9550

A

UNITED TECHNOLOGIES DIESEL SYSTEMS

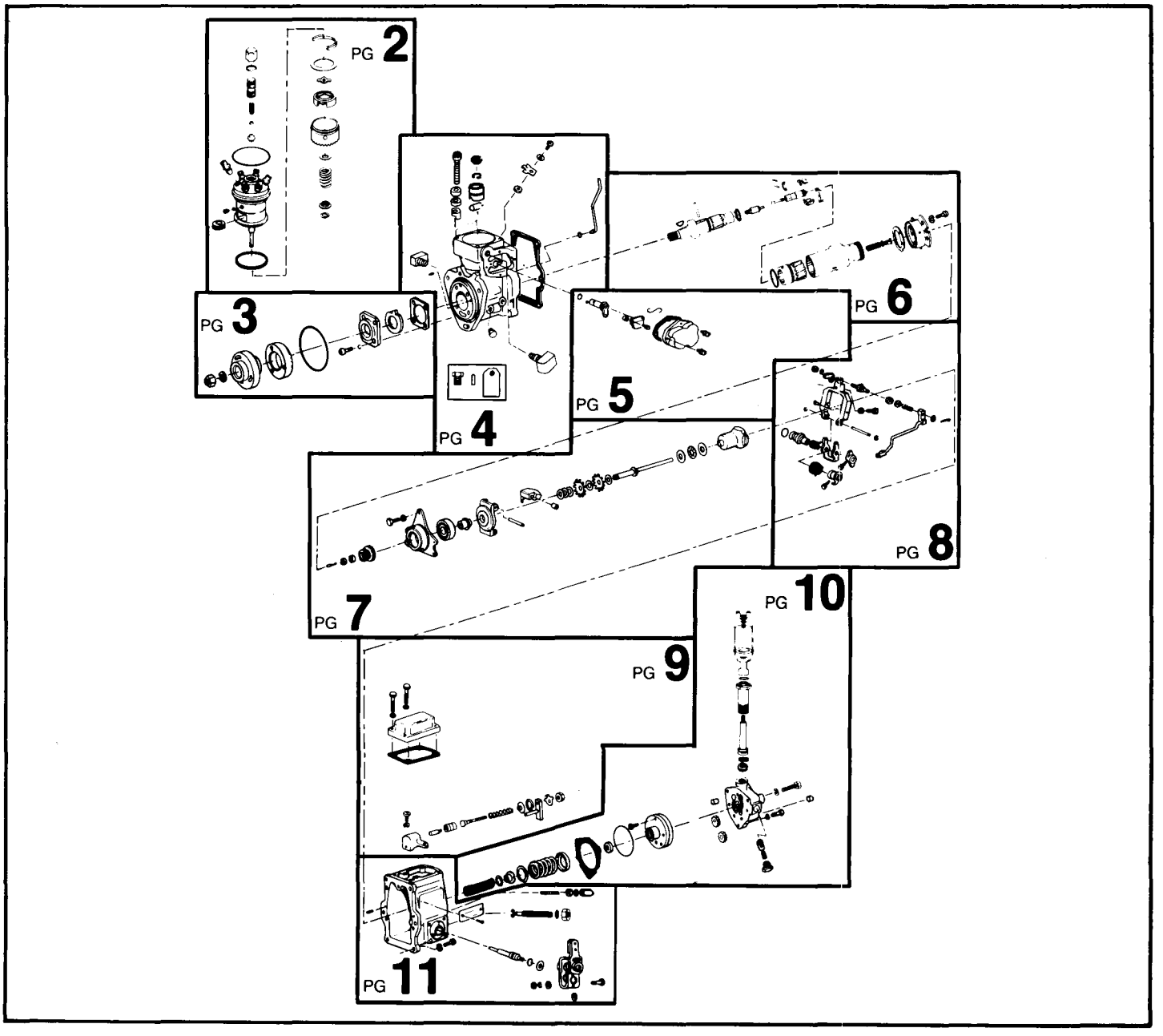
PUMP ROTATION:
Clockwise
FIRING ORDER:
1-5-3-6-2-4
MOUNTING:
L.H.
SPECIAL FEATURES:
Low Idle Screw Capsule

INTERNATIONAL HARVESTER
100 6A 100A 9550

Special Information:

