

389

A & B

PUMP ROTATION:
Counterclockwise Firing Order: 1-5-4-8-6-3-7-2
MOUNT:
Vee
TIMED FOR PORT CLOSING
SPECIAL FEATURES:
3.00:1 Gear Ratio

MACK
MODEL 300 #PVM450389

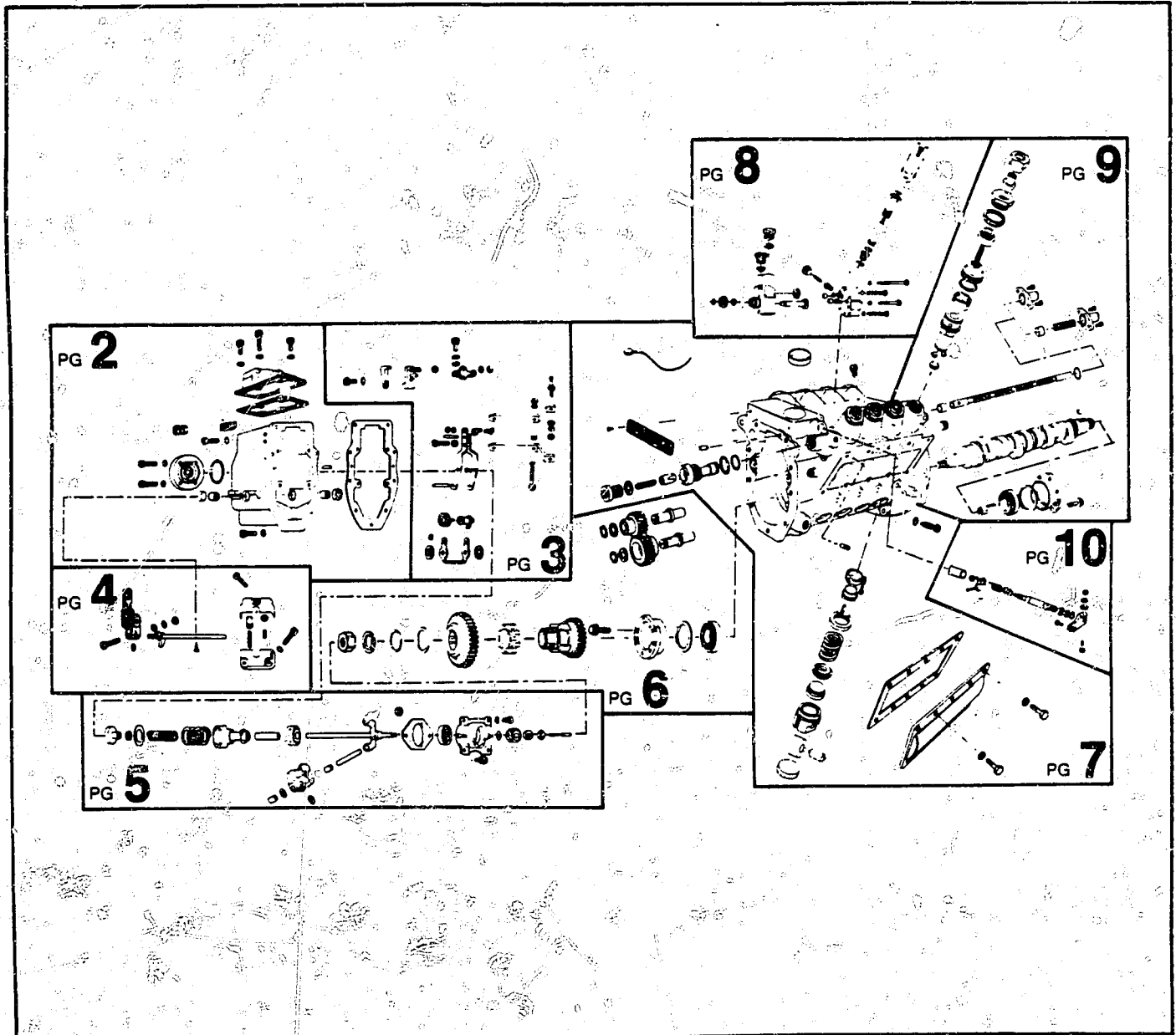
Special Information:



SERVICE PARTS

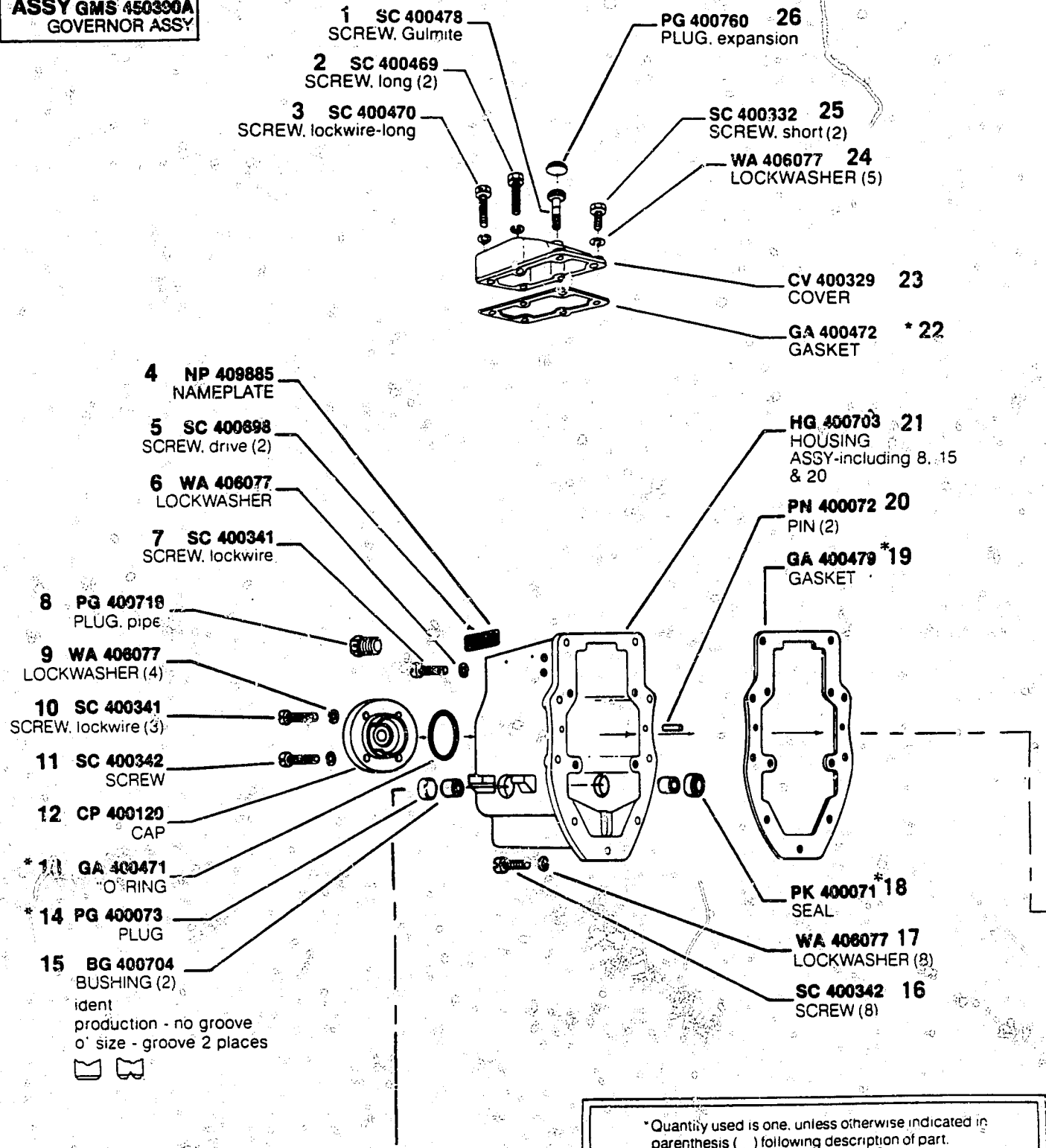
Following are all parts, part numbers, pump codes and calibrations for the *Model 300 #PVM450389*. The exploded view drawing below is detailed with part numbers

listed on the pages indicated. Refer to the Index Section for explanations of codes and abbreviations.



MODEL 300 #PVM 450389

ASSY GMS 450390A
GOVERNOR ASSY



* Quantity used is one, unless otherwise indicated in parenthesis () following description of part.

*Denotes parts included in Pump Repair Gasket Kit KT 409738.

MODEL 300 #PVM 450389

ASSY LE 402642
LEVER ASY
 fulcrum-including 8, 10
 thru 12, 14, 15, 19 thru
 27

3 PL 410390
 PLATE, stop
 (ident #98)
 See record of change page 11

4 WA 406192
 WASHER

5 SC 400328
 SCREW

1 NT 400327
 NUT (2)

2 PL 400261
 PLATE, hanger
 (idont # —)

SC 400342 32
 SCREW (2)

WA 406077 31
 LOCKWASHER (2)

WA 400340 30
 WASHER (2)

BK 403603 29
 BRIDGE

WA 406275 28
 LOCKWASHER

6 WA 406077
 LOCKWASHER

7 NT 406405
 NUT

8 PN 402658
 PIN

9 SC 400136
 SCREW, droop

10 LE 402651
 LEVER,
 fulcrum-including 12

NT 402658 27
 NUT

PN 402685 26
 PIN (2)

LK 402657 25
 LINK (2)

WA 400340 24
 WASHER (2)

WA 406077 23
 LOCKWASHER (2)

NT 406405 22
 NUT (2)

SR 402789 21
 SPACER

WA 402810 20
 WASHER (2)

