

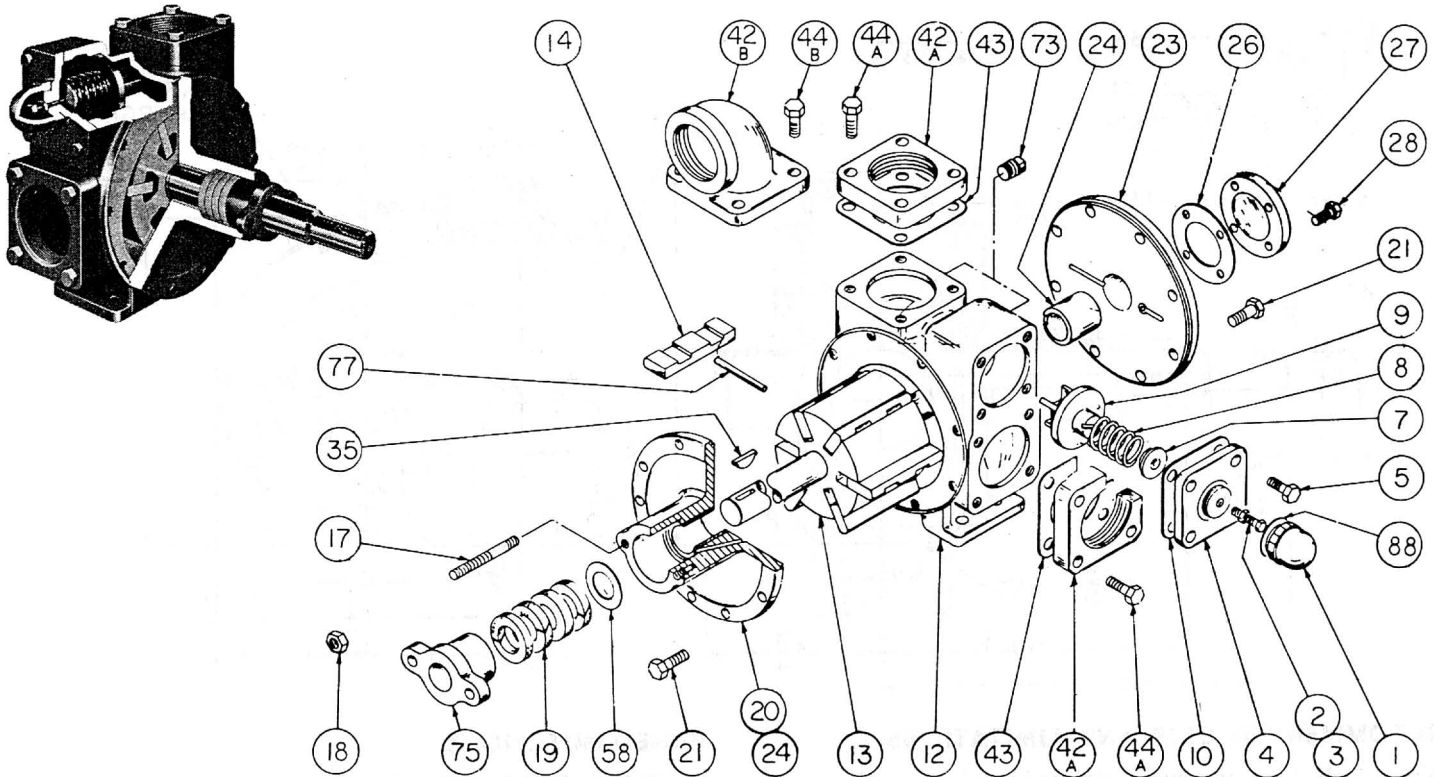
BLACKMER PUMP PARTS LIST

PUMP MODEL: NP3

(For Operating and Maintenance Instructions see page 135)

PARTS LIST NO. 185/Z5

| | |
|-------------------|----------------------------------|
| Section Effective | 100 |
| Replaces | Jun. 72 185/F7 Dated 10-68 |



DISCONTINUED MODEL

DON'T FORGET THE SERIAL NUMBER . . .

