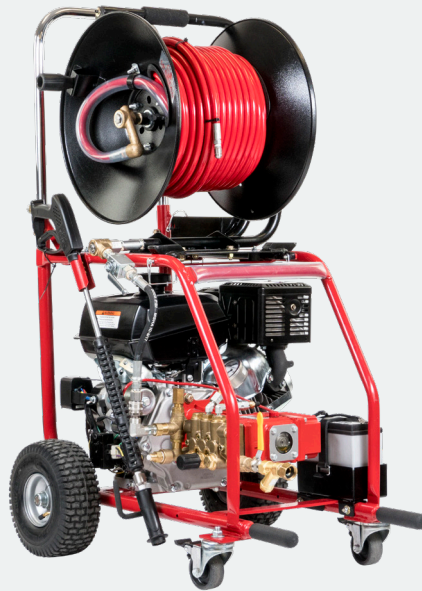




# SPARTAN TOOL

FOR TOUGH CUSTOMERS. SINCE 1943.



## PRODUCT MANUAL

# Model 727

Spartan Tool LLC | 1618 Terminal Road | Niles, MI 49120  
order by phone **800.435.3866** order online **SpartanTool.com**

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Part #72700000 (Rev. C) 2021-02



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# Warnings

- 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.
- Explosive fuel can cause fires and severe burns. Fuel is flammable and its vapors can ignite. Store fuel only in approved containers, in well ventilated, unoccupied buildings. Do not fill the fuel tank while the engine is hot or running, since spilled fuel could ignite if it comes in contact with hot parts or sparks from ignition. Do not start the engine near spilled fuel. Never use fuel as a cleaning agent.
- 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 6 feet 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.



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

- Never point the wash gun at anyone while operating the unit. Injury may result.
- Drains and sewer can carry bacteria and other infectious micro-organisms or materials which can cause death or severe illness. Avoid exposing eyes, nose, mouth, ears, hands, and cuts and abrasions to waste water or other potentially infectious materials during drain and sewer cleaning operations. To further help protect against exposure to infectious materials, wash hands, arms and other areas of the body, as needed, with hot, soapy water and, if necessary, flush mucous membranes with water. Also, disinfect potentially contaminated equipment by washing such surfaces with a hot soapy wash using a strong detergent.
- For any questions, contact Spartan Tool at the address shown below.

## 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.



## GENERAL

- Pipe Sizes: Up to 6" diameter
- Max Water Pressure: 3,000 psi
- Max Water Flow: 4 GPM
- Unit Size: 23"W x 35"D x 37"H
- Weight - power unit: 166 lbs.
- Weight - reel with hose: 54 lbs.

## ENGINE

- Model: 14 HP, Kohler CH440
- Electric Start: Standard
- Low oil alert system: Standard
- Cylinders: 1
- Bore & Stroke: 3.5 x 2.7
- Full throttle RPM: 3,200
- Fuel: Gasoline (1.85 gal capacity)
- Oil: SAE 10W30 (1.16 qt capacity)
- Sparkplug: Champion RC12YC
- Cooling: Air
- Battery: 12VDC, 17.5 Amp hour, 310 CCA
- Back-up starter: Recoil
- Choke: Manual

## PUMP

- Type: Triplex Plunger, GIANT
- Max Pressure: 3,000 PSI
- Max Water Output: 4.8 GPM
- Max Temperature: 160°F
- Max RPM: 3,400
- Plungers: 3

## FEATURES

- Triplex ceramic plunger pump has adjustable pressure regulator for up to 3,000 PSI at 4 GPM
- 200 feet of high pressure 5/16" I.D. working hose
- 75 feet of high pressure 3/16" I.D. working hose
- Patented pulse technology reduces friction, continuously moves hose down the line and improves hose retrieval
- Electric-start motor with manual backup and direct drive
- Detachable dual-action hose reel tilts forward for use in cleanouts below the cart and removes so you can take it indoors
- Thermal dump feature controls heat buildup during continuous operation
- Air evacuation port standard for easy winterization in below-freezing temperatures
- Low engine oil shutdown
- Easy-ride 10" pneumatic tires
- 5 nozzles and nozzle-cleaning tool included

## SAFETY

- Gauntlet-style gloves included
- Adjustable unloader valve to prevent over-pressurization
- Thermal-pressure relief valve



# New Unit Start-Up

## BEFORE RUNNING UNIT

Locate the small cardboard box packed with the following materials:

- (1) Spartan 727 Product Manual
- (1) Engine Owners Manual
- (1)  $\frac{3}{8}$ " to  $\frac{1}{4}$ " quick disconnect adapter
- (1) Sparkplug wrench
- (1) Nozzle cleaner

Packaged separately:

- (1) Trigger wash wand
- (1) 75' x  $\frac{3}{8}$ " I.D. jetting hose with nozzle



**NOTE** If any of the above items are missing, contact Spartan Tool Customer Service at 800.435.3866 or by email at [CustomerService@SpartanTool.com](mailto:CustomerService@SpartanTool.com).

Locate the battery. There are two battery terminals. One is connected. One is not. Loosen the nut on the disconnected terminal with a wrench. Connect the loose cable to the terminal between the nut and the "U" shaped bracket on the battery. Tighten securely (20 to 40 in-lbs).



## PRE-CHECK

1. Check engine oil (SAE 10W30) by reading the dipstick. (Refer to engine owners manual.)
2. Check pump oil (use only Giant Synthetic or a 15W-50 synthetic motor oil).
3. Check engine fuel. Fill as necessary. Remove the rear hose reel retaining pins to allow the hose reel to be tilted forward for access to the engine fuel tank.
4. Check pump inlet line strainer for cleanliness before each use. Never run a unit without a strainer.
5. Check the jetting nozzle for possible plugged jet holes using visual inspection and the nozzle cleaning tool. If plugged, use the nozzle cleaner to carefully clear the obstruction (and then rinse).
  - **CAUTION:** DO NOT ENLARGE THE JET HOLES OF THE NOZZLE. Operating the jetter with jetting nozzle holes plugged OR enlarged will interfere with the performance of the machine.
6. Use a good-quality ¾" or larger garden hose connected to an adequate water supply. Connect hose to hot or cold water faucet.
  - To check for a required minimum 4 GPM water supply, open water spigot valve and time water flow through the garden hose and into a one-gallon container. If the container fills in 15 seconds or less, the water supply has adequate flow to supply the jetter.
  - Insufficient water supply will cause pump to cavitate.

