

Use With: OM-04402  
MR-04538

PUBLICATION NUMBER PL-04642-01

Pump Issue 1  
January 30, 1997  
Rev. B



**PRIME-AIRE<sup>™</sup> SERIES**  
**PUMP MODEL**  
**PA6A60-4045D**

**MANUAL**  
**PART 2 of 3**

**PARTS**  
**LIST**  
**WITH**  
**PERFORMANCE CURVE**

**THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO**

**GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA** Printed in U.S.A.

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Register your new  
Gorman-Rupp pump online at  
[www.gormanrupp.com/register](http://www.gormanrupp.com/register).

Valid serial number and e-mail address required.



**The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.**

### **RECORD YOUR PUMP MODEL AND SERIAL NUMBER**

Please record your pump model and serial number in the spaces provided below. Your Gorman-Rupp distributor needs this information when you require parts or service.

Pump Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

## PERFORMANCE CURVE – SECTION A

### RECORDING MODEL AND SERIAL NUMBERS

Please record the pump model and serial number in the spaces provided below and in the separate Installation/Operation Manual accompanying your pump. Your Gorman-Rupp distributor needs this information when you require parts or service.

Pump Model: \_\_\_\_\_

Serial Number: \_\_\_\_\_

### WARRANTY INFORMATION

The pump warranty is provided as part of Gorman-Rupp's support program for customers who operate and maintain their equipment as described in this manual and other accompanying literature. Please note that should the equipment be abused or modified to change its performance beyond the original factory specifications, the warranty will become void and any claim will be denied.

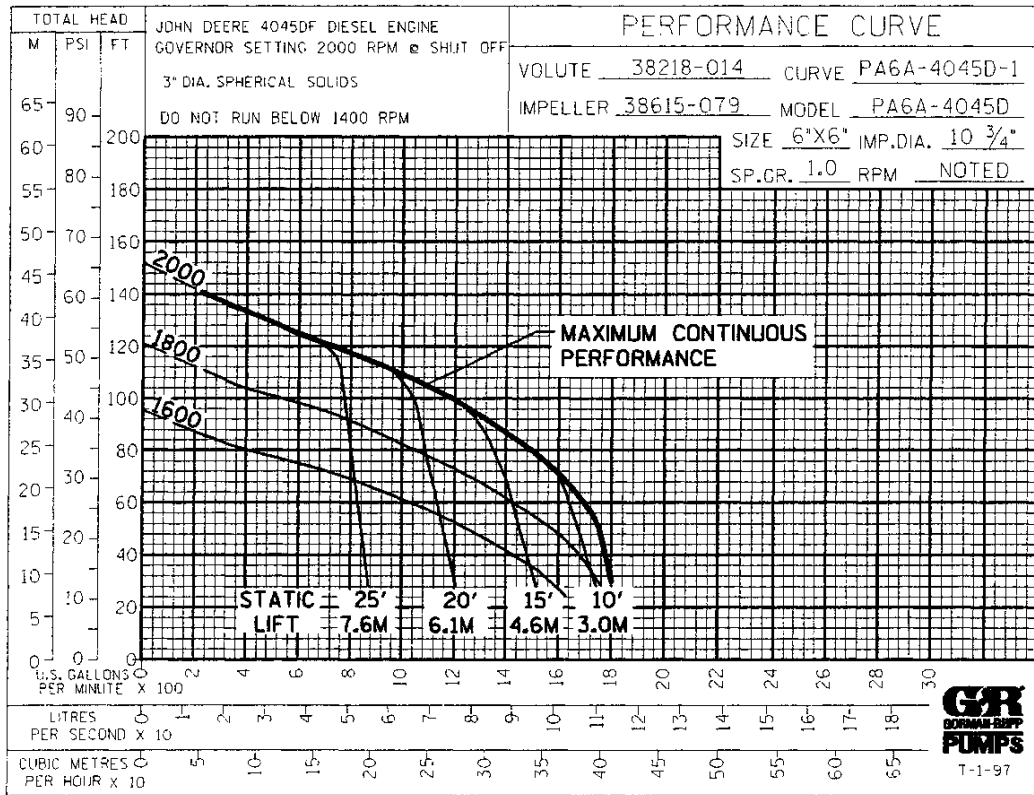
### PERFORMANCE CURVE

The performance curve on the following page is based on 70° F (21° C) clear water at sea level, corrected to 0.80 specific gravity, with minimum suction lift. Since pump installations are seldom identical, your performance may be different due to such factors as viscosity, specific gravity, elevation, temperature, and impeller trim.

If your pump serial number is followed by an "N", your pump is **NOT** a standard production model. Contact the Gorman-Rupp Company to verify performance or part numbers.

