

\* \* 5100 SERIES \* \*  
\* \* ENGINEERING CODEBOOK \* \*

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

THIS IS A CODE BOOK FOR THE 5100 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: 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

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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. . . . . :	05	07	10	12	15	17	20	22	25
SIZE IN INCHES:	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2	2-1/4	2-1/2

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

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.

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 \* \*  
 \* 5100 SERIES \*  
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SERIES IDENTIFICATION

STUD HOLES - 4 AT 11/16 DIAMETER  
 STUD DIA. - 5/8 IN.  
 ONE-PIECE DRIVE SHAFT AND GEAR (INTEGRAL)  
 HOUSING HEIGHT - 6 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 2 2-1/4 AND 2-1/2 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
	7			XX		XX	I	XX
	8			XX		XX	I II	

**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.

### GEARS

1. CODES MARKED ^ ARE GEARS SETS FOR SINGLE UNIT 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. JIC PORTS ARE RECOMMENDED FOR USE AT PRESSURES UP TO 2500 PSI.  
FOR HIGHER PRESSURES CONSULT FACTORY.
4. 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 OR 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.

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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>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
024	1	574-00885	CW T2, 2&4 BOLT B FLG	531	1	GA-0574-3D	DR TYPE I 4 BOLT SAE B
031	1	GA-0574-3D	CW TYPE I 4 BOLT SAE B	567	1	JA-0574-3D	DR TYPE I 4 BOLT SAE C
067	1	JA-0574-3D	CW TYPE I 4 BOLT SAE C	586	1	QA-0574-3D	DR TYPE I 2 BOLT SAE B
080	1	IB-0574-15D	CW 5000/5000 PB	587	1	MA-0574-3D	DR TYPE I 2 BOLT SAE C
081	1	KB-0574-15D	CW 7500/5000 PB	599	1	LA-0574-3D	DR TYPE I PAD MT
085	* 1	IA-0574-3D	CW TYPE II 2 BOLT SAE B	731	1	GA-0574-4D	DR TYPE I 4 BOLT SAE B
086	1	QA-0574-3D	CW TYPE I 2 BOLT SAE B	767	1	JA-0574-6D	DR TYPE I 4 BOLT SAE C
087	1	MA-0574-3D	CW TYPE I 2 BOLT SAE C	786	1	QA-0574-5D	DR TYPE I 2 BOLT SAE B
088	1	KA-0574-3D	CW TYPE II 2 BOLT SAE C	787	1	MA-0574-5D	DR TYPE I 2 BOLT SAE C
099	1	LA-0574-3D	CW TYPE I PAD MT	799	1	LA-0574-4D	DR TYPE I PAD MT
124	1	574-00885	CCW T2, 2&4 BOLT B FLG	824	1	574-00885	DR T2, 2&4 BOLT B FLG
131	1	GA-0574-3D	CCW TYPE I 4 BOLT SAE B	831	1	GA-0574-4D	DR TYPE I 4 BOLT SAE B
167	1	JA-0574-3D	CCW TYPE I 4 BOLT SAE C	867	1	JA-0574-6D	DR TYPE I 4 BOLT SAE C
180	1	IB-0574-15D	CCW 5000/5000 PB	886	1	QA-0574-5D	DR TYPE I 2 BOLT SAE B
181	1	KB-0574-15D	CCW 7500/5000 PB	887	1	MA-0574-5D	DR TYPE I 2 BOLT SAE C
185	1	IA-0574-3D	CCW TYPE II 2 BOLT SAE B	888	1	KA-0574-7D	DR TYPE II 2 BOLT SAE C
186	1	QA-0574-3D	CCW TYPE I 2 BOLT SAE B	899	1	LA-0574-4D	DR TYPE I PAD MT
187	1	MA-0574-3D	CCW TYPE I 2 BOLT SAE C				
188	1	KA-0574-3D	CCW TYPE II 2 BOLT SAE C				
199	1	LA-0574-3D	CCW TYPE I PAD MT				
224	1	574-00885	DR T2, 2&4 BOLT B FLG				
231	1	GA-0574-3D	DR TYPE I 4 BOLT SAE B				
267	1	JA-0574-3D	DR TYPE I 4 BOLT SAE C				
280	* 1	IB-0574-15D	DR 5000/5000 PB				
281	* 1	KB-0574-15D	DR 7500/5000 PB				
285	* 1	IA-0574-3D	DR TYPE II 2 BOLT SAE B				
286	1	QA-0574-3D	DR TYPE I 2 BOLT SAE B				
287	1	MA-0574-3D	DR TYPE I 2 BOLT SAE C				
288	1	KA-0574-3D	DR TYPE II 2 BOLT SAE C				
299	1	LA-0574-3D	DR TYPE I PAD MT				
331	1	GA-0574-3D	CW TYPE I 4 BOLT SAE B				
367	1	JA-0574-3D	CW TYPE I 4 BOLT SAE C				
386	1	QA-0574-3D	CW TYPE I 2 BOLT SAE B				
387	1	MA-0574-3D	CW TYPE I 2 BOLT SAE C				
399	1	LA-0574-3D	CW TYPE I PAD MT				
431	1	GA-0574-3D	CCW TYPE I 4 BOLT SAE B				
467	1	JA-0574-3D	CCW TYPE I 4 BOLT SAE C				
486	1	QA-0574-3D	CCW TYPE I 2 BOLT SAE B				
487	1	MA-0574-3D	CCW TYPE I 2 BOLT SAE C				
499	1	LA-0574-3D	CCW TYPE I PAD MT				

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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>
024	1	MA-0558-1XS	RING SEAL	088	2	R-0921	CROWNED ROLLER BRGN
024	2	R-0921	CROWNED ROLLER BRGN	088	1	S-0280	PLUG
024	1	S-0280	PLUG	088	1	W62-26-17	DOUBLE LIP SEAL
024	1	W62-26-17	DOUBLE LIP SEAL	088	1	MA-0558-1XS	RING SEAL
024	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT	099	1	MA-0558-1XS	RING SEAL
031	1	MA-0558-1XS	RING SEAL	099	2	R-0921	CROWNED ROLLER BRGN
031	2	R-0921	CROWNED ROLLER BRGN	099	1	S-0280	PLUG
031	1	S-0280	PLUG	099	1	W62-26-17	DOUBLE LIP SEAL
031	1	W62-26-17	DOUBLE LIP SEAL	124	1	MA-0558-1XS	RING SEAL
067	1	MA-0558-1XS	RING SEAL	124	2	R-0921	CROWNED ROLLER BRGN
067	2	R-0921	CROWNED ROLLER BRGN	124	1	S-0280	PLUG
067	1	S-0280	PLUG	124	1	W62-26-17	DOUBLE LIP SEAL
067	1	W62-26-17	DOUBLE LIP SEAL	124	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT
080	1	K-2995-26	O'RING	131	1	MA-0558-1XS	RING SEAL
080	1	K-2995-30	O'RING	131	2	R-0921	CROWNED ROLLER BRGN
080	1	MA-0558-1XS	RING SEAL	131	1	S-0280	PLUG
080	2	R-0921	CROWNED ROLLER BRGN	131	1	W62-26-17	DOUBLE LIP SEAL
080	1	S-0280	PLUG	167	1	MA-0558-1XS	RING SEAL
080	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT	167	2	R-0921	CROWNED ROLLER BRGN
080	1	W62-26-16	DOUBLE LIP SEAL	167	1	S-0280	PLUG
080	1	ZJ-0558	SEAL RETAINER	167	1	W62-26-17	DOUBLE LIP SEAL
081	1	MA-0558-1XS	RING SEAL	180	1	K-2995-26	O'RING
081	2	R-0921	CROWNED ROLLER BRGN	180	1	K-2995-30	O'RING
081	1	S-0280	PLUG	180	1	MA-0558-1XS	RING SEAL
081	1	W0-00	PIPE PLUG/SQ. HD 1/4 NPT	180	2	R-0921	CROWNED ROLLER BRGN
081	1	W62-26-17	DOUBLE LIP SEAL	180	1	S-0280	PLUG
081	1	ZK-0558	SPACER	180	1	W0-00	PIPE PLUG/SQ. HD 1/4 NPT
085	1	MA-0558-1XS	RING SEAL	180	1	W62-26-16	DOUBLE LIP SEAL
085	2	R-0921	CROWNED ROLLER BRGN	180	1	ZJ-0558	SEAL RETAINER
085	1	S-0280	PLUG	181	1	MA-0558-1XS	RING SEAL
085	1	W62-26-17	DOUBLE LIP SEAL	181	1	S-0280	PLUG
086	1	MA-0558-1XS	RING SEAL	181	1	W0-00	PIPE PLUG/SQ. HD 1/4 NPT
086	2	R-0921	CROWNED ROLLER BRGN	181	1	W62-26-17	DOUBLE LIP SEAL
086	1	S-0280	PLUG	181	1	ZK-0558	SPACER
086	1	W62-26-17	DOUBLE LIP SEAL	185	1	MA-0558-1XS	RING SEAL
087	1	MA-0558-1XS	RING SEAL	185	2	R-0921	CROWNED ROLLER BRGN
087	2	R-0921	CROWNED ROLLER BRGN	185	1	S-0280	PLUG
087	1	S-0280	PLUG	185	1	W62-26-17	DOUBLE LIP SEAL
087	1	W62-26-17	DOUBLE LIP SEAL				

