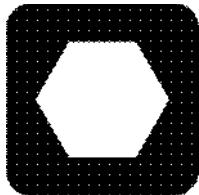


# **RT95**

## **Powershift**

# **Parts**

# **Manual**



# ***Ditch Witch®***

## **RT95 Powershift**

ISSUE NO. 09PL-07/11

For Replacement Copy Order **P/N 053-122**

This manual contains information concerning the following models:  
**RT95 Powershift Tractor**

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# FOREWORD

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This manual contains illustrated parts lists to help you select quality ProTech<sup>®</sup> Replacement parts for your Ditch Witch<sup>®</sup> equipment. Using other replacement parts will lessen the productivity of your equipment.

- ◆ Part numbers enclosed in a box are no longer available from The Charles Machine Works, Inc. Your local Ditch Witch dealer may be able to locate the part for you.
- ◆ Footnotes provide more information to help you identify parts shown in the manual.
- ◆ Assembly instructions and Tech Bits articles referenced in footnotes are available through your local Ditch Witch dealer.
- ◆ Description and specifications in this book were current at publication. However, The Charles Machine Works, Inc. reserves the right to improve equipment, so this manual might not reflect the most current improvements.
- ◆ Instructions on recommended equipment use and maintenance are in the Operator's Manual that was shipped with your equipment.

## **Keep the following in mind when ordering ProTech replacement parts:**

- ◆ Specify parts you need by part number and description, not by illustration reference numbers.
- ◆ Have equipment model and serial number on hand to help ensure you get the right parts for your machine whether it's old or new.

**Thank you for buying and using Ditch Witch equipment and ProTech replacement parts.**



# WARRANTY

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DW WARRANTY Policy  
July, 2005

## **POLICY 1: DITCH WITCH® EQUIPMENT AND REPLACEMENT PARTS LIMITED WARRANTY POLICY**

Subject to the limitation and exclusions herein, free replacement parts will be provided at any authorized Ditch Witch dealership for any Ditch Witch equipment or parts manufactured by The Charles Machine Works, Inc. (CMW) that fail due to a defect in material or workmanship within one (1) year of first commercial use (Exception: 2 years for all SK500 Attachments). Free labor will be provided at any authorized Ditch Witch dealership for installation of parts under this warranty during the first year following "initial commercial" use of the serial numbered Ditch Witch equipment on which it is installed. The customer is responsible for transporting their equipment to an authorized Ditch Witch dealership for all warranty work.

### **EXCLUSIONS FROM PRODUCT WARRANTY**

- All incidental or consequential damages.
- All defects, damages, or injuries caused by misuse, abuse, improper installation, alteration, neglect, or uses other than those for which products were intended.
- All defects, damages, or injuries caused by improper training, operation, or servicing of products in a manner inconsistent with manufacturer's recommendations.
- All engines and engine accessories (these are covered by original manufacturer's warranty).
- Tires, belts, and other parts which are subject to another manufacturer's warranty. (Such warranty will be available to purchaser.)
- ALL IMPLIED WARRANTIES NOT EXPRESSLY STATED HEREIN, INCLUDING ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY.

IF THE PRODUCTS ARE PURCHASED FOR COMMERCIAL PURPOSES, AS DEFINED BY THE UNIFORM COMMERCIAL CODE, THEN THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF AND THERE ARE NO IMPLIED WARRANTIES OF ANY KIND WHICH EXTEND TO A COMMERCIAL BUYER. ALL OTHER PROVISIONS OF THIS LIMITED WARRANTY APPLY INCLUDING THE DUTIES IMPOSED.

Ditch Witch products have been tested to deliver acceptable performance in most conditions. This does not imply they will deliver acceptable performance in all conditions. Therefore, to assure suitability, products should be operated under anticipated working conditions prior to purchase.

Defects will be determined by an inspection within thirty (30) days of the date of failure of the product or part by CMW or its authorized dealer. CMW will provide the location of its inspection facilities or its nearest authorized dealer upon inquiry. CMW reserves the right to supply remanufactured replacement parts under this warranty as it deems appropriate.

Extended warranties are available upon request from your local Ditch Witch dealer or CMW.

Some states do not allow exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply. Further, some states do not allow exclusion of or limitation of how long an implied warranty lasts, so the above limitation may not apply. This limited warranty gives product owner specific legal rights and the product owner may also have other rights which vary from state to state.

For information regarding this limited warranty, contact CMW's Product Support Department, P.O. Box 66, Perry, OK 73077-0066, or contact your local Ditch Witch dealer.

# CONTENTS

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## Decals

Decal Location - RT95 .....	8
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## Engine Components

Cold Start Kit .....	26
John Deere Engine .....	14
John Deere Engine Service .....	16
Muffler Guard Kit .....	22
Muffler Support .....	20
Muffler/Air Filter .....	18
Radiator Support Kit .....	28
Radiator/ Split Cooler .....	24

## Power Train

Axle - Axle Housing - Rigid .....	60
Axle - Axle Housing - Steerable .....	48
Axle - Bevel Gear / Pinion Set .....	42
Axle - Differential - Rigid .....	52
Axle - Differential - Steerable .....	54
Axle - Diff Lock - Steerable / Rigid .....	50
Axle - Double Joint - Steerable .....	44
Axle - Potentiometer - Steerable .....	58
Axle - Reduction Gears - Rigid .....	64
Axle - Swivel Housing / Steering Cylinder .....	46
Axle - Wheel Hub / Reduction Gear .....	56
Axle - Wheel Hub - Rigid .....	62
Brake Caliper - Powershift .....	70
Brake Caliper Service .....	72
Differential .....	36
Heavy Duty Brake Kit .....	80
Powershift Drive Line .....	66
Powershift Transmission .....	32
Park Brake .....	78
Service Brake System - Begins .....	74
Service Brake System - Ends .....	76
Tilt Frame Differential Mount - RT90/95/115 .....	38
Tilt Frame Differential Mount - RT95M/95H/RT115 .....	40
Tire/Wheel (38x18-20 E10TL) .....	68
Transfer Case .....	34

## Frame Components

4-Post ROPS .....	116
Air Conditioning Kit .....	126
Backfill Blade Assembly .....	114
Battery Installation .....	102
Cab Heater Assembly .....	122
Cab Kit .....	118
Canopy & Light Kit .....	128
Counterweight/Grille (RT Series) - Begins .....	96
Counterweight/Grille (RT Series) - Ends .....	94
Engine Enclosure .....	86
Fenders/Covers .....	88
Front Counterweight .....	84
Fuel Tank .....	104
Hydraulic Reservoir .....	108
Seat Platform .....	110

Seat Swivel & Base .....	112
Sound Blankets .....	130
Tape Dispenser .....	132
Tilt Steering .....	98
Trench Depth Meter Module .....	90
Trench Depth Meter/Odometer Mount .....	92

## Control Components

BFB Control .....	144
BFB Cylinder Guard .....	152
Foot Throttle .....	140
Ground Speed Direction Hand Control .....	136
Hand Throttle .....	138
Hydrostatic Pump Linkage - Begins .....	150
Hydrostatic Pump Linkage - Ends .....	148
Powershift Lever .....	142
Rear Steer Control .....	146

## Hydraulics

**\*See Technical Supplement for further Hydraulic Information ..... #053-127**

Auxiliary Hydraulics .....	160
Auxiliary Drive Lubrication .....	162
BFB Hydraulics .....	166
BFB Valve .....	168
Frame Tilt Hydraulics .....	174
Ground Drive Motor Hydraulics .....	164
Hydraulic Control Valve - 3-spool .....	178
Hydraulic Cylinder (2x1x3.38) .....	180
Hydraulic Cylinder (2x1.25x8) .....	182
Hydraulic Cylinder (3x1.75x8) .....	184
Hydraulic Filter .....	156
No Frame Tilt/No Rear Steer Option .....	176
Power Steering Valve Hydraulics .....	170
Powershift Manifold Hydraulics .....	158
Rear Steer Hydraulics .....	172

## Electrical

**\*See Technical Supplement for further Electrical Information ..... #053-127**

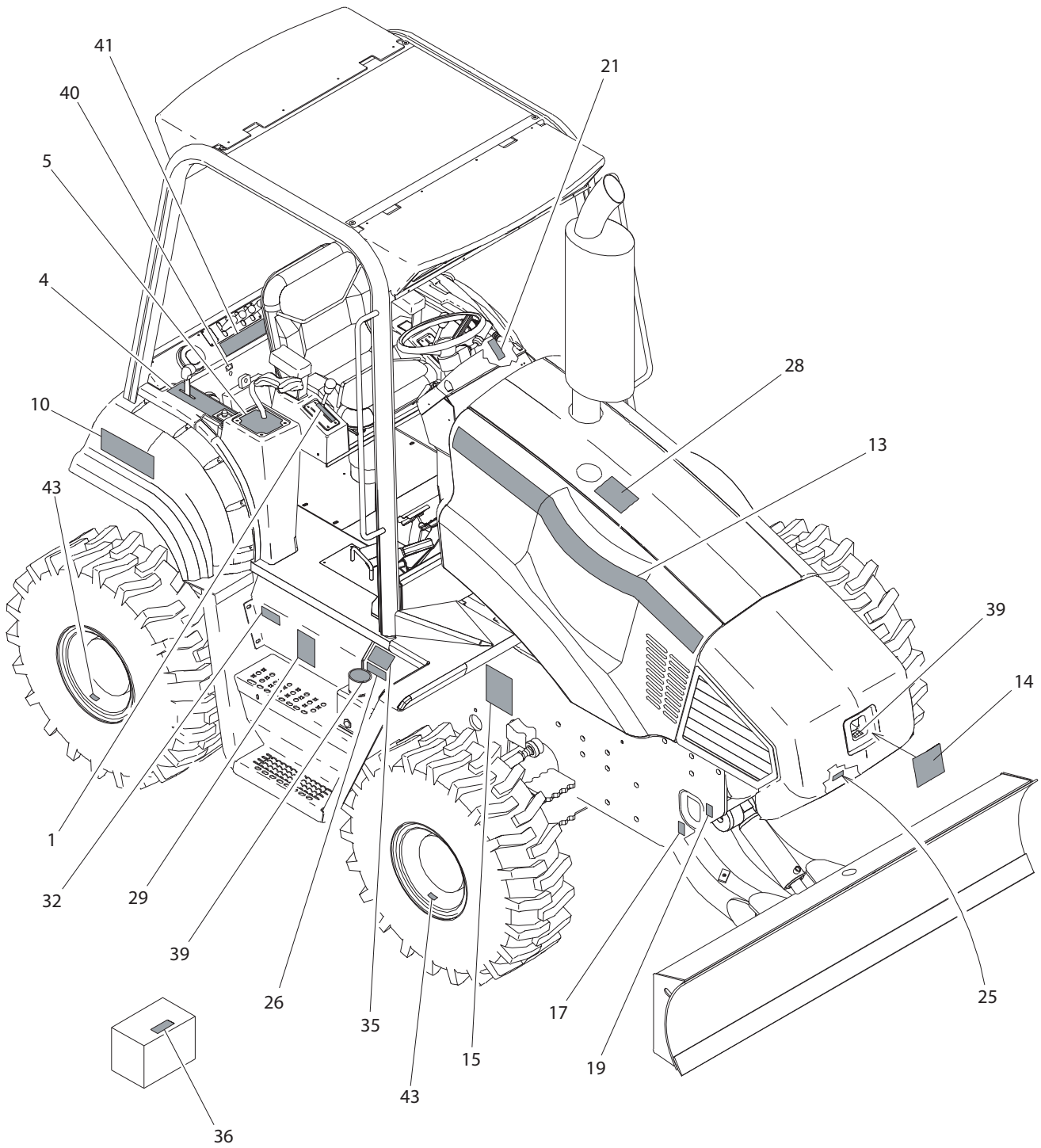
## Miscellaneous

Bolt/Nut Torque Chart .....	190
Filters .....	194
Optional Kits .....	194
Parts Manual Change Request .....	195
Related Publications .....	194
Replacement O-Ring Chart .....	193
Warranty Registration .....	198

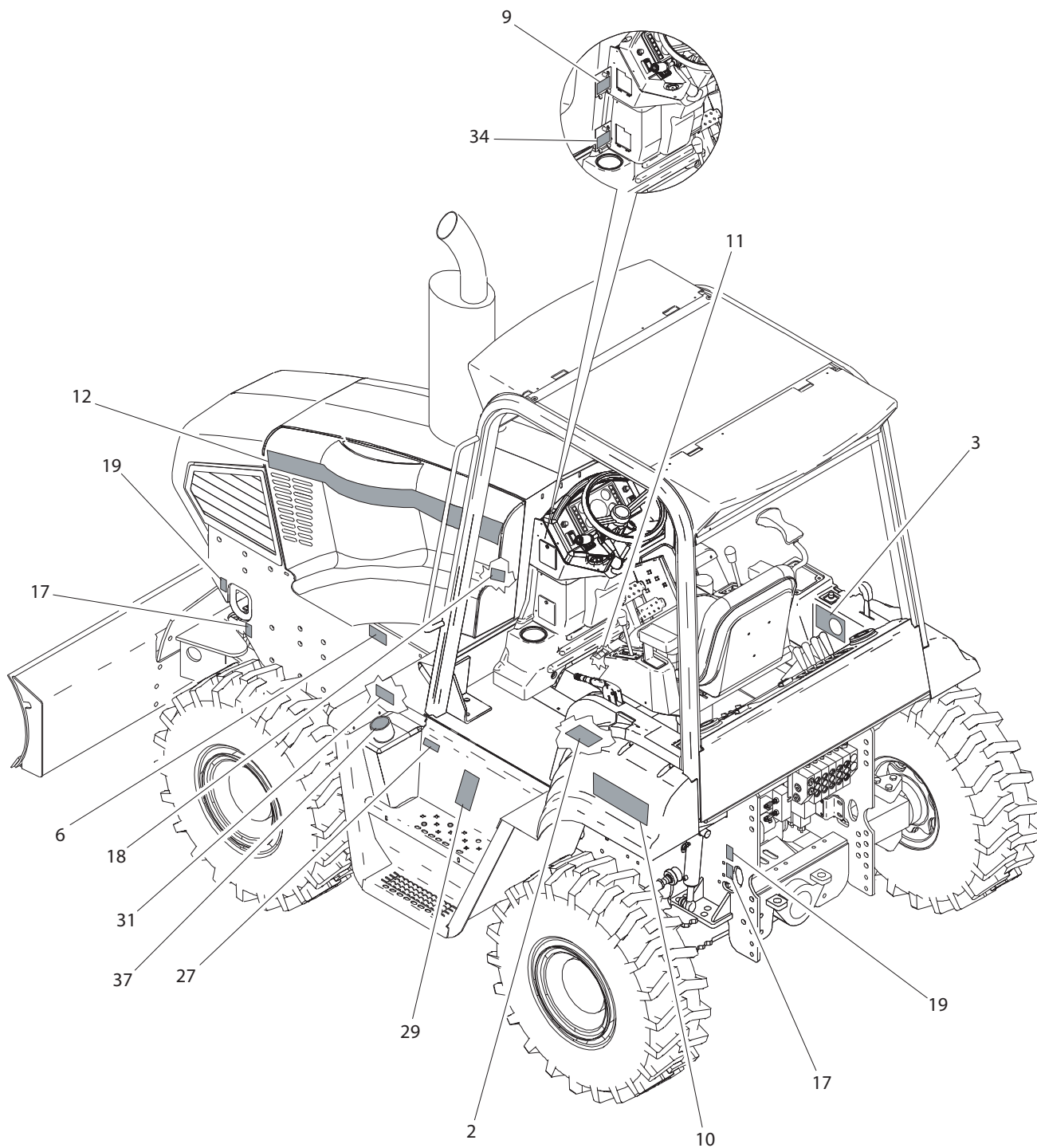


# DECALS

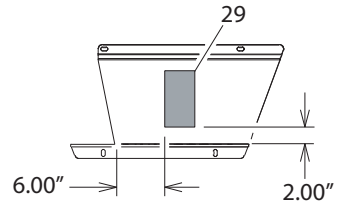
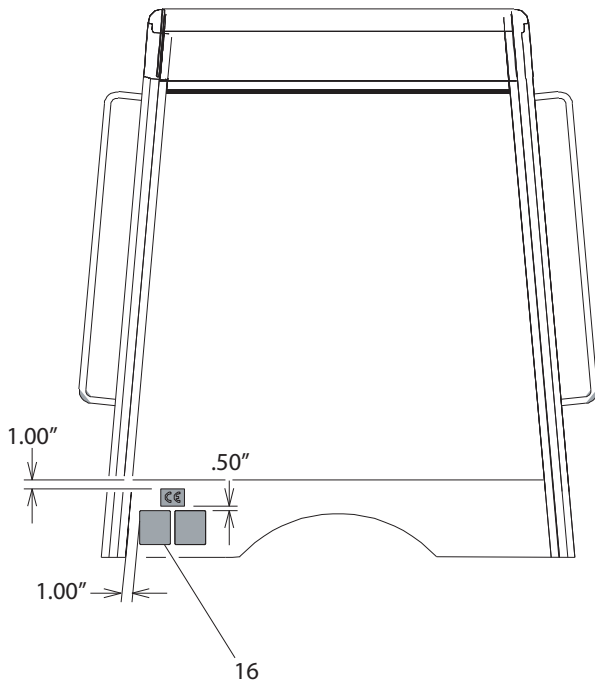
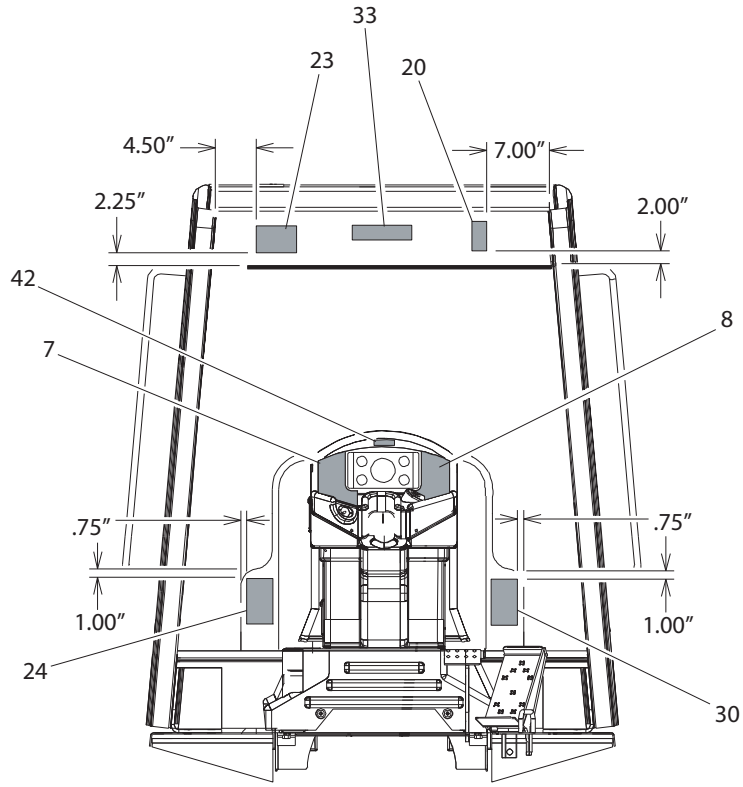
# DECAL LOCATION RT95



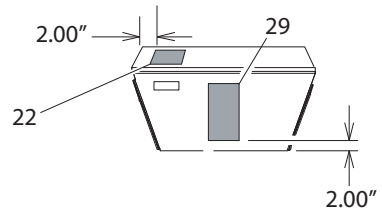
# DECAL LOCATION RT95



# DECAL LOCATION RT95



BATTERY DOOR



# DECAL LOCATION

## RT95

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	275-921		DECAL KIT - RT95H	
	275-922		DECAL KIT - RT95M	
1	273-092	1	GROUND DRIVE CONTROL	
	700-151	1	GROUND DRIVE CONTROL	SEE FOOTNOTE 3
2	273-263	1	1 AND 2 SHIFT	RT95H
	273-213	1	MOBILE-WORK	RT95M
3	273-094	1	AXLE LOCK/AUXILIARY	
4	273-095	1	STEER/TILT/THROTTLE	
5	273-100	1	BFB FUNCTIONS	
6	275-400	1	NOTICE OIL LEVEL	
7	273-102	1	REEL CARRIER/COLD START	RT95H
	273-262	1	REEL CARRIER/COLD START	RT95M
8	273-103	1	HORN/ROTOWITCH/IGNITION	
9	273-104	1	FUSE PANEL	
10	270-1268	2	DITCH WITCH LOGOTYPE	
	273-108	2	DITCH WITCH-ID	OLD STYLE - SEE FOOTNOTE 1
11	273-109	1	TEST PORTS	RT95H
12	273-490	1	RT95 MODEL ID STRIPE LEFT	
13	273-491	1	RT95 MODEL ID STRIPE RIGHT	
14	273-246	1	RIGID LOGO PLACARD	
15	273-455	1	LUBRICATION CHART	
16	274-291	1	SOUND POWER 10	SEE FOOTNOTE 1
17	274-318	4	TIE DOWN LOCATION	
18	274-375	1	MASTER DISCONNECT SWITCH	
19	274-442	2	LIFT LOCATION	
20	274-724	1	ONE CALL NOTIFICATION	
21	275-361	1	PARKING BRAKE	
22	275-033	1	NOTICE ELECTRICAL SYSTEM	
23	275-048	1	IMPORTANT SAFETY RULES	
24	275-070	1	WARNING RUNAWAY	
25	700-064	1	POWER BEYOND/RETURN/PRESSURE	
26	275-120	1	RESERVOIR (THF)	
27	275-148	1	FUEL TANK (DIESEL)	
28	273-452	1	NOTICE COOLANT	
29	275-185	2	WARNING SINGLE OPERATOR	
30	275-303	1	WARNING ROLLOVER	
31	275-497	1	OIL DRAIN-ID	
32	275-203	1	BATTERY	
33	273-197	1	OVERHEAD CONSOLE	SEE FOOTNOTE 2
34	273-239	1	RELAY PANEL	
35	274-198	1	NOTICE OIL LEVEL	
36	273-267	1	DITCH WITCH BATTERY	
37	700-062	1	DIESEL FUEL CAP	
38	700-063	1	HYDRAULIC OIL CAP	
39	273-292	1	FRAME NOSE CASTING WEIGHT	
40	273-458	1	EDT	SEE FOOTNOTE 1
41	273-449	1	CRUISE CONTROL OVERLAY	RT95H, SEE FOOTNOTE 3
42	273-496	1	NOTICE ENGINE SPEED	RT95M
43	270-2027	4	TIRE PRESSURE LABEL	

### FOOTNOTES

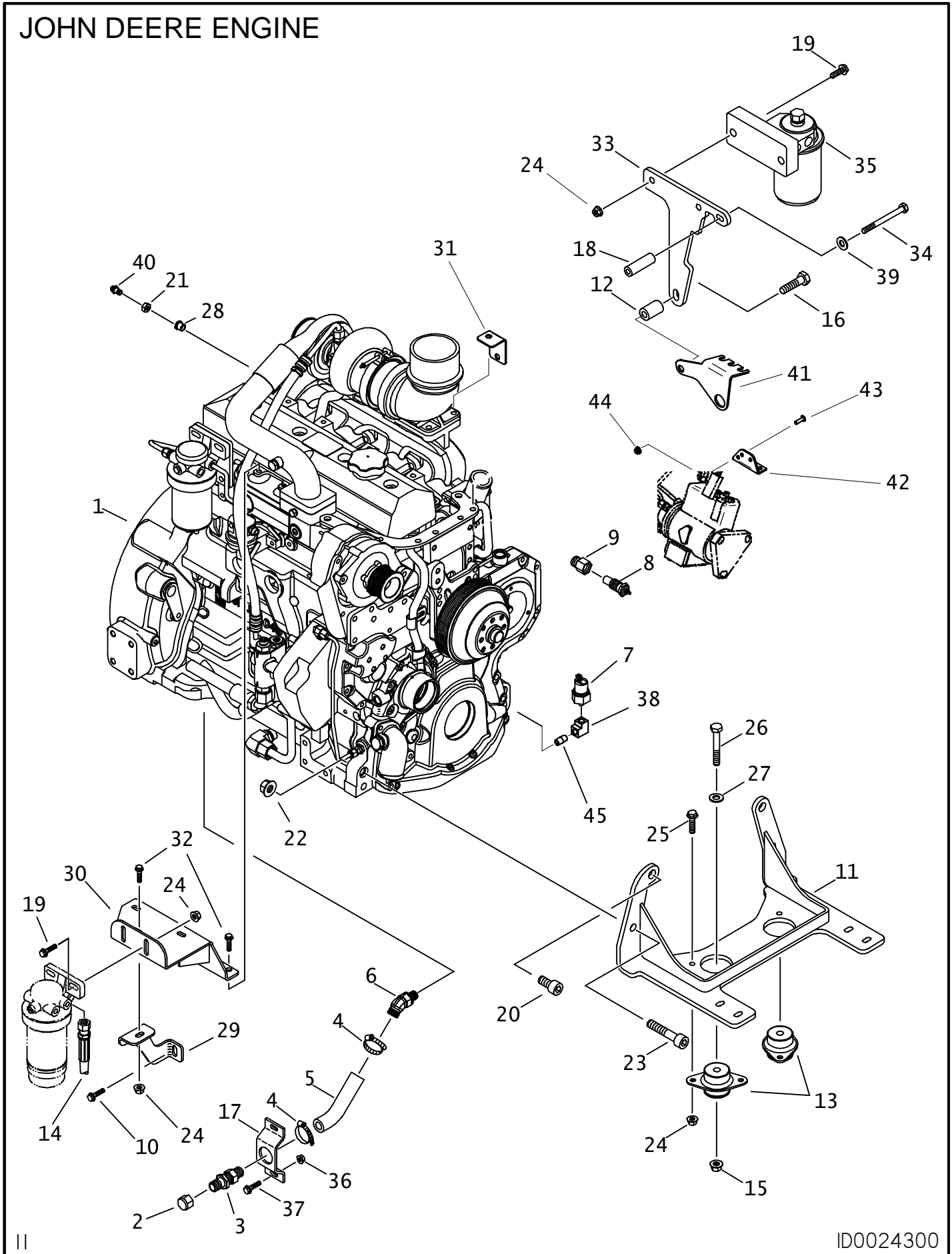
1. NOT PART OF KIT.
2. 273-197 NOT PART OF KIT. PROVIDED IN CANOPY AND LIGHT KIT 600-382
3. NOT PART OF KIT. PROVIDED IN CRUISE CONTROL KIT 604-968.





# **ENGINE COMPONENTS**

# JOHN DEERE ENGINE



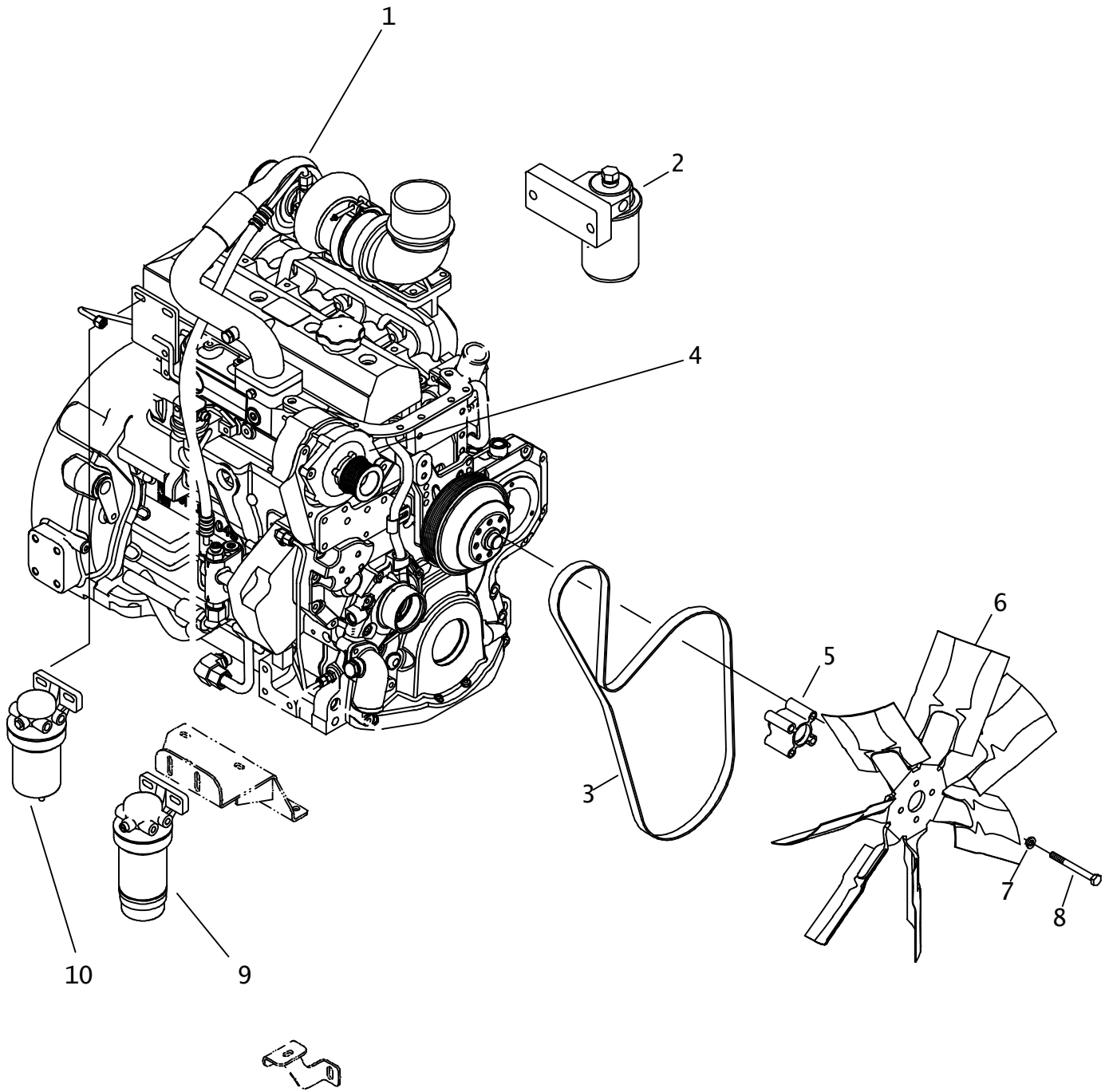
# JOHN DEERE ENGINE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-511	1	ENGINE - DEERE DIESEL	OBSOLETE
2.	154-324	1	CAP (100F)	
3.	149-624	1	BK S/O COUPLER (100-10H)	
4.	110-353	2	WORM CLAMP (3/4" TO 1-1/2")	
5.	116-044	AR	BULK HOSE (5/8", SOLD PER 1")	USE 1 @ 5.75"
6.	153-160	1	S/O COUPER (18M-10H45)	
7.	215-1203	1	SENDER, OIL PRESSURE (0-80psi) SD	
8.	217-565	1	TEMPERATURE SENDER 100 - 280 F	
9.	217-247	1	WATER TEMPERATURE ADAPTER	
10.	107-009	1	FLG LK SCREW (M12-1.75 X 25MM)	
11.	337-369	1	FRONT ENGINE BRACKET	
12.	184-427	1	BOSS	
13.	116-946	2	ENGINE SHOCK MOUNT	POSITION METAL FACE TO FRAME BOTTOM
14.	159-625	1	FUEL FILTER HOSE (060)	
15.	106-709	2	FLG LK NUT (M12-1.75)	
16.	106-527	2	SCREW (M14-2.00 X 50mm)	
17.	310-599	1	MOUNT	
18.	178-358	1	SLEEVE	
19.	107-002	2	FLG LK SCREW (M10-1.50 X 30mm)	
20.	106-643	2	SCREW (M16-2.00 X 25mm, SOC)	
21.	156-277	1	COMPRESSION NUT (05T)	
22.	106-545	2	LOCKNUT (M16-2.0, PRV TRQ, 10.9)	
23.	107-723	2	SCREW (M16-2.00 X 70mm, SOC)	
24.	106-266	9	FLG NUT (M10-1.50)	
25.	107-001	4	FLG LK SCREW (M10-1.50 X 25mm)	
26.	106-336	2	SCREW (M12-1.75 X 90mm)	
27.	105-475	2	WASHER (1/2")	
28.	156-276	1	FERRULE (05T)	
29.	323-365	1	FILTER MOUNT SUPPORT	
30.	323-634	1	FILTER MOUNT	
31.	324-592	1	BRACKET	MECHANICAL UNITS ONLY
32.	106-382	4	FLG LK SCREW (M10-1.5 X 20mm)	
33.	315-534	1	FILTER MOUNT	
34.	106-124	1	SCREW (M10-1.50 X 110mm)	
35.	194-478	-	ENGINE OIL FILTER	
36.	106-386	2	FLG LOCKNUT (M8-1.25)	
37.	106-989	2	FLG LK SCREW (M8-1.25 X 35mm)	
38.	156-228	1	ELBOW (02NF-02NF90)	
39.	106-396	1	WASHER (M10, HARDENED)	
40.	156-275	1	TUBE CONNECTOR (04H-05T)	
41.	307-068	1	CABLE BRACKET	
42.	307-069	1	LEVER BRACKET	
43.	106-640	2	SCREW (M6-1.00 X 20MM, BUT SOC)	
44.	106-385	2	FLG LOCKNUT (M6-1.00)	
45.	115-180	1	ALL THREAD (1/8-NPT)	

NOT SHOWN:

FOOTNOTES:

# JOHN DEERE ENGINE SERVICE



# JOHN DEERE ENGINE SERVICE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-511	-	ENGINE - DEERE DIESEL	OBSOLETE
2.	194-478	1	ENGINE OIL FILTER	
	499-944	-	OIL FILTER SEAL RING	
3.	170-371	1	FAN BELT	
4.	217-450	1	ALTERNATOR 65 AMP (REMAN)	
5.	194-052	1	FAN SPACER	
6.	194-521	1	21.8" METAL BLADE PULLER FAN	
7.	106-090	4	LOCK WASHER (M10)	
8.	106-564	4	SCREW (M10-1.50 X 100MM)	
9.	194-588	1	PRIMARY FUEL FILTER	
10.	159-255	1	FUEL FILTER	

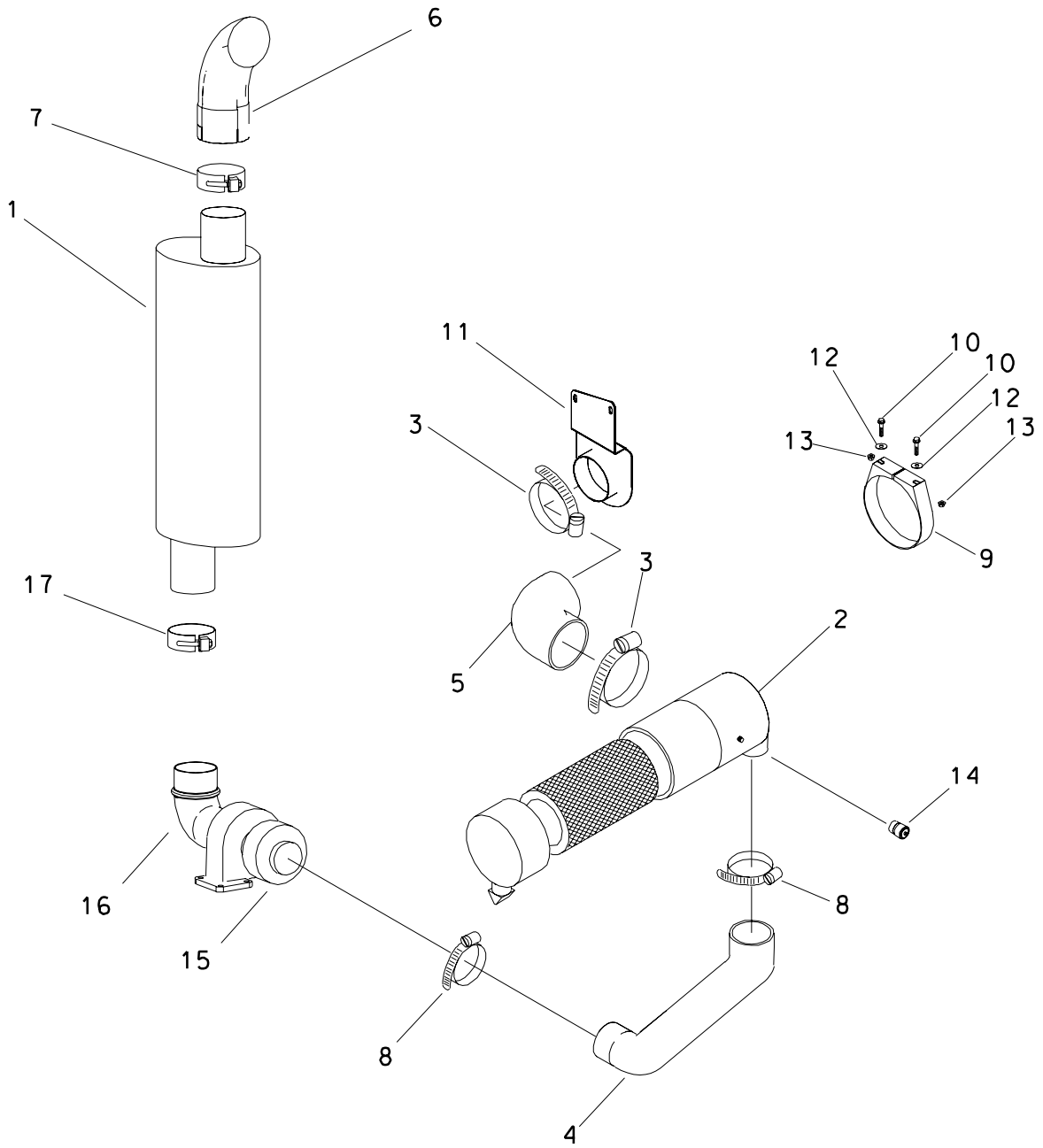
## NOT SHOWN:

054-087	1	JOHN DEERE TIER II OPER MANUAL
194-254	1	STARTER
194-501	1	THERMOSTAT
165-883	1	GASKET, THERMOSTAT
213-080	2	WHEEL SPEED SENSOR
159-586	-	SPEED SENSOR O-RING
213-085	1	DIODE HARNESS

## FOOTNOTES:

## NOTE:

# MUFFLER AND AIR FILTER



# MUFFLER AND AIR FILTER

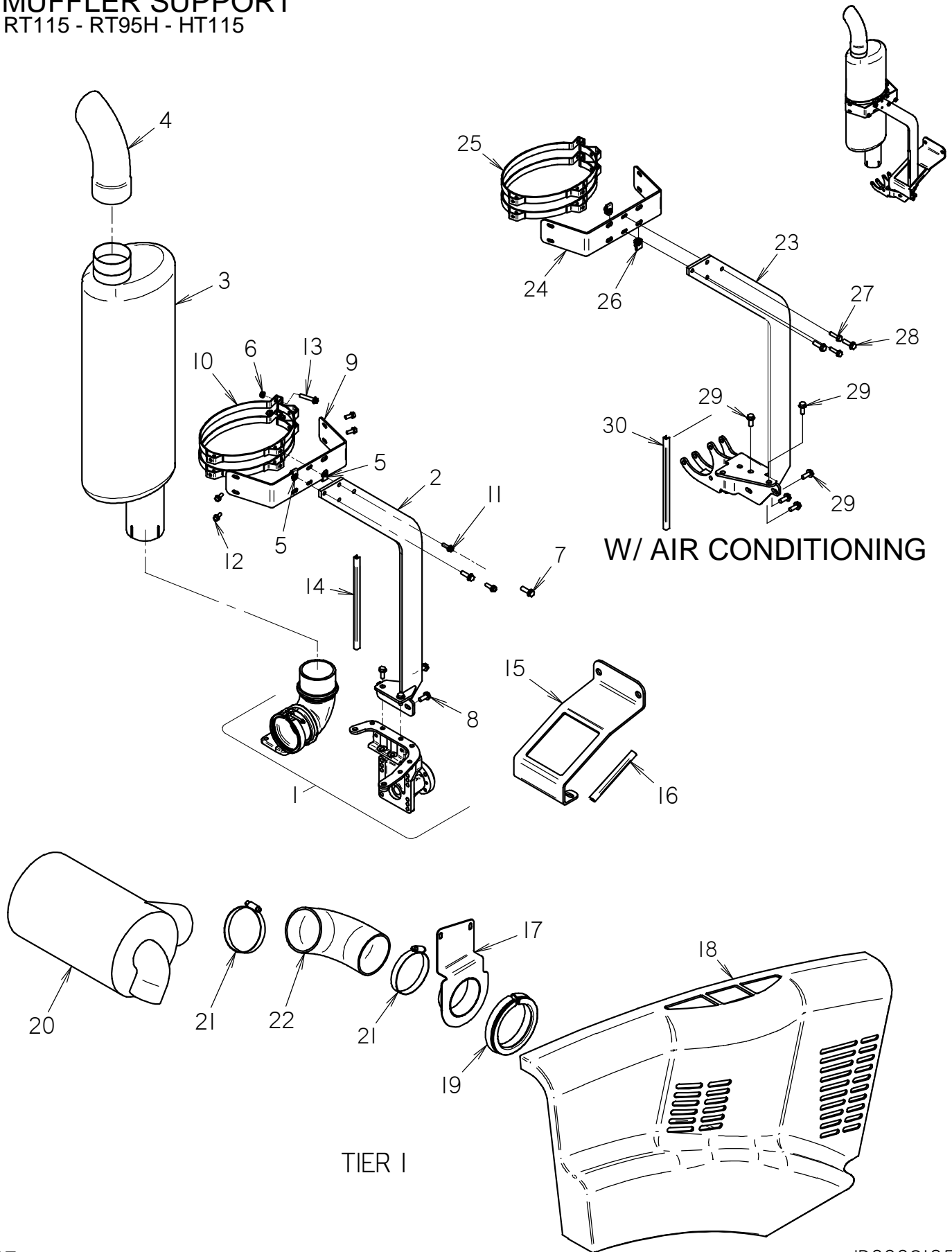
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-201	1	MUFFLER	
2.	194-121	1	AIR CLEANER	
	194-147	1	ELEMENT (PRIMARY)	
	194-148	1	ELEMENT (SECONDARY)	
3.	110-170	2	WORM CLAMP (4-1/8" TO 5")	
4.	149-634	1	ELBOW HOSE (3.000" X 3.500")	
5.	117-852	1	INTAKE ELBOW (4.5")	
6.	196-351	1	EXHAUST TUBE (4" X 12")	
7.	194-027	1	MUFFLER CLAMP (4.143")	
8.	110-367	2	WORM CLAMP (3-1/4" TO 4-1/8")	
9.	309-877	1	MOUNTING BAND (9.330")	
10.	106-989	2	FLG LK SCREW (M8-1.25 X 35mm)	
11.	320-175	1	INLET MOUNT	
12.	105-223	2	WASHER (3/8")	
13.	106-386	2	FLG LOCKNUT (M8-1.25)	
14.	194-788	1	RESTRICTION INDICATOR (25"H2O)	
15.	499-317	-	TURBOCHARGER (REMAN.)	
16.	194-252	-	EXHAUST PIPE ELBOW	
17.	111-138	1	MUFFLER CLAMP (3.59" TO 4.06")	

FOOTNOTES



# MUFFLER SUPPORT

RT115 - RT95H - HT115



# MUFFLER SUPPORT

## RT115 - RT95H - HT115

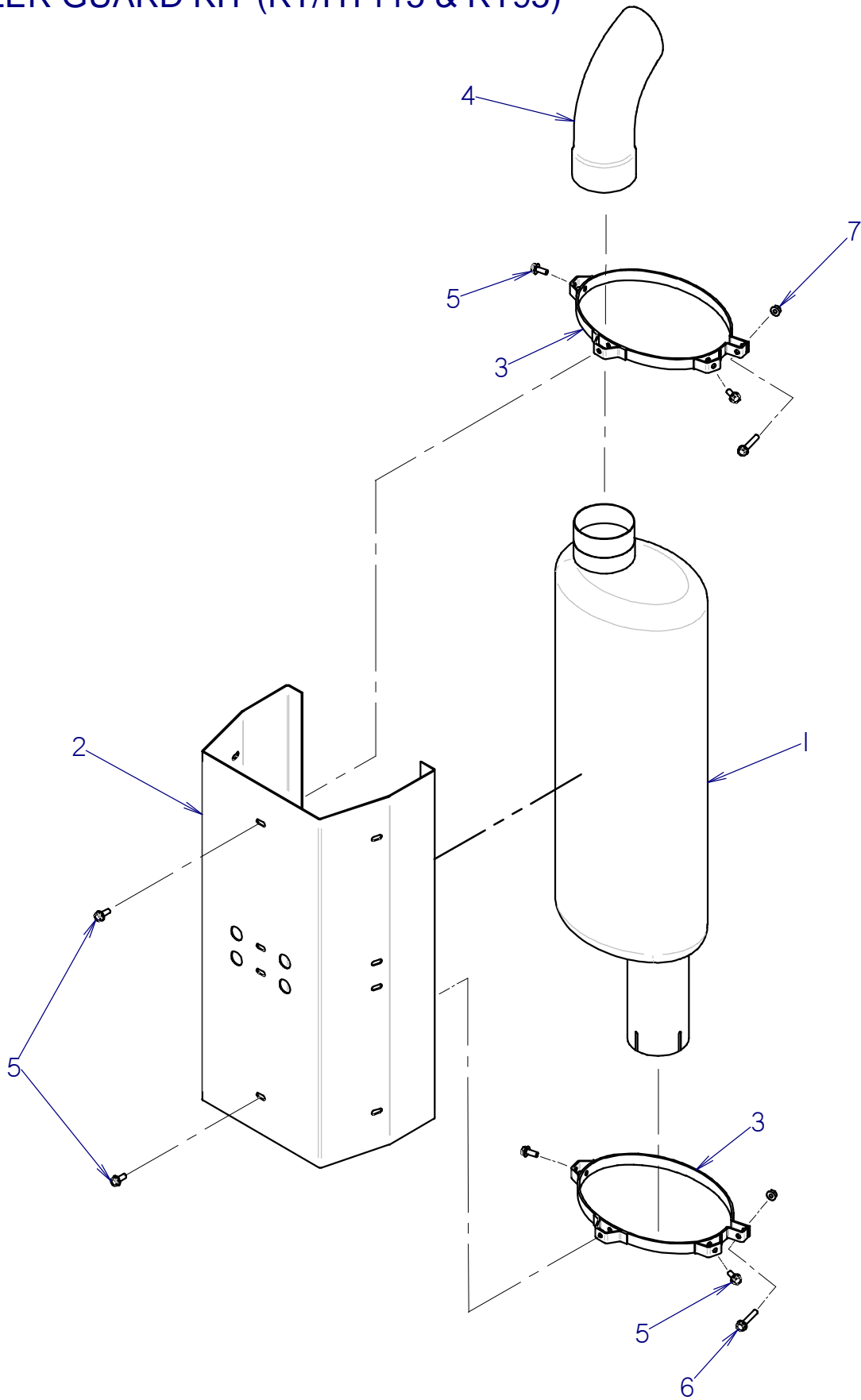
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-368		MUFFLER SUPPORT KIT	INCLUDES REF NO,S 2, 5, 7 - 11 & 14
1	194-370	1	ENGINE ASSY	OBSOLETE, EXHAUST ELBOW AND FAN MOUNT NOT PART OF KIT
2	320-494	1	FRONT SUPPORT	
3	194-201	1	MUFFLER	NOT PART OF KIT
4	196-351	1	EXHAUST TUBE (4" X 12")	NOT PART OF KIT
5	106-719	2	CLIP NUT (3/8-NC)	
6	105-003	2	FLG LOCKNUT (5/16-NC)	INCLUDED WITH MOUNTING CLAMP 111-136
7	105-827	4	FLG LK BOLT (3/8-NC X 1-1/4")	
8	107-001	4	FLG LK SCREW (M10-1.50 X 25MM)	
9	320-932	1	MUFFLER MOUNT PLATE	
10	111-136	2	MOUNTING CLAMP	SHAPE TO FIT MUFFLER
11	105-873	2	FLG LK BOLT (5/16-NC X 1")	
12	105-823	4	FLG LK BOLT (5/16-NC X 3/4")	INCLUDED WITH MOUNTING CLAMP 111-136
13	105-562	2	FLG BOLT (5/16-NC X 1-3/4")	INCLUDED WITH MOUNTING CLAMP 111-136
14	116-461	1	BULK EDGE (3/8", SOLD PER FT)	USE 12"
15	325-634	1	RADIATOR MOUNT	SEE FOOTNOTE 2
16	115-704	1	BULK EDGE (1/4", SOLD PER 1")	USE 1 @ 7"
	191-428		AIR INTAKE CONVERSION KIT	INCL'S REF. NO'S 17-22 & SEE FOOTNOTE 1
17	320-175	1	INLET MOUNT	
18	320-738	1	RIGHT SIDE PANEL W/ AIR INTAKE	
19	117-978	1	BULK EDGE(3/16 W/ 1" BULB)	
20	194-121	1	AIR CLEANER ASSEMBLY	
21	110-170	2	WORM CLAMP (4-1/8" TO 5")	
22	117-852	1	INTAKE ELBOW (4.5")	
	190-1181	-	MUFFLER AND COMPRESSOR MOUNT	FOR UNITS WITH AIR CONDITIONING
23	300-1576	1	MUFFLER AND COMPRESSOR MOUNT	
24	320-932	1	MUFFLER MOUNT PLATE	
25	111-136	2	MOUNTING CLAMP	
26	106-719	2	CLIP NUT (3/8-NC)	
27	105-866	2	FLG LK BOLT (5/16-NC X 1.250")	
28	105-827	2	FLG LK BOLT (3/8-NC X 1-1/4")	
29	107-001	5	FLG LK SCREW (M10-1.50 X 25MM)	
30	116-461	12	BULK EDGE (3/8", SOLD PER FT)	

#### FOOTNOTES:

1. 191-428 AIR-INTAKE CONVERSION KIT ONLY USED ON RT115 TIER 1 UNITS.
2. REF #15 (325-634) FOR USE ON RT115/HT115 ONLY. SEE PAGE ENTITLED "RADIATOR/OIL COOLER (TIER 2) FOR REFERENCE.

#### NOTE:

# MUFFLER GUARD KIT (RT/HT115 & RT95)



## MUFFLER GUARD KIT (RT/HT115 & RT95)

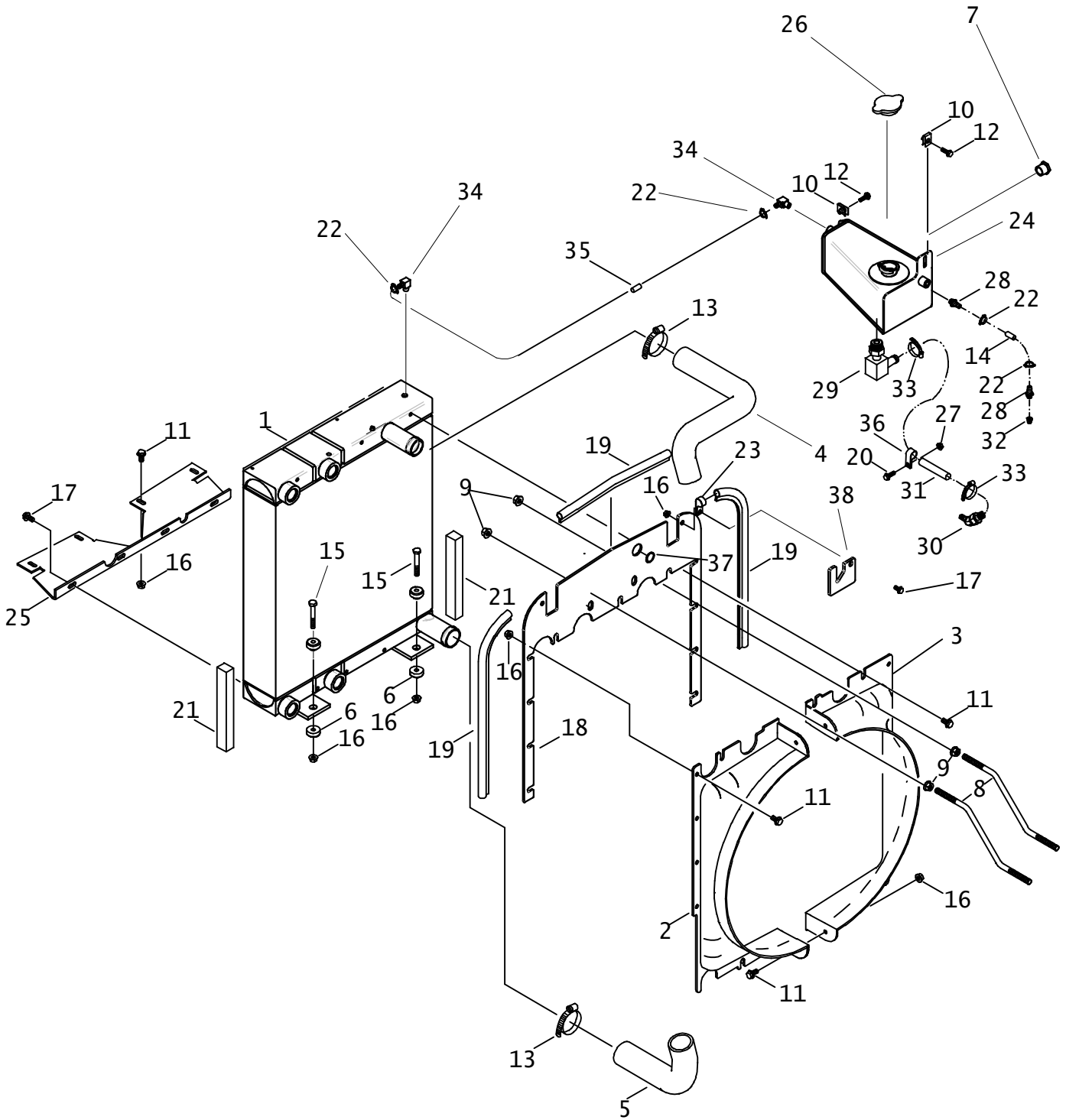
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-308		MUFFLER GUARD KIT (RT115)	INCLUDES REF. NO'S 2 & 3
1	194-201	1	MUFFLER	
2	320-491	1	MUFFLER GUARD	
3	111-136	2	MOUNTING CLAMP	INCLUDES REF. NO'S 5, 6 & 7 SEE FOOTNOTE 1
4	196-351	1	EXHAUST TUBE (4" X 12")	
5	105-823	6	FLG LK BOLT (5/16-NC X 3/4")	
6	105-562	2	FLG BOLT (5/16-NC X 1-3/4")	
7	105-003	2	FLG LOCKNUT (5/16-NC)	

### FOOTNOTES

- I. MOUNTING CLAMP NEEDS TO BE SHAPED TO FIT MUFFLER.

