

* * 124 SERIES * *

* * ENGINEERING CODEBOOK * *

THROUGH THE USE OF THIS CATALOG ALL THE COMPONENT PARTS OF ANY PERMCO PUMP OR MOTOR CAN BE DETERMINED EXCLUDING FASTENERS.

THIS CODE BOOK IS FOR THE 124 SERIES PUMPS AND MOTORS.

EACH MODEL SERIES IS DIVIDED IN THE FOLLOWING MANNER:

- I. SHAFT END COVERS FOLLOWED BY SHAFT END COVER SMALL PARTS.
- II. PORT END COVERS FOLLOWED BY PORT END COVER SMALL PARTS.
- III. GEAR HOUSINGS FOLLOWED BY:
 - A. GEAR HOUSING SMALL PARTS.
 - B. GEARS.
- IV. DRIVE SHAFTS OR GEAR/SHAFTS FOLLOWED BY DRIVE SHAFT SMALL PARTS.
- V. BEARING CARRIERS FOLLOWED BY BEARING CARRIER SMALL PARTS.
- VI. CONNECTING SHAFTS.

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BELOW IS AN EXAMPLE OF HOW TO USE THIS CATALOG:

SINGLE ASSEMBLY CODE: P124A082AEZA20-54

TANDEM ASSEMBLY CODE: P124B082AHZA20-54ZFZA12-1

P	DENOTES PUMP	(M DENOTES MOTOR)
124	SERIES	
A B OR L	MODEL TYPE	(A-SINGLE B-TANDEM AND L-EXTENDED STUDS)
082	SHAFT END COVER	
AE	PORT END COVER	(SINGLE)
AH	PORT END COVER	(MULTIPLE)
ZA20	GEAR HOUSING	(FIRST)
54	DRIVE SHAFT	
<hr/>		
IF	BEARING CARRIER	
ZA12	GEAR HOUSING	(SECOND)
1	CONNECTING SHAFT	

THE ROTATION OF ANY UNIT IS IDENTIFIED BY THE FIRST DIGIT OF THE SHAFT END COVER CODE (SEE INDIVIDUAL SERIES COVER PAGES). THE GEAR SIZE IS DENOTED BY THE TWO (2) DIGITS IN THE GEAR HOUSING CODE.

CODE. :	05	07	10	12	15	17	20
SIZE IN INCHES:	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2

ROTATION IS VIEWED LOOKING AT SHAFT END (SHAFT ON TOP.)
AN ASTERISK (*) DENOTES EITHER OBSOLETE OR SPECIAL. PLEASE CONSULT FACTORY AS THEY
MAY BE REPLACED BY OTHER STANDARD ITEMS.

* * ABBREVIATIONS USED IN PART DESCRIPTIONS * *

SHAFT END COVER DESCRIPTIONS

PD PILOT DIAMETER

PX PILOT EXTENSION

PORT END COVER DESCRIPTIONS

OS PORTS ARE OUT THE SIDE

XSD EXTENDED STUDS

SHAFT DESCRIPTIONS

T TOOTH

W/THD END WITH THREADED END

PORTING DESCRIPTIONS

NPT NATIONAL PIPE THREAD.

ODT STRAIGHT THREAD. PORT SIZE REFERS TO O.D.TUBE.

SF SPLIT FLANGE PORTS. PORT SIZE REFERS TO FLANGE HOLE DIAMETER.

T INTERNAL CONNECTIONS TO FRONT & BACK SECTION.

B CONNECTION TO BACK SECTION.

F CONNECTION TO FRONT SECTION.

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 * 124 SERIES *
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SERIES IDENTIFICATION

STUD HOLES - 4 AT 9/16 DIAMETER
 STUD DIA. - 1/2 IN.
 ONE-PIECE DRIVE SHAFT AND GEAR (INTEGRAL)
 HOUSING HEIGHT - 4 INCHES
 HOUSING WIDTH - GEAR SIZE + .400 INCH
 DOWELLED
BOLT TORQUE (SINGLE UNITS) 120 FT-LBS
STUD TORQUE (MUTIPLE UNITS) 115-120 FT-LBS

GEAR WIDTHS AVAILABLE

CODE. :	05	07	10	12	15	17	20
SIZE IN INCHES:	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2

SHAFT END COVERS

THE TYPE OF SHAFT END COVER IS DETERMINED BY THE ENTIRE 3 DIGIT DESIGNATION.

TYPE II - WITHOUT OUTBOARD BEARING.

THE FIRST DIGIT OF THE SHAFT END COVER CODE DESIGNATES PUMP/MOTOR ROTATION.

		<u>CW</u>	<u>CCW</u>	<u>DBL</u>	<u>PUMP</u>	<u>MOTOR</u>	<u>TYPE</u>
ALL CODES BEGINNING WITH	0	XX			XX		II
	1		XX		XX		II
	8			XX		XX	II

THE SHAFT END COVER TYPE AND DRIVE SHAFT TYPE MUST HAVE THE SAME NUMBER DESIGNATION.

PERMCO MODEL: 124

Shaft End Covers

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
022	1	574-01275	EURO SEC RECT.MT. 36.5MM PILOT
078	^ 1	574-01218	124 2 BLT 'A'TYP II FOR CLUTCH
082	1	574-01218	124 'A' SEC 2 BLT TYP II CW
084	1	574-01288	124 SEC PAD MT. CLUTCH PUMP CW
085	1	574-01118	124 'B' SEC 2 BLT TYP II CW
122	1	574-01275	EURO SEC RECT.MT. 36.5MM PILOT
178	^ 1	574-01218	124 2 BLT 'A'TYP II FOR CLUTCH
182	1	574-01218	124 'A' SEC 2 BLT TYP II CCW
184	1	574-01288	124 SEC PAD MT. CLUTCH PUMP CCW
185	1	574-01118	124 'B' SEC 2 BLT TYP II CCW
882	1	574-01235	124 'A' SEC 2 BLT TYP II MOTOR
885	1	574-01191	124 'B' SEC 2 BLT TYP II MOTOR

^ THE CODES "078" AND "178" ARE FOR PUMPS USING CLUTCH ASSEMBLIES ONLY.
THE "45 OR 99" SHAFT CODE IS TO BE USED FOR CLUTCH PUMPS.

