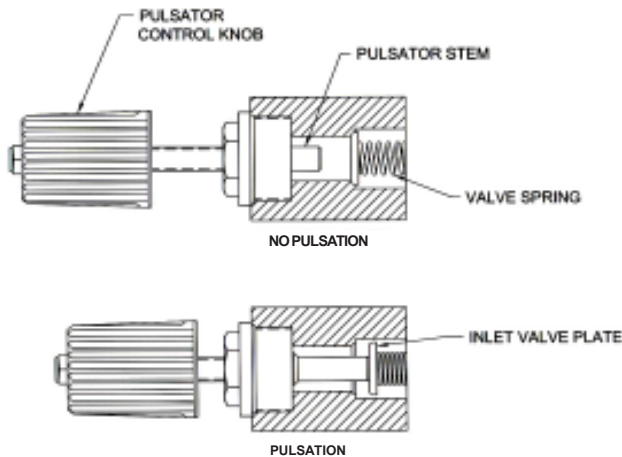




Pulsation



Pulsation is activated when control knob is turned “in” (see activating pulsator procedure below). As control knob is turned in, the pulsator stem will force the inlet valve plate open, compressing the valve spring. With inlet valve held open, center plunger cannot develop pressurized flow. Pulsating action results since only two of the three plungers are developing pressurized flow.



Pulsation
Control

To activate pulsator, follow these steps below:

1. Start engine. (Refer to engine operating procedure on page 13)
2. Insert jetting hose several feet into pipe opening. (Refer to setup section on page 14)
3. Advance engine to full throttle and place the reel supply valve in the “on” position (up). (Refer to operating instructions on page 22)
4. Start turning pulsator control knob “in” (clockwise). You may start to hear a clicking sound made by the inlet valve plate moving back and forth against pulsator valve stem. Continue turning control knob “in” until clicking sound disappears and pulsation is evident in jetting hose. (Refer to drawing above)

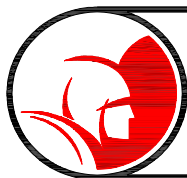


WARNING: Turning pulsator control knob too far into pump will cause damage to inlet valve plate, spring, and spring retainer. Increased resistance should be felt when valve spring is reaching full compression. This is an indicator that you are turning pulsator control knob too far into pump.

5. Pulsation is now fully activated.

To deactivate pulsation, turn pulsation control knob completely out (counter clockwise).

NOTE: Operating pressure will decrease and fluctuate when pulsation is activated. At full throttle, pressure is approximately 1400-1700 psi.



Lubrication & Maintenance



Engine



See Periodic Maintenance Chart below.
For fuel, oil, and coolant recommendations see page 21.
See Engine Owner's manual for additional information.

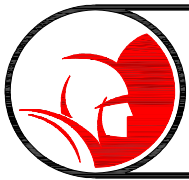
Periodic Maintenance - Engine

MAINTENANCE	INTERVAL							
	Daily	First 8 hr.	Every 25 hr.	Every 50 hr.	Every 100 hr.	Every 200 hr.	Every 300 hr.	Every 400 hr.
Check and add engine oil	•							
Check for loose or lost nuts and screws	•							
Check for fuel and oil leakage	•							
Check battery electrolyte level	•							
Check and clean radiator screen	•							
Tighten nuts and screws			•					
★ Clean air cleaner foam element			•					
★ Clean air cleaner paper element					•			
Change engine oil		•			•			
Clean and regap spark plug					•			
Change oil filter						•		
★ Replace air cleaner paper element							•	
K Clean combustion chamber							•	
K Check and adjust valve clearance							•	
K Clean and lap valve seating surface							•	
K Inspect radiator and hoses						•		
K Check fan belt conditions and tension						•		
K Change coolant								•

Note: The service intervals indicated are to be used as a guide. Service should be performed more frequently as necessary by operating condition.

★ Service more frequently under dusty conditions.

K: Have an authorized Kawasaki engine dealer perform these services.



Lubrication & Maintenance (cont.)



General Maintenance

- Check entire unit daily for water, fuel, and oil leaks.
- Inspect machine daily for loose or lost nuts, bolts, etc.



- a. Clean inlet filter daily.
- b. Check battery electrolyte level every week or 10 hours. Fill with distilled water if needed.



Lubrication & Maintenance (cont.)



Pump



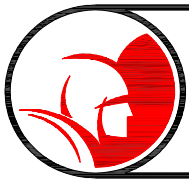
Fill

Change pump oil after first 50 hours of operation, then at regular intervals of 500 hours or less depending on operating conditions. Use SAE 90 Gear Oil.

High Pressure Reel Assembly



Oil rewind drive
chain every 50
hours (SAE 30
or heavier).



Fuel, Oil & Coolant Recommendations



Fuel

Use only clean, fresh, unleaded regular grade gasoline.



CAUTION: Do not mix oil with gasoline.

Octane Rating The octane rating of a gasoline is a measure of its resistance to “knocking”. Use a minimum of 87 octane of the antiknock is recommended. The antiknock index is posted on service station pumps in the U.S.A.

Note: If “knocking or pinging” occurs, use a different brand of gasoline or higher octane rating.

Oxygenated Fuel Oxygenates (either ethanol or MTBE) are added to the gasoline. If you use the oxygenated fuel be sure it is unleaded and meets the minimum octane rating requirement.

The following are the EPA approved percentages of fuel oxygenates.

ETHANOL: (Ethyl or Grain Alcohol) You may use gasoline containing up to 10% ethanol by volume.

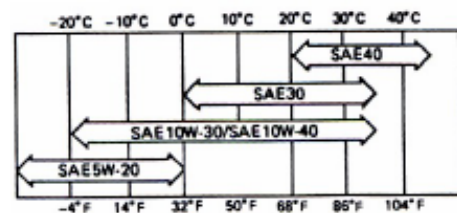
MTBE: (Methyl Tertiary Butyl Ether) You may use gasoline containing up to 15% MTBE by volume.

METHANOL: (Methyl or Wood Alcohol) You may use gasoline containing up to 5% methanol by volume, as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

Engine Oil

The following engine oils are recommended.

API Service Classifications: SF, SG, SH or SJ.



Oil Viscosity Choose the viscosity according to the temperature in the above chart.

Note: Using multi grade oils (5W-20, 10W30, and 10W40) will increase oil consumption. Check oil level more frequently when using them.

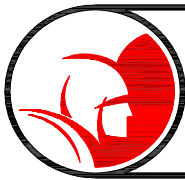
Engine Coolant

DEXCOOL® Extended Life Antifreeze/Coolant.



Note: Do not mix with other coolants.

Mixed Ratio: 50% mix.



Operating Instructions



Operation:

Release the reel lock and disengage rewind engagement handle so reel can free spin. Select and install nozzle, hose guards(s) and roller guides.

Always insert sewer hose several feet into pipe opening before actuating hose reel valve. Never stand in front of pipe opening when nozzle is near pipe opening. As described in “Setup Section,” work upstream whenever possible.



You are ready to start pipe cleaning operations after tank filling and engine starting procedures are followed. Advance engine throttle to full speed.



Note: At this time, put on safety goggles to prevent eye injury from flying water and debris.

Now move hose reel valve ON (up) and let out hose as nozzle pulls into pipe. Untwist hose kinks as necessary before they enter the pipe. Since it is impossible to know exactly what the nozzle “sees” as it advances in a pipe, always proceed slowly and cautiously. Pull back 1-2 feet for every 4-5 feet of progress to make sure that the hose is not burying itself or tying itself up in an open cavity or larger pipe. Continue working up the line while watching and feeling for speed changes as the nozzle makes its way into a blockage. When working over a manhole, you often will see dirty water, chunks of grease or debris flow past as the nozzle penetrates a blockage. When backed up water flows, the line is probably open. Continue working up the line to open restrictions as desired. Now pull the “working” nozzle back slowly to re-clean and scour the pipe walls. When working through heavy and long blockages you may have to flush debris back to machine every 5-10 ft. Repeat until water runs clean from the pipe.

Do not let engine run at full throttle without load (hose reel valve OFF) for longer than 1-2 minutes.

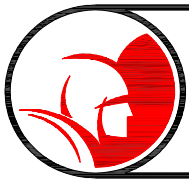
The Model 758 will pull out past 250’ but you will find the going slower because of the pressure loss from extra hose length. Unless longer operation is common, we recommend the hose extensions be added only when needed. If moving the jet before the job is done, the hose can be disconnected from the jet to avoid pulling hose completely out of pipe and restarting.

When finished, turn water valve off (down) before removing nozzle from pipe.



Hint: Wind white tape around hose (a minimum of 6 ft. from end recommended) to warn of nozzle being too close to pipe opening.

Wind hose back onto reel, remove hose guard and install hose end and nozzle in holder. Put pin in place. Lock reel. Store all parts in tool box compartment. Follow engine shut down procedure. **Reminder:** Engine key switch must be off to prevent battery drain when not using. Reverse setup instructions, drain tank and disconnect fill hose. Replace manhole cover or pipe caps and clean up machine before leaving job site.



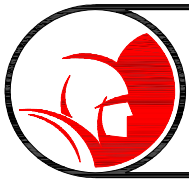
Operating Instructions (cont.)



Operating Hints:

The following techniques can be tried if the going gets slow.

- Grab the hose into an “S” shape and twist the hose to help it get around corners and off of pipe edges. (See Fig. 7 page 24.)
- Turn water valve off and pull hose back out of line. Look for traces of clay or other material to determine if nozzle is burying itself outside of pipe.
- Try different nozzle or different pipe openings.
- Walk to nearby buildings and manholes and listen for water sound to determine if hose is going where it should. The hose may tie itself up in a manhole and need help going into the next pipe. Use a pole or pipe to guide hose so entering the manhole can be avoided.



Pipe Jetting Procedure



Equipment:

Although the Model 758 is capable of various high pressure cleaning operations, jetting pipes of 4” - 12” is typically the major work required of the jet. The hose reel is designed for outdoor applications. See sections on the mobile hose reel and 1/4” drain hose for indoor or remote applications and for lines smaller than 6”.



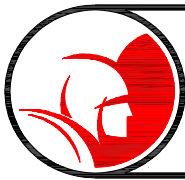
For **safety** reasons, always operate with 2 people when the pipe entrance is away from the jet location; one person should stay near the jet to control the machine operation while the other person works the hose and nozzle. The mobile hose reel should be used for remote control whenever the second person cannot be seen or heard by the machine operator.



The sewer hose should always be replaced when cord reinforcement can be seen because of a worn cover.

The Model 758 **nozzles** are designed to match the pressure and flow performance of your jet. They are key to efficient operation because they convert all of the engine and pump power to water speed for hose pull and for cleaning impact.

Nozzles “758 **Closed**” (75800800) and “758 **Open**” (75800900) are standard equipment. See parts section for part numbers to order additional nozzles or root cutters. Nozzle holes will wear after several months of continuous use. If the system operating pressure gradually drops, try a new nozzle to check for wear. Check for nozzle plugging occasionally by removing the nozzle from the hose and holding up to the light. Clean by inserting small diameter wire if necessary. Plugged nozzles will cause poor hose pull even though the gauge pressure will show higher.



When Obstruction Are Encountered



Fig. 7



Fig. 8

- When obstruction or corners are encountered it may be necessary to manually rotate the hose (See Fig. 7) to enable feed through that area. The rotation will cause the jetting nozzle to jump over or around those areas. When it becomes necessary to manually rotate the hose to clear obstructions, any rotations in one direction must be followed by an equal number in the opposite direction to prevent kinks from building in the hose.
- At times, it will be necessary to move the hose slightly in and out of the drain line to assist the jetting nozzle in clearing stubborn clogs, obstructions, or tight corners (See Fig. 8).



1/4" Drain Hose



The 1/4" hose and nozzle may be used to clean smaller diameter lines. Attach the 1/4" hose to the forward end of the wash down gun as described above.

Use the 1/4" drain hose on lines 2" - 4" similar to the reel hose. Again, use care not to discharge water unless the hose is in the pipe. On inside lines, use short bursts of the gun to limit water backup.



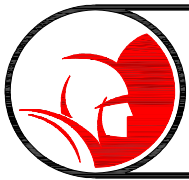
If 50', 75' or 100' 1/4" hoses are used with the reel hose, the pressure gauge may read more than 2800 psi. Adjust engine speed to reduce to desired pressure to avoid engine overheat.

Standard Equipment

Part #	Description
77719400	1/4" X 50' Hose

Optional Equipment

Part #	Description
77719500	1/4" X 75' Hose
77708700	1/4" X 100' Hose



Wash Down Kit - 73817300



Note: To use wash-down gun do the following:

- 1 Turn reel supply valve “off” (down).
- 2 Connect wash-down gun hose to end of 250 ft hose.
- 3 Start unit and operate wash-down gun with reel supply valve “on” (up).

The wash down gun is used to control the spray lance and the 1/4” drain hose. The lance is attached by pulling back on the ring of the guns quick connect fitting. Insert adapter nipple of lance (or 1/4” hose) until ring can slide back to original position. The lance is equipped with a spray nozzle for general use.



Caution: *Under no circumstances should you ever operate the wash down gun in the direction of any other person(s). To do so may cause serious damage to eyes or other bodily tissue and may even cause death!*

Contents of Kit: 1/4” x 50’ hose, lance assembly, 1/4” nozzle, hand gun.



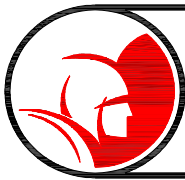
Mobile Hose Reel - 73816800 (Optional)



The mobile hose reel is used for remote use and control of the sewer hose. 400’ total length of hose is the practical maximum with the 250’ or 150’ length on the machine reel and the balance on the mobile reel. To use, attach the machine reel hose to the valve of the mobile reel. Attach nozzle to mobile reel hose and make sure the mobile reel valve is off (handle perpendicular to valve body). Start jet as usual and open machine hose reel valve.

Now move the mobile reel to the pipe opening and use as before, using the mobile valve to control water flow (put hose in pipe before opening valve). To rewind hose, stand on front plate and use crank provided.





Venturi Pump Attachment- 77763700 (Optional)

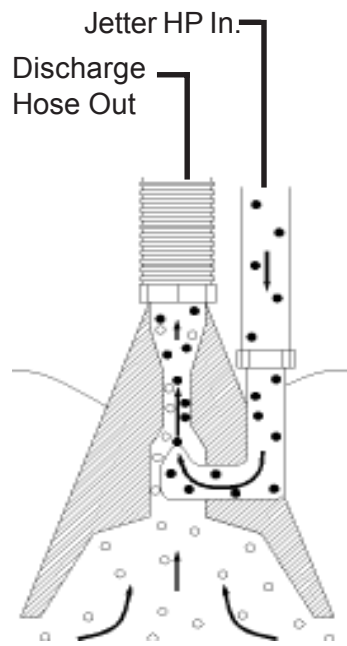


Fig. 9

How the Venturi Effect works.

The venturi effect uses the venturi pumping attachment and your Spartan Jetter to create a vacuum effect to drain standing water. In Fig. 9, the black circles represent water from the jetter and the white circles represent the water to be pumped. The venturi has two parts: the Venturi Throat, which is a restricted section of the suction tube; and above that is the venturi itself which is the part where the tube widens and connects to the discharge hose. The water from your Spartan Jetter is accelerated through a venturi restriction which causes it to increase speed causing a pressure drop and creates the vacuum that sucks in more water at the base of the attachment.

Venturi Pumping Attachment Operating Instructions

1. Attach high pressure hose directly to the suction head of the venturi attachment.
2. Lower suction head into water or liquid to be pumped. The discharge hose is 15 ft. long and this determines the maximum depth or distance liquids can be pumped.
3. At a depth of 15 ft., the venturi attachment will pump 35-40gpm. If additional lengths of discharge hose are added, the pumped volume will decrease accordingly.
4. Be sure to keep the pumping head submerged at all times to ensure steady, continuous operation.
5. Start engine and bring jet to full pressure. Use the ball valve on high pressure hose reel to control venturi operation.



Cold Weather Protection



Winterize machine when stored below 32 degrees F by following these steps:

Your machine can also be protected from freezing by using non alcohol based anti-freeze as follows:

Method 1

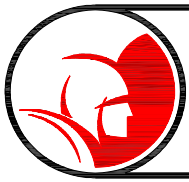
- Use pressurized air to blow out any remaining water left inside pump and hose by using the air blow-out feature (see page 12).

Method 2

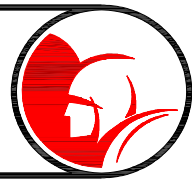
- Drain tank completely.
- Add 50/50 mix anti-freeze to tank as follows:

0° - 4 gal.
-30° - 6 gal.
- Remove nozzle and feed reel jetting hose into tank, open reel valve.
- Start engine and circulate water through system for 1 minute.
- Close reel valve and discharge water through gun and 1/4" hose if necessary.
- Check freeze protection of mix with tester and add more anti-freeze if necessary.
- Replace nozzle and hose.

Note: Some anti-freeze mixture can be caught and reused, but will have to be strengthened as necessary for adequate protection.



758 Pump System Malfunction Chart



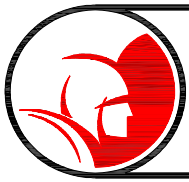
<u>MALFUNCTION</u>	<u>CAUSE</u>	<u>REMEDY</u>
The Pressure and/ or the Delivery Drops	Worn packing seals Broken valve spring Belt slippage Worn or Damaged nozzle Fouled discharge valve Fouled inlet strainer Worn or Damaged hose Worn or Plugged relief valve on pump Cavitation Unloader	Replace packing seals Replace spring Tighten or Replace belt Replace nozzle Clean valve assembly Clean strainer Repair/Replace hose Clean, Reset, and Replace worn parts Check suction lines on inlet of pump for restrictions Check for proper operation
Water in crankcase	High humidity Worn seals	Reduce oil change interval Replace seals
Noisy Operation	Worn bearings Cavitation	Replace bearings, Refill crankcase oil with recommended lubricant Check inlet lines for restrictions and/or proper sizing
Rough/Pulsating Operation with Pressure Drop	Worn packing Inlet restriction Accumulator pressure Unloader Cavitation	Replace packing Check system for stoppage, air leaks, correctly sized inlet plumbing to pump Recharge/Replace accumulator Check for proper operation Check inlet lines for restrictions and/or proper size
Pressure Drop at Gun	Restricted discharge plumbing	Re-size discharge plumbing to flow rate of pump
Excessive Leakage	Worn plungers Worn packing/seals Excessive vacuum Cracked plungers Inlet pressure too high	Replace plungers Adjust or Replace packing seals Reduce suction vacuum Replace plungers Reduce inlet pressure
High Crankcase Temperature	Wrong Grade of oil Improper amount of oil in crankcase	Use SAE 90 Gear Oil Adjust oil level to proper amount



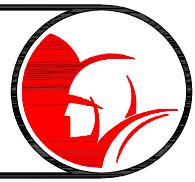
Troubleshooting



Symptom	Possible Causes	Corrective Action
Engine will not run	No Fuel Low Water Level Low Oil Pressure High Coolant Temperature	Fill fuel tank Fill water tank or Check Low Water Float Switch Check oil level Check Oil Pressure Switch Check coolant level Check Thermostat, replace if necessary
Refer To Kawasaki Owner's Manual for additional troubleshooting		
Low Pressure or Flow	Clogged inlet filter Jetting nozzle worn	Clean inlet filter element Check for wear in orifice of jetting nozzle, replace if necessary Use only approved jetting nozzles
Erratic Flow or Pressure	Worn or dirty pump valves Worn or dirty regulator parts Worn jetting nozzle	Replace or clean Replace or clean Replace jetting nozzle
Pump Noisy	Low pump oil level Worn or dirty valves Bad bearings	Add oil Replace or clean Inspect bearings, replace as required
Water Leaking from pump head	Pump seals worn	Replace pump seals



How To Use Parts & Accessories Section



Spartan Tool will supply all parts or accessories you require as quickly as possible. In order to do so, we must have information from you, including machine serial number and part numbers.

Please record the VIN number of your machine in the space provided below:

Spartan Model 758

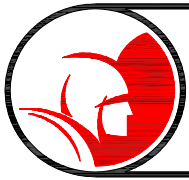
VIN No. _____

To order parts, look through the pictures until you find the part you require or an indication of where the part should be. Using the item number from the picture, go to that number on the adjacent page and check the description to determine if it is the part you desire.

Using the part numbers, please contact your Spartan Territory Manager or the factory in Mendota, Illinois or online at www.spartantool.com.

Thank You.

Customer Service, Spartan Tool
1506 W. Division Street
Mendota, IL 61342
Phone (800)435-3866
Fax (888)876-2371

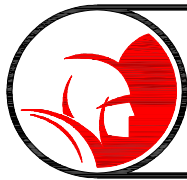


Special Note



Though much of your Model 758 Jet is user serviceable, trained professional mechanics may be needed with pump, plumbing, engine, lights, hitch and axle experience.