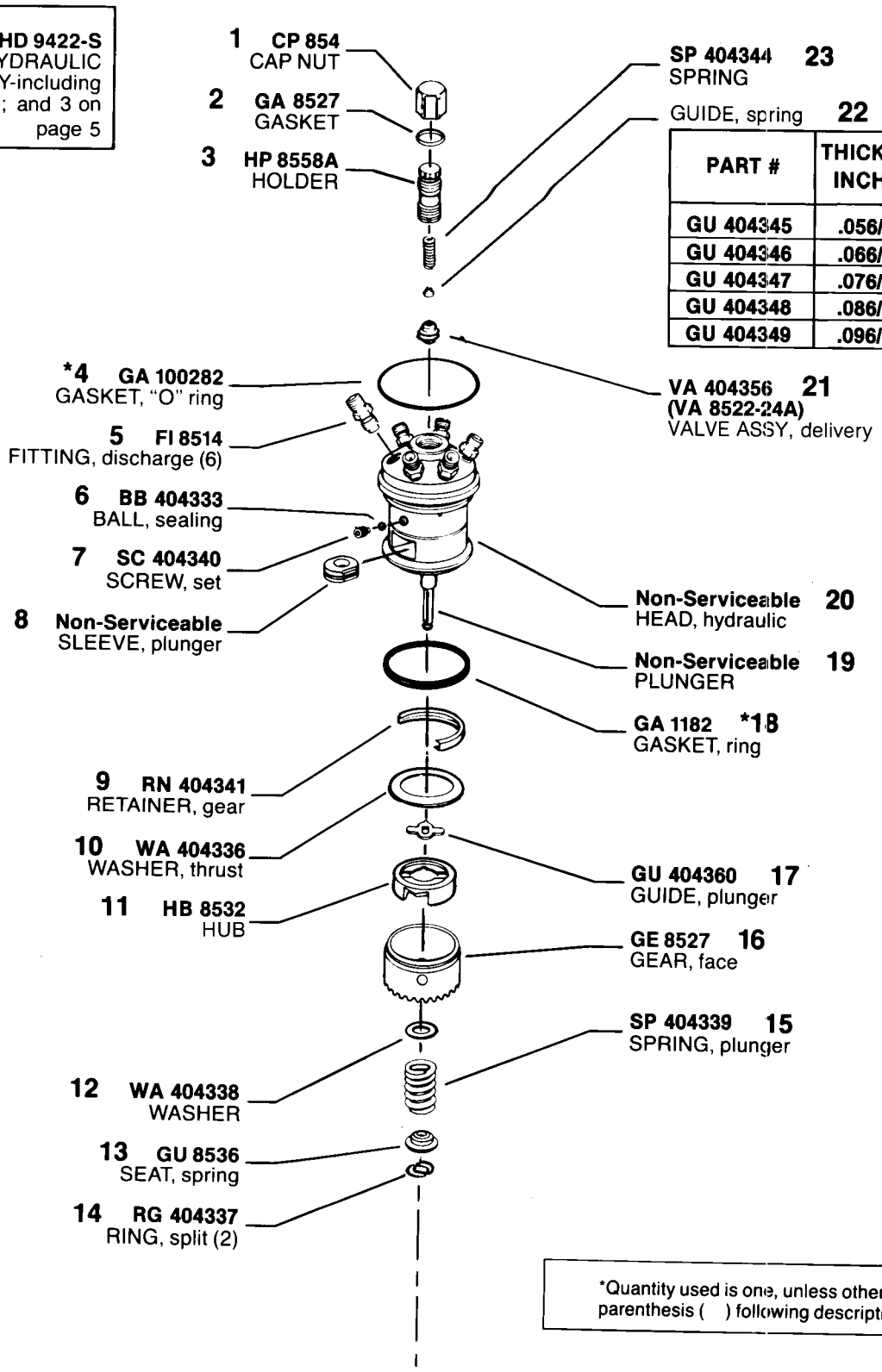
SERVICE PARTS

Following are all parts, part numbers, pump codes and calibrations for the *Model: 100 6A 100A 9550.* 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 9550

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

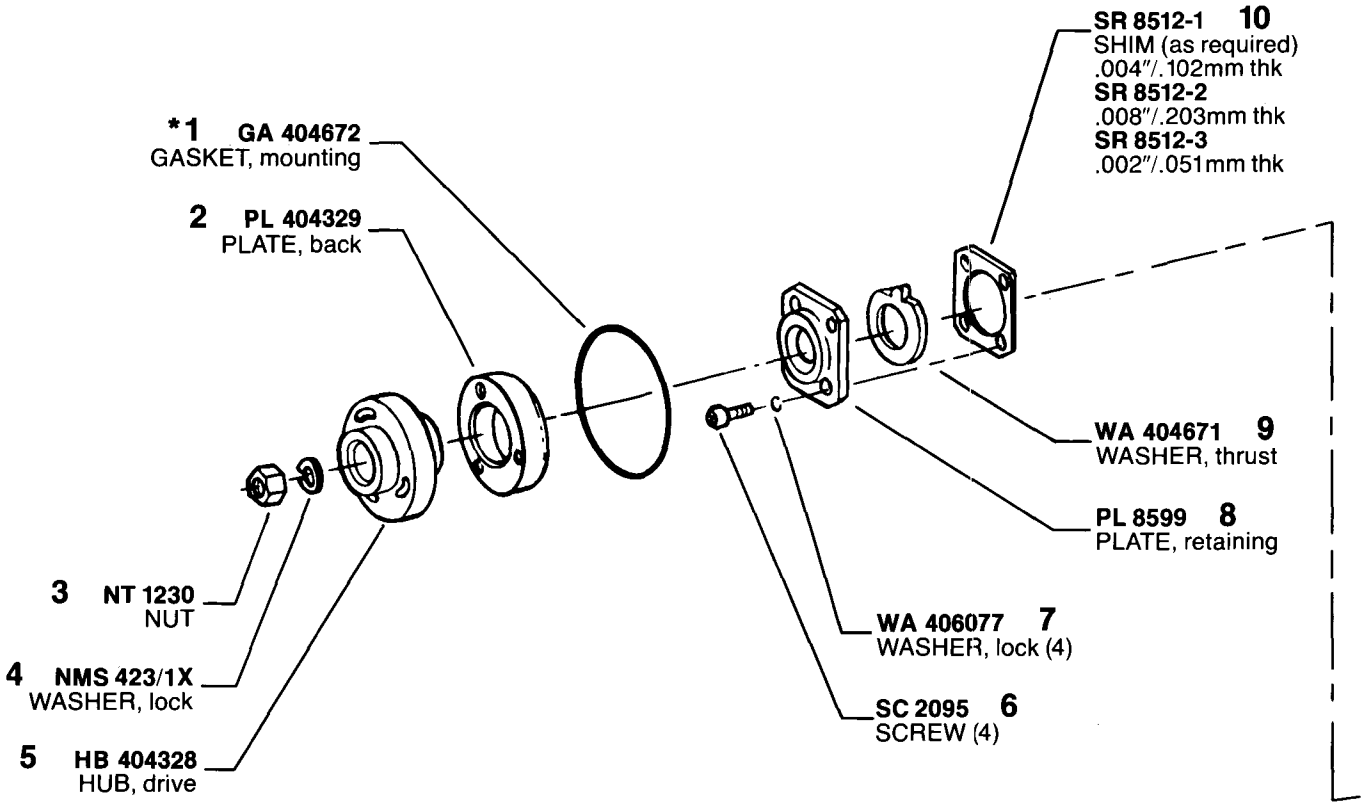


PART #	THICKNESS INCH/MM	COLOR CODE
GU 404345	.056/1.42	YELLOW
GU 404346	.066/1.68	RED
GU 404347	.076/1.93	BLUE
GU 404348	.086/2.18	BLACK
GU 404349	.096/2.44	WHITE

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

MODEL 100 6A 100A 9550

*Denotes parts in Repair Gasket Kit, KT 85195.



