PRODUCT MANUAL
Urban Soldier
Skid Mount Sewer Jetter
• 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. Do not fill the fuel tank while the engine is hot or running. 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.

• Ensure 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 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 appropriate chemicals or soaps.

• For any questions, contact Spartan Tool at the address shown below.

**CONTACT US**

Spartan Tool LLC  
1618 Terminal Road  
Niles, MI 49120  
800.435.3866  
SpartanTool.com
**SPECS**

- Pipe Sizes: up to 18" diameter
- Max Water Pressure: 3,000 psi
- Max Water Flow: 10 GPM
- Water Capacity: 210 gallons
- Unit Weight: 900 lbs (empty)
- Overall Size: 62"L x 37½"W x 43½"H
- Warranty: (1) year limited

**FEATURES**

- 22 HP Honda Gasoline Engine
- P25 Speck/Giant Triplex Pump
- eControl
- Warning lights provide machine status at a glance
- Pressure can be continuously adjusted with accessible handwheel
- Remote control
- 1/2" x 260’ of Maxflow HP hose
- 115’ of supply hose
- Stationary hose reel, electric rewind with freewheel system
- Powder coated steel frame

**SAFETY**

- Run dry protection with override ability
- Automatic engine shutdown protection for low engine oil
- Emergency stop
Description—Components

1. High-pressure hose on reel
2. Supply hose on reel
3. Supply hose valve
4. eController
5. Hose holder
6. High-pressure (HP) valve
7. Supply pipe
8. Water filter
9. Drain valve
10. Pressure regulator
11. Pressure gauge
12. Supply hose holder
13. Supply hose reel lock
14. Water filter valve
15. HP pump
16. Pulsator valve
17. Water tank level indicator
18. Water tank
19. Fuel tank
20. Engine
21. Battery
22. Nozzle holders
23. Muffler
1. High-pressure hose on reel
2. Supply hose on reel
3. Supply hose valve
4. eController
5. Hose holder
6. High-pressure (HP) valve
7. Supply pipe
8. Water filter
9. Drain valve
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Description—Components

1. High-pressure hose on reel
2. Supply hose on reel
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17. Water tank level indicator
18. Water tank
19. Fuel tank
20. Engine
21. Battery
22. Nozzle holders
23. Muffler
CONTROLS AND INDICATIONS

- Battery symbol
- Oil symbol
- Hour counter
- Remote control symbol
- Engine LED
- Engine symbol
- Throttle down
- Emergency stop
- Key switch (off / manual / Remote)
- High pressure LED
- High pressure symbol
- Throttle up
**PUSH BUTTONS AND INDICATING LIGHTS**

The **Engine On** light/button indicates the status and controls the starting of the engine. *(See page 16, *Starting the Engine*, for more information.)*

The **High Pressure Spray** light/button indicates the status and controls the high pressure spray valve. *(See page 18, *Cleaning a Drain Line*, for more information.)*

**The Blue LED above each button will blink** when the corresponding function is available. (The engine is ready to start or high pressure spray is available.)

**The Blue LED above each button will light solid** when the corresponding function is active. (The engine is running or the high pressure spray valve is open.)
The Riomote® radio remote control consists of a large waterproof and shockproof hand-held sender and a unit-mounted receiver. The system is provided with separate batteries (8 hours per charge) and is supplied with a battery charger.
**WARNING:** Read the **Operator’s Manual** thoroughly before using any Spartan Tool product. Drain and sewer cleaning can be dangerous if proper procedures are not followed. Know the proper operation, correct applications for your Spartan Tool products.

**EMERGENCY STOP**

This machine is equipped with an **Emergency Stop**. By operating the Emergency Stop, the machine will shut down. Do not use this button for normal stopping. Only use it when dangerous situations occur. After use, remove the danger and then rotate the Emergency Stop button clockwise to be able to start up again. Ensure the Emergency Stop can always be reached.

**PRESSURE REGULATOR**

The **Pressure Regulator** functions to ensure that the working pressure never gets too high. It functions like a safety valve, relieving water to the storage tank to reduce pressure in the HP hose line.