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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>
186	1	MA-0558-1XS	RING SEAL	281	2	L-0280-K	CHECK VALVE ASSY
186	2	R-0921	CROWNED ROLLER BRGN	281	1	MA-0558-1XS	RING SEAL
186	1	S-0280	PLUG	281	2	R-0921	CROWNED ROLLER BRGN
186	1	W62-26-17	DOUBLE LIP SEAL	281	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT
				281	1	W62-26-17	DOULBE LIP SEAL
187	1	MA-0558-1XS	RING SEAL	281	1	ZK-0558	SPACER
187	2	R-0921	CROWNED ROLLER BRGN				
187	1	S-0280	PLUG	285	2	L-0280-K	CHECK VALVE ASSY
187	1	W62-26-17	DOUBLE LIP SEAL	285	1	MA-0558-1XS	RING SEAL
				285	2	R-0921	CROWNED ROLLER BRGN
188	1	MA-0558-1XS	RING SEAL	285	1	W62-26-17	DOUBLE LIP SEAL
188	2	R-0921	CROWNED ROLLER BRGN				
188	1	S-0280	PLUG	286	2	L-0280-K	CHECK VALVE ASSY
188	1	W62-26-17	DOUBLE LIP SEAL	286	1	MA-0558-1XS	RING SEAL
				286	2	R-0921	CROWNED ROLLER BRGN
199	1	MA-0558-1XS	RING SEAL	286	1	W62-26-17	DOUBLE LIP SEAL
199	2	R-0921	CROWNED ROLLER BRGN				
199	1	S-0280	PLUG	287	2	L-0280-K	CHECK VALVE ASSY
199	1	W62-26-17	DOUBLE LIP SEAL	287	1	MA-0558-1XS	RING SEAL
				287	2	R-0921	CROWNED ROLLER BRGN
224	2	L-0280-K	CHECK VALVE ASSY	287	1	W62-26-17	DOUBLE LIP SEAL
224	1	MA-0558-1XS	RING SEAL				
224	2	R-0921	CROWNED ROLLER BRGN	288	2	L-0280-K	CHECK VALVE ASSY
224	1	W62-26-17	DOUBLE LIP SEAL	288	1	MA-0558-1XS	RING SEAL
224	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT	288	2	R-0921	CROWNED ROLLER BRGN
				288	1	W62-26-17	DOUBLE LIP SEAL
231	2	L-0280-K	CHECK VALVE ASSY				
231	1	MA-0558-1XS	RING SEAL	299	2	L-0280-K	CHECK VALVE ASSY
231	2	R-0921	CROWNED ROLLER BRGN	299	1	MA-0558-1XS	RING SEAL
231	1	W62-26-17	DOUBLE LIP SEAL	299	2	R-0921	CROWNED ROLLER BRGN
				299	1	W62-26-17	DOUBLE LIP SEAL
267	2	L-0280-K	CHECK VALVE ASSY				
267	1	MA-0558-1XS	RING SEAL	331	1	MA-0558-1XS	RING SEAL
267	2	R-0921	CROWNED ROLLER BRGN	331	2	R-0921	CROWNED ROLLER BRGN
267	1	W62-26-17	DOUBLE LIP SEAL	331	1	S-0280	PLUG
				331	1	W023-283	RETAINING RING
280	1	K-2995-26	O'RING	331	1	W58-47	BALL BEARING
280	1	K-2995-30	O'RING	331	1	W62-26-17	DOUBLE LIP SEAL
280	2	L-0280-K	CHECK VALVE ASSY				
280	1	MA-0558-1XS	RING SEAL	367	1	MA-0558-1XS	RING SEAL
280	2	R-0921	CROWNED ROLLER BRGN	367	2	R-0921	CROWNED ROLLER BRGN
280	1	W0-00	PIPE PLUG/ SQ HD 1/4 NPT	367	1	S-0280	PLUG
280	1	W62-26-16	DOUBLE LIP SEAL	367	1	W023-283	RETAINING RING
280	1	ZJ-0558	SEAL RETAINER	367	1	W58-47	BALL BEARING
				367	1	W62-26-17	DOUBLE LIP SEAL

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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>
386	1	MA-0558-1XS	RING SEAL	499	1	MA-0558-1XS	RING SEAL
386	2	R-0921	CROWNED ROLLER BRGN	499	2	R-0921	CROWNED ROLLER BRGN
386	1	S-0280	PLUG	499	1	S-0280	PLUG
386	1	W023-283	RETAINING RING	499	1	W023-283	RETAINING RING
386	1	W58-47	BALL BEARING	499	1	W58-47	BALL BEARING
386	1	W62-26-17	DOUBLE LIP SEAL	499	1	W62-26-17	DOUBLE LIP SEAL
387	1	MA-0558-1XS	RING SEAL	531	2	L-0280-K	CHECK VALVE ASSY
387	2	R-0921	CROWNED ROLLER BRGN	531	1	MA-0558-1XS	RING SEAL
387	1	S-0280	PLUG	531	2	R-0921	CROWNED ROLLER BRGN
387	1	W023-283	RETAINING RING	531	1	W023-283	RETAINING RING
387	1	W58-47	BALL BEARING	531	1	W58-47	BALL BEARING
387	1	W62-26-17	DOUBLE LIP SEAL	531	1	W62-26-17	DOUBLE LIP SEAL
399	1	MA-0558-1XS	RING SEAL	567	2	L-0280-K	CHECK VALVE ASSY
399	2	R-0921	CROWNED ROLLER BRGN	567	1	MA-0558-1XS	RING SEAL
399	1	S-0280	PLUG	567	2	R-0921	CROWNED ROLLER BRGN
399	1	W023-283	RETAINING RING	567	1	W023-283	RETAINING RING
399	1	W58-47	BALL BEARING	567	1	W58-47	BALL BEARING
399	1	W62-26-17	DOUBLE LIP SEAL	567	1	W62-26-17	DOUBLE LIP SEAL
431	1	MA-0558-1XS	RING SEAL	586	2	L-0280-K	CHECK VALVE ASSY
431	2	R-0921	CROWNED ROLLER BRGN	586	1	MA-0558-1XS	RING SEAL
431	1	S-0280	PLUG	586	2	R-0921	CROWNED ROLLER BRGN
431	1	W023-283	RETAINING RING	586	1	W023-283	RETAINING RING
431	1	W58-47	BALL BEARING	586	1	W58-47	BALL BEARING
431	1	W62-26-17	DOUBLE LIP SEAL	586	1	W62-26-17	DOUBLE LIP SEAL
467	1	MA-0558-1XS	RING SEAL	587	2	L-0280-K	CHECK VALVE ASSY
467	2	R-0921	CROWNED ROLLER BRGN	587	1	MA-0558-1XS	RING SEAL
467	1	S-0280	PLUG	587	2	R-0921	CROWNED ROLLER BRGN
467	1	W023-283	RETAINING RING	587	1	W023-283	RETAINING RING
467	1	W58-47	BALL BEARING	587	1	W58-47	BALL BEARING
467	1	W62-26-17	DOUBLE LIP SEAL	587	1	W62-26-17	DOUBLE LIP SEAL
486	1	MA-0558-1XS	RING SEAL	599	2	L-0280-K	CHECK VALVE ASSY
486	2	R-0921	CROWNED ROLLER BRGN	599	1	MA-0558-1XS	RING SEAL
486	1	S-0280	PLUG	599	2	R-0921	CROWNED ROLLER BRGN
486	1	W023-283	RETAINING RING	599	1	W023-283	RETAINING RING
486	1	W58-47	BALL BEARING	599	1	W58-47	BALL BEARING
486	1	W62-26-17	DOUBLE LIP SEAL	599	1	W62-26-17	DOUBLE LIP SEAL
487	1	MA-0558-1XS	RING SEAL				
487	2	R-0921	CROWNED ROLLER BRGN				
487	1	S-0280	PLUG				
487	1	W023-283	RETAINING RING				
487	1	W58-47	BALL BEARING				
487	1	W62-26-17	DOUBLE LIP SEAL				

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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>
731	2	L-0280-K	CHECK VALVE ASSY	824	1	565-00407-ISR	5151/3000 SERIES SNAP RING
731	1	MA-0558-1XS	RING SEAL	824	2	L-0280-K	CHECK VALVE ASSY
731	2	R-0921	CROWNED ROLLER BRGN	824	1	MA-0558-1XS	RING SEAL
731	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT	824	2	R-0921	CROWNED ROLLER BRGN
731	1	W023-283	RETAINING RING	824	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT
731	1	W58-47	BALL BEARING	824	1	W62-49-8	HP SEAL
731	1	W62-49-8	HP SEAL				
731	1	ZB-0558	SPACER	831	1	558-00474-BS	BEARING SPACER
				831	2	L-0280-K	CHECK VALVE ASSY
767	2	L-0280-K	CHECK VALVE ASSY	831	1	MA-0558-1XS	RING SEAL
767	1	MA-0558-1XS	RING SEAL	831	2	R-0921	CROWNED ROLLER BRGN
767	2	R-0921	CROWNED ROLLER BRGN	831	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT
767	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT	831	1	W023-283	RETAINING RING
767	1	W023-283	RETAINING RING	831	1	W62-49-8	HP SEAL
767	1	W58-47	BALL BEARING				
767	1	W62-49-8	HP SEAL	867	1	558-00474-BS	BEARING SPACER
767	1	ZB-0558	SPACER	867	2	L-0280-K	CHECK VALVE ASSY
				867	1	MA-0558-1XS	RING SEAL
786	2	L-0280-K	CHECK VALVE ASSY	867	2	R-0921	CROWNED ROLLER BRGN
786	1	MA-0558-1XS	RING SEAL	867	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT
786	2	R-0921	CROWNED ROLLER BRGN	867	1	W023-283	RETAINING RING
786	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT	867	1	W62-49-8	HP SEAL
786	1	W023-283	RETAINING RING				
786	1	W58-47	BALL BEARING	886	1	558-00474-BS	BEARING SPACER
786	1	W62-49-8	HP SEAL	886	2	L-0280-K	CHECK VALVE ASSY
786	1	ZB-0558	SPACER	886	1	MA-0558-1XS	RING SEAL
				886	2	R-0921	CROWNED ROLLER BRGN
787	2	L-0280-K	CHECK VALVE ASSY	886	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT
787	1	MA-0558-1XS	RING SEAL	886	1	W023-283	RETAINING RING
787	2	R-0921	CROWNED ROLLER BRGN	886	1	W62-49-8	HP SEAL
787	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT				
787	1	W023-283	RETAINING RING	887	1	558-00474-BS	BEARING SPACER
787	1	W58-47	BALL BEARING	887	2	L-0280-K	CHECK VALVE ASSY
787	1	W62-49-8	HP SEAL	887	1	MA-0558-1XS	RING SEAL
787	1	ZB-0558	SPACER	887	2	R-0921	CROWNED ROLLER BRGN
				887	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT
799	2	L-0280-K	CHECK VALVE ASSY	887	1	W023-283	RETAINING RING
799	1	MA-0558-1XS	RING SEAL	887	1	W62-49-8	HP SEAL
799	2	R-0921	CROWNED ROLLER BRGN				
799	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT				
799	1	W023-283	RETAINING RING				
799	1	W58-47	BALL BEARING				
799	1	W62-49-8	HP SEAL				
799	1	ZB-0558	SPACER				

PERMCO MODEL: 5100

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>
888	1	961-00504	5000 RETAINER TYPE II MOTOR				
888	1	K-2995-164	O'RING				
888	2	L-0280-K	CHECK VALVE ASSY				
888	1	MA-0558-1XS	RING SEAL				
888	2	R-0921	CROWNED ROLLER BRGN				
888	1	W0-00	PIPE PLUG/ SQ HD 1/4" NPT				
888	1	W023-283	RETAINER RING				
888	1	W62-49-8	HP SEAL				

TELL-TALE BREAKDOWN

1	226-01015	DOUBLE LIP SEAL (OUTER)
1	OZ-0961	SEAL RETAINER "TELL-TALE"
1	K-2995-47	O'RING
1	W0-19	PIPE PLUG/SOC HD 1/8-27 NPT
1	W023-283	5000 SNAP RING

ALL DRY VALVE PUMPS REQUIRE DRY VALVE RING SEALS

1	MA-0558-DV	DRY VALVE RING SEALS
1	OZ-0961	SEAL RETAINER
1	K-2995-47	O'RING
1	W62-49-8	HP SEAL
1	W023-283	RETAINING RING

