



SPARTAN

738 Skid Mount Water Jet

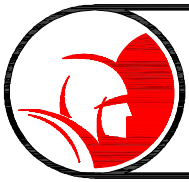
Owner's Manual

Record the Serial Number of your
Model 738 Skid Mount
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.

“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.”

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

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Model 738 Water Jet Specifications



General

— Pipe Sizes	Up to 12" in Diameter
— Max Water Delivery	12 GPM
— Max Pressure Delivery	2000 PSI

Skid Data

— Total Skid Weight with tank (Empty)	750 Lbs.
— Total Skid Weight without tank	590 Lbs.
— Total Skid Weight with tank (Full)	1550 Lbs.
— Tank Capacity	100 Gal.

Engine

— Horsepower	19 V-Twin
— Cylinders	2
— Bore & Stroke	2.96 x 2.99 Cu. In.
— Fuel	Gasoline
— Cooling	Air
— Oil Capacity (w/filter)	1.7 US Qt.
— Starter	Electric
— Alternator	13 Amp
— Battery	12 VDC

Pump

— Max Pressure	2000
— Max Water Output	12
— Max Temperature	140
— RPM	1425
— Plungers	3



Model 738 Water Jet Features



Features

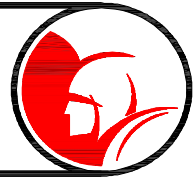
- 90° pivoting multi-position hose reel
- Equipped with 3/8" x 250' high pressure jetting hose
- Open and Closed nozzles for 3/8 inch hose
- Easily accessible pump inlet filter assembly
- Low water shut down protection
- 150' of 5/8 water supply hose
- Electric start engine
- Air purge system to protect against cold weather conditions
- Tool box
- Pig-tail style hose rewind guide
- 5-position nozzle holder
- Air purge system for cold weather protection
- 12-gallon fuel tank

Optional Features

- Venturi Pump
- Foot Pedal Valve
- Mobile Hose Reel
- Various Special Application Nozzles
- Wash Down Kit



Jet Applications Areas



There are a wide variety of uses for the Spartan Model 738 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, follow the steps below.



- 1.) Remove the 8 bolts that secure the jetter frame and the water tank frame to the crate.
- 2.) Position the unit inside your van or truck bed in a location that best fits your application.
- 3.) Secure the two units together by using the included (2) 3/8-16 x 4-1/2" screws, (4) 3/8 flat washers, and (2) 3/8-16 locking nuts.
- 4.) Next you'll want to plan out the exhaust routing and the frame mounting points. If required, use the flexible exhaust pipe (cut to length) and elbow supplied with this unit. Be sure to avoid any brake and fuel lines, fuel tank, spare tire mounts, etc. Once the desired position is achieved, mark the hole locations for the exhaust port and the frame mounts. (See Fig. 1)
- 5.) Using the skid mount frame holes as a guide, drill (8) 13/32 diameter holes through the floor of the vehicle.
- 6.) Place the (8) rubber pads between the frame and the vehicle floor and then secure the skid mount unit to the vehicle using the (8) 3/8-16 x 3" screws, (16) 3/8 flat washers, and (8) 3/8-16 locking nuts.
- 7.) Cut or drill an opening in the vehicle floor and mount the exhaust port. Use the supplied muffler clamps to secure the flexible pipe and elbow to the muffler.
- 8.) Remove the battery cover and connect the positive cable (red) to the positive post of the battery. Replace cover.
- 9.) Connect the fill hose and bypass hose to the water tank. No clamps required (See Fig. 2)
- 10.) Connect the water tank to the pump using the supply hose (short hose included with unit) and (2) hose clamps (included with unit) (See Fig. 3 on next page)
- 11.) Connect the low water switch. (See Fig. 4 on next page)



Fig. 1

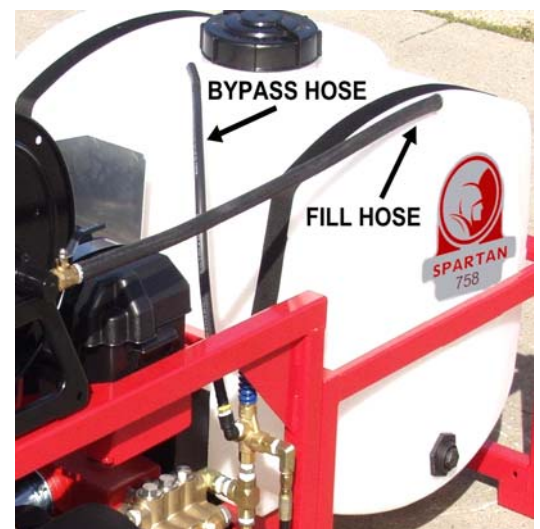
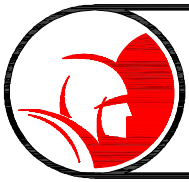


Fig. 2



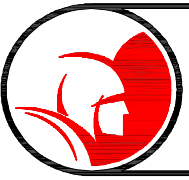
Uncrating and Prep



Fig. 3



Fig. 4



Pump and Pressure System



The pump and relief valve are the heart of your jet. They have been specially designed for use with cold water (140°F max.) 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 over 2000 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 2000 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 2000 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 (>33') the operating pressure can also be over 2000 psi at full gpm. Reducing engine rpm will produce lower pressures to prevent regulator valve from bypassing off and on. Continued operation at pressures over 2000 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. 4.)

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.

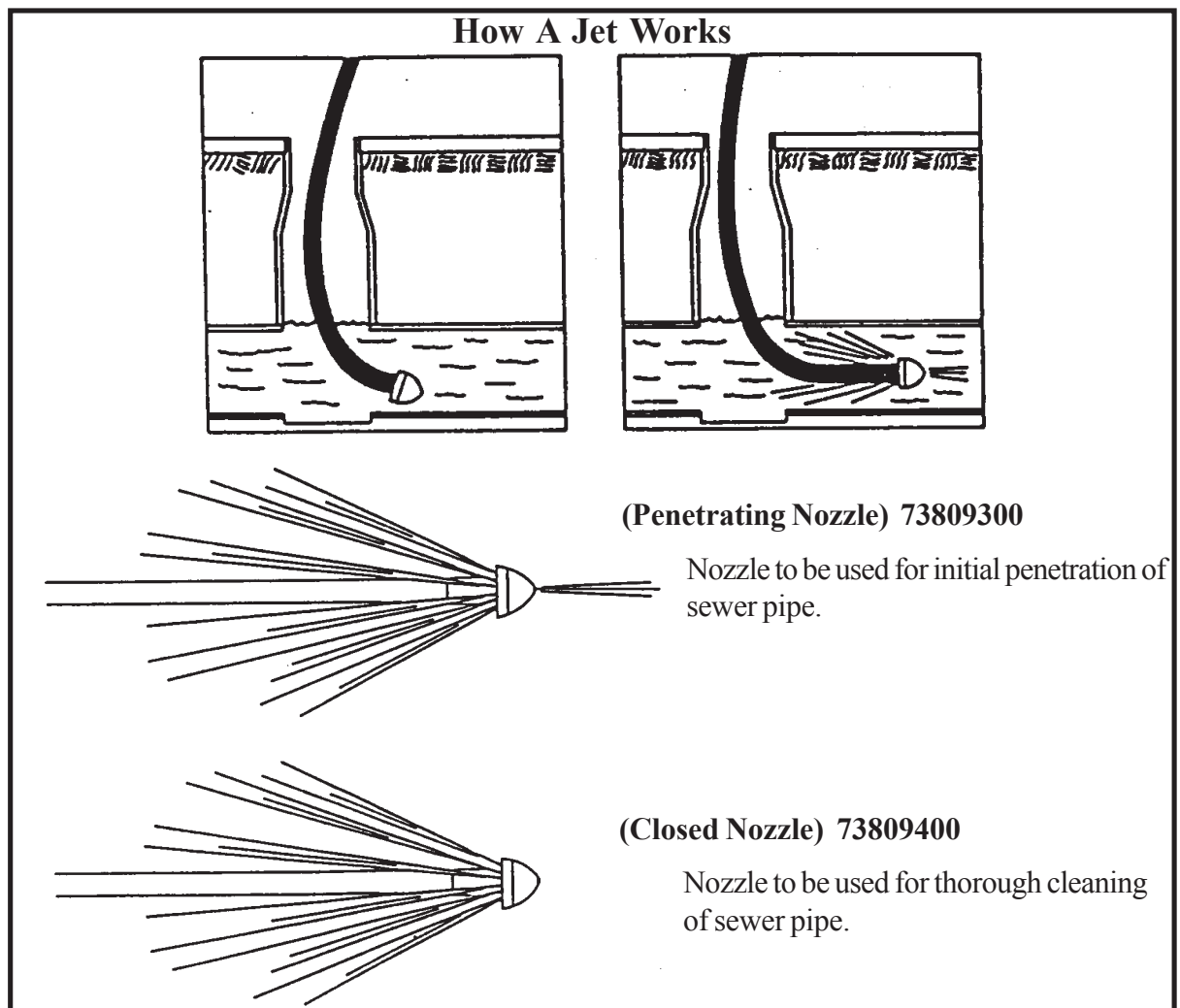


Fig. 4



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.



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 fuel valve **ON**.
- The hose reel valve may generally be placed on the **ON** (up) position during starting. However for manual start or marginal battery charge conditions place the hose reel valve in the **OFF** (down) position for ease of starting.
- Key-start the engine. Choke as necessary. Allow the engine to warm up at idle for 1 minute minimum.

Engine Shut-Down

- Turn the engine key switch **OFF**. (The engine key switch must be OFF when the engine is not running to avoid battery draining.)
- Turn the fuel valve OFF.



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 unit with the hose reel at the downhill side.



Warning: Unit must be level for low water shutdown to operate correctly. When unit is on an incline with the tank near empty, enough water can be held in the lower 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.

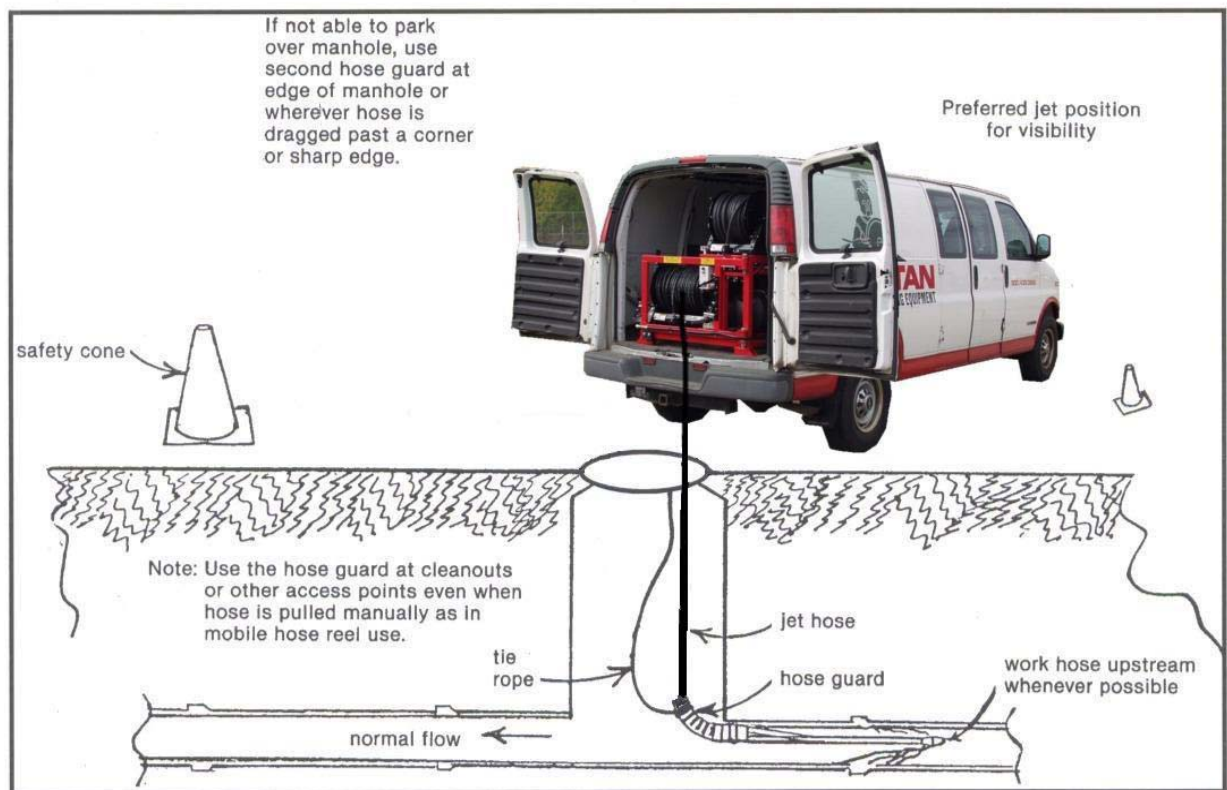


Fig. 5



Operating Instructions



Operation:

Release the **reel lock**. 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 738 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.



Operating Instructions (cont.)



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. Idle engine for 30 seconds before stopping engine.

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 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. 8 page 19.)
- 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 738 Skid Mounted Water Jet is capable of various high pressure cleaning, jetting pipes of 4" - 10" 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 wire or cord reinforcement can be seen because of a worn cover.

The Model 738 **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 "738 **Closed**" (73809400) and "738 **Open**" (73809300) are standard equipment. See parts book for part numbers to order additional nozzles and nozzle holders. 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. 8



Fig. 9

- When obstruction or corners are encountered it may be necessary to manually rotate the hose (See Fig. 8) 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. 9).



Wash Down Gun - 73817300 (Optional)

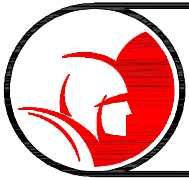


Note: To use wash-down gun do the following:

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

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 variable 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!*



1/4" Drain Hose - (Optional)



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 1750 psi. Adjust engine speed to reduce to desired pressure to avoid engine overheat.



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)



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.