**PERSONAL PROTECTIVE EQUIPMENT**

The following personal protective equipment should be worn by personnel operating or working with the Urban Soldier:

- Hearing protection
- Protective safety goggles
- Gloves (recommended)
- Waterproof work clothing (recommended)
- Spray boots for use with the spray gun (recommended)

**WORK AREA**

The following precautions must be observed when establishing a work area for use of the Urban Soldier:

- Clearly mark the work area.
- Maintain a minimum distance of 20 feet from the work area.
- Remove all loose materials from inside the work area.
- Never spray from an unstable surface (ladder, boat, scaffold, etc.).
- Never use in a confined space (closed room).
- Ensure there are no combustible materials in the area.
- The area must be adequately ventilated to prevent accumulation of carbon monoxide.
- DO NOT use corrosive chemicals in conjunction with Spartan Tool sewer jetters. Only environmentally-approved chemicals should be introduced into drain lines.
GENERAL PRECAUTIONS

• Do not let the machine operate without supervision.
• Keep children and animals away from the machine.
• DO NOT spray on humans or animals. *If the skin is penetrated, immediately seek medical attention.*
• Prevent damage from debris or flying parts.
• Avoid spraying near electrical connections and other electric components if you are cleaning with a spray gun.
• Never block the controls in any way.
• Put personal protective equipment on BEFORE you start the machine.
• Ensure that the spray nozzle does not leave the drain.

SAFETY DECALS

1. Safety glasses, hard hats, and hearing protection are required
2. Safety shoes are required
3. Be familiar with the user’s manual
4. Hand protection is required
5. Wear protective clothing against caustic material
7. Slipping hazard
8. Pinching hazard (hand injury)
9. Rotating machinery
10. Warning, machine auto start
Important Symbols

**PRESSURE GAUGE**

The mechanical relief in the unloader valve will prevent pressure from exceeding 3000 PSI.

**WARNING** If the unit fails to maintain pressure within the operating zone, contact Spartan Tool Customer Service at 800.435.3866 or by email at CustomerService@SpartanTool.com.
CHECK BEFORE DEPARTURE

Before you drive away with the vehicle, check the following:

1. The high-pressure hose has been inserted into the hose holder (5) and secured with the locking pin.
2. The high-pressure hose reel is locked with the clutch engaged (see page 18).
3. The supply hose is connected to the supply hose holder (12). The supply hose reel is locked by means of the reel locking device (13).
4. If temperatures are below freezing, the water tank should be emptied and the piping system drained and flushed with antifreeze. (See page 19, Cold Weather Operation, for more information.)
5. The vehicle is now ready for departure.

PLACEMENT OF URBAN SOLDIER

1. Put the vehicle at the desired location and set the parking brake.
2. Block the tires if using on an incline or uneven surface.
3. Mark the working area by establishing barriers to prevent inadvertent access to the work area.

PRIOR TO STARTING THE URBAN SOLDIER

1. Ensure there is adequate fuel in the fuel tank (19) for the intended task.
2. Ensure the water filter (8) is clean. Clean the filter, if necessary.
3. Check that the supply valve (14) to the water filter is open.
4. Check that the high-pressure valve (6) at the HP hose reel is closed.
5. Fill the water tank via the supply pipe (7) or the supply hose. (The maximum water temperature is 55°C/130°F.)
6. Loosen the control wheel of the pressure regulator (10) (rotate counter-clockwise).
7. Attach the jetting nozzle onto the high-pressure hose.
STARTING THE ENGINE

**IMPORTANT!** The machine is equipped with an Emergency Stop. By operating this Stop, the machine will shut down. Do not use this button for normal stopping. Only use when dangerous situations occur. After use, rotate the Emergency Stop clockwise to be able to start again. Make sure the Emergency Stop can always be reached.

**CAUTION!** Put on protective safety goggles and hearing protection before starting the machine.

1. Put the key in the eController key switch.
2. Turn the key clockwise to position 1, Manual Control on.
   - Battery and oil symbols light up.
3. Pull the choke, if necessary.
4. Push the engine button briefly.
   - Engine starts.
   - When the engine is running, the blue Engine LED is illuminated.
   - Battery and oil symbol lights go off.
5. Push the choke back.
6. Increase the RPM by pressing the throttle up button.
RIOMOTE® CONTROL

The Riomote® remote control provides the ability to operate the high pressure machine jetter from a distance. There are multiple versions of the remote control based on the available functions of the machine.