PERMCO MODEL: 124

SHAFT END COVER SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
022	2	921-01108	124 HI PRESS BUSH	882	2	921-01108	124 HI PRESS BUSH
022	1	226-01121	124 PUMP SEAL	882	1	249-01555	124 MOTOR SEAL
022	1	408-01277	124 SEC.PILOT SLEEVE 36.5MM DIA.	882	1	961-01193	124 SEAL RETAINER
078	2	921-01108	124 HI PRESS BUSH	882	1	565-01194	1/4" JIC PLUG
078	1	226-01121	124 PUMP SEAL	882	1	565-00407-ISR	124 SNAP RING
078	1	961-01193	124 SHAFT SEAL RETAINER	882	2	L-0280-K	CHECK VALVES
078	1	565-00407-ISR	124 SNAP RING	885	2	921-01108	124 HI PRESS BUSH
082	2	921-01108	124 HI PRESS BUSH	885	1	249-01555	124 MOTOR SEAL
082	1	226-01121	124 PUMP SEAL	885	1	961-01193	124 SEAL RETAINER
084	2	921-01108	124 HI PRESS BUSH	885	1	565-01194	1/4" JIC PLUG
084	1	226-01121	124 PUMP SEAL	885	1	565-00407-ISR	124 SNAP RING
084	1	565-01289	124 SNAP RING, PAD MT. CLUTCH	885	2	L-0280-K	CHECK VALVES
085	2	921-01108	124 HI PRESS BUSH				
085	1	226-01121	124 PUMP SEAL				
122	2	921-01108	124 HI PRESS BUSH				
122	1	226-01121	124 PUMP SEAL				
122	1	408-01277	124 SEC.PILOT SLEEVE 36.5MM DIA.				
178	2	921-01108	124 HI PRESS BUSH				
178	1	226-01121	124 PUMP SEAL				
178	1	961-01193	124 SHAFT SEAL RETAINER				
178	1	565-00407-ISR	124 SNAP RING				
182	2	921-01108	124 HI PRESS BUSH				
182	1	226-01121	124 PUMP SEAL				
184	2	921-01108	124 HI PRESS BUSH				
184	1	226-01121	124 PUMP SEAL				
184	1	565-01289	124 SNAP RING, PAD MT. CLUTCH				
185	2	921-01108	124 HI PRESS BUSH				
185	1	226-01121	124 PUMP SEAL				

PERMCO MODEL: 124

Port End Covers (PUMP ONLY)

