

FOR TOUGH CUSTOMERS. SINCE 1943.



PRODUCT MANUAL Model 717 Mini Jet



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- 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 owners' manual for instructions 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 with its cart (used to house the engine and gasoline tank) located in any confined space or area with inadequate ventilation. Operate this equipment only when the cart is located outdoors or in an open, well-ventilated area.
- Ensure the jet hose has been placed in the pipe a minimum of 3 feet (15 feet is recommended) before engaging the water pressure to prevent the hose from coming out of the pipe prematurely and causing injury.
- Always shut off the water pressure before pulling the hose out of the pipe. Mark the hose a minimum of 6 feet from the end to help
 ensure 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.
- 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 Spartan Tool at the address shown below.



CAUTION: Portions of the system can still be under pressure even if the unit is not operating.

CONTACT US

Spartan Tool LLC 1618 Terminal Rod Niles, MI 49120 800.435.3866 SpartanTool.com

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.

Technical Information



GENERAL

Pipe Sizes: 1-1/4" to 6" diameter

Max Water Pressure: 1,500 psi

· Max Water Flow: 2.2 GPM

Water Capacity: 300 gallons

Unit Size: 21-1/4"W x 34"D x 47-1/2"H

Weight: 133 lbs.

ENGINE

Model:

Horsepower: 2 HP

Speed (RPM): 1,800 RPM

Motor Weight: 53 lbs.

Max Electric Draw: 19 Amps @ 1,500 PSI

Volts: 115/230

• Frequency (HZ): 60

Phase: Single

Thermal Protection Overload

PUMP

Type: Triplex Plunger

Max Pressure: 1,500 PSI

Max Water Output: 2.2 GPM

Max Temperature: 160°F

Max RPM: 3,400

Plungers: 3

FEATURES

· Triplex ceramic plunger pump has adjustable pressure

regulator for up to 1,500 PSI at 2.2 GPM

- Portable power pack can be removed from the cart and used separately in tight spaces
- Patented pulse technology reduces friction, continuously moves hose down the line and improves hose retrieval
- Dual hose reel
- Easy-ride 10" pneumatic tires
- · 6 nozzles and nozzle-cleaning tool included
- · Wash-down gun with lance
- 25' power cord with ground fault interrupter

SAFETY

- · Ground fault interrupter
- Adjustable unloaded valve to prevent over-pressurization
- · Thermal-pressure relief valve
- · Gauntlet-style jetting gloves included

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 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. 1.)

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.

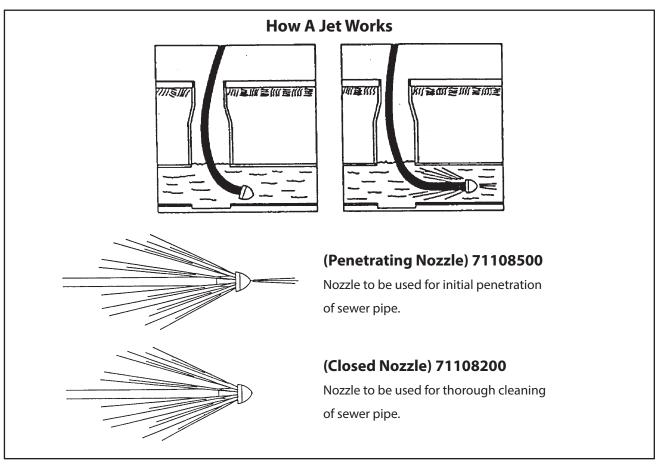


Fig. 1

Jetting Applications



There are a wide variety of uses for the Spartan Model 717 Water Jet. Here are just a few:

- Apartments/Hotels
 - · Mains and garage drains, remove grease and debris from main lines under the buildings.
- Factories
 - Food processing plants and foundries have frequent drain and sewer blockages.
- Farms, Rural
 - · Clean and spray barns, pens and heavy farm equipment, revitalize drain field in septic systems.
- · 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.
- 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.
- 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 accumulation downstream.

Other opportunities for using the Jet and accessories are as follows:

- · Clean interiors of buildings, factories, farms.
- Clean and washdown trucks, buses, other large equipment.
- Clean insides of tanks.
- Clean parking lot and gas station drains.
- Clean commercial air conditioning lines.





WARNING: Read the "Operator's Manual" thoroughly before using any Spartan Tool product. Drain/sewer cleaning can be dangerous if proper procedures are not followed. Know the proper operation, correct applications and the limitatons of all Spartan Tool products before use.



CAUTION: Use of any electrical equipment in a wet environment can cause fatal shock if equipment is not properly grounded, adequately maintained, and if care is not used by the operator.

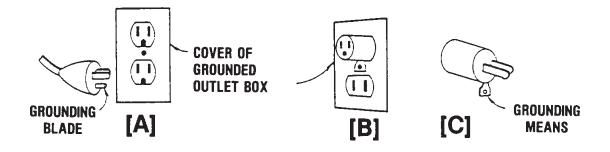
GROUNDING INSTRUCTIONS

Before using your Spartan Tool equipment, make sure a properly grounded, three hole electrical outlet is available. If not, as in some older homes, use a three-prong adapter and connect the green pigtail (or grounding lug) to a known ground such as a cold water pipe. A three-prong adapter is provided and available through Spartan Tool. Never cut off the grounding prong for use in a two hole outlet receptacle. By doing so, you have cut off your protection from shock.

Spartan Tool equipment must be grounded while in use to protect the operator from electrical shock. Spartan Tool equipment comes with a three-conductor cord and three-prong grounding type plug to fit the properly grounded receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal. If your unit is for use on less than 150V, it has a plug that looks like that shown in sketch (A). An adapter, see sketches (B) and (C), is available for connecting sketch (A) type plugs to a two-prong receptacle, except in Canada.