## PRE-CHECK

1. Attach the garden hose from a water supply to the jetter.
  - If a hot water supply is used, do not allow water temperature to exceed 140°F, that is thermo-dump valve setting.
2. Attach jetter hose to the unit (do not attach the jetting nozzle at this time).
3. Prime the system by turning the supply hose valve **on**, turning the pump inlet valve **on**, and turning the jetter hose reel control valve **on**. Allow the water to flow until the air is purged from the system.
4. Turn jetter hose reel control valve **off**.
5. Attach selected jetting nozzle to the hose finger tight.
6. Mark a location on hose 3 feet from the jetting nozzle end with a band of tape. Use that mark to determine when jetting nozzle is near access hole.
  - Avoid injury from unconfined jetting nozzles. Place the hose and nozzle at least 3 feet into the line to be cleaned before starting the engine.
  - Turn the hose reel valve **on** (valve must be **on** for engine to start).
7. Turn the engine fuel valve **on**. Start the engine at a reduced (about ¼) throttle setting. Allow 1 to 2 minutes for the engine to warm up, then fully open the throttle.
  - **NOTE:** Only operate the Model 727 in the upright position. Never allow the unit to be laid on its back or on its side. Damage to the engine will result.
8. You are now ready to start jetting.



# Jetting Operation & Procedures

## STARTING

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.

1. Keep jetting hose at least 3 feet into pipe line access hole. **Do not remove hose from line at any time while under power.**
2. Adjust **regulator control knob** to 3,000 PSI.
  - **WARNING: Do not exceed 3,000 PSI. Injury or machine damage may result.** Control hose water pressure and flow at the hose reel valve. Open and close the valve slowly for smooth engine response.
  - Never run the machine with the hose reel valve in the closed position for more than 1 to 2 minutes. Extended shut-off causes the water recycled in the pump to overheat, which will cause the thermal valve to open and vent hot water.
3. Begin jetting.

## STOPPING

1. Shut down the engine by reducing to ¼ throttle before turning the ignition **off**.
2. Shut **off** the water supply. Disconnect hoses.

## GENERAL PROCEDURES

- Jetting hose selection is determined by the size of the line to be cleaned.
  - Use the ¾" I.D. hose directly from the hose reel for large lines and distances.
  - Use the smaller ½" I.D. hose (provided separately) for smaller jobs requiring jetting through traps.
- Use of the smaller ¾" jetting hose should be made directly from the pump quick disconnect fitting (using the provided ¾" to ¼" adapter) for the best results. For jobs located at distance from the jetting machine, use the trigger wash wand at the end of the ¾" I.D. hose for flow control and attach the ¾" I.D. hose to the wash wand.
- Jetting nozzle selection is made according to the size of the hose used and the type of jetting to be done. See the jetting nozzle descriptions for best applications.
- If possible, jetting to the approximate far end of the build-up. Pull the jetter hose back at a slow rate (down to about 1 ft/min for heavy drainline accumulation), allowing enough time for the jetting nozzle to wash the pipe clean.
- For best results, jet from the lower end of the line to be cleaned. Provision may have to be made to catch accumulation of water during jetting operation.
- Hold the jetter hose, release the locking "L" pin on the reel and allow the hose to feed itself into the line to be cleaned. Pushing on the hose to aid in feeding may be required through traps, blockages, and long distances.
- When jetting a drain line through a trap, you may have to help the jetter hose feed through the trap by grasping it near the entrance of the drain and jabbing the jetting nozzle through the trap with a quick thrusting motion.
- When jetting from the high end of the line, turn the jetter hose reel valve off occasionally to allow water accumulation to drain past the jetting nozzle.



# Jetting Operation & Procedures

- When obstruction or corners are encountered, it may be necessary to manually rotate the hose (Fig. 1) to enable the hose to feed through the area. This will cause the jetting nozzle to jump over or around those areas. If 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.
- It may also be necessary to move the hose slightly in and out of the drain line to assist the jetting nozzle in cleaning stubborn clogs, obstructions, or tight corners (Fig. 2).



**FIG. 1**



**FIG. 2**

## PULSE CONTROL

- The Model 727 comes equipped with a pulsator. The purpose of the pulsation is to assist in moving the water jet hose through the pipe. The pulsator unit operates by creating a vibrating or pulsing action on the hose using pressurized water. The pulsing or vibration action 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 a pipe much farther and faster.
- To engage the pulsator, turn the control knob 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 completely turned in or out to avoid excessive wear on pump and pulsation unit. Excessive use of the pulsator will lead to quicker wear of the jetting hose.

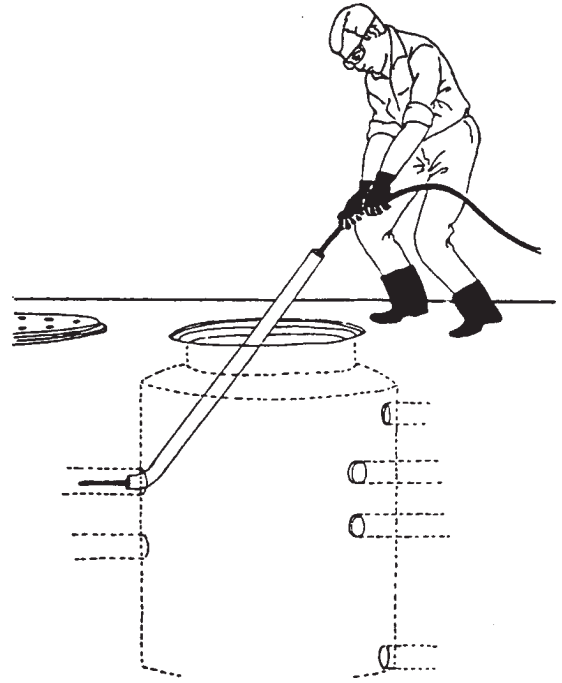
## RESIDUE

- Most drain line residue is precipitated (a solid is formed when it falls out of water suspension and collects on drain pipe walls). A 3,000 PSI water blast from the jetter can very quickly wash these drain lines clean.
- Many lines have a deep layer of hard soap and lime residue bonded to the drain pipe wall. In some of these cases you will encounter a very slow jetting speed because you are cutting through this hard soap. As an aid to gauging the travel of the jetting hose, mark the hose at intervals with tape or other markers.
- To clear soap residue, use the cleaning jet nozzles with hot tap water (140°F max). Jet to the far end of the soap residue (jetting can be very slow, down to 6" per minute). Pull the jet hose out very slowly to allow time for water jets to cut through the soap cake. At times, you will wash large tubular sections of soap downstream.
  - **WARNING:** Hot water can cause severe burns. Wear a face shield, gloves, and a raincoat when using water at high temperatures.

# Jetting Operation & Procedures

## SEPTIC TANKS AND MANHOLE ENTRANCES

- Use a section of 1½" or 2" PVC pipe with a 45° fitting attached to the end to aid in feeding the jetter hose into a drain line in a septic tank or manhole (Fig. 3).
- **Use caution when entering a confined space! Follow OSHA guidelines. Dangerous gases in these areas may be lethal!**



**FIG. 3**



## Pressure Washing Instructions

- Attach the handgun and lance with quick disconnect fitting to the ⅝" jetting hose for pressure washing applications. Refer to jetting start-up procedures.
- Adjust the Vari-Nozzle at the end of the lance to achieve the best spray pattern for the pressure wash job being done.