MODEL 100 6A 100A 9550

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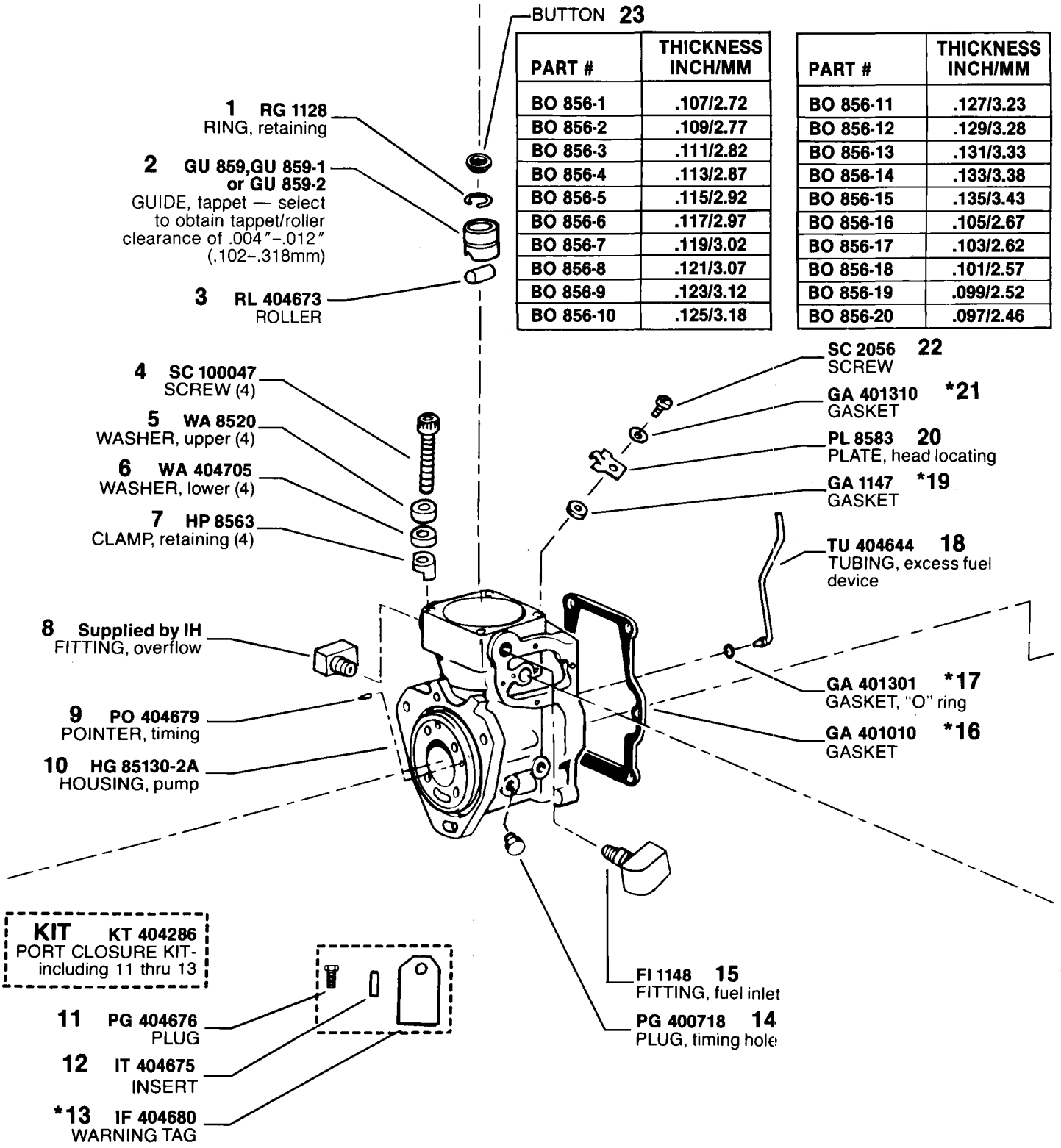

PART #	THICKNESS INCH/MM
BO 856-1	.107/2.72
BO 856-2	.109/2.77
BO 856-3	.111/2.82
BO 856-4	.113/2.87
BO 856-5	.115/2.92
BO 856-6	.117/2.97
BO 856-7	.119/3.02
BO 856-8	.121/3.07
BO 856-9	.123/3.12
BO 856-10	.125/3.18

PART #	THICKNESS INCH/MM
BO 856-11	.127/3.23
BO 856-12	.129/3.28
BO 856-13	.131/3.33
BO 856-14	.133/3.38
BO 856-15	.135/3.43
BO 856-16	.105/2.67
BO 856-17	.103/2.62
BO 856-18	.101/2.57
BO 856-19	.099/2.52
BO 856-20	.097/2.46

