

9163

A & B



**UNITED
TECHNOLOGIES
DIESEL SYSTEMS**

PUMP ROTATION:
Clockwise
FIRING ORDER:
1-5-3-6-2-4
MOUNTING:
L.H.
SPECIAL FEATURES:
Low Idle Screw Capsule

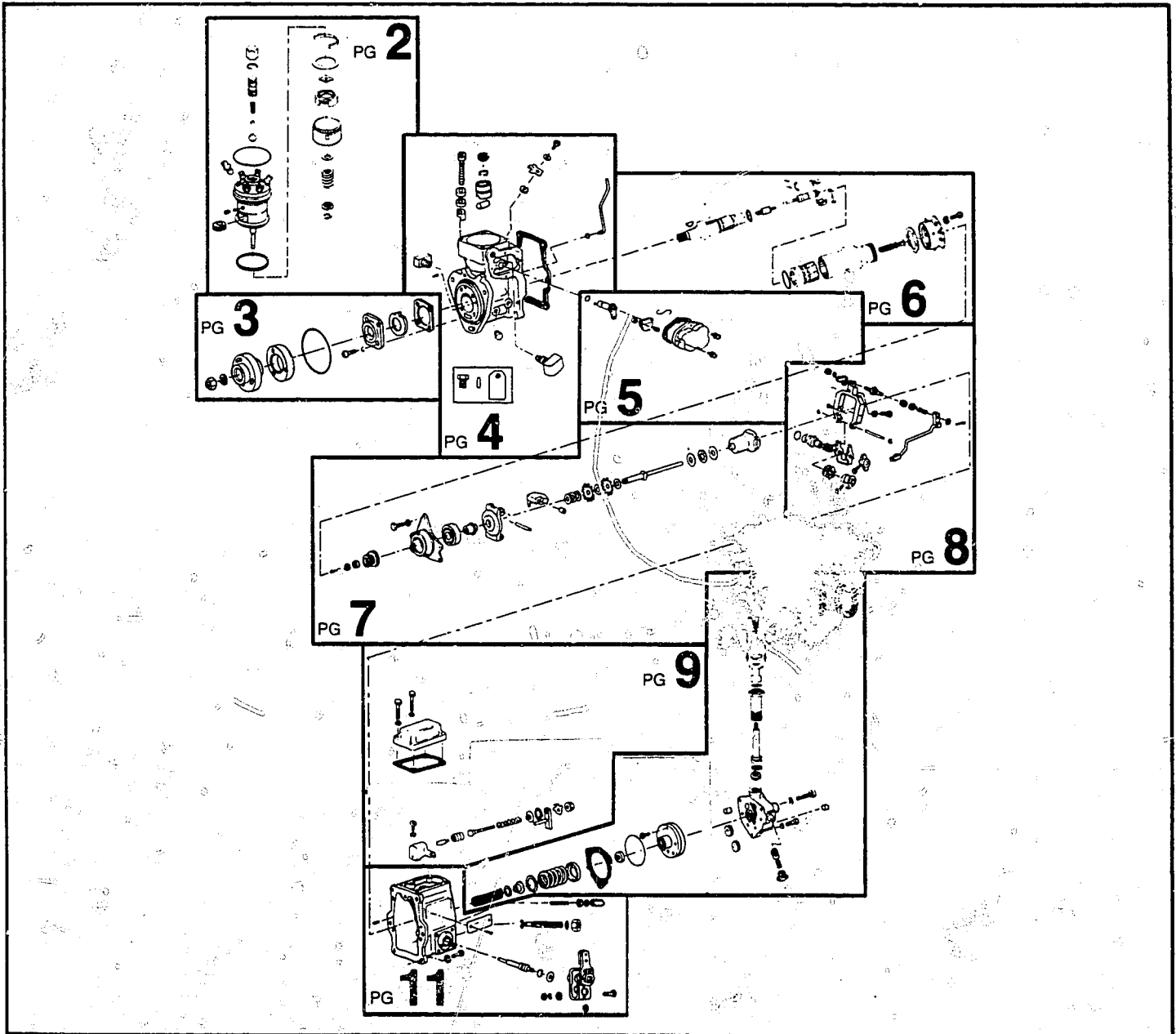
**INTERNATIONAL HARVESTER
100 6A 100A 9163**

Special Information:

