

\* \* 197 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 CODE BOOK IS FOR THE 197 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
SIZE IN INCHES:	1/2	3/4	1	1-1/4	1-1/2	1-3/4	2

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

\* \* ABBREVIATIONS USED IN PART DESCRIPTIONS \* \*

SHAFT END COVER DESCRIPTIONS

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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 \* 197 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 - 5-3/8 INCHES  
 HOUSING WIDTH - GEAR SIZE + 1/2 INCH  
**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.  
 THIS SERIES IS AVAILABLE BOTH WITH AND WITHOUT OUTBOARD BEARINGS.

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>BEARING</u>
ALL CODES BEGINNING WITH	0	XX			XX		
	1		XX		XX		
	3	XX			XX		XX
	4		XX		XX		XX
	7			XX		XX	XX
	8			XX		XX	

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.

PERMCO MODEL: 197

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
031	1	574-00368	197 'B' SEC 4-BLT CW	731	1	574-01321	197 'B' SEC 4-BLT MOTOR
050	1	574-01372	197 'C' SEC 2&4-BLT CCW	750	1	574-01372	197 'C' SEC 2&4-BLT MOTOR
067	1	574-00376	197 'C' SEC 4-BLT CW	767	1	574-01323	197 'C' SEC 4-BLT MOTOR
076	1	574-01273	EURO RECT.MT.50.7MM PILOT	783	1	574-01324	197 'A' SEC 2 BLT MOTOR
083	1	574-00895	197 'A' SEC 2 BLT CW	786	1	574-01353	197 'B' SEC 2 BLT MOTOR
086	1	574-00377	197 'B' SEC 2 BLT CW	790	1	574-01371	197 'B' SEC 2&4 BLT MOTOR
090	1	574-01371	197 'B' SEC 2&4 BLT CW	831	1	574-01321	197 'B' SEC 4-BLT MOTOR
131	1	574-00368	197 'B' SEC 4-BLT CCW	850	1	574-01372	197 'C' SEC 2&4-BLT MOTOR
150	1	574-01372	197 'C' SEC 2&4-BLT CCW	867	1	574-01323	197 'C' SEC 4-BLT MOTOR
167	1	574-00376	197 'C' SEC 4-BLT CCW	883	1	574-01324	197 'A' SEC 2 BLT MOTOR
176	1	574-01273	EURO RECT.MT.50.7MM PILOT	886	1	574-01353	197 'B' SEC 2 BLT MOTOR
183	1	574-00895	197 'A' SEC 2 BLT CCW	890	1	574-01371	197 'B' SEC 2&4 BLT MOTOR
186	1	574-00377	197 'B' SEC 2 BLT CCW				
190	1	574-01371	197 'B' SEC 2&4 BLT CCW				
331	1	574-00368	197 'B' SEC 4-BLT CW				
350	1	574-01372	197 'C' SEC 2&4-BLT CW				
367	1	574-00376	197 'C' SEC 4-BLT CW				
383	1	574-00895	197 'A' SEC 2 BLT CW				
386	1	574-00377	197 'B' SEC 2 BLT CW				
390	1	574-01371	197 'B' SEC 2&4 BLT CW				
431	1	574-00368	197 'B' SEC 4-BLT CCW				
450	1	574-01372	197 'C' SEC 2&4-BLT CCW				
467	1	574-00376	197 'C' SEC 4-BLT CCW				
483	1	574-00895	197 'A' SEC 2 BLT CCW				
486	1	574-00377	197 'B' SEC 2 BLT CCW				
490	1	574-01371	197 'B' SEC 2&4 BLT CCW				

**PERMCO MODEL: 197**

**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>
031	2	921-00427-P	197 HI PRESS BUSH	190	2	921-00427-P	197 HI PRESS BUSH
031	1	W62-26-18	DOULBE LIP SEAL	190	1	W62-26-18	DOULBE LIP SEAL
050	2	921-00427-P	197 HI PRESS BUSH	190	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
050	1	W62-26-18	DOULBE LIP SEAL	190	2	S-0280	PLUG
050	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	331	2	921-00427-P	197 HI PRESS BUSH
050	2	S-0280	PLUG	331	1	W023-206	SPIROLOX SNAP RING
067	2	921-00427-P	197 HI PRESS BUSH	331	1	W58-39	BALL BEARING
067	1	W62-26-18	DOULBE LIP SEAL	331	1	W62-26-18	DOULBE LIP SEAL
076	2	921-00427-P	197 HI PRESS BUSH	350	2	921-00427-P	197 HI PRESS BUSH
076	1	W62-26-18	DOULBE LIP SEAL	350	1	W023-206	SPIROLOX SNAP RING
083	2	921-00427-P	197 HI PRESS BUSH	350	1	W58-39	BALL BEARING
083	1	W62-26-18	DOULBE LIP SEAL	350	1	W62-26-18	DOULBE LIP SEAL
086	2	921-00427-P	197 HI PRESS BUSH	350	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
086	1	W62-26-18	DOULBE LIP SEAL	350	2	S-0280	PLUG
090	2	921-00427-P	197 HI PRESS BUSH	367	2	921-00427-P	197 HI PRESS BUSH
090	1	W62-26-18	DOULBE LIP SEAL	367	1	W023-206	SPIROLOX SNAP RING
090	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	367	1	W58-39	BALL BEARING
090	2	S-0280	PLUG	367	1	W62-26-18	DOULBE LIP SEAL
131	2	921-00427-P	197 HI PRESS BUSH	383	2	921-00427-P	197 HI PRESS BUSH
131	1	W62-26-18	DOULBE LIP SEAL	383	1	W023-206	SPIROLOX SNAP RING
150	2	921-00427-P	197 HI PRESS BUSH	383	1	W58-39	BALL BEARING
150	1	W62-26-18	DOULBE LIP SEAL	383	1	W62-26-18	DOULBE LIP SEAL
150	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	386	2	921-00427-P	197 HI PRESS BUSH
150	2	S-0280	PLUG	386	1	W023-206	SPIROLOX SNAP RING
167	2	921-00427-P	197 HI PRESS BUSH	386	1	W58-39	BALL BEARING
167	1	W62-26-18	DOULBE LIP SEAL	386	1	W62-26-18	DOULBE LIP SEAL
176	2	921-00427-P	197 HI PRESS BUSH	390	2	921-00427-P	197 HI PRESS BUSH
176	1	W62-26-18	DOULBE LIP SEAL	390	1	W023-206	SPIROLOX SNAP RING
183	2	921-00427-P	197 HI PRESS BUSH	390	2	S-0280	PLUG
183	1	W62-26-18	DOULBE LIP SEAL	390	1	W58-39	BALL BEARING
186	2	921-00427-P	197 HI PRESS BUSH	390	1	W62-26-18	DOULBE LIP SEAL
186	1	W62-26-18	DOULBE LIP SEAL	390	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
186	2	921-00427-P	197 HI PRESS BUSH	431	2	921-00427-P	197 HI PRESS BUSH
186	1	W62-26-18	DOULBE LIP SEAL	431	1	W023-206	SPIROLOX SNAP RING
				431	1	W58-39	BALL BEARING
				431	1	W62-26-18	DOULBE LIP SEAL

## PERMCO MODEL: 197

## 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>
450	2	921-00427-P	197 HI PRESS BUSH	767	2	L-0280-K	CHECK VALVE
450	1	W023-206	SPIROLOX SNAP RING	767	2	921-00427-P	197 HI PRESS BUSH
450	1	W58-39	BALL BEARING	767	1	W62-49-11	MOTOR SEAL
450	1	W62-26-18	DOULBE LIP SEAL	767	1	W58-39	BALL BEARING
450	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	767	1	W023-206	SPIROLOX SNAP RING
450	2	S-0280	PLUG	767	1	ZD-0558	BEARING SPACER
				767	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
467	2	921-00427-P	197 HI PRESS BUSH				
467	1	W023-206	SPIROLOX SNAP RING	783	2	L-0280-K	CHECK VALVE
467	1	W58-39	BALL BEARING	783	2	921-00427-P	197 HI PRESS BUSH
467	1	W62-26-18	DOULBE LIP SEAL	783	1	W62-49-11	MOTOR SEAL
				783	1	W58-39	BALL BEARING
483	2	921-00427-P	197 HI PRESS BUSH	783	1	W023-206	SPIROLOX SNAP RING
483	1	W023-206	SPIROLOX SNAP RING	783	1	ZD-0558	BEARING SPACER
483	1	W58-39	BALL BEARING	783	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
483	1	W62-26-18	DOULBE LIP SEAL				
486	2	921-00427-P	197 HI PRESS BUSH	786	2	L-0280-K	CHECK VALVE
486	1	W023-206	SPIROLOX SNAP RING	786	2	921-00427-P	197 HI PRESS BUSH
486	1	W58-39	BALL BEARING	786	1	W62-49-11	MOTOR SEAL
486	1	W62-26-18	DOULBE LIP SEAL	786	1	W58-39	BALL BEARING
				786	1	W023-206	SPIROLOX SNAP RING
490	2	921-00427-P	197 HI PRESS BUSH	786	1	ZD-0558	BEARING SPACER
490	1	W023-206	SPIROLOX SNAP RING	786	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
490	1	W58-39	BALL BEARING				
490	1	W62-26-18	DOULBE LIP SEAL	790	2	L-0280-K	CHECK VALVE
490	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	790	2	921-00427-P	197 HI PRESS BUSH
490	2	S-0280	PLUG	790	1	W62-49-11	MOTOR SEAL
				790	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
731	2	L-0280-K	CHECK VALVE	790	1	W58-39	BALL BEARING
731	2	921-00427-P	197 HI PRESS BUSH	790	1	W023-206	SPIROLOX SNAP RING
731	1	W62-49-11	MOTOR SEAL	790	1	ZD-0558	BEARING SPACER
731	1	W58-39	BALL BEARING				
731	1	W023-206	SPIROLOX SNAP RING	831	2	L-0280-K	CHECK VALVE
731	1	ZD-0558	BEARING SPACER	831	2	921-00427-P	197 HI PRESS BUSH
731	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	831	1	W62-49-11	MOTOR SEAL
				831	1	W023-206	SPIROLOX SNAP RING
750	2	L-0280-K	CHECK VALVE	831	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
750	2	921-00427-P	197 HI PRESS BUSH	831	1	400-00682	BEARING SPACER
750	1	W62-49-11	MOTOR SEAL				
750	1	565-01194	1/4" ORB, HOLLOW HEX PLUG				
750	1	W58-39	BALL BEARING				
750	1	W023-206	SPIROLOX SNAP RING				
750	1	ZD-0558	BEARING SPACER				