NOTE:

# RADIATOR / SPLIT COOLER



## RADIATOR / SPLIT COOLER

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-283	1	RADIATOR/OIL COOLER	
2.	194-115	1	LEFT SIDE FAN SHROUD	
3.	194-114	1	RIGHT SIDE FAN SHROUD	
4.	115-059	1	UPPER COOLANT HOSE	
5.	115-058	1	LOWER COOLANT HOSE	
6.	116-128	2	SHOCK MOUNT	
7.	110-549	1	SIGHT GAUGE (12N)	
8.	365-494	2	RADIATOR ROD	
9.	106-709	4	FLG LK NUT (M12-1.75)	
10.	107-135	2	CLIP NUT (M8-1.25)	
11.	107-001	16	FLG LK SCREW (M10-1.50 X 25mm)	
12.	106-992	2	FLG LK SCREW (M8-1.25 X 25mm)	
13.	110-134	4	WORM CLAMP (2.062" TO 2.750")	
14.	116-108	AR	BULK HOSE (5/16", SOLD PER 1")	USE 1@ 24"
15.	106-998	2	FLG LK SCREW (M10-1.50 X 70mm)	
16.	106-266	18	FLG NUT (M10-1.50)	
17.	106-999	6	FLG LK SCREW (M10-1.50 X 20mm)	
18.	323-203	1	AIR BARRIER	
19.	116-978	AR	BULK EDGE (1/4", SOLD PER FT)	65", SEE FOOTNOTE 3
20.	106-162	1	FLG SCREW (M8-1.25 X 20MM)	
21.	116-107	AR	BULK STRIP (1.2", SOLD PER 1")	USE 2 @ 11"
22.	110-249	4	WORM CLAMP (1/4" X 5/8")	
23.	110-259	2	BOLT-ON CLAMP (.625")	
24.	364-638	1	PRESSURE TANK	
25.	117-339	1	AIR BARRIER	
26.	111-084	1	RADIATOR CAP (16 PSI)	
27.	106-386	1	FLG LOCKNUT (M8-1.25)	
28.	155-162	2	S/O COUPLER (04N-05H)	
29.	514-285	1	S/O COUPLER (08N-10H90)	
30.	153-160	1	S/O COUPLER (18M-10H45)	SEE FOOTNOTE 1
31.	116-750	AR	BULK HOSE (5/8", SOLD PER 1")	USE 1@ 22.5"
32.	115-286	1	REDUCER (08N-1/4-NF)	SEE FOOTNOTE 2
33.	110-217	2	WORM CLAMP (7/16" X 1")	
34.	155-164	2	S/O COUPLER (04N-05H90)	
35.	116-108	12	BULK HOSE (5/16", SOLD PER 1")	USE 1@ 12"
36.	110-333	1	BOLT-ON CLAMP (1")	
37.	502-046	1	GROMMET (3/4)	
38.	117-819	2	FLAP	

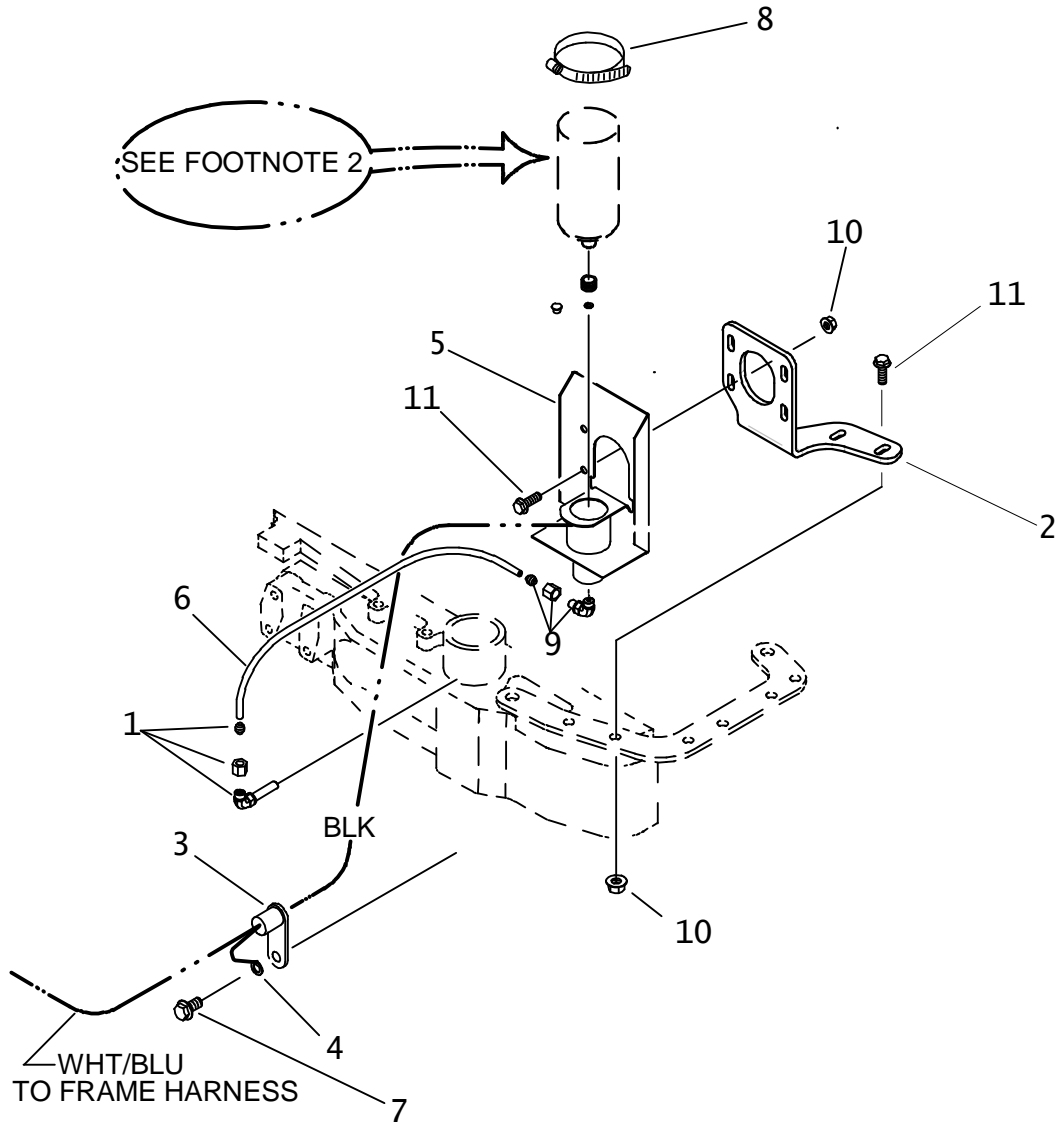
NOT SHOWN:

FOOTNOTES:

1. CONNECTS INTO ENGINE WATER PUMP
2. CONNECTS INTO ENGINE CYLINDER HEAD
3. REF 19 (116-978) USES THREE PIECES, TWO @ 25" & ONE @ 15".

NOTE:

# COLD START KIT



## COLD START KIT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-366		COLD START KIT	INCL REF NO.S 1-12 & 306-607 & 306-608
1.	195-843	1	INJECTOR NOZZLE (CLDSTRT)	
	156-204	-	FERRULE (02T)	
	156-205	-	COMPRESSION NUT (02T)	
2.	323-382	1	BRACKET	
3.	215-073	1	SENSOR SWITCH	SEE FOOTNOTE 1
4.	215-590	1	RING TERMINAL (.375")	SEE FOOTNOTE 1
5.	306-628	1	VALVE/CANISTER BRACKET	
6.	156-018	AR	BULK TUBING (1/8", SOLD PER 1")	USE 1@ 7"
7.	106-654	1	FLG LK SCREW (M10-1.50 X 16mm)	
8.	110-169	1	WORM CLAMP (2.812" TO 3.750")	
9.	156-272	1	TUBE CONNECTOR (02N-02T90, ORF)	
	156-204		FERRULE (02T)	
	156-205		COMPRESSION NUT (02T)	
10.	106-386	6	FLG LK NUT (M8-1.25)	
11.	106-991	6	FLG LK SCREW (M8-1.25 X 20mm)	

NOT SHOWN:

306-607	1	HORN BUTTON
306-608	1	BUTTON COVER

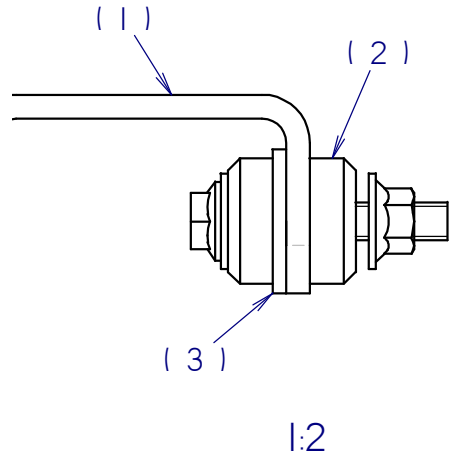
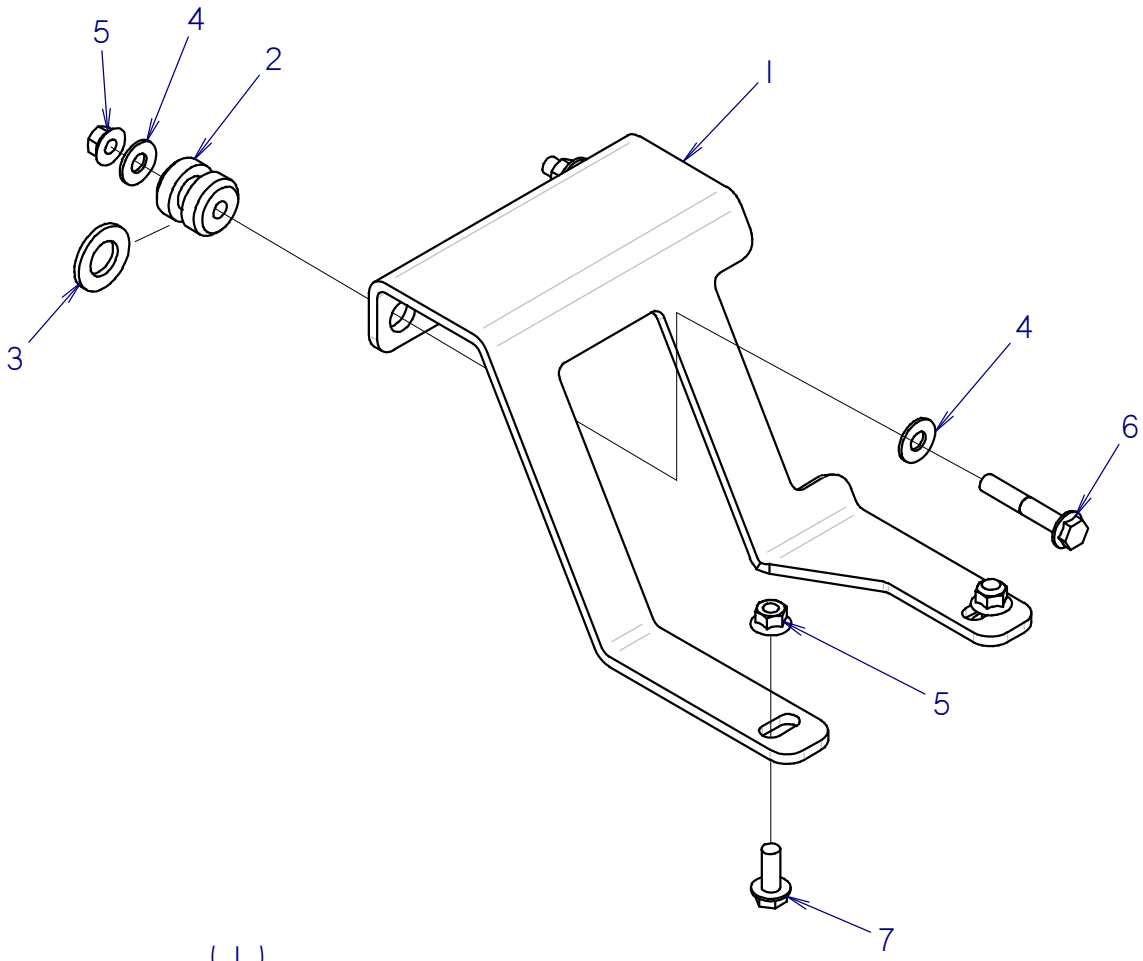
FOOTNOTES:

1. REF NO.'S 3 & 4 BOLT ONTO ENGINE WITH ALTERNATOR ELECTRICAL HARNESS.
2. USE OF 8 OZ. ETHER CANISTER IS REQUIRED, WHICH WILL COME WITH SEALS AND FOAM.

NOTE:



# RADIATOR SUPPORT KIT RT95



# RADIATOR SUPPORT KIT

## RT95

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	300-1172	1	RADIATOR SUPPORT BRACKET	
2	116-128	2	SHOCK MOUNT	SEE FOOTNOTE 1
3	105-975	2	WASHER (3/4")	SEE FOOTNOTE 1
4	105-118	4	WASHER (3/8")	
5	106-266	4	FLG NUT (M10-1.50)	
6	106-997	2	FLG LK SCREW (M10-1.50 X 60MM)	
7	107-001	2	FLG LK SCREW (M10-1.50 X 25MM)	

NOT SHOWN:

190-1082 RADIATOR SUPPORT KIT INCLUDES REF 1 THRU 7

FOOTNOTES:

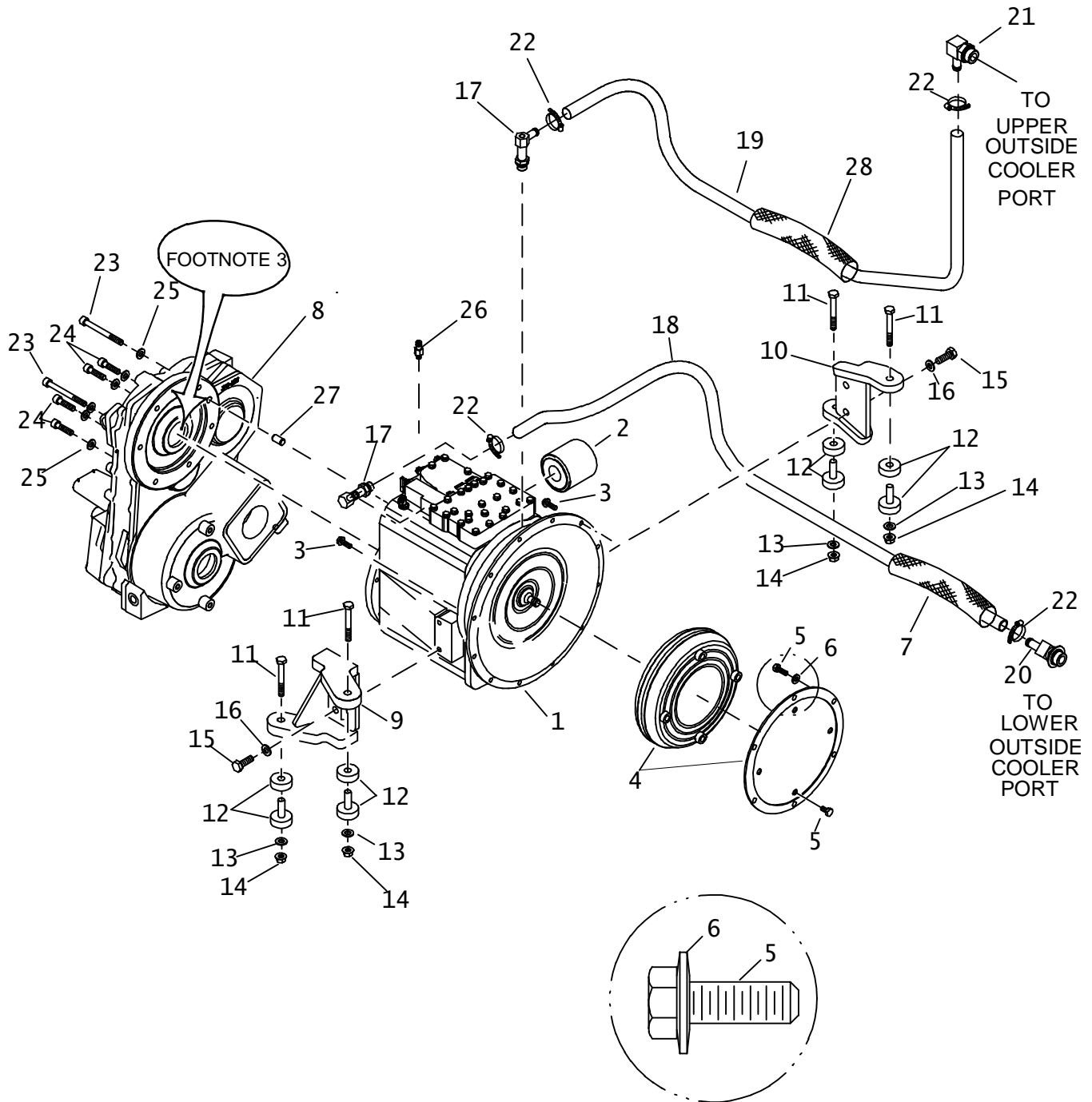
- AUXILIARY VIEW SHOWS PROPER INSTALLATION OF SHOCK MOUNT (116-128) & WASHER (105-975).

NOTE:



# **POWER TRAIN**

# POWERSHIFT TRANSMISSION RT95M



# POWERSHIFT TRANSMISSION RT95M

REF PART NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	166-542	1	TRANSMISSION (2-SPD)	SEE FOOTNOTE 3 & NOT SHOWN FOR SERVICE PARTS.
2.	159-509	-	OIL FILTER	
3.	106-383	12	FLG LK SCREW (M10-1.50 X 30mm)	SEE FOOTNOTE 1
4.	166-519	1	TORQUE CONVERTER (1.93 NEEDLE)	
	166-252	-	DRIVE PLATE	
5.	105-032	12	BOLT (3/8-NC X 3/4 ")	SEE FOOTNOTE 1
6.	107-505	-	BEVELED WASHER (M8)	SEE FOOTNOTE 2
7.	117-324	1	ABRASION SLEEVE (1.25" X 48")	
8.	166-193	-	GROUND DRIVE TRANSMISSION	SEE FOOTNOTE 1
9.	306-971	1	RIGHT REAR TRANSMISSION MOUNT	
10.	306-972	1	LEFT REAR TRANSMISSION MOUNT	
11.	105-386	4	BOLT (5/8-NC X 4-1/2")	SEE FOOTNOTE 1
12.	116-151	4	SHOCK MOUNT	
13.	105-416	4	WASHER (5/8")	
14.	105-994	4	FLG LOCKNUT (5/8-NC)	
15.	107-572	4	SCREW (M14-1.50 X 40mm)	SEE FOOTNOTE 1
16.	105-071	4	WASHER (1/2")	
17.	149-790	2	S/O COUPLER (M22-1.50-10H90XL)	
18.	116-044	AR	BULK HOSE (5/8", SOLD PER 1")	USE 1@ 80"
19.	116-044	AR	BULK HOSE (5/8", SOLD PER 1")	USE 1@ 70"
20.	149-811	1	S/O COUPLER (16S-10H)	
21.	149-596	1	S/O COUPLER (16S-10H90)	
22.	110-026	4	WORM CLAMP (1/2" TO 1-1/4")	
23.	105-678	2	SCREW (M12-1.75 X 140mm, SOC)	
24.	106-707	4	SCREW (M12-1.75 X 45mm, SOC)	
25.	106-397	6	WASHER (M12, HARDENED)	
26.	157-311	1	QDC ADAPTER (02-04H)	SERVICE PART ONLY
27.	107-893	2	DOWELL PIN (16mm X 32mm)	SERVICE PART ONLY
28.	117-691	1	ABRASION SLEEVE (1.25" X 68")	

#### NOT SHOWN:

500-1528	1	SHIFT SOLENOID
500-2076	1	CLUTCH KIT
500-2077	1	DISTRIBUTOR SEAL KIT
500-2078	1	TRANSMISSION GASKET KIT
500-2086	1	SEAL, REAR MAIN
111-151	1	TRANSMISSION DIPSTICK
213-293	1	TRANSMISSION TEMP SWITCH

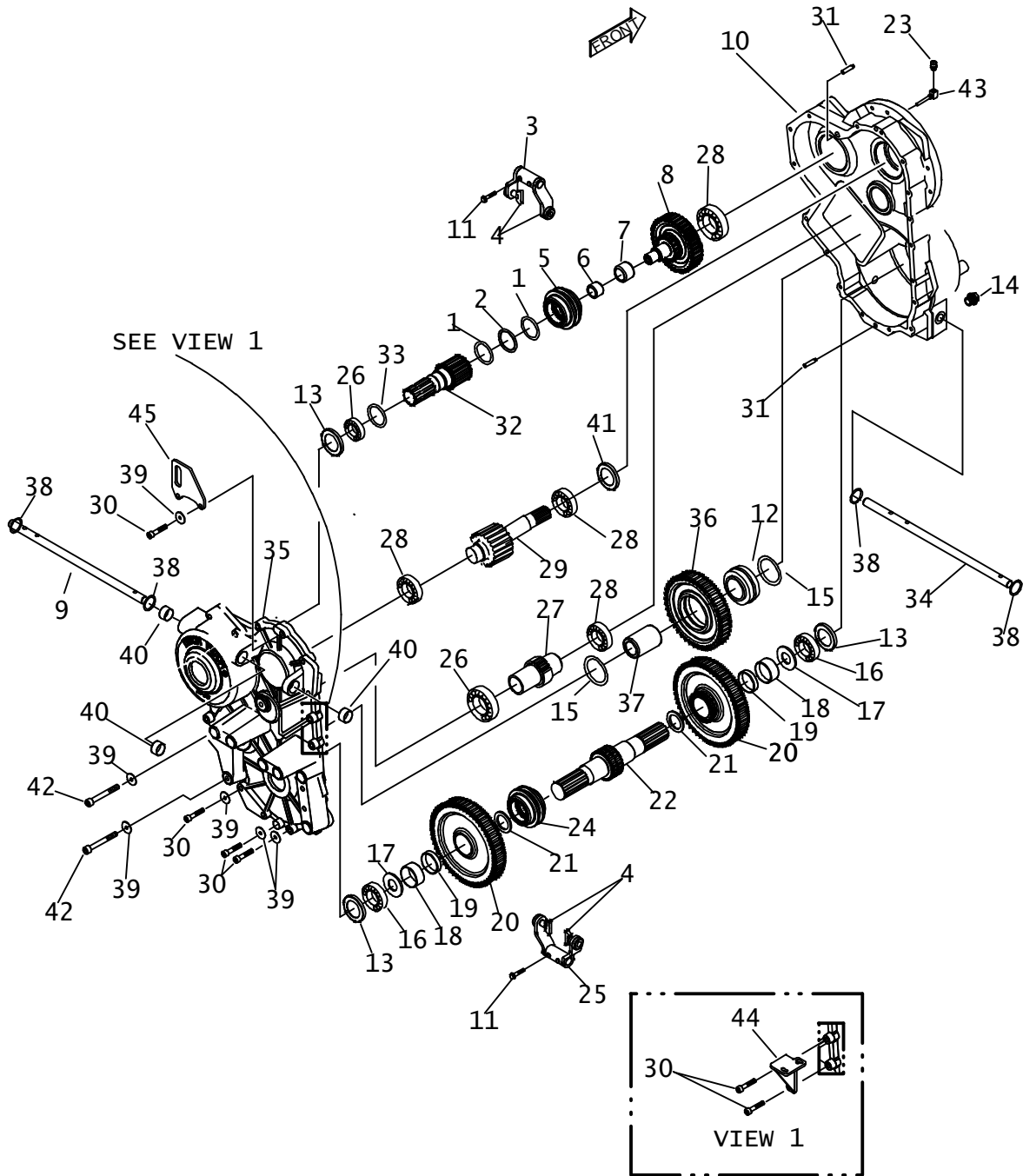
#### FOOTNOTES:

1. USE LOCTITE NO. 242 OR ITS EQUIVALENT
2. USE BEVELED WASHER TO PREVENT CRACKING DRIVE PLATE REF #4.
3. REPLACEMENT FOR INPUT SHAFT SEAL 500-2022.
4. APPLY NEVER SEIZE TO INPUT SHAFT SPLINES.

#### NOTE:

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# TRANSFER CASE



# TRANSFER CASE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	166-193		GROUND DRIVE TRANSMISSION	
1.	125-384	2	BEARING RACE (1.375")	
2.	125-383	1	NEEDLE BEARING (1.375")	
3.	361-934	1	SHIFT YOKE	
4.	361-578	4	SHIFT PADDLE	
5.	165-564	1	SHIFT COLLAR (UPPER)	
6.	125-171	1	NEEDLE BEARING	
7.	126-031	1	NEEDLE BEARING (1.375")	
8.	168-062	1	IDLER GEAR	
9.	167-355	1	SHIFT SHAFT	
10.	165-585	1	DROP BOX HOUSING	
11.	105-827	4	FLG LK BOLT (3/8-NC X 1-1/4")	
12.	125-168	1	ROLLER BEARING	
13.	156-984	3	SEAL	
14.	115-211	3	PLUG (O8N,SQ,MAG)	
15.	156-982	2	O-RING	
16.	125-045	2	BALL BEARING (1.771")	
17.	107-503	2	THRUST WASHER (45mm)	
18.	185-198	2	BEARING	
19.	185-199	2	BEARING	
20.	165-562	2	OUTPUT GEAR	
21.	125-170	2	THRUST WASHER (2.000")	
22.	167-350	1	OUTPUT SHAFT	
23.	159-003	1	AIR VENT (O2N)	
24.	165-565	1	SHIFT COLLAR (LOWER)	
25.	182-226	1	SHIFT YOKE	
26.	125-040	2	BALL BEARING (1.968")	
27.	165-584	1	CROWD PINION	
28.	125-049	4	BALL BEARING (2.165")	
29.	167-349	1	PINION SHAFT	
30.	106-555	15	SCREW (M10-1.50 X 45mm, SOC)	
31.	106-866	2	DOWEL PIN (M10 X 30mm)	
32.	167-348	1	OUTPUT SHAFT	
33.	125-378	1	THRUST RACE (2.756")	
34.	167-356	1	SHIFT SHAFT	
35.	165-586	1	DROP BOX COVER	
36.	165-563	1	IDLER GEAR	
37.	165-561	1	IDLER SLEEVE	
38.	155-878	4	INTERNAL SEAL (.750")	
39.	106-396	18	WASHER (M10, HARDENED)	
40.	125-175	3	SLEEVE BEARING	
41.	157-501	1	INTERNAL SEAL	
42.	107-502	3	SCREW (M10-1.50 X 80mm, SOC)	
43.	514-123	1	PICKUP TUBE (O2N-O2NF90-2")	
44.	307-458	1	STOP	
45.	320-647	1	TRANSFER CASE LIFT	SEE FOOTNOTE I

NOT SHOWN:

#### FOOTNOTES:

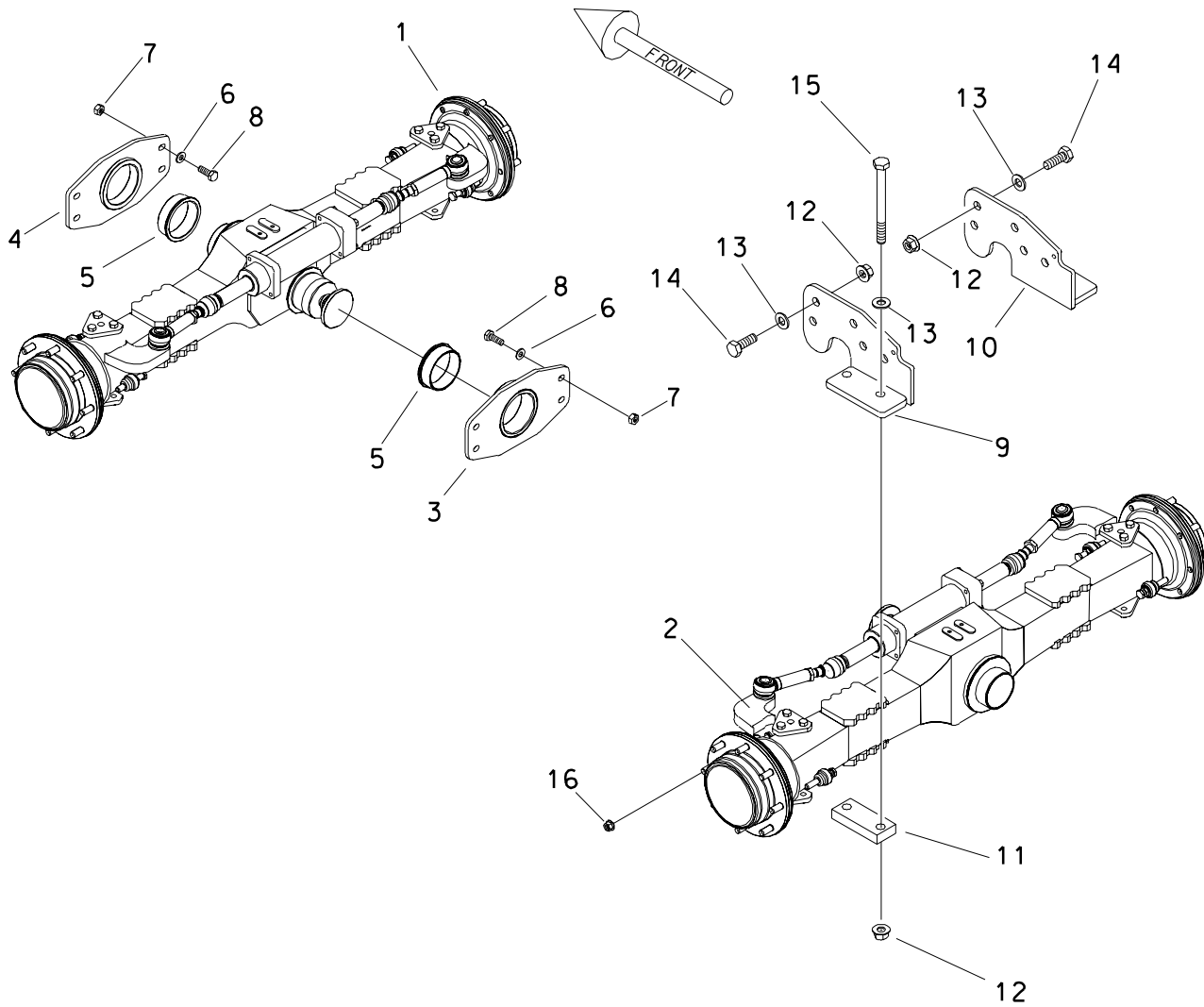
- I. TRANSFER CASE LIFT BRACKET (p/n 320-647) IS REQUIRED TO REMOVE TRANSFER CASE. REMOVE TWO MOUNTING SCREWS, ALIGN, BRACKET WITH MOUNTING HOLES AS SHOWN, AND RE-INSTALL SCREWS. REFER TO RT POWERSHIFT REPAIR GUIDE P/N 055-072 FOR FURTHER INSTRUCTIONS.

NOTE:



# DIFFERENTIAL

RT90/RT95/RT115



# DIFFERENTIAL

## RT90/RT95/RT115

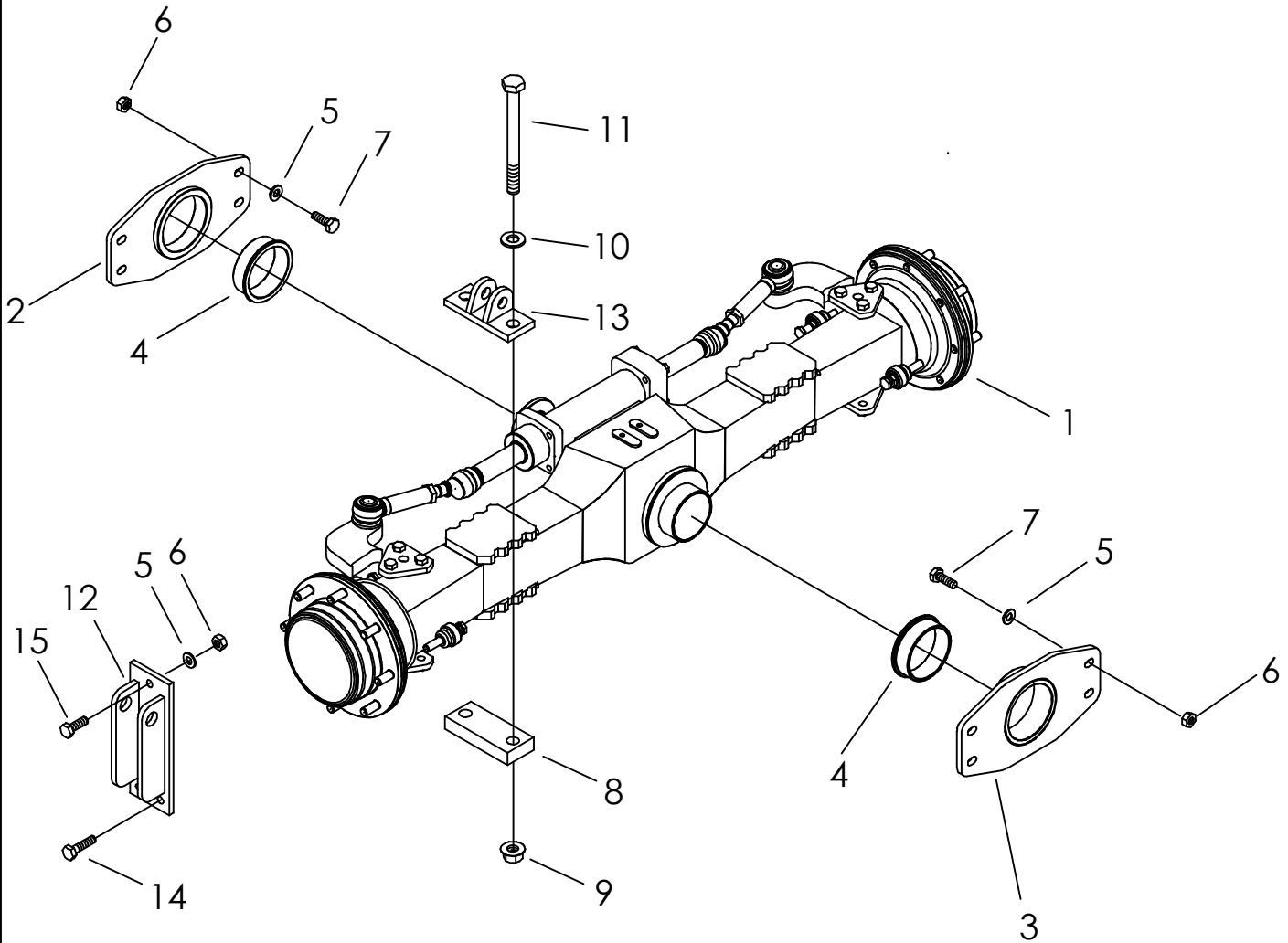
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	160-455	1	STEERABLE AXLE (26.22)	QTY. OF 2 WITH REAR STEER
2.	160-456	1	RIGID PLANETARY AXLE (28.22)	
	160-455	-	STEERABLE AXLE (26.22)	
3.	306-748	1	AXLE MOUNT	
4.	307-711	1	AXLE MOUNT	
5.	178-365	2	BRONZE BUSHING (4.928")	
6.	106-398	8	WASHER (M16, HARDENED)	
7.	106-355	8	FLG NUT (M16-2.00, 10.9)	
8.	106-616	8	SCREW (M16-2.00 X 55mm, 10.9)	
9.	306-896	1	LEFT AXLE MOUNT	
10.	307-280	1	RIGHT AXLE MOUNT	
11.	307-303	2	CLAMP PLATE	
12.	106-489	14	FLG NUT (M24-3.00, 10.9)	
13.	106-625	14	WASHER (M24)	
14.	107-152	10	SCREW (M24-3.00 X 80mm, 10.9)	
15.	107-089	4	SCREW (M24-3.00 X 260mm, 10.9)	
16.	499-521	32	LUG NUT (M20-1.50)	

FOOTNOTES

**TILT FRAME DIFFERENTIAL MOUNT**

RT90/RT95/RT115 BEGINS WITH S/N CMWRT95MLB0000374

CMW 15T3CB0000220, CMW15QPB0000161, CMWRT95HVB0000410



## TILT FRAME DIFFERENTIAL MOUNT

RT90/RT95/RT115 BEGINS WITH S/N CMWRT95MLB0000374

CMW 15T3CB0000220, CMW15QPB0000161, CMWRT95HVB0000410

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	160-456	-	RIGID PLANETARY AXLE (28.22)	
	160-455	-	STEERABLE AXLE (26.22)	
2.	306-748	1	AXLE MOUNT	
3.	307-711	1	AXLE MOUNT	
4.	178-365	2	BRONZE BUSHING (4.928")	
5.	106-398	14	WASHER (M16, HARDENED)	
6.	106-545	14	LOCKNUT (M16-2.0, PRV TRQ, 10.9)	
7.	106-616	8	SCREW (M16-2.00 X 55mm, 10.9)	
8.	307-303	2	CLAMP PLATE	
9.	106-489	4	FLG NUT (M24-3.00, 10.9)	
10.	106-625	4	WASHER (M24)	
11.	107-089	4	SCREW (M24-3.00 X 260mm, 10.9)	
12.	301-1942	2	TILT CYLINDER MOUNT	SEE FOOTNOTE 1
13.	301-1940	2	TILT CYLINDER AXLE MOUNT	SEE FOOTNOTE 1
14.	106-666	4	SCREW (M16-2.00 X 65mm, 10.9)	
15.	106-340	2	SCREW (M16-2.00 X 50mm)	

NOT SHOWN:

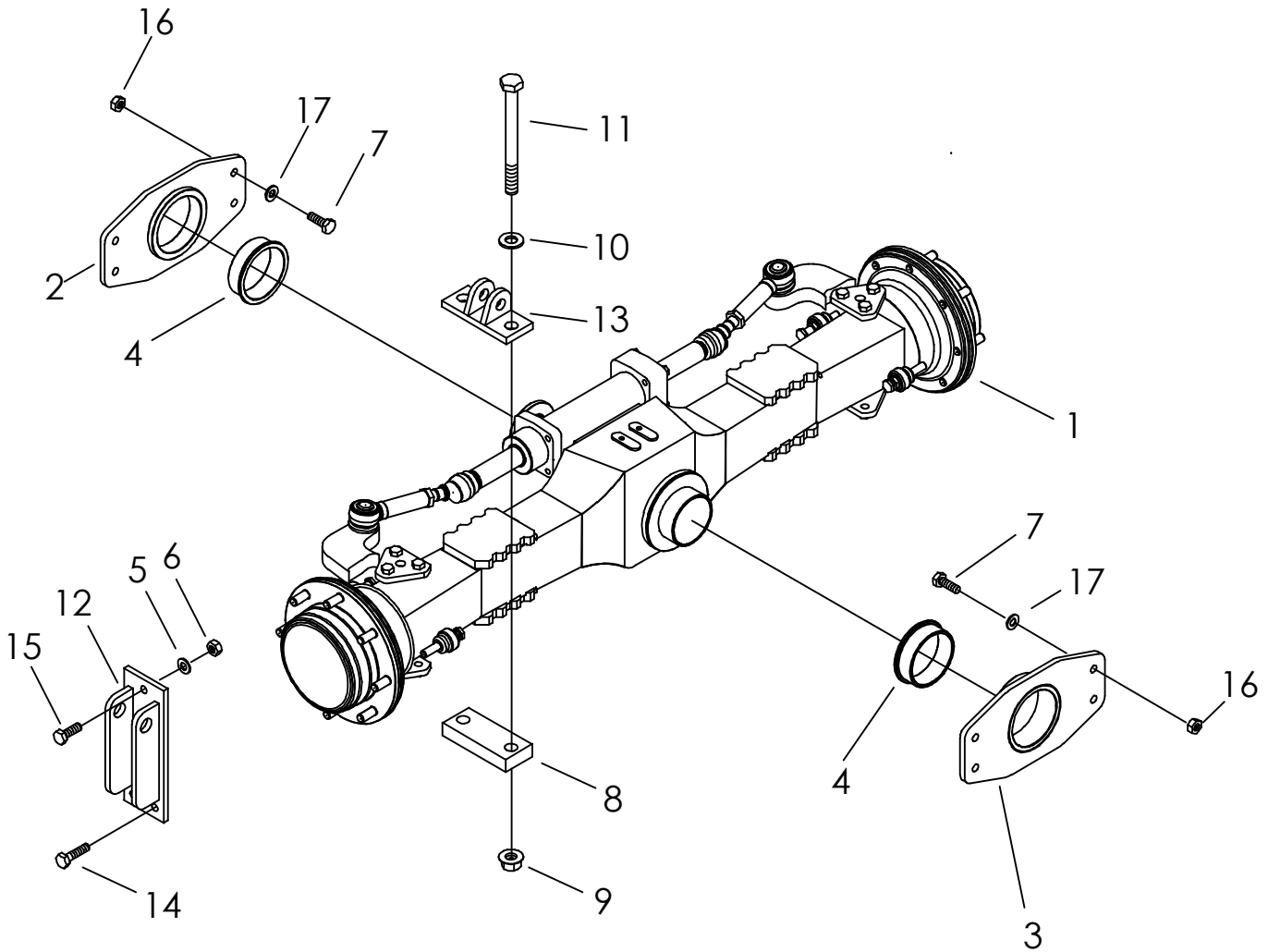
### FOOTNOTES:

1. OLDER UNITS USED TILT MOUNTS 306-891 AND 306-893. IF REPLACING ONE OF THESE COMPONENTS ALL 4 PARTS MUST BE REPLACED BY 301-1940 AND 301-1942.

NOTE:

**TILT FRAME DIFFERENTIAL MOUNT**

RT95M - RT95H - RT115 BEGINS WITH S/N CMWRT95HVB0000410, CMWRT95MLB0000374  
CMWRT15T3CB0000220, CMWRT115QPB0000161. T2 & T3 UNITS



## TILT FRAME DIFFERENTIAL MOUNT

RT95M - RT95H - RT115 BEGINS WITH S/N CMWRT95HVB0000410, CMWRT95MLB0000374  
 CMWRT15T3CB0000220, CMWRT115QPB0000161. T2 & T3 UNITS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	160-456	-	RIGID PLANETARY AXLE (28.22)	
	160-455	-	STEERABLE AXLE (26.22)	
2.	301-0186	1	AXLE MOUNT	
3.	301-0187	1	AXLE MOUNT	
4.	178-365	2	BRONZE BUSHING (4.928")	
5.	106-398	6	WASHER (M16, HARDENED)	
6.	106-545	6	LOCKNUT (M16-2.0, PRV TRQ, 10.9)	
7.	106-831	8	SCREW (M20-2.50 X 60mm, 10.9)	
8.	307-303	2	CLAMP PLATE	
9.	106-489	4	FLG NUT (M24-3.00, 10.9)	
10.	106-625	4	WASHER (M24)	
11.	107-089	4	SCREW (M24-3.00 X 260mm, 10.9)	
12.	301-1942	2	TILT CYLINDER MOUNT	SEE FOOTNOTE 1
13.	301-1940	2	TILT CYLINDER AXLE MOUNT	SEE FOOTNOTE 1
14.	106-666	4	SCREW (M16-2.00 X 65mm, 10.9)	
15.	106-340	2	SCREW (M16-2.00 X 50mm)	
16.	106-356	8	FLG NUT (M20-2.50, 10.9)	
17.	106-399	8	WASHER (M20, HARDENED)	

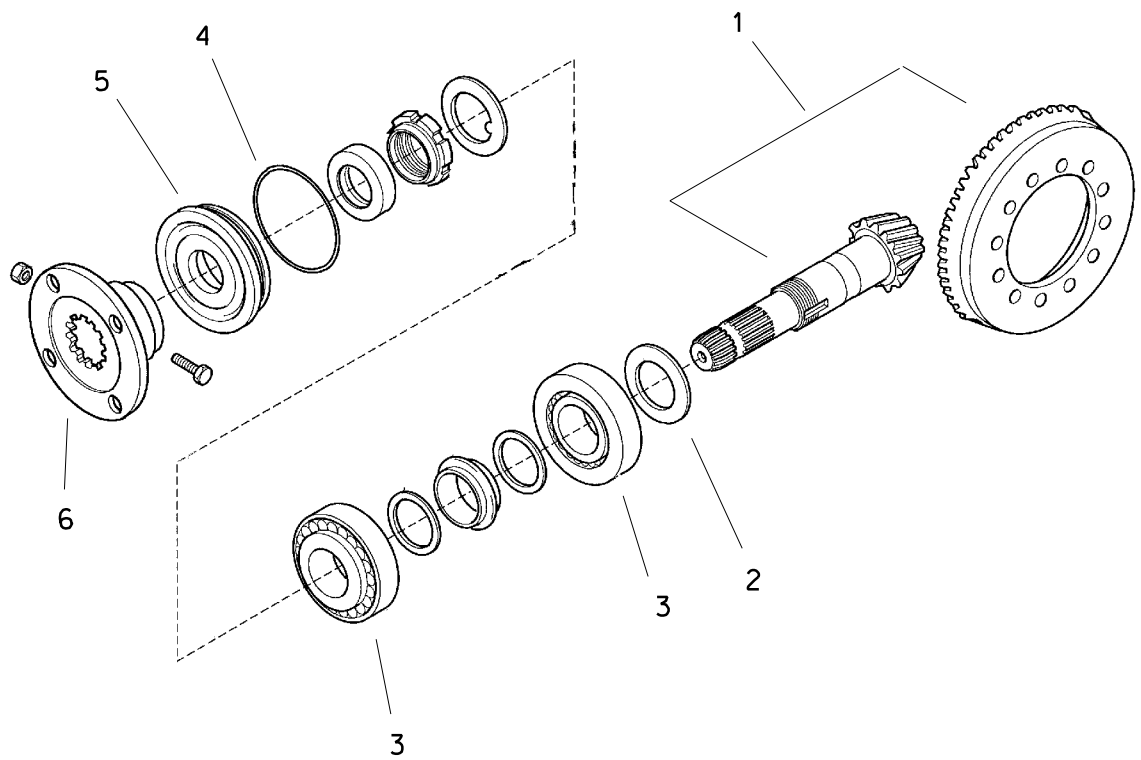
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### FOOTNOTES:

1. OLDER UNITS USED TILT MOUNTS 306-891 AND 306-893. IF REPLACING ONE OF THESE COMPONENTS ALL 4 PARTS MUST BE REPLACED BY 301-1940 AND 301-1942.

