

Parts Book P20-P50/51-P75/76-P315 Gear Pumps and Motors Distributor Program



ENGINEERING **YOUR** SUCCESS.

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Selections

- 1. Select Pump or a Motor**
- 2. Select Series**
 - 020**
 - 051**
 - 076**
- 3. Select Type**
 - Standard Pump**
 - Pump with Out Board Bearing**
 - Tandem Pump**
 - Motor Comes Standard with O/B Bearing**
- 4. Select Shaft End Cover**
- 5. Select Port End Cover and Housing**
- 7. Select Gear Housing and Porting**
- 8. Select Gear Set**
 - Drive Shaft and Gear Set**
 - Continental Gear Set**
 - Continental will use Motor Component Kit**
- 9. Select the Fasteners**
- 10. Select the Component and Seal Kit**
- 11. Additional Questions**
 - Extended Studs and locations**
 - Side Ports or Rear Ports Plugged**
- 12. Standard Questions**
 - What is the main system relief valve setting**
 - What is the maximum speed**
 - How much flow at what RPM [CID X RPM] / 231**

Basic Formulas

Cylinders

$$F = PXA$$

$$P = F/A$$

$$A = F/P$$

$$\text{Area of a Circle} = D \text{ Sq.} \times .7854$$

Hydraulic Pumps

$$\text{GPM} = [\text{RPM} \times \text{CID}] / 231$$

$$\text{CID} = [\text{GPM} \times 231] / \text{RPM}$$

$$T = [\text{CID} \times \text{PSI}] / 75.36 \text{ LBS FT.}$$

$$T = [\text{CID} \times \text{PSI}] / 6.28 \text{ LBS Inch}$$

$$T = [\text{HP} \times 5252] / \text{RPM LBS FT.}$$

$$T = [\text{HP} \times 63025] / \text{RPM LBS Inch}$$

$$\text{HP} = [T \times \text{RPM}] / 5252 \text{ LBS FT.}$$

$$\text{HP} = [T \times \text{RPM}] / 63025 \text{ LBS Inch}$$

Hydraulic Motors

$$\text{RPM} = [\text{GPM} \times 231 / \text{CIR}]$$

$$\text{CIR} = [\text{GPM} \times 231 / \text{RPM}]$$

$$T = [\text{CIR} \times \text{PSI}] / 75.36 \text{ LBS FT.}$$

Glossary of Terms

F = Force

A = Area

P = Pressure

HP = Horse Power

GPM = Gallons Per Minute

PSI = Pressure Per Sq. Inch

RPM = Revolutions Per Min.

231 = Cubic Inches in 1 Gallon

T = Torque

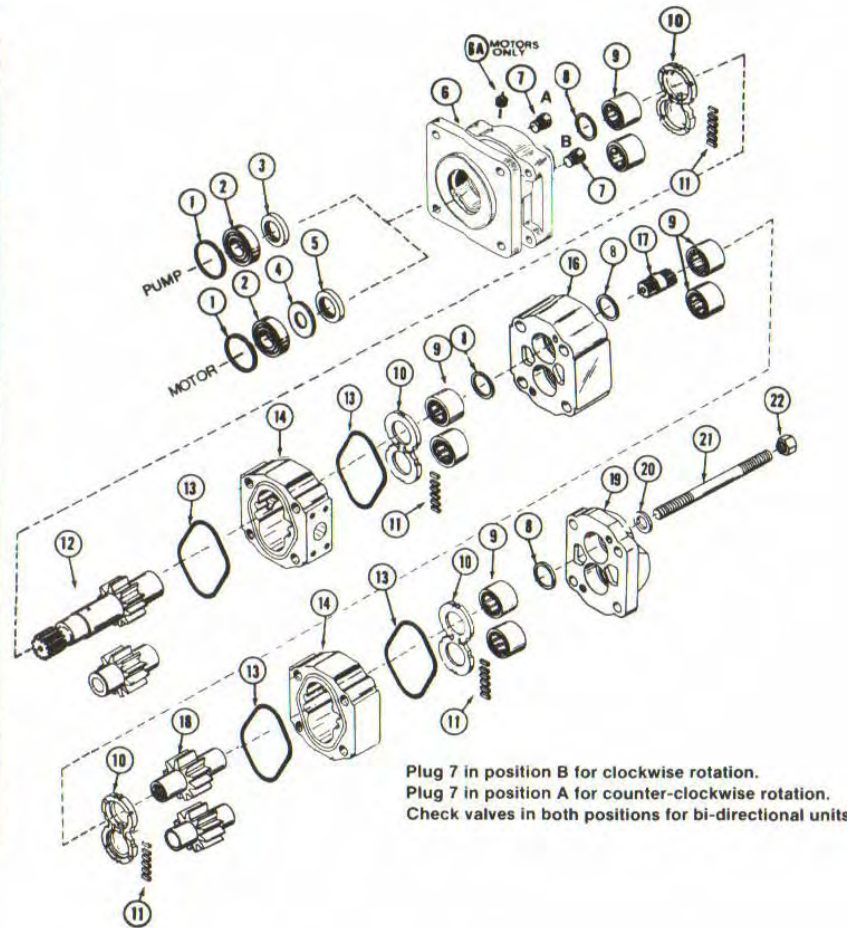
**CID = Cubic Inches Displaced
Per Revolution Pump**

**CIR = Cubic Inches Displaced
Per Revolution Motor**

PGP/PGM020 Pumps and Motors

PGP/PGM020 Standard Parts List

Item No.	Description	Required	Ten Digit No. (TDN)
1	Snap Ring	1	391-2686-063
2	Outboard Bearing	1	391-0381-040
	Outboard Spacer	1	391-3383-069
3	Lip Seal (pump)	1	391-2883-058
4	Seal Retainer (motor)	1	391-3381-040
5	Lip Seal (motor)	1	391-2883-119
6	Shaft End Cover	1	308-50XX-XXX
6A	Drain Plug (motor)	1	391-2282-XXX
7	Check Assemblies for Motors & Bi-Rotational Pumps	2	391-3681-001
	Plugs (pumps only)	1	391-2286-004
8	Ring Seals (per gear section)	2	391-2585-006
9	Roller Bearings (per gear section)	4	391-0381-906
	Thrust plates (motor) (per gear section)	2	391-2185-913
10	Thrust plates (pump) (per gear section)	2	391-2185-913
	Pocket Seals (per gear section)	1 strip	391-2882-022 (Viton) 391-2882-051 (Buna)
12	Drive Shaft Gear Set	1 Set	312-29XX-XXX
13	Gasket Seals (per gear section)	2	391-2884-019
14	Gear Housing	1	308-8XXX-XXX
16	Bearing Carrier	-	308-7XXX-XXX
17	Connecting Shaft	-	312-1133-001
18	Gear Set	set	312-28XX-XXX
19	Port End Cover	1	308-3XXX-XXX
20	Washers	4	391-3782-146
21	Cap Screws (single units)	4	391-1401-XXX
	Studs (multiple units)	4	391-1425-XXX
22	Nuts (multiple units)	4	391-1451-115