- Engine repair is best performed by your local Kawasaki repairman.
- Contact Spartan Tool or consult the Pump Repair Manual for all pump repair or troubleshooting.
- All plumbing repairs should use Spartan parts. The high pressure plumbing has been designed for pressures greater than 3000 PSI. Substituting parts is dangerous and voids Spartan warranties. Use standard pipe sealing compound or “Teflon”® tape to seal all joints except swivel joints and hose nozzles (o-rings, seals, and tapered seat designs do not require sealing materials).



Electrical Components

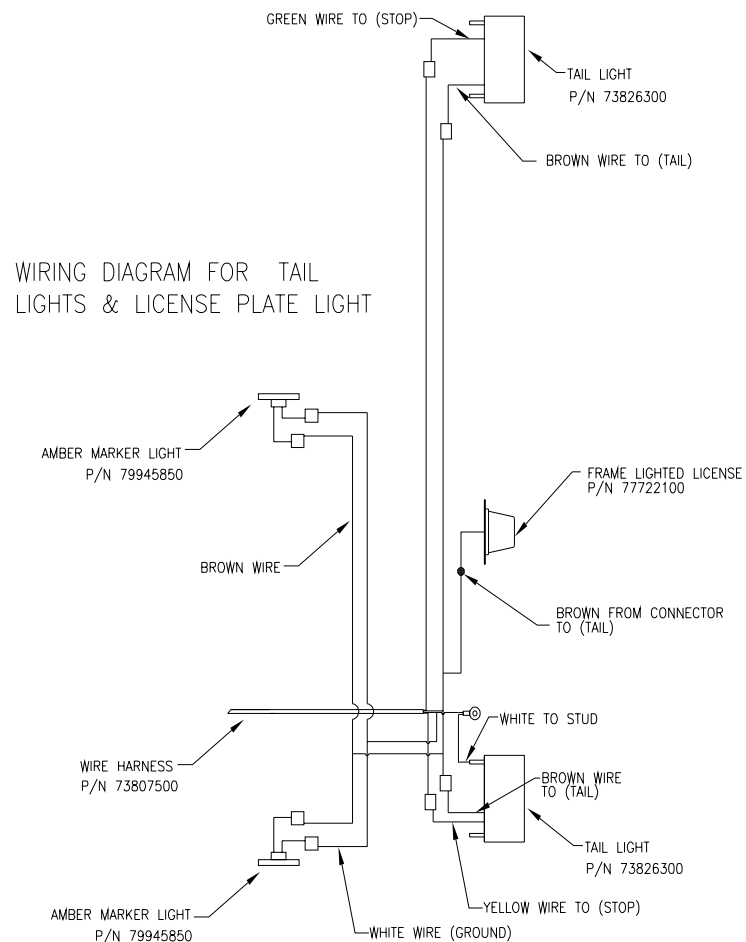


Part Number	Description
44036500	Receptacle: Vehicle - (mounts on vehicle)
44055000	Plug: Trailer Lights - (inserted into above receptacle)
77731600	Connector Plug Set

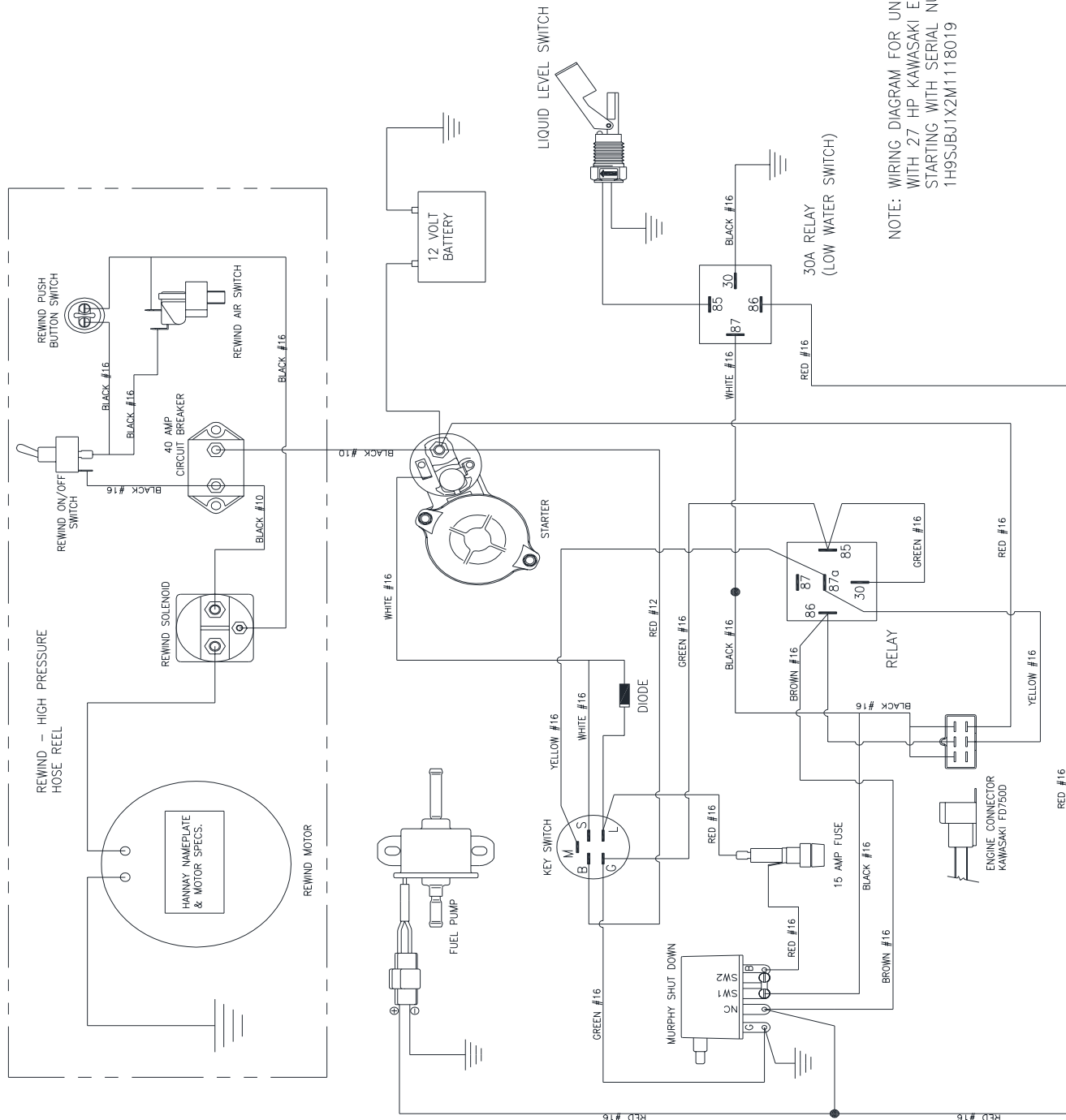
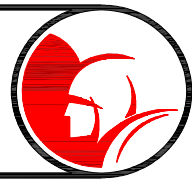
Other wiring supplies are easily obtained at local parts stores and therefore, are not listed.



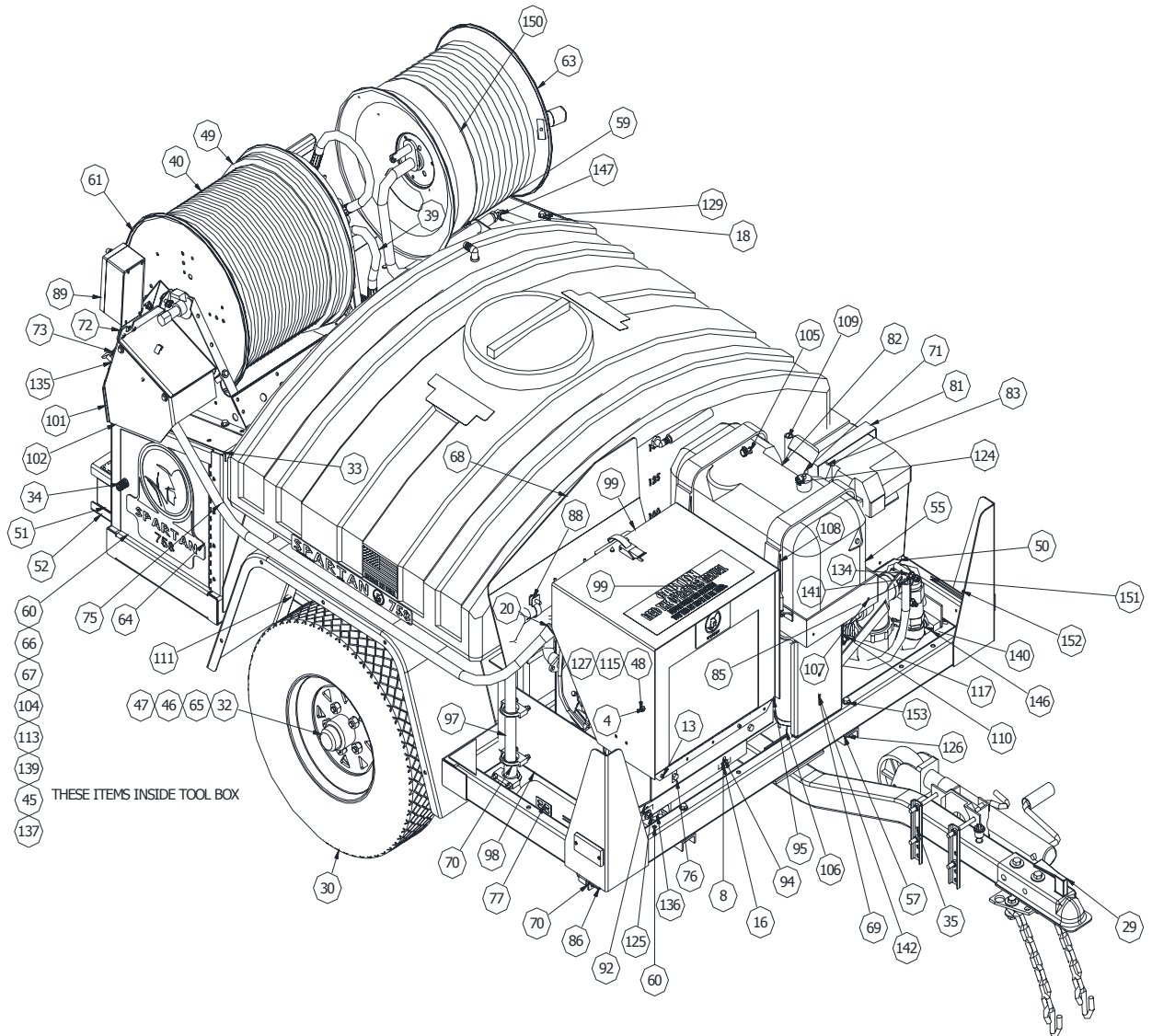
Wiring Diagrams

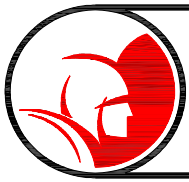


Wiring Diagrams (cont.)

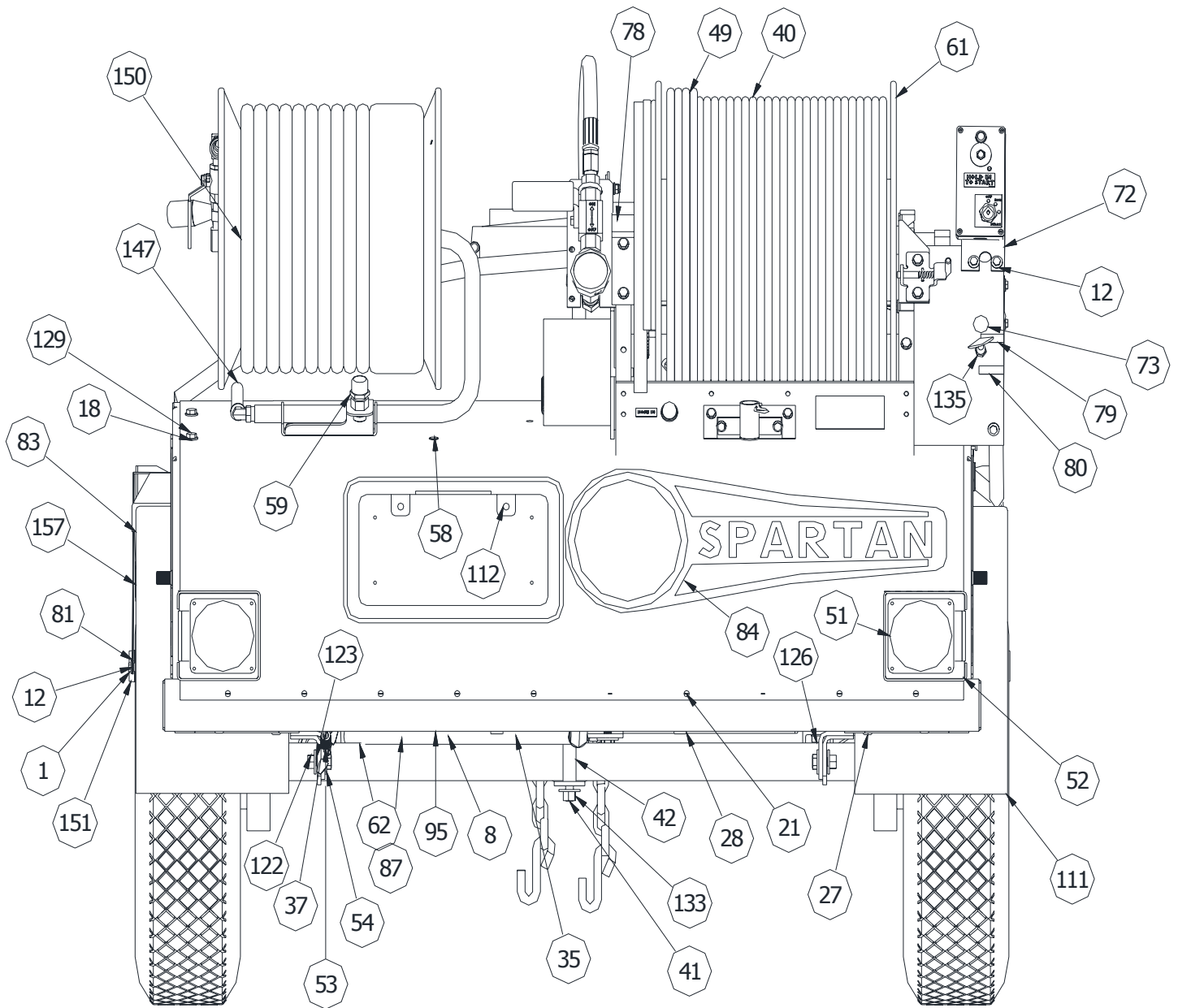
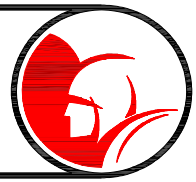


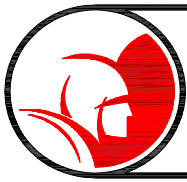
NOTE: WIRING DIAGRAM FOR UNITS
WITH 27 HP KAWASAKI ENGINE
STARTING WITH SERIAL NUMBER:
1H9SJB1X2M118019



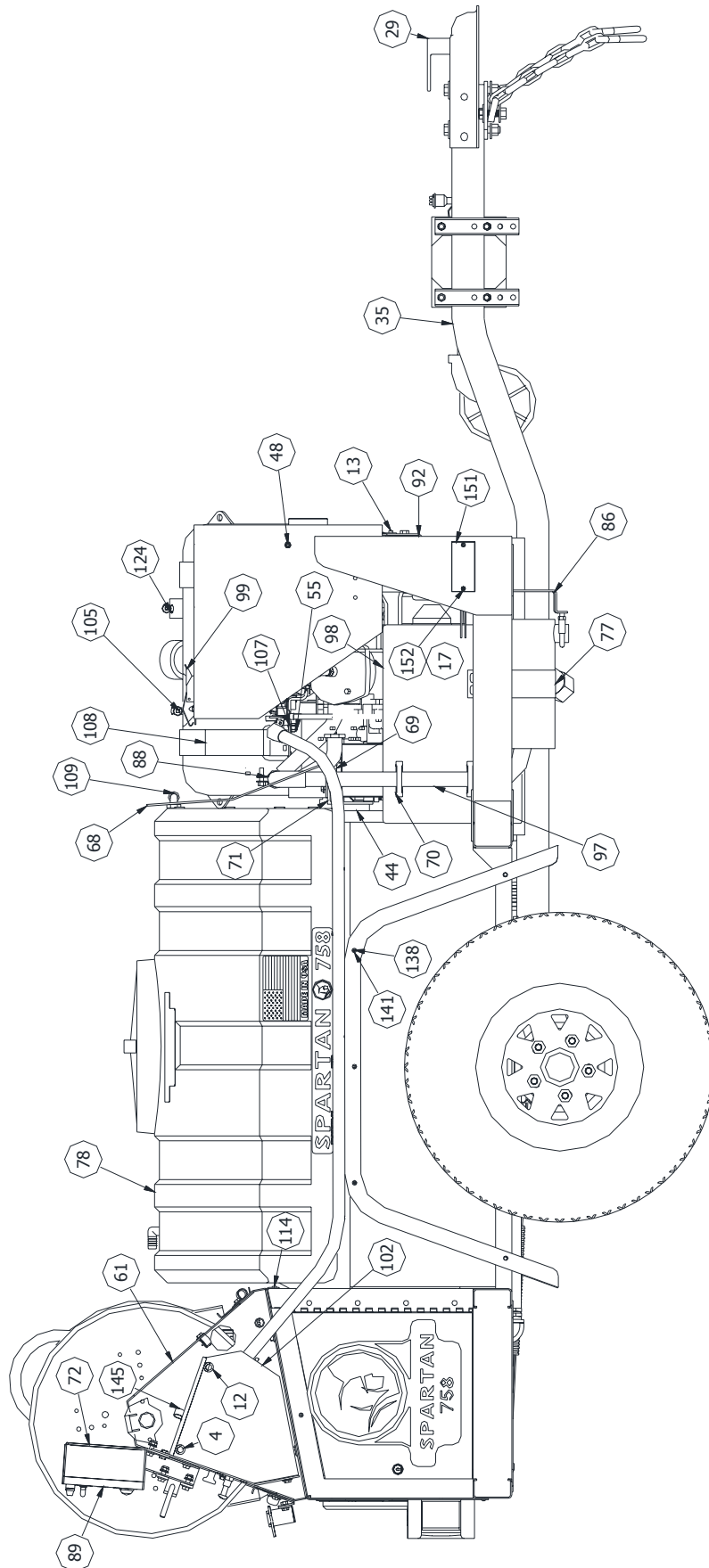
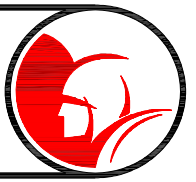


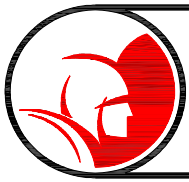
758 Final Assembly (cont.)