SERVICE PARTS

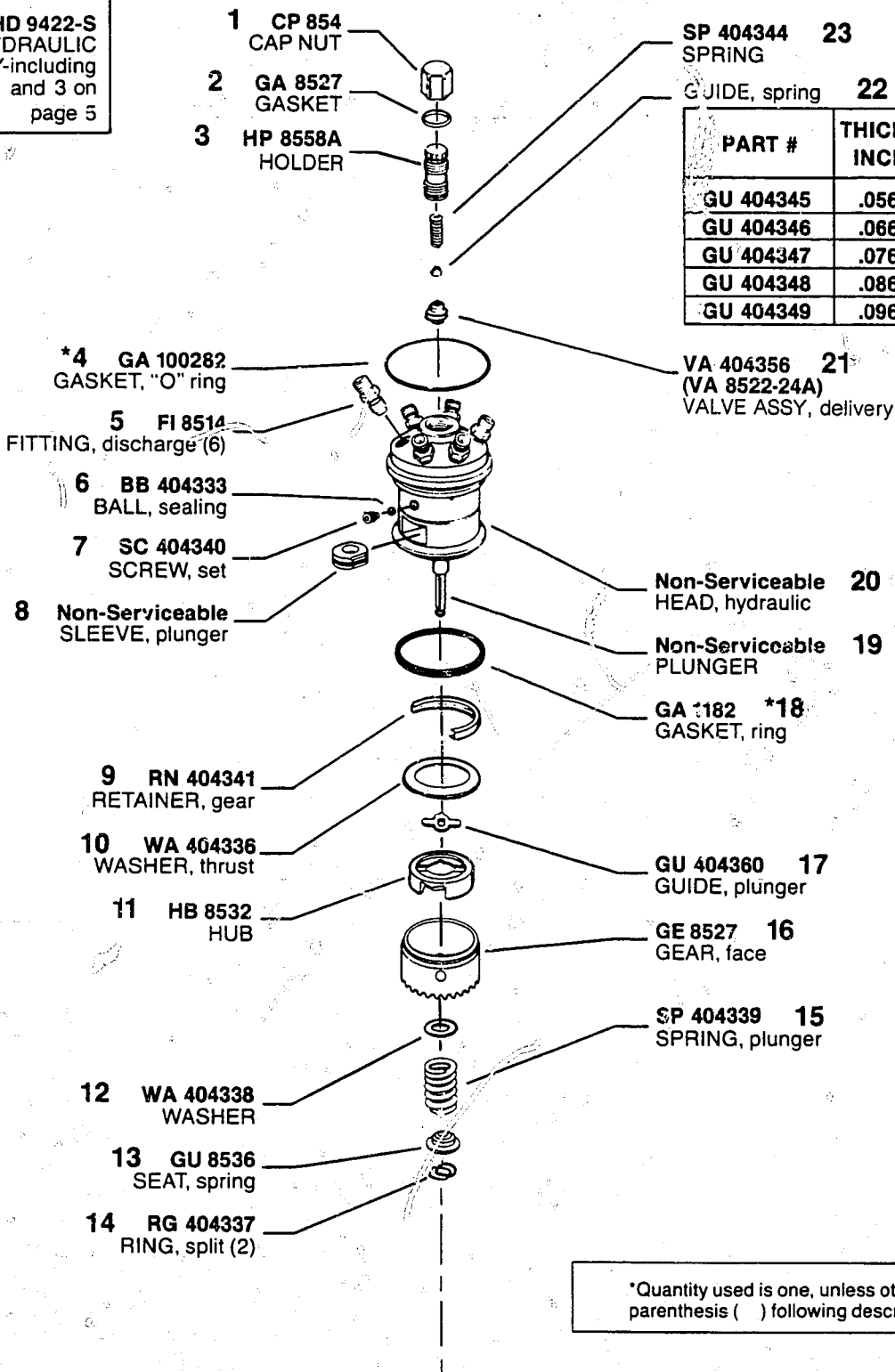
Following are all parts, part numbers, pump codes and calibrations for the Model: 100 6A 100A 9163. The exploded view drawing below is detailed with part

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



MODEL 100 6A 100A 9163

ASSY HD 9422-S
10MM HYDRAULIC
HEAD ASSY-including
1 thru 23; and 3 on
page 5

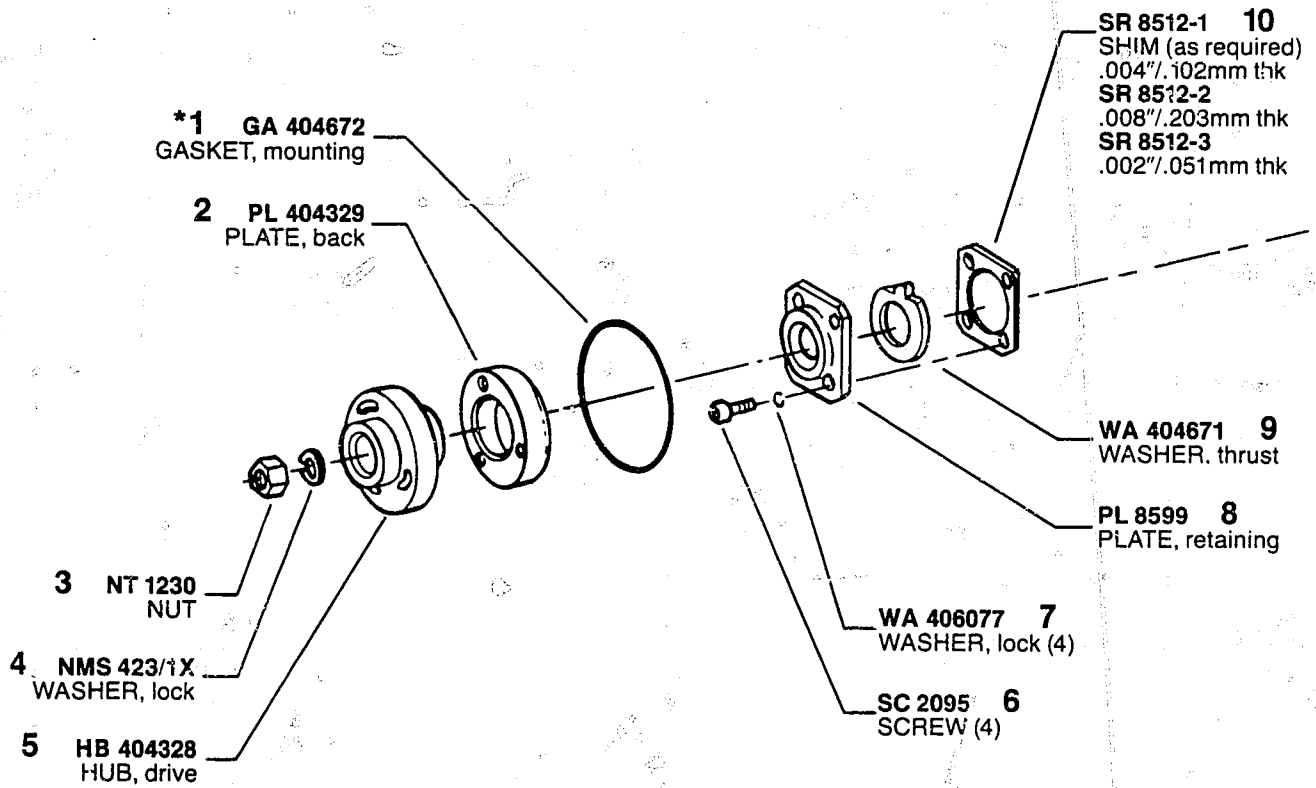


PART #	THICKNESS INCH/MM	COLOR CODE
GU 404345	.056/1.42	YELLOW
GU 404346	.066/1.68	RED
GU 404347	.076/1.93	BLUE
GU 404348	.086/2.18	BLACK
GU 404349	.096/2.44	WHITE