SC 402700 19
 SCREW

11 PN 400812
 PIN

12 PN 400150
 PIN (2)

13 SP 400179
 SPRING

14 RG 400152
 RING (2)

15 BK 410114
 BRACKET

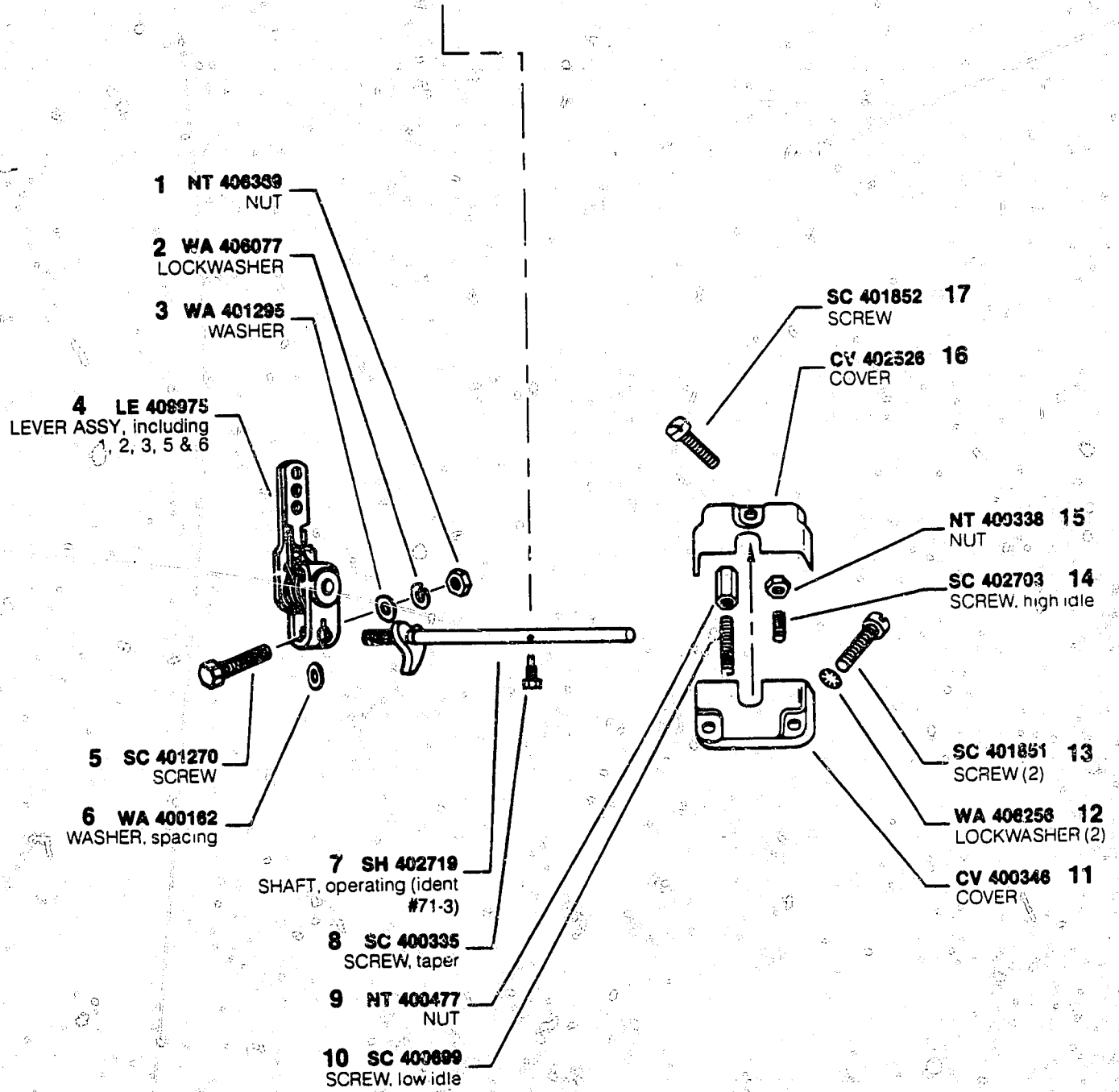
21

SC 400339 18
 SCREW

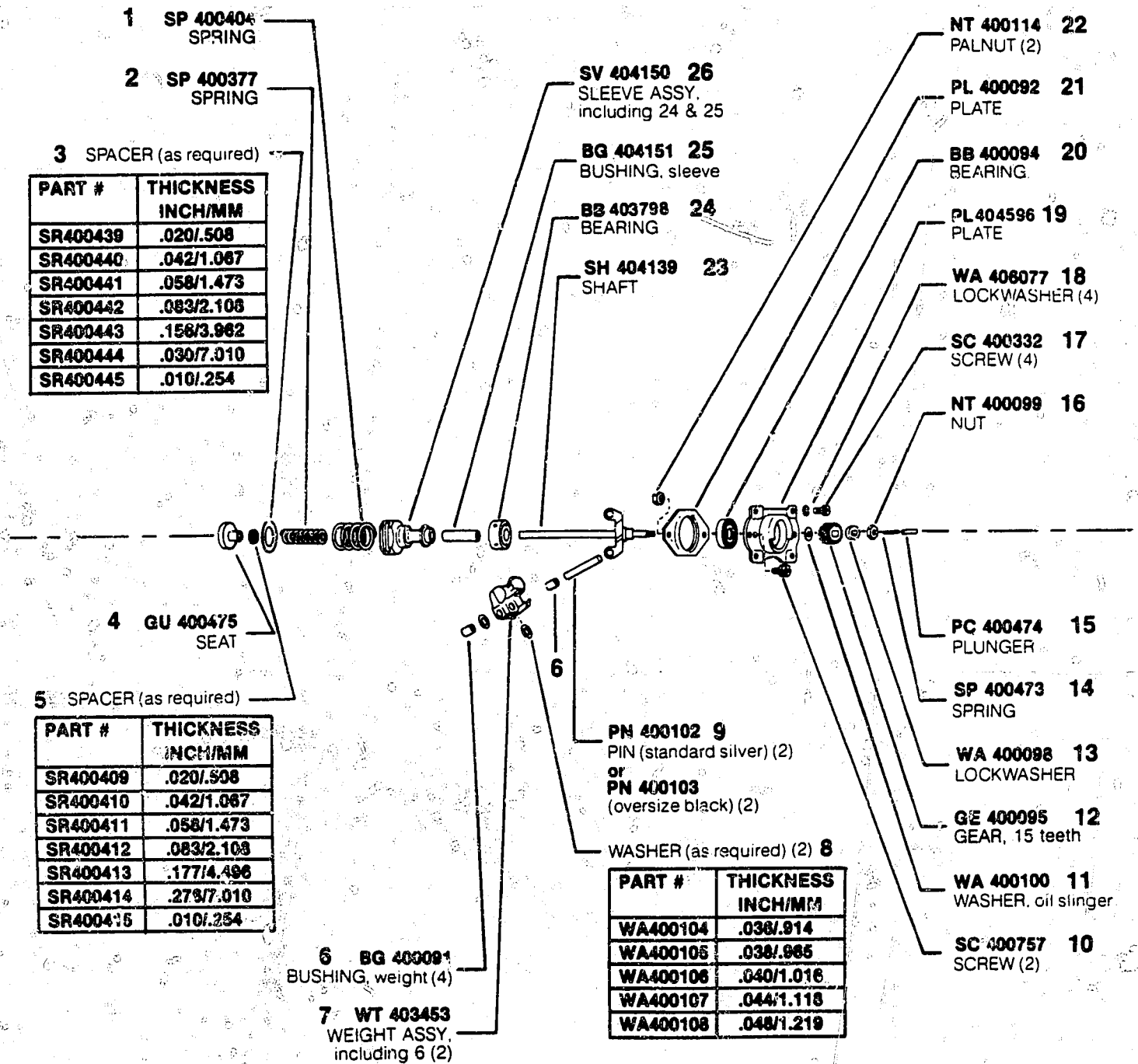
CA 410153 17
 CAM

PL 400178 16
 PLATE

MODEL 300 #PVM 450389



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ASSY GE 408680
 (RUBBER DRIVE)
 DRIVE ASSY-including
 5, 8 thru 11

PRODUCTION - No Groove
 1st 'O' SIZE - One Groove
 2nd 'O' SIZE - Two Grooves



- 1 GE 402586**
GEAR, idler-upper
- 2 WA 402811**
WASHER, flat (2)
- 3 SP 402733**
RING, retaining (2)
- 4 GE 402587**
GEAR, idler-lower

- SH 404987 1st 'O' Size** 17
- SH 404988 2nd 'O' Size**
- SHAFT, upper
- SH 409714 1st 'O' Size** 16
- SH 409715 2nd 'O' Size**
- SHAFT, lower

- 5 RG 100036**
RING, true lock
See Note

- 6 WA 400334**
LOCKWASHER

- 7 NT 400333**
NUT

- SC 403602 15**
SCREW (12)

- PL 402675 14**
PLATE

- 8 SPACER (as required)**

PART #	THICKNESS INCH/MM
SR400191	.065/1.65
SR400192	.070/1.78
SR400193	.075/1.90
SR400194	.080/2.03
SR400195	.085/2.16
SR400196	.0825/1.59
SR400197	.080/1.52
SR400198	.0875/1.71
SR400199	.0725/1.84
SR400200	.0775/1.97
SR400201	.0825/2.10
SR400202	.0875/2.22

Not Serviced 11
 GEAR & HUB,
 drive-if replace-
 ment is
 necessary, use
GE 408680

- IT 400189 10**
INSERT, drive

Not Serviced 9
 GEAR, drive-if
 replacment is
 necessary, use
GE 408680

- RB 400059 13**
BEARING (2)