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 Gear Pump Division
 1775 Logan Avenue, Youngstown, OH 44501 USA
 Tel: (330) 746-8011 • Fax: (330) 746-1148
<http://www.parker.com/gearpumps>

PGP/PGM 020 Series Parts

Item # 6 Shaft End Covers

Pump

<u>Description</u>	<u>Code</u>	<u>Part Number</u>
2 Bolt Pad Mount	10	308 5016 203
4 Bolt Clover Leaf	27	308 5036 201
4 Bolt SAE B	42	308 5030 201
2/4 Bolt SAE B	46	308 5053 202
2 Bolt SAE A	94	308 5020 204
2 Bolt SAE B Short Shaft	96	308 5029 205
2 Bolt SAE B	97	308 5020 201

Motor

4 Bolt SAE B	42	308 5030 401
2/4 Bolt SAE B	46	308 5053 402
2 Bolt SAE A	94	308 5020 404
2 Bolt SAE B Short	96	308 5029 401
2 Bolt B	97	308 5020 401

Item #6A Drain Plug 391 2282 056 1/4" NPT



Item # 12 Drive Shaft Gear Sets

Description

7/8" 13 Tooth Code 25

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>	
Continental	25	312 1135 138	Shaft Only
.50" Gear	25	312 2905 230	
.75" Gear	25	312 2907 230	
1.00" Gear	25	312 2910 230	
1.25" Gear	25	312 2912 230	
1.50" Gear	25	312 2915 230	
1.75" Gear	25	312 2917 230	
2.00" Gear	25	312 2920 230	

7/8" Keyed Shaft Code 30

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>	
Continental	30	312 1500 300	Shaft Only
.50" Gear	30	312 2905 730	
.75" Gear	30	312 2907 730	
1.00" Gear	30	312 2910 730	
1.25" Gear	30	312 2912 730	
1.50" Gear	30	312 2915 730	
1.75" Gear	30	312 2917 730	
2.00" Gear	30	312 2920 730	
Key		391 1781 025	Integral Gear Shaft
Key		391 1781 085	Continental Gear Shaft

Item # 12 Drive Shaft Gear Sets

1" 15 Tooth Shaft Code 98

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>	
Continental	98	312 1000 401	Shaft Only
1.00" Gear	98	312 2910 240	
1.25" Gear	98	312 2912 240	
1.50" Gear	98	312 2915 240	
1.75" Gear	98	312 2917 240	
2.00" Gear	98	312 2920 240	

1" Keyed Shaft Code 43

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>	
Continental	43	312 1500 400	Shaft Only
.50" Gear	43	312 2905 740	
.75" Gear	43	312 2907 740	
1.00" Gear	43	312 2910 740	
1.25" Gear	43	312 2912 740	
1.50" Gear	43	312 2915 740	
1.75" Gear	43	312 2917 740	
2.00" Gear	43	312 2920 740	
Key		391 1781 021	

Note:

Integral Gear Sets include the shaft , driven gear and idler gear as one unit. Continental Gear Sets include the driven gear and idle gear and the shafts are carried separately see item # 18. Special machining is manufactured in the driven Continental Gear so multiple shafts can be installed.

Item # 14 Gear Housings

Blank

Code AB

<u>Gears Size</u>	<u>Code</u>	<u>Part Number</u>
.50" Gear	AB05	308 8005 100
.75" Gear	AB07	308 8007 100
1.00" Gear	AB10	308 8010 100
1.25" Gear	AB12	308 8012 100
1.50" Gear	AB15	308 8015 100
1.75" Gear	AB17	308 8017 100
2.00" Gear	AB20	308 8020 100

NPT

1/2" X 1/2" BI Rotational NPT

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>
.50" Gear	IR05	308 8005 104
.75" Gear	IR07	308 8007 104

3/4" X 3/4" BI Rotational NPT

.75" Gear	IF07	308 8007 116
1.00" Gear	IF10	308 8010 116
1.25" Gear	IF12	308 8012 116
1.50" Gear	IF15	308 8015 116
1.75" Gear	IF17	308 8017 116
2.00" Gear	IF20	308 8020 116

1" X 1" BI Rotational NPT

1.00" Gear	YF10	308 8010 127
1.25" Gear	YF12	308 8012 127
1.50" Gear	YF15	308 8015 127
1.75" Gear	YF17	308 8017 127
2.00" Gear	YF20	308 8020 127

Item # 14 Gear Housings

NPT

1 1/4" X 1 1/4" BI Rotational NPT

<u>Gears Size</u>	<u>Code</u>	<u>Part Number</u>
1.50" Gear	YL15	308 8015 132
1.75" Gear	YL17	308 8017 132
2.00" Gear	YL20	308 8020 132

1" X 3/4" CCW NPT

1.00" Gear	IG10	308 8010 118
1.25" Gear	IG12	308 8012 118
1.50" Gear	IG15	308 8015 118
1.75" Gear	IG17	308 8017 118
2.00" Gear	IG20	308 8020 118

1" X 3/4" CW NPT

1.00" Gear	IJ10	308 8010 118
1.25" Gear	IJ12	308 8012 118
1.50" Gear	IJ15	308 8015 118
1.75" Gear	IJ17	308 8017 118
2.00" Gear	IJ20	308 8020 118

1 1/4" X 1" CCW NPT

1.25" Gear	YG12	308 8012 128
1.50" Gear	YG15	308 8015 128
1.75" Gear	YG17	308 8017 128
2.00" Gear	YG20	308 8020 128