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

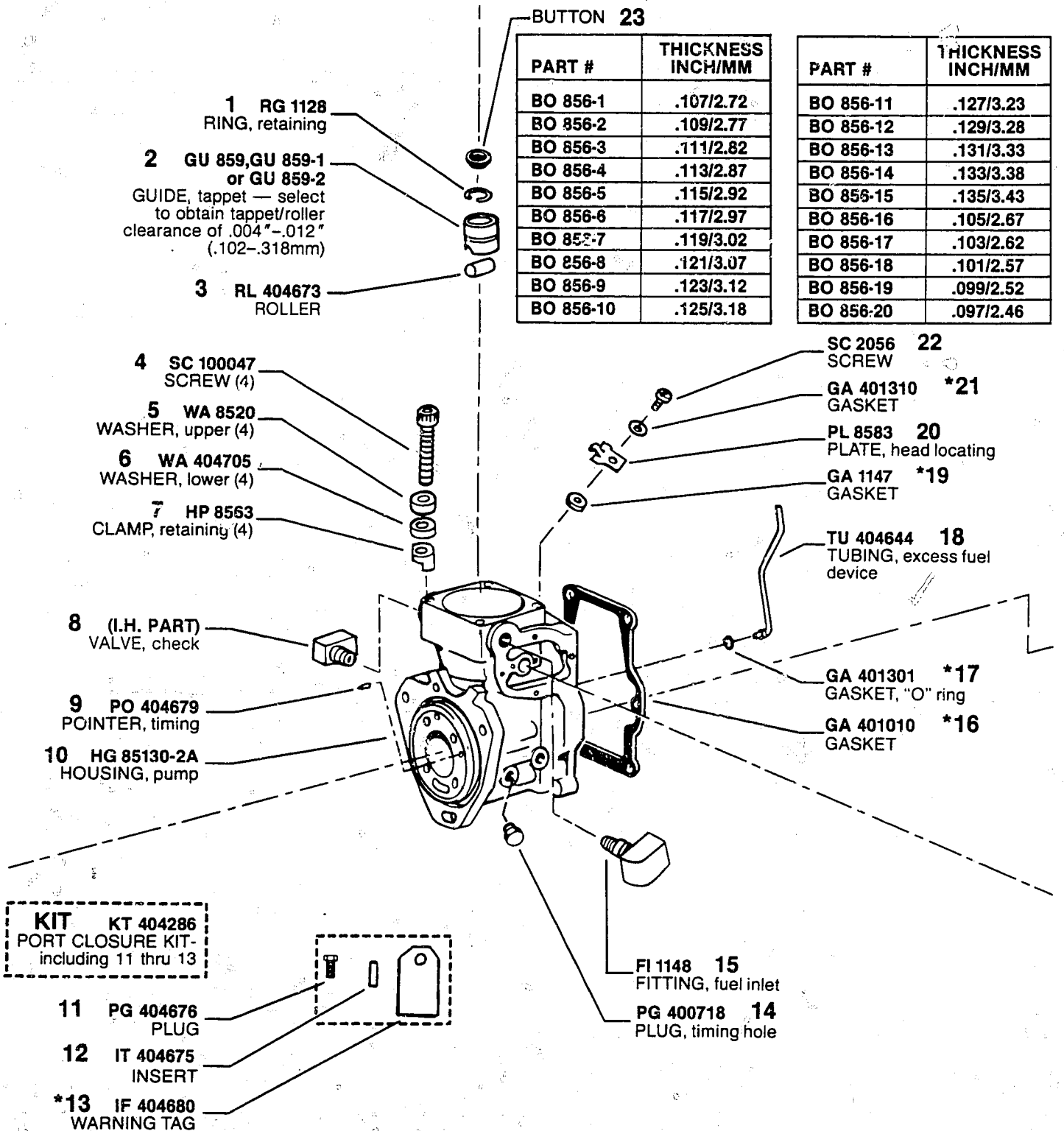
MODEL 100 6A 100A 9163

*Denotes parts in Repair Gasket Kit, KT 85195.