NOTE:

AXLE -  
BEVEL GEAR/PINION SET  
STEERABLE/RIGID



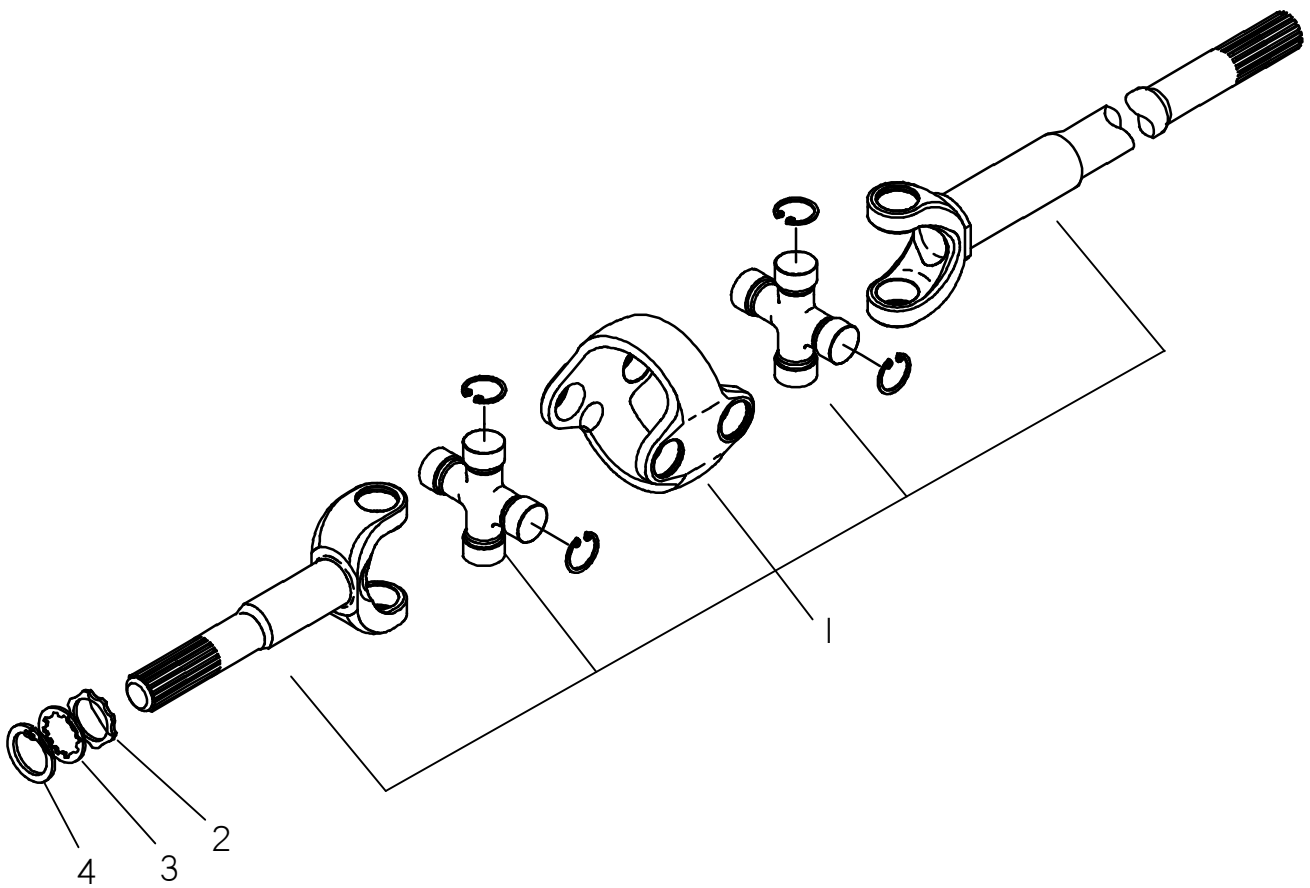
# AXLE- BEVEL GEAR/PINION SET STEERABLE/RIGID

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	499-478	1	BEVEL GEAR SET Z12/32	
2.	499-487	1	SHIM KIT	
			SHIM 2.50mm	
			SHIM 2.60mm	
			SHIM 2.70mm	
			SHIM 2.80mm	
			SHIM 2.90mm	
			SHIM 3.00mm	
			SHIM 3.10mm	
			SHIM 3.20mm	
			SHIM 3.30mm	
			SHIM 3.40mm	
3.	499-479	2	BEARING	
4.	499-480	1	OIL SEAL RING	
5.	499-481	1	O-RING	
6.	499-482	1	FLANGE	

## FOOTNOTES



AXLE  
DOUBLE JOINT  
STEERABLE



# AXLE DOUBLE JOINT STEERABLE

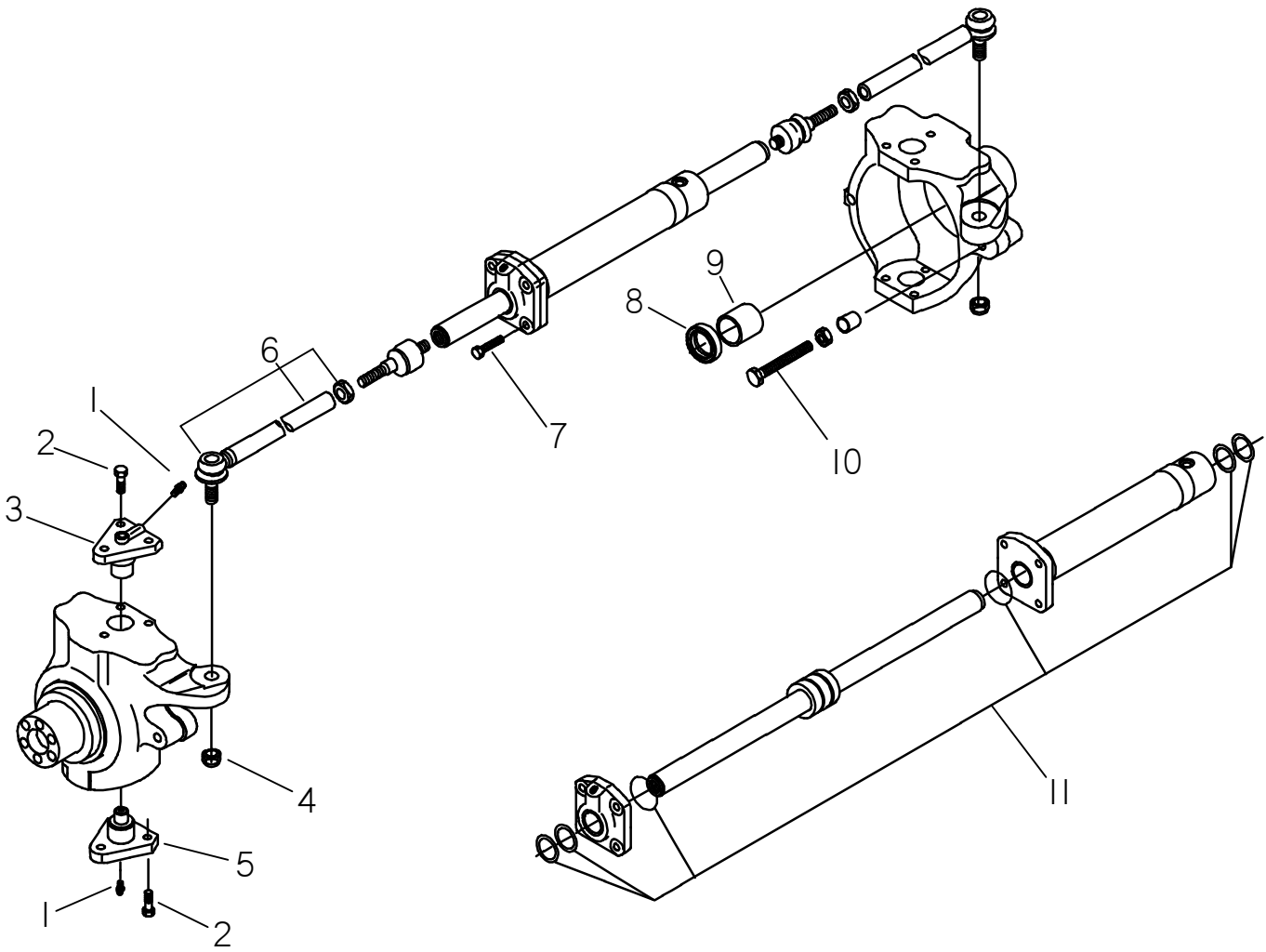
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	499-495	2	DOUBLE JOINT	
2.	500-1266	2	THRUST WASHER	
3.	500-1267	2	WASHER	
4.	500-1268	2	SNAP RING	

NOT SHOWN:

FOOTNOTES:

NOTE:

# AXLE SWIVEL HOUSING & STEERING CYL. STEERABLE



# AXLE SWIVEL HOUSING & STEERING CYL. STEERABLE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	115-065	4	ZERK, METRIC (M6 X 1)	
2.	106-472	12	SCREW (M14-2.00 X 35mm)	
3.	499-473	2	KING PIN	
4.	499-474	2	NUT (M20-1.5)	
5.	499-475	2	KING PIN	
6.	499-476	2	STEERING ARM ASS'Y	
7.	107-344	4	LK SCREW (M12-1.75 X 45mm)	
8.	157-747	2	OIL SEAL	
9.	178-172	2	BUSHING	
10.	107-345	4	SCREW (M16-2.00 X 100mm)	
11.	499-477	1	OIL SEAL KIT (CYL)	

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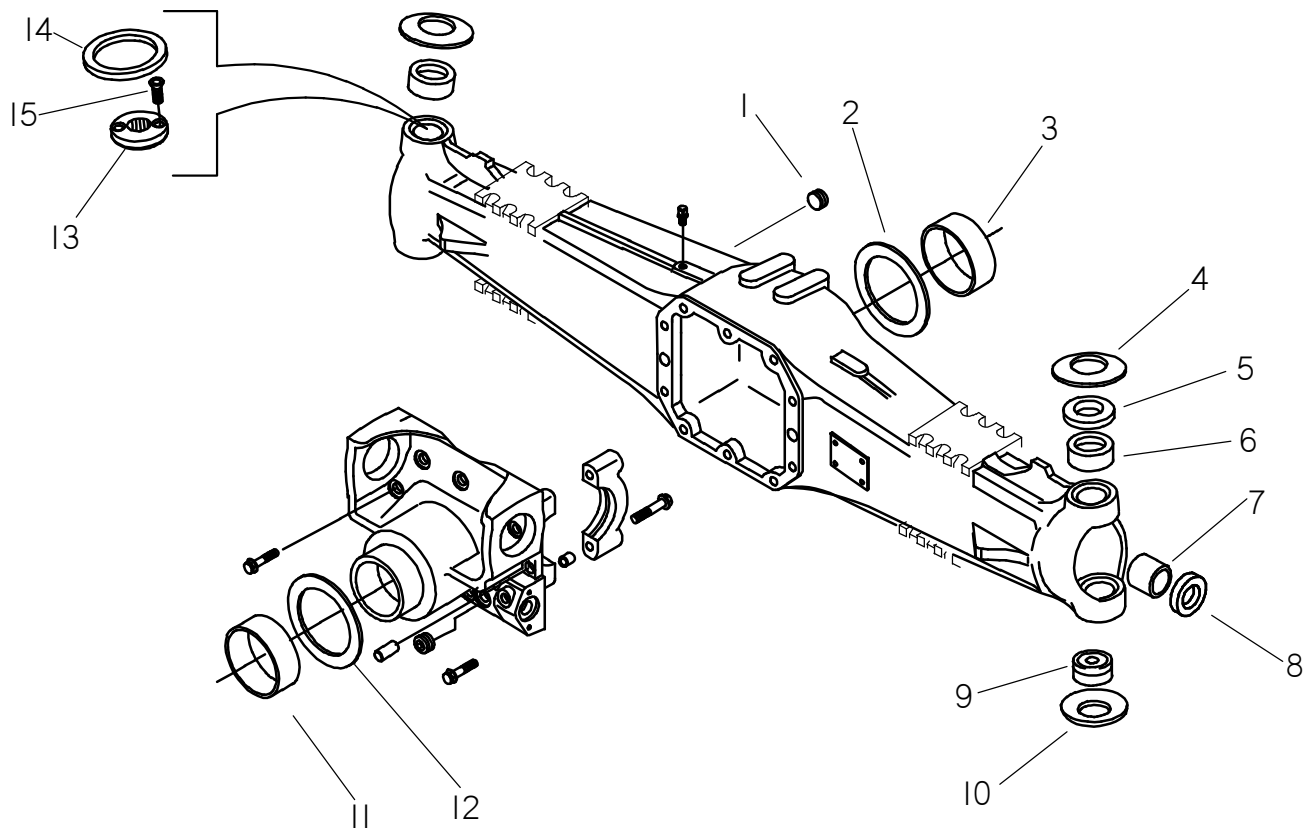
FOOTNOTES:

NOTE:

# AXLE

## AXLE HOUSING

### STEERABLE



# AXLE AXLE HOUSING STEERABLE

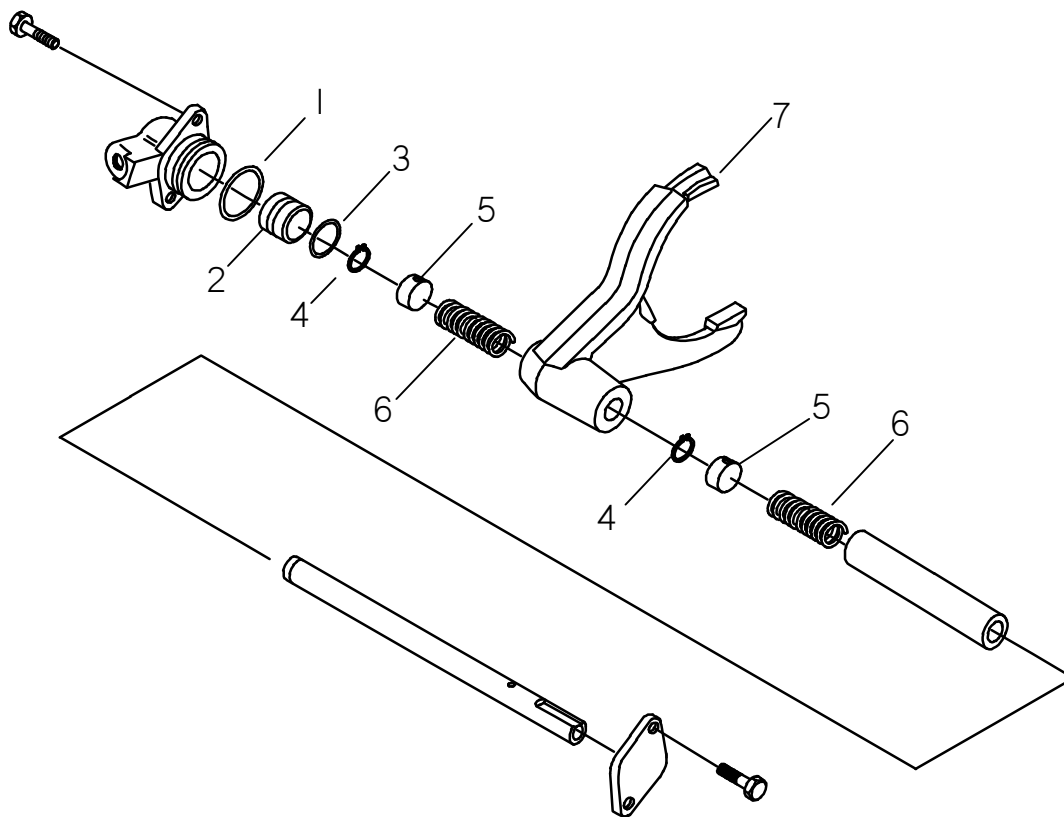
REF	PART				REMARKS
NO.	NUMBER	QTY	DESCRIPTION		
1.	514-345	2	PLUG (M22-1.50, SOC)		
2.	499-461	1	THRUST WASHER		
3.	499-462	1	BUSHING		
4.	499-463	2	BELLEVILLE WASHER		
5.	499-464	1	SPACER		
6.	499-465	2	BUSHING		
7.	499-466	2	BUSHING		
8.	499-467	2	OIL SEAL RING		
	500-1135	2	OIL SEAL		
9.	499-468	2	SPHERICAL BEARING		
10.	499-469	2	BELLEVILLE WASHER		
11.	499-470	1	BUSHING		
12.	499-471	1	THRUST WASHER		
13.	499-472	1	PIN LOCKING WASHER		
14.	500-1697	1	LH BUSH (SPACER)		
15.	500-1698	2	SCREW (M4-.7 x 10mm, 10.9)		

NOT SHOWN:

FOOTNOTES:

NOTE:

AXLE  
DIFF LOCK  
STEERABLE/RIGID



**AXLE  
DIFF LOCK  
STEERABLE/RIGID**

REF PART NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	499-488	1	O-RING	
2.	499-489	1	PISTON	
3.	499-490	1	O-RING	
4.	499-491	2	SNAP RING (D12)	
5.	499-492	2	SPACER	
6.	499-493	2	SPRING	
7.	499-494	1	FORK	

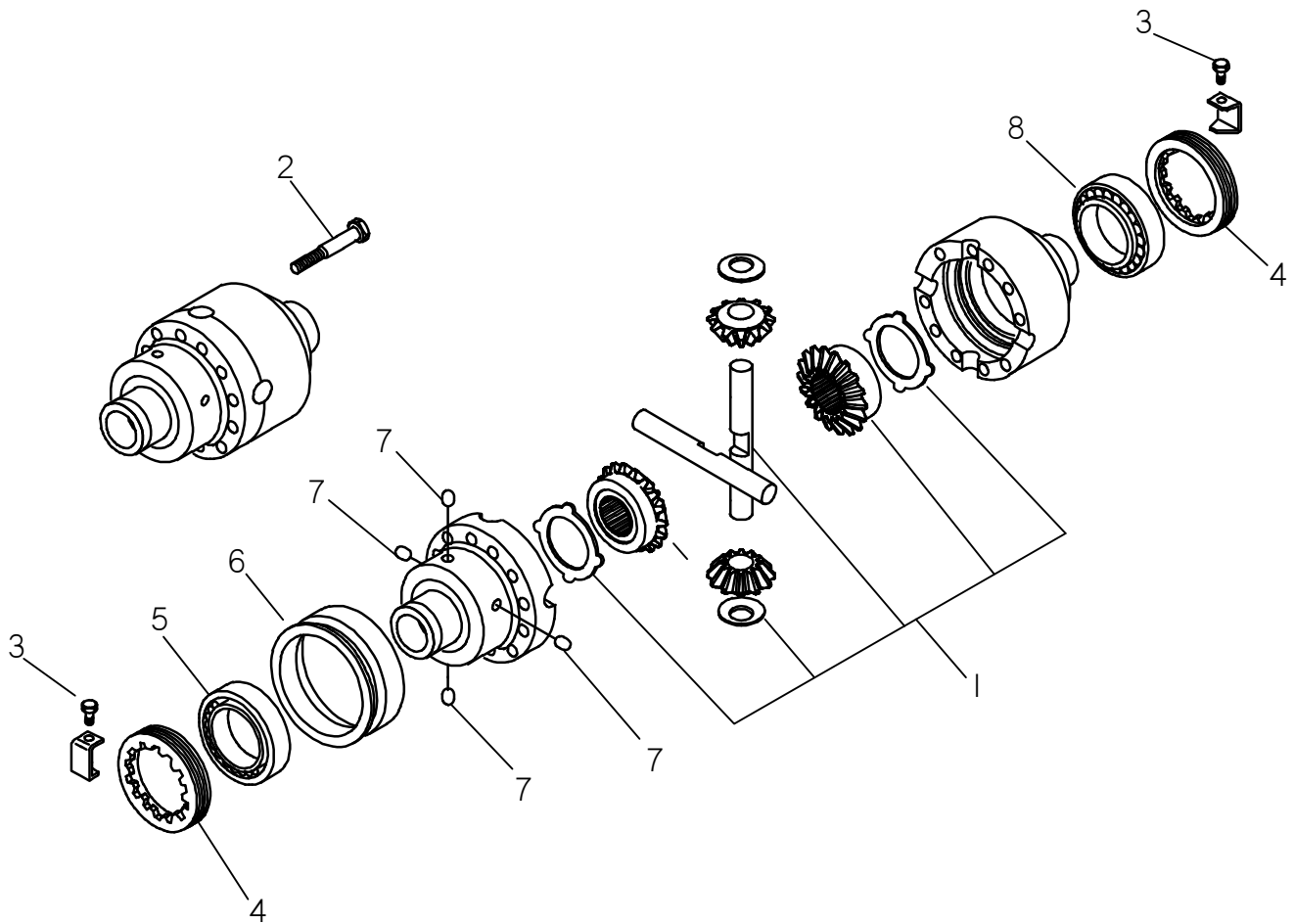
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FOOTNOTES:

NOTE:



# AXLE DIFFERENTIAL RIGID



# AXLE DIFFERENTIAL RIGID

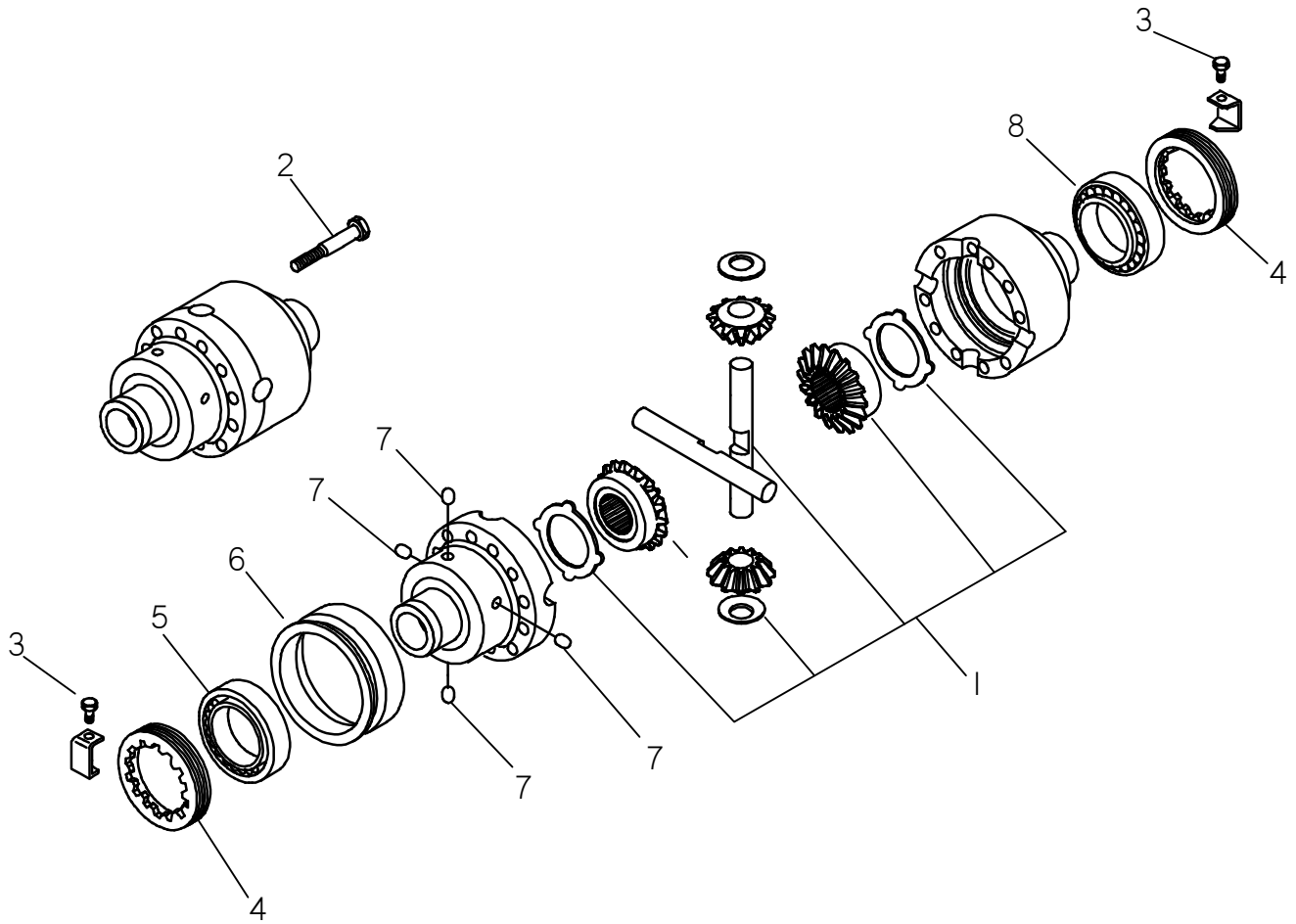
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	499-513	1	DIFFERENTIAL KIT	
2.	107-346	12	LK SCREW (M10-1.50 X 75mm)	
3.	107-348	2	SCREW (M6-1.00 X 10mm)	
4.	501-893	2	RING NUT	
5.	499-484	2	BEARING	USED ON ALL MODELS. SIZE: 90X50X21.75mm
6.	499-485	1	SLEEVE	
7.	499-486	4	PIN	
8.	500-2006	1	BEARING	REPLACES ONE 499-484 ON NEWER MODELS. SIZE: 90X55X23mm

NOT SHOWN:

FOOTNOTES:

NOTE:

# AXLE DIFFERENTIAL STEERABLE



# AXLE DIFFERENTIAL STEERABLE

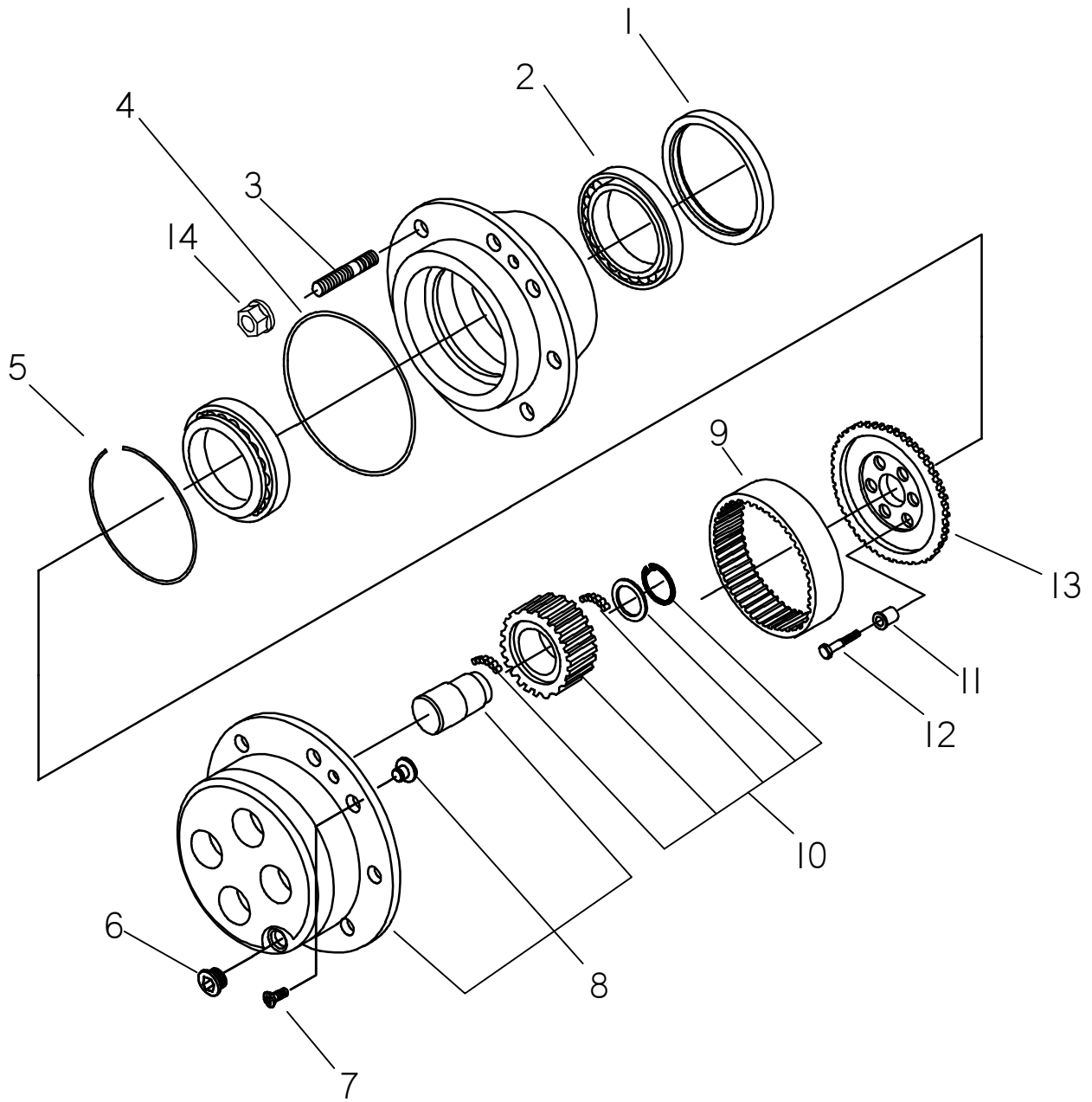
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	499-483	1	DIFFERENTIAL KIT	
2.	107-346	12	LK SCREW (M10-1.50 X 75mm)	
3.	107-348	2	SCREW (M6-1.00 X 10mm)	
4.	501-893	2	RING NUT	
5.	499-484	2	BEARING	USED ON ALL MODELS. SIZE: 90X50X21.75mm
6.	499-485	1	SLEEVE	
7.	499-486	4	PIN	
8.	500-2006	1	BEARING	REPLACES ONE 499-484 ON NEWER MODELS. SIZE: 90X55X23mm

NOT SHOWN:

FOOTNOTES:

NOTE:

# AXLE-WHEEL HUB/REDUCTION GEAR STEERABLE



## AXLE-WHEEL HUB/REDUCTION GEAR STEERABLE

REF PART NO. NUMBER	QTY	DESCRIPTION	REMARKS
1. 499-497	2	SEAL RING	EARLY STYLE 176mm OD
499-940		SEAL KIT	CURRENT PRODUCTION 180mm OD
499-948		OIL SEAL	CURRENT PRODUCTION
2. 499-498	4	BEARING	
3. 499-499	8	STUD	QTY PER WHEEL ASS'Y
4. 157-224	2	O-RING	
5. 499-501	2	RING	
6. 114-036	2	PLUG, PLANETARY CARRIER	
7. 107-349	4	SCREW (M8-1.25 X 20mm)	
8. 499-502	2	PLANETARY CARRIER ASS'Y	
9. 499-503	2	CROWN GEAR	
10. 499-504	1	PLANET GEAR KIT	4 KITS PER WHEEL ASSEMBLY
11. 499-505	12	CENTERING BUSHING	
12. 499-506	12	BOLT (M12 X 45)	
13. 499-507	2	WHEEL CARRIER	
14. 499-521	8	LUG NUT (M20-1.50)	QTY PER WHEEL ASS'Y

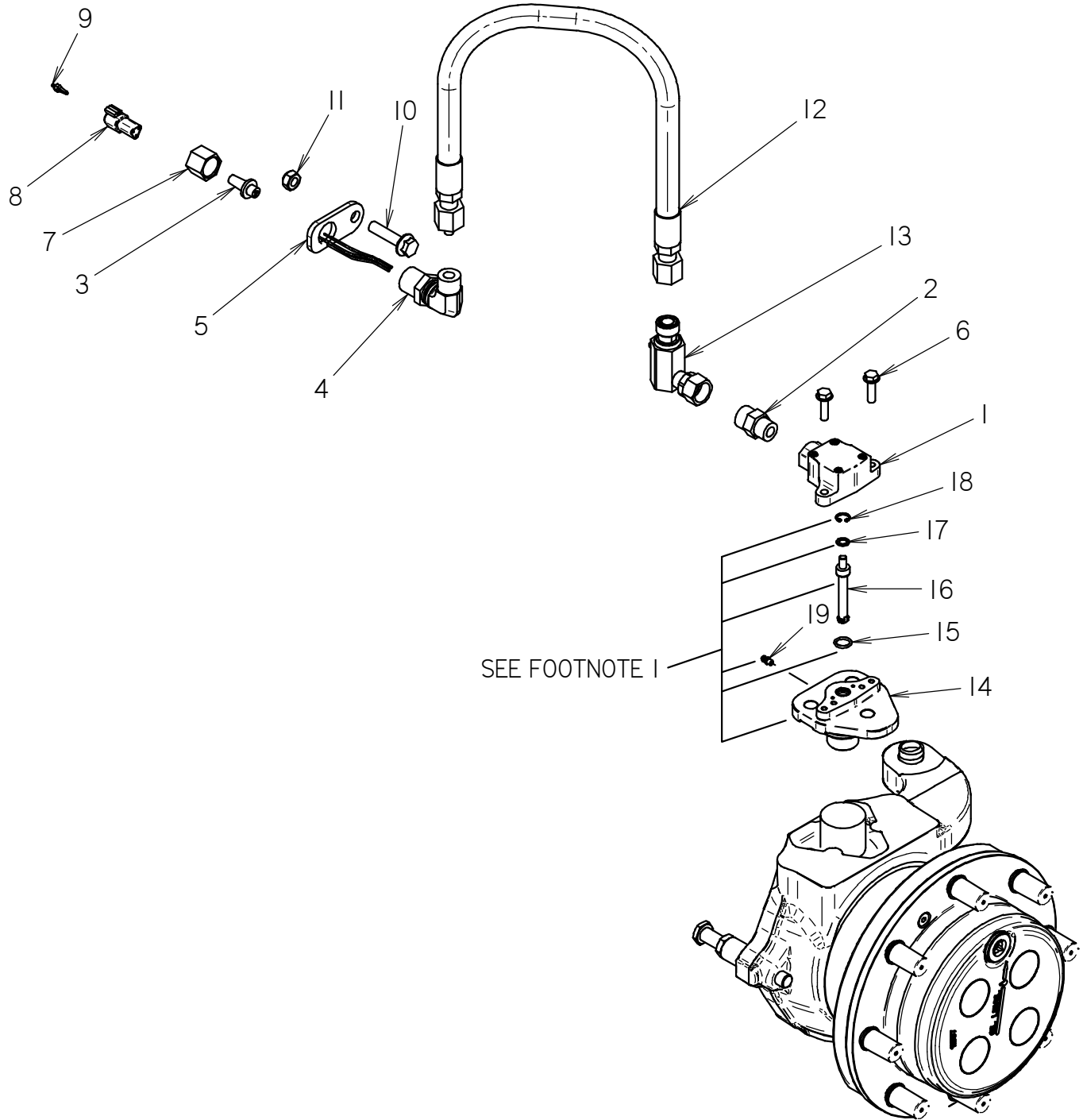
NOT SHOWN:

FOOTNOTES:

NOTE:

# REAR STEER AXLE SENSOR

BEGINS WITH S/N'S: CMWRT95MH90000290, CMWRT95HV90000367, CMWRI5T3C90000132



# REAR STEER AXLE SENSOR

BEGINS WITH S/N'S: CMWRT95MH90000290, CMWRT95HV90000367, CMWRI5T3C90000132

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	215-1503	1	REAR STEER SENSOR	SEE FOOTNOTE 4
2	154-301	1	CONNECTOR (10S-100)	SEE FOOTNOTE 4
3	362-1404	1	WIRE GROMMET	SEE FOOTNOTE 4
4	154-291	1	BK CONNECTOR (100-10090BK)	SEE FOOTNOTE 4
5	300-9066	1	BRACKET	SEE FOOTNOTE 2 & 4
6	106-163	2	FLG SCREW (M8-1.25 X 30MM)	
7	154-310	1	REDUCER NUT (100F)	
8	215-1518	1	3 PIN DEUTSCH CONNECTOR, DT04-3P	SEE FOOTNOTE 4
9	215-1517	1	3 PIN DEUTSCH PLUG, W3P	SEE FOOTNOTE 4
10	107-008	1	FLG LK SCREW (M12-1.75 X 50MM)	
11	106-685	1	LOCKNUT (M12-1.75, PRV TRQ, 10.9)	
12	150-2907	1	HOSE (100FX-22"-3000)	SEE FOOTNOTE 3 & 4
13	150-2843	1	SWIVEL (100-100FX90; DO NOT PRESSURIZE)	SEE FOOTNOTE 4 & 5
14	500-1804	1	KING PIN (REAR STEER)	SEE FOOTNOTE 1
15	499-512	1	O-RING	SEE FOOTNOTE 1
16	500-1801	1	SHAFT	SEE FOOTNOTE 1
17	500-1802	1	WASHER	SEE FOOTNOTE 1
18	500-1803	1	SNAP RING D15	SEE FOOTNOTE 1
19	115-065	1	ZERK (M6 X 1)	SEE FOOTNOTE 1

#### NOT SHOWN:

- 214-133, TERMINAL PIN (DEUTSCH), USE QTY=3 PER AXLE SENSOR ASSEMBLY
- 215-1535, HEAT SHRINK 3/8" ADHESIVE, USE QTY=3 @ 2" FOR A TOTAL OF 6" PER AXLE SENSOR ASSEMBLY
- 215-1546, KEVLAR BRAIDED SLEEVING (1/2"), USE QTY=2 @ 5" FOR A TOTAL OF 10" PER AXLE SENSOR ASSEMBLY

#### FOOTNOTES:

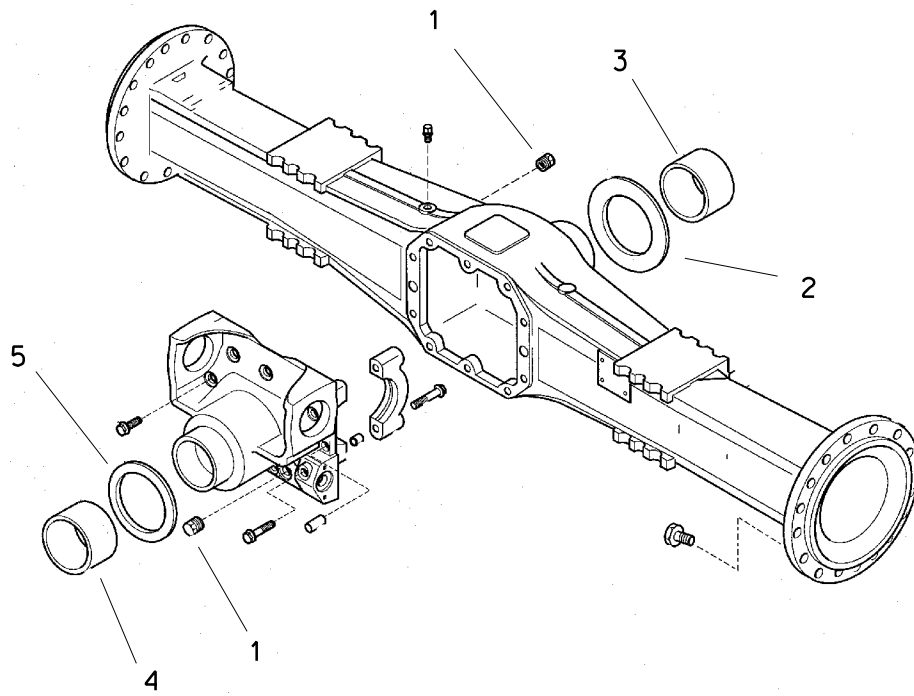
1. PARTS BELONG TO CARRARO REAR STEER KIT 190-1424.
2. BRACKET 300-9066 IS ONLY USED ON THE REAR AXLE SENSOR ASSEMBLIES, 220-1181 AND 220-1183.
3. HOSE 150-2907 USED IN AXLE SENSOR ASSEMBLY 220-1181; USE HOSE 153-294 FOR AXLE SENSOR ASSEMBLY 220-1180, HOSE 515-605 FOR AXLE SENSOR ASSEMBLY 220-1182, AND HOSE 150-1729 FOR AXLE SENSOR ASSEMBLY 220-1183.
4. PARTS BELONG TO AXLE SENSOR ASSEMBLIES; SEE NOTE BELOW FOR DETAILS
5. ONLY USED IN RT90/95/115 AXLE SENSOR ASSEMBLIES 220-1180 AND 220-1181.

#### NOTE:

- RT90/95/115 FRONT AXLE SENSOR ASSEMBLY IS P/N 220-1180
- RT90/95/115 REAR AXLE SENSOR ASSEMBLY IS P/N 220-1181
- RT70/75 FRONT AXLE SENSOR ASSEMBLY IS P/N 220-1182
- RT70/75 REAR AXLE SENSOR ASSEMBLY IS P/N 220-1183



AXLE -  
AXLE HOUSING  
RIGID

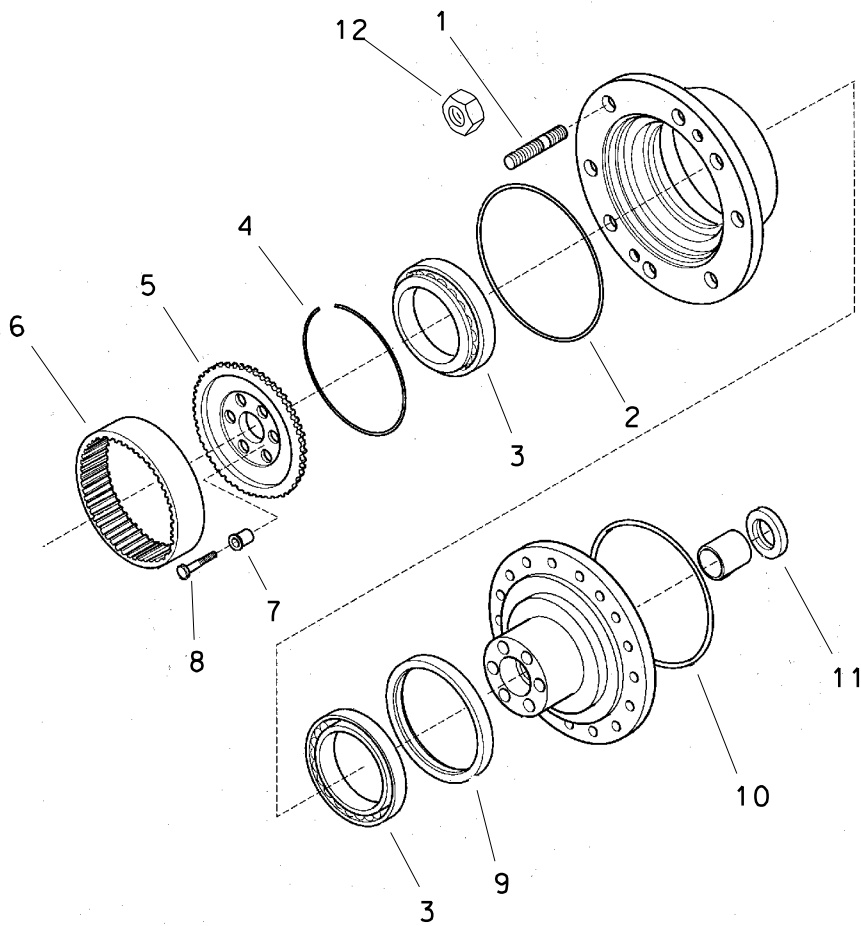


AXLE-  
AXLE HOUSING  
RIGID

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	514-345	2	PLUG (M22-1.50, SOC)	
2.	499-461	1	THRUST WASHER	
3.	499-462	1	BUSHING	
4.	499-470	1	BUSHING	
5.	499-471	1	THRUST WASHER	

FOOTNOTES

AXLE -  
WHEEL HUB  
RIGID

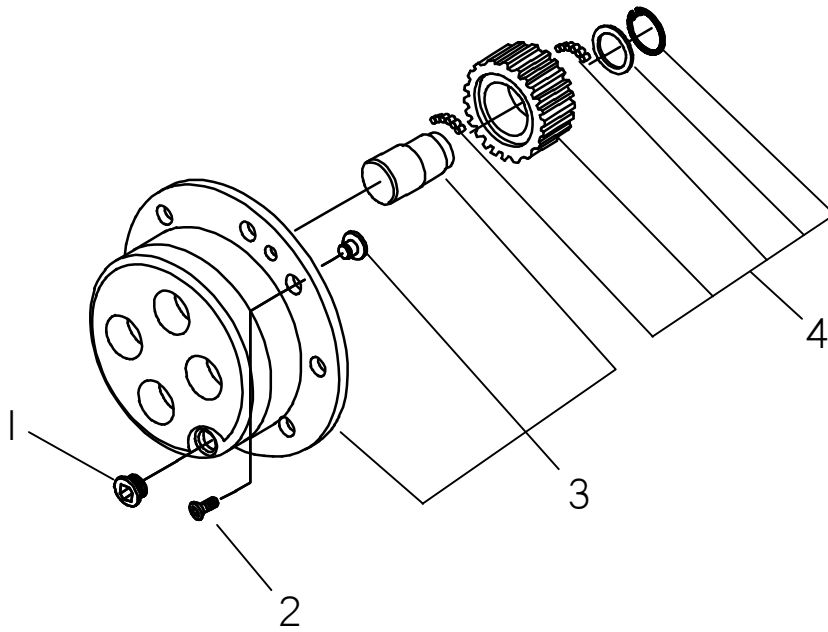


AXLE-  
WHEEL HUB  
RIGID

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	499-499	8	STUD	QTY PER WHEEL ASS'Y
2.	157-224	2	O-RING	
3.	499-498	4	BEARING	
4.	499-501	2	RING	
5.	499-507	2	WHEEL CARRIER	
6.	499-503	2	CROWN GEAR	
7.	499-505	16	CENTERING BUSHING	
8.	499-506	16	BOLT (M12 X 45)	
9.	499-497	2	SEAL RING	
10.	499-515	2	O-RING	
11.	499-516	2	SEAL RING	
12.	499-521	8	LUG NUT (M20 X 1.50)	QTY PER WHEEL ASS'Y

FOOTNOTES

# AXLE-REDUCTION GEARS RIDGE



# AXLE-REDUCTION GEARS RIDGE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	114-036	2	PLUG, PLANETARY CARRIER	
2.	107-349	4	SCREW (M8-1.25 X 20mm)	
3.	499-502	2	PLANETARY CARRIER ASS'Y	
4.	499-504	1	PLANET GEAR KIT	4 KITS PER WHEEL ASSEMBLY

**NOT SHOWN:**

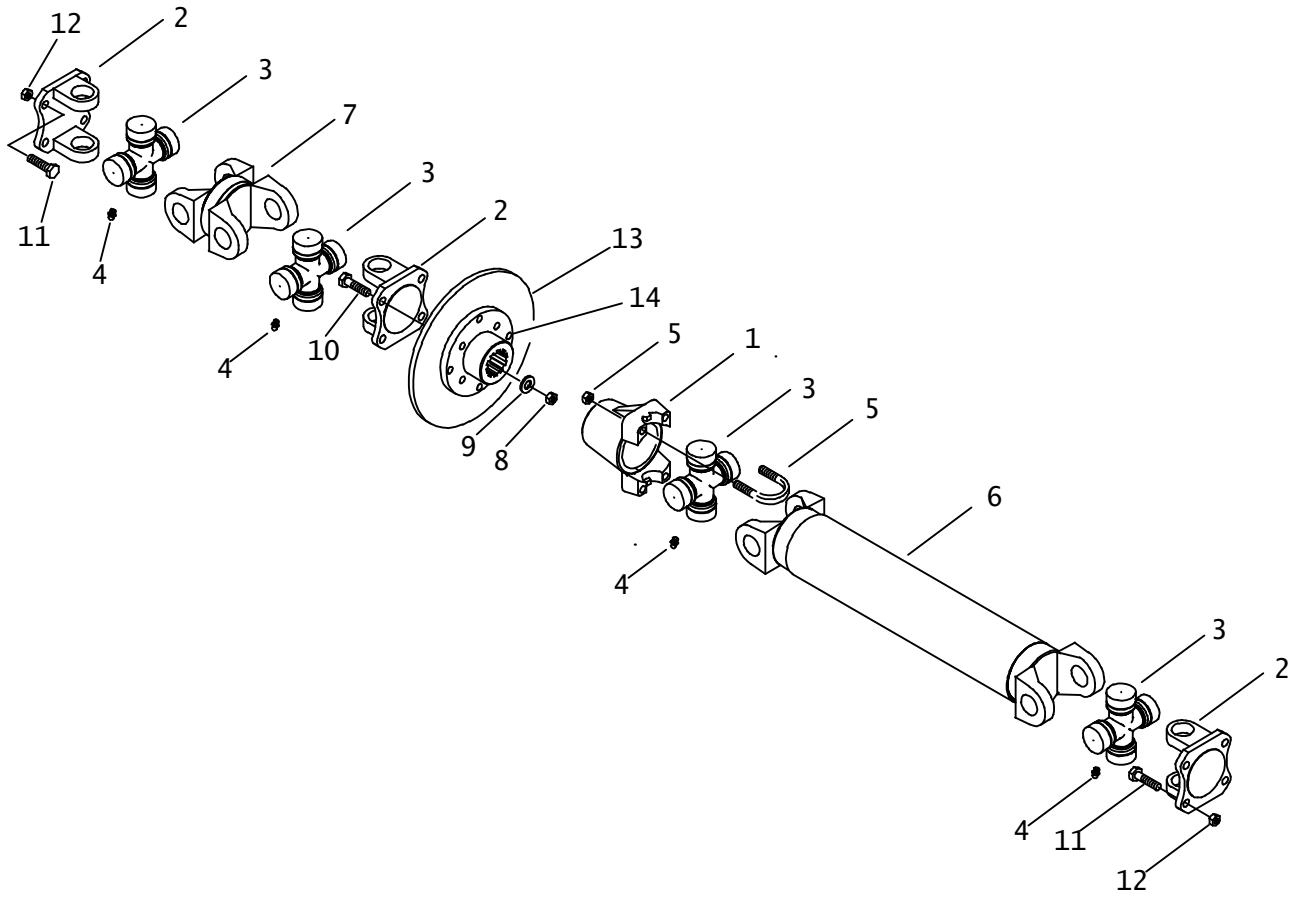
499-517 2 SPLINE SHAFT Z-12  
 499-518 2 COUPLING  
 499-519 2 SNAPRING (D33)  
 499-520 2 HALF SHAFT

**FOOTNOTES:**

**NOTE:**

# POWERSHIFT DRIVE LINE

RT90M



# POWERSHIFT DRIVE LINE

RT90M

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	182-140	1	YOKE	
2.	182-173	3	FLANGE YOKE	
3.	182-145	4	CROSS/BEARING KIT (1-3/16")	
4.	115-003	-	ZERK (1/4-NF, STR)	
5.	182-146	1	U BOLT KIT	
6.	166-235	1	FRONT DRIVE SHAFT	
7.	166-231	1	REAR DIRVE SHAFT	
8.	105-151	4	LOCKNUT (7/16-NC)	
9.	178-072	4	WASHER	
10.	105-222	4	BOLT (7/16-NC X 1-3/4")	
11.	105-119	8	BOLT (7/16 NF X 1-1/2")	
12.	105-120	8	NUT (7/16-NF)	USE LOCTITE 242 OR EQUIVALENT
13.	160-516	-	BRAKE DISC	
14.	306-970	-	DRIVELINE FLANGE	

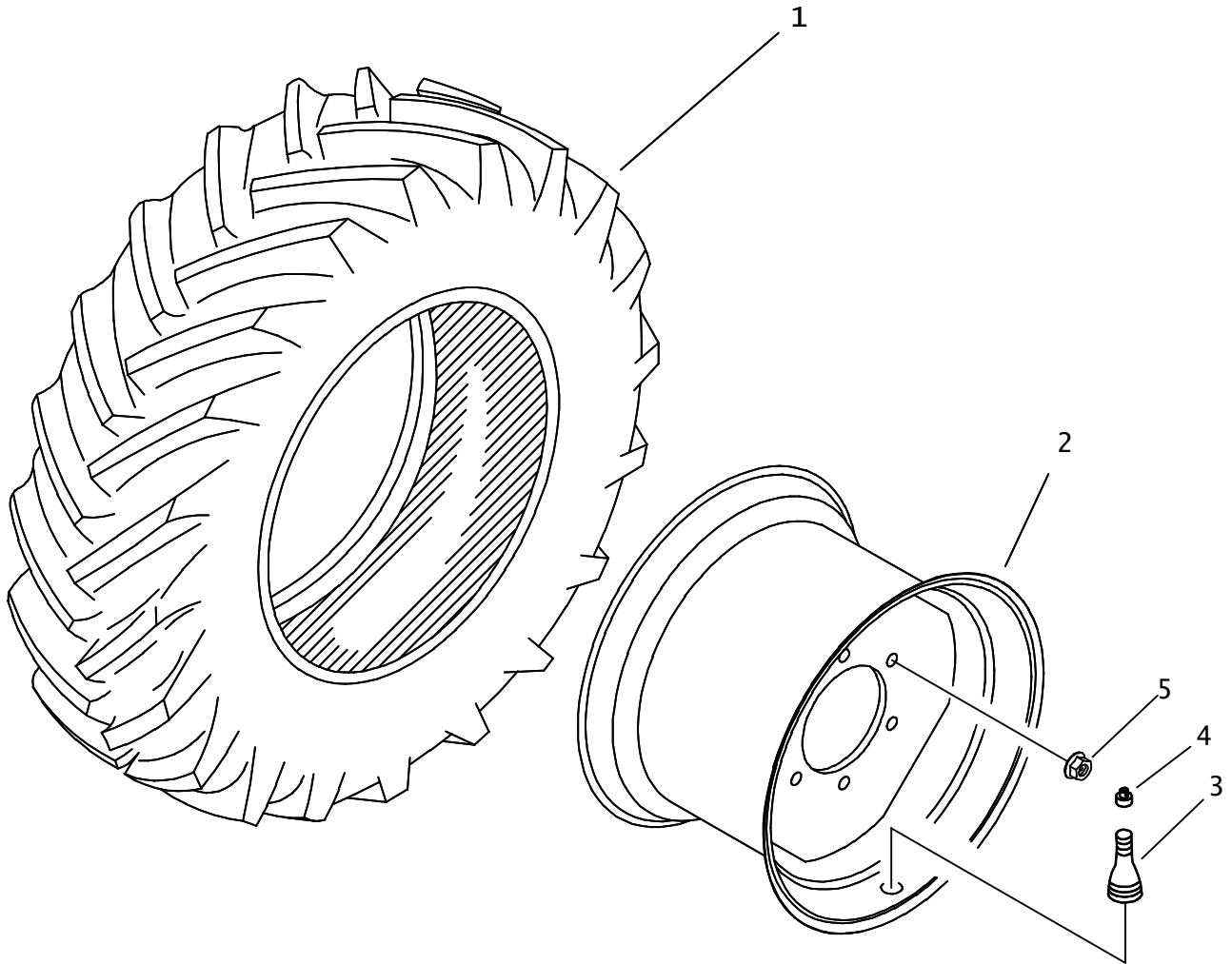
FOOTNOTES

NOTE:



# TIRE & WHEEL

38 X 18.00-20 E16TL



# TIRE & WHEEL

## 38 X 18.00-20 E16TL

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	205-1126	4	T/W (38 X 18.00-20 16PLY)	INCL. REF. #'S 1, 2, 3
1.	205-1125	4	TIRE (38 X 18.00-20.0, E16TL)	16 PLY
2.	205-473	4	WHEEL (20.0 X 14 WD W/8) HP	
3.	205-168	4	VALVE STEM (.625")	INCL. REF #4
4.	205-165	4	VALVE CAP (.305"-32)	
5.	499-521	-	LUG NUT (M20-1.50)	

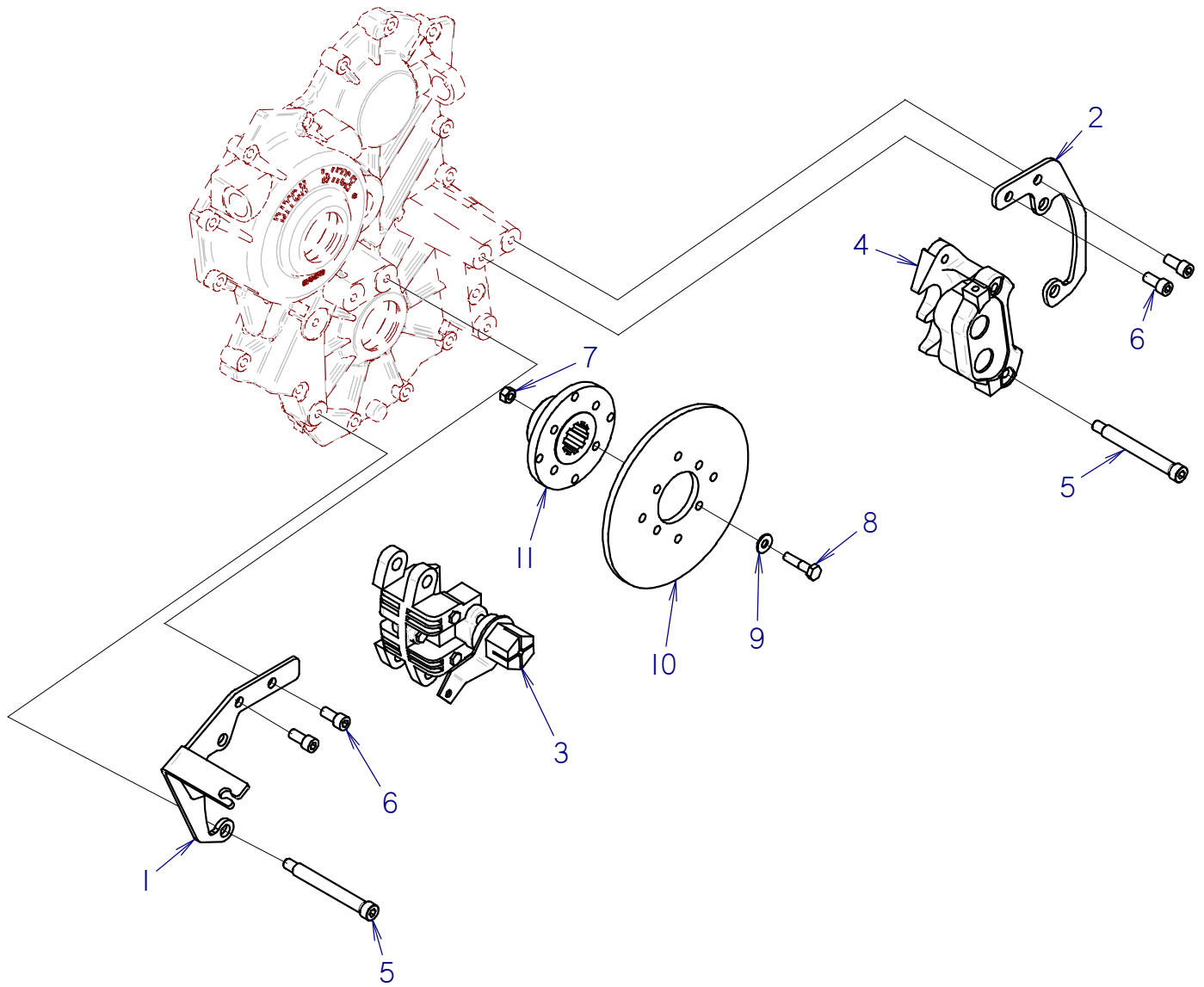
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FOOTNOTES:

NOTE:

REPLACES 205-456

# BRAKE CALIPER POWERSHIFT



# BRAKE CALIPER POWERSHIFT

REF PART NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	320-261	1	LEFT BRAKE BRACKET	
2	312-768	1	RIGHT BRAKE BRACKET	
3	160-773	1	BRAKE CALIPER	PARK BRAKE & SEE FOOTNOTE 1
4	160-534	1	BRAKE CALIPER	SERVICE BRAKE & SEE FOOTNOTE 2
5	107-498	4	SHLD BLT(M16 X 120MM,M12-1.75)	SEE FOOTNOTE #3.
6	105-248	4	SCREW (M12-1.75 X 25MM, SOC)	
7	105-894	4	LOCKNUT(M10-1.50,PRV TRQ,10.9)	
8	106-621	4	SCREW (M10-1.50 X 45MM, 10.9)	
9	105-793	4	WASHER (M10)	
10	160-516	1	BRAKE DISC	
11	306-970	1	DRIVELINE FLANGE	

NOT SHOWN:

**FOOTNOTES:**

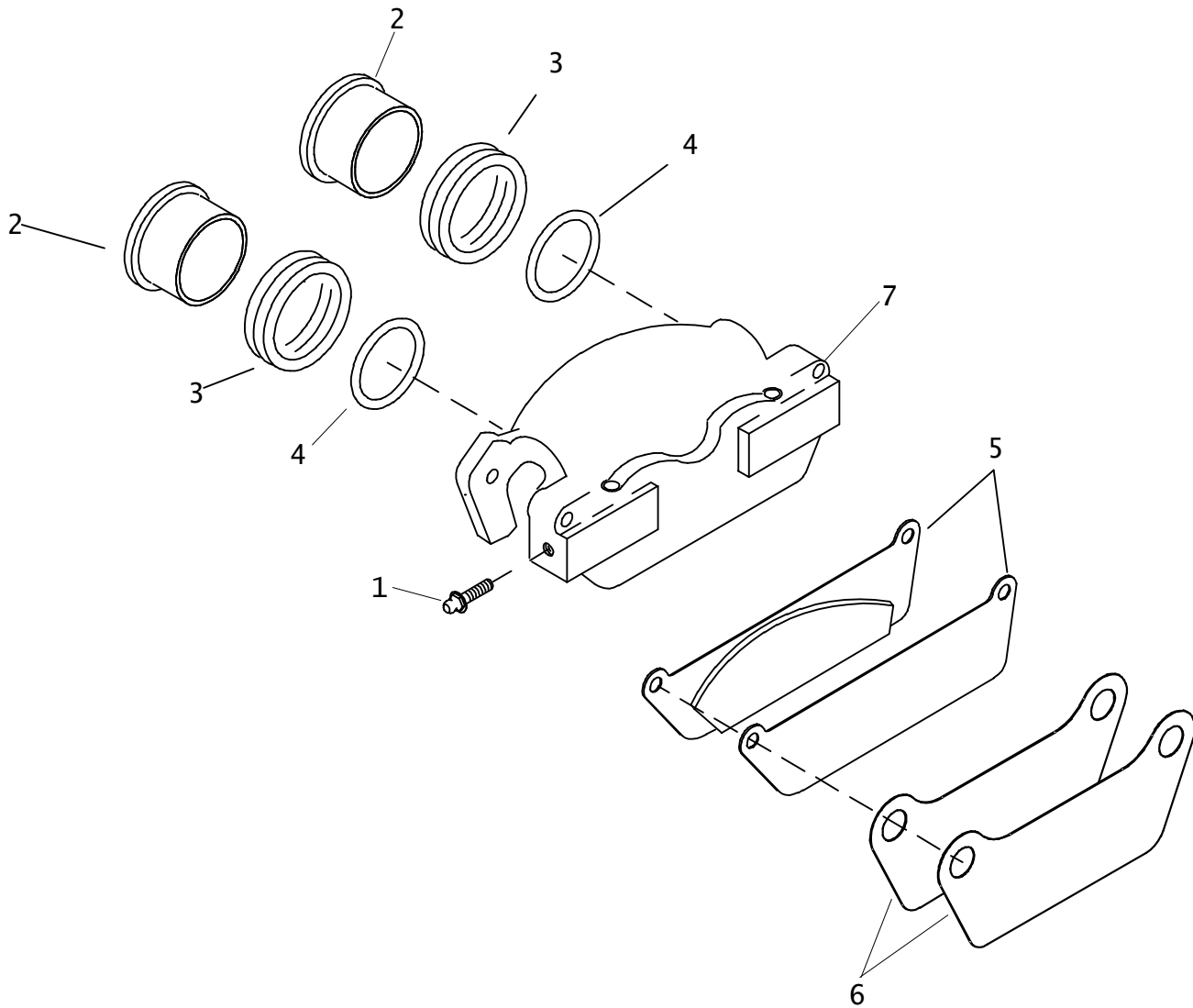
- REF #3 (160-773) INCLUDES 1X EXTENSION SPRING, 115-600 & 1X FRICTION PAD KIT (PAIR) 505-073.
- REF #4 (160-534) INCLUDES 1 PAIR BRAKE PADS (505-083) & 1X INSULATOR (41 SERIES) 502-168.
- CLEAN BOLT THREADS & HOLE THREADS. APPLY LOCTITE 277 OR EQUIVALENT TO BOTH SETS OF THREADS AND TORQUE BOLTS TO 85 FT-LBS.