**PERMCO MODEL: 5100**

**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	YZ-0592D	BLANK & BLANK SINGLE	GL	1	YZ-0592-RP-5SD	3/4NPT SIDE & 1 1/4NPT XSD
AH	1	YZ-0592D	BLANK & BLANK MULT	GX	1	YZ-0592-302D	3/4JIC REAR & 1JIC XSD
AX	1	YZ-0592D	BLANK & BLANK MULT XSD	HM	1	YZ-0592-RP-63D	1JIC REAR & 1 1/4JIC SINGLE
BD	1	YZ-0592-57D	3/4JIC & BLANK SINGLE	HN	1	YZ-0592-RP-63D	1JIC REAR & 1 1/4JIC MULT
BH	1	YZ-0592-57D	3/4JIC & BLANK MULT	HO	1	YZ-0592-RP-63D	1JIC REAR & 1 1/4JIC XSD
BX	1	YZ-0592-57D	3/4JIC & BLANK MULT XSD	HP	1	YZ-0592-RP-63SD	1JIC SIDE & 1 1/4JIC SINGLE
CA	1	YZ-0592-RP-60D	1 1/4JIC REAR & BLANK SINGLE	HQ	1	YZ-0592-RP-63SD	1JIC SIDE & 1 1/4JIC MULT
CB	1	YZ-0592-RP-60D	1 1/4JIC REAR & BLANK MULT	HR	1	YZ-0592-RP-63SD	1JIC SIDE & 1 1/4JIC XSD
CC	1	YZ-0592-RP-60D	1 1/4JIC REAR & BLANK XSD	ID	1	YZ-0592-30D	1JIC REAR & 1JIC SINGLE
CD	1	YZ-0592-79D	BLANK & 3/4JIC SINGLE	IF	1	YZ-0592-23D	1NPT REAR & 3/4NPT SINGLE
CE	1	YZ-0592-RP-60SD	1 1/4JIC SIDE & BLANK SINGLE	IG	1	YZ-0592-23D	1NPT REAR & 3/4NPT MULT
CH	1	YZ-0592-79D	BLANK & 3/4JIC MULT	IH	1	YZ-0592-30D	1JIC REAR & 1JIC MULT
CM	1	YZ-0592-RP-60SD	1 1/4JIC SIDE & BLANK MULT	II	1	YZ-0592-23D	1NPT REAR & 3/4NPT XSD
CN	1	YZ-0592-RP-60SD	1 1/4JIC SIDE & BLANK XSD	IJ	1	YZ-0592-RP-3SD	1NPT SIDE & 3/4NPT SINGLE
CX	1	YZ-0592-79D	BLANK & 3/4JIC MULT XSD	IK	1	YZ-0592-RP-3SD	1NPT SIDE & 3/4NPT MULT
DA	1	YZ-0592-RP-60D	BLANK REAR & 1 1/4JIC SINGLE	IL	1	YZ-0592-RP-3SD	1NPT SIDE & 3/4NPT XSD
DB	1	YZ-0592-RP-60D	BLANK REAR & 1 1/4JIC MULT	IM	1	592-00899D	5100 PEC W/640 RV SINGLE-CW
DC	1	YZ-0592-RP-60D	BLANK REAR & 1 1/4JIC XSD	IN	1	592-00899D	5100 PEC W/640 RV MULTIPLE-CW
DE	1	YZ-0592-RP-60SD	BLANK SIDE & 1 1/4JIC SINGLE	IP	1	592-00899D	5100 PEC W/640 RV XSTD-CW
DL	1	YZ-0592-RP-60SD	BLANK SIDE & 1 1/4JIC MULT	IR	1	592-00899D	5100 PEC W/640 RV SINGLE-CCW
DM	1	YZ-0592-RP-60SD	BLANK SIDE & 1 1/4JIC XSD	IS	1	592-00899D	5100 PEC W/640 RV MULTIPLE-CCW
ED	1	YZ-0592-58D	3/4JIC & 3/4JIC SINGLE	IT	1	592-00899D	5100 PEC W/640 RV XSTD-CCW
EH	1	YZ-0592-58D	3/4JIC & 3/4JIC MULT	IX	1	YZ-0592-30D	1JIC REAR & 1JIC XSD
EX	1	YZ-0592-58D	3/4JIC & 3/4JIC MULT XSD	JD	1	YZ-0592-1D	3/4NPT & BLANK SINGLE
FD	1	YZ-0592-303D	1JIC REAR & 3/4JIC SINGLE	JF	1	YZ-0592-RP-7D	1NPT REAR & 1NPT SINGLE
FF	1	YZ-0592-22D	3/4NPT REAR & 1NPT SINGLE	JG	1	YZ-0592-RP-7D	1NPT REAR & 1NPT MULT
FG	1	YZ-0592-22D	3/4NPT REAR & 1NPT MULT	JH	1	YZ-0592-1D	3/4NPT & BLANK MULT
FH	1	YZ-0592-303D	1JIC REAR & 3/4JIC MULT	JI	1	YZ-0592-RP-7D	1NPT REAR & 1NPT XSD
FI	1	YZ-0592-22D	3/4NPT REAR & 1NPT XSD	JJ	1	YZ-0592-RP-7SD	1NPT SIDE & 1NPT SINGLE
FJ	1	YZ-0592-RP-3SD	3/4NPT SIDE & 1NPT SINGLE	JK	1	YZ-0592-RP-7SD	1NPT SIDE & 1NPT MULT
FK	1	YZ-0592-RP-3SD	3/4NPT SIDE & 1NPT MULT	JL	1	YZ-0592-RP-7SD	1NPT SIDE & 1NPT XSD
FL	1	YZ-0592-RP-3SD	3/4NPT SIDE & 1NPT XSD	JN	1	IB-0574-24D	PB 5000/5000 5000/3000 CW
FX	1	YZ-0592-303D	1JIC REAR & 3/4JIC XSD	JX	1	YZ-0592-1D	3/4NPT & BLANK MULT XSD
GD	1	YZ-0592-302D	3/4JIC REAR & 1JIC SINGLE	KD	1	YZ-0592-21D	BLANK & 3/4NPT SINGLE
GF	1	YZ-0592-RP-5D	3/4NPT REAR & 1 1/4NPT SGL	KF	1	YZ-0592-RP-9D	1NPT REAR & 1 1/4NPT SINGLE
GG	1	YZ-0592-RP-5D	3/4NPT REAR & 1 1/4NPT MULT	KG	1	YZ-0592-RP-9D	1NPT REAR & 1 1/4NPT MULT
GH	1	YZ-0592-302D	3/4JIC REAR & 1JIC MULT	KH	1	YZ-0592-21D	BLANK & 3/4NPT MULT
GI	1	YZ-0592-RP-5D	3/4NPT REAR & 1 1/4NPT XSD	KI	1	YZ-0592-RP-9D	1NPT REAR & 1 1/4NPT XSD
GJ	1	YZ-0592-RP-5SD	3/4NPT SIDE & 1 1/4NPT SGL	KJ	1	YZ-0592-RP-9SD	1NPT SIDE & 1 1/4NPT SINGLE
GK	1	YZ-0592-RP-5SD	3/4NPT SIDE & 1 1/4NPT MULT	KK	1	YZ-0592-RP-9SD	1NPT SIDE & 1 1/4NPT MULT

