

291

A thru E

PUMP ROTATION:
Clockwise: Firing Order: 1-5-3-6-2-4
DRIVE END:
R. H. Side
TIMED FOR PORT CLOSING
SPECIAL FEATURES:
"Dual Speed"

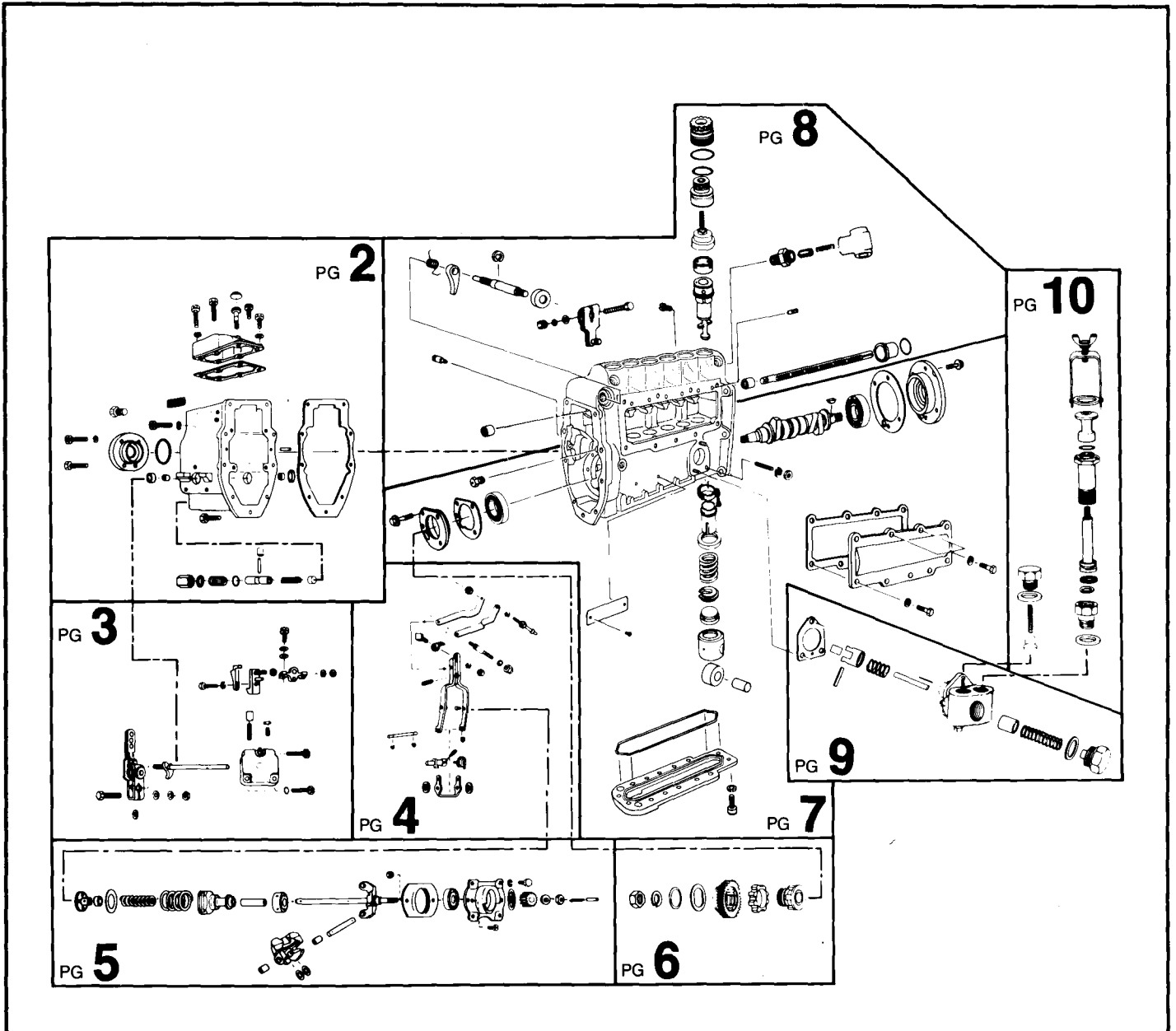
MACK
MODEL 300 #PLM 450291A-E
Special Information:



SERVICE PARTS

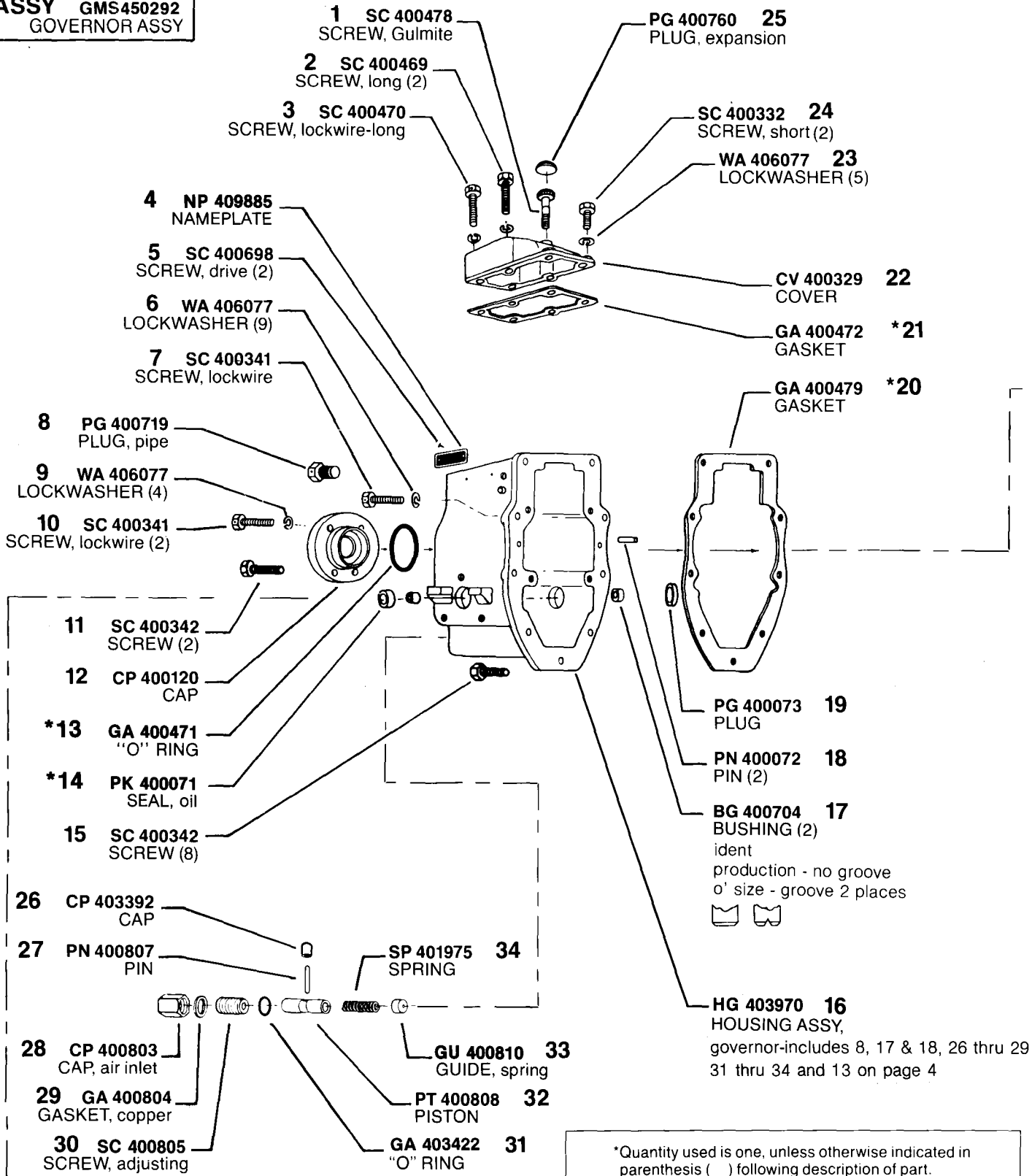
Following are all parts, part numbers, pump codes and calibrations for the Model: #PLM 450291A-E. The exploded view drawing below is detailed with part numbers

