

* * ENGINEERING CODEBOOK * *

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

THE FOLLOWING SERIES ARE INCLUDED:

1500 2100 2500 3000 **3100** 3700 5000 5100 7500 AND 7600.

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.

COPYRIGHT C AUGUST 1999 BY PERMCO INC. ALL RIGHTS RESERVED. NO PART OF THIS BOOK MAY BE REPRODUCED STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS ELECTRONIC MECHANICAL PHOTOCOPYING RECORDING OR OTHERWISE WITHOUT PRIOR WRITTEN PERMISSION OF PERMCO INC.

BELOW IS AN EXAMPLE OF HOW TO USE THIS CATALOG:

SINGLE ASSEMBLY CODE: P7500A079AHNP20-6
TANDEM ASSEMBLY CODE: P7500B079AHNP20-6BNI12-1

P DENOTES PUMP (M DENOTES MOTOR)
7500 SERIES
A B OR C MODEL TYPE (A-SINGLE B-TANDEM C-SPECIAL DRIVE SHAFT)
079 SHAFT END COVER
AH PORT END COVER
NP20 GEAR HOUSING (FIRST)
6 DRIVE SHAFT

B BEARING CARRIER
NI12 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 :	02	05	07	10	12	15	17	20	22	25	27	30
SIZE IN INCHES:	1/4	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2	2-1/4	2-1/2	2-3/4	3

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

FT MT FOOT MOUNT
 G F TOP GREASE FITTING ON TOP (OTHERS ON BOTTOM)
 PAD MT PAD MOUNT
 PB PIGGYBACK PUMP
 PD PILOT DIAMETER
 PX PILOT EXTENSION
 RD FLG ROUND FLANGE
 W/MTG SLT WITH MOUNTING SLOT
 WD WITH DRAIN
 WD2 WITH DRAIN AT 2 OCLOCK POSITION
 WD8 WITH DRAIN AT 8 OCLOCK POSITION
 WD12 WITH DRAIN AT 12 OCLOCK POSITION
 W2D WITH 2 DRAINS

PORT END COVER DESCRIPTIONS

OS PORTS ARE OUT THE SIDE
 PB PIGGYBACK PUMP
 XSD EXTENDED STUDS

SHAFT DESCRIPTIONS

T TOOTH
 PB PIGGYBACK PUMP
 W/THD END WITH THREADED END

PORTING DESCRIPTIONS

JIC STRAIGHT THREAD. PORT SIZE REFERS TO O.D. OF 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.

 * * * * *
 * 3100 SERIES *
 * * * * *

SERIES IDENTIFICATION

STUD HOLES - 4 AT 11/16 DIAMETER
 STUD DIA. - 5/8 IN.
 ONE-PIECE DRIVE SHAFT AND GEAR (INTEGRAL)
 HOUSING HEIGHT - 5-3/8 INCHES
 HOUSING WIDTH - GEAR SIZE + 3/4 INCH
 DOWELLED
BOLT TORQUE - 200 FT-LBS

GEAR WIDTHS AVAILABLE

1/2 3/4 1 1-1/4 1-1/2 1-3/4 AND 2 INCHES

SHAFT END COVERS

THE TYPE OF SHAFT END COVER IS DETERMINED BY THE ENTIRE 3 DIGIT DESIGNATION.
 THERE ARE TWO BASIC TYPES OF SHAFT END COVERS WHICH ARE DIFFERENTIATED BY THE BEARING CONFIGURATION.
 THIS SERIES IS AVAILABLE BOTH WITH AND WITHOUT OUTBOARD BEARINGS.

TYPE I - WITH SINGLE OUTBOARD BALL BEARING OR WITHOUT.
 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>	<u>BEARING</u>
ALL CODES BEGINNING WITH	0	XX			XX		I II	
	1		XX		XX		I II	
	2			XX	XX		I II	
	3	XX			XX		I	XX
	4		XX		XX		I	XX
	5			XX	XX		I	XX
	7			XX		XX	I	XX
	8			XX		XX	I	

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

DRIVE SHAFTS

C - DENOTES SPECIAL SEPARATE DRIVE SHAFT. (REFER TO CODING ILLUSTRATION ON INTRODUCTORY PAGES). THESE CODES MUST BE USED IN CONJUNCTION WITH SHAFT END COVERS WHICH CONTAIN OUTBOARD BEARINGS. HOWEVER A DIFFERENT SHAFT SEAL IS REQUIRED. SEE DRIVE SHAFT PARTS.

GEARS

1. CODES MARKED ^ ARE GEAR SETS FOR SINGLE UNIT APPLICATIONS.
2. CODES MARKED ~ ARE GEAR SETS FOR HEAVY DUTY APPLICATIONS.

HOUSINGS

1. CODES MARKED ' ARE FOR LOW PRESSURE INLET PORT ONLY.
2. CODES MARKED + ARE GOOD FOR PRESSURES UP TO 2500 PSI. APPLIES TO SMALLEST PORT.
3. NPT THREADS ARE NOT RECOMMENDED FOR USE AT PRESSURES EXCEEDING 2000 PSI.
4. JIC PORTS ARE RECOMMENDED FOR USE AT PRESSURES UP TO 2500 PSI.
FOR HIGHER PRESSURES CONSULT FACTORY.
5. SPLIT FLANGE PORTS ARE RECOMMENDED FOR PRESSURES ABOVE 2500 PSI.
CONSULT FACTORY FOR CORRECT PORTING.

BEARING CARRIERS

FOR MULTIPLE MOTORS USE A AA BB EE KK LL MM CODES. DO NOT USE IN PUMPS.

BEARING CARRIER FLOW

FLOW FROM BEARING CARRIER SIDE PORT TO GEAR HOUSING SHOULD NOT EXCEED 21 GPM ON THE SUCTION SIDE OR 40 GPM ON THE PRESSURE SIDE.

PERMCO MODEL: 3100

Shaft End Covers

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
016	* 1	574-00230-CHLD	CW CHELSEA (XR) MTG FLG	394	1	EA-0574-3D	CW TYPE I 6 BOLT RD FLG
031	1	DA-0574-3D	CW TYPE I 4 BOLT SAE B	399	1	ZB-0574-3D	CW TYPE I PAD MT
033	1	DA-0574-5D	CW TYPE I 4 BOLT SPECIAL	431	1	DA-0574-3D	CCW TYPE I 4 BOLT SAE B
067	1	OA-0574-3D	CW TYPE I 4 BOLT SAE C	433	1	DA-0574-5D	CCW TYPE I 4 BOLT SPECIAL
080	1	CB-0574-15D	CW 5000/3000 3000/3000 PB	467	1	OA-0574-3D	CCW TYPE I 4 BOLT SAE C
081	1	YA-0574-15D	CW 7500/3000 PB	483	1	VA-0574-3D	CCW TYPE I 2 BOLT SAE A
083	1	VA-0574-3D	CW TYPE I 2 BOLT SAE A	486	1	FA-0574-3D	CCW TYPE I 2 BOLT SAE B
085	1	CA-0574-3D	CW TYPE II 2 BOLT SAE B	490	1	FDA-0574-3D	CCW TYPE I 2 OR 4 BOLT SAE B
086	1	FA-0574-3D	CW TYPE I 2 BOLT SAE B	494	1	EA-0574-3D	CCW TYPE I 6 BOLT RD FLG
090	1	FDA-0574-3D	CW TYPE I 2 OR 4 BOLT SAE B	499	1	ZB-0574-3D	CCW TYPE I PAD MT
094	1	EA-0574-3D	CW TYPE I 6 BOLT RD FLG	500	1	574-00343-HFD	3000 SEC 6 BOLT RND FISH PUMP
116	* 1	574-00230-CHLD	CCW CHELSEA (XR) MTG FLG	531	1	DA-0574-3D	DR TYPE I 4 BOLT SAE B
131	1	DA-0574-3D	CCW TYPE I 4 BOLT SAE B	533	1	DA-0574-5D	DR TYPE I 4 BOLT SPEC
133	1	DA-0574-5D	CCW TYPE I 4 BOLT SPECIAL	567	1	OA-0574-3D	DR TYPE I 4 BOLT SAE C
167	1	OA-0574-3D	CCW TYPE I 4 BOLT SAE C	583	1	VA-0574-3D	DR TYPE I 2 BOLT SAE A
180	1	CB-0574-15D	CCW 5000/3000 3000/3000 PB	586	1	FA-0574-3D	DR TYPE I 2 BOLT SAE B
181	1	YA-0574-15D	CCW 7500/3000 PB	590	1	FDA-0574-3D	DR TYPE I 2 OR 4 BOLT SAE B
183	1	VA-0574-3D	CCW TYPE I 2 BOLT SAE A	594	1	EA-0574-3D	DR TYPE I 6 BOLT RD FLG
185	1	CA-0574-3D	CCW TYPE II 2 BOLT SAE B	599	1	ZB-0574-3D	DR TYPE I PAD MT
186	1	FA-0574-3D	CCW TYPE I 2 BOLT SAE B	731	1	DA-0574-6D	DR TYPE I 4 BOLT SAE B
190	1	FDA-0574-3D	CCW TYPE I 2 OR 4 BOLT SAE B	767	1	OA-0574-4D	DR TYPE I 4 BOLT SAE C
194	1	EA-0574-3D	CCW TYPE I 6 BOLT RD FLG	783	1	VA-0574-4D	DR TYPE I 2 BOLT SAE A
200	1	574-00343-HFD	3000 SEC 6 BOLT RND FISH PUMP	786	1	FA-0574-4D	DR TYPE I 2 BOLT SAE B
216	* 1	574-00230-CHLD	DR CHELSEA (XR) MTG FLG	790	1	FDA-0574-4D	DR TYPE I 2 OR 4 BOLT SAE B
231	1	DA-0574-3D	DR TYPE I 4 BOLT SAE B	794	1	EA-0574-6D	DR TYPE I 6 BOLT RD FLG
233	1	DA-0574-5D	DR TYPE I 4 BOLT SPECIAL	799	1	ZB-0574-4D	DR TYPE I PAD MT
267	1	OA-0574-3D	DR TYPE I 4 BOLT SAE C	831	1	DA-0574-6D	DR TYPE I 4 BOLT SAE B
280	1	CB-0574-15D	DR 5000/3000 3000/3000 PB	867	1	OA-0574-4D	DR TYPE I 4 BOLT SAE C
281	1	YA-0574-15D	DR 7500/3000 PB	883	1	VA-0574-4D	DR TYPE I 2 BOLT SAE A
283	1	VA-0574-3D	DR TYPE I 2 BOLT SAE A	885	1	CA-0574-3SPLD	DR TYPE II 2 BOLT SAE B
285	1	CA-0574-3D	DR TYPE II 2 BOLT SAE B	886	1	FA-0574-4D	DR TYPE I 2 BOLT SAE B
286	1	FA-0574-3D	DR TYPE I 2 BOLT SAE B	890	1	FDA-0574-4D	DR TYPE I 2 OR 4 BOLT SAE B
290	1	FDA-0574-3D	DR TYPE I 2 OR 4 BOLT SAE B	894	1	EA-0574-6D	DR TYPE I 6 BOLT RD FLG
294	1	EA-0574-3D	DR TYPE I 6 BOLT RD FLG				
331	1	DA-0574-3D	CW TYPE I 4 BOLT SAE B				
333	1	DA-0574-5D	CW TYPE I 4 BOLT SPECIAL				
367	1	OA-0574-3D	CW TYPE I 4 BOLT SAE C				
383	1	VA-0574-3D	CW TYPE I 2 BOLT SAE A				
386	1	FA-0574-3D	CW TYPE I 2 BOLT SAE B				
390	1	FDA-0574-3D	CW TYPE I 2 OR 4 BOLT SAE B				

