

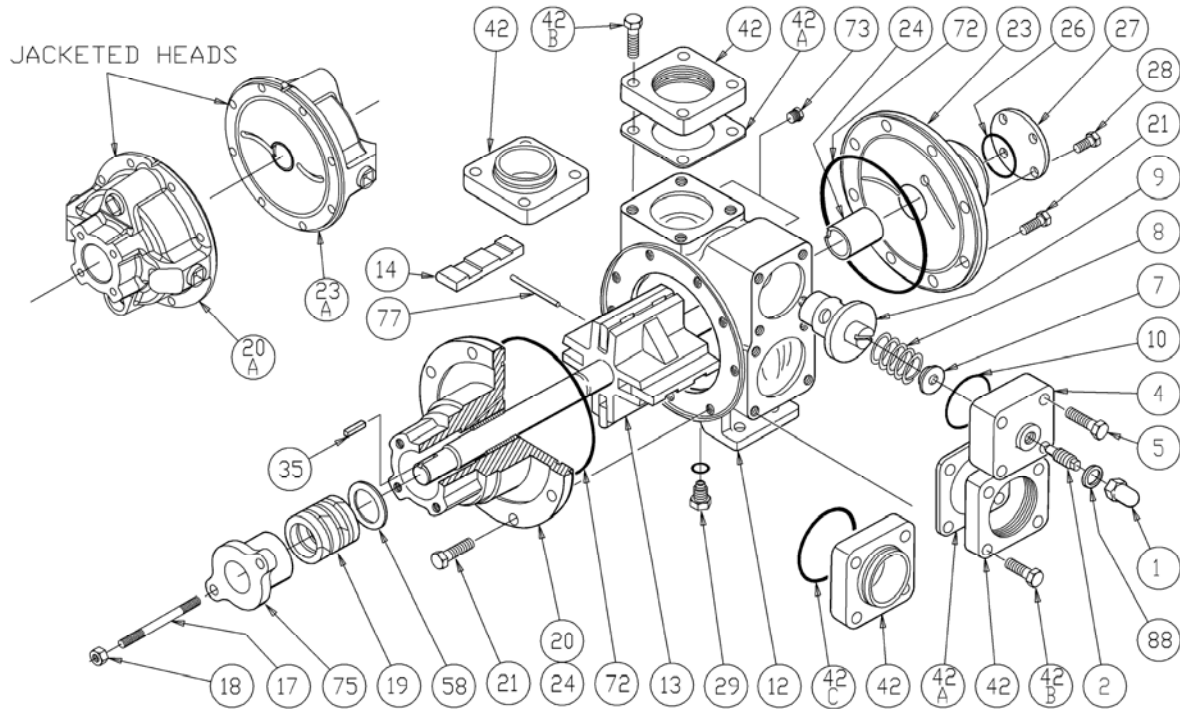
BLACKMER PARTS LIST

PUMP MODEL: NP2F

961402 **PARTS LIST**
Page 1 of 2 **103-A02**

| | |
|-----------|----------|
| Section | 103 |
| Effective | Nov 2012 |
| Replaces | Aug 2011 |