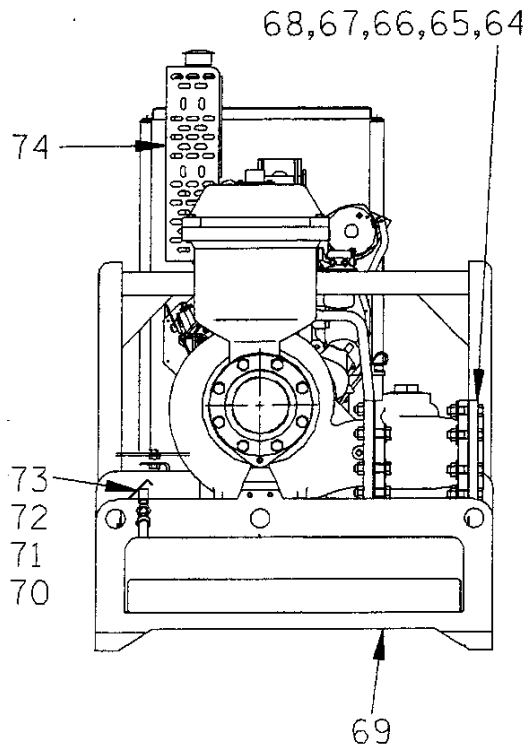
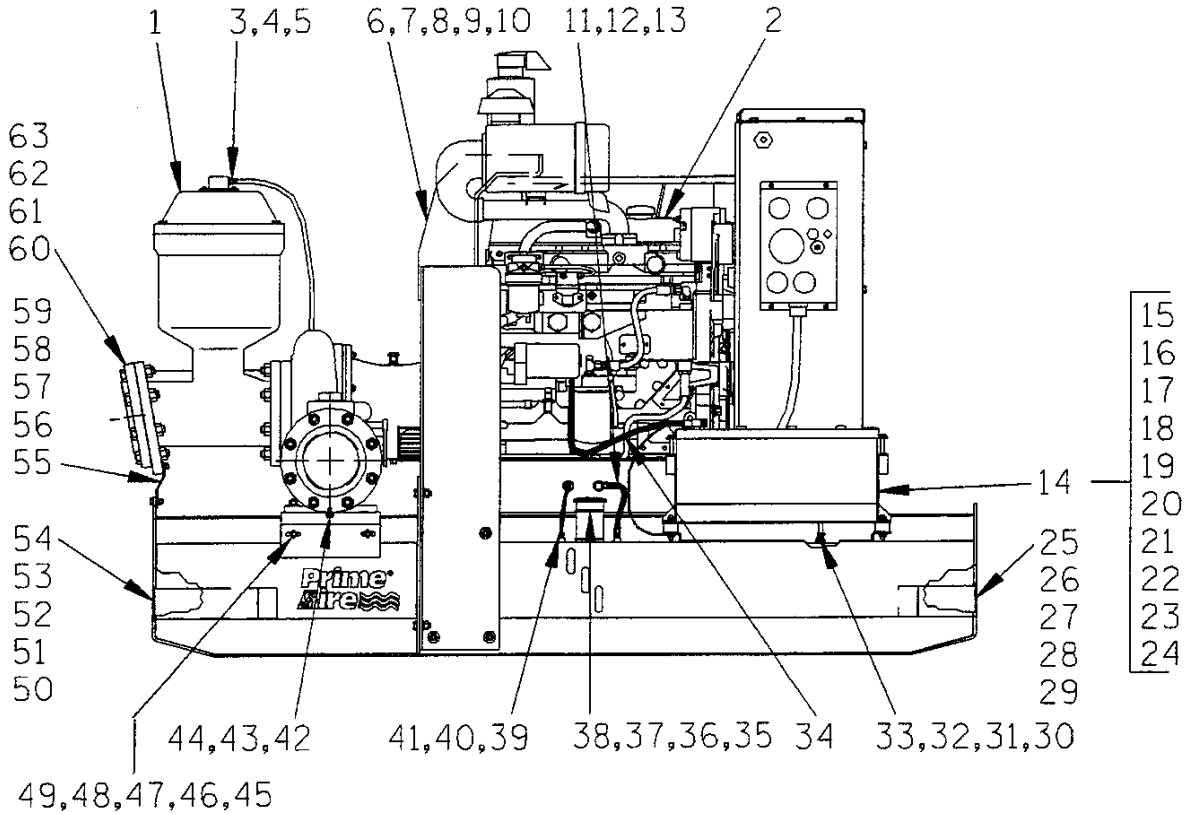


Pump speed and operating condition points must be within the continuous performance range shown on the curve.



Performance Curve – Model PA6A60-4045D

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S/N 1110032 TO 1115250  
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**PARTS LIST**  
**Pump Model PA6A60-4045D**

If your pump serial number is followed by an "N", your pump is **NOT** a standard production model. Contact the Gorman-Rupp Company to verify part numbers.

