

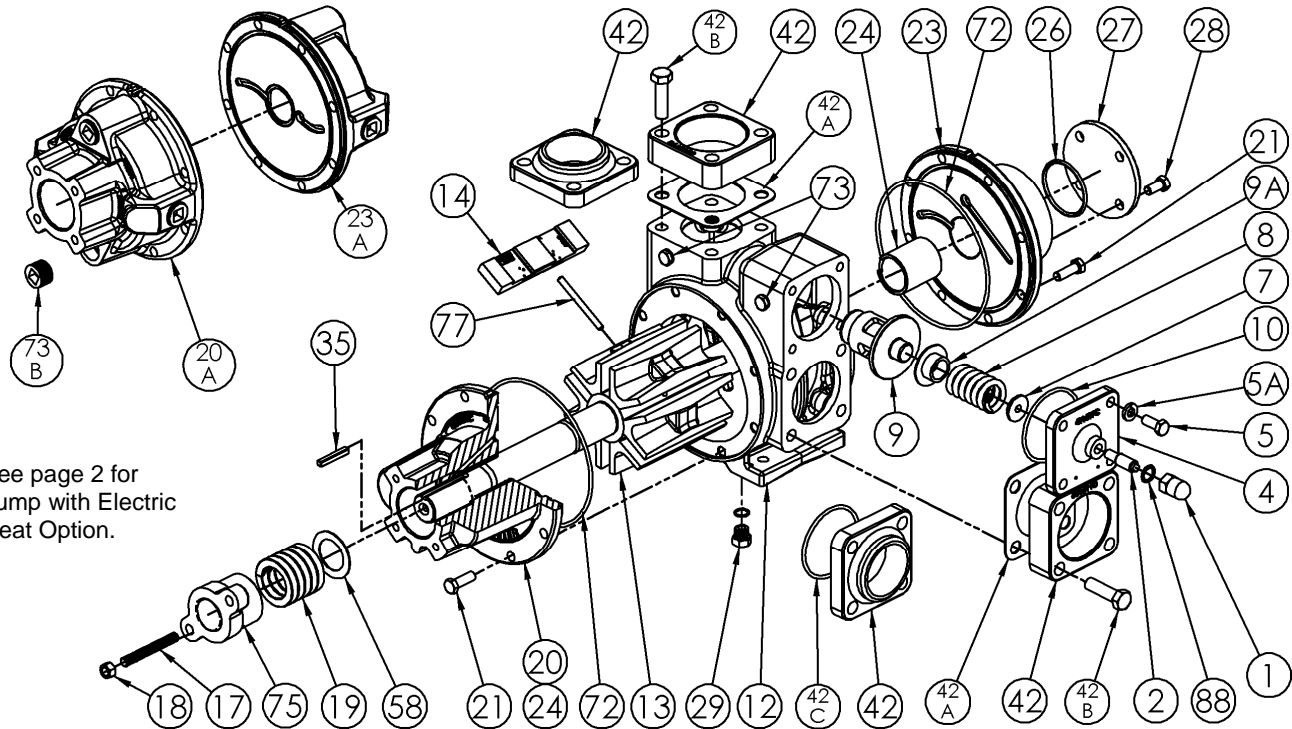
# BLACKMER PARTS LIST

## PUMP MODEL: NP2.5F

961602 **PARTS LIST**  
Page 1 of 4 **103-A03**

Section | 103  
Effective | Nov 2012  
Replaces | Sept 2011

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



Ref. No.	Description	Qty	Part No.	Ref. No.	Description	Qty	Part No.
1	Cap - Relief Valve (R/V)	1	411453	20A	Head & Bushing Asy. - Inboard (Jacket)	1	031672
2	Adjusting Screw - R/V	1	431401	21	Capscrews - Head	16	920341
4	Cover - R/V (Std.)	1	411600	23	Head & Bushing Asy. - Outboard	1	031677
	Cover - R/V <sup>1,4</sup> (high pressure)		411608	23A	Head & Bushing Asy. - Outboard (Jacket)	1	031673
5	Capscrew - R/V Cover (Std.)	4	920316	24	Bushing (Sleeve Bearing)	2	<sup>5</sup> 161600
	Capscrew - R/V Cover <sup>1,4</sup> (high pressure)		920421	26	O-Ring - Bearing Cover (FKM) (Std.)	1	<sup>5</sup> 702038
5A	Lockwasher - R/V Capscrew <sup>1,4</sup> (high press)	0 - 4	909649		O-Ring - Bearing Cover (PTFE)		702234
7	Spring Guide - R/V (Std.)	1	423955		O-Ring - Bearing Cover (Buna-N) <sup>4</sup>		702037
	Spring Guide - R/V <sup>1,4</sup> (high pressure)		421805	27	Bearing Cover	1	041600
8	Spring - R/V (41-50 psi) <sup>2</sup>	1	471608	28	Capscrews - Bearing Cover	4	920291
	Spring - R/V (51-110 psi)		471631	29	Pipe Plug Asy. (SAE # 6) (FKM) (Std.)	1	908212
	Spring - R/V (111-150 psi)		471614		Pipe Plug Asy. (SAE # 6) (PTFE)		908213
	SS Spring - R/V (51-110 psi)		471632		Pipe Plug Asy. (SAE #6) (Buna-N) <sup>4</sup>		908211
	SS Spring - R/V (111-150 psi)		471615	35	Key - Shaft	1	<sup>5</sup> 909177
