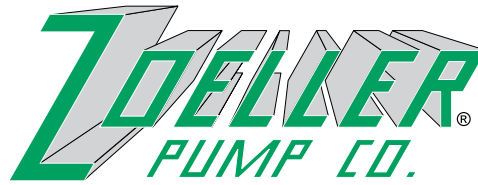


"QUALITY PUMPS SINCE 1939"



SECTION: 2.50.030

FM1563

1106

Supersedes

0803

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

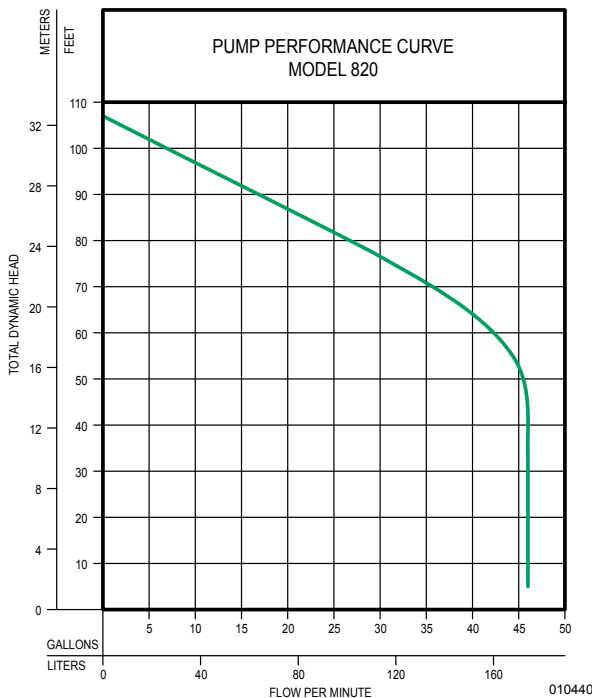
MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
 SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
 (502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

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THE SHARK Series 820 GRINDER PUMP

FEATURES:

- Rust Resistant Steel Cover (Epoxy Coated)
- 2 HP, 60 Hz, 1 Ph, 3450 RPM, Automatic Grinder Pump with Integral Control. (See FM1478)
- Upper and Lower Ball Bearings
- Corrosion resistant powder coated epoxy finish
- 1 1/4" NPT Galvanized Piping
- 1 1/4" Cast Iron Check Valve
- 1 1/4" Rubber Discharge Pipe Seal.
- Grinder Control Float factory set to match pressure collector system "ON" level
- Adjustable Alarm Float Switch preset at factory
- Maximum operating temperature 130°F (54°C)



SIMPLEX REPLACEMENT GRINDER FOR POSITIVE DISPLACEMENT GRINDERS (For Pump Prefix Identification see News & Views 0052)