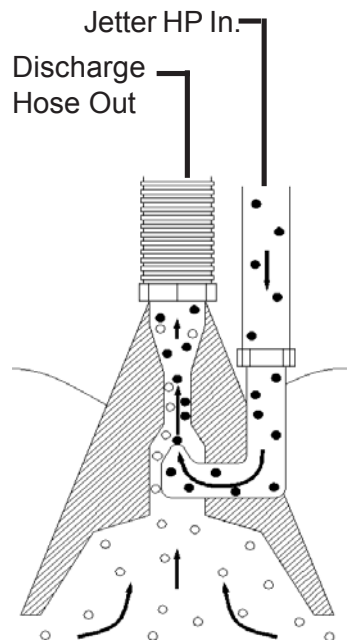


Fig. 9

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.



Maintenance



Pump	Change oil after the initial 50 hours and then every 500 hours or less thereafter, depending upon operating conditions. Use SAE 90 Gear Oil.
Engine	Follow maintenance instructions in the engine manual.
Hose	Hose should be replaced when braid is visible.
Battery	Check fluid every week or 10 hours and fill with distilled water if needed.



Cold Weather Protection



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

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

Method 1

- Connect air hose to blow out fitting located near the pump to purge air from the entire system.

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.

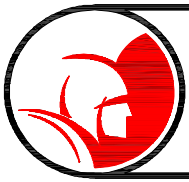
Note: Some anti-freeze mixture can be caught and reused, but will have to be strengthened as necessary for adequate protection.



738 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	Giant oil is recommended Adjust oil level to proper amount



Troubleshooting



Symptom	Possible Causes	Corrective Action
Engine will not run	Check fuel levels Check fuel valve Check water level	Fill fuel tank Turn fuel valve ON Fill water tank or check low water shut-down.
Low pressure or flow	Clogged inlet filter Jetting nozzle worn	Clean inlet filter element Check for wear or orifice of jetting nozzle, replace nozzle 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 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 Manual



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 serial number of your machine in the space provided below:

Spartan Model 738 Skid Mount

Serial 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.



Special Note

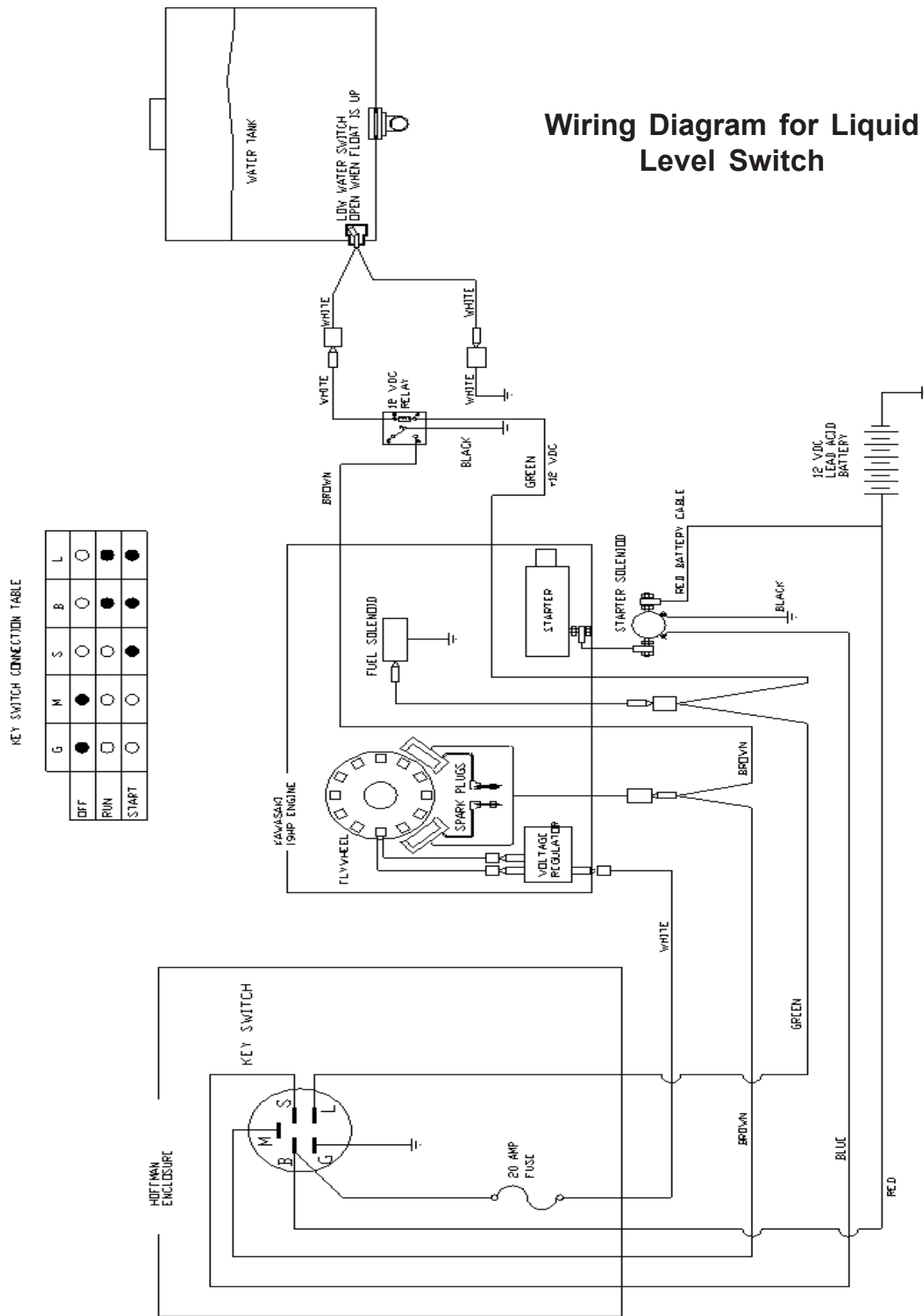


Though much of your Model 738 Skid Mount Jet is user serviceable, trained professional mechanics may be needed with pump, plumbing, engine, lights, hitch and axle experience.

- Engine repair is best performed by your local engine 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 2000 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).

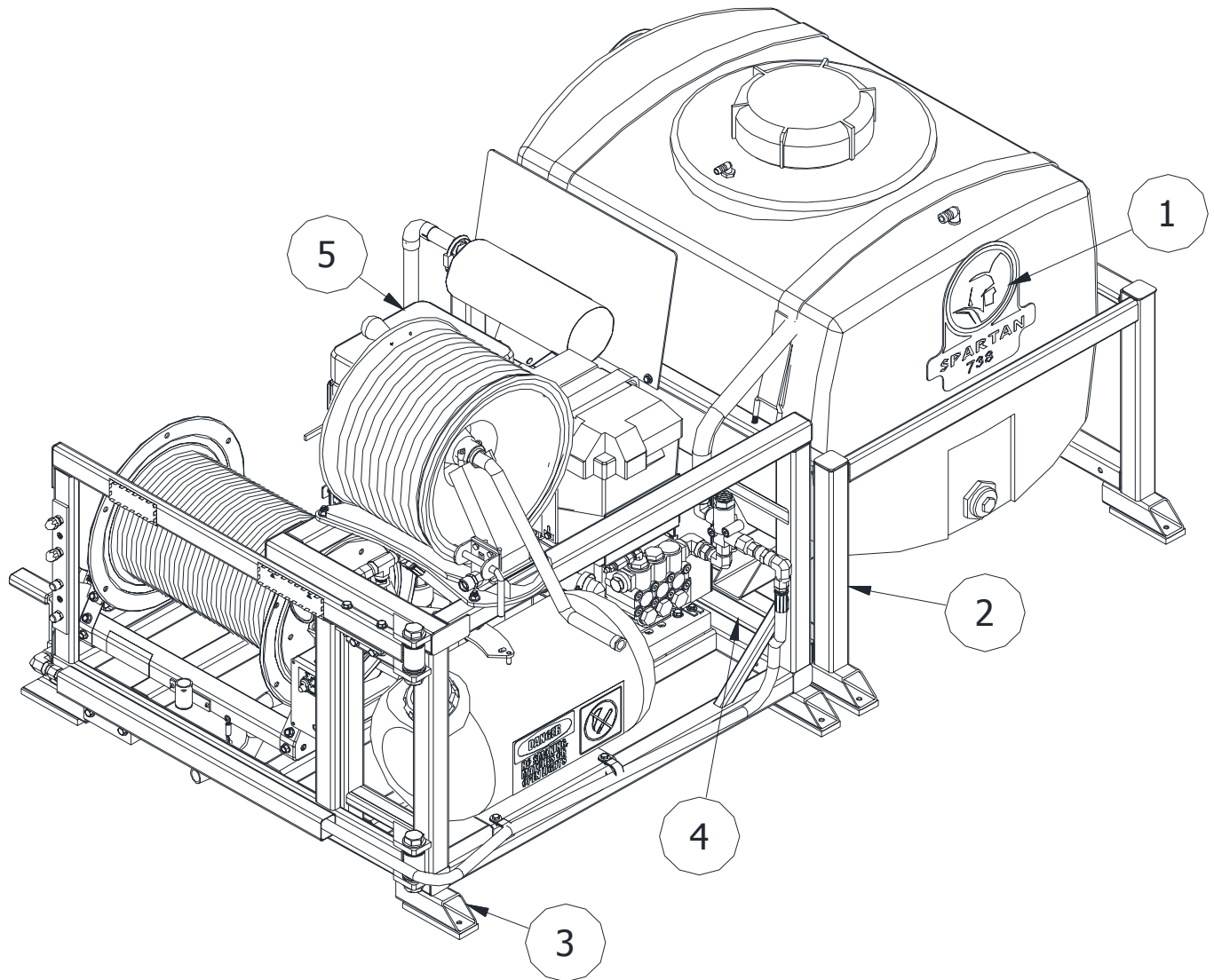


Wiring Diagram





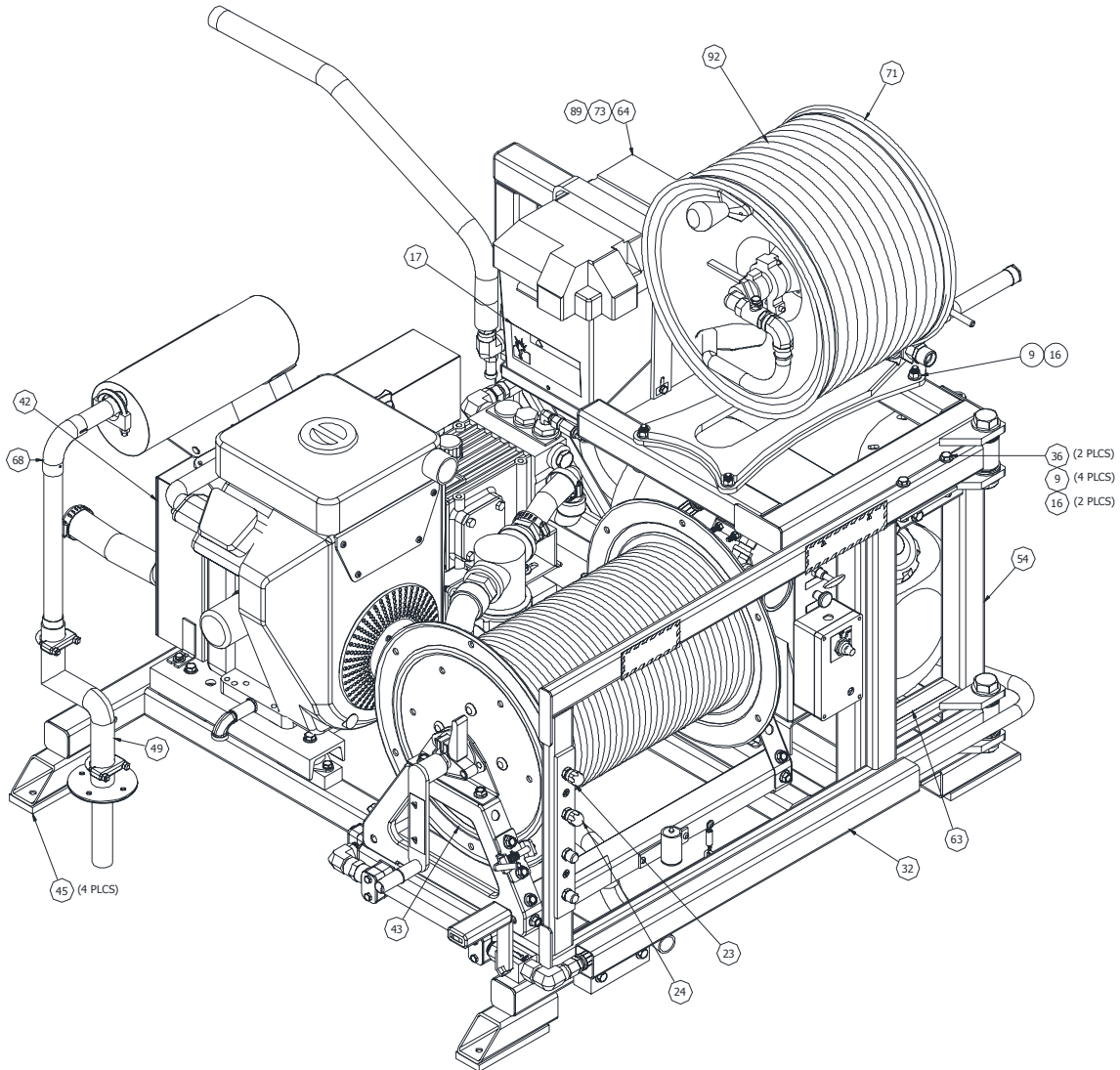
Assy, 738 Skid Mount w/Tank 738000SM



Item	Qty	Part #	Description
1	2	73817100	DECAL, SPARTAN 738
2	1	73829500	ASSY, WATER TANK W/ FRAME
3	1	73832000	ASSY, 738 SKID MOUNT
4	1	73832800	ASSY, 738 SKID MOUNT SPACER
5	2	75819900	STRIP, MUFFLER SUPPORT