**WARNING:** Avoid running the machine with the handgun in the closed position for more than 1 minute. Extended shut-off causes the water recycled in the pump to overheat, which will cause the thermal valve to open and vent hot water.



The following nozzles are provided in sizes to fit both the  $\frac{5}{8}$ " I.D. ( $\frac{1}{4}$  NPT) hose and  $\frac{3}{4}$ " I.D. ( $\frac{1}{2}$  NPT) hose, except for the rotating nozzle, which is only provided to fit the  $\frac{5}{8}$ " I.D. hose.

## **THRUSTER JETTING NOZZLES—FOR DISTANCE**

These nozzles have four jets in reverse at a low angle for maximum thrust

## **OPEN JETTING NOZZLES—FOR PENETRATION**

These nozzles have four jets in reverse at a low angle, plus one forward penetrating jet. These penetrating jetting nozzles are used to jet through grease, ice, or other residue.

## **ROTATING JETTING NOZZLE**

This nozzle is used to clean the wall of the sewer line after the line has been unclogged.



# Care & Maintenance

## ENGINE

- **Oil**—SAE 10W30 (1.16 qt capacity)
  - Check engine oil with every usage. Make the first engine oil change after (1) month or 20 hours of operation and every (6) months or 100 hours of operation thereafter.
- **Air Cleaner**—Dual element type
  - Check air cleaner with every usage. Clean every (3) months or 50 hours of operation.
- **Sediment Cup**
  - Check every (6) months or 100 hours of operation.
- **Spark Plug**—Champion RC12YC
  - Check every (6) months or 100 hours of operation.
  - Replace every year or 300 hours of operation.

## PUMP

- **Oil**—Giant synthetic or 20W-50 (15W-50 for colder weather) synthetic motor oil (Capacity: 21 fl oz)
  - Change oil after the first 50 hours of operation, then at regular intervals of 500 hours or less, depending on operating conditions.
- **Inlet strainer**
  - Check inlet strainer before every usage to ensure that it is not blocked. Take care to ensure that no dirt or particles are allowed to enter the pump system.



**WARNING:** Do not exceed 3,000 PSI. Injury or machine damage may result.

## BATTERY

- **12V DC, 17.5 Amp Hour**—310 CCA
  - Maintenance-free battery. See battery for warnings.



**WARNING:** The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.

## FREEZE PROTECTION

**Cold Weather Protection:** To avoid damage to the pump and water jet hose, keep the Model 727 from freezing temperatures. If the Model 727 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 (located next to the pressure gauge).
- **Method 2:** Attach a short garden hose (not to exceed 4 feet) to the pump inlet valve and put the other end of the garden hose into a mixture of 50% antifreeze and 50% water. Cycle antifreeze mixture through the system. When antifreeze flows from the outlet, the system is protected.



PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Low pressure or flow.	Clogged inlet filter or improper size.	Clean. Use adequate size. Check more frequently.
	Inadequate water supply.	Check flow available to pump.
	Worn nozzle.	Replace nozzle of proper size.
	Leaky discharge hose.	Repair or replace.
	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.
	Worn packing seals.	Replace packing seals.
	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.
	Pump not fully primed.	Remove jetter hose at outlet. Turn pump inlet valve on. Run pump until fully primed.
	Low engine RPM.	Check full throttle speed (adjust to 3,200 RPM).
Rough/pulsating operation with pressure drop.	Pump not fully primed.	Remove jetter hose at outlet. Turn pump inlet valve on. Run pump until fully primed.
	Worn packing.	Replace packing.
	Inlet restriction.	Check system for stoppage, air leaks, and correctly sized inlet plumbing.
	Cavitation.	Check inlet lines for restrictions and/or proper size.
Water in crankcase.	High humidity.	Reduce oil change interval.
	Leakage of crankcase or seals installed backwards.	Replace packing.
	Worn seals.	Replace seals.
Noisy operation.	Pump not fully primed.	Remove jetter hose at outlet. Turn pump inlet valve on. Run pump until fully primed.
	Worn bearings.	Replace bearings. Refill crankcase with recommended lubricant.
	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
Frequent or premature failure of the packing.	Damaged or worn plungers.	Replace plungers.
	Abrasive material in 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 the specified range.
	Over pressure of pumps.	Reduce pressure.
	Running pump dry.	Do not run with inadequate water supply.
Excessive leakage.	Worn or cracked plungers.	Replace plungers.
	Worn packing/seals.	Adjust or replace packing seals.
	Excessive vacuum.	Reduce suction vacuum.
	Inlet pressure too high.	Reduce inlet pressure.



## HOW TO USE THE PARTS & ACCESSORIES SECTION

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

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

### SPARTAN MODEL 727

*Unit Serial Number*

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 Spartan Tool directly at [www.SpartanTool.com](http://www.SpartanTool.com).