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

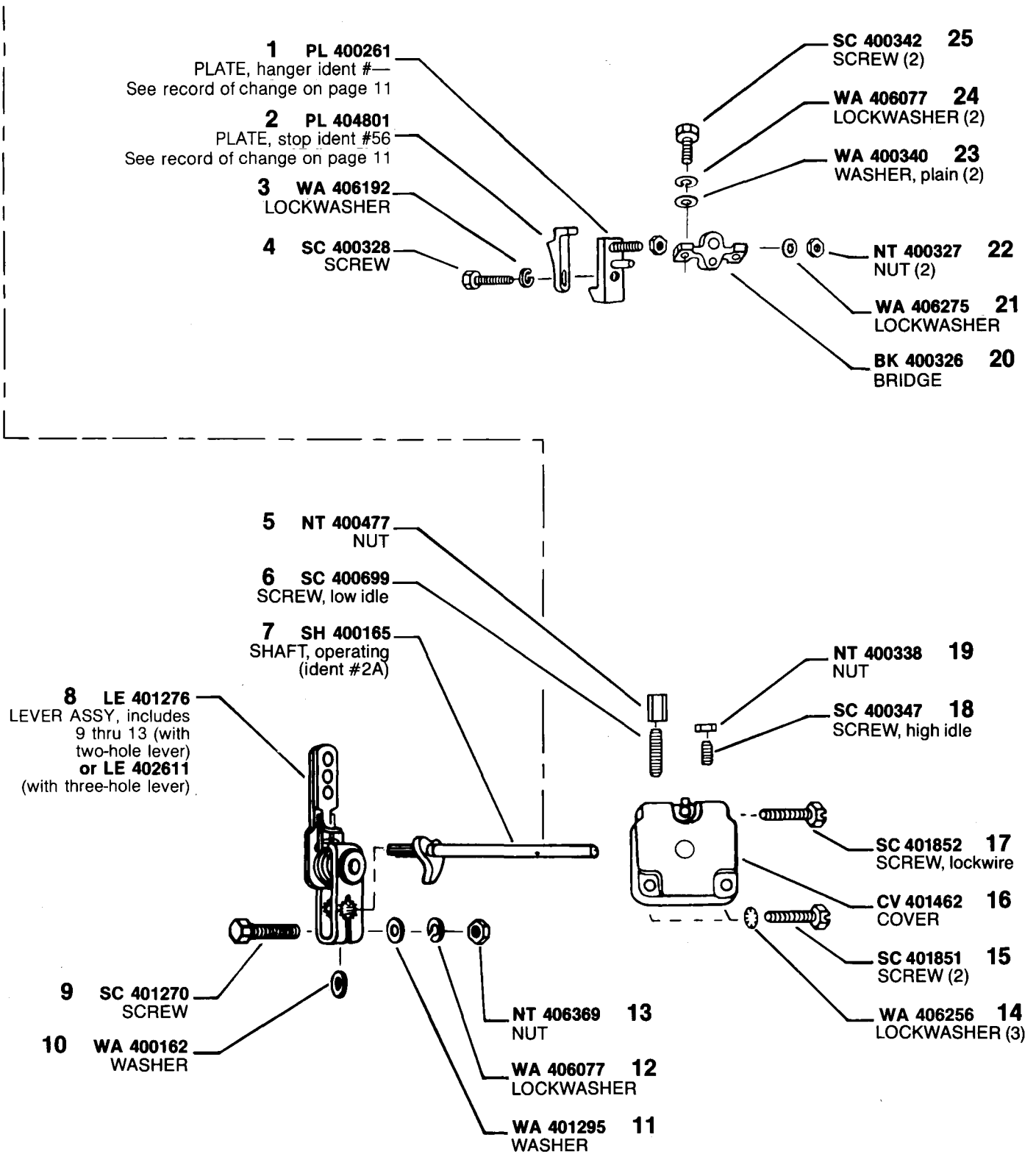


MODEL 300 #PLM 450291A-E

ASSY GMS450292
GOVERNOR ASSY



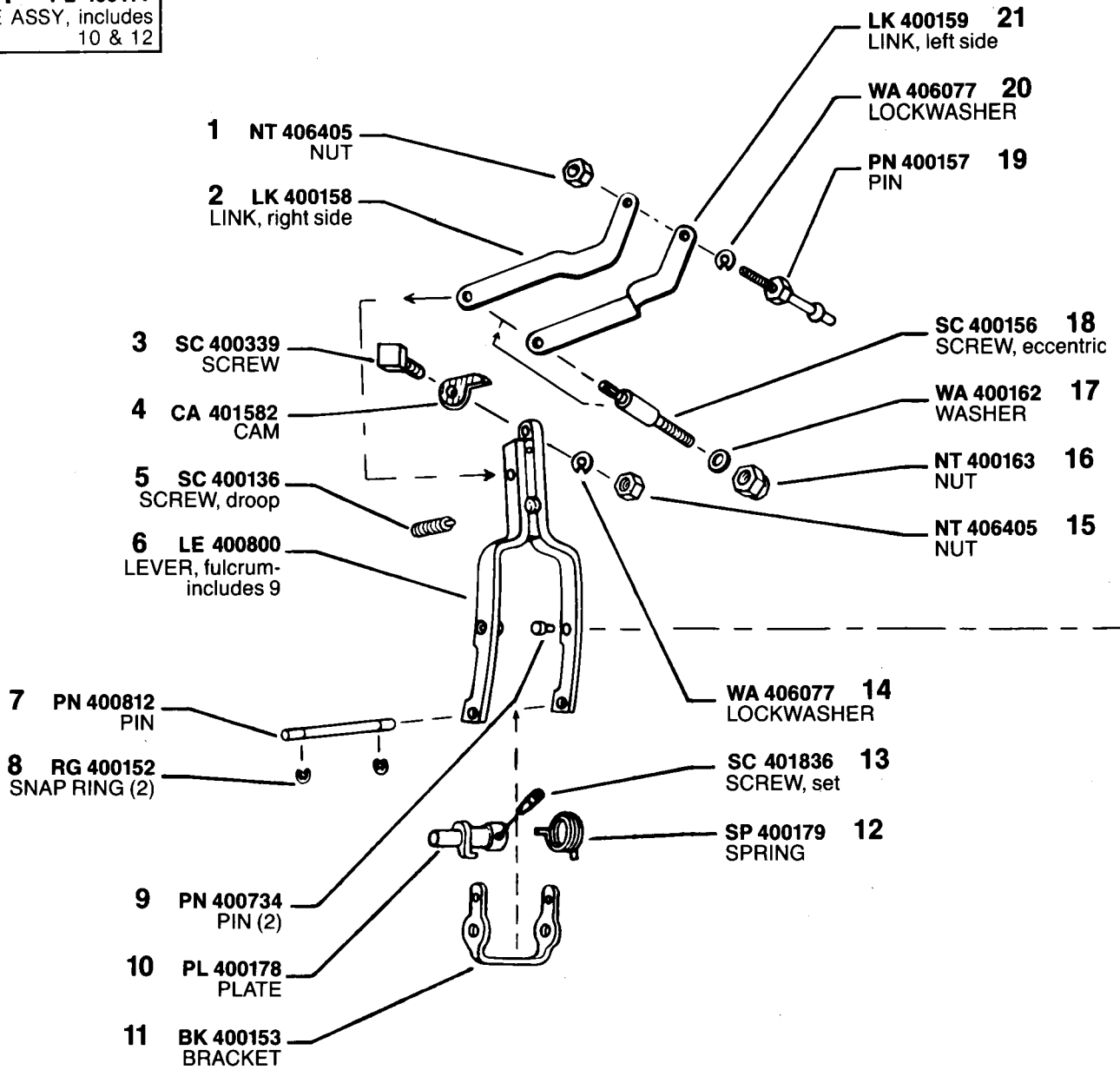
MODEL 300 #PLM 450291A-E



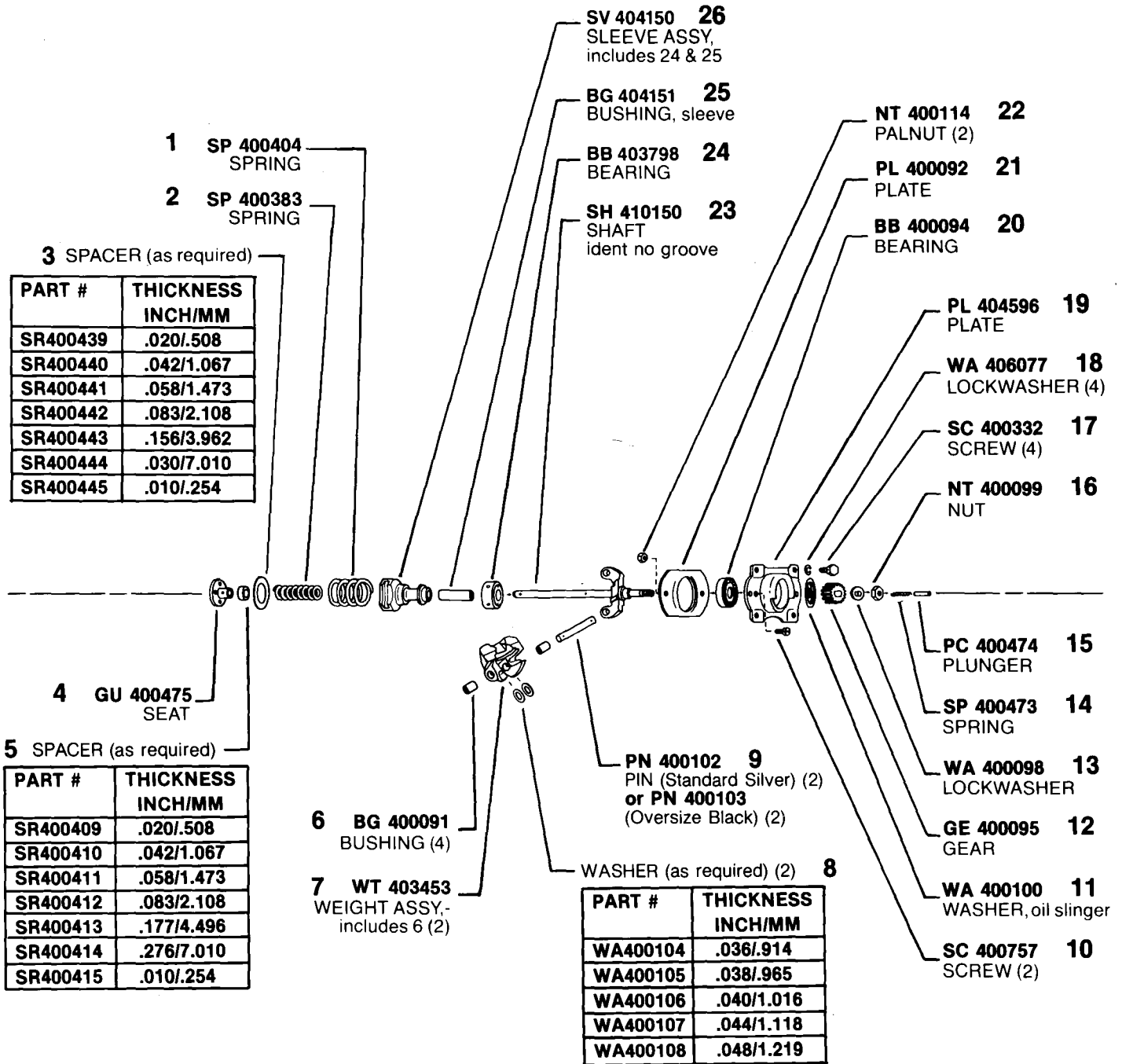
