

NOTE: When ordering parts, give QUANTITY, PART NUMBER, DESCRIPTION, and COMPLETE MODEL NUMBER. Reference numbers are used ONLY to identify parts in the drawing and are NOT to be used as order numbers.

Model 9940-9750NRL

Models 9940-9751NRL and 9940-9753NRL

Ref. No.	Qty. Req'd.	Part No.	Description
1	1	18775	Body
2	1	13257	Housing (Volute)
3a	1	13261	Drain Plug
3b	1	13261	Water Flush Plug
4	1	13343	Impeller
5	1	14528	Seal/Seat Assembly
6	1	13259	O-ring (Volute)
7	2	13312	O-ring (Plug)
8a	7	18316	Machine Screw
8b	14	13314	Washer
8c	7	13311	Nut
9	1	14990	Slinger
10	1	18807	Seal O-ring
11	1	15057	Pedestal Mounting Bracket
12	2	04257	Ball Bearing
13	1	15839	Shaft
14	1	15838	Spacer
15	2	04259	Internal Rtg. Ring
16	1	12582	External Rtg. Ring
17	4	13309	Capscrew

Ref. No.	Qty. Req'd.	Part No.	Description
1	1	18775	Body
2	1	13257	Housing (Volute)
3a	1	13261	Drain Plug
3b	1	13261	Water Flush Plug
4	1	13253	Impeller (9940-9751NRL)
4	1	13255	Impeller (9940-9753NRL)
5	1	14528	Seal/Seat Assembly
6	1	13259	O-ring (Volute)
7	2	13312	O-ring (Plug)
8a	7	18316	Machine Screw
8b	14	13314	Washer
8c	7	13311	Nut
9	1	14990	Slinger
10	1	18807	Seal O-ring
17	4	13309	Capscrew
18	1	13409	Motor, 3/4 hp (9940-9751NRL)
18	1	13410	Motor, 1-1/2 hp (9940-9753NRL)

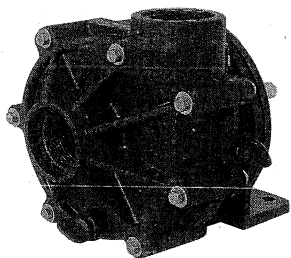
Installation, Operation, Repair and Parts Manual

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Description

Hypor's 9700 series pumps are specifically designed for bulk transfer of fertilizer and agricultural chemicals. The pumps have centrifugal force impellers for quiet, efficient pumping action. The 9700 centrifugals feature Noryl housings, which provide a

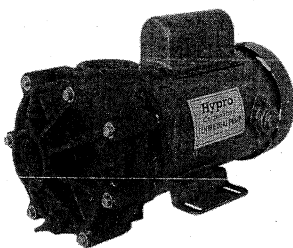
wide range of corrosion resistance. The close-coupled models are offered with 3/4 and 1 1/2 horsepower 115/208-230 volt AC motors. The pedestal mount model is equipped with a 5/8" solid shaft.



SERIES 9940-9750NRL

Noryl Pedestal-Mount Centrifugal Pump

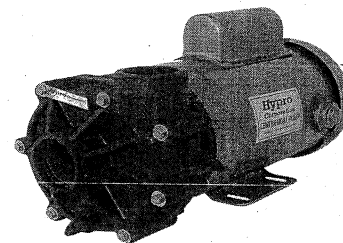
Vlax. Flow Rate: 132 gpm
Max. Pressure: 35 psi
Max. Speed: 3600 rpm
Shaft: 5/8" solid
Ports: 1-1/2" NPT inlet
 1-1/2" NPT outlet



SERIES 9940-9751NRL

Noryl Close-Coupled AC Motor-Driven Centrifugal Pump

Max. Flow Rate: 44 gpm
Max. Pressure: 30 psi
Max. Speed: 3450 rpm
Motor: 3/4 hp, 115/208-230V AC
Ports: 1-1/2" NPT inlet
 1-1/2" NPT outlet



SERIES 9940-9753NRL

Noryl Close-Coupled AC Motor-Driven Centrifugal Pump

Max. Flow Rate: 88 gpm
Max. Pressure: 30 psi
Max. Speed: 3450 rpm
Motor: 1-1/2 hp, 115/208-230V AC
Ports: 1-1/2" NPT inlet
 1-1/2" NPT outlet



General Safety Information

WARNING: DO NOT pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. **DO NOT** use in explosive atmospheres. The pump should be used only with liquids compatible with the pump component materials. Failure to follow this warning can result in personal injury and/or property damage and will void the product warranty.