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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	YZ-0592-RP-9SD	1NPT SIDE & 1 1/4NPT XSD	NK	1	YZ-0592-RP-9SD	1 1/4NPT SIDE & 1NPT XSD
KN	1	IB-0574-24D	PB 5000/5000 5000/3000 CCW	NM	1	YZ-0592-RP-67D	1 1/4JIC REAR & 1 1/4JIC SGL
KP	1	YZ-0592-RP-61D	1 1/4JIC REAR & 3/4JIC SG	NN	1	YZ-0592-RP-67D	1 1/4JIC REAR & 1 1/4JIC MLT
KQ	1	YZ-0592-RP-61D	1 1/4JIC REAR & 3/4JIC MULT	NO	1	YZ-0592-RP-67D	1 1/4JIC REAR & 1 1/4JIC XSD
KR	1	YZ-0592-RP-61D	1 1/4JIC REAR & 3/4JIC XSD	NP	1	YZ-0592-RP-67SD	1 1/4JIC SIDE & 1 1/4JIC SGL
KS	1	YZ-0592-RP-61SD	1 1/4JIC SIDE & 3/4JIC SGL	NQ	1	YZ-0592-RP-67SD	1 1/4JIC SIDE & 1 1/4JIC MLT
KT	1	YZ-0592-RP-61SD	1 1/4JIC SIDE & 3/4JIC MULT	NR	1	YZ-0592-RP-67SD	1 1/4JIC SIDE & 1 1/4JIC XSD
KU	1	YZ-0592-RP-61SD	1 1/4JIC SIDE & 3/4JIC XSD	OF	1	YZ-0592-RP-11D	1 1/4NPT REAR & 1 1/4NPT SGL
KX	1	YZ-0592-21D	BLANK & 3/4NPT MULT XSD	OG	1	YZ-0592-RP-11D	1 1/4NPT REAR & 1 1/4NPT MLT
LD	1	YZ-0592-2D	3/4NPT & 3/4NPT SINGLE	OH	1	YZ-0592-RP-11D	1 1/4NPT REAR & 1 1/4NPT XSD
LH	1	YZ-0592-2D	3/4NPT & 3/4NPT MULT	OI	1	YZ-0592-RP-11SD	1 1/4NPT SIDE & 1 1/4NPT SGL
LN	1	IB-0574-24D	PB 5000/5000 5000/3000 BIRO	OJ	1	YZ-0592-RP-11SD	1 1/4NPT SIDE & 1 1/4NPT MLT
LP	1	YZ-0592-RP-65D	1 1/4JIC REAR & 7/8JIC SGL	OK	1	YZ-0592-RP-11SD	1 1/4NPT SIDE & 1 1/4NPT XSD
LQ	1	YZ-0592-RP-65D	1 1/4JIC REAR & 7/8JIC MULT	OM	1	YZ-0592-PCRD	PEC W/INT RV SINGLE CW
LR	1	YZ-0592-RP-65D	1 1/4JIC REAR & 7/8JIC XSD	ON	1	YZ-0592-PCRD	PEC W/INT RV MULT CW
LS	1	YZ-0592-RP-65SD	1 1/4JIC SIDE & 7/8JIC SGL	OP	1	YZ-0592-PCRD	PEC W/INT RV XSD CW
LT	1	YZ-0592-RP-65SD	1 1/4JIC SIDE & 7/8JIC MULT	OR	1	YZ-0592-PCRD	PEC W/INT RV SINGLE CCW
LU	1	YZ-0592-RP-65SD	1 1/4JIC SIDE & 7/8JIC XSD	OS	1	YZ-0592-PCRD	PEC W/INT RV MULT CCW
LX	1	YZ-0592-2D	3/4NPT & 3/4NPT MULT XSD	OT	1	YZ-0592-PCRD	PEC W/INT RV XSD CCW
LZ	1	ZA-0574-24D	DR PB FEMALE 2 BOLT A	VF	1	YZ-0592-16D	1NPT REAR & BLANK SINGLE
MD	1	YZ-0592-3D	1NPT & 1NPT REAR SGL	VG	1	YZ-0592-16D	1NPT REAR & BLANK MULT
MF	1	YZ-0592-RP-5D	1 1/4NPT REAR & 3/4NPT SGL	VH	1	YZ-0592-16D	1NPT REAR & BLANK XSD
MG	1	YZ-0592-RP-5D	1 1/4NPT REAR & 3/4NPT MULT	VI	1	YZ-0592-RP-16SD	1NPT SIDE & BLANK SINGLE
MH	1	YZ-0592-3D	1NPT & 1NPT REAR MULT	VJ	1	YZ-0592-RP-16SD	1NPT SIDE & BLANK MULT
MI	1	YZ-0592-RP-5SD	1 1/4NPT SIDE & 3/4NPT SGL	VK	1	YZ-0592-RP-16SD	1NPT SIDE & BLANK XSD
MJ	1	YZ-0592-RP-5SD	1 1/4NPT SIDE & 3/4NPT MULT	VM	1	YZ-0592-RP-61D	3/4JIC REAR & 1 1/4JIC SGL
MK	1	YZ-0592-RP-5SD	1 1/4NPT SIDE & 3/4NPT XSD	VN	1	YZ-0592-RP-61D	3/4JIC & 1 1/4JIC MULT
MM	1	YZ-0592-RP-63D	1 1/4JIC REAR & 1JIC SINGLE	VO	1	YZ-0592-RP-61D	3/4JIC REAR & 1 1/4JIC XSD
MN	1	YZ-0592-RP-63D	1 1/4JIC REAR & 1JIC MULT	VP	1	YZ-0592-RP-61SD	3/4JIC SIDE & 1 1/4JIC SGL
MO	1	YZ-0592-RP-63D	1 1/4JIC REAR & 1JIC XSD	VQ	1	YZ-0592-RP-61SD	3/4JIC SIDE & 1 1/4JIC MULT
MP	1	YZ-0592-RP-63SD	1 1/4JIC SIDE & 1JIC SINGLE	VR	1	YZ-0592-RP-61SD	3/4JIC SIDE & 1 1/4JIC XSD
MQ	1	YZ-0592-RP-63SD	1 1/4JIC SIDE & 1JIC MULT	WF	1	YZ-0592-15D	BLANK REAR & 1NPT SINGLE
MR	1	YZ-0592-RP-63SD	1 1/4JIC SIDE & 1JIC XSD	WG	1	YZ-0592-15D	BLANK REAR & 1NPT MULT
MX	1	YZ-0592-3D	1NPT & 1NPT REAR XSD	WH	1	YZ-0592-15D	BLANK REAR & 1NPT XSD
MZ	1	ZA-0574-24D	DR PB FEMALE 2 BOLT A	WI	1	YZ-0592-RP-15SD	BLANK SIDE & 1NPT SINGLE
NF	1	YZ-0592-RP-9D	1 1/4NPT & 1NPT SINGLE	WJ	1	YZ-0592-RP-15SD	BLANK SIDE & 1NPT MULT
NG	1	YZ-0592-RP-9D	1 1/4NPT REAR & 1NPT MULT	WK	1	YZ-0592-RP-15SD	BLANK SIDE & 1NPT XSD
NH	1	YZ-0592-RP-9D	1 1/4NPT REAR & 1NPT XSD	XF	1	YZ-0592-RP-20D	1 1/4NPT REAR & BLANK SINGLE
NI	1	YZ-0592-RP-9SD	1 1/4NPT SIDE & 1NPT SINGLE	XG	1	YZ-0592-RP-20D	1 1/4NPT REAR & BLANK MULT
NJ	1	YZ-0592-RP-9SD	1 1/4NPT SIDE & 1NPT MULT	XH	1	YZ-0592-RP-20D	1 1/4NPT REAR & BLANK XSD

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

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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	MA-0558-1XS	RING SEAL	LN	2	L-0280-K	CHECK VALVE ASSY
	2	R-0921	CROWNED ROLLER BRNG	LN	1	MA-0558-1XS	RING SEAL
IM	2	MA-0558-1XS	5000 EXTRA SERV RING SEAL	LN	2	R-0921	CROWNED ROLLER BRNG
IM	2	R-0921	2500 5000 CRW ROLLER BRGN	LN	2	W1-19	CAP SCREW
IM	1	RP-5514-3000	RELIEF VALVE ASSEMBLY	LN	2	W2-0	LOCK WASHER
					1	W62-26-16	DOUBLE LIP SEAL
IN	2	MA-0558-1XS	5000 EXTRA SERV RING SEAL	LZ	2	900-00328-IWN	INTERNAL WRENCH NUT
IN	2	R-0921	2500 5000 CRW ROLLER BRGN	LZ	2	L-0280-K	CHECK VAVLE ASS`Y
IN	1	RP-5514-3000	RELIEF VALVE ASSEMBLY	LZ	1	MA-0558-1XS	RING SEAL
				LZ	2	R-0921	CROWNED ROLLER BEARING
IP	2	MA-0558-1XS	5000 EXTRA SERV RING SEAL	LZ	1	W023-283	RETAINING RING
IP	2	R-0921	2500 5000 CRW ROLLER BRGN	LZ	1	W58-47	BALL BEARING
IP	1	RP-5514-3000	RELIEF VALVE ASSEMBLY	LZ	1	W62-26-17	DOUBLE LIP SEAL
				LZ	1	ZK-0022	7/8 SAE B FEMALE SPLINE PB
IR	2	MA-0558-1XS	5000 EXTRA SERV RING SEAL	MZ	2	900-00328-IWN	INTERNAL WRENCH NUT
IR	2	R-0921	2500 5000 CRW ROLLER BRGN	MZ	2	L-0280-K	CHECK VALVE ASS`Y
IR	1	RP-5514-3000	RELIEF VALVE ASSEMBLY	MZ	1	MA-0558-1XS	RING SEAL
				MZ	2	R-0921	CROWNED ROLLER BEARING
IS	2	MA-0558-1XS	5000 EXTRA SERV RING SEAL	MZ	1	W023-283	RETAINING RING
IS	2	R-0921	2500 5000 CRW ROLLER BRGN	MZ	1	W58-47	BALL BEARING
IS	1	RP-5514-3000	RELIEF VALVE ASSEMBLY	MZ	1	W62-26-17	DOUBLE LIP SEAL
				MZ	1	ZH-0022	5/8 SAE A FEMALE SPLINE PB
IT	2	MA-0558-1XS	5000 EXTRA SERV RING SEAL	OM	2	R-0921	2500 5000 CRW ROLLER BRGN
IT	2	R-0921	2500 5000 CRW ROLLER BRGN	OM	1	514-00352-RV	RELIEF VALVE CARTRIDGE
IT	1	RP-5514-3000	RELIEF VALVE ASSEMBLY	OM	1	MA-0558-1XS	5000 EXTRA SERV RING SEAL
JN	1	MA-0558-1XS	RING SEAL	ON	1	514-00352-RV	RELIEF VALVE CARTRIDGE
JN	2	R-0921	CROWNED ROLLER BRGN	ON	1	MA-0558-1XS	5000 EXTRA SERV RING SEAL
JN	1	S-0280	PLUG	ON	2	R-0921	2500 5000 CRW ROLLER BRGN
JN	2	W1-19	CAP SCREW	ON			
JN	2	W2-0	LOCK WASHER	ON			
JN	1	W62-26-16	DOUBLE LIP SEAL	OP	1	514-00352-RV	RELIEF VALVE CARTRIDGE
KN	1	MA-0558-1XS	RING SEAL	OP	1	MA-0558-1XS	5000 EXTRA SERV RING SEAL
KN	2	R-0921	CROWNED ROLLER BRGN	OP	2	R-0921	2500 5000 CRW ROLLER BRGN
KN	1	S-0280	PLUG	OR	1	514-00352-RV	RELIEF VALVE CARTRIDGE
KN	2	W1-19	CAP SCREW	OR	1	MA-0558-1XS	5000 EXTRA SERV RING SEAL
KN	2	W2-0	LOCK WASHER	OR	2	R-0921	2500 5000 CRW ROLLER BRGN
KN	1	W62-26-16	DOUBLE LIP SEAL	OR			

PERMCO MODEL: 5100

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	514-00352-RV	RELIEF VALVE CARTRIDGE
OS	1	MA-0558-1XS	5000 EXTRA SERV RING SEAL
OS	2	R-0921	2500 5000 CRW ROLLER BRGN
OT	1	514-00352-RV	RELIEF VALVE CARTRIDGE
OT	1	MA-0558-1XS	5000 EXTRA SERV RING SEAL
OT	2	R-0921	2500 5000 CRW ROLLER BRGN