PERMCO MODEL: 197

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>
850	2	L-0280-K	CHECK VALVE	886	2	L-0280-K	CHECK VALVE
850	2	921-00427-P	197 HI PRESS BUSH	886	2	921-00427-P	197 HI PRESS BUSH
850	1	W62-49-11	MOTOR SEAL	886	1	W62-49-11	MOTOR SEAL
850	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	886	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
850	1	W023-206	SPIROLOX SNAP RING	886	1	W023-206	SPIROLOX SNAP RING
850	1	400-00682	BEARING SPACER	886	1	400-00682	BEARING SPACER
867	2	L-0280-K	CHECK VALVE	890	2	L-0280-K	CHECK VALVE
867	2	921-00427-P	197 HI PRESS BUSH	890	2	921-00427-P	197 HI PRESS BUSH
867	1	W62-49-11	MOTOR SEAL	890	1	W62-49-11	MOTOR SEAL
867	1	565-01194	1/4" ORB, HOLLOW HEX PLUG	890	1	565-01194	1/4" ORB, HOLLOW HEX PLUG
867	1	W023-206	SPIROLOX SNAP RING	890	1	W023-206	SPIROLOX SNAP RING
867	1	400-00682	BEARING SPACER	890	1	400-00682	BEARING SPACER
883	2	L-0280-K	CHECK VALVE				
883	2	921-00427-P	197 HI PRESS BUSH				
883	1	W62-49-11	MOTOR SEAL				
883	1	565-01194	1/4" ORB, HOLLOW HEX PLUG				
883	1	W023-206	SPIROLOX SNAP RING				
883	1	400-00682	BEARING SPACER				

For tell-tale applications a "D" must follow the P197\_\_.

Shaft end cover must be noted to have machining done for tell-tale drain.

Extra small parts needed for tell-tale unit.

<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
1	MZ-0961-1	SEAL RETAINER "TELL-TALE"
1	W62-26-18	SEAL FOR "TELL-TALE"
1	W023-206	SNAP RING
1	W0-19	PIPE PLUG/SOC HD 1/8-27 NPT
1	K-2995-109	RETAINER QUAD-RING

PERMCO MODEL: 197

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
AA	1	592-00370-1-1	3/4 SIDE & 1/2 SIDE (JIC)	EC	1	592-00370-5-3	1/2 REAR & 3/4 SIDE (JIC)
AB	1	592-00370-1-2	3/4 REAR & 1/2 REAR (JIC)	ED	1	592-00370-5-4	1/2 SIDE & 3/4 REAR (JIC)
AC	1	592-00370-1-3	3/4 SIDE & 1/2 REAR (JIC)	EI	1	592-00370-5-9	1-1/2 SIDE & BLANK (JIC)
AD	1	592-00370-1-4	3/4 BACK & 1/2 SIDE (JIC)	EV	1	592-00370-5-22	1/2 SIDE & 1/2 SIDE (JIC)
AH	1	592-00373	BLANK MULTIPLE	EW	1	592-00370-5-23	1/2 REAR & 1/2 REAR (JIC)
AI	1	592-00370-1-9	1/2 SIDE & BLANK (JIC)	EY	1	592-00370-5-25	1/2 REAR & 1/2 SIDE (JIC)
AV	1	592-00370-1-22	3/4 SIDE & 3/4 SIDE (JIC)	EZ	1	592-00370-5-26	1/2 SIDE & 1/2 REAR (JIC)
AW	1	592-00370-1-23	3/4 REAR & 3/4 REAR (JIC)	FA	1	592-00370-6-1	3/4 SIDE & 1 SIDE (JIC)
AX	1	592-00373	BLANK MULTIPLE XSD	FB	1	592-00370-6-2	3/4 REAR & 1 REAR (JIC)
AY	1	592-00370-1-25	3/4 SIDE & 3/4 REAR (JIC)	FC	1	592-00370-6-3	3/4 REAR & 1 SIDE (JIC)
AZ	1	592-00370-1-26	3/4 REAR & 3/4 SIDE (JIC)	FD	1	592-00370-6-4	3/4 SIDE & 1 REAR (JIC)
BA	1	592-00370-2-1	1 SIDE & 3/4 SIDE (JIC)	FE	1	592-00370-6-5	3/4 SIDE & 1-1/4 SIDE (JIC)
BB	1	592-00370-2-2	1 REAR & 3/4 REAR (JIC)	FG	1	592-00370-6-7	3/4 REAR & 1-1/4 REAR (JIC)
BC	1	592-00370-2-3	1 SIDE & 3/4 REAR (JIC)	FH	1	592-00370-6-8	3/4 SIDEIN & 1-1/4 REAROUT (JIC)
BD	1	592-00370-2-4	1 REAR & 3/4 SIDE (JIC)	FI	1	592-00370-6-9	1/2 REAR & BLANK (JIC)
BI	1	592-00370-2-9	3/4 SIDE & BLANK (JIC)	GA	1	592-00370-7-1	1 SIDE & 1-1/4 SIDE (JIC))
BV	1	592-00370-2-22	1 SIDE & 1 SIDE (JIC)	GB	1	592-00370-7-2	1 REAR & 1-1/4 REAR (JIC)
BW	1	592-00370-2-23	1 REAR & 1 REAR (JIC)	GC	1	592-00370-7-3	1 REAR & 1-1/4 SIDE (JIC)
BY	1	592-00370-2-25	1 SIDE & 1 REAR (JIC)	GD	1	592-00370-7-4	1 SIDE & 1-1/4 REAR (JIC)
BZ	1	592-00370-2-26	1 REAR & 1 SIDE (JIC)	GI	1	592-00370-7-9	3/4 REAR & BLANK (JIC)
CA	1	592-00370-3-1	1-1/4 SIDE & 1 SIDE (JIC)	HA	1	592-00370-8-1	1-1/4 SIDE & 1-1/2 SIDE (JIC)
CB	1	592-00370-3-2	1-1/4 REAR & 1 REAR (JIC)	HC	1	592-00370-8-3	1-1/4 REAR & 1-1/2 SIDE (JIC)
CC	1	592-00370-3-3	1-1/4 SIDE & 1 REAR (JIC)	HD	1	592-00370-8-4	1 SIDE & 1-1/2 SIDE (JIC)
CD	1	592-00370-3-4	1-1/4 REAR & 1 SIDE (JIC)	HF	1	592-00370-8-6	1 REAROUT & 1-1/2 SIDEIN (JIC)
CE	1	592-00370-3-5	1-1/4 SIDE & 3/4 SIDE (JIC)	HI	1	592-00370-8-9	1 REAR & BLANK (JIC)
CG	1	592-00370-3-7	1-1/4 REAR & 3/4 REAR (JIC)	IA	1	592-00370-9-1	BLANK & 1/2 SIDE (JIC)
CH	1	592-00370-3-8	1-1/4 SIDEIN & 3/4 REAROUT(JIC)	IB	1	592-00370-9-2	BLANK & 3/4 SIDE (JIC)
CI	1	592-00370-3-9	1 SIDE BLANK (JIC)	IC	1	592-00370-9-3	BLANK & 1 SIDE (JIC)
CV	1	592-00370-3-22	1-1/4 SIDE & 1-1/4 SIDE (JIC)	ID	1	592-00370-9-4	BLANK & 1-1/4 SIDE (JIC)
CW	1	592-00370-3-23	1-1/4 REAR & 1-1/4 REAR (JIC)	IE	1	592-00370-9-5	BLANK & 1-1/2 SIDE (JIC)
CY	1	592-00370-3-25	1-1/4 SIDE & 1-1/4 REAR (JIC)	IF	1	592-00370-9-6	BLANK & 1/2 REAR (JIC)
CZ	1	592-00370-3-26	1-1/4 REAR & 1-1/4 SIDE (JIC)	IG	1	592-00370-9-7	BLANK & 3/4 REAR (JIC)
DA	1	592-00370-4-1	1-1/2 SIDE & 1-1/4 SIDE (JIC)	IH	1	592-00370-9-8	BLANK & 1 REAR (JIC)
DB	1	592-00370-4-2	1-1/2 SIDE & 1 SIDE (JIC)	IJ	1	592-00370-9-10	BLANK & 1-1/4 REAR (JIC)
DC	1	592-00370-4-3	1-1/2 SIDE & 1-1/4 REAR (JIC)	IK	1	592-00370-9-11	BLANK & 1/2 SIDE (SF)
DF	1	592-00370-4-6	1-1/2 SIDEIN & 1 REAROUT(JIC)	IL	1	592-00370-9-12	BLANK & 3/4 SIDE (SF)
DI	1	592-00370-4-9	1-1/4 SIDE & BLANK (JIC)	IM	1	592-00370-9-13	BLANK & 1 SIDE (SF)
DV	1	592-00370-4-22	1-1/2 SIDE & 1-1/2 SIDE (JIC)	IN	1	592-00370-9-14	BLANK & 1-1/4 SIDE (SF)
EA	1	592-00370-5-1	1/2 SIDE & 3/4 SIDE (JIC)	IO	1	592-00370-9-15	BLANK & 1-1/2 SIDE (SF)
EB	1	592-00370-5-2	1/2 REAR & 3/4 REAR (JIC)	JA	1	592-00370-10-1	1 REAR & 3/4 REAR (BSPP)

