

6924

A & B

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

MACK
APE 6G 110A 6924A & B

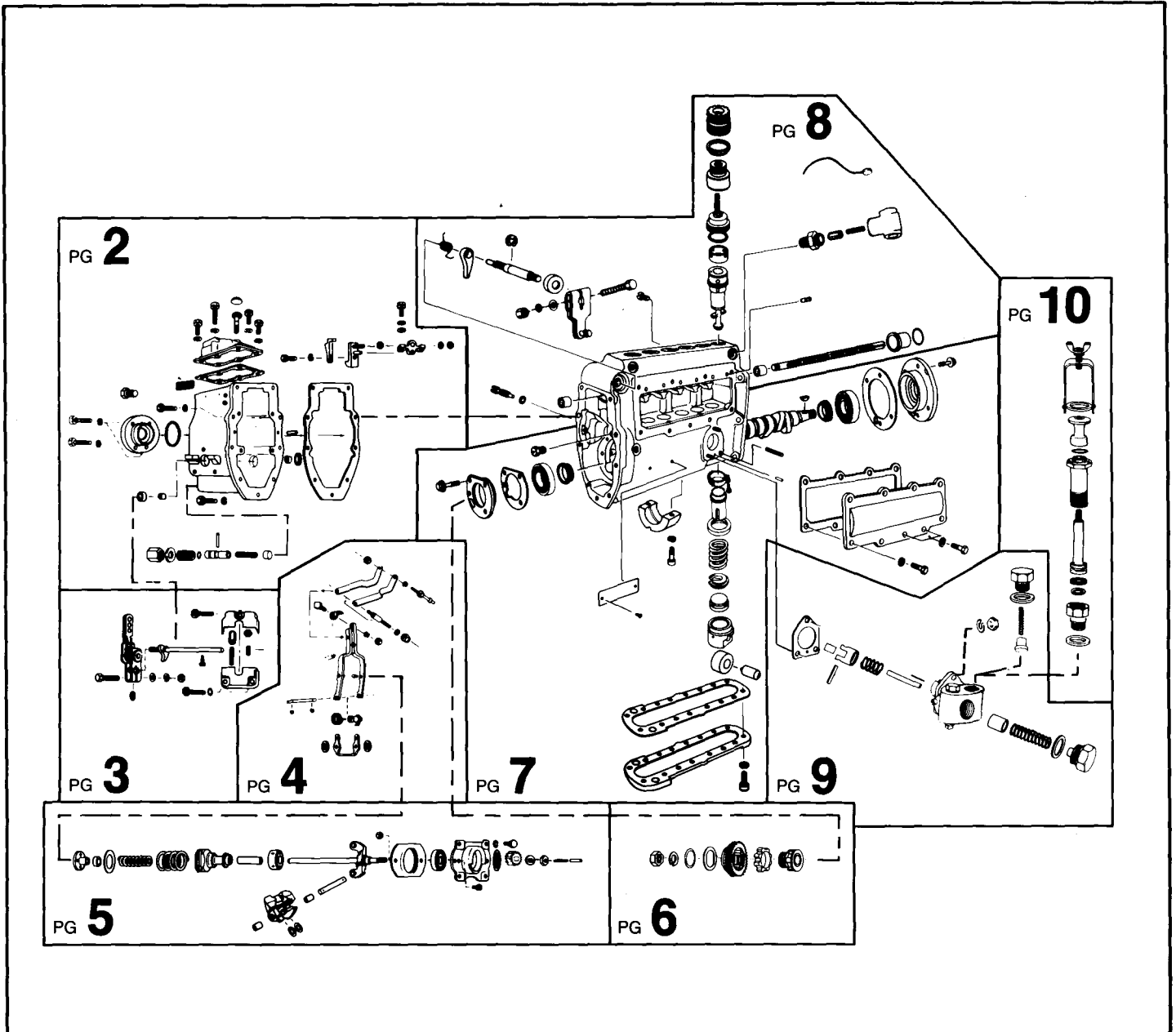
Special Information:



SERVICE PARTS

Following are all parts, part numbers, pump codes and calibrations for the *Model: APE 6G 110A 6924A & B*. The exploded view drawing below is detailed with part