1 1/4" X 1" CW NPT

1.25" Gear	YJ12	308 8012 128
1.50" Gear	YJ15	308 8015 128
1.75" Gear	YJ17	308 8017 128
2.00" Gear	YJ20	308 8020 128

Item # 14 Gear Housings

O-RING

Description

3/4" X 3/4" BI Rotational ODT

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>
.75" Gear	EF07	308 8007 316
1.00" Gear	EF10	308 8010 316
1.25" Gear	EF12	308 8012 316
1.50" Gear	EF15	308 8015 316
1.75" Gear	EF17	308 8017 316
2.00" Gear	EF20	308 8020 316

1" X 1" BI Rotational ODT

1.00" Gear	AF10	308 8010 327	Rated to 2240 PSI
1.25" Gear	AF12	308 8012 327	
1.50" Gear	AF15	308 8015 327	
1.75" Gear	AF17	308 8017 327	
2.00" Gear	AF20	308 8020 327	

1 1/4" X 1 1/4" BI Rotational ODT

1.50" Gear	AL15	308 8015 332	Rated to 2530 PSI
1.75" Gear	AL17	308 8017 332	
2.00" Gear	AL20	308 8020 332	

1" X 3/4" CCW ODT

1.00" Gear	EG10	308 8010 318
1.25" Gear	EG12	308 8012 318
1.50" Gear	EG15	308 8015 318
1.75" Gear	EG17	308 8017 318
2.00" Gear	EG20	308 8020 318

1" X 3/4" CW ODT

1.00" Gear	EJ10	308 8010 318
1.25" Gear	EJ12	308 8012 318
1.50" Gear	EJ15	308 8015 318
1.75" Gear	EJ17	308 8017 318
2.00" Gear	EJ20	308 8020 318

Item # 14 Gear Housings

O-RING

Description

1 1/4" X 1" CCW ODT

<u>Gear Sizes</u>	<u>Code</u>	<u>Part Number</u>
1.25" Gear	AG12	308 8012 328
1.50" Gear	AG15	308 8015 328
1.75" Gear	AG17	308 8017 328
2.00" Gear	AG20	308 8020 328

1 1/4" X 1" CW ODT

1.25" Gear	AJ12	308 8012 328
1.50" Gear	AJ15	308 8015 328
1.75" Gear	AJ17	308 8017 328
2.00" Gear	AJ20	308 8020 328

Item # 16 Bearing Carriers

<u>Description</u>	<u>Code</u>	<u>Part Number</u>
Bi-Rotational No Ports	B	308 7300 100
Clockwise No Ports	C	308 7363 100
Counter Clockwise	D	308 7363 100

Item # 18 Gear Sets

Continental or Downstream Gear Sets

<u>Gear Size</u>	<u>Part Number</u>	<u>Notes</u>
.50" Gear	312 2805 000	Gear Set Only
.75" Gear	312 2807 000	Gear Set Only
1.00" Gear	312 2810 000	Gear Set Only
1.25" Gear	312 2812 000	Gear Set Only
1.50" Gear	312 2815 000	Gear Set Only
1.75" Gear	312 2817 000	Gear Set Only
2.00" Gear	312 2820 000	Gear Set Only
Connecting Shaft	312 1133 001	

Item # 19 Port End Covers

<u>Description</u>	<u>Code</u>	<u>Part Number</u>
Blank	BE	308 3100 100
NPT		
3/4" BI Rotational	ME	308 3100 116
1" BI Rotational	QU	308 3100 127
1" X 3/4" CW	EI	308 3100 169
1" X 3/4" CCW	AI	308 3100 118
O-Ring		
3/4" BI Rotational	FE	308 3100 316
1" BI Rotational	JE	308 3100 327
1" X 3/4" CW	GE	308 3100 369
1" X 3/4" CCW	HE	308 3100 318

Item # 21 Fasteners Single Section Only

Cap Screws

<u>Gear Size</u>	<u>Part Number</u>
.50" Gear	391 1401 379
.75" Gear	391 1401 395
1.00" Gear	391 1401 385
1.25" Gear	391 1401 385
1.50" Gear	391 1401 381
1.75" Gear	391 1401 382
2.00" Gear	391 1401 382

Washers	391 3782 146
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Seal & Component Parts

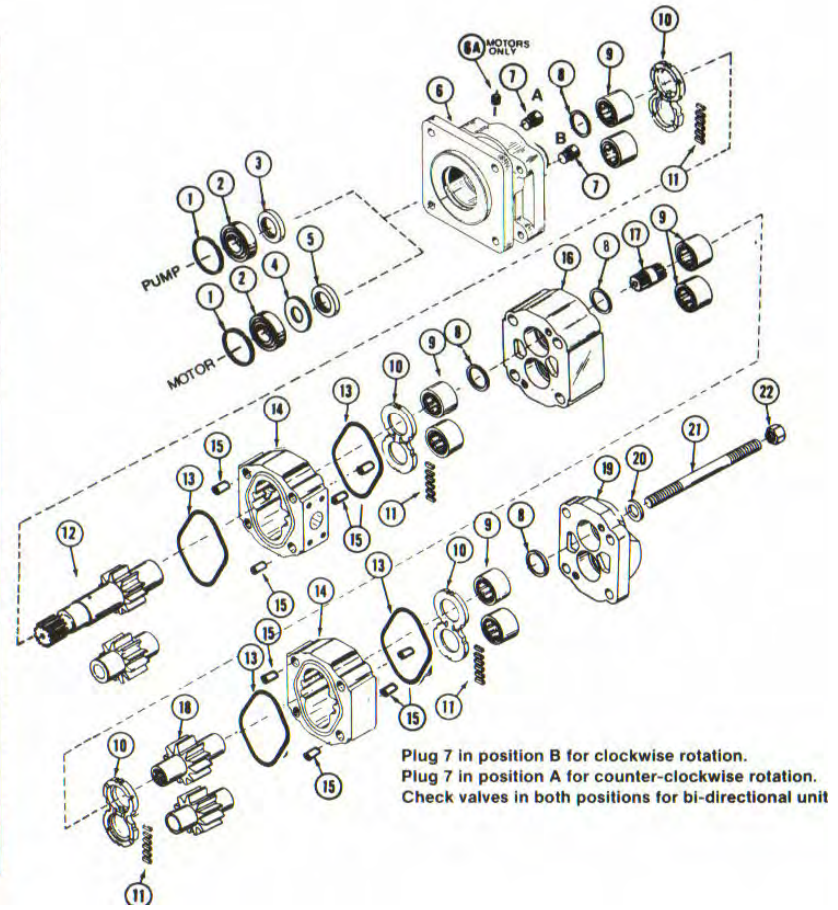
Item #	Description	Part Number	Pump	Tan	O/B	Motor
1	Snap Ring	391 2686 063	X	X	1	1
2	Outboard Bearing	391 0381 040	X	X	1	1
	Outboard Spacer	391 3383 069	X	X	1	1
3	Lip Seal	391 2883 058	1	1	1	X
4	Seal Retainer	391 3381 040	X	X	X	1
5	Lip Seal [High Press]	391 2883 119	X	X	X	1
7	Checks	391 3681 001	2	2	2	2
8	Ring Seals	391 2585 006	2	2	2	2
9	Roller Bearings	391 0381 906	4	8	4	4
10	Thrust Plates	391 2185 913	2	4	2	2
11	Pocket Seals	391 2882 051	1	2	1	1
13	Gasket Seals	391 2884 019	2	4	2	2