PERMCO MODEL: 3100

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>
016	1	KA-0558-1XS	RING SEAL	086	1	S-0280	PLUG
016	1	S-0280	PLUG	086	1	W62-26-16	DOUBLE LIP SEAL
016	1	W62-26-16	SHAFT SEAL	086	2	X-0921	CROWNED ROLLER BRGN
016	2	X-0921	BEARING				
				090	1	KA-0558-1XS	RING SEAL
031	1	KA-0558-1XS	RING SEAL	090	1	S-0280	PLUG
031	1	S-0280	PLUG	090	1	W62-26-16	DOUBLE LIP SEAL
031	1	W62-26-16	DOUBLE LIP SEAL	090	2	X-0921	CROWNED ROLLER BRGN
031	2	X-0921	CROWNED ROLLER BRGN				
				094	1	KA-0558-1XS	RING SEAL
033	1	KA-0558-1XS	RING SEAL	094	1	S-0280	PLUG
033	1	S-0280	PLUG	094	1	W62-26-16	DOUBLE LIP SEAL
033	1	W62-26-16	DOUBLE LIP SEAL	094	2	X-0921	CROWNED ROLLER BRGN
033	2	X-0921	CROWNED ROLLER BRGN				
				116	1	KA-0558-1XS	RING SEAL
067	1	KA-0558-1XS	RING SEAL	116	1	S-0280	PLUG
067	1	S-0280	PLUG	116	1	W62-26-16	SHAFT SEAL
067	1	W62-26-16	DOUBLE LIP SEAL	116	2	X-0921	BEARING
067	2	X-0921	CROWNED ROLLER BRGN				
				131	1	KA-0558-1XS	RING SEAL
080	1	K-2995-26	O'RING	131	1	S-0280	PLUG
080	1	K-2995-30	O'RING	131	1	W62-26-16	DOUBLE LIP SEAL
080	1	KA-0558-1XS	RING SEAL	131	2	X-0921	CROWNED ROLLER BRGN
080	1	S-0280	PLUG				
080	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT	133	1	KA-0558-1XS	RING SEAL
080	1	W62-26-16	DOUBLE LIP SEAL	133	1	S-0280	PLUG
080	2	X-0921	CROWNED ROLLER BRGN	133	1	W62-26-16	DOUBLE LIP SEAL
080	1	ZJ-0558	SEAL RETAINER	133	2	X-0921	CROWNED ROLLER BRGN
				167	1	KA-0558-1XS	RING SEAL
081	1	KA-0558-1XS	RING SEAL	167	1	S-0280	PLUG
081	1	S-0280	PLUG	167	1	W62-26-16	DOUBLE LIP SEAL
081	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT	167	2	X-0921	CROWNED ROLLER BRGN
081	1	W62-26-17	DOUBLE LIP SEAL	167			
081	2	X-0921	CROWNED ROLLER BRGN				
081	1	ZK-0558	SPACER	180	1	K-2995-26	O'RING
				180	1	K-2995-30	O'RING
083	1	KA-0558-1XS	RING SEAL	180	1	KA-0558-1XS	RING SEAL
083	1	S-0280	PLUG	180	1	S-0280	PLUG
083	1	W62-26-16	DOUBLE LIP SEAL	180	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT
083	2	X-0921	CROWNED ROLLER BRGN	180	1	W62-26-16	DOUBLE LIP SEAL
				180	2	X-0921	CROWNED ROLLER BRGN
085	1	KA-0558-1XS	RING SEAL	180	1	ZJ-0558	SEAL RETAINER
085	1	S-0280	PLUG				
085	1	W62-26-16	DOUBLE LIP SEAL	181	1	KA-0558-1XS	RING SEAL
085	2	X-0921	CROWNED ROLLER BRGN	181	1	S-0280	PLUG
				181	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT
086	1	KA-0558-1XS	RING SEAL	181	1	W62-26-17	DOUBLE LIP SEAL

PERMCO MODEL: 3100

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>
181	2	X-0921	CROWNED ROLLER BRGN	267	1	KA-0558-1XS	RING SEAL
181	1	ZK-0558	SPACER	267	2	L-0280-K	CHECK VALVE ASSY
				267	1	W62-26-16	DOUBLE LIP SEAL
183	1	KA-0558-1XS	RING SEAL	267	2	X-0921	CROWNED ROLLER BRGN
183	1	S-0280	PLUG				
183	1	W62-26-16	DOUBLE LIP SEAL	280	1	K-2995-26	O'RING
183	2	X-0921	CROWNED ROLLER BRGN	280	1	K-2995-30	O'RING
				280	1	KA-0558-1XS	RING SEAL
185	1	KA-0558-1XS	RING SEAL	280	2	L-0280-K	CHECK VALVE ASSY
185	1	S-0280	PLUG	280	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT
185	1	W62-26-16	DOUBLE LIP SEAL	280	1	W62-26-16	DOUBLE LIP SEAL
185	2	X-0921	CROWNED ROLLER BRGN	280	2	X-0921	CROWNED ROLLER BRGN
				280	1	ZJ-0558	SEAL RETAINER
186	1	KA-0558-1XS	RING SEAL				
186	1	S-0280	PLUG	281	1	KA-0558-1XS	RING SEAL
186	1	W62-26-16	DOUBLE LIP SEAL	281	2	L-0280-K	CHECK VALVE ASSY
186	2	X-0921	CROWNED ROLLER BRGN	281	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT
				281	1	W62-26-17	DOUBLE LIP SEAL
190	1	KA-0558-1XS	RING SEAL	281	2	X-0921	CROWNED ROLLER BRGN
190	1	S-0280	PLUG	281	1	ZK-0558	SPACER
190	1	W62-26-16	DOUBLE LIP SEAL				
190	2	X-0921	CROWNED ROLLER BRGN	283	1	KA-0558-1XS	RING SEAL
				283	2	L-0280-K	CHECK VALVE ASSY
194	1	KA-0558-1XS	RING SEAL	283	1	W62-26-16	DOUBLE LIP SEAL
194	1	S-0280	PLUG	283	2	X-0921	CROWNED ROLLER BRGN
194	1	W62-26-16	DOUBLE LIP SEAL				
194	2	X-0921	CROWNED ROLLER BRGN	285	1	KA-0558-1XS	RING SEAL
				285	2	L-0280-K	CHECK VALVE ASSY
200	1	KA-0558-1XS	3000 EXTRA SERV RING SEAL	285	1	W62-26-16	DOUBLE LIP SEAL
200	2	L-0280-K	2500 3700 3000 5000 7500CK	285	2	X-0921	CROWNED ROLLER BRGN
200	1	W62-26-16	3000 5000 DOUBLE LIP SEAL				
200	2	X-0921	3000 CRWND ROLLER BRGN	286	1	KA-0558-1XS	RING SEAL
				286	2	L-0280-K	CHECK VALVE ASSY
216	1	KA-0558-1XS	RING SEAL	286	1	W62-26-16	DOUBLE LIP SEAL
216	2	L-0280-K	CHECK VALVE ASSY	286	2	X-0921	CROWNED ROLLER BRGN
216	1	W62-26-16	SHAFT SEAL				
216	2	X-0921	BEARING	290	1	KA-0558-1XS	RING SEAL
				290	2	L-0280-K	CHECK VALVE ASSY
231	1	KA-0558-1XS	RING SEAL	290	1	W62-26-16	DOUBLE LIP SEAL
231	2	L-0280-K	CHECK VALVE ASSY	290	2	X-0921	CROWNED ROLLER BRGN
231	1	W62-26-16	DOUBLE LIP SEAL				
231	2	X-0921	CROWNED ROLLER BRGN	294	1	KA-0558-1XS	RING SEAL
				294	2	L-0280-K	CHECK VALVE ASSY
233	1	KA-0558-1XS	RING SEAL	294	1	W62-26-16	DOUBLE LIP SEAL
233	2	L-0280-K	CHECK VALVE ASSY	294	2	X-0921	CROWNED ROLLER BRGN
233	1	W62-26-16	DOUBLE LIP SEAL				
233	2	X-0921	CROWNED ROLLER BRGN	331	1	KA-0558-1XS	RING SEAL

PERMCO MODEL: 3100

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>
331	1	S-0280	PLUG	399	1	KA-0558-1XS	RING SEAL
331	1	W023-206	SPIROLOX SNAP RING	399	1	S-0280	PLUG
331	1	W58-39	BALL BEARING	399	1	W023-206	SPIROLOX SNAP RING
331	1	W62-26-16	DOUBLE LIP SEAL	399	1	W58-39	BALL BEARING
331	2	X-0921	CROWNED ROLLER BRGN	399	1	W62-26-16	DOUBLE LIP SEAL
				399	2	X-0921	CROWNED ROLLER BRGN
333	1	KA-0558-1XS	RING SEAL				
333	1	S-0280	PLUG	431	1	KA-0558-1XS	RING SEAL
333	1	W023-206	SPIROLOX SNAP RING	431	1	S-0280	PLUG
333	1	W58-39	BALL BEARING	431	1	W023-206	SPIROLOX SNAP RING
333	1	W62-26-16	DOUBLE LIP SEAL	431	1	W58-39	BALL BEARING
333	2	X-0921	CROWNED ROLLER BRGN	431	1	W62-26-16	DOUBLE LIP SEAL
				431	2	X-0921	CROWNED ROLLER BRGN
367	1	KA-0558-1XS	RING SEAL				
367	1	S-0280	PLUG	433	1	KA-0558-1XS	RING SEAL
367	1	W023-206	SPIROLOX SNAP RING	433	1	S-0280	PLUG
367	1	W58-39	BALL BEARING	433	1	W023-206	SPIROLOX SNAP RING
367	1	W62-26-16	DOUBLE LIP SEAL	433	1	W58-39	BALL BEARING
367	2	X-0921	CROWNED ROLLER BRGN	433	1	W62-26-16	DOUBLE LIP SEAL
				433	2	X-0921	CROWNED ROLLER BRGN
383	1	KA-0558-1XS	RING SEAL				
383	1	S-0280	PLUG	467	1	KA-0558-1XS	RING SEAL
383	1	W023-206	SPIROLOX SNAP RING	467	1	S-0280	PLUG
383	1	W58-39	BALL BEARING	467	1	W023-206	SPIROLOX SNAP RING
383	1	W62-26-16	DOUBLE LIP SEAL	467	1	W58-39	BALL BEARING
383	2	X-0921	CROWNED ROLLER BRGN	467	1	W62-26-16	DOUBLE LIP SEAL
				467	2	X-0921	CROWNED ROLLER BRGN
386	1	KA-0558-1XS	RING SEAL				
386	1	S-0280	PLUG	483	1	KA-0558-1XS	RING SEAL
386	1	W023-206	SPIROLOX SNAP RING	483	1	S-0280	PLUG
386	1	W58-39	BALL BEARING	483	1	W023-206	SPIROLOX SNAP RING
386	1	W62-26-16	DOUBLE LIP SEAL	483	1	W58-39	BALL BEARING
386	2	X-0921	CROWNED ROLLER BRGN	483	1	W62-26-16	DOUBLE LIP SEAL
				483	2	X-0921	CROWNED ROLLER BRGN
390	1	KA-0558-1XS	RING SEAL				
390	1	S-0280	PLUG	486	1	KA-0558-1XS	RING SEAL
390	1	W023-206	SPIROLOX SNAP RING	486	1	S-0280	PLUG
390	1	W58-39	BALL BEARING	486	1	W023-206	SPIROLOX SNAP RING
390	1	W62-26-16	DOUBLE LIP SEAL	486	1	W58-39	BALL BEARING
390	2	X-0921	CROWNED ROLLER BRGN	486	1	W62-26-16	DOUBLE LIP SEAL
				486	2	X-0921	CROWNED ROLLER BRGN
394	1	KA-0558-1XS	RING SEAL				
394	1	S-0280	PLUG	490	1	KA-0558-1XS	RING SEAL
394	1	W023-206	SPIROLOX SNAP RING	490	1	S-0280	PLUG
394	1	W58-39	BALL BEARING	490	1	W023-206	SPIROLOX SNAP RING
394	1	W62-26-16	DOUBLE LIP SEAL	490	1	W58-39	BALL BEARING
394	2	X-0921	CROWNED ROLLER BRGN	490	1	W62-26-16	DOUBLE LIP SEAL

PERMCO MODEL: 3100

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>
490	2	X-0921	CROWNED ROLLER BRGN	583	1	W58-39	BALL BEARING
				583	1	W62-26-16	DOUBLE LIP SEAL
494	1	KA-0558-1XS	RING SEAL	583	2	X-0921	CROWNED ROLLER BRGN
494	1	S-0280	PLUG				
494	1	W023-206	SPIROLOX SNAP RING	586	1	KA-0558-1XS	RING SEAL
494	1	W58-39	BALL BEARING	586	2	L-0280-K	CHECK VALVE ASSY
494	1	W62-26-16	DOUBLE LIP SEAL	586	1	W023-206	SPIROLOX SNAP RING
494	2	X-0921	CROWNED ROLLER BRGN	586	1	W58-39	BALL BEARING
				586	1	W62-26-16	DOUBLE LIP SEAL
				586	2	X-0921	CROWNED ROLLER BRGN
499	1	KA-0558-1XS	RING SEAL				
499	1	S-0280	PLUG				
499	1	W023-206	SPIROLOX SNAP RING	590	1	KA-0558-1XS	RING SEAL
499	1	W58-39	BALL BEARING	590	2	L-0280-K	CHECK VALVE ASSY
499	1	W62-26-16	DOUBLE LIP SEAL	590	1	W023-206	SPIROLOX SNAP RING
499	2	X-0921	CROWNED ROLLER BRGN	590	1	W58-39	BALL BEARING
				590	1	W62-26-16	DOUBLE LIP SEAL
				590	2	X-0921	CROWNED ROLLER BRGN
500	1	KA-0558-1XS	3000 EXTRA SERV RING SEAL				
500	2	L-0280-K	2500 3700 3000 5000 7500CK				
500	1	W023-206	SPIROLOX SNAP RING	594	1	KA-0558-1XS	RING SEAL
500	1	W58-39	1200 3000 BALL BEARING	594	2	L-0280-K	CHECK VALVE ASSY
500	1	W62-26-16	3000 5000 DOUBLE LIP SEAL	594	1	W023-206	SPIROLOX SNAP RING
500	2	X-0921	3000 CRWND ROLLER BRGN	594	1	W58-39	BALL BEARING
				594	1	W62-26-16	DOUBLE LIP SEAL
				594	2	X-0921	CROWNED ROLLER BRGN
531	1	KA-0558-1XS	RING SEAL				
531	2	L-0280-K	CHECK VALVE ASSY				
531	1	W023-206	SPIROLOX SNAP RING	599	1	KA-0558-1XS	RING SEAL
531	1	W58-39	BALL BEARING	599	2	L-0280-K	CHECK VALVE ASSY
531	1	W62-26-16	DOUBLE LIP SEAL	599	1	W023-206	SPIROLOX SNAP RING
531	2	X-0921	CROWNED ROLLER BRGN	599	1	W58-39	BALL BEARING
				599	1	W62-26-16	DOUBLE LIP SEAL
				599	2	X-0921	CROWNED ROLLER BRGN
533	1	KA-0558-1XS	RING SEAL				
533	2	L-0280-K	CHECK VALVE ASSY				
533	1	W023-206	SPIROLOX SNAP RING	731	1	KA-0558-1XS	RING SEAL
533	1	W58-39	BALL BEARING	731	2	L-0280-K	CHECK VALVE ASSY
533	1	W62-26-16	DOUBLE LIP SEAL	731	1	W0-17	PIPE PLUG
533	2	X-0921	CROWNED ROLLER BRGN	731	1	W023-206	SPIROLOX SNAP RING
				731	1	W58-39	BALL BEARING
				731	1	W62-49-9	HP SEAL
567	1	KA-0558-1XS	RING SEAL				
567	2	L-0280-K	CHECK VALVE ASSY				
567	1	W023-206	SPIROLOX SNAP RING	731	2	X-0921	CROWNED ROLLER BRGN
567	1	W58-39	BALL BEARING	731	1	ZD-0558	SEAL RETAINER
567	1	W62-26-16	DOUBLE LIP SEAL				
567	2	X-0921	CROWNED ROLLER BRGN	767	1	KA-0558-1XS	RING SEAL
				767	2	L-0280-K	CHECK VALVE ASSY
				767	1	W0-17	PIPE PLUG
583	1	KA-0558-1XS	RING SEAL	767	1	W023-206	SPIROLOX SNAP RING
583	2	L-0280-K	CHECK VALVE ASSY	767	1	W58-39	BALL BEARING
583	1	W023-206	SPIROLOX SNAP RING	767	1	W62-49-9	HP SEAL