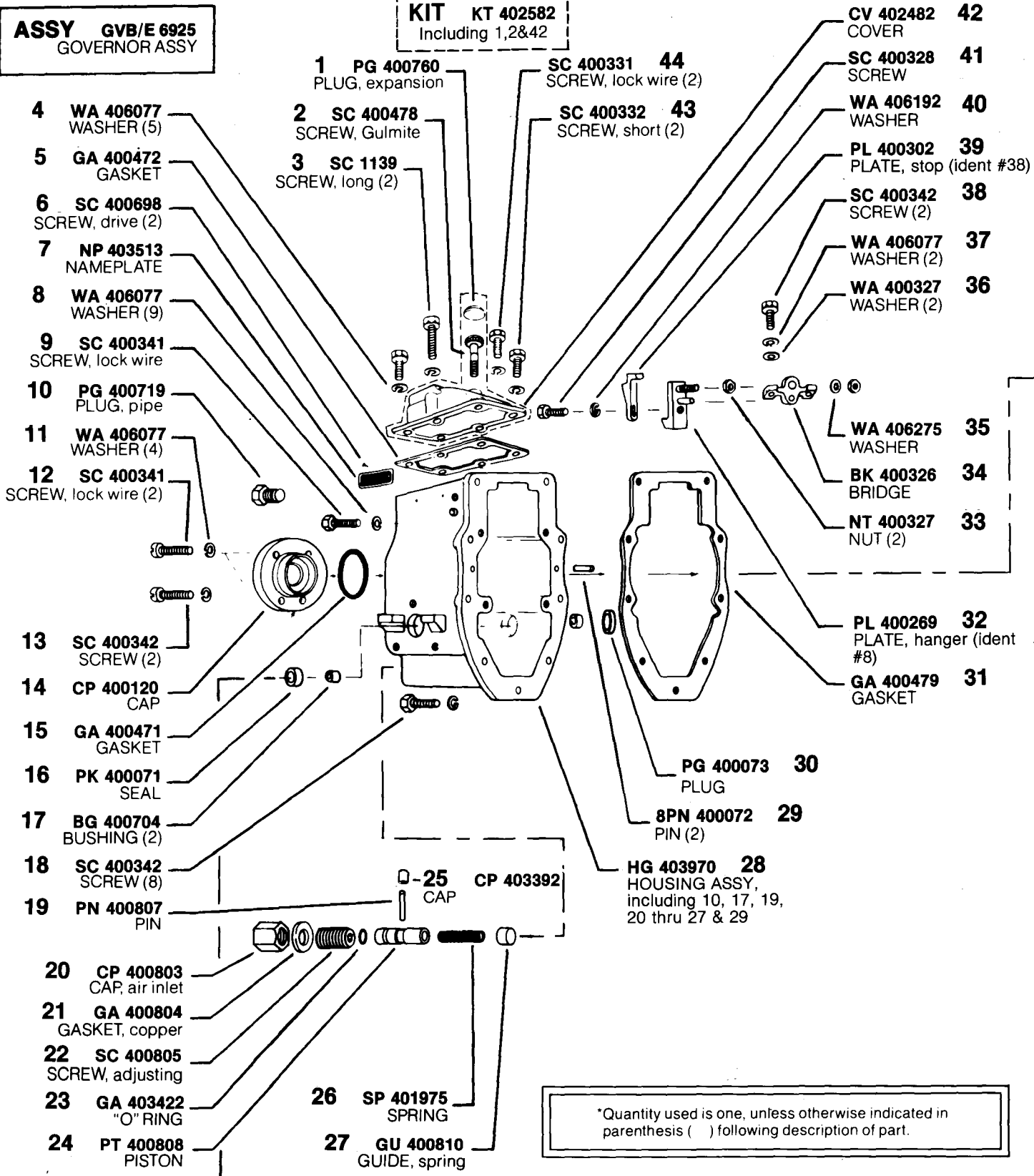
numbers listed on the pages indicated. Refer to the Index Section for explanations of codes and abbreviations.