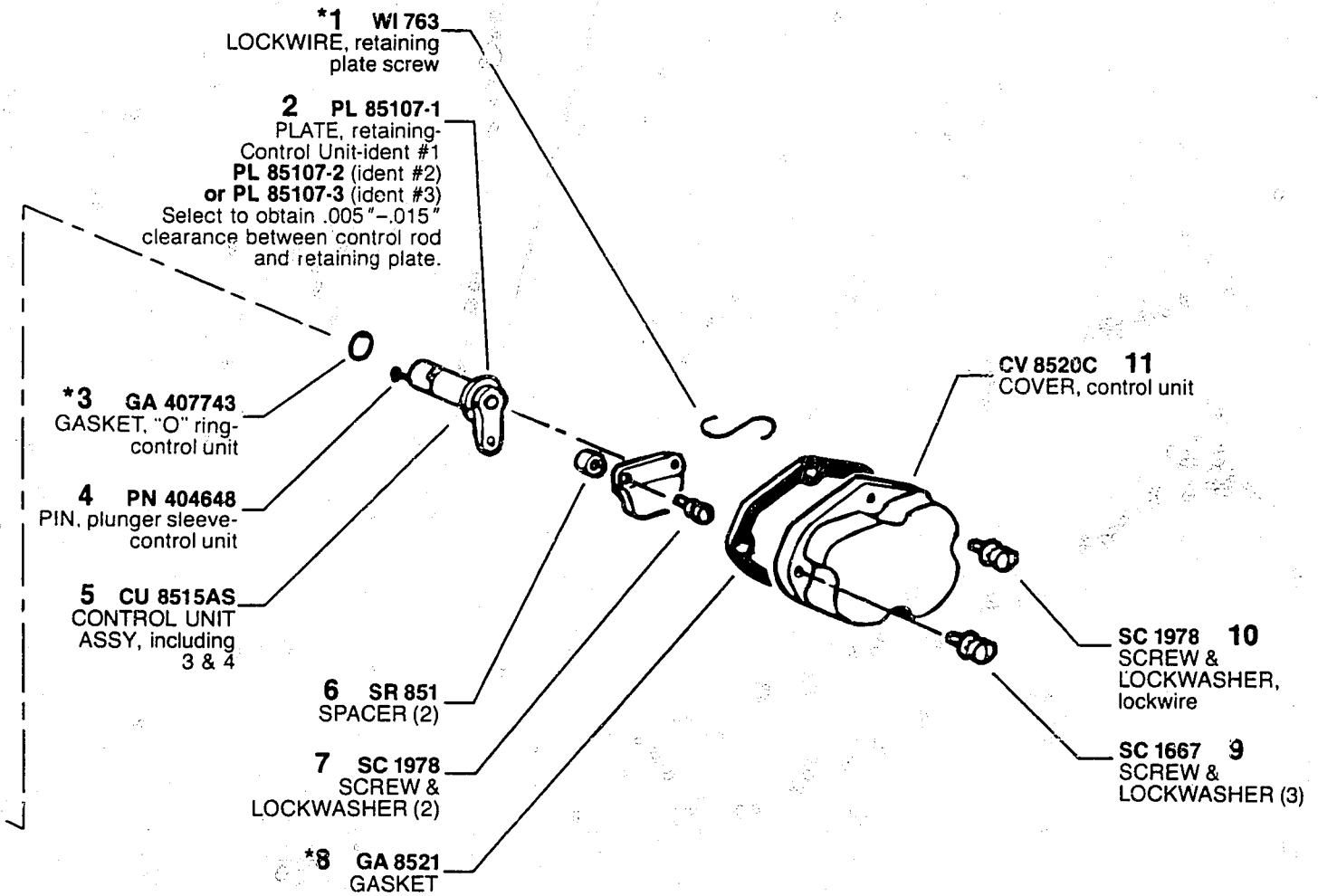
MODEL 100 6A 100A 9163

*Denotes parts in Repair Gasket Kit, KT 85195.



MODEL 100 6A 100A 9163

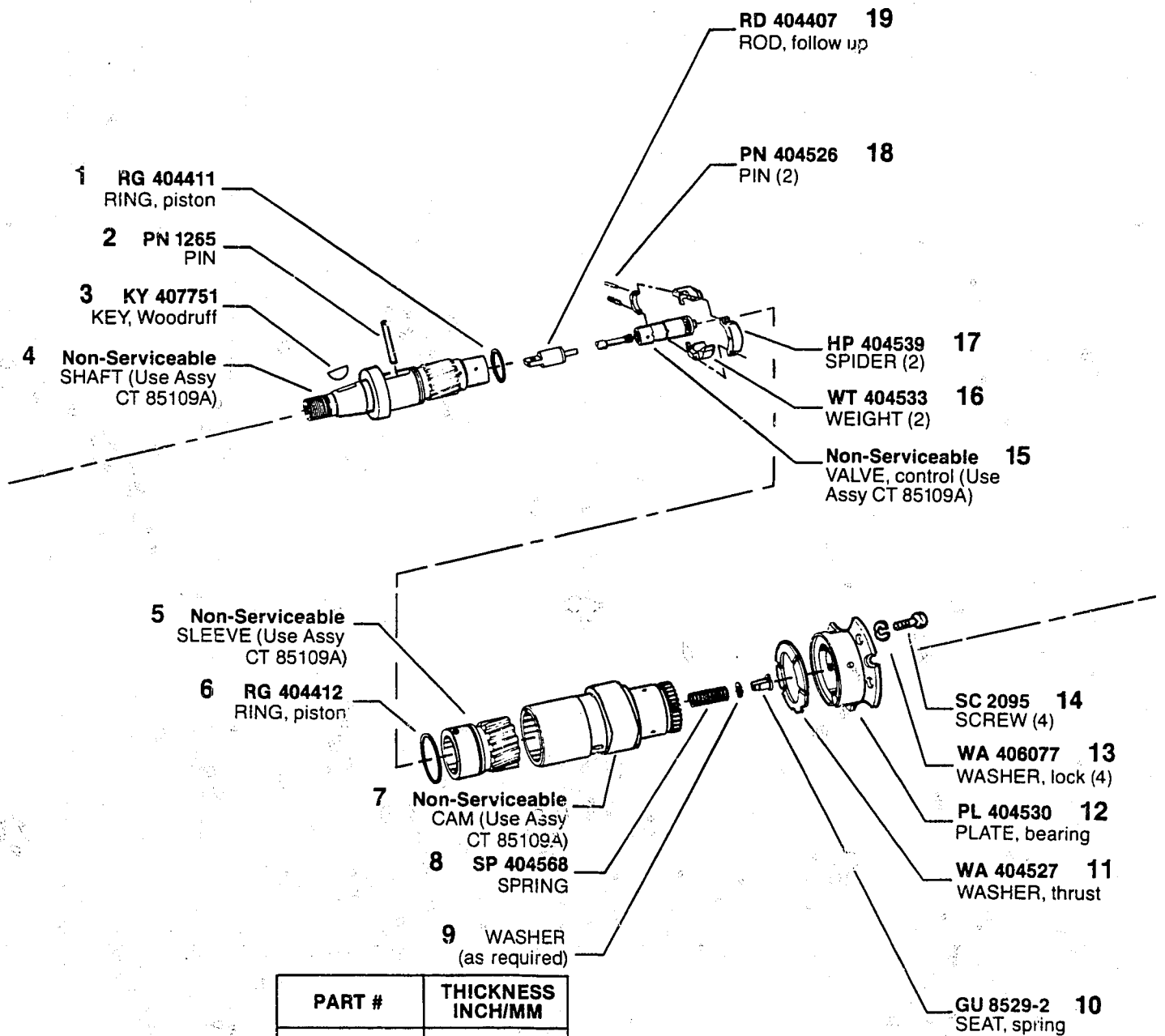
*Denotes parts in Repair Gasket Kit, KT 85195.