MODEL 300 #PLM 450291A-E

ASSY LE 400782
 LEVER ASSY, fulcrum-
 includes 1, 2, 6 thru 9
 11 & 16 thru 21

ASSY PL 400177
 PLATE ASSY, includes
 10 & 12

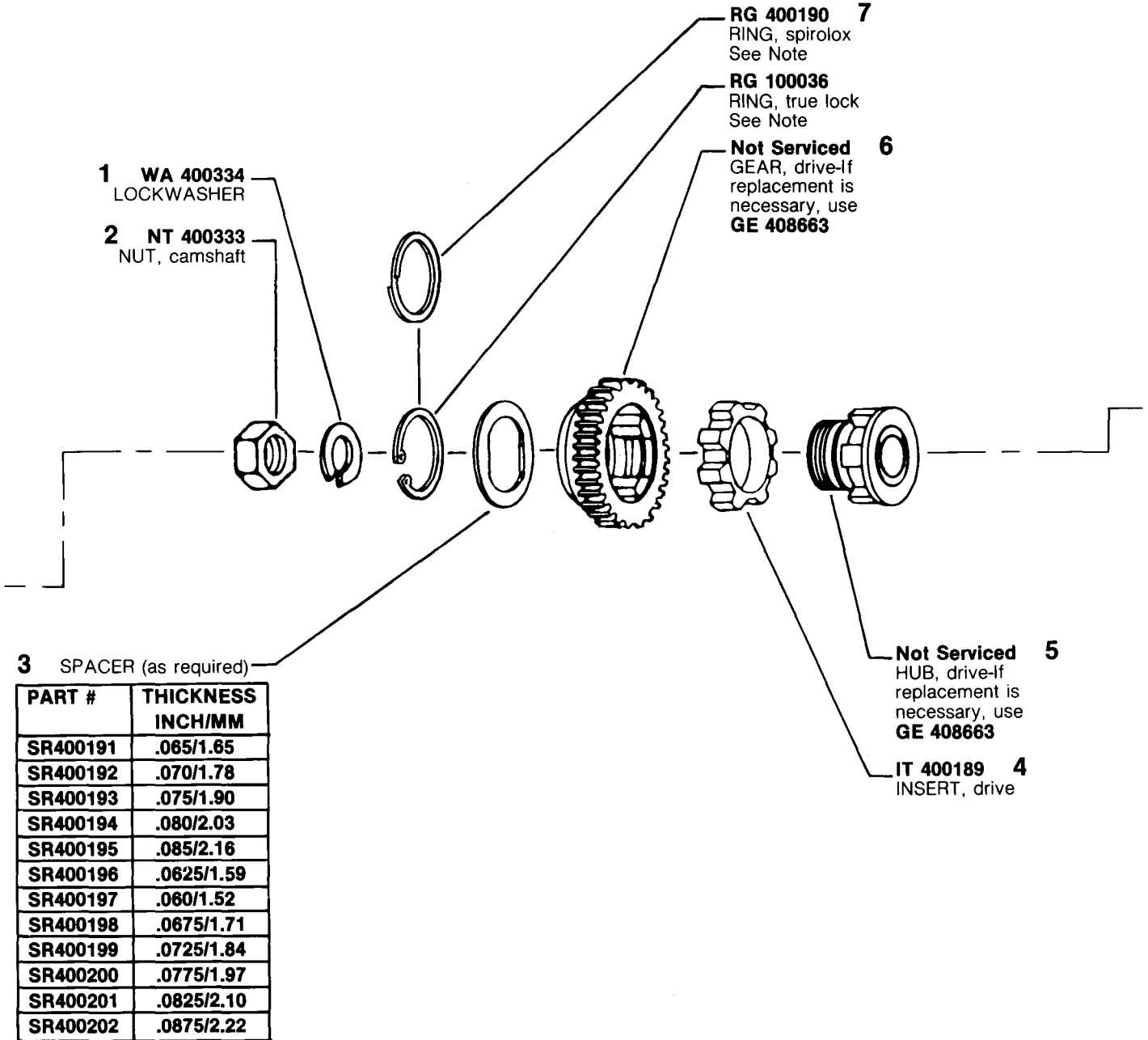


MODEL 300 #PLM 450291A-E



MODEL 300 #PLM 450291A-E

ASSY GE 408663