MODEL APE 6G 110A 6924A & B

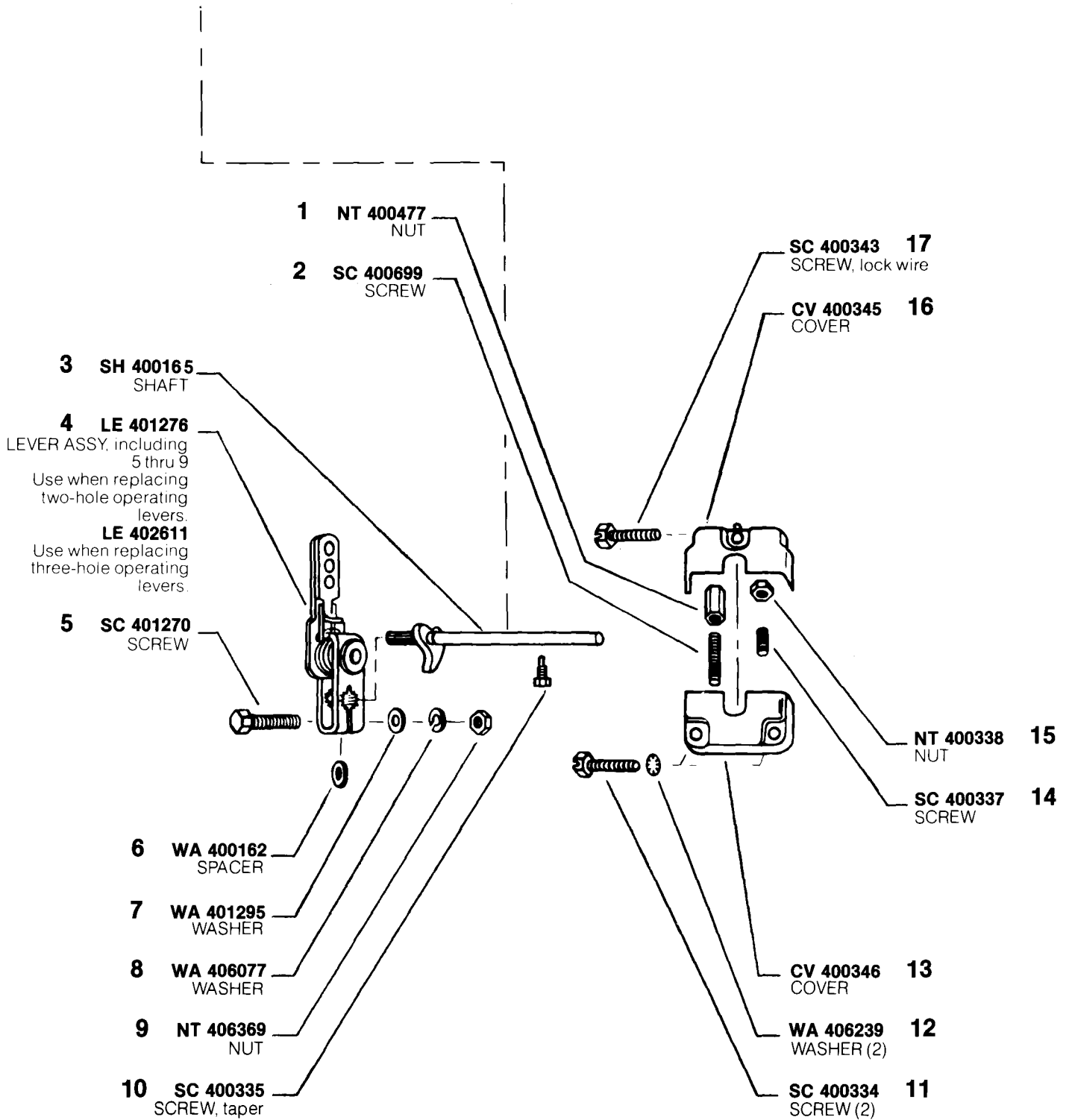
ASSY GVB/E 6925
GOVERNOR ASSY

KIT KT 402582
Including 1,2&42



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

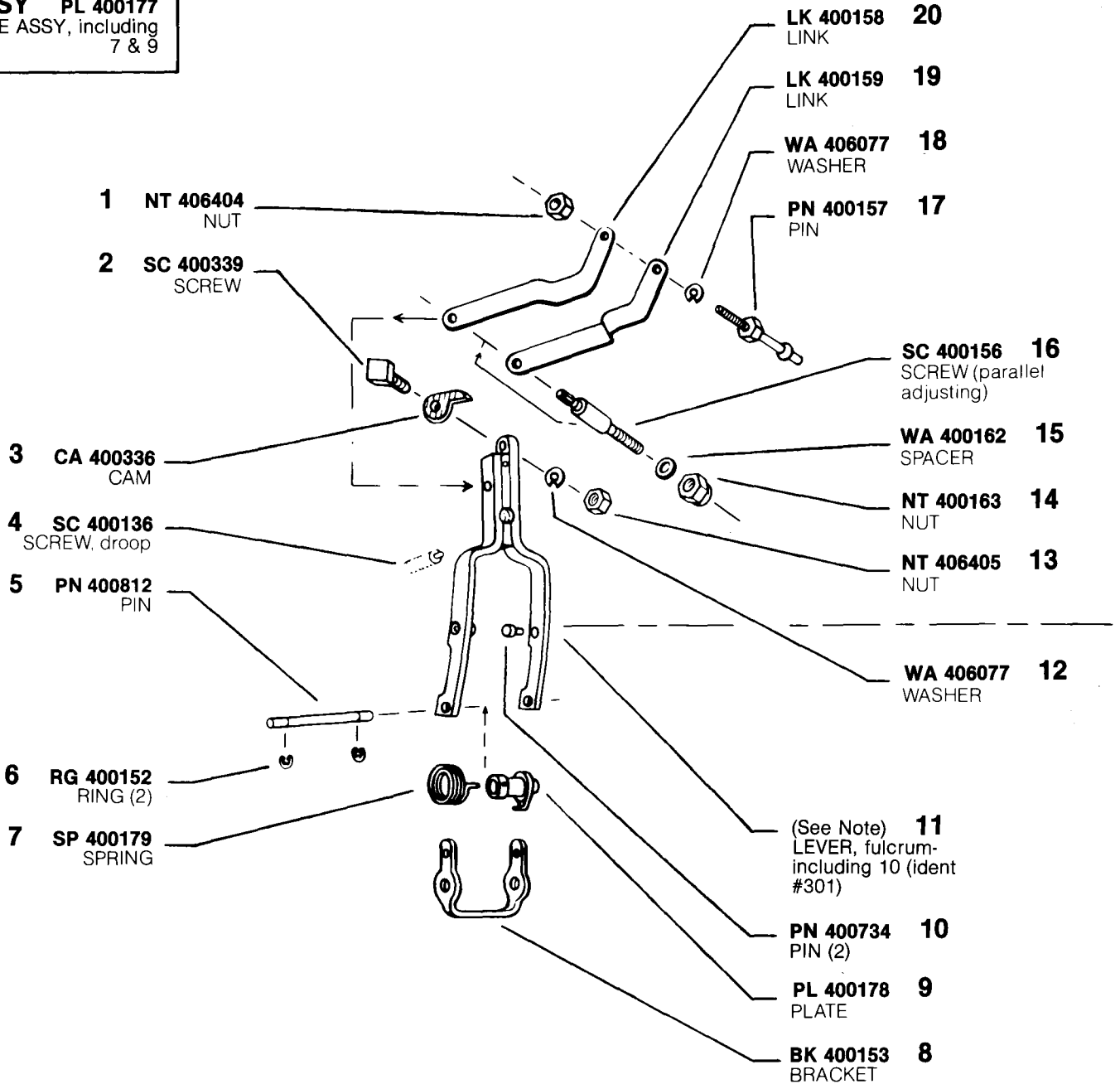
MODEL APE 6G 110A 6924A & B



MODEL APE 6G 110A 6924A & B

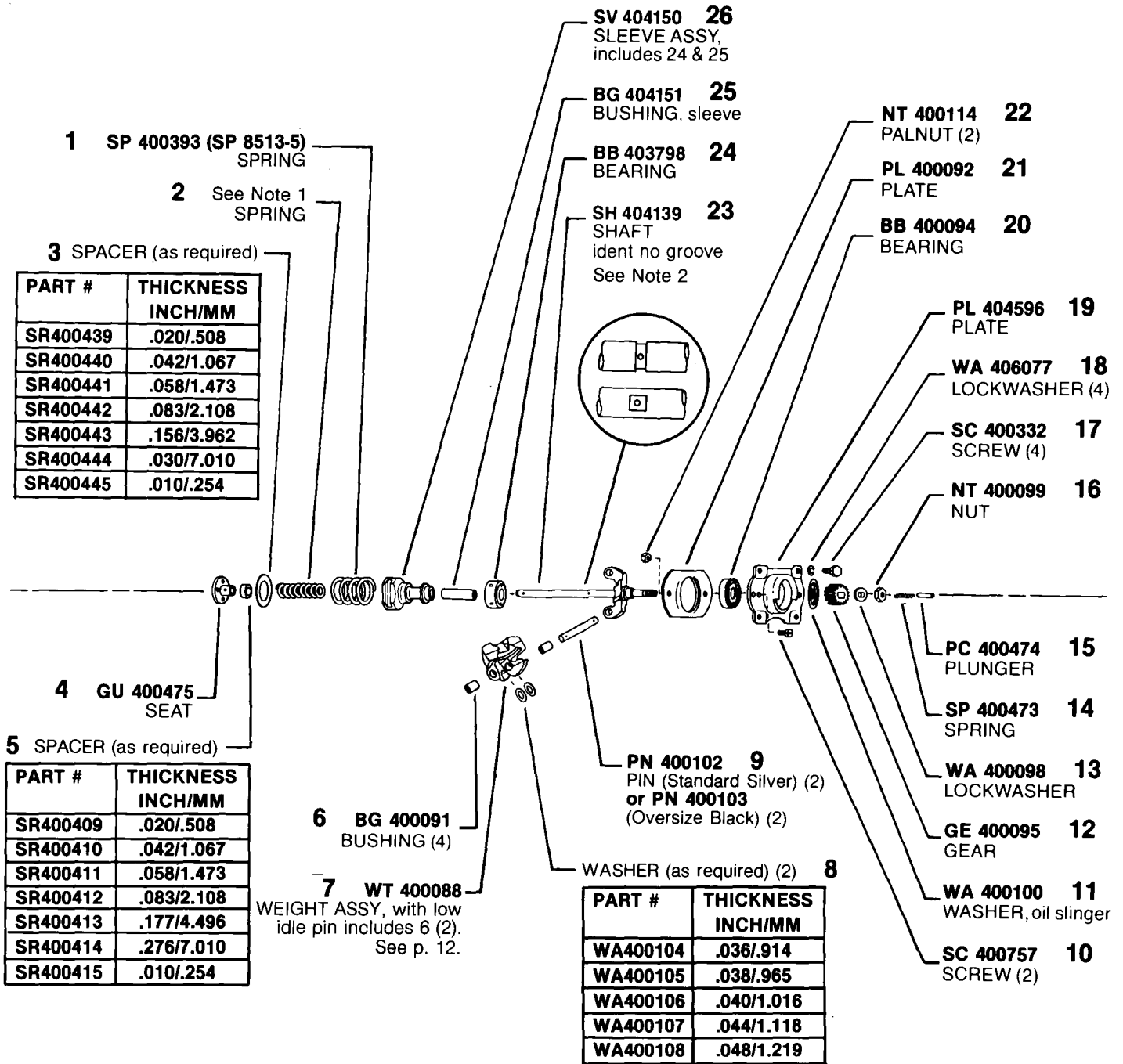
ASSY (See Note)
fulcrum-including
5, 10, 11 &
16 thru 20

ASSY PL 400177
PLATE ASSY, including
7 & 9



Note: Initially, LE 79300-6A (included item #11, LE 79301A) was used with GVB/E6925. The lever is identified by a "301" stamping. When replacement of the fulcrum becomes necessary, use LE 400782 (includes item #11, LE 400800). Important — governor inner spring varies depending upon fulcrum being used. Refer to page 5 of this specification for part number information.