MODEL 100 6A 100A 9550

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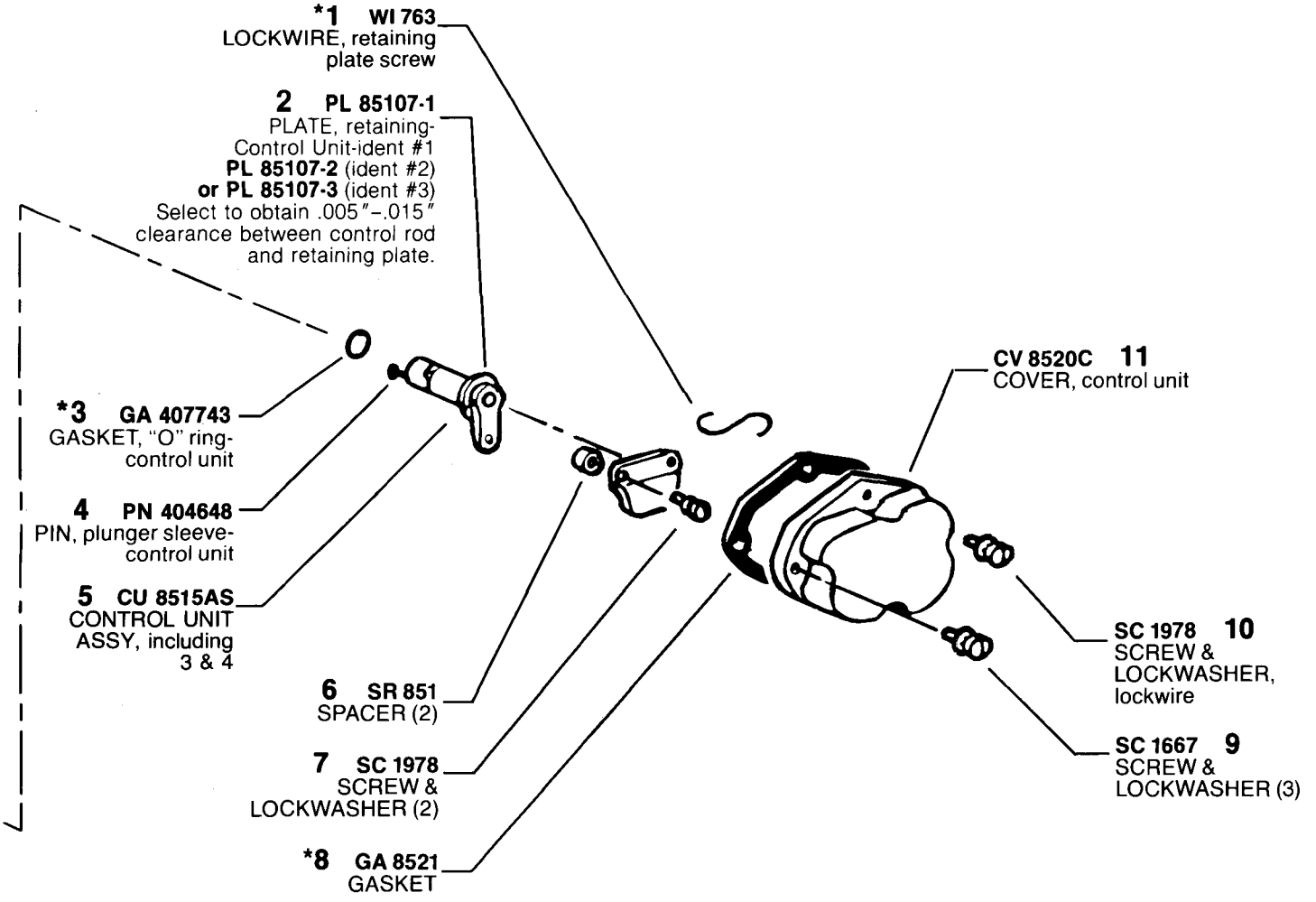
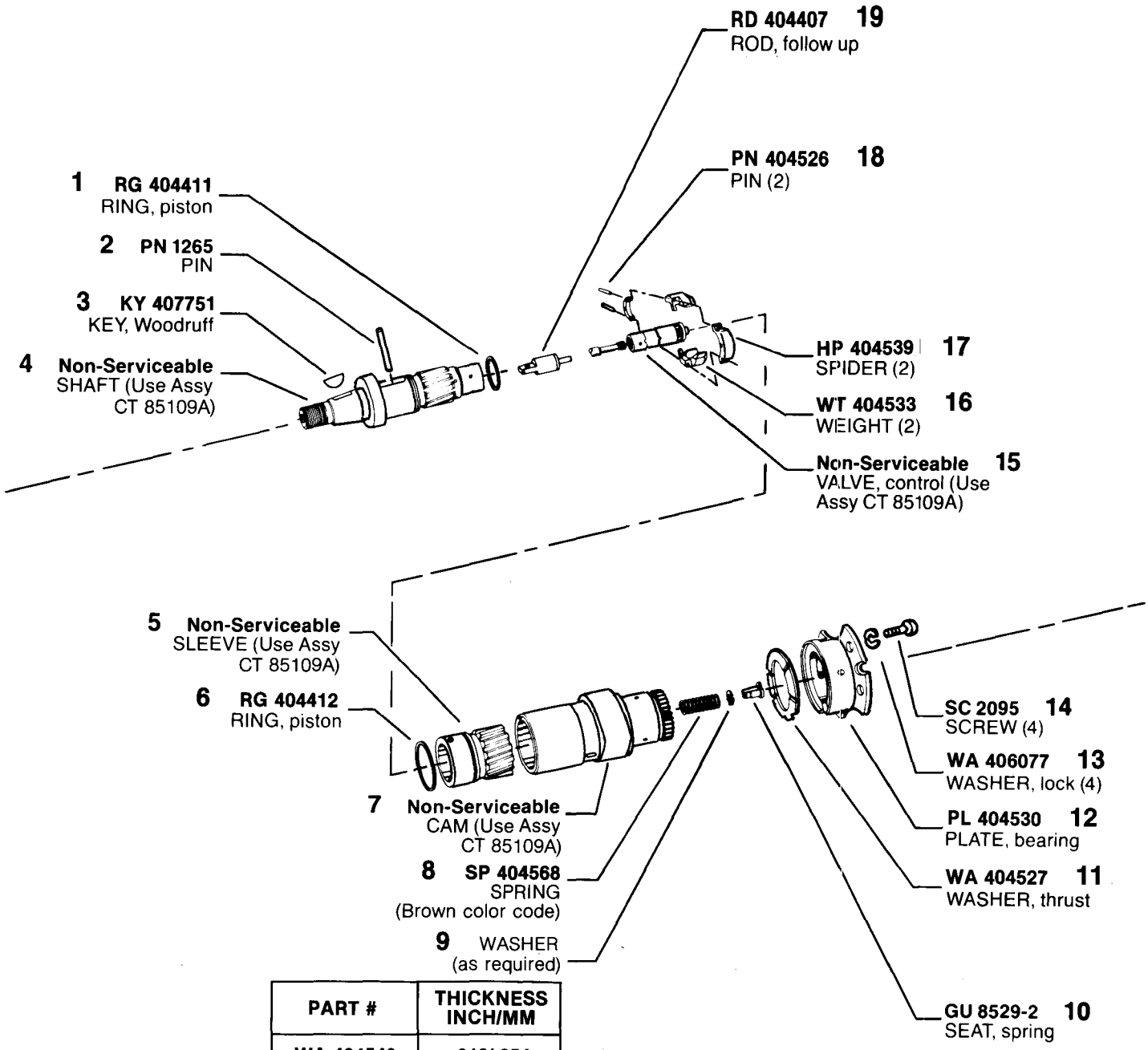


MODEL 100 6A 100A 9550

*Denotes parts in Repair Gasket Kit, KT 85195.