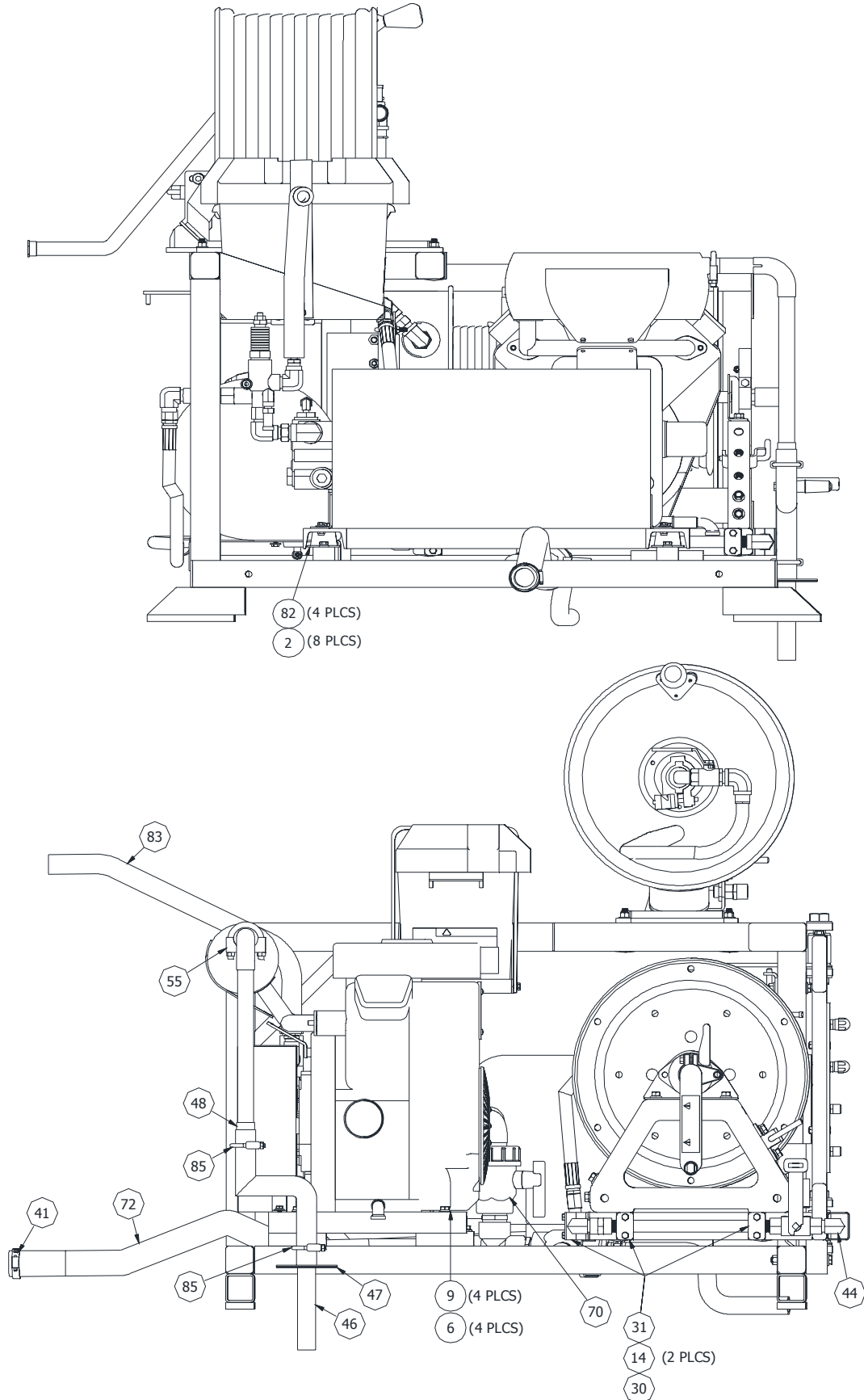


Assy, 738 Skid Mount 73832000



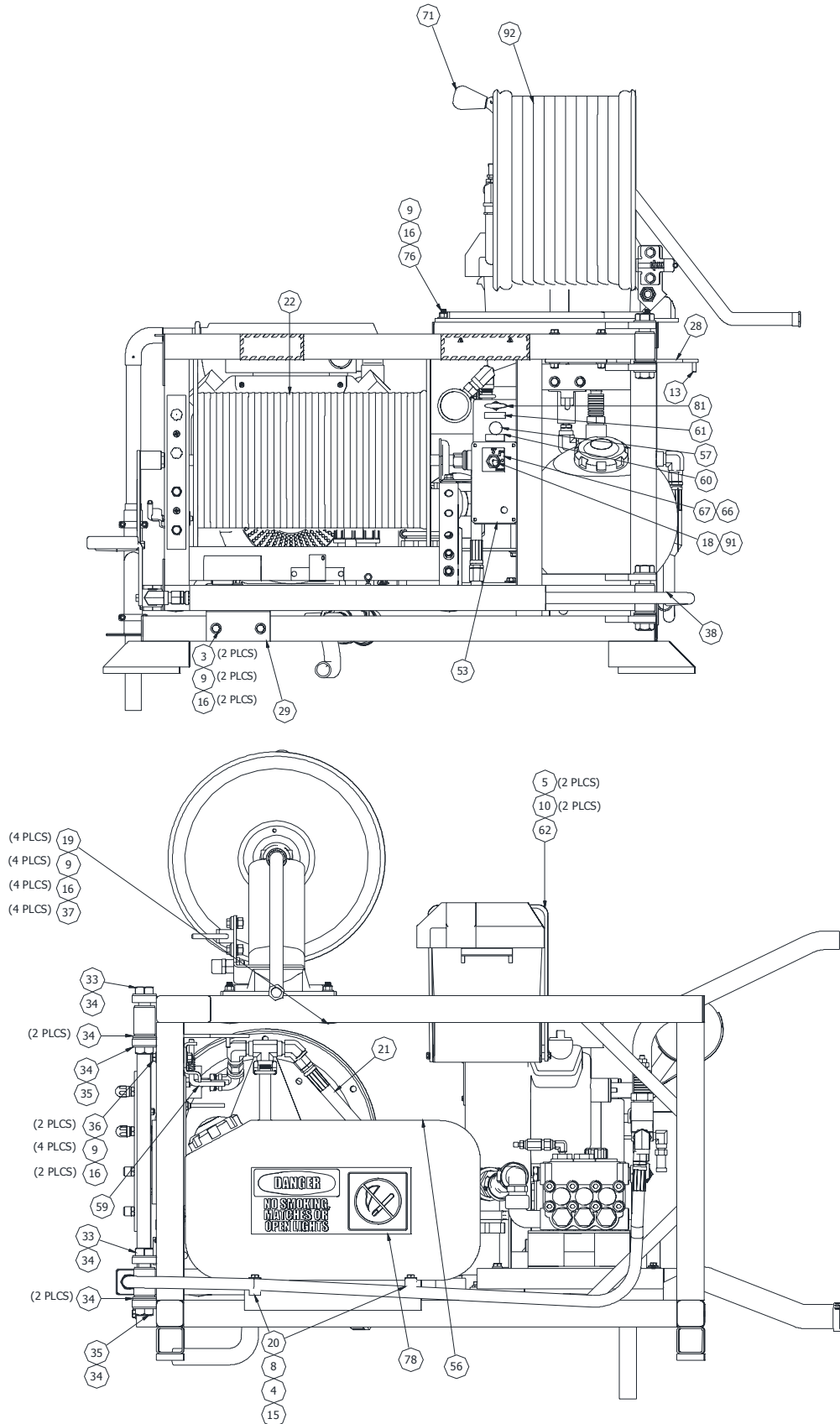


Assy, 738 Skid Mount 73832000



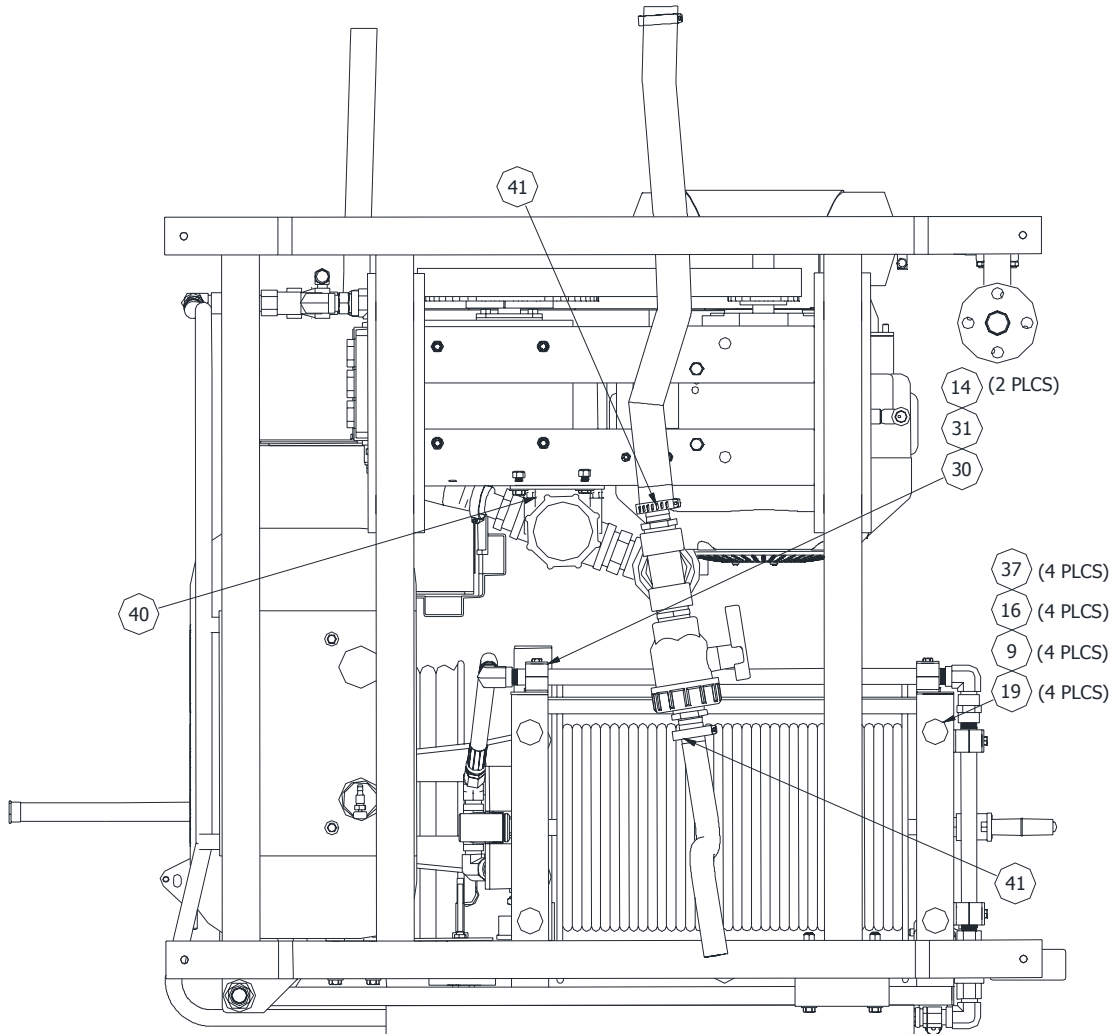
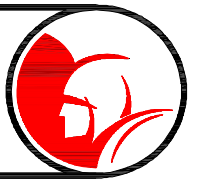


Assy, 738 Skid Mount 73832000





Assy, 738 Skid Mount 73832000





Assy, 738 Skid Mount 73832000



ITEM	QTY	PART NUMBER	DESCRIPTION
1	4	00113600	SCREW, HEX HD CAP 1/4-20 X 5/8
2	8	00115100	SCREW, HEX HD CAP 5/16-18 X 1
3	2	00117500	SCREW, HEX HD 3/8-16 X 4
4	2	00162600	WASHER, FLAT 5/16 USS
5	2	00165400	WASHER, LOCK SPLIT 1/4
6	4	00165800	WASHER, LOCK SPLIT 3/8
7	4	02825100	WASHER, FLAT 1/4 USS
8	2	02939000	SCREW, CAP HEX HD 5/16-18 X 3/4
9	22	03366300	WASHER, FLAT 3/8 SAE
10	2	04728200	SCREW, HEX HD 1/4-20 X3/8
11	1	44235901	TOOL BOX 468
12	1	44298100	KEYCHAIN, SPARTAN LOGO
13	1	50209200	PIN, DOWEL 5/16 X 1
14	8	521012-04	SCREW, HEX HD 1/4-20 X 1-1/2
15	2	522122-00	NUT, LOCK 5/16 -18
16	14	522132-00	NUT, NYLON LOCKING 3/8-16
17	1	585463-01	DECAL, WARNING BATTERY
18	1	61018000	HOLDER, FUSE
19	8	61030600	PLUG, 1-1/4
20	2	72715100	CLAMP, 1-1/8 ID PLASTIC COATED
21	1	73808100	HOSE, HP 1/2 NPT X 19 LONG
22	1	73808600	HOSE, 3/8 X 250 BLACK
23	1	73809300	NOZZLE, OPEN 738
24	1	73809400	NOZZLE, CLOSED 738
27	1	73826700	ASSY, WIRE HARNESS-RELAY 738
28	1	73828700	PLATE, SKID MOUNT INDEX
29	1	73829070	SUPPORT, SWING ARM END
30	4	73829200	CLAMP, 1/2" PIPE (2HALVES)
31	4	73829210	COVER PLATE, 1/2"PIPE CLAMP
32	1	73829900	ASSY, SWING ARM (SKID MOUNT)
33	2	73830300	SCREW, HEX HD 7/8-14 X 4-1/2
34	6	73830400	WASHER, FLAT 7/8 SAE
35	2	73830500	NUT, NYLON LOCKING JAM 7/8-14
36	4	73830600	SCREW, HEX HD 3/8-16 X 2-3/4
37	4	73830700	SCREW, HEX FLANGE HD 3/8-16 X 3/4
38	1	73830800	HOSE, HP 1/2 NPT X 87 LONG
39	1	73830900	CABLE, NEGATIVE BATTERY 60" LONG
40	1	73831000	U-BOLT, 3" TUBE OD W/ NUTS
41	5	73831200	CLAMP, HOSE 1-1/16" -2" #24
42	1	73831400	ASSY, POWER PACK (738 SKID)
43	1	73831600	ASSY, HP REEL (738 SKID)
44	1	73831900	ASSY, HP PIPE (738 SKID)
45	4	73832500	PAD, RUBBER ISOLATOR
46	1	73833200	WELDMENT, EXHAUST BULKHEAD
47	2	73833300	GASKET, EXHAUST BULKHEAD
48	1	73833400	ADAPTER, EXHAUST
49	5FT	73833500	PIPE, FLEXIBLE EXHAUST
50	1	73833600	SOLENIOD, STARTER (738 19HP)