**NOTE:**

- REFER TO PARK BRAKE PAGE FOR INFORMATION ON PARK BRAKE CABLE.

# BRAKE CALIPER

RT70/RT75/RT90/RT95  
SERVICE



# BRAKE CALIPER

## RT70/RT75/RT90/RT95

### SERVICE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	160-534		BRAKE CALIPER	INCL REF NO:'S 1 THRU 7
1.	160-665	3	BRAKE BLEEDER VALVE	
2.	505-080	2	CALIPER PISTON	
3.	505-081	2	DUST BOOT	
4.	505-082	2	SQUARE RING (223 D70)	
5.	505-083	1	BRAKE PAD (PAIR)	PAIR
6.	502-168	2	INSULATOR	
7.	N.A.	1	CALIPER BODY	

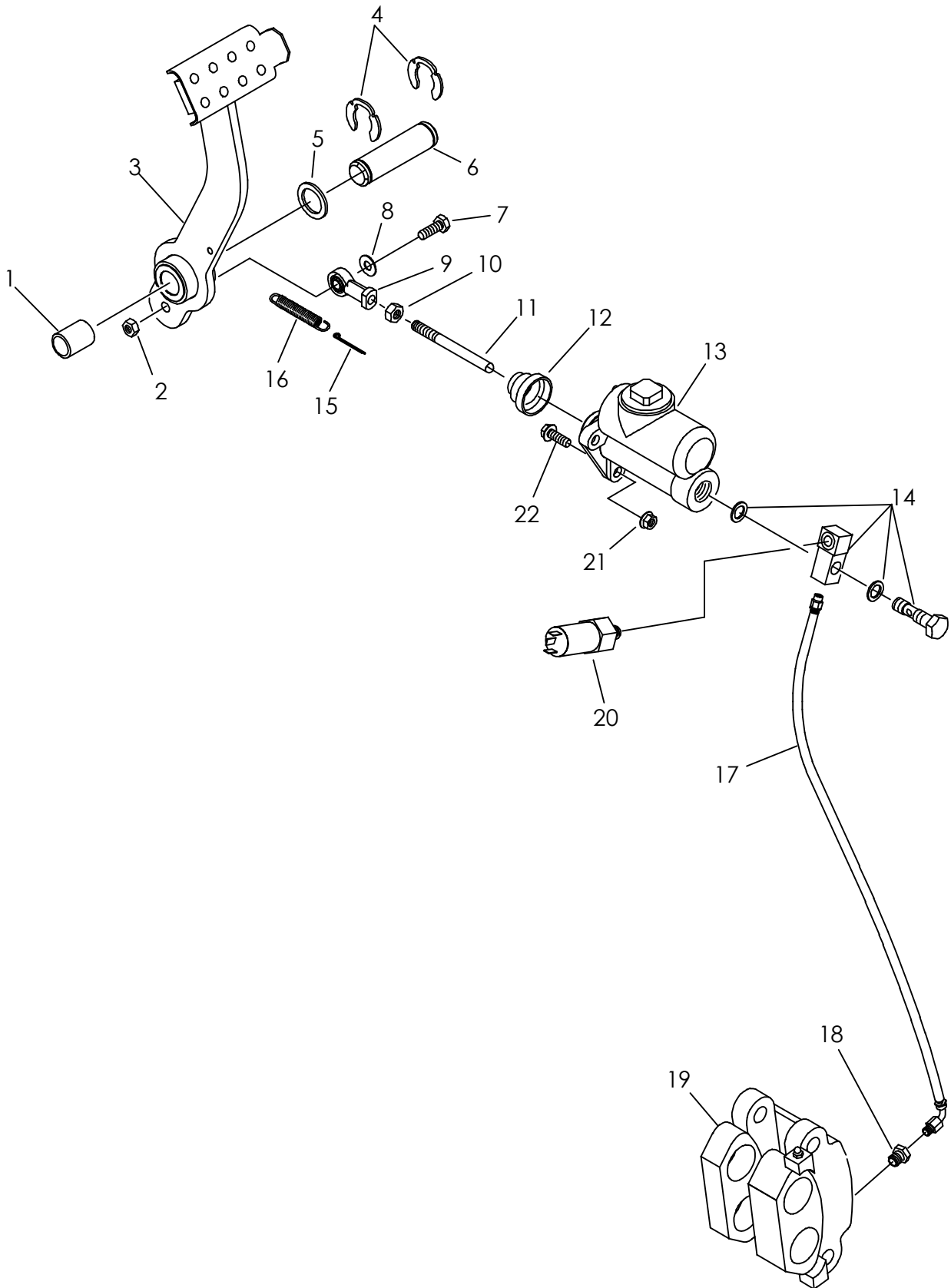
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FOOTNOTES:

NOTE:

# SERVICE BRAKE SYSTEM

POWERSHIFT  
BEGINS WITH S/N



# SERVICE BRAKE SYSTEM POWERSHIFT BEGINS WITH S/N

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	125-407	1	BRONZE BUSHING (1.000")	
2.	105-053	1	NUT (3/8-NC)	
3.	306-996	1	BRAKE PEDAL	
4.	115-484	2	EXTERNAL SNAP RING (1.000")	
5.	110-078	1	MACH BUSHING (1.000", 14GA)	
6.	178-383	1	PIN (1.000" X 3.900")	
7.	107-242	1	LK BOLT (3/8-NC X 1-1/2", NLK)	
8.	106-415	1	WASHER (.406")	
9.	110-102	1	ROD END (3/8-NF, FM)	
10.	105-093	1	NUT (3/8-NF)	
11.	361-887	1	MASTER CYLINDER ROD	
12.	115-329	1	DUST COVER	
13.	151-216	1	MASTER CYLINDER	USE REPAIR KIT 500-1586
14.	157-293	1	BANJO CONNECTOR (08-05T-04NF)	
15.	105-504	1	COTTER PIN (.187 X .750)	
16.	115-613	1	EXTENSION SPRING	
17.	149-861	1	BRAKE HOSE (3/16 T X 19")	
18.	156-282	1	FLARE FITTING (03TM-04TFM)	
19.	160-534	1	BRAKE CALIPER	
20.	214-914	1	BRAKE CUTOUT SWITCH	TORQUE TO 180 in-lbs
21.	106-266	3	FLG NUT (M10-1.50)	
22.	107-002	3	FLG LK SCREW (M10-1.50 X 30mm)	

NOT SHOWN:

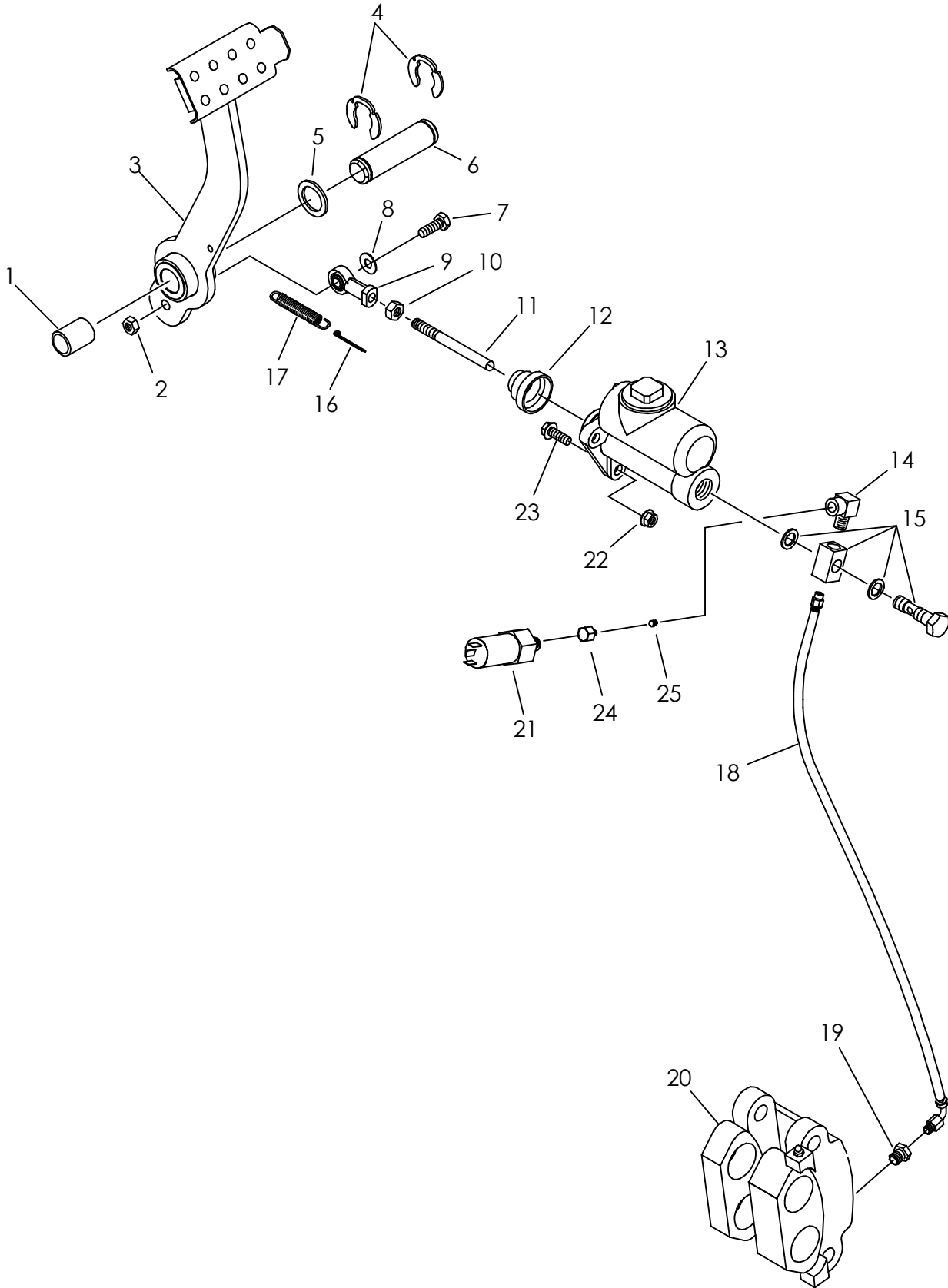
FOOTNOTES:

NOTE:



# SERVICE BRAKE SYSTEM

POWERSHIFT  
ENDS WITH S/N



# SERVICE BRAKE SYSTEM

## POWERSHIFT

### ENDS WITH S/N

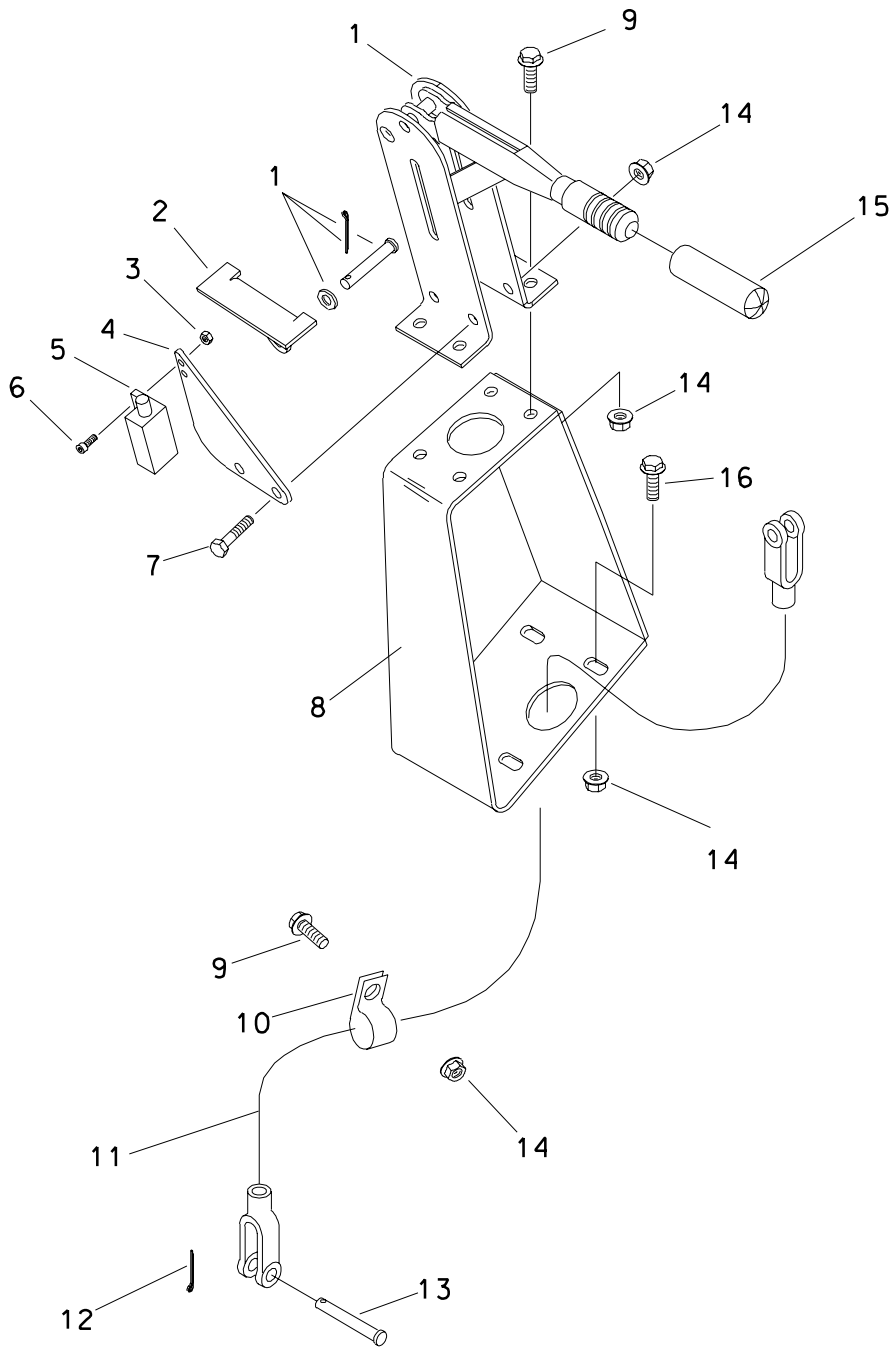
REF	PART			REMARKS
NO.	NUMBER	QTY	DESCRIPTION	
1.	125-407	1	BRONZE BUSHING (1.000")	
2.	105-053	1	NUT (3/8-NC)	
3.	306-996	1	BRAKE PEDAL	
4.	115-484	2	EXTERNAL SNAP RING (1.000")	
5.	110-078	1	MACH BUSHING (1.000", 14GA)	
6.	178-383	1	PIN (1.000" X 3.900")	
7.	107-242	1	LK BOLT (3/8-NC X 1-1/2", NLK)	
8.	106-415	1	WASHER (.406")	
9.	110-102	1	ROD END (3/8-NF, FM)	
10.	105-093	1	NUT (3/8-NF)	
11.	361-887	1	MASTER CYLINDER ROD	
12.	115-329	1	DUST COVER	
13.	151-216	1	MASTER CYLINDER	USE REPAIR KIT 500-1586
14.	155-120	1	STREET ELBOW (04N-04NF90)	
15.	157-293	1	BANJO CONNECTOR (08-05T-04NF)	
16.	105-504	1	COTTER PIN (.187 X .750)	
17.	115-613	1	EXTENSION SPRING	
18.	149-861	1	BRAKE HOSE (3/16 T X 19")	
19.	156-282	1	FLARE FITTING (03TM-04TFM)	
20.	160-534	1	BRAKE CALIPER	
21.	214-914	1	BRAKE CUTOUT SWITCH	TO INSTALL, HAND TIGHTEN THEN APPLY 180 in-lbs TORQUE MAX.
22.	106-266	3	FLG NUT (M10-1.50)	
23.	107-002	3	FLG LK SCREW (M10-1.50 X 30mm)	
24.	157-840	1	REDUCER (02N-04SF)	
25.	115-181	1	REDUCER (04N-02NF)	

NOT SHOWN:

FOOTNOTES:

NOTE:

## PARK BRAKE



# PARK BRAKE

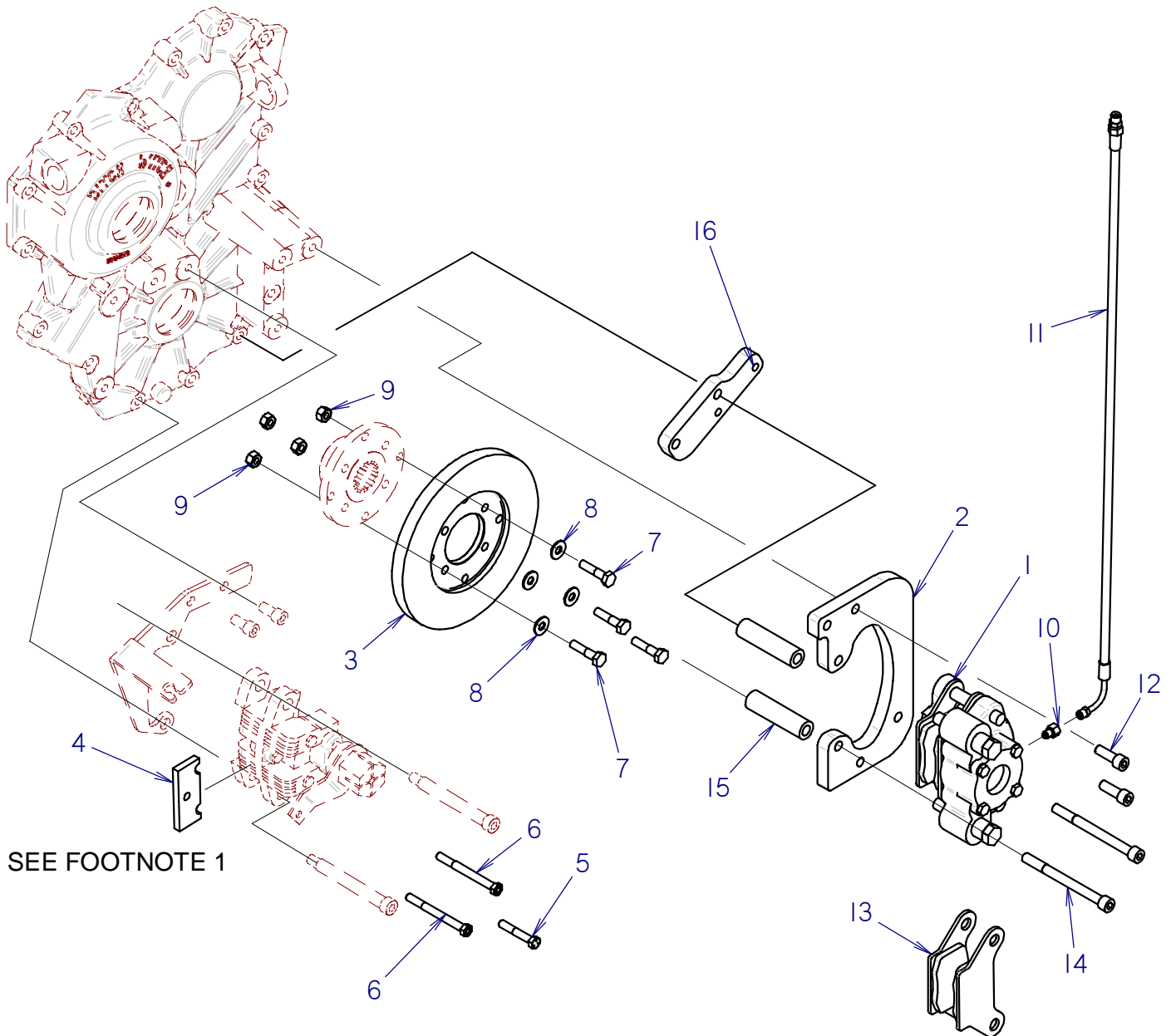
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	160-744	1	PARKING BRAKE LEVER	
2.	309-413	1	ACTUATOR BRACKET	
3.	105-680	2	NUT (M4, W/LK WSHR)	
4.	309-412	1	SWITCH BRACKET	
5.	217-705	1	PLUNGER SWITCH	
6.	106-715	2	SCREW (M4-0.70 X 12mm, SOC)	
7.	106-328	2	SCREW (M8-1.25 X 40mm)	
8.	309-383	1	PARK BRAKE BRACKET	
9.	106-991	5	FLG LK SCREW (M8-1.25 X 20mm)	
10.	110-373	1	BOLT ON CLAMP (13/16")	
11.	194-183	1	BRAKE CABLE	USED ON POWER SHIFT
	194-184	1	BRAKE CABLE	USED ON HYDROSTATIC
12.	105-508	1	COTTER PIN (3/32" X 1")	
13.	110-053	1	CLEVIS PIN (3/8" X 1.078")	
14.	106-386	11	FLG LOCKNUT (M8-1.25)	
15.	110-469	1	GRIP (7/8", ORANGE)	
16.	106-162	4	FLG SCREW (M8-1.25 X 20mm)	SEE FOOTNOTE 1

FOOTNOTES

1. USE LOCTITE 242 (BLUE) WHEN INSTALLING BOLTS.

# HEAVY DUTY BRAKE KIT

RT70M/RT75M RT90M/RT95M  
KIT P/N 190-1097



SEE FOOTNOTE 1

# HEAVY DUTY BRAKE KIT

RT70M/RT75M RT90M/RT95M  
KIT P/N 190-1097

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	160-1033	1	BRAKE CALIPER	TORQUE MOUNTING BOLTS 180- 200 FT - LBS.
2	300-1958	1	RIGHT BRAKE BRACKET	
3	160-1036	1	BRAKE DISC	
4	160-1041	1	MECHANICAL CALIPER SPACER	
5	105-162	1	BOLT (3/8-NC X 2-1/4")	
6	105-022	2	BOLT (3/8-NC X 4")	
7	106-621	4	SCREW (M10-1.50 X 45MM, 10.9)	
8	105-793	4	WASHER (M10)	
9	105-894	4	LOCKNUT(M10-1.50,PRV TRQ,10.9)	
10	156-282	1	FLARE FITTING (03TM-04TFM)	
11	149-862	1	BRAKE HOSE (3/16T X 34")	
12	106-797	2	SCREW (M12-1.75 X 35MM, SOC)	
13	160-1066	2	BRAKE PAD (INDIVIDUAL)	
14	105-678	2	SCREW (M12-1.75 X 140MM, SOC)	
15	300-1960	2	SPACER	
16	300-1959	1	RIGHT BRAKE BRACKET	

NOT SHOWN:

**FOOTNOTES:**

- I. INSTALL ITEM #4 BETWEEN PARK BRAKE (160-733) CALIPER HALVES. RE-ASSEMBLE USING LONGER BOLTS, ITEMS #5 & #6 (2X) RE-USE STEEL FLAT WASHERS ON CALIPER. TORQUE BOLTS TO 30 - 35 FT/LBS.

**NOTE:**

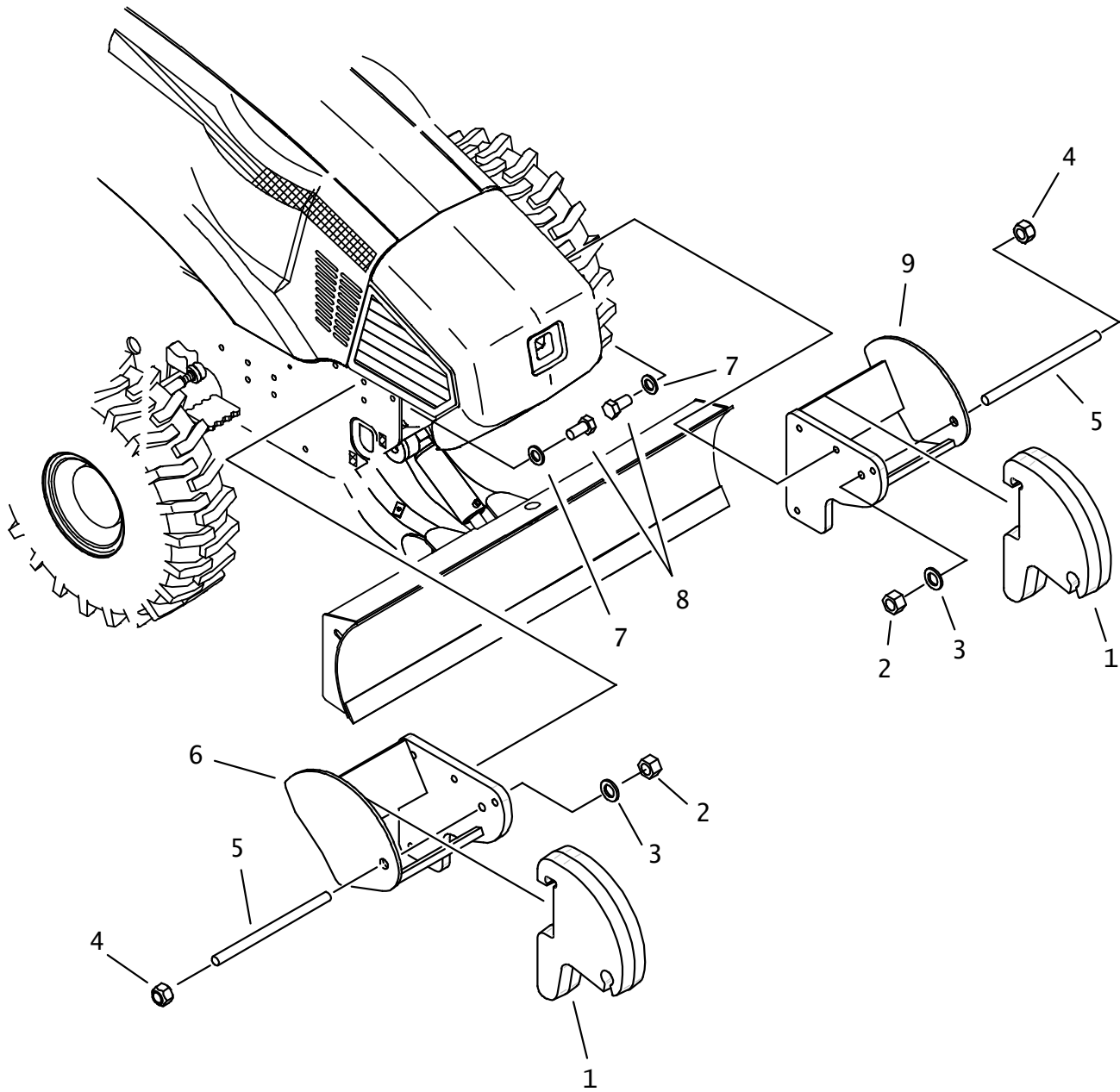
HEAVY DUTY BRAKE KIT, 190-1097, INCLUDES ITEMS 1 - 12 AND ITEMS 14 - 16.



# **FRAME COMPONENTS**



# FRONT COUNTERWEIGHT



## FRONT COUNTERWEIGHT

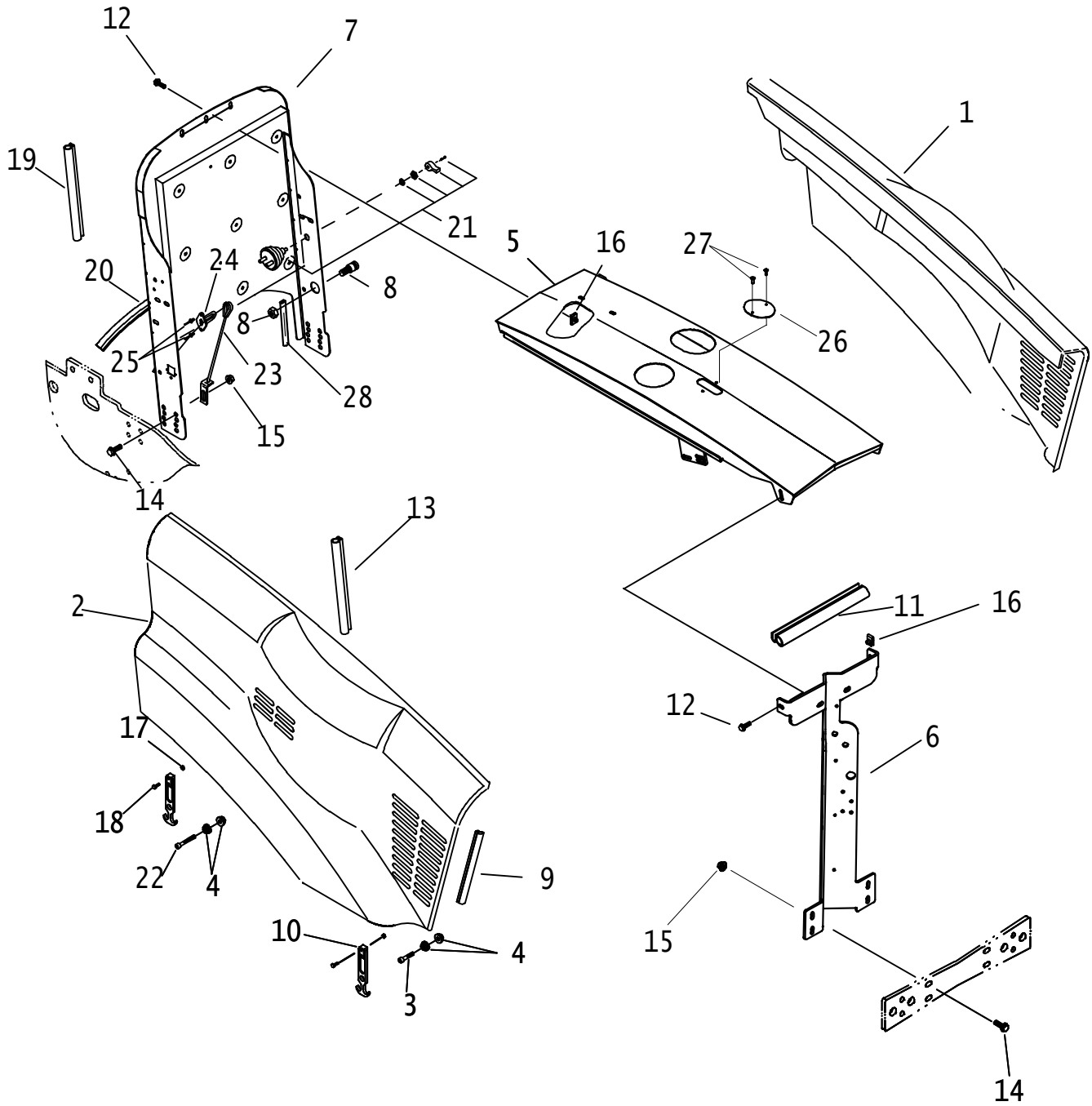
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	100-863	-	COUNTERWEIGHT KIT	INCLUDES REF. NO'S 1-9
1.	375-369	8	WEIGHT CASTING	
2.	106-352	2	NUT (M24-3.00)	USED ONLY WITH 3 WEIGHTS OR LESS
3.	106-488	2	WASHER (M24, HARDENED)	USED ONLY WITH 3 WEIGHTS OR LESS
4.	106-587	2	LOCKNUT (M24-3.0, PRV TRQ, 10.9)	
5.	179-605	2	ALL THREAD ROD (M24 X 15.00)	
6.	319-948	1	RIGHT WEIGHT RACK	
7.	106-399	8	WASHER (M20, HARDENED)	
8.	106-611	8	SCREW (M20-2.50 X 40MM, 10.9)	
9.	319-947	1	LEFT WEIGHT RACK	

NOT SHOWN:

FOOTNOTES:

NOTE:

# ENGINE ENCLOSURE



# ENGINE ENCLOSURE

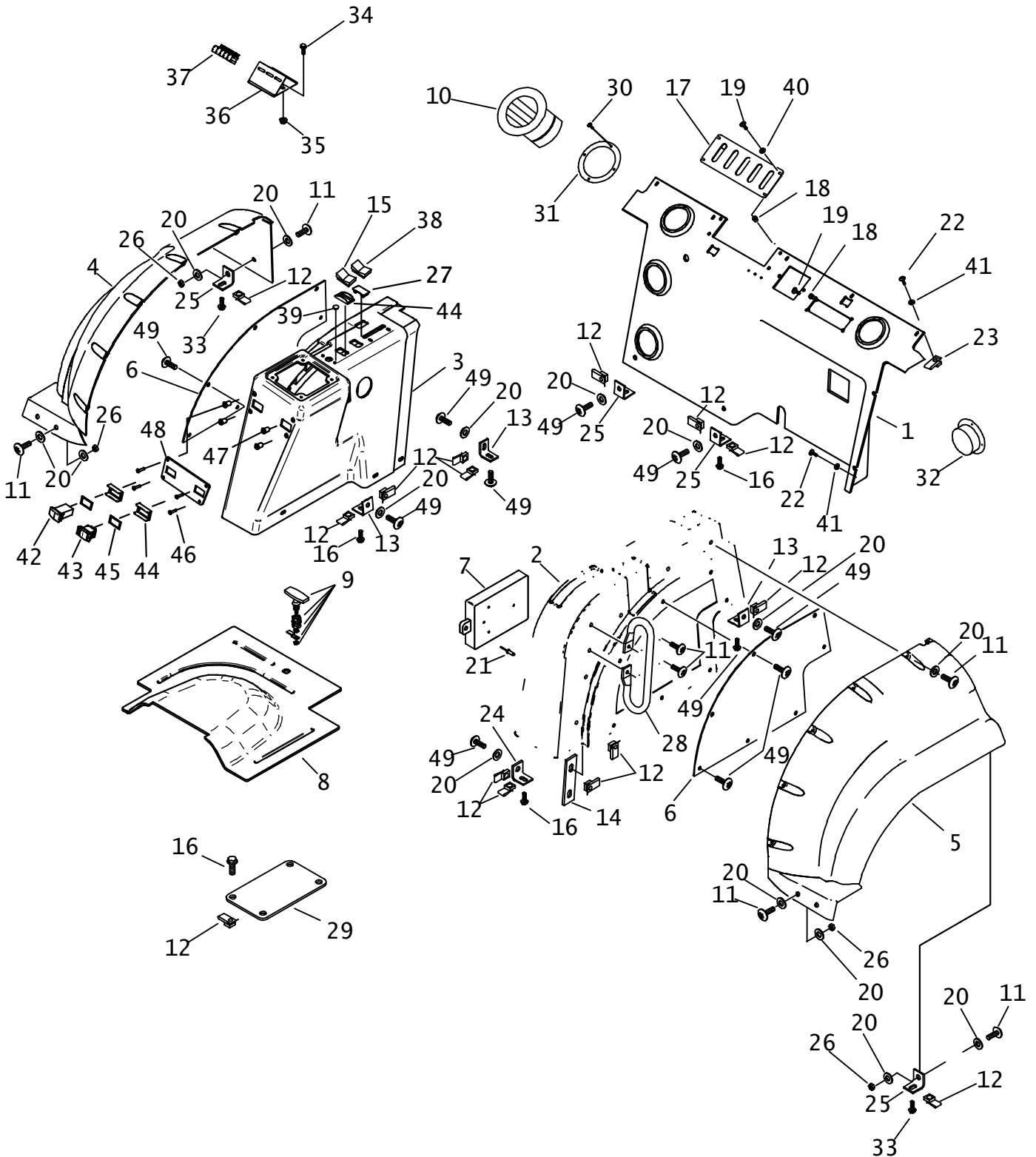
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-227		SIDE PANEL LOCK KIT	INCLUDES REF #'S 23,24 & 25.
1.	307-463	1	LEFT SIDE PANEL	
2.	320-738	1	RIGHT SIDE PANEL W/ AIR INTAKE	
3.	106-081	2	SCREW (M10-1.50 X	
4.	106-387	8	FLG LOCKNUT (M10-1.50)	
5.	319-808	1	MID HOOD	
6.	307-909	1	FRONT HOOD SUPPORT	
7.	310-716	1	FIREWALL	
	111-043	9	INSULATION STUD	
	117-341	1	SOUND INSULATION	
8.	211-087	1	BATTERY JUMPER TERMINALS (RED)	
9.	117-344	AR	BULK EDGE (3/16", SOLD PER 1')	USE 2 @ 25"
10.	110-681	4	DRAW LATCH	
11.	117-344	AR	BULK EDGE (3/16", SOLD PER 1')	USE 1 @ 16"
12.	107-001	7	FLG LK SCREW (M10-1.50 X 25mm)	
13.	117-978	AR	BULK EDGE (3/16 W/ 1" BULB)(FT)	USE 18"
14.	107-003	8	FLG LK SCREW (M12-1.75 X 35mm)	
15.	106-709	8	FLG LK NUT (M12-1.75)	
16.	106-558	5	CLIP NUT (M10-1.50)	
17.	106-048	8	LOCKNUT (#10-24)	
18.	106-408	8	BOLT (#10-24 X 1-1/4", SOC,	
19.	116-489	AR	BULK EDGE (1/8", SOLD PER 1')	USE 2 @ 21"
20.	116-421	AR	BULK EDGE (1/8", SOLD PER 1')	USE 1 @ 26"
21.	217-819	1	BATTERY DISCONNECT SWITCH	INCLUDES HARDWARE
22.	106-725	2	SCREW (M10-1.50 X 65mm, SOC)	
23.	194-345	2	LOCK CABLE	
24.	318-523	2	LOCK BRACKET	
25.	110-348	4	POP RIVET(3/16" X .664")	
26.	325-791	1	HOOD CAP	
27.	106-313	2	POP RIVET(1/8" X 3/8" ALUM)	
28.	115-686	2	BULK EDGE (5/32", SOLD PER 1")	5-1/2" EACH

NOT SHOWN:

FOOTNOTES:

NOTE:

# FENDER AND COVERS



# FENDER AND COVERS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	306-492	1	REAR PANEL	
	323-977	1	REAR PANEL	ASSY USED WITH A/C OR HEATER OPTION
2.	306-491	1	LEFT FENDER	
3.	306-490	1	RIGHT FENDER	
4.	313-225	1	RIGHT OUTSIDE FENDER	
5.	313-226	1	LEFT OUTSIDE FENDER	
6.	308-897	2	PANEL	
7.	250-622	1	MANUAL COMPARTMENT	
8.	318-793	1	FLOOR PLATE	
9.	107-461	1	LOCKING LATCH	
10.	120-085	4	ADJUSTABLE LOUVER (23-0005)	
11.	107-778	26	SCREW (M8-1.25 X 30mm, BUT SOC)	SEE FOOTNOTE 3
12.	107-135	38	CLIP NUT (M8-1.25)	
13.	306-796	2	TAB	
14.	309-816	2	STRAP	
15.	217-762	1	ROCKER SWITCH (SPDT)	USED WITH AXLE LOCK
16.	106-992	12	FLG LK SCREW (M8-1.25 X 25mm)	
17.	307-644	1	COVER	
18.	107-358	8	WELLNUT (M4-0.7 X 12.67mm LG)	
19.	107-580	8	SCREW (M4-0.70 X 16mm, BUT SOC)	
20.	107-629	43	WASHER (M8)	
21.	110-348	3	POP RIVET (3/16" X .664")	
22.	105-1549	7	SCREW (M6-1.00 X 20MM)	
23.	106-574	5	CLIP NUT (M6-1.00)	
24.	306-795	1	TAB	
25.	309-434	6	TAB	
26.	107-096	9	LOCKNUT (M8-1.25, NLK)	
27.	362-823	6	COVER	SEE FOOTNOTE 5
28.	117-360	2	GRAB HANDLE	
29.	309-847	1	FUEL SENDER COVER	
30.	106-155	20	SCREW (#4-40 X 5/8", PAN PLPS)	
31.	120-084	4	HOSE ADAPTER (23-0048)	
32.	120-123	1	HOSE ADAPTER (23-0090)	
33.	106-989	2	FLG LK SCREW (M8-1.25 X 35mm)	
34.	106-806	2	FLG LK SCREW (M12-1.75 X 25mm)	
35.	106-709	2	FLG LK NUT (M12-1.75)	
36.	316-945	1	RELAY MOUNT	SEE FOOTNOTE 1
37.	217-194	10	MICRO RELAY BASE	
38.	217-764	1	ROCKER SWITCH (SPDT)	USED WITH FRAME TILT OPTION
39.	157-333	1	HOLE PLUG (.750")	SEE FOOTNOTE 2
40.	107-597	4	WASHER (M4)	
41.	106-388	7	WASHER (M6)	
42.	217-072	1	ROCKER SWITCH	SEE FOOTNOTE 4 & 5
43.	217-817	1	ROCKER SWITCH (SEALED)	SEE FOOTNOTE 4 & 5
44.	110-854	6	SWITCH ACTUATOR GUARD	USE WITH AXLE LOCK, FRAME TILT, REAR STEER & REEL WINDER
45.	165-817	2	SWITCH GASKET	SEE FOOTNOTE 4 & 5
46.	107-312	4	SCREW (M6-1.00X25MM, BUT SOC)	SEE FOOTNOTE 4
47.	107-871	4	WELLNUT (M6-1.00 X 20.35MM LG)	SEE FOOTNOTE 4
48.	300-9262	1	SWITCH MOUNT	SEE FOOTNOTE 4
49.	106-163	22	FLG SCREW (M8-1.25 X 30MM)	

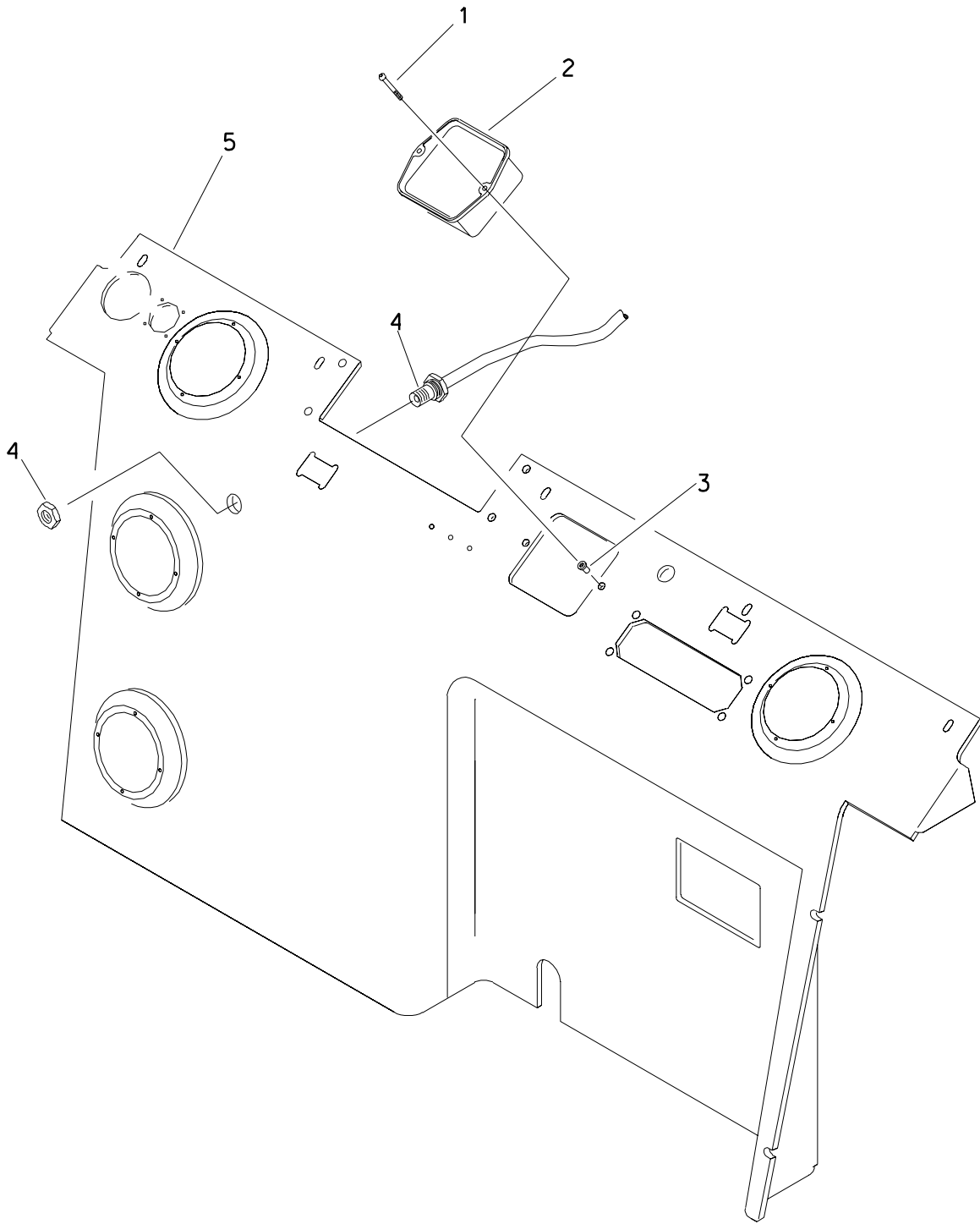
## FOOTNOTES

1. THIS IS TO BE USED FOR POWERSHIFT UNITS ONLY
2. USE LOCTITE 401 ADHESIVE
3. USE LOCTITE 242 OR EQUIVALENT.
4. USED WITH REAR STEER SYSTEM.
5. UNITS WITHOUT REAR STEER, FRAME TILT, AXLE LOCK, OR REEL WINDER USE PLUGS 362-823.