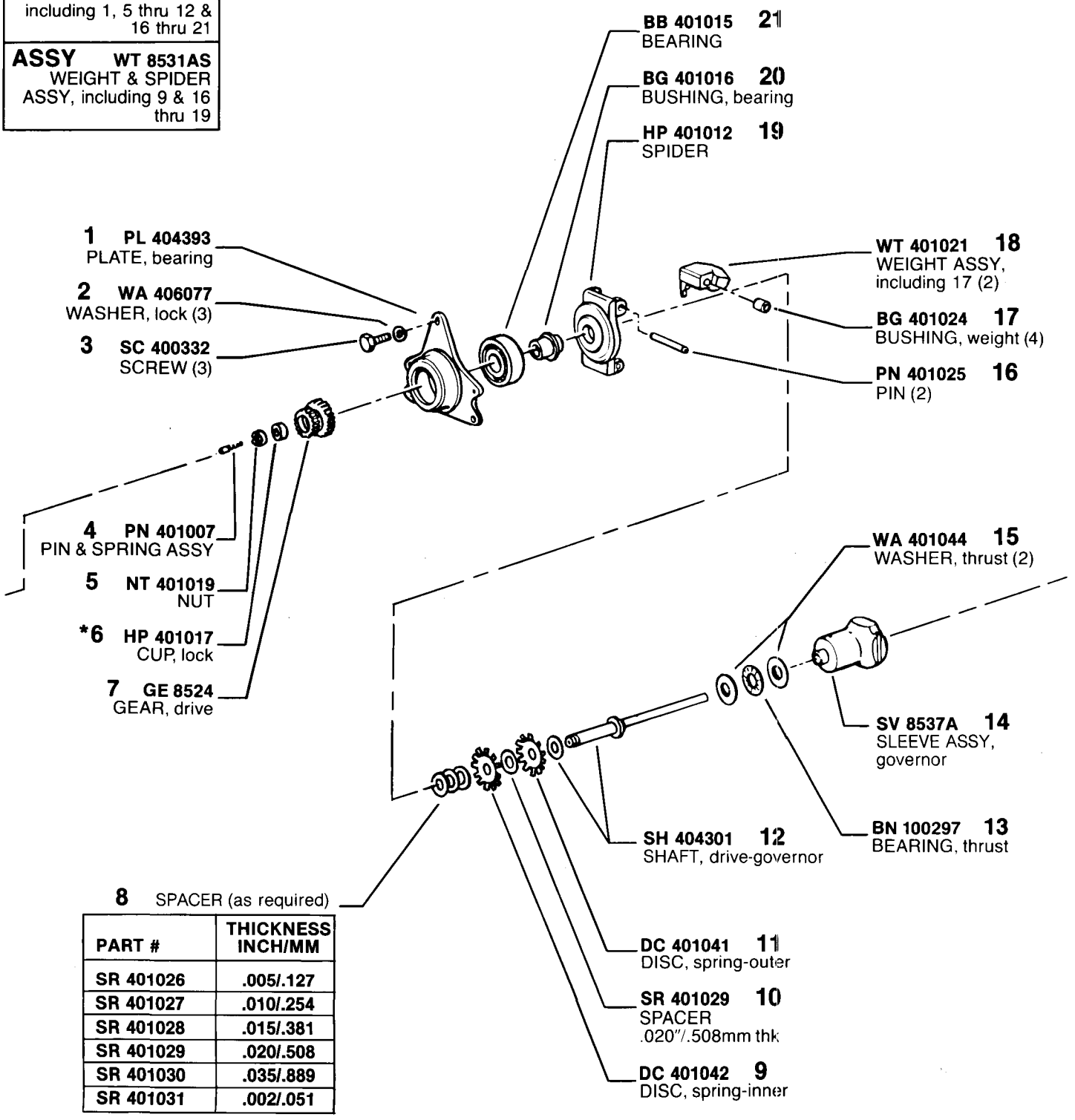
ASSY CT 85109A
INTRAVANCE®
CAMSHAFT ASSY-
including 1, 2, 4 thru 12
& 15 thru 19



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

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

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

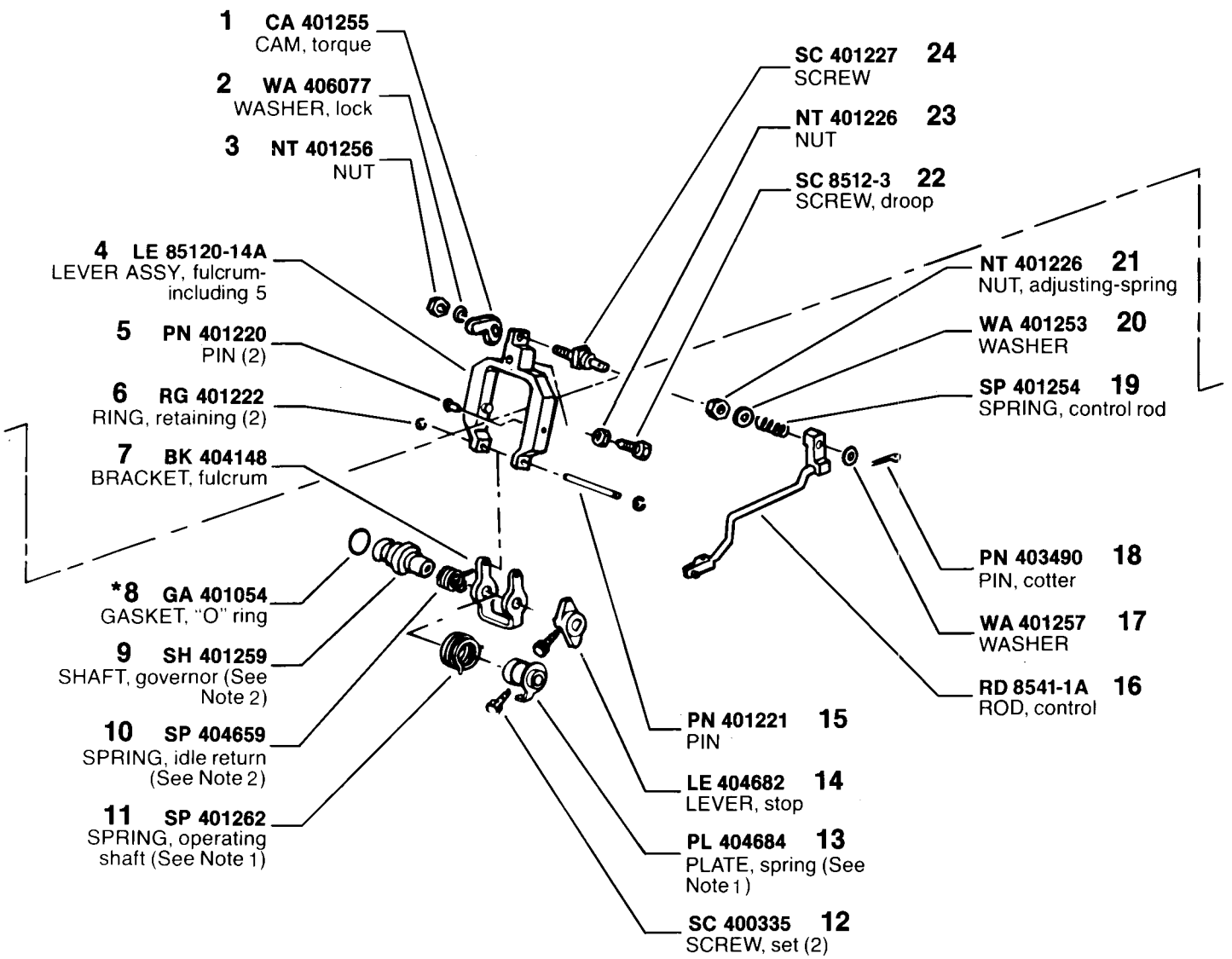


PART #	THICKNESS INCH/MM
SR 401026	.005/.127
SR 401027	.010/.254
SR 401028	.015/.381
SR 401029	.020/.508
SR 401030	.035/.889
SR 401031	.002/.051

MODEL 100 6A 100A 9550

*Denotes parts in Repair Gasket Kit, KT 85195.