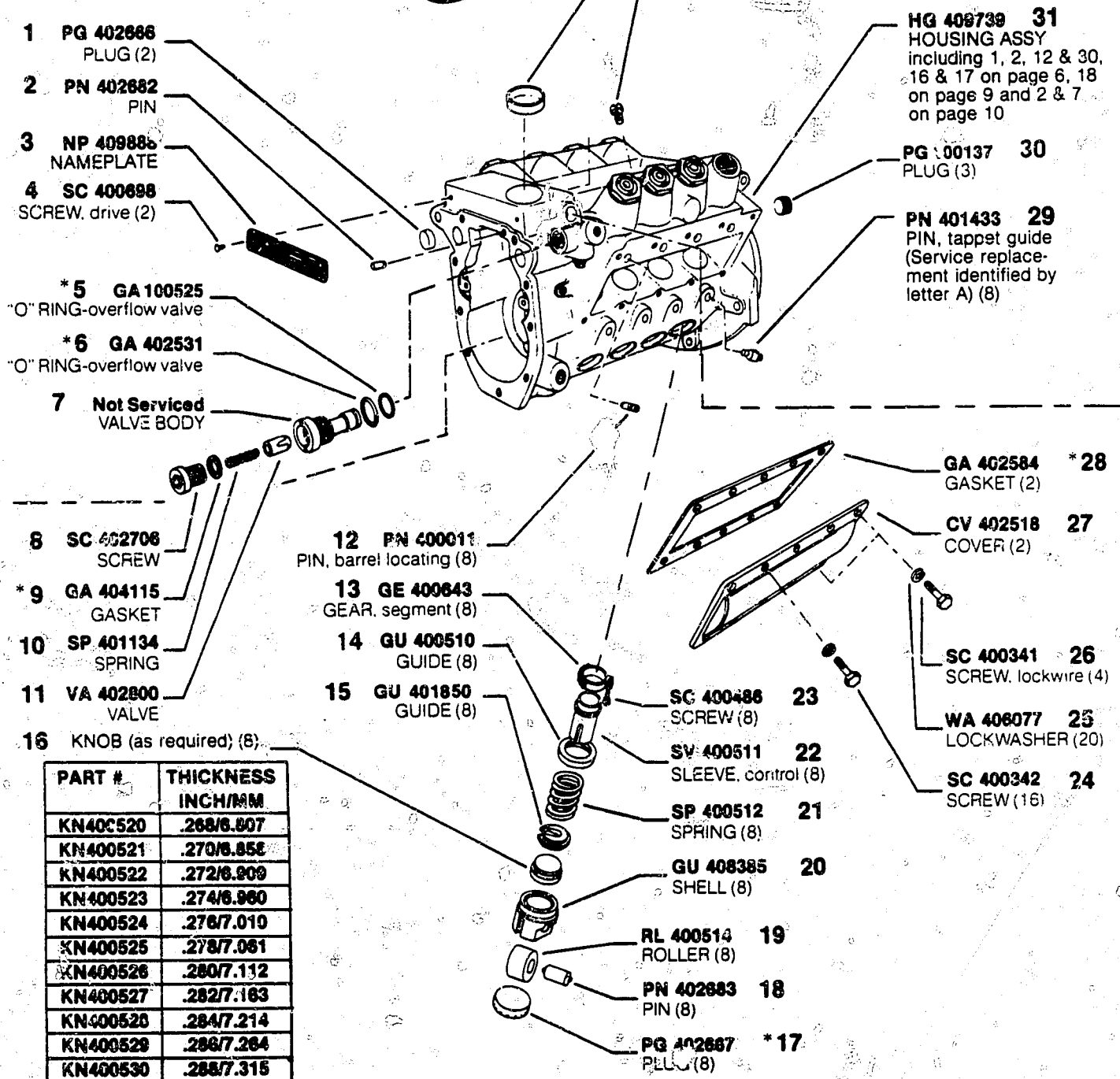
- SPACER (as required) 12

PART #	THICKNESS INCH/MM
SR402736	.002/.051
SR402737	.004/.102
SR402738	.006/.152
SR402739	.008/.203
SR402740	.012/.305
SR402741	.018/.406
SR402742	.032/.813