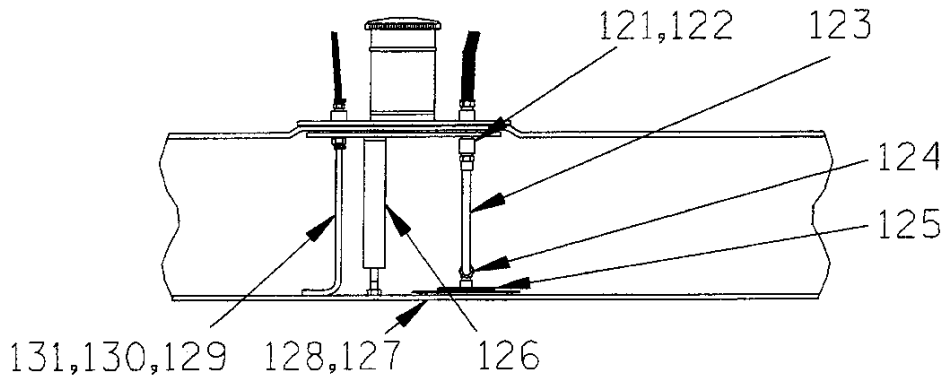
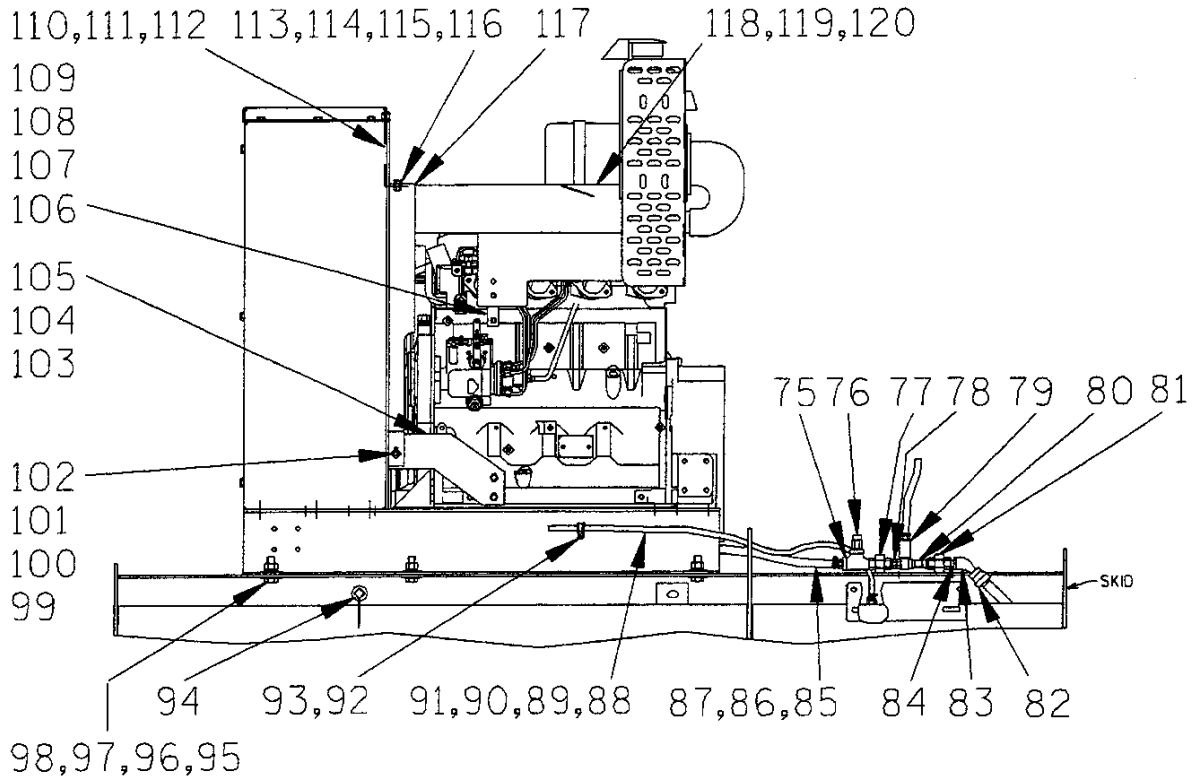
ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY	ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
1	PUMP ASSEMBLY	PA6A60-(SAE 4/10)		1	38	SEALING WASHER	25123-056	----	12
2	J D 4045DF150 ENGINE	29224-113	----	1	39	BARB HOSE FITTING	26523-386	----	2
3	REDUCER BUSHING	AP1608	11999	1	40	HOSE	11308H	----	1
4	MALE CONNECTOR	S1599	----	2	41	HOSE CLAMP	26518-641	----	2
5	1/2" BRAIDED HOSE (3.25')	18513-113	----	1	42	HEX HD CAPSCREW	B0603	15991	1
6	LIFTING BAIL	44711--020	24150	1	43	LOCKWASHER	J06	15991	1
7	HEX HD CAPSCREW	B0805	15991	10	44	FLAT WASHER	K06	15991	1
8	HEX NUT	D08	15991	6	45	CHECK VALVE BRKT	34256-014	15120	1
9	LOCKWASHER	J08	15991	10	46	HEX HD CAPSCREW	B0604	15991	2
10	FLAT WASHER	K08	15991	12	47	HEX NUT	D06	15991	2
11	MALE CONNECTOR	S1447	----	1	48	LOCKWASHER	J06	15991	2
12	MALE ELBOW	26351-131	----	1	49	FLAT WASHER	K06	15991	4
13	HOSE ASSY	46341-789	----	1	50	FUEL TANK RETAINER	41441-408	24150	1
14	BATTERY BOX ASSY	GRP40-08C	----	1	51	CARRIAGE BOLT	AB0805	15991	2
15	- HEX HD CAPSCREW	B0607	15991	2	52	HEX NUT	D08	15991	2
16	- FLAT WASHER	K06	15991	2	53	LOCKWASHER	J08	15991	2
17	- FLANGED HEX NUT	21765-314	----	2	54	FLAT WASHER	K08	15991	2
18	- GRND CABLE ASSY	47311-064	----	1	55	PRIM CHAMBER BRKT	34535-010	15120	1
19	- BATTERY BOX LID	42113-012	24150	1	56	HEX HD CAPSCREW	B0604	15991	3
20	- 12V BATTERY	SEE OPTIONS LIST			57	HEX NUT	D06	15991	2
21	- BATTERY TAG	38818-506	----	1	58	LOCKWASHER	J06	15991	3
22	- BATTERY BOX	42431-030	24150	1	59	FLAT WASHER	K06	15991	3
23	- STUD MOUNT	24631-006	----	4	60	SUCTION FLANGE	1758	10010	1
24	- FLANGED HEX NUT	21765-314	----	8	61	SUCT FLANGE GSKT	1679G	18000	1
25	A/C FUEL TANK RETAINER	41441-407	24150	1	62	HEX HD CAPSCREW	B1212	15991	8
26	CARRIAGE BOLT	AB0805	15991	2	63	HEX NUT	D12	15991	8
27	HEX NUT	D08	15991	2	64	DISCHARGE FLANGE	1758	10010	1
28	LOCKWASHER	J08	15991	2	65	DISCH FLANGE GSKT	1679G	18000	1
29	FLAT WASHER	K08	15991	2	66	HEX HD CAPSCREW	B1213	15991	8
30	REDUCER BUSHING	AP0602	15079	1	67	HEX NUT	D12	15991	8
31	BARB ELBOW	26523-502	----	1	68	FLAT WASHER	21161-446	----	8
32	HOSE CLAMP	26518-641	----	1	69	SKID ASSY	41565-570	24150	1
33	1' PLASTIC TUBING	18523-366	----	1	70	VENTURI GUARD ASSY	42381-067	----	1
34	I/O CABLE ASSY	47311-107	----	1	71	HEX HD CAPSCREW	B0504	15991	2
35	FUEL FILLNECK ASSY	46312-015	24150	1	72	LOCKWASHER	J05	15991	2
36	FUEL FILL GSKT	38687-553	19020	1	73	FLAT WASHER	K05	15991	2
37	NYLON LOCK NUT	BC#10	15991	12	74	MUFFLER GRD ASSY	42331-057	----	1

\* INDICATES PARTS RECOMMENDED FOR STOCK

Above Serial Numbers Do Not Apply To Pumps Made In Canada.