Assy, 738 Skid Mount 73832000

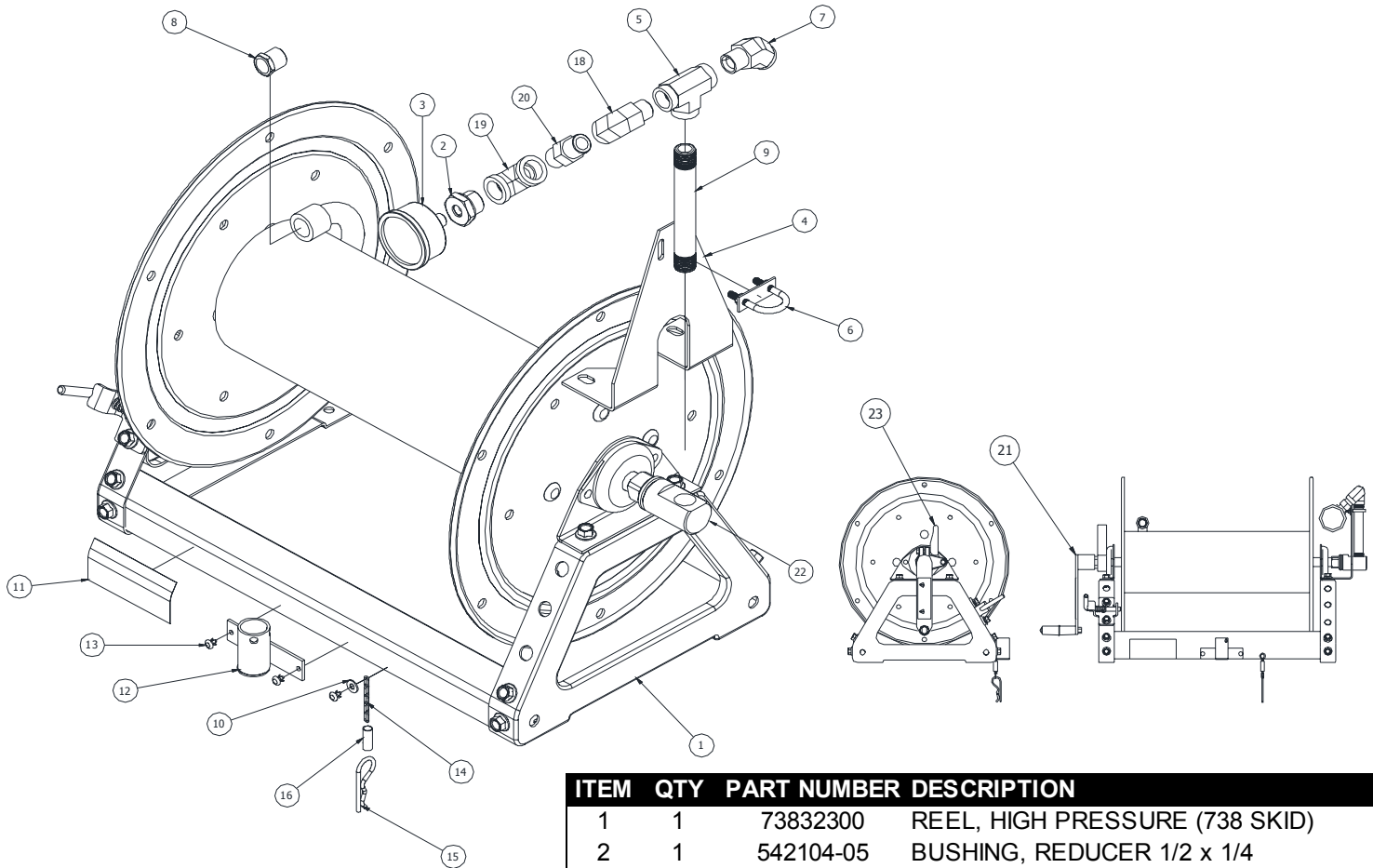


ITEM	QTY	PART NUMBER	DESCRIPTION
51	4	73833700	SCREW, SELF DRILLING 1/4-20 X 1
53	1	73835900	ENCLOSURE, IGNITION SWITCH SKID
54	1	73837000	ASSY, SKID MOUNT FRAME
55	1	75803100	CLAMP, MUFFER 1-1/4
56	1	75813500	ASSY, GAS TANK
	1	75817900	CAP, FUEL TANK W/ GAUGE
57	1	75807400	CONTROL, CHOKE
58	1	75808500	CABLE, POSITIVE BATTERY 78" LONG
59	1	79816600	ASSY, SWIVEL LOCK
60	1	75813900	DECAL, CHOKE
61	1	75814000	DECAL, THROTTLE
62	1	75814700	STRAP, BATTERY HOLD DOWN
63	1	75815100	DECAL, GASOLINE ONLY
64	1	75815300	MODIFIED BOX, BATTERY
66	1	75818300	IGNITION SWITCH
	1	75815927	KEY IGNITION KAWASAKI
67	1	75818600	DECAL, KEY SWITCH
68	1	75821500	WELDMENT, EXHAUST EXTENTION
69	1	75823600	RELAY
70	1	75824800	ASSY, STRAINER (SKID MOUNT)
71	1	75867000	FILL REEL ASSY
72	10FT	77710200	HOSE, 1-1/4 ID X 4 SPIRAL SM
73	1	77728900	CAP, CABLE # 5704 RED
77	1	77763900	ELBOW, 45 DEG STREET 1/2 STEEL
78	1	77766300	LABEL, DANGER "NO SMOKING"
79	8	77768800	TIE WIRE-PLASTIC
80	8	77768900	HOLDER, WIRE TIE ADHESIVE BACKED
81	1	77771501	THROTTLE CONTROL, LOCKING
82	4	77785200	MOUNT, MOTOR
83	4FT	77785900	HOSE, PUSH LOK 3/4
85	2	79823800	CLAMP, MUFFER 1-1/2
86	1FT	79827900	TUBING HEAT SHRINK 1.1-3/8
87	2	79842100	CLAMP, HOSE 3/16
88	3	79842200	CLAMP, HOSE 1/2
89	1	79847800	BATTERY, DIESEL 875 CCA
90	4FT	79849800	HOSE, FUEL 5/16 ID
91	1	79850400	FUSE, 15 AMP X 1-1/4 LG
92	1	79944100	HOSE, GARDEN 5/8 X 100'



738 H.P. Reel Assembly

73831600

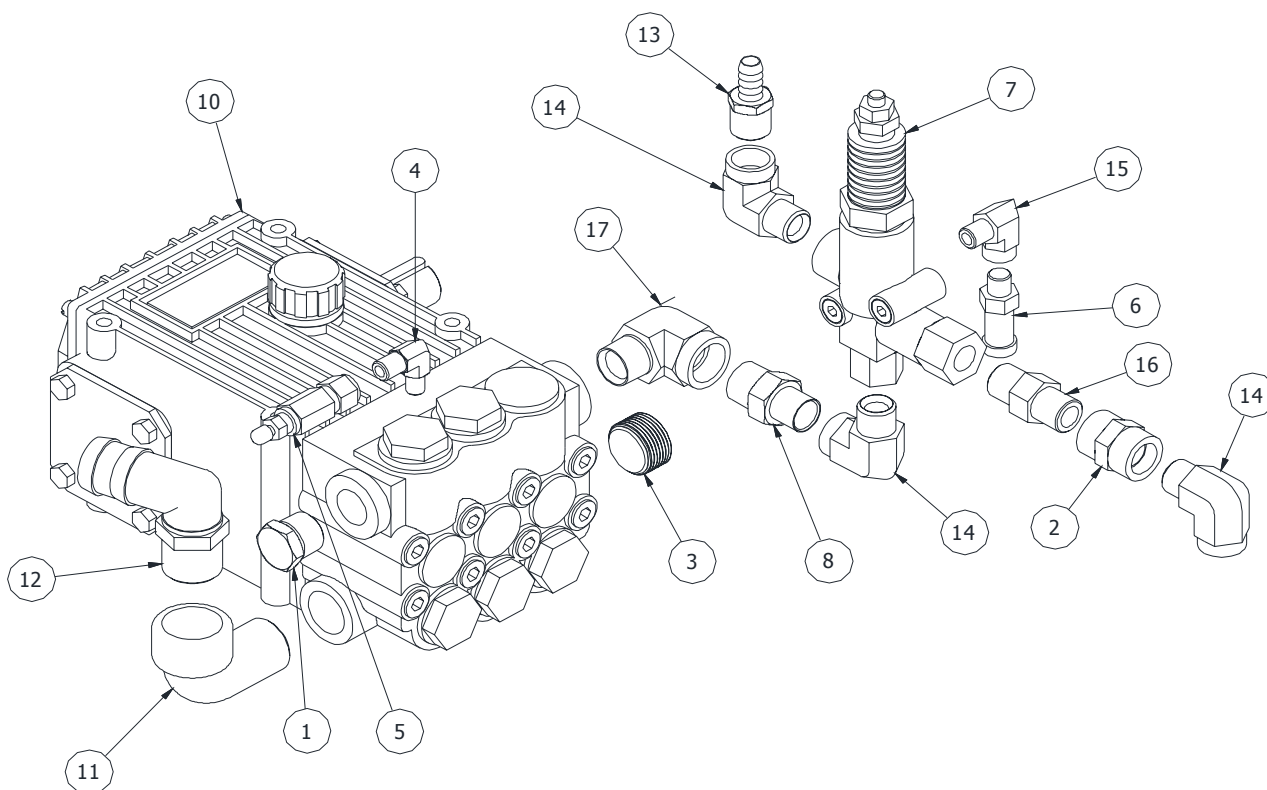


ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	73832300	REEL, HIGH PRESSURE (738 SKID)
2	1	542104-05	BUSHING, REDUCER 1/2 x 1/4
3	1	73818800	GAUGE, 3000 PSI
4	1	73805800	SUPPORT, VALVE
5	1	73832200	TEE, 1/2 FEMALE HP STEEL
6	1	77778900	BOLT,U 3/4 W/NUTS
7	1	77763900	ELBOW, 45 DEG. STREET 1/2 NPT
8	1	73820600	BUSHING, REDUCER 1/2 X 3/8
9	1	73832100	PIPE, 1/2 BLACK STEEL 6" LONG
10	1	00162400	WASHER, FLAT 3/16 USS
11	1	72707800	DECAL, WARNING - HP WATER JET
12	1	73816000	WELDMENT, HOSE HOLSTER (HP REEL)
13	3	77726500	RIVET, BLIND 3/16 DIA. (.062 - .125)
14	1FT	77726800	CHAIN, #5 DOUBLE LOOP
15	1	77737100	PIN, HAIR 9 GAUGE 2.45" LONG
16	1FT	77749400	TUBING, HEAT SHRINK 3/8
18	1	77705101	ELBOW, 90 DEG. STREET 1/2"
19	1	72714600	ELBOW, 90 DEG. FEMALE 1/2
20	1	77770800	NIPPLE, HEX 1/2 NPT
21	1	73817500	HANDLE, REEL
22	1	73819000	ASSY, REEL SWIVEL
23	1	73828400	TENSIONER, CAM LOCK BRAKE



Assy, Pump (738 Skid Mount)

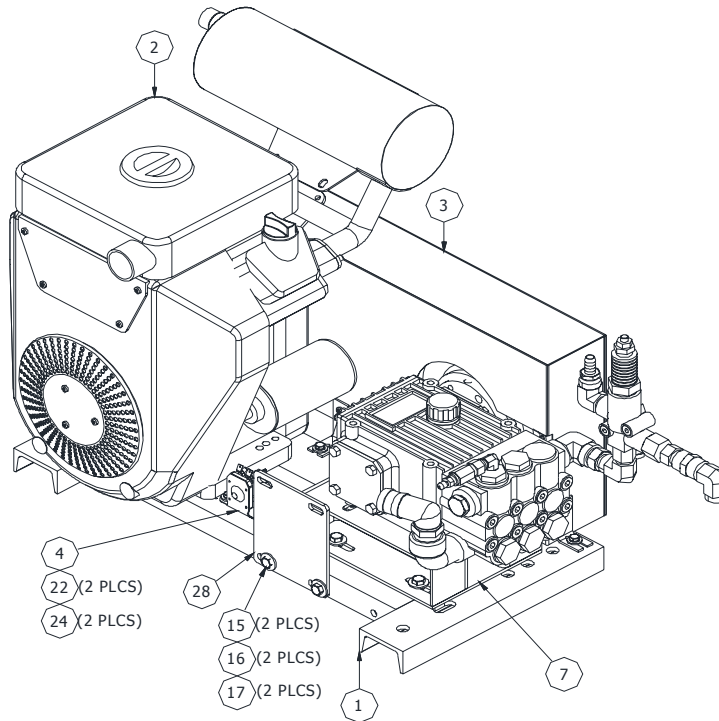
73831300



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	542103-05	PLUG, HEX 3/4 STEEL
2	1	542106-04	COUPLING, 1/2 STEEL
3	1	71132300	PLUG, INTERNAL HEX 1" NPT STEEL
4	1	71707300	ELBOW, 90 DEG MALE 1/4 X 1/8
5	1	71707400	VALVE, CHECK W/ AIR VALVE
6	1	73810700	VALVE, POPOFF
7	1	73810800	UNLOADER, GIANT
8	1	73811700	NIPPLE, 3/4 X 1/2 HP
10	1	73827300	PUMP, SPECK NP25/50-150
11	1	75803200	ELBOW, ST 90 DEG 1" POLYPRO
12	1	75824600	ELBOW, 1 NPT X 1-1/4 HOSE BARB
13	1	77704900	FITTING PUSH-LOK 1/2-14
14	3	77705101	ELBOW, 90 DEG STREET 1/2 STEEL
15	1	77724300	ELBOW, 90 DEG STREET 1/4 STEEL
16	1	77770800	NIPPLE, 1/2 X 1/2
17	1	79816200	ELBOW 90 DEG STREET 3/4 STEEL