PERMCO MODEL: 3100

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>
767	2	X-0921	CROWNED ROLLER BRGN	831	1	400-00682	BEARING SPACER
767	1	ZD-0558	SEAL RETAINER	831	1	KA-0558-1XS	RING SEAL
				831	2	L-0280-K	CHECK VALVE ASSY
783	1	KA-0558-1XS	RING SEAL	831	1	W0-17	PIPE PLUG
783	2	L-0280-K	CHECK VALVE ASSY	831	1	W023-206	SPIROLOX SNAP RING
783	1	W0-17	PIPE PLUG	831	1	W62-49-9	HP SEAL
783	1	W023-206	SPIROLOX SNAP RING	831	2	X-0921	CROWNED ROLLER BRGN
783	1	W58-39	BALL BEARING				
783	1	W62-49-9	HP SEAL	867	1	400-00682	BEARING SPACER
783	2	X-0921	CROWNED ROLLER BRGN	867	1	KA-0558-1XS	RING SEAL
783	1	ZD-0558	SEAL RETAINER	867	2	L-0280-K	CHECK VALVE ASSY
				867	1	W0-17	PIPE PLUG
786	1	KA-0558-1XS	RING SEAL	867	1	W023-206	SPIROLOX SNAP RING
786	2	L-0280-K	CHECK VALVE ASSY	867	1	W62-49-9	HP SEAL
786	1	W0-17	PIPE PLUG	867	2	X-0921	CROWNED ROLLER BRGN
786	1	W023-206	SPIROLOX SNAP RING				
786	1	W58-39	BALL BEARING	883	1	400-00682	BEARING SPACER
786	1	W62-49-9	HP SEAL	883	1	KA-0558-1XS	RING SEAL
786	2	X-0921	CROWNED ROLLER BRGN	883	2	L-0280-K	CHECK VALVE ASSY
786	1	ZD-0558	SEAL RETAINER	883	1	W0-17	PIPE PLUG
				883	1	W023-206	SPIROLOX SNAP RING
790	1	KA-0558-1XS	RING SEAL	883	1	W62-49-9	HP SEAL
790	2	L-0280-K	CHECK VALVE ASSY	883	2	X-0921	CROWNED ROLLER BRGN
790	1	W0-17	PIPE PLUG				
790	1	W023-206	SPIROLOX SNAP RING	885	1	558-00498-SR	SEAL RETNR TYPE II MOTOR
790	1	W58-39	BALL BEARING	885	1	KA-0558-1XS	RING SEAL
790	1	W62-49-9	HP SEAL	885	2	L-0280-K	CHECK VALVE ASSY
790	2	X-0921	CROWNED ROLLER BRGN	885	1	W023-206	SPIROLOX SNAP RING
790	1	ZD-0558	SEAL RETAINER	885	1	W62-49-9	HP SEAL
				885	2	X-0921	CROWNED ROLLER BRGN
794	1	KA-0558-1XS	RING SEAL				
794	2	L-0280-K	CHECK VALVE ASSY	886	1	400-00682	BEARING SPACER
794	1	W0-17	PIPE PLUG	886	1	KA-0558-1XS	RING SEAL
794	1	W023-206	SPIROLOX SNAP RING	886	2	L-0280-K	CHECK VALVE ASSY
794	1	W58-39	BALL BEARING	886	1	W0-17	PIPE PLUG
794	1	W62-49-9	HP SEAL	886	1	W023-206	SPIROLOX SNAP RING
794	2	X-0921	CROWNED ROLLER BRGN	886	1	W62-49-9	HP SEAL
794	1	ZD-0558	SEAL RETAINER	886	2	X-0921	CROWNED ROLLER BRGN
799	1	KA-0558-1XS	RING SEAL	890	1	400-00682	BEARING SPACER
799	2	L-0280-K	CHECK VALVE ASSY	890	1	KA-0558-1XS	RING SEAL
799	1	W0-17	PIPE PLUG	890	2	L-0280-K	CHECK VALVE ASSY
799	1	W023-206	SPIROLOX SNAP RING	890	1	W0-17	PIPE PLUG
799	1	W58-39	BALL BEARING	890	1	W023-206	SPIROLOX SNAP RING
799	1	W62-49-9	HP SEAL	890	1	W62-49-9	HP SEAL
799	2	X-0921	CROWNED ROLLER BRGN	890	2	X-0921	CROWNED ROLLER BRGN
799	1	ZD-0558	SEAL RETAINER				

PERMCO MODEL: 3100

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>
894	1	400-00682	BEARING SPACER
894	1	KA-0558-1XS	RING SEAL
894	2	L-0280-K	CHECK VALVE ASSY
894	1	W0-17	PIPE PLUG
894	1	W023-206	SPIROLOX SNAP RING
894	1	W62-49-9	HP SEAL
894	2	X-0921	CROWNED ROLLER BRGN

TELL-TALE BREAKDOWN

1	W62-26-18	DOUBLE LIP SEAL (OUTER)
1	MZ-0961-1	SEAL-RETAINER (TELL-TALE)
1	K-2995-109	QUAD RING
1	W023-206	SNAP RING
1	W0-19	1/8"NPT PIPE PLUG

OPTIONAL TELL-TALE SEALS

1	W62-49-11	MOTOR SEAL (OUTER)
1	W62-34-18	VITON DOUBLE LIP SEAL (OUTER)

PERMCO MODEL: 3100

Port 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>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
AD	1	WZ-0592D	BLANK & BLANK SINGLE	GL	1	WZ-0592-RP-5SD	3/4NPT SIDE & 1 1/4NPT XSD
AH	1	WZ-0592D	BLANK & BLANK MULT	GX	1	WZ-0592-302D	3/4JIC & 1JIC MULT XSD
AX	1	WZ-0592D	BLANK & BLANK MULT XSD	HM	1	WZ-0592-RP-63D	1JIC REAR & 1 1/4JIC SINGLE
BD	1	WZ-0592-57D	3/4JIC & BLANK SINGLE	HN	1	WZ-0592-RP-63D	1JIC REAR & 1 1/4JIC MULT
BH	1	WZ-0592-57D	3/4JIC & BLANK MULT	HO	1	WZ-0592-RP-63D	1JIC REAR & 1 1/4JIC XSD
BX	1	WZ-0592-57D	3/4JIC & BLANK MULT XSD	HP	1	WZ-0592-RP-63SD	1JIC SIDE & 1 1/4JIC SINGLE
CA	1	WZ-0592-RP-60D	1 1/4JIC REAR & BLANK SINGLE	HQ	1	WZ-0592-RP-63SD	1JIC SIDE & 1 1/4JIC MULT
CB	1	WZ-0592-RP-60D	1 1/4JIC REAR & BLANK MULT	HR	1	WZ-0592-RP-63SD	1JIC SIDE & 1 1/4JIC XSD
CC	1	WZ-0592-RP-60D	1 1/4JIC REAR & BLANK XSD	ID	1	WZ-0592-301D	1JIC & 1JIC SINGLE
CD	1	WZ-0592-79D	BLANK & 3/4JIC SINGLE	IF	1	WZ-0592-23D	1 & 3/4NPT-REAR SINGLE
CE	1	WZ-0592-RP-60SD	1 1/4JIC SIDE & BLANK SINGLE	IG	1	WZ-0592-23D	1 & 3/4NPT-REAR MULT
CH	1	WZ-0592-79D	BLANK & 3/4JIC MULT	IH	1	WZ-0592-301D	1JIC & 1JIC MULT
CM	1	WZ-0592-RP-60SD	1 1/4JIC SIDE & BLANK MULT	II	1	WZ-0592-23D	1 & 3/4NPT-SIDE XSD
CN	1	WZ-0592-RP-60SD	1 1/4JIC SIDE & BLANK XSD	IJ	1	WZ-0592-RP-3SD	1 & 3/4NPT-SIDE SINGLE
CX	1	WZ-0592-79D	BLANK & 3/4JIC MULT XSD	IK	1	WZ-0592-RP-3SD	1 & 3/4NPT-SIDE MULT
DA	1	WZ-0592-RP-60D	BLANK REAR & 1 1/4JIC SINGLE	IL	1	WZ-0592-RP-3SD	1 & 3/4NPT-REAR XSD
DB	1	WZ-0592-RP-60D	BLANK REAR & 1 1/4JIC MULT	IM	1	592-00912D	PEC W/RELIEF SINGLE CW EXT DR
DC	1	WZ-0592-RP-60D	BLANK REAR & 1 1/4JIC XSD	IN	1	592-00912D	PEC W/RELIEF MULT CW EXT DR
DE	1	WZ-0592-RP-60SD	BLANK SIDE & 1 1/4JIC SINGLE	IP	1	592-00912D	PEC W/RELIEF XSD CW EXT DR
DL	1	WZ-0592-RP-60SD	BLANK SIDE & 1 1/4JIC MULT	IR	1	592-00912D	PEC W/RELIEF SINGLE CCW EXT DR
DM	1	WZ-0592-RP-60SD	BLANK SIDE & 1 1/4JIC XSD	IS	1	592-00912D	PEC W/RELIEF MULT CCW EXT DR
ED	1	WZ-0592-58D	3/4JIC & 3/4JIC REAR SINGLE	IT	1	592-00912D	PEC W/RELIEF XSD CCW EXT DR
EH	1	WZ-0592-58D	3/4JIC & 3/4JIC REAR MULT.	IX	1	WZ-0592-301D	1JIC & 1JIC MULT XSD
EX	1	WZ-0592-58D	3/4JIC & 3/4JIC REAR XSD	JD	1	WZ-0592-1D	3/4NPT & BLANK SINGLE
FD	1	WZ-0592-303D	1JIC & 3/4JIC SINGLE	JF	1	WZ-0592-RP-7D	1NPT REAR & 1NPT SINGLE
FF	1	WZ-0592-22D	3/4 & 1 NPT-REAR SINGLE	JG	1	WZ-0592-RP-7D	1NPT REAR & 1NPT MULT
FG	1	WZ-0592-22D	3/4 & 1 NPT-REAR MULT	JH	1	WZ-0592-1D	3/4NPT & BLANK MULT
FH	1	WZ-0592-303D	1 JIC & 3/4JIC MULT	JI	1	WZ-0592-RP-7D	1NPT REAR & 1NPT XSD
FI	1	WZ-0592-22D	3/4 & 1 NPT-REAR XSD	JJ	1	WZ-0592-RP-7SD	1NPT SIDE & 1NPT SINGLE
FJ	1	WZ-0592-RP-3SD	3/4 & 1 NPT-SIDE SINGLE	JK	1	WZ-0592-RP-7SD	1NPT SIDE & 1NPT MULT
FK	1	WZ-0592-RP-3SD	3/4 & 1 NPT-SIDE MULT	JL	1	WZ-0592-RP-7SD	1NPT SIDE & 1NPT XSD
FL	1	WZ-0592-RP-3SD	3/4 & 1 NPT-SIDE XSD	JN	1	CB-0574-24D	PB 3000/3000 3000/5000 CW
FX	1	WZ-0592-303D	1 JIC & 3/4JIC MULT XSD	JX	1	WZ-0592-1D	3/4NPT & BLANK MULT XSD
GD	1	WZ-0592-302D	3/4JIC & 1JIC SINGLE	KD	1	WZ-0592-21D	BLANK & 3/4NPT SINGLE
GF	1	WZ-0592-RP-5D	3/4NPT REAR & 1 1/4NPT SGL	KF	1	WZ-0592-RP-9D	1NPT REAR & 1 1/4NPT SINGLE
GG	1	WZ-0592-RP-5D	3/4NPT REAR & 1 1/4NPT MULT	KG	1	WZ-0592-RP-9D	1NPT REAR & 1 1/4NPT MULT
GH	1	WZ-0592-302D	3/4JIC & 1JIC MULT	KH	1	WZ-0592-21D	BLANK & 3/4NPT MULT
GI	1	WZ-0592-RP-5D	3/4NPT REAR & 1 1/4NPT XSD	KI	1	WZ-0592-RP-9D	1NPT REAR & 1 1/4NPT XSD
GJ	1	WZ-0592-RP-5SD	3/4NPT SIDE & 1 1/4NPT SGL	KJ	1	WZ-0592-RP-9SD	1NPT SIDE & 1 1/4NPT SINGLE
GK	1	WZ-0592-RP-5SD	3/4NPT SIDE & 1 1/4NPT MULT	KK	1	WZ-0592-RP-9SD	1NPT SIDE & 1 1/4NPT MULT