CANADIAN SERIAL NO. .... AND UP

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FUEL PICK-UP SYSTEM



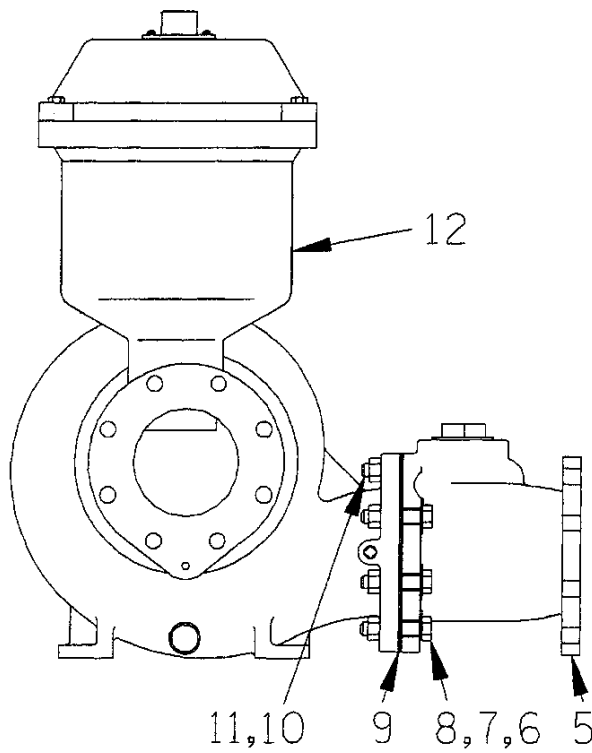
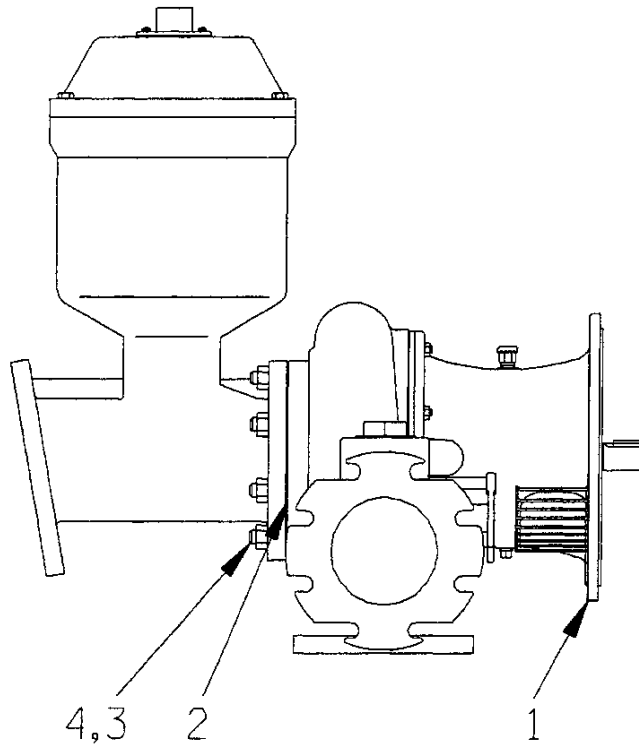
S/N 1110032 TO 1115250  
PUMP ISSUE 1

**PARTS LIST**  
**Pump Model PA6A60-4045D**

ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY	ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
75	SERVICE TEE	US08	11999	1	115	LOCKWASHER	J06	15991	2
76	RELIEF VALVE	26662-028	----	1	116	FLAT WASHER	K06	15991	2
77	PIPE UNION	AH08	11999	1	117	BELT GUARD	34778-007	----	1
78	REDUCER BUSHING	AP0806	15079	1	118	ENG GUARD ASSY	42381-070	24150	1
79	PIPE COUPLING	AE08	15079	1	119	HEX HD CAPSCREW	B0603	15991	2
80	VENTURI	26817-002	----	1	120	LOCKWASHER	J06	15991	2
81	PIPE UNION	AH08	11999	1	121	45° ELBOW	26114-802	----	1
82	RED PIPE BUSHING	AE1208	15079	1	122	MALE CONNECTOR	26171-013	----	1
83	45° STREET ELBOW	AGS08	11999	1	123	3/8" TUBING	18533-119	----	1
84	PIPE NIPPLE	T08	15079	1	124	90° MALE ELBOW	26171-038	----	1
85	HOSE	18533-304	----	1	125	FUEL PICK-UP ASSY	41822-009	24150	1
86	HOSE CLAMP	26518-683	----	2	126	FUEL FILLER SUPPORT	41441-406	24150	1
87	BARB HOSE FITTING	26523-391	----	2	127	FUEL TANK	38651-001	19220	1
88	REDUCER BUSHING	AP0604	15079	1	128	PIPE PLUG	P06	19220	1
89	MALE CONNECTOR	26523-386	----	1	129	MALE CONNECTOR	26523-386	----	1
90	HOSE CLAMP	26518-641	----	1	130	HOSE CLAMP	26518-641	----	1
91	2 1/2" PLASTIC TUBING	18523-366	----	1	131	12" TUBING	18523-366	----	1
92	HEX HD CAPSCREW	B#10-03	15991	2					
93	HEX NUT	D#10	15991	2	NOT SHOWN:				
94	LOCKWASHER	J#10	15991	2		INSTRUCTION DECAL	38818-128	----	1
95	CUSHION CABLE CLAMP	27111-339	----	2		WARNING DECAL	38816-063	----	2
96	OIL DRAIN ASSY	46342-013	----	1		LUBE DECAL	38816-079	----	1
97	HEX HD CAPSCREW	B1007	15991	6		WARNING DECAL	38816-096	----	1
98	HEX NUT	D10	15991	6		SUCTION STICKER	6588AG	----	1
99	LOCKWASHER	J10	15991	6		DISCHARGE STICKER	6588BJ	----	1
100	FLAT WASHER	K10	15991	12		RPM DECAL	2613FJ	----	1
101	HEX HD CAPSCREW	B0604	15991	1		LIFT DECAL	38816-175	----	1
102	HEX NUT	D06	15991	1		LIFT DECAL	38816-218	----	2
103	LOCKWASHER	J06	15991	1		PA DECAL	38812-078	----	2
104	FLAT WASHER	K06	15991	2		WARNING DECAL	2613FE	----	1
105	BELT GUARD ASSY	33441-044	----	1		ROTATION STICKER	2613M	----	1
106	HEX HD CAPSCREW	22645-180	----	2		G-R DECAL	GR06	----	2
107	LOCKWASHER	21171-512	----	2		INSTR TAG PAPER	38817-009	----	1
108	GUARD BRKT ASSY	42381-071	24150	1		ENG START-UP TAG	38816-269	----	1
109	HEX HD CAPSCREW	22645-158	----	1		NAME PLATE	38818-127	13000	1
110	HEX HD CAPSCREW	B0603	15991	1		DRIVE SCREW	BM#04-03	17000	4
111	LOCKWASHER	J06	15991	1		STRAINER	7823A	24000	1
112	GUARD BRKT ASSY	42381-072	24150	1					
113	HEX HD CAPSCREW	B0604	15991	4	OPTIONAL:				
114	HEX NUT	D06	15991	2		12V BATTERY	29331-506	----	1