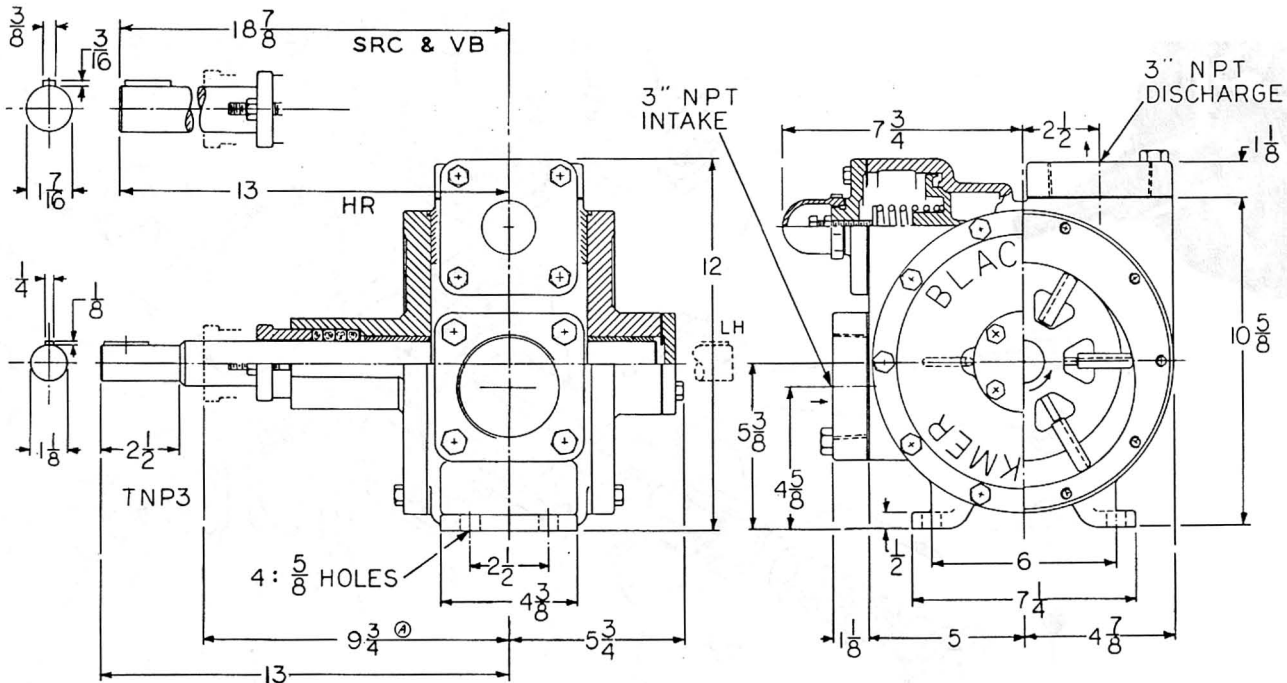
Would you like to be sure of getting the right material and have your order serviced faster? Then, also include the Pump Model Designation and the Pump Serial Number — both are stamped into a name-plate on the pump cylinder. Your serial number is a key to our records.