PERMCO MODEL: 3100

Port End Covers

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
KL	1	WZ-0592-RP-9SD	1NPT SIDE & 1 1/4NPT XSD	NJ	1	WZ-0592-RP-9SD	1 1/4NPT SIDE & 1NPT MULT
KN	1	CB-0574-24D	PB 3000/3000 3000/5000 CCW	NK	1	WZ-0592-RP-9SD	1 1/4NPT SIDE & 1NPT XSD
KP	1	WZ-0592-RP-61D	1 1/4JIC REAR & 3/4JIC SGL	NM	1	WZ-0592-RP-67D	1 1/4JIC REAR & 1 1/4JIC SGL
KQ	1	WZ-0592-RP-61D	1 1/4JIC REAR & 3/4JIC MULT	NN	1	WZ-0592-RP-67D	1 1/4JIC REAR & 1 1/4JIC MLT
KR	1	WZ-0592-RP-61D	1 1/4JIC REAR & 3/4JIC XSD	NO	1	WZ-0592-RP-67D	1 1/4JIC REAR & 1 1/4JIC XSD
KS	1	WZ-0592-RP-61SD	1 1/4JIC SIDE & 3/4JIC SGL	NP	1	WZ-0592-RP-67SD	1 1/4JIC SIDE & 1 1/4JIC SGL
KT	1	WZ-0592-RP-61SD	1 1/4JIC SIDE & 3/4JIC MULT	NQ	1	WZ-0592-RP-67SD	1 1/4JIC SIDE & 1 1/4JIC MLT
KU	1	WZ-0592-RP-61SD	1 1/4JIC SIDE & 3/4JIC XSD	NR	1	WZ-0592-RP-67SD	1 1/4JIC SIDE & 1 1/4JIC XSD
KX	1	WZ-0592-21D	BLANK & 3/4NPT MULT XSD	OF	1	WZ-0592-RP-11D	1 1/4NPT REAR & 1 1/4NPT SGL
LD	1	WZ-0592-2D	3/4NPT & 3/4NPT SINGLE	OG	1	WZ-0592-RP-11D	1 1/4NPT REAR & 1 1/4NPT MLT
LH	1	WZ-0592-2D	3/4NPT & 3/4NPT MULT	OH	1	WZ-0592-RP-11D	1 1/4NPT REAR & 1 1/4NPT XSD
LN	1	CB-0574-24D	PB 3000/3000 3000/5000 BIRO	OI	1	WZ-0592-RP-11SD	1 1/4NPT SIDE & 1 1/4NPT SGL
LP	1	WZ-0592-RP-65D	1 1/4JIC REAR & 7/8JIC SGL	OJ	1	WZ-0592-RP-11SD	1 1/4NPT SIDE & 1 1/4NPT MLT
LQ	1	WZ-0592-RP-65D	1 1/4JIC REAR & 7/8JIC MULT	OK	1	WZ-0592-RP-11SD	1 1/4NPT SIDE & 1 1/4NPT XSD
LR	1	WZ-0592-RP-65D	1 1/4JIC REAR & 7/8JIC XSD	OM	1	592-00912D	PEC W/RELIEF SINGLE CW INT DR
LS	1	WZ-0592-RP-65SD	1 1/4JIC SIDE & 7/8JIC SGL	ON	1	592-00912D	PEC W/RELIEF MULT CW INT DR
LT	1	WZ-0592-RP-65SD	1 1/4JIC SIDE & 7/8JIC MULT	OP	1	592-00912D	PEC W/RELIEF XSD CW INT DR
LU	1	WZ-0592-RP-65SD	1 1/4JIC SIDE & 7/8JIC XSD	OR	1	592-00912D	PEC W/RELIEF SINGLE CCW INT DR
LX	1	WZ-0592-2D	3/4NPT & 3/4NPT MULT XSD	OS	1	592-00912D	PEC W/RELIEF MULT CCW INT DR
LZ	1	VA-0574-24D	DR PB FEMALE 2 BOLT A 7/8-13	OT	1	592-00912D	PEC W/RELIEF XSD CCW INT DR
MD	1	WZ-0592-3D	1 NPT X 1 NPT OB SINGLE	VF	1	WZ-0592-16D	1NPT REAR & BLANK SINGLE
ME	1	WZ-0592-RP-5D	1 1/4NPT REAR & 3/4NPT XSD	VG	1	WZ-0592-16D	1NPT REAR & BLANK MULT
MF	1	WZ-0592-RP-5D	1 1/4NPT REAR & 3/4NPT SGL	VH	1	WZ-0592-16D	1NPT REAR & BLANK XSD
MG	1	WZ-0592-RP-5D	1 1/4NPT REAR & 3/4NPT MULT	VI	1	WZ-0592-RP-16SD	1NPT SIDE & BLANK SINGLE
MH	1	WZ-0592-3D	1 NPT & 1 NPT MULT	VJ	1	WZ-0592-RP-16SD	1NPT SIDE & BLANK MULT
MI	1	WZ-0592-RP-5SD	1 1/4NPT SIDE & 3/4NPT SGL	VK	1	WZ-0592-RP-16SD	1NPT SIDE & BLANK XSD
MJ	1	WZ-0592-RP-5SD	1 1/4NPT SIDE & 3/4NPT MULT	VM	1	WZ-0592-RP-61D	3/4JIC REAR & 1 1/4JIC SGL
MK	1	WZ-0592-RP-5SD	1 1/4NPT SIDE & 3/4NPT XSD	VN	1	WZ-0592-RP-61D	3/4JIC REAR & 1 1/4JIC MULT
MM	1	WZ-0592-RP-63D	1 1/4JIC REAR & 1JIC SINGLE	VO	1	WZ-0592-RP-61D	3/4JIC REAR & 1 1/4JIC XSD
MN	1	WZ-0592-RP-63D	1 1/4JIC REAR & 1JIC MULT	VP	1	WZ-0592-RP-61SD	3/4JIC SIDE & 1 1/4JIC SGL
MO	1	WZ-0592-RP-63D	1 1/4JIC REAR & 1JIC XSD	VQ	1	WZ-0592-RP-61SD	3/4JIC SIDE & 1 1/4JIC MULT
MP	1	WZ-0592-RP-63SD	1 1/4JIC SIDE & 1JIC SINGLE	VR	1	WZ-0592-RP-61SD	3/4JIC SIDE & 1 1/4JIC XSD
MQ	1	WZ-0592-RP-63SD	1 1/4JIC SIDE & 1JIC MULT	WF	1	WZ-0592-16D	BLANK REAR & 1NPT SINGLE
MR	1	WZ-0592-RP-63SD	1 1/4JIC SIDE & 1JIC XSD	WG	1	WZ-0592-16D	BLANK REAR & 1NPT MULT
MX	1	WZ-0592-3D	1 NPT & 1 NPT XSD	WH	1	WZ-0592-16D	BLANK REAR & 1NPT XSD
MZ	1	VA-0574-24D	DR PB FEMALE 2 BOLT A 5/8-9	WI	1	WZ-0592-RP-16SD	BLANK SIDE & 1NPT SINGLE
NF	1	WZ-0592-RP-9D	1 1/4NPT REAR & 1NPT SINGLE	WJ	1	WZ-0592-RP-16SD	BLANK SIDE & 1NPT MULT
NG	1	WZ-0592-RP-9D	1 1/4NPT REAR & 1NPT MULT	WK	1	WZ-0592-RP-16SD	BLANK SIDE & 1NPT XSD
NH	1	WZ-0592-RP-9D	1 1/4NPT REAR & 1NPT XSD	XF	1	WZ-0592-RP-20D	1 1/4NPT REAR & BLANK SINGLE
NI	1	WZ-0592-RP-9SD	1 1/4NPT SIDE & 1NPT SINGLE	XG	1	WZ-0592-RP-20D	1 1/4NPT REAR & BLANK MULT

PERMCO MODEL: 3100

Port 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>
XH	1	WZ-0592-RP-20D	1 1/4NPT REAR & BLANK XSD
XI	1	WZ-0592-RP-20SD	1 1/4NPT SIDE & BLANK SINGLE
XJ	1	WZ-0592-RP-20SD	1 1/4NPT SIDE & BLANK MULT
XK	1	WZ-0592-RP-20SD	1 1/4NPT SIDE & BLANK XSD
YF	1	WZ-0592-RP-20D	BLANK REAR & 1 1/4NPT SINGLE
YG	1	WZ-0592-RP-20D	BLANK REAR & 1 1/4NPT MULT
YH	1	WZ-0592-RP-20D	BLANK REAR & 1 1/4NPT XSD
YI	1	WZ-0592-RP-20SD	BLANK SIDE & 1 1/4NPT SINGLE
YJ	1	WZ-0592-RP-20SD	BLANK SIDE & 1 1/4NPT MULT
YK	1	WZ-0592-RP-20SD	BLANK SIDE & 1 1/4NPT XSD

PERMCO MODEL: 3000

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>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	1	KA-0558-1XS	RING SEAL	IR	1	400-00684	BALL RETAINER
	2	X-0921	CROWNED ROLLER BRNG	IR	1	400-00688	SPRING
	1	Z-1967-45-2	PERMCO NAME TAG	IR	1	400-00691	SPRING HOUSING
IM	1	400-00684	BALL RETAINER	IR	2	400-00699	SPRING RETAINER
IM	1	400-00688	SPRING	IR	1	400-00705	BALL
IM	1	400-00691	SPRING HOUSING	IR	1	400-00719	O' RING
IM	2	400-00699	SPRING RETAINER	IR	1	400-00838	COMPRESSION WASHER
IM	1	400-00705	BALL	IR	1	400-00864	BALL SEAT
IM	1	400-00719	O' RING	IR	1	400-00867	O-RING
IM	1	400-00838	COMPRESSION WASHER	IR	1	400-00994	DM 400 RELIEF VALVE CAP
IM	1	400-00864	BALL SEAT	IR	2	KA-0558-1XS	RING SEAL
IM	1	400-00867	O-RING	IR	1	W0-2	1/2 PIPE PLUG
IM	1	400-00994	DM 400 RELIEF VALVE CAP	IR	2	X-0921	CROWNED ROLLER BEARING
IM	2	KA-0558-1XS	RING SEAL	IS	1	400-00684	BALL RETAINER
IM	1	W0-2	1/2 PIPE PLUG	IS	1	400-00688	SPRING
IM	2	X-0921	CROWNED ROLLER BEARING	IS	1	400-00691	SPRING HOUSING
				IS	2	400-00699	SPRING RETAINER
IN	1	400-00684	BALL RETAINER	IS	1	400-00705	BALL
IN	1	400-00688	SPRING	IS	1	400-00719	O' RING
IN	1	400-00691	SPRING HOUSING	IS	1	400-00838	COMPRESSION WASHER
IN	2	400-00699	SPRING RETAINER	IS	1	400-00864	BALL SEAT
IN	1	400-00705	BALL	IS	1	400-00867	O-RING
IN	1	400-00719	O' RING	IS	1	400-00994	DM 400 RELIEF VALVE CAP
IN	1	400-00838	COMPRESSION WASHER	IS	2	KA-0558-1XS	RING SEAL
IN	1	400-00864	BALL SEAT	IS	1	W0-2	1/2 PIPE PLUG
IN	1	400-00867	O-RING	IS	2	X-0921	CROWNED ROLLER BEARING
IN	1	400-00994	DM 400 RELIEF VALVE CAP				
IN	2	KA-0558-1XS	RING SEAL	IT	1	400-00684	BALL RETAINER
IN	1	W0-2	1/2 PIPE PLUG	IT	1	400-00688	SPRING
IN	2	X-0921	CROWNED ROLLER BEARING	IT	1	400-00691	SPRING HOUSING
				IT	2	400-00699	SPRING RETAINER
IP	1	400-00684	BALL RETAINER	IT	1	400-00705	BALL
IP	1	400-00688	SPRING	IT	1	400-00719	O' RING
IP	1	400-00691	SPRING HOUSING	IT	1	400-00838	COMPRESSION WASHER
IP	2	400-00699	SPRING RETAINER	IT	1	400-00864	BALL SEAT
IP	1	400-00705	BALL	IT	1	400-00867	O-RING
IP	1	400-00719	O' RING	IT	1	400-00994	DM 400 RELIEF VALVE CAP
IP	1	400-00838	COMPRESSION WASHER	IT	2	KA-0558-1XS	RING SEAL
IP	1	400-00864	BALL SEAT	IT	1	W0-2	1/2 PIPE PLUG
IP	1	400-00867	O-RING	IT	2	X-0921	CROWNED ROLLER BEARING
IP	1	400-00994	DM 400 RELIEF VALVE CAP				
IP	2	KA-0558-1XS	RING SEAL	JN	1	KA-0558-1XS	RING SEAL
IP	1	W0-2	1/2 PIPE PLUG	JN	1	S-0280	PLUG
IP	2	X-0921	CROWNED ROLLER BEARING	JN	2	W1-29	CAP SCREW
				JN	2	W2-0	LOCK WASHER
				JN	1	W62-26-16	DOUBLE LIP SEAL