**PERMCO MODEL: 197**

**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>
JB	1	592-00370-10-2	1 REAR & 3/4 REAR (BSPP)	PC	1	592-00370-16-3	1 SIDE & 3/4 SIDE (SF)
JC	1	592-00370-10-3	1 SIDE & 3/4 REAR (BSPP)	PD	1	592-00370-16-4	1-1/4 SIDE & 3/4 SIDE (SF)
JD	1	592-00370-10-4	1 REAR & 3/4 SIDE (BSPP)	PE	1	592-00370-16-5	1-1/4 SIDE & 1 SIDE (SF)
JI	1	592-00370-10-9	1-1/4 REAR & BLANK (JIC)	PF	1	592-00370-16-6	1-1/2 SIDE & 1 SIDE (SF)
JV	1	592-00370-12-22	1 SIDE & 1 SIDE (BSPP)	PG	1	592-00370-16-7	1-1/2 SIDE & 1-1/4 SIDE (SF)
JW	1	592-00370-10-23	1 REAR & 1 REAR (BSPP)	PH	1	592-00370-16-8	1/2 SIDE & 3/4 SIDE (SF)
JY	1	592-00370-10-25	1 SIDE & 1 REAR (BSPP)	PJ	1	592-00370-16-10	1/2 SIDE & 1 SIDE (SF)
JZ	1	592-00370-10-26	1 REAR & 1 SIDE (BSPP)	PK	1	592-00370-16-11	3/4 SIDE & 1 SIDE (SF)
KA	1	592-00370-11-1	1-1/4 SIDE & 1 SIDE (BSPP)	PL	1	592-00370-16-12	3/4 SIDE & 1-1/4 SIDE (SF)
KB	1	592-00370-11-2	1-1/4 REAR & 1 REAR (BSPP)	PM	1	592-00370-16-13	1 SIDE & 1-1/4 SIDE (SF)
KC	1	592-00370-11-3	1-1/4 SIDE & 1 REAR (BSPP)	PN	1	592-00370-16-14	1 SIDE & 1-1/2 SIDE (SF)
KD	1	592-00370-11-4	1-1/4 REAR & 1 SIDE (BSPP)	PO	1	592-00370-16-15	1-1/4 SIDE & 1-1/2 SIDE (SF)
KI	1	592-00370-11-9	1/2 SIDE & BLANK (SF)	PV	1	592-00370-16-22	1/2 SIDE & 1/2 SIDE (SF)
KV	1	592-00370-11-22	1-1/4 SIDE & 1-1/4 SIDE (BSPP)	PW	1	592-00370-16-23	3/4 SIDE & 3/4 SIDE (SF)
KW	1	592-00370-11-23	1-1/4 REAR & 1-1/4 REAR (BSPP)	PX	1	592-00370-16-24	1 SIDE & 1 SIDE (SF)
KY	1	592-00370-11-25	1-1/4 SIDE & 1-1/4 REAR (BSPP)	PY	1	592-00370-16-25	1-1/4 SIDE & 1-1/4 SIDE (SF)
KZ	1	592-00370-11-26	1-1/4 REAR & 1-1/4 SIDE (BSPP)	PZ	1	592-00370-16-26	1-1/2 SIDE & 1-1/2 SIDE (SF)
LA	1	592-00370-12-1	1-1/2 SIDE & 1-1/4 SIDE (BSPP)	QI	1	592-00370-3-0	1-1/4 REAR-IN & 3/4 SIDE-OUT (JIC)
LC	1	592-00370-12-3	1-1/2 SIDE & 1-1/4 REAR (BSPP)	RI	1	592-00370-6-0	3/4 REAR-OUT & 1-1/4 SIDE-IN (JIC)
LI	1	592-00370-12-9	3/4 SIDE & BLANK (SF)				
LV	1	592-00370-12-22	1-1/2 SIDE & 1-1/2 SIDE (BSPP)				
MA	1	592-00370-13-1	3/4 SIDE & 1 SIDE (BSPP)				
MB	1	592-00370-13-2	3/4 REAR & 1 REAR (BSPP)	QQ	1	592-01352-17-17	3/4 JIC & 3/4 JIC OS MOTOR
MC	1	592-00370-13-3	3/4 REAR & 1 SIDE (BSPP)	RR	1	592-01352-18-18	1 JIC & 1 JIC OS MOTOR
MD	1	592-00370-13-4	3/4 SIDE & 1 REAR (BSPP)	SS	1	592-01352-19-19	1-1/4 JIC & 1-1/4 JIC OS MOTOR
MI	1	592-00370-13-9	1 SIDE & BLANK (SF)	UU	1	592-01352-21-21	3/4 SF & 3/4 SF OS MOTOR
MV	1	592-00370-13-22	3/4 SIDE & 3/4 SIDE (BSPP)	VV	1	592-01352-22-22	1 SF & 1 SF OS MOTOR
MW	1	592-00370-13-23	3/4 REAR & 3/4 REAR (BSPP)	WW	1	592-01352-23-23	1-1/4 SF & 1-1/4 SF OS MOTOR
MY	1	592-00370-13-25	3/4 REAR & 3/4 SIDE (BSPP)	XX	1	592-01352-27-27	3/4 JIC & 3/4 JIC OB MOTOR
MZ	1	592-00370-13-26	3/4 SIDE & 3/4 REAR (BSPP)	YY	1	592-01352-28-28	1 JIC & 1 JIC OB MOTOR
NA	1	592-00370-14-1	1 SIDE & 1-1/4 SIDE (BSPP)				
NB	1	592-00370-14-2	1 REAR & 1-1/4 REAR (BSPP)				
NC	1	592-00370-14-3	1 REAR & 1-1/4 SIDE (BSPP)				
ND	1	592-00370-14-4	1 SIDE & 1-1/4 REAR (BSPP)				
NI	1	592-00370-14-9	1-1/4 SIDE & BLANK (SF)				
OA	1	592-00370-15-1	1-1/4 SIDE & 1-1/2 SIDE (BSPP)				
OC	1	592-00370-15-3	1-1/4 REAR & 1-1/2 SIDE (BSPP)				
OI	1	592-00370-15-9	1-1/2 SIDE & BLANK (SF)				
PA	1	592-00370-16-1	3/4 SIDE & 1/2 SIDE (SF)				
PB	1	592-00370-16-2	1 SIDE & 1/2 SIDE (SF)				

**PORT END COVER (MOTOR CODES)**

PERMCO MODEL: 197

PORT END COVER SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	2	921-00427-P	197 HI PRESS BUSH
	1	Z-1967-45-2	PERMCO NAME TAG

**PERMCO MODEL: 197****Housings (PUMP)**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
ZA05	1	577-00369-05	197 1/2" GEAR-1" WIDE HOUSING
ZA07	1	577-00369-07	197 3/4" GEAR-1.25" WIDE HOUSING
ZA10	1	577-00369-10	197 1" GEAR-1.5" WIDE HOUSING
ZA12	1	577-00369-12	197 1-1/4" GEAR-1.75" WIDE HOUSING
ZA15	1	577-00369-15	197 1-1/2" GEAR-2" WIDE HOUSING
ZA17	1	577-00369-17	197 1-3/4" GEAR-2.25" WIDE HOUSING
ZA20	1	577-00369-20	197 2" GEAR-2.5" WIDE HOUSING

**PERMCO MODEL: 197****Housings (MOTOR)**

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
DA07	1	577-01354-07	197 3/4" GEAR HOUSING MOTOR
DA10	1	577-01354-10	197 1" GEAR HOUSING MOTOR
DA12	1	577-01354-12	197 1-1/4" GEAR HOUSING MOTOR
DA15	1	577-01354-15	197 1-1/2" GEAR HOUSING MOTOR
DA17	1	577-01354-17	197 1-3/4" GEAR HOUSING MOTOR
DA20	1	577-01354-20	197 2" GEAR HOUSING MOTOR

**PERMCO MODEL: 197****HOUSING SMALL PARTS (PUMP)**

<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 197 DOWEL PIN
	2	947-00365-TP	197 SERIES THRUST PLATE
	2	947-00372-WSR	197 THRUST PLATE SEAL RING
	2	947-00374-WBR	197 THRST PLT BACK-UP RING
	2	TA-2995-242	3000/197 SQUARE GASKET SEAL

**PERMCO MODEL: 197****HOUSING SMALL PARTS (MOTOR)**

<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 197 DOWEL PIN
	2	947-01348	197 MOTOR THRUST PLATE
	2	280-1770-929	197 BACK-UP RING MOTOR
	4	280-1770-930	197 END SEAL, MOTOR
	4	280-1770-931	197 SIDE SEAL, MOTOR
	2	TA-2995-241	197 GASKET SEAL MOTOR

**PERMCO MODEL: 197**

**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	996-00380-05	197 1/2 GEAR SET
07	1	996-00380-07	197 3/4 GEAR SET
10	1	996-00380-10	197 1 GEAR SET
12	1	996-00380-12	197 1-1/4 GEAR SET
15	1	996-00380-15	197 1-1/2 GEAR SET
17	1	996-00380-17	197 1-3/4 GEAR SET
20	1	996-00380-20	197 2 GEAR SET

**PERMCO MODEL: 197**

**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>
14	1	414-380-07	7/8-13T GEAR SHAFT .75" GEAR
14	1	414-380-10	7/8-13T GEAR SHAFT 1" GEAR
14	1	414-380-12	7/8-13T GEAR SHAFT 1.25" GEAR
14	1	414-380-15	7/8-13T GEAR SHAFT 1.5" GEAR
14	1	414-380-17	7/8-13T GEAR SHAFT 1.75" GEAR
14	1	414-380-20	7/8-13T GEAR SHAFT 2" GEAR
29	1	415-380-07	197 G/SH SET 7/8 KEYED B
32	1	418-380-07	197 GS 1 KEYED; 3/4" GEAR
32	1	418-380-12	197 GS 1 KEYED; 1-1/4" GEAR
32	1	418-380-15	197 GS 1 KEYED; 1-1/2" GEAR
32	1	418-380-17	197 GS 1 KEYED; 1-3/4" GEAR
32	1	418-380-20	197 GS 1 KEYED; 2" GEAR
48	1	024-01274-07	197 G/SH,EURO,TAPER,W/M14X1.5EXT.THRD
48	1	024-01274-10	197 G/SH,EURO,TAPER,W/M14X1.5EXT.THRD
48	1	024-01274-12	197 G/SH,EURO,TAPER,W/M14X1.5EXT.THRD
48	1	024-01274-15	197 G/SH,EURO,TAPER,W/M14X1.5EXT.THRD
87	1	419-380-07	197 15T SAE BB 3/4 G/SH SET
87	1	419-380-10	197 15T SAE BB 1 G/SH SET
87	1	419-380-12	197 15T SAE BB 1-1/4 G/SH SET
87	1	419-380-15	197 15T SAE BB 1-1/2 G/SH SET
87	1	419-380-17	197 15T SAE BB 1-3/4 G/SH SET
87	1	419-380-20	197 15T SAE BB 2 G/SH SET
C 6	1	ZG-0024	3000 SHAFT 14 TOOTH 1-1/4 DIA
C00	1	ZQ-0024	SHAFT 3000 1 1/4 KEYED
C04	1	ZW-0024	3000 SHAFT KEYED 7/8 DIA
C14	1	ZI-0024	3000 SHAFT 13 TOOTH 7/8 DIA
C19	1	023-00979	3000 3/4" 11T SPLN 1.49 SFT EXT
C21	* 1	ZP-0024	3000 TAPER SHFT/THREADED END
C22	1	024-00409-HF	CONT. SHAFT FISH PUMP 1 KEYED
C24	1	ZU-0024	3000 SHAFT KEYED 3/4 DIA
C29	1	ZJ-0024	3000 SHAFT KEYED 7/8 DIA
C29XL	1	ZJ-0024-XL	3000 SHAFT KEYED 7/8 DIA EXT. LONG
C32	1	DC-0024	3000 SHAFT KEYED 1 DIA
C32XL	1	DC-0024-XL	3000 SHAFT KEYED 1 DIA EXT. LONG
C57	1	BC-0024	3000 SHAFT 1 6-T SPLINE
C84	1	ZH-0024	3000 SHAFT 9 TOOTH 5/8 DIA
C87	1	ZT-0024	3000 15T SHAFT SAE 'BB'
CM1	1	024-00513	197 DR SHFT 25MM STR KYED