1. When wiring the motor, follow all local electrical and safety codes as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).
2. Always disconnect the power source before performing any work on or near the motor or its connected load. If the power disconnect point is out-of-sight, lock it in the open position and tag it to prevent unexpected application of power. Failure to do so could result in electrical shock!
3. Be careful when touching the exterior of an operating motor - it may be hot enough to be painful or cause injury. It is normal for modern motors to be hot when they operate at rated load and voltage because modern motors are built to operate at higher temperatures.
4. Do not insert any object into the motor.
5. Do not use any tools or equipment that require the use of your hands or feet to operate.
6. Do not touch the pump or its components while the pump is running.
7. Do not touch the pump or its components while the pump is running.
8. Do not handle the pump with wet hands or while standing in water because electrical shock could occur. Disconnect the main power before handling the unit for ANY REASON.
9. The unit should run clockwise as viewed facing shaft end. Counterclockwise rotation can result in damage to the pump motor, property damage and/or personal injury.
10. Release all pressure within the system before servicing any component.
11. The maximum liquid temperature is 180° F for Series 9700 centrifugal pumps.
12. Drain all liquids from the system before servicing any component. Flush with water.
13. Secure the discharge lines before starting the pump. An unsecured line may whip, causing personal injury and/or property damage.



General Safety Information

(General Safety Information Continued)

14. Check hose for weak or worn condition before each use. Make certain that all connections are tightly secured.
15. Periodically inspect the pump and the system components. Perform routine maintenance as required (see Maintenance section).
16. Use only pipe, hose and fittings rated for the maximum psi rating of the pump.
17. Do not use these pumps for pumping water or other liquids for human or animal consumption.

Troubleshooting

Symptom	Probable Cause(s)	Corrective Action(s)
Pump will not prime or retain prime after operating.	<ol style="list-style-type: none">1. Air leak in the suction line.2. Clogged foot valve or strainer.	<ol style="list-style-type: none">1. Repair or replace.2. Clean or replace
Flow rate is low.	<ol style="list-style-type: none">1. Incorrect speed.2. Piping is fouled or damaged.3. Clogged impeller or worn impeller.4. Discharge line restricted or undersized.5. High discharge pressure.	<ol style="list-style-type: none">1. Check drive.2. Clean or replace.3. Clean or replace.4. Flush out piping or replace.5. Check and reduce.
Pump runs but there is no fluid.	<ol style="list-style-type: none">1. Faulty suction piping.2. Pump is located too far from the fluid source.3. Gate valve is closed.4. Clogged strainer.5. Fouled foot valve.6. Discharge height is too great.7. Suction lift is too great.	<ol style="list-style-type: none">1. Replace.2. Relocate.3. Open.4. Clean or replace.5. Clean or replace.6. Lower the height.7. Lower the pump.
Liquid drips from the point where the shaft enters the pump casing, when the pump is full of liquid.	<ol style="list-style-type: none">1. Damaged mechanical seal.	<ol style="list-style-type: none">1. Replace. (See Mechanical Seal Replacement section.)
The pump starts and stops pumping.	<ol style="list-style-type: none">1. Fouled impeller.2. Faulty mechanical seal.3. Leak in the suction line.4. Leak in the foot valve.	<ol style="list-style-type: none">1. Clean.2. Replace.3. Repair.4. Repair or replace.
Excessive noise while pump in operation.	<ol style="list-style-type: none">1. Pump not secured to firm foundation.2. Piping not supported to relieve any strain on the pump assembly.3. Restricted suction line.4. Cavitation.	<ol style="list-style-type: none">1. Secure properly.2. Make necessary adjustments.3. Clean or correct.4. a. Reduce speed. b. Increase inlet size. c. Use thinner material.