PERMCO MODEL: 3000

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>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
JN	2	X-0921	CROWNED ROLLER BRGN	OM	1	400-00867	O-RING
JN	1	Z-1967-45-2	PERMCO NAME TAG	OM	1	400-00994	DM 400 RELIEF VALVE CAP
KN	1	KA-0558-1XS	RING SEAL	OM	2	KA-0558-1XS	RING SEAL
KN	1	S-0280	PLUG	OM	1	W0-5	1"NPT PIPE PLUG
KN	2	W1-29	CAP SCREW	OM	2	X-0921	CROWNED ROLLER BEARING
KN	2	W2-0	LOCK WASHER	ON	1	400-00684	BALL RETAINER
KN	1	W62-26-16	DOUBLE LIP SEAL	ON	1	400-00688	SPRING
KN	2	X-0921	CROWNED ROLLER BRGN	ON	1	400-00691	SPRING HOUSING
KN	1	Z-1967-45-2	PERMCO NAME TAG	ON	2	400-00699	SPRING RETAINER
LN	1	KA-0558-1XS	RING SEAL	ON	1	400-00705	BALL
LN	2	L-0280-K	CHECK VALVE ASSY	ON	1	400-00719	O' RING
LN	2	W1-29	CAP SCREW	ON	1	400-00838	COMPRESSION WASHER
LN	2	W2-0	LOCK WASHER	ON	1	400-00864	BALL SEAT
LN	1	W62-26-16	DOUBLE LIP SEAL	ON	1	400-00867	O-RING
LN	2	X-0921	CROWNED ROLLER BRGN	ON	1	400-00994	DM 400 RELIEF VALVE CAP
LN	2	X-0921	CROWNED ROLLER BRGN	ON	2	KA-0558-1XS	RING SEAL
LN	1	Z-1967-45-2	PERMCO NAME TAG	ON	1	W0-5	1"NPT PIPE PLUG
LZ	2	900-00328-IWN	INTERNAL WRENCH NUT	ON	2	X-0921	CROWNED ROLLER BEARING
LZ	1	KA-0558-1XS	RING SEAL	OP	1	400-00684	BALL RETAINER
LZ	2	L-0280-K	CHECK VALVE ASS`Y	OP	1	400-00688	SPRING
LZ	1	W023-283	RETAINING RING	OP	1	400-00691	SPRING HOUSING
LZ	1	W58-47	BALL BEARING	OP	2	400-00699	SPRING RETAINER
LZ	1	W62-26-17	DOUBLE LIP SEAL	OP	1	400-00705	BALL
LZ	2	X-0921	CROWNED ROLLER BEARING	OP	1	400-00719	O RING
LZ	1	Z-1967-45-2	PERMCO NAME TAG	OP	1	400-00838	COMPRESSION WASHER
LZ	1	ZB-0022	7/8 FEMALE B SPLINE SHAFT	OP	1	400-00864	BALL SEAT
MZ	2	900-00328-IWN	INTERNAL WRENCH NUT	OP	1	400-00867	O-RING
MZ	1	KA-0558-1XS	RING SEAL	OP	1	400-00994	DM 400 RELIEF VALVE CAP
MZ	2	L-0280-K	CHECK VALVE ASS'Y	OP	2	KA-0558-1XS	RING SEAL
MZ	1	W023-283	RETAINING RING	OP	1	W0-5	1"NPT PIPE PLUG
MZ	1	W58-47	BALL BEARING	OP	2	X-0921	CROWNED ROLLER BEARING
MZ	1	W62-26-17	DOUBLE LIP SEAL	OR	1	400-00684	BALL RETAINER
MZ	2	X-0921	CROWNED ROLLER BRNG	OR	1	400-00688	SPRING
MZ	1	Z-1967-45-2	PERMCO NAME TAG	OR	1	400-00691	SPRING HOUSING
MZ	1	ZJ-0022	5/8 FEMALE A SPLINE SHAFT	OR	2	400-00699	SPRING RETAINER
OM	1	400-00684	BALL RETAINER	OR	1	400-00705	BALL
OM	1	400-00688	SPRING	OR	1	400-00719	O' RING
OM	1	400-00691	SPRING HOUSING	OR	1	400-00838	COMPRESSION WASHER
OM	2	400-00699	SPRING RETAINER	OR	1	400-00864	BALL SEAT
OM	1	400-00705	BALL	OR	1	400-00867	O-RING
OM	1	400-00719	O' RING	OR	1	400-00994	DM 400 RELIEF VALVE CAP
OM	1	400-00838	COMPRESSION WASHER	OR	2	KA-0558-1XS	RING SEAL
OM	1	400-00864	BALL SEAT	OR	1	W0-5	1"NPT PIPE PLUG
OM	1	400-00864	BALL SEAT	OR	2	X-0921	CROWNED ROLLER BEARING

PERMCO MODEL: 3100

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>
OS	1	400-00684	BALL RETAINER
OS	1	400-00688	SPRING
OS	1	400-00691	SPRING HOUSING
OS	2	400-00699	SPRING RETAINER
OS	1	400-00705	BALL
OS	1	400-00719	O' RING
OS	1	400-00838	COMPRESSION WASHER
OS	1	400-00864	BALL SEAT
OS	1	400-00867	O-RING
OS	2	KA-0558-1XS	RING SEAL
OS	1	W0-5	1" PIPE PLUG
OS	2	X-0921	CROWNED ROLLER BEARING
OS	1	400-00994	DM 400 RELIEF VALVE CAP
OT	1	400-00684	BALL RETAINER
OT	1	400-00688	SPRING
OT	1	400-00691	SPRING HOUSING
OT	2	400-00699	SPRING RETAINER
OT	1	400-00705	BALL
OT	1	400-00719	O' RING
OT	1	400-00838	COMPRESSION WASHER
OT	1	400-00864	BALL SEAT
OT	1	400-00867	O-RING
OT	2	KA-0558-1XS	RING SEAL
OT	1	W0-5	1" PIPE PLUG
OT	2	X-0921	CROWNED ROLLER BEARING
OT	1	400-00994	DM 400 RELIEF VALVE CAP

PERMCO MODEL: 3100

Housings

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
DB10	+	1 QZ-0577-10-57D	3/4 JIC	& BLANK	HA20	1	QZ-0577-20-7D	BLANK	& 1 1/4 NPT
DB12		1 QZ-0577-12-57D	3/4 JIC	& BLANK	HA25	1	QZ-0577-25-7D	BLANK	& 1 1/4 NPT
DB15		1 QZ-0577-15-57D	3/4 JIC	& BLANK	HB10	1	QZ-0577-10-1D	3/4 NPT	& BLANK
DB17		1 QZ-0577-17-57D	3/4 JIC	& BLANK	HB12	1	QZ-0577-12-1D	3/4 NPT	& BLANK
DB20		1 QZ-0577-20-57D	3/4 JIC	& BLANK	HB15	1	QZ-0577-15-1D	3/4 NPT	& BLANK
DC10	+	1 QZ-0577-10-57D	BLANK	& 3/4 JIC	HC10	1	QZ-0577-10-1D	BLANK	& 3/4 NPT
DC12		1 QZ-0577-12-57D	BLANK	& 3/4 JIC	HC12	1	QZ-0577-12-1D	BLANK	& 3/4 NPT
DC15		1 QZ-0577-15-57D	BLANK	& 3/4 JIC	HC15	1	QZ-0577-15-1D	BLANK	& 3/4 NPT
DC17		1 QZ-0577-17-57D	BLANK	& 3/4 JIC	HE10	1	QZ-0577-10-2D	3/4 NPT	& 3/4 NPT
DC20		1 QZ-0577-20-57D	BLANK	& 3/4 JIC	HE12	1	QZ-0577-12-2D	3/4 NPT	& 3/4 NPT
DC25		1 QZ-0577-25-57D	BLANK	& 3/4 JIC	HE15	1	QZ-0577-15-2D	3/4 NPT	& 3/4 NPT
DE10	+	1 QZ-0577-10-58D	3/4 JIC	& 3/4 JIC	HE17	1	QZ-0577-17-2D	3/4 NPT	& 3/4 NPT
DE12		1 QZ-0577-12-58D	3/4 JIC	& 3/4 JIC	HE20	1	QZ-0577-20-2D	3/4 NPT	& 3/4 NPT
DE15		1 QZ-0577-15-58D	3/4 JIC	& 3/4 JIC	HE25	1	QZ-0577-25-2D	3/4 NPT	& 3/4 NPT
DE17		1 QZ-0577-17-58D	3/4 JIC	& 3/4 JIC	HF10	1	QZ-0577-10-3D	3/4 NPT	& 1 NPT
DE20		1 QZ-0577-20-58D	3/4 JIC	& 3/4 JIC	HF12	1	QZ-0577-12-3D	3/4 NPT	& 1 NPT
DE25		1 QZ-0577-25-58D	3/4 JIC	& 3/4 JIC	HF15	1	QZ-0577-15-3D	3/4 NPT	& 1 NPT
DF10	+	1 QZ-0577-10-71D	3/4 JIC	& 1 JIC	HF17	1	QZ-0577-17-3D	3/4 NPT	& 1 NPT
DF12		1 QZ-0577-12-71D	3/4 JIC	& 1 JIC	HI10	1	QZ-0577-10-3D	1 NPT	& 3/4 NPT
DF15		1 QZ-0577-15-71D	3/4 JIC	& 1 JIC	HI12	1	QZ-0577-12-3D	1 NPT	& 3/4 NPT
DF17		1 QZ-0577-17-71D	3/4 JIC	& 1 JIC	HI15	1	QZ-0577-15-3D	1 NPT	& 3/4 NPT
DF20		1 QZ-0577-20-71D	3/4 JIC	& 1 JIC	HI17	1	QZ-0577-17-3D	1 NPT	& 3/4 NPT
DF25		1 QZ-0577-25-71D	3/4 JIC	& 1 JIC	HK07	1	QZ-0577-07-14D	1/2 NPT	& BLANK
DG15		1 QZ-0577-15-73D	3/4 JIC	& 1 1/4 JIC	HK10	1	QZ-0577-10-14D	1/2 NPT	& BLANK
DG17		1 QZ-0577-17-73D	3/4 JIC	& 1 1/4 JIC	HL07	1	QZ-0577-07-14D	BLANK	& 1/2 NPT
DI10	+	1 QZ-0577-10-71D	1 JIC	& 3/4 JIC	HL10	1	QZ-0577-10-14D	BLANK	& 1/2 NPT
DI12		1 QZ-0577-12-71D	1 JIC	& 3/4 JIC	HM20	1	QZ-0577-20-76D	3/4 JIC	& 1 1/2 JIC
DI15		1 QZ-0577-15-71D	1 JIC	& 3/4 JIC	HM25	1	QZ-0577-25-76D	3/4 JIC	& 1 1/2 JIC
DI17		1 QZ-0577-17-71D	1 JIC	& 3/4 JIC	HO20	1	QZ-0577-20-76D	1 1/2 JIC	& 3/4 JIC
DI20		1 QZ-0577-20-71D	1 JIC	& 3/4 JIC	HO25	1	QZ-0577-25-76D	1 1/2 JIC	& 3/4 JIC
DI25		1 QZ-0577-25-71D	1 JIC	& 3/4 JIC	HQ07	1	QZ-0577-07-9D	1/2 NPT	& 1/2 NPT
DJ15		1 QZ-0577-15-73D	1 1/4 JIC	& 3/4 JIC	HZ15	1	QZ-0577-15-7D	1 1/4 NPT	& BLANK
DJ17		1 QZ-0577-17-73D	1 1/4 JIC	& 3/4 JIC	HZ17	1	QZ-0577-17-7D	1 1/4 NPT	& BLANK
DK10	+	1 QZ-0577-10-62D	7/8 JIC	& 1 JIC	HZ20	1	QZ-0577-20-7D	1 1/4 NPT	& BLANK
DK12		1 QZ-0577-12-62D	7/8 JIC	& 1 JIC	HZ25	1	QZ-0577-25-7D	1 1/4 NPT	& BLANK
DL10	+	1 QZ-0577-10-62D	1 JIC	& 7/8 JIC	NA12	1	QZ-0577-12-35D	BLANK	& 1 1/4 SF
DL12		1 QZ-0577-12-62D	1 JIC	& 7/8 JIC	NA15	1	QZ-0577-15-35D	BLANK	& 1 1/4 SF
DY12		1 QZ-0577-12-60D	7/8 JIC	& BLANK	NA17	1	QZ-0577-17-35D	BLANK	& 1 1/4 SF
HA15		1 QZ-0577-15-7D	BLANK	& 1 1/4 NPT	NA20	1	QZ-0577-20-35D	BLANK	& 1 1/4 SF
HA17		1 QZ-0577-17-7D	BLANK	& 1 1/4 NPT	NA25	1	QZ-0577-25-35D	BLANK	& 1 1/4 SF