NOTE:

# TRENCH DEPTH METER MODULE

RT70/RT75/RT90/RT95/RT115



# TRENCH DEPTH METER MODULE

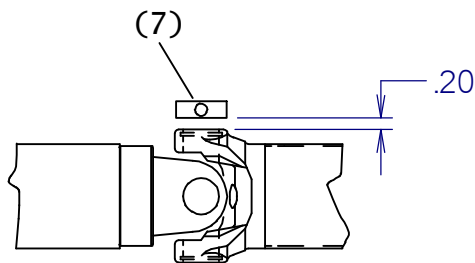
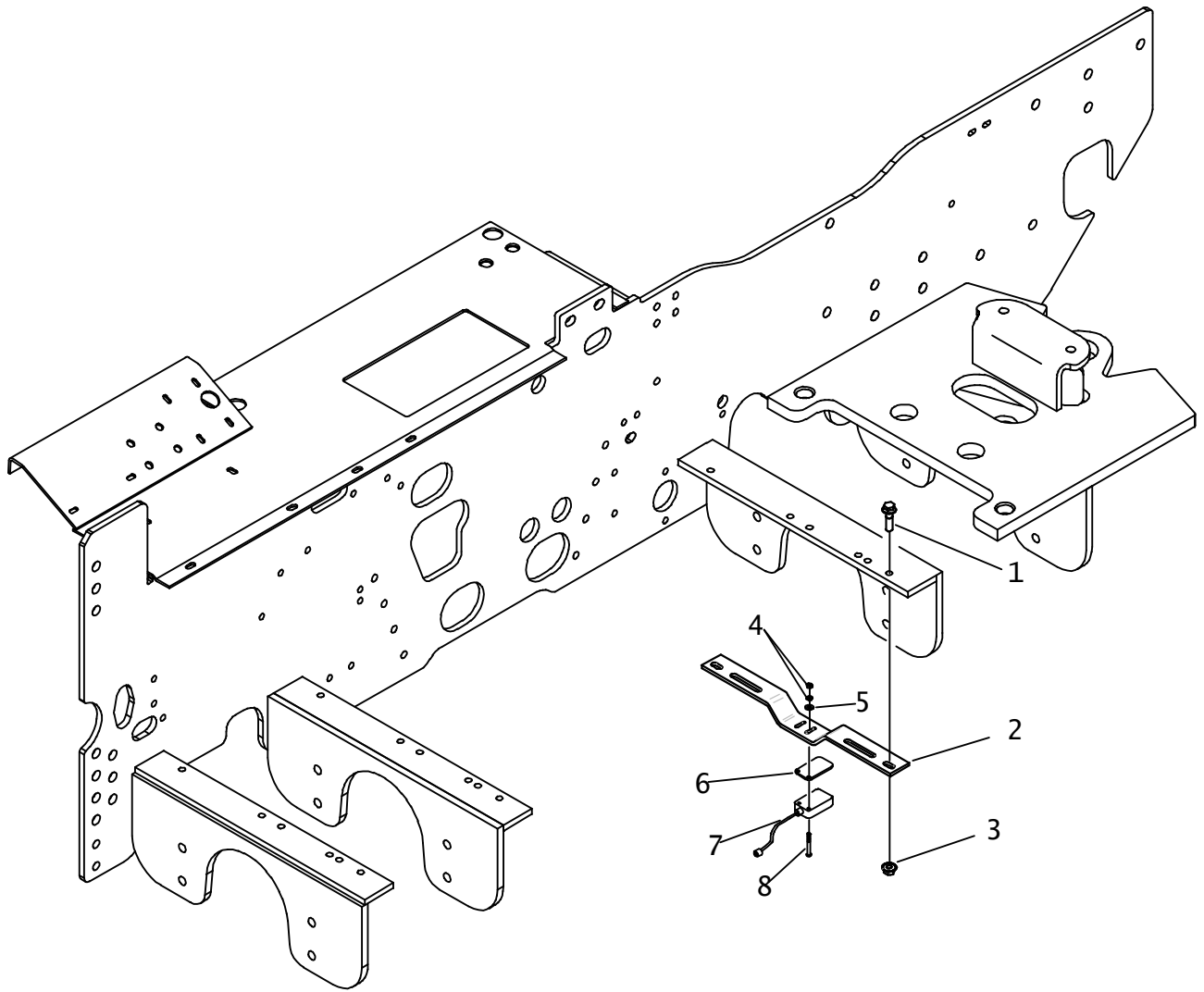
RT70/RT75/RT90/RT95/RT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	107-580	2	SCREW (M4-0.70 X 16mm, BUT SOC)	
2.	220-086	1	TRENCH DEPTH METER	
3.	107-358	2	WELLNUT (M4-0.7 X 12.67mm LG)	
4.	213-075	1	TDM HARNESS	
5.	319-745	-	REAR PANEL	

FOOTNOTES



# TRENCH DEPTH METER/ODOMETER MT



## TRENCH DEPTH METER/ODOMETER MT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	107-004	3	FLG LK SCREW (M12-1.75 X 45mm)	RT95 / RT115 & SEE FOOTNOTE 2
2.	315-744	1	SENSOR BRACKET	
3.	106-709	3	FLG LK NUT (M12-1.75)	RT95 / RT115 & SEE FOOTNOTE 2
4.	105-680	2	NUT (M4, W/LK WSHR)	
5.	107-597	2	WASHER (M4)	
6.	107-451	AR	SHIM (.135")	SEE FOOTNOTE 1
7.	214-692	1	PROXIMITY SWITCH	
8.	107-414	2	SCREW (M4-0.70 X 30mm, BUT SOC)	

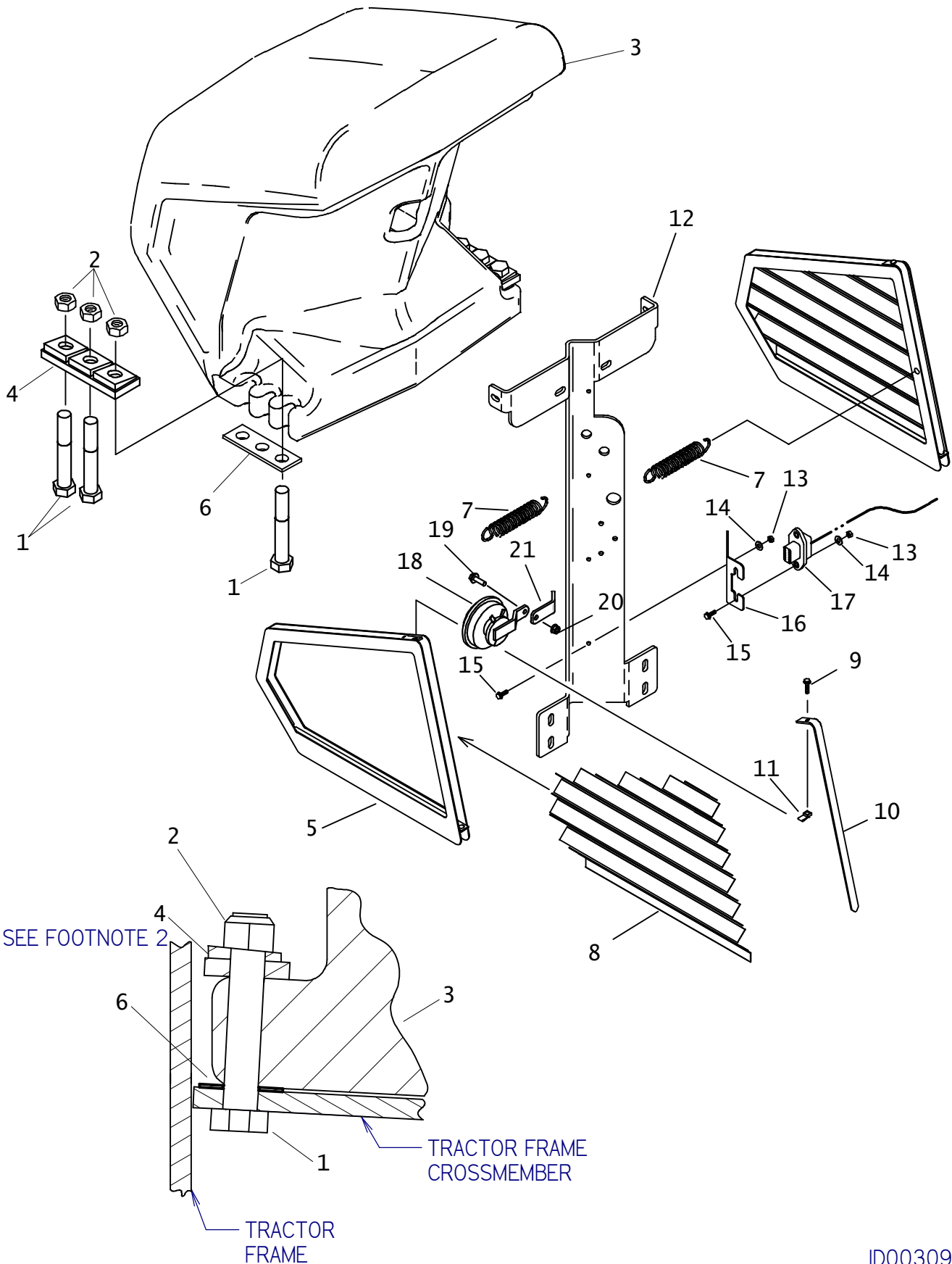
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### FOOTNOTES

- SHIMS (107-451) ARE USED TO ADJUST SPACING OF PROXIMITY SWITCH (214-692) FROM THE DRIVE SHAFT.
- RT75 USES 2X 105-003 (FLG LOCKNUT 5/16-NC) & 2X 105-190 (BOLT 5/16-NC X 2-3/4")

NOTE

# COUNTERWEIGHT/GRILLE (RT SERIES) ENDS WITH SERIAL NUMBER (SEE NOTES)



## COUNTERWEIGHT/GRILLE (RT SERIES)

ENDS WITH SERIAL NUMBER (SEE NOTES)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	106-633	6	SCREW (M20-2.5 X 130mm)	SEE FOOTNOTE 1, 3 & 4
2.	106-665	6	LOCKNUT (M20-2.50, 10.9)	SEE FOOTNOTE 4
3.	375-370	1	CASTING (FRAME NOSE)	SEE FOOTNOTE 3
4.	327-389	2	CLAMP BAR	SEE FOOTNOTE 2 & 4
5.	313-825	2	GRILLE	SEE FOOTNOTE 4
6.	118-400	2	SHIM (.075")	
7.	117-386	2	EXTENSION SPRING	
8.	308-723	2	SCREEN	
9.	106-987	2	FLG LK SCREW (M6-1.00 X 16mm)	
10.	178-873	2	SCREEN RETAINER	
11.	106-574	2	CLIP NUT(M6-1.00)	
12.	307-909	-	FRONT HOOD SUPPORT	
13.	106-237	3	LOCKNUT (M6-1.00, PRV TRQ, NLK)	
14.	105-284	3	WASHER (3/16")	
15.	106-161	3	FLG SCREW (M6-1.00 X 20mm)	
16.	318-726	1	PLATE	
17.	217-267	1	HYDROSTAT FRAME HARNESS	
	217-268	1	POWERSHIFT FRAME HARNESS	
18.	306-609	1	HIGH FREQUENCY HORN	OBSOLETE
	192-006	1	HIGH FREQUENCY HORN	
	192-005	1	HORN BRACKET	
19.	106-992	2	FLG LK SCREW (M8-1.25 X 25MM)	
20.	106-386	2	FLG LOCKNUT (M8-1.25)	
21.	323-673	1	HORN BRACKET	

NOT SHOWN:

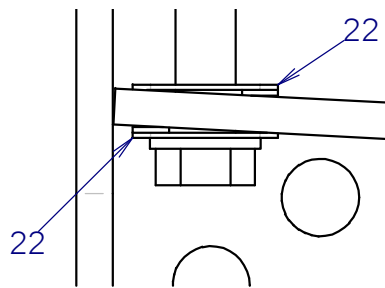
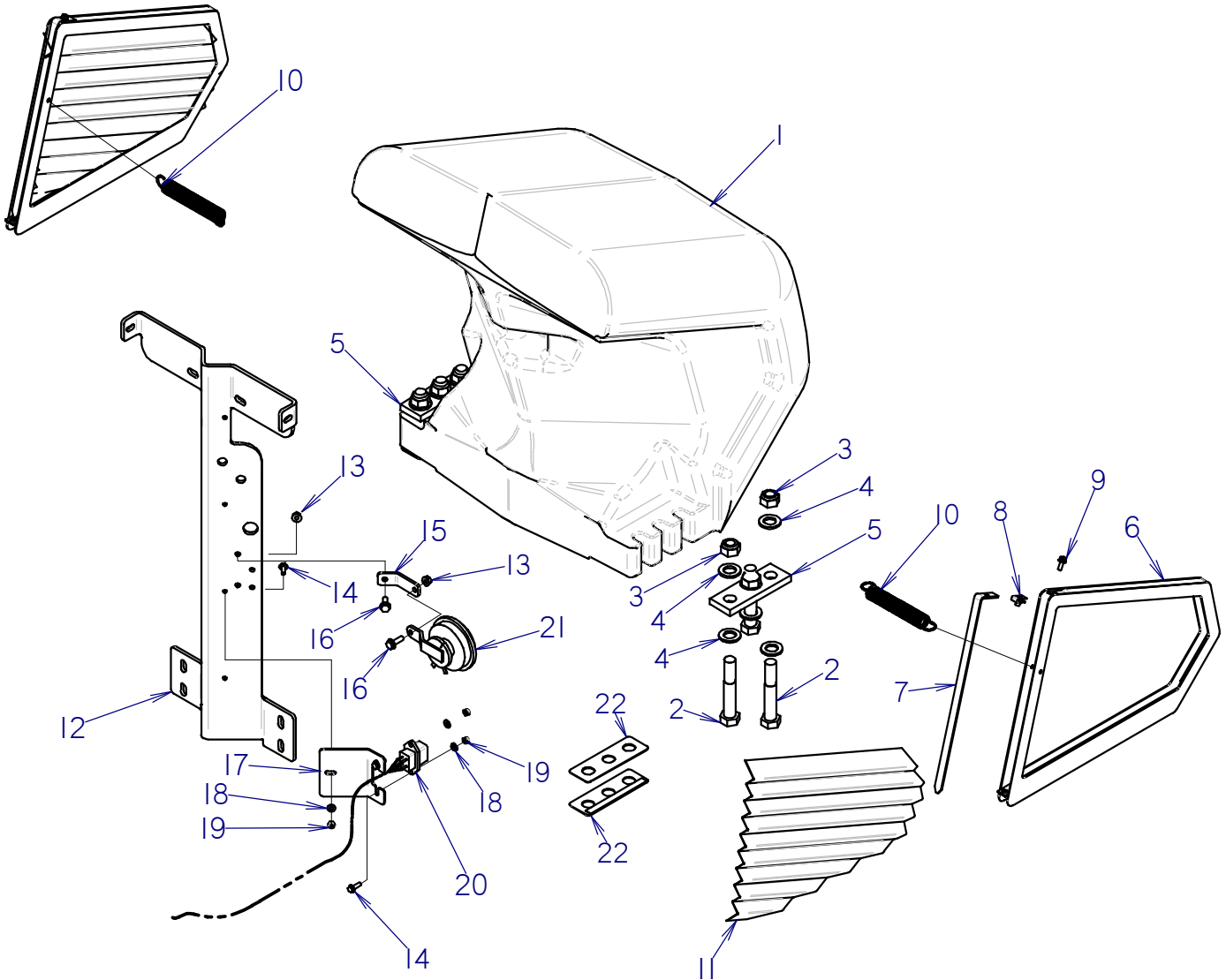
FOOTNOTES:

- 1- TORQUE BOLT TO 350 FT/LB (475 N/m)
- 2- INSTALL REF #4 (327-389) WITH THICK EDGE TO FRAME.
- 3- REFER TO NOSE CASTING INSTALLATION INSTRUCTION 051-420.
- 4- 104-186, BOLT AND SHIM KIT, INCLUDES REF #'S 1,2,4 & 6.

NOTE:

1. RT75 ENDS WITH S/N 5Z0663.
2. RT95 / RT115 ENDS WITH S/N 5Z0676

# COUNTERWEIGHT/GRILLE (RT SERIES) BEGINS WITH SERIAL NUMBER (SEE NOTES)



SEE FOOTNOTE 2

## COUNTERWEIGHT/GRILLE (RT SERIES) BEGINS WITH SERIAL NUMBER (SEE NOTES)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	375-457	1	NOSE CASTING	
2	106-626	6	SCREW (M20-2.50 X 120MM, 10.9)	SEE FOOTNOTE 1, 2 & 3
3	106-665	6	LOCKNUT (M20-2.50, 10.9)	
4	106-399	12	WASHER (M20, HARDENED)	
5	307-531	2	CLAMP BAR	
6	313-825	2	GRILLE	
7	178-873	2	SCREEN RETAINER	
8	106-574	2	CLIP NUT (M6-1.00)	
9	106-987	2	FLG LK SCREW (M6-1.00 X 16MM)	
10	117-386	2	EXTENSION SPRING	
11	308-723	2	SCREEN	
12	307-909	1	FRONT HOOD SUPPORT	
13	106-386	2	FLG LOCKNUT (M8-1.25)	
14	106-161	3	FLG SCREW (M6-1.00 X 20MM)	
15	323-673	1	HORN BRACKET	
16	106-992	2	FLG LK SCREW (M8-1.25 X 25MM)	
17	318-726	1	PLATE	
18	105-284	3	WASHER (3/16")	
19	106-237	3	LOCKNUT (M6-1.00,PRV TRQ,NLK)	
20	217-267	1	HYDROSTAT FRAME HARNESS	
21	306-609	1	HIGH FREQUENCY HORN	
22	329-358	4	SHIM	SEE FOOTNOTE 2

NOT SHOWN

#### FOOTNOTES

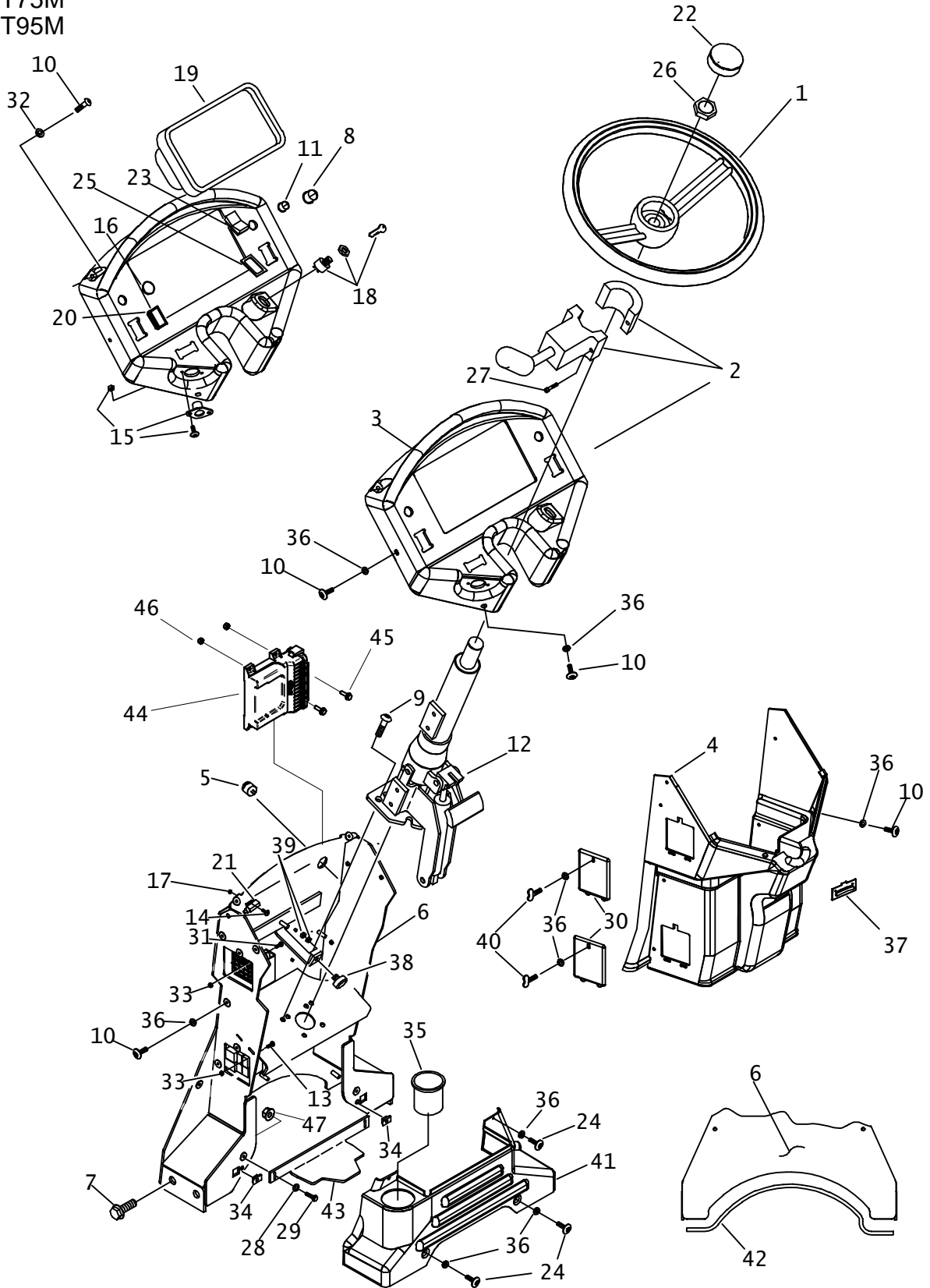
1. TORQUE BOLT TO 350 ft/lbs.
2. USE SHIMS (REF #22) WHEN MOUNTING NEW CAST NOSE (375-457) ONTO TRACTOR FRAME BEFORE SERIAL NUMBERS LISTED IN FOOTNOTES 4 & 5.
3. REFER TO NOSE CASTING INSTALLATION INSTRUCTIONS 051-420 FOR CORRECT TORQUE SEQUENCE.

#### NOTE

1. RT75 BEGINS WITH SERIAL NUMBER 5Z0664.
2. RT95/RT115 BEGINS WITH SERIAL NUMBER 5Z0677.

# TILT STEERING

RT75H RT75M  
RT95H RT95M



# TILT STEERING

## RT75H RT75M

## RT95H RT95M

REF PART NO. NUMBER	QTY	DESCRIPTION	REMARKS
1.	160-428	1 STEERING WHEEL	
2.	215-243	1 F-N-R SHIFTER	POWERSHIFT UNITS ONLY
3.	318-555	1 MAIN CONSOLE	
4.	318-556	1 CONSOLE CENTER SECTION	
5.	306-603	1 AUDIO ALARM	
6.	315-142	1 PEDESTAL	
7.	106-470	4 FLG SCREW (M16-2.0 X 40mm)	
8.	306-608	1 BUTTON COVER	
9.	107-864	4 BOLT (3/8-NC X 1.00", BUT SOC)	
10.	105-1550	14 SCREW (M6-1.00 X 25MM)	
11.	306-607	1 HORN BUTTON	
12.	306-433	1 STEERING COLUMN	
	499-855	- KNOB KIT	
	499-856	- TILT LEVER KIT	
	499-857	- SHAFT KIT	
	499-858	- GAS SPRING KIT ( CYLINDER )	
13.	105-185	2 BOLT (#10-24 X 1/2 ", RD SLT)	
14.	107-580	2 SCREW (M4-0.70 X 16mm, BUT SOC)	
15.	214-301	1 ACCESSORY SOCKET	
	107-580	2 SCREW (M4-0.70 X 16mm, BUT SOC)	
	105-680	2 NUT (M4, W/LK WSHR)	
16.	211-067	1 DOME PLUG (.687")	
17.	105-680	2 NUT (M4, W/LK WSHR)	
18.	214-852	1 IGNITION SWITCH	
	214-961	KEY, PAIR	
	214-962	SWITCH MOUNTING NUT	
19.	211-273	1 5-GAUGE CLUSTER	
20.	362-823	AR COVER	3 W/ POWERSHIFT UNITS, 2 W/ HYDROSTAT UNITS
21.	217-704	1 PLUNGER SWITCH	
22.	110-730	1 STEERING WHEEL CAP	
23.	217-762	1 ROCKER SWITCH (SPDT)	HYDROSTAT UNITS ONLY
24.	105-1552	4 SCREW (M6-1.00 X 16MM)	
25.	165-817	1 SWITCH GASKET	HYDROSTAT UNITS ONLY
26.	105-361	1 JAM NUT (13/16 NF)	
27.	106-425	2 (M5-0.80 X 40mm, SOC)	NOT USED ON POWER SHIFT UNITS
28.	105-095	2 WASHER (1/4")	NOT USED ON POWER SHIFT UNITS
29.	106-381	2 FLG LK SCREW (M8-1.25 X 25MM)	
30.	318-560	2 ACCESS DOOR	

#### NOT SHOWN:

CONNECTOR CAP (TURK RS-CC), P/N: 211-078, QTY = 1  
 DIODE CONNECTOR, P/N: 214-449, QTY = 1

#### FOOTNOTES:

#### NOTE:



# TILT STEERING

## RT75H RT75M

## RT95H RT95M

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
31.	106-049	6	BOLT (#10-24 X 3/4", PLPS)	
32.	107-744	2	WASHER (M6)	
33.	106-048	8	LOCKNUT (#10-24)	
34.	106-574	2	CLIP NUT (M6-1.00)	
35.	308-888	1	CUP HOLDER	
36.	107-801	18	WASHER (M6)	
37.	110-208	1	LEVEL INDICATOR	
38.	116-525	1	BUMPER	
39.	106-252	2	JAM NUT (5/16-NC)	
40.	107-800	2	WING SCREW (M6-1 X 25mm)	
41.	318-557	1	CONSOLE BASE	
42.	115-686	AR	BULK EDGE (5/32",SOLD PER 1")	USE 1 @ 25"
43.	314-487	1	BRACE	NOT USED ON POWER SHIFT UNITS
44.	220-1241	1	30 PIN CONTROLLER V3	SEE FOOTNOTE 1
45.	106-161	2	FLG SCREW (M6-1.00 X 20MM)	SEE FOOTNOTE 1
46.	106-538	2	LOCKNUT (M6-1.00,PRV TRQ,10.9)	SEE FOOTNOTE 1
47.	106-386	2	FLG LOCKNUT (M8-1.25)	

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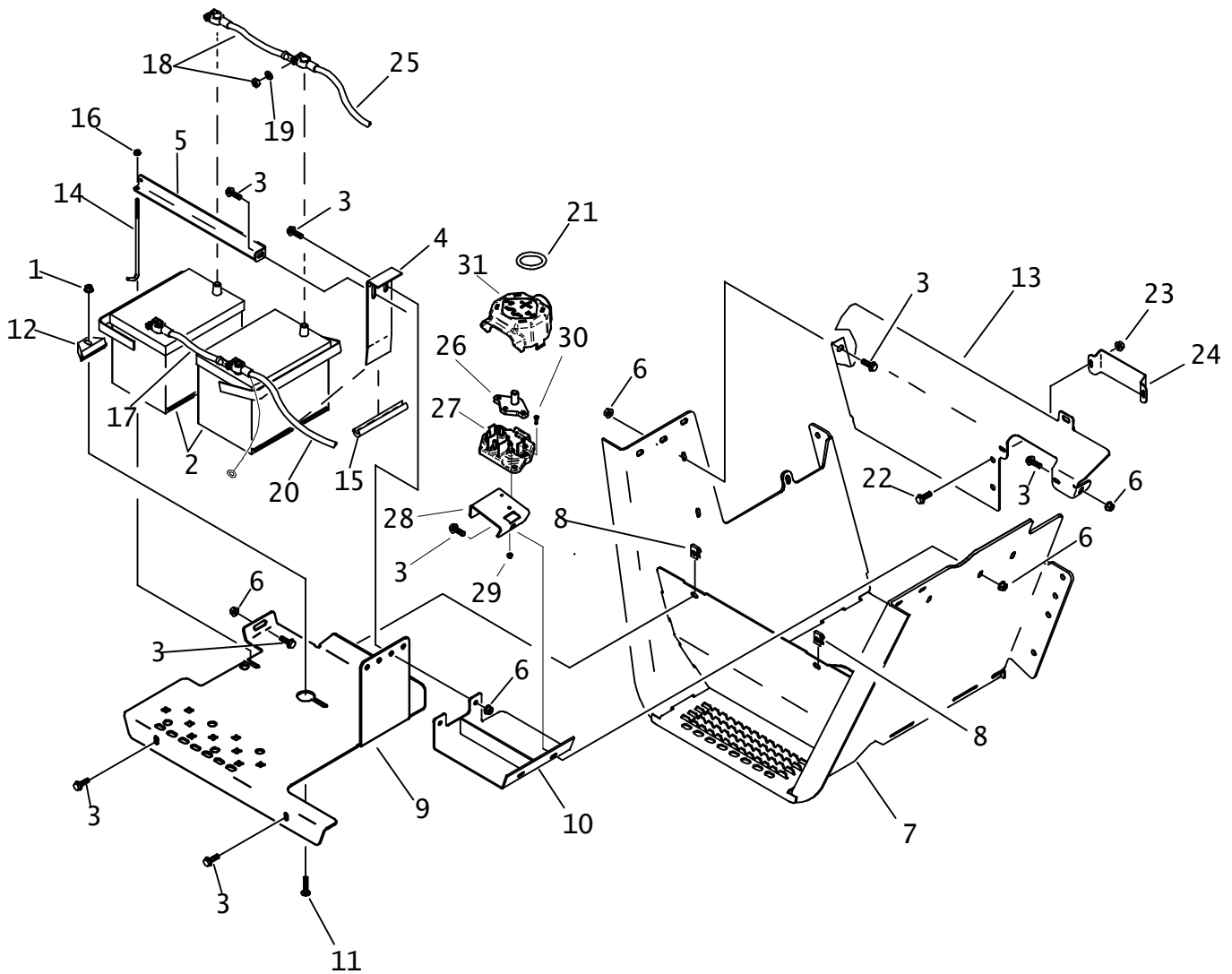
#### FOOTNOTES:

- I. USED WITH REAR STEER OPTION OR REAR STEER AND CRUISE CONTROL OPTION WHEN UPDATED WITH THE REAR STEER KITS I90-1437 OR I90-1438. CRUISE ONLY OPTION USES MODULE 220-569 @1X, BOLTS I05-815 @ 2X, AND NUTS I06-048 @ 2X.

NOTE:



# BATTERY INSTALLATION



# BATTERY INSTALLATION

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	190-944		DUAL BATTERY CONVERSION KIT	INCL 'S REF. NO.'S 2,5,14,16-19
1.	105-814	1	FLG LOCKNUT (3/8-NC)	
2.	215-244	-	BATTERY (12V 800 AMP)	
3.	107-001	10	FLG LK SCREW (M10-1.50 X 25mm)	
4.	320-112	1	HOLD DOWN	
5.	322-951	1	BATTERY HOLD DOWN	
6.	106-387	6	FLG LOCKNUT (M10-1.50)	
7.	300-9750	1	CRADLE WELDMENT	
8.	106-558	2	CLIP NUT (M10-1.50)	
9.	320-116	1	BATTERY TRAY STEP	SEE FOOTNOTE 1
10.	320-115	1	TRAY SUPPORT	
11.	108-067	1	CARRIAGE BOLT (3/8-NC X 2")	REFER TO FOOTNOTE 1
12.	107-554	2	BATTERY HOLD DOWN	
13.	320-118	1	BATTERY COVER	
14.	179-799	1	J-HOOK	
15.	116-789	AR	RUBBER EDGE TRIM 1/8" (FT)	USE 3"
16.	105-832	1	FLG LOCKNUT (1/4-NC)	
17.	215-349	1	BAT CABLE (2 GA X 8", RED)	
18.	215-350	1	BAT CABLE (2 GA X 8", BLK)	
19.	106-390	2	WASHER (M10)	
20.	213-255	1	BAT CABLE (2/0 X 55", RED)	
21.	115-320	1	GOMMET (1-1/2")	
22.	106-379	2	FLG LK SCREW (M6-1.00 X 20mm)	
23.	106-353	2	FLG NUT (M6-1.00)	
24.	323-279	1	COVER	
25.	213-338	1	BAT CABLE (2/0 GA X 70", BLK)	
26.	215-1011	1	BUSSBAR (MAIN FUSE HOLDER)	
27.	215-1009	1	MAIN FUSE HOLDER BASE	
28.	300-4466	1	FUSE HOLDER MOUNT ASSEMBLY	
29.	107-859	2	LOCKNUT, #6-32, NYLON INSERT	
30.	106-367	2	SCREW (#6-32 X 1/2" PLPS SS)	
31.	215-1010	1	MAIN FUSE HOLDER COVER	

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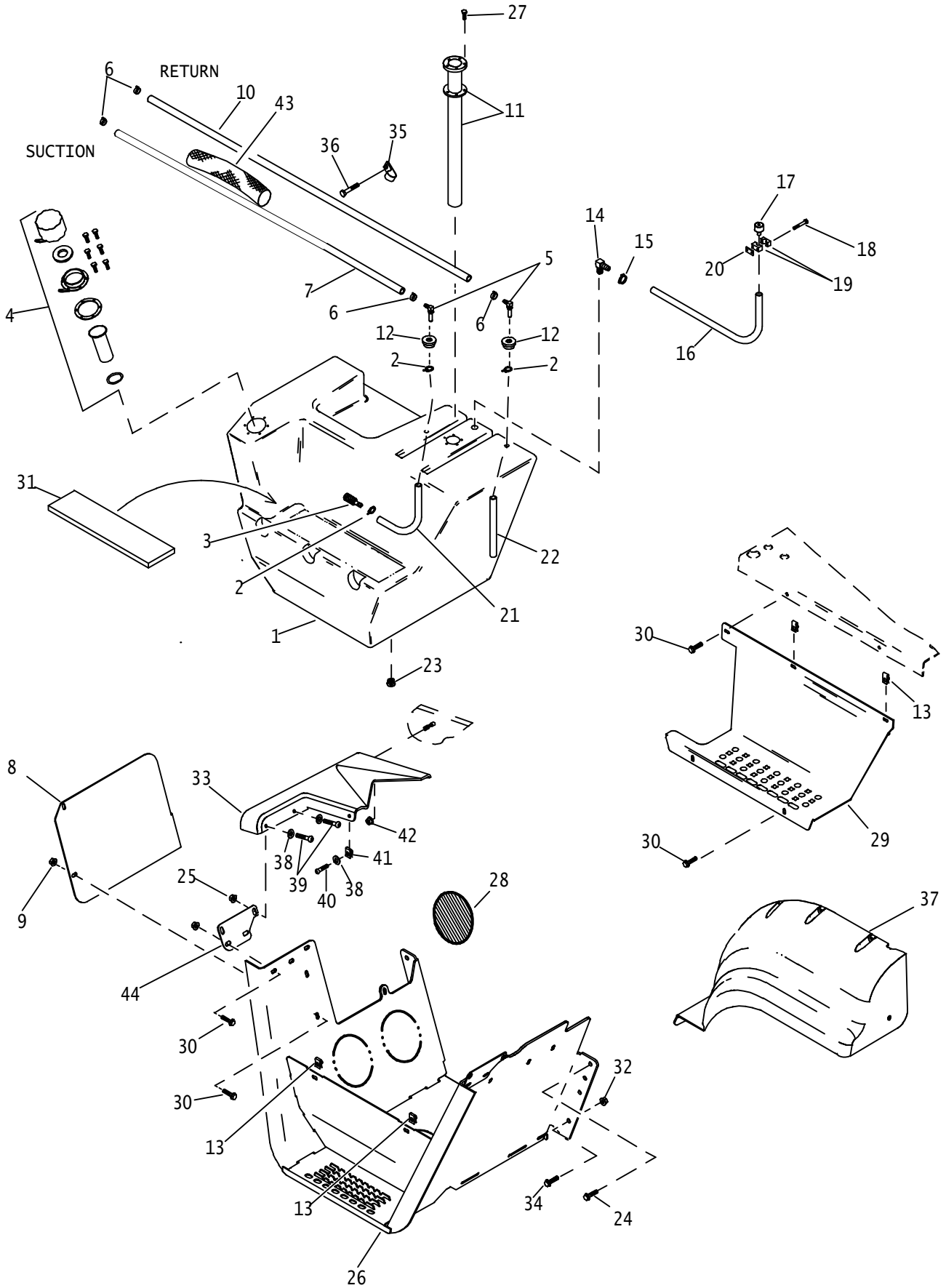
215-375 BAT CABLE (1/0 GA X 24", BLK)  
 215-309 BAT CABLE(4 GA X 20", BLK)

FOOTNOTES:

1. HOLE IN CENTER OF BATTERY TRAY STEP IS FOR ACCESSING CARRIAGE BOLT WHEN STARTING TIGHTENING PROCESS.

NOTE:

# FUEL TANK



# FUEL TANK

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-165	1	FUEL TANK	
2.	110-563	3	SPRING CLAMP (3/8")	
3.	156-268	1	FUEL STRAINER (04H)	
	194-505	1	FUEL PICKUP (04H)	BEGINS WITH S/N
4.	364-567	1	FILL NECK	SEE FOOTNOTE 3
	153-760	1	CAP	
	153-594	2	GASKET, FILL NECK CAP	
	153-607	1	FLANGE GASKET	
	153-761	1	FLANGE	
	107-781	6	HEX SCREW (#10-24 X 5/8")	
	153-606	1	STRAINER BASKET	
5.	156-269	2	S/O COUPLER (04H-05H90)	
6.	110-528	4	SNAP-ON CLAMP (.531" TO .593")	
7.	116-108	AR	BULK HOSE (5/16", SOLD PER 1")	USE 1 @ 72"
8.	319-484	1	COVER	
9.	106-387	4	FLG LOCKNUT (M10-1.50)	
10.	116-108	AR	BULK HOSE (5/16", SOLD PER 1")	USE 1 @ 53"
11.	214-650	1	FUEL SENDER	
	165-704	1	GASKET	
12.	116-325	2	GROMMET (.362")	
13.	106-558	4	CLIP NUT (M10-1.50)	
14.	156-108	1	S/O COUPLER (08N-08H90)	
15.	110-217	1	WORM CLAMP(7/16" TO 1")	
16.	116-322	AR	BULK HOSE (1/2",SOLD PER 1")	USE 1 @ 48"
17.	111-021	1	BREATHER CAP (TANK)	
18.	105-818	2	BOLT (1/4-NC X 1-1/2")	
19.	110-411	1	BOLT-ON CLAMP (3/4", SET)	
20.	322-289	1	BACKUP (BOLT-ON)	
21.	118-096	AR	BULK FUEL TUBING (1/4", PER FT)	USE 1 @ 24"
22.	118-096	AR	BULK FUEL TUBING (1/4", PER FT)	USE 1 @ 20"
23.	114-002	1	PLUG (06N, SOC)	
24.	105-829	2	FLG LK BOLT(1/2 NC X 1")	
25.	106-386	2	FLG LOCKNUT (M8-1.25)	

NOT SHOWN:

#### FOOTNOTES:

- ARRANGE LINER PADS IN AN EVEN PATTERN ON INTERIOR SURFACES OF THE SIDE PLATES, BOTTOM PLATE AND KICK PLATE. USE .12 THICK AND .25 THICK TO PROVIDE A SNUG FIT FOR THE TANK. APPLY AND ADJUST THE LINER PADS UNTIL THE LEAST MOVEMENT POSSIBLE HAS BEEN ACCOMPLISHED. ONCE FILLED THE TANK SHOULD NOT SHIFT.
- LAYER SUPPORT MAT BETWEEN LEDGE OF TANK AND UNDERSIDE OF STEP UNTIL FIRM PRESSURE IS REQUIRED TO ALIGN SLOTS AND INSERT SCREWS
- ORIENT PADLOCK LUGS AWAY FROM STAIRWELL

NOTE:

# FUEL TANK

REF PART NO.	NUMBER	QTY	DESCRIPTION	REMARKS
26.	300-9750	1	CRADLE WELDMENT	
27.	105-1190	5	BOLT (#10-24 X 1-1/4")	
28.	117-425	AR	LINER PAD (.12"THK)	SEE FOOTNOTE 1
	117-463	AR	LINER PAD (.25"THK)	
29.	313-821	1	TREAD, FUEL	
30.	107-001	12	FLG LK SCREW (M10-1.50 X 25mm)	
31.	117-442	AR	SUPPORT MAT	SEE FOOTNOTE 2
32.	106-198	2	FLG LOCKNUT (1/2 NC, GD8)	
33.	313-911	1	LEFT AIR DEFLECTOR	
34.	105-831	2	FLG LOCK BOLT (1/2-NC X 1-1/2")	
35.	110-333	1	BOLT ON CLAMP (1")	
36.	105-033	1	BOLT (5/16-NC X 2")	
37.	313-226	-	LEFT OUTSIDE FENDER	
38.	107-629	3	WASHER (M8)	
39.	107-778	2	SCREW (M8-1.25 X 30mm, BUT SOC)	
40.	106-640	1	SCREW (M6-1.00 X 20mm, BUT SOC)	
41.	106-574	1	CLIP NUT (M6-1.00)	
42.	105-003	1	FLG LOCKNUT (5/16-NC)	
43.	117-671	1	ABRASION SLEEVE (1" X 12")	
44.	319-452	1	CONNECTOR PLATE	

NOT SHOWN:

FOOTNOTES:

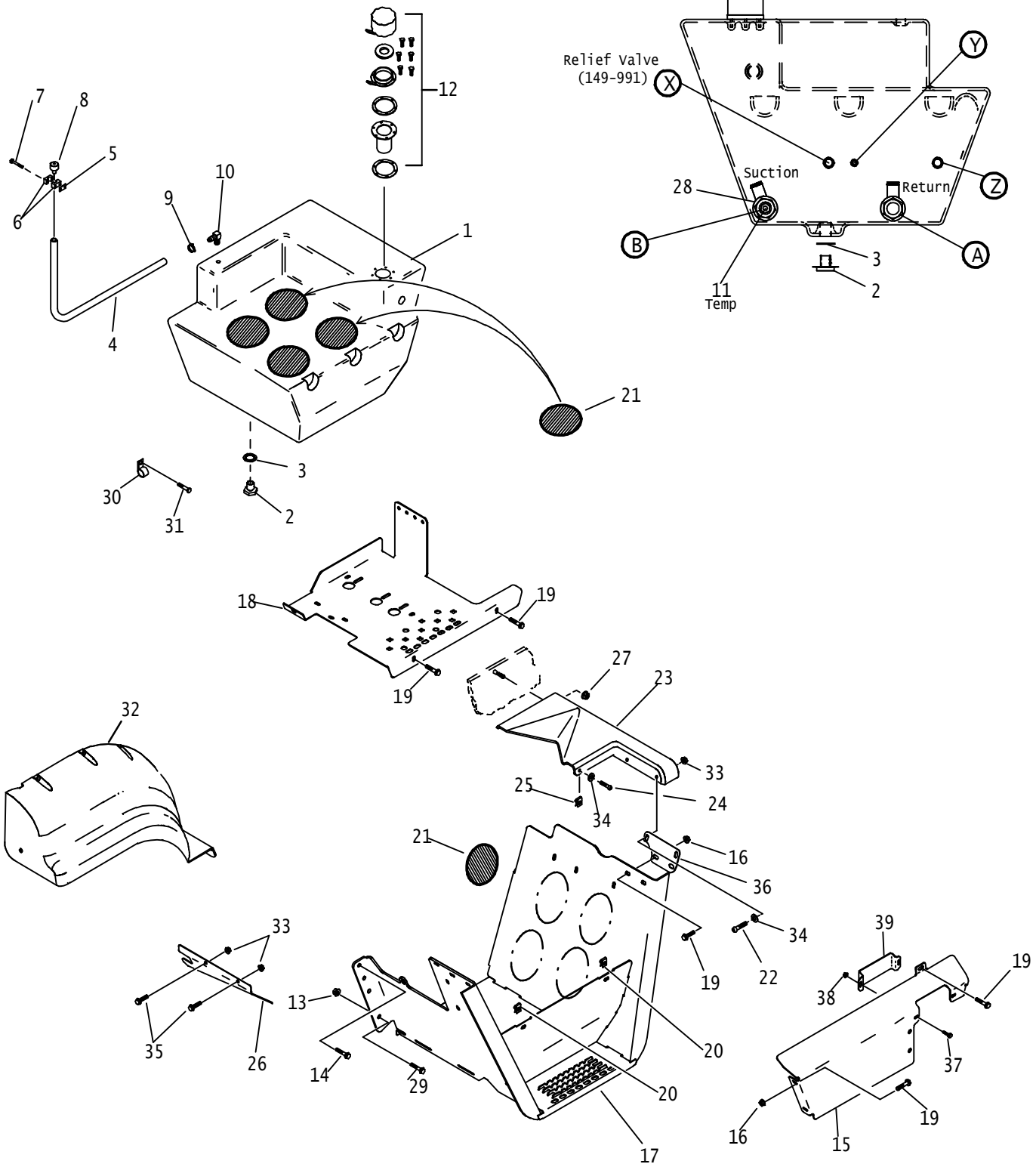
NOTE:





# HYDRAULIC RESERVOIR RT90 / RT95 / RT115 BEGINS WITH S/N 5X0710

REAR VIEW OF TANK  
(ENLARGED)  
← FRONT OF TRACTOR



**HYDRAULIC RESERVOIR**

RT90 / RT95 / RT115

BEGINS WITH S/N 5X0710

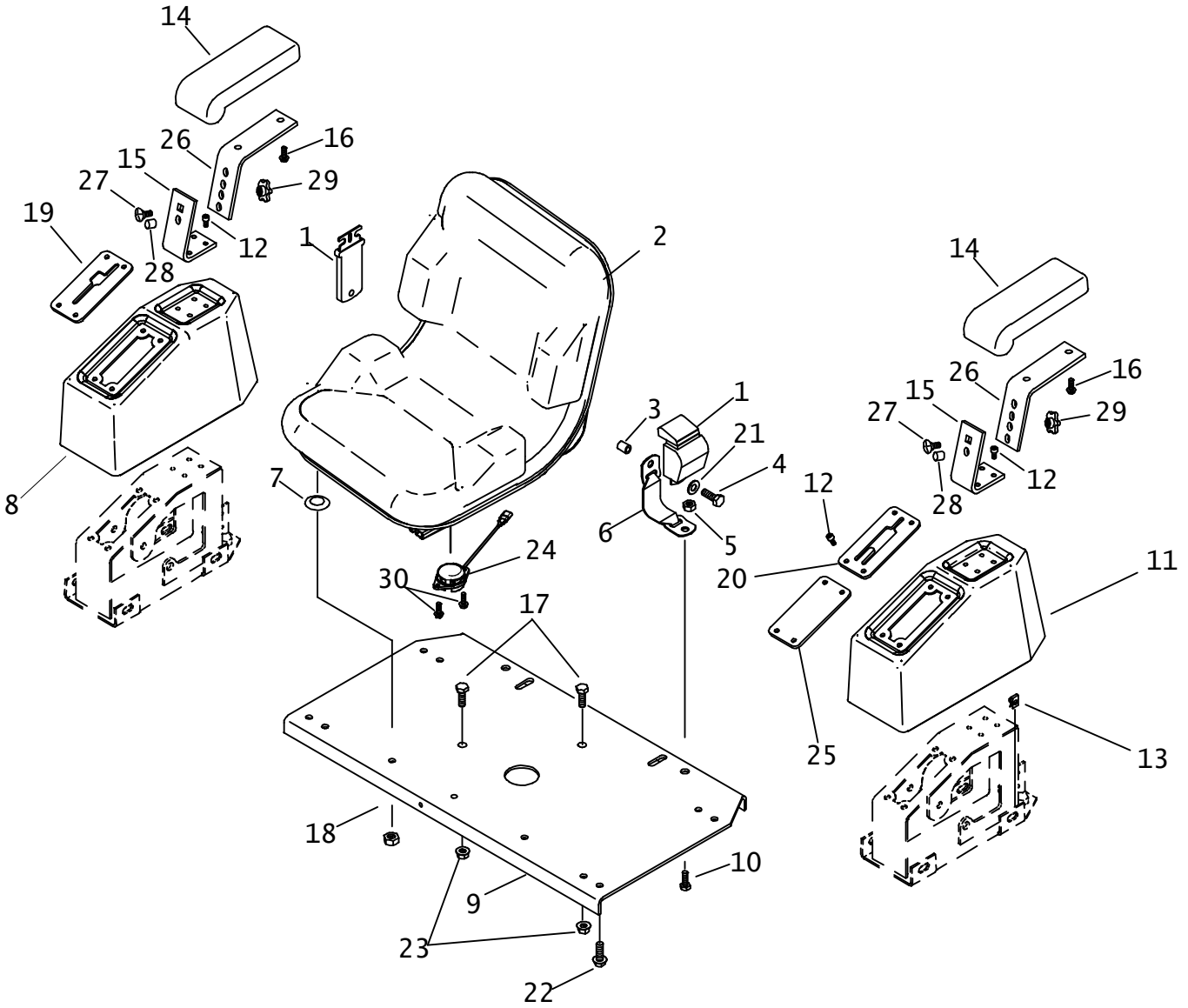
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	150-1388	1	HYDRAULIC RESERVOIR	
	121-040	-	SIGHT GLASS	
2.	157-466	1	DRAIN PLUG (1-UNF, .375 ORF)	
3.	500-749	1	O-RING (211 D70)	
4.	116-322	AR	BULK HOSE (1/2", SOLD PER 1")	USE 1 @ 48"
5.	322-289	1	BACKUP (BOLT-ON)	
6.	110-411	1	BOLT-ON CLAMP (3/4", SET)	
7.	105-818	2	BOLT (1/4-NC X 1-1/2")	
8.	111-021	1	BREATHER CAP (TANK)	
9.	110-217	1	WORM CLAMP (7/16" TO 1")	
10.	156-108	1	S/O COUPLER (08N-08H90)	
11.	214-854	-	TEMPERATURE SWITCH	
12.	364-567	1	FILL NECK	SEE FOOTNOTE 2
	153-760	1	CAP	
	153-594	1	GASKET, FILL NECK CAP	
	153-607	1	FLANGE GASKET	
	153-606	1	STRAINER BASKET	
	153-761	1	FLANGE	
	107-781	6	HEX SCREW (#10-24 X 5/8)	
13.	106-198	2	FLG LOCKNUT (1/2-NC, GD8)	
14.	105-829	6	FLG LK BOLT (1/2-NC X 1")	
15.	320-118	1	BATTERY COVER	SEE FOOTNOTE 3
16.	106-387	6	FLG LOCKNUT (M10-1.50)	
17.	300-9750	1	CRADLE WELDMENT	
18.	320-116	1	BATTERY TRAY STEP	
19.	107-001	12	FLG LK SCREW (M10-1.50 X 25mm)	
20.	106-558	4	CLIP NUT (M10-1.50)	
21.	117-425	AR	LINER PAD (.12"THK)	SEE FOOTNOTE 1
	117-463	AR	LINER PAD (.25"THK)	SEE FOOTNOTE 1
22.	107-778	2	SCREW (M8-1.25 X 30mm, BUT SOC)	
23.	313-910	1	RIGHT AIR DEFLECTOR	
24.	106-640	1	SCREW (M6-1.00 X 20mm, BUT SOC)	
25.	106-574	1	CLIP NUT (M6-1.00)	
26.	315-440	1	TOP MUD SHIELD	
27.	105-003	1	FLG LOCKNUT (5/16-NC)	
28.	157-987	1	S/O COUPLER (20S-16H90,04NF)	
	514-446	1	REDUCER (24S-20SF)	
29.	105-831	2	FLG LK BOLT (1/2-NC X 1-1/2")	
30.	110-333	1	BOLT-ON CLAMP (1")	
31.	105-033	1	BOLT (5/16-NC X 2")	
32.	313-225	-	RIGHT OUTSIDE FENDER	
33.	106-386	4	FLG LOCKNUT (M8-1.25)	
34.	107-629	3	WASHER (M8)	
35.	106-162	2	FLG SCREW (M8-1.25 X 20mm)	
36.	319-452	1	CONNECTOR PLATE	
37.	106-379	2	FLG LK SCREW (M6-1.00 X 20mm)	
38.	106-353	2	FLG NUT (M6-1.00)	
39.	323-279	1	COVER	

## FOOTNOTES

1. ARRANGE LINER PADS IN AN EVEN PATTERN ON INTERIOR SURFACES OF THE SIDE PLATES, BOTTOM PLATE AND AND KICK PLATE. USE .12" THICK AND .25" THICK TO PROVIDE A SNUG FIT FOR THE TANK. APPLY AND ADJUST THE LINER PADS UNTIL THE LEAST MOVEMENT POSSIBLE HAS BEEN ACCOMPLISHED. ONCE FILLED THE TANK SHOULD NOT SHIFT.
2. ORIENT PADLOCK LUGS AWAY FROM STAIRWELL.
3. REFER TO PAGE "BATTERY INSTALLATION" FOR BATTERY INSTALLATION DETAILS.

# SEAT PLATFORM

RT70H - RT75H - RT95H - RT95M



## SEAT PLATFORM

RT70H - RT75H - RT95H - RT95M

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	117-924	1	SEAT BELT SET W/5.75" TONGUE	
	117-925	-	SEAT BELT TONGUE (5.75")	
2.	117-429	1	SEAT	
	115-445		REPLACEMENT SEAT	
	115-428		ADJUSTABLE TRACK	
3.	184-252	2	BUSHING (.562" X 1" X .590")	
4.	106-333	2	SCREW (M12-1.75 X 40mm, 8.8)	
5.	106-031	2	LOCKNUT (M12-1.75, NLK)	
6.	115-430	2	SEAT BELT TETHER	
7.	105-267	4	CUP WASHER (5/16")	
8.	309-431	1	RIGHT SEAT CONSOLE	SEE FOOTNOTE 2
	324-563	1	RIGHT SEAT CONSOLE	USE ON HYDROSTATS WITH CRUISE CONTROL UNITS ONLY
9.	314-594	1	SEAT BASE	
10.	105-273	2	SCREW (M12-1.75 X 30mm)	
11.	305-649	1	LEFT SEAT CONSOLE	
12.	107-312	16	SCREW (M6-1.00 X 25mm, BUT SOC)	
13.	106-574	8	CLIP NUT (M6-1.00)	
14.	117-314	2	ARMREST	
15.	309-294	2	LOWER ARMREST BRACKET	
16.	106-159	4	FLG SCREW (1/4-NC X 3/4")	
17.	105-876	2	SCREW (M10-1.50 X 35mm)	
18.	105-089	4	LOCKNUT (5/16-NC)	
19.	319-158	1	Z-GATE	SEE FOOTNOTE 2
20.	313-411	1	Y-GATE	USED WITH COMBO ATTACHMENT
	316-479	1	PLOW GATE	USED WITH PLOW ATTACHMENT
21.	106-391	2	WASHER (M12)	
22.	107-001	8	FLG LK SCREW (M10-1.50 X 25mm)	
23.	106-387	2	FLG LOCKNUT (M10-1.50)	
24.	215-1107	1	SEAT SWITCH	
25.	310-801	1	BLANK	USED ON MECHANICAL UNITS ONLY
26.	313-707	2	UPPER ARMREST BRACKET	
27.	107-702	2	CARRIAGE BOLT (3/8-NC X 3/4")	
28.	107-698	2	DOWEL PIN (.375 X .500)	
29.	110-383	2	KNOB (3/8-NC, BLACK)	
30.	106-168	2	FLG LK BOLT (1/4-NC X 3/4")	SEE FOOTNOTE 1

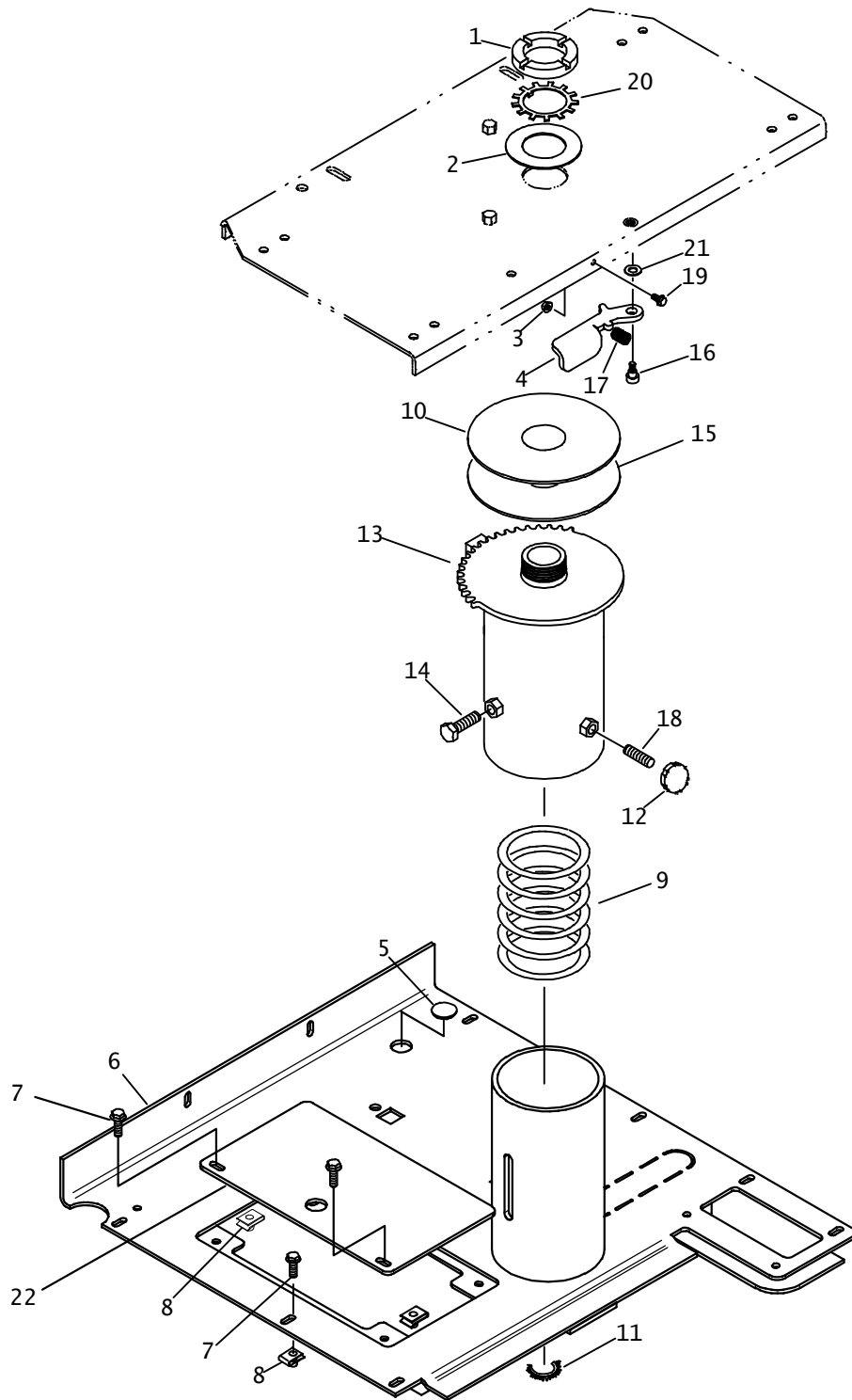
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FOOTNOTES:

1. USE LOCTITE 242 OR EQUIVALENT.
2. NOT USED ON HYDROSTAT UNITS WITH CRUISE CONTROL OPTION

NOTE:

## SEAT SWIVEL AND BASE



## SEAT SWIVEL AND BASE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	107-528	1	PN10 SLOTTED NUT	SEE FOOTNOTE 2
2	106-522	1	WASHER (2-1/16")	
3	106-385	1	FLG LOCKNUT (M6-1.00)	
4	308-895	1	LEVER	
5	110-178	2	PLUG (7/8")	
6	306-844	1	SEAT BASE	
	322-986	1	SEAT BASE	FOR TIER 2 RT90 & RT115
	324-729	1	SEAT BASE	FOR HT115
	300-8537	1	SEAT BASE	SEE FOOTNOTE 4 FOR INSTR. & BEG. S/N; FOOTNOTE 5
7	106-992	9	FLG LK SCREW (M8-1.25 X 25mm)	SEE FOOTNOTE 1
8	107-135	13	CLIP NUT (M8-1.25)	
9	117-816	1	COMPRESSION SPRING	
10	179-382	1	SHIM (.020)	
11	115-662	1	GROMMET EDGE (3/16" X 12.7")	
12	110-383	1	KNOB (3/8-NC, BLACK)	
13	308-879	1	SWIVEL	
14	106-559	1	SCREW (M12-1.75 X 25mm)	
15	117-301	1	SWIVEL DISK (7" UHMW)	SEE FOOTNOTE 3
16	107-582	1	SHLD BOLT (3/8" X 1/4", 5/16-NC)	SEE FOOTNOTE 1
17	115-645	1	COMPRESSION SPRING	
18	106-121	1	STUD BOLT (3/8-NC X 1-1/2")	
19	106-986	1	FLG LK SCREW (M6-1.00 X 12mm)	
20	107-606	1	TANG LOCK WASHER (2")	
21	105-095	1	WASHER (1/4")	
22	300-8446	1	ACCESS PANEL	SEE FOOTNOTE 4 FOR INSTR. & BEG. S/N; FOOTNOTE 5

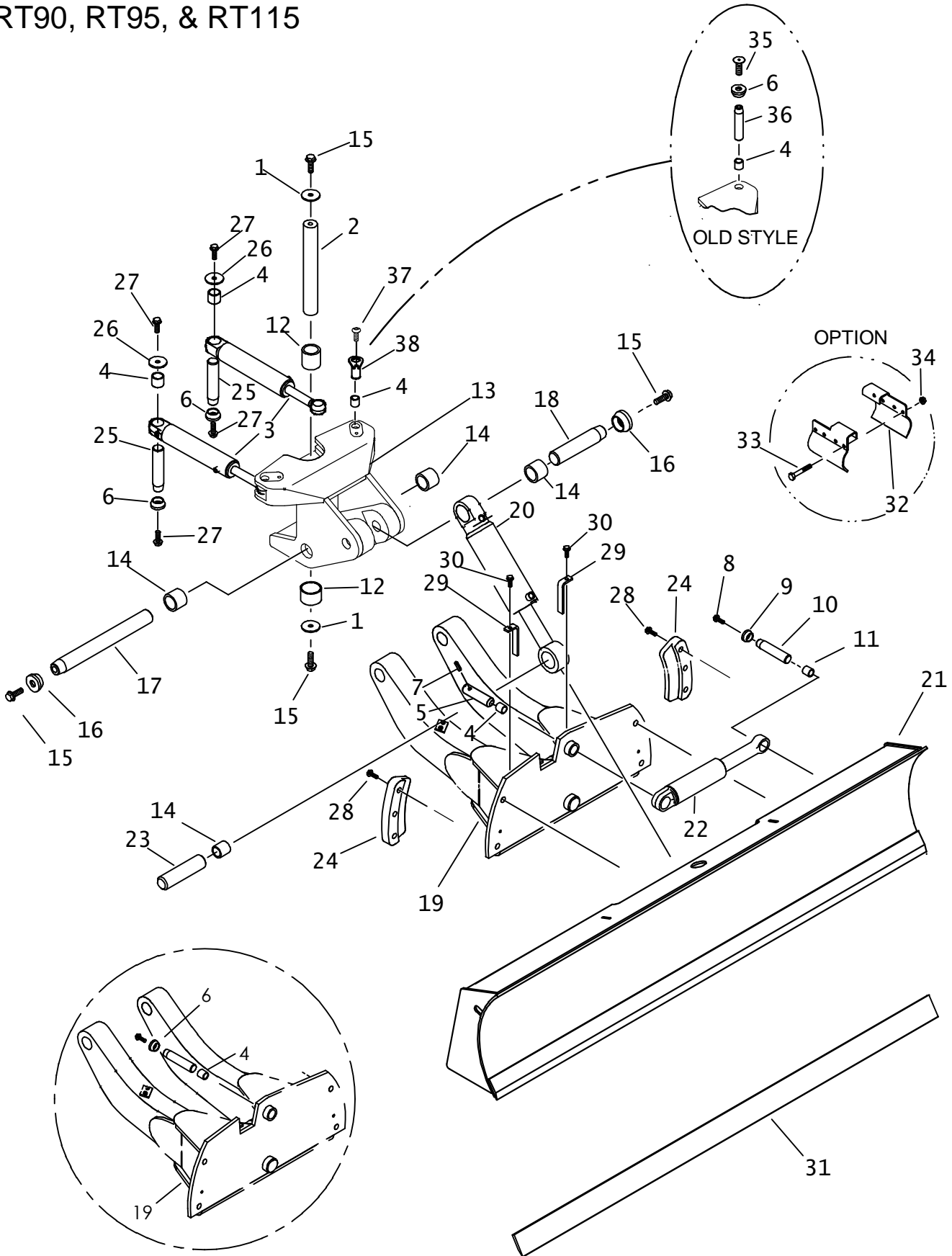
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### FOOTNOTES:

- USE LOCTITE 242 OR EQUIVALENT
- TORQUE SPANNER NUT TO PREVENT ROTATION, THEN REVERSE DIRECTION AND LOOSEN 1/8 OF A TURN.
- NO LUBRICANT ON ITEM #15
- SEAT BASE 300-8537, ACCESS PANEL 300-8446 MUST BE USED TOGETHER.  
BEGINS WITH SERIAL NUMBERS; RT95ME90000274 RT95HJ90000351 RT115T3T90000125.
- USE 2X 106-264 FOR RETAINING 300-8446 TO 300-8537 IF WELDNUTS ARE PRESENT.  
BEGINS WITH SERIAL NUMBERS; RT95HP90000380 RT95ME90000291 RI5T3L90000135.

