

# Component Identification

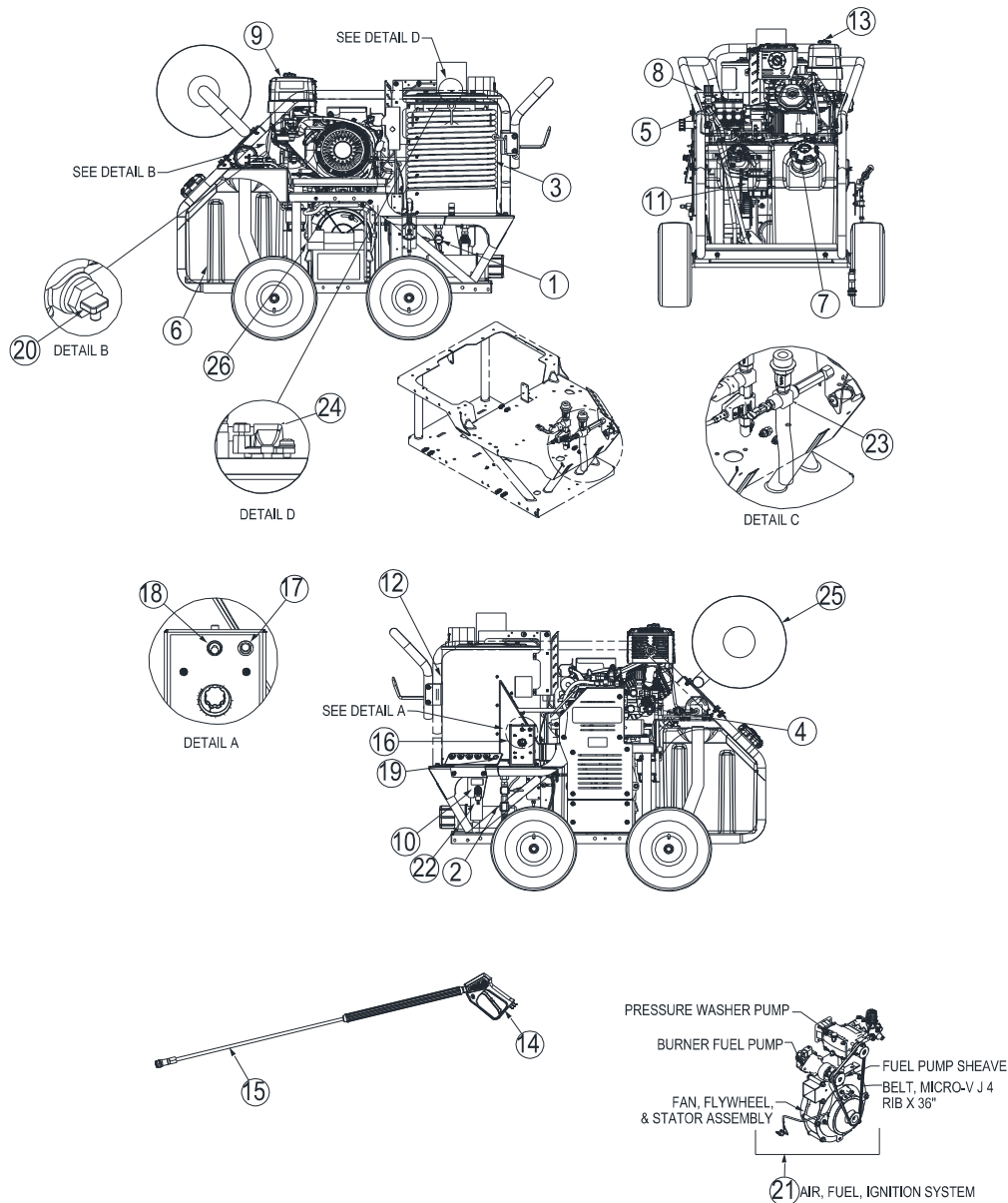


Fig06883

Ref #	Description	Ref #	Description	Ref #	Description
1	High PSI limit switch	10	High Pressure Outlet	19	Nozzle Storage
2	Flow Switch	11	Fuel Filter/Water Separator	20	Thermal Relief Valve
3	Heating Coil	12	Heat Exchanger	21	Air, Fuel, Ignition System
4	Garden Hose Water Inlet	13	Gas Tank & Cap	22	Chemical injector
5	Pump	14	Spray Gun	23	Rupture Disc Fitting
6	Diesel Fuel Tank	15	Wand	24	Flame Sensor
7	Diesel Fuel Cap	16	Control Box (See Detail A)	25	Hose reel (sold by Separately)
8	Unloader	17	Circuit Protector	26	Battery Box
9	Engine	18	Heat Switch		