PERMCO MODEL: 3100

Housings

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
NB12	1	QZ-0577-12-32D	1 SF	& BLANK	NL20	1	QZ-0577-20-38D	1 1/4 SF	& 1 1/2 SF
NB15	1	QZ-0577-15-32D	1 SF	& BLANK	NL25	1	QZ-0577-25-38D	1 1/4 SF	& 1 1/2 SF
NB17	1	QZ-0577-17-32D	1 SF	& BLANK	NO17	1	QZ-0577-17-38D	1 1/2 SF	& 1 1/4 SF
NB20	1	QZ-0577-20-32D	1 SF	& BLANK	NO20	1	QZ-0577-20-38D	1 1/2 SF	& 1 1/4 SF
NB25	1	QZ-0577-25-32D	1 SF	& BLANK	NO25	1	QZ-0577-25-38D	1 1/2 SF	& 1 1/4 SF
NC12	1	QZ-0577-12-32D	BLANK	& 1 SF	NT17	1	QZ-0577-17-39D	BLANK	& 1 1/2 SF
NC15	1	QZ-0577-15-32D	BLANK	& 1 SF	NT20	1	QZ-0577-20-39D	BLANK	& 1 1/2 SF
NC17	1	QZ-0577-17-32D	BLANK	& 1 SF	NT25	1	QZ-0577-25-39D	BLANK	& 1 1/2 SF
NC20	1	QZ-0577-20-32D	BLANK	& 1 SF	NZ12	1	QZ-0577-12-35D	1 1/4 SF	& BLANK
NC25	1	QZ-0577-25-32D	BLANK	& 1 SF	NZ15	1	QZ-0577-15-35D	1 1/4 SF	& BLANK
ND17	1	QZ-0577-17-39D	1 1/2 SF	& BLANK	NZ17	1	QZ-0577-17-35D	1 1/4 SF	& BLANK
ND20	1	QZ-0577-20-39D	1 1/2 SF	& BLANK	NZ20	1	QZ-0577-20-35D	1 1/4 SF	& BLANK
ND25	1	QZ-0577-25-39D	1 1/2 SF	& BLANK	NZ25	1	QZ-0577-25-35D	1 1/4 SF	& BLANK
NE10	1	QZ-0577-10-33D	1 SF	& 1 SF	TA25	1	QZ-0577-25-42D	1 SF	& 2 SF
NE12	1	QZ-0577-12-33D	1 SF	& 1 SF	TB10	1	QZ-0577-10-29D	3/4 SF	& BLANK
NE15	1	QZ-0577-15-33D	1 SF	& 1 SF	TB12	1	QZ-0577-12-29D	3/4 SF	& BLANK
NE17	1	QZ-0577-17-33D	1 SF	& 1 SF	TB15	1	QZ-0577-15-29D	3/4 SF	& BLANK
NE20	1	QZ-0577-20-33D	1 SF	& 1 SF	TC10	1	QZ-0577-10-29D	BLANK	& 3/4 SF
NE25	1	QZ-0577-25-33D	1 SF	& 1 SF	TC12	1	QZ-0577-12-29D	BLANK	& 3/4 SF
NF12	1	QZ-0577-12-34D	1 SF	& 1 1/4 SF	TC15	1	QZ-0577-15-29D	BLANK	& 3/4 SF
NF15	1	QZ-0577-15-34D	1 SF	& 1 1/4 SF	TE10	1	QZ-0577-10-30D	3/4 SF	& 3/4 SF
NF17	1	QZ-0577-17-34D	1 SF	& 1 1/4 SF	TF10	1	QZ-0577-10-31D	3/4 SF	& 1 SF
NF20	1	QZ-0577-20-34D	1 SF	& 1 1/4 SF	TF12	1	QZ-0577-12-31D	3/4 SF	& 1 SF
NF25	1	QZ-0577-25-34D	1 SF	& 1 1/4 SF	TF15	1	QZ-0577-15-31D	3/4 SF	& 1 SF
NG17	1	QZ-0577-17-44D	1 SF	& 1 1/2 SF	TF17	1	QZ-0577-17-31D	3/4 SF	& 1 SF
NG20	1	QZ-0577-20-44D	1 SF	& 1 1/2 SF	TF20	1	QZ-0577-20-31D	3/4 SF	& 1 SF
NG25	1	QZ-0577-25-44D	1 SF	& 1 1/2 SF	TF25	1	QZ-0577-25-31D	3/4 SF	& 1 SF
NI12	1	QZ-0577-12-34D	1 1/4 SF	& 1 SF	TG12	1	QZ-0577-12-37D	3/4 SF	& 1 1/4 SF
NI15	1	QZ-0577-15-34D	1 1/4 SF	& 1 SF	TI10	1	QZ-0577-10-31D	1 SF	& 3/4 SF
NI17	1	QZ-0577-17-34D	1 1/4 SF	& 1 SF	TI12	1	QZ-0577-12-31D	1 SF	& 3/4 SF
NI20	1	QZ-0577-20-34D	1 1/4 SF	& 1 SF	TI15	1	QZ-0577-15-31D	1 SF	& 3/4 SF
NI25	1	QZ-0577-25-34D	1 1/4 SF	& 1 SF	TI17	1	QZ-0577-17-31D	1 SF	& 3/4 SF
NJ17	1	QZ-0577-17-44D	1 1/2 SF	& 1 SF	TI20	1	QZ-0577-20-31D	1 SF	& 3/4 SF
NJ20	1	QZ-0577-20-44D	1 1/2 SF	& 1 SF	TI25	1	QZ-0577-25-31D	1 SF	& 3/4 SF
NJ25	1	QZ-0577-25-44D	1 1/2 SF	& 1 SF	TJ12	1	QZ-0577-12-37D	1 1/4 SF	& 3/4 SF
NK15	1	QZ-0577-15-36D	1 1/4 SF	& 1 1/4 SF	TP25	1	QZ-0577-25-42D	2 SF	& 1 SF
NK17	1	QZ-0577-17-36D	1 1/4 SF	& 1 1/4 SF	XA20	1	QZ-0577-20-17D	BLANK	& 1 1/2 NPT
NK20	1	QZ-0577-20-36D	1 1/4 SF	& 1 1/4 SF	XA25	1	QZ-0577-25-17D	BLANK	& 1 1/2 NPT
NK25	1	QZ-0577-25-36D	1 1/4 SF	& 1 1/4 SF	XB10	1	QZ-0577-10-4D	1 NPT	& BLANK
NL17	1	QZ-0577-17-38D	1 1/4 SF	& 1 1/2 SF	XB12	1	QZ-0577-12-4D	1 NPT	& BLANK

PERMCO MODEL: 3100

Housings

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
XB15	1	QZ-0577-15-4D	1 NPT	& BLANK	ZB25	1	QZ-0577-25-63D	1 JIC	& BLANK
XB17	1	QZ-0577-17-4D	1 NPT	& BLANK	ZC10	1	QZ-0577-10-63D	BLANK	& 1 JIC
XC10	1	QZ-0577-10-4D	BLANK	& 1 NPT	ZC12	+	1 QZ-0577-12-63D	BLANK	& 1 JIC
XC12	1	QZ-0577-12-4D	BLANK	& 1 NPT	ZC15	1	QZ-0577-15-63D	BLANK	& 1 JIC
XC15	1	QZ-0577-15-4D	BLANK	& 1 NPT	ZC17	1	QZ-0577-17-63D	BLANK	& 1 JIC
XC17	1	QZ-0577-17-4D	BLANK	& 1 NPT	ZC20	1	QZ-0577-20-63D	BLANK	& 1 JIC
XE12	1	QZ-0577-12-5D	1 NPT	& 1 NPT	ZC25	1	QZ-0577-25-63D	BLANK	& 1 JIC
XE15	1	QZ-0577-15-5D	1 NPT	& 1 NPT	ZD17	'	1 QZ-0577-17-69D	1 1/2 JIC	& BLANK
XE17	1	QZ-0577-17-5D	1 NPT	& 1 NPT	ZD20	+	1 QZ-0577-20-69D	1 1/2 JIC	& BLANK
XE20	1	QZ-0577-20-5D	1 NPT	& 1 NPT	ZD25	1	QZ-0577-25-69D	1 1/2 JIC	& BLANK
XE25	1	QZ-0577-25-5D	1 NPT	& 1 NPT	ZE15	1	QZ-0577-15-64D	1 JIC	& 1 JIC
XF15	'	1 QZ-0577-15-6D	1 NPT	& 1 1/4 NPT	ZE17	1	QZ-0577-17-64D	1 JIC	& 1 JIC
XF17	1	QZ-0577-17-6D	1 NPT	& 1 1/4 NPT	ZE20	1	QZ-0577-20-64D	1 JIC	& 1 JIC
XF20	1	QZ-0577-20-6D	1 NPT	& 1 1/4 NPT	ZE25	1	QZ-0577-25-64D	1 JIC	& 1 JIC
XF25	1	QZ-0577-25-6D	1 NPT	& 1 1/4 NPT	ZF15	'	1 QZ-0577-15-65D	1 JIC	& 1 1/4 JIC
XI15	'	1 QZ-0577-15-6D	1 1/4 NPT	& 1 NPT	ZF17	'	1 QZ-0577-17-65D	1 JIC	& 1 1/4 JIC
XI17	1	QZ-0577-17-6D	1 1/4 NPT	& 1 NPT	ZF20	1	QZ-0577-20-65D	1 JIC	& 1 1/4 JIC
XI20	1	QZ-0577-20-6D	1 1/4 NPT	& 1 NPT	ZF25	1	QZ-0577-25-65D	1 JIC	& 1 1/4 JIC
XI25	1	QZ-0577-25-6D	1 1/4 NPT	& 1 NPT	ZG17	'	1 QZ-0577-17-74D	1 JIC	& 1 1/2 JIC
XK20	1	QZ-0577-20-8D	1 1/4 NPT	& 1 1/4 NPT	ZG20	'	1 QZ-0577-20-74D	1 JIC	& 1 1/2 JIC
XK25	1	QZ-0577-25-8D	1 1/4 NPT	& 1 1/4 NPT	ZG25	1	QZ-0577-25-74D	1 JIC	& 1 1/2 JIC
XL20	'	1 QZ-0577-20-12D	1 1/4 NPT	& 1 1/2 NPT	ZI15	'	1 QZ-0577-15-65D	1 1/4 JIC	& 1 JIC
XL25	1	QZ-0577-25-12D	1 1/4 NPT	& 1 1/2 NPT	ZI17	'	1 QZ-0577-17-65D	1 1/4 JIC	& 1 JIC
XO20	'	1 QZ-0577-20-12D	1 1/2 NPT	& 1 1/4 NPT	ZI20	1	QZ-0577-20-65D	1 1/4 JIC	& 1 JIC
XO25	1	QZ-0577-25-12D	1 1/2 NPT	& 1 1/4 NPT	ZI25	1	QZ-0577-25-65D	1 1/4 JIC	& 1 JIC
XZ20	'	1 QZ-0577-20-17D	1 1/2 NPT	& BLANK	ZJ17	'	1 QZ-0577-17-74D	1 1/2 JIC	& 1 JIC
XZ25	1	QZ-0577-25-17D	1 1/2 NPT	& BLANK	ZJ20	'	1 QZ-0577-20-74D	1 1/2 JIC	& 1 JIC
ZA05	1	QZ-0577-05D	BLANK	& BLANK	ZJ25	1	QZ-0577-25-74D	1 1/2 JIC	& 1 JIC
ZA07	1	QZ-0577-07D	BLANK	& BLANK	ZK17	+	1 QZ-0577-17-67D	1 1/4 JIC	& 1 1/4 JIC
ZA10	1	QZ-0577-10D	BLANK	& BLANK	ZK20	1	QZ-0577-20-67D	1 1/4 JIC	& 1 1/4 JIC
ZA12	1	QZ-0577-12D	BLANK	& BLANK	ZK25	1	QZ-0577-25-67D	1 1/4 JIC	& 1 1/4 JIC
ZA15	1	QZ-0577-15D	BLANK	& BLANK	ZL17	+	1 QZ-0577-17-68D	1 1/4 JIC	& 1 1/2 JIC
ZA17	1	QZ-0577-17D	BLANK	& BLANK	ZL20	'	1 QZ-0577-20-68D	1 1/4 JIC	& 1 1/2 JIC
ZA20	1	QZ-0577-20D	BLANK	& BLANK	ZL25	1	QZ-0577-25-68D	1 1/4 JIC	& 1 1/2 JIC
ZA25	1	QZ-0577-25D	BLANK	& BLANK	ZN15	'	1 QZ-0577-15-66D	BLANK	& 1-1/4 JIC
ZB10	'	1 QZ-0577-10-63D	1 JIC	& BLANK	ZN17	'	1 QZ-0577-17-66D	BLANK	& 1-1/4 JIC
ZB12	+	1 QZ-0577-12-63D	1 JIC	& BLANK	ZO17	+	1 QZ-0577-17-68D	1 1/2 JIC	& 1 1/4 JIC
ZB15	1	QZ-0577-15-63D	1 JIC	& BLANK	ZO20	'	1 QZ-0577-20-68D	1 1/2 JIC	& 1 1/4 JIC
ZB17	1	QZ-0577-17-63D	1 JIC	& BLANK	ZO25	1	QZ-0577-25-68D	1 1/2 JIC	& 1 1/4 JIC
ZB20	1	QZ-0577-20-63D	1 JIC	& BLANK	ZT17	'	1 QZ-0577-17-69D	BLANK	& 1 1/2 JIC