EMERGENCY STOP TEST

Check that the emergency stop works before working with the Riomote® control. Proceed as follows:

1. Insert the key into the eController key switch.
2. Turn the key to position 2, Remote Control on.
   - Remote control on icon displays continuously.
   - Battery and oil symbols light up.
3. Switch the Riomote® control on.
   - Press and hold the Start button on the Riomote® to link the Riomote® with the Urban Soldier.
   - Two green lights on the receiver light when the Riomote® control is in contact with the receiver.
   - Blue remote control symbol lights up.
4. Depress the Stop button to exercise the Emergency Stop function.

BATTERY INDICATION

If the Battery indicator on the Riomote control lights continuously, the battery must be recharged.

NOTE! The engine will shut down if the remote is out of range or the battery loses charge.

NOTE! If the engine does NOT stop by using the Riomote® control, contact Spartan Tool Customer Service.
CLEANING A DRAIN LINE

1. Attach a suitable nozzle onto the high-pressure hose.

2. With the hose reel out of gear, put the nozzle into the drain to be cleaned (a minimum of 6 feet). A clutch assembly (30) on the HP hose reel drive unit can be disengaged to allow the hose reel to free wheel for pulling the hose off the reel manually.

3. Rotate the pressure regulator (10) clockwise to increase pressure to the desired value on the pressure gauge (11).

4. Open the high-pressure valve (6).

5. Depress the high pressure on button (35).
   • Water begins spraying out of the nozzle at the end of the hose.
   • High pressure LED (33) lights blue.

6. Increase or decrease engine RPM by pushing the throttle up button or throttle down button.

7. The hose will now unwind and work its way into the drain line.

8. When possible, jet the drain line from the low end to the high end of the pipe.

9. Check for water draining away as an indication that the blockage has been cleared in the drain line.

10. When the blockage has been cleared, continue to flush the pipe while rewinding the high-pressure hose.
ATTENTION! Ensure that the spraying nozzle does not leave the drain while spraying. Water under high pressure may cause severe injury.

STOP SPRAYING
Depress the high pressure button (35) to shut the high pressure valve.
- The high pressure LED (33) extinguishes.
- Water spray at hose nozzle stops.
- Engine RPM decreases.
- Close the high pressure valve (6).

CARE OF THE HP HOSE
- Always clean the hose after use.
- Ensure there are no sharp objects near the hose.
- Ensure vehicles do not cross over the hose.

IMPORTANT! Rewind hose onto reel under pressure to avoid crushing. If machine has run out of water, ensure hose is unwound before pressurizing.

COLD WEATHER OPERATION
Your high-pressure device may freeze in cold weather and temperatures below 32°F. A number of safety precautions must be taken.

Additional preparations before departure:
1. Drain the water tank by opening the drain valve.
2. When all the water has been removed or drained, remove the water filter.
3. Clean the filter and mount it in opposite order.
4. Close the drain valve.
5. Remove the nozzle/gun from the HP hose.
6. Antifreeze unit with optional Antifreeze System.
CLEANING A WALL, TERRACE, OR FLOOR

**CAUTION!** Before using a spray gun, set the jetter pressure below the maximum spray gun pressure (+/- half the maximum spray gun pressure). Do this prior to starting the engine. Once the engine is running, jetter pressure can be increased by turning the HP regulator handwheel to the working pressure. DO NOT exceed the green band pressure on the pressure gauge.

1. Attach the **spray gun** (B) onto the high-pressure hose.
2. Disengage the **clutch** and completely unroll the **high pressure hose**.
3. Attach the **spray lance gun** (C), securing the quick coupling tightly.
4. Open the **manual HP valve** (6).
5. Depress the **High Pressure On button**.
6. Throttle up the engine speed by pushing the (+) **button**.
7. Rotate the **pressure regulator hand wheel** (10) clockwise until the desired operating pressure is reached when the spray gun is open.

**SECURE AFTER HIGH-PRESSURE CLEANING**

1. Depress the **high pressure button** (35) to shut the high-pressure valve and throttle down the engine.
2. Close the **manual high pressure valve** (6).
3. Depress the **Engine On button** (34) for more than 1 second to stop the engine.
4. Rewind the hose.