The green-colored rigid ear (or lug), extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box.

- The Spartan Model 717 is equipped with a ground fault interrupter (GFI) to guard against shock.
- Extension cords are not to be used with the Spartan Model 717.





DON'T ASSUME THAT ALL THREE-HOLE OUTLETS ARE PROPERLY INSTALLED. Check the outlet and also the adapter, if used with an outlet testing device which quickly indicates if a ground is connected. Correct a faulty test indication before proceeding.

Safety Procedures

- The Spartan Model 717 is equipped with a ground fault interrupter (GFI) to guard against shock.
- Extension cords are not to be used with the Spartan Model 717.



CAUTION: Always locate drain/sewer cleaning machine as close as possible to opening the pipe. Do not locate machine more than 3 feet from the opening of the pipe.



CAUTION: Avoid eye or skin contact with acids or caustic substances while cleaning drains/sewers.

- Always wear safety goggles and rubber, gauntlet-style gloves when cleaning drains/sewers to avoid injury.
- Before beginning work, ask the customer if either acids or caustic substances are present in the pipe. If in doubt, litmus paper used at the opening of the pipe may give an indication of the type of substance in the line. Litmus paper (acids/caustics) can be purchased at most pharmacies.



CAUTION: Drains/sewers carry bacteria and the possibility of infectious disease exists, if exposed.

- Always wear safety goggles and rubber gloves to minimize exposure to infection from bacteria in pipes.
- Avoid contact with ears, eyes or mouth with contents of pipe to lower the risk of infection. DO NOT SMOKE!
- Avoid exposing any cuts to drains/sewers and sewer cleaning equipment.

Follow all rules of safety and good housekeeping.

- Keep work area clean.
- Keep all safety guards in place.
- Stay alert.
- Place machine and controls in a stableand accessible position for safe operation.
- Properly store the tools.
- Keep children away from all equipment.
- Use only recommended equipment and accessories. Maintain tools in original working condtion.
- · Do not wear loose fitting clothes.
- Do not exceed limitations of equipment or accessories.
- · Avoid accidental starting by unplugging machine when not in use.
- Always wear recommended safety gear.
- · Always lift with legs and not your back.
- Wear ear protectors when using equipment for extended periods of time.

Before using the operational instructions for the "Mini Jet", follow this checklist.

- 1. Check the ground fault interrupter (GFI) before each use. (See instructions located on the GFI.) Do NOT use the GFI if the indicator light does not go on when reset or if the indicator light remains on when the test button is pushed in. Do NOT use extension cord with GFI.
- 2. The inlet screen must be cleaned before each use to avoid damage to the pump or pulsator. To clean the inlet screen, remove the hose by pulling back on the disconnect fitting at the water inlet valve (see Fig. 2.) Remove the water inlet valve and screen. Rinse the screen thoroughly with water. Replace the screen, water inlet valve and hose.



WARNING: Never operate the "Mini Jet" without the inlet screen. Damage to the pump or pulsator may occur.

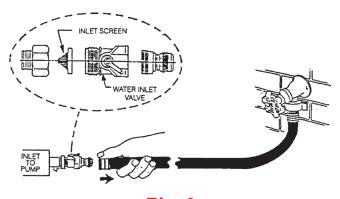


Fig. 2

- 3. Use only garden hose with 5/8" I.D. Make sure there are no impurities in the incoming water supply. If the possibility of impurities exist, turn on the incoming water supply for 15 seconds to remove debris or rust buildup.
- 4. Select the proper nozzle for the application and install it on the hose. Insure the nozzle has been tightened sufficiently to avoid loosening. Use these guidelines for nozzle selection.

A. Ultra Lite Hose/Nozzle - To execute bends in 1 1/4" - 1 1/2" lines.

B. 20° Open Nozzle - To blast openings and clean 1 1/2" - 6" lines.

C. 20° Closed Nozzle - To clean 1 1/2" - 2" lines.

D. 30° Closed Nozzle - To clean 2" - 3" lines.

E. 45° Closed Nozzle - To clean 4" - 6" lines.





WARNING: A minimum of 19 AMPS must be available on the electrical circuit at all times for the "Mini Jet" to function properly.

CAUTION: - 20 AMP CIRCUIT - MAX PRESSURE 1500 PSI

- 1. Make sure the Pre-Operation Checklist has been followed before opening the "Mini Jet".
- 2. Position the "Mini Jet" close to the pipe opening and electrical outlet. Never allow more than 3 feet between the machine and the pipe to avoid having the hose from exit prematurely.
- 3. Release the jet hose from the reel by turning the plastic knob on the side of the reel support frame counterclockwise (left). (see Fig. 3.)

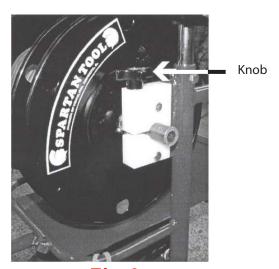


Fig. 3

- 4. Pull off a length of hose from the reel and push at least 6 feet of hose into the pipe.
- 5. Connect one end of a garden hose to the water faucet and the other end of the hose to the water inlet connection (see Fig. 4).

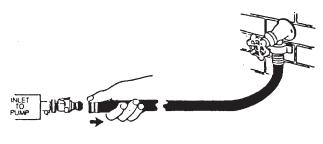
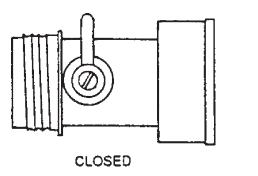


Fig. 4

- 6. Turn on the water faucet.
- 7. Prime the system by turning on the water inlet valve (see Fig. 5). Allow the water to flow until the air is purged from the system.
- 8. Flip the motor switch "on".