PGP/PGM050/051 Pumps and Motors

PGP/PGM050/051 Standard Parts List

Item No.	Description	Required	Ten Digit No. (TDN)
1	Snap Ring	1	391-2686-065
2	Outboard Bearing	1	391-0381-077
	Outboard Spacer	1	391-3383-087
3	Lip Seal (pump)	1	391-2883-103
4	Seal Retainer (motor)	1	391-3383-020
5	Lip Seal (motor)	1	391-2883-115
6	Shaft End Cover	1	313-50XX-XXX
6A	Drain Plug (motor)	1	391-2282-XXX
7	Check Assemblies for Motors & Bi-Rotational Pumps	2	391-3681-001
	Plugs (pumps only)	1	391-2286-004
8	Ring Seals (per gear section)	2	391-2585-009
9	Roller Bearings (per gear section)	4	391-0381-905
10	Thrust plates (motor) (per gear section)	2	391-2185-912
	Thrust plates (pump) (per gear section)	2	391-2185-929
11	Pocket Seals (per gear section)	1 strip	391-2882-022 (Viton) 391-2882-051 (Buna)
12	Drive Shaft Gear Set	1 Set	313-29XX-XXX
13	Gasket Seals (per gear section)	2	391-2884-021
14	Gear Housing	1	313-8XXX-XXX
15	Dowel Pins (series 51) (per gear section)	4	391-2082-032
16	Bearing Carrier	-	313-7XXX-XXX
17	Connecting Shaft	-	313-1133-001
18	Gear Set	set	313-28XX-XXX
19	Port End Cover	1	313-3XXX-XXX
20	Washers	4	391-3784-028
21	Cap Screws (single units)	4	391-1401-XXX
	Studs (multiple units)	4	391-1425-XXX
22	Nuts (multiple units)	4	391-1451-076



PGP/PGM 051 Series Parts

Item # 6 Shaft End Covers

Pump

Description	Code	Part Number
4 Bolt SAE B	42	313 5037 201
2/4 Bolt B Type II	46	313 5057 204
SAE C 4 Bolt	78	313 5037 202
2 Bolt SAE B	97	313 5027 201

Motor

4 Bolt B	42	313 5037 401
2/4 Bolt B	46	313 5057 204
SAE C 4 Bolt	78	313 5037 402
2 Bolt B	97	313 5027 401
Item # 6 A Drain Plug		391 2282 056



Item # 12 Drive Shaft Gear Sets

Description

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>	
1 1/4" Keyed Shaft			
1.00" Gear	11	313 2910 750	
1.25" Gear	11	313 2912 750	
1.50" Gear	11	313 2915 750	
1.75" Gear	11	313 2917 750	
2.00" Gear	11	313 2920 750	
2.25" Gear	11	313 2925 750	
2.50" Gear	11	313 2925 750	
Key		391 1781 045	
7/8" 13 Tooth Code 25			
Continental	25	313 1000 300	Shaft Only
1.00" Gear	25	313 2910 230	
1.25" Gear	25	313 2912 230	
1.50" Gear	25	313 2915 230	
1.75" Gear	25	313 2917 230	
2.00" Gear	25	313 2920 230	
2.25" Gear	25	313 2922 230	
2.50" Gear	25	313 2925 230	

Item # 12 Drive Shaft Gear Sets

1" Diameter Code 43

Continental	43	313 1500 400
1.00" Gear	43	313 2910 740
1.25" Gear	43	313 2912 740
1.50" Gear	43	313 2915 740
1.75" Gear	43	313 2917 740
2.00" Gear	43	313 2920 740
2.25" Gear	43	313 2922 740
2.50" Gear	43	313 2925 740
Key		391 1781 021

7/8" 13 Tooth Code 65 Short Shaft Type II

1.00" Gear	65	313 2910 430
1.25" Gear	65	313 2912 430
1.50" Gear	65	313 2915 430
1.75" Gear	65	313 2917 430
2.00" Gear	65	313 2920 430
2.25" Gear	65	313 2922 430
2.50" Gear	65	313 2925 430

1" Diameter Keyed Short Shaft Code 67 Type II

1.00" Gear	67	313 2910 940
1.25" Gear	67	313 2912 940
1.50" Gear	67	313 2915 940
1.75" Gear	67	313 2917 940
2.00" Gear	67	313 2920 940
2.25" Gear	67	313 2922 940
2.50" Gear	67	313 2925 940
Key		391 1781 021

Item # 12 Drive Shaft Gear Sets

1" 15 Tooth Code 98

Continental	98	313 1000 400	Shaft Only
1.00" Gear	98	313 2910 140	Not Available in Tandem
1.25" Gear	98	313 2912 140	Not Available in Tandem
1.50" Gear	98	313 2915 140	Not Available in Tandem
1.75" Gear	98	313 2917 140	
2.00" Gear	98	313 2920 140	
2.25" Gear	98	313 2922 140	
2.50" Gear	98	313 2922 140	

Continental Connecting Shaft 313 1133 001

Note:

Integral Gear Sets include the shaft , drive gear and idler gear as one unit.
Continental Gear Sets include the drive gear and idler gear and the shafts are carried separately. Special machining is manufacturer in the drive Continental Gear so multiple shafts can be installed.