MODEL 100 6A 100A 9163

*Denotes parts in Repair Gasket Kit, KT 85195.

ASSY CT 85109A
INTRAVANCE®
CAMSHAFT ASSY
including 1, 2, 4 thru 12
& 15 thru 19

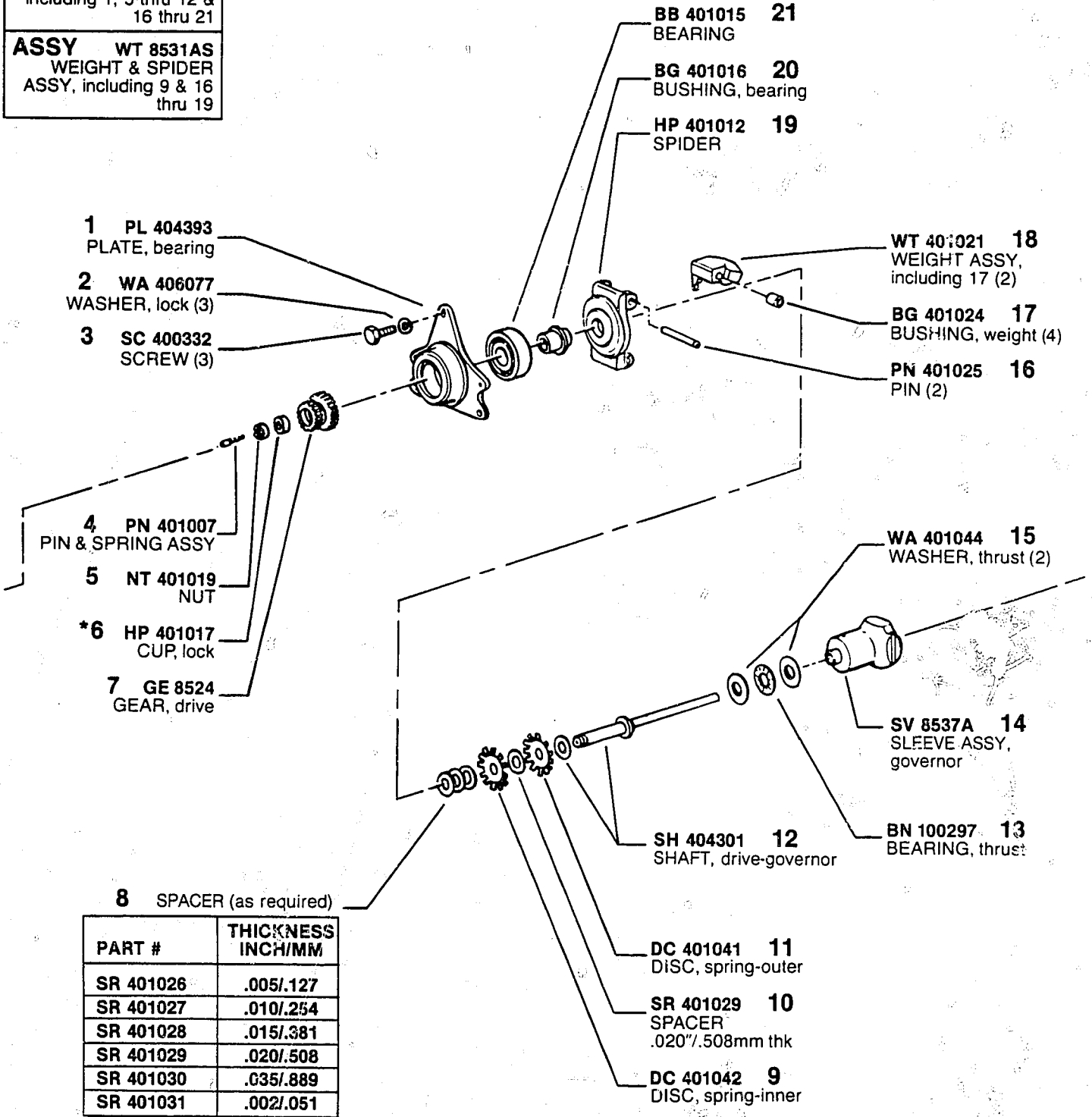


PART #	THICKNESS INCH/MM
WA 404540	.010/.254
WA 404541	.015/.381
WA 404542	.040/1.02
WA 404543	.060/1.52
WA 404544	.004/.102