**IMPORTANT!** Rewind hose onto reel under pressure to avoid crushing. If machine has run out of water, ensure hose is unwound before pressurizing.
CAUTION! Always stop the engine first and depressurize the system before servicing or repairing the machine. To depressurize the system, open the manual HP valve. If the spray gun is attached, you must also pull the trigger to release the pressure.

DAILY MAINTENANCE

Check Oil Levels

- Check all oil levels daily (engine oil, HP water pump oil).
- Add oil if necessary (see page “MOTOR” on page 24, Technical Specifications, Motor).
- If oil level has dropped, this implies a leak in the system. In this case, check all gaskets and couplings in the system.
- Immediately repair damage and fill the system with the correct oil.

NOTE! During the break-in period, oil consumption may be greater than usual.

Clean the Water Filter

1. Close the water filter valve (14).
2. Unscrew the cap from the filter piece (8).
3. Clean the filter and associated parts. After cleaning, assemble the parts in reverse order.
4. Open the water filter valve (14).
5. Check for leakage.
MINOR SERVICE

Minor service must be carried out every **250 working hours** (or at least once every 6 months) and includes the following parts of the machine:

1. **Drive and Engine**
   - Change the oil in the engine.
   - Replace the oil filter.
   - Clean the air filter.
   - Replace the fuel filter.
   - Check tension of the V-belt and increase tension if necessary.
   - Check the condition of the battery.
   - Check the torque of attachment bolts for the engine and tighten as necessary.

2. **Carriage**
   - Lubricate all mechanical moving parts in the system. Check that all nuts and bolts have been correctly tightened.

3. **Pump system**
   a. Cleaning the high-pressure control system:
      - With the manual high-pressure valve closed, the pressure gauge should NOT indicate any pressure due to recirculation through the unloader valve.
      - If the spray gun is connected and closed, the pressure gauge should NOT indicate any pressure due to recirculation through the unloader valve.
      - If the pressure gauge does indicate a pressure, this implies a leakage in the system or the pop-off valve on the unloader valve may be dirty or damaged. (Contact Spartan Tool Customer Service for assistance.)
      - If leakage is suspected, stop the machine, unscrew the hose coupling and clean or replace the pop-off valve on the unloader. Also, check the condition of the O-ring and gasket. (Contact Spartan Tool Customer Service for assistance.)
   b. Regularly clean the high-pressure control system:
      - Carefully remove all dirt.
      - Proper maintenance will increase the service life of this part.
   c. Changing the pump oil:
      - Change the pump oil in the high-pressure pump after every 500 working hours (or at least once a year).
EXTENSIVE PERIODIC MAINTENANCE

Have the high-pressure machine checked and maintained on a regular basis by a Spartan Tool technician.

MAINTENANCE SCHEDULE

<table>
<thead>
<tr>
<th>Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check oil levels</td>
<td>Daily</td>
</tr>
<tr>
<td>Clean water filter</td>
<td>Before each use</td>
</tr>
<tr>
<td>Clean carriage</td>
<td>Weekly</td>
</tr>
<tr>
<td>Service engine</td>
<td>Every 250 working hours or at least once every 6 months</td>
</tr>
<tr>
<td>Lubricate moving parts</td>
<td>Every 250 working hours or at least once every 6 months</td>
</tr>
<tr>
<td>Clean pressure regulator</td>
<td>Every 250 working hours or at least once every 6 months</td>
</tr>
<tr>
<td>Renew pump oil</td>
<td>Every 500 working hours or once a year</td>
</tr>
<tr>
<td>Decalcify suction valves</td>
<td>Once a year</td>
</tr>
<tr>
<td>Decalcify pressure valves</td>
<td>Once a year</td>
</tr>
<tr>
<td>Puncture nozzle holes</td>
<td>Before each use</td>
</tr>
</tbody>
</table>