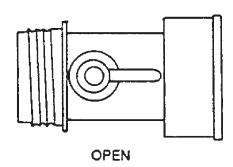


Fig. 5

- 9. Allow the water jet hose to enter the pipe a few feet by holding the hose and pushing it into the pipe.
- 10. The "Mini Jet" will operate up to 1,500 psi. If the machine is operating at a lower pressure, the pressure control knob can be turned clockwise (right) to increase the pressure. The operating pressure is shown on the pressure gauge (see Fig. 6).

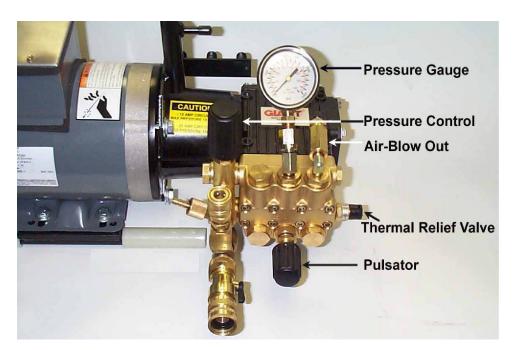


Fig. 6

11. Always pull the water jet hose back one half the distance advanced. The actual cleaning of the pipes takes place when the hose is pulled back toward the operator. Pulling the water jet hose backwards also insures that the hose is not caught in the pipe or has not exited the pipe.

PULSATION CONTROL

- 12. On pipes wth minimum stoppage problems, it may not be necessary to engage the pulsator when using the "Mini Jet". However, there are times when a pipe cannot be cleaned without the use of the pulsator.
- 13. The "Mini Jet" Comes equipped with a Pulsator (see Fig. 7). The purpose of the pulsation is to assist in moving the water jet hose through the pipe. The pulsator unit operates by creating a vibration or pulsing action on the hose using pressurized water. The pulsing or vibration acton reduces hose drag in a pipe by reducing surface contact of the hose on the pipe and, with the assistance of the water jet nozzle, causes the hose to propel itself into the pipe farther and faster.



Fig. 7

The pulsation control can be activated in all cleaning applications from minimum to maximum obstructions. The pulsation control is engaged in the following manner:

- A. Insure the "Mini Jet" unit is completely operational (unit running) and the water jet hose with nozzle has been placed in the pipe about 3 to 6 feet.
- B. Turn know of the pulsation control clockwise (right) all the way to the built-in stop. The vibrating or pulsing action will start instantly and the hose will move into the pipe. A slight drop in pressure will be noted on the pressure gauge when the pulsation is engaged. When retrieving the hose from the pipe, pulsating action is not required and by turning the control knob counterclockwise (left) all the way to the stop, the unit is returned to standard jetting.



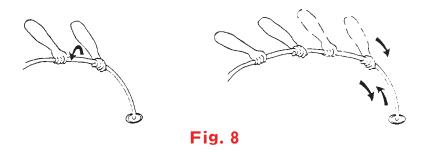
NOTE: Pulsation Control Knob must be in one of two possible positions during operation. The knob must be turned completely out or turned completely in to avoid excessive wear on pump and pulsation unit.

*Patent #: 5580225

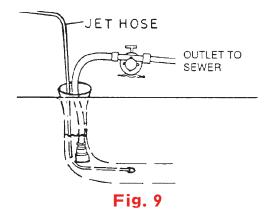


WARNING: Be sure to re-adjust pressure control to 1,500 PSI by turning control knob left (counterclockwise) before stopping unit, this will make it easier to re-start the unit. (The fuse or breaker may trip repeatedly if the unit is operated over 1,500 PSI due to the higher current being drawn by the motor.)

14. If the water jet hose fails to advance even with the assistance of the pulsator, it may be necessary to pull off additional hose and twist the hose in a corkscrew-like manner (see Fig. 8).



15. In those rare instances where backflow is created, a bilge pump may be used (see Fig. 9).



- 16. When the pipe cleaning operation is complete, the "Mini Jet" must be shut-down in the following sequence to avoid problems.
- A. Turn off the motor switch.
- B. Turn off the water faucet.
- C. Close the water inlet valve.
- D. Unplug the electrical outlet.
- E. Disconnect the garden hose.
- F. Retrieve the hose and lock the reel.

Removal of "Power Pak"



The minijet is actually "two water jets in one". It can be operated as a complete long line unit or the "power pak" can be removed from the main reel frame and used as an independent portable unit in conjunction with shorter water jet hose assemblies.

To remove the "power pak" follow these guidelines:

- 1. Remove hair pin clip located on right side of "power pak" motor plate by pulling pin free of holes in motor plate and base plate.
- 2. Disconnect pressure feed hose from reel to pump at quck disconnect located on left side of pump.
- 3. Slide "power pak" unit from base plate by pulling forward on front handle, lift unit free.

NOTE: To reinstall unit, reverse above procedure.

The "power pak" unit can now be taken to the job site. Attach the selected jet hose assembly to the quick coupler at pump outlet, attach garden hose to inlet and plug in unit. "Power pak" is now operational.

Preventive Maintenance



1. **Cold Weather Protection:** To avoid damage to the pump and water jet hose, keep the "Mini Jet" from freezing temperatures. If the "Mini Jet" must be stored in freezing temperatures, you must use one of the following methods.

Method 1:

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

Method 2:

Attach a short garden hose (not to exceed four feet) to the water inlet valve and put the other end of the garden hose into a mixture of 50% antifreeze and 50% water. Plug in the machine and turn the motor switch "on". Allow the mixture to be pumped completely through the system.