ALL DRY VALVE PUMPS REQUIRE DRY VALVE RING SEALS

1	MA-0558-DV	DRY VALVE RING SEAL
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PERMCO MODEL: 5100

Housings

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
DB10	+	1 LZ-0577-10-57D	3/4 JIC	& BLANK	HC15	1	LZ-0577-15-1D	BLANK	& 3/4 NPT
DB12	+	1 LZ-0577-12-57D	3/4 JIC	& BLANK	HC17	1	LZ-0577-17-1D	BLANK	& 3/4 NPT
DB15	1	LZ-0577-15-57D	3/4 JIC	& BLANK	HE10	1	LZ-0577-10-2D	3/4 NPT	& 3/4 NPT
DB17	1	LZ-0577-17-57D	3/4 JIC	& BLANK	HE12	1	LZ-0577-12-2D	3/4 NPT	& 3/4 NPT
DB20	1	LZ-0577-20-57D	3/4 JIC	& BLANK	HE15	1	LZ-0577-15-2D	3/4 NPT	& 3/4 NPT
DC10	+	1 LZ-0577-10-57D	BLANK	& 3/4 JIC	HE17	1	LZ-0577-17-2D	3/4 NPT	& 3/4 NPT
DC12	+	1 LZ-0577-12-57D	BLANK	& 3/4 JIC	HE20	1	LZ-0577-20-2D	3/4 NPT	& 3/4 NPT
DC15	1	LZ-0577-15-57D	BLANK	& 3/4 JIC	HF10	1	LZ-0577-10-3D	3/4 NPT	& 1 NPT
DC17	1	LZ-0577-17-57D	BLANK	& 3/4 JIC	HF12	1	LZ-0577-12-3D	3/4 NPT	& 1 NPT
DC20	1	LZ-0577-20-57D	BLANK	& 3/4 JIC	HF15	1	LZ-0577-15-3D	3/4 NPT	& 1 NPT
DE10	+	1 LZ-0577-10-58D	3/4 JIC	& 3/4 JIC	HF17	1	LZ-0577-17-3D	3/4 NPT	& 1 NPT
DE12	+	1 LZ-0577-12-58D	3/4 JIC	& 3/4 JIC	HF20	1	LZ-0577-20-3D	3/4 NPT	& 1 NPT
DE15	1	LZ-0577-15-58D	3/4 JIC	& 3/4 JIC	HI10	1	LZ-0577-10-3D	1 NPT	& 3/4 NPT
DE17	1	LZ-0577-17-58D	3/4 JIC	& 3/4 JIC	HI12	1	LZ-0577-12-3D	1 NPT	& 3/4 NPT
DE20	1	LZ-0577-20-58D	3/4 JIC	& 3/4 JIC	HI15	1	LZ-0577-15-3D	1 NPT	& 3/4 NPT
DF10	+	1 LZ-0577-10-71D	3/4 JIC	& 1 JIC	HI17	1	LZ-0577-17-3D	1 NPT	& 3/4 NPT
DF12	+	1 LZ-0577-12-71D	3/4 JIC	& 1 JIC	HI20	1	LZ-0577-20-3D	1 NPT	& 3/4 NPT
DF15	1	LZ-0577-15-71D	3/4 JIC	& 1 JIC	HZ15	1	LZ-0577-15-7D	1 1/4 NPT	& BLANK
DF17	1	LZ-0577-17-71D	3/4 JIC	& 1 JIC	HZ17	1	LZ-0577-17-7D	1 1/4 NPT	& BLANK
DF20	1	LZ-0577-20-71D	3/4 JIC	& 1 JIC	HZ20	1	LZ-0577-20-7D	1 1/4 NPT	& BLANK
DG15	+	1 LZ-0577-15-73D	3/4 JIC	& 1 1/4 JIC	HZ22	1	LZ-0577-22-7D	1 1/4 NPT	& BLANK
DG17	1	LZ-0577-17-73D	3/4 JIC	& 1 1/4 JIC	HZ25	1	LZ-0577-25-7D	1 1/4 NPT	& BLANK
DI10	+	1 LZ-0577-10-71D	1 JIC	& 3/4 JIC	NA12	1	LZ-0577-12-35D	BLANK	& 1 1/4 SF
DI12	+	1 LZ-0577-12-71D	1 JIC	& 3/4 JIC	NA15	+	1 LZ-0577-15-35D	BLANK	& 1 1/4 SF
DI15	1	LZ-0577-15-71D	1 JIC	& 3/4 JIC	NA17	+	1 LZ-0577-17-35D	BLANK	& 1 1/4 SF
DI17	1	LZ-0577-17-71D	1 JIC	& 3/4 JIC	NA20	1	LZ-0577-20-35D	BLANK	& 1 1/4 SF
DI20	1	LZ-0577-20-71D	1 JIC	& 3/4 JIC	NA22	1	LZ-0577-22-35D	BLANK	& 1 1/4 SF
DJ15	+	1 LZ-0577-15-73D	1 1/4 JIC	& 3/4 JIC	NA25	1	LZ-0577-25-35D	BLANK	& 1 1/4 SF
DJ17	1	LZ-0577-17-73D	1 1/4 JIC	& 3/4 JIC	NB10	+	1 LZ-0577-10-32D	1 SF	& BLANK
HA15	1	LZ-0577-15-7D	BLANK	& 1 1/4 NPT	NB12	+	1 LZ-0577-12-32D	1 SF	& BLANK
HA17	1	LZ-0577-17-7D	BLANK	& 1 1/4 NPT	NB15	1	LZ-0577-15-32D	1 SF	& BLANK
HA20	1	LZ-0577-20-7D	BLANK	& 1 1/4 NPT	NB17	1	LZ-0577-17-32D	1 SF	& BLANK
HA22	1	LZ-0577-22-7D	BLANK	& 1 1/4 NPT	NB20	1	LZ-0577-20-32D	1 SF	& BLANK
HA25	1	LZ-0577-25-7D	BLANK	& 1 1/4 NPT	NB22	1	LZ-0577-22-32D	1 SF	& BLANK
HB10	1	LZ-0577-10-1D	3/4 NPT	& BLANK	NB25	1	LZ-0577-25-32D	1 SF	& BLANK
HB12	1	LZ-0577-12-1D	3/4 NPT	& BLANK	NC10	+	1 LZ-0577-10-32D	BLANK	& 1 SF
HB15	1	LZ-0577-15-1D	3/4 NPT	& BLANK	NC12	+	1 LZ-0577-12-32D	BLANK	& 1 SF
HB17	1	LZ-0577-17-1D	3/4 NPT	& BLANK	NC15	1	LZ-0577-15-32D	BLANK	& 1 SF
HC10	1	LZ-0577-10-1D	BLANK	& 3/4 NPT	NC17	1	LZ-0577-17-32D	BLANK	& 1 SF
HC12	1	LZ-0577-12-1D	BLANK	& 3/4 NPT	NC20	1	LZ-0577-20-32D	BLANK	& 1 SF

PERMCO MODEL 5100      Housings

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			
NC22	1	LZ-0577-22-32D	BLANK	& 1 SF	NL15	+	1	LZ-0577-15-38D	1 1/4 SF & 1 1/2 SF		
NC25	1	LZ-0577-25-32D	BLANK	& 1 SF	NL17	+	1	LZ-0577-17-38D	1 1/4 SF & 1 1/2 SF		
ND15	'	1	LZ-0577-15-39D	1 1/2 SF & BLANK	NL20	'	1	LZ-0577-20-38D	1 1/4 SF & 1 1/2 SF		
ND17	'	1	LZ-0577-17-39D	1 1/2 SF & BLANK	NL22	'	1	LZ-0577-22-38D	1 1/4 SF & 1 1/2 SF		
ND20	+	1	LZ-0577-20-39D	1 1/2 SF & BLANK	NL25	'	1	LZ-0577-25-38D	1 1/4 SF & 1 1/2 SF		
ND22	1	LZ-0577-22-39D	1 1/2 SF	& BLANK	NM20	'	1	LZ-0577-20-45D	1 1/4 SF & 2 SF		
ND25	1	LZ-0577-25-39D	1 1/2 SF	& BLANK	NM22	'	1	LZ-0577-22-45D	1 1/4 SF & 2 SF		
NE12	+	+	1	LZ-0577-12-33D	1 SF	& 1 SF	NM25	'	1	LZ-0577-25-45D	1 1/4 SF & 2 SF
NE15	1	LZ-0577-15-33D	1 SF	& 1 SF	NO15	'	+	1	LZ-0577-15-38D	1 1/2 SF & 1 1/4 SF	
NE17	1	LZ-0577-17-33D	1 SF	& 1 SF	NO17	'	+	1	LZ-0577-17-38D	1 1/2 SF & 1 1/4 SF	
NE20	1	LZ-0577-20-33D	1 SF	& 1 SF	NO20	'	1	LZ-0577-20-38D	1 1/2 SF & 1 1/4 SF		
NE22	1	LZ-0577-22-33D	1 SF	& 1 SF	NO22	'	1	LZ-0577-22-38D	1 1/2 SF & 1 1/4 SF		
NE25	1	LZ-0577-25-33D	1 SF	& 1 SF	NO25	'	1	LZ-0577-25-38D	1 1/2 SF & 1 1/4 SF		
NF12	+	'	1	LZ-0577-12-34D	1 SF	& 1 1/4 SF	NP20	'	1	LZ-0577-20-45D	2 SF & 1 1/4 SF
NF15	'	1	LZ-0577-15-34D	1 SF & 1 1/4 SF	NP22	'	1	LZ-0577-22-45D	2 SF & 1 1/4 SF		
NF17	'	1	LZ-0577-17-34D	1 SF & 1 1/4 SF	NP25	'	1	LZ-0577-25-45D	2 SF & 1 1/4 SF		
NF20	1	LZ-0577-20-34D	1 SF	& 1 1/4 SF	NQ17	'	1	LZ-0577-17-40D	1 1/2 SF & 1 1/2 SF		
NF22	1	LZ-0577-22-34D	1 SF	& 1 1/4 SF	NQ20	+	+	1	LZ-0577-20-40D	1 1/2 SF & 1 1/2 SF	
NF25	1	LZ-0577-25-34D	1 SF	& 1 1/4 SF	NQ22	'	1	LZ-0577-22-40D	1 1/2 SF & 1 1/2 SF		
NG15	'	1	LZ-0577-15-44D	1 SF & 1 1/2 SF	NQ25	'	1	LZ-0577-25-40D	1 1/2 SF & 1 1/2 SF		
NG17	'	1	LZ-0577-17-44D	1 SF & 1 1/2 SF	NR20	+	'	1	LZ-0577-20-41D	1 1/2 SF & 2 SF	
NG20	'	1	LZ-0577-20-44D	1 SF & 1 1/2 SF	NR22	'	1	LZ-0577-22-41D	1 1/2 SF & 2 SF		
NG22	1	LZ-0577-22-44D	1 SF	& 1 1/2 SF	NR25	'	1	LZ-0577-25-41D	1 1/2 SF & 2 SF		
NG25	1	LZ-0577-25-44D	1 SF	& 1 1/2 SF	NT15	'	1	LZ-0577-15-39D	BLANK & 1 1/2 SF		
NI12	'	+	1	LZ-0577-12-34D	1 1/4 SF & 1 SF	NT17	'	1	LZ-0577-17-39D	BLANK & 1 1/2 SF	
NI15	'	1	LZ-0577-15-34D	1 1/4 SF & 1 SF	NT20	+	1	LZ-0577-20-39D	BLANK & 1 1/2 SF		
NI17	'	1	LZ-0577-17-34D	1 1/4 SF & 1 SF	NT22	'	1	LZ-0577-22-39D	BLANK & 1 1/2 SF		
NI20	1	LZ-0577-20-34D	1 1/4 SF	& 1 SF	NT25	'	1	LZ-0577-25-39D	BLANK & 1 1/2 SF		
NI22	1	LZ-0577-22-34D	1 1/4 SF	& 1 SF	NU20	'	+	1	LZ-0577-20-41D	2 SF & 1 1/2 SF	
NI25	1	LZ-0577-25-34D	1 1/4 SF	& 1 SF	NU22	'	1	LZ-0577-22-41D	2 SF & 1 1/2 SF		
NJ15	'	1	LZ-0577-15-44D	1 1/2 SF & 1 SF	NU25	'	1	LZ-0577-25-41D	2 SF & 1 1/2 SF		
NJ17	'	1	LZ-0577-17-44D	1 1/2 SF & 1 SF	NW25	+	+	1	LZ-0577-25-43D	2 SF & 2 SF	
NJ20	'	1	LZ-0577-20-44D	1 1/2 SF & 1 SF	NZ12	'	1	LZ-0577-12-35D	1 1/4 SF & BLANK		
NJ22	1	LZ-0577-22-44D	1 1/2 SF	& 1 SF	NZ15	+	1	LZ-0577-15-35D	1 1/4 SF & BLANK		
NJ25	1	LZ-0577-25-44D	1 1/2 SF	& 1 SF	NZ17	+	1	LZ-0577-17-35D	1 1/4 SF & BLANK		
NK15	+	+	1	LZ-0577-15-36D	1 1/4 SF & 1 1/4 SF	NZ20	'	1	LZ-0577-20-35D	1 1/4 SF & BLANK	
NK17	+	+	1	LZ-0577-17-36D	1 1/4 SF & 1 1/4 SF	NZ22	'	1	LZ-0577-22-35D	1 1/4 SF & BLANK	
NK20	1	LZ-0577-20-36D	1 1/4 SF	& 1 1/4 SF	NZ25	'	1	LZ-0577-25-35D	1 1/4 SF & BLANK		
NK22	1	LZ-0577-22-36D	1 1/4 SF	& 1 1/4 SF	TA20	'	1	LZ-0577-20-95D	1 SF & 2 SF		
NK25	1	LZ-0577-25-36D	1 1/4 SF	& 1 1/4 SF	TA22	'	1	LZ-0577-22-95D	1 SF & 2 SF		