\* INDICATES PARTS RECOMMENDED FOR STOCK

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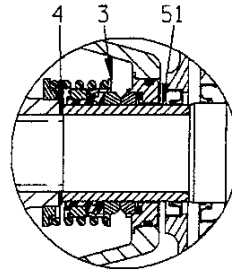
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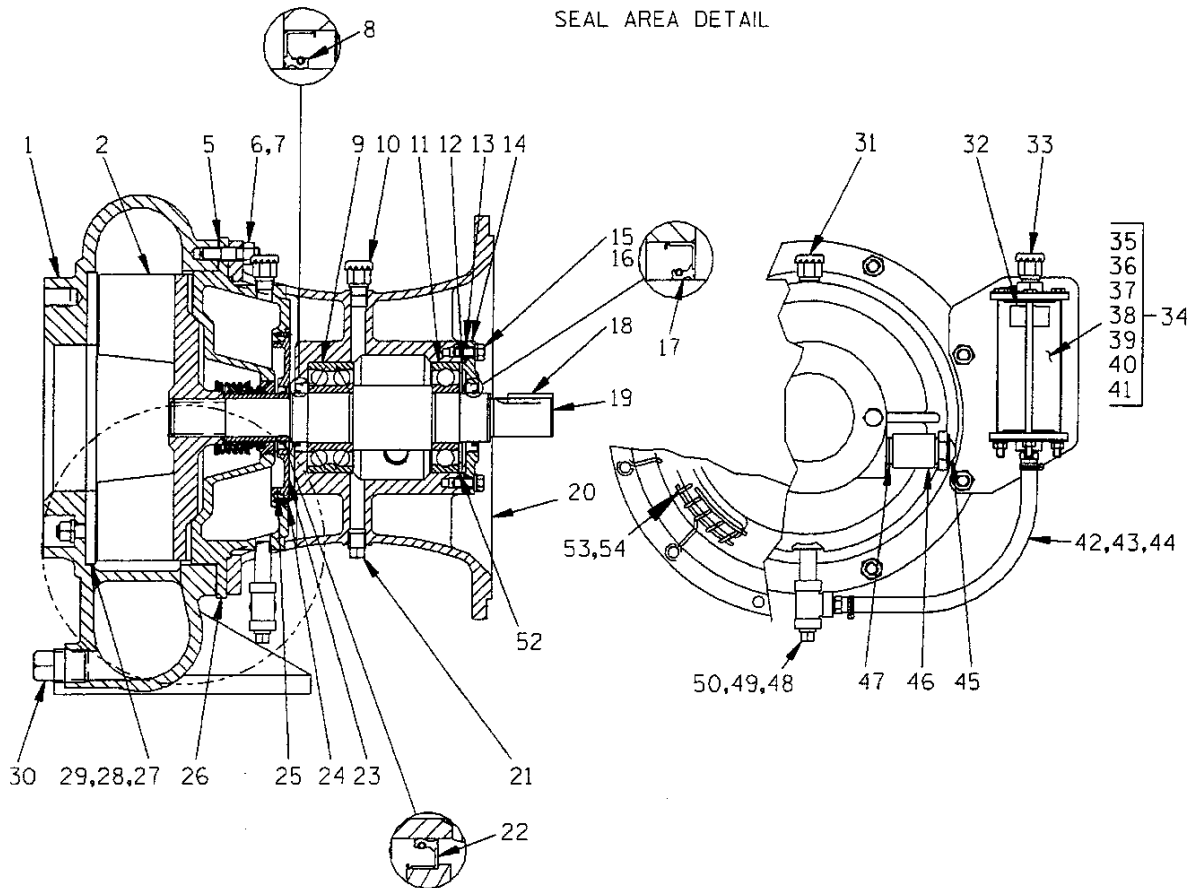
**PARTS LIST**  
**PA6A60-(SAE 4/10) Pump Assembly**

ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
1	PUMP END ASSY	66E60-(SAE4/10)	---	1
2	* PUMP CASING GSKT	1679G	18000	1
3	STUD	C1211	15991	8
4	HEX NUT	D12	15991	8
5	CHECK VALVE ASSY	46421-061	---	1
6	HEX HD CAPSCREW	B1214	15991	6
7	FLAT WASHER	21161-446	---	6
8	HEX NUT	D12	15991	6
9	* CHECK VALVE GSKT	25113-036	---	1
10	STUD	C1212	15991	2
11	HEX NUT	D12	15991	2
12	PRIMING CHAMBER ASSY	46112-703	---	1