- **2. Hot Water Damage to Pump:** Never use water at temperatures higher than 160°. Hot water above 160° will damage the pump and void the warranty.
- 3. Cavitation (Loss of Flow or Air in the System): If there is insufficient water flow in the garden hose or if air enters the inlet side of the pump, cavitation will occur. The pump will become noisy and vibrate. Damage to the pump can occur. If cavitation occurs, check for the following:
 - A. Filter screen at inlet is dirty or blocked.
 - B. Small diamter garden hose being used. (The longer the hose, the larger the diameter.) Garden hoses available in 1/2", 5/8" or 3/4".
 - C. Insufficient water flow. With the garden hose disconnected from the unit, and the valve turned on, a full stream should flow two feet or more from the hose end.
 - D. Check for kinks in garden hose.
 - E. Be sure hose gaskets are used at both ends of hose connections.
- **4. Pump Requirements:** Change crankcase oil after first 50 hours of operation, then at regular intervals of 500 hours or less depending on operating conditions. Use ONLY Giant crankcase oil or a 15W-50 synthetic oil. Failure to comply with these conditions voids the warranty.

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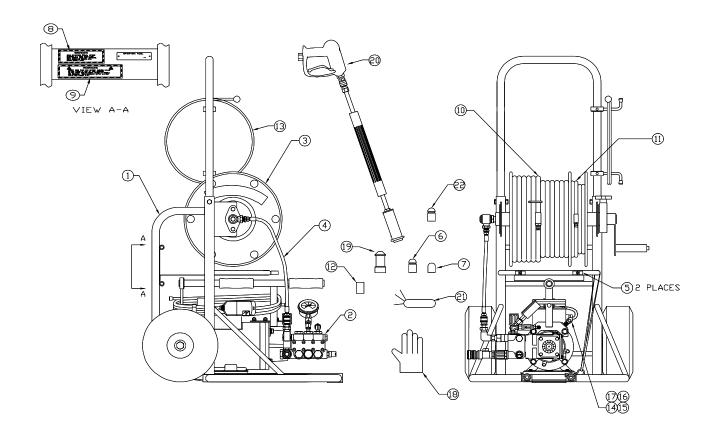
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
	Clogged inlet filter or improper size.	Clean. Use adequate size. Check more frequently.
	Worn or damaged nozzle.	Replace nozzle of proper size.
	Worn or damaged hose.	Repair or replace.
	Inadequate water supply.	Check flow available to pump.
	Broken Valve Spring.	Replace spring.
	Worn packing seals.	Replace packing seals.
Low pressure or flow.	Fouled or dirty inlet or discharge valves.	Clean inlet and discharge valve assemblies.
	Worn or plugged relief valve on pump.	Clean, reset, and replace.
	Cavitation.	Check suction lines on inlet of pump for restrictions.
	Unloader.	Check for proper operation.
	Pressure gauge inoperative or not registering accurately.	Check with new gauge. Replace worn or damaged gauge.
	Air leak in inlet plumbing.	Disassemble, reseal and reassemble
	Accumulator pressure.	Recharge/replace accumulator.
	Worn packing.	Replace packing.
Rough/pulsating operation with pressure drop.	Inlet restriction.	Check system for stoppage, air leaks, and correctly sized inlet plumbing.
	Cavitation.	Check inlet lines for restrictions and/or proper size.
	High humidity.	Reduce oil change interval.
Water in crankcase.	Leakage of crankcase or seals installed backwards.	Replace packing.
	Worn seals.	Replace seals.
	Worn bearings.	Replace bearings, refill crankcase with recommended lubricant.
Noisy pump.	Cavitation.	Check inlet lines for restrictions and/or proper size.
	Coupler loose on crankshaft.	Check and tighten set screws.

Troubleshooting

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
	Damaged or worn plungers.	Replace plungers.
Frequent or premature failure of the packing.	Abrasive material in the fluid being pumped.	Install proper filtration on pump inlet plumbing.
	Excessive pressure and/or temperature of fluid being pumped.	Check pressures and fluid inlet temperature. Be sure they are within specified range.
	Over pressure of pumps.	Reduce pressure.
	Running pump dry.	Do not run pump with inadequate water supply.
	Worn or cracked plungers.	Replace plungers.
	Worn packing/seals.	Adjust or replace packing seals.
Excessive leakage.	Excessive vacuum.	Reduce suction vacuum.
	Cracked plungers.	Replace plungers.
	Inlet pressure too high.	Reduce inlet pressure.
High crankcase temperature.	Wrong grade of oil.	Giant oil or 15W-50 Synthetic oil is recommended.
	Improper amount of oil in crankcase.	Adjust oil level to proper amount.