MODEL 100 6A 100A 9163

ASSY WT 8535A
WEIGHT & SHAFT-
including 1, 5-thru 12 &
16 thru 21

ASSY WT 8531AS
WEIGHT & SPIDER
ASSY, including 9 & 16
thru 19

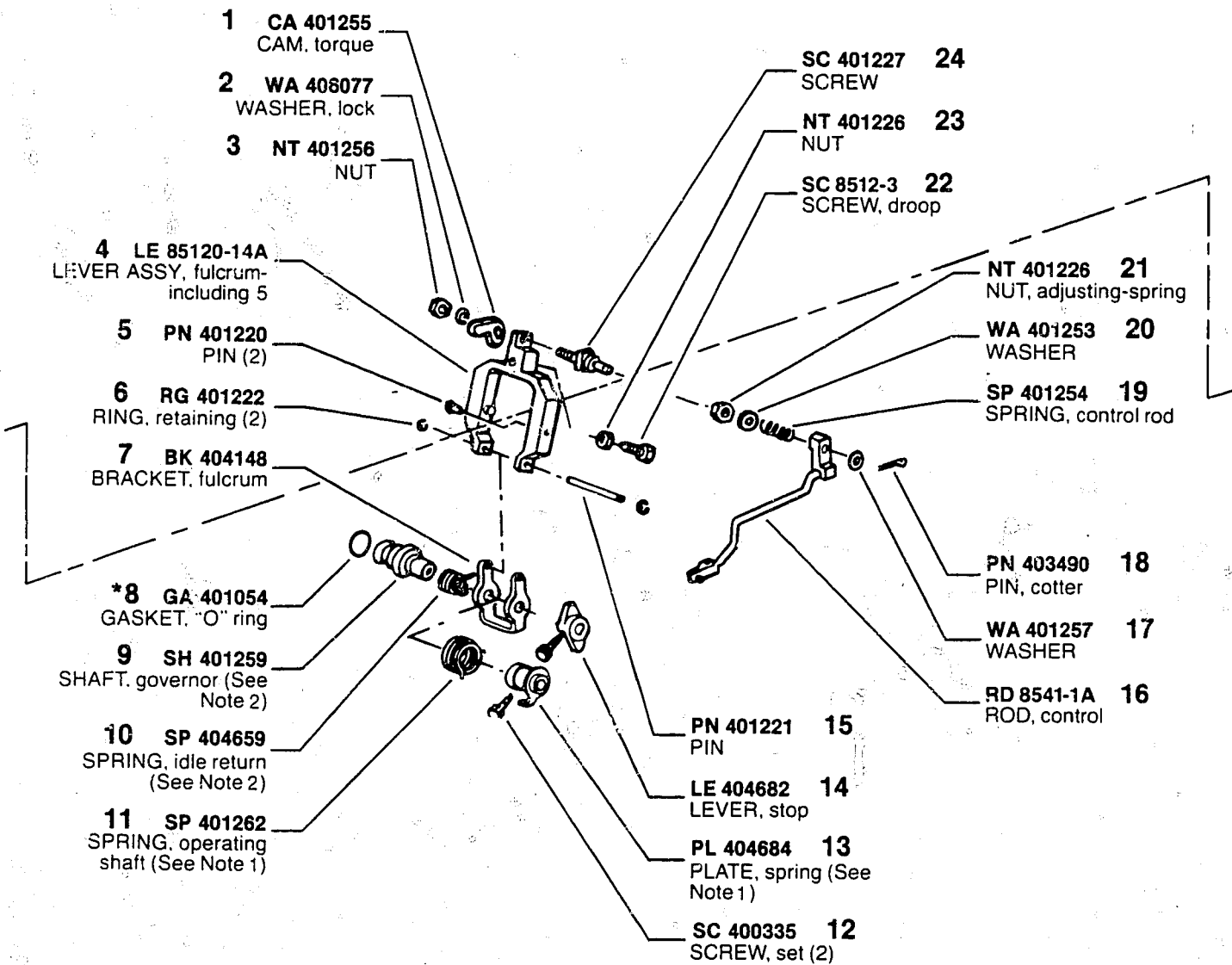


PART #	THICKNESS INCH/MM
SR 401026	.005/.127
SR 401027	.010/.254
SR 401028	.015/.381
SR 401029	.020/.508
SR 401030	.035/.889
SR 401031	.002/.051

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ASSY LE 85128-2A
LEVER & ROD,
fulcrum-including 1 thru
7, 15 thru 21 & 24