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.

MODEL 100 6A 100A 9550

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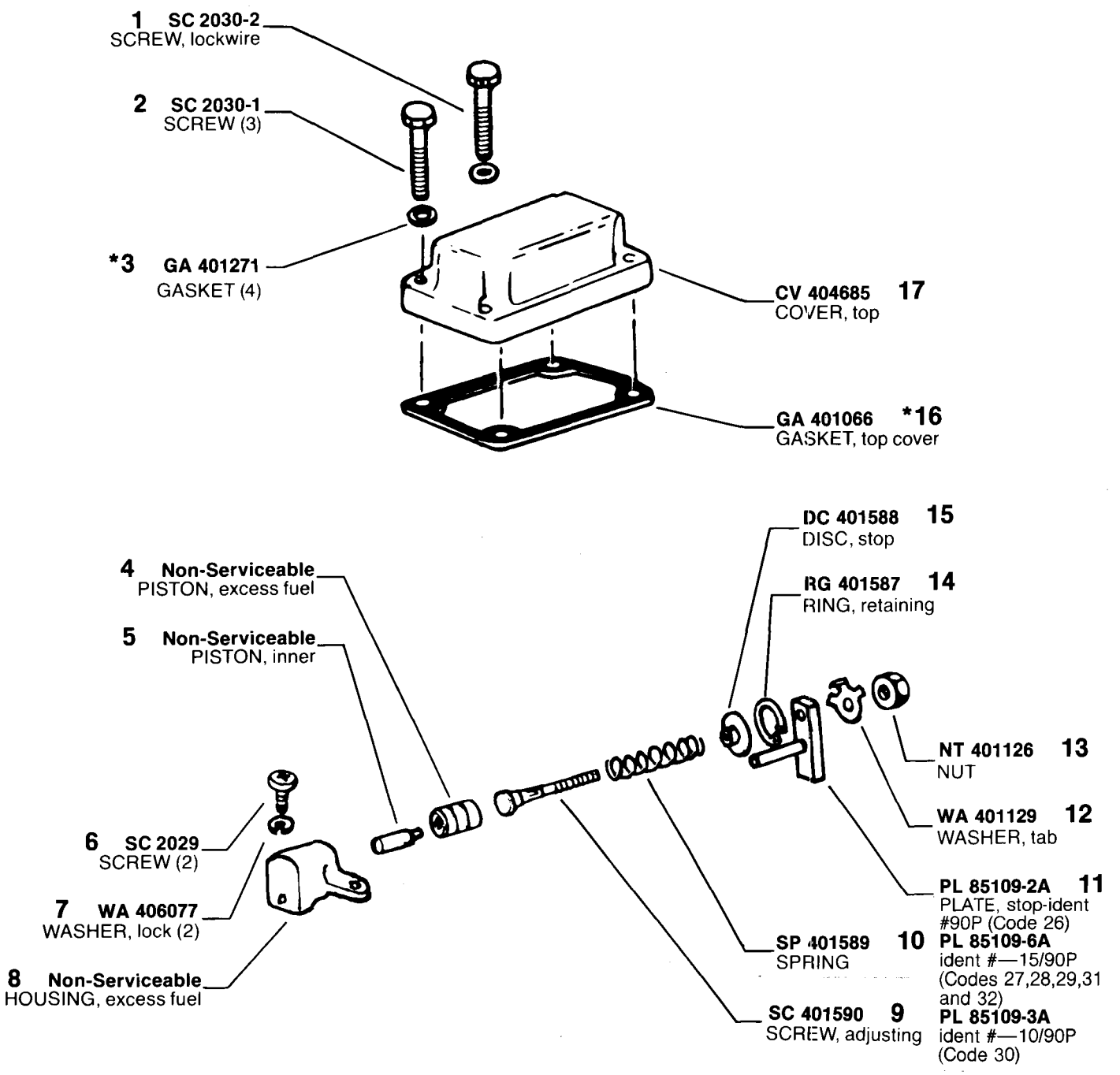
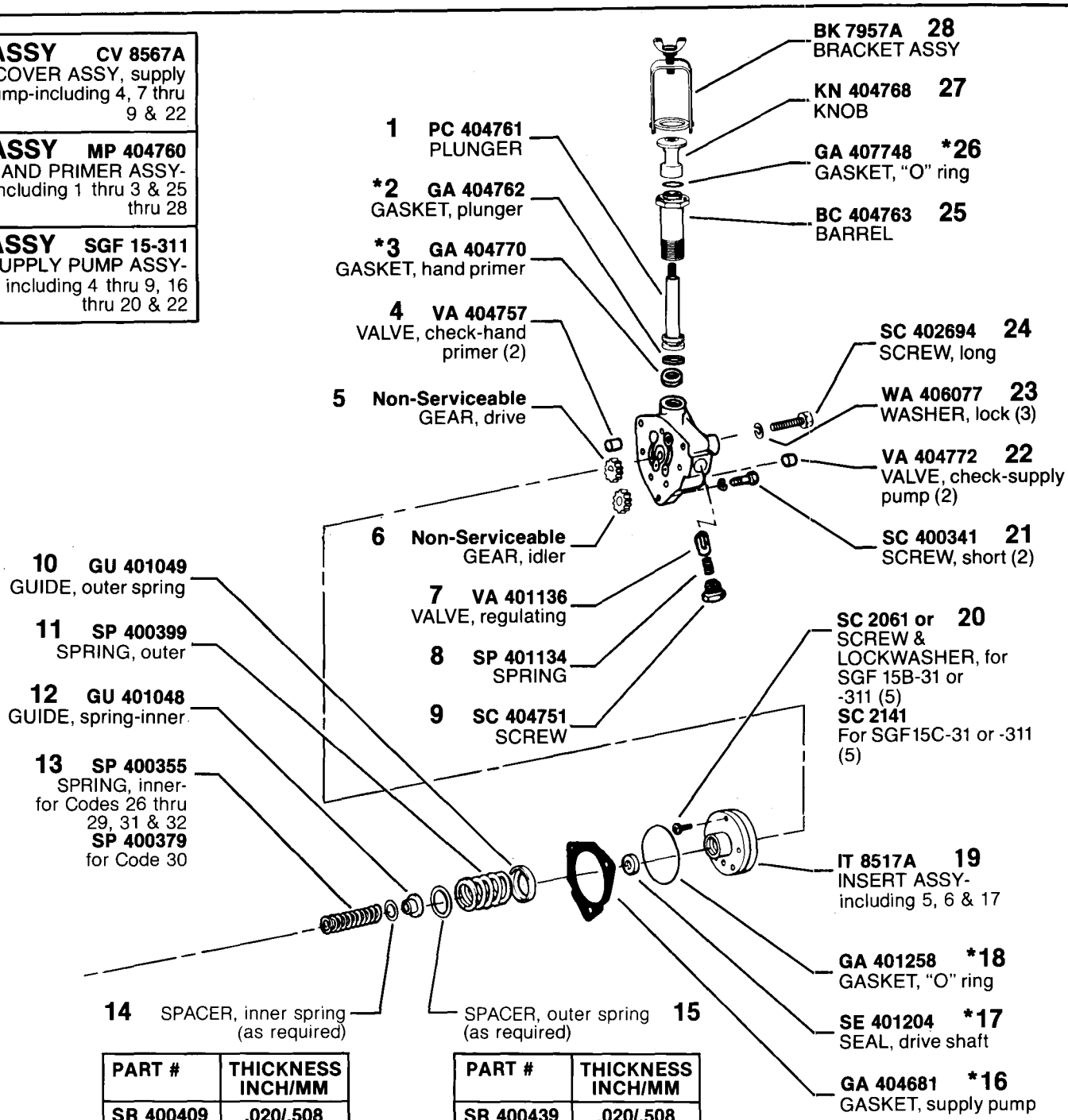
ASSY **PL 401607** EXCESS FUEL DEVICE ASSY- including 4, 5, 8 thru 10 & 12 thru 15