Final Assembly - 71700000

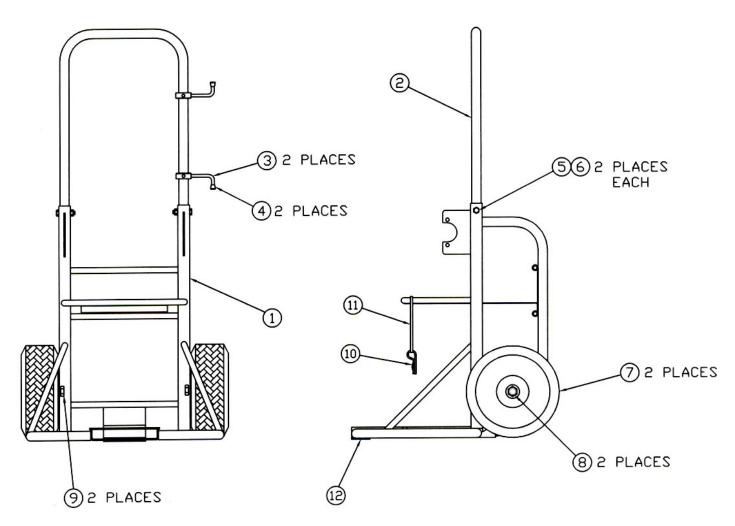


Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
1	44245700	Assembly, Frame	1	12	71108700	Bushing, Reducer 3/8 NPT x 1/4 NPT	1
2	71709000*	Assembly, Power Pak	1	13	71132900	Hose, Ultra Light w/Nozzle 25'	1
3	71702600	Assembly, Reel	1	14	71108200	Nozzle, 20 Deg Closed	1
4	71110200	Assembly, Hose 21"	1	15	71108300	Nozzle, 30 Deg Closed	1
5	71107200	Clamp, Gripper	2	16	71108400	Nozzle, 45 Deg Closed	1
6	44039500*	Rivet, Pop 1/8" Diameter	2	17	71108500	Nozzle, Open 20 Deg	1
7	71129200	Nozzle, 1/8" 20 Deg Closed	1	18	5G243631*	Gloves, Full Length	1
8	77739800	Decal, Caution	1	19	JH-SPNR1*	Nozzle, Revolving 1/4"	1
9	77739900	Decal, Warning	1	20	77799900	Handgun V Nozzle Assy-Small	1
10	71129001	Hose, 1/4" I.D. x 115' (Green)	1	21	71109900	Tip Cleaner Set	1
11	71129102	Hose, 3/16" I.D. x 50' (Orange)	1	22	71137500	Nozzle, Open 20 Deg	1

^{*}May not be available on website. Call customer service for price and availability.

Frame Assembly - 44245700



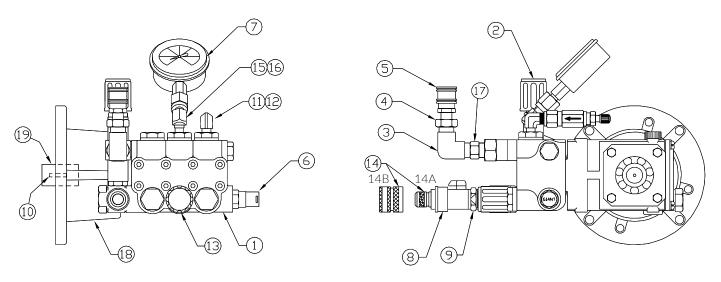


Item	Part Number	Description	Qty.
1	44245250*	Weldment, Frame 717	1
2	44245000	Handle	1
3	44245400	Weldment, Handle Wrap	2
4	44245600	Cap, Protective	2
5	00116900	Screw, Hex Head 3/8-16 x 1-3/4"	2
6	82001030	Nut, Nylock 3/8-16	2
7	71100700	Tire, 10" Pneumatic	2
8	02994400	Screw, Hex Head 5/8-18 x 4"	2
9	02820800	Nut, Jam 5/8-18	2
10	77737100	Pin, Cotter	1
11	75853810*	Cable Assembly	1
12	02865500	Rubber Pad	1

^{*}May not be available on website. Call customer service for price and availability.



Pump Assembly - 71706300

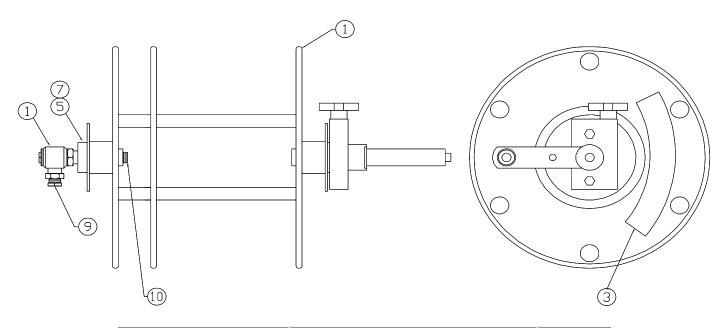


Item	Part Number	Description	Qty.
1	71705900	Pump, Giant P221	1
2	71705955	Unloader	1
3	71136300	Elbow, 90 Deg. Female 3/8	1
4	71108700	Bushing [,] Reducer 3/8 MNPT x 1/4 FNPT	1
5	77721300	Coupler, Quick - Female	1
6	71705954	Thermal Relief Valve	1
7	544001-01*	Gauge, 2000 PSI - 1/4 NPT	1
8	71106000	Shut-Off, Hose	1
9	75867030*	Swivel Garden Hose 1/2 NPT Brass	1
10	71706921*	Key 5/16 x 7/8 Pump	1
11	71707300	Elbow, 90 Deg. Male 1/4 x 1/8	1
12	71707400	Check Valve with Air Valve	1
13	71705953	Pulsator Valve Assembly	1
14A	71105902*	Connector, Quick Male 3/4 GHT	1
14B	71105901*	Connector, Quick Female 3/4 GHT	1
15	71706800	Elbow, 45 Deg. Street 1/8	1
16	71707000	Adapter, 1/8 MNPT x 1/4 FNPT	1
17	71700700	Nipple, Hex Male 3/8	1
18	71705956	Bell Housing	1
19	71705958	Aluminum Motor/Pump Shaft Coupler	1

^{*}May not be available on website. Call customer service for price and availability.