(RUBBER DRIVE)
 DRIVE ASSY, includes 3 thru 7



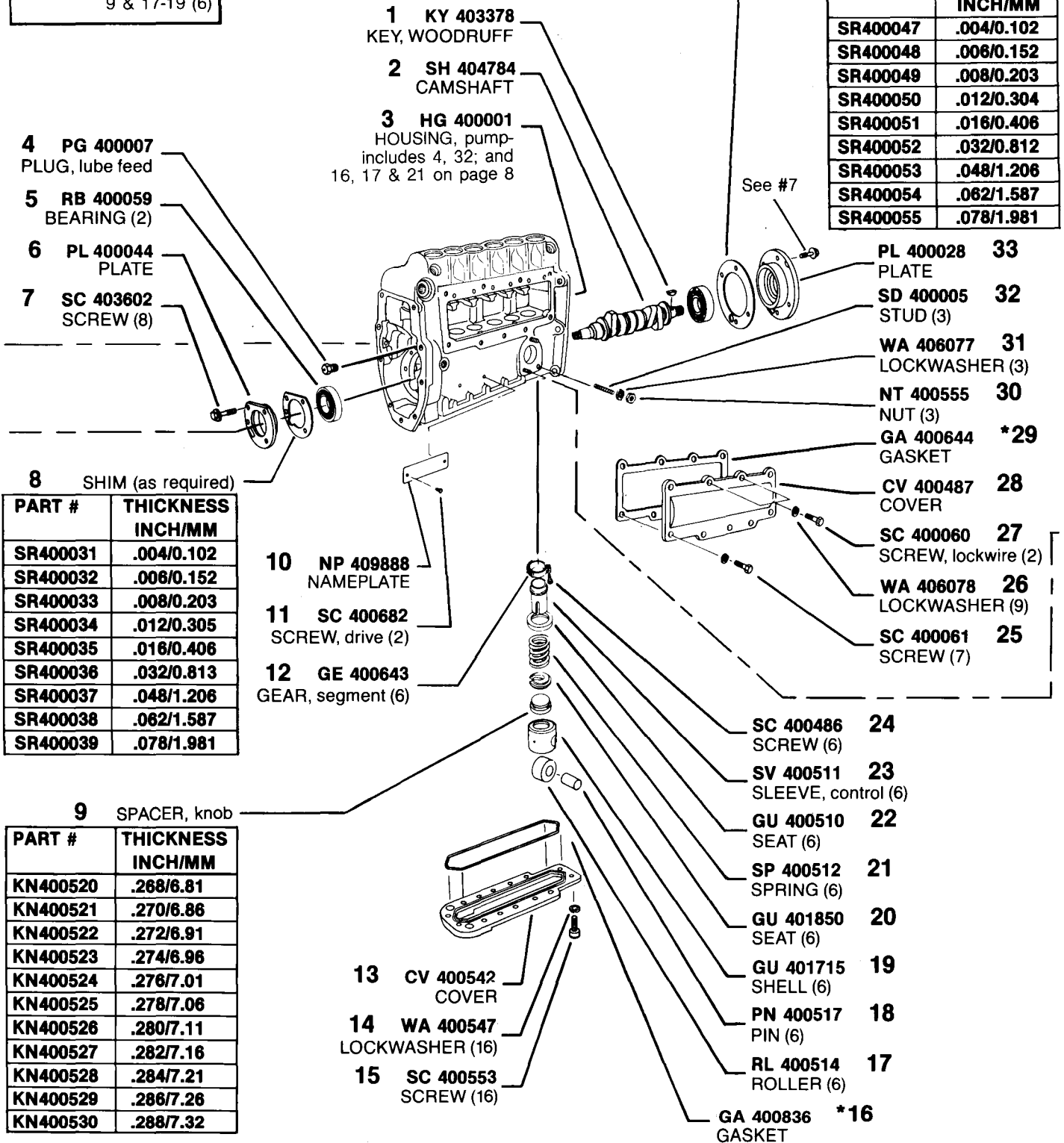
#7 NOTE: Earlier rubber drive assy GE 400182 used RG 400190 (Spirolox ring), later assy GE 408663 using RG 100036 (true lock ring). Spirolox & true lock rings are NOT interchangeable.