CODE	QTY	PART NUMBER	DESCRIPTION	CODE	QTY	PART NUMBER	DESCRIPTION
AB	1	592-01122-2365	7/8" X 5/8" SIDE (ODT) CW	IE	1	592-01122-2349	5/8" X 1-1/4" SIDE (ODT) CCW
AE	1	592-01122-2377	1" X 1-1/4" SIDE (ODT) CCW	IG	1	592-01122-1367	BLANK X 3/4" REAR-OUT(ODT) CW
AF	1	592-01122-2360	7/8" X 1/2" SIDE (ODT) CW	IN	1	592-01122-2267	3/4"SF-SIDE-OUT X BLANK CCW
AH	1	592-01134	BLANK MULTIPLE	IZ	1	592-01122-2177	1" X 1-1/4 SIDE (NPT) CCW
AI	1	592-01122-2316	3/4" X 3/4" SIDE (ODT) CW	JD	1	592-01122-2261	1/2" X 1" SIDE (SF) CCW
AK	1	592-01122-2364	3/4" X 5/8" SIDE (ODT) CW	JZ	1	592-01122-2170	3/4" X 1-1/4" SIDE (NPT) CCW
AM	1	592-01122-2359	3/4" X 1/2" SIDE (ODT) CW	KA	1	592-01122-2364	5/8" X 3/4" SIDE (ODT) CCW
AU	1	592-01122-2331	1-1/4"ODT-SIDE-IN X BLANK CW	KD	1	592-01122-2216	3/4" X 3/4" SIDE (SF) CCW
AV	1	592-01122-2326	1"ODT-SIDE-IN X BLANK CW	KE	1	592-01122-2327	1" X 1" SIDE (ODT) CCW
AW	1	592-01122-2321	7/8"ODT-SIDE-IN X BLANK CW	KM	1	592-01122-1322	7/8" X 7/8" REAR (ODT) CW
AX	1	592-01122-2315	3/4"ODT-SIDE-IN X BLANK CW	KN	1	592-01122-2257	1/2"SF-SIDE-OUT X BLANK CCW
AY	1	592-01122-2376	BLANK X 1"ODT-SIDE-OUT CW	KO	1	592-01122-1368	7/8" X 3/4" REAR (ODT) CW
BA	1	592-01122-2365	5/8" X 7/8" SIDE (ODT) CCW	KP	1	592-01122-1365	7/8" X 5/8" REAR (ODT) CW
BE	1	592-01122-2374	7/8" X 1-1/4" SIDE (ODT) CCW	KQ	1	592-01122-1316	3/4" X 3/4" REAR (ODT) CW
BT	1	592-01122-1377	1" X 1-1/4" REAR (ODT) CCW	KR	1	592-01122-1364	3/4" X 5/8" REAR (ODT) CW
CO	1	592-01122-2372	7/8"ODT-SIDE-OUT X BLANK CCW	KS	1	592-01122-1359	3/4" X 1/2" REAR (ODT) CW
CT	1	592-01122-1327	1" X 1" REAR (ODT) CCW	KZ	1	592-01122-2127	1" X 1" SIDE (NPT) CCW
DI	1	592-01122-2269	1" X 3/4" SIDE (SF) CW	LD	1	592-01122-2259	1/2" X 3/4" SIDE (SF) CCW
DJ	1	592-01122-2261	1" X 1/2" SIDE (SF) CW	LO	1	592-01122-2363	5/8"ODT-SIDE-OUT X BLANK CCW
DK	1	592-01122-2216	3/4" X 3/4" SIDE (SF) CW	LZ	1	592-01122-2169	3/4" X 1" SIDE (NPT) CCW
DL	1	592-01122-2259	3/4" X 1/2" SIDE (SF) CW	MA	1	592-01122-2359	1/2" X 3/4" SIDE (ODT) CCW
DN	1	592-01122-2226	BLANK X 1"SF-SIDE-IN CCW	MK	1	592-01122-1322	7/8" X 7/8" REAR (ODT) CCW
DO	1	592-01122-2367	3/4"ODT-SIDE-OUT X BLANK CCW	MO	1	592-01122-2357	1/2"ODT-SIDE-OUT X BLANK CCW
EA	1	592-01122-2377	1-1/4" X 1" SIDE (ODT) CW	MT	1	592-01122-1370	3/4" X 1-1/4" REAR (ODT) CCW
EB	1	592-01122-2374	1-1/4" X 7/8" SIDE (ODT) CW	ND	1	592-01122-2226	1"SF-SIDE-IN X BLANK
EF	1	592-01122-2370	1-1/4" X 3/4" SIDE (ODT) CW	NE	1	592-01122-2215	3/4"SF-SIDE-IN X BLANK CW
EI	1	592-01122-2349	1-1/4" X 5/8" SIDE (ODT) CW	NI	1	592-01122-2267	BLANK X 3/4"SF-SIDE-OUT CW
EK	1	592-01122-2327	1" X 1" SIDE (ODT) CW	NK	1	592-01122-2257	BLANK X 1/2"SF-SIDE-OUT CW
EN	1	592-01122-2215	BLANK X 3/4"SF-SIDE-IN CCW	OC	1	592-01122-2372	BLANK X 7/8"ODT-SIDE-OUT CW
ET	1	592-01122-1374	7/8" X 1-1/4" REAR (ODT) CCW	OD	1	592-01122-2367	BLANK X 3/4"ODT-SIDE-OUT CW
EU	1	592-01122-2373	1" X 7/8" SIDE (ODT) CW	OK	1	592-01122-1368	3/4" X 7/8" REAR (ODT) CCW
EV	1	592-01122-2369	1" X 3/4" SIDE (ODT) CW	OL	1	592-01122-2363	BLANK X 5/8"ODT-SIDE-OUT CW
EW	1	592-01122-2366	1" X 5/8" SIDE (ODT) CW	OM	1	592-01122-2357	BLANK X 1/2"ODT-SIDE-OUT CW
EX	1	592-01122-2322	7/8" X 7/8" SIDE (ODT) CW	OT	1	592-01122-1373	7/8" X 1"REAR (ODT) CCW
EY	1	592-01122-2368	7/8" X 3/4" SIDE (ODT) CW	PK	1	592-01122-1365	5/8" X 7/8" REAR (ODT) CCW
FA	1	592-01122-2360	1/2" X 7/8" SIDE (ODT) CCW	PL	1	592-01291-3903	3/4" X 1-1/4" (NPT) S&R CCW
FE	1	592-01122-2370	3/4" X 1-1/4" SIDE (ODT) CCW	PR	1	592-01291-3903	1-1/4" X 3/4" (NPT) S&R CW
GI	1	592-01122-1367	3/4" REAR-OUT X BLANK (ODT)CCW	PT	1	592-01122-1369	3/4" X 1" REAR (ODT) CCW
IA	1	592-01122-2316	3/4" X 3/4" SIDE (ODT) CCW	PV	1	592-01122-1177	1" X 1-1/4" REAR (NPT) CCW
ID	1	592-01122-2269	3/4" X 1" SIDE (SF) CCW	PZ	1	592-01122-1169	3/4" X 1" REAR (NPT) CCW

PERMCO MODEL: 124

Port End Covers (PUMP ONLY)

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
QK	1	592-01122-1316	3/4" X 3/4" REAR (ODT) CCW
QT	1	592-01122-1366	5/8" X 1" REAR (ODT) CCW
QZ	1	592-01122-2116	3/4" X 3/4" SIDE (NPT) CCW
RK	1	592-01122-1364	5/8" X 3/4" REAR (ODT) CCW
RZ	1	592-01122-1159	1/2" X 3/4" REAR (NPT) CCW
SK	1	592-01122-1359	1/2" X 3/4" REAR (ODT) CCW
SL	1	592-01291-3370	3/4" X 1-1/4" (ODT) S&R CCW
SR	1	592-01291-3370	1-1/4" X 3/4" (ODT) S&R CW
TB	1	592-01122-1377	1-1/4" X 1" REAR (ODT) CW
TC	1	592-01122-1327	1" X 1" REAR (ODT) CW
TE	1	592-01122-1374	1-1/4" X 7/8" REAR (ODT) CW
TM	1	592-01122-1370	1-1/4" X 3/4" REAR (ODT) CW
TO	1	592-01122-1373	1" X 7/8" REAR (ODT) CW
TP	1	592-01122-1369	1" X 3/4" REAR (ODT) CW
TQ	1	592-01122-1366	1" X 5/8" REAR (ODT) CW
UA	1	592-01122-2331	BLANK X 1-1/4"ODT-SIDE-IN CCW
UE	1	592-01122-2373	7/8" X 1" SIDE (ODT) CCW
VA	1	592-01122-2326	BLANK X 1"ODT-SIDE-IN CCW
VE	1	592-01122-2369	3/4" X 1" SIDE (ODT) CCW
VP	1	592-01122-1177	1-1/4" X 1" REAR (NPT) CW
WA	1	592-01122-2321	BLANK X 7/8"ODT-SIDE-IN CCW
WE	1	592-01122-2366	5/8" X 1" SIDE (ODT) CCW
XA	1	592-01122-2315	BLANK X 3/4"ODT-SIDE-IN CCW
XE	1	592-01122-2322	7/8" X 7/8" SIDE (ODT) CCW
YA	1	592-01122-2376	1"ODT-SIDE-OUT X BLANK CCW
YE	1	592-01122-2368	3/4" X 7/8" SIDE (ODT) CCW
ZI	1	592-01122-2177	1-1/4" X 1" SIDE (NPT) CW
ZJ	1	592-01122-2170	1-1/4" X 3/4" SIDE (NPT) CW
ZK	1	592-01122-2127	1" X 1" SIDE (NPT) CW
ZL	1	592-01122-2169	1" X 3/4" SIDE (NPT) CW
ZP	1	592-01122-1169	1" X 3/4" REAR (NPT) CW
ZQ	1	592-01122-2116	3/4" X 3/4" SIDE (NPT) CW
ZR	1	592-01122-1159	3/4" X 1/2" REAR (NPT) CW