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SEAL AREA DETAIL



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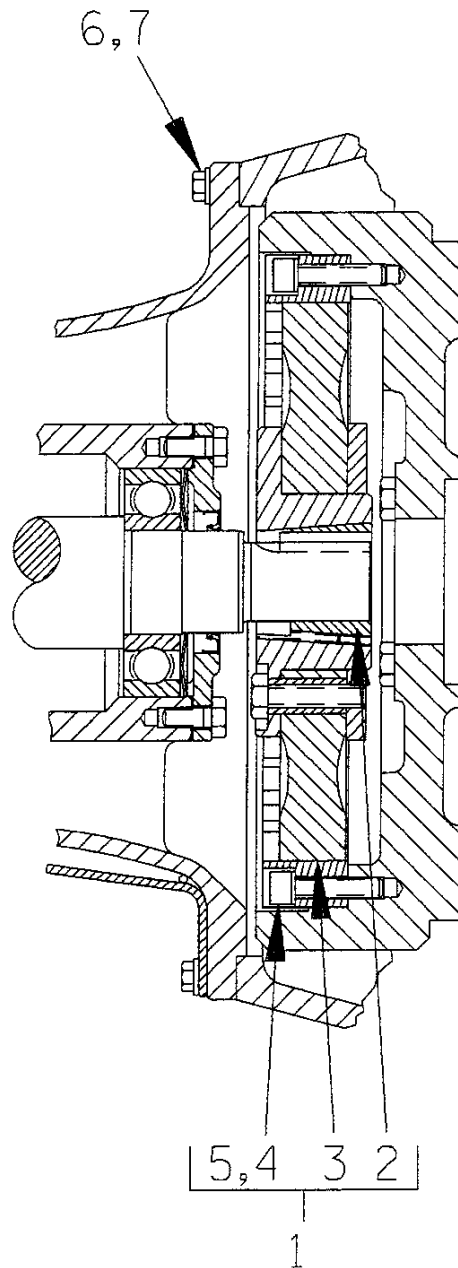
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**PARTS LIST**  
**66E60-(SAE4/10) Pump End Assembly**

ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY	ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
1	PUMP CASING	38218-014	10000	1	29	LOCKWASHER	J08	15991	2
2 *	IMPELLER ASSY	46151-409	----	1	30	CASING DRAIN PLUG	P16	10009	1
	-SPRING RETAINER	31167-023	15000	1	31	AIR VENT	S1703	----	1
3 *	SEAL ASSY	46512-048	----	1	32	OIL LEVEL DECAL	38816-123	----	1
4 *	ADJ SHIM SET	5091	17090	1	33	AIR VENT	S1703	----	1
5 *	CASING GASKET SET	34G	18000	1	34	SIGHT GAUGE ASSY	46353-045	----	1
6	STUD	C0809	15991	8	35	-LOWER COVER	26846-501	----	2
7	HEX NUT	D08	15991	8	36	-SUPPORT ASSY	41881-555	24150	1
8 *	OIL SEAL	25258-622	----	1	37	-HEX HD CAPSCREW	B0426	15991	3
9 *	INBOARD BALL BEARING	23421-461	----	1	38	-HEX NUT	D04	15991	3
10	AIR VENT	S1703	----	1	39	-LOCKWASHER	J04	15991	3
11 *	OUTBOARD BALL BRG	S1077	----	1	40 *	-CHAMBER GSKT	38681-204	20000	2
12 *	THRUST WASHER	31133-197	15210	1	41	-SIGHT CHAMBER	26846-502	----	1
13 *	BRG COVER GSKT	5413G	18000	1	42	MALE CONNECTOR	26523-409	----	2
14	BEARING CAP	4185A	10010	1	43	HOSE	18513-054	----	1
15	HEX HD CAPSCREW	B0604	15991	4	44	HOSE CLAMP	26518-642	----	2
16	LOCKWASHER	J06	15991	4	45	OIL LVL SIGHT GAUGE	S1471	----	1
17 *	OIL SEAL	25258-622	----	1	46	PIPE COUPLING	AE12	15079	1
18 *	IMP SHAFT KEY	N0607	15990	1	47	PIPE NIPPLE	T12	15079	1
19 *	IMPELLER SHAFT	38514-807	1706H	1	48	PIPE NIPPLE	T0608	15079	1
20	INTERMEDIATE	38263-614	10010	1	49	PIPE TEE	U06	11999	1
21	BRG CAVITY DRAIN PLUG	P06	15079	1	50	SEAL CVTY DRAIN PLUG	P06	15079	1
22 *	OIL SEAL	25258-620	----	1	51 *	SHAFT SLEEVE	31163-016	1706H	1
23	SEAL PLATE COVER	38242-707	10000	1	52 *	BRG SHIM SET	8546	15990	1
24	FH MACHINE SCREW	Y#10-02	15991	4	53	INTERMEDIATE GUARD	42381-031	24150	1
25 *	SEAL PLT COVER O-RING	25152-256	----	1	54	INTERMEDIATE GUARD	42381-032	24150	1
26	SEAL PLATE	38272-527	10000	1		NOT SHOWN:			
27 *	WEAR PLATE ASSY	46451-746	24150	1		PIPE PLUG	P06	15079	2
28	HEX NUT	D08	15991	2		DRIVE ASSY	44162-119	----	1
						PIPE PLUG	P04	15079	1