Item # 14 Gear Housings

Blank

Code AB		Standard	Wide Port
<u>Gears Sizes</u>	<u>Code</u>	<u>Part Number</u>	<u>Part Number</u>
1.00" Gear	AB10	313 8210 100	N/A
1.25" Gear	AB12	313 8212 100	N/A
1.50" Gear	AB15	313 8215 100	315 8215 102
1.75" Gear	AB17	313 8217 100	315 8217 102
2.00" Gear	AB20	313 8220 100	315 8220 102
2.25" Gear	AB22	313 8222 100	315 8222 101
2.50" Gear	AB25	313 8225 100	315 8225 101

NPT

3/4" BI Rotational NPT

1.00" Gear	IR10	313 8210 116	
1.25" Gear	IR12	313 8212 116	

1" BI Rotational NPT

1.50" Gear	YF15	313 8215 127	
1.75" Gear	YF17	313 8217 127	
2.00" Gear	YF20	313 8220 127	
2.25" Gear	YF22	313 8222 127	
2.50" Gear	YF25	313 8225 127	

1 1/4" BI Rotational NPT

1.50" Gear	YL15	313 8215 132	315 8215 132
1.75" Gear	YL17	313 8217 132	315 8217 132
2.00" Gear	YL20	313 8220 132	315 8220 132
2.25" Gear	YL22	313 8222 132	N/A
2.50" Gear	YL25	313 8225 132	315 8225 132

1 1/2" BI Rotational NPT

2.00" Gear	YR20	313 8220 137	N/A
2.25" Gear	YR22	313 8222 137	315 8222 137
2.50" Gear	YR25	313 8225 137	315 8225 137

Item # 14 Gear Housings

NPT

1 1/4" X 1" CW NPT

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>
1.50" Gear	YJ15	313 8215 128
1.75" Gear	YJ17	313 8217 128
2.00" Gear	YJ20	313 8220 128
2.50" Gear	YJ25	313 8225 128

1 1/4" X 1" CCW NPT

1.50" Gear	YG15	313 8215 128
1.75" Gear	YG17	313 8217 128
2.00" Gear	YG20	313 8220 128
2.50" Gear	YG25	313 8225 128

1 1/2" X 1 1/4" CW NPT

2.50" Gear	YP25	313 8225 133
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1 1/2" -X 1 1/4" CCW NPT

2.50" Gear	YM25	313 8225 133
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O-Ring

3/4" X 3/4" BI Rotational ODT

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>
1.25" Gear	EF12	313 8212 316
1.50" Gear	EF15	313 8215 316
1.75" Gear	EF17	313 8217 316
2.00" Gear	EF20	313 8220 316
2.25" Gear	EF22	313 8222 316

1" X 1" BI Rotational ODT

1.50" Gear	AF15	313 8215 327
1.75" Gear	AF17	313 8217 327
2.00" Gear	AF20	313 8220 327
2.25" Gear	AF22	313 8222 327
2.50" Gear	AF25	313 3225 327

Item # 14 Gear Housings

O-Ring

1 1/4" X 1 1/4" Bi Rotational ODT

<u>Gear Size</u>	<u>Standard Code</u>	<u>Wide Port Part Number</u>	<u>Part Number</u>
1.50" Gear	AL15	N/A	315 8215 332
1.75" Gear	AL17	N/A	315 8217 332
2.00" Gear	AL20	313 8220 332	315 8220 332
2.25" Gear	AL22	313 8222 322	315 8222 332
2.50" Gear		313 8225 322	315 8225 332

1 1/2" X 1 1/2" BI Rotational ODT

2.25" Gear	AR22	313 8222 337
2.50" Gear	AR25	313 8225 337

1 1/4" X 1" CW ODT

1.50" Gear	AJ15	313 8215 328
1.75" Gear	AJ17	313 8217 328
2.00" Gear	AJ20	313 8220 328
2.25" Gear	AJ22	313 8222 328
2.50" Gear	AJ25	313 8225 328

1 1/4" X 1" CCW ODT

1.50" Gear	AG15	313 8215 328
1.75" Gear	AG17	313 8217 328
2.00" Gear	AG20	313 8220 328
2.25" Gear	AG22	313 8222 328
2.50" Gear	AG25	313 8225 328

1 1/2" X 1 1/4" CW ODT

2.00" Gear	AP20	313 8220 333
2.25" Gear	AP22	313 8222 333
2.50" Gear	AP25	313 8225 333

1 1/2" X 1 1/4" CCW ODT

2.00" Gear	AM20	313 8220 333
2.25" Gear	AM22	313 8222 333
2.50" Gear	AM25	313 8225 333

Item # 16 Bearing Carriers

<u>Description</u>	<u>Code</u>	<u>Part Number</u>
Bi-Rotational No Ports	B	313 7740 100
Clockwise No Ports	C	313 7723 100
Counter Clockwise	D	313 7723 100

Item # 18 Gear Sets

Continental or Downstream Gear Sets

<u>Gear Size</u>	<u>Part Number</u>	<u>Notes</u>
1.00" Gear	313 2810 000	Gear Set Only
1.25" Gear	313 2812 000	Gear Set Only
1.50" Gear	313 2815 000	Gear Set Only
1.75" Gear	313 2817 000	Gear Set Only
2.00" Gear	313 2820 000	Gear Set Only
2.25" Gear	313 2822 000	Gear Set Only
2.50" Gear	313 2825 000	Gear Set Only

Item # 19 Port End Covers

Description	Code	Ext. Studs	Standard Part Number	Wide Port Part Number
No Ports	BE	BY	313 3120 100	N/A
NPT				
3/4" BI Rotational	ME	MY	313 3120 116	N/A
1" BI Rotational	**	**	313 3120 127	N/A
1 1/4" BI Rotational	**	**	N/A	315 3220 132
1 1/2" BI Rotational	**	**	N/A	315 3220 137
O-Ring				
3/4" Bi Rotational	FE	FY	313 3120 316	N/A
1 1/4" Bi	**	**	N/A	315 3220 332