MODEL APE 6G 110A 6924A & B

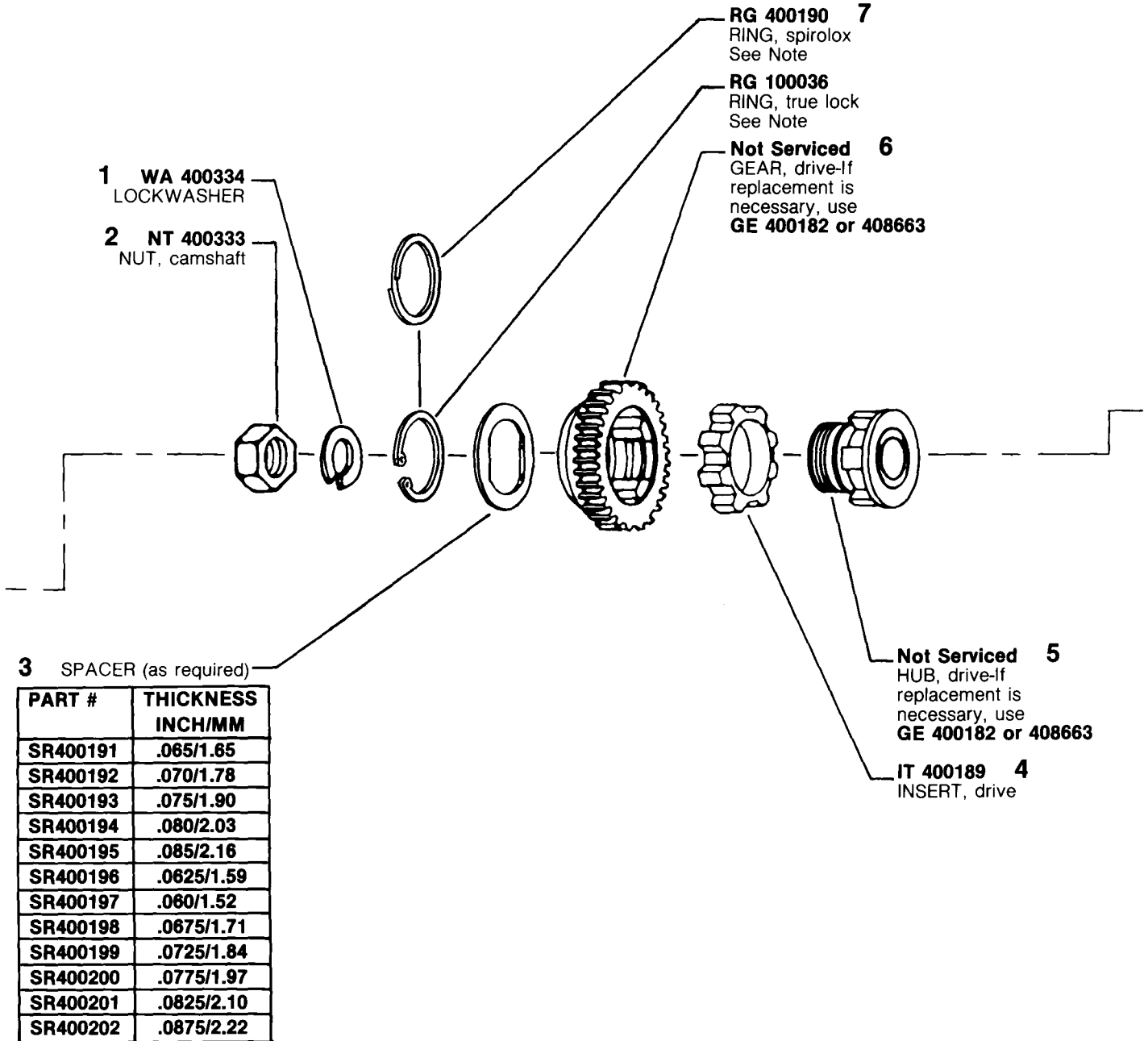


Note 1: Governor inner spring (#2) is dependent upon fulcrum lever; use SP 400355 (SP 8512-7) with LE79301A (ident stamping - 301) and SP 400378 (SP 8512-30) with LE400800 (no ident.)

Note 2: When replacing shaft (#23 w/groove) with latest shaft (SH404139 no groove) BG404151 (25) MUST be used. Shaft with groove used BG400118.

MODEL APE 6G 110A 6924A & B

**ASSY GE 400182
or 408633
(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 APE 6G 110A 6924A & B

ASSY TP 7657A
TAPPET ASSY, includes
9 & 17 thru 20 (6)

Table 1

Item #2	#5	#7 & Identification		#33 & Identification	
SH 76140	SR 7656	PL 76158	Slot for Lube Oil Drain	PL 76153	None
SH 408578	Omit	PL 76158	Slot for Lube Oil Drain	PL 76153	None
SH 404784	Omit	PL 400044	Scallop for Lube Oil Drain	PL 400028	Black Oxided or ID Groove on Front Face

1 KY 403378
KEY, WOODRUFF

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

3 HG 761281A
HOUSING-including
4, 30, 31, and
19 & 23 on page 8.

4 PG 400007
PLUG, lube feed

5 (See Table 1)
SPACER (2)

6 RB 400059
BEARING (2)

7 (See Table 1)
PLATE

8 SHIM (as required)

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

9 SPACER, knob

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

10 NP 409895
NAMEPLATE

11 SC 400698
SCREW, drive (2)

12 GE 400643
GEAR, segment (6)

13 CV 400772
COVER

14 WA 400547
LOCKWASHER (16)

15 SC 400553
SCREW (16)

2 (See Table 1)
CAMSHAFT

(See Table 1) 33
PLATE

SC 403602 32
SCREW (8)