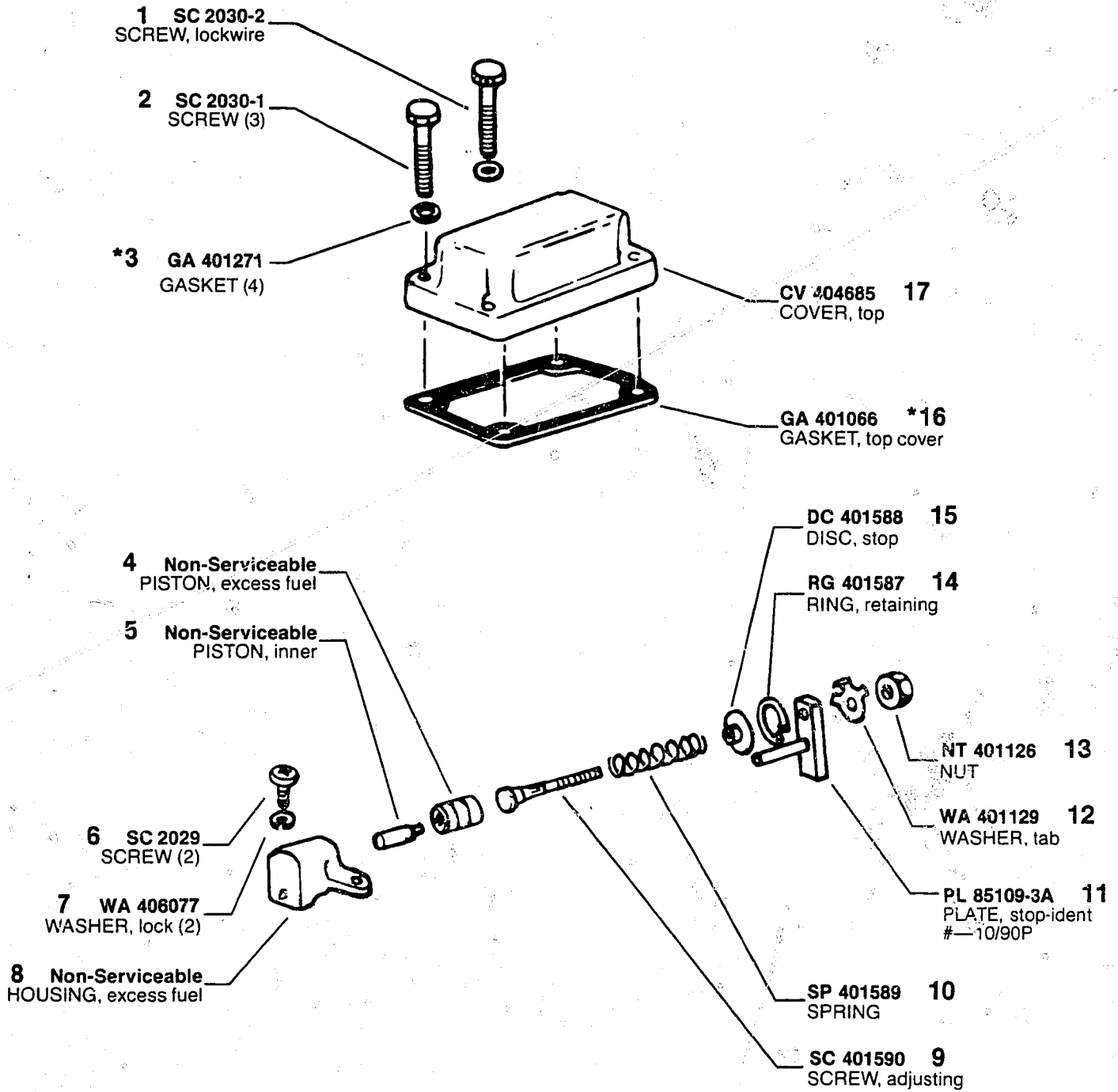


NOTE 1: If operating shaft spring has red or yellow band, replace spring (11) and spring plate (13).

NOTE 2: When replacing governor shaft (9) or governor operating shaft (5 on page 11), see if governor has idle return spring (10). If not, replace governor and operating shafts with SH 85153A which includes 9, 10; and 5 on page 11.

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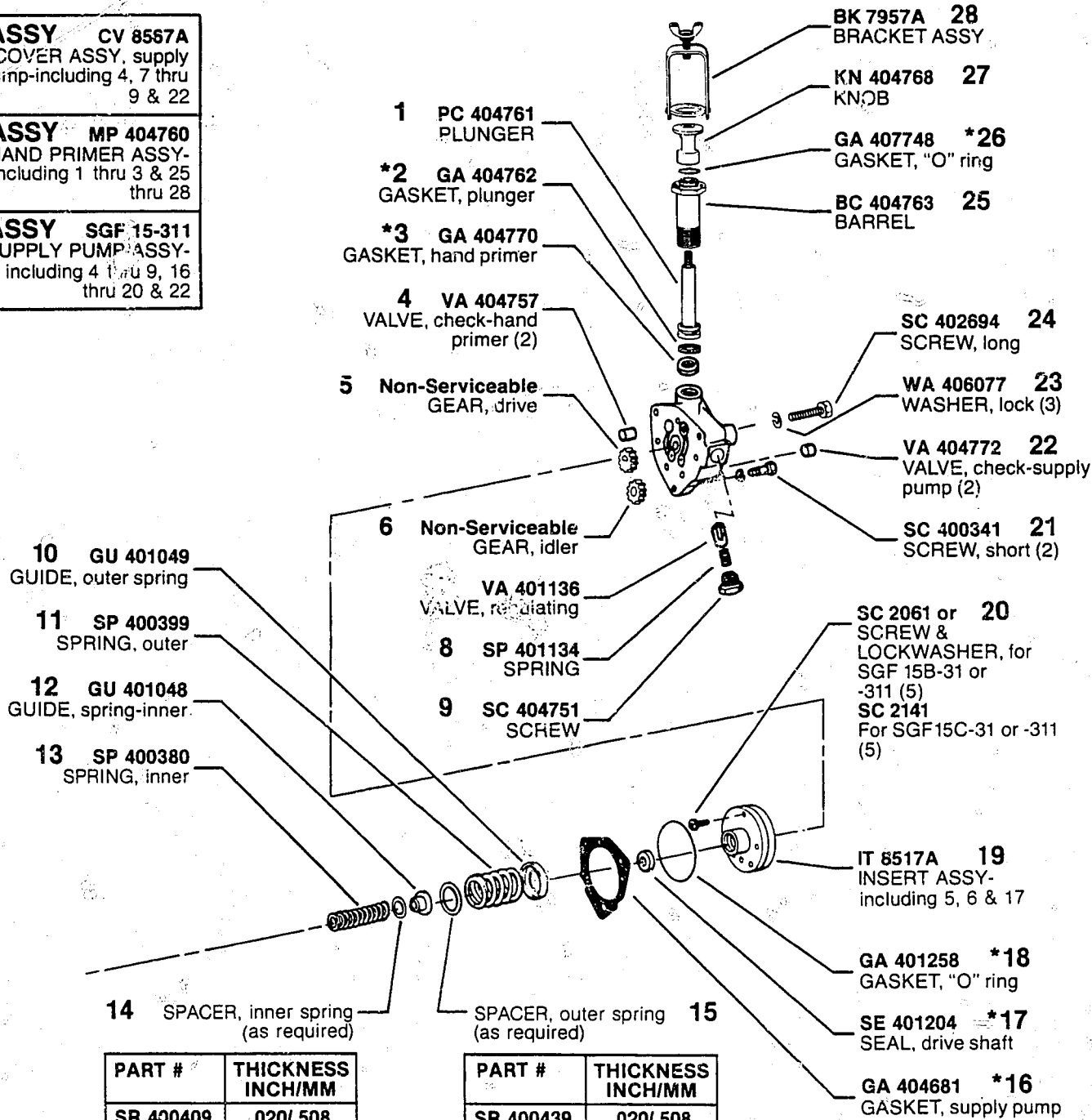
ASSY PL 401607
EXCESS FUEL
DEVICE ASSY-
including 4, 5, 8 thru
10 & 12 thru 15



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MODEL 100 6A 100A 9163

- ASSY CV 8557A**
COVER ASSY, supply pump-including 4, 7 thru 9 & 22
- ASSY MP 404760**
HAND PRIMER ASSY-including 1 thru 3 & 25 thru 28
- ASSY SGF 15-311**
SUPPLY PUMP ASSY-including 4 thru 9, 16 thru 20 & 22