Item # 21 Fasteners

Description	Standard Part Number	Wide Port Part Number
Cap Screws		
<u>Gear Size</u>	<u>Part Number</u>	<u>Part Number</u>
1.00" Gear	391 1401 088	N/A
1.25" Gear	391 1401 069	N/A
1.50" Gear	391 1401 027	391 1401 076
1.75" Gear	391 1401 025	391 1401 090
2.00" Gear	391 1401 103	391 1401 090
2.25" Gear	391 1401 089	391 1401 105
2.50" Gear	391 1401 095	391 1401 111
Studs		
1.00" Gear	391 1425 107	N/A
1.25" Gear	391 1425 107	N/A
1.50" Gear	391 1425 111	391 1425 092
1.75" Gear	391 1425 111	391 1425 093
2.00" Gear	391 1425 110	391 1425 001
2.25" Gear	391 1425 110	391 1425 002
2.50" Gear	391 1425 092	391 1425 003
Washers	391 3784 028	
Nuts	391 1451 076	

Seal & Component Parts

item #	Description	Part Number	Pump	Tan	O/B	Motor
1	Snap Ring	391 2686 065	X	X	1	1
	Ring Retainer	391 2686 016	X	X	1	1
2	Outboard Bearing	391 0381 077	X	X	1	1
	Outboard Spacer	391 3383 087	X	X	X	1
3	Lip Seal	391 2881 103	1	1	1	X
4	Seal Retainer	391 3383 020	X	X	1	1
5	Lip Seal [High Press]	391 2883 115	X	X	X	1
7	Checks	391 3681 001	2	2	2	2
8	Ring Seals	391 2585 009	2	4	2	2
9	Roller Bearings	391 0381 905	4	8	4	4
10	Thrust Plates	391 2185 912	2	4	2	2
11	Pocket Seals	391 2882 051	1	2	1	1
13	Gasket Seals	391 2884 021	2	4	2	2
15	Dowel Pins	391 2082 032	4	8	4	4

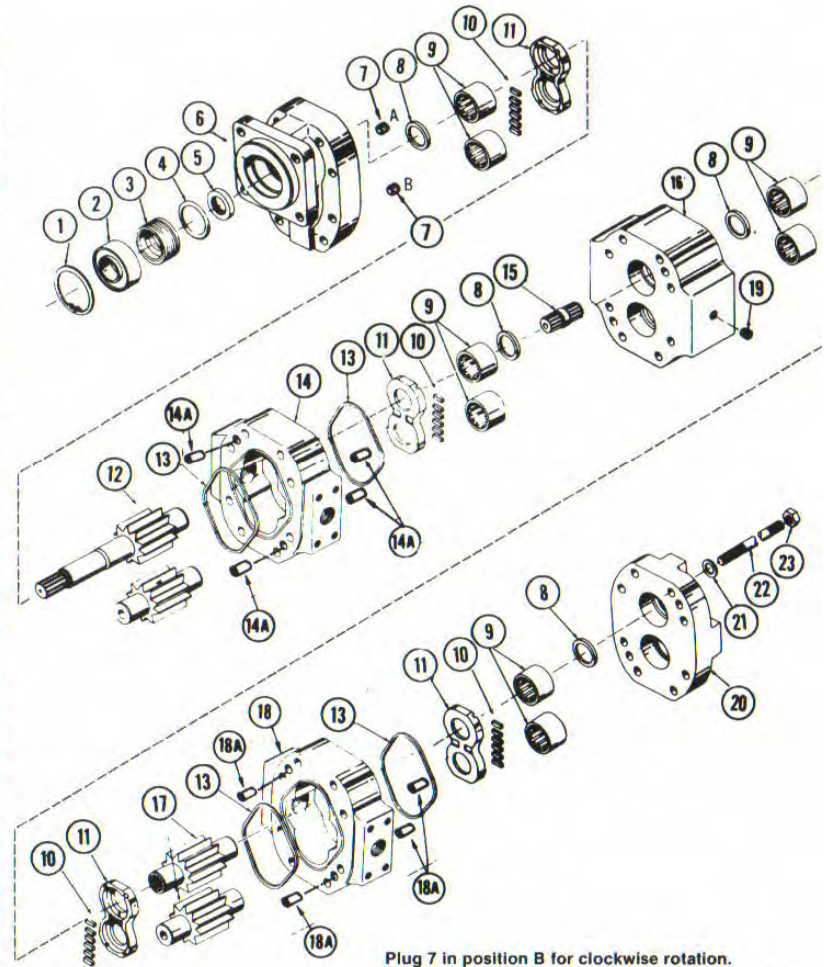
*** Note: When building a Wide Port pump or motor remove the Standard Gasket Seal for the kit and place on the shelf for future use.**



PGP/PGM075/076 Pumps and Motors

PGP/PGM075/076 Standard Parts List

Item No.	Description	Required	Ten Digit No. (TDN)
1	Snap Ring	1	391-2686-025
2	Outboard Bearing	1	391-0381-078
	Outboard Spacer	1	391-3383-018
3	Seal Retainer (pump)	1	391-2584-082
	Seal Retainer (motor)	1	391-2584-051
4	O-Ring	1	391-2881-457
5	Lip Seal (pump)	1	391-2883-052
	Lip Seal (motor)	1	391-2883-094
6	Shaft End Cover	1	316-50XX-XXX
7	Check Assemblies for Motors & Bi-Rotational Pumps	2	391-3681-001
	Plugs (pumps only)	1	391-2286-004
8	Ring Seals (per gear section)	2	391-2585-011
9	Roller Bearings (per gear section)	4	391-0381-904
10	Pocket Seals (per gear section)	1 strip	391-2882-084
11	Thrust plates (motor) (per gear section)	2	391-2185-920
	Thrust plates (pump) (per gear section)	2	391-2185-926
12	Drive Shaft Gear Set	1	316-29XX-XXX
13	Gasket Seals (per gear section)	2	391-2884-024
14	Gear Housing	1	316-8XXX-XXX
14A	Dowel Pins (76 only) (per gear section)	4	391-2082-033
15	Connecting Shaft	-	316-1133-001
16	Bearing Carrier	-	316-7XXX-XXX
17	Gear Set	set	316-28XX-XXX
18	Gear Housing	1	316-8XXX-XXX
18A	Dowel Pins (76 only) (per gear section)	4	391-2082-033
19	Plug	1	391-2281-010
20	Port End Cover	1	316-3XXX-XXX
21	Washers	8	391-3784-028
22	Cap Screws (single units)	8	391-1401-XXX
	Studs (multiple units)	8	391-1425-XXX
23	Nuts (multiple units)	8	391-1451-076