PERMCO MODEL: 124**Port End Covers (MOTOR ONLY)**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
CL	1	592-01195-2127	1" X 1" SIDE (NPT) MOTOR
CM	1	592-01195-2116	3/4" X 3/4" SIDE (NPT) MOTOR
CP	1	592-01195-2104	1/2" X 1/2" SIDE (NPT) MOTOR
CQ	1	592-01195-2227	1" X 1" SIDE (SF) MOTOR
CR	1	592-01195-2216	3/4" X 3/4" SIDE (SF) MOTOR
QM	1	592-01195-1327	1" X 1" REAR (ODT) MOTOR
QP	1	592-01195-1316	3/4" X 3/4" REAR (ODT) MOTOR
QR	1	592-01195-1304	1/2" X 1/2" REAR (ODT) MOTOR
QW	1	592-01195-1127	1" X 1" REAR (NPT) MOTOR
QX	1	592-01195-1116	3/4" X 3/4" REAR (NPT) MOTOR
QY	1	592-01195-1104	1/2" X 1/2" REAR (NPT) MOTOR
UM	1	592-01195-2327	1" X 1" SIDE (ODT) MOTOR
UP	1	592-01195-2304	1/2" X 1/2" SIDE (ODT) MOTOR
UQ	1	592-01195-2316	3/4" X 3/4" SIDE (ODT) MOTOR
UU	1	592-01195	1/2" X 1/2" SIDE (BSPP) MOTOR

PERMCO MODEL: 124

PORT END COVER SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	2	921-01108	124 HI PRESS BUSH
	1	Z-1967-45-2	PERMCO NAME TAG

PERMCO MODEL: 124**Pump Housings**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
ZA02	1	577-01109-02	124 1/4" GEAR .650" WIDE HOUSING
ZA05	1	577-01109-05	124 1/2" GEAR .900" WIDE HOUSING
ZA07	1	577-01109-07	124 3/4" GEAR 1.15" WIDE HOUSING
ZA08	1	577-01109-08	124 7/8" GEAR 1.27" WIDE HOUSING
ZA10	1	577-01109-10	124 1" GEAR 1.40" WIDE HOUSING
ZA11	1	577-01109-11	124 1-1/8" GEAR 1.52" WIDE HOUSING
ZA12	1	577-01109-12	124 1-1/4" GEAR 1.65" WIDE HOUSING
ZA15	1	577-01109-15	124 1-1/2" GEAR 1.90" WIDE HOUSING
ZA17	1	577-01109-17	124 1-3/4" GEAR 2.15" WIDE HOUSING
ZA20	1	577-01109-20	124 2" GEAR 2.40" WIDE HOUSING

PERMCO MODEL: 124**PUMP HOUSING SMALL PARTS**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	4	280-1971-071	124 DOWEL PIN
	2	947-01105	124 THRUST PLATE (PUMP)
	2	947-01106	124 THRUST PLATE BACK-UP (PUMP)
	2	947-01107	124 THRST PLATE SEAL (PUMP)
	2	TA-2995-152	124 SQUARE GASKET SEAL (PUMP)

PERMCO MODEL: 124**Motor Housings**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
DA05	1	577-01158-05	124 1/2" GEAR-.900" WIDE HOUSING(MOTOR)
DA07	1	577-01158-07	124 3/4" GEAR-1.15" WIDE HOUSING(MOTOR)
DA10	1	577-01158-10	124 1" GEAR-1.40" WIDE HOUSING(MOTOR)
DA12	1	577-01158-12	124 1-1/4" GEAR-1.65" WIDE HOUSING(MOTOR)
DA15	1	577-01158-15	124 1-1/2" GEAR-1.90" WIDE HOUSING(MOTOR)
DA17	1	577-01158-17	124 1-3/4" GEAR-2.15" WIDE HOUSING(MOTOR)
DA20	1	577-01158-20	124 2" GEAR-2.40" WIDE HOUSING(MOTOR)

PERMCO MODEL: 124**MOTOR HOUSING SMALL PARTS**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	4	280-1971-071	124 DOWEL PIN
	2	947-01138	124 MOTOR THRUST PLATE
	2	947-01139	124 THRUST PLATE BACK-UP(MOTOR)
	4	947-01140	124 THRST PLATE SIDE SEAL (MOTOR)
	4	947-01141	124 THRST PLATE END SEAL(MOTOR)
	2	TA-2995-153	124 SQUARE GASKET SEAL (MOTOR)