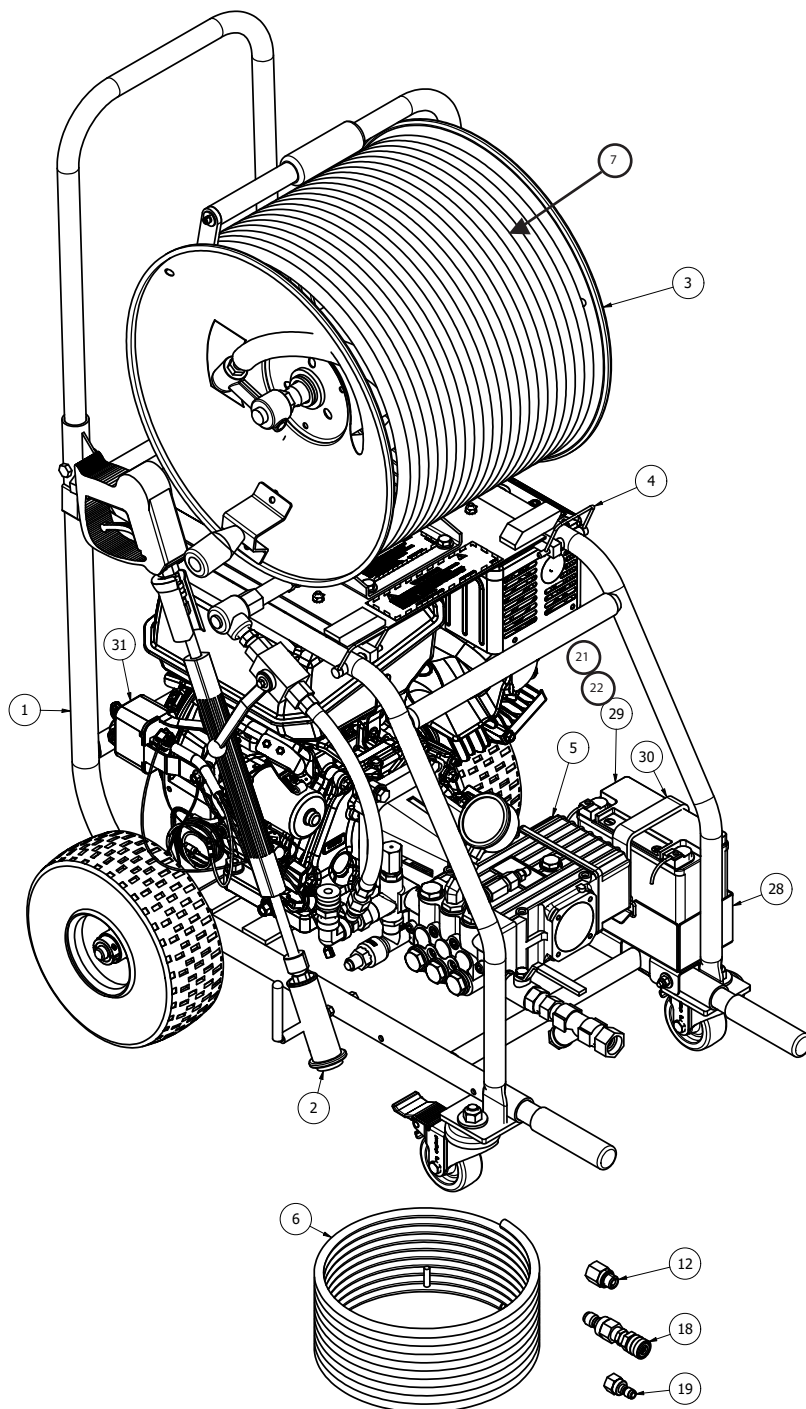
### CONTACT US

Spartan Tool LLC  
1618 Terminal Road  
Niles, MI 49120  
800.435.3866  
[SpartanTool.com](http://SpartanTool.com)

Part Number	Description	Qty.
JH-SPNR1	Revolving Nozzle	1
72705500	3/8" Cleaning Nozzle	1
72705400	3/8" Thruster Nozzle	1
72705200	5/8" Cleaning Nozzle	1
72705100	5/8" Thruster Nozzle	1
H3/16-75	3/8" I.D. x 75' Hose Assembly (orange)	1
72711300	3/8" x 1/4" Adapter Assembly	1
71109900	Tip Cleaner	1
5G243631	Safety Gloves—full length	1
77799800	Handgun Lance w/Nozzle Assembly	1
77721400	Coupler, Quick Gun Male	1
542104-03	Bushing Red 3/8m x 1/4f St.	1
77721400	Coupler, Quick Gun—Male	1

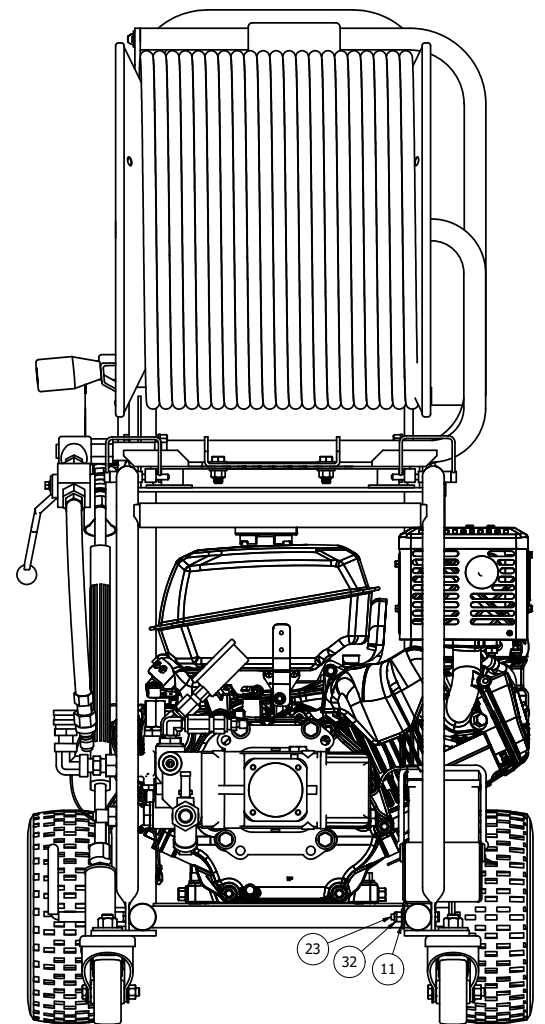
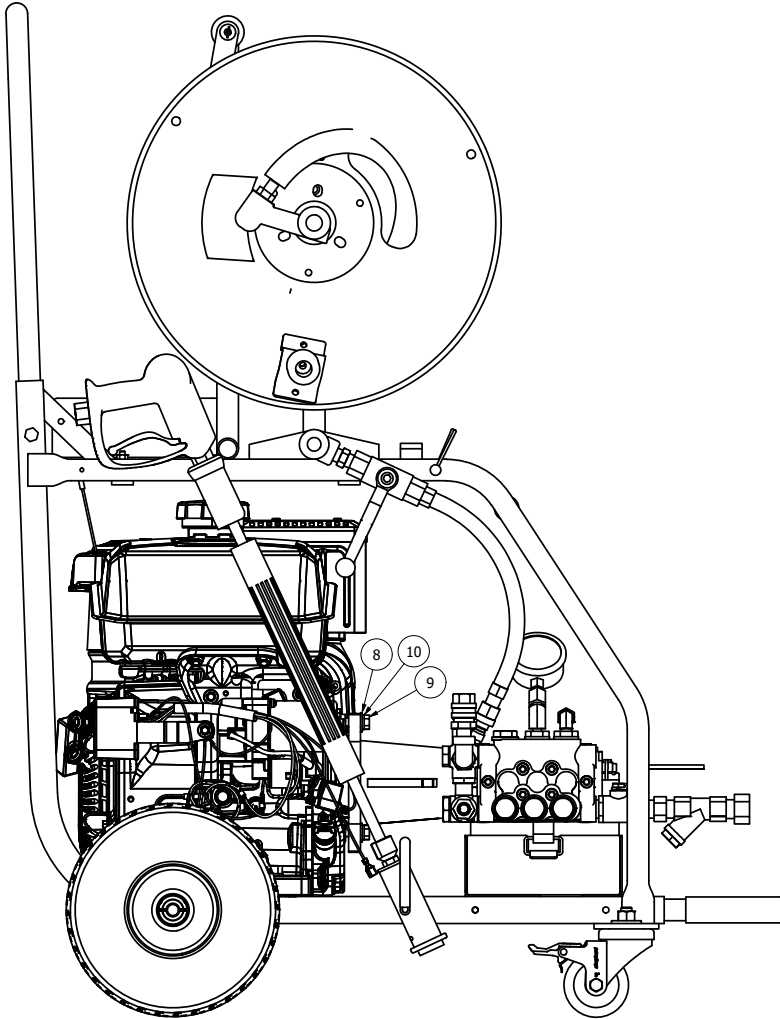
# Model 727 Final Assembly