NOTE:

# BACKFILL BLADE ASSEMBLY RT90, RT95, & RT115



SEE FOOTNOTE 2

## BACKFILL BLADE ASSEMBLY RT90, RT95, & RT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	105-416	2	WASHER (5/8")	
2.	178-572	1	PIN (1.75" X 12.75")	
3.	151-057	-	CYL (2.0" X 1.25" X 8.0")	
4.	125-771	5	COMPOSITION BUSHING (1.25")	
5.	300-7763	1	PIN	SEE FOOTNOTE 2
6.	181-982	1	TAPERED INSERT (1.25")	
7.	107-434	1	ROLL PIN 3/8 X 1-5/8	
8.	106-164	1	FLG LK SCREW (M10-1.50 X 30mm)	
9.	181-981	1	TAPERED INSERT (1")	
10.	183-767	1	TAPERED PIN (25.4mm X 60mm)	
11.	125-770	1	COMPOSITION BUSHING (1")	
12.	125-822	2	COMPOSITION BUSHING (1.750")	
13.	331-475	1	PIVOT	
14.	125-773	4	COMPOSITION BUSHING (1.750")	
15.	106-470	4	FLG SCREW (M16-2.00 X 40mm)	
16.	181-975	2	TAPERED INSERT (1.75")	
17.	178-584	1	TAPERED PIN (1.750" X 13.90")	
18.	183-768	1	TAPERED PIN (44.4mm X 205mm)	
19.	308-921	1	LIFT ARM	
20.	151-070	-	CYL (3" X 1.75" X 8")	
21.	300-8635	1	LOW ANGLE BACKFILL BLADE, 80"	SEE FOOTNOTE 1
22.	151-202	-	CYL (2" X 1" X 3.38")	
23.	178-532	1	PIN (1.750" X 7.000")	
24.	314-104	2	TILT BLADE RETAINER	
25.	178-394	2	TAPERED PIN (1.250" X 4.250")	
26.	105-475	2	WASHER (1/2")	
27.	105-830	4	FLG LK BOLT (1/2-NC X 1-1/4")	
28.	106-012	6	FLANGE BOLT (5/8-NC X 3")	
29.	309-138	2	RETAINER	
30.	106-383	2	FLG LK SCREW (M10-1.50 X 30mm)	
31.	331-751	1	80" CUTTING EDGE	
32.	322-360	2	FITTING GUARD (3.0" CYL)	OPTION
33.	106-330	4	SCREW (M8-1.25 X 70mm)	OPTION
34.	106-386	4	FLG LOCKNUT (M8-1.25)	OPTION
35.	105-1187	2	SCREW (M10-1.5 X 35mm)	USE LOCTITE 242
36.	105-1188	2	TAPERED PIN (1.250" X 2.560")	
37.	107-537	2	SCREW (M10-1.5 X 20mm)	USE LOCTITE 242
38.	300-8460	2	TAB PIN (1.250" X 2.57")	

NOT SHOWN:

### FOOTNOTES:

- BACKFILL BLADE 300-4321 IS SUPERSEDED BY 300-8635 ON RT90, RT95, AND RT115.  
RT95M BEGINS WITH S/N CMWRT95MJ90000296  
RT95H BEGINS WITH S/N CMWRT95HK90000364  
RT115 BEGINS WITH S/N CMWRI5T3K90000130
- EARLIER MODELS USE P/N 183-766 TAPERED PIN (31.7mm X 90MM) WITH 106-469 FLG SCREW (M12-1.75 X 30mm)

NOTE:





## 4 - POST ROPS

BEGINS WITH S/N 5W0527 HYDROSTAT UNITS  
 BEGINS WITH S/N 5Y0468 POWERSHIFT UNITS

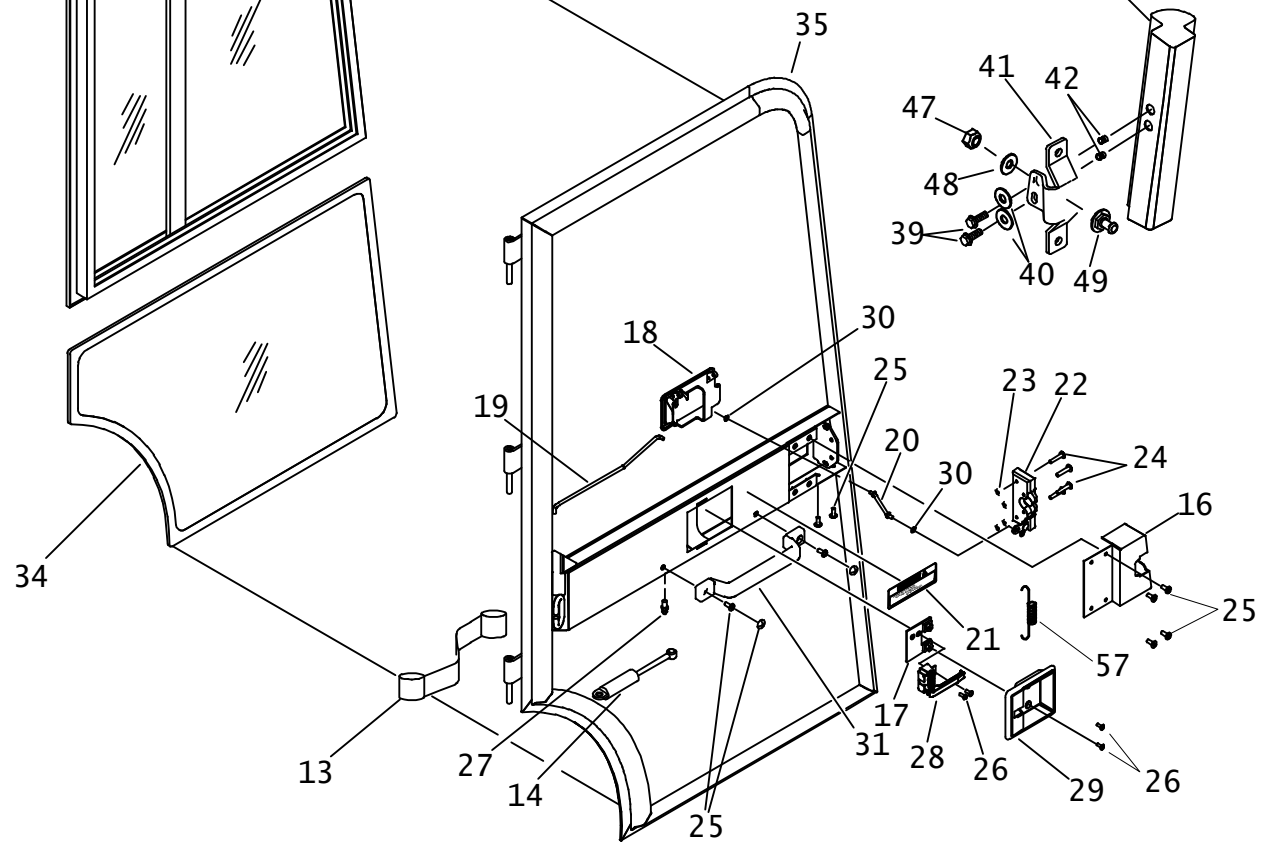
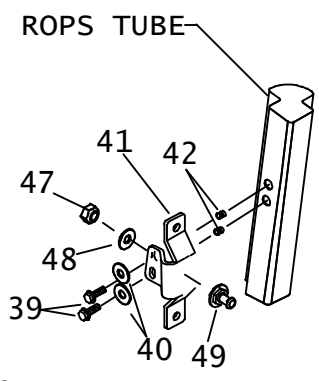
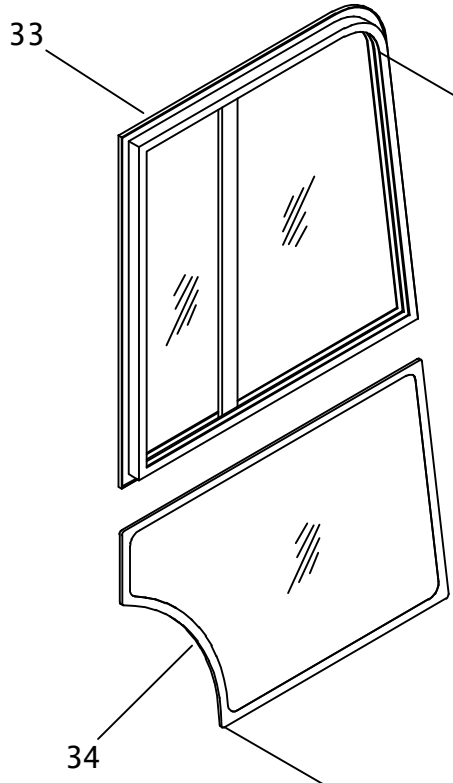
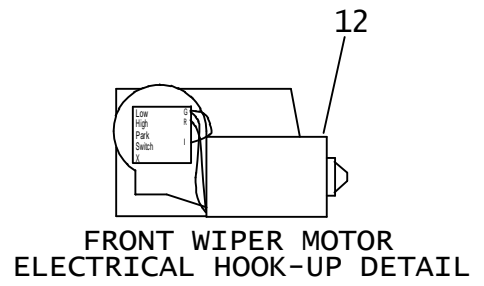
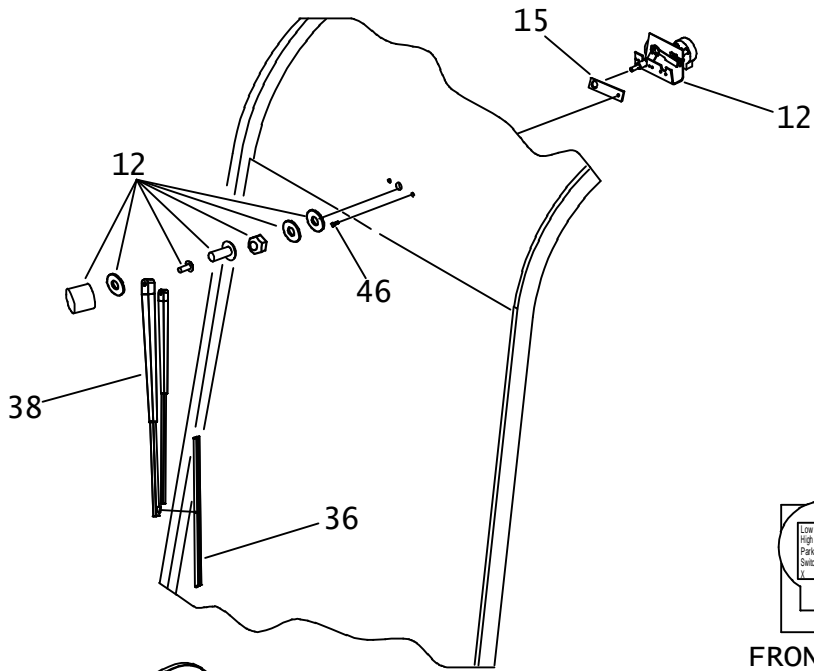
REF PART NO.	NUMBER	QTY	DESCRIPTION	REMARKS
1.	320-250	1	4-POST ROPS FRAME	
2.	107-923	4	SCREW (3/4-NC X 5", GD5) SPEC.	REFER TO FOOTNOTE 1
3.	116-421 AR		BULK EDGE (1/8", SOLD PER 1')	USE 1@ 2.5 FT
4.	117-973	8	SHOCK MOUNT	
5.	107-924	8	NUT (3/4-NC) SPECIAL	
6.	107-922	4	SCREW (3/4-NC X 4-1/2", GD5) SPEC.	REFER TO FOOTNOTE 2
7.	320-240	4	ISOLATOR IRON	
8.	117-344 AR		BULK EDGE (3/16", SOLD PER 1")	USE 2 @ 1 FT.
9.	117-344 AR		BULK EDGE (3/16", SOLD PER 1")	USE 1 @ 3.5 FT.
10.	320-745	1	CHECK GAUGE	
11.	250-063	1	MANUAL COMPARTMENT	
12.	110-348	3	POP RIVET (3/16" X .664")	

### FOOTNOTES

1. SCREW (107-923) HAS GOLD PLATING TO DISTINGUISH IT FROM SCREW (107-922). PROPER LOCATION IS IMPORTANT FOR PROPER ASSEMBLY OF THE ROPS. TORQUE TO 200 Ft.Lbs, USE LOCTITE 271 OR EQUIVALENT.
2. SCREW (107-922) HAS SILVER PLATING TO DISTINGUISH IT FROM SCREW (107-923). PROPER LOCATION IS IMPORTANT FOR PROPER ASSEMBLY OF THE ROPS. TORQUE TO 200 Ft.Lbs, USE LOCTITE 271 OR EQUIVALENT.

NOTE:

# CAB KIT



# CAB KIT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-179		CAB KIT	INCL. REF. #S I-57
1.	499-436	1	DOOR ASSY (RIGHT)	
	499-437	1	DOOR ASSY (LEFT)	
2.	121-044	1	SLIDER ASS'Y (REAR)	SEE NOT SHOWN FOR REPLACEMENT LATCH.
	499-747	-	WINDOW FRAME	OBSOLETE
	499-748	-	REAR WINDOW	
3.	121-045	1	SIDE WINDOW (LEFT)	
	121-046	1	SIDE WINDOW (RIGHT)	
4.	121-047	1	FRONT WINDOW	
5.	117-829	21	SEAL, PSA DOUBLE D	
6.	318-374	1	U-CLAMP	
7.	318-358	1	DOORPOST (LEFT)	
	318-359	1	DOORPOST (RIGHT)	
8.	318-375	2	BRACKET, LOWER DOOR POST	
9.	318-376	2	WINDOW RETAINING CLIP	
10.	318-377	2	PLATE	
11.	107-786	32	SCREW, (#10-32 X 1-1/2") HEX	
12.	214-897	1	WIPER MOTOR	
13.	499-441	2	DOOR STRAP	
14.	499-438	2	GAS SPRING STRUT	
15.	119-003	1	SPACER, WIPER MOTOR	
16.	318-360	1	CAM LATCH COVER (RIGHT)	
	318-361	1	CAM LATCH COVER (LEFT)	
17.	318-362	1	INNER BRACKET (RIGHT)	
	318-363	1	INNER BRACKET (LEFT)	
18.	117-825	1	L. LATCH, PADDLE W/KEY	
	117-854	1	R. LATCH, PADDLE W/KEY	
19.	117-821	1	LEFT ROD, DOOR LINKAGE	
	117-855	1	RIGHT ROD, DOOR LINKAGE	
20.	117-856	2	ROD, DOOR LINKAGE	
21.	273-279	1	WARNING TAG	
22.	117-824	1	LEFT LATCH, ROTARY	
	117-857	1	RIGHT LATCH, ROTARY	
23.	105-085	4	LOCKNUT (1/4-NC)	
24.	107-787	4	SCREW (1/4-20 X 1-1/4) TRUS,TORX	
25.	107-788	8	SCREW (1/4 X 5/8)TRUS, TORX T27	COMES WITH SNAP-ON COVER
26.	107-789	4	SCREW (#10-24 X 1/2 ") TRUS, TORX	
27.	166-450	1	STUD, CYLINDER	
28.	117-823	1	LEFT HANDLE, INSIDE	
	117-858	1	RIGHT HANDLE, INSIDE	
29.	499-440	1	INSIDE DOOR BEZEL	
30.	117-828	4	RETAINER, INTERNAL TOOTH	
31.	499-439	1	DOOR PULL	
32.	107-245	4	FLG LK BOLT (3/8-NC X 3/4", NLK)	

## NOTE:

MOUNTING A CAB ON THE RT70/RT90/RT115

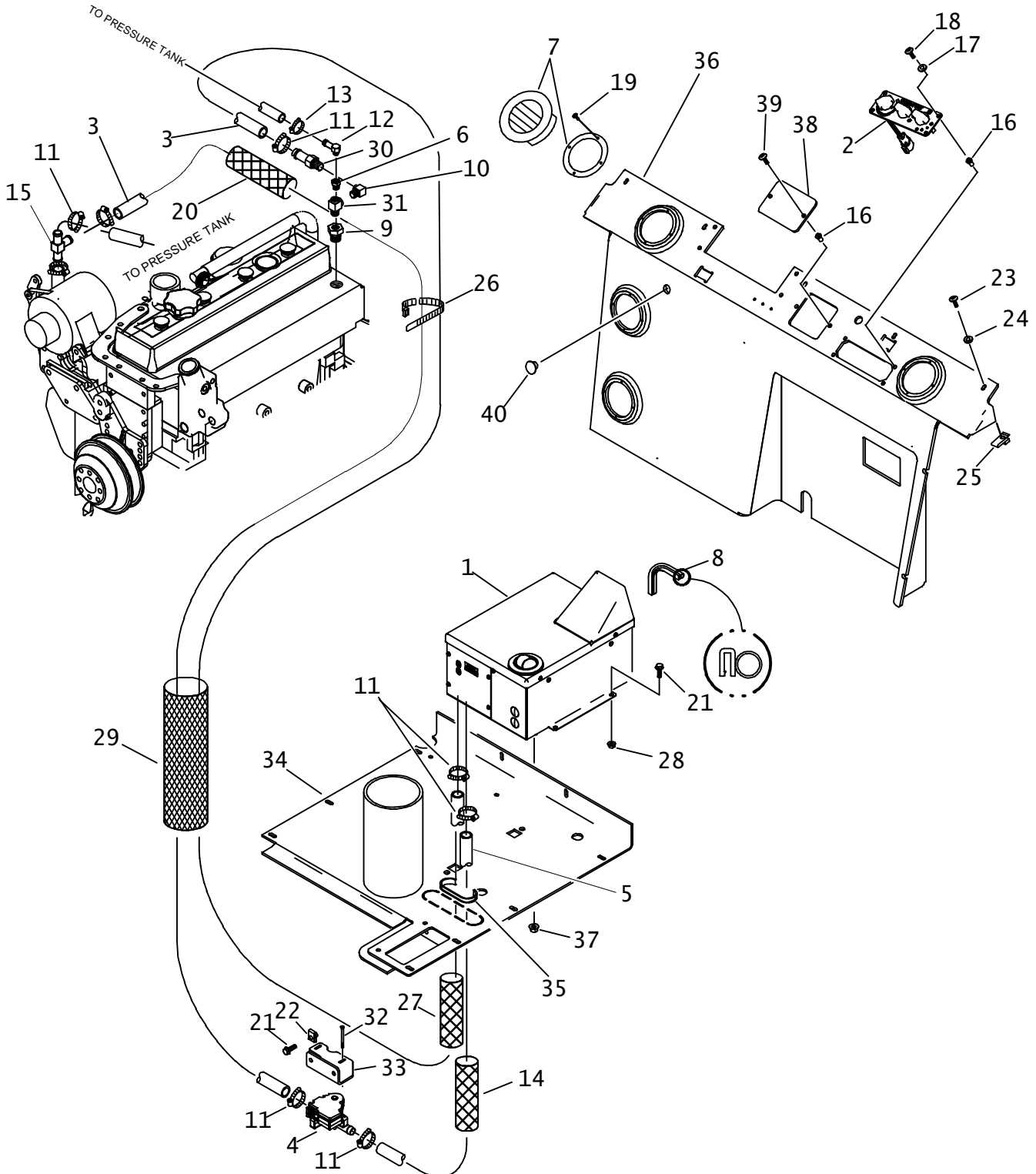
1. A CAB CAN BE MOUNTED DIRECTLY ON RT70M OR RT90M WHEN OLD ROPS HAS NOT BEEN MODIFIED WITH THE NEW ISOLATORS.
2. A CAB CAN NOT BE MOUNTED ON A RT70H, RT90H OR RT115H WHEN AN OLD ROPS HAS BEEN MOFIFIED WITH THE NEW ISOLATORS.
3. A CAB CAN BE MOUNTED ON A RT79H, RT90H OR RT115H WITH A NEW ROPS WITH THE NEW ISOLATORS.



# CAB KIT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
33.	121-048	1	SLIDER, (LEFT DOOR)	SEE NOT SHOWN FOR REPLACEMENT LATCH.
	121-049	1	SLIDER, (RIGHT DOOR)	SEE NOT SHOWN FOR REPLACEMENT LATCH.
34.	121-050	1	GLASS (LOWER DOOR), LEFT	
	121-051	1	GLASS (LOWER DOOR), RIGHT	
35.	318-364	1	RIGHT DOOR	
	318-365	1	LEFT DOOR	
36.	121-052	1	WIPER BLADE	
37.	105-047	4	LOCKNUT (3/8-NC)	
38.	121-053	1	WIPER ARM	
39.	106-991	8	FLG LK SCREW (M8-1.25 X 20mm)	
40.	106-415	8	WASHER (.406")	
41.	117-826	1	STRIKE BRACKET (RIGHT)	
	117-827	1	STRIKE BRACKET (LEFT)	
42.	106-565	8	NUTSERT, (M8-1.25)	
43.	106-469	8	FLG SCREW (M12-1.75 X 30mm)	
44.	106-709	8	FLG LK NUT (M12-1.75)	
45.	105-895	4	LOCK WASHER (3/8")	
46.	105-865	1	BOLT (1/4-NC X 3/4", GD8)	
47.	105-151	2	LOCKNUT (7/16-NC)	
48.	105-059	2	WASHER (7/16)	
49.	117-861	2	STRIKER BOLT	
50.	107-778	2	SCREW (M8-1.25 X 30mm, BUT SOC)	
51.	318-879	1	BOTTLE BRACKET	
52.	107-135	2	CLIP NUT (M8-1.25)	
53.	344-115	1	WINDSHIELD WASHER TANK	
54.	107-875	6	WASHER (.400" ID. BRASS)	
55.	116-866	AR	BULK HOSE (3/16", SOLD PER 1")	USE 1 @ 150"
56.	110-249	1	WORM CLAMP (1/4"TO 5/8")	
57.	118-357	1	EXTENSION SPRING	
NOT SHOWN:				
	256-669	2	URETHANE ADHESIVE	10.5 FL. OZ. TUBES
	105-1305	1	KEYS (RT TRACTOR CAB)	REPLACEMENT KEYS
	115-1014	2	CLIP	RETAINS STRUT 499-438 ONTO STUD 166-450
	500-2067		LEFT SLIDER LATCH REAR	USED ON 121-044 SLIDER (REAR)
	500-2068		RIGHT SLIDER LATCH REAR	USED ON 121-044 SLIDER (REAR)
	500-2069		LEFT SLIDER LATCH	USED ON 121-048 SLIDER (LT DOOR)
	500-2070		RIGHT SLIDER LATCH	USED ON 121-049 SLIDER (RT DOOR)
NOTE:				

# CAB HEATER ASS'Y RT95 TIER2



# CAB HEATER ASS'Y

## RT95 TIER2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-377		A/C HEATER KIT	
	191-376		HEATER KIT	
1.	499-802	1	MODEL EE320, HVAC, 12V	SEE FOOTNOTE 1
	194-439	1	HEATER	SEE FOOTNOTE 1
2.	499-837	1	CONTROL PANEL, FAN-AC-HT	SEE FOOTNOTE 2
3.	116-044	AR	BULK HOSE (5/8" , SOLD PER 1")	USE 2 @ 90"
4.	499-705	1	HEATER VALVE	
5.	116-044	AR	BULK HOSE (5/8" , SOLD PER 1")	USE 1 @ 22"
6.	115-106	1	REDUCER (06N-04NF)	
7.	499-833	4	LOUVER MOUNT, 3.1" HOLE	
8.	117-344	AR	BULK EDGE (3/16", SOLD PER FT)	USE 1 @ 16"
9.	514-085	1	REDUCER (08N-06NF)	
10.	156-260	1	STREET ELBOW (06N-06NF90)	
11.	110-217	8	WORM CLAMP (7/16"TO 1")	
12.	155-164	1	S/O COUPLER (04N-05H90)	
13.	110-249	1	WORM CLAMP (1/4"TO 5/8")	
14.	117-622	1	ABRASION SLEEVE (1.25" X 20")	
15.	514-159	1	S/O TEE (10H)	
16.	107-358	6	WELLNUT (M4-0.7 X 12.67mm LG)	
17.	107-597	4	WASHER (M4)	
18.	107-580	4	SCREW (M4-0.70 X 16mm, BUT SOC)	
19.	107-852	16	SCREW (#8 X 5/8" CSK PLPS)	
20.	117-397	1	ABRASION SLEEVE (1.25" X 35")	
21.	106-992	4	FLG LK SCREW (M8-1.25 X 25mm)	
22.	107-135	-	CLIP NUT (M8-1.25)	
23.	106-640	-	SCREW (M6-1.00 X 20mm, BUT SOC)	
24.	106-388	-	WASHER (M6)	
25.	106-574	-	CLIP NUT (M6-1.00)	
26.	110-030	1	CABLE TIE (1/16" TO 4")	
27.	117-396	1	ABRASION SLEEVE (1.25" X 28")	
28.	106-386	4	FLG LOCKNUT (M8-1.25)	
29.	117-265	1	ABRASION SLEEVE (1.75" X 50")	

NOT SHOWN:



# CAB HEATER ASS'Y

## RT95 TIER2

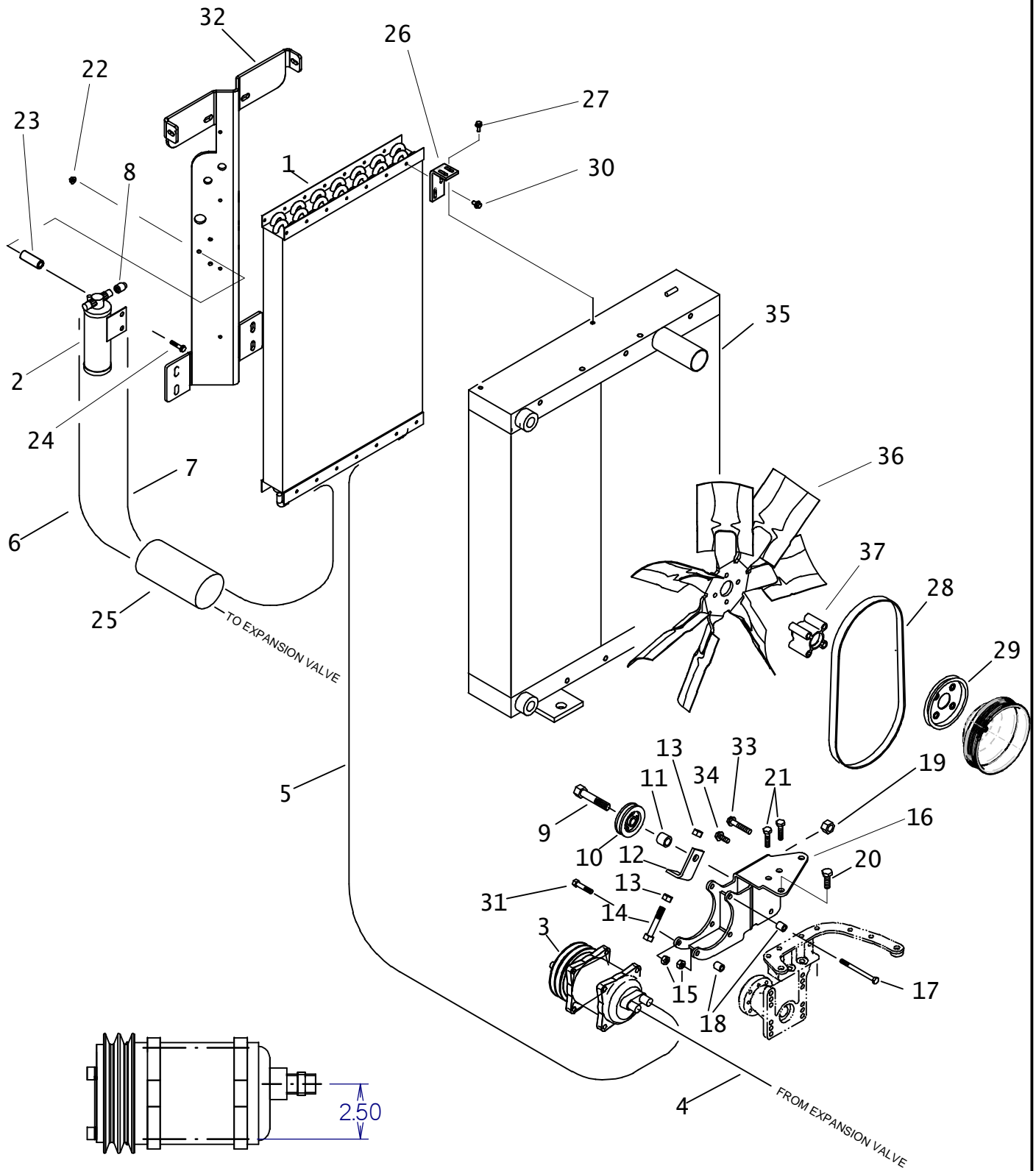
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
30.	155-112	1	S/O COUPLER (06N-10H)	
31.	155-017	1	SERVICE TEE (06N-06NF-06NF)	
32.	108-113	2	SCREW (#6-19 X 1-1/4" PLASTIC)	
33.	318-811	1	VALVE BRACKET	
34.	322-986	-	SEAT BASE	
35.	115-662	1	GROMMET EDGE (3/16" X 12.7")	
36.	362-1233	1	REAR PANEL W/ AC DUCT	
37.	105-814	4	FLG LOCKNUT (3/8-NC)	SCREWS ONTO STUD BOLTS ON BOTTOM OF REF #1 (499-802)
38.	322-871	1	TDM COVER	
39.	107-393	2	SCREW (M4-0.70 X 16mm, BX)	
40.	157-333	1	HOLE PLUG (.750")	

## NOT SHOWN:

213-174	SWITCH, THERMOSTAT
499-704	BLOWER MOTOR
499-829	COIL, EVAP
499-830	COIL, HEAT
499-831	VALVE, EXP BLOCK
499-834	WIRE HARNESS
499-835	RECIRCULATION AIR FILTER
499-842	HOSE, DRAIN
499-843	FTG, DRAIN
499-844	CONDENSATE VALVE
255-008	REFRIGERANT (30 LB. BOTTLE)
499-707	BLOWER SWITCH
499-708	A/C SWITCH
499-709	WATER VALVE CONTROL
499-838	BRACKET, CONTROL PANEL
499-839	DECAL CONTROLS
499-840	KNOB, POINTER PUSH ON
194-289	A/C HEATER KIT
213-041	A/C HARNESS
217-826	MINI RELAY (SPDT)
362-823	COVER, FITS IN SLOT ON REAR PANEL



# AIR CONDITIONING KIT



## AIR CONDITIONING KIT

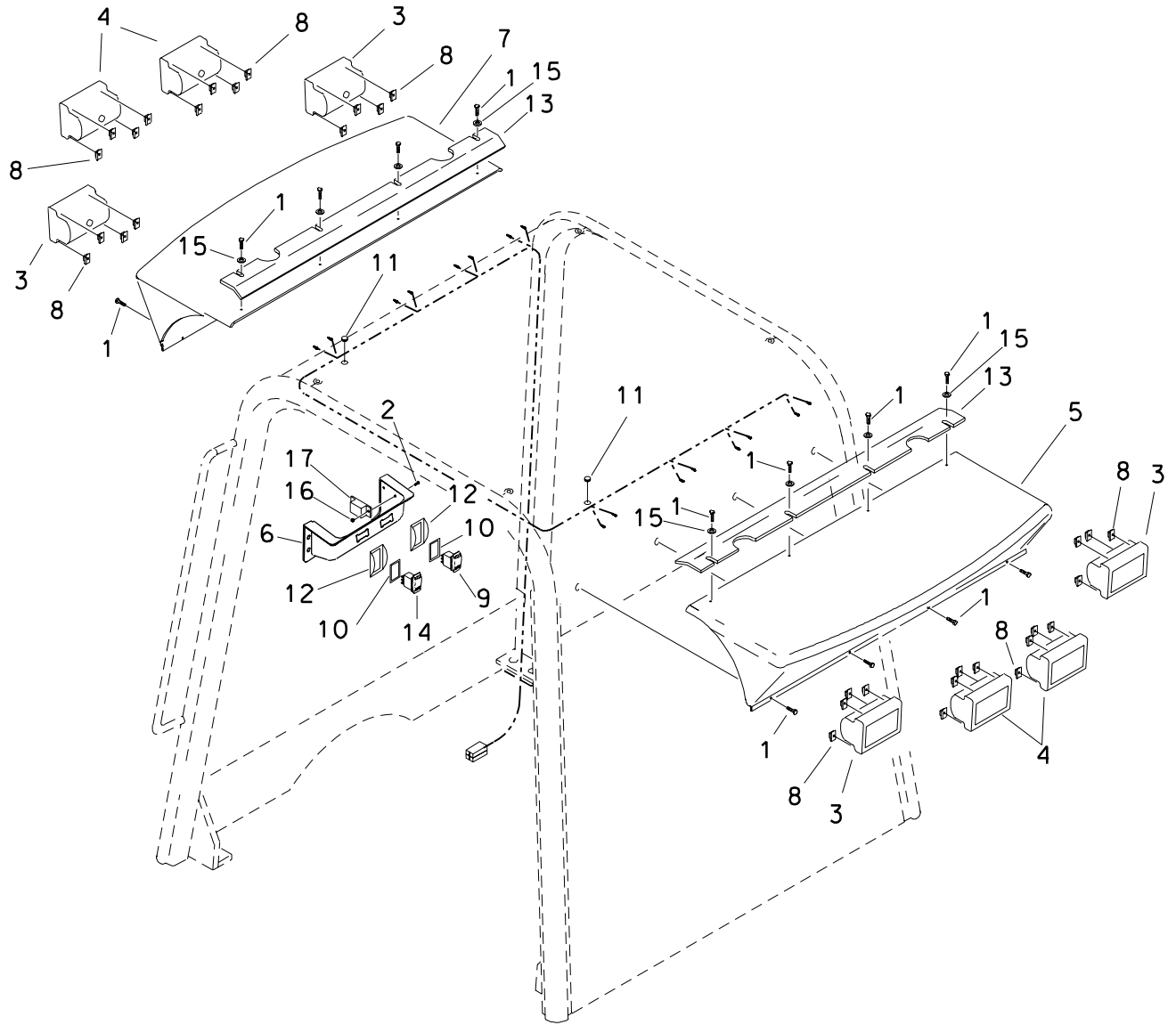
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-358		A/C-HEATER KIT	INCL. REF. #'S 1-34.
1.	499-836	1	CONDENSER COIL	
2.	499-205	1	RECEIVER DRIER	
3.	499-706	1	COMPRESSOR	
	499-841	1	COMPRESSOR FITTING	
4.	499-845	1	HOSE (#10 X 90" EVP-CP)	
5.	499-846	1	HOSE (#08 X 55" CP-CND)	
6.	499-847	1	HOSE (#06 X 36" CND-RD)	
7.	499-848	1	HOSE (#06 X 118" RD-EVP)	
8.	214-946	1	BINARY SWITCH	
9.	107-197	1	SCREW (M16-2.00 X 80mm,10.9)	SEE FOOTNOTE 1
10.	170-359	1	BALL BEARING V-PULLEY IDLER	
11.	179-723	1	SPACER	
12.	307-980	1	SLIDE BAR	
13.	106-089	2	NUT (M12-1.75, 10.9)	
14.	106-720	1	SCREW (M12-1.75 X 70mm)	
15.	105-089	4	LOCKNUT (5/16-NC)	
16.	319-917	1	COMPRESSOR MOUNT	
17.	105-190	2	BOLT (5/16-NC X 2-3/4")	
18.	179-726	2	SPACER	
19.	106-077	1	HEX NUT (M16-2.00, 10.9)	
20.	106-333	1	SCREW (M12-1.75 X 40mm, 8.8)	SEE FOOTNOTE 1
21.	105-876	3	SCREW (M10-1.50 X 35mm)	SEE FOOTNOTE 1
22.	106-386	2	FLG LOCKNUT (M8-1.25)	
23.	184-239	2	SPACER	
24.	107-872	2	SCREW (M8-1.25 X 65MM)	
25.	115-687	2	ABRASION SLEEVE (SOLD PER FOOT)	USE 2 @ 2'
26.	306-769	4	MOUNT BAR	
27.	106-987	4	FLG LK SCREW (M6-1.00 X 16mm)	
28.	171-007	1	COMPRESSOR BELT	
29.	170-365	1	DRIVE PULLEY	
30.	105-836	4	FLG LOCK BOLT (1/4-NC X 1/2")	
31.	105-160	2	BOLT (5/16-NC X 1-1/4")	
32.	307-909	-	FRONT HOOD SUPPORT	
33.	107-001	1	FLG LK SCREW (M10-1.50 X 25MM)	
34.	106-654	1	FLG LK SCREW (M10-1.50 X 16MM)	
35.	194-283	-	RADIATOR/SPLIT COOLER	USED ON MECHANICAL UNITS
	306-459	-	RADIATOR/OIL COOLER	USED ON HYDROSTAT UNITS
36.	194-521	-	21.8" METAL BLADE PULLER FAN	
37.	194-052	-	FAN SPACER	

### FOOTNOTES

1- USE LOCTITE 242 OR EQUIVALENT.

### NOTE:

# CANOPY AND LIGHT KIT



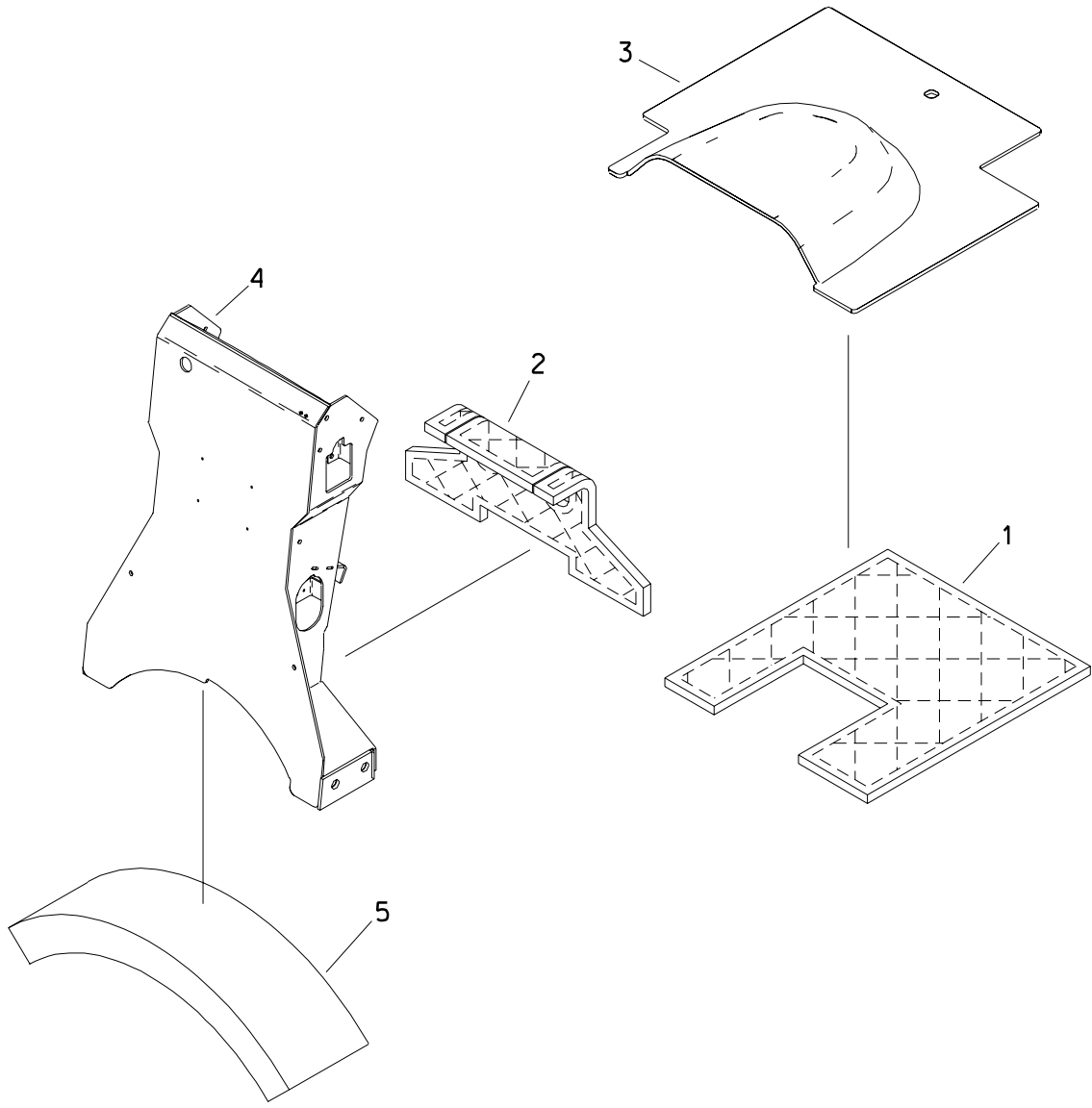
# CANOPY AND LIGHT KIT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-180		LIGHT KIT	INCLUDES REF #'S 1-17
1.	107-716	16	SCREW (1/4" - 14 x 7/8" SLF DRL)	
2.	105-185	2	BOLT (#10-24 X 1/2", RD SLT)	
3.	217-288	4	WORK LIGHT (100FO)	
4.	217-287	4	WARNING LIGHT	
5.	305-658	1	EYE-BROW CANOPY	
6.	308-894	1	OVERHEAD CONSOLE	
7.	310-113	1	FRONT EYE-BROW CANOPY	
8.	107-405	32	CLIP NUT (6-32)	
9.	217-762	1	ROCKER SWITCH (SPDT)	
10.	165-817	2	SWITCH GASKET	
11.	115-349	2	GROMMET (1/2")	DRILL 2-23/32" HOLES ON DIMPLES
12.	110-854	2	SWITCH ACTUATOR GUARD	
13.	318-661	2	STRAP	
14.	214-912	1	DPST ON-OFF ROCKER SWITCH	
15.	105-284	8	WASHER (3/16")	
16.	106-048	2	LOCKNUT (#10-24)	
17.	215-041	1	FLASHER	

NOT SHOWN:  
362-823 COVER

FOOTNOTES

# SOUND BLANKETS



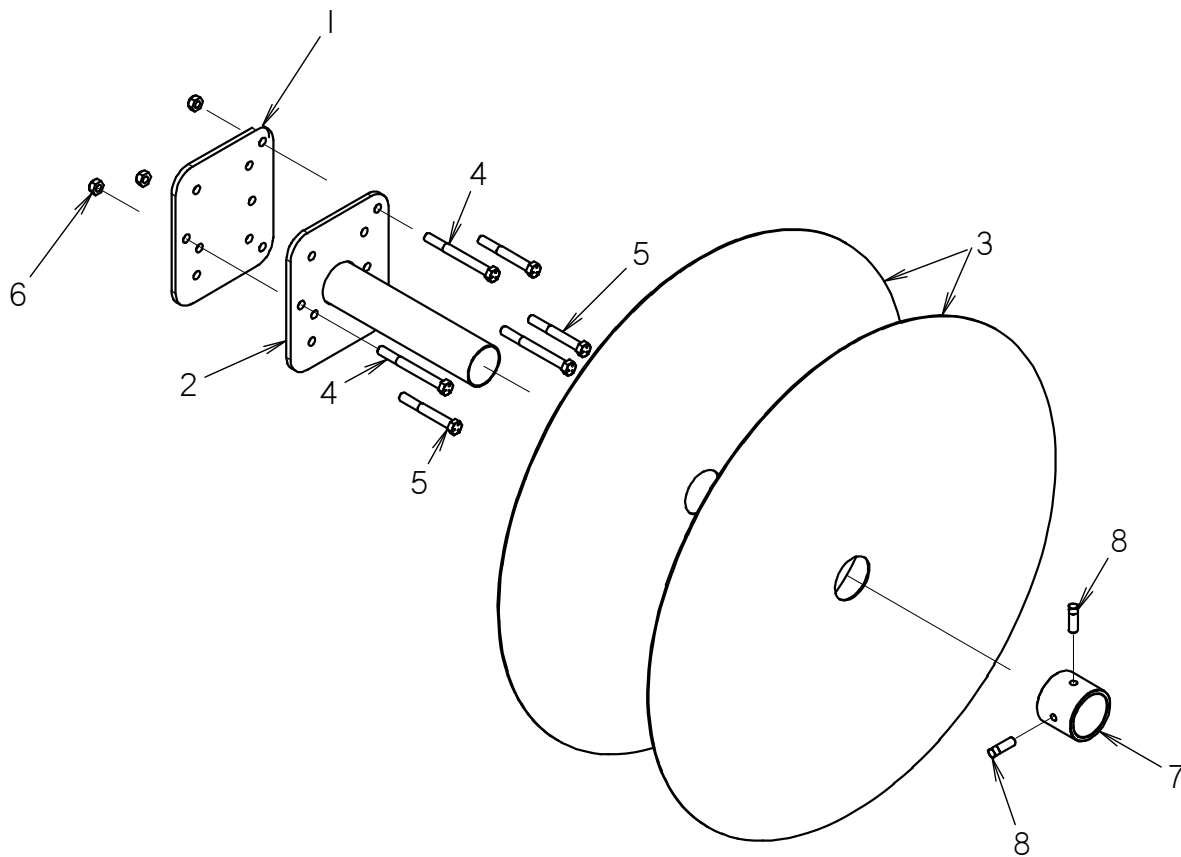
# SOUND BLANKETS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	117-833	1	SOUND BLANKET	POWERSHIFT ONLY
	117-832	1	SOUND BLANKET	HT115 AND HYDROSTAT ONLY
2.	117-834	1	SOUND BLANKET	USED ON RT/HT115 & POWERSHIFT ONLY
	117-835	1	SOUND BLANKET	USED ON RT75/95 HYDROSTAT ONLY
3.	313-238	-	FLOOR PLATE	
	318-793	-	FLOOR PLATE	
	324-566	-	FLOOR PLATE	HT115 ONLY
4.	315-142	-	PEDESTAL	
5.	117-847	1	HEAT BLANKET	

FOOTNOTES



## TAPE DISPENSER



# TAPE DISPENSER

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	190-1637	-	TAPE DISPENSER	INCL'S REF #'S 1 THRU 8
1	301-1490	1	PLATE	
2	301-1399	1	MOUNT	
3	301-1491	2	RING	
4	105-258	3	BOLT (3/8-NC X 3-3/4")	RT80 & RT55
5	105-098	3	BOLT (3/8-NC X 3")	HT/RT115 & QUAD RT45
6	105-047	3	LOCKNUT (3/8-NC)	
7	301-1492	1	COLLAR	
8	105-714	2	SET SCREW (3/8-NC X 1", SQ)	

NOT SHOWN:

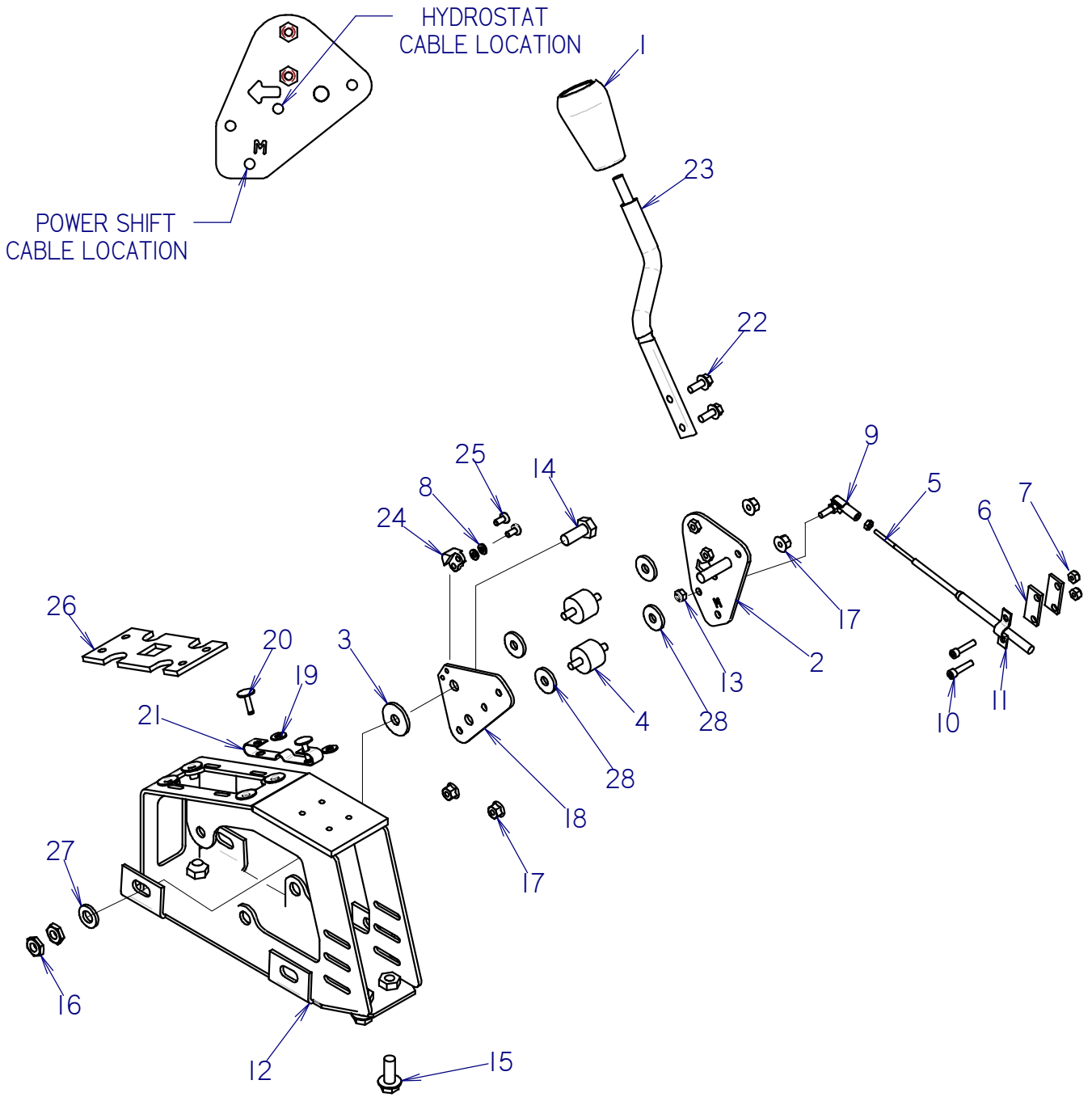
FOOTNOTES:

NOTE:



# **CONTROL COMPONENTS**

# GRND SPEED DIRECTION HAND CNTL



## GRND SPEED DIRECTION HAND CNTL

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	110-445	1	KNOB (3/8-NC, ORANGE)	
2	319-914	1	RIGHT CONTROL	SEE FOOTNOTE 3 AND INCLUDES HARDWARE
3	107-529	1	WASHER UHMW (3/8)	
4	116-980	2	SHOCK MOUNT	
5	196-287	1	CONTROL CABLE	SEE FOOTNOTE 4
6	331-166	2	BOLT-ON BACK-UP (.306")	
7	106-048	2	LOCKNUT (#10-24)	
8	106-205	2	WASHER (.191")	
9	110-318	1	BALL JOINT (#10-32, FM)	
10	105-810	2	BOLT (#10-24 X 7/8", SOC)	
11	110-697	1	BOLT-ON CLAMP (.360")	
12	309-227	1	CONTROL LEVER FRAME	
13	107-770	1	LOCKNUT (1/4-NF, NYL INSERT)	
14	105-245	1	SCREW (M10-1.50 X 25MM)	
15	107-001	4	FLG LK SCREW (M10-1.50 X 25MM)	
16	107-769	2	JAM NUT (M10-1.50)	SEE FOOTNOTE 2
17	105-832	4	FLG LOCKNUT (1/4-NC)	
18	310-127	1	PIVOT PLATE	
19	105-284	2	WASHER (3/16")	
20	110-348	2	POP RIVET (3/16" X .664")	
21	115-598	1	SPRING DETENT	
22	106-987	2	FLG LK SCREW (M6-1.00 X 16MM)	
23	117-519	1	CONTROL HANDLE	
24	315-149	1	DETENT TIP	
25	106-271	2	SCREW (M5-0.80 X 8MM, PLPS)	SEE FOOTNOTE 1
26	316-476	1	TEMPLATE	
27	106-396	1	WASHER (M10, HARDENED)	
28	106-261	4	WASHER (.334")	

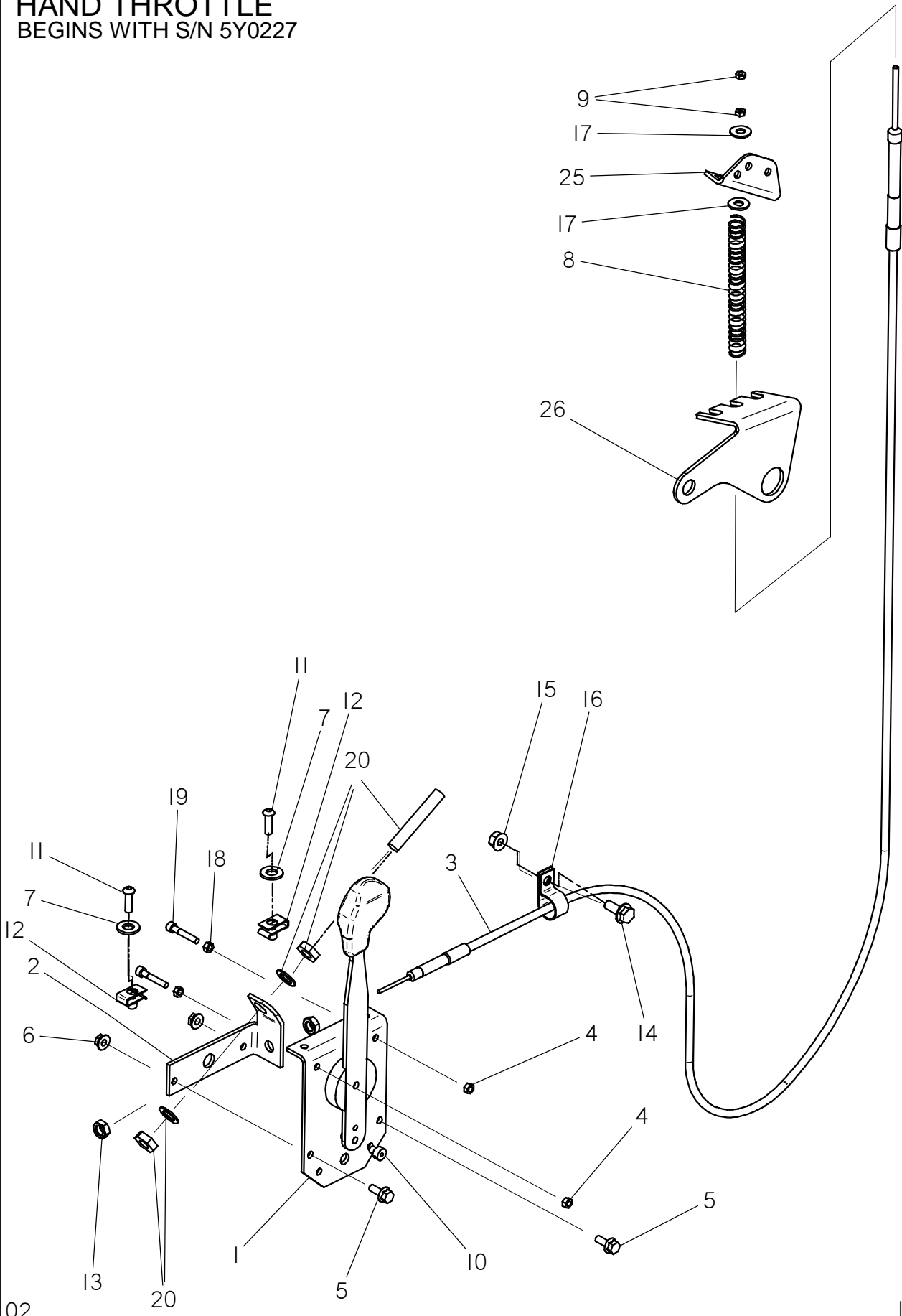
### FOOTNOTES

1. USE LOCTITE 242 OR EQUIVALENT
2. TORQUE TO 70 IN.-LBS.
3. IF ORDERING THIS PART FOR MACHINE WITH S/N \_\_\_\_\_ OR OLDER, YOU MUST ALSO ORDER LEVER (#319-916) AND REFER TO PARTS PAGE "GRD SPEED DIRECTION FOOT CONTROL", IF THIS UNIT IS EQUIPPED WITH CRUISE CONTROL, PART 319-916 IS NOT NEEDED.
4. 196-287 IS FOR HYDROSTAT TRACTORS. USE 194-196 FOR POWER SHIFT TRACTORS.