PERMCO MODEL: 124

GEAR SHAFTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
24	1	024-01416-07	124GRST,3/4KEY, 2.31"EXT, TNDM	55XL	~ 1	024-01268-17	124 T, T2, B-KEYD 1-3/4" 2.8"EXT.
24	1	024-01416-10	124GRST,3/4KEY, 2.31"EXT, TNDM	55XL	~ 1	024-01268-20	124 T, T2, B-KEYD 2" 2.8"EXT.
24	1	024-01416-12	124GRST,3/4KEY, 2.31"EXT, TNDM	75	1	024-01276-05	124 G/SH,EURO,TAPER,W/M12X1.5EXT.THRD
24	1	024-01416-15	124GRST,3/4KEY, 2.31"EXT, TNDM	75	1	024-01276-07	124 G/SH,EURO,TAPER,W/M12X1.5EXT.THRD
24	1	024-01416-17	124GRST,3/4KEY, 2.31"EXT, TNDM	75	1	024-01276-10	124 G/SH,EURO,TAPER,W/M12X1.5EXT.THRD
24	1	024-01416-20	124GRST,3/4KEY, 2.31"EXT, TNDM	75	1	024-01276-12	124 G/SH,EURO,TAPER,W/M12X1.5EXT.THRD
45	^ 1	024-01284-05	T, T2, TAPRD. CLUTCH 2.28" ext. 81	81	1	024-01344-10	124GRSET,T2,11T SPLN,19-4,TNDM
45	^ 1	024-01284-07	T, T2, TAPRD. CLUTCH 2.28" ext. 81	81	1	024-01344-12	124GRSET,T2,11T SPLN,19-4,TNDM
45	* ^ 1	024-01284-08	T, T2, TAPRD. CLUTCH 2.28" ext. 81	81	1	024-01344-15	124GRSET,T2,11T SPLN,19-4,TNDM
45	^ 1	024-01284-10	T, T2, TAPRD. CLUTCH 2.28" ext. 81	81	1	024-01344-17	124GRSET,T2,11T SPLN,19-4,TNDM
45	* ^ 1	024-01284-11	T, T2, TAPRD. CLUTCH 2.28" ext. 81	81	1	024-01344-20	124GRSET,T2,11T SPLN,19-4,TNDM
45	^ 1	024-01284-12	T, T2, TAPRD. CLUTCH 2.28" ext. 85	85	1	024-01214-05	124 G/SH T, T2, A-SPLN 1/2"
45	^ 1	024-01284-15	T, T2, TAPRD. CLUTCH 2.28" ext. 85	85	1	024-01214-07	124 G/SH T, T2, A-SPLN 3/4"
45	^ 1	024-01284-17	T, T2, TAPRD. CLUTCH 2.28" ext. 85	85	1	024-01214-10	124 G/SH T, T2, A-SPLN 1"
45	^ 1	024-01284-20	T, T2, TAPRD. CLUTCH 2.28" ext. 85	85	1	024-01214-12	124 G/SH T, T2, A-SPLN 1-1/4"
54	1	024-01104-05	124 G/SH T, T2, B-SPLN 1/2"	85	1	024-01214-15	124 G/SH T, T2, A-SPLN 1-1/2"
54	1	024-01104-07	124 G/SH T, T2, B-SPLN 3/4"	85	1	024-01214-17	124 G/SH T, T2, A-SPLN 1-3/4"
54	1	024-01104-10	124 G/SH T, T2, B-SPLN 1"	85	1	024-01214-20	124 G/SH T, T2, A-SPLN 2"
54	1	024-01104-12	124 G/SH T, T2, B-SPLN 1-1/4"	86	1	024-01215-05	124 G/SH T, T2, A-KEYD 1/2"
54	1	024-01104-15	124 G/SH T, T2, B-SPLN 1-1/2"	86	1	024-01215-07	124 G/SH T, T2, A-KEYD 3/4"
54	1	024-01104-17	124 G/SH T, T2, B-SPLN 1-3/4"	86	1	024-01215-10	124 G/SH T, T2, A-KEYD 1"
54	1	024-01104-20	124 G/SH T, T2, B-SPLN 2"	86	1	024-01215-12	124 G/SH T, T2, A-KEYD 1-1/4"
55	1	024-01213-05	124 G/SH T, T2, B-KEYD 1/2"	86	1	024-01215-15	124 G/SH T, T2, A-KEYD 1-1/2"
55	1	024-01213-07	124 G/SH T, T2, B-KEYD 3/4"	86	1	024-01215-17	124 G/SH T, T2, A-KEYD 1-3/4"
55	1	024-01213-10	124 G/SH T, T2, B-KEYD 1"	86	1	024-01215-20	124 G/SH T, T2, A-KEYD 2"
55	1	024-01213-12	124 G/SH T, T2, B-KEYD 1-1/4"	86XL	1	024-01331-05	124 G/SH T, T2, LONG A-KEYD 1/2"
55	1	024-01213-15	124 G/SH T, T2, B-KEYD 1-1/2"	86XL	1	024-01331-07	124 G/SH T, T2, LONG A-KEYD 3/4"
55	1	024-01213-17	124 G/SH T, T2, B-KEYD 1-3/4"	86XL	1	024-01331-10	124 G/SH T, T2, LONG A-KEYD 1"
55	1	024-01213-20	124 G/SH T, T2, B-KEYD 2"	86XL	1	024-01331-12	124 G/SH T, T2, LONG A-KEYD 1-1/4"
55XL	~ 1	024-01268-05	124 T, T2, B-KD 1/2" 2.8"EXT.	99	^ 1	024-01236-10	T,TAPRD. CLUTCH 1.9"ext.3/8"BRKT
55XL	~ 1	024-01268-07	124 T, T2, B-KD 3/4" 2.8"EXT.	99	^ 1	024-01236-15	T,TAPRD. CLUTCH 1.9"ext.3/8"BRKT
55XL	~ 1	024-01268-10	124 T, T2, B-KD 1" 2.8"EXT.	99	^ 1	024-01236-17	T,TAPRD. CLUTCH 1.9"ext.3/8"BRKT
55XL	~ 1	024-01268-12	124 T, T2, B-KD 1-1/4" 2.8"EXT.	99	^ 1	024-01236-20	T,TAPRD. CLUTCH 1.9"ext.3/8"BRKT
55XL	~ 1	024-01268-15	124 T, T2, B-KD 1-1/2" 2.8"EXT.				