Assy Reel 717 - 71702700



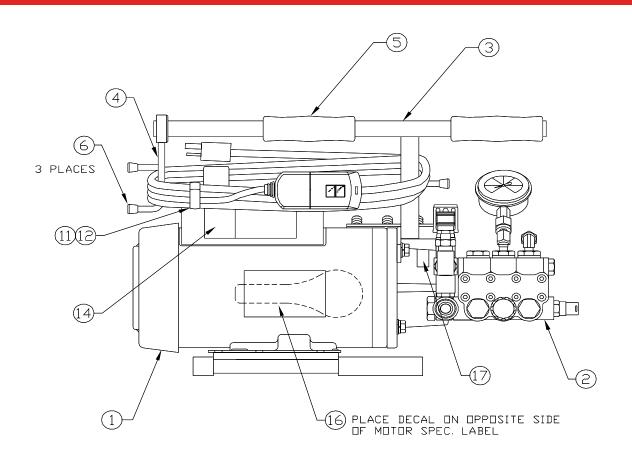


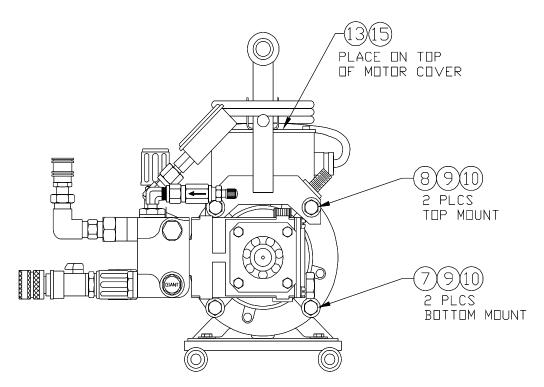
Item	Part Number	Description	Qty.
1	71702600	Reel, 717	1
2	7173100	Handcrank	1
3	71703200*	Brake	1
4	71703300	Brake Knob	1
5	71703400*	Bearing, 1"	2
6	71703500	Swivel, Replcmnt 717 3/8 Brass	1
7	71703600*	Collar, Shaft	1
8	44052700	Decal, Drum Model 200 & 300	2
9	71108700	Bushing, Reducer 3/8M x 1/4 F Brass	1
10	542012-03*	Nipple 3/8 x 1/4	1

^{*}May not be available on website. Call customer service for price and availability.



Assy, Motor & Pump 71705800





Assy, Motor & Pump 71705800



Item	Part Number	Description	Qty.
1	71706100	Assembly, Motor - 2 HP	1
2	71706300	Assembly, Pump	1
3	44244700	Assembly, Handle (includes 4, 5, & 6)	1
4	44245500	Weldment, Cord Holder	1
5	71102500	Grip, Foam	2
6	44245600	Cap, Protective	3
7	77759900	Screw, Hex Head 3/8-16 x 1-1/4"	2
8	79920150*	Screw, Hex Head 3/8-16 x 1-1/2"	2
9	00165800	Washer, Split-Lock 3/8	4
10	00162600	Washer, Flat 3/8	4
11	71107600	Velcro	10"
12	01588200	Washer, Flat 3/16 SAE	1
13	585431-01*	Decal, Warning - Untrained Personnel	1
14	585427-01*	Decal, Warning - High Pressure	1
15	585412-02*	Decal Danger - Electrocution	1
16	71706500	Decal, Spartan	1
17	71706600*	Decal, Caution - Amperage	1

717 Pump Torque Specifications

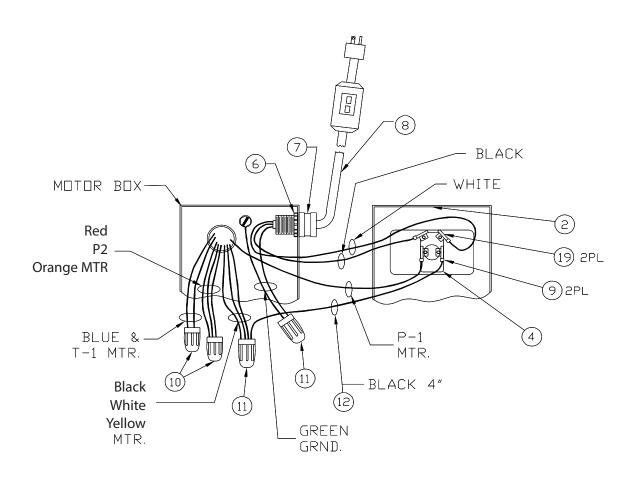


Item	Part Number	Description	Torque Amount
16c	71705926	Tension Screw, plunger	120 (inlbs.)
32	71705943	Valve Plug	59 (inlbs.)
34	71705946*	Hex Head Cap Screw	105 (inlbs.)

^{*}May not be available on website. Call customer service for price and availability.



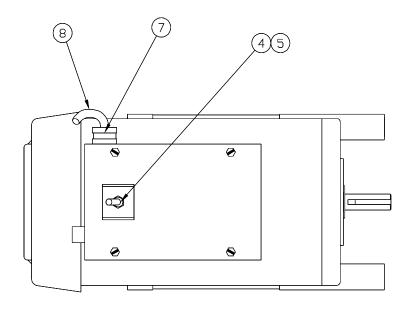
Assy, Motor 71706100

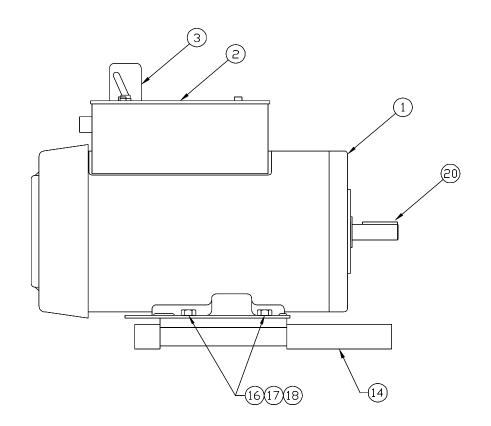


Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
1	71706000	Motor, Marathon 2 HP	1	11	71107000*	Connector Twist-On Wire	2
2	71135003*	Cover, Motor (Machined)	1	12	71125700*	Wire, Black - 14 AWG THNN	4"
3	44005200*	Guard, Toggle Switch (Black)	1	13	44244300*	Assy, Motor Plate (incl. 14 & 15)	1
4	532000-02*	Switch [,] Toggle DPST	1	14	44244100	Skid, Nylon 4-1/8" LG	2
5	44110500	Rubber Boot	1	15	44244200	Skid, Nylon 1"LG	2
6	538006-02*	1/2" Steel Locknut	1	16	00114800	Screw, Hex HD 5/16-18 x 5/8	4
7	538006-01*	Strain Relief Cord Grip	1	17	77743400*	Kantlink Lockwasher, 5/16	4
8	71103301*	Cord, Power 12GA GFCI	1	18	00162600	Washer, Flat 5/16 USS Zinc	4
9	71106800	Disconnect, Flag Type	2	19	71707200	Disconnect, Flag INSL (12 AWG)	4
10	71125800*	Connector Twist-On Small	2	20	71123100*	Key 3/16 x 1-1/4 (Motor)	1