## Component Identification cont'd

<b>REFERENCE GUIDE</b>	
<b>1. High, PSI limit switch</b>	This is a backup safety feature, if the system pressure exceeds the set pressure this device will stop the burner from firing.
<b>2. Flow Switch</b>	Mechanical device that senses water flow
<b>3. Heating Coil</b>	Steel piping wound together with an inlet for incoming cold water and outlet for hot water to exit.
<b>4. Garden Hose Water Inlet</b>	Means of connecting garden hose to pump inlet. Connect garden hose here.
<b>5. Pump</b>	A device that moves fluid through a combination of suction and displacement.
<b>6. Diesel Fuel Tank</b>	Fuel storage container for diesel fuels.
<b>7. Diesel Fuel Cap</b>	Vented cover for fuel tank.
<b>8. Unloader</b>	Valve that regulates pressure and directs flow into bypass when trigger is closed.
<b>9. Engine</b>	The air-cooled engine powers the pump.
<b>10. High Pressure Outlet</b>	Connection point for the high-pressure hose.
<b>11. Fuel Filter / Water Separator</b>	Filter in fuel line that removes water and screens out dirt and debris from fuel.
<b>12. Heat Exchanger</b>	Device that heats the water by forcing a flame across steel pipe.
<b>13. Gas Tank &amp; Cap</b>	Gas tank is a container for holding gas and gas cap is cover for gas tank.
<b>14. Spray Gun</b>	Used to divert water out to nozzle.
<b>15. Grip</b>	Section of wand to extend length and provide stability.
<b>16. Wand</b>	Rod to extend length.
<b>17. Control Box</b>	Housing device for mounting switches and machine controls.
<b>18. Circuit Breaker</b>	Device for protecting circuit from damage if overloaded or shorted.
<b>19. Heat Switch</b>	Acts as an on/off device for power to burner components.
<b>20. Nozzle Storage</b>	A space for storing nozzles.
<b>21. Thermal Relief Valve</b>	Safety device that discharges hot water from the pump manifold during long bypass operation.
<b>22. Air, Fuel, Ignition System</b>	System provides air, fuel, and ignition for combustion
<b>23. Chemical Injector</b>	Siphons cleaning chemicals into a low pressure washer spray downstream of the pump.
<b>24. Rupture Disc</b>	Safety device that will open and relieve excess system pressure.
<b>25. Flame Sensor</b>	Device for sensing if the burner has a flame.
<b>26. Battery Box</b>	Storage place for battery.

# Safety Labeling

**5** **WARNING**  
**Burn Hazard**  
 Do not touch hot muffler. Muffler may be hot even if the unit is stopped. Allow unit to cool before servicing. 788936

**7** **WARNING**  
**BURN HAZARD**  
 Do not touch hot surface. 797513

**7** **WARNING**  
**SCALE BUILD-UP/EXPLOSION HAZARD**  
 • Failure to properly maintain the coil can result in a steam explosion  
 • Scale or lime build-up will act as an insulator and decrease coil efficiency  
 • Weakening of the coil tube due to hot spots can result in a coil rupture  
**CHEMICAL EXPOSURE HAZARD**  
 • Always wear properly rated safety goggles when descaling the coil.  
 • Always wear labor gloves when handling coil cleaning chemicals.  
 • Understand all safety hazards and first aid measures for coil cleaning chemical being used.  
 • Follow coil cleaning chemical manufacturer's directions when handling, mixing and using coil cleaning chemical.  
 Read owner's manual. See maintenance section of manual for descaling procedure.  
 Read the coil cleaning chemical safety information. Serious injury or death can result if safety instructions are not followed. 03221

**6** **DANGER**  
**FOR OUTDOOR USE ONLY!** Using this pressure washer indoors **CAN KILL YOU IN MINUTES!** Engine exhaust and burner exhaust contain carbon monoxide. This is a poison you cannot see or smell.  
  