**PERMCO MODEL: 197**

**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>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
14	1	SP-1000-8	SHAFT PROTECTOR	C21	1	SA-0558	3000 SPACER
29	1	SP-1000-8	SHAFT PROTECTOR	C21	1	SP-1000-8	SHAFT PROTECTOR
29	1	W09-06	1/4 X 3/8 X 1 KEY	C21	1	W09-505	# 505 WDRF KEY
32	1	SP-1000-3	SHAFT PROTECTOR	C21	1	W86-100	2500 SNAP RING
32	1	W09-02	1/4 X 3/8 X 1-1/4 KEY	C21	1	ZD-0558	3000 SEAL RETAINER
48	1	SP-1000-3	SHAFT PROTECTOR	C22	1	SA-0558	3000 SPACER
48	1	009-01258	WOODRUFF KEY 4 X 7.5MM	C22	1	SP-1000-8	SHAFT PROTECTOR
48	1	900-01259	SPLIT WASHER 14MM	C22	1	W09-01	1/4 X 3/8 X 1-3/4 KEY
48	1	900-01260	NEX NUT M14 X 1.5	C22	1	W86-100	2500 SNAP RING
87	1	SP-1000-3	SHAFT PROTECTOR	C22	1	ZD-0558	3000 SEAL RETAINER
C 6	1	SA-0558	3000 SPACER	C24	1	SA-0558	3000 SPACER
C 6	1	SP-1000-5	SHAFT PROTECTOR	C24	1	SP-1000-3	SHAFT PROTECTOR
C 6	1	W86-100	2500 SNAP RING	C24	1	W09-59	3/16 X 3/16 X 1-9/16 KEY
C 6	1	ZD-0558	3000 SEAL RETAINER	C24	1	W86-100	2500 SNAP RING
C00	1	SA-0558	3000 SPACER	C24	1	ZD-0558	3000 SEAL RETAINER
C00	1	SP-1000-5	SHAFT PROTECTOR	C29	1	SA-0558	3000 SPACER
C00	1	W86-100	2500 SNAP RING	C29	1	SP-1000-8	SHAFT PROTECTOR
C00	1	W09-27	5/16 X 15/32 X 1-1/2 KEY	C29	1	W09-06	1/4 X 3/8 X 1 KEY
C00	1	ZD-0558	3000 SEAL RETAINER	C29	1	W86-100	2500 SNAP RING
C04	1	SA-0558	3000 SPACER	C29	1	ZD-0558	3000 SEAL RETAINER
C04	1	SP-1000-8	SHAFT PROTECTOR	C29XL	1	SA-0558	3000 SPACER
C04	1	W09-38	1/4 X 3/8 X 7/8 KEY	C29XL	1	SP-1000-8	SHAFT PROTECTOR
C04	1	W86-100	2500 SNAP RING	C29XL	1	W09-01	1/4 X 3/8 X 1-3/4 KEY
C04	1	ZD-0558	3000 SEAL RETAINER	C29XL	1	W86-100	2500 SNAP RING
C14	1	SA-0558	3000 SPACER	C29XL	1	ZD-0558	3000 SEAL RETAINER
C14	1	SP-1000-8	SHAFT PROTECTOR	C32	1	SA-0558	3000 SPACER
C14	1	W86-100	2500 SNAP RING	C32	1	SP-1000-3	SHAFT PROTECTOR
C14	1	ZD-0558	3000 SEAL RETAINER	C32	1	W09-02	1/4 X 3/8 X 1-1/4 KEY
C19	1	SA-0558	3000 SPACER	C32	1	W86-100	2500 SNAP RING
C19	1	SP-1000-8	SHAFT PROTECTOR	C32	1	ZD-0558	3000 SEAL RETAINER
C19	1	W86-100	2500 SNAP RING	C32XL	2	SA-0558	3000 SPACER
C19	1	ZD-0558	3000 SEAL RETAINER	C32XL	1	SP-1000-3	SHAFT PROTECTOR
				C32XL	1	W09-20	1/4 X 1/4 X 1-1/2 KEY
				C32XL	1	W86-100	2500 SNAP RING
				C32XL	1	ZD-0558	3000 SEAL RETAINER

**PERMCO MODEL: 197****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>	<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
C57	2	SA-0558	3000 SPACER				
C57	1	SP-1000-3	SHAFT PROTECTOR				
C57	2	W86-100	2500 SNAP RING				
C57	1	ZD-0558	3000 SEAL RETAINER				
C84	1	SP-1000-7	SHAFT PROTECTOR				
C84	1	ZD-0558	3000 SEAL RETAINER				
C87	1	SP-1000-3	SHAFT PROTECTOR				
C87	1	W86-100	2500 SNAP RING				
C87	1	ZD-0558	3000 SEAL RETAINER				
C87	1	SA-0558	3000 SPACER				

**197 SERIES  
BEARING CARRIER CODES  
SINGLE IN, DUAL OUT  
Part # 576-00375**

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

Select inlet port size. Find the appropriate letter that meets the port size and the rotation requirements.

Select outlet port requirements. Top outlet refers to the front gear section for clockwise rotation and rear gear section for counter-clockwise rotation. Bottom outlet refers to the rear gear section for clockwise rotation and front gear section for counter-clockwise rotation.

Combine the inlet port designation with the outlet port designation to arrive at the bearing carrier code.

**EXAMPLE**

Rotation: Clockwise  
 Inlet Porting: 1-1/4" Split Flange inlet  
 Designator: C  
 Outlet Porting: 1" Split Flange Top (front)  
 3/4" Split Flange Bottom (rear)  
 Designator: AB  
 Complete Bearing Carrier Code: CAB

**Split Flange**

**Porting Codes**

Inlet Port	Rotation	
	CW	CCW
1	A	B
1-1/4	C	D
1-1/2	E	F
2	G	H

**BSPP**

**Porting Codes**

Inlet Port	Rotation	
	CW	CCW
1	I	J
1-1/4	K	L
1-1/2	M	N

**Straight Threads (JIC)**

**Porting Codes**

Inlet Port	Rotation	
	CW	CCW
1	Q	R
1-1/4	S	T
1-1/2	U	V

Bottom Outlets	Top Outlets		
	3/4	1	1-1/4
3/4	AA	AB	AC
1	BA	BB	BC
1-1/4	CA	CB	CC

Bottom Outlets	Top Outlets		
	3/4	1	1-1/4
3/4	DA	DB	DC
1	EA	EB	EC
1-1/4	FA	FB	FC

Bottom Outlets	Top Outlets			
	1/2	3/4	1	1-1/4
1/2	HA	HB	HC	HD
3/4	JA	JB	JC	JD
1	KA	KB	KC	KD
1-1/4	LA	LB	LC	LD

**197 SERIES  
BEARING CARRIER CODES  
SINGLE IN, SINGLE OUT  
Part # 576-00865**

**EXAMPLE**

Rotation: Clockwise  
 Inlet Porting: 1-1/4" Split Flange inlet  
 Designator: C  
 Outlet Porting: 1" Split Flange - Front  
 Designator: BX  
 Complete Bearing Carrier Code: CBX

**Split Flange**

**BSPP**

**Straight Threads (JIC)**

**Porting Codes**

**Porting Codes**

**Porting Codes**

Inlet Port	Rotation	
	CW	CCW
1	A	B
1-1/4	C	D
1-1/2	E	F
2	G	H

Inlet Port	Rotation	
	CW	CCW
1	I	J
1-1/4	K	L
1-1/2	M	N

Inlet Port	Rotation	
	CW	CCW
1	Q	R
1-1/4	S	T
1-1/2	U	V

Outlet Ports	Port	Port	Common
Size	To Front	To Rear	Outlet
3/4	AX	XA	MA
1	BX	XB	MB
1-1/4	CX	XC	MC
1-1/2	DX	XD	MD
2	EX	XE	ME

Outlet Ports	Port	Port	Common
Size	To Front	To Rear	Outlet
3/4	GX	XG	MG
1	HX	XH	MH
1-1/4	IX	XI	MI
1-1/2	JX	XJ	MJ

Outlet Ports	Port	Port	Common
Size	To Front	To Rear	Outlet
1/2	LX	XL	ML
3/4	MX	XM	MM
1	NX	XN	MN
1-1/4	QX	XQ	MQ
1-1/2	RX	XR	MR