Keep with Instructions 103-A00 for Installation, Operation and Maintenance



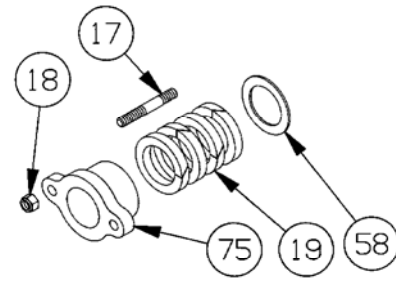
| Ref. No. | Description | Parts per Pump | Part No. | Ref. No. | Description | Parts per Pump | Part No. |
|----------|------------------------------------------------|----------------|---------------------|------------------|-----------------------------------------------|----------------|---------------------|
| 1 | Cap – Relief Valve (R/V) | 1 | 411453 | 20 | Head & Bushing Asy. - Inboard | 1 | 031476 |
| 2 | Adjusting Screw – R/V | 1 | 431401 | 20A | Head & Bushing Asy. – Inboard (Jacket) | 1 | 031472 |
| 4 | Cover – R/V (Std.) | 1 | 411469 | 21 | Capscrews - Head | 16 | 920341 |
| | Cover – R/V ^{1,5} | | 411468 | 23 | Head & Bushing Asy. - Outboard | | 031477 |
| 5 | Capscrew – R/V Cover (Std.) | 4 | 920316 | 23A | Head & Bushing Asy. – Outboard (Jacket) | 1 | 031473 |
| | Capscrew – R/V Cover ^{1,5} | | 920401 | 24 | Bushing (Sleeve Bearing) | | 2 |
| 7 | Spring Guide – R/V | 1 | 423955 | 26 | O-Ring – Bearing Cover (FKM) (Std.) | 1 | ⁴ 702209 |
| 8 | Spring – R/V (36-50 psi) | 1 | 471415 | | O-Ring – Bearing Cover (PTFE) | | 702126 |
| | Spring – R/V (51-75 psi) | | 471420 | | O-Ring - Bearing Cover (Buna-N) ⁵ | | 701929 |
| | Spring – R/V (76-110 psi) | | 471425 | 27 | Bearing Cover | 041400 | |
| | Spring – R/V (111-150 psi) | | 471428 | 28 | Capscrews – Flange | 920291 | |
| | SS Spring – R/V (51-75 psi) | | 471418 | 29 | Pipe Plug Asy. (SAE #6) (FKM) (Std.) | 908212 | |
| | SS Spring – R/V (76-110 psi) | | 471427 | | Pipe Plug Asy. (SAE #6) (PTFE) | 908213 | |
| | SS Spring – R/V (111-150 psi) | | 471429 | | Pipe Plug Asy. (SAE #6) (Buna-N) ⁵ | 908211 | |
| | SS Spring – R/V (151-200 psi) ^{1,5} | | 471468 | | 35 | Key Shaft | ⁴ 909160 |
| 9 | Valve – R/V (Std.) | 1 | 451417 | 42 ² | Flange – 2” NPT (Std.) | 2 | 651411 |
| | Valve – R/V (Nickel Plated) ⁵ | | 451415 | Flange – 2” Weld | 654405 | | |
| 10 | O-Ring – R/V Cover (FKM) (Std.) | 1 | ⁴ 702212 | 42A | Gasket – NPT Flange (Comp.) (Std.) | 2 | ⁴ 381421 |
| | O-Ring – R/V Cover (PTFE) | | 702213 | 42B | Capscrew – Flange | | 920351 |
| | O-Ring – R/V Cover (Buna-N) ⁵ | | 702211 | 42C | O-Ring – Flange (FKM) | | 0 - 2 |
| 12 | Cylinder (Std.) | 1 | 021403 | | O-Ring – Flange (PTFE) | 702056 | |
| | Cylinder w/ SAE Drain (Cast Iron) ⁵ | | 021402 | | O-Ring – Flange (Buna-N) ⁵ | 701934 | |
| 13 | Rotor & Shaft, Open Rotor (Shown) | 1 | 261468 | 72 | O-Ring – Head (FKM) (Std.) | 2 | ⁴ 702241 |
| | Rotor & Shaft, Closed Rotor (Opt.) | | 261475 | | O-Ring – Head (PTFE) | | 702242 |
| 14 | Vane – Duravane (Std.) ⁵ | 4 | ⁴ 091419 | | O-Ring – Head (Buna-N) ⁵ | 2 | 702022 |
| | Vane – EC Laminate | | 091429 | 73 | Gage Plug | | 908198 |
| | Vane – EC Cast Iron | | 093923 | 77 | Push Rods | | ⁴ 123905 |
| | Vane – EC Bronze | | 093924 | 88 | Gasket – R/V Cap | | ⁴ 701981 |
| — | Kit — Maintenance | — | 898929 | — | — | — | 898929 |

¹ Optional High Pressure Relief Valve - **parts must be used as a group** (includes p/n's 411468, 920401, and 471468).
² See backside for Flange Options. ⁴ Included in Maintenance Kit EC = Extra-Clearance SS = Stainless Steel
⁵ AFFF service pumps include: Nickel Pltd. High Press. RV, 200 psi RV spring, Buna O-rings, Cyl. w/ Drain, Lip Seal & Duravanes.