WD820/WH820 AUTOMATIC



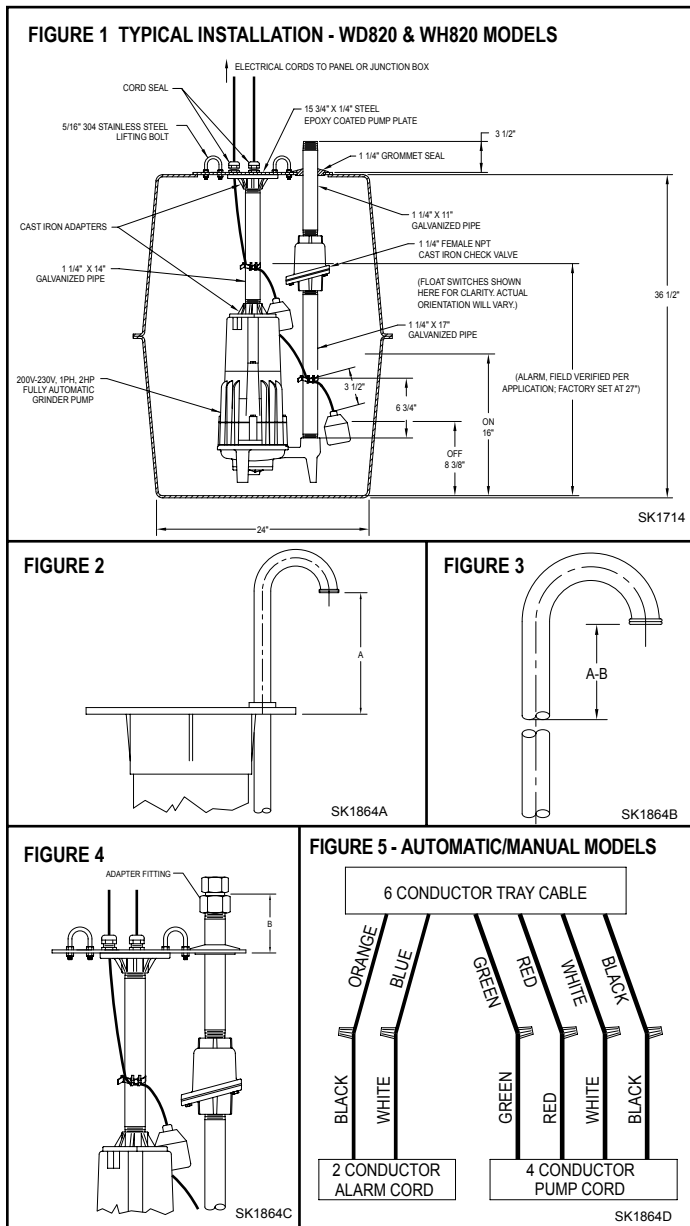
Product may not be exactly as pictured.

SIMPLEX REPLACEMENT GRINDER

820 GRINDER • 2 HP, 1 1/4" N.P.T. • VERTICAL DISCHARGE

Assembly Part Number	Assembly Weight	Pump Part Number	Pump Weight	Model	Volts	Ph	Mode	Amp
<input type="checkbox"/> 932-0005	129 lbs.	820-0011	92 lbs.	WD820*	230	1	Auto	13.7
<input type="checkbox"/> 932-0006	129 lbs.	820-0005	92 lbs.	WH820*	200	1	Auto	15.5
<input type="checkbox"/> 932-0007	130 lbs.	820-0013	93 lbs.	WD820	230	1	Auto/Man.	13.7
<input type="checkbox"/> 932-0008	130 lbs.	820-0014	93 lbs.	WH820	200	1	Auto/Man.	15.5
<input type="checkbox"/> 10-1195	Adapter kit J-box assembly for pumps w/quick disconnect plug connection.							
<input type="checkbox"/> 10-1196	Adapter kit discharge assembly for pumps w/gooseneck discharge.							

* WD & WH grinder pumps are completely automatic with starting controls in pump switch case.



PREINSTALLATION CHECKLIST

1. **Inspect your pump assembly.** Occasionally, products are damaged during shipment. If the unit is damaged, contact your wholesaler before using.
2. **Carefully read the literature** provided to familiarize yourself with specific details regarding installation and use. These materials should be retained for future reference.
3. Check to be sure your power source is capable of handling the voltage requirements of the motor, as indicated on the pump name plate and literature.
4. Make sure the pump electrical supply circuit is equipped with fuses or circuit breakers of proper capacity. A separate branch circuit is recommended, sized according to the "National Electrical Code" for the current shown on the pump name plate and literature.
5. See CAUTIONS & WARNINGS on FM1239: 820 GRINDER INSTALLATION INSTRUCTIONS.
NOTE: If you do not know the pump-out cycle time, record it from the closest pump unit with similar head requirements or higher. (See 20 below)

TYPICAL REPLACEMENT INSTALLATION

1. Electrical wiring and enclosures must be in accordance with the "National Electric Code" and any other applicable state and electrical requirements.
2. **WARNING ELECTRICAL PRECAUTION**-Before servicing a pump always shut off the main power breaker - making sure you are wearing insulated protective sole shoes and not standing in water. Under flooded conditions, contact your local electrical company or a qualified licensed electrician for disconnecting electrical service prior to pump removal. Refer to the original installation/service manual for any precautions that

need to be obeyed, ie: pump may have more than one electrical supply connection.