PERMCO MODEL: 5100

Housings

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
TA25	1	LZ-0577-25-95D	1 SF	& 2 SF	XC22	1	LZ-0577-22-4D	BLANK	& 1 NPT
TB10	1	LZ-0577-10-29D	3/4 SF	& BLANK	XE12	1	LZ-0577-12-5D	1 NPT	& 1 NPT
TB12	1	LZ-0577-12-29D	3/4 SF	& BLANK	XE15	1	LZ-0577-15-5D	1 NPT	& 1 NPT
TB15	1	LZ-0577-15-29D	3/4 SF	& BLANK	XE17	1	LZ-0577-17-5D	1 NPT	& 1 NPT
TB17	1	LZ-0577-17-29D	3/4 SF	& BLANK	XE20	1	LZ-0577-20-5D	1 NPT	& 1 NPT
TC10	1	LZ-0577-10-29D	BLANK	& 3/4 SF	XE22	1	LZ-0577-22-5D	1 NPT	& 1 NPT
TC12	1	LZ-0577-12-29D	BLANK	& 3/4 SF	XE25	1	LZ-0577-25-5D	1 NPT	& 1 NPT
TC15	1	LZ-0577-15-29D	BLANK	& 3/4 SF	XF15	1	LZ-0577-15-6D	1 NPT	& 1 1/4 NPT
TC17	1	LZ-0577-17-29D	BLANK	& 3/4 SF	XF17	1	LZ-0577-17-6D	1 NPT	& 1 1/4 NPT
TE20	1	LZ-0577-20-30D	3/4 SF	& 3/4 SF	XF20	1	LZ-0577-20-6D	1 NPT	& 1 1/4 NPT
TE22	1	LZ-0577-22-30D	3/4 SF	& 3/4 SF	XF22	1	LZ-0577-22-6D	1 NPT	& 1 1/4 NPT
TE25	1	LZ-0577-25-30D	3/4 SF	& 3/4 SF	XF25	1	LZ-0577-25-6D	1 NPT	& 1 1/4 NPT
TF10	1	LZ-0577-10-31D	3/4 SF	& 1 SF	XG20	1	LZ-0577-20-11D	1 NPT	& 1-1/2 NPT
TF12	1	LZ-0577-12-31D	3/4 SF	& 1 SF	XG22	1	LZ-0577-22-11D	1 NPT	& 1-1/2 NPT
TF15	1	LZ-0577-15-31D	3/4 SF	& 1 SF	XG25	1	LZ-0577-25-11D	1 NPT	& 1-1/2 NPT
TF17	1	LZ-0577-17-31D	3/4 SF	& 1 SF	XI15	1	LZ-0577-15-6D	1 1/4 NPT	& 1 NPT
TF20	1	LZ-0577-20-31D	3/4 SF	& 1 SF	XI17	1	LZ-0577-17-6D	1 1/4 NPT	& 1 NPT
TG12	1	LZ-0577-12-37D	3/4 SF	& 1-1/4 SF	XI20	1	LZ-0577-20-6D	1 1/4 NPT	& 1 NPT
TG15	1	LZ-0577-15-37D	3/4 SF	& 1-1/4 SF	XI22	1	LZ-0577-22-6D	1 1/4 NPT	& 1 NPT
TG17	1	LZ-0577-17-37D	3/4 SF	& 1-1/4 SF	XI25	1	LZ-0577-25-6D	1 1/4 NPT	& 1 NPT
TI10	1	LZ-0577-10-31D	1 SF	& 3/4 SF	XJ20	1	LZ-0577-20-11D	1 1/2 NPT	& 1 NPT
TI12	1	LZ-0577-12-31D	1 SF	& 3/4 SF	XJ22	1	LZ-0577-22-11D	1 1/2 NPT	& 1 NPT
TI15	1	LZ-0577-15-31D	1 SF	& 3/4 SF	XJ25	1	LZ-0577-25-11D	1 1/2 NPT	& 1 NPT
TI17	1	LZ-0577-17-31D	1 SF	& 3/4 SF	XK17	1	LZ-0577-17-8D	1 1/4 NPT	& 1 1/4 NPT
TI20	1	LZ-0577-20-31D	1 SF	& 3/4 SF	XK20	1	LZ-0577-20-8D	1 1/4 NPT	& 1 1/4 NPT
TJ12	1	LZ-0577-12-37D	1-1/4 SF	& 3/4 SF	XK22	1	LZ-0577-22-8D	1 1/4 NPT	& 1 1/4 NPT
TJ15	1	LZ-0577-15-37D	1-1/4 SF	& 3/4 SF	XK25	1	LZ-0577-25-8D	1 1/4 NPT	& 1 1/4 NPT
TJ17	1	LZ-0577-17-37D	1-1/4 SF	& 3/4 SF	XL20	1	LZ-0577-20-12D	1 1/4 NPT	& 1 1/2 NPT
TP20	1	LZ-0577-20-95D	2 SF	& 1 SF	XL22	1	LZ-0577-22-12D	1 1/4 NPT	& 1 1/2 NPT
TP22	1	LZ-0577-22-95D	2 SF	& 1 SF	XL25	1	LZ-0577-25-12D	1 1/4 NPT	& 1 1/2 NPT
TP25	1	LZ-0577-25-95D	2 SF	& 1 SF	XO20	1	LZ-0577-20-12D	1 1/2 NPT	& 1 1/4 NPT
XB12	1	LZ-0577-12-4D	1 NPT	& BLANK	XO22	1	LZ-0577-22-12D	1 1/2 NPT	& 1 1/4 NPT
XB15	1	LZ-0577-15-4D	1 NPT	& BLANK	XO25	1	LZ-0577-25-12D	1 1/2 NPT	& 1 1/4 NPT
XB17	1	LZ-0577-17-4D	1 NPT	& BLANK	XQ25	1	LZ-0577-25-13D	1 1/2 NPT	& 1 1/2 NPT
XB20	1	LZ-0577-20-4D	1 NPT	& BLANK	ZA05	1	LZ-0577-05D	BLANK	& BLANK
XB22	1	LZ-0577-22-4D	1 NPT	& BLANK	ZA07	1	LZ-0577-07D	BLANK	& BLANK
XC12	1	LZ-0577-12-4D	BLANK	& 1 NPT	ZA10	1	LZ-0577-10D	BLANK	& BLANK
XC15	1	LZ-0577-15-4D	BLANK	& 1 NPT	ZA12	1	LZ-0577-12D	BLANK	& BLANK
XC17	1	LZ-0577-17-4D	BLANK	& 1 NPT	ZA15	1	LZ-0577-15D	BLANK	& BLANK
XC20	1	LZ-0577-20-4D	BLANK	& 1 NPT	ZA17	1	LZ-0577-17D	BLANK	& BLANK