	SS Spring - R/V (151-200 psi) <sup>1</sup> (hp)		471671	42 <sup>3</sup>	Flange - 2½" NPT	2	651611
9	Valve - R/V (51-200 psi) (Std.)	1	451623		Flange - 2½" Weld		651610
	Valve - R/V (51-200 psi) (Nickel Plated)		451624	42A	Gasket - NPT Flange (Comp.) (Std.)	2	<sup>5</sup> 381650
	Valve - R/V (41-50 psi) <sup>2</sup>		451609	42B <sup>2</sup>	Capscrew - (NPT Flange ONLY)	8	920532
9A	Collar - Valve <sup>1,4</sup> (high pressure)	0 - 1	431606		Capscrew - Weld / DIN <sup>4</sup> / ANSI Flange		920491
10	O-Ring - R/V Cover (FKM) (Std.)	1	<sup>5</sup> 701924	42C	O-Ring - Weld Flange (FKM)	0 - 2	701924
	O-Ring - R/V Cover (PTFE)		702079		O-Ring - Weld Flange (PTFE)		702079
	O-Ring - R/V Cover (Buna-N) <sup>4</sup>		701925		O-ring - Weld Flange (Buna-N) <sup>4</sup>		701925
12	Cylinder (Std.)	1	021605	72	O-Ring - Head (FKM) (Std.)	2	<sup>5</sup> 702241
	Cylinder w/ SAE Drain (Cast Iron) <sup>4</sup>		021602		O-Ring - Head (PTFE)		702242
13	Rotor & Shaft, Open Rotor (Shown)	1	261668		O-Ring - Head (Buna-N) <sup>4</sup>		702240
	Rotor & Shaft, Closed Rotor (Opt.)		261675	73	Gage Plug	2	908198
14	Vane - Duravane (Std.) <sup>4</sup>	6	<sup>5</sup> 091619	73B	Jacket Plug	0 - 4	908223
	Vane - EC Laminate		091627	77	Push Rods	3	<sup>5</sup> 121607
	Vane - EC Cast Iron		091621	88	Gasket - R/V Cap	1	<sup>5</sup> 701981
	Vane - EC Bronze		091624	—	Kit - Maintenance	—	898930
20	Head & Bushing Asy. - Inboard	1	031676				

<sup>1</sup> Optional High Pressure Relief Valve - **parts must be used as a group** (includes p/n 411608, 920421, 909649, 421805, 431606 & 471671).