MODEL 300 #PVM 450389

ASSY VA 402799
VALVE ASSY, overflow -
including 5 thru 11

ASSY TP 408384
TAPPET ASSY-
including 16 & 18 thru
20



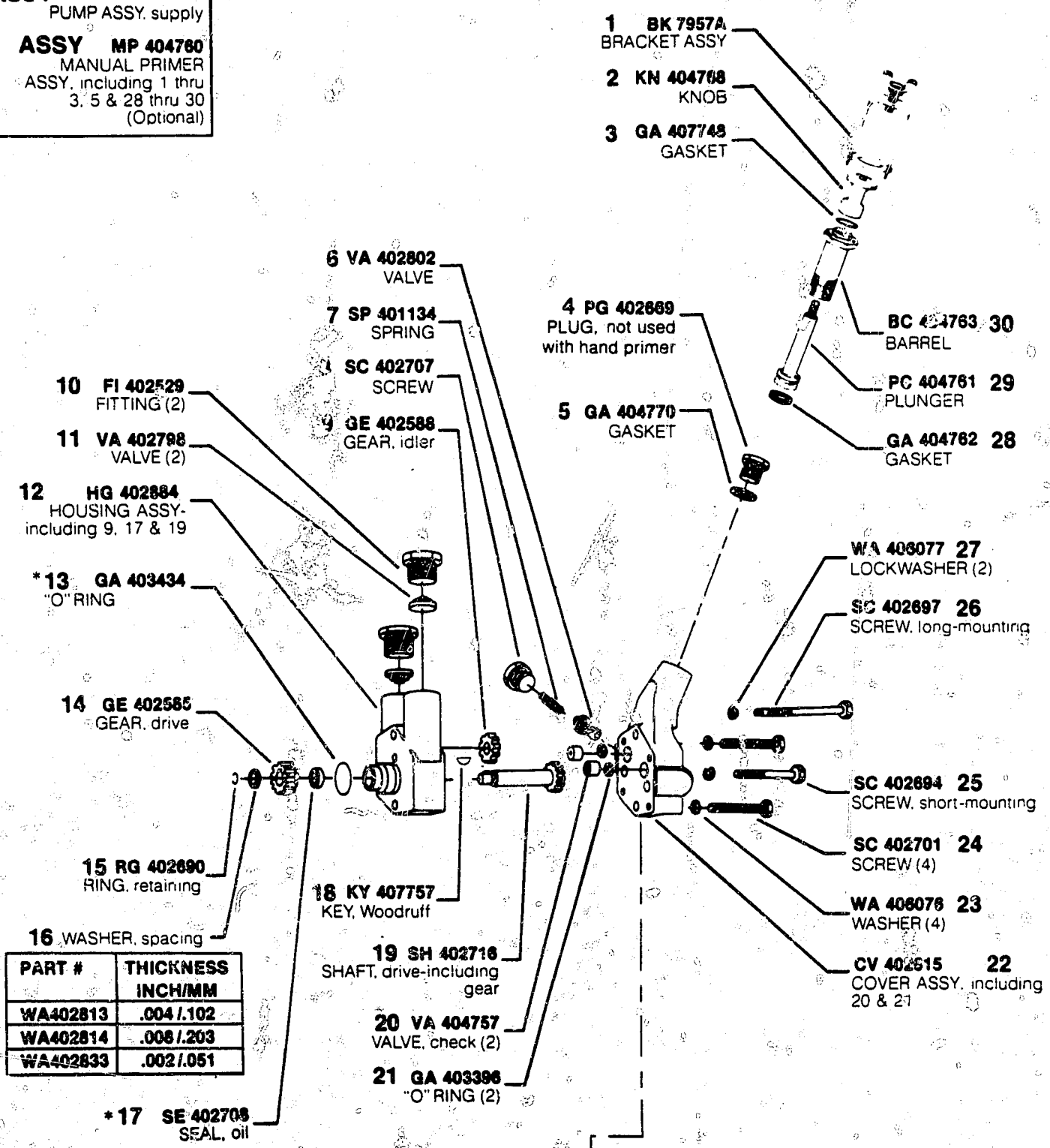
PART #	THICKNESS INCH/MM
KN400520	.268/6.807
KN400521	.270/6.858
KN400522	.272/6.909
KN400523	.274/6.960
KN400524	.276/7.010
KN400525	.278/7.061
KN400526	.280/7.112
KN400527	.282/7.163
KN400528	.284/7.214
KN400529	.286/7.264
KN400530	.288/7.315

*Denotes parts included in Pump Repair Gasket Kit - KT 409738.