PERMCO MODEL: 5100

Housings

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
ZA20	1	LZ-0577-20D	BLANK	& BLANK	ZK22	1	LZ-0577-22-67D	1 1/4 JIC	& 1 1/4 JIC
ZA22	1	LZ-0577-22D	BLANK	& BLANK	ZK25	1	LZ-0577-25-67D	1 1/4 JIC	& 1 1/4 JIC
ZA25	1	LZ-0577-25D	BLANK	& BLANK	ZL20	+	1 LZ-0577-20-68D	1 1/4 JIC	& 1 1/2 JIC
ZB10	'	1 LZ-0577-10-63D	1 JIC	& BLANK	ZL22	'	1 LZ-0577-22-68D	1 1/4 JIC	& 1 1/2 JIC
ZB12	'	1 LZ-0577-12-63D	1 JIC	& BLANK	ZL25	1	LZ-0577-25-68D	1 1/4 JIC	& 1 1/2 JIC
ZB15	+	1 LZ-0577-15-63D	1 JIC	& BLANK	ZN15	'	1 LZ-0577-15-66D	BLANK	& 1 1/4 JIC
ZB17	+	1 LZ-0577-17-63D	1 JIC	& BLANK	ZN17	'	1 LZ-0577-17-66D	BLANK	& 1 1/4 JIC
ZB20	1	LZ-0577-20-63D	1 JIC	& BLANK	ZN20	+	1 LZ-0577-20-66D	BLANK	& 1 1/4 JIC
ZB22	1	LZ-0577-22-63D	1 JIC	& BLANK	ZN22	1	LZ-0577-22-66D	BLANK	& 1 1/4 JIC
ZC10	'	1 LZ-0577-10-63D	BLANK	& 1 JIC	ZN25	1	LZ-0577-25-66D	BLANK	& 1 1/4 JIC
ZC12	'	1 LZ-0577-12-63D	BLANK	& 1 JIC	ZO20	'	1 LZ-0577-20-68D	1 1/2 JIC	& 1 1/4 JIC
ZC15	+	1 LZ-0577-15-63D	BLANK	& 1 JIC	ZO22	'	1 LZ-0577-22-68D	1 1/2 JIC	& 1 1/4 JIC
ZC17	+	1 LZ-0577-17-63D	BLANK	& 1 JIC	ZO25	1	LZ-0577-25-68D	1 1/2 JIC	& 1 1/4 JIC
ZC20	1	LZ-0577-20-63D	BLANK	& 1 JIC	ZQ25	1	LZ-0577-25-70D	1 1/2 JIC	& 1 1/2 JIC
ZC22	1	LZ-0577-22-63D	BLANK	& 1 JIC	ZT20	'	1 LZ-0577-20-69D	BLANK	& 1 1/2 JIC
ZD20	'	1 LZ-0577-20-69D	1 1/2 JIC	& BLANK	ZT22	'	1 LZ-0577-22-69D	BLANK	& 1 1/2 JIC
ZD22	'	1 LZ-0577-22-69D	1 1/2 JIC	& BLANK	ZT25	1	LZ-0577-25-69D	BLANK	& 1 1/2 JIC
ZD25	1	LZ-0577-25-69D	1 1/2 JIC	& BLANK	ZZ15	'	1 LZ-0577-15-66D	1 1/4 JIC	& BLANK
ZE15	+	1 LZ-0577-15-64D	1 JIC	& 1 JIC	ZZ17	'	1 LZ-0577-17-66D	1 1/4 JIC	& BLANK
ZE17	+	1 LZ-0577-17-64D	1 JIC	& 1 JIC	ZZ20	1	LZ-0577-20-66D	1 1/4 JIC	& BLANK
ZE20	1	LZ-0577-20-64D	1 JIC	& 1 JIC	ZZ22	1	LZ-0577-22-66D	1 1/4 JIC	& BLANK
ZE22	1	LZ-0577-22-64D	1 JIC	& 1 JIC	ZZ25	1	LZ-0577-25-66D	1 1/4 JIC	& BLANK
ZE25	1	LZ-0577-25-64D	1 JIC	& 1 JIC					
ZF15	+	1 LZ-0577-15-65D	1 JIC	& 1 1/4 JIC					
ZF17	+	1 LZ-0577-17-65D	1 JIC	& 1 1/4 JIC					
ZF20	'	1 LZ-0577-20-65D	1 JIC	& 1 1/4 JIC					
ZF22	1	LZ-0577-22-65D	1 JIC	& 1 1/4 JIC					
ZF25	1	LZ-0577-25-65D	1 JIC	& 1 1/4 JIC					
ZG17	+	1 LZ-0577-17-74D	1 JIC	& 1 1/2 JIC					
ZG20	'	1 LZ-0577-20-74D	1 JIC	& 1 1/2 JIC					
ZG22	'	1 LZ-0577-22-74D	1 JIC	& 1 1/2 JIC					
ZI15	'	1 LZ-0577-15-65D	1 1/4 JIC	& 1 JIC					
ZI17	'	1 LZ-0577-17-65D	1 1/4 JIC	& 1 JIC					
ZI20	'	1 LZ-0577-20-65D	1 1/4 JIC	& 1 JIC					
ZI22	1	LZ-0577-22-65D	1 1/4 JIC	& 1 JIC					
ZI25	1	LZ-0577-25-65D	1 1/4 JIC	& 1 JIC					
ZJ17	'	1 LZ-0577-17-74D	1 1/2 JIC	& 1 JIC					
ZJ20	'	1 LZ-0577-20-74D	1 1/2 JIC	& 1 JIC					
ZJ22	'	1 LZ-0577-22-74D	1 1/2 JIC	& 1 JIC					
ZK20	+	1 LZ-0577-20-67D	1 1/4 JIC	& 1 1/4 JIC					

PERMCO MODEL: 5100

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-2995-244	SQUARE GASKET SEAL
	2	X-0947-TC	TEFLON THRUST PLATE

ALL DRY VALVE PUMPS REQUIRE DRY VALVE THRUST PLATES

2	X-0947-DV	DRY VALVE PLATE ( BIRO )
		OR
2	X-0947-DVS	DRY VALVE PLATE ( SINGLE ROT. )

PERMCO MODEL: 5100

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	LZ-0995L-05	1/2 GEAR SET
07	1	LZ-0995L-07	3/4 GEAR SET
10	1	LZ-0995L-10	1 GEAR SET
12	1	LZ-0995L-12	1 1/4 GEAR SET
15	1	LZ-0995L-15	1 1/2 GEAR SET
17	1	LZ-0995L-17	1 3/4 GEAR SET
20	1	LZ-0995L-20	2 GEAR SET
22	1	LZ-0995L-22	2 1/4 GEAR SET
25	1	LZ-0995L-25	2 1/2 GEAR SET

PERMCO MODEL: 5100

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
6	^	1	OC-0024L-1-17	5000	G/SH	14TH	1.25 DIA
6	^	1	OC-0024L-1-22	5000	GEAR/SHAFT	SET	2-1/4
6		1	OC-0024L-3-10	TYPE I	14T	SPLINE	SAE C
6		1	OC-0024L-3-12	TYPE I	14T	SPLINE	SAE C
6		1	OC-0024L-3-15	TYPE I	14T	SPLINE	SAE C
6		1	OC-0024L-3-17	TYPE I	14T	SPLINE	SAE C
6		1	OC-0024L-3-20	TYPE I	14T	SPLINE	SAE C
6		1	OC-0024L-3-22	TYPE I	14T	SPLINE	SAE C
6		1	OC-0024L-3-25	TYPE I	14T	SPLINE	SAE C
00	^	1	RC-0024L-1-20	5000	G/SH	1.25	KEYED
00	^	1	RC-0024L-1-22	5000	GEAR/SHAFT	SET	2-1/4
00	^	1	RC-0024L-1-25	5000	G/S	1/25	KEYED
00	^	1	RC-0024L-1-30	5000	G/SH	1-1/4	KEYED 3
00		1	RC-0024L-3-10	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-12	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-15	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-17	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-20	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-22	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-25	TYPE I	KEYED	SAE	C
00		1	RC-0024L-3-27	TYPE I	KEYED	SAE	C
00		1	RC-0024L-1-30	TYPE I	KEYED	SAE	C
11	*	1	ZF-0022	5000/5000	PB		
12		1	ZI-0022	7500/5000	PB		
14	^	1	UC-0024L-1-15	5000	GEAR/SHAFT	SET	1-1/2
14	^	1	UC-0024L-1-17	5000	G/SH	7/8 - 13TH	1-3/4
14	^	1	UC-0024L-1-20	5000	G/SH	SET	2
14	^	1	UC-0024L-1-22	5000	G/SH	SET	2-1/4
14	^	1	UC-0024L-1-25	5000	G/S	13	TOOTH 7/8 DIA
14	*	1	UC-0024L-3-10	TYPE I	13T	SPLINE	SAE B
14		1	UC-0024L-3-12	TYPE I	13T	SPLINE	SAE B
14		1	UC-0024L-3-15	TYPE I	13T	SPLINE	SAE B
14		1	UC-0024L-3-17	TYPE I	13T	SPLINE	SAE B
14		1	UC-0024L-3-20	TYPE I	13T	SPLINE	SAE B
14		1	UC-0024L-3-22	TYPE I	13T	SPLINE	SAE B
14		1	UC-0024L-3-25	TYPE I	13T	SPLINE	SAE B
32	^	1	SC-0024L-1-15	OBSOLETE	3/26/98		
32	^	1	SC-0024L-1-17	5000	GEAR/SHAFT	SET	1-3/4
32	^	1	SC-0024L-1-25	5000	USE	SC-0024L-3-25	
32	*	1	SC-0024L-3-12	TYPE I	KEYED		
32	*	1	SC-0024L-3-15	TYPE I	KEYED		
32	*	1	SC-0024L-3-17	TYPE I	KEYED		
32	*	1	SC-0024L-3-20	TYPE I	KEYED		
32	*	1	SC-0024L-3-22	TYPE I	KEYED		
32	*	1	SC-0024L-3-25	TYPE I	KEYED		
42	^	1	OC-0024L-2-12	5000	G/SH	ST	1-1/4 14T TYPE II
42	^	1	OC-0024L-2-15	5000	G/SH	ST	1-1/2 14T TYPE II
42	^	1	OC-0024L-2-17	5000	G/S	14	TOOTH 1.25 DIA
42	*	1	OC-0024L-4-12	TYPE II	14T	SPLINE	SAE C
42	*	1	OC-0024L-4-17	TYPE II	14T	SPLINE	SAE C
42		1	OC-0024L-4-20	TYPE II	14T	SPLINE	SAE C
42		1	OC-0024L-4-22	TYPE II	14T	SPLINE	SAE C
42	*	1	OC-0024L-4-25	TYPE II	14T	SPLINE	SAE C
87	^	1	ZS-0024L-1-25	5000	G/S	1	DIA.15T SPLN SINGLE
87		1	ZS-0024L-3-17	5000	G/S	1	DIA 15T SPLINE
C 1		1	ZA-0024	TYPE I	1-1/8	KEYED	
C 6		1	ZF-0024	1-1/4	DIA.	14T	SPLINE
C00		1	ZE-0024	1-1/4	DIA.	KEYED	SHAFT
C14		1	ZC-0024	7/8	DIA.	13T	SPLINE
C29		1	ZX-0024	7/8	DIA.	KEYED	SHAFT OBSOLETE
C32		1	ZD-0024	1	DIA.	KEYED	SHAFT
C32XL		1	ZD-0024-XL	1"	DIA	KEYED	EXTRA LG
C62		1	202-0499-502	1-1/4"	DIA.	KEYED	3"EXT
C87		1	ZS-0024-1	1	DIA.	15T	SPLINE
SPL		1	024-00501	1"	DIA	KEYED	SAE BB
SPL		1	ZL-0024	1.1"	DIA	6	TOOTH SPLINE
SPL	*	1	024-00939	55/64"	DIA	13	TOOTH

PERMCO MODEL: 5100

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>
00	1	W09-27	5/16 X 15/32 X 1-1/2 KEY
32	1	W09-02	1/4 X 3/8 X 1-1/4 KEY
C 1	1	W09-01	1/4 X 3/8 X 1-3/4 KEY
C 1	1	ZB-0558	5000 SPACER
C 6	1	ZB-0558	5000 SPACER
C00	1	W09-27	5/16 X 15/32 X 1-1/2 KEY
C00	1	ZB-0558	5000 SPACER
C14	1	ZB-0558	5000 SPACER
C29	1	W09-06	1/4 X 3/8 X 1 KEY
C29	1	ZB-0558	5000 SPACER
C32	1	W09-02	1/4 X 3/8 X 1-1/4 KEY
C32	1	ZB-0558	5000 SPACER
C32XL	1	W09-18	1/4 X 3/8 X 2 KEY
C32XL	1	ZB-0558	5000 SPACER
C62	1	558-01017	BEARING SPACER
C62	1	565-01016	SPIROL RETAINING RING
C62	1	226-01015	PUMP SEAL, 1-1/4 SHAFT
C62	1	280-1772-186	MOTOR SEAL, 1-1/4 SHAFT
C62	1	ZB-0558	5000 SPACER
C62	1	W09-44	5/16 X 15/32 X 2-1/4 KEY
C62	1	W023-283	SNAP RING
C62	1	W58-47	BALL BEARING
C87	1	ZB-0558	5000 SPACER