PACKING - STANDARD

| Ref. No. | Part Name | Parts Per Pump | Part No. |
|----------|-----------------------------|----------------|---------------------|
| 17 | Stud - Packing Follower | 2 | 921450 |
| 18 | Nut - Packing Follower Stud | 2 | 922428 |
| 19 | Packing Set | 1 | ⁴ 321400 |
| 58 | Pack Washer | 1 | 351207 |
| 75 | Packing Follower | 1 | 141468 |

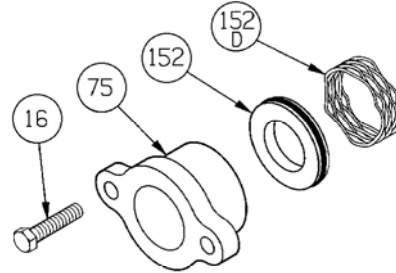
⁴ Included in Maintenance Kit



LIP SEAL – OPTIONAL ⁵

| Ref. No. | Part Name | Parts Per Pump | Part No. |
|----------|------------------------------|----------------|----------|
| 16 | Capscrew - Follower | 2 | 920295 |
| 75 | Seal Follower | 1 | 141468 |
| 152 | Lip Seal Assembly (To 500°F) | 1 | 702244 |
| 152D | Wave Spring | 1 | 321401 |

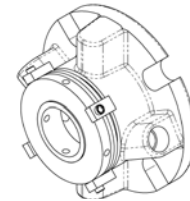
NOTE: A Commercial Mechanical Seal (Cartridge Type) can be used in place of packing or lip seals. Consult mechanical seal manufacturer for more information.



COMMERCIAL MECHANICAL SEAL (Cartridge Type) - OPTIONAL

| Ref. No. | Part Name | Parts Per Pump | Part No. |
|----------|-----------------|----------------|----------|
| - | John Crane 5610 | 1 | 331471 |

NOTE: Seal Materials (Sil-Car, Carbon, FKM)

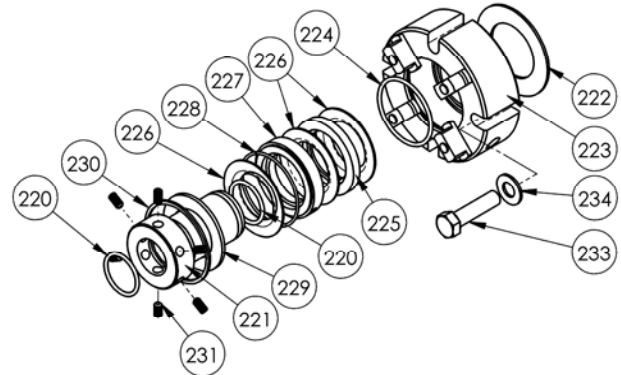


Commercial Mechanical Seal Cartridge Type

TRIPLE-LIP CARTRIDGE SEAL - OPTIONAL

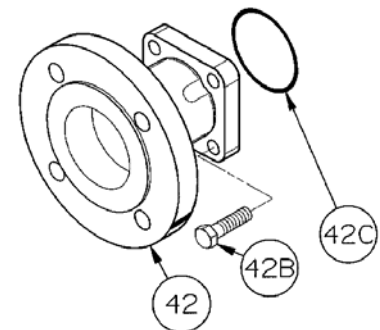
| Ref. No. | Part Name | Seal | Seal Rebuild Kit |
|----------|----------------------------------|---------------|------------------|
| — | TRIPLE-LIP CARTRIDGE SEAL | 331773 | 899104 |
| 220 | Shaft Sleeve O-Ring | 2 | X |
| 221 | Shaft Sleeve | 1 | |
| 222 | Gasket | 1 | X |
| 223 | Gland Plate Assembly | 1 | |
| 224 | Element O-Ring | 1 | X |
| 225 | Seal Spacer | 1 | X |
| 226 | Seal Element | 3 | X |
| 227 | Flushing Spacer | 1 | X |
| 228 | Flushing Spacer O-Ring | 1 | X |
| 229 | Retaining Ring | 1 | |
| 230 | Snap Ring | 1 | X |
| 231 | Shaft Sleeve Setscrews | 6 | X |
| 233 | Gland Capscrew | 4 | |
| 234 | Flat Washer | 4 | |

X = Parts Included in Seal Rebuild Kit



FLANGE OPTIONS

| Ref. No. | Part Name | Parts Per Pump | Part No. |
|----------|-------------------------------|----------------|----------|
| 42 | Flange – ANSI 2" 150 lb. R.F. | 1-2 | 651417 |



ANSI FLANGE