3. If installation is outdoors, locate tank riser and unlock and raise hinged riser lid. For indoor installations, this step is not required.
4. After you shut off the power, open electrical enclosure or electrical disconnect to separate pump power lead, and signal leads. Coil wires and lay them to the side and keep dry.
5. Close ball or gate valve in discharge line and then disconnect the quick disconnect assembly.
6. Loosen the twelve (12) captive 5/16" bolts that retain the grinder pump core.
7. Attach lifting cable or rope to the two (2) pump core eye bolts. Carefully raise pump core straight up and out of the basin. Set old pump core down and remove lifting cable.
8. Prepare your Zoeller grinder pump assembly for installation by removing all packing materials including the white nylon ties that are holding the alarm float and pump control float to the suspension pipe and discharge pipe. Do not remove the large black nylon tie that is securing the control float to the discharge pipe.
9. For application with an electrical quick disconnect and a gooseneck discharge pipe, Zoeller Company adapter kit P/N 10-1196 will simplify installation. Measure distance from underside of pump plate to gooseneck outlet. See Figure 2. Record measurement. Place adapter fitting on 1/4" discharge pipe of the new replacement pump. Measure the distance from the underside of the replacement plate to the bottom of the internal socket of the adapter fitting. See Figure 4. Record measurement. Subtract the second measurement from the first and mark gooseneck with this figure. See Figure 3. Cut old gooseneck discharge line at this location. Transfer gooseneck pipe to the replacement grinder and tighten adapter fitting. Place old pump core out of the way.
10. Verify the correct pump "On" height by measuring the height from the threaded discharge to the top of the black nylon tie securing the pump control float (6 3/4" - See figure 1). Also verify the distance from the control float to the small nylon tie that is secured to the black nylon tie mentioned above (3 1/2" - See fig. 1). Adjust if necessary. With tethered as figured, the pump will turn on at approximately 16".
11. Alarm Float Switch is set at factory to turn "On" at 27". To change the "On" level, refer to FM0419; Variable Level Float Switch Installation Instructions.
NOTE: Float switches must be positioned so that they will be free of any object in the tank and the tank walls.
12. Attach lifting cable or rope to the stainless steel U-bolts on the pump plate.
13. Place sealing foam with pressure sensitive adhesive on the underside of the pump plate. Center the sealing foam over the holes around the edge of the pump plate. Using a pencil or pen, poke holes thru the sealing foam using the holes in the pump plate as a guide. Clean off pit where the pump plate sits.
14. Lower unit into basin being sure to line up the quick disconnect fittings and the bolt holes. Start all twelve (12) bolts (supplied) with washers (supplied) under the bolt heads. After all bolts have been started, the bolts can be tightened. Engage the quick disconnect, tighten if required, and open the ball or gate valve in discharge pipe.
15. Change out the UF cord seals in the electrical enclosure with cord seals supplied to accept cordage.
16. Thread pump power cord and alarm float switch cord through the cord seals and into the electrical enclosure. Zoeller Company adapter kit P/N 10-1195 will simplify installations with an electrical quick disconnect. Installation with electrical quick disconnect fitting will require the following operations. Cut six conductor cable leading from tank wall directly above the electrical quick disconnect fitting. Strip outer cord jacket back three (3) inches from end being sure not to nick individual conductors. Thread the 6 conductor cables through the largest cord seal and into the junction box. Thread the pump cord and float switch cord through the remaining cord seals and into junction box. Using the wire nuts provided, connect the wires per Figure 5.
17. Connect pump power cord and alarm float switch cord to their respective terminations.
18. Check control panel for relay current/power specifications. If too low, change relays or rewire as required for the amps on the name plate or catalog sheet.
19. Replace electrical enclosure cover. Turn main power breaker on.
20. Fill basin and allow unit to cycle (on-off). Time the pump-out cycle. The cycle should be at or less than the recorded cycle time.
21. For outside installations, hinged cover should now be shut and locked. Installation is now complete.
22. For future service and repair information refer to FM1239 (820 Installation Instructions).