<sup>2</sup> Low pressure spring must be used with low pressure valve p/n 451609

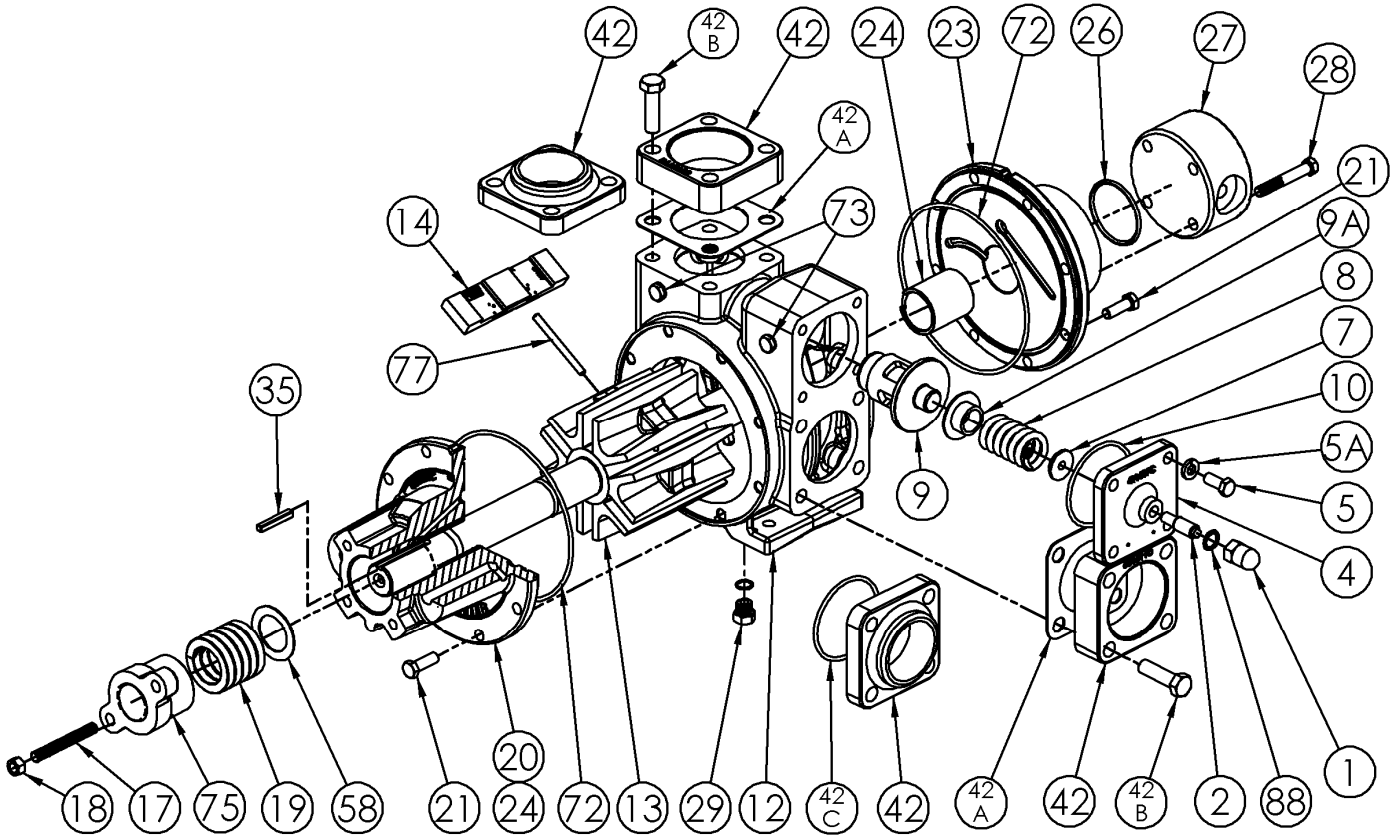
<sup>3</sup> See Page 3 for other flanges

<sup>4</sup> AFFF service pumps include: Nickel Plated, High Press. RV, 200 psi RV spring, Buna O-rings, Cyl. w/ Drain, Lip Seal & Duravanes.