SD 400005 31
STUD, supply pump
mounting (3)

PN 400008 30
PIN, roll

GA 400771 *29
GASKET

CV 400767 28
COVER

WA 406078 27
LOCKWASHER (9)

SC 400060 26
SCREW, wire seal (2)

SC 400061 25
SCREW (7)

SC 400486 24
SCREW (6)

SV 402790 23
SLEEVE, control (6)

GU 400510 22
SEAT (6)

SP 400512 21
SPRING (6)

GU 401850 20
SEAT (6)

GU 76181 19
SHELL (6)

PN 402683 18
PIN (6)

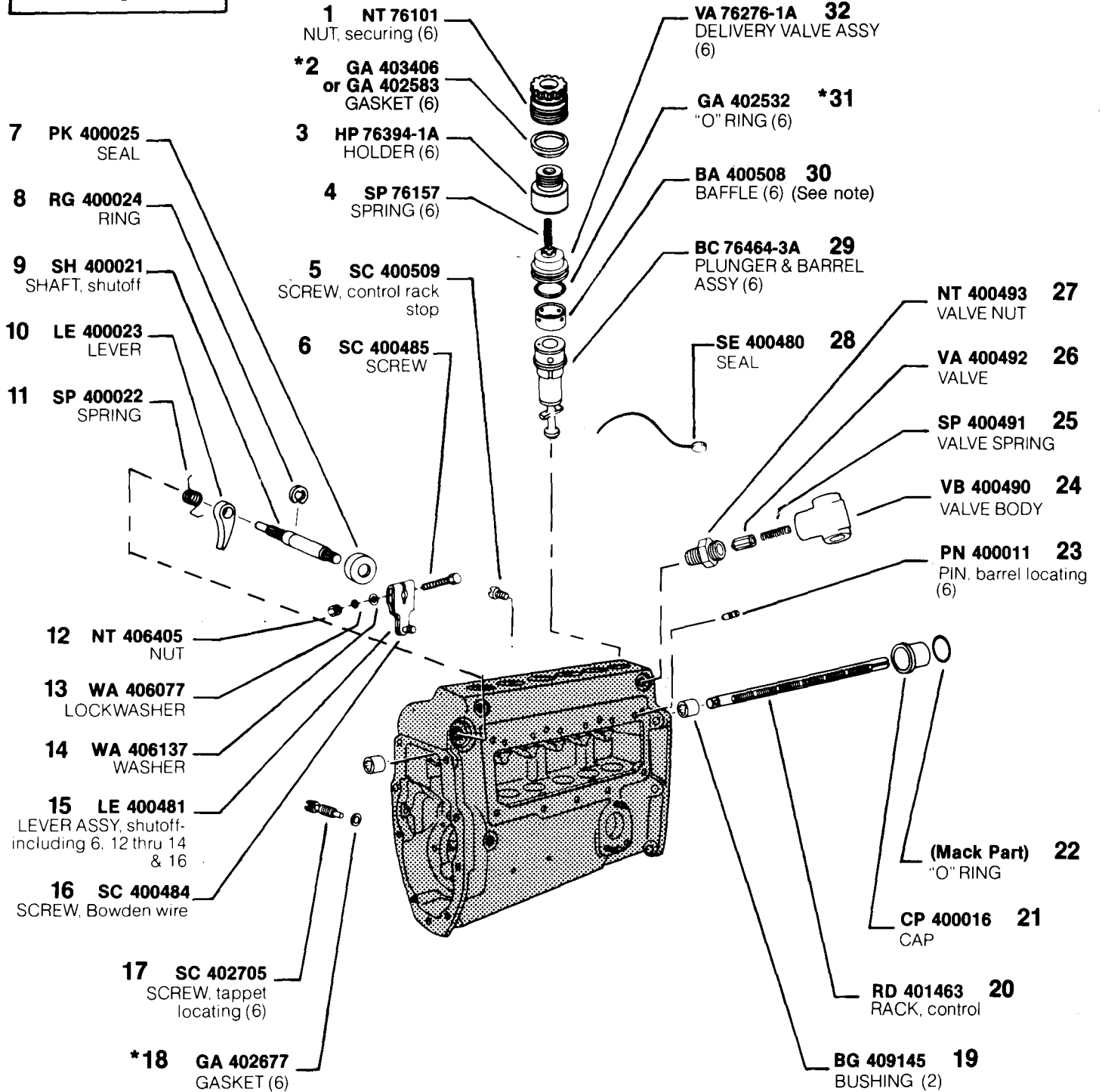
RL 400514 17
ROLLER (6)

GA 400774 *16
GASKET

*Denotes parts in Pump Gasket Repair Kit, KT76484.