*Denotes parts in Repair Gasket Kit, KT 85195.

MODEL 100 6A 100A 9550

ASSY	**CV 8567A** 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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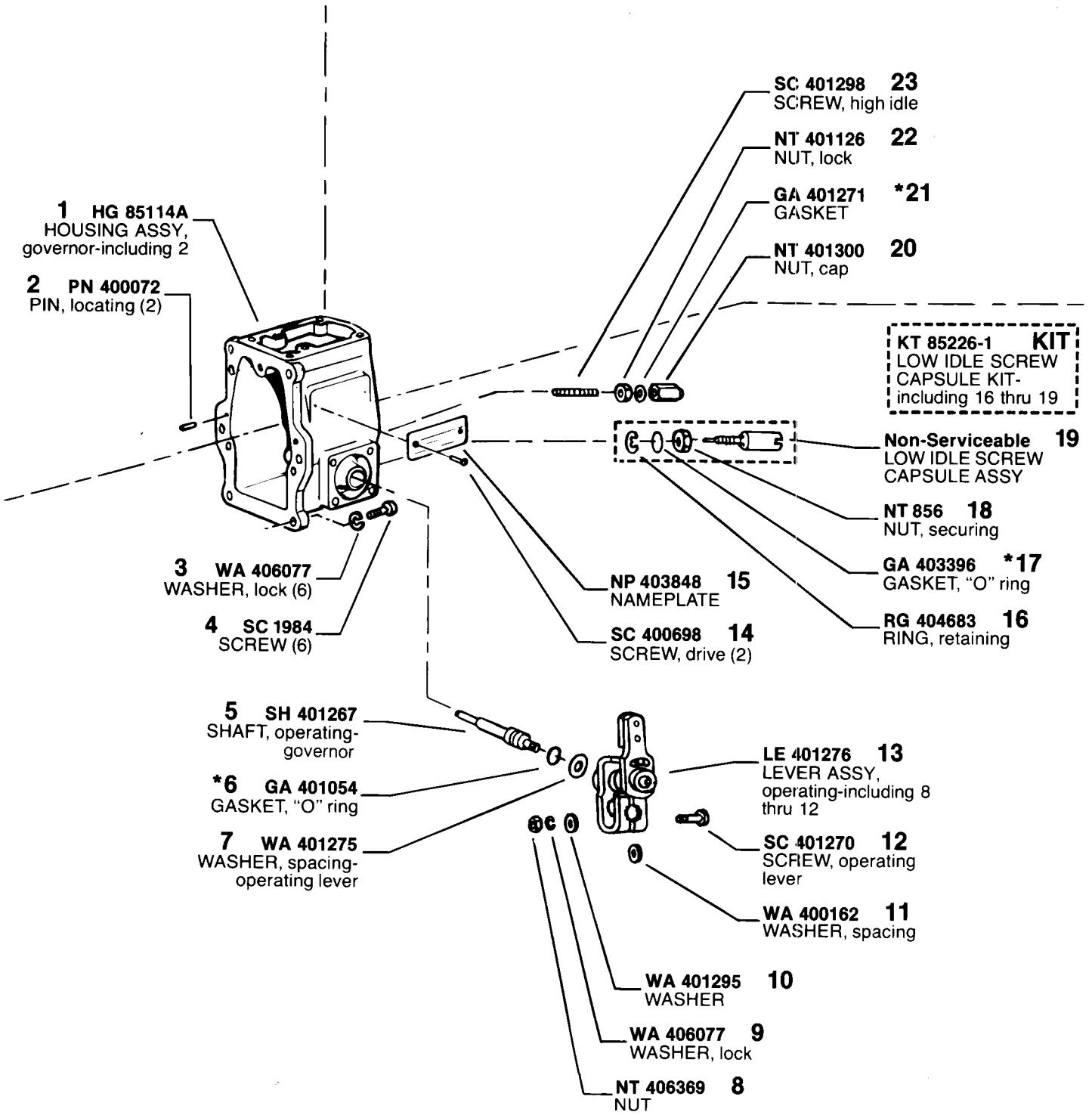

MODEL 100 6A 100A 9550

*Denotes parts in Repair Gasket Kit, KT 85195.