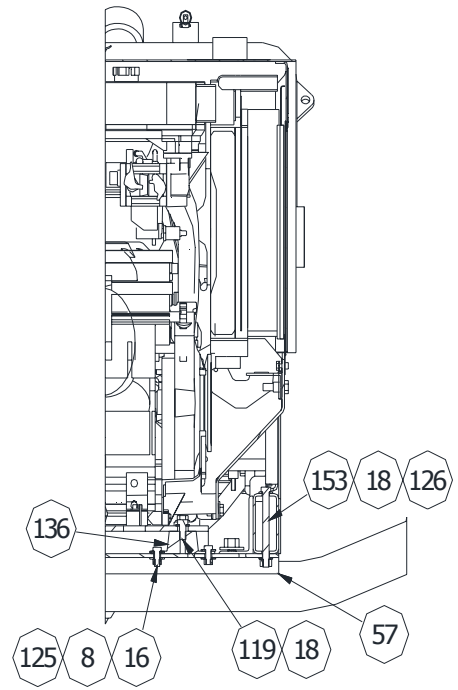
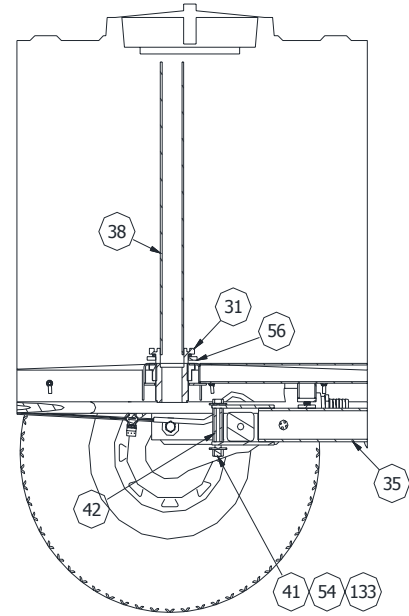
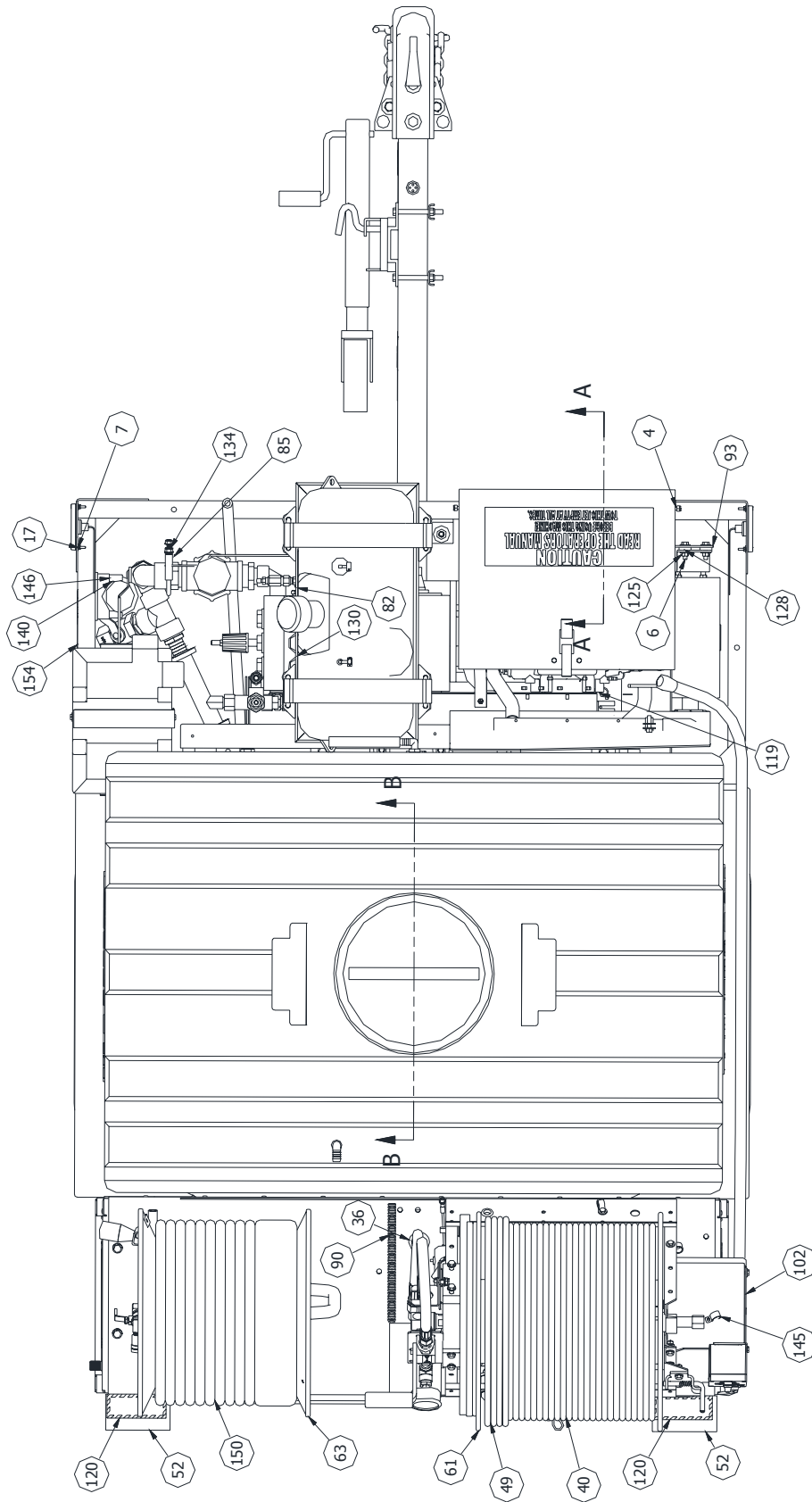


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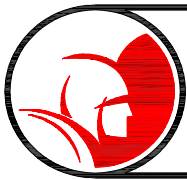




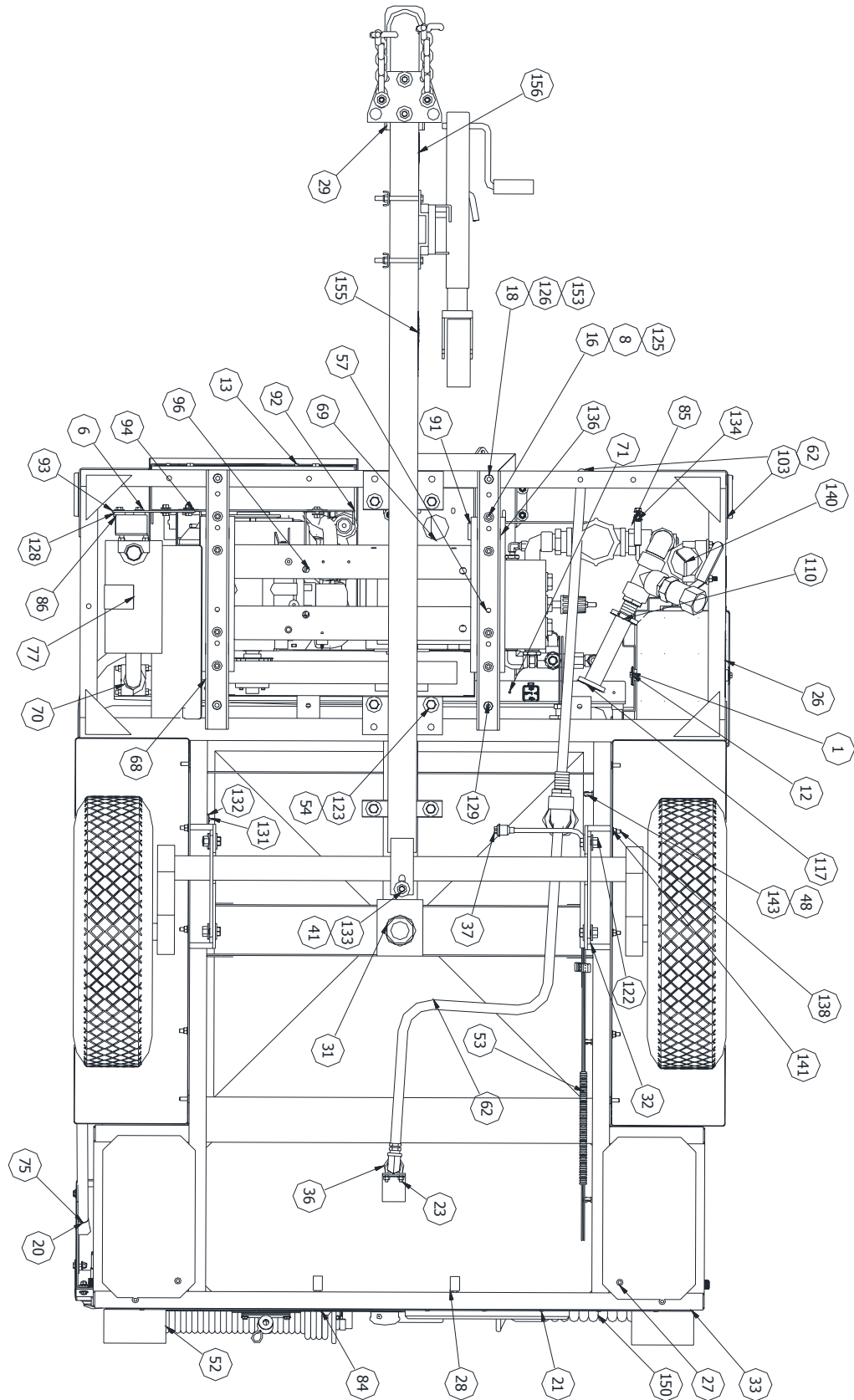
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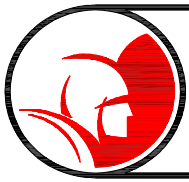


SECTION A-A
SCALE 1 / 8

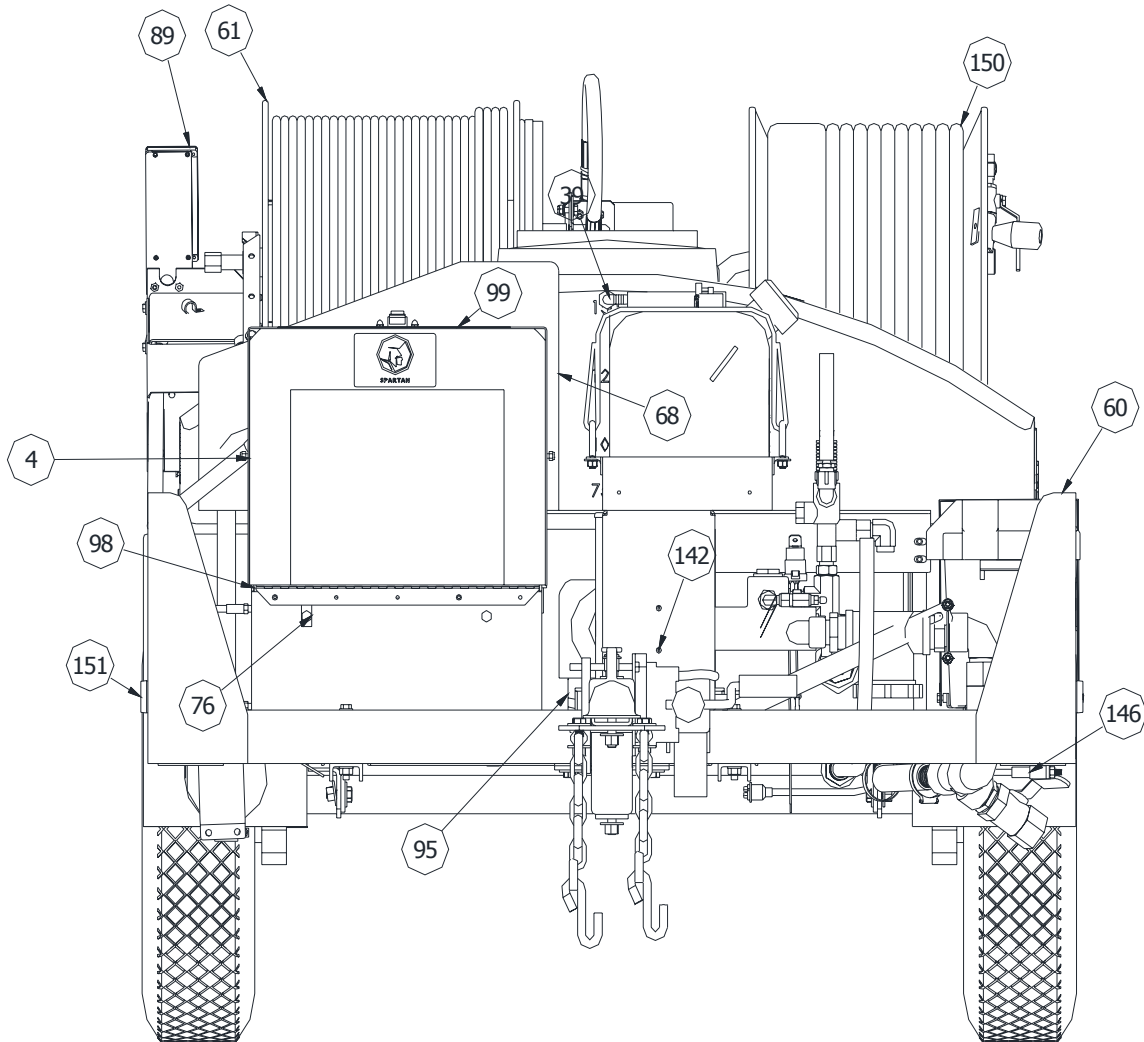
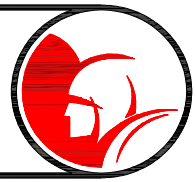


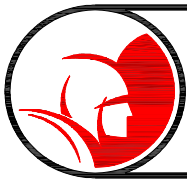
758 Final Assembly (cont.)



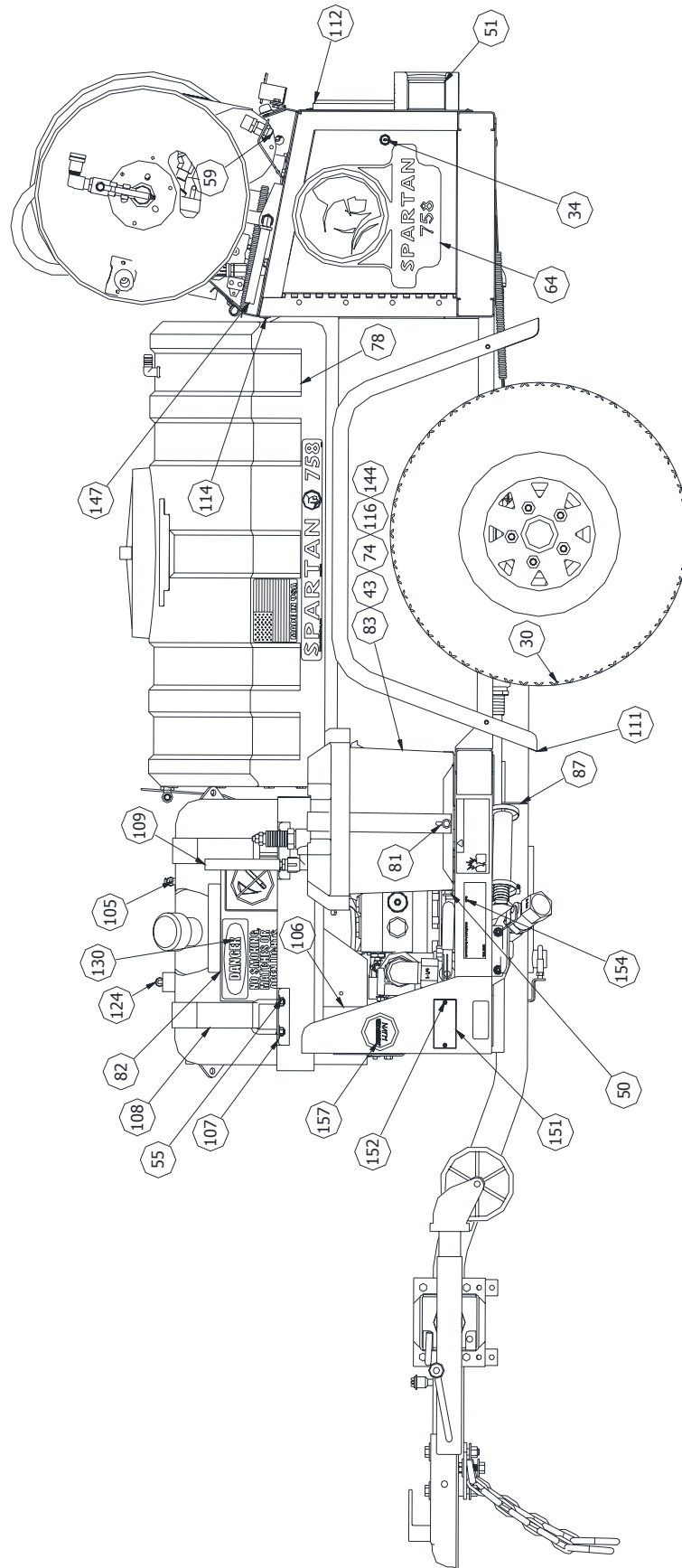


758 Final Assembly (cont.)





758 Final Assembly (cont.)





758 Final Assembly (cont.)



ITEM	QTY	PART #	DESCRIPTION
1	4	00113500	SCREW, HEX HD 1/4-20 X 1/2
2	1	00113600	SCREW, HEX HD 1/4-20 X 5/8
3	3	00113700	SCREW, HX HD 1/4-20 X 3/4
4	7	00113901	SCREW, HX HD 1/4-20 X 1 ZN
5	1	00115100	SCREW, HX HD 5/16-18 X 1"
6	2	00115300	SCREW, HX HD 5/16-18 X 1-1/4
7	4	00162400	WASHER, FLAT 3/16 USS
8	26	00162600	WASHER, FLAT 5/16 USS
9	1	00165300	WASHER, LOCK SPLIT #10
10	4	01950800	NUT, 1/4-20 HEX KEP
11	3	02821200	NUT, NYLOCK JAM 1/4-20
12	23	02825100	WASHER, FLAT 1/4 USS
13	5	02826800	SCREW, SCKT HD 10-32 X 1/2
14	1	02828100	SHEET METAL SCREW #8 X 1/2"
15	2	02899200	WASHER, FLAT 5/16 USS
16	11	02939000	SCREW, HX HD 5/16-18 X 3/4
17	4	03312001	NUT, HEX KEP 8-32
18	36	03366300	WASHER, FLAT 3/8 SAE
19	12	03850100	NUT, HEX KEP 10-32 ZINC PLTD
20	2	04699800	MOUNTING TIP, RUBBER
21	10	04723100	SCREW, MACHINE 10-32 X 5/8"
22	10	521012-03	SCREW, HEX HD 1/4-20 X 3/4
23	1	521400-04	U-BOLT 1 X 1-3/4 1/4-20 ZINC
24	2	522122-00	NUT, LOCK 5/16-18
25	11	522132-00	NUT, NYLON LOCKING 3/8-16
26	1	585463-01	DECAL, BATTERY
27	4	62009500	GROMMET, RUBBER 9/32 ID
28	2	72715100	CLAMP, HOSE 1-1/8 ID COATED
29	1	73803300	COUPLER, TONGUE 2-1/2"
30	2	73803700	WHEEL, 175/80 R13
31	1	73803800	ADAPTER 1-1/2" TANK
32	1	73804300	AXLE, 2300 LB
33	1	73805100	COVER, TOOLBOX
34	2	73806200	LOCK, DOOR
35	1	73806800	ASSY, HITCH TUBE
36	2	73807400	GROMMET, 7/8" ID
37	1	73807500	ASSY WIRING HARNESS
38	1	73808000	PIPE, OVERFLOW
39	1	73808100	HOSE, HP 1/2 NPT X 19" LONG
40	1	73808600	HOSE, HIGH PRESS 3/8" X 250'
41	1	73808800	BOLT 1/2-20 X 4 GR 9
42	1	73815100	TUBE, TOWBAR SPACER
43	1	73815300	CABLE, NEG BATTERY 60" LG
44	2	73815400	SPACER, RUBBER

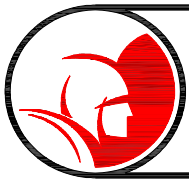
ITEM	QTY	PART #	DESCRIPTION
45	1	73817300	WASHDOWN ACCESSORY PAK
46	2	73819400	PROTECTOR, BEARING
47	2	73819500	BRA, BEARING PROTECT
48	13	73821200	NUT, NYLON LOCKING 1/4-20
49	1	73821500	HOSE, LEADER 3/8 X 15' ORANGE
50	1	73824600	WELDMENT, BATTERY TRAY
51	2	73826300	LIGHT, TAIL
52	2	73826400	WELDMENT, TAIL LIGHT
53	22FT	73826800	LOOM, SPLIT 3/8
54	22	73826900	WASHER, FLAT 1/2 USS
55	4	73829700	U-BOLT, SQ 2" X 2-5/8" (3/8-16)
56	1	73852700	GASKET-TANK 4X4X2-5/8 DIA
57	2	74012070	STRINGER, 738-758
58	2	74017200	PLUG, 7/16" BLACK PLASTIC
59	1	74021800	ASSY, HOSE HOLSTER
60	1	74023100	FRAME, 740 TRAILER
61	1	74024200	ASSY, HP REEL 740
62	1	74026000	ASSY, HP PIPE
63	1	74027000	ASSY, COM FILL REEL
64	2	75800100	DECAL, SPARTAN 758
65	2	75800700	PLUG, EZ LUBE
66	1	75800800	NOZZLE, OPEN 758
67	1	75800900	NOZZLE, OPEN 758
68	1	75801900	SHIELD, HEAT - REAR
69	1	75802300	SHEET, GAS TANK MOUNT
70	4	75803100	CLAMP, MUFFLER 1-1/4"
71	1	75805400	ANGLE, GAS TANK
72	1	75806500	PLATE, CONTROL BOX MOUNT
73	1	75807400	CHOKE CABLE
74	1	75808500	CABLE, POS BATTERY 60" LG
75	1	75808700	CONDUIT, THROTTLE CONTROL
76	2	75811200	U-NUT 3/8-16
77	1	75813000	MUFFLER, 758
78	2	75813400	ASSY, WATER TANK- 758
79	1	75813900	DECAL, CHOKE
80	1	75814000	DECAL, THROTTLE
81	1	75814700	STRAP, BATTERY HOLD DOWN
82	1	75815100	DECAL, GASOLINE ONLY
83	1	75815300	BOX, BATTERY (MODIFIED)
84	1	75815400	DECAL, SPARTAN
85	1	75817000	SUPPORT, PLUMBING