<sup>5</sup> Included in Maintenance Kit.

EC = Extra-Clearance SS = Stainless Steel

# Pumps with Heads for Electric Heating



Ref. No.	Description	Parts per Pump	Part No.	Ref. No.	Description	Parts per Pump	Part No.
1	Cap - Relief Valve (R/V)	1	411453	24	Bushing – EH (Sleeve Bearing)	2	161601
2	Adjusting Screw - R/V	1	431401	26	O-Ring - Bearing Cover (FKM) (Std.)	1	702038
4	Cover - R/V (Std.)	1	411600		O-Ring - Bearing Cover (PTFE)		702234
5	Capscrew - R/V Cover (Std.)	4	920316	27	Bearing Cover EH	1	041880
7	Spring Guide - R/V (Std.)	1	423955	28	Capscrews - Bearing Cover EH	4	920444
8	SS Spring - R/V (51-110 psi)	1	471632	29	Pipe Plug Assy. (SAE # 6) (FKM) (Std)	1	908212
9	Valve - R/V (51-200 psi) (Std.)	1	451623		Pipe Plug Assy. (SAE # 6) (PTFE)		908213
	Valve - R/V (51-200 psi) (Nickel Plated)		451624	35	Key - Shaft	1	909177
10	O-Ring - R/V Cover (FKM) (Std.)	1	701924	42 <sup>3</sup>	Flange – 2½" NPT (Std.)	2	651611
	O-Ring - R/V Cover (PTFE)		702079		Flange – 2 ½" Weld		651610
12	Cylinder (Std.)	1	021605	42A	Gasket - NPT Flange (Comp.) (Std.)	2	381650
	Cylinder w/ SAE Drain (Cast Iron)		021602	42B <sup>2</sup>	Capscrew – (NPT Flange ONLY)	8	920532
13	Rotor & Shaft, Open Rotor (Shown)	1	261668		Capscrew – Weld / ANSI Flange		920491
	Rotor & Shaft, Closed Rotor (Opt.)		261675	42C	O-Ring – Weld Flange (FKM)	0 - 2	701924
14	Vane - Duravane (Std.)	6	091619		O-Ring – Weld Flange (PTFE)		702079
	Vane - EC Laminate		091627	72	O-Ring - Head (FKM) (Std.)	2	702241
	Vane - EC Cast Iron		091621		O-Ring - Head (PTFE)		702242
	Vane - EC Bronze		091624	73	Gage Plug	2	908198
20	Head & Bushing Assy. – Inboard EH	1	031684	77	Push Rods	3	121607
21	Capscrews - Head	16	920341	88	Gasket - R/V Cap	1	701981
23	Head & Bushing Assy. – Outboard EH	1	031685				

<sup>3</sup> See Page 3 for other flanges

**EH** = Electric Heat Option Parts

**EC** = Extra-Clearance

**SS** = Stainless Steel



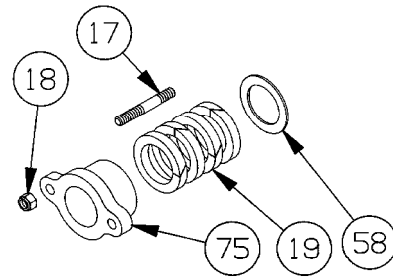
1809 Century Avenue, Grand Rapids, Michigan 49503-1530, U.S.A.  
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Parts List 103-A03  
 Page 2 of 4