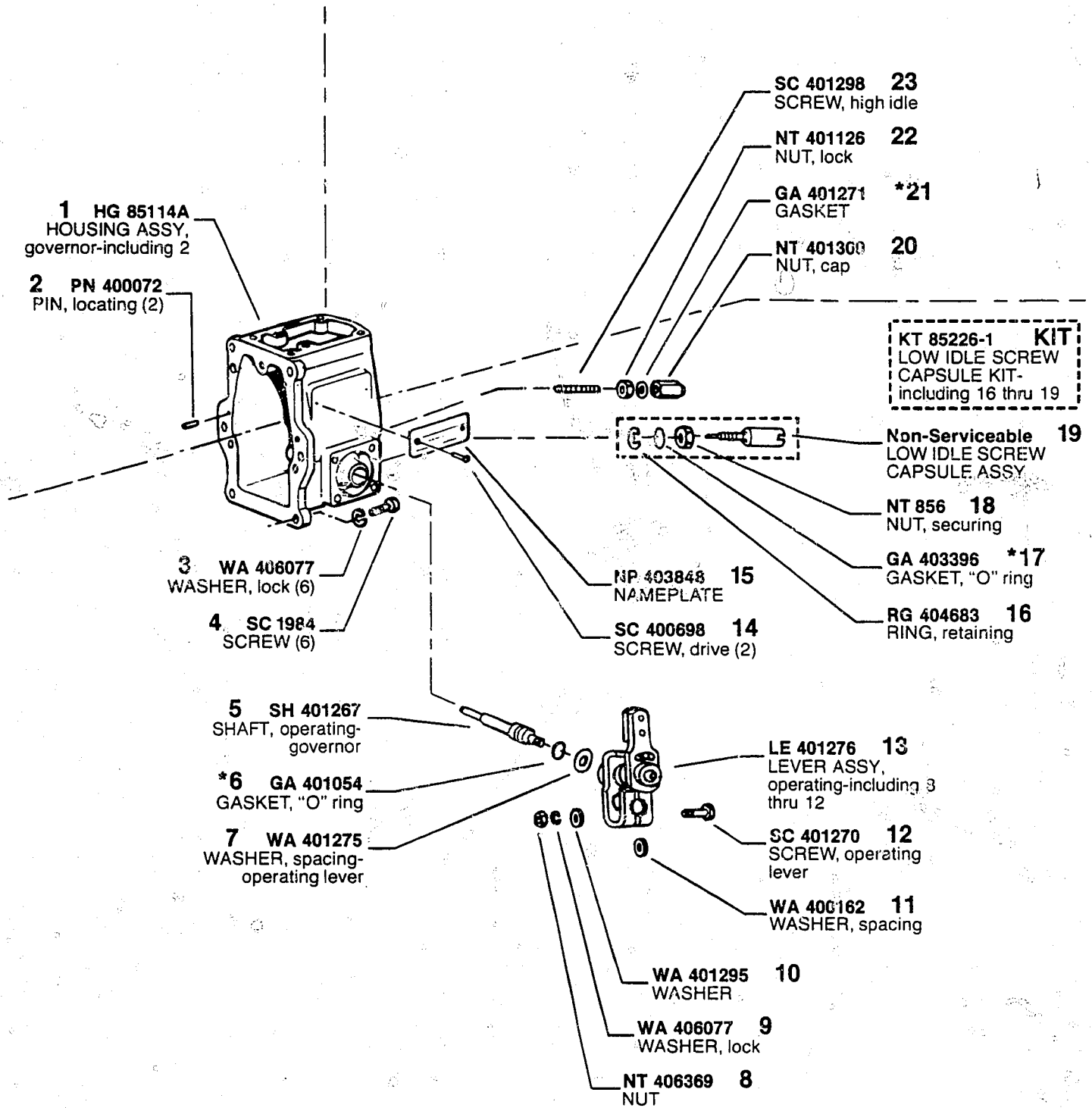


PART #	THICKNESS INCH/MM
SR 400409	.020/.508
SR 400410	.042/1.07
SR 400411	.058/1.47
SR 400412	.083/2.11
SR 400413	.177/4.50
SR 400414	.276/7.01
SR 400415	.010/.254
SR 400416	.005/.127

PART #	THICKNESS INCH/MM
SR 400439	.020/.508
SR 400440	.042/1.07
SR 400441	.058/1.47
SR 400442	.083/2.11
SR 400443	.156/3.96
SR 400444	.030/.762
SR 400445	.010/.254

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CALIBRATION SET-UP

Nozzle Holder TSE 77107-5
 High Pressure Tubing 1/4" O.D. x .062" x 32" Long (6.35 x 1.58 x 813 mm)
 Test Oil Viscor 1487 (at 100°F (38°C) at pump inlet)
 Supply Pump Pressure 40 psi (276 KPa) min at full load (rated) speed
 Lube Oil Pressure55 psi (380 KPa)
 INTRAVANCE™
 Camshaft Assy CT 85109A (Stamped Ident Code: 109)
 Advance: 14° Total
 Start: 300-500 RPM
 End: 1720-1920 RPM

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PROCEDURE: Refer to Service Instructions and use figures below.

**INTERNATIONAL HARVESTER
100 6A 100A 9163**

9163 (Code 1)

CODE DATA

Customer No. 675 955 C91
 Engine Model DT 414 (144 BHP)
 Application F 1466
 Governor RPM 50/2400
 Inner Spring Gap 2.75 ± .25 mm
 Outer Spring Precompression 1.75 ± .25 mm
 Cam Angle (Ref) 50°

Lift To Port Closing Requirement024"-.030"
 (0.60-0.75 mm)

Delivery Valve Opening Pressure 1150-1450 psi
 (7.929-9.998 MPa)

STEP	A	B	C	D
	Full Load	Puff Limiter Delivery Check	Peak Torque (from actual A delivery)	Cam Departure
RPM	2400	not applicable	1600	2475
DEL	*37.5		*+5.0	—

STEP	E	F	G	H
	High Speed Shut-Off	Droop Screw (from actual C delivery)	Low Idle	Starting Fuel Min Delivery
RPM	2800	1400	650	150
DEL	2cc Max	*-0.5	*11.5	10

*Permissible tolerances: Service Check: ± 2.5 cc/500 str
 Recalibration: ± 0.5 cc/500 str

STEP A: Max variation between cyl: 3.0 cc/500 str

STEP A thru G: cc/500 str

STEP H: cc/100 str