| REF. NO. | PART NAME | NO. PARTS PER PUMP | PART NO. | REF. NO. | PART NAME | NO. PARTS PER PUMP | PART NO. |
|-----------------------------|--|--------------------|------------|----------|--------------------------------------|--------------------|----------|
| 1 | Valve Cap | 1 | 413955 | 14 | Vane — Composition | 6 | 091805 |
| 2 | Adjusting Screw | 1 | 431808 | | Vane — Composition (Extra Clearance) | | 091816 |
| 3 | Locknut | 1 | 922923 | | Vane — Iron | | 091807 |
| 4 | Valve Cover | 1 | 411805 | | Vane — Iron (Extra Clearance) | | 091821 |
| 5 | Cover Capscrews | 4 | 920331 | | Vane — Bronze | | 091806 |
| 7 | Spring Guide | 1 | 421805 | | Vane — Bronze (Extra Clearance) | | 091804 |
| 8 | Valve Spring (30-35 psi) | 1 | 471804 | 17 | Stud | 2 | 921450 |
| | Valve Spring (36-50 psi) | | 471805 | 18 | Stud Nut | 2 | 922415 |
| | Valve Spring (51-110 psi) | | 471806 | 19 | Packing | 1 | 325176 |
| | Valve Spring (111-150 psi) | | 471809 | 20 | Inboard Head & Bushing Assy. | 1 | 031822 |
| | Valve Spring (36-50 psi) (Stainless Steel) | | 471815 | 21 | Head Capscrew | 20 | 920369 |
| | Valve Spring (51-110 psi) (Stainless Steel) | | 471807 | 23 | Outboard Head & Bushing Assy. | 1 | 031824 |
| 9 | Valve Spring (111-150 psi) (Stainless Steel) | 1 | 471808 | 24 | Bearing, sleeve | 2 | 161821 |
| | Pressure Control Valve | | 451803 | 26 | Bearing Cover Gasket | 1 | 381815 |
| 10 | Cover Gasket — Fiber | 1 | 531803 | 27 | Bearing Cover | 1 | 041823 |
| | Cover Gasket — Asbestos | | 531850 | 28 | Bearing Cover Capscrew | 4 | 920177 |
| 12 | Pump Cylinder | 1 | 021805 | 35 | Key | 1 | 909130 |
| 13 | Rotor & Shaft (Coupling Drive) | 1 | 261847 | 42A | Flange | 1-2 | 651803 |
| | Rotor & Shaft (Coupling Drive)* | | 261849 | 42B | Flange Elbow | 1-2 | 651805 |
| | Rotor & Shaft (SRC & VB)** | | 261821 | 43 | Flange Gasket — Fiber | 2 | 381811 |
| | Rotor & Shaft (SRC & VB)** | | 261823 | 44A | Flange Gasket — Asbestos | | 381816 |
| | Rotor & Shaft (SRC & VB)* | | 261825 | 44B | Flange Capscrew | 4-8 | 920530 |
| | Rotor & Shaft (HR Reducer)*** | | 261827 | 58 | Flange Elbow Capscrew | 4-8 | 920511 |
| Rotor & Shaft (HR Reducer)* | 261827 | 73 | Packwasher | 1 | 355107 | | |
| | | | | 75 | Gage Plug | 2 | 908195 |
| | | | | 77 | Packing Follower | 1 | 141801 |
| | | | | 88 | Push Rod | 3 | 121807 |
| | | | | | Cap Gasket | 1 | 533908 |

*Extra clearance for viscosities over 10,000 SSU

**For use on Blackmer reduction gear type SRC and on V-Belt Units

***For use on Blackmer reduction gear type HR



RECOMMENDED USES AND LIMITATIONS

NP models have internal metallized-graphite bearings and teflon-asbestos packing.

Full size rotor and composition vanes are standard on NP models and are suitable for most non-abrasive liquids such as gasolines, fuel oil, and solvents. Full size vanes and rotor should be used whenever the pump must pull a maximum dry vacuum such as on underground tanks.

Extra-clearance rotor and composition vanes are available on NP models. This construction is suitable for handling a great variety of non-abrasive liquids or viscous liquids at elevated temperatures. Solvents, caustics, asphalt, and resins are typical.

Metal vanes (iron or bronze) are recommended for pumps that handle *only* viscous liquids such as molasses, asphalt, bunker C, etc. They can be used on thin liquids but at speeds slower than the maximum available for composition vanes.

VANE LIMITATIONS

| TYPE VANE | Maximum Recommended | | |
|-----------------|---------------------|---------|------------|
| | Speed | Temp. | Viscosity |
| COMPOSITION: | | | |
| | Standard Size | 640 RPM | 240° F |
| Extra Clearance | 640 RPM | 500° F | 20,000 SSU |
| IRON: | | | |
| | Standard Size | 500 RPM | 240° F |
| Extra Clearance | 500 RPM | 500° F | |
| BRONZE: | | | |
| | Standard Size | 500 RPM | 180° F |
| Extra Clearance | 500 RPM | 500° F | |

Maximum Temperature with:
 Standard Valve Spring 300° F
 Stainless Steel Valve Spring 500° F

Maximum Differential Pressure 150 PSI

Rated Capacity at Maximum Speed with:
 Metal Vanes 200 GPM
 Composition Vanes 250 GPM

Maximum Recommended Speed at:
 3,000 SSU 500 RPM
 10,000 SSU 400 RPM
 15,000 SSU 350 RPM
 20,000 SSU 300 RPM
 35,000 SSU 250 RPM
 50,000 SSU 200 RPM
 100,000 SSU 100 RPM

DISCONTINUED MODEL