Plug 7 in position B for clockwise rotation.
 Plug 7 in position A for counter-clockwise rotation.
 Check valves in both positions for bi-directional units

P76 Series Parts

Item # 6 Shaft End Covers

Pump

Description
SAE C 4 Bolt

Code
78

Part Number
316 5037 202

Motor

SAE C 4 Bolt

78

316 5037 402



Item # 12 Drive Shaft Gear Sets

Description

SAE C 1 1/4" 14 Tooth

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>	<u>Notes</u>
Continental Shaft	7	316 1135 148	Shaft Only
1.00" Gear	7	316 2910 250	
1.25" Gear	7	316 2912 250	
1.50" Gear	7	316 2915 250	
1.75" Gear	7	316 2917 250	
2.00" Gear	7	316 2920 250	
2.25" Gear	7	316 2922 250	
2.50" Gear	7	316 2925 250	

SAE C 1 1/4" Round Keyed

Continental Shaft	11	316 1135 147	Shaft Only
1.25" Gear	11	316 2912 750	
1.50" Gear	11	316 2915 750	
1.75" Gear	11	316 2917 750	
2.00" Gear	11	316 2920 750	
2.25" Gear	11	316 2922 750	
2.50" Gear	11	316 2925 750	
Key		316 1781 045	

Connecting Shaft 316 1133 001

14 Gear Housings

Universal Code OM

1 1/2" X 1 1/4" CCW SF

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>
1.50" Gear	OM15	316 8215 233
1.75" Gear	OM17	316 8217 233

Standard & Universal CCW SF

2" X 1 1/4" SF

2.00" Gear	ON20	316 8220 234
2.25" Gear	ON22	316 8222 234
2.50" Gear	ON25	316 8225 234

Packer Code OM

1 1/2" X 1 1/4" SF

1.50" Gear	OM15	316 8215 918
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Packer Code ON

2" X 1 1/4" SF

1.75" Gear	ON17	316 8217 918
2.00" Gear	ON20	316 8220 920
2.20" Gear	ON22	316 8222 918
2.25" Gear	ON25	316 8225 920

16 Bearing Carriers

Description		Part Number
BI Rotational No Ports	B	316 7740 100
Clock wise No Ports	C	316 7723 100
CCW No Ports	D	316 7723 100

Item # 18 Gear Sets

Continental or Downstream Gear Sets

<u>Gear Size</u>	<u>Part Number</u>	<u>Note</u>
1.00" Gear	316 2810 000	Gear Set Only
1.25" Gear	316 2812 000	Gear Set Only
1.50" Gear	316 2815 000	Gear Set Only
1.75" Gear	316 2817 000	Gear Set Only
2.00" Gear	316 2820 000	Gear Set Only
2.25" Gear	316 2822 000	Gear Set Only
2.50" Gear	316 2825 000	Gear Set Only

Item # 19 Port End Covers

<u>Description</u>	<u>Code</u>	<u>Ext. Studs</u>	<u>No Ext Studs</u>	<u>Part Number</u>
No Ports Standard	BE	BY	BI	316 3120 100
1" ODT BI	JE	JY	JI	316 3120 327
Universal	**			316 3120 914
Packer	**			316 3000 097

Item # 21 Fasteners

Cap Screws

<u>Gear Size</u>	<u>Part Number</u>
1.00" Gear	391 1401 027
1.25" Gear	391 1401 025
1.50" Gear	391 1401 103
1.75" Gear	391 1401 089
2.00" Gear	391 1401 095
2.25" Gear	391 1401 076
2.50" Gear	391 1401 090

Washers 391 3784 028

Nuts 391 1451 076

Seal & Component Parts

Item #	Description	Part Number	Pump	Tan	Motor
1	Snap Ring	391 2686 025	1	1	1
2	Outboard Bearing	391 0381 078	1	1	1
	Outboard Spacer	391 3383 018	1	1	1
3	Seal Retainer Pump	391 2584 082	1	1	X
	Seal Retainer Motor	391 2584 051	X	X	1
4	O-Ring	391 2881 457	1	1	1
5	Lip Seal Pump	391 2883 052	1	1	X
	Lip Seal Motor	391 2883 094	X	X	1
7	Check Motors	391 3681 001	X	X	2
	Check Pumps	391 2286 004	1	1	X
8	Ring Seals	391 2585 011	2	4	2
9	Roller Bearings	391 0381 904	4	8	4
10	Pocket Seals	391 2882 084	1	2	1
11	Thrust Plates Motor	391 2185 920	X	X	2
	Thrust Plates Pump	391 2185 926	2	4	X
13	Gasket Seals	391 2884 024	2	4	2
14A	Dowel Pins	391 2082 033	4	8	4
19	Plug	391 2281 010	X	1	X