## FINAL ASSEMBLY (72700000)





# Model 727 Final Assembly



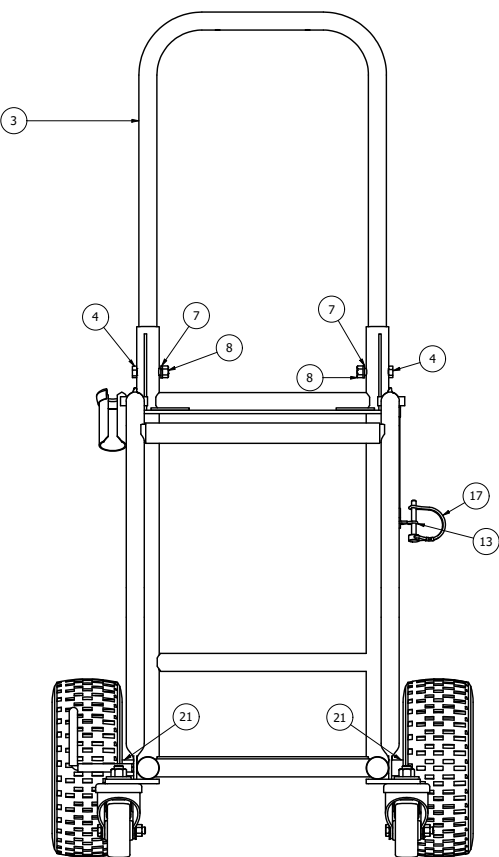
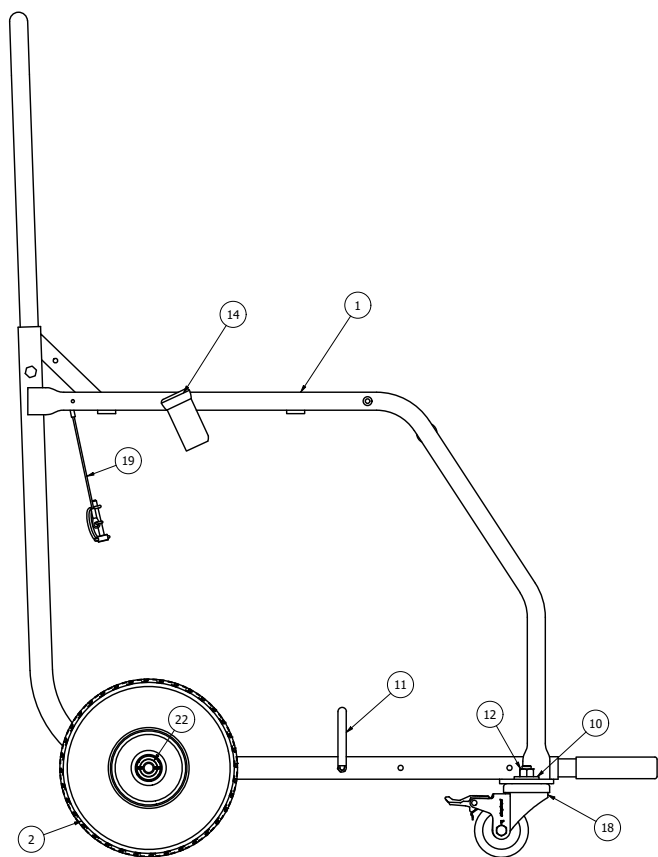
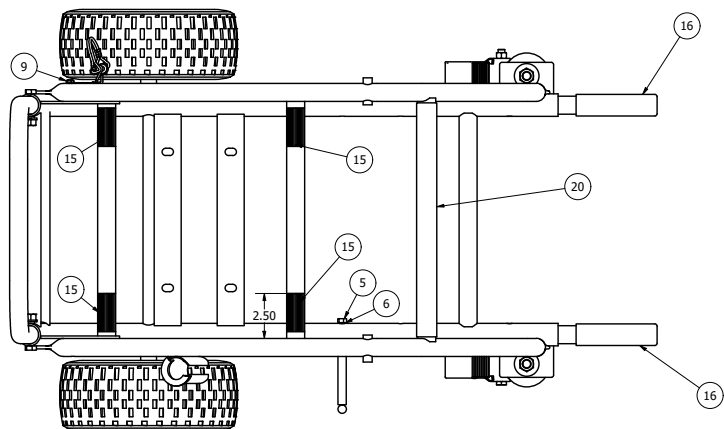
# Model 727 Final Assembly

Item	Part Number	Description	Qty.
1	72704100	Assembly, Frame—727	1
2	77799800	Spraygun Assembly	1
3	72727700	Assembly, HP Reel	1
4	72711100	Pin, Safety Snap	2
5	72726200	Assembly, Pump	1
6	H 3/16-75	3/16" I.D. x 75' Hose Assembly (orange)	1
7	72706700	Hose, 3/8" O.D. x 200' (red)	1
8	00162600	Washer, Flat 3/16" USS	12
9	00116900	Screw, Hex Head 3/16-16 x 1 3/4	8
10	00165800	Washer, Lock-Split 3/8"	4
11	00763301	Washer, Flat 1/4"	4
12	542104-03	Bushing, Red 3/8" M x 1/4" F STL	1
13*	72705100	Nozzle, Closed for 3/16" Hose	1
14*	72705200	Nozzle, Open for 3/16" Hose	1
15*	72705400	Nozzle, Closed for 3/8" Hose	1
16*	72705500	Nozzle, Open for 3/8" Hose	1
18	72711300	Assembly, Adapter 3/8" to 1/4"	1
19	77721400	Plug, Female 1/4" NPT	1
21	72706500	Cable, Positive Battery	1
22	72706600	Cable, Negative Battery	1
23	79920154	Screw, Hex Head Cap 1/4-20 x 2"	2
28	72708510	Battery Box	1
29	72708500	Battery	1
30	72708520	Battery Strap	1
31	72708400	Engine, 14 HP	1
32	73821200	Nut, Nylon Locking 1/4-20	2
35*	64050080	Clamp, Drum Cable	1
36*	JH-SPNR1	Nozzle, Rotating 1/4"	1