NOTE:

# HAND THROTTLE

BEGINS WITH S/N 5Y0227



02

ID0025136

# HAND THROTTLE

## BEGINS WITH S/N 5Y0227

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	306-619	1	CONTROL LEVER	
	117-593	1	KNOB (ORANGE)	
2.	324-666	1	CONTROL BRACKET	
3.	194-539	1	CONTROL CABLE	
4.	106-850	2	LOCKNUT (M5-0.80)	
5.	106-987	2	FLG LK SCREW (M6-1.00 X 16mm)	
6.	106-353	2	FLG NUT (M6-1.00)	
7.	107-744	2	WASHER (M6)	
8.	115-604	1	COMPRESSION SPRING	
9.	506-021	2	NUT (#10-32)	
10.	196-058	1	CABLE SWIVEL (.081")	
	106-205	1	WASHER (.191")	
	505-114	1	THRUST WASHER (.343")	
11.	106-640	2	SCREW (M6-1.00 X 20mm ,BUT SOC)	
12.	106-574	2	CLIP NUT (M6-1.00)	
13.	106-018	2	JAM NUT (3/8-NF)	USE LOCTITE 242 OR ITS EQUIVILENT
14.	106-991	1	FLG LK SCREW (M8-1.25 X 20MM)	
15.	106-386	1	FLG LOCKNUT (M8-1.25)	
16.	110-373	1	BOLT-ON CLAMP (13/16")	
17.	105-095	2	WASHER (1/4")	
18.	106-138	2	NUT (M5-0.8.)	
19.	107-465	2	SCREW (M5-0.80 X 30MM, SOC)	
20.	215-1447	1	PROXIMITY SWITCH 12MM EUROFAST	POWERSHIFT ONLY & REFER TO F/N 1
21.	307-069	-	LEVER BRACKET	
22.	307-068	-	CABLE BRACKET	

NOT SHOWN:

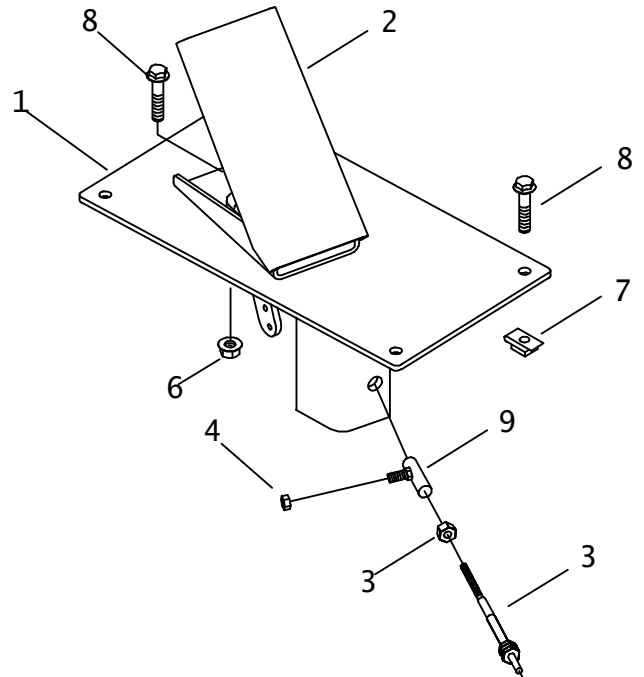
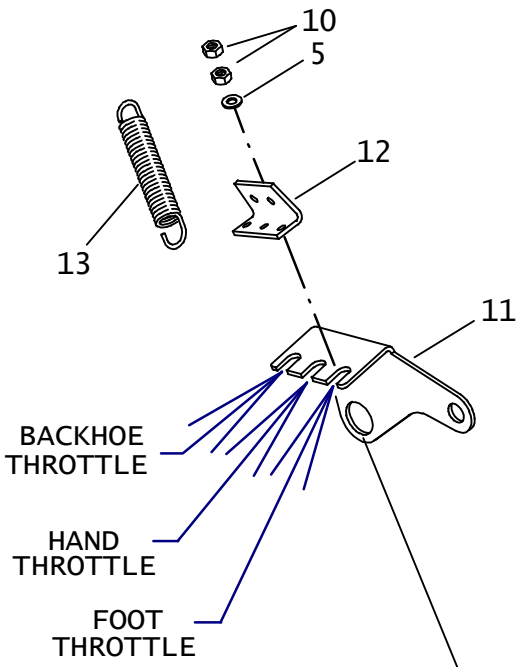
FOOTNOTES:

- I. PROXIMITY SWITCH 215-1447 SUPERCEDED PROXIMITY SWITCH 213-272

NOTE:



# FOOT THROTTLE



# FOOT THROTTLE

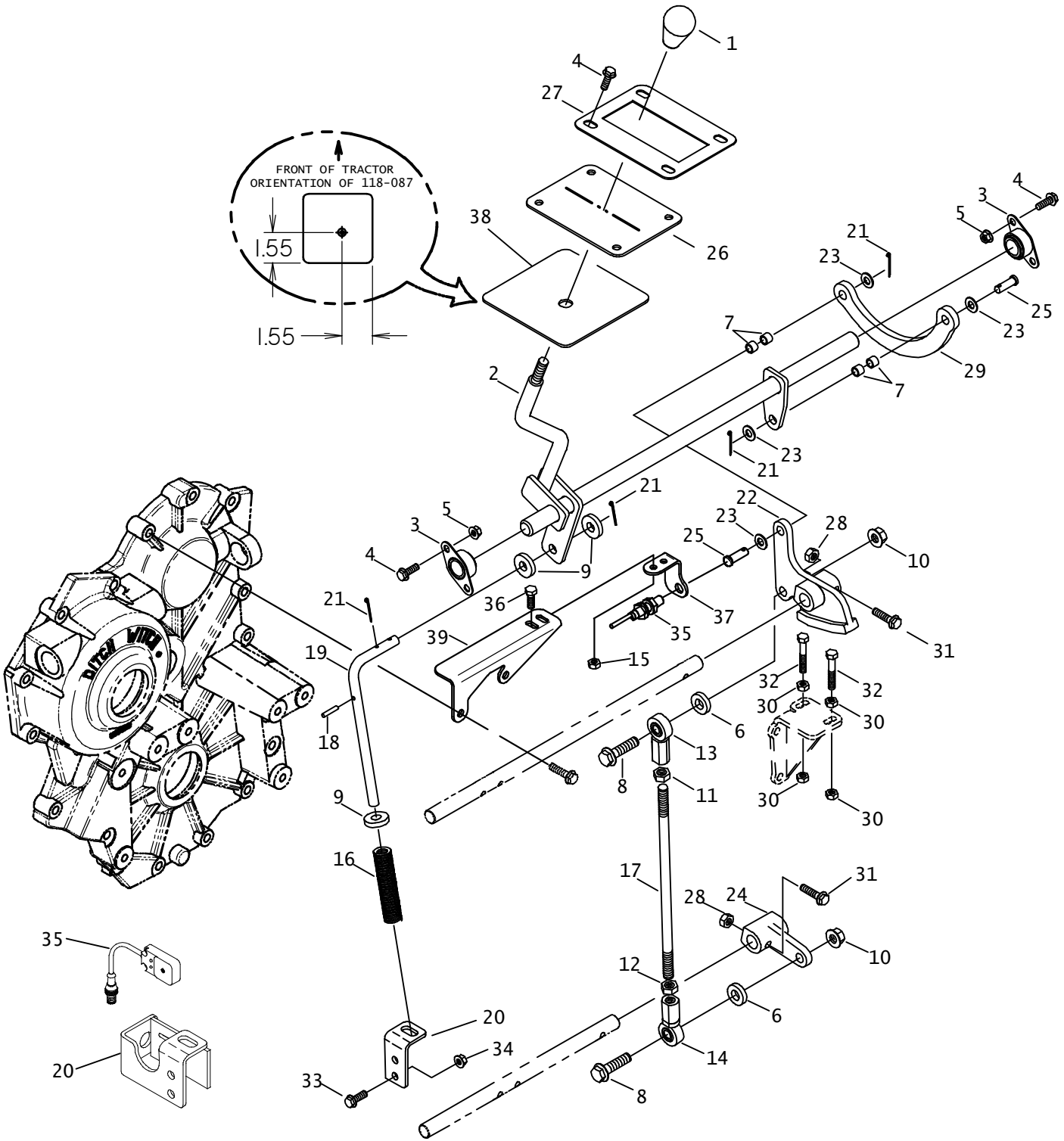
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	307-530	1	BASE	
2	307-515	1	THROTTLE PEDAL	
3	194-133	1	CONTROL CABLE (110.0")	
	506-021	1	NUT (#10-32)	
4	107-770	1	LOCKNUT (1/4-NF, NYL INSERT)	
5	105-095	1	WASHER (1/4")	
6	106-386	2	FLG LOCKNUT (M8-1.25)	
7	107-135	4	CLIP NUT (M8-1.25)	
8	106-992	6	FLG LK SCREW (M8-1.25 X 25mm)	
9	110-318	1	BALL JOINT (#10-32, FM)	
10	506-021	2	NUT (#10-32)	
11	307-068	-	CABLE BRACKET	
12	307-069	-	LEVER BRACKET	
13	117-959	1	EXTENSION SPRING	

NOT SHOWN:

FOOTNOTES:

NOTE:

# POWERSHIFT LEVER



# POWERSHIFT LEVER

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	110-375	1	KNOB (1/2-NC, YELLOW)	
2.	306-954	1	SHIFT ARM	
3.	125-488	2	FLANGE BUSHING (.875")	
4.	106-992	8	FLG LK SCREW (M8-1.25 X 25mm)	
5.	106-386	4	FLG LOCKNUT (M8-1.25)	
6.	106-397	2	WASHER (M12, HARDENED)	
7.	125-174	4	BRONZE BUSHING (.375"X.500")	
8.	107-004	2	FLG LK SCREW (M12-1.75 X 45mm)	
9.	105-244	AR	WASHER (1/2")	
10.	106-354	2	FLANGE NUT (M12-1.75)	
11.	106-447	1	JAM NUT (1/2-NF)	
12.	107-573	1	JAM NUT (1/2-NF, LH)	
13.	110-290	1	ROD END (1/2-NF, FM)	
14.	107-574	1	ROD END (1/2-NF, FM, LH)	
15.	105-832	2	FLG LOCKNUT (1/4-NC)	
16.	117-019	1	COMPRESSION SPRING	
17.	306-762	1	SHIFT ROD	
18.	106-131	1	DOWEL PIN (.187 X 1.000)	
19.	306-666	1	SPRING ROD	
20.	316-939	1	SWITCH BRACKET	BEFORE S/N
	307-568	1	SPRING MOUNT	AFTER S/N
21.	105-509	4	COTTER PIN (1/8" X 1")	
22.	375-395	1	LEVER	
23.	105-117	4	WASHER (5/16")	
24.	375-396	1	LEVER	
25.	110-306	2	CLEVIS PIN (3/8" X .890")	
26.	307-585	1	BELLOW	OBSOLETE
	118-074	1	DUST SHIELD	
27.	307-580	1	BELLOW MOUNT	
28.	105-047	2	LOCKNUT (3/8-NC)	
29.	306-763	1	SHIFT LINK	
30.	106-539	4	JAM NUT (M8-1.25)	
31.	105-883	2	FLG LK BOLT (3/8-NC X 2")	
32.	106-892	2	SCREW (M8-1.25 X 50mm)	
33.	107-002	2	FLG LK SCREW (M10-1.50 X 30mm)	
34.	106-266	2	FLG NUT(M10-1.50)	
35.	217-269	1	PROXIMITY SWITCH	BEFORE S/N
	215-1447	1	PROXIMITY SWITCH	AFTER S/N_____ & REFER TO FOOTNOTE I
36.	106-168	2	FLG LK BOLT (1/4-NC X 3/4")	
37.	329-489	1	MOUNT	
38.	118-087	1	DUST SHIELD	
39.	329-488	1	MOUNT	

NOT SHOWN:

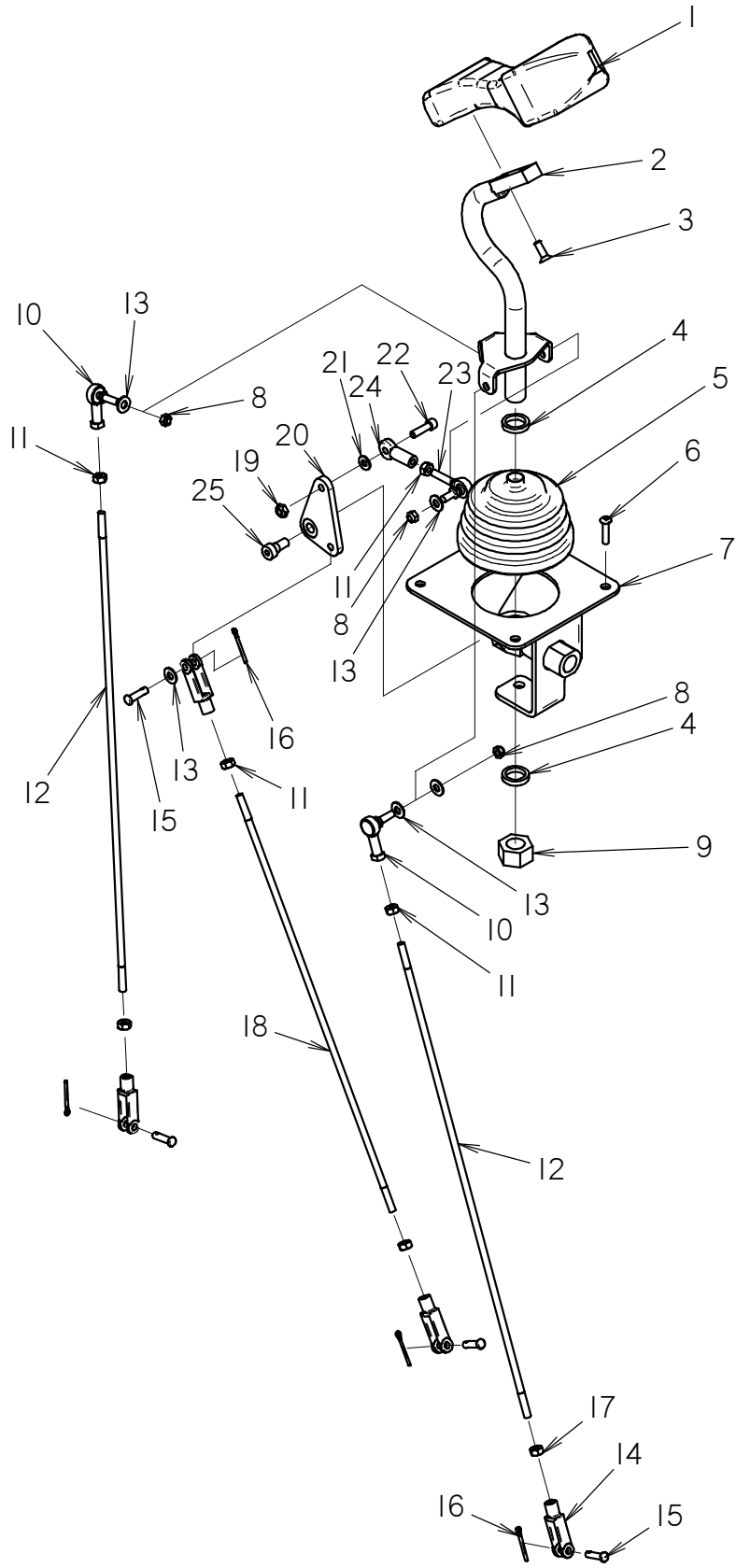
#### FOOTNOTES:

- I. PROXIMITY SWITCH 215-1447 SUPERCEDES PROXIMITY SWITCH 213-272.

#### NOTE:

- I. ADD LOCTITE 242 TO ALL ADJUSTMENT SCREW THREADS

# BFB BLADE CONTROLS



# BFB BLADE CONTROLS

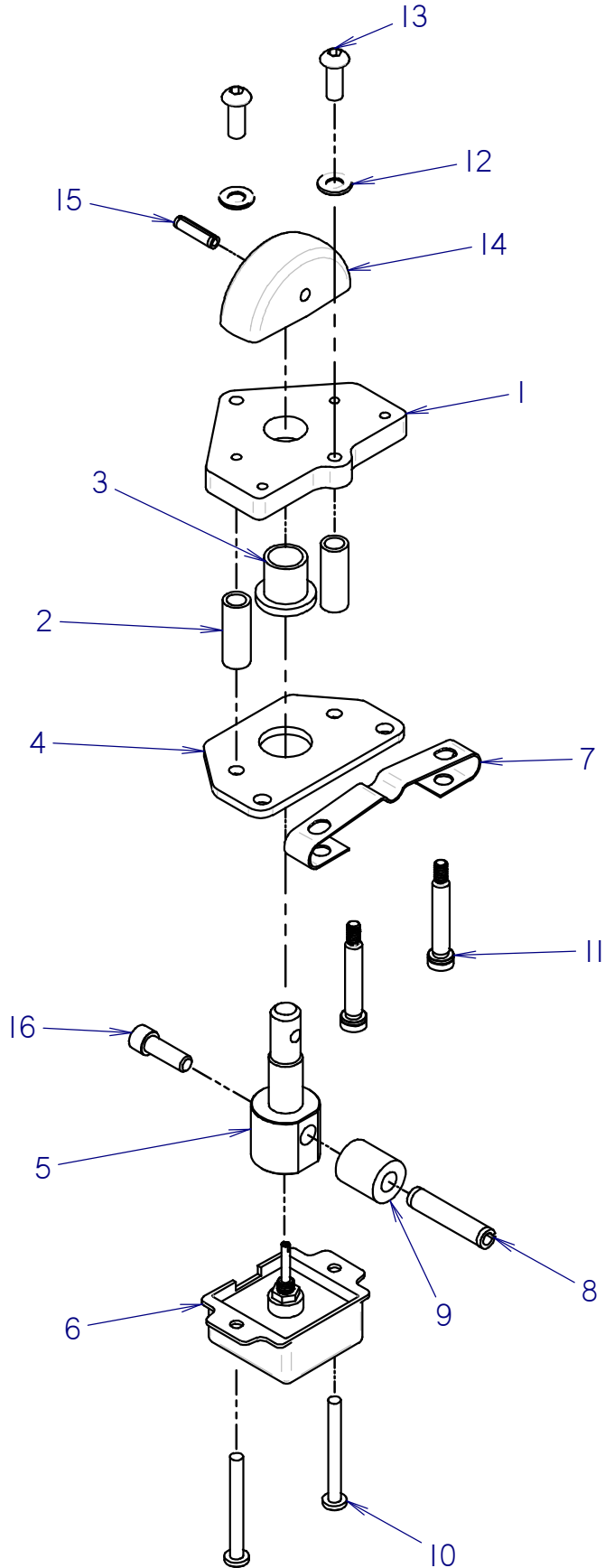
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	117-345	1	CONTROL HANDLE	
2	305-728	1	HANDLE ASSEMBLY	
3	105-263	2	BOLT (1/4-NC X 3/4", CSK, SOC)	
4	178-421	2	BUSHING	
5	110-330	1	DUST BOOT	
6	107-312	4	SCREW (M6-1.00 X 25MM, BUT SOC)	
7	305-727	1	MOUNT ASSEMBLY	
8	107-770	3	LOCKNUT (1/4-NF, NYL INSERT)	
9	105-387	1	LOCKNUT (3/4-NF)	
10	160-540	2	ROD END	
11	105-152	4	NUT (1/4-NF)	
12	179-884	2	ROD (19.44")	
13	106-076	5	WASHER (1/4")	
14	107-790	4	CLEVIS (1/4-NF-LH)	
15	110-082	4	CLEVIS PIN (1/4 X 11/16)	
16	105-508	4	COTTER PIN (3/32" X 1")	
17	105-878	3	NUT (1/4-NF, LH)	
18	179-885	1	ROD (17")	
19	105-085	1	LOCKNUT (1/4"-NC)	
20	305-724	1	LINKAGE PLATE	
21	105-284	1	WASHER (3/16")	
22	105-087	1	BOLT (1/4-NC X 7/8", SOC)	
23	110-565	1	BALL JOINT (1/4-NF)	
24	110-281	1	ROD END (1/4-NF, FM)	
25	107-582	1	SHLD BOLT(3/8" X 1/4",5/16-NC)	

NOT SHOWN:

FOOTNOTES:

NOTE:

# REAR STEER CONTROL KIT



## REAR STEER CONTROL KIT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	318-366	1	MOUNT PLATE	SEE FOOTNOTE 1
2	179-416	2	BOSS	
3	125-447	1	BUSHING	
4	318-367	1	BOTTOM PLATE	
5	166-449	1	SHAFT	
6	217-273	1	POSITION POTENTIOMETER	
7	115-598	1	SPRING DETENT	
8	105-529	1	ROLL PIN (5/16" X 1-1/2")	
9	179-418	1	BUSHING	
10	106-120	2	SCREW (#10-24 X1-3/4",PAN SLT)	SEE FOOTNOTE 2
11	107-785	2	SHLD BLT(1/4" X 1-1/4",#10-24)	SEE FOOTNOTE 2
12	107-744	2	WASHER (M6)	
13	107-193	2	SCREW (M6-1.00 X 16MM,BUT SOC)	
14	117-887	1	KNOB	
15	105-522	1	ROLL PIN (3/16" X 3/4")	
16	105-161	1	BOLT (1/4-NC X 3/4", SOC)	SEE FOOTNOTE 2

NOT SHOWN:

**FOOTNOTES:**

1. P/N 191-221 REAR STEER CONTROL KIT INCLUDES REFERENCE # 1-16
2. USE LOCTITE 242 OR EQUIVALENT

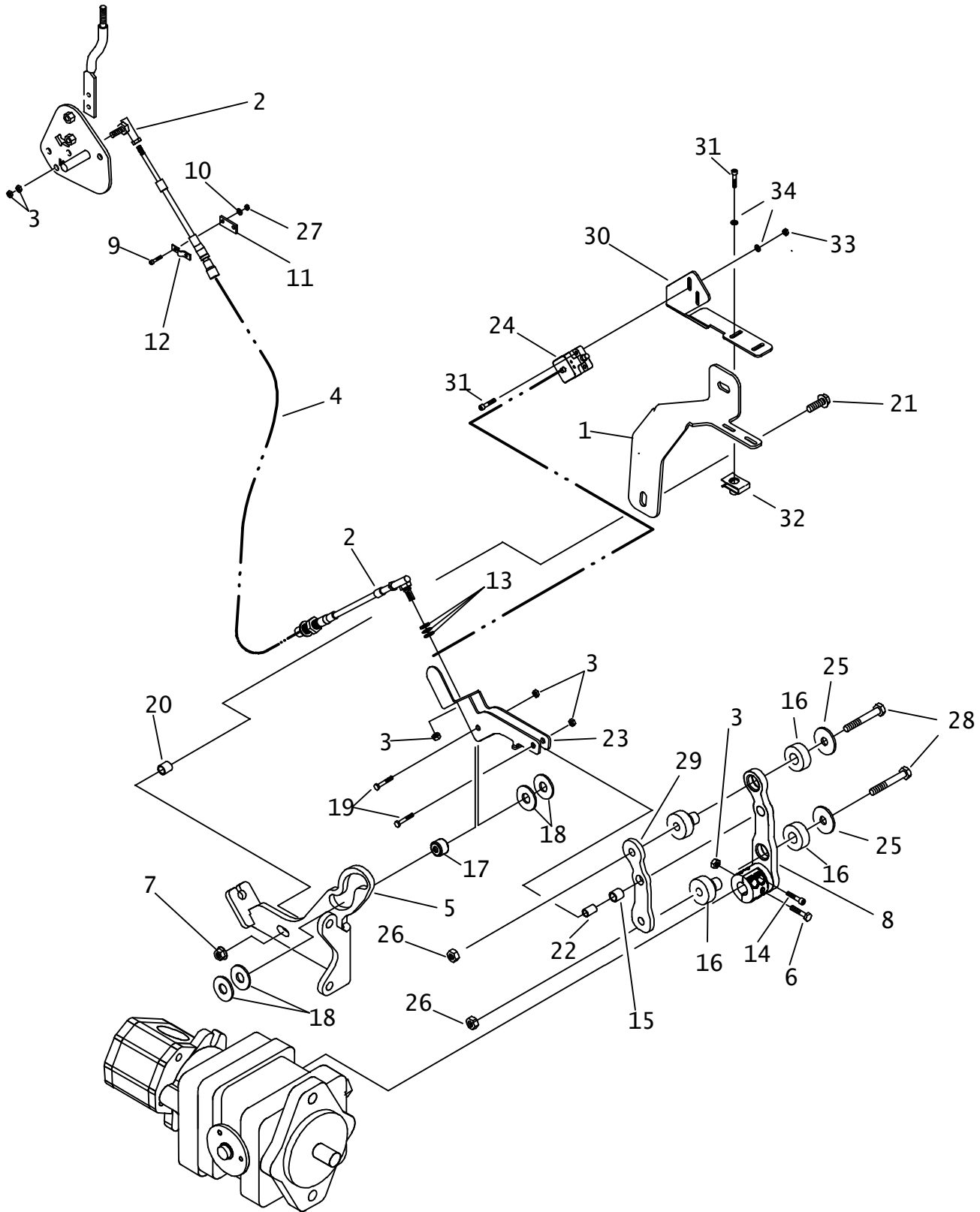
**NOTE:**

REFER TO INSTALLATION INSTRUCTION 051-319 FOR REAR STEER UPGRADE KIT INFORMATION.  
 191-251 IS THE REAR STEER UPGRADE KIT AND 259-516 IS THE REAR STEER ALIGNMENT (SPECAL TOOL) .  
 REFER TO O-RING CHART (800-301) FOR REPLACEMENT O-RINGS.



# HYDROSTATIC PUMP LINKAGE

ENDS WITH S/N \_\_\_\_\_.



## HYDROSTATIC PUMP LINKAGE ENDS WITH S/N\_\_\_\_\_.

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	315-735	1	REAR SUPPORT (AUX DRIVE PUMP)	
2.	110-318	2	BALL JOINT (#10-32, FM)	
3.	106-678	6	LOCKNUT (1/4-NF)	
4.	194-196	-	CONTROL CABLE (116")	
5.	315-484	1	CAM PLATE	SEE FOOTNOTE 1
6.	105-106	1	BOLT (1/4-NC X 2")	
7.	106-386	1	FLG LOCKNUT (M8-1.25)	
8.	315-483	1	PUMP TRUNNION LEVER	
9.	105-810	2	BOLT (#10-24 X 7/8", SOC)	
10.	106-205	2	WASHER (.191")	
11.	331-166	1	BOLT-ON BACKUP (.360")	
12.	110-697	1	BOLT-ON CLAMP (.360")	
13.	107-092	3	WASHER (.254")	
14.	106-528	4	SCREW (M6-1.00 X 20mm, SOC)	SEE FOOTNOTE 2
15.	179-301	1	BRONZE BUSHING (.375)	
16.	116-142	2	SHOCK MOUNT	
17.	125-491	1	CAM YOKE ROLLER BEARING	
18.	117-614	4	FRICTION WASHER (.781")	
19.	105-699	2	BOLT (1/4-NF X 1-1/4")	SEE FOOTNOTE 2
20.	181-636	1	BUSHING	
21.	106-989	1	FLG LK SCREW (M8-1.25 X 35mm)	
22.	179-302	1	SLEEVE (.250)	
23.	313-954	1	CABLE CONNECTOR	
24.	217-269	1	PROXIMITY SWITCH	
25.	105-069	2	WASHER (.406")	
26.	105-047	2	LOCKNUT (3/8-NC)	
27.	105-811	2	LOCKNUT (#10-24)	
28.	105-162	2	BOLT (3/8-NC X 2-1/4")	
29.	315-536	1	INNER CONTROL ARM	
30.	315-646	1	PROXIMITY SWITCH MOUNT	
31.	107-268	4	SCREW (M4-0.70 X 20mm, SOC)	
32.	107-516	2	CLIP NUT (M4-.7)	
33.	105-680	2	NUT (M4, W/LK WSHR)	
34.	107-597	4	WASHER (M4)	

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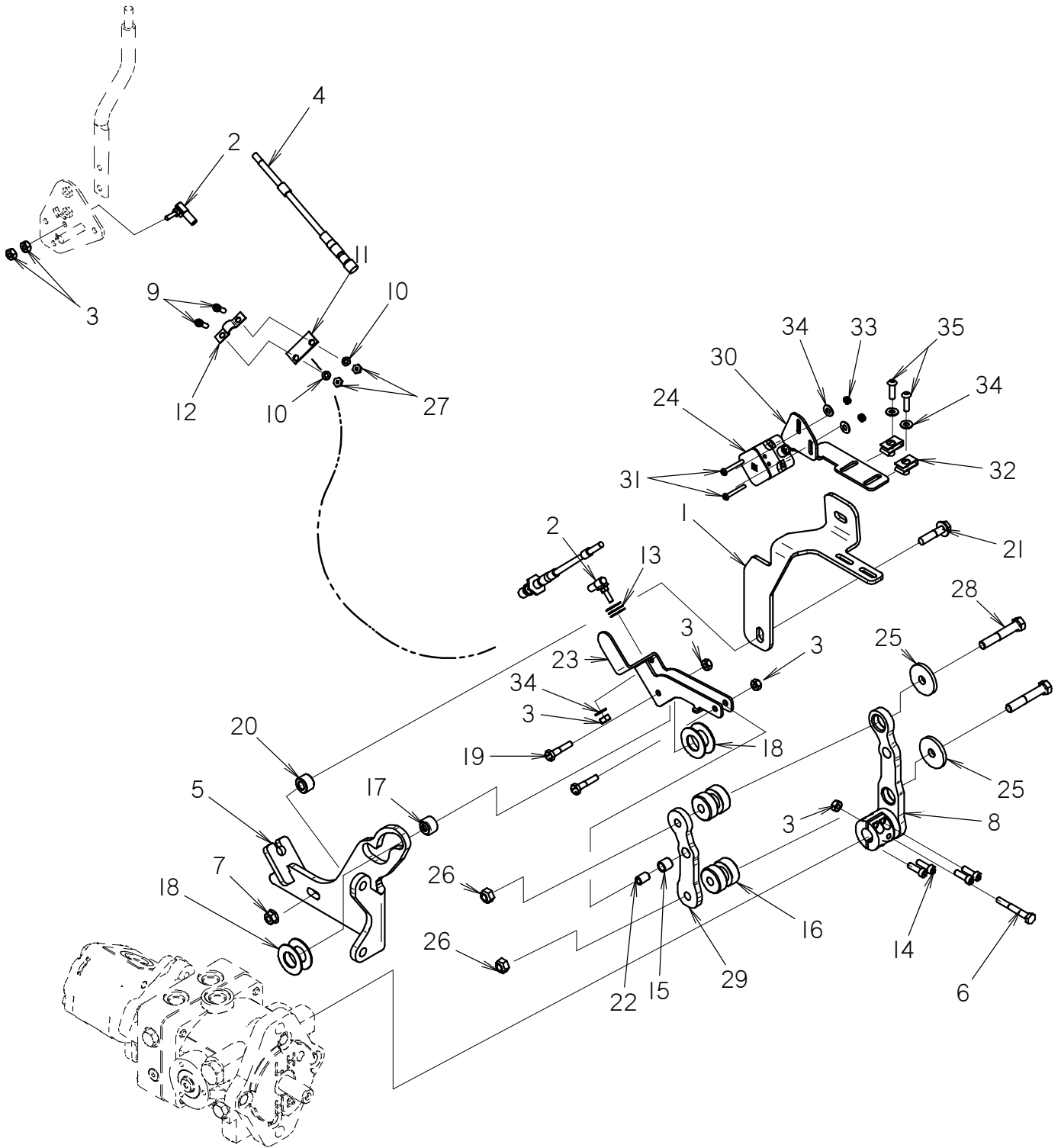
### FOOTNOTES:

1. TO ATTACH BRACKET (REF #5) USE THE TWO INSIDE BOLTS LOCATED IN THE REAR OF THE FRONT PUMP ON THE SAME SIDE AS THE TRUNNION SHAFT.
2. APPLY LOCTITE BEFORE ASSEMBLY.

NOTE:

# HYDROSTATIC PUMP LINKAGE

BEGINS WITH S/N CMWRT95MK90000264



## HYDROSTATIC PUMP LINKAGE

BEGINS WITH S/N CMWRT95MK90000264

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	315-735	1	REAR SUPPORT (AUX DRIVE PUMP)	
2	110-318	2	BALL JOINT (#10-32, FM)	
3	106-678	6	LOCKNUT (1/4-NF)	
4	194-196	1	CONTROL CABLE	
5	315-484	1	CAM PLATE	SEE FOOTNOTE 1
6	105-106	1	BOLT (1/4-NC X 2")	
7	106-386	1	FLG LOCKNUT (M8-1.25)	
8	315-483	1	PUMP TRUNNION LEVER	
9	105-810	2	BOLT (#10-24 X 7/8", SOC)	
10	106-205	2	WASHER (1.91")	
11	331-166	1	BOLT-ON BACK-UP (.306")	
12	110-697	1	BOLT-ON CLAMP (.360")	
13	107-092	3	WASHER (.254")	
14	106-528	4	SCREW (M6-1.00 X 20MM, SOC)	SEE FOOTNOTE 2
15	179-301	1	BRONZE BUSHING (.375)	
16	116-142	2	SHOCK MOUNT	
17	125-491	1	CAM YOKE ROLLER BEARING	
18	117-614	4	FRICTION WASHER (.781")	
19	105-699	2	BOLT (1/4-NF X 1 1/4")	SEE FOOTNOTE 2
20	181-636	1	BUSHING	
21	106-989	1	FLG LK SCREW (M8-1.25 X 35MM)	
22	179-302	1	SLEEVE (.250)	
23	313-954	1	CABLE CONNECTOR	
24	215-1175	1	PROXIMITY SWITCH	SEE FOOTNOTE 3, BEGINS W/ S/N: CMWRT95MK90000264
25	105-069	2	WASHER (.406")	
26	105-047	2	LOCKNUT (3/8-NC)	
27	105-811	2	LOCKNUT (#10-24)	
28	105-162	2	BOLT (3/8-NC X 2-1/4")	
29	315-536	1	INNER CONTROL ARM	
30	300-6250	1	PROXIMITY SWITCH MOUNT	SEE FOOTNOTE 3, BEGINS W/ S/N: CMWRT95MK90000264
31	107-414	2	SCREW (M4-0.70 X 30MM,BUT SOC)	SEE FOOTNOTE 3, BEGINS W/ S/N: CMWRT95MK90000264
32	106-574	2	CLIP NUT (M6-1.00)	
33	105-680	2	NUT (M4, W/LK WSHR)	
34	105-284	5	WASHER (.316")	
35	106-640	2	SCREW (M6-1.00 X 20MM,BUT SOC)	

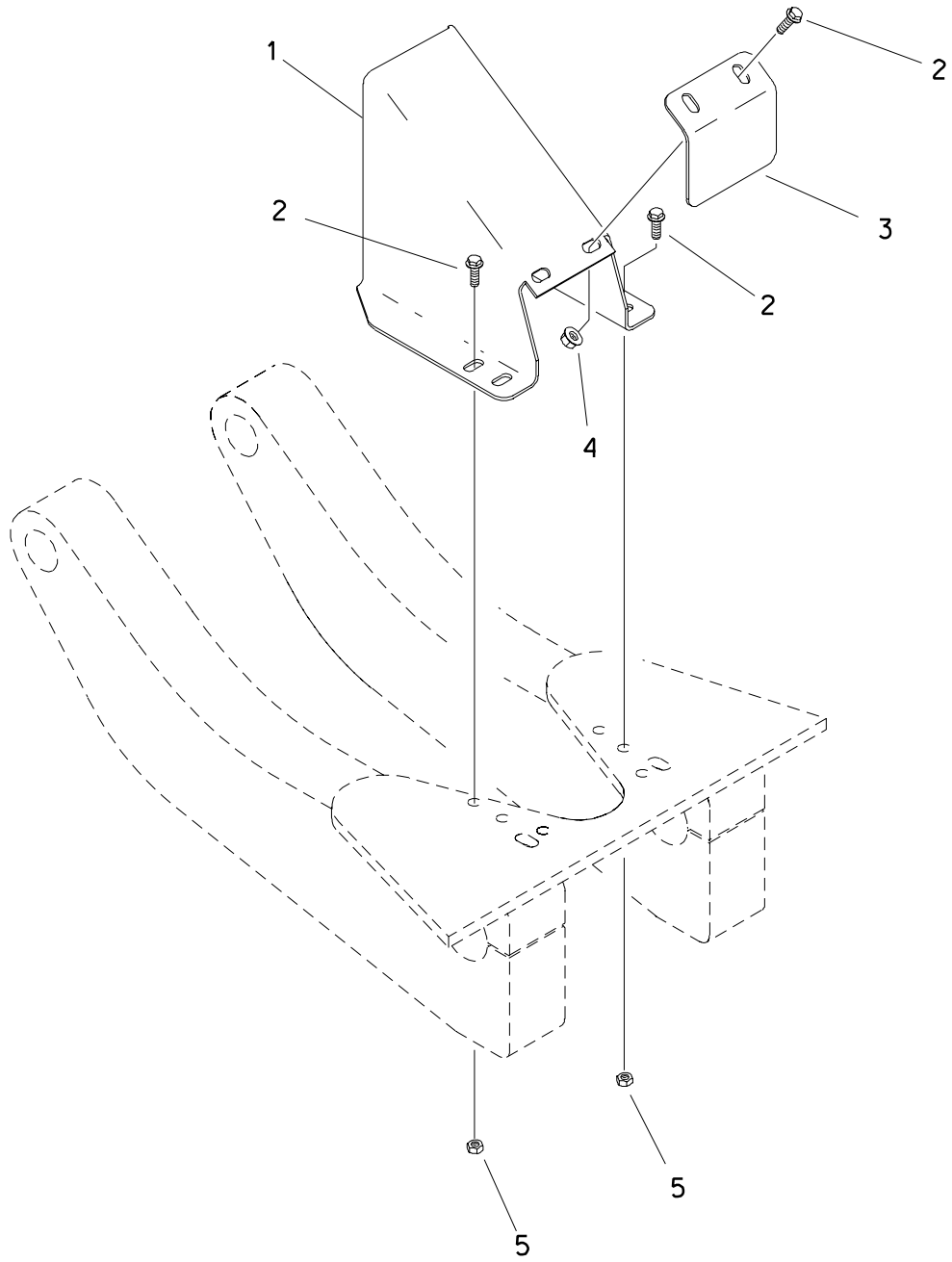
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FOOTNOTES:

1. TO ATTACH BRACKET (REF #5) USE TWO INSIDE BOLTS LOCATED IN THE REAR OF THE FRONT PUMP ON THE SAME SIDE AS THE TRUNNION SHAFT.
2. APPLY LOCTITE BEFORE ASSEMBLY.
3. UNITS PRIOR TO S/N CMWRT95MK90000264 USE SENSOR 217-269 (1X), BRACKET 315-646 (1X), AND BOLTS 107-268 (2X).

NOTE:

# BFB CYLINDER GUARD



# BFB CYLINDER GUARD

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-285		CYLINDER GUARD KIT	INCLUDES REF NUMBERS 1-5 & SEE FOOTNOTE 1
1.	319-787	1	CYLINDER GUARD	
2.	106-724	6	FLG SCREW (M10-1.50 X 25mm)	
3.	319-789	1	COVER	
4.	106-387	2	FLG LOCKNUT (M10-1.50)	
5.	106-758	4	LOCKNUT (M10-1.50)	

**NOTE**

REFER TO INSTALLATION INSTRUCTIONS 051-336 FOR INSTALLING BFB CYLINDER GUARD.

**FOOTNOTES**

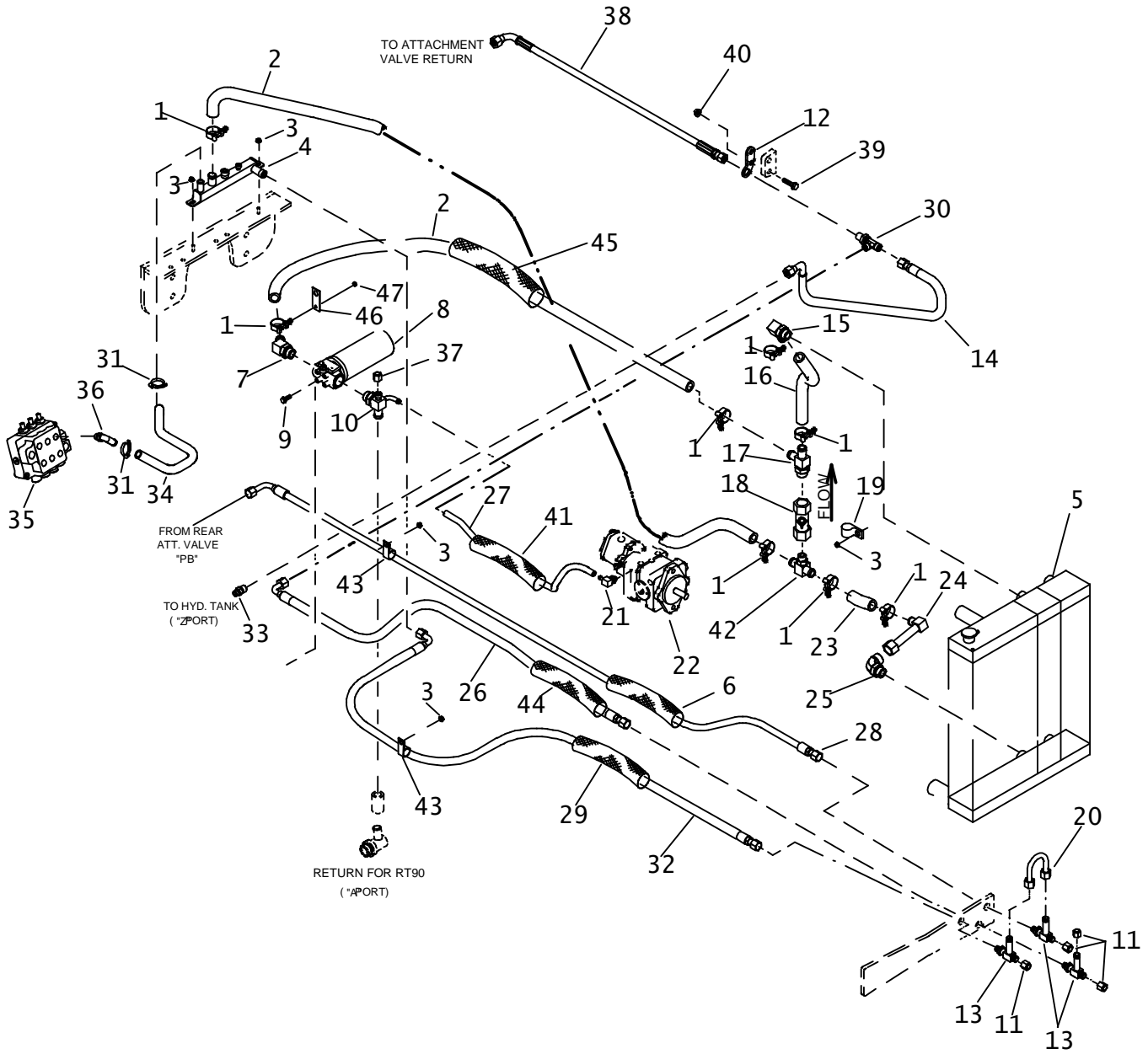
1. THIS OPTION CANNOT BE USED WITH AUX. MANIFOLD KIT 191-272 BECAUSE OF INTERFERENCE.