MODEL 300 #PLM 450291A-E

ASSY TP 401716
TAPPET ASSY, includes
9 & 17-19 (6)

SHIM (as required) **34**

PART #	THICKNESS INCH/MM
SR400047	.004/0.102
SR400048	.006/0.152
SR400049	.008/0.203
SR400050	.012/0.304
SR400051	.016/0.406
SR400052	.032/0.812
SR400053	.048/1.206
SR400054	.062/1.587
SR400055	.078/1.981



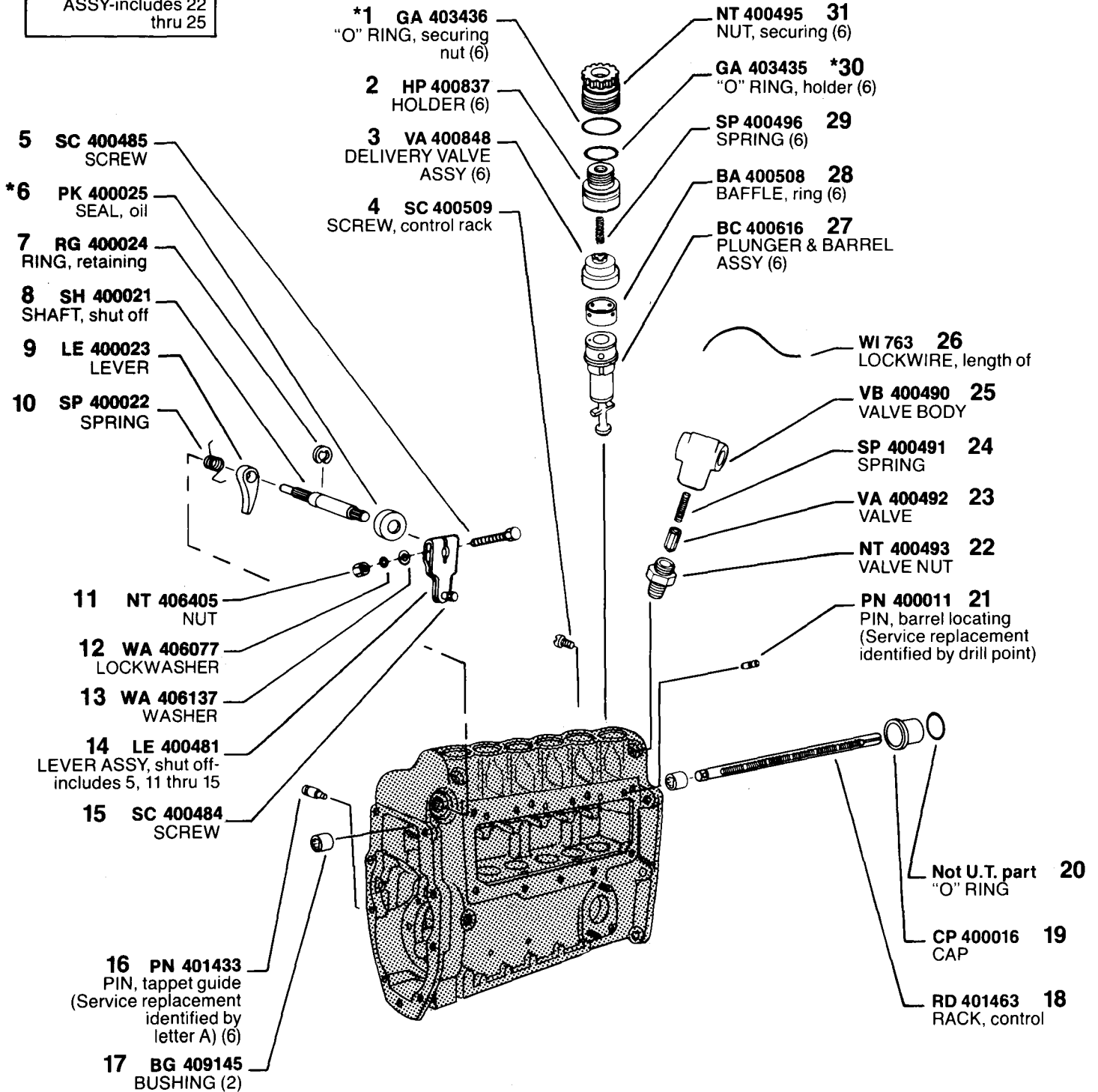
PART #	THICKNESS INCH/MM
SR400031	.004/0.102
SR400032	.006/0.152
SR400033	.008/0.203
SR400034	.012/0.305
SR400035	.016/0.406
SR400036	.032/0.813
SR400037	.048/1.206
SR400038	.062/1.587
SR400039	.078/1.981