\*Not shown

# Frame Assembly

## FRAME ASSEMBLY (72704100)

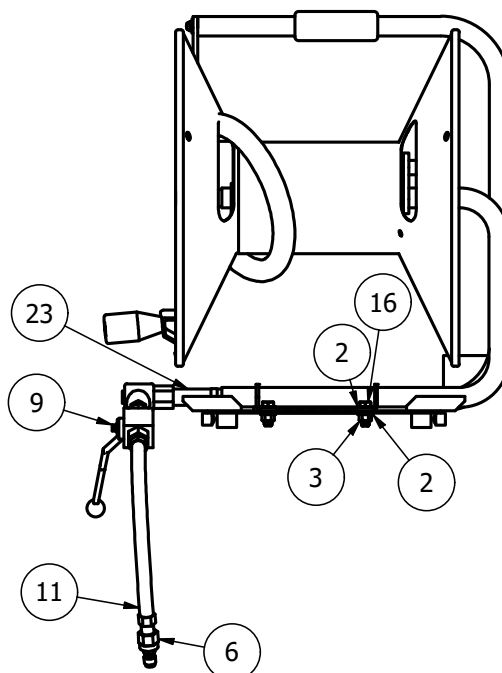
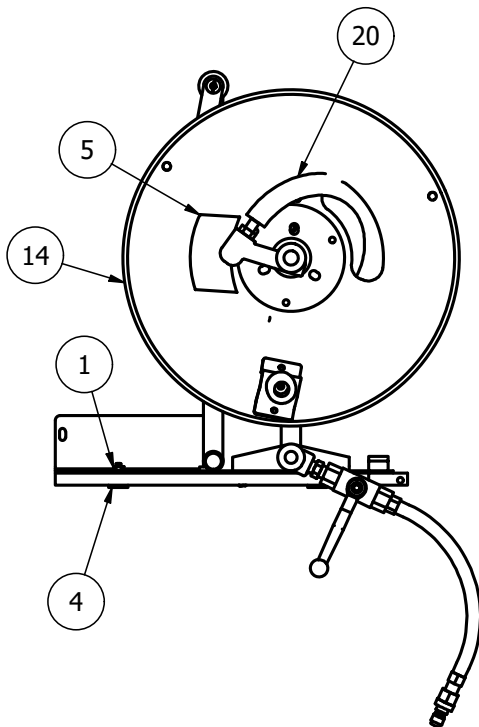
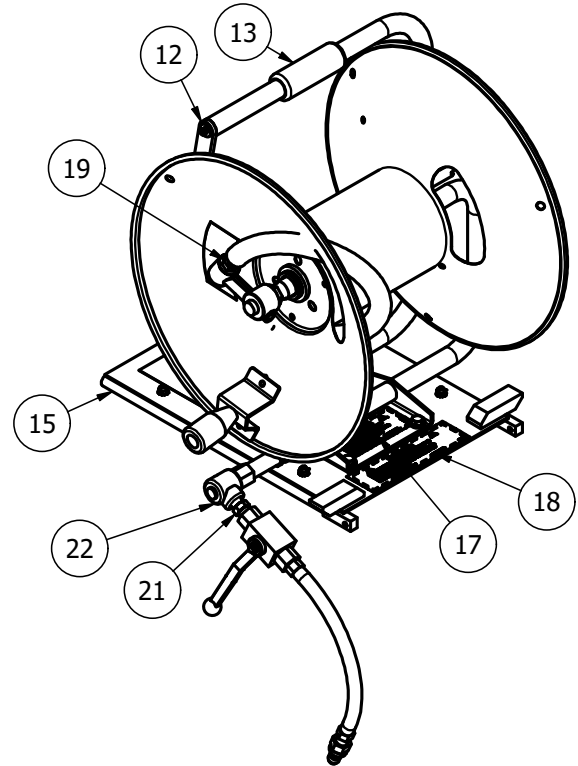
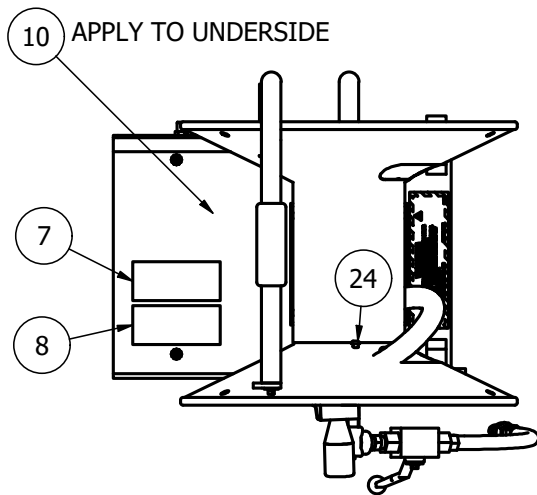


# Frame Assembly

Item	Part Number	Description	Qty.
1	72700150	Weldment, Frame—727	1
2	71100700	Tire	2
3	44245000	Handle, Mini-Jet	1
4	00116900	Screw Cap $\frac{3}{8}$ -16 x 1 $\frac{3}{4}$	2
5	00137300	Hex Nut $\frac{1}{4}$ -20	2
6	00165300	Split Lockwasher #10	2
7	00165800	Washer $\frac{3}{8}$ " Lock	2
8	02934100	Nut, Hex $\frac{3}{8}$ -16	2
9	44119500	Screw, Hex Washer Slotted #10-24 x $\frac{1}{2}$ "	1
10	50HW12F0	Washer, Flat $\frac{1}{2}$ "	2
11	72726800	Lower Wand Support	1
12	77744800	Locknut, Stover $\frac{1}{2}$ -13	2
13	77813100	Hook, "S"	1
14	79907600	$\frac{1}{8}$ " Rubber Trim	1
15	02865500	Rubber Pad	1
16	72726550	Handle Grips	2
17	72714700	Pin, Safety Snap	1
18	72703702	Caster	2
19	75853820	Cable Assembly	1
20	72703900	Tube, Clear Plastic 13" Lg.	1
21	72700800	Spacer, Wheel	2
22	5PP55120	Collar, Locking Set $\frac{3}{8}$ "	2