758 Final Assembly (cont.)

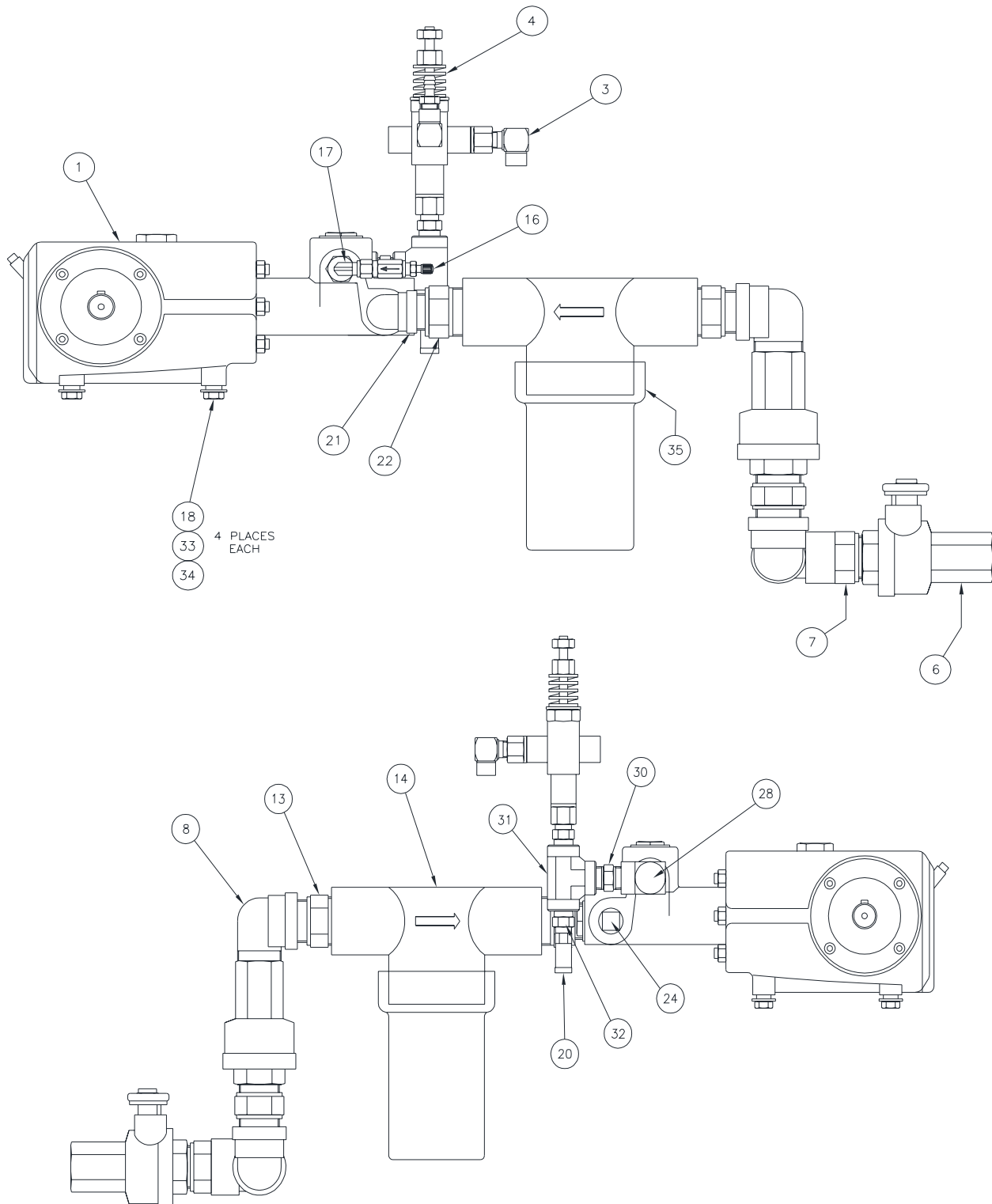
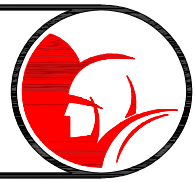


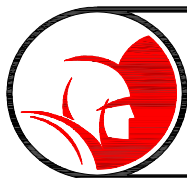
ITEM	QTY	PART #	DESCRIPTION	ITEM	QTY	PART #	DESCRIPTION
86	1	75817200	SUPPORT, MUFFLER	130	1	77766300	LABEL, DANGER "NO SMOKING"
87	1	75817800	ASSY, WIRE HARNESS-RELAY	131	28	77768800	TIE WIRE - PLASTIC
88	1	75818010	CLAMP, KAWASAKI 27 HP	132	16	77768900	HOLDER, WIRE TIE
89	1	75818400	ASSY, ENGINE CONTROL BOX	133	1	77769300	LOCK-NUT 1/2-20 UNF GRADE 9
90	1	75819400	HARNESS, WIRING 758 (27HP)	134	1	77770400	CLAMP, MUFFLER 2-1/4" ZINC PL
91	1	75819500	ANGLE, PLUMBING SUPPORT	135	1	77771501	THROTTLE CONTROL, LOCKING
92	1	75819800	WELDMENT, LOWER ENG.	136	4	77785200	MOUNT, MOTOR
93	1	75819900	STRIP, MUFFLER SUPPORT	137	1	77800600	ASSY, HOSE GUARD 2"
94	2	75820100	ANGLE, LOWER ENGINE ENCL	138	6	77805100	BOLT, CARRIAGE 5/16-18 X 1
95	1	75820200	ASSY, POWER PAK 758 (27HP)	139	1	79827300	ASS'Y, HAND CRANK
96	2	75821300	SCREW, HEX HD M8 X 16	140	1	79829300	CLAMP, MUFFLER 2-1/2" ZINC
97	1	75821500	WELDMENT, EXHAUST EXT	141	20	79838800	NUT, FLANGED HEX 5/16-18
98	1	75821800	SHIELD, HEAT (SIDE)	142	2	79842100	CLAMP, HOSE 3/16
99	1	75821900	ASSY, UPPER COVER ENCL	143	4	79842200	CLAMP, HOSE 1/2
100	2	75822400	SPACER, NYLON 1/2 DI	144	1	79847800	BATTERY, DIESEL 875 CCA
101	1	75828100	WELDMENT, CONTROL MOUNT	145	3	79860000	CLAMP, VINYL COATED 5/8"
102	1	75828130	PLATE, 130	146	1	79872000	SADDLE, VALVE CLAMP
103	1	75866100	DECAL, 758 TIRE & LOAD	147	3FT	79904483	1/2" PUSH-ON HOSE
104	1	75866500	ASSY, 3/8 ANTI-TURN AROUND	148	2	79920159	SCREW, PHIL FL HD 1/4-20X 1
105	1	75871600	TANK, 8 GAL GASOLINE	149	5	79925700	CONNECTOR-PUSH-ON 2 WIRE
106	1	75871610	CANISTER, CHARCOAL	150	1	79944100	HOSE, GARDEN 5/8 X 100'
107	1	75871700	WELDMENT, GAS TANK	151	2	79945850	LIGHT, SIDE MARKER AMBER
108	2	75871800	STRAP, 8 GAL GAS TANK	152	4	79945860	SCREW, 8-32x1-1/4 FLT HD ZNC
109	2FT	77705000	PUSH LOK HOSE	153	2	79947360	SCREW, 3/8-16 x 3-3/4 HX HD
110	1.4FT	77710200	HOSE 1-1/4 X 4 SPIRAL SM	154	1		DECAL, VIN NUMBER
111	2	77710500	FENDER-PAINTED	155	1	79952300	DECAL, WHEEL & LUG NUTS
112	1	77722100	FRAME, LIGHTED LICENSE	156	1	79952400	DECAL, SAFETY CHAINS
113	1	77724000	BUSHING 1/2 X 3/8NPT	157	1	79952700	DECAL, NATM COMPLIANCE
114	20	77726500	RIVET, BLIND 3/16 DIA.				
115	2FT	77726800	CHAIN, #5 DOUBLE LOOP				
116	1	77728900	CAP, CABLE #5704 RED				
117	2	77736900	CLAMP, HOSE 1-9/16 - 2-1/2 #32				
118	4	77738100	SCREW, CAP HEX HD 3/8-16 X 1				
119	5	77738300	SCREW, CAP HEX HD 3/8-16 X 3/4				
120	2	77739800	DECAL, CAUTION (READ MAN)				
121	1	77739900	DECAL, WARNING (INSERT)				
122	10	77744800	NUT, STOVER LOCK 1/2-13 UNC				
123	10	77745800	SCREW, HEX HD 1/2-13 X 1-1/4				
124	2	77746000	CLAMP, HOSE 7/32 - 5/8 S.S.				
125	13	77747800	NUT, HEX 5/16-18				
126	20	77748000	NUT, STOVER LOCK 3/8-16 UNC				
127	2FT	77749400	TUBING, HEAT SHRINK 3/8				
128	9	77755000	WASHER, ROBO 3/8"				
129	10	77759900	SCREW, CAP HX 3/8-16 X 1-1/4				



758 Pump Assembly

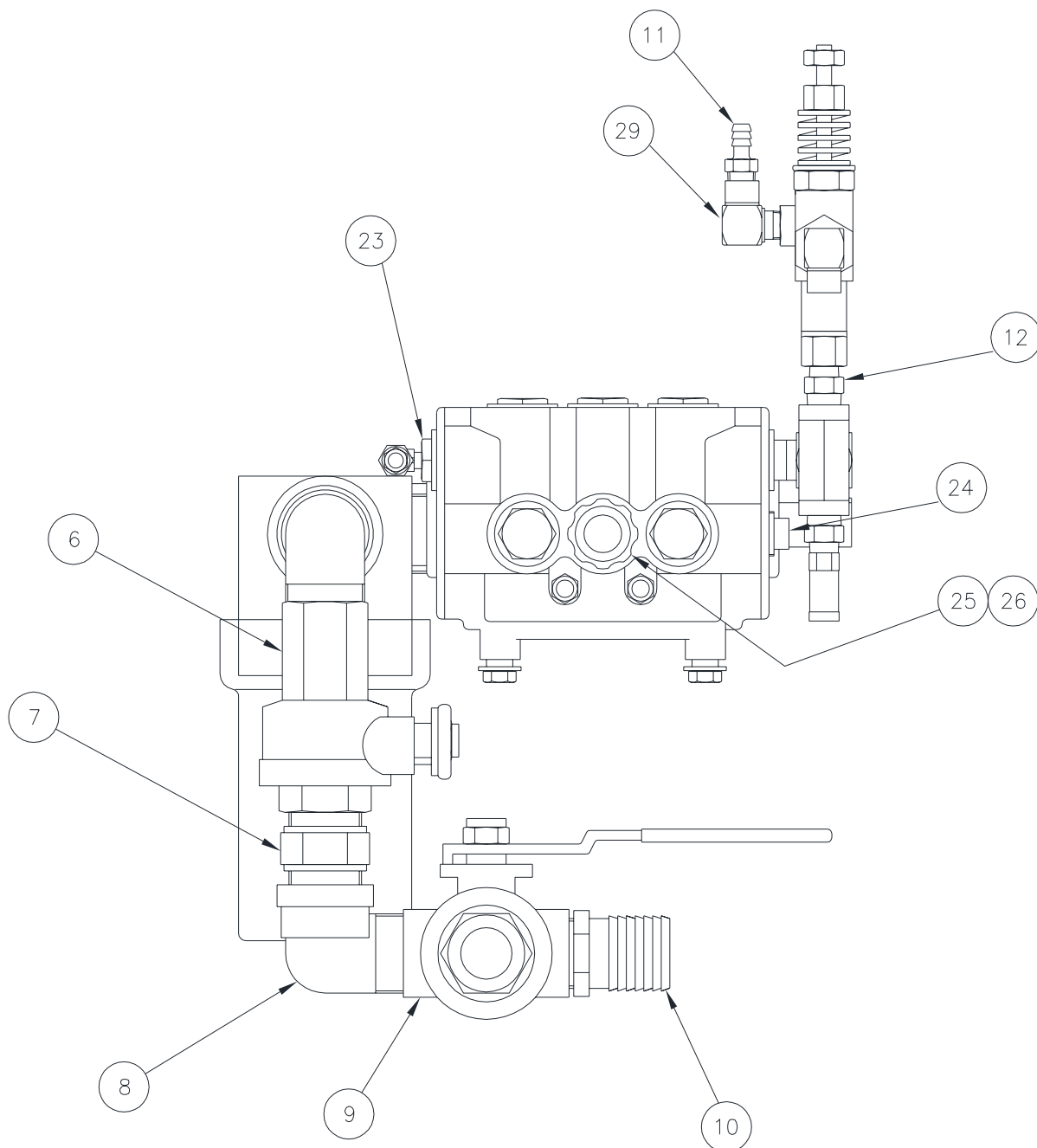
75802700

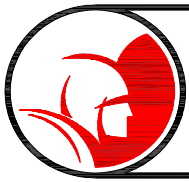




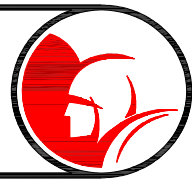
758 Pump Assembly

75802700





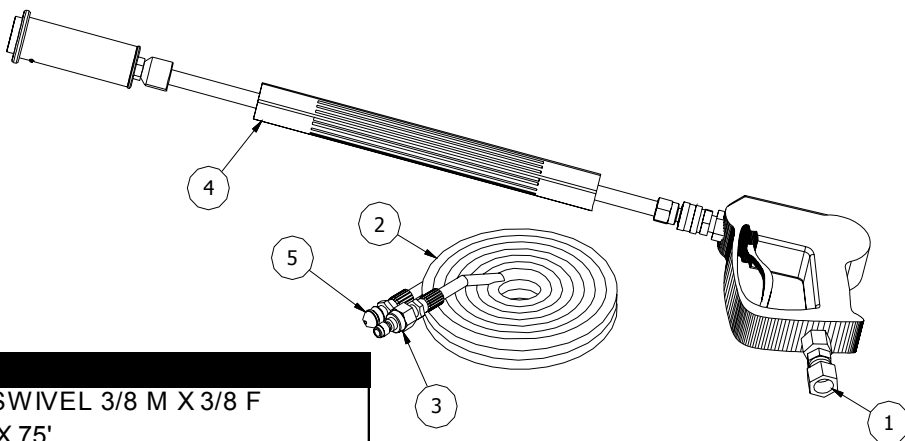
758 Pump Assembly - 75802700



Item #	Qty	Part #	Description
1	1	75800500	Pump
3	1	77705101	Elbow, 90° Street 1/2NPT
4	1	75802800	Unloader
6	2	75806000	Valve, Ball 1-1/4 FNPT x 1-1/4 FNPT
7	2	75802900	Nipple, Close 1-1/4 Polypropylene
8	2	79811300	Elbow 90° 1-1/4 (MPT) x 1-1/4 (FPT) Poly
9	1	75803000	Tee 1-1/4" FNPT Polypropylene
10	1	79812000	Barb, Hose 1-1/4" (MNPT) x 1-1/4" Poly
11	1	77704900	Fitting, Push Lok 1/2-14
12	1	73811700	Nipple, 3/4 x 1/2 Steel
13	1	79811600	Nipple, 1-1/2" x 1-1/4" MPT Polypropylene
14	1	79811700	Filter, 1-1/2" FPT Polypropylene
16	1	71707400	Valve, Check w/ Air Valve
17	1	71707300	Elbow, 90° Male 1/4 x 1/8
18	4	78700200	Washer, Flat M12
20	1	75805100	Valve, Pop Off
21	1	75803200	Elbow, 90° Street 1" Polypropylene
22	1	75803300	Nipple, 1" x 1-1/2" Polypropylene
23	1	75803400	Bushing, Reducer 3/4" MNPT x 1/8" FNPT
24	1	75803500	Plug 1" MNPT Stainless
25	1	75807000	Assembly, Pulsation Plunger
26	1	75824200	Stop, Pulsation Knob
27	1	7581930P	Weldment, Pump Mount
28	1	79816200	Elbow, 90° Street 3/4 H.P.
29	1	73818000	Elbow, 90° 1/2" Male x 1/2" Female
30	1	79825300	Nipple, 3/4" x 2" H.P.
31	1	79816100	Tee, 3/4" x FPT H.P.
32	1	79816300	Bushing, Reducer 3/4" x 1/4"
33	4	44181400	Washer, Lock-Split M12
34	4	75823100	Screw, Hex Hd M12 x 25mm
35	1	73827000	Filter Gasket



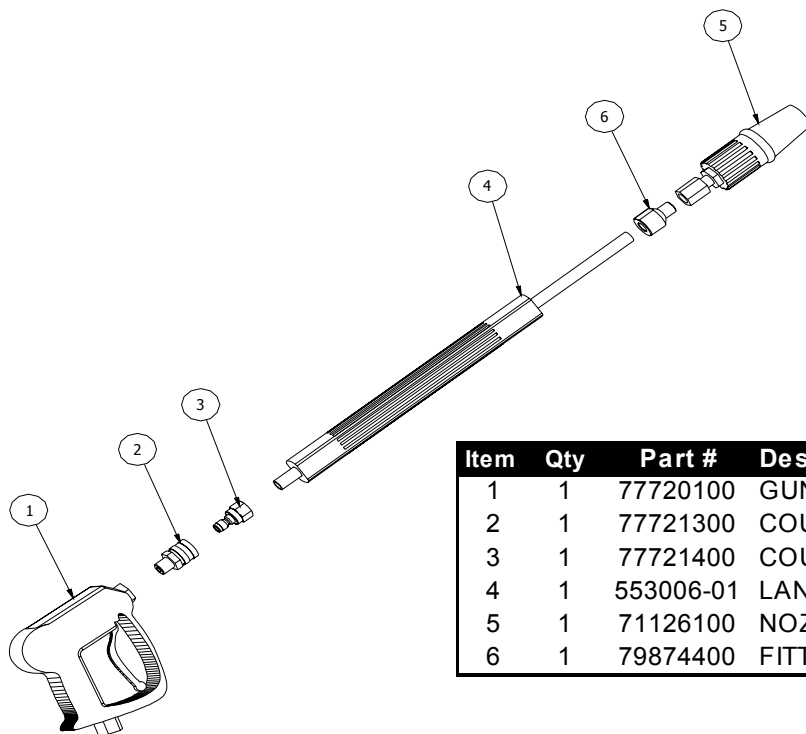
Wash Down Accessory Package 73817300



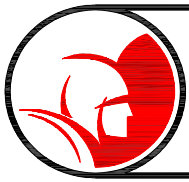
Item	Qty	Part #	Description
1	1	73816500	ADAPTER, SWIVEL 3/8 M X 3/8 F
2	1	77719500	HOSE, 1/4" X 75'
3	1	77721400	COUPLER, QUICK GUN MALE
4	1	77799800	HANDGUN LANCE VNOZZLE ASSEMBLY
5	1	77815800	NOZZLE, 1/4" DOMED (6)