PERMCO MODEL: 197

Bearing Carriers

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
AAA	1	576-00375-1-11	1X3/4TP 3/4BP(SF)CW	CCC	1	576-00375-3-33	1-1/4X1-1/4TP 1-1/4BP(SF)CW
AAB	1	576-00375-1-12	1X1TP 3/4BP(SF)CW	CCX	1	576-00865-9	1-1/4T-L X 1-1/4F-R (SF)CW
AAC	1	576-00375-1-13	1X1-1/4TP 3/4BP(SF)CW	CMA	1	576-00865-6	1-1/4T-L X 3/4T-R (SF)CW
AAX	1	576-00865-1	1THRU-L X3/4F-R(SF)CW	CMB	1	576-00865-8	1-1/4T-L X 1T-R (SF)CW
ABA	1	576-00375-1-21	1X3/4TP 1BP(SF)CW	CMC	1	576-00865-10	1-1/4T-L X 1-1/4T-R(SF)CW
ABB	1	576-00375-1-22	1X1TP 1BP(SF)CW	CXA	1	576-00865-5	1-1/4T-L X 3/4B-R (SF)CW
ABC	1	576-00375-1-23	1X1-1/4TP 1BP(SF)CW	CXB	1	576-00865-7	1-1/4T-L X 1B-R (SF)CW
ABX	1	576-00865-3	1T-L X 1F-R (SF)CW	CXC	1	576-00865-9	1-1/4T-L X 1-1/4B-R(SF)CW
ACA	1	576-00375-1-31	1X3/4TP 1-1/4BP(SF)CW	DAA	1	576-00375-4-11	1-1/4X3/4TP 3/4BP(SF)CCW
ACB	1	576-00375-1-32	1X1TP 1-1/4BP(SF)CW	DAB	1	576-00375-4-12	1-1/4X1TP 3/4BP(SF)CCW
ACC	1	576-00375-1-33	1X1-1/4TP 1-1/4BP(SF)CW	DAC	1	576-00375-4-13	1-1/4X1-1/4TP 3/4BP(SF)CCW
AMA	1	576-00865-2	3/4T-L X 1T-R (SF)CW	DAX	1	576-00865-5	3/4F-L X 1-1/4T-R(SF)CCW
AMB	1	576-00865-4	1T-L X1T-R (SF)CW	DBA	1	576-00375-4-21	1-1/4X3/4TP 1BP(SF)CCW
AXA	1	576-00865-1	1T-L X 3/4B-R (SF)CW	DBB	1	576-00375-4-22	1-1/4X1TP 1BP(SF)CCW
AXB	1	576-00865-3	1T-L X 1B-R (SF)CW	DBC	1	576-00375-4-23	1-1/4X1-1/4TP 1BP(SF)CCW
BAA	1	576-00375-2-11	1X3/4TP 3/4BP(SF)CCW	DBX	1	576-00865-7	1F-L X 1-1/4T-R(SF)CCW
BAB	1	576-00375-2-12	1X1TP 3/4BP(SF)CCW	DCA	1	576-00375-4-31	1-1/4X3/4TP 1-1/4BP(SF)CCW
BAC	1	576-00375-2-13	1X1-1/4TP 3/4BP(SF)CCW	DCB	1	576-00375-4-32	1-1/4X1TP 1-1/4BP(SF)CCW
BAX	1	576-00865-1	3/4F-L X 1T-R (SF)CCW	DCC	1	576-00375-4-33	1-1/4X1-1/4TP 1-1/4BP(SF)CCW
BBA	1	576-00375-2-21	1X3/4TP 1BP(SF)CCW	DCX	1	576-00865-9	1-1/4F-L X 1-1/4T-R(SF)CCW
BBB	1	576-00375-2-22	1X1TP 1BP(SF)CCW	DMA	1	576-00865-6	3/4T-L X 1-1/4T-R(SF)CCW
BBC	1	576-00375-2-23	1X1-1/4TP 1BP(SF)CCW	DMB	1	576-00865-8	1T-L X 1-1/4T-R(SF)CCW
BBX	1	576-00865-3	1F-L X 1T-R (SF)CCW	DMC	1	576-00865-10	1-1/4T-L X 1-1/4T-R(SF)CCW
BCA	1	576-00375-2-31	1X3/4TP 1-1/4BP(SF)CCW	DXA	1	576-00865-5	3/4B-L X 1-1/4T-R(SF)CCW
BCB	1	576-00375-2-32	1X1TP 1-1/4BP(SF)CCW	DXB	1	576-00865-7	1B-L X 1-1/4T-R(SF)CCW
BCC	1	576-00375-2-33	1X1-1/4TP 1-1/4BP(SF)CCW	DXC	1	576-00865-9	1-1/4B-L X 1-1/4T-R(SF)CCW
BMA	1	576-00865-2	3/4T-L X 1T-R (SF)CCW	EAA	1	576-00375-5-11	1-1/2X3/4TP 3/4BP(SF)CW
BMB	1	576-00865-4	1T-L X 1T-R (SF)CCW	EAB	1	576-00375-5-12	1-1/2X1TP 3/4BP(SF)CCW
BXA	1	576-00865-1	3/4B-L X 1T-R (SF)CCW	EAC	1	576-00375-5-13	1-1/2X1-1/4TP 3/4BP(SF)CW
BXB	1	576-00865-3	1B-L X 1T-R (SF)CCW	EAX	1	576-00865-11	1-1/2T-L X 3/4F-R(SF)CW
CAA	1	576-00375-3-11	1-1/4X3/4TP 3/4BP(SF)CW	EBA	1	576-00375-5-21	1-1/2X3/4TP 1BP(SF)CW
CAB	1	576-00375-3-12	1-1/4X1TP 3/4BP(SF)CW	EBB	1	576-00375-5-22	1-1/2X1TP 1BP(SF)CW
CAC	1	576-00375-3-13	1-1/4X1-1/4TP 3/4BP(SF)CW	EBC	1	576-00375-5-23	1-1/2X1-1/4TP 1BP(SF)CW
CAX	1	576-00865-5	1-1/4T-L X 3/4F-R (SF)CW	EBX	1	576-00865-13	1-1/2T-L X 1F-R(SF)CW
CBA	1	576-00375-3-21	1-1/4X3/4TP 1BP(SF)CW	ECA	1	576-00375-5-31	1-1/2X3/4TP 1-1/4BP(SF)CW
CBB	1	576-00375-3-22	1-1/4X1TP 1BP(SF)CW	ECB	1	576-00375-5-32	1-1/2X1TP 1-1/4BP(SF)CW
CBC	1	576-00375-3-23	1-1/4X1-1/4TP 1BP(SF)CW	ECC	1	576-00375-5-33	1-1/2X1-1/4TP 1-1/4BP(SF)CW
CBX	1	576-00865-7	1-1/4T-L X 1F-R (SF)CW	ECX	1	576-00865-15	1-1/2T-L X 1-1/4F-R(SF)CW
CCA	1	576-00375-3-31	1-1/4X3/4TP 1-1/4BP(SF)CW	EDX	1	576-00865-17	1-1/2T-L X 1-1/2F-R(SF)CW
CCB	1	576-00375-3-32	1-1/4X1TP 1-1/4BP(SF)CW	EMA	1	576-00865-12	1-1/2T-L X 3/4T-R(SF)CW