MODEL APE 6G 110A 6924A & B

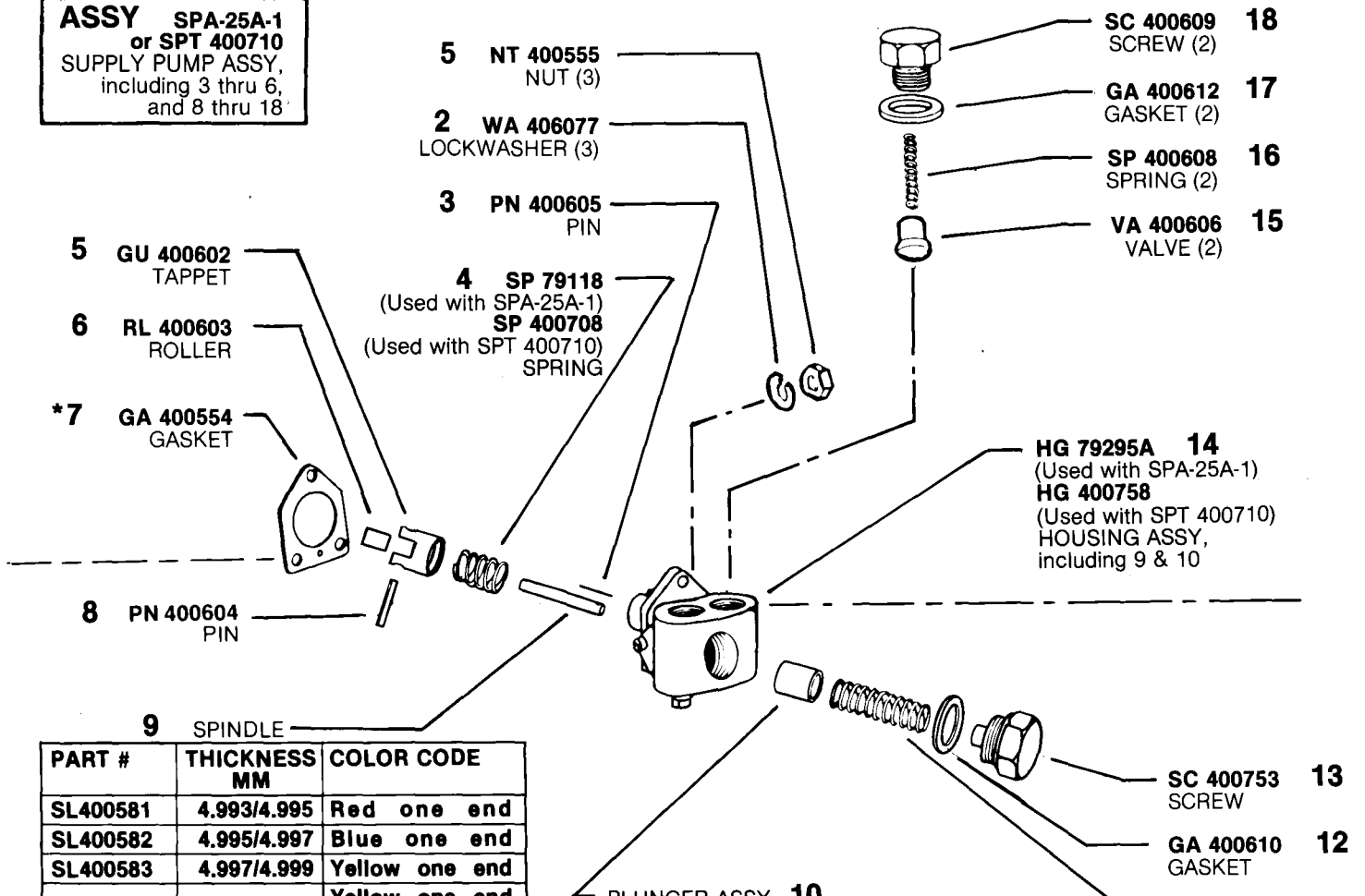
ASSY VA 400683
VALVE ASSY, overflow-
including 24 thru 27



*Denotes parts in Pump Gasket Repair Kit, KT 76484.

MODEL APE 6G 110A 6924A & B

ASSY SPA-25A-1
or SPT 400710
SUPPLY PUMP ASSY,
 including 3 thru 6,
 and 8 thru 18



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
SL 400588	5.189/5.191	Red both ends
SL 400589	5.191/5.193	Blue both ends
SL 400590	5.193/5.195	Yellow both ends
SL 400591	5.195/5.197	Black both ends