HandGun Lance Vnozzle Assembly 77799800

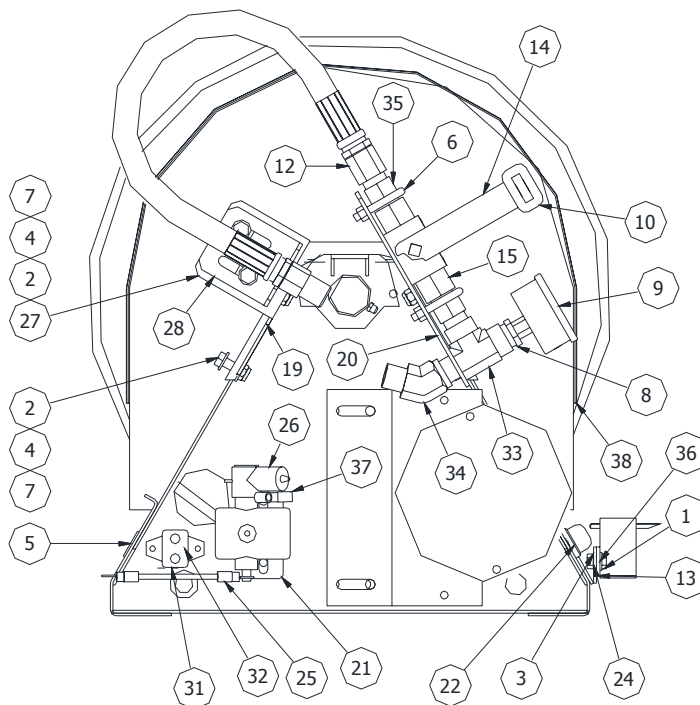
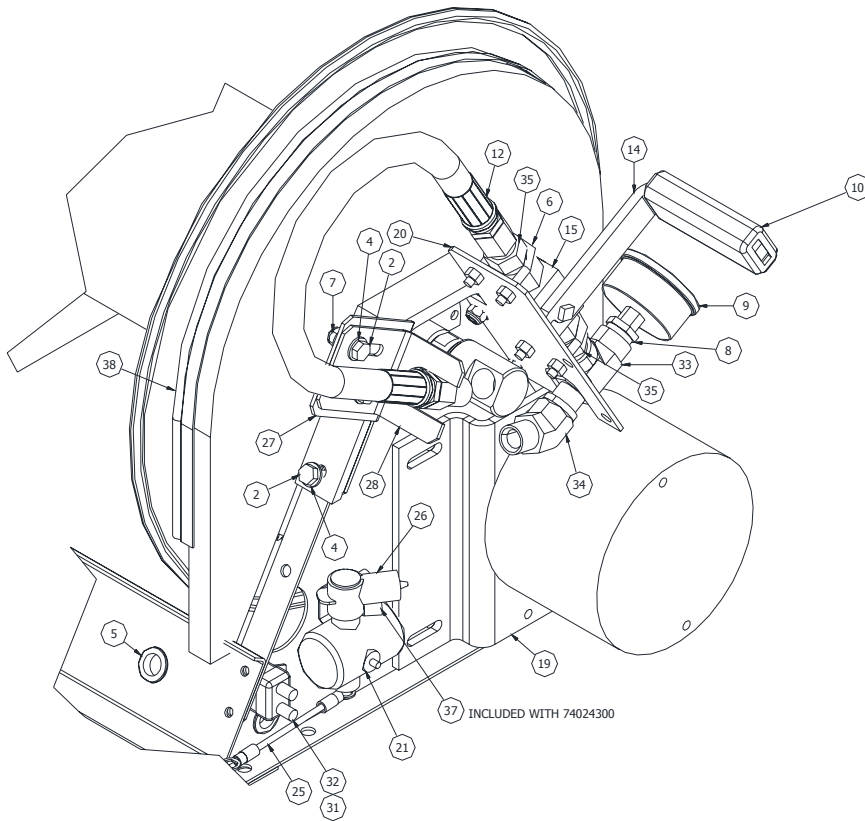
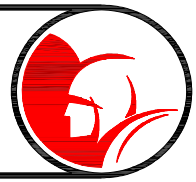


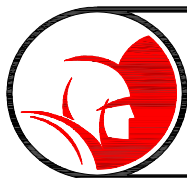
Item	Qty	Part #	Description
1	1	77720100	GUN, HAND
2	1	77721300	COUPLER, QUICK GUN, 1/4" NPT MALE
3	1	77721400	COUPLER, QUICK GUN, MALE
4	1	553006-01	LANCE, INSULATED GRIP, 18"
5	1	71126100	NOZZLE - VARIABLE .080
6	1	79874400	FITTING, WAND ANTI-KICKBACK



Assy, Reel High Pressure 740

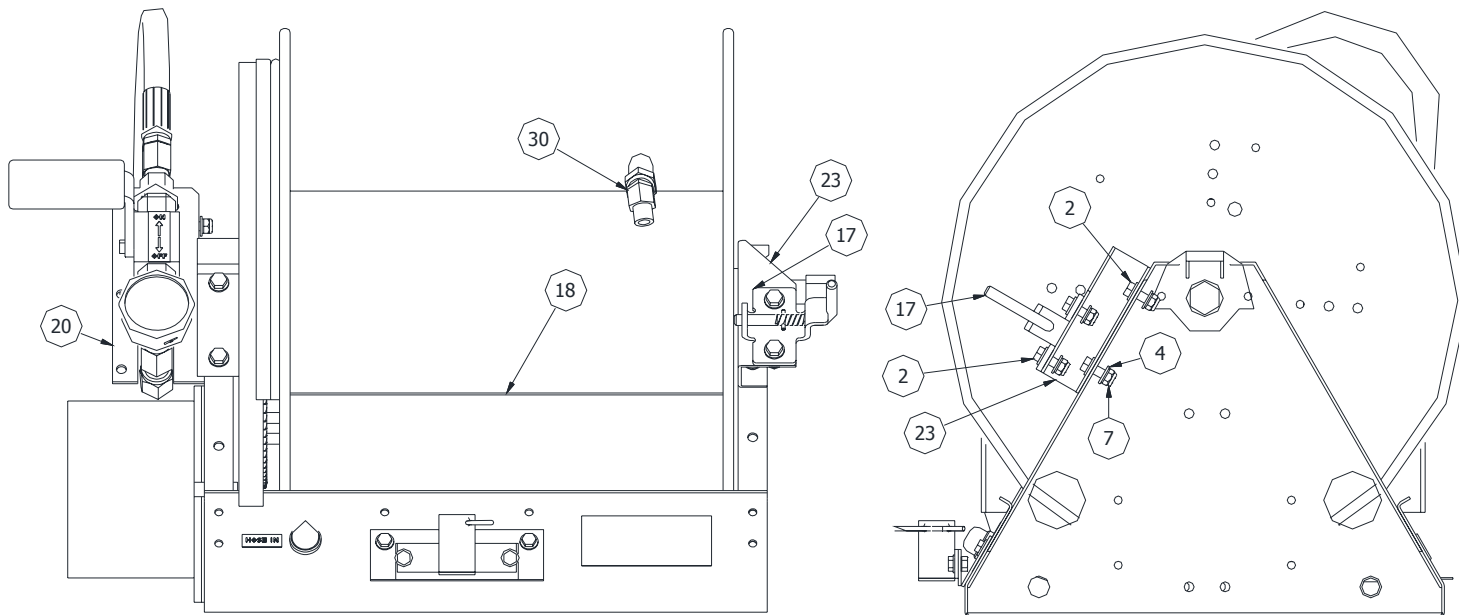
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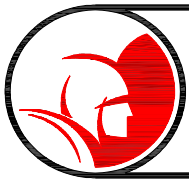
Assy, Reel High Pressure 740

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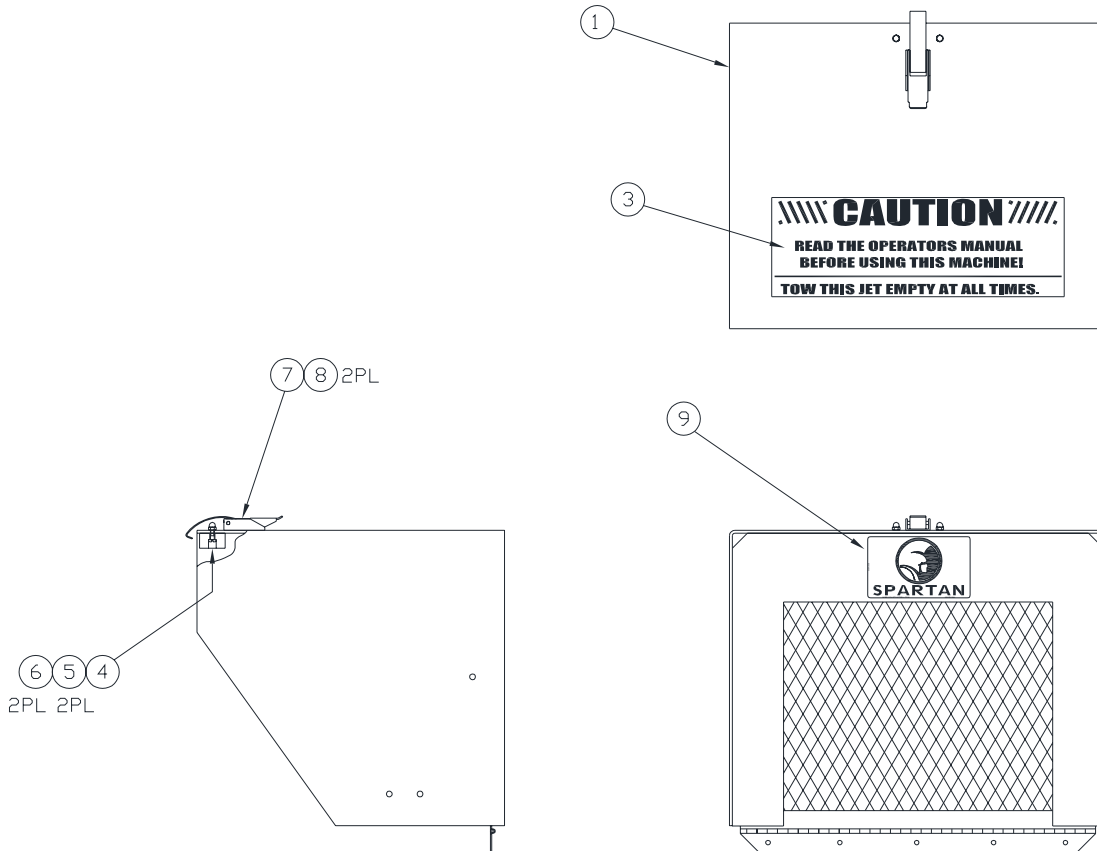
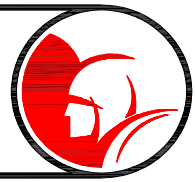


Item	Qty	Part #	Description
1	4	00113500	SCREW, HEX HD CAP 1/4-20 x 1/2
2	10	00115100	SCREW, HEX HD CAP 5/16-18 X1
3	4	01950800	NUT, 1/4-20 HEXKEP
4	20	02899200	WASHER, FLAT 5/16
5	2	44121300	GROMMET
6	2	521400-04	UBOLT 1 X 1-3/4 1/4-20
7	10	522122-00	NUT, LOCK 5/16-18
8	1	542104-05	BUSHING, REDUCER 1/2 X 1/4
9	1	544000-01	GAUGE, 5000 PSI
10	1	71102500	GRIP, FOAM BLACK
11	1	72707800	DECAL, WARNING HP WATER
12	1	73808100	HOSE, HP 1/2NPT X 19' LONG
13	1	73816000	WELDMENT, HOSE HOLSTER
14	1	73816100	HANDLE, HP VALVE
15	1	73816200	VALVE, 1/2 NPT HP
16	1	73817800	DECAL, BALL VALVE ON-OFF
17	1	73825500	LOCK, REEL
18	1	74024210	RUBBER STRIP, ADHESIVE BACK
19	1	74024300	HP REEL 740

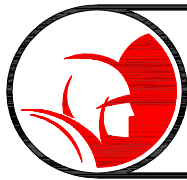
Item	Qty	Part #	Description
20	1	74024530	BRACKET, HP VALVE
21	1	74024600	SOLENIOD 12 VDC (PART OF 74024300)
22	1	74024700	PUSH BUTTON WITH BOOT (PART OF 74024300)
23	1	74024710	BRACKET, REEL LOCK
24	1	74024800	ADAPTER, HOSE HOLSTER
25	1	74024900	JUMPER WIRE 12" BLACK
26	1	74025400	BOOT, RING TERMINAL RED
27	1	74026200	ANGLE, ANTI-TORQUE
28	1	74026300	FORK, ANTI-TORQUE
29	1	75814200	DECAL, HOSE IN
30	1	75828200	ELBOW, 45 DEG 1/2 F SWIV X 3/8
31	1	75869300	CIRCUIT BREAKER 40 AMP
32	1	75869310	BOOT, CIRCUIT BREAKER RED
33	1	77711301	TEE, MALE RUN 1/2 NPT
34	1	77763900	ELBOW, 45 DEG STREET 1/2NPT
35	2	77770800	NIPPLE, HEX 1/2 NPT
36	4	79908200	WASHER, FLAT 1/4 SAE
37	2	79946170	TERMINAL, 3/8 RING 12-10 AWG
38	3ft	79961150	EDGE GRIP, RUBBER SEAL
39	1	77737100	PIN, HAIR 9 GAUGE 2.45" LONG



Assy, Upper Cover Enc 75821900



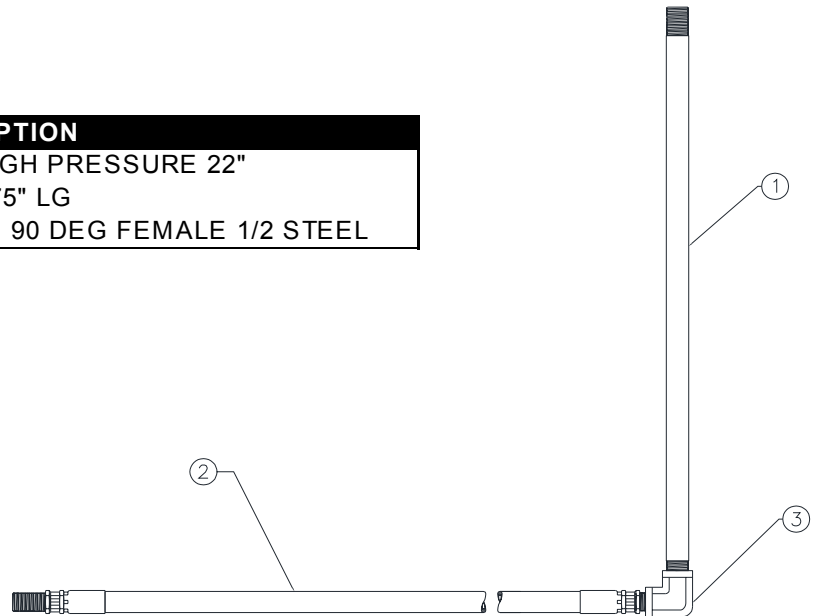
ITEM	QTY	PART #	DESCRIPTION
1	1	75804400	WELDMENT, UPPER COVER ENCLOSUR
3	1	73817200	DECAL, CAUTION READ MANUAL
4	1	75818100	BUMPER, RUBBER (758 HOOD ENC.)
5	2	04725200	ACORN NUT, #10-32 ZINC PLATED
6	2	04723100	MACHINE SCREW 10-32 X 5/8 RD
7	1	75821200	LATCH, OVER CENTER DRAW
8	2	77726500	RIVET, POP 3/16 X 3/16 GRIP
9	1	44297900	DECAL, SPARTAN 3" X 5"



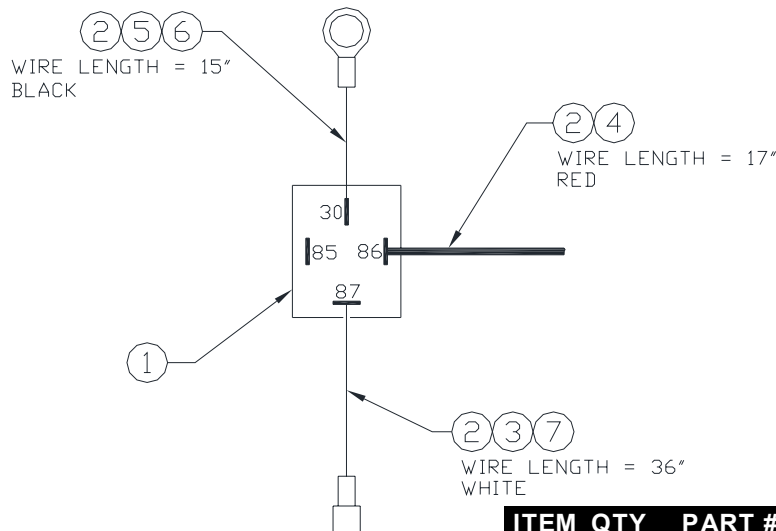
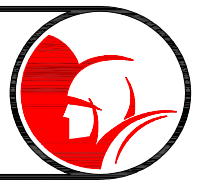
Assy, High Pressure Pipe 73807300



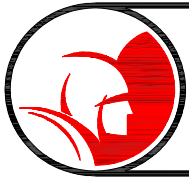
ITEM	QTY	PART #	DESCRIPTION
1	1	73809000	PIPE, HIGH PRESSURE 22"
2	1	73825200	HOSE, 75" LG
3	1	72714600	ELBOW, 90 DEG FEMALE 1/2 STEEL



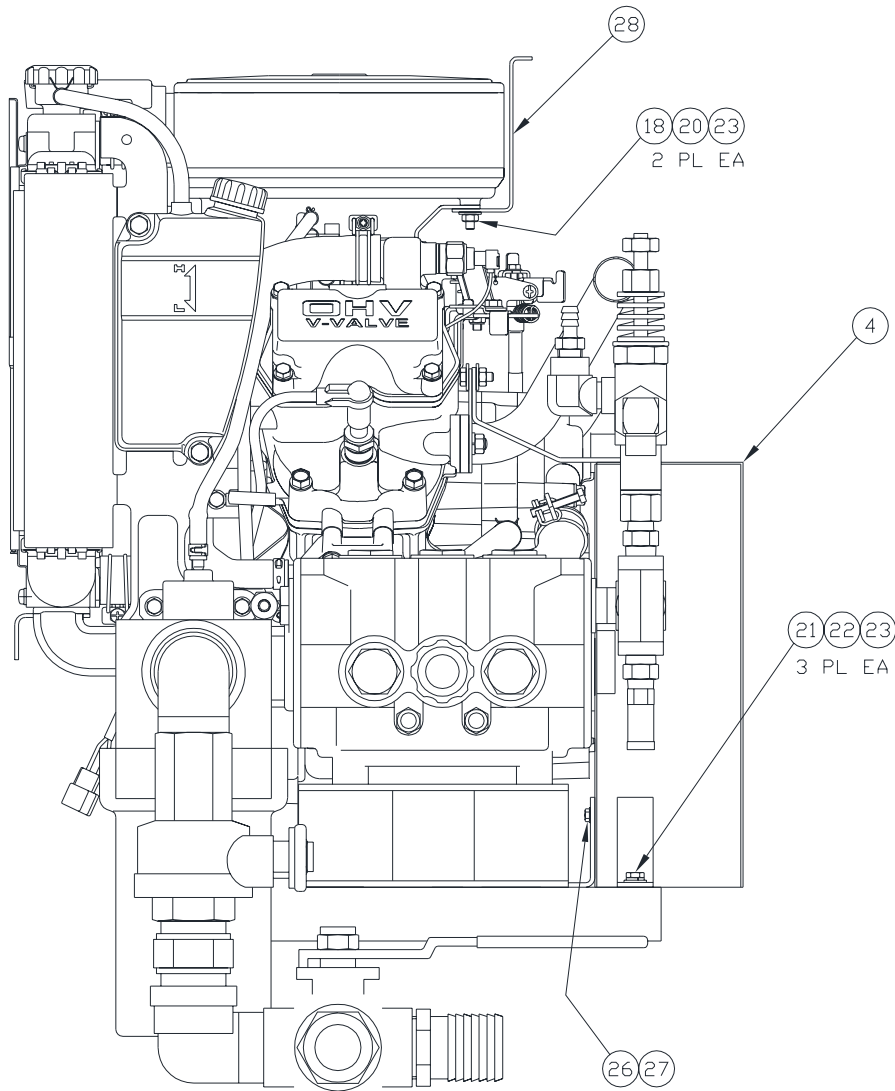
Assy, Wire Harness-Relay 75817800

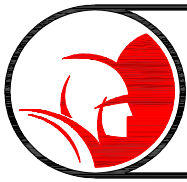


ITEM	QTY	PART #	DESCRIPTION
1	1	75823600	RELAY
2	3	44216100	DISCONNECT, .250 FEMALE 16-14
3	3	77733000	WIRE, 16 AWG STRANDED WHITE
4	1.42	77733100	WIRE, 16 AWG RED STRANDED CU
5	1.25	44222400	WIRE, HOOK-UP 16 AWG-BLACK
6	1	77733300	TERMINAL, RING 5/16"
7	1	77751600	DISCONNECT, .250 FEMALE BULLET