UNITED TECHNOLOGIES DIESEL SYSTEMS

CALIBRATION SET-UP
Nozzle Holder . . . . . .TSE 77107-5
High Pressure Tubing . . .¼" O.D. x .062" x 32" Long (6.35 x 1.58 x 813 mm)
Test Oil . . . . . .Viscor 1487 @ 100°F (38°C) at pump inlet
Supply Pump Pressure 40 psi (276 KPa) min at full load (rated) speed
Lube Oil Pressure . . . . .55 psi (380 KPa)
INTRAVANCE®
Camshaft Assy . . . . . .CT 85109A (Stamped Ident Code: 109)
Advance: 14° Total
Start: 300-500 RPM
End: 1720-1920 RPM

PROCEDURE: Refer to Service Instructions and use figures below.

INTERNATIONAL HARVESTER
100 6A 100A 9550

9550 (Code 26)
CODE DATA

Customer No. 691 335 C91
Engine Model ..... D 466 (140 BHP)
Application ..... 3488 Tractor
Governor RPM..... 700/2400
Inner Spring Gap ..... 3.50 ± .25 mm
Outer Spring Precompression ..... 1.25 ± .25 mm
Cam Angle (Ref).....60°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)
Delivery Valve Opening Pressure .....1150-1450 psi (7.929-9.998 MPa)

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM DEL	**2400** ***35.5**	**not applicable**	**1700** ***+1.0**	**2475** **—**

STEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM DEL	**2900** **2cc Max**	**1400** ***−1.0**	**700** ***6.0**	**150** **10**

*Permissable 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

9550 (Code 27)
CODE DATA

Customer No. 180 2253 C91
Engine Model ..... D 436 (130 BHP)
Application ..... 3688 Tractor
Governor RPM..... 700/2400
Inner Spring Gap ..... 3.40 ± .25 mm
Outer Spring Precompression ..... 1.25 ± .25 mm
Cam Angle (Ref).....70°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)
Delivery Valve Opening Pressure .....1150-1450 psi (7.929-9.998 MPa)

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM DEL	**2400** ***35.0**	**not applicable**	**1800** ***+4.0**	**2475** **—**

STEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM DEL	**2900** **2cc Max**	**1500** ***−1.5**	**700** ***6.0**	**150** **10**

*Permissable 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

9550 (Code 28)

CODE DATA

Customer No. 691 159 C91
Engine Model ..... DT 436B (160 BHP)
Application ..... 5088 Tractor
Governor RPM 800/2400
Inner Spring Gap ..... 3.50 ± .25 mm
Outer Spring Precompression ..... 2.10 ± .25 mm
Cam Angle (Ref) ..... 75°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)

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

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM DEL	**2400** ***37.5**	**not applicable**	**1800** *** + 4.5**	**2475** **—**

STEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM DEL	**2900** **2cc Max**	**1500** *** − 0.5**	**800** ***7.0**	**150** **10**

*Permissable 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

9550 (Code 29)

CODE DATA

Customer No. 691 180 C91
Engine Model ..... DT 466B (185 BHP)
Application ..... 5288 Tractor
Governor RPM 830/2400
Inner Spring Gap ..... 3.35 ± .25 mm
Outer Spring Precompression ..... 2.10 ± .25 mm
Cam Angle (Ref) ..... 65°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)

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

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM DEL	**2400** ***43.5**	**not applicable**	**1800** *** + 4.5**	**2475** **—**

TEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM DEL	**2900** **2cc Max**	**1500** *** + 0.5**	**830** ***7.0**	**500** **(See Note Below)**

*Permissable tolerances: Service Check: ± 2.5 cc/500 str
Recalibration: ± 0.5 cc/500 str
STEP A: Max variation between cyl: 4.0 cc/500 str
STEP A thru H: cc/500 str
STEP I: cc/100 str
NOTE: Run pump at 500 RPM (operating lever in shut-off position). If average fuel delivery is greater than 2cc/500 str, engine shut-off may be prevented. Refer to M-100 Service Bulletin #S2 for further information.

9550 (Code 30)

CODE DATA

Customer No. 691 019 C92
Engine Model ..... DT 466B (200 BHP)
Application ..... FE 3788
Governor RPM 900/2500
Inner Spring Gap ..... 3.85 ± .25 mm
Outer Spring Precompression ..... 3.25 ± .25 mm
Cam Angle (Ref) ..... 60°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)
Delivery Valve Opening Pressure ..... 1150-1450 psi (7.929-9.998 MPa)

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM DEL	**2500** ***46.5**	**not applicable**	**2000** *** + 0.5**	**2575** **—**

STEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM DEL	**3050** **2cc Max**	**1700** *** + 0**	**900** ***7.0**	**150** **10**

*Permissable tolerances: Service Check: ± 2.5 cc/500 str
Recalibration: ± 0.5 cc/500 str
STEP A: Max variation between cyl: 4.0 cc/500 str
STEP A thru G: cc/500 str
STEP H: cc/100 str

9550 (Code 31)

CODE DATA

Customer No. 691 057 C93
Engine Model ..... DT 466B (175 BHP)
Application ..... FE 3588
Governor RPM 900/2400
Inner Spring Gap ..... 3.85 ± .25 mm
Outer Spring Precompression ..... 3.25 ± .25 mm
Cam Angle (Ref) ..... 75°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)
Delivery Valve Opening Pressure ..... 1150-1450 psi (7.929-9.998 MPa)

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM DEL	**2400** ***41.0**	**not applicable**	**1900** *** + 2.5**	**2475** **—**

STEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM DEL	**2900** **2cc Max**	**1600** *** + 0**	**900** ***7.0**	**150** **10**

*Permissable tolerances: Service Check: ± 2.5 cc/500 str
Recalibration: ± 0.5 cc/500 str
STEP A: Max variation between cyl: 4.0 cc/500 str
STEP A thru G: cc/500 str
STEP H: cc/100 str

9550 (Code 32)

CODE DATA

Customer No. 691 056 C93
Engine Model ..... DT 436B (155 BHP)
Application ..... FE 3388
Governor RPM..... 900/2400
Inner Spring Gap ..... 3.85 ± .25 mm
Outer Spring Precompression ..... 3.25 ± .25 mm
Cam Angle (Ref).....75°

Lift To Port Closing Requirement ..... .024"-.030" (0.60-0.75 mm)

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

STEP	A Full Load	B Puff Limiter Delivery Check	C Peak Torque (from actual A delivery)	D Cam Departure
RPM	**2400**	**not applicable**	**1800**	**2475**
DEL	***36.5**		***+3.5**	**—**

STEP	E High Speed Shut-Off	F Droop Screw (from actual C delivery)	G Low Idle	H Starting Fuel Min Delivery
RPM	**3000**	**1500**	**900**	**150**
DEL	**2cc Max**	***−1.5**	***7.0**	**10**

*Permissable 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