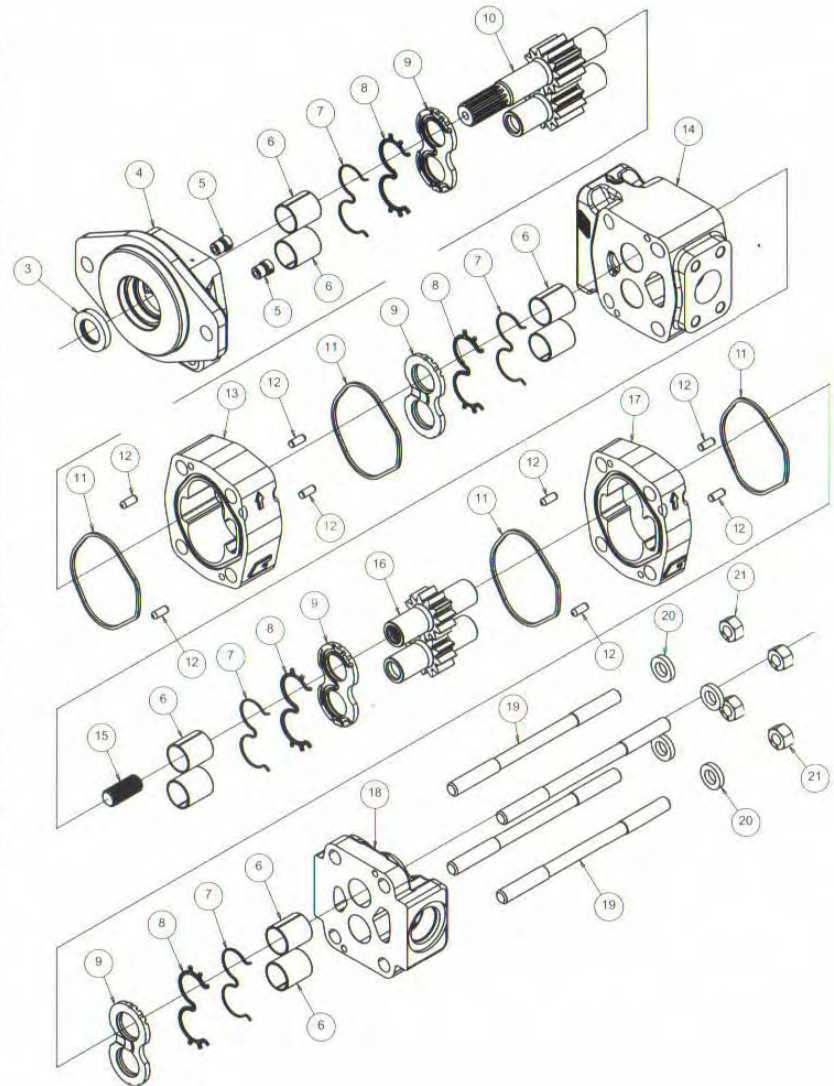
Note: The Packer pump has several different components. Please refer to the individual prints for a complete listing for each component.

PGP/PGM 315 Pumps and Motors

PGP/PGM 315 Standard Parts List

Item No.	Description	Required	Ten Digit No. (TDN)
1	Snap Ring	N/A	
2	Outboard Bearing	N/A	
3	Seal — pump	1	391-2883-151
	Seal — motor	1	391-2883-156
4	Shaft End Cover	1	326-50XX-XXX*
5	Checks — motor	2	391-3681-001
6	Bushings	4	391-0482-195
7	Seals — pump-per section	2	391-2883-169 (back-up seal)
8		2	391-2883-168 (channel seal)
7	Seals — motor-per section	2	391-2881-995 (back-up seal)
8		4	391-2881-996 (end channel seal)
		4	391-2881-997 (side channel seal)
9	Thrust Plates — pump	2	391-2185-963
	Thrust Plates — motor	2	391-2185-970
10	Gear Set	1	326-29XX-XXX*
11	Gasket Seal — pump	2	391-2881-968
	Gasket Seal — motor	2	391-2881-429
12	Dowel Pins	4	391-2082-071
13	Gear Housing — pump	1	326-81XX-100*
	Gear Housing — motor	1	326-82XX-100*
14	Bearing Carrier	1	326-7XXX-XXX*
15	Connecting Shaft	1	326-1133-001
16	Gear Set	1	326-28XX-XXX*
17	Gear Housing — pump	1	326-81XX-100*
	Gear Housing — motor	1	326-82XX-100*
18	Port End Cover	1	326-30XX-XXX*
19	Studs or Cap Screws		
	Studs	4	391-1426-XXX*
	Cap Screws	4	391-1401-XXX*
20	Washers	4	391-3782-132
21	Nuts	4	391-1451-051

* = Varies depending upon gear width and/or configuration



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 Gear Pump Division
 1775 Logan Avenue, Youngstown, OH 44501 USA
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<http://www.parker.com/gearpump>

Item # 4 Shaft End Covers

Pump or Motor Bi Rotational

<u>Description</u>	<u>Code</u>	<u>Part Number</u>
SAE 2 Bolt A	93	326 5127 404
SAE 2 Bolt B	96	326 5129 403

Item # 10 Gear Sets

SAE B 7/8" 13 Tooth Spline

<u>Description</u>	<u>Code</u>	<u>Part Number</u>
.75" Gear Set	65	326 2907 330
1.00" Gear Set	65	326 2010 330
1.25" Gear Set	65	326 2012 330
1.50" Gear Set	65	326 2015 330
1.75" Gear Set	65	326 2017 330
2.00" Gear Set	65	326 2020 330

SAE A 5/8" 9 Tooth

.75" Gear Set	96	326 2907 320
1.00" Gear Set	96	326 2910 320
1.25" Gear Set	96	326 2912 320
1.50" Gear Set	96	326 2915 320
1.75" Gear Set	96	326 2917 320
2.00" Gear Set	96	326 2920 320

Item # 13 Gear Housings

Non-Ported

<u>Gear Size</u>	<u>Code</u>	<u>Part Number</u>
.75" Gear Set	EB07	326 8207 100
1.00" Gear Set	EB10	326 8210 100
1.25" Gear Set	EB12	326 8212 100
1.50" Gear Set	EB15	326 8215 100
1.75" Gear Set	EB17	326 8217 100
2.00" Gear Set	EB20	326 8220 100

Item # 18 Port End Cover

Description

<u>Bi Rotational Rear ODT</u>	<u>Code</u>	<u>Part Number</u>
3/4" X 3/4"	RQ	326 3121 316
1" X 1"	RN	326 3121 327
Bi Rotational Side ODT		
3/4" X 3/4"	VR	326 3122 316
1" X 1"	VN	326 3122 327

Item # 19 Cap Screws

<u>Gear Size</u>	<u>Part Number</u>
.75" Gear Set	391 1401 342
1.00" Gear Set	391 1401 154
1.25" Gear Set	391 1401 348
1.50" Gear Set	391 1401 347
1.75" Gear Set	391 1401 003
2.00" Gear Set	391 1401 004
Washers	391 3782 132

Seal and Component Parts

Pump Motor

<u>Item #</u>	<u>Description</u>	<u>Part Number</u>	<u>Pump/Motor</u>
3	Lip Seal	391 2883 151	1
5	Checks	391 3681 001	2
6	Bushings	391 0482 195	4
7	Seals Back Up	391 2881 995	2
8	Seals End Channel	391 2881 996	4
	Seals Side Channel	391 2881 997	4
9	Thrust Plates	391 2185 970	2
11	Gaskets Seal	391 2881 429	2
12	Dowel Pins	391 2082 071	4



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