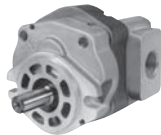


Parker / Gresen Pump Repair Kits

Contents	Page
Gear Pump Parts	
• P16, TP16 - 2 Place, TP16 - 3 Place	1002
• PVP16, CP16, 20	1003
• R20, TP20 - 2 Place, TP20 - 3 Place	1004
• M20 Motor	1005
Assembly Torque Values	1006
Overhung Load Data	1006

P16 PUMP PARTS



Part #	Description	Pump Model	Price
TY-17098	Dowel pins	All	\$ 1.71
TY-15419	Service kit	All	30.11
TY-27163	Pressure plate	All	24.06
TY-14881	Shaft Seal	All	5.25

TP16 PUMP PARTS 2 PLACE



Part #	Description	Pump Model	Price
TY-17098	Dowel pins	All	\$ 1.71
TY-15623	Service kit	All	27.02
TY-27163	Pressure plate	All	24.06
TY-14881	Shaft Seal	All	5.25

TP16 PUMP PARTS 3 PLACE



Part #	Description	Pump Model	Price
TY-17098	Dowel pins	All	\$ 1.71
TY-15609	Service kit	All	44.25
TY-27163	Pressure plate	All	24.06
TY-14881	Shaft Seal	All	5.25

PVP16 PUMP PARTS



Part #	Description	Pump Model	Price
TY-17098	Dowel pins	All	\$ 1.71
TY-15419	Service kit	All	30.11
TY-27163	Pressure plate	All	24.06
TY-14881	Shaft Seal	All	5.25

CP16 PUMP PARTS



Part #	Description	Pump Model	Price
TY-17098	Dowel pins	All	\$ 1.71
TY-15419	Service kit	All	30.11
TY-27163	Pressure plate	All	24.06
TY-14881	Shaft Seal	All	5.25

SERIES 20 PUMP PARTS



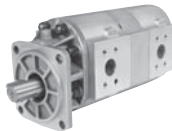
Part #	Description	Pump Model	Price
TY-15629	Soft goods service kit - Shaft #4	All	\$ 24.30
TY-15630	Soft goods service kit - Shaft #1,2,3,5,6,7	All	29.07
TY-14145	Shaft seal - Shaft #1,2,3,5	All	13.70
TY-14416	Shaft seal - Shaft #4	All	15.12

R20 PUMP PARTS



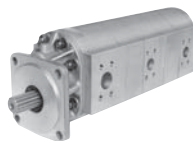
Part #	Description	Pump Model	Price
TY-14662	Soft goods service kit - Shaft #1,2,3,5,6	All	\$ 62.05
TY-14305	Soft goods service kit - Shaft #4	All	34.44
TY-22792	Pressure Plate	All	62.29
TY-14145	Shaft seal - Shaft #1,2,3,5	All	13.70
TY-14416	Shaft seal - Shaft #4	All	15.12

TP20 PUMP PARTS 2 PLACE



Part #	Description	Pump Model	Price
TY-15672	Seal kit	All	\$ 37.49
TY-23403	Pressure plate	20080—20150	65.77
TY-22195	Pressure plate	20200—20450	68.05
TY-14145	Shaft Seal	All	13.70

TP20 PUMP PARTS 3 PLACE



Part #	Description	Pump Model	Price
TY-15672	Seal kit	All	\$ 37.49
TY-23403	Pressure plate	20080—20150	65.77
TY-22195	Pressure plate	20200—20450	68.05
TY-14145	Shaft Seal	All	13.70

M20 MOTOR PARTS



Part #	Description	Pump Model	Price
TY-14306	Soft goods service kit - Shaft #1,2,3,5,6	All	\$ 40.75
TY-15382	Soft goods service kit - Shaft #4	All	38.00
TY-15483	Shaft seal - Shaft #1,2,3,5	All	29.29

ASSEMBLY TORQUE VALUES



Assembly Torque Values

NOTES:

All torque values are based on a lubricated condition. If capscrews and/or nuts are dirty, they must be washed, blown dry, and re-oiled prior to installation. All studs must be washed and blown dry—DO NOT re-oil.