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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
EMB	1	576-00865-14	1-1/2T-L X 1T-R(SF)CW	GDX	1	576-00865-25	2T-L X 1-1/2F-R(SF)CW
EMC	1	576-00865-16	1-1/2T-L X 1-1/4T-R (SF)CW	GEX	1	576-00865-27	2T-L X 2F-R(SF)CW
EMD	1	576-00865-18	1-1/2T-L X 1-1/2T-R(SF)CW	GMA	1	576-00865-20	2T-L X 3/4T-R(SF)CW
EXA	1	576-00865-11	1-1/2T-L X 3/4B-R(SF)CW	GMB	1	576-00865-22	2T-L X 1T-R(SF)CW
EXB	1	576-00865-13	1-1/2T-L X 1B-R(SF)CW	GMC	1	576-00865-24	2T-L X 1-1/4T-R(SF)CW
EXC	1	576-00865-15	1-1/2T-L X 1-1/4B-R(SF)CW	GMD	1	576-00865-26	2T-L X 1-1/2T-R(SF)CW
EXD	1	576-00865-17	1-1/2T-L X 1-1/2B-R(SF)CW	GME	1	576-00865-28	2T-L X 2T-R(SF)CW
FAA	1	576-00375-6-11	1-1/2X3/4TP 3/4BP(SF)CCW	GXA	1	576-00865-19	2T-L X 3/4B-R(SF)CW
FAB	1	576-00375-6-12	1-1/2X1TP 3/4BP(SF)CCW	GXB	1	576-00865-21	2T-L X 1B-R(SF)CW
FAC	1	576-00375-6-13	1-1/2X1-1/4TP 3/4BP(SF)CCW	GXC	1	576-00865-23	2T-L X 1-1/4B-R(SF)CW
FAX	1	576-00865-11	3/4F-L X 1-1/2T-R(SF)CCW	GXD	1	576-00865-25	2T-L X 1-1/2B-R(SF)CW
FBA	1	576-00375-6-21	1-1/2X3/4TP 1BP(SF)CCW	GXE	1	576-00865-27	2T-L X 2B-R(SF)CW
FBB	1	576-00375-6-22	1-1/2X1TP 1BP(SF)CCW	HAA	1	576-00375-8-11	2X3/4TP 3/4BP(SF)CCW
FBC	1	576-00375-6-23	1-1/2X1-1/4TP 1BP(SF)CCW	HAB	1	576-00375-8-12	2X1TP 3/4BP(SF)CCW
FBX	1	576-00865-13	1F-L X 1-1/2T-R(SF)CCW	HAC	1	576-00375-8-13	2X1-1/4TP 3/4BP(SF)CCW
FCA	1	576-00375-6-31	1-1/2X3/4TP 1-1/4BP(SF)CCW	HAX	1	576-00865-19	3/4F-L X 2T-R(SF)CCW
FCB	1	576-00375-6-32	1-1/2X1TP 1-1/4BP(SF)CCW	HBA	1	576-00375-8-21	2X3/4TP 1BP(SF)CCW
FCC	1	576-00375-6-33	1-1/2X1-1/4TP 1-1/4BP(SF)CCW	HBB	1	576-00375-8-22	2X1TP 1BP(SF)CCW
FCX	1	576-00865-15	1-1/4F-L X 1-1/2T-R(SF)CCW	HBC	1	576-00375-8-23	2X1-1/4TP 1BP(SF)CCW
FDX	1	576-00865-17	1-1/2F-L X 1-1/2T-R(SF)CCW	HBX	1	576-00865-21	1F-L X 2T-R(SF)CCW
FMA	1	576-00865-12	3/4T-L X 1-1/2T-R(SF)CCW	HCA	1	576-00375-8-31	2X3/4TP 1-1/4BP(SF)CCW
FMB	1	576-00864-14	1T-L X 1-1/2T-R(SF)CCW	HCB	1	576-00375-8-32	2X1TP 1-1/4BP(SF)CCW
FMC	1	576-00865-16	1-1/4T-L X 1-1/2T-R(SF)CCW	HCC	1	576-00375-8-33	2X1-1/4TP 1-1/4BP(SF)CCW
FMD	1	576-00865-18	1-1/2T-L X 1-1/2T-R(SF)CCW	HCX	1	576-00865-23	1-1/4F-L X 2T-R(SF)CCW
FXA	1	576-00865-11	3/4B-L X 1-1/2T-R(SF)CCW	HDX	1	576-00865-25	1-1/2F-L X 2T-R(SF)CCW
FXB	1	576-00865-13	1B-L X 1-1/2T-R(SF)CCW	HEX	1	576-00865-27	2F-L X 2T-R(SF)CCW
FXC	1	576-00865-15	1-1/4B-T X1-1/2T-R(SF)CCW	HMA	1	576-00865-20	3/4T-L X 2T-R(SF)CCW
FXD	1	576-00865-17	1-1/2B-L X 1-1/2T-R(SF)CCW	HMB	1	576-00865-22	1T-L X 1T-R(SF)CCW
GAA	1	576-00375-7-11	2X3/4TP 3/4BP(SF)CW	HMC	1	576-00865-24	1-1/4T-L X 2T-R(SF)CCW
GAB	1	576-00375-7-12	2X1TP 3/4BP(SF)CW	HMD	1	576-00865-26	1-1/2T-L X 2T-R(SF)CCW
GAC	1	576-00375-7-13	2X1-1/4TP 3/4BP(SF)CW	HME	1	576-00865-28	2T-L X 2T-R(SF)CCW
GAX	1	576-00865-19	2T-L X 3/4F-R(SF)CW	HXA	1	576-00865-19	3/4B-L X 2T-R(SF)CCW
GBA	1	576-00375-7-21	2X3/4TP 1BP(SF)CW	HXB	1	576-00865-21	1B-L X 2T-R(SF)CCW
GBB	1	576-00375-7-22	2X1TP 1BP(SF)CW	HXC	1	576-00865-23	1-1/4B-L X 2T-R(SF)CCW
GBC	1	576-00375-7-23	2X1-1/4TP 1BP(SF)CW	HXD	1	576-00865-25	1-1/2B-L X 2T-R(SF)CCW
GBX	1	576-00865-21	2T-L X 1F-R(SF)CW	HXE	1	576-00865-27	2B-L X 2T-R(SF)CCW
GCA	1	576-00375-7-31	2X3/4TP 1-1/4BP(SF)CW	IDA	1	576-00375-9-41	1X3/4TP 3/4BP(BSPP)CW
GCB	1	576-00375-7-32	2X1TP 1-1/4BP(SF)CW	IDB	1	576-00375-9-42	1X1TP.3/4BP(BSPP)CW
GCC	1	576-00375-7-33	2X1-1/4TP 1-1/4BP(SF)CW	IDC	1	576-00375-9-43	1X1-1/4TP 3/4BP(BSPP)CW
GCX	1	576-00865-23	2T-L X 1-1/4F-R(SF)CW	IEA	1	576-00375-9-51	1X3/4TP 1BP(BSPP)CW

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<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>
IEB	1	576-00375-9-52	1X1TP 1BP(BSPP)CW	KMI	1	576-00865-50	1-1/4T-L X 1-1/4T-R(BSPP)CW
IEC	1	576-00375-9-53	1X1-1/4TP 1BP(BSPP)CW	KXG	1	576-00865-45	1-1/4T-L X 3/4B-R(BSPP)CW
IFA	1	576-00375-9-61	1X3/4TP 1-1/4BP(BSPP)CW	KXH	1	576-00865-47	1-1/4T-L X 1B-R(BSPP)CW
IFB	1	576-00375-9-62	1X1TP 1-1/4BP(BSPP)CW	KXI	1	576-00865-49	1-1/4T-L X 1-1/4B-R(BSPP)CW
IFC	1	576-00375-9-63	1X1-1/4TP 1-1/4BP(BSPP)CW	LDA	1	576-00375-12-41	1-1/4X3/4TP 3/4BP(BSPP)CCW
IGX	1	576-00865-41	1T-L X 3/4F-R(BSPP)CW	LDB	1	576-00375-12-42	1-1/4X1TP 3/4BP(BSPP)CCW
IHX	1	576-00865-43	1T-L X 1F-R(BSPP)CW	LDC	1	576-00375-12-43	1-1/4X1-1/4TP 3/4BP(BSPP)CCW
IMG	1	576-00865-42	1T-L X 3/4T-R(BSPP)CW	LEA	1	576-00375-12-51	1-1/4X3/4TP 1BP(BSPP)CCW
IMH	1	576-00865-44	1T-L X 1T-R(BSPP)CW	LEB	1	576-00375-12-52	1-1/4X1TP 1BP(BSPP)CCW
IXG	1	576-00865-41	1T-L X 3/4B-R(BSPP)CW	LEC	1	576-00375-12-53	1-1/4X1-1/4TP 1BP(BSPP)CCW
IXH	1	576-00865-43	1T-L X 1B-R(BSPP)CW	LFA	1	576-00375-12-61	1-1/4X3/4TP 1-1/4BP(BSPP)CCW
JDA	1	576-00375-10-41	1X3/4TP 3/4BP(BSPP)CCW	LFB	1	576-00375-12-62	1-1/4X1TP 1-1/4BP(BSPP)CCW
JDB	1	576-00375-10-42	1X1TP 3/4BP(BSPP)CCW	LFC	1	576-00375-12-63	1-1/4X1-1/4TP 1-1/4BP(BSPP)CCW
JDC	1	576-00375-10-43	1X1-1/4TP 3/4BP(BSPP)CCW	LGX	1	576-00865-45	3/4F-L X 1-1/4T-R(BSPP)CCW
JEA	1	576-00375-10-51	1X3/4TP 1BP(BSPP)CCW	LHX	1	576-00865-47	1F-L X 1-1/4T-R(BSPP)CCW
JEB	1	576-00375-10-52	1X1TP 1BP(BSPP)CCW	LIX	1	576-00865-49	1-1/4F-L X 1-1/4T-R(BSPP)CCW
JEC	1	576-00375-10-53	1X1-1/4TP 1BP(BSPP)CCW	LMG	1	576-00865-46	3/4T-L X 1-1/4T-R(BSPP)CCW
JFA	1	576-00375-10-61	1X3/4TP 1-1/4BP(BSPP)CCW	LMH	1	576-00865-48	1T-L X 1-1/4T-R(BSPP)CCW
JFB	1	576-00375-10-62	1X1TP 1-1/4BP(BSPP)CCW	LMI	1	576-00865-50	1-1/4T-L X 1-1/4T-R(BSPP)CCW
JFC	1	576-00375-10-63	1X1-1/4TP 1-1/4BP(BSPP)CCW	LXG	1	576-00865-45	3/4B-L X 1-1/4T-R(BSPP)CCW
JGX	1	576-00865-41	3/4F-L X 1T-R(BSPP)CCW	LXH	1	576-00865-47	1B-L X 1-1/4T-R(BSPP)CCW
JHX	1	576-00865-43	1F-L X 1T-R(BSPP)CCW	LXI	1	576-00865-49	1-1/4B-L X 1-1/4T-R(BSPP)CCW
JMG	1	576-00865-42	3/4T-L X 1T-R(BSPP)CCW	MDA	1	576-00375-13-41	1-1/2X3/4TP 3/4BP(BSPP)CW
JMH	1	576-00865-44	1T-L X 1T-R(BSPP)CCW	MDB	1	576-00375-13-42	1-1/2X1TP 3/4BP(BSPP)CW
JXG	1	576-00865-41	3/4B-L X 1T-R(BSPP)CCW	MDC	1	576-00375-13-43	1-1/2X1-1/4TP 3/4BP(BSPP)CW
JXH	1	576-00865-43	1B-L X 1T-R(BSPP)CCW	MEA	1	576-00375-13-51	1-1/2X3/4TP 1BP(BSPP)CW
KDA	1	576-00375-11-41	1-1/4X3/4TP 3/4BP(BSPP)CW	MEB	1	576-00375-13-52	1-1/2X1TP 1BP(BSPP)CW
KDB	1	576-00375-11-42	1-1/4X1TP 3/4BP(BSPP)CW	MEC	1	576-00375-13-53	1-1/2X1-1/4TP 1BP(BSPP)CW
KDC	1	576-00375-11-43	1-1/4X1-1/4TP 3/4BP(BSPP)CW	MFA	1	576-00375-13-61	1-1/2X3/4TP 1-1/4BP(BSPP)CW
KEA	1	576-00375-11-51	1-1/4X3/4TP 1BP(BSPP)CW	MFB	1	576-00375-13-62	1-1/2X1TP 1-1/4BP(BSPP)CW
KEB	1	576-00375-11-52	1-1/4X1TP 1BP(BSPP)CW	MFC	1	576-00375-13-63	1-1/2X1-1/4TP 1-1/4BP(BSPP)CW
KEC	1	576-00375-11-53	1-1/4X1-1/4TP 1BP(BSPP)CW	MGX	1	576-00865-51	1-1/2T-L X 3/4F-R(BSPP)CW
KFA	1	576-00375-11-61	1-1/4X3/4TP 1-1/4BP(BSPP)CW	MHX	1	576-00865-53	1-1/2T-L X 1F-R(BSPP)CW
KFB	1	576-00375-11-62	1-1/4X1TP 1-1/4BP(BSPP)CW	MIX	1	576-00865-55	1-1/2T-L X 1-1/4F-R(BSPP)CW
KFC	1	576-00375-11-63	1-1/4X1-1/4TP 1-1/4BP(BSPP)CW	MJX	1	576-00865-57	1-1/2T-L X 1-1/2F-R(BSPP)CW
KGX	1	576-00865-45	1-1/4T-L X 3/4F-R(BSPP)CW	MMG	1	576-00865-52	1-1/2T-L X 3/4T-R(BSPP)CW
KHX	1	576-00865-47	1-1/4T-L X 1F-R(BSPP)CW	MMH	1	576-00865-54	1-1/2T-L X 1T-R(BSPP)CW
KIX	1	576-00865-49	1-1/4T-L X 1-1/4F-R(BSPP)CW	MMI	1	576-00865-56	1-1/2T-L X 1-1/4T-R(BSPP)CW
KMG	1	576-00865-46	1-1/4T-L X 3/4T-R(BSPP)CW	MMJ	1	576-00865-58	1-1/2T-L X 1-1/2T-R(BSPP)CW
KMH	1	576-00865-48	1-1/4T-L X 1T-R(BSPP)CW	MXG	1	576-00865-51	1-1/2T-L X 3/4B-R(BSPP)CW