- ^ THE SHAFT CODES "45 AND 99" ARE TO BE USED WITH SHAFT END COVER CODES "078" AND "178". THESE SHAFTS ARE FOR CLUTCH PUMP UNITS.
- ^ THE SHAFT CODE "45" USES A 3/4" BRACKET.
- ^ THE SHAFT CODE "99" USES A 3/8" BRACKET.
- ~ THE SHAFT CODE "55XL" IS A CROSS PUMP REPLACEMENT.

PERMCO MODEL: 124**GEAR SHAFT SMALL PARTS**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
24	1	SP-1000-8	7/8" SHAFT PROTECTOR
24	1	W09-59	3/16 X 3/16 X 1-9/16 KEY
45	1	SP-1000-8	7/8" SHAFT PROTECTOR
45	1	W09-505	#505 WOODRUFF KEY
54	1	SP-1000-8	7/8" SHAFT PROTECTOR
55	1	SP-1000-8	7/8" SHAFT PROTECTOR
55	1	009-01216	1/4 X 1/4 X 1 KEY
55XL	1	SP-1000-8	7/8" SHAFT PROTECTOR
55XL	1	009-01216	1/4 X 1/4 X 1 KEY
75	1	SP-1000-7	5/8" SHAFT PROTECTOR
75	1	009-01254	#405 WOODRUFF KEY
75	1	900-01252	WAVE SPRING WASHER
75	1	900-01253	M12 X 1.5 NUT
81	1	SP-1000-8	7/8" SHAFT PROTECTOR
85	1	SP-1000-7	5/8" SHAFT PROTECTOR
86	1	SP-1000-7	5/8" SHAFT PROTECTOR
86	1	009-01217	5/32 X 5/32 X 3/4 KEY
86XL	1	SP-1000-7	5/8" SHAFT PROTECTOR
86XL	1	009-01332	5/32 X 5/32 X 1 KEY
99	1	SP-1000-8	7/8" SHAFT PROTECTOR
99	1	W09-505	#505 WOODRUFF KEY

PERMCO MODEL: 124**Rear Gears for Tandem Units**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
02	1	996-01103-02	124 1/4" GEAR SET
05	1	996-01103-05	124 1/2" GEAR SET
07	1	996-01103-07	124 3/4" GEAR SET
10	1	996-01103-10	124 1" GEAR SET
12	1	996-01103-12	124 1-1/4" GEAR SET
15	1	996-01103-15	124 1-1/2" GEAR SET
17	1	996-01103-17	124 1-3/4" GEAR SET
20	1	996-01103-20	124 2" GEAR SET

PERMCO MODEL: 124

Bearing Carriers (Single In, Single Out)

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
AG	1	576-01127-1262	1/2 & 1-1/4 (SF) CCW	KJ	1	576-01127-1375	7/8 & 1-1/2 (ODT) CCW
AJ	1	576-01127-1337	1-1/2 & 1-1/2 (ODT) CCW	KL	1	576-01127-1362	1/2 & 1-1/4 (ODT) CCW
AL	1	576-01127-1349	5/8 & 1-1/4 (ODT) CCW	LA	1	576-01127-1349	1-1/4 & 5/8 (ODT) CW
B	1	576-01127	THRU-L & BLANK CW	LB	1	576-01127-1270	3/4 & 1-1/4 (SF) CCW
BG	1	576-01127-1227	1 & 1 (SF) CCW	LG	1	576-01127-1216	3/4 & 3/4 (SF) CCW
BI	1	576-01127-1232	1-1/4 & 1-1/4 (SF) CW	LJ	1	576-01127-1371	3/4 & 1-1/2 (ODT) CCW
BJ	1	576-01127-1381	1-1/4 & 1-1/2 (ODT) CCW	LK	1	576-01127-1362	1-1/4 & 1/2 (ODT) CW
BK	1	576-01127-1277	1-1/4 & 1 (SF) CW	LM	1	576-01127-1327	1 & 1 (ODT) CW
BL	1	576-01127-1270	1-1/4 & 3/4 (SF) CW	LP	1	576-01127-1373	1 & 7/8 (ODT) CW
C	1	576-01127	BLANK & THRU CCW	LQ	1	576-01127-1369	1 & 3/4 (ODT) CW
EG	1	576-01127-1269	3/4 & 1 (SF) CCW	LR	1	576-01127-1366	1 & 5/8 (ODT) CW
EJ	1	576-01127-1378	1 & 1-1/2 (ODT) CCW	LS	1	576-01127-1361	1 & 1/2 (ODT) CW
GA	1	576-01127-1262	1-1/4 & 1/2 (SF) CW	LT	1	576-01127-1316	3/4 & 3/4 (ODT) CW
GB	1	576-01127-1227	1 & 1 (SF) CW	LU	1	576-01127-1364	3/4 & 5/8 (ODT) CW
GE	1	576-01127-1269	1 & 3/4 (SF) CW	LV	1	576-01127-1359	3/4 & 1/2 (ODT) CW
GK	1	576-01127-1261	1 & 1/2 (SF) CW	MG	1	576-01127-1259	1/2 & 3/4 (SF) CCW
GL	1	576-01127-1216	3/4 & 3/4 (SF) CW	MJ	1	576-01127-1332	1-1/4 & 1-1/4 (ODT) CCW
GM	1	576-01127-1259	3/4 & 1/2 (SF) CW	ML	1	576-01127-1327	1 & 1 (ODT) CCW
IB	1	576-01127-1232	1-1/4 & 1-1/4 (SF) CCW	NJ	1	576-01127-1377	1 & 1-1/4 (ODT) CCW
JA	1	576-01127-1337	1-1/2 & 1-1/2 (ODT) CW	OJ	1	576-01127-1374	7/8 & 1-1/4 (ODT) CCW
JB	1	576-01127-1381	1-1/2 & 1-1/4 (ODT) CW	PJ	1	576-01127-1370	3/4 & 1-1/4 (ODT) CCW
JE	1	576-01127-1378	1-1/2 & 1 (ODT) CW	PL	1	576-01127-1373	7/8 & 1 (ODT) CCW
JK	1	576-01127-1375	1-1/2 & 7/8 (ODT) CW	QL	1	576-01127-1369	3/4 & 1 (ODT) CCW
JL	1	576-01127-1371	1-1/2 & 3/4 (ODT) CW	RL	1	576-01127-1366	5/8 & 1 (ODT) CCW
JM	1	576-01127-1332	1-1/4 & 1-1/4 (ODT) CW	SL	1	576-01127-1361	1/2 & 1 (ODT) CCW
JN	1	576-01127-1377	1-1/4 & 1 (ODT) CW	TL	1	576-01127-1316	3/4 & 3/4 (ODT) CCW
JO	1	576-01127-1374	1-1/4 & 7/8 (ODT) CW	UL	1	576-01127-1364	5/8 & 3/4 (ODT) CCW
JP	1	576-01127-1370	1-1/4 & 3/4 (ODT) CW	VL	1	576-01127-1359	1/2 & 3/4 (ODT) CCW
KB	1	576-01127-1277	1 & 1-1/4 (SF) CCW				
KG	1	576-01127-1261	1/2 & 1 (SF) CCW				