**PACKING – STANDARD & ELECTRIC HEAT OPTION**

Ref. No.	Part Name	Parts Per Pump	Part No.
17	Stud - Packing Follower	2	921868
18	Nut - Packing Follower Stud	2	922428
19	Packing Set Packing Set – Electric Heat Option	1	<sup>5</sup> 321868 321880
58	Pack Washer	1	355168
75	Packing Follower	1	141868

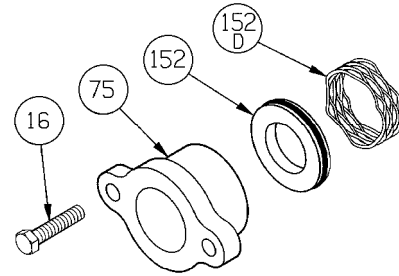
<sup>5</sup> Included in Maintenance Kit.



**LIP SEAL - OPTIONAL <sup>4</sup>**

Ref. No.	Part Name	Parts Per Pump	Part No.
16	Capscrew - Follower	2	920359
75	Seal Follower	1	141868
152	Lip Seal Assembly (To 500°F)	1	702245
152D	Wave Spring	1	321601

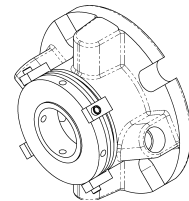
**NOTE:** A Commercial Mechanical Seal (cartridge type) can be used in place of packing or lip seals. Consult mechanical seal manufacturer for more information.



**COMMERCIAL MECHANICAL SEAL (Cartridge Type) - OPTIONAL**

Ref. No.	Part Name	Parts Per Pump	Part No.
-	John Crane 5610	1	331639

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

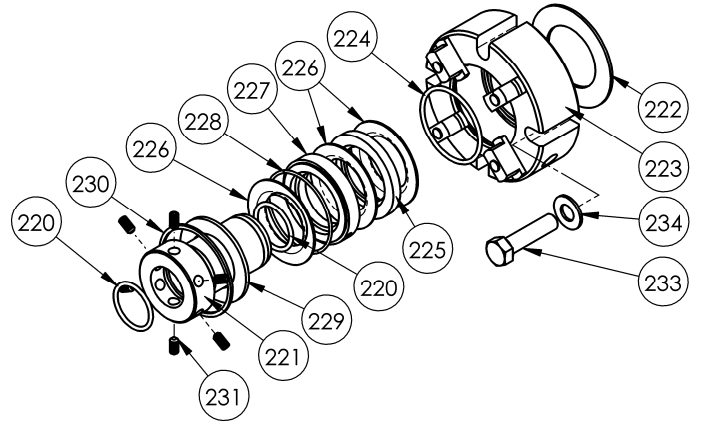


Commercial Mechanical Seal Cartridge Type

**TRIPLE-LIP CARTRIDGE SEAL - OPTIONAL**

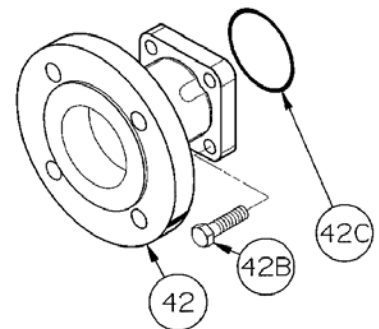
Ref. No.	Part Name	Seal	Seal Rebuild Kit
—	<b>TRIPLE-LIP CARTRIDGE SEAL</b>	<b>331774</b>	<b>899105</b>
220	Shaft Sleeve O-Ring	2	X
221	Shaft Sleeve	1	
222	Gasket	1	X
223	Gland Plate Assembly	1	
224	Element O-Ring	1	X
225	Seal Spacer	1	X
226	Seal Element	3	X
227	Flushing Spacer	1	X
228	Flushing Spacer 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 3" 150 lb. R.F.	0-2	651617



ANSI FLANGE



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Parts List 103-A03  
Page 4 of 4