Replace parts immediately if there is wear or defect.
## General Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>See page 28, Appendix A: Urban Soldier Dimensions</td>
</tr>
<tr>
<td>Water tank capacity</td>
<td>105 gal. per tank</td>
</tr>
<tr>
<td>Fill medium</td>
<td>Water (H20) maximum</td>
</tr>
<tr>
<td>Temperature medium</td>
<td>132° F</td>
</tr>
<tr>
<td>Total length of high-pressure hose</td>
<td>260 ft.</td>
</tr>
<tr>
<td>Diameter of high-pressure hose</td>
<td>½&quot; (NW13)</td>
</tr>
<tr>
<td>Total length of supply hose</td>
<td>115 ft.</td>
</tr>
<tr>
<td>Diameter of supply hose</td>
<td>¾&quot; (NW19)</td>
</tr>
<tr>
<td>Pressure regulator</td>
<td>ULH 221</td>
</tr>
<tr>
<td>Year of construction</td>
<td>See name plate on frame</td>
</tr>
</tbody>
</table>

## Motor

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Honda GX 690</td>
</tr>
<tr>
<td>Number of cylinders</td>
<td>2</td>
</tr>
<tr>
<td>Power</td>
<td>16.6 kW (22.3 HP)</td>
</tr>
<tr>
<td>Fuel</td>
<td>Unleaded Gasoline</td>
</tr>
<tr>
<td>Fuel tank</td>
<td>8 gal.</td>
</tr>
<tr>
<td>Cooling</td>
<td>Air cooled</td>
</tr>
<tr>
<td>Weight</td>
<td>101 lbs.</td>
</tr>
<tr>
<td>Battery</td>
<td>12V, 45AH</td>
</tr>
<tr>
<td>Engine oil</td>
<td>10W30 API/SF-CC or better</td>
</tr>
<tr>
<td>Engine oil capacity</td>
<td>2.0L (2.1 US qt.)</td>
</tr>
</tbody>
</table>
## PUMP

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Speck NP25</td>
</tr>
<tr>
<td>Maximum pressure</td>
<td>See name plate on frame</td>
</tr>
<tr>
<td>Maximum output</td>
<td>See name plate on frame</td>
</tr>
<tr>
<td>Weight</td>
<td>37.5 lbs.</td>
</tr>
<tr>
<td>Maximum water temperature</td>
<td>60° C / 140° F</td>
</tr>
<tr>
<td>Gear oil</td>
<td>GX 80W90</td>
</tr>
<tr>
<td>Gear oil capacity</td>
<td>0.9 liters (30.4 fl. oz.)</td>
</tr>
</tbody>
</table>
### Troubleshooting

<table>
<thead>
<tr>
<th>FAILURE</th>
<th>REASON</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine does not start or stops abruptly.</td>
<td>Machine has run out of fuel.</td>
<td>Add fuel.</td>
</tr>
<tr>
<td></td>
<td>Main or secondary fuse blown.</td>
<td>Replace the defective fuse and restart engine. If problem repeats, contact Spartan Tool Customer Service.</td>
</tr>
<tr>
<td></td>
<td>Battery voltage too low.</td>
<td>Charge or replace the battery.</td>
</tr>
<tr>
<td></td>
<td>Emergency stop activated.</td>
<td>Rotate the emergency stop button in order to be able to start up again.</td>
</tr>
<tr>
<td></td>
<td>Insufficient level in the water tank.</td>
<td>Fill the water tank and start again.</td>
</tr>
<tr>
<td>The high-pressure pump does not produce the required pressure.</td>
<td>Water tank empty.</td>
<td>Fill the water tank.</td>
</tr>
<tr>
<td></td>
<td>Supply valve to water filter closed.</td>
<td>Open the supply valve.</td>
</tr>
<tr>
<td></td>
<td>Water filter clogged.</td>
<td>Stop the machine and clean the water filter.</td>
</tr>
<tr>
<td></td>
<td>Air in the high-pressure pump.</td>
<td>Allow the machine to run a few minutes. The failure will normally disappear. If not, contact Spartan Tool Customer Service.</td>
</tr>
<tr>
<td></td>
<td>Suction valves blocked.</td>
<td>Carefully loosen the valves and de-scale them, if necessary.</td>
</tr>
<tr>
<td></td>
<td>V-belt not sufficiently tightened.</td>
<td>Tighten the V-belt; replace if necessary.</td>
</tr>
<tr>
<td></td>
<td>Suction valves worn.</td>
<td>Contact Spartan Tool Customer Service.</td>
</tr>
<tr>
<td>Pressure varies.</td>
<td>Water level in tank too low.</td>
<td>Stop the engine, refill the tank and restart engine.</td>
</tr>
<tr>
<td></td>
<td>Water supply valve not sufficiently opened.</td>
<td>Open the supply valve completely.</td>
</tr>
<tr>
<td></td>
<td>Water filter clogged.</td>
<td>Stop the machine and clean the filter.</td>
</tr>
<tr>
<td></td>
<td>Pump sucks air.</td>
<td>Stop the machine and check all hoses and couplings for leakage.</td>
</tr>
<tr>
<td></td>
<td>Nozzle clogged.</td>
<td>Stop the machine and clean the nozzle (clean the nozzle holes).</td>
</tr>
<tr>
<td></td>
<td>Pressure valves dirty or worn.</td>
<td>Stop the machine. Check the condition of the pressure valves. Clean or replace them.</td>
</tr>
<tr>
<td></td>
<td>Pump gasket worn.</td>
<td>Stop the machine and replace gasket.</td>
</tr>
<tr>
<td></td>
<td>Pump v-belts slip.</td>
<td>Stop the machine and tighten the belts.</td>
</tr>
<tr>
<td></td>
<td>Ceramic plungers in the pump damaged.</td>
<td>Contact Spartan Tool Customer Service.</td>
</tr>
<tr>
<td></td>
<td>Pressure control clogged or internally damaged.</td>
<td>Contact Spartan Tool Customer Service.</td>
</tr>
</tbody>
</table>
# Troubleshooting