NOTE: THE CODES SHOWN ABOVE REFLECT THE OUTLET PORT TO THE FRONT GEAR SECTION. WHEN USING BOTH SINGLE-IN, SINGLE-OUT BEARING CARRIER WITH A SINGLE-IN, DUAL-OUT BEARING CARRIER THE DUAL-OUT SHOULD BE THE LAST BEARING CARRIER TO PROVIDE AN OUTLET FOR THE LAST GEAR SECTION.

NOTE: FOR MIXED PORTING IN THE BEARING CARRIER REFER TO THE P197 SERIES CODES.

PERMCO MODEL: 124

Bearing Carriers (Single In, Dual Out)

CODE	QTY	PART NUMBER	D E S C R I P T I O N	CODE	QTY	PART NUMBER	D E S C R I P T I O N
BQ	1	576-01129-6322	1-T X 7/8BP & 7/8TP (ODT) CCW	JF	1	576-01129-4373	1-1/2-T X 1TP & 7/8BP (ODT) CW
BR	1	576-01129-6369	1-T X 1BP & 3/4TP (ODT) CCW	KF	1	576-01129-4322	1-1/2-T X 7/8TP & 7/8BP(ODT) CW
BS	1	576-01129-6316	1-T X 3/4BP & 3/4TP (ODT) CCW	LF	1	576-01129-4369	1-1/2-T X 1TP & 3/4BP (ODT) CW
BU	1	576-01129-6364	1-T X 3/4BP & 5/8TP (ODT) CCW	MF	1	576-01129-4316	1-1/2-T X 3/4TP & 3/4BP(ODT) CW
BV	1	576-01129-6359	1-T X 3/4BP & 1/2TP (ODT) CCW	OF	1	576-01129-5327	1-1/4-T X 1TP & 1BP (ODT) CW
BW	1	576-01129-6311	1-T X 5/8BP & 5/8TP (ODT) CCW	PF	1	576-01129-5373	1-1/4-T X 1TP & 7/8BP (ODT) CW
BX	1	576-01129-6304	1-T X 1/2BP & 1/2TP (ODT) CCW	QB	1	576-01129-6322	1-T X 7/8TP & 7/8BP(ODT) CW
BZ	1	576-01129-5216	1-1/4-T X 3/4TP & 3/4BP (SF) CW	QF	1	576-01129-5322	1-1/4-T X 7/8TP & 7/8BP(ODT) CW
CZ	1	576-01129-5259	1-1/4-T X 3/4TP & 1/2BP (SF) CW	RB	1	576-01129-6369	1-T X 1TP & 3/4BP(ODT) CW
DZ	1	576-01129-5204	1-1/4-T X 1/2TP & 1/2BP (SF) CW	RF	1	576-01129-5369	1-1/4-T X 1TP & 3/4BP(ODT) CW
EZ	1	576-01129-6216	1-T X 3/4TP & 3/4BP (SF) CW	SB	1	576-01129-6316	1-T X 3/4TP & 3/4BP(ODT) CW
FI	1	576-01129-4327	1-1/2-T X 1BP & 1TP (ODT) CCW	SF	1	576-01129-5316	1-1/4-T X 3/4TP & 3/4BP(ODT) CW
FJ	1	576-01129-4373	1-1/2-T X 1BP & 7/8TP (ODT) CCW	TF	1	576-01129-5364	1-1/4-T X 3/4TP & 5/8BP(ODT) CW
FK	1	576-01129-4322	1-1/2-T X 7/8BP & 7/8TP(ODT) CCW	UB	1	576-01129-6364	1-T X 3/4TP & 5/8BP(ODT) CW
FL	1	576-01129-4369	1-1/2-T X 1BP & 3/4TP (ODT) CCW	UF	1	576-01129-5359	1-1/4-T X 3/4TP & 1/2BP(ODT) CW
FM	1	576-01129-4316	1-1/2-T X 3/4BP & 3/4TP (ODT) CCW	VB	1	576-01129-6359	1-T X 3/4TP & 1/2BP(ODT) CW
FO	1	576-01129-5327	1-1/4-T X 1BP & 1TP (ODT) CCW	VF	1	576-01129-5311	1-1/4-T X 5/8TP & 5/8BP(ODT) CW
FP	1	576-01129-5373	1-1/4-T X 1BP & 7/8TP (ODT) CCW	WB	1	576-01129-6311	1-T X 5/8TP & 5/8BP (ODT) CW
FQ	1	576-01129-5322	1-1/4-T X 7/8BP & 7/8TP (ODT) CCW	WF	1	576-01129-5304	1-1/4-T X 1/2TP & 1/2BP (ODT) CW
FR	1	576-01129-5369	1-1/4-T X 1BP & 3/4TP (ODT) CCW	XB	1	576-01129-6304	1-T X 1/2TP & 1/2BP(ODT) CW
FS	1	576-01129-5316	1-1/4-T X 3/4BP & 3/4TP (ODT) CCW	XF	1	576-01129-6327	1-T X 1TP & 1BP(ODT) CW
FT	1	576-01129-5364	1-1/4-T X 3/4BP & 5/8TP (ODT) CCW	YF	1	576-01129-6373	1-T X 1TP & 7/8BP(ODT) CW
FU	1	576-01129-5359	1-1/4-T X 3/4BP & 1/2TP (ODT) CCW	ZB	1	576-01129-5216	1-1/4-T X 3/4BP & 3/4TP(SF) CCW
FV	1	576-01129-5311	1-1/4-T X 5/8BP & 5/8TP (ODT) CCW	ZC	1	576-01129-5259	1-1/4-T X 3/4BP & 1/2TP(SF) CCW
FW	1	576-01129-5304	1-1/4-T X 1/2BP & 1/2TP(ODT) CCW	ZD	1	576-01129-5204	1-1/4-T X 1/2BP & 1/2TP(SF) CCW
FX	1	576-01129-6327	1-T X 1BP & 1TP (ODT) CCW	ZE	1	576-01129-6216	1-T X 3/4BP & 3/4TP(SF) CCW
FY	1	576-01129-6373	1-T X 1BP & 7/8TP (ODT) CCW	ZF	1	576-01129-6259	1-T X 3/4BP & 1/2TP(SF) CCW
FZ	1	576-01129-6259	1-T X 3/4TP & 1/2BP (SF) CW	ZG	1	576-01129-6204	1-T X 1/2BP & 1/2TP(SF) CCW
GZ	1	576-01129-6204	1-T X 1/2TP & 1/2BP (SF) CW				
IF	1	576-01129-4327	1-1/2-T X 1TP & 1BP(ODT) CW				