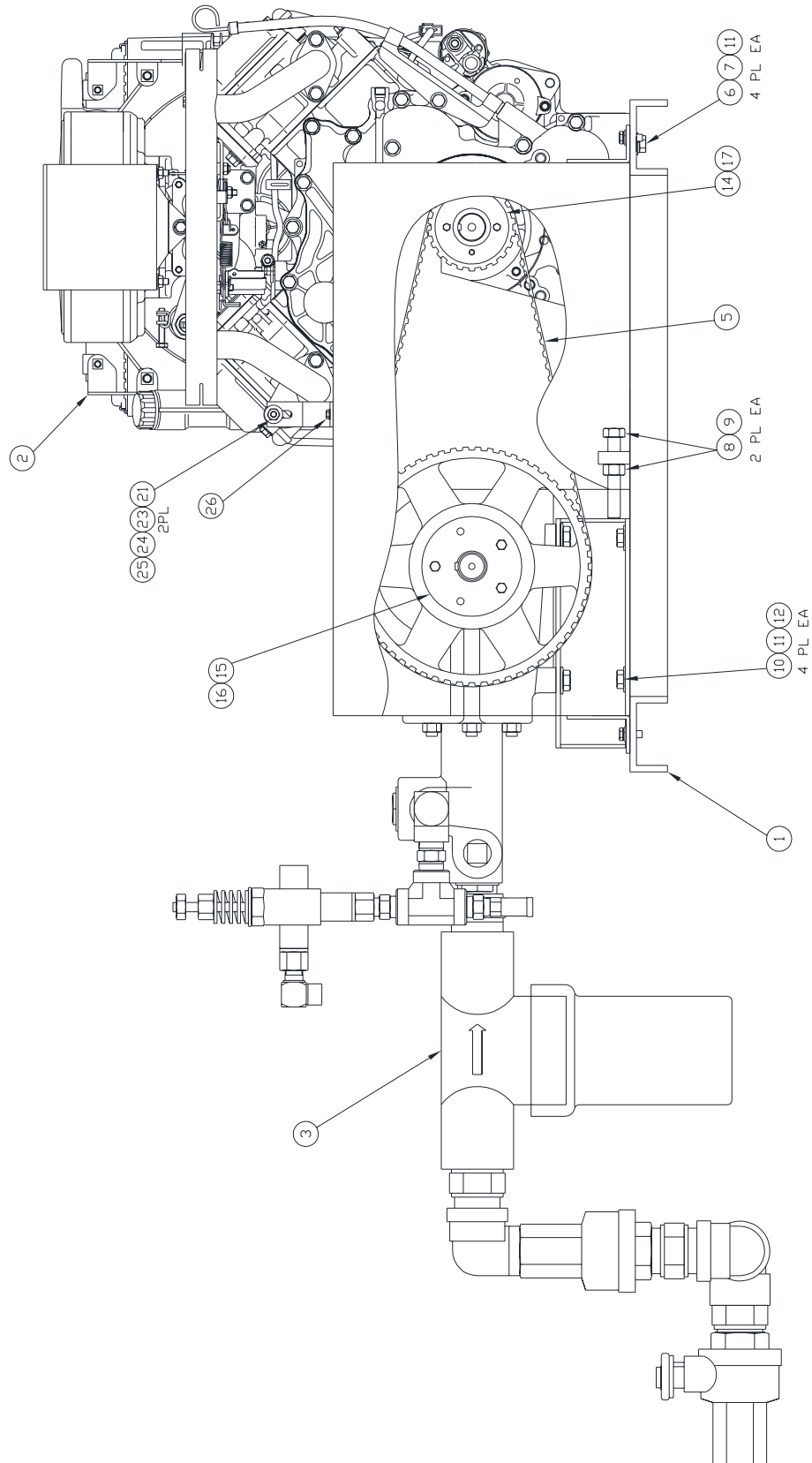


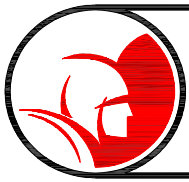
758 Power Pak - 75820200



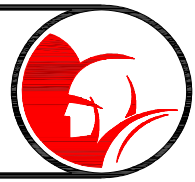


758 Power Pak - 75820200

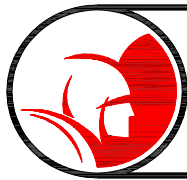




758 Power Pak - 75820200

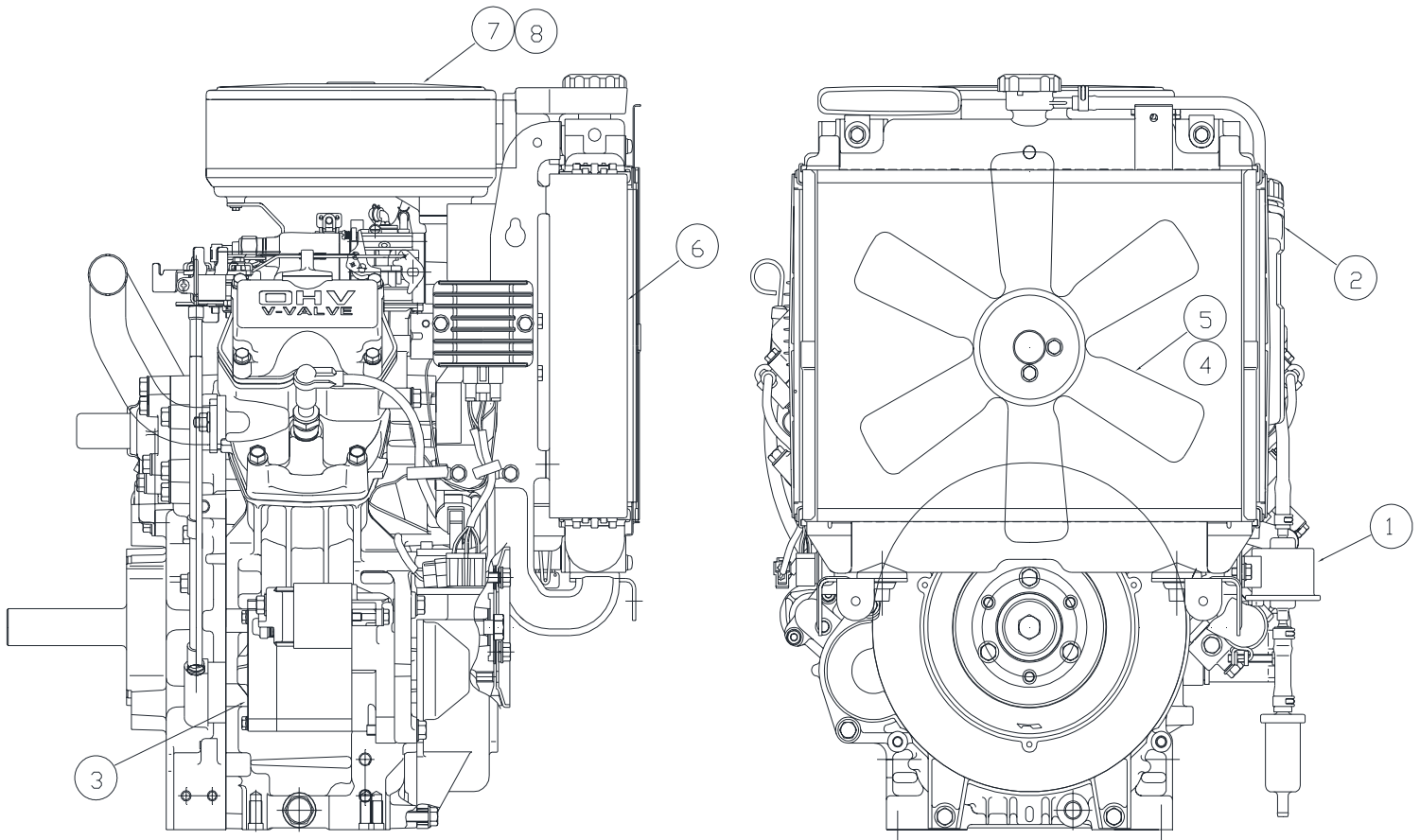


Item #	Qty	Part #	Description
1	1	73801600	Weldment, Power Pak 738-758
2	1	75818000	27HP Engine
3	1	75802700	Pump Assembly
4	1	75820300	Weldment, Belt Guard (27HP)
5	1	75820400	Belt, 480H200
6	4	75822800	Screw, Cap Hex Head M10 - 25mm (Metric)
7	4	44029500	Lock Washer, M10 (Metric)
8	2	77727100	Adjusting Bolt, 1/2-13 x 2 1/4
9	2	00778000	Nut, 1/2 - 13
10	4	77738100	Bolt, Hex Head 3/8 - 16 x 1
11	8	00162700	Flat Washer, 3/8
12	4	522132-00	Nylock Nut, 3/8 - 16
14	1	75820500	Sheave, Drive
15	1	75820600	Sheave, Driven
16	1	73810500	Bushing, Driven
17	1	75820700	Bushing, Drive
18	2	75821000	Screw, M6 x 22mm (metric)
20	2	75821100	Nylock Nut, M6 (metric)
21	4	00113600	Bolt, 1/4 - 20 x 3/4
22	3	00165400	Lock Washer, 1/4"
23	7	02825100	Flat Washer, 1/4"
24	1	75820800	Belt Guard Bracket (Top)
25	1	02821200	Nylock Nut, 1/4 - 20
26	2	44119500	Self Tapping Screw, 10-24 x 1/2
27	1	75820900	Belt Guard Bracket (Bottom)
28	1	75820000	Latch Bracket (Engine Enclosure)

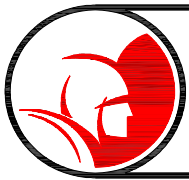


Engine, 758 27HP Kawasaki

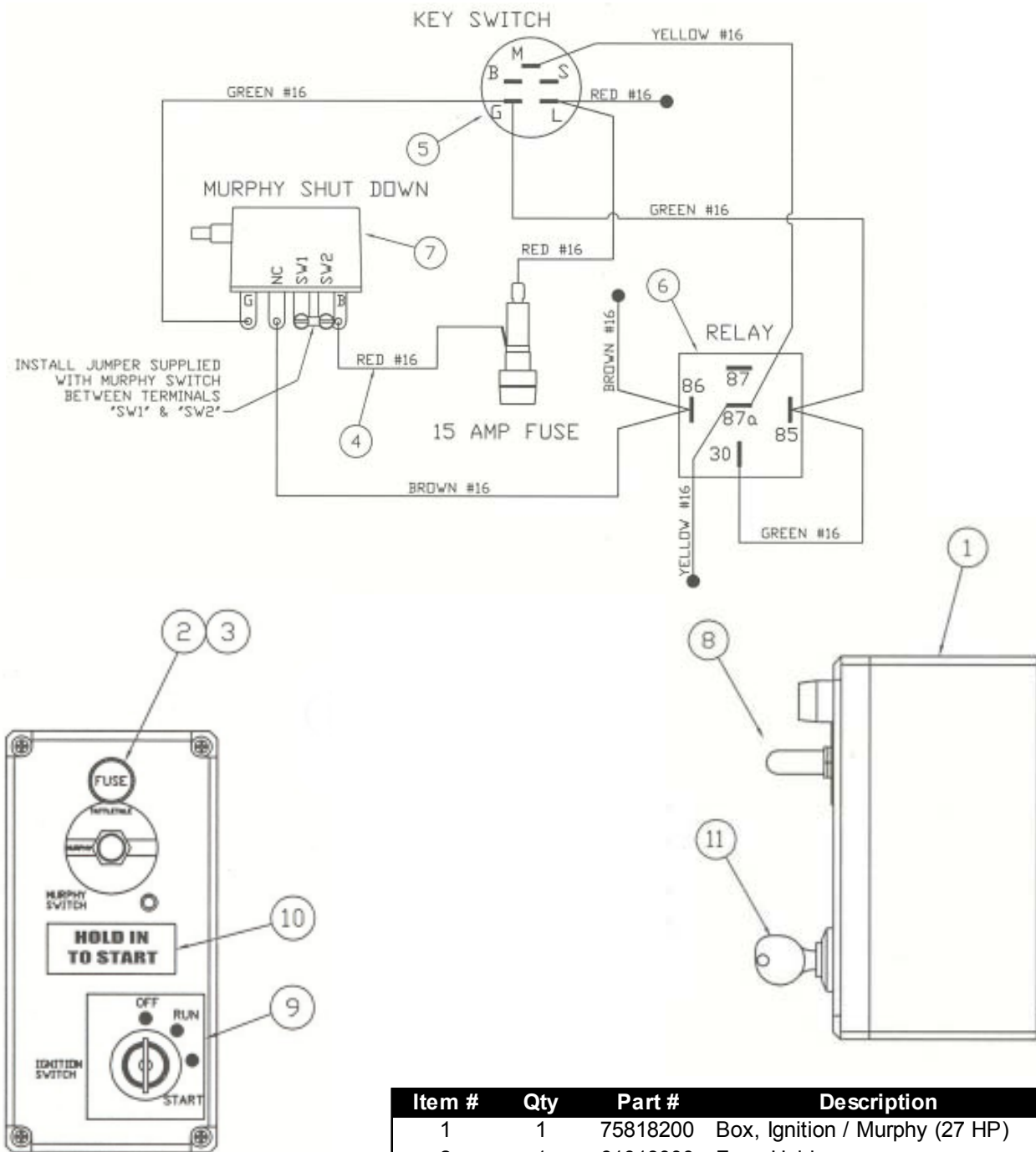
75818000



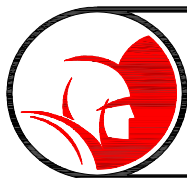
Item #	Qty	Part #	Description
1	1	75816700	Pump, Fuel Electric Kawasaki
2	1	75817300	Tank, Coolant-Kawasaki
3	1	75824000	Starter, 27 HP Kawasaki
4	1	75824100	Fan, 27 HP Kawasaki
5	1	75825100	Shoud, Fan 27 HP
6	1	75826000	Radiator, 758 Jet 27 HP
7	1	75826500	Air Filter Element Kawa 27 HP
8	1	75826600	Outer Foam Element, Kawa 27 HP



758 Engine Control Box - 75818400

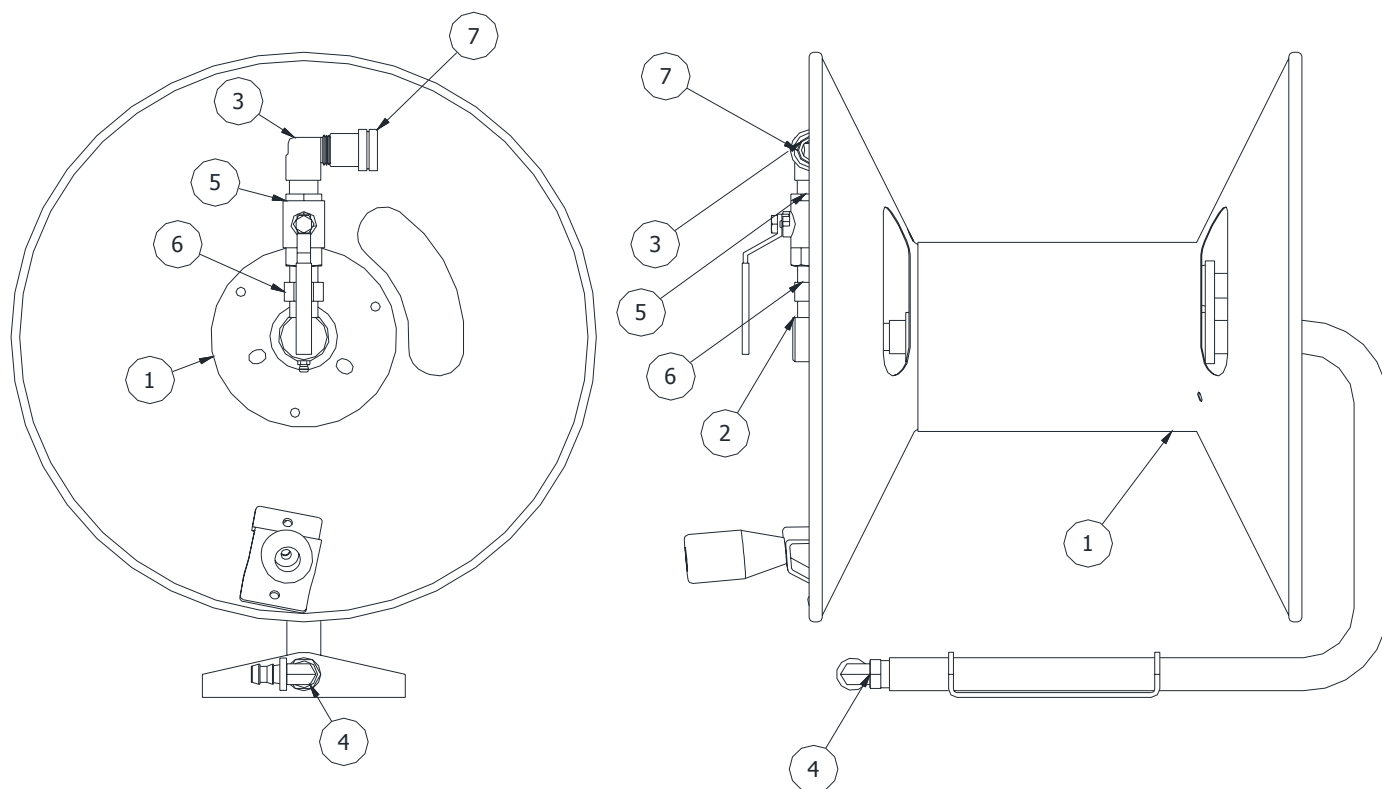


Item #	Qty	Part #	Description
1	1	75818200	Box, Ignition / Murphy (27 HP)
2	1	61018000	Fuse Holder
3	1	79850400	Fuse, 15 AMP
4	1	75810500	Wire Assy, Fuse - Murphy (Red)
5	1	75818300	Ignition Switch
6	1	75823600	Relay
7	1	75815800	Switch, Murphy Shutdown
8	1	75823700	Dust Boot
9	1	75818600	Decal, Key Switch
10	1	75814100	Decal, Hold In To Start
11	1	75815927	Ignition Key
12	1	75822700	Wiring Assy, Relay / Ignition

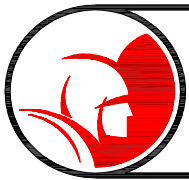


Assy, Com Fill Reel

74027000



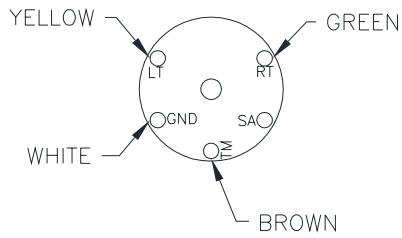
Item #	Qty	Part #	Description
1	1	72727500	REEL, HP HOSE
2	1	79962100	SWIVEL, HP REEL 1/2"
3	1	79904464	ST EL 90D 1/2NPT BRASS
4	1	79904478	EL 90D 1/2 NPT-BARB BRASS
5	1	72704800	VALVE, BALL 1/2M X 1/2F
6	1	77770800	NIPPLE, HEX 1/2 NPT
7	1	75867040	ADAPTER, 3/4 FGHT-1/2 FNPT



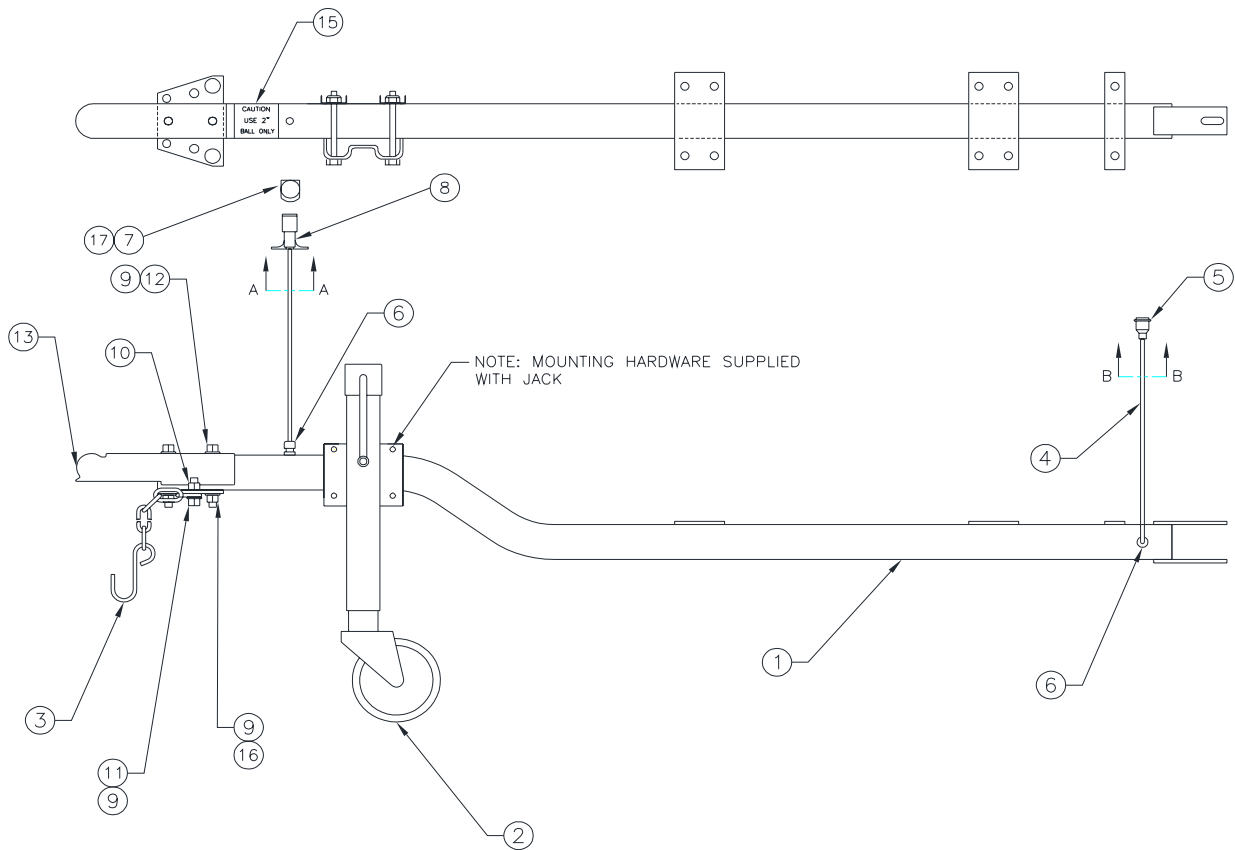
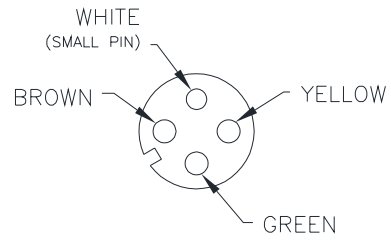
Hitch Tube Assembly - 73806800