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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
MXH	1	576-00865-53	1-1/2T-L X 1B-R(BSPP)CW	QLX	1	576-00865-59	1T-L X 1/2F-R(JIC)CW
MXI	1	576-00865-55	1-1/2T-L X 1-1/4B-R(BSPP)CW	QML	1	576-00865-60	1T-L X 1/2T-R(JIC)CW
MXJ	1	576-00865-57	1-1/2T-L X 1-1/2B-R(BSPP)CW	QMM	1	576-00865-62	1T-L X 3/4T-R(JIC)CW
NDA	1	576-00375-14-41	1-1/2X3/4TP 3/4BP(BSPP)CCW	QMN	1	576-00865-64	1T-L X 1T-R(JIC)CW
NDB	1	576-00375-14-42	1-1/2X1TP 3/4BP(BSPP)CCW	QMX	1	576-00865-61	1T-L X 3/4F-R(JIC)CW
NDC	1	576-00375-14-43	1-1/2X1-1/4TP 3/4BP(BSPP)CCW	QNX	1	576-00865-63	1T-L X 1F-R(JIC)CW
NEA	1	576-00375-14-51	1-1/2X3/4TP 1BP(BSPP)CCW	QXL	1	576-00865-59	1T-L X 1/2B-R(JIC)CW
NEB	1	576-00375-14-52	1-1/2X1TP 1BP(BSPP)CCW	QXM	1	576-00865-61	1T-L X 3/4B-R(JIC)CW
NEC	1	576-00375-14-53	1-1/2X1-1/4TP 1BP(BSPP)CCW	QXN	1	576-00865-63	1T-L X 1B-R(JIC)CW
NFA	1	576-00375-14-61	1-1/2X3/4TP 1-1/4BP(BSPP)CCW	RHA	1	576-00375-18-81	1X1/2TP 1/2BP(JIC)CCW
NFB	1	576-00375-14-62	1-1/2X1TP 1-1/4BP(BSPP)CCW	RHB	1	576-00375-18-82	1X3/4TP 1/2BP(JIC)CCW
NFC	1	576-00375-14-63	1-1/2X1-1/4TP 1-1/4BP(BSPP)CCW	RHC	1	576-00375-18-83	1X1TP 1/2BP(JIC)CCW
NGX	1	576-00865-51	3/4F-L X 1-1/2T-R(BSPP)CCW	RHD	1	576-00375-18-84	1X1-1/4TP 1/2BP(JIC)CCW
NHX	1	576-00865-53	1F-L X 1-1/2T-R(BSPP)CCW	RJA	1	576-00375-18-101	1X1/2TP 3/4BP(JIC)CCW
NIX	1	576-00865-55	1-1/4F-L X 1-1/2T-R(BSPP)CCW	RJB	1	576-00375-18-102	1X3/4TP 3/4BP(JIC)CCW
NJX	1	576-00865-57	1-1/2F-L X 1-1/2T-R(BSPP)CCW	RJC	1	576-00375-18-103	1X1TP 3/4BP(JIC)CCW
NMG	1	576-00865-52	3/4T-L X 1-1/2T-R(BSPP)CCW	RJD	1	576-00375-18-104	1X1-1/4TP 3/4BP(JIC)CCW
NMH	1	576-00865-54	1T-L X 1-1/2T-R(BSPP)CCW	RKA	1	576-00375-18-111	1X1/2TP 1BP(JIC)CCW
NMI	1	576-00865-56	1-1/4T-L X 1-1/2T-R(BSPP)CCW	RKB	1	576-00375-18-112	1X3/4TP 1BP(JIC)CCW
NMJ	1	576-00865-58	1-1/2T-L X 1-1/2T-R(BSPP)CCW	RKC	1	576-00375-18-113	1X1TP 1BP(JIC)CCW
NXG	1	576-00865-51	3/4B-L X 1-1/2T-R(BSPP)CCW	RKD	1	576-00375-18-114	1X1-1/4TP 1BP(JIC)CCW
NXH	1	576-00865-53	1B-L X 1-1/2T-R(BSPP)CCW	RLA	1	576-00375-18-121	1X1/2TP 1-1/4BP(JIC)CCW
NXI	1	576-00865-55	1-1/4B-L X 1-1/2T-R(BSPP)CCW	RLB	1	576-00375-18-122	1X3/4TP 1-1/4BP(JIC)CCW
NXJ	1	576-00865-57	1-1/2B-L X 1-1/2T-R(BSPP)CCW	RLC	1	576-00375-18-123	1X1TP 1-1/4BP(JIC)CCW
QHA	1	576-00375-17-81	1X1/2TP 1/2BP(JIC)CW	RLD	1	576-00375-18-124	1X1-1/4TP 1-1/4BP(JIC)CCW
QHB	1	576-00375-17-82	1X3/4TP 1/2BP(JIC)CW	RLX	1	576-00865-59	1/2B-L X 1T-R(JIC)CCW
QHC	1	576-00375-17-83	1X1TP 1/2BP(JIC)CW	RML	1	576-00865-60	1/2T-L X 1T-R(JIC)CCW
QHD	1	576-00375-17-84	1X1-1/4TP 1/2BP(JIC)CW	RMM	1	576-00865-62	3/4T-L X 1T-R(JIC)CCW
QJA	1	576-00375-17-101	1X1/2TP 3/4BP(JIC)CW	RMN	1	576-00865-64	1T-L X 1T-R(JIC)CCW
QJB	1	576-00375-17-102	1X3/4TP 3/4BP(JIC)CW	RMX	1	576-00865-61	3/4F-L X 1T-R(JIC)CCW
QJC	1	576-00375-17-103	1X1TP 3/4BP(JIC)CW	RNX	1	576-00865-63	1F-L X 1T-R(JIC)CCW
QJD	1	576-00375-17-104	1X1-1/4TP 3/4BP(JIC)CW	RXL	1	576-00865-59	1/2B-L X 1T-R(JIC)CCW
QKA	1	576-00375-17-111	1X1/2TP 1BP(JIC)CW	RXM	1	576-00865-61	3/4B-L X 1T-R(JIC)CCW
QKB	1	576-00375-17-112	1X3/4TP 1BP(JIC)CW	RXN	1	576-00865-63	1B-L X 1T-R(JIC)CCW
QKC	1	576-00375-17-113	1X1TP 1BP(JIC)CW	SHA	1	576-00375-19-81	1-1/4X1/2TP 1/2BP(JIC)CW
QKD	1	576-00375-17-114	1X1-1/4TP 1BP(JIC)CW	SHB	1	576-00375-19-82	1-1/4X3/4TP 1/2BP(JIC)CW
QLA	1	576-00375-17-121	1X1/2TP 1-1/4BP(JIC)CW	SHC	1	576-00375-19-83	1-1/4X1TP 1/2BP(JIC)CW
QLB	1	576-00375-17-122	1X3/4TP 1-1/4BP(JIC)CW	SHD	1	576-00375-19-84	1-1/4X1-1/4TP 1/2BP(JIC)CW
QLC	1	576-00375-17-123	1X1TP 1-1/4BP(JIC)CW	SJA	1	576-00375-19-101	1-1/4X1/2TP 3/4BP(JIC)CW
QLD	1	576-00375-17-124	1X1-1/4TP 1-1/4BP(JIC)CW	SJB	1	576-00375-19-102	1-1/4X3/4TP 3/4BP(JIC)CW