MODEL 300 #PVM 450389

ASSY SGL 450269A
 PUMP ASSY. supply

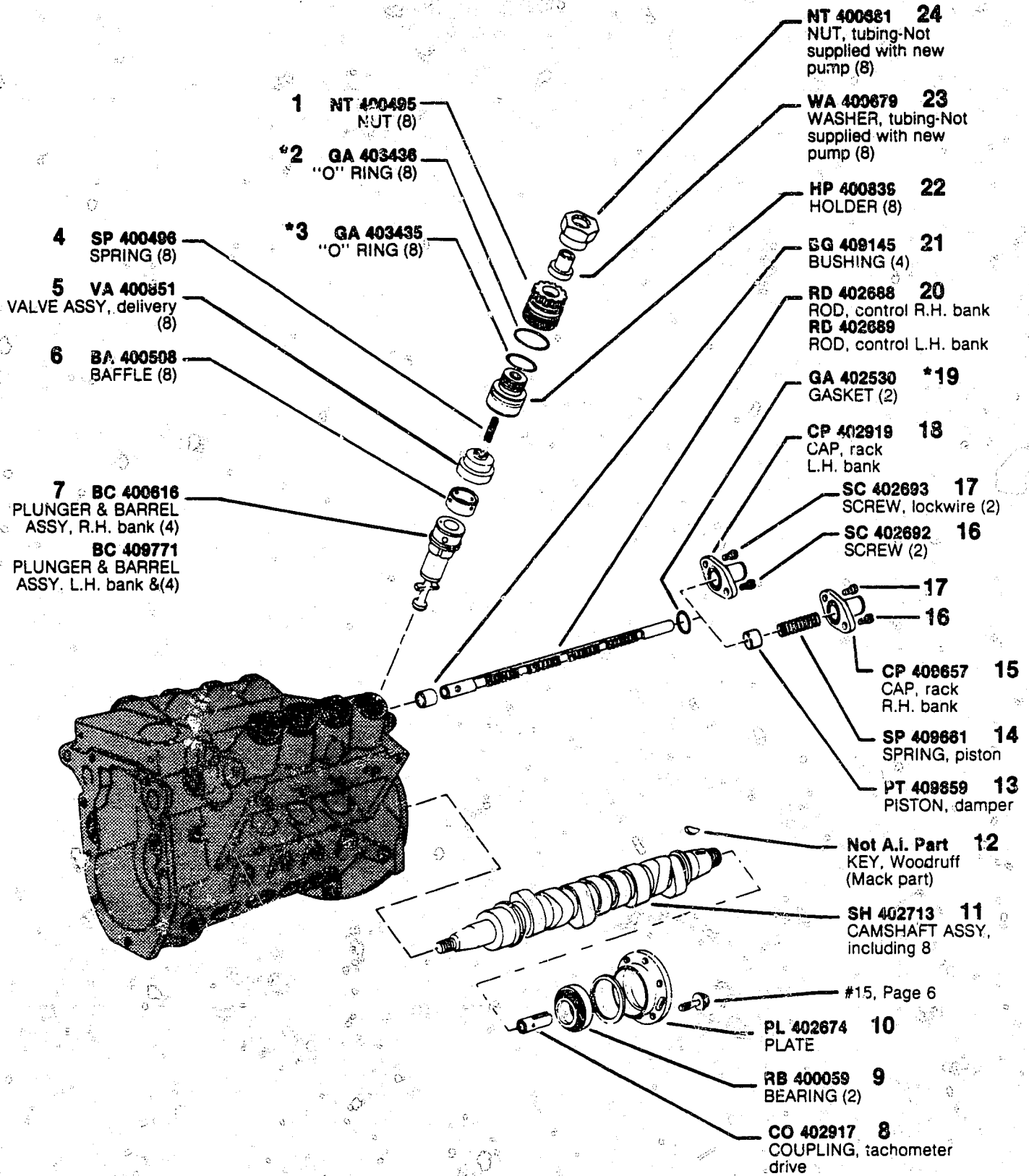
ASSY MP 404760
 MANUAL PRIMER
 ASSY. including 1 thru
 3, 5 & 28 thru 30
 (Optional)



PART #	THICKNESS INCH/MM
WA402813	.004 / .102
WA402814	.006 / .203
WA402833	.002 / .051

*Denotes parts included in Pump Repair Gasket Kit: KT 409738.