Assy, Power Pak 738 Skid 73831400

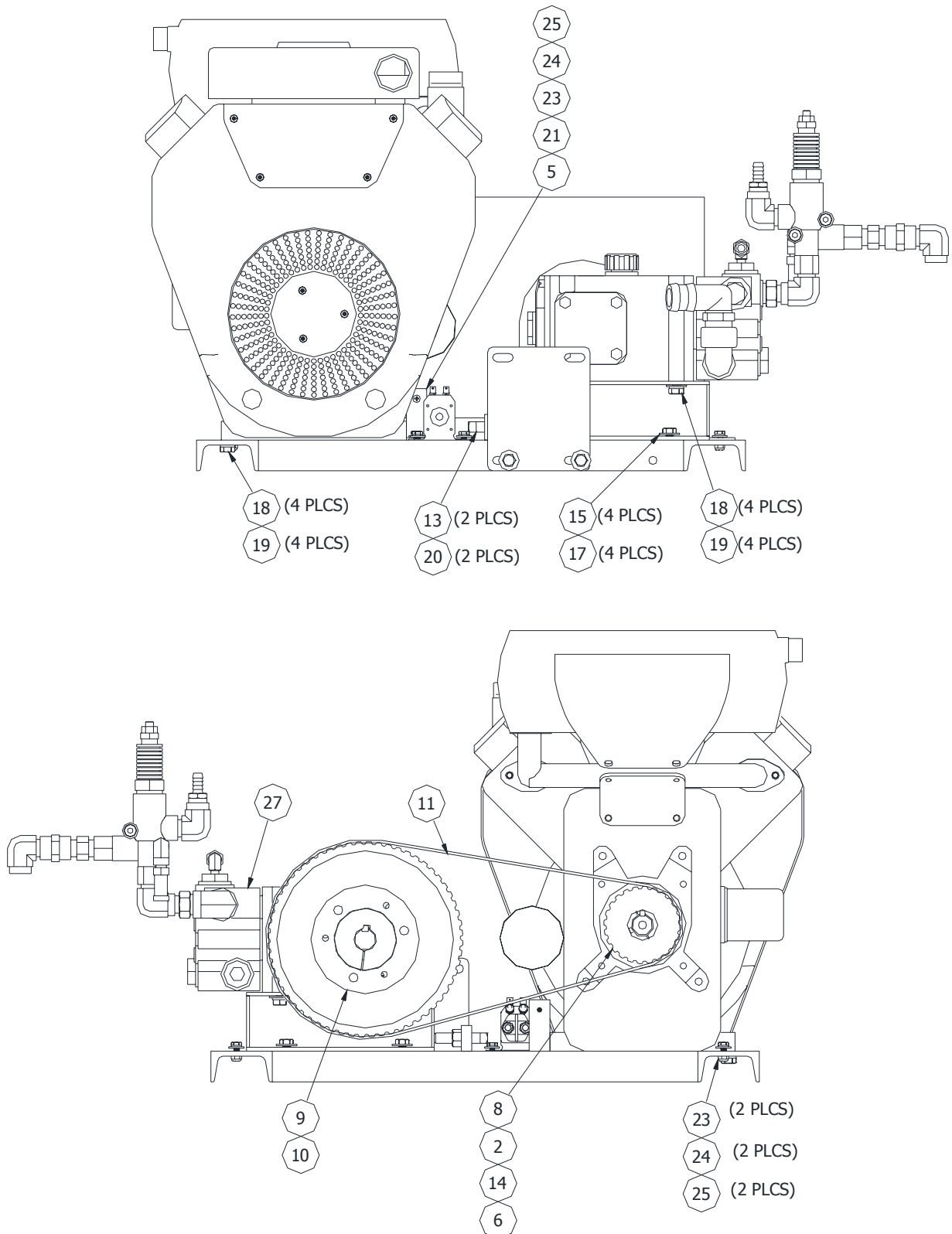


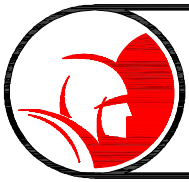
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	73801600	WELDMNT, POWER PAK 738-758
2	1	73831500	ENGINE, 19 HP KAWASAKI
	1	73819300	SOLENOID, FUEL
	1	73852900	STARTER, 19 HP KAWASKI
3	1	75820300	WELDMNT, BELT GUARD
4	1	73833600	SOLENOID, STARTER 738 19 HP
5	1	75820800	BRACKET, BELT GUARD
6	1	75811600	BUSHING H 1-1/8
7	1	73828000	WELDMNT, PUMP MOUNT 738
8	1	73810000	SHEAVE,ENGINE DRIVE, 24 TEETH
9	1	73810400	SHEAVE, DRIVEN (60H150SF)
10	1	73810500	BUSHING, DRIVEN (SF X 28mm)
11	1	73810600	BELT, DRIVE (480H150)
13	2	77727100	BOLT, BELT ADJUSTMENT
14	1	79823400	KEY, 1/4 X 1/4 X 1-5/8
15	6	521035-03	SCREW, HEX HD 3/8-16 X 1
17	6	522132-00	NUT, NYLON LOCKING 3/8-16
18	8	75822800	SCREW, CAP M10 X 25mm
19	8	44029500	WASHER, SPLIT LOCK M10
20	2	00778000	NUT, HEX 1/2-13
22	1	00113600	SCREW, HEX HD 1/4-20 X 3/4
23	3	521012-03	SCREW, HEX HD 1/4-20 X 3/4
24	4	02825100	WASHER, FLAT 1/4 USS
25	4	00165400	WASHER, LOCK SPLIT 1/4
27	1	73831300	ASS'Y, PUMP - 738 SKID MOUNT
28	1	73831100	PLATE, STRAINER ASS'Y MOUNTING



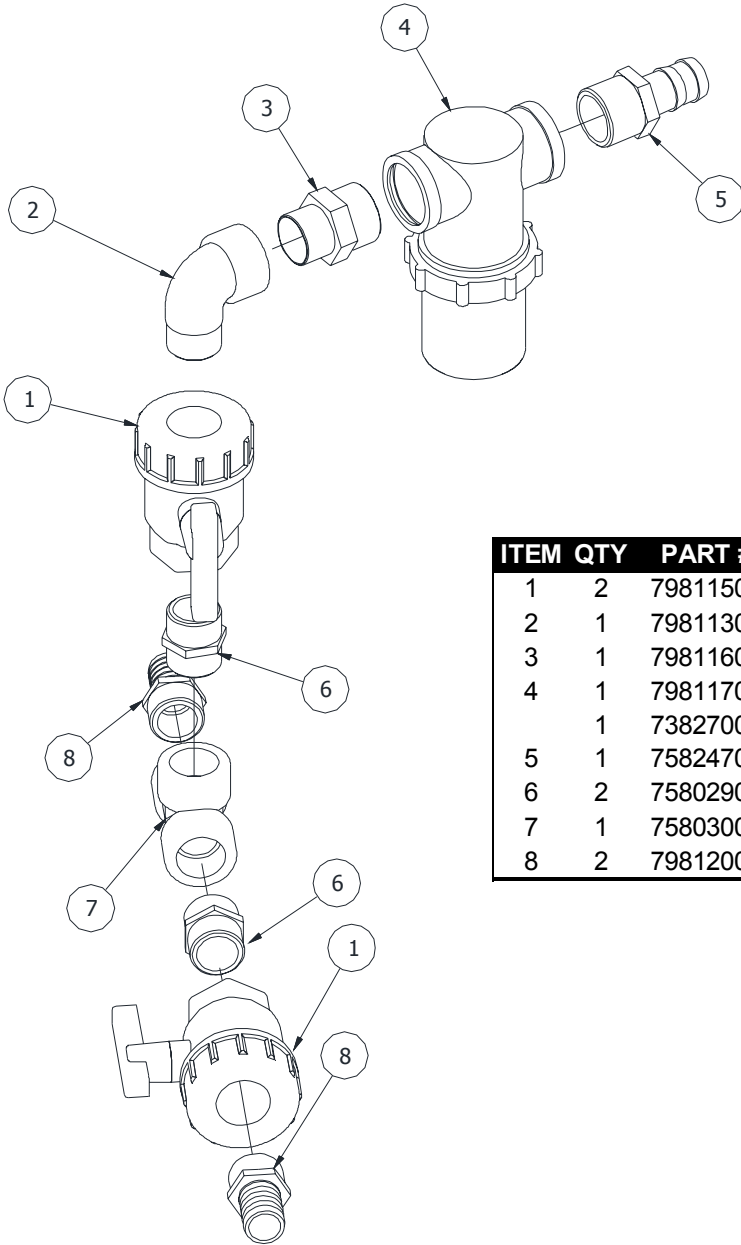
Assy, Power Pak 738 Skid

73831400





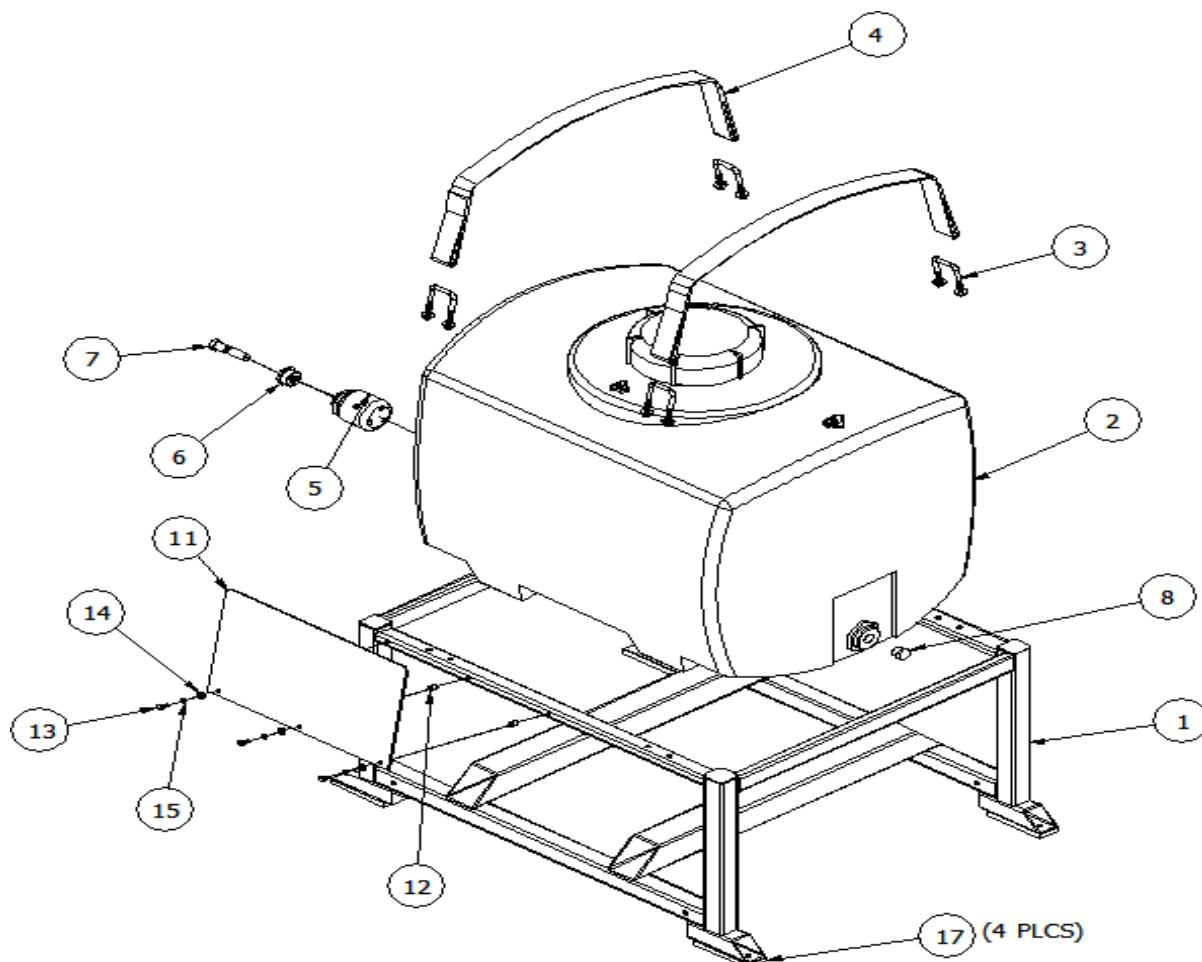
Assy, Strainer (Skid Mount) 75824800



ITEM	QTY	PART #	DESCRIPTION
1	2	79811500	VALVE, BALL 1-1/4 FNPT X 1-1/4
2	1	79811300	ELBOW 90 DEG ST 1-1/4 MPTX 1-1/4
3	1	79811600	NIPPLE 1-1/2 X 1-1/4 MPT POLYPRO
4	1	79811700	FILTER 1-1/2 FPT POLYPRO
	1	73827000	GASKET, WATER FILTER
5	1	75824700	HOSE BARB, 1-1/2 MPT X 1-1/4
6	2	75802900	NIPPLE, CLOSE 1-1/4 POLYPRO
7	1	75803000	TEE 1-1/4 FNPT PROLYPRO
8	2	79812000	BARB, HOSE 1-1/4 MPT X1-1/4 POLYPRO