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

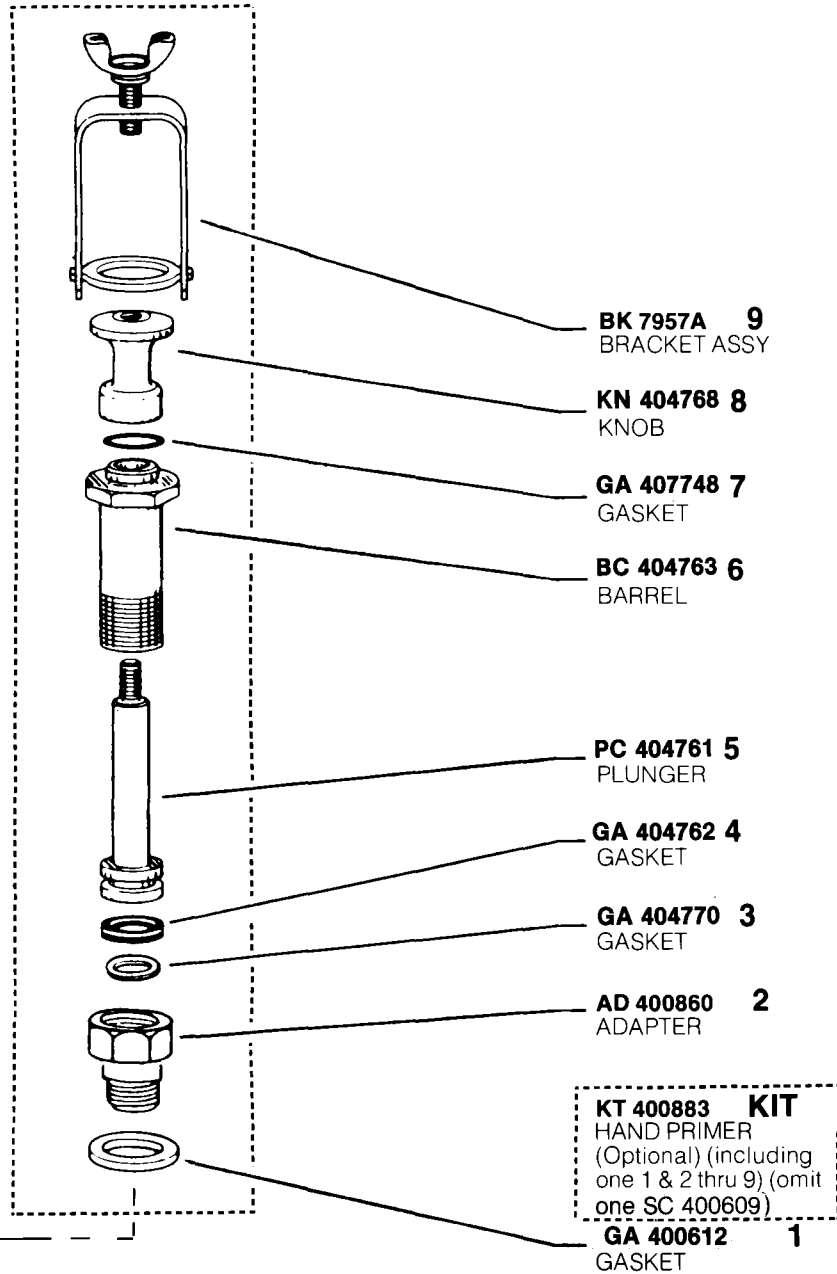
SPINDLE (requires reaming)

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

*Denotes parts in Pump Gasket Repair Kit, KT 76484.

MODEL APE 6G 110A 6924A & B

ASSY MP 404760
MANUAL PRIMER
ASSY, including 3 thru 9
(Optional)



MODEL APE 6G 110A 6924A & B

CALIBRATION SET-UP

Engine Holders HNS 780650
 Opening Pressure 4200-4350 psi
 Engine Nozzles NBM 770000
 High Pressure Tubing 1/4" OD x .067" ID
 x 36" Long
 Air Pressure 70-90 psi to air inlet cap

Calibrating Oil Viscor 1487 @ 100°-105°F
 (38-41°C) at pump inlet
 Lube Oil SAE #20 or #30 at 20 psi at pump inlet
 Pump Rotation Clockwise
 Firing Order 1-5-3-6-2-4
 PROCEDURE Refer to the Service Instructions
 and use figures below

6924A1 & B1 DATA

Engine Model E6-350
 Engine Static Timing 22°
 Customer Pump No. 313GC5135-P18
 Kit No. KT 76496-1
 Customer Kit No. 313GC5135-P17
 Governor Speeds 250/975
 Cam Nose Angle 94°

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
 1.250" (full load position) extension

STEP	A Full Load at 1.250" Rack Ext	B Cam Departure	C Peak Torque (from actual A delivery)	D Droop Screw (from actual A delivery)
RPM	975	1000-1010	800	700
DEL cc/500 str	104.5-109.5	NONE	+ 9.5 ± 3.0	+ 12.0 ± 3.0
DEL cc/300 str	62.5-65.5	NONE	+ 5.5 ± 2.0	+ 7.0 ± 2.0

STEP	E "PLE"	F Low Idle	G Minimum Delivery	H "Dual Speed" Cam Departure
RPM	800	290	75	910-920
DEL cc/500 str	52.0-56.0	12-20	—	NONE
DEL cc/300 str	31.0-33.5	7-12	—	NONE
DEL cc/100 str	—	—	12.0	NONE

SERVICE CHECK — A, C & D are applicable.

MACK
MODEL 6G
SERVICE BULLETIN S15

Reference 18-FI-86
Issued June 1986
Service Bulletin
Model 300 #S2
Service Bulletin
Model 6BBT #S15

**GOVERNOR WEIGHT CONVERSION
FROM DUAL FINGER (PINNED)
WEIGHTS TO NON-PINNED WEIGHTS.**

Governors originally equipped with WT7965A or WT400089 (WT7969A) may be replaced by WT403453 by using the spring combinations listed below.

<u>Full Load RPM</u>		<u>Inner Spring</u>	<u>Outer Spring</u>
1000-1050	use	SP400383	SP400404
900-975	use	SP400350	SP400404
850	use	SP400359	SP400404

Governor spring gaps and preload should be set as specified under specific pump data found in the micro-fiche.

The letter "A" that identified WT403453 from WT7970A has been eliminated because a new mold is being used that assures sufficient clearance.

The use of WT7970A is acceptable but should be checked for bearing clearance as described in bulletins M300, #S2 and 6BBT, #S15.

MODEL APE 6G 110A 6924A & B