PART #	THICKNESS INCH/MM
KN400520	.268/6.81
KN400521	.270/6.86
KN400522	.272/6.91
KN400523	.274/6.96
KN400524	.276/7.01
KN400525	.278/7.06
KN400526	.280/7.11
KN400527	.282/7.16
KN400528	.284/7.21
KN400529	.286/7.26
KN400530	.288/7.32

*Denotes parts in Gasket Kit, KT 401705.

MODEL 300 #PLM 450291A-E

ASSY VA 400683
OVERFLOW VALVE
 ASSY-includes 22
 thru 25



*Denotes parts in Gasket Kit KT 401705.

MODEL 300 #PLM 450291A-E

ASSY SPT 400710
SUPPLY PUMP ASSY

1 HG 400758
HOUSING ASSY,
includes 8 & 12

2 PN 400605
PIN

3 SP 400708
SPRING

4 GU 400602
TAPPET

5 RL 400603
ROLLER

***6** GA 400554
GASKET

7 PN 400604
PIN

8 SPINDLE

PLUNGER ASSY 12

PART #	THICKNESS MM	COLOR CODE
PC400561	24.984/24.989	Two white dots
PC400562	24.986/24.991	Two green dots
PC400563	24.988/24.993	Two yellow dots
PC400564	24.990/24.995	Two red dots
PC400565	24.992/24.997	Two blue dots
PC400566	25.083/25.087	Three black dots
PC400567	25.085/25.089	Two black dots
PC400568	25.089/25.093	Two red & two black dots

PART #	THICKNESS MM	COLOR CODE
SL400581	4.993/4.995	Red one end
SL400582	4.995/4.997	Blue one end
SL400583	4.997/4.999	Yellow one end
SL400743	5.020/5.022	Yellow one end White one end
SL400744	5.044/5.046	Yellow one end Black one end
SL400745	5.067/5.069	White one end Black one end
SL400584	5.087/5.089	White one end
SL400585	5.089/5.091	Black one end
SL400586	5.091/5.093	Green one end
SL400587	5.093/5.095	Alum. one end
SL400746	5.116/5.118	Alum. one end Red one end
SL400747	5.139/5.141	Alum. one end Blue one end
SL400748	5.162/5.164	Alum. one end Yellow one end
SL400589	5.189/5.191	Red both ends
SL400590	5.191/5.193	Blue both ends
SL400591	5.193/5.195	Yellow both ends
SL400592	5.195/5.197	Black both ends

SPINDLE (requires reaming)

PART #	THICKNESS MM	COLOR CODE
SL7912-1	5.557/5.560	Red & blue one end
SL7912-2	5.561/5.564	Red & green one end
SL7912-3	5.565/5.568	Red & yellow one end
SL7912-4	5.569/5.572	Blue & green one end