Assy, Water Tank w/Frame Skid 73829500



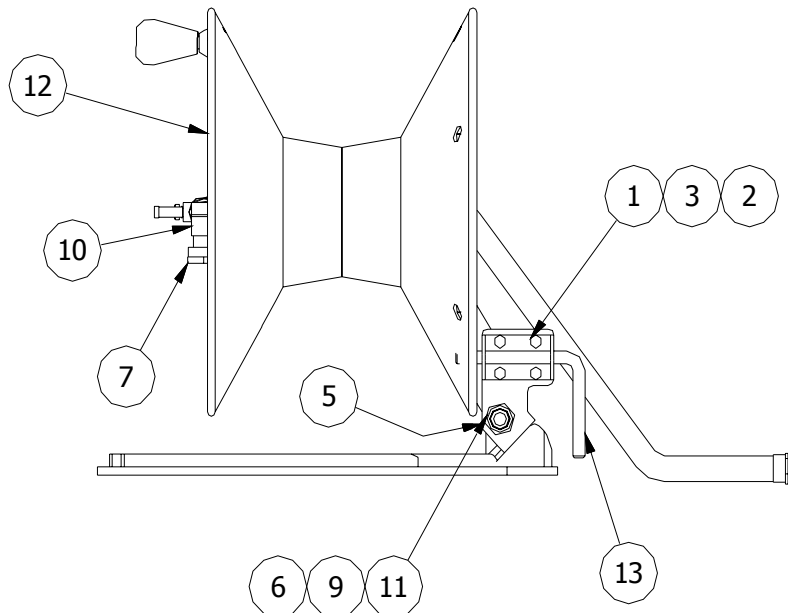
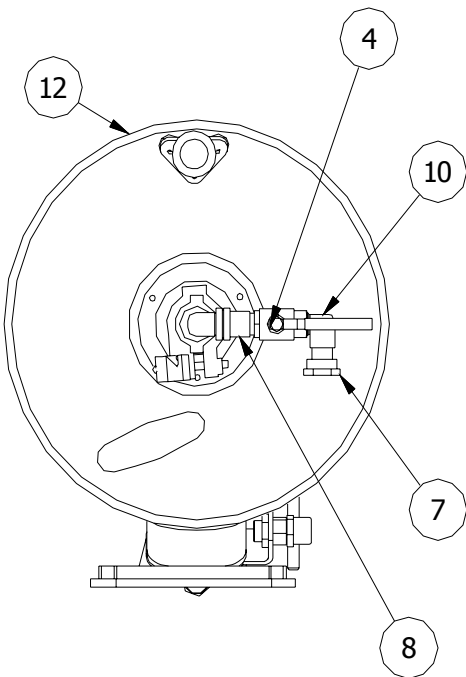
ITEM #	QTY	PART NUMBER	DESCRIPTION
1	1	73836000	ASSY, WATER TANK FRAME
2	1	73829400	ASS'Y, WATER TANK (SKID MOUNT)
3	4	73829700	U-BOLT, SQUARE 2" X 2-5/8" (3/8-16)
4	2	73829800	STRAP, WATER TANK HOLD DOWN
5	1	73827800	BULKHEAD FITTING W/PVC CAP
6	1	73827600	BUSHING, REDUCER (MODIFIED)
7	1	75823200	SWITCH, LIQUID LEVEL
8	1	61019200	PLUG, 3/4 POLYPROPYLENE
9	1	62008400	DISCONNECT, MALE .250 TAB 22-18 (NOT SHOWN)
10	1	534004-01	DISCONNECT, FEMALE .250 TAB 22-18 (NOT SHOWN)
11	1	73832900	SHIELD, HEAT - SKID MOUNT
12	3	73833000	NUT, RIVET 1/4-20 .027"-.165"
13	3	521012-03	SCREW, HEX HD 1/4-20 X 3/4
14	3	02825100	WASHER, FLAT 1/4 USS
15	3	00165400	WASHER, LOCK SPLIT 1/4
17	4	73832500	PAD, RUBBER ISOLATOR
18	2	73832400	SCREW, HEX HD 3/8-16 X 4-3/4 (NOT SHOWN)
19	4	00162700	WASHER, FLAT 3/8 USS ZINC PLTD (NOT SHOWN)
20	2	522132-00	NUT, NYLOCK 3/8-16 (NOT SHOWN)



75867000 Fill Reel Assembly

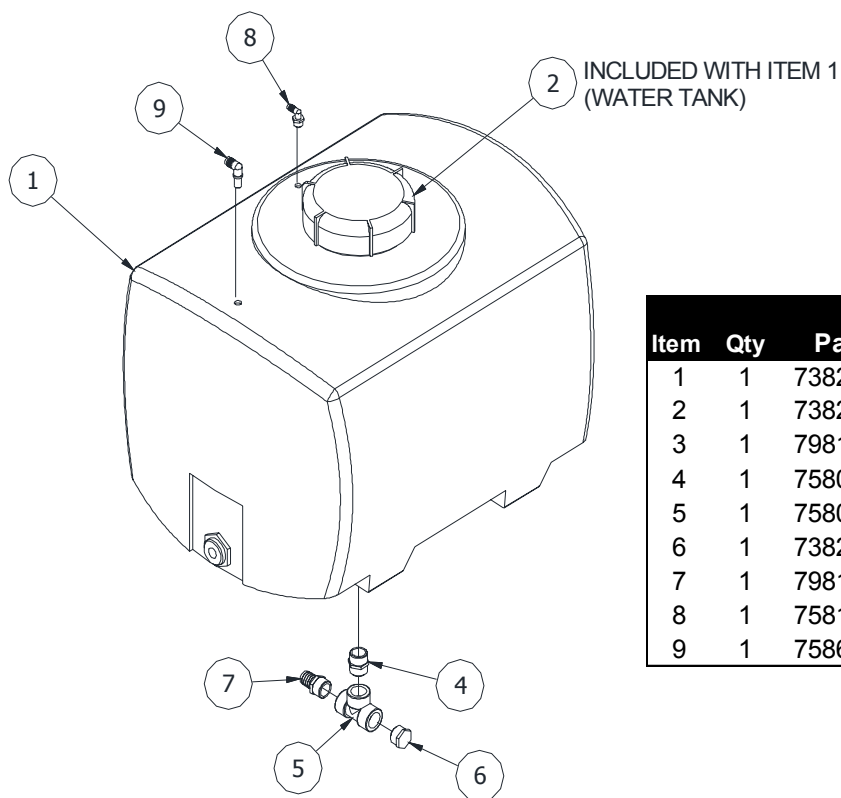


ITEM	QTY	PART #	DESCRIPTION
1	4	00113901	SCREW, HXHD CAP 1/4-20 X 1 ZN
2	4	02821200	NUT, NYLOCK JAM 1/4-20
3	4	02825100	WASHER, FLAT 1/4 USS
4	1	72704800	VALVE, BALL 1/2 M X 1/2 F
5	1	75867010	BRACKET, FILL REEL LATCH - 2010
6	1	75867020	LOCKNUT, PIPE 1/2" NPT
7	1	75867030	ADAPTER, 3/4 GHT SWVL - 1/2 NPT
8	1	75867040	ADAPTER, 3/4 FGHT - 1/2 FNPT
9	1	77770800	NIPPLE, HEX 1/2 NPT
10	1	79904464	ST EL 90D 1/2NPT BRASS
11	1	79904492	ADAPTER, GARDEN HOSE 3/4M-1/2FM
12	1	79940300	RAPID REEL, 2008 FILL
13	1	79966320	LATCH, SPRING BOLT ZN PLT





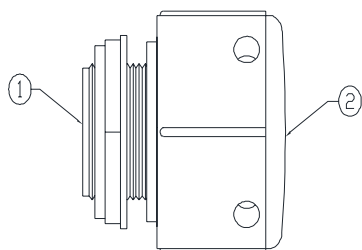
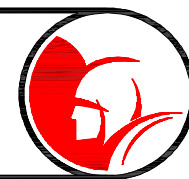
Assy, Water Tank Skid Mount 73829400



Item	Qty	Part #	Description
1	1	73828601	TANK,100 GAL WATER
2	1	73828610	CAP, WATER TANK
3	1	79818500	BULKHEAD FITTING 1-1/4 POLYPRO
4	1	75802900	NIPPLE, CLOSE 1-1/4 POLYPRO
5	1	75803000	TEE, 1-1/4 FNPT POLYPRO
6	1	73829600	PLUG, 1-1/4 POLYPRO
7	1	79812000	BARB,HOSE 1-1/4 MPT X 1-1/4 PO
8	1	75811700	EL, 90DEG HOSE BARB 1/2MPT X 1/2
9	1	75867300	ELBOW, NOZZLE BODY W/NUT 5/8



Bulkhead Fitting w/PVC Cap 73827800



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



Pump, Speck NP25/50-150 73827300



Item	Qty	Part Number	Description
1	1	73810205	CRANKCASE
2	1	73810206	OIL FILL PLUG W/ GASKET
3	1	73810207	CRANKCASE COVER
3A	2	73810208	OIL SIGHT GLASS W/ GASKET
4	1	73810209	O-RING
5	1	73810210	OIL DRAIN PLUG
5A	1	73810211	GASKET FOR OIL DRAIN PLUG
5B	1	73810212	PLUG W/ GASKET
6	4	73810213	SCREW
6A	4	73810214	SPRING WASHER
7	1	73810215	BEARING COVER OPEN
8	8	73810216	BEARING COVER CLOSED
8A	1	73810217	SHIM
9	2	73810218	O-RING
10	8	73810219	SCREW, W/ WASHER
11	1	73810220	RADIAL SHAFT SEAL
12	1	73810221	BEARING
12A	1	73810222	BEARING
13	1	73810223	CRANKSHAFT
14	1	73810224	KEY
15	3	73810225	CONNECTING ROD ASSEMBLY
15A	6	73810226	SCREW W/ WASHER
16	3	73810227	PLUNGER ASSY, 25mm
16A	3	73810228	PLUNGER BASE
16B	3	73810229	PLUNGER PIPE, 25mm
16C	3	73810230	CENTERING SLEEVE

Item	Qty	Part Number	Description
16D	3	73810231	TENSIONING SCREW
16E	3	73810232	O-RING
16F	3	73810233	BACKUP RING
16G	3	73810234	COPPER WASHER
17	3	73810235	CROSSHEAD PIN
18	3	73810236	O-RING
19	3	73810237	OIL SEAL
20	3	73810238	SEAL CASE
21	3	73810239	O-RING
22	3	73810240	O-RING
23	3	73810241	V-SLEEVE, 25mm
23A	3	73810242	SPACER RING
23B	3	73810243	WEEP SEAL
24	6	73810244	PRESSURE RING
25	3	73810245	WEEP RETURN RING
26	1	73810246	MANIFOLD
27	6	73810247	VALVE SEAT
27A	6	73810248	VALVE ASSEMBLY
28	6	73810249	VALVE PLATE
29	6	73810250	VALVE SPRING
30	6	73810251	VALVE SPRING RETAINER
31	6	73810252	O-RING
32	6	73810253	PLUG
33	6	73810254	O-RING
34	8	73810255	CAP SCREW



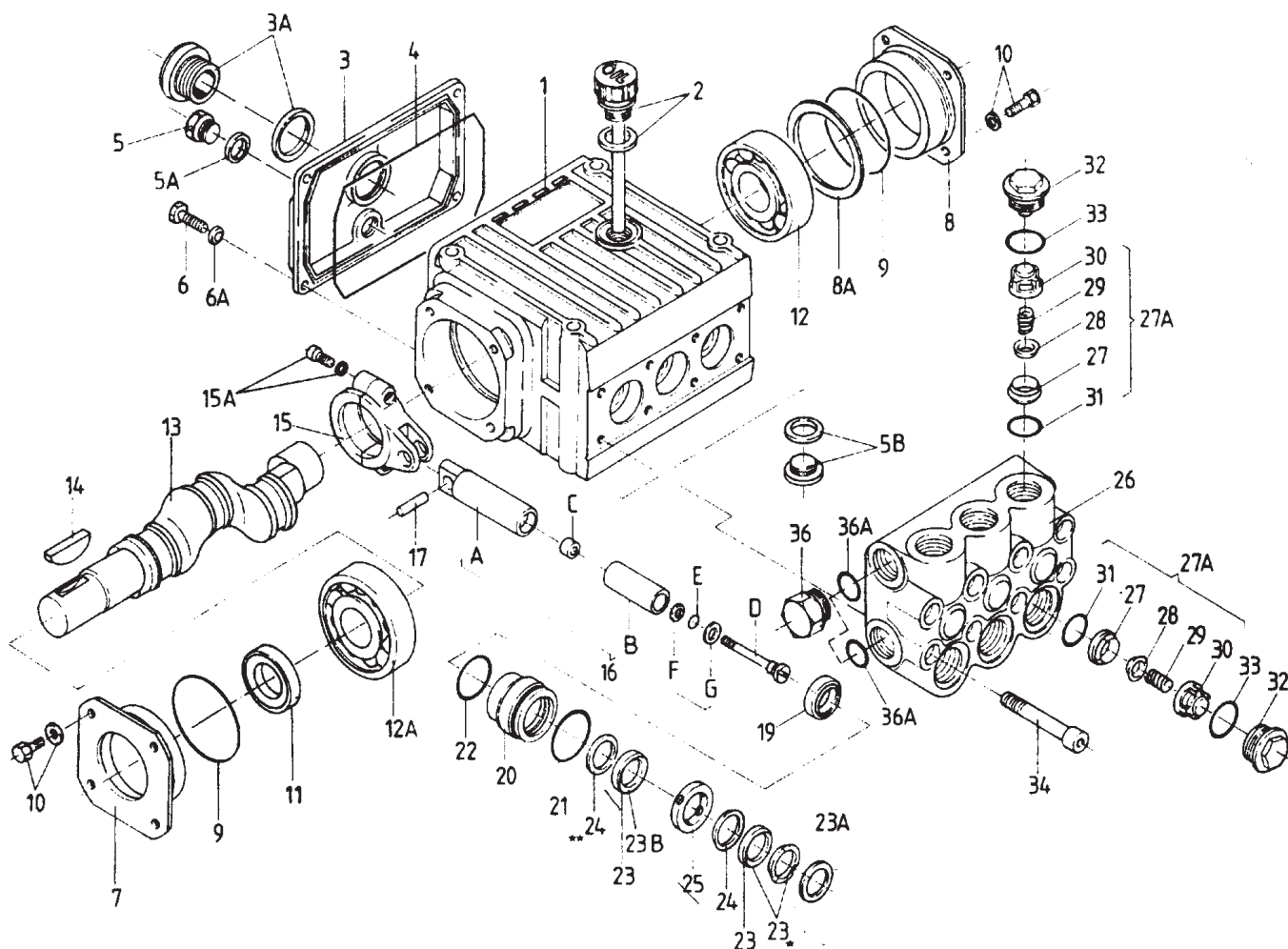
738 Pump Torque Specifications



Item Number	Part Number	Description	Torque Amount
15A	73810226	Screw w/ Washer	216 in. - lbs.
16D	73810231	Tensioning Screw	240 in. - lbs
32	73810253	Plug	125 ft. - lbs
34	73810255	Cap Screw	35 ft. - lbs