PERMCO MODEL: 3100

Housings

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>	
ZT20	+ 1	QZ-0577-20-69D	BLANK	& 1 1/2 JIC
ZT25	1	QZ-0577-25-69D	BLANK	& 1 1/2 JIC
ZW07	1	QZ-0577-07-61D	1/2 JIC	& 1/2 JIC
ZW10	1	QZ-0577-10-61D	1/2 JIC	& 1/2 JIC
ZX07	1	QZ-0577-07-60D	BLANK	& 1/2 JIC
ZX10	1	QZ-0577-10-60D	BLANK	& 1/2 JIC
ZY07	1	QZ-0577-07-60D	1/2 JIC	& BLANK
ZY10	1	QZ-0577-10-60D	1/2 JIC	& BLANK
ZZ15	' 1	QZ-0577-15-66D	1 1/4 JIC	& BLANK
ZZ17	' 1	QZ-0577-17-66D	1 1/4 JIC	& BLANK

PERMCO MODEL: 3100

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	280-1971-032	3100 5100 DOWEL PIN
	2	TA-2995-242	SQUARE GASKET SEAL
	2	ZZ-0947-TC	TEFLON THRUST PLATE

PERMCO MODEL: 3100

Gear and Shaft Combinations

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
05	1	U-0996L-05	1/2 GEAR SET
07	1	U-0996L-07	3/4 GEAR SET
10	1	U-0996L-10	1 GEAR SET
12	1	U-0996L-12	1 1/4 GEAR SET
15	1	U-0996L-15	1 1/2 GEAR SET
17	1	U-0996L-17	1 3/4 GEAR SET
20	1	U-0996L-20	2 GEAR SET
25	1	U-0996L-25	2 1/2 GEAR SET

PERMCO MODEL: 3100

DRIVE SHAFTS OR GEAR/SHAFTS

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		
03	1	ZE-0022	3000/3000 PB	54	^	1	AC-0024L-2-12	21/3000 G/SH S T2 B SPLN 1-1/4	
11	1	ZC-0022	5000/3000 PB	54	^	1	AC-0024L-2-15	21/3000 G/SH S T2 B SPLN 1-1/2	
12	1	ZG-0022	7500/3000 PB	54	^	1	AC-0024L-2-17	21/3000 G/SH S T2 B SPLN 1-3/4	
14	^	1	AC-0024L-1-05	21/3000 G/SH SET T1 B SPL 1/2	54	^	1	AC-0024L-2-20	21/3000 G/SH S T2 B SPLN
14	^	1	AC-0024L-1-07	21/3000 G/SH SET T1 B SPL 1/2	54	*	1	AC-0024L-4-10	21/3000 G/SH S T2 B SPLN 1
14	^	1	AC-0024L-1-10	21/3000 G/SH SET T1 B SPLN SIN	54		1	AC-0024L-4-12	TYPE II 13T SPLINE SAE B
14	^	1	AC-0024L-1-12	21/3000 G/SH SET T1 B SPLN SIN	54	*	1	AC-0024L-4-15	21/3000 G/SH S T2 B SPLN 1-1/2
14	^	1	AC-0024L-1-15	21/3000 G/SH SET T1 B SPLN SIN	54	*	1	AC-0024L-4-17	21/3000 G/SH S T2 B SPLN 1-3/4
14	^	1	AC-0024L-1-17	21/3000 G/SH SET T1 B SPLN SIN	54	*	1	AC-0024L-4-20	21/3000 G/SH S T2 B SPLN 2
14	^	1	AC-0024L-1-20	21/3000 G/SH SET T1 B SPLN SIN	55	^	1	CC-0024L-2-17	3000 TYP II 7/8 KEYED 1-3/4
14	1	AC-0024L-3-05	21/3000 G/SH S T1 B SPLN 1/2	55		1	CC-0024L-4-10	TYPE II KEYED SAE B	
14	1	AC-0024L-3-07	21/3000 G/SH S T1 B SPLN 3/4	55	*	1	CC-0024L-4-12	TYPE II KEYED SAE B	
14	1	AC-0024L-3-10	TYPE I 13T SPLINE SAE B	56	*	1	DC-0024L-4-17	TYPE II KEYED	
14	1	AC-0024L-3-12	TYPE I 13T SPLINE SAE B	57	*	1	BC-0024L-3-15	OBSOLETE	
14	1	AC-0024L-3-15	TYPE I 13T SPLINE SAE B	57	*	1	BC-0024L-3-17	3000 GEAR/SHAFT SET 1-3/4	
14	1	AC-0024L-3-17	TYPE I 13T SPLINE SAE B	84	^	1	ZF-0024L-1-10	3000 G/S 9 TOOTH 5/8 DIA	
14	1	AC-0024L-3-20	TYPE I 13T SPLINE SAE B	87		1	ZT-0024L-1-15	TYPE I 15T SPLINE SAE BB	
14	^	1	AC-0024L-13-25	TYPE I 13T SPLINE SAE B/SINGLE	87		1	ZT-0024L-1-17	TYPE I 15T SPLINE SAE BB
22	^	1	024-00344-HFS	2-1/2 G/SH FISH PUMP 1 KEYED	87		1	ZT-0024L-1-20	TYPE I 15T SPLINE SAE BB
29	^	1	CC-0024L-1-07	TYPE I KEYED SAE B	87		1	ZT-0024L-3-15	TYPE I 15T SPLINE SAE BB
29	1	CC-0024L-1-15	TYPE I KEYED SAE B	87		1	ZT-0024L-3-17	TYPE I 15T SPLINE SAE	
29	1	CC-0024L-3-07	TYPE I KEYED SAE B	87		1	ZT-0024L-3-20	TYPE I 15T SPLINE SAE BB	
29	1	CC-0024L-3-10	TYPE I KEYED SAE B	89	^	1	GD-0024L-1-10	3000 .875 DIA 5/8 MALE THRD	
29	1	CC-0024L-3-12	TYPE I KEYED SAE B	89	^	1	GD-0024L-1-12	3000 GEAR/SHAFT SET 1-1/4	
29	1	CC-0024L-3-15	TYPE I KEYED SAE B	89	^	1	GD-0024L-1-15	3000 GEAR/SHAFT SET 1-1/2	
29	1	CC-0024L-3-17	TYPE I KEYED SAE B	89	*	1	GD-0024L-3-12	KEYED W/ TREADED END	
29	1	CC-0024L-3-20	TYPE I KEYED SAE B	89	*	1	GD-0024L-3-15	KEYED W/ TREADED END	
29	1	CC-0024L-1-25	TYPE I KEYED SAE B						
32	1	DC-0024L-1-17	3000 G/SH 1 KEYED						
32	^	1	DC-0024L-1-20	3000 G/SH 1 KEYED					
32	1	DC-0024L-3-07	TYPE I KEYED						
32	1	DC-0024L-3-10	TYPE I KEYED						
32	1	DC-0024L-3-12	TYPE I KEYED						
32	1	DC-0024L-3-15	TYPE I KEYED						
32	1	DC-0024L-3-17	TYPE I KEYED						
32	1	DC-0024L-3-20	TYPE I KEYED						
32	1	DC-0024L-1-25	TYPE I KEYED						
54	^	1	AC-0024L-2-10	21/3000 G/SH S T2 B SPLN 1					
54	^	1	AC-0024L-2-07	21/3000 G/SH S T2 B SPLN 3/4					
54	^	1	AC-0024L-2-10	21/3000 G/SH S T2 B SPLN 1					

PERMCO MODEL: 3100

DRIVE SHAFTS OR 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>
C 6	1	ZG-0024	3000 1-1/4 DIA 14T SPLINE				
C00	1	ZQ-0024	3000 1-1/4 DIA. KEYED				
C02	* 1	ZM-0024-1	3000 SHAFT TH'D & KEYED				
C04 / C89	1	ZW-0024	3000 7/8 DIA KEYED W/THD END				
C14	1	ZI-0024	3000 7/8 DIA 13T SPLINE				
C19	1	023-00979	3000 SFT 11T SPLN 1.49 SFT EXT				
C20	1	024-00740	3000 TAPERD W/THREADS				
C21	1	ZP-0024	3000 7/8 DIA TAPERED KEYED				
C22	1	024-00409-HF	CONT.SHAFT FISH PUMP 1 KEYED				
C24	1	ZU-0024	3000 3/4 DIA. KEYED				
C29	1	ZJ-0024	3000 7/8 DIA. KEYED				
C29XL	1	ZJ-0024-XL	3000 7/8 DIA. KEYED EX. LONG				
C32	1	DC-0024	3000 1 DIA KEYED				
C32XL	1	DC-0024-XL	3000 1 DIA KEYED EX. LONG				
C57	1	BC-0024	3000 1 DIA. 6T SPLINE				
C84	1	ZH-0024	3000 5/8 DIA. 9T SPLINE				
C85	1	024-00835	3000 DR SHFT 5/8 KEYED				
C87	1	ZT-0024	3000 1 DIA. 15T SPLINE				
SPL	* 1	C-810135	3000 SHAFT 11 TOOTH				

PERMCO MODEL: 3100

DRIVE SHAFT SMALL PARTS

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
22	1	W09-01	1/4 X 3/8 X 1-3/4 KEY	C19	1	W62-49-11	MOTOR SEAL
				C19	1	W86-100	RETAINER RING
29	1	W09-06	1/4 X 3/8 X 1 KEY	C20	1	SA-0558	SPACER
32	1	W09-02	1/4 X 3/8 X 1-1/4 KEY	C20	1	W86-100	RETAINER RING
				C20	1	ZD-0558	SEAL RETAINER
55	1	W09-06	1/4 X 3/8 X 1 KEY	C20	1	W62-26-18	PUMP SEAL
				C20	1	W62-49-11	MOTOR SEAL
56	1	W09-02	1/4 X 3/8 X 1-1/4 KEY	C20	1	W09-606	KEY, WOODRUFF 606
89	1	W09-03	1/4 X 7/16 X 1 KEY	C21	1	SA-0558	SPACER
				C21	1	W09-505	KEY, WOODRUFF 505
C 6	1	SA-0558	SPACER	C21	1	W62-26-18	PUMP SEAL
C 6	1	W62-26-18	PUMP SEAL	C21	1	W62-49-11	MOTOR SEAL
C 6	1	W62-49-11	MOTOR SEAL	C21	1	W86-100	RETAINER RING
C 6	1	W86-100	RETAINER RING	C21	1	ZD-0558	SEAL RETAINER
C 6	1	ZD-0558	SEAL RETAINER	C22	1	SA-0558	SPACER
C00	1	SA-0558	3000 SPACER	C22	1	W09-01	KEY, 1/4 X 3/8 X 1-3/4
C00	1	W62-26-18	PUMP SEAL	C22	1	W62-26-18	PUMP SEAL
C00	1	W62-49-11	MOTOR SEAL	C22	1	W62-49-11	MOTOR SEAL
C00	1	W86-100	2500 SNAP RING	C22	1	W86-100	RETAINER RING
C00	1	ZD-0558	3000 SEAL RETAINER	C22	1	ZD-0558	SEAL RETAINER
C00	1	W09-27	KEY, 5/16 X 15/32 X 1-1/2	C24	1	SA-0558	SPACER
				C24	1	W09-59	KEY, 3/16 X 3/16 X 1-9/16
C02	1	SA-0558	SPACER	C24	1	W62-26-18	PUMP SEAL
C02	1	W09-505	KEY, WOODRUFF 505	C24	1	W62-49-11	MOTOR SEAL
C02	1	W62-26-18	PUMP SEAL	C24	1	W86-100	RETAINER RING
C02	1	W62-49-11	MOTOR SEAL	C24	1	ZD-0558	SEAL RETAINER
C02	1	W86-100	RETAINER RING	C29	1	SA-0558	SPACER
C02	1	ZD-0558	SEAL RETAINER	C29	1	W09-06	KEY, 1/4 X 3/8 X 1
C04	1	SA-0558	SPACER	C29	1	W62-26-18	PUMP SEAL
C04	1	W09-38	KEY, 1/4 X 3/8 X 7/8	C29	1	W62-49-11	MOTOR SEAL
C04	1	W62-26-18	PUMP SEAL	C29	1	W86-100	RETAINER RING
C04	1	W62-49-11	MOTOR SEAL	C29	1	ZD-0558	SEAL RETAINER
C04	1	W86-100	RETAINER RING	C29XL	1	SA-0558	SPACER
C04	1	ZD-0558	SEAL RETAINER	C29XL	1	W09-01	KEY, 1/4 X 3/8 X 1-3/4
C14	1	SA-0558	SPACER	C29XL	1	W62-26-18	PUMP SEAL
C14	1	W62-26-18	PUMP SEAL	C29XL	1	W62-49-11	MOTOR SEAL
C14	1	W62-49-11	MOTOR SEAL	C29XL	1	W86-100	RETAINER RING
C14	1	W86-100	SNAP RING	C29XL	1	ZD-0558	SEAL RETAINER
C14	1	ZD-0558	SEAL RETAINER	C19	1	SA-0558	3000 SPACER
C19	1	SA-0558	3000 SPACER	C19	1	ZD-0558	SEAL RETAINER
C19	1	ZD-0558	SEAL RETAINER	C19	1	W62-26-18	PUMP SEAL