The following torque values are to be used in the assembly of pumps and motors:

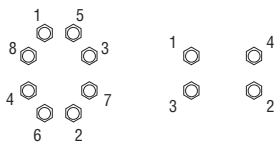
Series	Size	Torque (Ft.-Lbs)
P1	5/16 "	20-25
P12	M10	20-25
P14, FP14, TFP14, TP16	3/8 "	30-35
SSFP14	1/2 "	80-90
P2	3/8 "	30-35
P16, HP16, TP16	1/2 "	70-75
FPR16	1/2 "	80-90
FP16	5/8 "	160-175
TFP16	5/8 "	160-175
SSFP16	5/8 "	160-175
DP16	1/2 "	70-75
DP16 (valve)	3/8 "	30-35
FP17	5/16 "	18-20
20, M20, FP20	1/2 "	80-90
P6, FM6, TM6	1/2 "	80-90
25, M25, FP25	5/8 "	160-175
FP257, FPW257	5/8 "	160-175
HP7, HM7, FP7	3/4 "	240-250
SL7	5/8 "	160-175
HP8, HM8, FP8, SL8	3/4 "	240-250
PM23	5/8 "	180-190
DPH	5/8 "	180-190
HILLSDALE	3/8 "	40-45
HILLSDALE	7/16 "	50-55
T101/102	5/8 "	195-200
MGG/PGG (body)	5/16 "	21-24
MGG/PGG (flange)	#10	46-54 (in.-lb.)

NOTES:

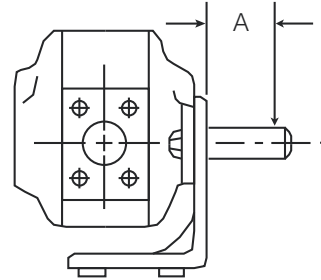
For "Mixed" Series, ie: TP25450-20200-P14-45A, use torque values corresponding to each section: 25 Series for the 25450 (160-175), 20 Series for the 20200 (80-90), and P14 Series for the P14-45 (30-35). Verify stud/capscrew sizes.

Torque value should be divided into two or three equal values, and applied in stages. e.g. P16 should be first torqued to 35 ft. lbs. then torqued to the final value of 70-75 ft. lbs.

While torquing the pump please follow pattern as shown below:



Overhung Load Data



PUMP SIZE	Dim. "A"	Allowable Load "L"	Allowable Operating Pressure
P12-17	1.00 "	100 Lbs..	2000 PSI
-22	"	"	"
-28	"	"	"
-34	"	"	"
-40	"	"	"
-45	"	"	"
P14-42	1.00 "	200 Lbs..	2000 PSI
-59	"	"	"
-74	"	"	"
-91	"	"	"
-108	"	"	"
P16-45	1.00 "	390 Lbs..	2200 PSI
-65	"	"	2200 PSI
-85	"	"	2100 PSI
-100	"	"	2100 PSI
-115	"	"	2000 PSI
-150	"	"	1800 PSI
-180	"	"	1700 PSI
-200	"	"	1600 PSI
20150	1.50 "	1050 Lbs..	2000 PSI
20200	"	"	"
20250	"	"	"
20300	"	"	"
20350	"	"	"
20400	"	"	"
20450	"	"	"
25500	1.50 "	1050 Lbs..	1800 PSI
25550	"	"	1600 PSI
25600	"	"	1350 PSI
25770	"	"	1150 PSI
25950	"	"	900 PSI
HP7	1.50 "	1300 Lbs..	3000 PSI
HP8	1.50 "	1300 Lbs..	2800 PSI

Allowable Load "L" must not be exceeded.

When Belt Drive is used, "L" must include both belt pre-tension and torque load.