Pump, Speck NP25/50-150 73827300



738 Pump Repair Kits



Plunger Packing Kits (73810256)

Qty.	Part Number	Description
3	73810239	O-Ring
3	73810240	O-Ring
3	73810241	V-Sleeve
3	73810243	Weep Seal
6	73810244	Pressure Ring

Oil Seal Kit (73810257)

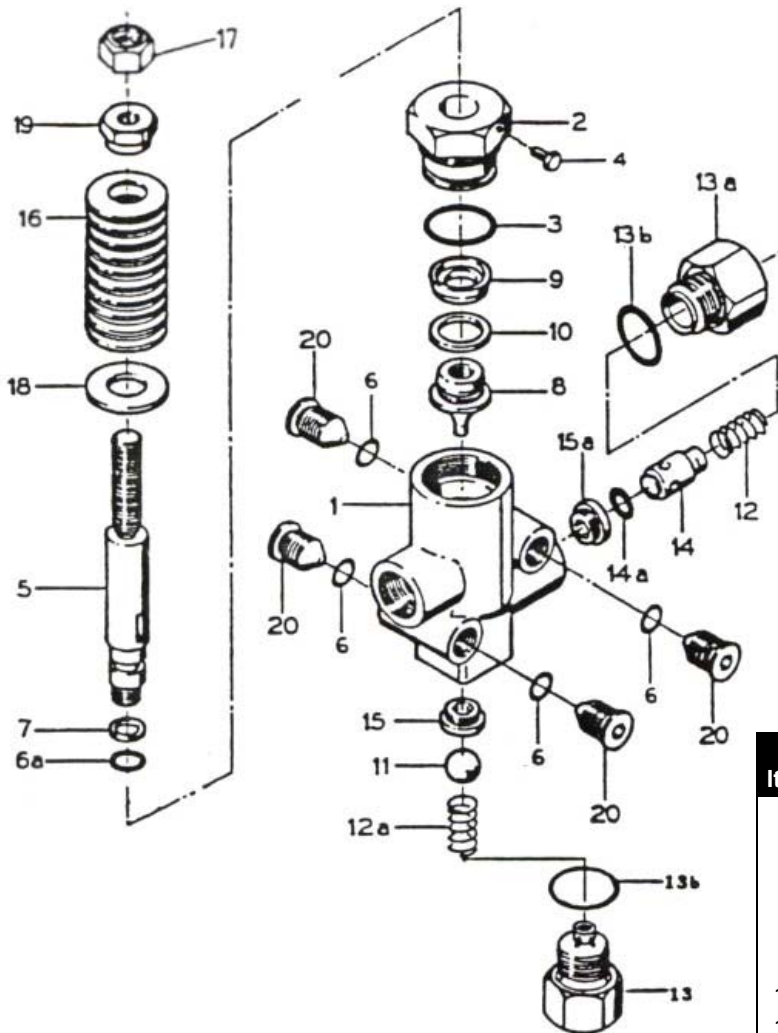
Qty.	Part Number	Description
3	73810237	Oil Seal

Valve Assy. Kit (73810258)

Qty.	Part Number	Description
6	73810248	Valve Assy., Complete
6	73810233	O-Ring



738 Unloader - 73810800



Repair Kit 73810827

Part			
Item	Qty	Number	Description
3	1	73810803	O-Ring, Valve Cap
6	4	73810806	O-Ring, Plug
6a	1	73810807	O-Ring, Valve Stem
7	2	73810808	BackUp Ring, Valve Stem
9	1	73810810	Cup, 23mm
10	1	73810811	BackUp Ring, Piston
13b	2	73810817	O-Ring, Spring Retainer
14a	1	73810819	O-Ring, Outlet Valve

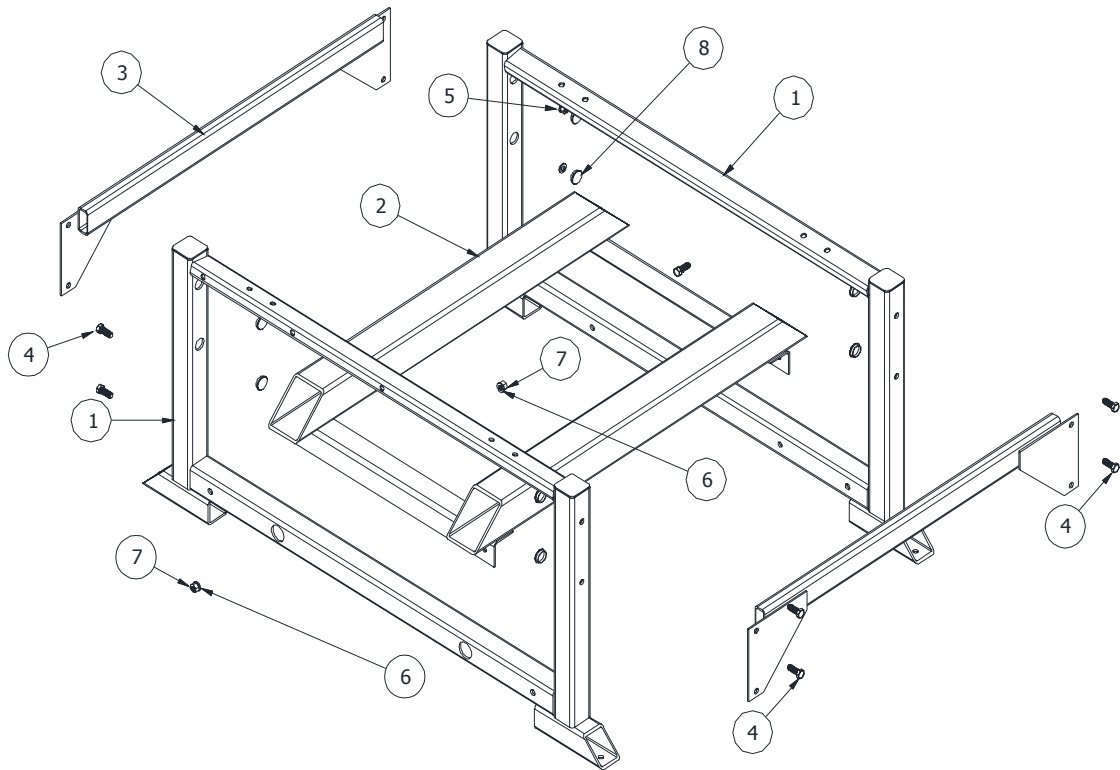
Part			
Item	Qty	Number	Description
1	1	73810801	Valve Body
2	1	73810802	Valve Cap
3	*	1	73810803 O-Ring, Valve Cap
4	1	73810804	Set Screw, Valve Cap
5	1	73810805	Valve Stem
6	*	4	73810806 O-Ring, Plug
6a	*	1	73810807 O-Ring, Valve Stem
7	*	2	73810808 BackUp Ring, Valve Stem
8	1	73810809	Piston
9	*	1	73810810 Cup, 23mm
10	*	1	73810811 BackUp Ring, Piston
11	1	73810812	Ball, Inlet
12	1	73810813	Spring, Outlet Valve

Part			
Item	Qty	Number	Description
12a	1	73810814	Spring, Inlet
13	1	73810815	Inlet Adapter
13a	1	73810816	Spring Retainer, Outlet Valve
13b *	2	73810817	O-Ring, Spring Retainer
14	1	73810818	Outlet Valve
14a *	1	73810819	O-Ring, Outlet Valve
15	1	73810820	Seat, Inlet Valve - S.S.
15a	1	73810821	Seat, Outlet Valve - Brass
16	17	73810822	Spring, Red 2400 PSI
17	1	73810823	Nut
18	1	73810824	Washer, Spring
19	1	73810825	Adjusting Nut
20	4	73810826	Plug, 1/4"

* Included in Repair Kit (73810827)



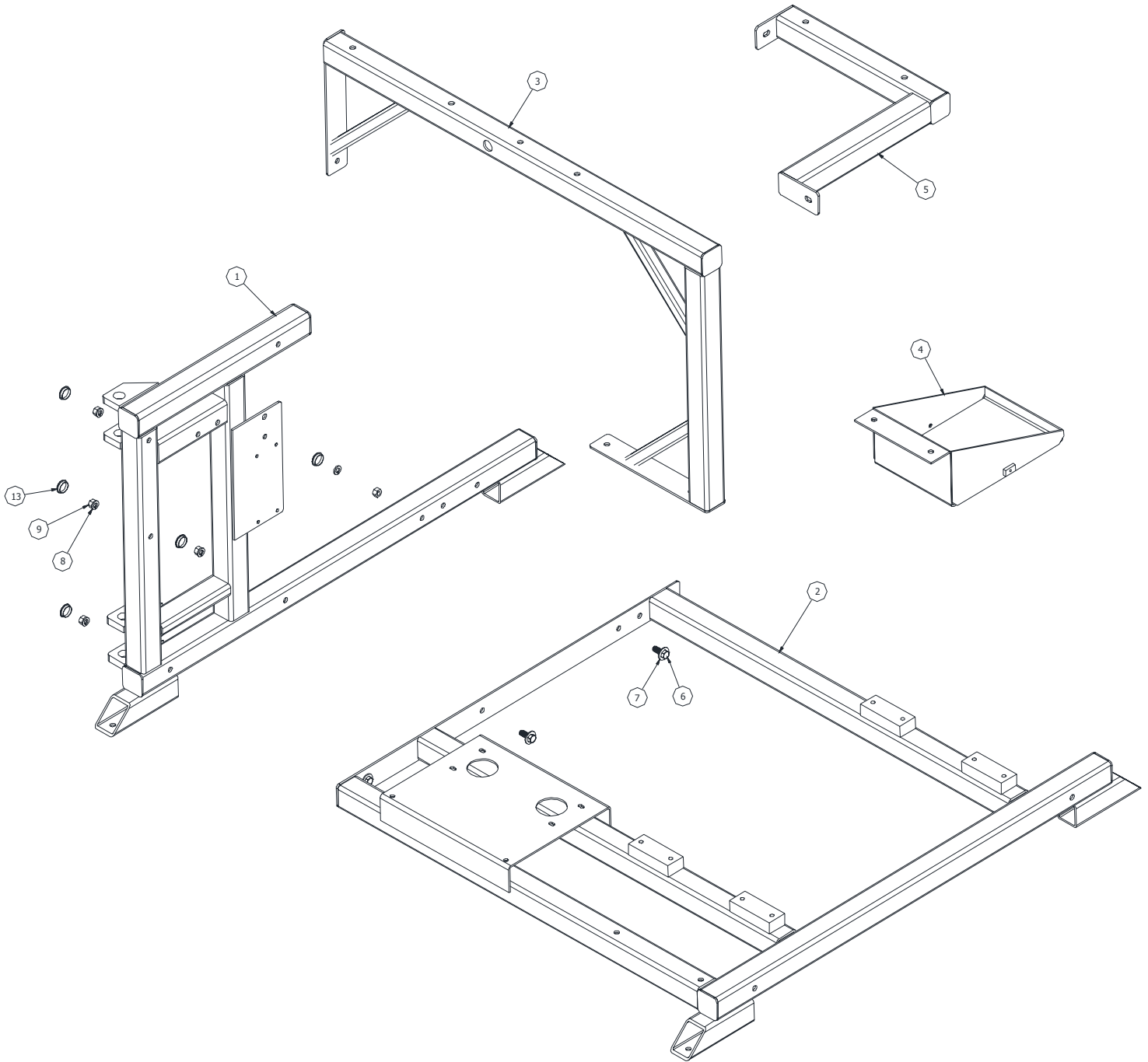
Assy, Water Tank Frame 73836000



Item	Qty	Part #	Description
1	2	73836400	WELDMENT, WATER TANK FRAME
2	1	73836100	WELDMENT, TANK SUPPORT
3	2	73836200	WELDMENT, UPPER BRACE
4	12	77738100	SCREW, CAP HEX HD 3/8-16 X 1"
5	4	00162700	WASHER, FLAT 3/8 USS ZINC PLTD
6	12	00165800	WASHER, LOCK-SPLIT MEDIUM 3/8
7	12	02934100	3/8-16 HEX NUT ZINC PLTD
8	8	73837100	PLUG, BLK NYLON SNAP-IN