PERMCO MODEL: 3100

DRIVE 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>
C32	1	SA-0558	3000 SPACER
C32	1	W09-02	KEY, 1/4 X 3/8 X 1-1/4
C32	1	W62-26-18	PUMP SEAL
C32	1	W62-49-11	MOTOR SEAL
C32	1	W86-100	SNAP RING
C32	1	ZD-0558	SEAL RETAINER
C32XL	1	SA-0558	3000 SPACER
C32XL	1	W09-20	KEY, 1/4 X 1/4 X 1-1/2
C32XL	1	W62-26-18	PUMP SEAL
C32XL	1	W62-49-11	MOTOR SEAL
C32XL	1	W86-100	SNAP RING
C32XL	1	ZD-0558	SEAL RETAINER
C57	2	SA-0558	3000 SPACER
C57	1	W62-26-18	PUMP SEAL
C57	1	W62-49-11	MOTOR SEAL
C57	2	W86-100	SNAP RING
C57	1	ZD-0558	SEAL RETAINER
C84	1	W62-26-18	PUMP SEAL
C84	1	W62-49-11	MOTOR SEAL
C84	1	ZD-0558	SEAL RETAINER
C85	1	W62-26-18	PUMP SEAL
C85	1	W62-49-11	MOTOR SEAL
C85	1	009-00836	KEY, 3/16 x 3/16 x 1-1/4
C85	1	ZD-0558	SEAL RETAINER
C87	1	SA-0558	3000 SPACER
C87	1	W62-26-18	PUMP SEAL
C87	1	W62-49-11	MOTOR SEAL
C87	1	W86-100	SNAP RING
C87	1	ZD-0558	SEAL RETAINER

PERMCO MODEL: 3100

Bearing Carriers

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
A	1	UZ-0576D	BLANK	& BLANK	KK	1	DA-0576-2-33D	1 SF-T	& 1 SF-T
AA	1	DA-0576-2-67D	1-1/4 JIC-T	& 1-1/4 JIC-T	KQ	1	VZ-0576-33-31D	1 SF-T	& 3/4 SF-B
AB	1	VZ-0576-11-63D	BLANK	& 1 JIC-T	KW	1	VZ-0576-44-31D	1 SF-T	& 3/4 SF-F
AC	1	VZ-0576-11-66D	BLANK	& 1 1/4 JIC-T	LA	1	VZ-0576-11-35D	1 1/4 SF-T	& BLANK
AE	1	VZ-0576-11-69D	BLANK	& 1 1/2 JIC-T	LJ	1	VZ-0576-55-55D	1 JIC-F	& 1 JIC-F
AK	1	VZ-0576-11-32D	BLANK	& 1 SF-T	LL	1	DA-0576-2-36D	1-1/4 SF-T	& 1-1/4 SF-T
AL	1	VZ-0576-11-35D	BLANK	& 1 1/4 SF-T	LQ	1	VZ-0576-33-37D	1 1/4 SF-T	& 3/4 SF-B
AM	1	VZ-0576-11-39D	BLANK	& 1 1/2 SF-T	LR	1	VZ-0576-33-34D	1 1/4 SF-T	& 1 SF-B
AQ	1	VZ-0576-33-129D	T	& 3/4 SF-B	LW	1	VZ-0576-44-37D	1 1/4 SF-T	& 3/4 SF-F
AS	1	VZ-0576-11-4D	BLANK	& 1 NPT-T	LY	1	VZ-0576-44-34D	1 1/4 SF-T	& 1 SF-F
AU	1	VZ-0576-11-7D	BLANK	& 1 1/4 NPT-T	MA	1	VZ-0576-11-39D	1 1/2 SF-T	& BLANK
B	1	UZ-0576-11D	T	& BLANK	MM	1	DA-0576-2-40D	1-1/2 SF-T	& 1-1/2 SF-T
BA	1	VZ-0576-11-63D	1 JIC-T	& BLANK	MQ	1	VZ-0576-33-49D	1 1/2 SF-T	& 3/4 SF-B
BB	1	DA-0576-2-64D	1 JIC-T	& 1 JIC-T	MR	1	VZ-0576-33-44D	1 1/2 SF-T	& 1 SF-B
BI	1	VZ-0576-33-71D	1 JIC-T	& 3/4 JIC-B	MY	1	VZ-0576-44-44D	1 1/2 SF-T	& 1 SF-F
BQ	1	VZ-0576-44-71D	1 JIC-T	& 3/4 JIC-F	QA	1	VZ-0576-44-129D	3/4 SF-B	& T
C	1	UZ-0576-11D	BLANK	& T	QB	1	VZ-0576-33-71D	3/4 JIC-F	& 1 JIC-T
CA	1	VZ-0576-11-66D	1 1/4 JIC-T	& BLANK	QC	1	VZ-0576-33-73D	3/4 JIC-F	& 1 1/4 JIC-T
CI	1	VZ-0576-33-73D	1 1/4 JIC-T	& 3/4 JIC-B	QE	1	VZ-0576-33-76D	3/4 JIC-F	& 1 1/2 JIC-T
CJ	1	VZ-0576-33-65D	1 1/4 JIC-T	& 1 JIC-B	QK	1	VZ-0576-44-31D	3/4 SF-B	& 1 SF-T
CQ	1	VZ-0576-44-73D	1 1/4 JIC-T	& 3/4 JIC-F	QL	1	VZ-0576-44-37D	3/4 SF-B	& 1 1/4 SF-T
CR	1	VZ-0576-44-65D	1 1/4 JIC-T	& 1 JIC-F	QM	1	VZ-0576-44-49D	3/4 SF-B	& 1 1/2 SF-T
EA	1	VZ-0576-11-69D	1 1/2 JIC-T	& BLANK	QR	1	VZ-0576-55-31D	3/4 SF-B	& 1 SF-B
EE	1	DA-0576-2-70D	1-1/2 JIC-T	& 1-1/2 JIC-T	QY	1	VZ-0576-55-31D	1 SF-F	& 3/4 SF-F
EI	1	VZ-0576-33-76D	1 1/2 JIC-T	& 3/4 JIC-B	RC	1	VZ-0576-33-65D	1 JIC-F	& 1 1/4 JIC-T
EJ	1	VZ-0576-33-74D	1 1/2 JIC-T	& 1 JIC-B	RE	1	VZ-0576-33-74D	1 JIC-F	& 1 1/2 JIC-T
ER	1	VZ-0576-44-74D	1 1/2 JIC-T	& 1 JIC-F	RL	1	VZ-0576-44-34D	1 SF-B	& 1 1/4 SF-T
IB	1	VZ-0576-44-71D	3/4 JIC-B	& 1 JIC-T	RM	1	VZ-0576-44-44D	1 SF-B	& 1 1/2 SF-T
IC	1	VZ-0576-44-73D	3/4 JIC-B	& 1 1/4 JIC-T	RQ	1	VZ0576-555-131D	1 SF-B	& 3/4 SF-B
IE	1	VZ-0576-44-76D	3/4 JIC-B	& 1 1/2 JIC-T	RY	1	VZ0576-555-103D	3/4 NPT-F	& 1 NPT-F
IJ	1	VZ-0576-55-71D	3/4 JIC-B	& 1 JIC-B	SA	1	VZ-0576-11-4D	1 NPT-T	& BLANK
IS	1	VZ-0576-33-3D	3/4 NPT-F	& 1 NPT-T	SI	1	VZ-0576-44-3D	1 NPT-T	& 3/4 NPT-F
IU	1	VZ-0576-33-10D	3/4 NPT-F	& 1 1/4 NPT-T	SS	1	DA-0576-2-5D	1 NPT-T	& 1 NPT-T
JC	1	VZ-0576-44-65D	1 JIC-B	& 1 1/4 JIC-T	SW	1	VZ-0576-33-3D	1 NPT-T	& 3/4 NPT-B
JE	1	VZ-0576-44-74D	1 JIC-B	& 1 1/2 JIC-T	UA	1	VZ-0576-11-7D	1 1/4 NPT-T	& BLANK
JI	1	VZ0576-555-171D	1 JIC-B	& 3/4 JIC-B	UI	1	VZ-0576-44-10D	1 1/4 NPT-T	& 3/4 NPT-F
JL	1	VZ-0576-55-55D	1 JIC-B	& 1 JIC-B	UJ	1	VZ-0576-44-6D	1 1/4 NPT-T	& 1 NPT-F
JU	1	VZ-0576-33-6D	1 NPT-F	& 1 1/4 NPT-T	UW	1	VZ-0576-33-10D	1 1/4 NPT-T	& 3/4 NPT-B
JW	1	VZ-0576-55-71D	1 JIC-F	& 3/4 JIC-F	UY	1	VZ-0576-33-6D	1 1/4 NPT-T	& 1 NPT-B
KA	1	VZ-0576-11-32D	1 SF-T	& BLANK	WJ	1	VZ0576-555-171D	3/4 JIC-F	& 1 JIC-F

PERMCO MODEL: 3100

Bearing Carriers

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>	
WK	1	VZ-0576-33-31D	3/4 SF-F	& 1 SF-T
WL	1	VZ-0576-33-37D	3/4 SF-F	& 1 1/4 SF-T
WM	1	VZ-0576-33-49D	3/4 SF-F	& 1 1/2 SF-T
WS	1	VZ-0576-44-3D	3/4 NPT-B	& 1 NPT-T
WU	1	VZ-0576-44-10D	3/4 NPT-B	& 1 1/4 NPT-T
WY	1	VZ-0576-55-3D	3/4 NPT-B	& 1 NPT-B
YL	1	VZ-0576-33-34D	1 SF-F	& 1 1/4 SF-T
YM	1	VZ-0576-33-44D	1 SF-F	& 1 1/2 SF-T
YQ	1	VZ0576-555-131D	3/4 SF-F	& 1 SF-F
YR	1	VZ-0576-55-3D	1 NPT-F	& 3/4 NPT-F
YU	1	VZ-0576-44-6D	1 NPT-B	& 1 1/4 NPT-T
YW	1	VZ0576-555-103D	1 NPT-B	& 3/4 NPT-B

PERMCO MODEL: 3100

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>
	2	KA-0558-1XS	RING SEAL
	4	X-0921	CROWNED ROLLER BRNG
AQ	2	KA-0558-1XS	RING SEAL
AQ	1	W0-19	PIPE PLUG
AQ	4	X-0921	CROWNED ROLLER BRGN
B	2	KA-0558-1XS	RING SEAL
B	1	W0-19	PIPE PLUG
B	4	X-0921	CROWNED ROLLER BRGN
C	2	KA-0558-1XS	RING SEAL
C	1	W0-19	PIPE PLUG
C	4	X-0921	CROWNED ROLLER BRGN
QA	2	KA-0558-1XS	RING SEAL
QA	1	W0-19	PIPE PLUG
QA	4	X-0921	CROWNED ROLLER BRGN

PERMCO MODEL: 3100

Gear and Connecting Shafts

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>
1	1	YZ-0022

<u>D E S C R I P T I O N</u>
CONNECTING 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
2-1/2"	#78

JIC

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
2-1/2"	B-831-218

FASTENERS FOR SINGLE UNITS

Gear Size	Part #	Bolt Length	Qty.
1/2"	W1-13	4"	4
3/4"	W1-13	4"	4
1"	W1-58	4-1/2"	4
1-1/4"	W1-58	4-1/2"	4
1-1/2"	W1-14	5"	4
1-3/4"	W1-14	5"	4
2"	W1-78	5-1/2"	4
2-1/2"	W1-65	6"	4
Washer #	W033-2		4

Shaft Protectors

SP-1000-1		.656"Dia
SP-1000-2		.587"Dia
SP-1000-3	DC, GD, BC	1"Dia
SP-1000-4		1-1/8"Dia
SP-1000-5	ZF, ZQ	1-1/4"Dia
SP-1000-6		1/2"Dia
SP-1000-7		5/8"Dia
SP-1000-8		3/4"Dia
SP-1000-8	AC, CC	7/8"Dia

Shaft Protectors for extended studs

SP-1000-7	2
-----------	---

FASTENERS FOR DOUBLE UNITS

	Flush	Extended
Dual Section	7.25	9.25
Triple Section	10.5	12.5
Quad Section	13.75	15.75
***Add total gear width + above dimension to obtain stud length.		
Washer #	W033-2	4
Nut #	W3-65	4

Stud #	Description
ZD-0391-08	5/8-11 x 8"
ZD-0391-875	5/8-11 x 8.75"
ZD-0391-09	5/8-11 x 9"
ZD-0391-095	5/8-11 x 9.5"
ZD-0391-10	5/8-11 x 10"
ZD-0391-105	5/8-11 x 10.5"
ZD-0391-112	5/8-11 x 11.25"
ZD-0391-12	5/8-11 x 12"
ZD-0391-125	5/8-11 x 12.5"
ZD-0391-132	5/8-11 x 13.25"
ZD-0391-14	5/8-11 x 14"
ZD-0391-142	5/8-11 x 14.25"
ZD-0391-16	5/8-11 x 16"
ZD-0391-18	5/8-11 x 18"
ZD-0391-20	5/8-11 x 20"
ZD-0391-22	5/8-11 x 22"
ZD-0391-24	5/8-11 x 24"
ZD-0391-26	5/8-11 x 26"
ZD-0391-28	5/8-11 x 28"
ZD-0391-30	5/8-11 x 30"
ZD-0391-36	5/8-11 x 36"
ZD-0391-40	5/8-11 x 40"