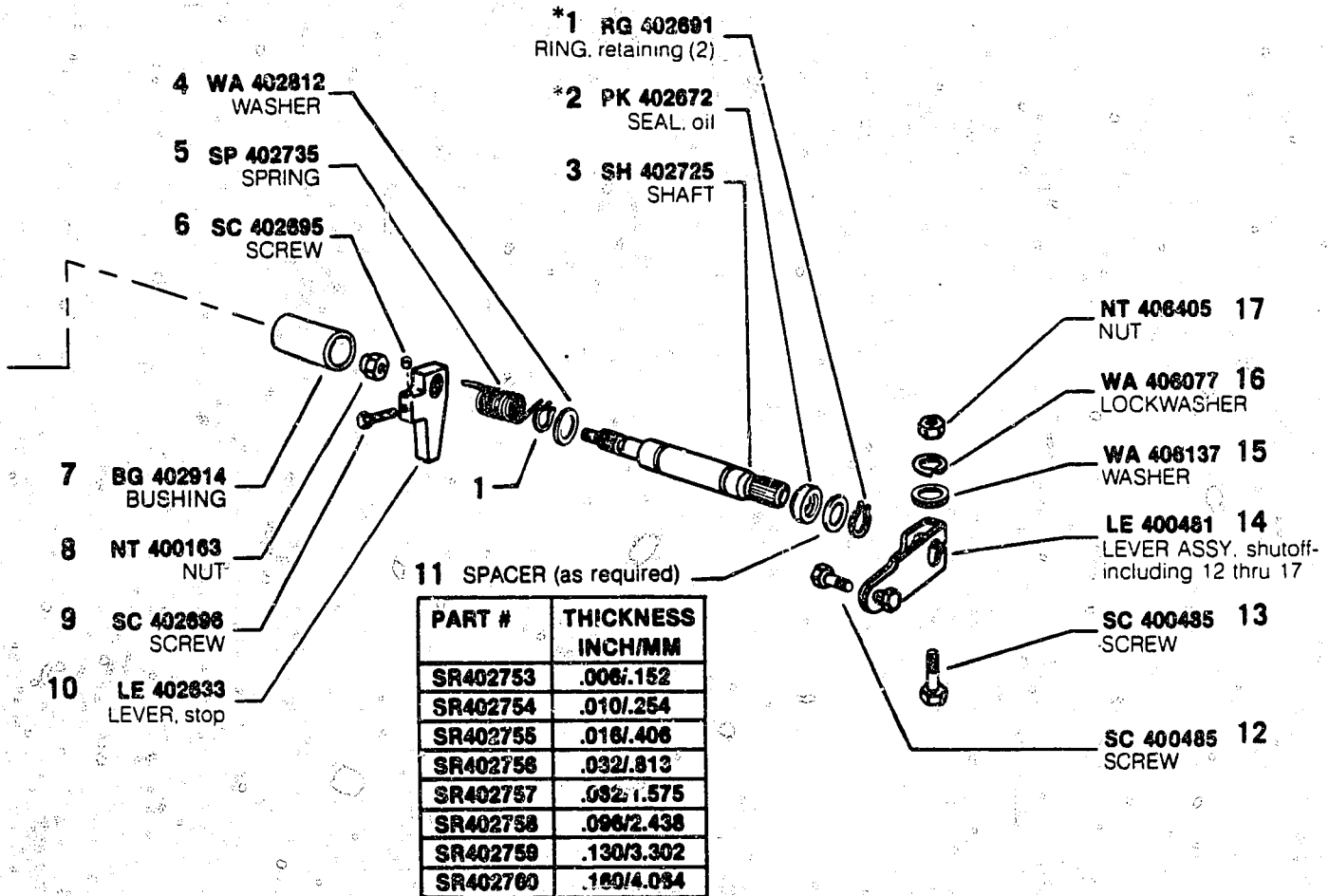
MODEL 300 #PVM 450389



*Denotes parts included in Pump Repair Gasket Kit KT-409738.

MODEL 300 #PVM 450389

ASSY LE 402634
LEVER ASSY, inner
 stop-including 6, 9 & 10



*Denotes parts included in Pump Repair Gasket Kit KT 409738.

MODEL 300 #PVM 450389

CALIBRATION SET-UP

Engine Holders HNM 780322
 Opening Pressure 4200-4350 psi
 Engine Nozzles NBM 770403
 Engine Nozzle & Holder Assy Ref #NHM 780357
 High Pressure Tubing 1/4" OD x .084" ID
 x 27" Long

Calibrating Oil Viscor 1487C @ 100°-105°F
 (38-41°C) at pump inlet
 Lube Oil CAE #20 or #30 at 20 psi/1.4 bar
 Pump Rotation Counterclockwise
 Firing Order 1-5-4-8-8-3-7-2
PROCEDURE Refer to the Service Instructions
 and use figures below

450389A&B DATA

Engine Model E9-500
 Engine Static Timing 17°
 Customer No. 313GC5178-P8
 Kit No. KT409919
 Customer Kit No. 313GC5176-P5
 Governor Speeds 300/950
 Cam Nose Angle 80°(±2°)

Governor Outer Spring
 Precompression Flush to 0.5mm (.020")
 Governor Inner Spring Gap 4.00-4.50mm (.138"-.157")
 Lift to Port Closing 3.00-3.20mm
 (0.118"-0.126"), cam lift with L.H. bank control rack
 at 0.348" (full load position) extension

STEP	A	B	C	D
	Full Load at 0.348" Rack Ext	Cam Departure	Peak Torque (from Actual A delivery)	Drop Screw (from Actual A delivery)
RPM	950	990	750	650
DEL cc/500 str	108.0-114.5	—	+4.5±3.5	+5.5±3.5
DEL cc/300 str	65.0-68.5	—	+2.5±2.0	+3.0±2.0
	E	F	G	
	"PLE"	Low Idle	Minimum Delivery	
RPM	800	325	75	
DEL cc/500 str	52.0-56.0	9.0-11.0	—	
DEL cc/300 str	31.0-33.5	5.5-6.5	—	
DEL cc/100 str	—	—	12.0	

SERVICE CHECK — A, C & D are applicable.

Calibration data consist of latest calibration figures. Earlier editions may require changing parts to meet calibration requirements.

RECORD OF CHANGE

EDITION	STOP PLATE
A	PL 404654 IDENT. #75
B	PL 410390 IDENT. #08

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