NOTE: WHEN USING BOTH SINGLE-IN, SINGLE-OUT BEARING CARRIER WITH A SINGLE-IN, DUAL-OUT BEARING CARRIER THE DUAL-OUT SHOULD BE THE LAST BEARING CARRIER TO PROVIDE AN OUTLET FOR THE LAST GEAR SECTION.

In the belly down position, determine pump rotation from shaft end. Clockwise rotation will put the inlet on the left side and the top outlet port will be for the front gear section. Counter-clockwise rotation will put the inlet on the right side and the top outlet will be for the rear gear section.

NOTE: FOR MIXED PORTING IN THE BEARING CARRIER REFER TO THE P197 SERIES CODES.

PERMCO MODEL: 124

BEARING CARRIER SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	4	921-01108	124 HI PRESS BUSH

PERMCO MODEL: 124

CONNECTING SHAFT SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
1	1	022-01125	124 CONNECTOR SHAFT

Plastic Plugs	
NPT & BSPP	
port size	part #
1/8"	#8
1/4"	#11
3/8"	#17
1/2"	#23
3/4"	#30
1"	#42
1-1/4"	#53
1-1/2"	#57
2"	#68
ODT	
1/2"	#23
3/8"	#17
5/8"	#27
3/4"	#35
7/8"	#42
1"	#44
1-1/4"	#53
1-1/2"	#57
SF & metric SF	
1/2"	#12
3/4"	B-831-213
1"	B-831-214
1-1/4"	B-831-215
1-1/2"	B-831-216
2"	B-831-217

Fasteners for Single Units		
Gear Size	Cap Screw #	Qty
1/2"	W1-88	4
3/4"	W1-11	4
1"	W1-66	4
1-1/4"	W1-12	4
1-1/2"	W1-69	4
1-3/4"	W1-83	4
2"	W1-60	4
Washer	W033-1	4
Shaft Protectors		
SP-1000-1		.656" Dia.
SP-1000-2		.587" Dia.
SP-1000-3		1" Dia.
SP-1000-6		1/2" Dia.
SP-1000-7		5/8" Dia.
SP-1000-8		3/4" Dia.
SP-1000-8		7/8" Dia.
SP-1000-7		5/8" Dia.
Shaft Protector for extended stud		
part #		Qty.
SP-1000-6		2

For multiple units with total gear widths up to 2-1/4" use the cap screws listed below. These may be used with threaded rod for extended studs.

Total gear width	Cap screw #	Qty.
1"	W1-099	4
1-1/4"	W1-099	4
1-1/2"	W1-76	4
1-3/4"	W1-76	4
2"	W1-75	4
2-1/4"	W1-75	4
W033-1	Washer	4

Fasteners for Multiple Units

	Flush	Extended
Dual Section	6	7.5
Triple Section	9	10.5
Quad Section	12	13.5

***Add total gear widths + above dimension to obtain stud length.

W033-1	Washer	4
W3-40	Nuts	4

Stud #	Description
ZE-0391-10	1/2"-13 X 10"
ZE-0391-12	1/2"-13 X 12"
ZE-0391-14	1/2"-13 X 14"
ZE-0391-16	1/2"-13 X 16"
ZE-0391-20	1/2"-13 X 20"
ZE-0391-24	1/2"-13 X 24"
ZE-0391-28	1/2"-13 X 28"