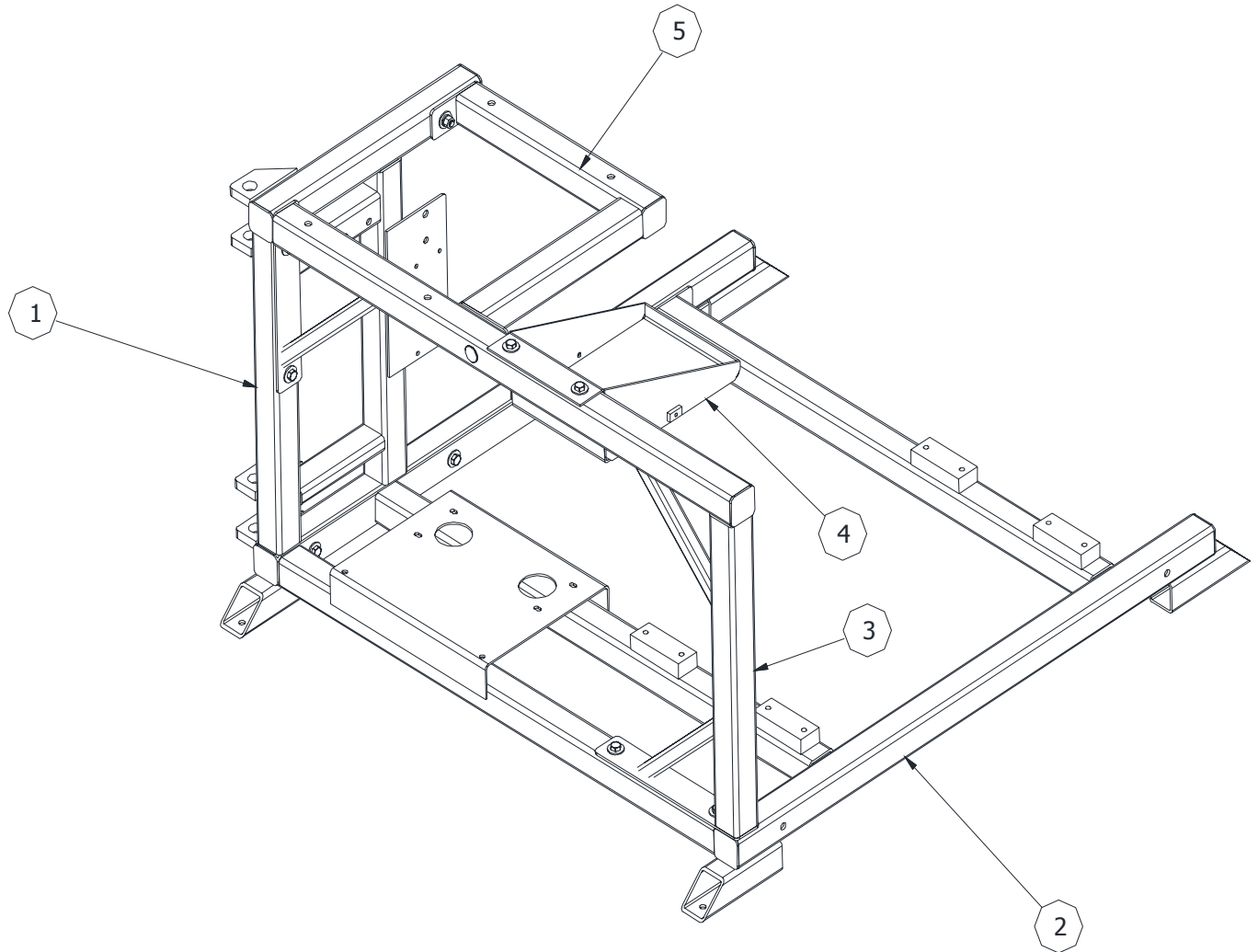


Assy, Skid Mount Frame 73837000





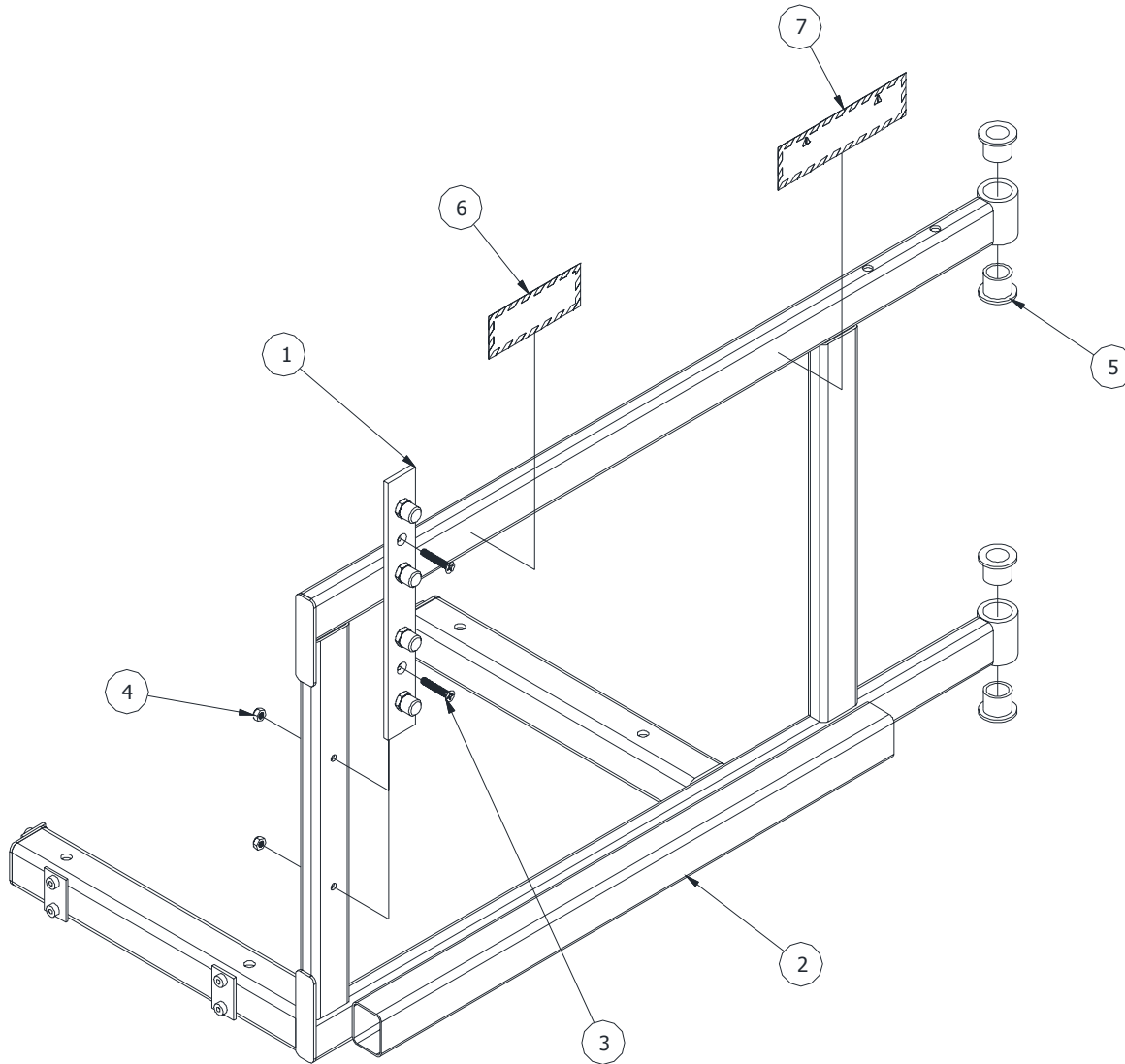
Assy, Skid Mount Frame 73837000



Item	Qty	Part #	Description
1	1	73836500	WELDMENT, SKID FRAME FRONT
2	1	73836600	WELDMENT, SKID FRAME BASE
3	1	73836700	WELDMENT, SKID FRAME SIDE
4	1	73836900	WELDMENT, BATTERY TRAY
5	1	73836800	WELDMENT, SKID FRAME REEL
6	11	77738100	SCREW, CAP HEX HD 3/8-16 X 1
7	11	00162700	WASHER, FLAT 3/8 USS ZINC PLTD
8	11	00165800	WASHER, LOCK SPLIT MEDIUM 3/8
9	11	02934100	3/8-16 HEX NUT ZINC PLTD
13	11	73837100	PLUG, BLK NYLON SNAP-IN



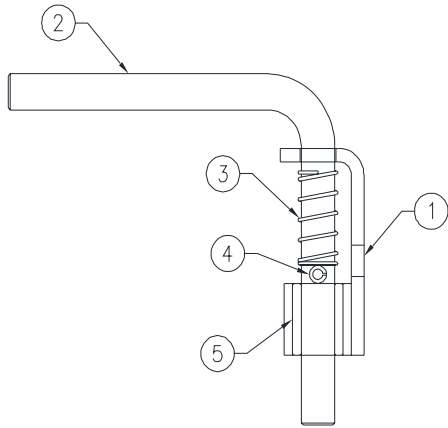
Assy, Swing Arm (Skid Mount) 73829900



Item	Qty	Part #	Description
1	1	73829060	WELDMENT, NOZZLE HOLDER
2	1	73837500	WELDMENT, SWING ARM
3	2	73830100	SCREW, FLAT HD 1/4-20 X 1-1/2
4	2	02821200	NUT, NYLOCK JAM 1/4-20
5	4	73830200	BEARING, FLANGED BRONZE 7/8 ID
6	1	77739800	DECAL, CAUTION MANUAL REEL
7	1	77739900	DECAL, WARNING REAR



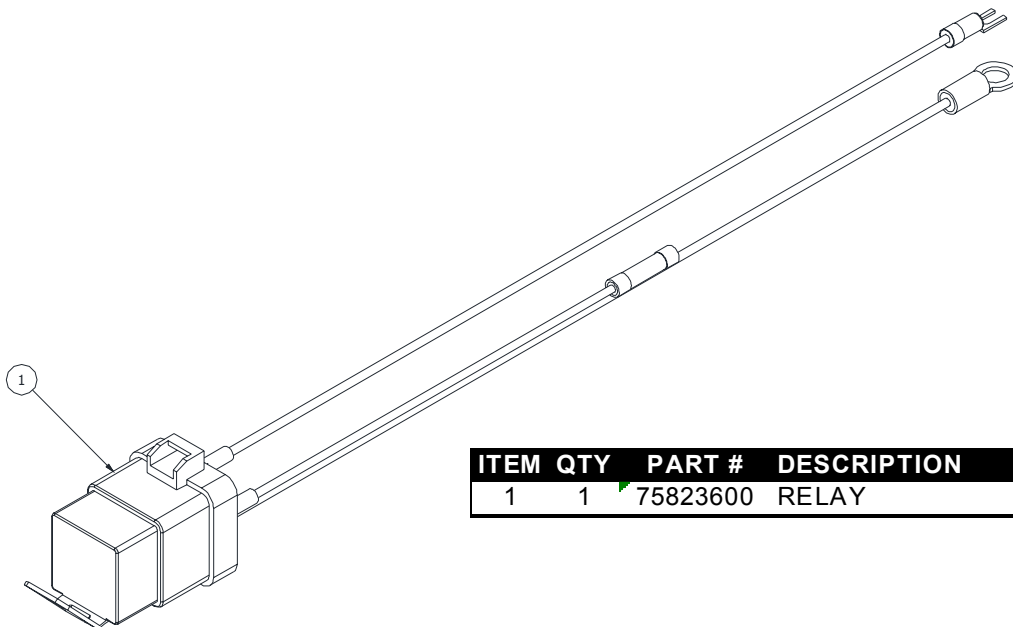
Assy, Swivel Lock 79816600



Item	Qty	Part #	Description
1	1	79816500	WELDMNT, SWIVEL LOCK
2	1	79815300	PIN,SWIVEL LOCK
3	1	02888500	SPRING, COMPRESSION
4	1	44213000	PIN, ROLL PIN 1/4X 1/50
5	1	03421300	BRONZE BRG MDL-81



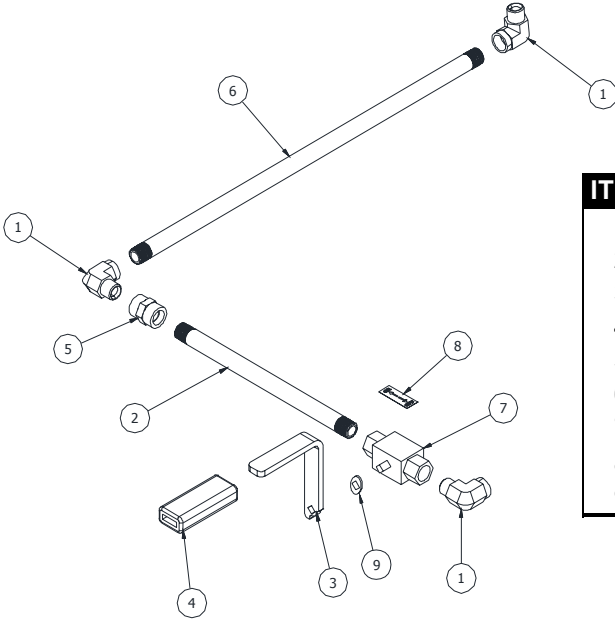
Assy, Wire Harness-Relay 73826700



ITEM	QTY	PART #	DESCRIPTION
1	1	75823600	RELAY



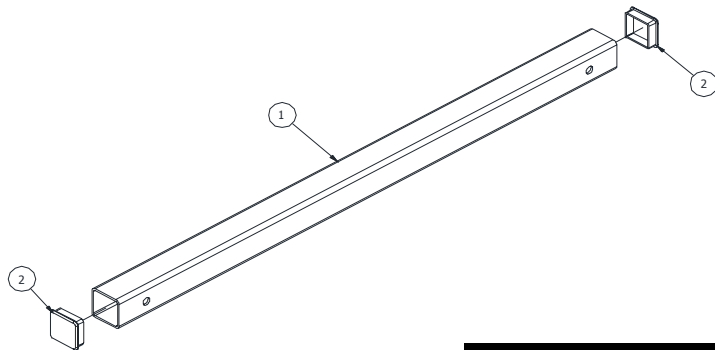
Assy, HP Pipe (738 Skid) 73831900



ITEM	QTY	PART #	DESCRIPTION
1	3	77705101	ELBOW, 90 DEG STREET 1/2"
2	1	73831800	PIPE, 1/2" STEEL 12" LONG
3	1	73816100	HANDLE, HIGH PRESSURE
4	1	71102500	GRIP, FOAM BLACK
5	1	54106-04	COUPLING, 1/2" STEEL
6	1	73831700	PIPE, 1/2" STEEL 24" LONG
7	1	75814600	VALVE, BALL 1/2 NPT W/ DECAL
8	1	73817800	DECAL ON/OFF
9	1	73818900	WASHER, STOP



Assy, 738 Skid Mount Spacer 73832800



Item	Qty	Part #	Description
1	1	73832600	TUBE, 738 SKID MOUNT SPACER
2	2	73832700	PLUG, 2 X 2 SQUARE END CAP



Optional 738 Accessories



Part Number	Description
73809300	Nozzle, Open
73809400	Nozzle, Closed
77724000	Reducer 1/2 x 3/8
75700200	Q-Nozzle
73820700	Nozzle, Grenade Bomb with Reducer
73700200	Rotating Nozzle
73821500	3/8 x 15 ft. Leader Hose
73700100	3/8 x 75 ft. Hose
73808601	3/8 x 150 ft. Hose
73808602	3/8 x 250 ft. Hose
73808600	3/8 x 350 ft. Hose
73808603	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
77763700	Venturi Pump
*77799800	Handgun Lance Vari-Nozzle Assembly
*73816500	Adapter, Swivel 3/8M to 3/8F
73817300	Wash Down Accessory Kit
44237200	468 Root Cutter
34/3-1	3" - Model 34 Root Cutter
34/3-2	4" - Model 34 Root Cutter
34003701	Root Cutter Adaptor Hose
199106-04	Foot Pedal Valve Kit
77773903	Foot Pedal
77800600	Hose Guard (Tiger Tail)

* Included in Washdown Accessory Kit



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

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