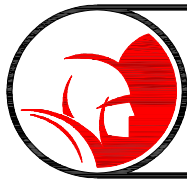


VIEW A-A



VIEW B-B

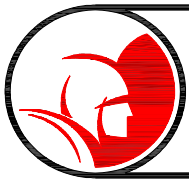




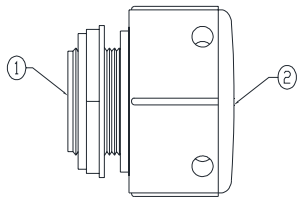
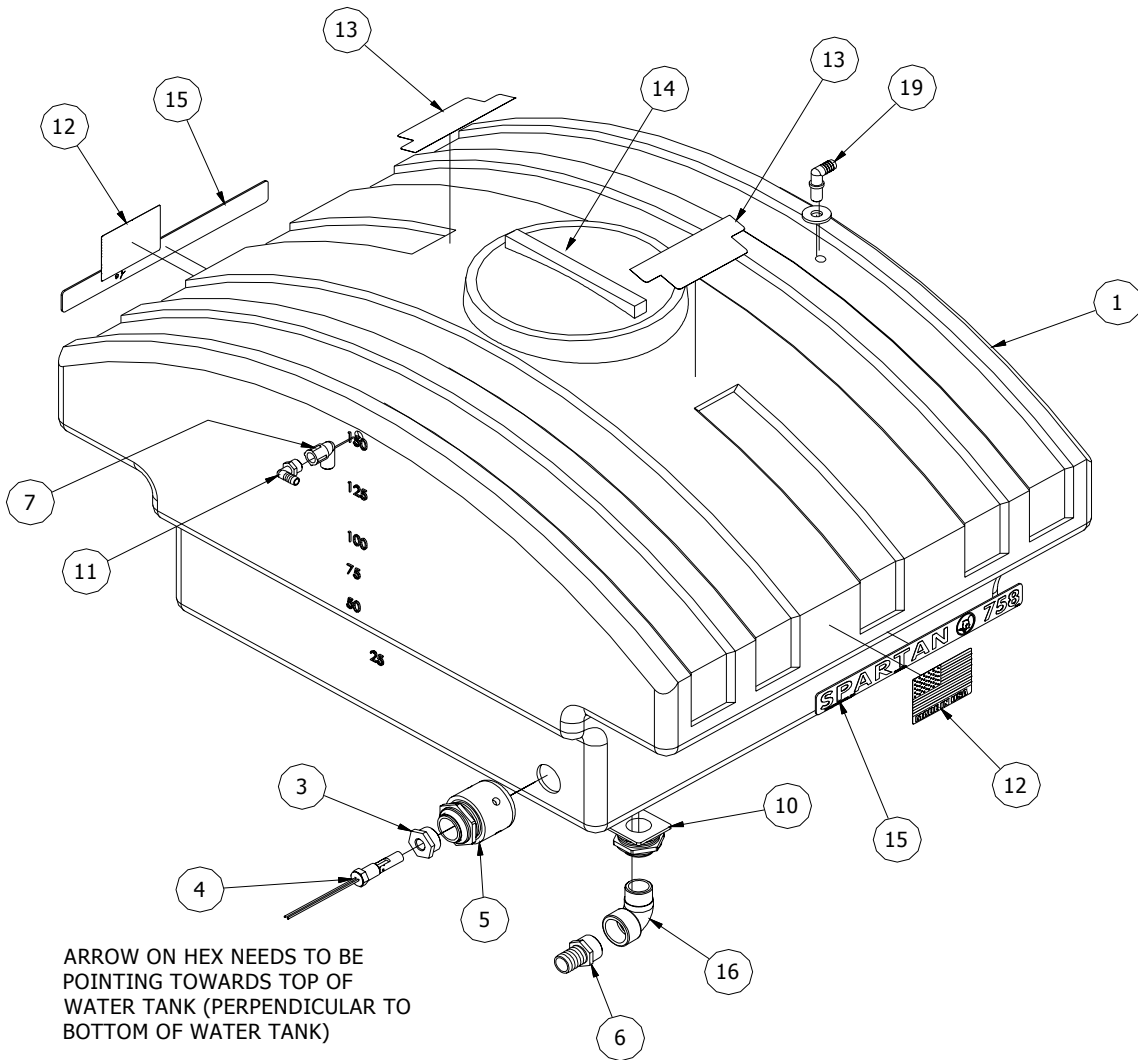
Hitch Tube Assembly (cont.)



Item				
No	Qty	Part No	Description	
1	1	73808700	Weldment, Hitch Tube	
2	1	73852800	Assy., Jack	
3	2	79960000	Chain, Safety	
4	10.5'	77731500	Wire, Trailer Primary Jacketed	
5	1	77731600	Connector, Plug Set	
6	2	77764200	Grip, Cord	
7	1	44036500	Trailer Connector, Vehicle End	
8	1	44055000	Trailer Connector, Trailer End	
9	6	73826900	Washer, 1/2" Flat High Strength	
10	2	77744800	Locknut, 1/2-13 Stover	
11	2	77745800	Screw, Hex HD Cap 1/2-13 x 1/4	
12	2	73808800	Bolt, 1/2-20 x 4"	
13	1	73803300	Tongue Coupler 2-1/2" Sq.	
15	1	77749500	Decal, 2" Ball Only	
16	2	77769300	Lock-Nut 1/2-20 UNF	
17	1	77770900	Rubber Boot (Not Shown) for Item 7	



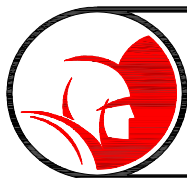
758 Water Tank Assembly - 75813400



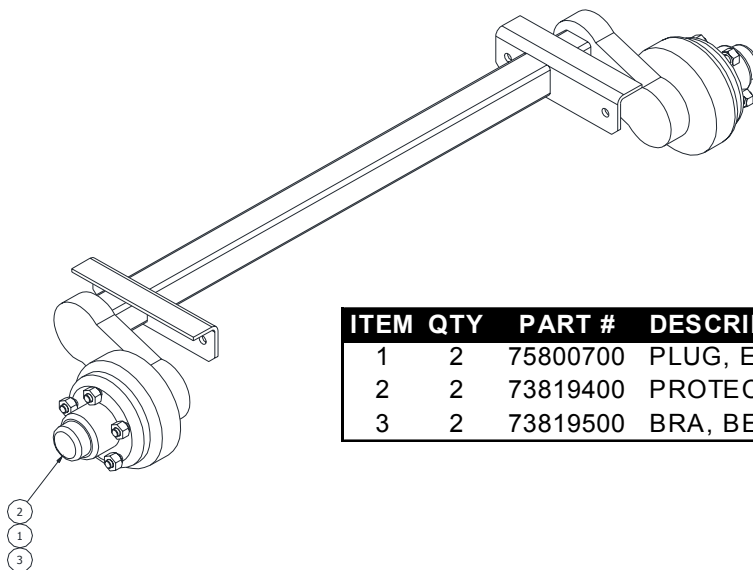
Item 5 (73827800) Bulk head Fitting

Item	Qty	Part #	Description
1	1	73827700	Bulkhead Fitting, 1-1/4
2	1	73827500	Cap, PVC 2-1/12 NPT

Item	Qty	Part #	Description
1	1	73801800	Water Tank w/ holes
3	1	73827600	Bushing, Reducer 1 1/4 x 1/2
4	1	75823200	Switch, Liquid Level (Compac) x
5	1	73827800	Bulkhead Fitting
6	1	79812000	Barb, Hose 1 1/4
7	1	73818000	Elbow, 90 Street 1/2NPT
10	1	79818500	Bulkhead Fitting 1 1/4
11	1	75811700	Elbow, 90 Deg Hose Barb 1/2
12	2	73817400	USA Label
13	2	75800100	Decal, Spartan 758
14	1	73817600	Water Tank Cover
15	2	75826100	Decal, 758 Water Tank
16	1	79811300	Elbow, 90 Street 1 1/4 Poly
19	1	75811700	Elbow, 90 Deg Hose Barb 1/2



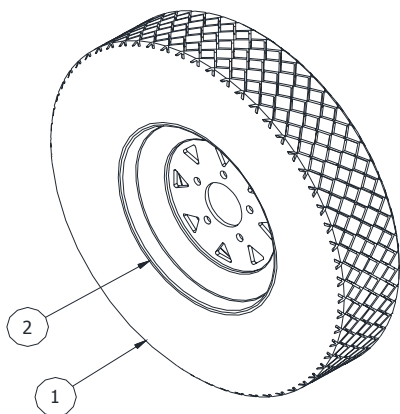
Axle-2300 LB 73804300



ITEM	QTY	PART #	DESCRIPTION
1	2	75800700	PLUG, EZ LUBE
2	2	73819400	PROTECTOR, BEARING
3	2	73819500	BRA, BEARING PROTECTOR



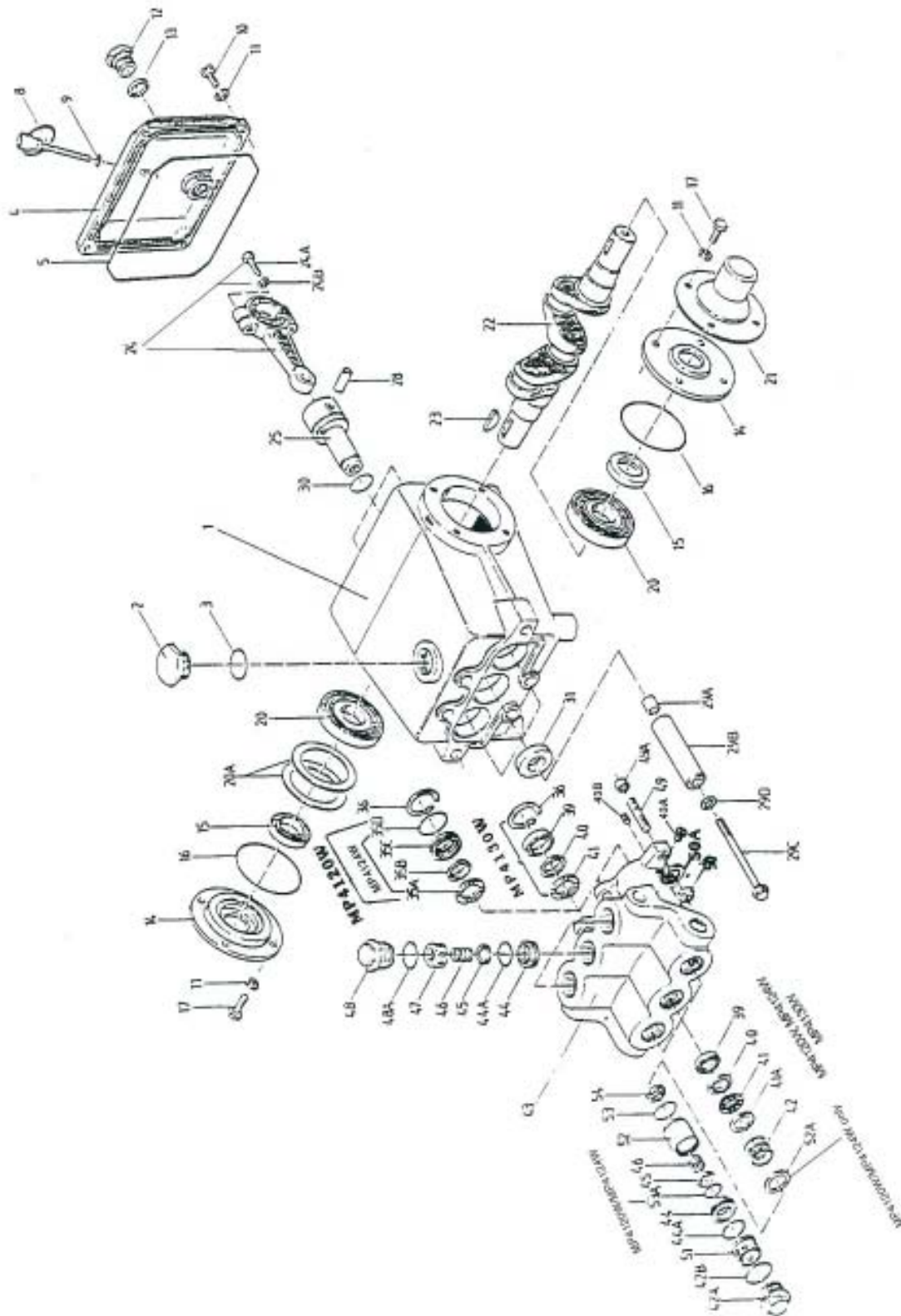
Assy, Tire & Wheel 73803700

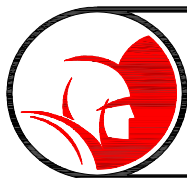


ITEM	QTY	PART #	DESCRIPTION
1	1	73803500	TIRE, 13" RADIAL-REPAIR PART
2	1	73803600	WHEEL, 13 X 4-1/2- REPAIR PART



758 Pump - Exploded View





758 Pump Parts List



Part			
Item	Qty	Number	Description
1	1	75800505	Crankcase
2	1	75800506	Oil Filler Cap
3	1	75800507	O-Ring, Filler Cap
4	1	75800508	Cover, Crankcase
5	1	75800509	O-Ring, Crankcase Cover
8	1	75800510	Oil Dip Stick
9	1	75800511	O-Ring, Dip Stick
10	4	75800512	Screw, Crankcase Cover
11	12	75800513	Spring Washer
12	1	75800514	Oil Drain Plug
13	1	75800515	Gasket, Oil Drain Plug
14	2	75800516	Bearing Cover
15	2	75800517	Seal, Crankshaft
16	2	75800518	O-Ring, Bearing Cover
17	8	75800519	Hex Screw, Bearing Cover
20	2	75800520	Rolling Bearing, Tapered
20A	3	75800521	Shim
21	1	75800522	Shaft Protector
22	1	75800523	Crankshaft
23	1	75800524	Key
24	3	75800525	Connecting Rod
24A&B	6	75800526	Hex Screw w/Washer
25	3	75800527	Crosshead Complete
28	3	75800528	Crosshead Pin
29A	3	75800529	Centering Sleeve
29B	3	75800530	Ceramic Plunger, 24mm
29C	3	75800531	Bolt, Sold only w/#07258
29D	3	75800532	Seal Washer
30	3	75800533	Flinger
31	3	75800534	Crankcase Oil Seal

Part			
Item	Qty	Number	Description
35A	3	75800535	Rear Support Ring
35B	3	75800536	Rear V-Sleeve
35C	3	75800537	Rear Pressure Ring
36	3	75800538	Snap Ring
39	3	75800539	Pressure Ring
40	3	75800540	V-Sleeve
41	3	75800541	Support Ring
41A	3	75800542	Spacer
42	3	75800543	Tension Spring
42A	3	75800544	Tension Plug
42B	3	75800545	O-Ring
43	1	75800546	Manifold Head
43A	2	75800547	Plug
43B	2	75800548	Plug
44	3	75800549	Valve Seat
44A	3	75800550	O-Ring, Valve Seat
45	3	75800551	Valve Plate
46	3	75800552	Valve Spring
47	3	75800553	Spring Retainer, Discharge
48	3	75800554	Plug, SS
48A	3	75800555	O-Ring Plug
49	6	75800556	Stud, Manifold
49A	2	75800557	Shim, Stud
50	3	75800558	Nut, Manifold Stud
50A	6	75800559	Spring Washer
51	6	75800560	Spacer
52	3	75800561	Valve Housing
52A	3	75800562	Spacer Ring
53	3	75800563	O-Ring
53A	3	75800564	O-Ring
54	3	75800565	Spring Retainer, Inlet

Plunger Packing Kit (75800566)

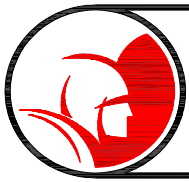
Item	Qty	Part Number	Description
40	3	75800540	V-Sleeve
35B	3	75800536	Rear V-Sleeve

Discharge Valve Assy. Kit (75800568)

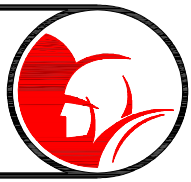
Item	Qty	Part Number	Description
48A	3	75800555	O-Ring, Plug
47	3	75800553	Spring Retainer
46	3	75800552	Valve Spring
44A	3	75800550	O-Ring
44	3	75800549	Valve Seat
45	3	75800551	Valve Plate

Inlet Valve Assy. Kit (75800567)

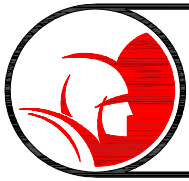
Item	Qty	Part Number	Description
42B	3	75800545	O-Ring Tension Plug
44A	3	75800550	O-Ring, Valve-Seat
44	3	75800549	Valve Seat
53A	3	75800564	O-Ring
45	3	75800551	Valve Plate
46	3	75800552	Valve Spring
53	3	75800563	O-Ring
54	3	75800565	Spring Retainer



758 Pump Torque Specifications



Item #	Part #	Description	Torque Amount
17	75800519	Hex Screw, Bearing Cover	125 in. - lbs.
24A	75800526	Hex Screw, connecting Rod	250 in. - lbs.
29C	75800531	Bolt, Plunger	300 in. - lbs.
50	75800558	Nut, Manifold Stud	700 in. - lbs.