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Bearing Carriers

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
SJC	1	576-00375-19-103	1-1/4X1TP 3/4BP(JIC)CW	TMM	1	576-00865-68	3/4T-L X 1-1/4T-R(JIC)CCW
SJD	1	576-00375-19-104	1-1/4X1-1/4TP 3/4BP(JIC)CW	TMN	1	576-00865-70	1T-L X 1-1/4T-R(JIC)CCW
SKA	1	576-00375-19-111	1-1/4X1/2TP 1BP(JIC)CW	TMQ	1	576-00865-72	1-1/4T-L X 1-1/4T-R(JIC)CCW
SKB	1	576-00375-19-112	1-1/4X3/4TP 1BP(JIC)CW	TMX	1	576-00865-67	3/4F-L X 1-1/4T-R(JIC)CCW
SKC	1	576-00375-19-113	1-1/4X1TP 1BP(JIC)CW	TNX	1	576-00865-69	1F-L X 1-1/4T-R(JIC)CCW
SKD	1	576-00375-19-114	1-1/4X1-1/4TP 1BP(JIC)CW	TQX	1	576-00865-71	1-1/4F-L X 1-1/4T-R(JIC)CCW
SLA	1	576-00375-19-121	1-1/4X1/2TP 1-1/4BP(JIC)CW	TXL	1	576-00865-65	1/2B-L X 1-1/4T-R(JIC)CCW
SLB	1	576-00375-19-122	1-1/4X3/4TP 1-1/4BP(JIC)CW	TXM	1	576-00865-67	3/4B-L X 1-1/4T-R(JIC)CCW
SLC	1	576-00375-19-123	1-1/4X1TP 1-1/4BP(JIC)CW	TXN	1	576-00865-69	1B-L X 1-1/4T-R(JIC)CCW
SLD	1	576-00375-19-124	1-1/4X1-1/4TP 1-1/4BP(JIC)CW	TXQ	1	576-00865-71	1-1/4B-L X 1-1/4T-R(JIC)CCW
SLX	1	576-00865-65	1-1/4T-L X 1/2F-R(JIC)CW	UHA	1	576-00375-21-81	1-1/2X1/2TP 1/2BP(JIC)CW
SML	1	576-00865-66	1-1/4T-L X 1/2T-R(JIC)CW	UHB	1	576-00375-21-82	1-1/2X3/4TP 1/2BP(JIC)CW
SMM	1	576-00865-68	1-1/4T-L X 3/4T-R(JIC)CW	UHC	1	576-00375-21-83	1-1/2X1TP 1/2BP(JIC)CW
SMN	1	576-00865-70	1-1/4T-L X 1T-R(JIC)CW	UHD	1	576-00375-21-84	1-1/X1-1/4TP 1/2BP(JIC)CW
SMQ	1	576-00865-72	1-1/4T-L X 1-1/4T-R(JIC)CW	UJA	1	576-00375-21-101	1-1/2X1/2TP 3/4BP(JIC)CW
SMX	1	576-00865-67	1-1/4T-L X 3/4F-R(JIC)CW	UJB	1	576-00375-21-102	1-1/2X3/4TP 3/4BP(JIC)CW
SNX	1	576-00865-69	1-1/4T-L X 1F-R(JIC)CW	UJC	1	576-00375-21-103	1-1/2X1TP 3/4BP(JIC)CW
SQX	1	576-00865-71	1-1/4T-L X 1-1/4F-R(JIC)CW	UJD	1	576-00375-21-104	1-1/2X1-1/4TP 3/4BP(JIC)CW
SXL	1	576-00865-65	1-1/4T-L X 1/2B-R(JIC)CW	UKA	1	576-00375-21-111	1-1/2X1/2TP 1BP(JIC)CW
SXM	1	576-00865-67	1-1/4T-L X 3/4B-R(JIC)CW	UKB	1	576-00375-21-112	1-1/2X3/4TP 1BP(JIC)CW
SXN	1	576-00865-69	1-1/4T-L X 1B-R(JIC)CW	UKC	1	576-00375-21-113	1-1/2X1TP 1BP(JIC)CW
SXQ	1	576-00865-71	1-1/4T-L X 1-1/4B-R(JIC)CW	UKD	1	576-00375-21-114	1-1/2X1-1/4TP 1BP(JIC)CW
THA	1	576-00375-20-81	1-1/4X1/2TP 1/2BP(JIC)CCW	ULA	1	576-00375-21-121	1-1/2X1/2TP 1-1/4BP(JIC)CW
THB	1	576-00375-20-82	1-1/4X3/4TP 1/2BP(JIC)CCW	ULB	1	576-00375-21-122	1-1/2X3/4TP 1-1/4BP(JIC)CW
THC	1	576-00375-20-83	1-1/4X1TP 1/2BP(JIC)CCW	ULC	1	576-00375-21-123	1-1/2X1TP 1-1/4BP(JIC)CW
THD	1	576-00375-20-84	1-1/4X1-1/4TP 1/2BP(JIC)CCW	ULD	1	576-00375-21-124	1-1/2X1-1/4TP 1-1/4BP(JIC)CW
TJA	1	576-00375-20-101	1-1/4X1/2TP 3/4BP(JIC)CCW	ULX	1	576-00865-73	1-1/2T-L X 1/2F-R(JIC)CW
TJB	1	576-00375-20-102	1-1/4X3/4TP 3/4BP(JIC)CCW	UML	1	576-00865-74	1-1/2T-L X 1/2T-R(JIC)CW
TJC	1	576-00375-20-103	1-1/4X1TP 3/4BP(JIC)CCW	UMM	1	576-00865-76	1-1/2T-L X 3/4T-R(JIC)CW
TJD	1	576-00375-20-104	1-1/4X1-1/4TP 3/4BP(JIC)CCW	UMN	1	576-00865-78	1-1/2T-L X 1T-R(JIC)CW
TKA	1	576-00375-20-111	1-1/4X1/2TP 1BP(JIC)CCW	UMQ	1	576-00865-80	1-1/2T-L X 1-1/4T-R(JIC)CW
TKB	1	576-00375-20-112	1-1/4X3/4TP 1BP(JIC)CCW	UMR	1	576-00865-82	1-1/2T-L X 1-1/2T-R(JIC)CW
TKC	1	576-00375-20-113	1-1/4X1TP 1BP(JIC)CCW	UMX	1	576-00865-75	1-1/2T-L X 3/4F-R(JIC)CW
TKD	1	576-00375-20-114	1-1/4X1-1/4TP 1BP(JIC)CCW	UNX	1	576-00865-77	1-1/2T-L X 1F-R(JIC)CW
TLA	1	576-00375-20-121	1-1/4X1/2TP 1-1/4BP(JIC)CCW	UQX	1	576-00865-79	1-1/2T-L X 1-1/4F-R(JIC)CW
TLB	1	576-00375-20-122	1-1/4X3/4TP 1-1/4BP(JIC)CCW	URX	1	576-00865-81	1-1/2T-L X 1-1/2F-R(JIC)CW
TLC	1	576-00375-20-123	1-1/4X1TP 1-1/4BP(JIC)CCW	UXL	1	576-00865-73	1-1/2T-L X 1/2B-R(JIC)CW
TLD	1	576-00375-20-124	1-1/4X1-1/4TP 1-1/4BP(JIC)CCW	UXM	1	576-00865-75	1-1/2T-L X 3/4B-R(JIC)CW
TLX	1	576-00865-65	1/2F-L X 1-1/4T-R(JIC)CCW	UXN	1	576-00865-77	1-1/2T-L X 1B-R(JIC)CW
TML	1	576-00865-66	1/2T-L X 1-1/4T-R(JIC)CCW	UXQ	1	576-00865-79	1-1/2T-L X 1-1/4B-R(JIC)CW

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**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>
UXR	1	576-00865-81	1-1/2T-L X 1-1/2B-R(JIC)CCW
VHA	1	576-00375-22-81	1-1/2X1/2TP 1/2BP(JIC)CCW
VHB	1	576-00375-22-82	1-1/2X3/4TP 1/2BP(JIC)CCW
VHC	1	576-00375-22-83	1-1/2X1TP 1/2BP(JIC)CCW
VHD	1	576-00375-22-84	1-1/2X1-1/4TP 1/2BP(JIC)CCW
VJA	1	576-00375-22-101	1-1/2X1/2TP 3/4BP(JIC)CCW
VJB	1	576-00375-22-102	1-1/2X3/4TP 3/4BP(JIC)CCW
VJC	1	576-00375-22-103	1-1/2X1TP 3/4BP(JIC)CCW
VJD	1	576-00375-22-104	1-1/2X1-1/4TP 3/4BP(JIC)CCW
VKA	1	576-00375-22-111	1-1/2X1/2TP 1BP(JIC)CCW
VKB	1	576-00375-22-112	1-1/2X3/4TP 1BP(JIC)CCW
VKC	1	576-00375-22-113	1-1/2X1TP 1BP(JIC)CCW
VKD	1	576-00375-22-114	1-1/2X1-1/4TP 1BP(JIC)CCW
VLA	1	576-00375-22-121	1-1/2X1/2TP 1-1/4BP(JIC)CCW
VLB	1	576-00375-22-122	1-1/2X3/4TP 1-1/4BP(JIC)CCW
VLC	1	576-00375-22-123	1-1/2X1TP 1-1/4BP(JIC)CCW
VLD	1	576-00375-22-124	1-1/2X1-1/4TP 1-1/4BP(JIC)CCW
VLX	1	576-00865-73	1/2F-L X 1-1/2T-R(JIC)CCW
VML	1	576-00865-74	1/2T-L X 1-1/2T-R(JIC)CCW
VMM	1	567-00865-76	3/4T-L X 1-1/2T-R(JIC)CCW
VMN	1	576-00865-78	1T-L X 1-1/2T-R(JIC)CCW
VMQ	1	576-00865-80	1-1/4T-L X 1-1/2T-R(JIC)CCW
VMR	1	576-00865-82	1-1/2T-L X 1-1/2T-R(JIC)CCW
VMX	1	576-00865-75	3/4F-L X 1-1/2T-R(JIC)CCW
VNX	1	576-00865-77	1F-L X 1-1/2T-R(JIC)CCW
VQX	1	576-00865-79	1-1/4F-L X 1-1/2T-R(JIC)CCW
VRX	1	576-00865-81	1-1/2F-L X 1-1/2T-R(JIC)CCW
VXL	1	576-00865-73	1/2B-L X 1-1/2T-R(JIC)CCW
VXM	1	576-00865-75	3/4B-L X 1-1/2T-R(JIC)CCW
VXN	1	576-00865-77	1B-L X 1-1/2T-R(JIC)CCW
VXQ	1	576-00865-79	1-1/4B-L X 1-1/2T-R(JIC)CCW
VXR	1	576-00865-81	1-1/2B-L X 1-1/2T-R(JIC)CCW

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BEARING CARRIER SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
	4	921-00427-P	197 HI PRESS BUSH

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CONNECTING SHAFT SMALL PARTS

<u>CODE</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>D E S C R I P T I O N</u>
1	1	022-00413-CS	197 CONNECTOR SHAFT

**PLASTIC PLUGS**

**NPT & BSPP**

Port size	Part#
1/8"	#8
1/4"	#11
3/8"	#17
1/2"	#23
3/4"	#30
1"	#42
1-1/4"	#53
1-1/2"	#57
2"	#68
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"	W1-096	3-1/2"	4
3/4"	W1-13	4"	4
1"	W1-13	4"	4
1-1/4"	W1-58	4-1/2"	4
1-1/2"	W1-58	4-1/2"	4
1-3/4"	W1-14	5"	4
2"	W1-14	5"	4

<b>Washer #</b>	W033-2	Qty.	4
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**Shaft Protectors**

SP-1000-1	.656" Dia
SP-1000-2	.587" Dia
SP-1000-3	1" Dia
SP-1000-4	1-1/8" Dia
SP-1000-5	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	7/8" Dia

**FASTENERS FOR DOUBLE UNITS**

	Flush	Extended
<b>Dual Section</b>	8	10
<b>Triple Section</b>	12	14
<b>Quad Section</b>	16	18
<b>***Add total gear width + above dimension to obtain stud length.</b>		

<b>Washer #</b>	W033-2	Qty.	4
<b>Nut #</b>	W3-65	Qty.	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"