# Reel Assembly

## REEL ASSEMBLY (72727700)

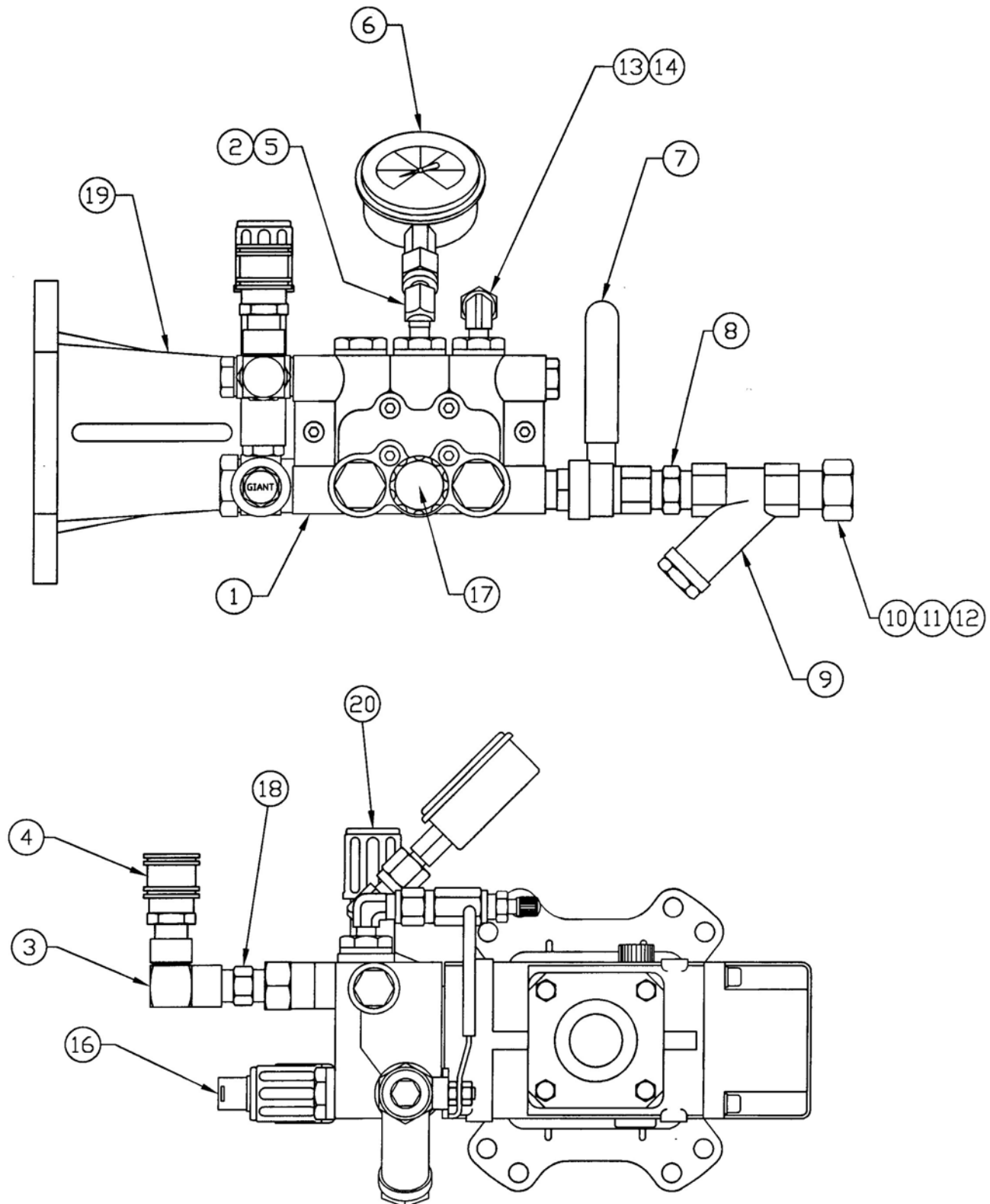


# Reel Assembly

Item	Part Number	Description	Qty.
1	01950800	Nut, ¼-20 Hex Kep	4
2	03366300	Washer, Flat ⅝" SAE	8
3	522132-00	Nut, Nylon Locking ⅝-16	4
4	5PP20200	Bumper, Frame 1" dia x ¾"	4
5	71108100	Decal, Spartan Table 711	1
6	72702000	Coupler, ⅝ Quick Male	1
7	72706400	Decal, Untrained Personnel	1
8	72707800	Decal, Waring HP Water Jet	1
9	72709400	Valve, Ball ⅝" 7,500 PSI	1
10	72709600	Decal, Flammable Fluids	1
11	72727800	Hose ⅝" Pump to Reel	1
12	72720000	Hose Retainer	1
13	72720600	Grip, Foam	1
14	72727500	Reel, HP Hose	1
15	72727600	Weldment, Reel Support	1
16	77738100	Screw, Hex HD ⅝-16 x 1	4
17	77739800	Decal, Caution (Read Manual)	1
18	77739900	Decal, Warning (Insert Hose)	1
19	542107-04	Nipl, Red ⅝ x ¼ STL	1
20	72709800	Tubing PVC 30" LG	1
21	79948030	Nipple, Hex ⅝" NPT Steel	1
22	72716500	Swivel, ⅝" FPT 90°	1
23	72730300	Nipple, ½ NPT x 3 SS	1
24	82020100	Screw, ¼-20 x 1	1