Assy, Motor 71706100









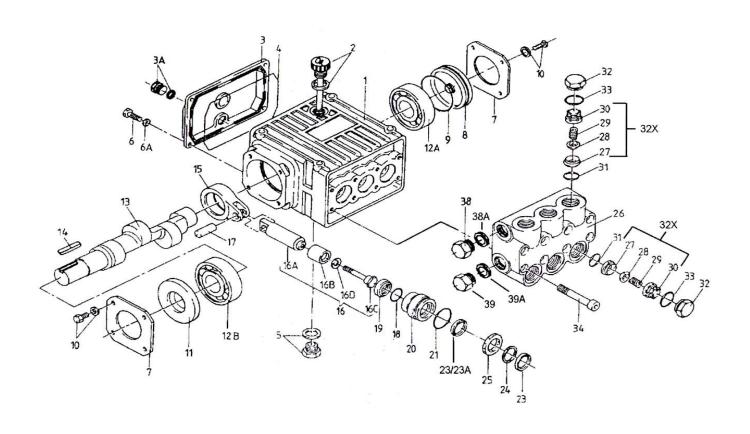
Pump, Giant P221 (Modified) 71705900

Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
1	71705905*	Crankcase (Giant P221)	1	17	71705928*	Wrist Pin (Giant P221)	3
2	71705906*	Oil Dipstick (Giant P221)	1	18	71705929	O-Ring (Giant P221-07770)	3
3	71705907*	Crankcase Cover, Short	1	19	71705930	Oil Seal (Giant P221)	3
3A	71705908	Drain Plug & Gasket (Giant P221)	1	20	71705931	Seal Case (Giant P221)	3
4	71705909	O-Ring (Giant P221-08005)	1	21	71705932	O-Ring (Giant P221-08443)	3
5	71705910*	Oil Drain Plug & Gskt (Giant P221)	1	23	71705933	V-Sleave, Weep (Giant P221)	3
6	71705911*	Screw, Short Cover (Giant P221)	4	23A	71705934	V-Sleave, Brown (Giant P221)	3
6A	71705912*	Washer, Short Cover (Giant P221)	4	24	71705935	Pressure Ring (Giant P221)	3
7	71705913*	Bearing Cover (Giant P221)	2	25	71705936	Weep Return Ring (Giant P221)	3
8	71705914	Sight Glass (Giant P221)	1	26	71705937	Valve Casing (Giant P221)	1
9	71705915	O-Ring (Giant P221-08492)	1	27	71705938*	Valve Seat (Giant P221)	6
10	71705916*	Screw w/Lock Wshr (Giant P221)	8	28	71705939*	Valve Plate (Giant P221)	6
11	71705917*	Radial Shaft Seal (Giant P221)	1	29	71705940	Valve Spring (Giant P221)	6
12A	71705918*	Ball Bearning (Giant P221-08020)	1	30	71705941*	Valve Spring Ret. (Giant P221)	6
12B	71705919*	Ball Bearing (Giant P221-01020)	1	31	71705942	O-Ring (Giant P221-07853)	6
13	71705920*	Crankshaft (Giant P221)	1	32	71706401	Plug, Valve-Giant	6
14	71705921*	Key 5/16 x 7/8 (Pump)	1	32X	7170943	Valve Assy Comp (Giant P221)	3
15	71705922*	Connecting Rod (Giant P221)	3	33	7170944	O-Ring (Giant P221-07913)	6
16	71705923	Plunger, Complete (Giant P221)	3	34	7170945	Screw, Hex HD Cap (Giant P221)	8
16A	71705924*	Plunger Base (Giant P221)	3	38	7170946*	Plug, 3/8" BSP (Giant P221)	1
16B	71705925	Plunger Pipe (Giant P221)	3	38A	7170947	Seal (Giant P221)	1
16C	71705926	Tension Screw (Giant P221)	3	39	7170948	Plug, 1/2" BSP (Giant P221)	1
16D	71705927	Copper Gasket (Giant P221)	3	39A	7170949	Copper Seal Ring (Giant P221)	1

^{*}May not be available on website. Call customer service for price and availability.

Pump-Exploded View 71705900





717 Pump Repair Kits



PLUNGER PACKING KITS (71705950)

Part Number	Description	Qty.
71705933	V-Sleeve, Weep	3
71705934	V-Sleeve, Brown	3
71705935	Pressure Ring	3

OIL SEAL KIT (71705952)