 NEVER use inside any building, structure or garage, EVEN IF doors and windows are open. Only use OUTSIDE and far away from windows, doors, and vents.

**6** **WARNING**  
**High Pressure Fluid Forces / Burn Hazard!**  
 High pressure spray can cause injection injury, eye injury, and loss of balance. Hot discharge fluid and hot surfaces can burn.  
 • NEVER direct discharge stream at or near any person. Do not allow any part of the body to come in contact with the fluid stream.  
 • Cut back - hold with two hands. Keep good footing and balance at all times.  
 • Surfaces of engine, burner, and wand can become very hot. Use only designated gripping areas of wand. Avoid contact with hot engine and burner.

**6** **Fire / Explosion Hazard**  
 Spraying flammables can cause explosion. Fuel is flammable and explosive. Exhaust can ignite combustible materials.  
 • NEVER spray flammable liquids. Operate only where open flame or torch is permitted.  
 • NEVER fuel a running or hot engine or oil burner.  
 • Ensure there are no fuel leaks before starting. Keep sources of sparks and flames away.  
 • Use approved container only for transferring fuel. Clean up fuel spills immediately.  
 • Keep engine and burner exhaust at least 7 feet from all combustible objects. Situate on heat-resistant footing when using burner.

**6** **Chemical Exposure Hazard**  
 • Understand all safety hazards and first aid measures for chemicals being used.  
 • Follow chemical manufacturer's directions when handling and cleaning with chemicals. Wear safety gear as directed.

**6** **Electric Shock Hazard**  
 • Keep spray away from electrical wiring, or electric shock / electrocution could occur.

**6** CAUTION: To Reduce Risk of Injury, Read Operating Instructions Carefully Before Using.

**8** **WARNING**  
**RECOIL STARTER ROPE**  
 Recoil starter rope can retract rapidly resulting in bodily injury. ALWAYS relieve spray gun pressure before pulling recoil starter rope. Pull starter rope slowly until resistance is felt, then pull rapidly. 801160  
 For questions, replacement parts or labels contact product support at [www.northstar.com](http://www.northstar.com) or call 1-800-270-0810.

**8** **WARNING**  
**BATTERY HAZARDS**  
**BATTERIES:** 1) contain caustic acid, 2) emit explosive gases, 3) can cause electric shock  
 • ALWAYS use eye protection. Caustic acid and explosive gases can cause blindness or severe burns.  
 • NO smoking, sparks, or flames.  
 • NEVER touch both battery terminals at the same time with your hand or any non insulated tools.  
 • FLUSH immediately with water if battery acid contacts eyes, skin or clothing.  
 • CONNECT cables in correct sequence: FIRST RED to POSITIVE terminal, then BLACK to NEGATIVE terminal. When disconnecting, DISCONNECT BLACK cable first, then RED.  
 • NEVER charge a visibly damaged or frozen battery. ALWAYS read and follow charger instructions.

**1** **WARNING**  
**IF RUPTURE DISK ACTIVATES AND RELEASES WATER:**  
 • Turn heat switch OFF  
 • Turn power switch OFF  
 • Turn water supply OFF  
 • Pull spray gun trigger to release pressure  
 • Unplug pressure washer, or remove the spark plug wire  
 Do not use pressure washer until Product Support arranges for repair or replacement.  
 Failure to turn off immediately could result in serious injury.  
 Call 1-800-270-0810

**2** **WARNING**  
**ROTATING MACHINERY**  
 Clothing or hair can become rapidly entangled in unguarded rotating parts, resulting in serious injury or death.  
**DO NOT** operate without power transmission belt guard in place.

**3.1** **3**

VIEW ROTATED FOR CLARITY

Fig157117-2

Always make sure safety labels are in place and in good condition. If a safety label is missing or not legible, order new labels or unsafe operation could result. To order replacement safety labels, call NorthStar Product Support at 1-800-270-0810.

Ref.#	Part #	Description	Qty.
1	782325	Decal, Danger and Warning	1
2	786632	Decal, Rotating Equipment Warning	1
3	798057	Hangtag, Rupture Disk Warning	1
3.1	32821	Lanyard, Hangtag Warning	1
4	797513	Decal, Burn Hazard Decal	2
5	788936	Decal, Burn Hazard Warning	1
6	801160	Decal, Recoil Warning	1
7	802203	Decal, Descaling Warning	1
8	782397	Decal, Battery Warning	1