# Pump Assembly

## PUMP ASSEMBLY (72726200)



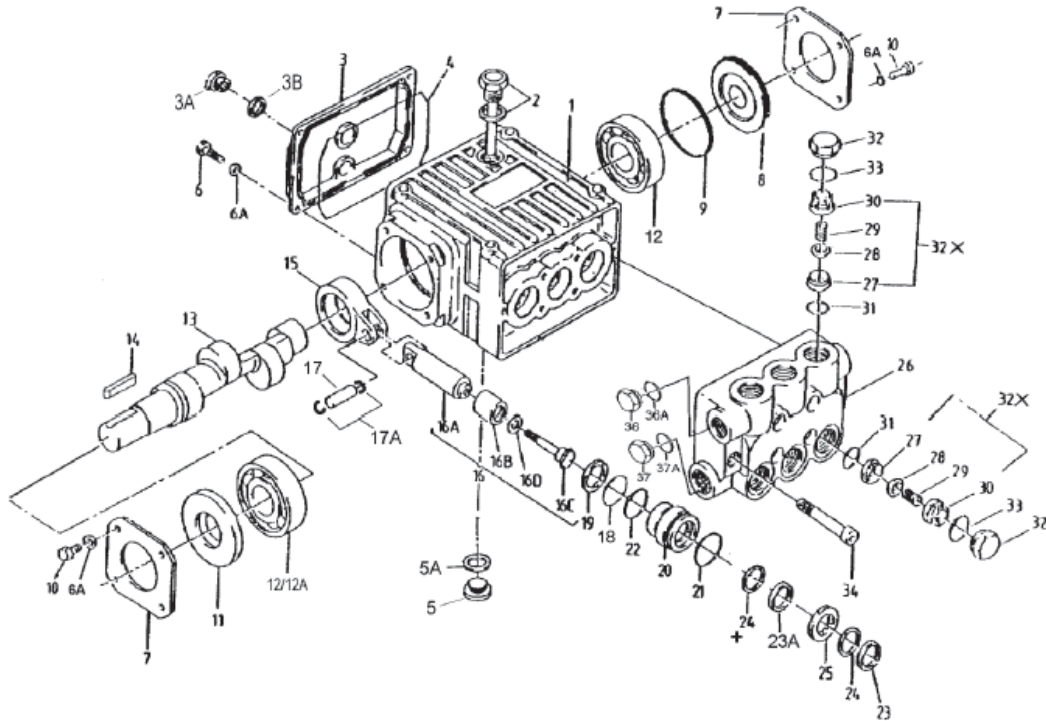
# Pump Assembly

Item	Part Number	Description	Qty.
1	72726000	Pump (see page 24 & 25)	1
2	71706800	Elbow, 45° ⅝" NPT	1
3	72710000	Elbow, 90° ⅝" FPT	1
4	72701900	Coupler, ⅝" Quick Female	1
5	71707000	Adapter, ⅝" MPT x ¼"	1
6	544003-01	Gauge, 5,000 PSI, ¼" NPT	1
7	72704800	Ball Valve	1
8	77770800	Nipple, ½" NPT	1
9	72705000	Strainer	1
10	72708000	Nut, ¾"	1
11	72707900	Fitting, ½" MPT	1
12	71136600	Gasket	1
13	71707300	Elbow, 90° Male ¼ x ⅝	1
14	71707400	Valve, Check with Air Valve	1
16	71705954	Thermal Relief Valve	1
17	72726003	Pulsator Valve Assembly	1
18	79948030	Nipple, Hex ⅝" Male NPT	1
19	72726093	Bell Housing	1
20	72726053	Unloader (see page 26)	1



# Pump—Exploded View

## PUMP—EXPLODED VIEW



Item	Part Number	Description	Qty.
1	72726005	Crankcase	1
2	72726006	Dipstick Assembly	1
3	72726007	Extended Crankcase Cover	1
3B	72726008	Oil Drain Plug with Gasket	1
4	72726009	O-Ring	1
5	72726010	Oil Drain Plug	1
5A	72726002	Gasket	1
6A	72726012	Washer, Lock-Extended Cover	4
6B	72726011	Screw, Extended Cover	4
7	72726013	Bearing Cover I	1
8	72726300	Sight Glass	1
9	72726015	O-Ring	1
10	72726016	Screw, with Lock Washer	8

# Pump Assembly

Item	Part Number	Description	Qty.
11	72726017	Radial Shaft Seal	1
12	72726018	Ball Bearing	2
13	72726019	Crankshaft	1
14	72726020	Straight Key	1
15	72726021	Connecting Rod	3
16	72726022	Plunger Assembly, 18mm	3
16B	72726023	Plunger Pipe	3
16C	72726024	Tension Screw	3
16D	72726025	Copper Washer	3
17	72726026	Wrist Pin	3
17A	72726027	Clip Ring	6
19	72726028	Oil Seal (kit 72726052)	3
20	72726029	Seal Case	3
21	72726030	O-Ring	3
22	72726031	O-Ring	3
23	72726032	V-Sleeve (kit 72726050)	3
23A	72726033	Grooved Seal, Brown (kit 72726050)	3
24	72726034	Pressure Ring (kit 72726050)	6
25	72726035	Weep Return Ring	3
26	72726036	Valve Casing	1
27	72726037	Valve Seat	6
28	72726038	Valve Plate	6
29	72726039	Valve Spring	6
30	72726040	Valve Spring Retainer	6
31	72726041	O-Ring (kit 71705951)	6
32	72726042	Valve Plug	6
32X	72726043	Valve Assembly, Complete (kit 71705951)	6
33	72726044	O-Ring	6
34	72726045	Hex Head Cap Screw	6
36	72726046	Plug, ⅜" BSP	1
36A	72726047	Copper Crush Washer	1
37	72726048	Plug, ½" BSP	1
37A	72726049	Seal	1

# Pump Details

## PUMP TORQUE SPECIFICATIONS

Item	Part Number	Description	Torque Amount
3B	72726008	Oil Drain Plug with Gasket	222 (in.-lbs.)
6	72726011	Screw, Extended Cover	43 (in.-lbs.)
10	72726016	Screw, with Lock Washer	85 (in.-lbs.)
16C	72726024	Tension Screw	220 (in.-lbs.)
34	72726045	Hex Head Cap Screw	222 (in.-lbs.)
32	72726042	Valve Plug	59 (ft.-lbs.)

## PUMP REPAIR KITS

### Plunger Packaging Kits (72726050)

Item	Part Number	Description	Qty.
23	72726032	Grooved Seal, Black	3
23A	72726033	Grooved Seal, Brown	3
24	72726034	Pressure Ring, 18mm	6

### Valve Assembly Kit (71705951)

Item	Part Number	Description	Qty.
31	72726041	O-Ring	6
32X	72726043	Valve Assembly, Complete	6

### Oil Seal Kit (72726052)

Item	Part Number	Description	Qty.
19	72726028	Oil Seal	3



## Other Parts & Accessories

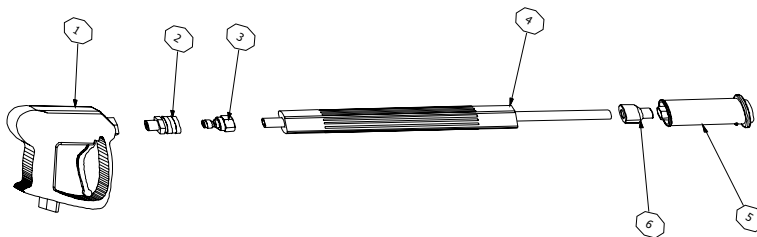
### UNLOADER REPAIR KITS

Part Number	Description
72726900	Unloader Repair Kit
72726950	Unloader Seal Repair Kit

### ADAPTER ASSEMBLY, 3/8 TO 1/4

Item	Part Number	Description	Qty.
1	71108700	Bushing, Red 3/8M x 1/4F	1
2	72702000	Coupler, 3/8 Quick Male	1
3	77721300	Coupler, Quick Gun 1/4 NPT	1

### HANDGUN LANCE NOZZLE ASSEMBLY (77799800)



Item	Part Number	Description	Qty.
1	77720100	Gun, Hand	1
2	77721300	Coupler, Quick Gun 1/4 NPT	1
3	77721400	Coupler, Quick Gun Male	1
4	553006-01	Lance, Insulated Grip 18"	1
5	71126110	Nozzle, Variable - .080"	1
6	79874400	Fitting, Wand Anti-Kickback	1

# Optional Accessories

## OPTIONAL ACCESSORIES

Part Number	Description
71129104	3/8" x 100' Hose Assembly (orange)
72713400	3/8" x 50' High Pressure Remote Hose
72713500	3/8" x 100' High Pressure Remote Hose
71701700	50' Stainless Hose
71701800	75' Stainless Hose
71702900	100' Stainless Hose
77773920	Spartan Foot Pedal Kit



For our terms and conditions, including warranty, please visit <https://spartantool.com/pages/terms-and-conditions>. For warranty assistance, please contact us at (800) 435-3866 or customerservice@spartantool.com.

## CONTACT US

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SpartanTool.com

## Notes

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# SPARTAN TOOL

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