758 Pump Repair Kits



Discharge Valve Assy. Kit (75800568)

Item	Qty	Part Number	Description
48A	3	75800555	O-Ring, Plug
47	3	75800553	Spring Retainer
46	3	75800552	Valve Spring
44A	3	75800550	O-Ring
44	3	75800549	Valve Seat
45	3	75800551	Valve Plate

Inlet Valve Assy. Kit (75800567)

Item	Qty	Part Number	Description
42B	3	75800545	O-Ring Tension Plug
44A	3	75800550	O-Ring, Valve-Seat
44	3	75800549	Valve Seat
53A	3	75800564	O-Ring
45	3	75800551	Valve Plate
46	3	75800552	Valve Spring
53	3	75800563	O-Ring
54	3	75800565	Spring Retainer

Plunger Packing Kits (75800566)

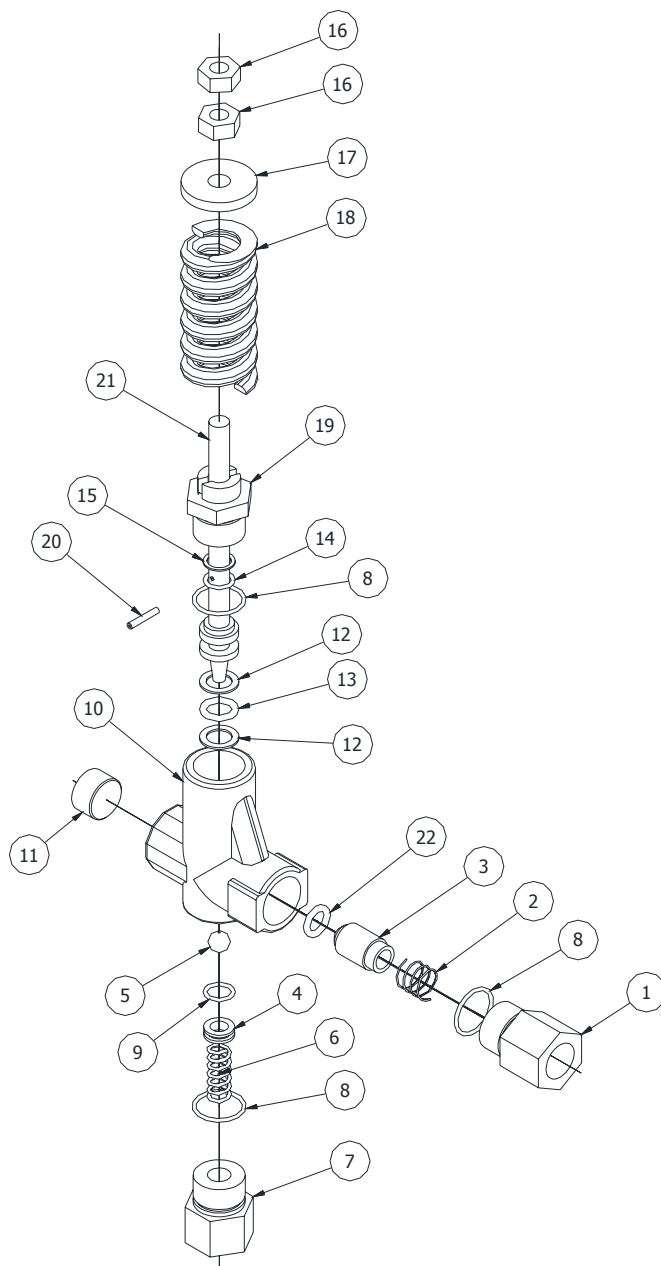
Item	Qty	Part Number	Description
40	3	75800540	V-Sleeve
35B	3	75800536	Rear V-Sleeve



Unloader - 75802800



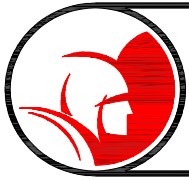
Item #	Qty	Part #	Description
1	1	75802801	Connection
2	1	75802802	Spring
3	1	75802803	Piston Housing
4	1	75802804	Seat
5	1	75802805	Ball
6	1	75802806	Spring
7	1	75802807	Inlet Fitting
8	3	75802808	O-Ring
9	1	75802809	O-Ring
10	1	75802810	Valve Housing
11	1	75802811	Plug
12	2	75802812	Back Ring
13	1	75802813	O-Ring
14	1	75802814	O-Ring
15	1	75802815	Back Ring
16	2	75802816	Nut
17	1	75802817	Spring Guide
18	1	75802818	Spring
19	1	75802819	Piston Housing
20	1	75802820	Pin
21	1	75802821	Piston
22	1	75802822	O-Ring



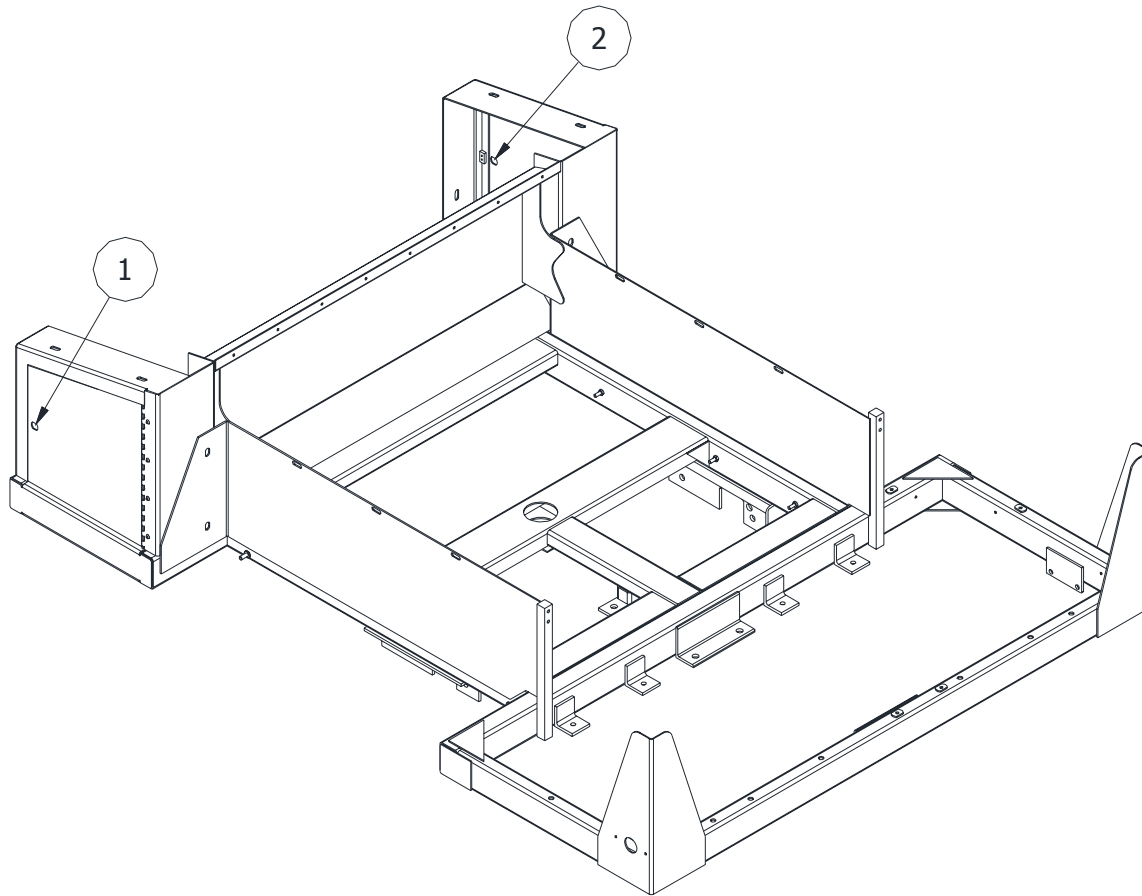
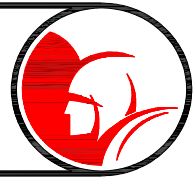
Unloader Repair Kit 75802823

Item #	Qty	Part #	Description
4	1	75802804	Seat
5	1	75802805	Ball
8	3	75802808	O-Ring
9	1	75802809	O-Ring
12	2	75802812	Back Ring
13	1	75802813	O-Ring
14	1	75802814	O-Ring
15	1	75802815	Back Ring
22	1	75802822	O-Ring

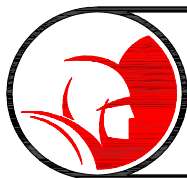
NOTE: Always remember to generously lubricate all moving parts with a light weight oil for easy reassembly and to give the moving parts protection when “running in” the unloader.



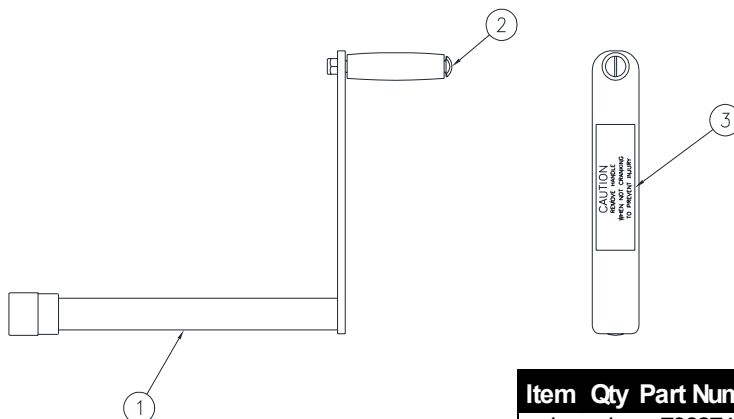
Weldment, Frame 740231000



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	73806100	Weldment, Door (R.H.)
2	1	73806000	Weldment, Door (L.H.)



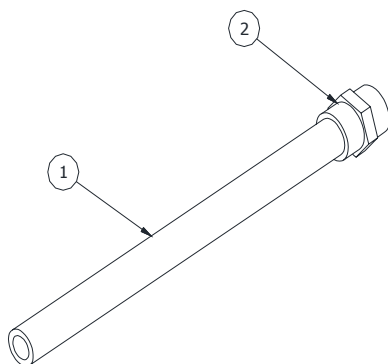
Assy, Hand Crank 79827300



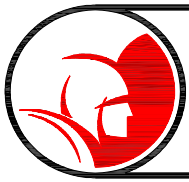
Item	Qty	Part Number	Description
1	1	79827400	Weldment, Hand Crank
2	1	79827800	Plastic Handle w/Bolt & Nut
3	1	77763500	Decal, Crank



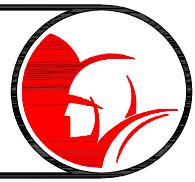
Assembly, 3/8" Anti-Turn Around 75866500



Item	Qty	Part Number	Description
1	1	75866510	Nipple, 3/8" x 9" Long
2	1	73818400	Coupler, Female 3/8 Hose



758 Decal Package - 75814400



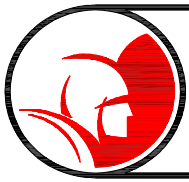
Item #	Qty	Part #	Description
1	1	72706400	Decal, Untrained Personnel
2	2	77763500	Decal, Crank
3	1	77740300	Decal, Clamp
4	1	77749500	Decal, Hitch Coupler
5	1	77766300	Label, Danger "No Smoking"
6	4	75800100	Decal, Spartan 758
7	2	77739800	Decal, Caution Rear Reel
8	1	77739900	Decal, Warning Rear
9	1	75815400	Decal, Spartan
10	1	72707800	Decal, Warning HP Jet
11	1	73817800	Decal, "On" "Off"
12	1	75800200	Decal, Disengage/Engage
13	2	73817400	USA Label
14	1	75814100	Decal, Hold in to Start
15	1	75814200	Decal, Hose In
16	1	75815100	Decal, Gasoline Only
17	1	75814300	Decal, Spartan 758
18	1	75813900	Decal, Choke
19	1	75814000	Decal, Throttle
20	1	58546301	Decal, Battery
21	1	73817200	Decal, Caution



758 Accessories



Part #	Description
75800900	Nozzle, Open
75800800	Nozzle, Closed
77724000	Reducer 1/2 x 3/8
73808600	3/8 x 250 ft. Hose
73808601	3/8 x 75 ft. Hose
73808602	3/8 x 150 ft. Hose
73808603	3/8 x 350 ft. Hose
77708600	1/4 x 33 ft. Hose
77719400	1/4 x 50 ft. Hose
77719500	1/4 x 75 ft. Hose
77708700	1/4 x 100 ft. Hose
73816800	Mobile Hose Reel
73820500	Grenade Nozzle
73700100	Rocket Nozzle
75700200	Q-Nozzle
73700300	Rotary Nozzle
77721800	0° Nozzle Lance
71701700	Hose S.S. Trap 50'
71701800	Hose S.S. Trap 75'
71702900	Hose S.S. Trap 100'
71701900	Jet Head Brass Ball 1-1/4" Dia x 1/8 NPT
71701901	Jet Head Brass Ball 1" Dia x 1/8 NPT
73817300	Wash Down Accessory Kit Includes *Items
*77799800	<i>Hand gun Lance Vari-Nozzle Assembly</i>
*77721400	<i>Coupler, Quick Gun, Male</i>
*77719401	<i>1/4 x 50 ft. Hose</i>
*77701401	<i>1/4" Nozzle Domed</i>
*73816500	<i>Swivel Adapter, 3/8 Male to 3/8 Female</i>
34/3-1	3" - Model 34 Root Cutter
34/3-2	4" - Model 34 Root Cutter
34003701	Root Cutter Adaptor Hose
44237200	Model 468 Root Cutter & Toolbox (* accessories included w/ 468 Rootcutter)
Model 468 Accessories	
*44236800	4" Tri-Blade Cutter
*44236900	6" Tri-Blade Cutter
*44237000	8" Tri-Blade Cutter
44260500	10" Tri-Blade Cutter
*44235100	4" Operating Skid
*44235200	6" Operating Skid
*44235300	8" Operating Skid
44260600	10" Operating Skid
*44236000	Installation Hardware
34003701	Leader Hose (Highly Recommended)



Tire Safety Information



This portion of the User's Manual contains tire safety information as required by 49 CFR 575.6.

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire Safety, as required by CFR 575.6. It can be obtained and downloaded from NHTSA, free of charge, from the following web site:

http://www.nhtsa.dot.gov/cars/rules/TireSafety/ridesonit/tires_index.html


Tire Safety Terminology Glossary

- **Cold tire inflation pressure** - The pressure in the tire before you drive.
- **Gross Axle Weight Rating (GAWR)** - The maximum weight that any axle can support, as published on the Certification / VIN label on the front left side of the trailer. Actual weight determined by weighing each axle on a public scale, with the trailer attached to the towing vehicle.
- **Gross Vehicle Weight Rating (GVWR)**- The maximum weight of the fully loaded trailer, as published on the Certification / VIN label. Actual weight determined by weighing trailer on a public scale, without being attached to the towing vehicle.
- **Load rating** - The maximum load that a tire is rated to carry for a given inflation pressure.
- **Maximum load rating** - The load rating for a tire at the maximum permissible inflation pressure for that tire.
- **Maximum permissible inflation pressure** - The maximum cold inflation pressure to which a tire may be inflated.
- **Outer diameter** - The overall diameter of an inflated new tire.
- **Recommended inflation pressure** - The inflation pressure provided by the vehicle manufacturer on the Tire Information label and the Certification/VIN tag.
- **Rim** - A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.
- **Vehicle maximum load on the tire** - The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.

Tire Information Placard

The Spartan Trailer Jet Federal Certification/VIN label is located on the forward half of the left (road) side of the unit. The VIN label will identify the units GVWR and GAWR.

The Spartan Trailer Jet's Tire Information Placard can be located adjacent to the trailer's VIN (Certification) label at the left front of the trailer. The placard includes the tire size, cold tire inflation pressure, and load limitations. The load limitation statement will give an indication of the maximum cargo capacity. Any items (cargo) added to the trailer must not cause the total weight to exceed the stated GVWR.

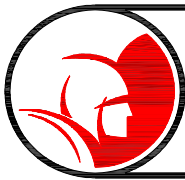


TIRE AND LOADING INFORMATION

The weight of cargo should never exceed 578 kg. or 1275 lbs.

TIRE	SIZE	COLD TIRE PRESSURE
FRONT	ST175-80-R13	344 KPA (50 PSI)
REAR	NONE	
SPARE	NONE	

**SEE OWNER'S
MANUAL FOR
ADDITIONAL
INFORMATION**



Tire Safety Information



Steps for Determining Correct Load Limit

- Locate the statement “The weight of cargo should never exceed 578 kg or 1275 lbs” on your tire information placard.
- This figure equals the available amount of cargo and luggage load capacity.
- Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

General Tire Information

- Tire inflation pressure is the level of air in the tire that provides the load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure a tire requires to be properly inflated. Since tires are designed to be used on more than one type of vehicle, tire manufacturers list the “maximum permissible inflation pressure” on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.
- Improper inflation is the main cause of tire failure. Excessive loads and/or under inflation cause tire overloading, which leads to abnormal tire flexing. Check the cold tire inflation pressures at least once a week for proper inflation levels.
 - o The proper air pressure may be found on the Certification/VIN label and/or the Tire Information placard.
- High speed towing in hot conditions degrades the life of the tires. The internal heat generated from high speeds breaks down the tire’s internal structure. It is recommended to drive at moderate speeds.
- If the trailer is stored for an extended period of time, the tires should be fully inflated to the maximum rated pressure. The trailer jet should be stored in a cool, dry place. Use tire covers to protect the trailer tires from the harsh effects of the sun.

Tire Maintenance

Checking Tire Pressure

- The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper PSI when a tire is cold. A cold tire is one that has not been driven on for at least three hours. Since driving raises the tires temperature, the internal air pressure also increases. To prevent inflated tire readings, the tire must be measured when cold.

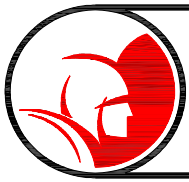
Maintaining Proper Tire Pressure

- a. Locate the recommended tire pressure on the vehicle’s tire information placard, certification label, or in the owner’s manual.
- b. Record the tire pressure of all tires.
- c. If the tire pressure is too high in any tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until the correct pressure is reached.
- d. If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. Add the missing pounds of air pressure to each tire that is under inflated.
- e. Check all the tires to make sure they have the same air pressure

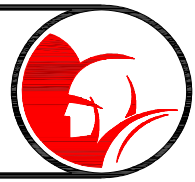
Note: If the tires are warm due to driving, but testing confirms under inflation, fill the tire to the recommended cold inflation pressure. While the tire may be slightly under inflated due to extra pressure in the warm tire, it is safer to drive a slightly under inflated tire than to drive a significantly under inflated tire. Since this is a temporary fix, the tire must be re-checked and adjusted once a cold reading can be obtained.

Tire Size and Tread

- Tires should be replaced when the tread is worn down 1/16 of an inch.
- Treadwear indicators on the bottom of the tire can be used as a guide. The indicators are raised sections spaced intermittently in the bottom of the tread grooves. If they appear even with the outside of the tread, the tire should be replaced.
- Replacement tires should be the same size as the original tires. To prevent error and maintain safety, it is recommended that all replacement parts be purchased through Spartan Tool LLC.



Tire Safety Information

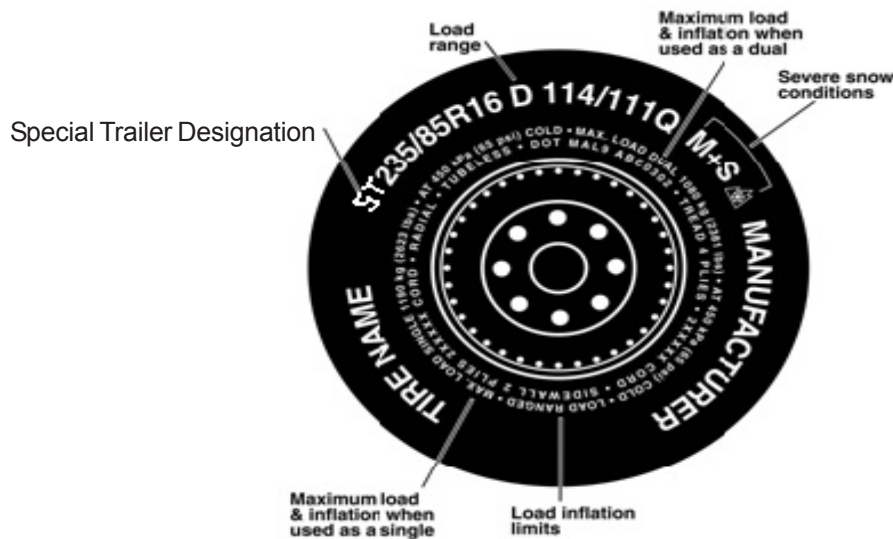


Tire Balance and Wheel Alignment

- Tires must be properly balanced to avoid vibrations and shaking of the trailer. A wheel alignment adjusts the angles of the wheels to position them correctly relative to the trailer's frame. Such adjustments can maximize the life of the tires, but should be performed by a qualified technician.

Tire Repair

- A punctured tire can be repaired by plugging the hole and patching the area that surrounds the puncture hole. A small puncture in the tire tread can be repaired, but punctures to the sidewall should not. Tires should be removed from the rim to be properly inspected before plugging.



Tire Fundamentals

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire. It also provides a tire identification number for safety standard certification and in case of a recall.

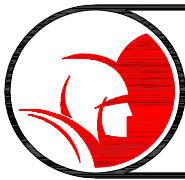
Tire Safety Tips

Preventing Tire Damage

- Slow down before driving over a pothole or other object in the road
- Do not run over curbs or other foreign objects in the roadway.

Tire Safety Checklist

- Check tire pressure regularly (at least once a month).
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure tire valves have valve caps.
- Check tire pressure before any long trips.
- Do not overload trailer. Check the Tire Information Placard for the maximum recommended trailer load.



Safety Information



Confirm that:

- The coupler is secure to the hitch and is locked,
- Electrical connections are made,
- There is appropriate slack in the safety chains,
- The tires are not visibly low on pressure, and the cargo is secure and in good condition.

Reporting Safety Defects

If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Spartan Tool LLC.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Spartan Tool LLC.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <http://www.safercar.gov>; or write to

Administrator
NHTSA
1200 New Jersey Avenue S.E.
Washington, DC 20590

You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

Spartan Tool LLC
1506 W. Division St.
Mendota, IL 61342



ONE YEAR WARRANTY



Spartan Tool warrants its equipment to be free from defects in material and workmanship for one year from the date of purchase. To obtain warranty service, a purchaser should notify Spartan Tool in writing, at the address provided below, within the warranty period, and Spartan Tool will direct where to take or send the equipment for service. If the defect is covered by the warranty, Spartan Tool will repair or replace, at its option, the defective equipment, without charge for labor or materials. (Freight and insurance are the purchaser's responsibility.)

This warranty is limited to the original retail purchaser and is not transferable. Spartan Tool assumes no responsibility for damage due to accident, neglect, abuse, tampering or misuse, nor damage from repairs or alterations by others. This warranty does not cover damage to the equipment resulting from the use of replacement parts other than Spartan Tool parts.

Spartan Tool's sole obligation and the original retail purchaser's exclusive remedy under this warranty shall be for repair or replacement as described above. ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL SPARTAN TOOL BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

SPARTAN TOOL L.L.C.
MENDOTA, ILLINOIS 61342

Spartan Tool L.L.C. reserves the right to make changes at any time, without notice, to specifications and models and also discontinue models. The right is also reserved to change specifications or parts at any time without incurring any obligation to equip same on models manufactured prior to the date of change.

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