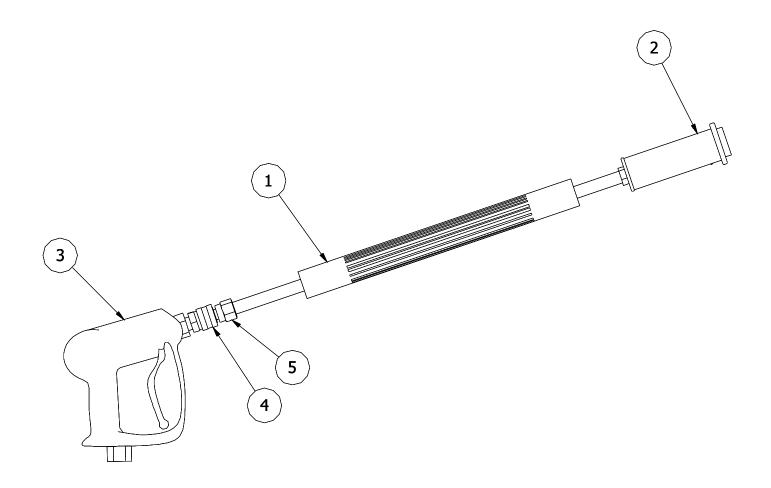
Part Number	Description	Qty.
71705930	Oil Seal	3

VALVE ASSEMBLY KIT (71705951)

Part Number	Description	Qty.
71705944	Valve Assembly Complete	6
71705942	O-Ring	6



Handgun Vnozzle Assy - Small 77799900

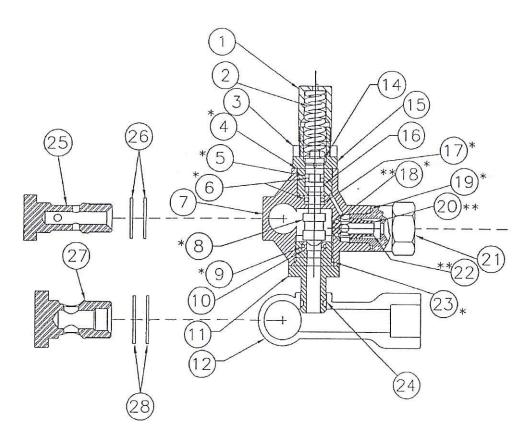


Item	Part Number	Description	Qty.
1	553006-01*	Lance, Insulated Grip 18"	1
2	71126100	Nozzle, Vari-	1
3	77720100	Gun, Hand	1
4	77721300	Coupler, Quick Gun, 1/4" NPT Male	1
5	77721400	Coupler, Quick Gun, Male	1

^{*}May not be available on website. Call customer service for price and availability.

Unloader (Giant P221) 71705955





Item	Part Number	Description	Qty.	Item	Part Number	Description	Qty.
1	71705964*	Adjusting Spring Cap	1	16	71705977*	Piston Rod	1
2	71705965	Pressure Spring	1	17	71705978*	Support Ring	1
3	71705966*	Nut	1	18	71705979*	O-Ring	1
4	71705929	O ⁻ Ring	1	19	71705944	O ⁻ Ring	1
5	71705967*	Support Ring	1	20	71705980*	Kick Back Valve Spring	1
6	71705968*	O-Ring, Piston	2	21	71705981	Kick Back Valve Retainer	1
7	71705969*	Unloader Body	1	22	71705982	Kick Back Valve Cone	1
8	71705970*	Piston	1	23	71705983	O-Ring	1
9	71705971*	O-Ring	1	24	71705984	O-Ring	1
10	71705972*	Seat	1	25	71705985*	Discharge Banjo Bolt	1
11	71705973*	Bypass Fitting, 23270	1	26	71705986	Seal Ring	2
12	71705974	Inlet Tube, 23270	1	27	71705987*	Inlet Banjo Bolt, 23270	1
14	71705975*	Spring Retainer	1	28	71705988	Seal Ring	2
15	71705976*	Guide Plug	1				

^{*}May not be available on website. Call customer service for price and availability.

Part Number	Description
71108200	20° Nozzle (Closed) 1/4" I.D. Hose
71108300	30° Nozzle (Closed) 1/4" I.D. Hose
71108400	45° Nozzle (Closed) 1/4" I.D. Hose
71108500	20° Nozzle (Open) 1/4" I.D. Hose
71129200	20° Trap Hose Nozzle (Closed) 3/16″ I.D. Hose
71137500	20° Trap Hose Nozzle (Open) 3/16" I.D. Hose
71700100*	1/4" I.D. x 115' High Pressure Hose w/Couplings
71129102	3/16" I.D. x 50' Trap Leader Hose w/Couplings
71132900	25' Ultra-Lite Hose Assembly w/Nozzle
71109900	Tip Cleaner
71110300*	Hand Gun Assembly w/Coupler
71129001	1/4" x 115'Thermoplastic Hose
71126200*	Lance Assembly w/Variable Spray Nozzle

^{*}May not be available on website. Call customer service for price and availability.

Optional Accessories



Part Number	Description
71129002*	1/4" I.D. x 50' High Pressure Hose w/Couplings
71129003*	1/4" I.D. x 75' High Pressure Hose w/Couplings
71129004*	1/4" I.D. x 150' High Pressure Hose w/Couplings
71129101*	3/16" I.D. x 25'Trap Leader Hose w/Couplings
71129103*	3/16" I.D. x 75' Trap Leader Hose w/Coupling
71129104*	3/16" I.D. x 100'Trap Leader Hose w/Couplings
71133000	50' Ultra-Lite Hose Assembly w/Nozzle
77721400	Coupler, Quick Gun (Male) (Item 1)
71138200*	Nozzle, Drop Head 3/16"
71701600*	Hose S.S. Trap 30' with Nozzle
71701700	Hose S.S. Trap 50' with Nozzle
71701800	Hose S.S. Trap 75' with Nozzle
71702900	Hose S.S. Trap 100' with Nozzle
71701900	Brass Nozzle (for S.S. Hose) 1-1/4" Dia. x 1/8 NPT

^{*}May not be available on website. Call customer service for price and availability.

^{**}Spartan strongly recommends upgrading your hose to a stainless steel hose if difficult situations are encountered.

Spartan Tool warrants its equipment to be free from defects in material and workmanship for two years 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 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 LLC Niles, Michigan 49120

Spartan Tool LLC 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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