PERMCO MODEL: 5100

Bearing Carriers

CODE	QTY	PART NUMBER	DESCRIPTION		CODE	QTY	PART NUMBER	DESCRIPTION	
A	1	SZ-0576D	BLANK	& BLANK	JU	1	TZ-0576-33-6D	1 NPT-F	& 1 1/4 NPT-T
AA	1	AB-0576-2-67D	1-1/4 JIC-T	& 1-1/4 JIC-T	JV	1	TZ-0576-33-11D	1 NPT-F	& 1 1/2 NPT-T
AB	1	TZ-0576-11-63D	BLANK	& 1 JIC-T	KA	1	TZ-0576-11-32D	1 SF-T	& BLANK
AC	1	TZ-0576-11-66D	BLANK	& 1 1/4 JIC-T	KK	1	AB-0576-2-33D	1 SF-T	& 1 SF-T
AE	1	TZ-0576-11-69D	BLANK	& 1 1/2 JIC-T	KQ	1	TZ-0576-33-31D	1 SF-T	& 3/4 SF-B
AK	1	TZ-0576-11-32D	BLANK	& 1 SF-T	KW	1	TZ-0576-44-31D	1 SF-T	& 3/4 SF-F
AL	1	TZ-0576-11-35D	BLANK	& 1 1/4 SF-T	LA	1	TZ-0576-11-35D	1 1/4 SF-T	& BLANK
AM	1	TZ-0576-11-39D	BLANK	& 1 1/2 SF-T	LL	1	AB-0576-2-36D	1-1/4 SF-T	& 1-1/4 SF-T
AQ	1	TZ-0576-33-129D	T	& 3/4 SF-B	LQ	1	TZ-0576-33-37D	1 1/4 SF-T	& 3/4 SF-B
AS	1	TZ-0576-11-4D	BLANK	& 1 NPT-T	LR	1	TZ-0576-33-34D	1 1/4 SF-T	& 1 SF-B
AU	1	TZ-0576-11-7D	BLANK	& 1 1/4 NPT-T	LW	1	TZ-0576-44-37D	1 1/4 SF-T	& 3/4 SF-F
AV	1	TZ-0576-11-17D	BLANK	& 1 1/2 NPT-T	LY	1	TZ-0576-44-34D	1 1/4 SF-T	& 1 SF-F
B	1	SZ-0576-11D	T	& BLANK	MA	1	TZ-0576-11-39D	1 1/2 SF-T	& BLANK
BA	1	TZ-0576-11-63D	1 JIC-T	& BLANK	MM	1	AB-0576-2-40D	1-1/2 SF-T	& 1-1/2 SF-T
BB	1	AB-0576-2-64D	1 JIC-T	& 1 JIC-T	MQ	1	TZ-0576-33-49D	1 1/2 SF-T	& 3/4 SF-B
BI	1	TZ-0576-33-71D	1 JIC-T	& 3/4 JIC-B	MR	1	TZ-0576-33-44D	1 1/2 SF-T	& 1 SF-B
BQ	1	TZ-0576-44-71D	1 JIC-T	& 3/4 JIC-F	MW	1	TZ-0576-44-49D	1 1/2 SF-T	& 3/4 SF-F
C	1	SZ-0576-11D	BLANK	& T	MY	1	TZ-0576-44-44D	1 1/2 SF-T	& 1 SF-F
CA	1	TZ-0576-11-66D	1 1/4 JIC-T	& BLANK	QA	1	TZ-0576-44-129D	3/4 SF-B	& T
CI	1	TZ-0576-33-73D	1 1/4 JIC-T	& 3/4 JIC-B	QB	1	TZ-0576-33-71D	3/4 JIC-F	& 1 JIC-T
CJ	1	TZ-0576-33-65D	1 1/4 JIC-T	& 1 JIC-B	QC	1	TZ-0576-33-73D	3/4 JIC-F	& 1 1/4 JIC-T
CQ	1	TZ-0576-44-73D	1 1/4 JIC-T	& 3/4 JIC-F	QE	1	TZ-0576-33-76D	3/4 JIC-F	& 1 1/2 JIC-T
CR	1	TZ-0576-44-65D	1 1/4 JIC-T	& 1 JIC-F	QK	1	TZ-0576-44-31D	3/4 SF-B	& 1 SF-T
EA	1	TZ-0576-11-69D	1 1/2 JIC-T	& BLANK	QL	1	TZ-0576-44-37D	3/4 SF-B	& 1 1/4 SF-T
EE	1	AB-0576-2-70D	1-1/2 JIC-T	& 1-1/2 JIC-T	QM	1	TZ-0576-44-49D	3/4 SF-B	& 1 1/2 SF-T
EI	1	TZ-0576-33-76D	1 1/2 JIC-T	& 3/4 JIC-B	QR	1	TZ-0576-55-31D	3/4 SF-B	& 1 SF-B
EJ	1	TZ-0576-33-74D	1 1/2 JIC-T	& 1 JIC-B	RC	1	TZ-0576-33-65D	1 JIC-F	& 1 1/4 JIC-T
EQ	1	TZ-0576-44-76D	1-1/2 JIC-T	& 3/4 JIC-F	RE	1	TZ-0576-33-74D	1 JIC-F	& 1 1/2 JIC-T
ER	1	TZ-0576-44-74D	1 1/2 JIC-T	& 1 JIC-F	RL	1	TZ-0576-44-34D	1 SF-B	& 1 1/4 SF-T
IB	1	TZ-0576-44-71D	3/4 JIC-B	& 1 JIC-T	RM	1	TZ-0576-44-44D	1 SF-B	& 1 1/2 SF-T
IC	1	TZ-0576-44-73D	3/4 JIC-B	& 1 1/4 JIC-T	RQ	1	TZ0576-555-131D	1 SF-B	& 3/4 SF-B
IE	1	TZ-0576-44-76D	3/4 JIC-B	& 1 1/2 JIC-T	SA	1	TZ-0576-11-4D	1 NPT-T	& BLANK
IJ	1	TZ-0576-55-71D	3/4 JIC-B	& 1 JIC-B	SI	1	TZ-0576-44-3D	1 NPT-T	& 3/4 NPT-F
IO	1	TZ-0576-44-157D	3/4 JIC-B	& T	SS	1	AB-0576-2-5D	1 NPT-T	& 1 NPT-T
IS	1	TZ-0576-33-3D	3/4 NPT-F	& 1 NPT-T	SW	1	TZ-0576-33-3D	1 NPT-T	& 3/4 NPT-B
IU	1	TZ-0576-33-10D	3/4 NPT-F	& 1 1/4 NPT-T	UA	1	TZ-0576-11-7D	1 1/4 NPT-T	& BLANK
JC	1	TZ-0576-44-65D	1 JIC-B	& 1 1/4 JIC-T	UI	1	TZ-0576-44-10D	1 1/4 NPT-T	& 3/4 NPT-F
JE	1	TZ-0576-44-74D	1 JIC-B	& 1 1/2 JIC-T	UJ	1	TZ-0576-44-6D	1 1/4 NPT-T	& 1 NPT-F
JL	1	TZ0576-555-171D	1 JIC-B	& 3/4 JIC-B	UW	1	TZ-0576-33-10D	1 1/4 NPT-T	& 3/4 NPT-B
JL	1	TZ-0576-55-55D	1 JIC-B	& 1 JIC-B	UY	1	TZ-0576-33-6D	1 1/4 NPT-T	& 1 NPT-B

PERMCO MODEL: 5100

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>
VA	1	TZ-0576-11-17D	1 1/2 NPT-T & BLANK
VJ	1	TZ-0576-44-11D	1 1/2 NPT-T & 1 NPT-F
VW	1	TZ-0576-33-20D	1 1/2 NPT-T & 3/4 NPT-B
VY	1	TZ-0576-33-11D	1 1/2 NPT-T & 1 NPT-B
WK	1	TZ-0576-33-31D	3/4 SF-F & 1 SF-T
WL	1	TZ-0576-33-37D	3/4 SF-F & 1 1/4 SF-T
WM	1	TZ-0576-44-49D	3/4 SF-F & 1 1/2 SF-T
WS	1	TZ-0576-44-3D	3/4 NPT-B & 1 NPT-T
WU	1	TZ-0576-44-10D	3/4 NPT-B & 1 1/4 NPT-T
WV	1	TZ-0576-44-20D	3/4 NPT-B & 1 1/2 NPT-T
WY	1	TZ-0576-55-3D	3/4 NPT-B & 1 NPT-B
WZ	1	TZ-0576-55-3D	1 NPT-F & 3/4 NPT-F
YL	1	TZ-0576-33-34D	1 SF-F & 1 1/4 SF-T
YM	1	TZ-0576-33-44D	1 SF-F & 1 1/2 SF-T
YU	1	TZ-0576-44-6D	1 NPT-B & 1 1/4 NPT-T
YV	1	TZ-0576-44-11D	1 NPT-B & 1 1/2 NPT-T
YW	1	TZ0576-555-103D	1 NPT-B & 3/4 NPT-B

PERMCO MODEL: 5100

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	MA-0558-1XS	RING SEAL
	4	R-0921	CROWNED ROLLER BRNG
AQ	2	MA-0558-1XS	RING SEAL
AQ	4	R-0921	CROWNED ROLLER BRGN
AQ	1	W0-19	PIPE PLUG
B	2	MA-0558-1XS	RING SEAL
B	4	R-0921	CROWNED ROLLER BRGN
B	1	W0-19	PIPE PLUG
C	2	MA-0558-1XS	RING SEAL
C	4	R-0921	CROWNED ROLLER BRGN
C	1	W0-19	PIPE PLUG
IO	2	MA-0558-1XS	RING SEAL
IO	4	R-0921	CROWNED ROLLER BRGN
IO	1	W0-19	PIPE PLUG
QA	2	MA-0558-1XS	RING SEAL
QA	4	R-0921	CROWNED ROLLER BRGN
QA	1	W0-19	PIPE PLUG

PERMCO MODEL: 5100

**Gear and Connecting Shafts**

<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	XZ-0022	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 Qty.	Part #	Bolt Length	
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
2-1/4"	W1-78	5-1/2"	4
2-1/2"	W1-65	6"	4
3"	W1-89	6-1/2"	4

Washer #	W033-2	4
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### Shaft Protectors

SP-1000-1	.656" Dia
SP-1000-2	.587" Dia
SP-1000-3	SC, ZS 1" Dia
SP-1000-4	1-1/4" Splined & 1-1/8" Dia
SP-1000-5	1-1/4" Dia Keyed
SP-1000-6	1/2" Dia
SP-1000-7	5/8" Dia
SP-1000-8	UC 3/4" Dia
SP-1000-8	7/8" Dia

### Shaft Protectors for extended studs

SP-1000-7	2
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### FASTENERS FOR DOUBLE UNITS

	Flush	Extended
Dual Section	7.62	9.62
Triple Section	11.25	13.25
Quad Section	14.88	16.88

\*\*\*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"