<table>
<thead>
<tr>
<th>FAILURE</th>
<th>REASON</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>No reaction from the Riomote controller.</td>
<td>No current.</td>
<td>Recharge the battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use new battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contact points are dirty.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check fuses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contact Spartan Tool Customer Service if problem is frequent or ongoing.</td>
</tr>
<tr>
<td>Transmitter is not on.</td>
<td></td>
<td>Activate the transmitter (link to the receiver).</td>
</tr>
<tr>
<td>Transmitter out of reach from receiver.</td>
<td></td>
<td>Bring the transmitter closer to the receiver.</td>
</tr>
<tr>
<td>Warning signal after short working time.</td>
<td>Battery discharged / defective.</td>
<td>Charge or replace the Riomote® battery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check the terminal connections.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contact Customer Service.</td>
</tr>
<tr>
<td>Transmitter indications are good but functions are not executed.</td>
<td>Emergency stop pushed in.</td>
<td>Unlock emergency stop.</td>
</tr>
<tr>
<td></td>
<td>Receiver has no current.</td>
<td>Check / replace fuses.</td>
</tr>
<tr>
<td></td>
<td>No radio connection.</td>
<td>Check functions of control lights.</td>
</tr>
<tr>
<td>Certain functions are not executed.</td>
<td>Receiver is faulty.</td>
<td>Contact Spartan Tool Customer Service.</td>
</tr>
<tr>
<td></td>
<td>Interruption in electric current.</td>
<td>Check all plugs. Plug in and push. Check control lights if functions are indicated.</td>
</tr>
<tr>
<td>Part Number</td>
<td>Description</td>
<td>Qty.</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------</td>
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<tr>
<td>75700600</td>
<td>Open Nozzle</td>
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<tr>
<td>75700500</td>
<td>Closed Nozzle</td>
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<tr>
<td>77799800</td>
<td>Handgun Assembly</td>
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<tr>
<td>77800600</td>
<td>Hose Guard Assembly, 2”</td>
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<td>79873500</td>
<td>Anti-Turnaround Pipe Assembly</td>
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<td>75729169</td>
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<td>75728000</td>
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<td>1/2” x 260’ Maxflow Hose</td>
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<tr>
<td>75729120</td>
<td>HP Hose Reel Swivel Seal</td>
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**Notes**

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<th>Unit Serial Number</th>
<th>Engine Serial Number</th>
<th>Pump Serial Number</th>
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**YOUR URBAN SOLDIER**

- SINCE 1943
- FOR TOUGH CUSTOMERS.