\* INDICATES PARTS RECOMMENDED FOR STOCK

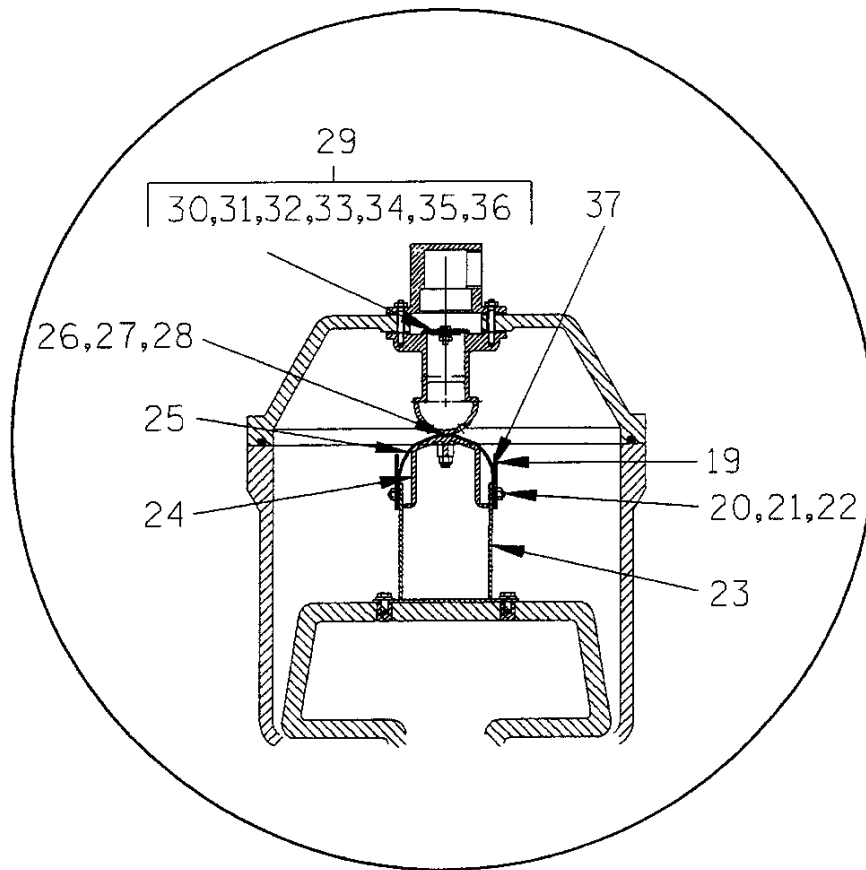
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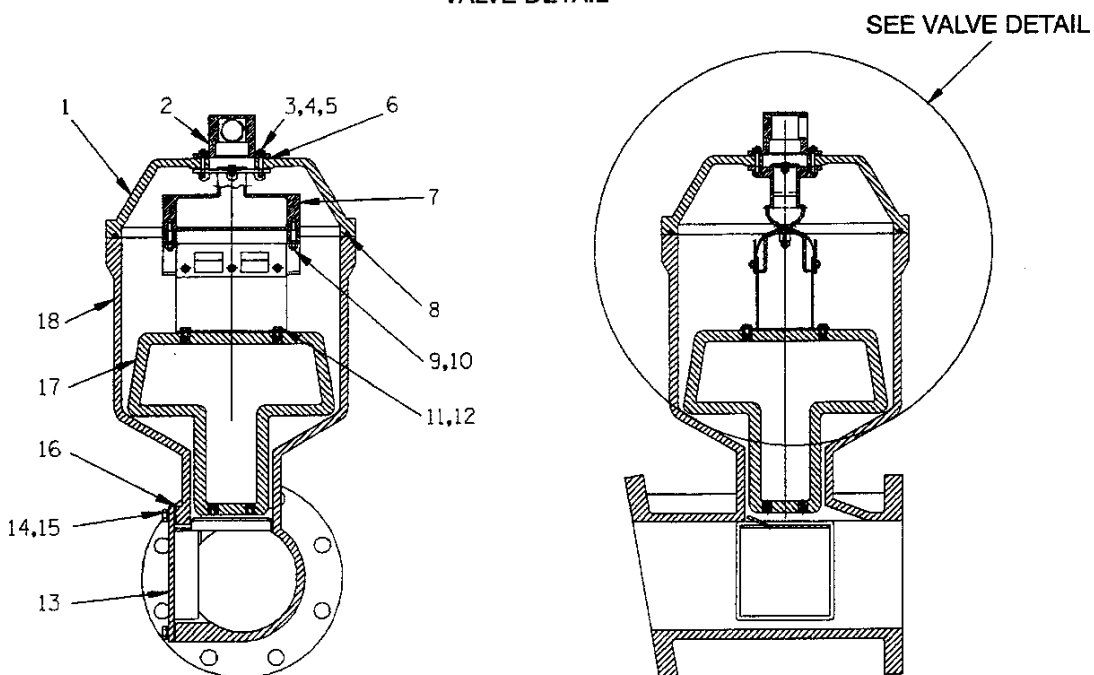
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**PARTS LIST**  
**(SAE4/10) Drive Assembly**

ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
1	COUPLING KIT	48112-001	---	1
2	-BUSHING	24131-345	---	1
3	-COUPLING ASSEMBLY	44165-011	---	1
4	-LOCKWASHER	21171-536	---	8
5	-SOCKET HD CAPSCREW	BD0606 1/2	15991	8
6	HEX HD CAPSCREW	B0605	15991	12
7	LOCKWASHER	J06	15991	12



VALVE DETAIL



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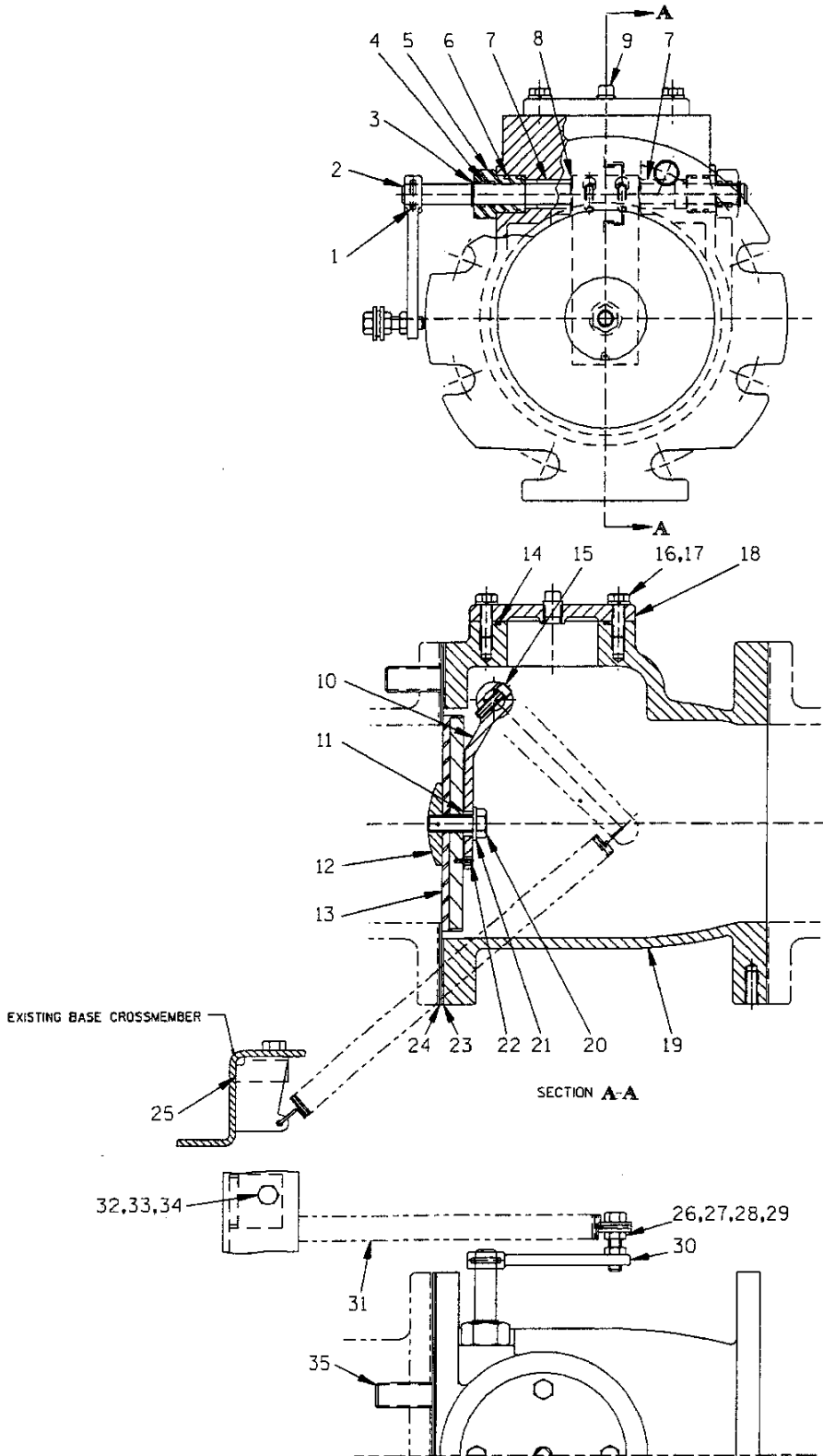
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**PARTS LIST**  
**46112-703 Peeler Type Priming Valve**

ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY	ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
1	PRIMING CHAMBER LID	38346-613	13000	1	21	LOCKWASHER	J#10	17000	6
2	PEELER VALVE NECK	38349-410	10000	1	22	HEX NUT	D#10	17000	6
3	LOCKWASHER	J#10	17000	4	23	VLV STRAP BRKT ASSY	41881-523	2415X	1
4	HEX NUT	D#10	17000	4	24	CLAMP PLATE	38349-406	14000	1
5	STUD	21332-038	---	4	25	VALVE STRAP	33276-041	19000	1
6 *	NECK GASKET	38683-266	19020	1	26	ADJ SHIM (IF REQ'D)	1868A	17000	2
7	VALVE BODY	38343-014	14000	1	27	ADJ SHIM (IF REQ'D)	1868B	17000	2
8 *	GASKET STRIP 4.06' LG	18515-031	---	1	28	ADJ SHIM (IF REQ'D)	1868C	17000	2
9	STUD	C0406 1/2	17000	2	29	CHECK VALVE ASSY	46411-112	---	1
10	HEX LOCK NUT	BC04	17000	2	30 *	-CHECK VALVE	38671-413	19020	1
11	HEX HD CAPSCREW	B0403	17000	4	31	-LOCKWASHER	J#10	17000	1
12	LOCKWASHER	J04	17000	4	32	-HEX NUT	D#10	17000	1
13	INDUCTOR GUARD ASSY	42381-066	24150	1	33	-SMALL VALVE WEIGHT	21161-810	---	1
14	HEX HD CAPSCREW	B0603	15991	4	34	-HEX HD CAPSCREW	B#10-02	17000	1
15	LOCKWASHER	J06	15991	4	35	-LARGE VALVE WEIGHT	21161-811	---	1
16 *	CHAMBER GSKT	38687-552	18000	1	36	-SEALING WASHER	S1590	---	1
17 *	PRIMING VALVE FLOAT	38349-404	19220	1	37	VLV STRAP PROTECTOR	33271-019	19000	2
18	PRIMING CHAMBER	38343-017	10000	1	NOT SHOWN:				
19	GUIDE PLATE	33522-009	17000	2		HEX HD CAPSCREW	B0807	15991	4
20	FLAT HD CAPSCREW	F#10-03	17000	6		PIPE PLUG	P04	15079	1

\* INDICATES PARTS RECOMMENDED FOR STOCK

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**PARTS LIST**  
**46421-061 Check Valve Assembly**

ITEM NO.	PART NAME	PART NUMBER	MAT'L CODE	QTY
1	* GROOVE PIN	21142-557	----	1
2	SHAFT	31671-004	1706H	1
3	SNAP RING	S668	----	2
4	* SHAFT O-RING	25152-114	----	4
5	SHAFT NUT	31871-064	14100	2
6	* SHAFT NUT O-RING	25152-119	----	4
7	* BUSHING	23181-153	----	2
8	SHIM	513A-3	17090	4
9	PIPE PLUG	P04	15079	1
10	VALVE ARM	38122-003	17070	1
11	SPACER	31133-218	17080	1
12	VALVE WEIGHT	11588	10010	1
13	* MOLDED CHECK VALVE	46411-098	24010	1
14	* COVER O-RING	25152-152	----	1
15	SOCKET HD CAPSCREW	BD0504	17000	2
16	HEX HD CAPSCREW	B0604	15991	4
17	LOCKWASHER	J06	15991	4
18	VALVE INSPECTION COVER	38346-614	10010	1
19	VALVE BODY	38341-501	10010	1
20	NYLOCK CAPSCREW	BT0806	15991	1
21	FLAT WASHER	KE08	15991	1
22	* GROOVE PIN	21142-150	----	1
23	* CHECK VALVE GASKET	25113-097	----	1
24	* SEAT	31265-042	17050	1
25	SPRING ANCHOR	34325-015	15120	1
26	JAM NUT	AT06	15991	2
27	HEX HD CAPSCREW	B0606	15991	1
28	FLAT WASHER	K06	15991	2
29	SPACER	31133-217	15000	1
30	HANDLE	38582-021	11060	1
31	* SPRING	24641-015	----	1
32	HEX HD CAPSCREW	B0604	15991	1
33	HEX NUT	D06	15991	1
34	LOCK WASHER	J06	15991	1
35	STUD	C1212	15991	2

## OPTIONAL:

CHECK VALVE FLAPPER	46411-116	24010	1
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\* INDICATES PARTS RECOMMENDED FOR STOCK

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