SC 400753 **11**
SCREW

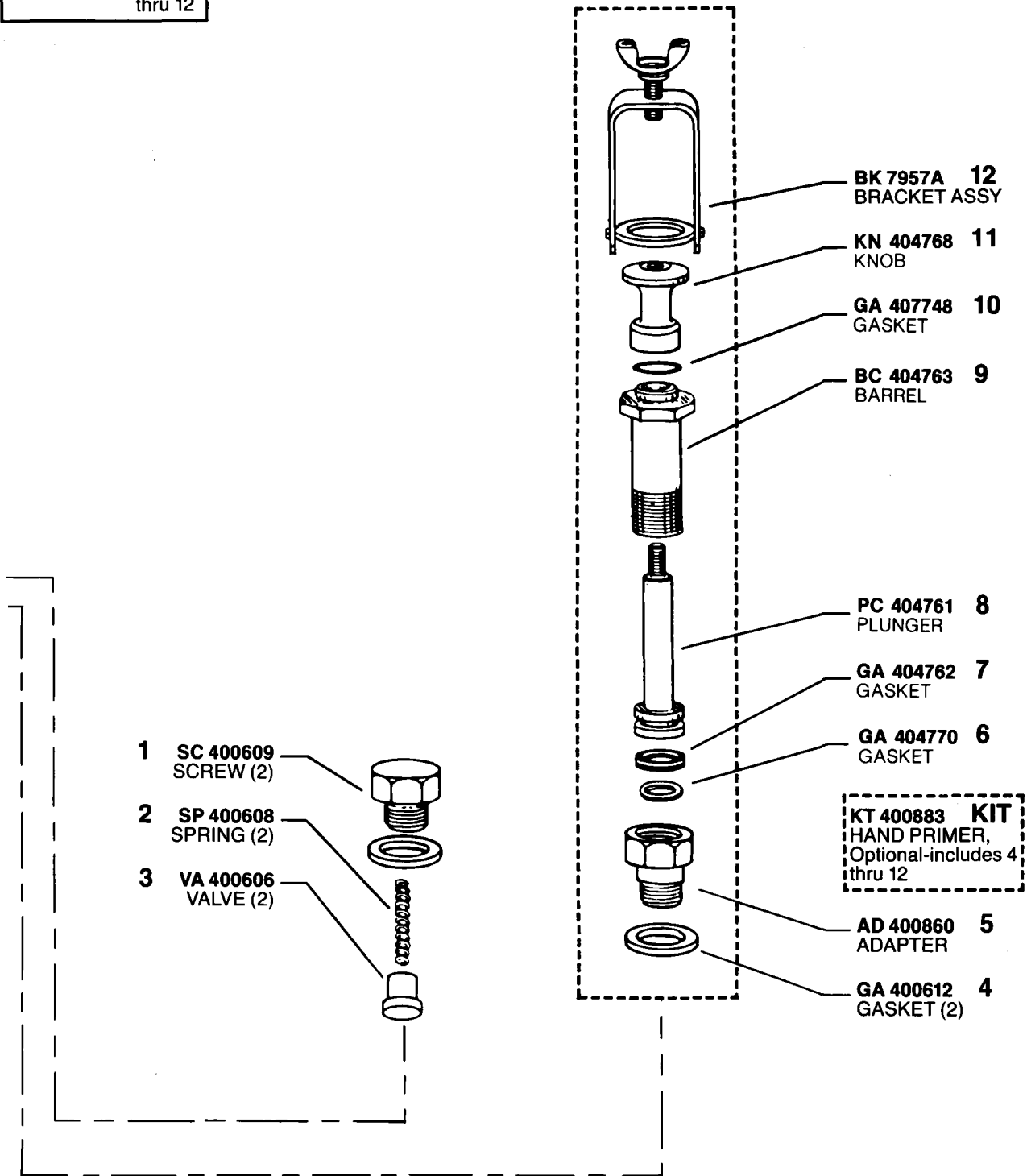
GA 400610 **10**
GASKET

SP 400709 **9**
SPRING

*Denotes parts in Gasket Kit KT 401705.

MODEL 300 #PLM 450291A-E

ASSY MP 404760
MANUAL PRIMER
 ASSY-includes 6
 thru 12



MODEL 300 #PLM 450291A-E

CALIBRATION SET-UP

Engine Holders HNM780322
 Opening Pressure 4200-4350 psi
 Engine Nozzles NBM 770316
 Engine Nozzle & Holder Assy. Ref #NHM 780356
 High Pressure Tubing 1/4" OD x .067" ID
 x 33" Long
 Calibrating Oil Viscor 1487C @ 100°-105°F
 (38-41°C) at pump inlet

Lube Oil SAE #20 or #30 at 20 psi/1.4 bar
 Air Pressure 70-90 psi to air inlet cap
 Pump Rotation Clockwise
 Firing Order 1-5-3-6-2-4
**PROCEDURE ... Refer to the Service Instructions
 and use figure below**

450291 A thru E DATA

Engine Model EM6-250-4VH
 Engine Static Timing 25°
 Customer No. 313GC5163-P26
 Kit No. KT408209
 Customer Kit No. 313GC5163-P25
 Governor Speeds 250/1050
 Cam Nose Angle 85°(± 2°)

Governor Outer Spring
 Precompression Flush to 0.5mm (.020")
 Governor Inner Spring Gap . 3.75-4.00mm (.148"-.157")
 Lift to Port Closing 3.00-3.20mm
 (.118"-.126"), cam lift with control rack at
 approximate mid-travel position

STEP	A	B	C	D
	Full Load at 1.150" Rack Ext	Cam Departure	Peak Torque (from actual A delivery)	Droop Screw (from actual A delivery)
RPM	1050	1080	700	630
DEL cc/500 str	65.5-69.0	NONE	+ 19.0 ± 2.5	+ 27.0 ± 2.5
DEL cc/300 str	39.5-41.5	NONE	+ 11.5 ± 1.5	+ 16.0 ± 1.5

	E	F	G	H
	"PLE"	Low Idle	Minimum Delivery	"Dual Speed" Cam Departure
RPM	800	300	75	910-920
DEL cc/500 str	63.0-67.0	12-15	—	NONE
DEL cc/300 str	38.0-40.0	7- 9	—	NONE
DEL cc/100 str	—	—	12.0	NONE

SERVICE CHECK—A, C & D are applicable.

Calibration data consist of latest calibration figures. Earlier editions may required changing parts to meet calibration requirements. See record of change chart.

RECORD OF CHANGE

EDITION	PLATE, stop	IDENT #	PLATE, hanger	IDENT #	NOZZLE, engine
A	PL404842	43	PL400269	8	NBM770076
B	PL403705	48	PL400269	8	NBM770076
C	PL408331	82	PL400269	8	NBM770076
D	PL408331	82	PL400269	8	NBM770316
E	PL404801	56	PL400261	—	NBM770316