# HYDRAULICS



# HYDRAULIC FILTER RT90 POWERSHIFT



# HYDRAULIC FILTER

## RT90 POWERSHIFT

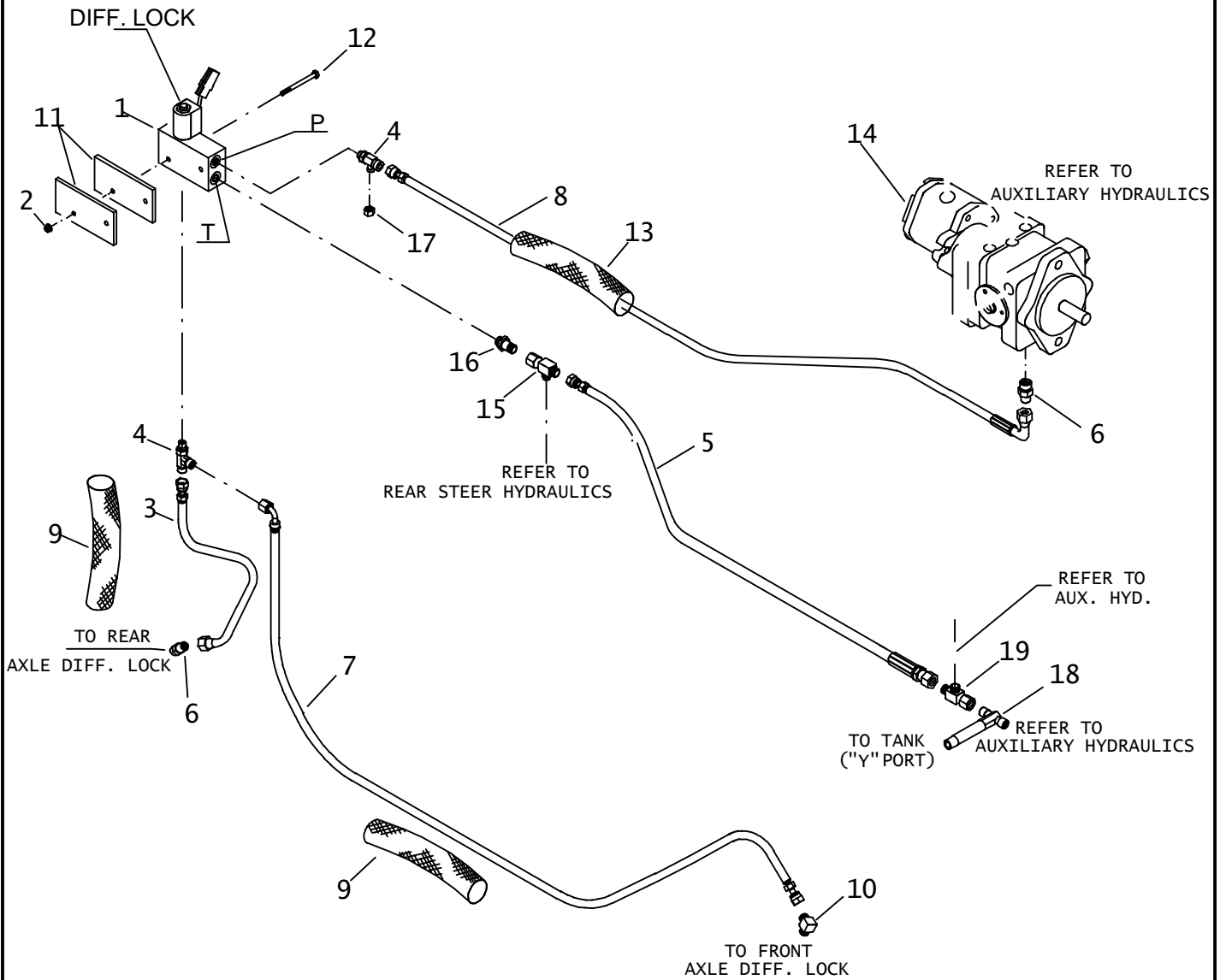
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	111-027	8	T-BOLT CLAMP (1.25" - 1.50")	
2.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 2 @ 75"
3.	105-003	5	FLG LOCKNUT (5/16-NC)	
4.	153-210	1	HYDRAULIC MANIFOLD (5 PORT)	
5.	194-283	-	RADIATOR/OIL COOLER	
6.	117-764	1	ABRASION SLEEVE (1.59" X 90")	
7.	155-230	1	S/O COUPLER (16S-16H45)	
8.	149-642	1	HYD OIL FILTER	SEE FOOTNOTE 1
	149-641	1	HYD OIL FILTER ELEMENT	SEE FOOTNOTE 2
	149-854	1	HYD OIL FILTER ELMT (1-3/8 UNF)	SEE FOOTNOTE 3
9.	105-827	2	FLG LK BOLT (3/8-NC X 1-1/4")	
10.	153-862	1	TEE (16S-080-16H-08H)	
11.	154-324	4	CAP (100F)	
12.	316-850	1	BRACKET	
13.	153-984	3	BK RUN TEE (100-100-100L)	
14.	153-957	1	HOSE (100FX45-44"-3000)	ENDS WITH S/N 5X0709.
	153-956	1	HOSE (100FX90-50"-3000)	BEGINS WITH S/N 5X0710.
15.	154-188	1	S/O COUPLER (16S-16H90)	
16.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 22"
17.	155-231	1	S/O BR TEE (16S-16H-16H)	
18.	153-888	1	CHECK VALVE ((16SF-16SF, 25 PSI)	
19.	110-332	1	BOLT-ON CLAMP (1-5/8")	
20.	149-821	1	HYD LINE (-10)	
21.	153-850	-	S/O COUPLER (10S-08H90)	
22.	153-564	-	TANDEM HYDRAULIC PUMP	
	150-2680		AUXILIARY PUMP	
23.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 7.5"
24.	157-313	1	CONNECTOR (160FX-16H90, XLG)	
25.	154-287	1	CONNECTOR (16S-16090)	
26.	155-466	1	HOSE (100FX90-74"-2750)	
27.	116-286	-	BULK HOSE (1/2", SOLD PER 1")	
28.	157-343	1	HOSE (100FX90S-120"-3000)	
29.	117-392	1	ABRASION SLEEVE (1.25" X 60")	
30.	154-319	1	BK RUN TEE (100)	
31.	110-353	2	WORM CLAMP (3/4" TO 1-1/2")	
32.	515-618	1	HOSE (100FX90-95"-3000)	
33.	154-391	1	CONNECTOR (08S-100)	
34.	116-636	AR	BULK HOSE (3/4", SOLD PER 1')	USE 1 @ 30"
35.	158-033	-	HYD CONTROL VALVE (3-SPOOL)	ENDS WITH S/N_____.
	159-809	-	HYD CONTROL VALVE (3-SPOOL)	BEGINS WITH S/N_____.
36.	154-362	1	S/O COUPLER (10S-12H90)	
37.	154-327	1	CAP (080F)	
38.	515-515	1	HOSE (100FX45-50"-3000)	
39.	107-336	2	FLG SCREW (M16-2.00 X 45mm, 10.9)	
40.	106-442	2	FLG LOCKNUT (M16-2.00, PRV TRQ)	
41.	117-611	1	ABRASION SLEEVE (1.00" X 22")	
42.	149-908	1	RUN TEE (16S-16H-16H)	
43.	110-333	2	BOLT-ON CLAMP (1")	
44.	117-691	1	ABRASION SLEEVE (1.25" X 68")	
45.	117-214	1	ABRASION SLEEVE (1.25" X 40")	
46.	320-253	1	TAB	SEE FOOTNOTE 4
47.	105-152	1	NUT (1/4-NF)	SEE FOOTNOTE 4

### FOOTNOTES:

- 149-642 (HYD. OIL FILTER) IS THE FILTER HEAD AND ELEMENT (149-854) IS A BREAK-IN FILTER.
- AFTER 50 HOURS CHANGE TO FILTER ELEMENT 149-641 WHICH IS THE REGULAR SERVICE FILTER.
- HOWEVER IF THE HYDRAULIC SYSTEM IS EVER EXPOSED TO CONTAMINATES THE BREAK-IN FILTER (149-854) SHOULD BE RE-INSTALLED FOR AT LEAST 50 HOURS OF OPERATION.
- REF. #46 (320-253) BOLTS TO T-BOLT CLAMP (111-027) AND SUPPORTS ELECTRICAL HARNESS CONNECTOR.

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# POWERSHIFT MANIFOLD HYDRAULICS RT90M



# POWERSHIFT MANIFOLD HYDRAULICS RT90M

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	157-245	1	MANIFOLD (1-SPL)	SEE FOOTNOTE 1
2.	106-385	2	FLG LOCKNUT (M6-1.00)	
3.	154-743	1	HOSE (040FX90-23"-3000)	
4.	154-316	2	RUN TEE (04S-040-040)	
5.	157-909	1	HOSE (060FX-28"-3000)	
6.	154-220	2	CONNECTOR (040-06S)	
7.	515-174	1	HOSE (040FX90-74"-3000)	
8.	515-712	1	HOSE (040FX90L-68"-3000)	
9.	117-611	2	ABRASION SLEEVE (1.00" X 22")	
10.	154-226	1	CONNECTOR (040-06S90)	
11.	306-885	2	MOUNT PLATE	SEE FOOTNOTE 2
12.	106-566	2	SCREW (M6-1.00 X 70mm)	
13.	117-387	1	ABRASION SLEEVE (1.00" X 42")	
14.	153-564	-	TANDEM HYDRAULIC PUMP	
	150-2680		AUXILIARY PUMP	
15.	154-344	1	UN RUN TEE (060FX-060-060)	
16.	154-411	1	CONNECTOR (04S-060)	
17.	154-296	1	CAP (040F)	
18.	153-917	-	TEE (08N-060-060)	
19.	157-331	-	UN RUN TEE (060FX-060-080)	

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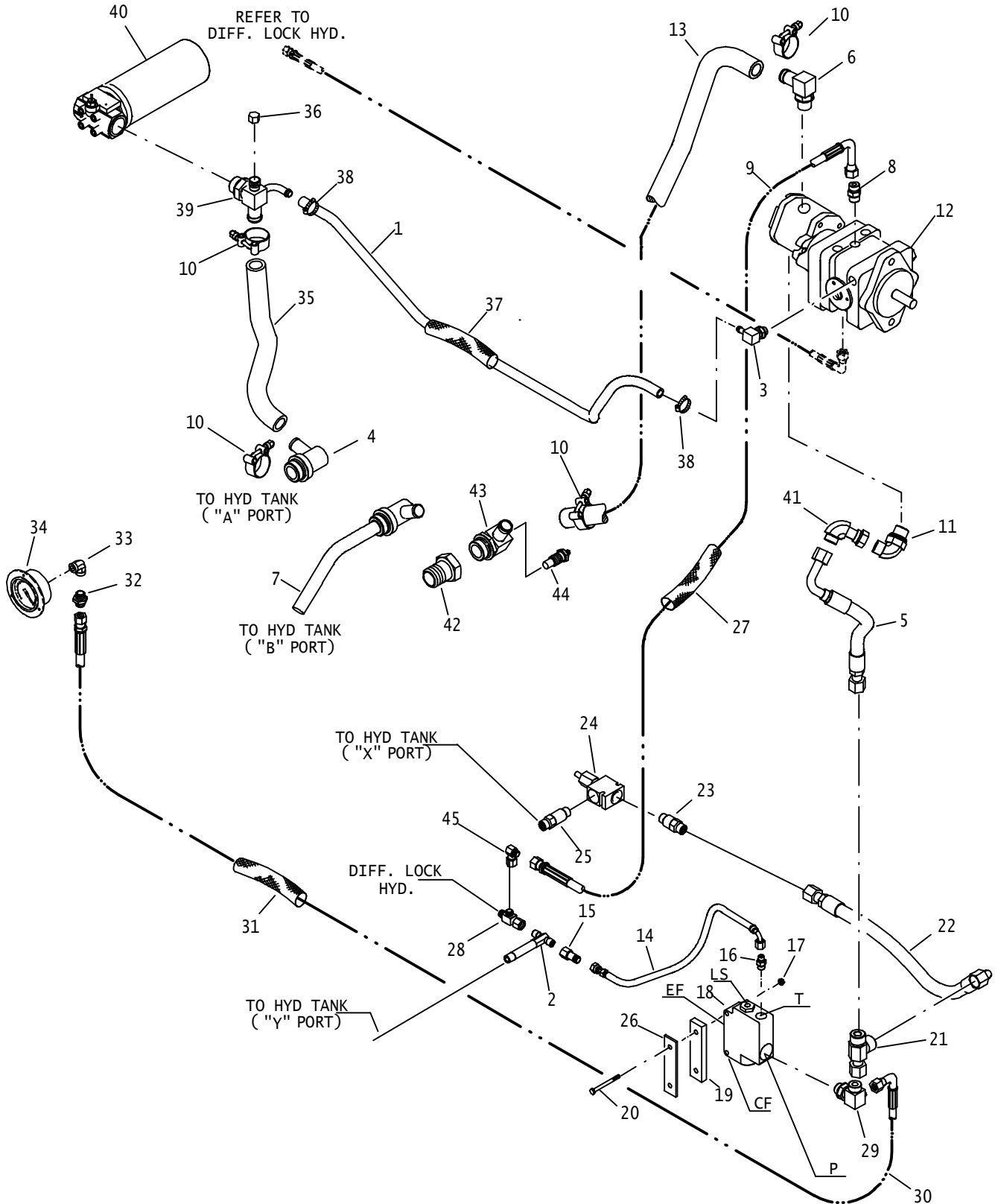
#### FOOTNOTES:

1. EARLY PRODUCTION MANIFOLDS HAVE A CAVITY PLUG WHERE THE RELIEF VALVE WAS LOCATED.
2. WITH "REAR STEER" OPTION TWO MOUNT PLATES (306-885) ARE REQUIRED, ONE ON EITHER SIDE OF FRAME.  
WITH "NO REAR STEER" ONLY ONE MOUNT PLATE (306-885) IS REQUIRED ON OUTSIDE OF FRAME.

#### NOTE:

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# AUXILIARY HYDRAULICS RT90 POWERSHIFT



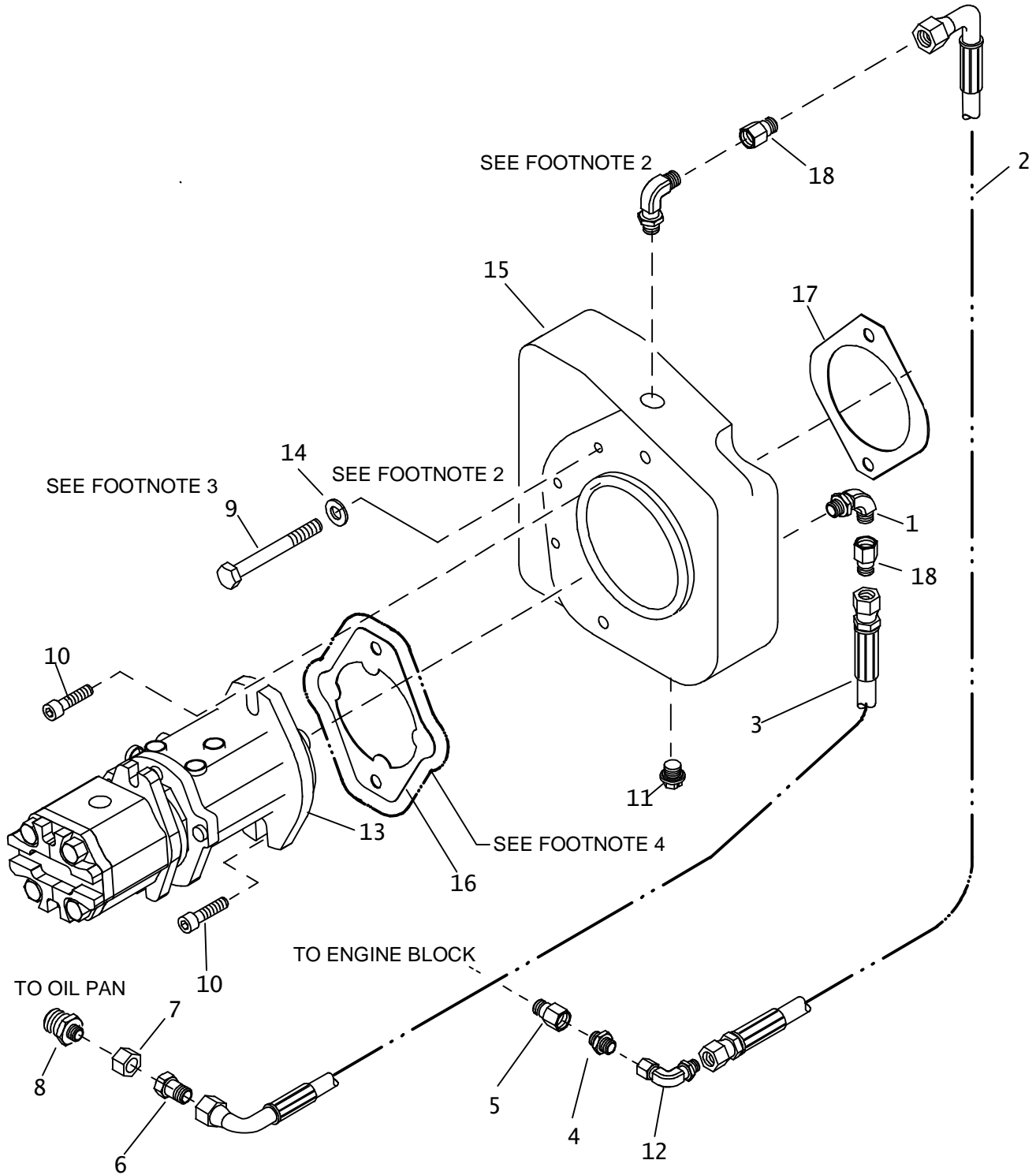
## AUXILIARY HYDRAULICS RT90 POWERSHIFT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	116-286	AR	BULK HOSE (1/2", SOLD PER 1")	USE 1 @ 48"
2.	153-917	1	TEE (08N-060-060)	
3.	153-850	1	S/O COUPLER (10S-08H90)	
4.	153-142	1	S/O COUPLER (20S-16H90)	
5.	155-491	1	HOSE (100FX90L-12"-3000)	
6.	155-146	1	S/O COUPLER (12S-16H90)	
7.	153-740	-	PICK UP TUBE	ENDS WITH S/N 5X0709.
8.	154-233	1	CONNECTOR (08S-080)	
9.	515-192	1	HOSE (080FX90L-54"-3000)	
10.	111-027	4	T-BOLT CLAMP (1.25" - 1.50")	
11.	154-298	1	CONNECTOR (10S-10090)	
12.	153-564	1	TANDEM HYDRAULIC PUMP	
	150-2680		AUXILIARY PUMP	
13.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 42"
14.	515-437	1	HOSE (040FX90-21"-3000)	ENDS WITH S/N 5X0709.
	154-743	1	HOSE (040FX90S-23"-3000)	BEGINS WITH S/N 5X0710
15.	154-373	1	REDUCER (040-060F)	
16.	154-278	1	CONNECTOR (04S-040)	
17.	106-385	2	FLG LOCKNUT (M6-1.00)	
18.	157-917	1	PRIORITY VALVE	
19.	306-886	1	SPACER	USED ON INSIDE OF FRAME PLATE
20.	107-054	2	SCREW (M6-1.00 X 90mm)	
21.	154-488	1	UN RUN TEE (100FX-100-100)	
22.	515-605	1	HOSE (100FX90S-20"-3000)	
23.	154-391	1	CONNECTOR (08S-100)	
24.	158-681	1	RELIEF VALVE (AUXILIARY)	PRE SET TO 2500 PSI
25.	149-991	1	CONNECTOR (08S-08S, XLG HEX)	
26.	309-817	1	SPACER PLATE	USED ON OUTSIDE OF FRAME PLATE
27.	117-612	1	ABRASION SLEEVE (1.00" X 46")	
28.	157-331	-	UN RUN TEE (060FX-060-080)	
29.	153-787	1	TEE (100-10S-040)	
30.	515-075	1	HOSE (040FX90S-82"-3000)	
31.	117-218	1	ABRASION SLEEVE (1.00" X 52")	
32.	154-339	1	CONNECTOR (04N-040)	
33.	149-896	1	STREET ELBOW (04NF-04NF90)	
34.	217-551	1	PRESSURE GAUGE (3000 PSI)	
35.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 25"
36.	154-327	-	CAP (080F)	
37.	117-611	1	ABRASION SLEEVE (1.00" X 22")	
38.	110-026	2	WORM CLAMP (1/2" TO 1-1/4")	
39.	153-862	-	TEE (16S-080-16H-08H)	
40.	149-642	-	HYD OIL FILTER HEAD	
41.	154-315	1	UNION (100-100FX90)	
42.	514-446	-	REDUCER (24S-20SF)	BEGINS WITH S/N 5X0710.
43.	157-987	-	S/O COUPLER (20S-16H90, 04NF)	BEGINS WITH S/N 5X0710.
44.	214-854	-	TEMPERATURE SWITCH	
45.	154-256	1	UNION (080-080FX90)	

## NOTE:

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# AUX DRIVE LUBRICATION RT90



## AUX DRIVE LUBRICATION RT90

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	154-226	1	CONNECTOR (040-06S90)	
2.	154-726	1	HOSE (040FX90-15"-3000)	
3.	515-041	1	HOSE (040FX90-20"-3000)	
4.	154-261	1	CONNECTOR (040-08S)	
5.	153-971	1	CONNECTOR (06N-08SF)	
6.	154-248	1	REDUCER STEM (040)	
7.	154-272	1	REDUCER NUT (080F)	
8.	153-757	1	CONNECTOR (M22-1.50-080)	
9.	106-645	2	SCREW (M12-1.75 X 110mm, 10.9)	SEE FOOTNOTE 3
10.	107-044	-	BOLT (M12-1.75 X 45mm, SOC)	SEE FOOTNOTE 1
11.	155-130	1	PLUG (06S)	
12.	154-255	1	UNION (040-040FX90)	
13.	153-564	-	TANDEM HYDRAULIC PUMP	SEE FOOTNOTE 1
	150-2680		AUXILIARY PUMP	
14.	106-391	2	WASHER (M12)	
15.	166-464	1	AUX DRIVE ADAPTER "B" PAD (9T)	
16.	153-833	-	GASKET (ENGINE/PUMP AUX DRIVE)	SEE FOOTNOTE'S 1, 2 & 4
17.	165-880	-	GASKET	
18.	154-373	2	REDUCER (040-060F)	

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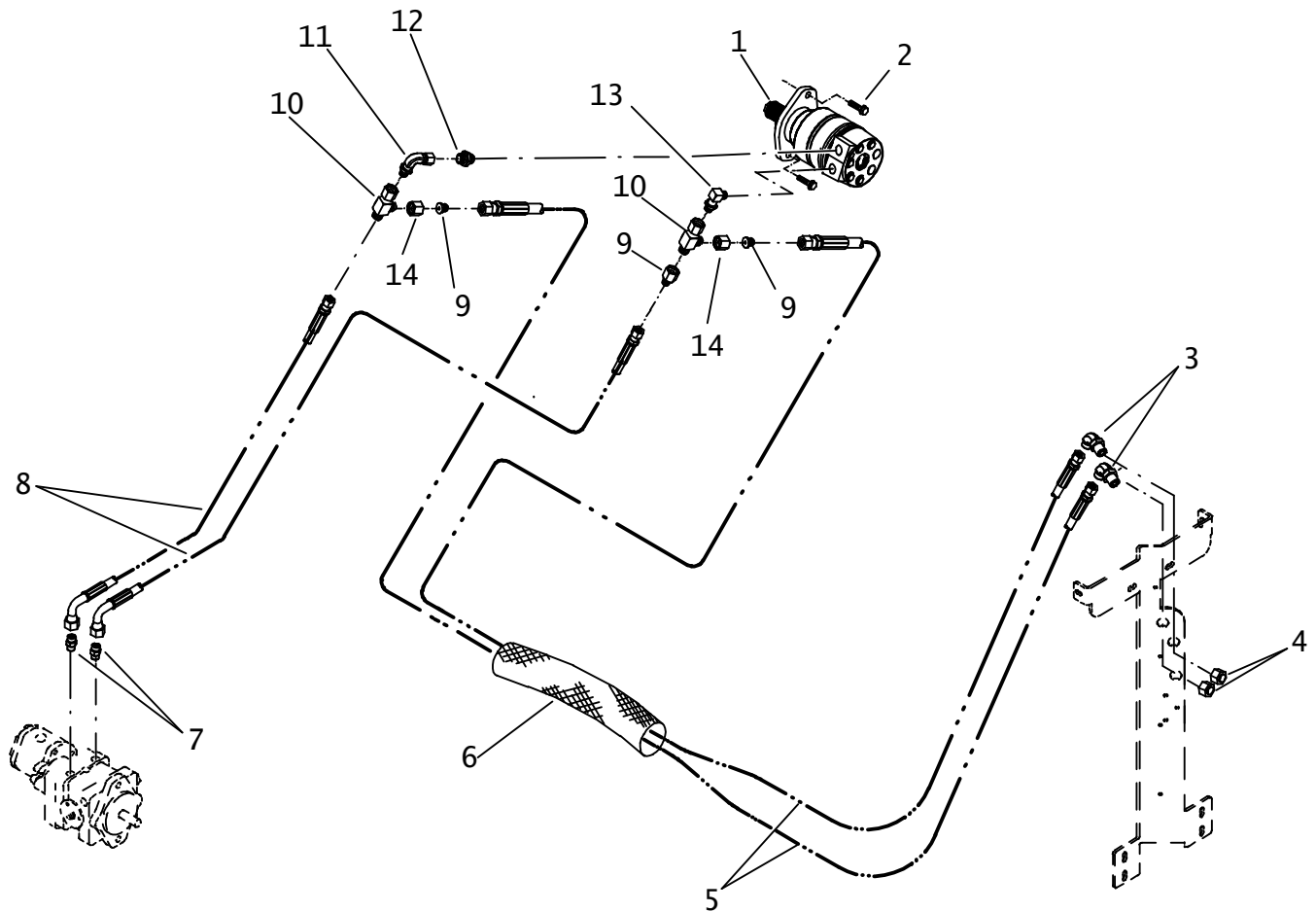
### FOOTNOTES:

1. REFER TO "AUXILIARY HYDRAULICS POWERSHIFT", THE TANDEM PUMP, HARDWARE AND GASKET ARE SHOWN ON THIS PAGE.
2. COVER & ELBOW CONNECTOR COME WITH AUXILIARY DRIVE.
3. SCREW (106-645) HOLDS AUXILIARY DRIVE TO ENGINE.
4. SILICON SEALER IS REQUIRED TO BOTH SURFACES OF ITEM 16 FOR PROPER SEAL.

NOTE:



## GROUND DRIVE MOTOR HYDRAULICS



# GROUND DRIVE MOTOR HYDRAULICS

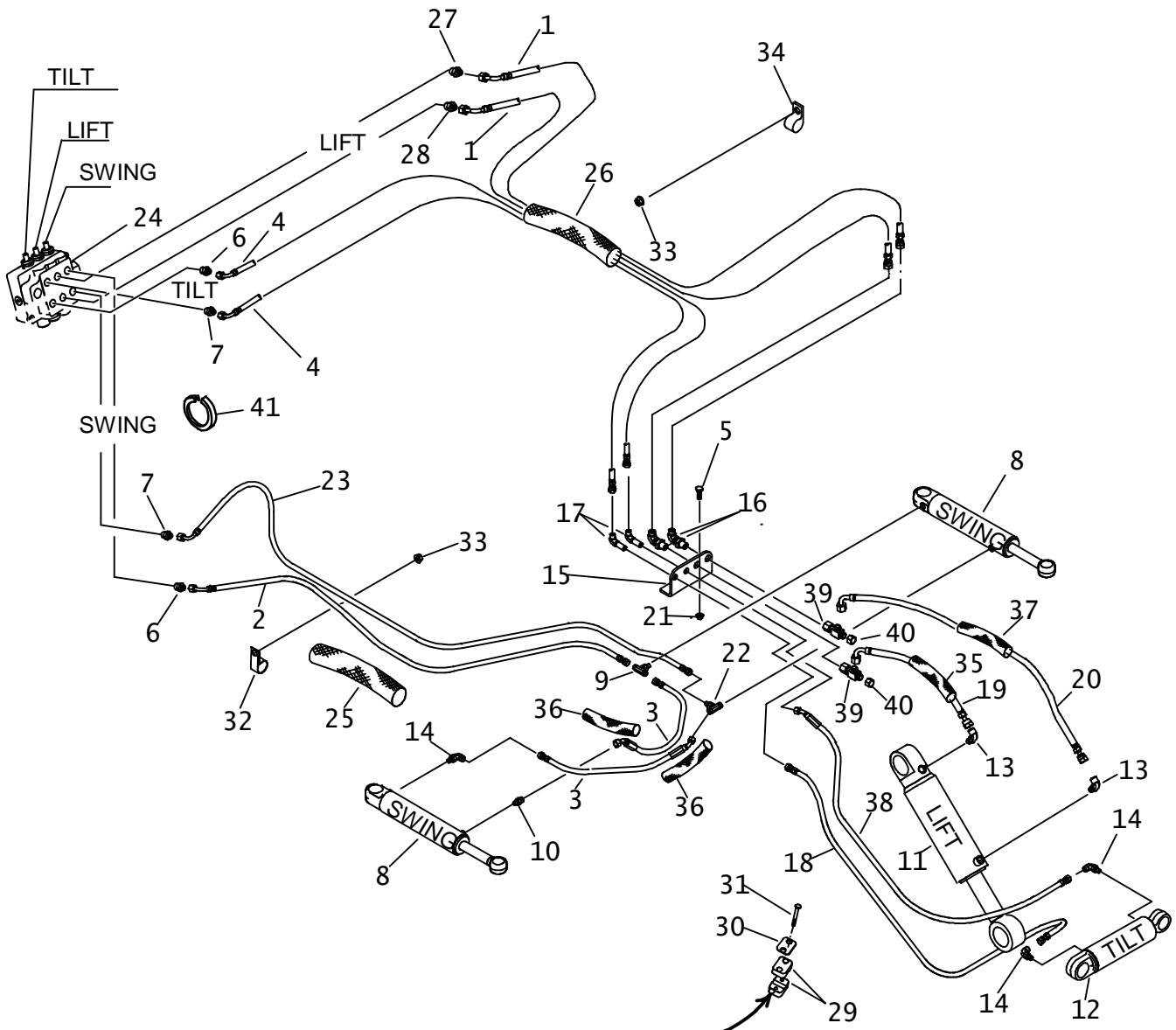
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	158-046	1	HYD. MOTOR (GROUND)	
2.	106-632	2	FLG LK SCREW (M12-1.75 X 35mm, SER)	
3.	154-355	2	BK CONNECTOR (040-04090BK)	
4.	154-296	2	CAP (040F)	
5.	157-263	2	HOSE (040FX-102"-5000)	
6.	115-902	1	ABRASION SLEEVE (1.59" X 100")	
7.	154-233	2	CONNECTOR (08S-080)	
8.	154-716	2	HOSE (080FX90-48"-3000)	
9.	154-248	2	REDUCER STEM (040)	
10.	154-266	2	UNION RUN TEE (080FX-080-080)	
11.	154-256	1	UNION (080-080FX90)	
12.	154-279	1	CONNECTOR (080-10S)	
13.	154-322	1	CONNECTOR (080-10S90)	
14.	154-272	2	REDUCER NUT (080F)	

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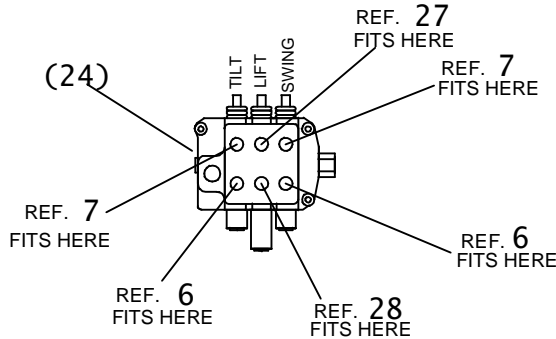
FOOTNOTES:

NOTE:

# BACKFILL BLADE HYDRAULICS



FOOTNOTE 2



# BACKFILL BLADE HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	153-074	2	HOSE (060FX90-88"-3000)	LIFT
2.	153-968	1	HOSE (040FX90S-82"-5000)	SWING
3.	515-310	2	HOSE (040FX45-22"-5000)	SWING
4.	515-137	2	HOSE (040FX90-90"-3000)	TILT
5.	106-327	2	SCREW (M8-1.25 X 30mm)	
6.	154-261	2	CONNECTOR (040-08S)	
7.	154-374	2	CONNECTOR (040-08S, ORF)	
8.	151-057	2	CYL (2.0" X 1.25" X 8.0")	SEE FOOTNOTE 1
9.	154-293	1	BRANCH TEE (04S-040-040)	
10.	154-278	1	CONNECTOR (04S-040)	
11.	151-070	1	CYL (3" X 1.75" X 8")	SEE FOOTNOTE 1
12.	151-202	1	CYL (2" X 1" X 3.38")	SEE FOOTNOTE 1
13.	154-342	2	CONNECTOR (06S-06090)	
14.	154-252	3	CONNECTOR (04S-04090)	
15.	307-416	1	BK BRACKET	
16.	154-229	2	BK CONNECTOR (060-06090BK)	
17.	154-355	2	BK CONNECTOR (040-04090BK)	
18.	154-921	1	HOSE (040FX-54"-3000-AR)	TILT
19.	154-929	1	HOSE (060FX90-19"-3000)	LIFT
20.	515-221	1	HOSE (060FX90S-28"-3000)	LIFT
21.	106-386	2	FLG LOCKNUT (M8-1.25)	
22.	154-316	1	RUN TEE (04S-040-040)	
23.	153-967	1	HOSE (040FX90S-90"-5000)	SWING
24.	158-033	-	HYD. CONTROL VALVE (3-SPOOL)	ENDS WITH S/N 5Y0446. OBSOLETE
	159-809	-	HYD. CONTROL VALVE (3-SPOOL)	BEGINS WITH S/N 5Y0447, USE FLOAT KIT 500-2020
25.	117-691	1	ABRASION SLEEVE (1.25" X 68")	
26.	115-920	1	ABRASION SLEEVE (2.38" X 70")	
27.	514-294	1	CONNECTOR (08S-060, ORF)	
28.	154-222	1	CONNECTOR (060-08S)	
29.	110-866	2	CLAMP SET (1/2")	SEE FOOTNOTE 2
30.	110-958	2	BACKUP PLATE	
31.	105-818	4	BOLT (1/4-NC X 1-1/2")	
32.	110-332	1	BOLT-ON CLAMP (1-5/8")	SEE FOOTNOTE 3
33.	105-003	2	FLG LOCKNUT (5/16-NC)	SEE FOOTNOTE 3
34.	110-333	1	BOLT-ON CLAMP (1")	SEE FOOTNOTE 3
35.	117-328	1	ABRASION SLEEVE (1.00" X 18")	
36.	117-672	2	ABRASION SLEEVE (1.00" X 20")	
37.	117-409	1	ABRASION SLEEVE (1.00" X 28")	
38.	153-973	1	HOSE (040FX45-54"-3000-AR)	TILT
39.	154-344	2	UN RUN TEE (060FX-060-060)	
40.	154-326	2	CAP (060F)	
41.	116-259	AR	BULK EDGE (1/2", SOLD PER FT)	USE 1 @ 20" & SEE FOOTNOTE 4

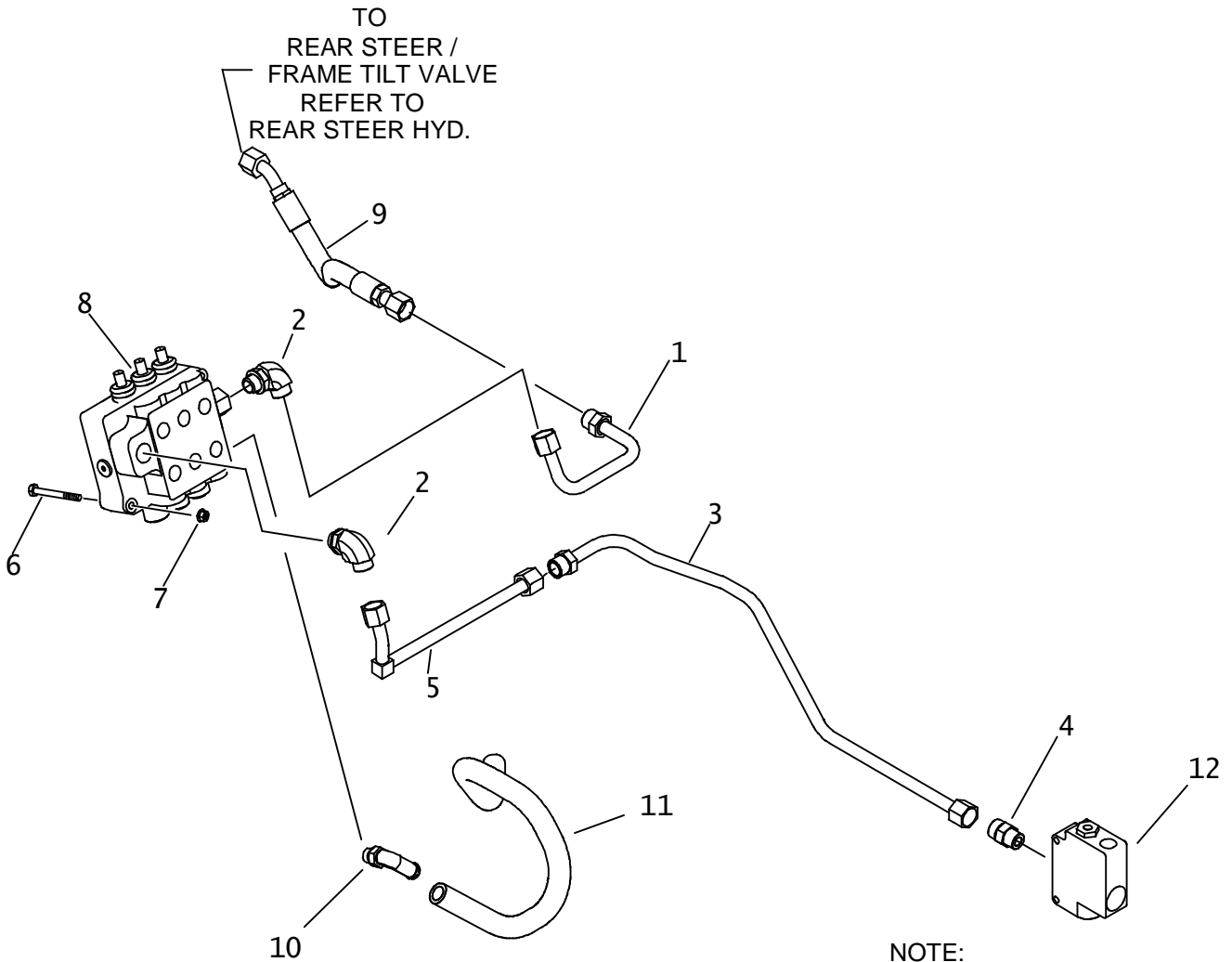
#### FOOTNOTES:

1. REFER TO PARTS PAGE "BACKFILL BLADE ASSEMBLY" FOR CYLINDER INSTALLATION HARDWARE.
2. CLAMP SET (110-866) BOLTS ONTO WELD PLATE ON BFB LIFT ARM.
3. #110-333, 105-003 & 110-332 ATTACH TO STUD BOLTS ON FRAME PLATES.
4. USE EDGING ON FRAME WHERE HOSE'S PASS THRU.

#### NOTE:

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# BACKFILL BLADE VALVE RT95



SEE FOOTNOTE 1

NOTE:  
FOR HYDROSTAT UNITS  
REFER TO  
AUX. HYD.- HYDROSTAT  
&  
FOR POWER SHIFT UNITS  
REFER TO  
AUX. HYD.- POWER SHIFT

## BACKFILL BLADE VALVE RT95

REF PART NO. NUMBER	QTY	DESCRIPTION	REMARKS
1. 149-851	1	HYD LINE (-10)	
2. 154-298	2	CONNECTOR (10S-10090)	
3. 149-849	1	HYD LINE (-10)	
4. 154-301	1	CONNECTOR (10S-100)	
5. 157-322	1	HYD LINE (-10)	
6. 105-292	3	SCREW (M8-1.25 X 75mm)	
7. 106-386	3	FLG LOCKNUT (M8-1.25)	
8. <u>158-033</u>	1	HYD. CONTROL VALVE (3-SPOOL)	ENDS WITH S/N_____, SEE FOOTNOTE 1
159-809	1	HYD. CONTROL VALVE (3-SPOOL)	BEGINS WITH S/N_____.
9. 153-907	1	HOSE (100FX45-16"-3000)	
10. 154-362	-	S/O COUPLER (10S-12H90)	
11. 116-636	-	BULK HOSE (3/4", SOLD PER 1')	USE 1 @ 25"
12. 157-917	-	PRIORITY VALVE	

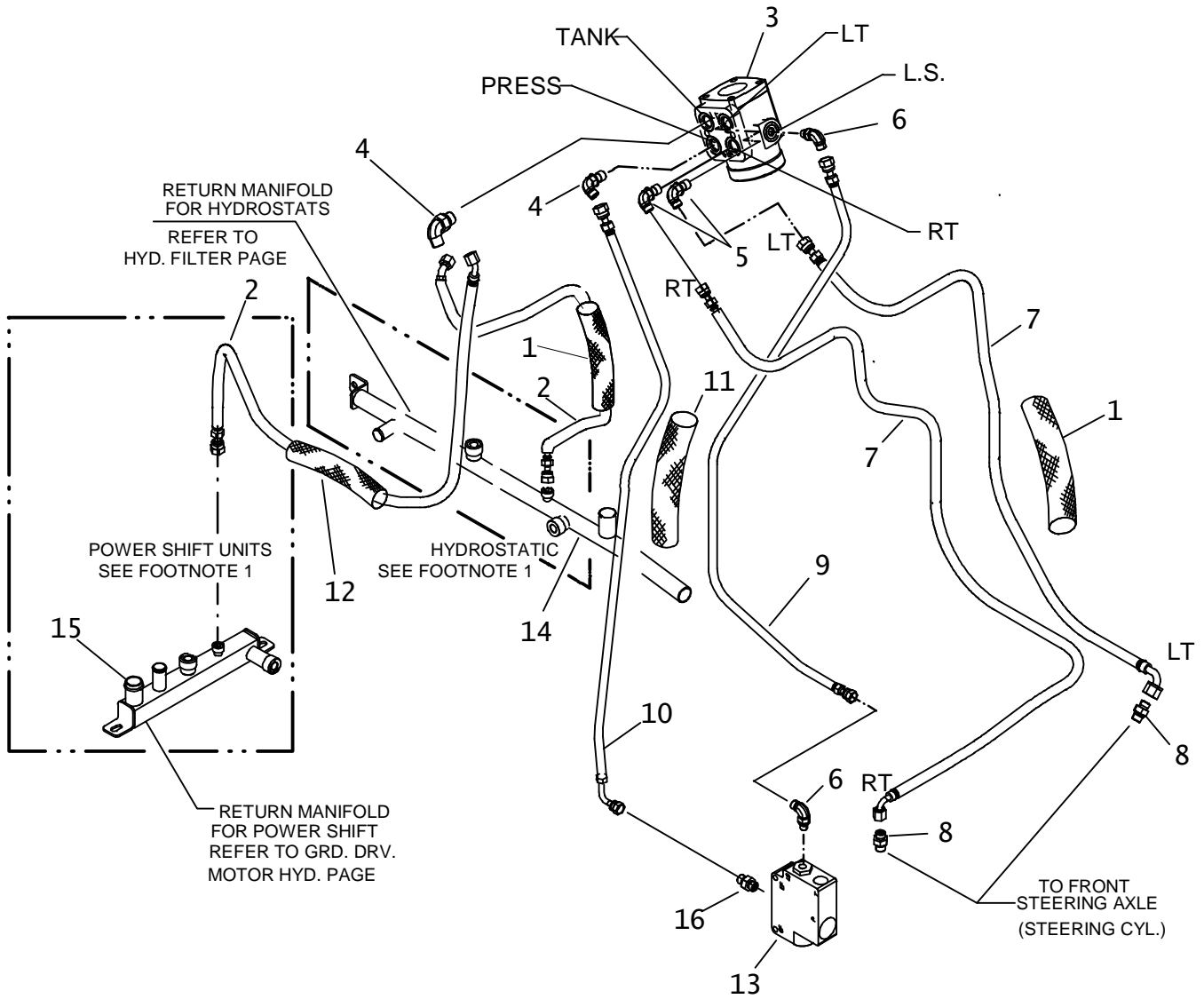
### FOOTNOTES

- FOR BFB VALVE RETURN HOSE'S REFER TO PAGE "PUMP DRIVE HYDRAULICS" FOR HYDROSTATICS OR PAGE "GROUND DRIVE MOTOR HYDRAULICS" FOR POWERSHIFTS.

### NOTE

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# POWER STEERING VALVE HYDRAULIC



## POWER STEERING VALVE HYDRAULIC

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	117-214	2	ABRASION SLEEVE (1.25" X 40")	
2.	515-222	1	HOSE (060FX45-46"-3000)	HYDROSTAT UNITS ONLY & SEE FOOTNOTE 1
	149-358	1	HOSE (060FX45-55"-3000)	POWER SHIFT UNITS ONLY & SEE FOOTNOTE 1
3.	149-371	1	POWER STEERING VALVE	
	190-913	1	SEAL REPAIR KIT	
4.	154-227	2	CONNECTOR (060-08S90)	
5.	154-276	2	CONNECTOR (040-08S90)	
6.	154-252	2	CONNECTOR (04S-04090)	
7.	116-804	2	HOSE (040FX90-69"-3000)	
8.	152-146	2	CONNECTOR (040-08S) SHORT	
9.	154-695	1	HOSE (040FX-38"-3000)	
10.	153-315	1	HOSE (060FX90S-36"-3000)	
11.	117-396	1	ABRASION SLEEVE (1.25" X 28")	
12.	117-387	1	ABRASION SLEEVE (1.00" X 42")	
13.	158-901	-	PRIORITY VALVE	
14.	307-535	-	RETURN MANIFOLD	
15.	153-210	-	HYDRAULIC MANIFOLD (5 PORT)	
16.	154-222	1	CONNECTOR (060-08S)	

### FOOTNOTES

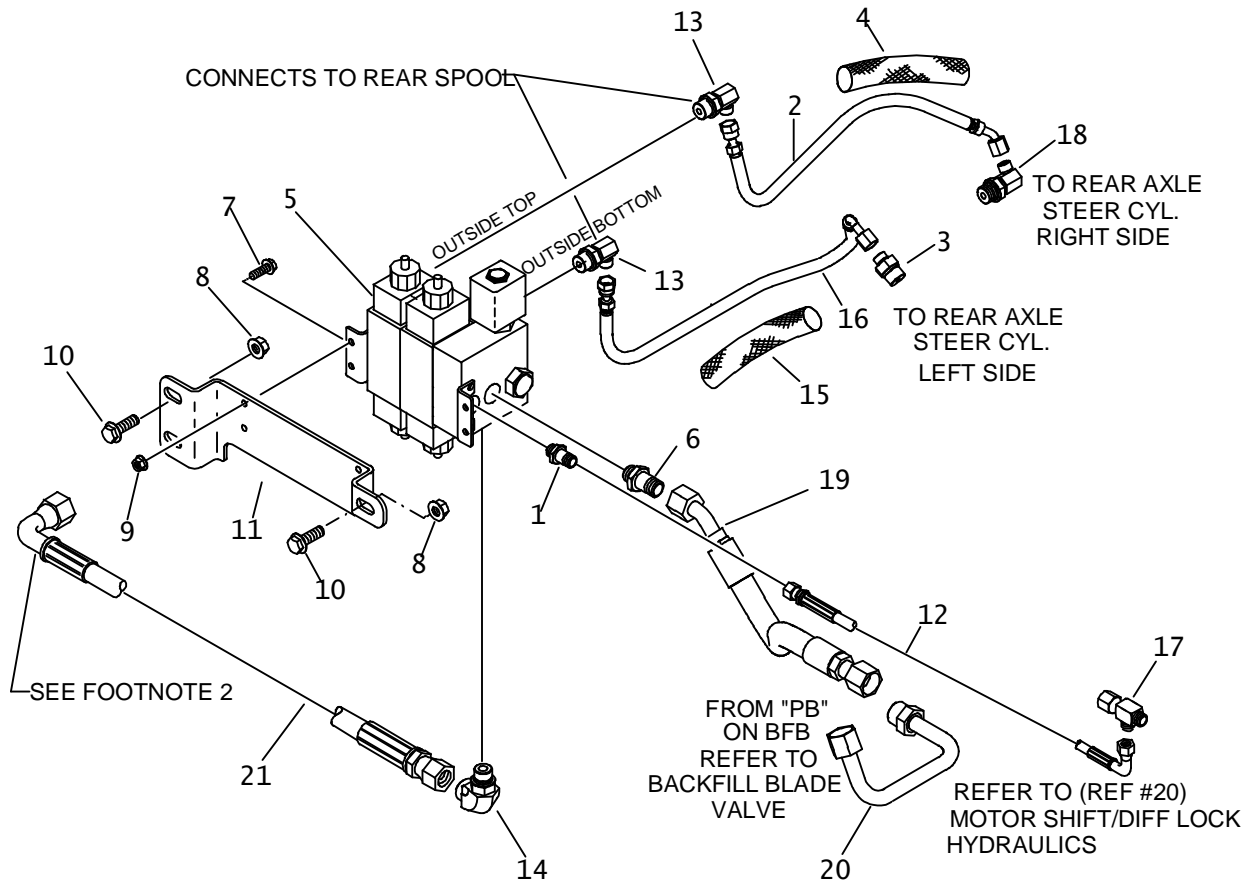
- AS INDICATED BY THE GRAPHICS, "RETURN TO TANK" ON HYDROSTATIC UNITS RETURNS TO RETURN MANIFOLD ON SIDE OF LEFT FRAME PLATE. "RETURN TO TANK" ON POWER SHIFT UNITS RETURNS TO RETURN MANIFOLD ON CROSSMEMBER OF FRAME.

### NOTE:

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.



# REAR STEER HYDRAULICS



## REAR STEER HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	154-222	1	CONNECTOR (060-08S)	
2.	154-934	1	HOSE (040FX45-18"-3000)	
3.	152-146	1	CONNECTOR (040-08S) SHORT	
4.	117-608	1	ABRASION SLEEVE (1.00" X 15")	
5.	153-785	1	HYDRAULIC VALVE (SGL SPOOL)	
	153-786	1	HYDRAULIC VALVE (2-SPOOL)	SEE FOOTNOTE 1
	159-505	-	SOLENOID TUBE	
	149-616	-	CAP NUT	
6.	154-391	1	CONNECTOR (08S-100)	
7.	106-379	4	FLG LK SCREW (M6-1.00 X 20mm)	
8.	106-354	3	FLANGE NUT (M12-1.75)	
9.	106-385	4	FLG LOCKNUT (M6-1.00)	
10.	106-632	3	FLG LK SCREW (M12-1.75 X 35mm, SER)	
11.	307-074	1	BRACKET	
12.	153-320	1	HOSE (060FX90L-17"-3000)	
13.	157-334	2	CONNECTOR (040-06S90, ORF)	
14.	154-298	1	CONNECTOR (10S-10090)	
15.	117-328	1	ABRASION SLEEVE (1.00" X 18")	
16.	515-462	1	HOSE (040FX90-22"-3000 AR)	
17.	154-344	-	UN RUN TEE (060FX-060-060)	REFER TO "MOTOR SHIFT/DIFF LOCK HYD" FOR DESTINATION
18.	154-276	1	CONNECTOR (040-08S90)	
19.	153-907	-	HOSE (100FX45-16"-3000)	
20.	149-851	-	HYD. LINE (-10)	
21.	515-129	-	HOSE (100FX90-30"-3000)	SEE FOOTNOTE 2

NOT SHOWN

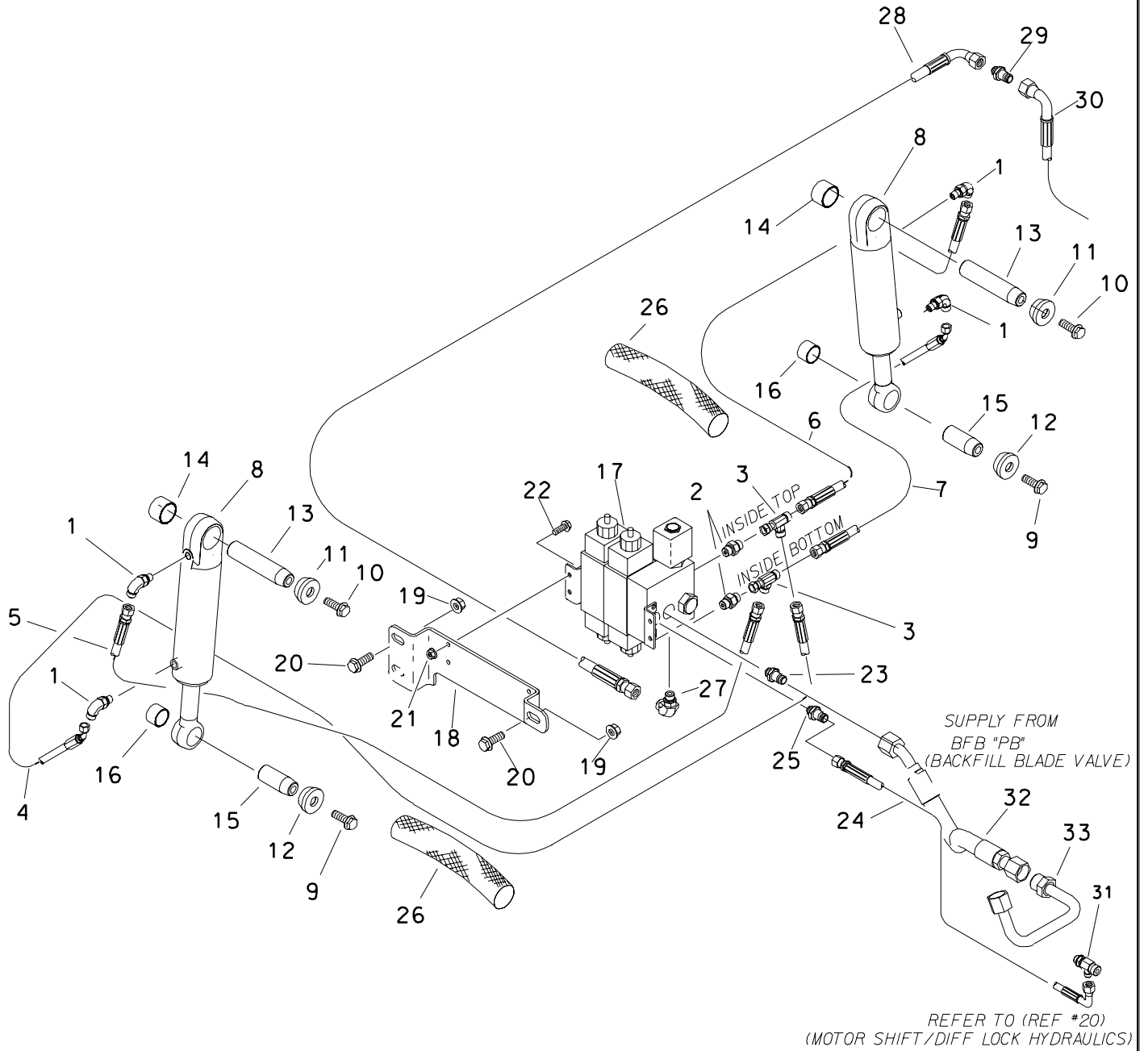
### FOOTNOTES

- 153-786 (2 SPOOL VALVE) IS USED WHEN FRAME TILT & REAR STEER OPTIONS ARE BOTH USED.
- REFERENCE #3 FROM "PUMP DRIVE HYD" WILL ATTACH HERE UNTIL A REAR ATTACHMENT IS ATTACHED ON TRACTOR.

### NOTE

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# FRAME TILT HYDRAULICS



# FRAME TILT HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	154-252	4	CONNECTOR (04S-04090)	
2.	154-385	2	CONNECTOR (040-06S, ORF)	
3.	154-265	2	UN RUN TEE (040FX-040-040)	
4.	154-963	1	HOSE (040FX45-24"-3000)	
5.	154-702	1	HOSE (040FX-30"-3000)	
6.	515-229	1	HOSE (040FX-34"-3000)	
7.	515-019	1	HOSE (040FX45-34"-3000)	
8.	151-202	2	CYL (2" X 1" X 3.38")	
9.	106-164	2	FLG LK SCREW (M10-1.50 X 30mm)	
10.	106-469	2	FLG SCREW (M12-1.75 X 30mm)	
11.	181-982	2	TAPERED INSERT (1.25")	
12.	181-981	2	TAPERED INSERT (1")	
13.	183-765	2	TAPERED PIN (31.7mm X 110mm)	
14.	125-771	2	COMPOSITION BUSHING (1.25")	
15.	183-767	2	TAPERED PIN (25.4mm X 60mm)	
16.	125-770	2	COMPOSITION BUSHING (1")	
17.	153-786	1	HYDRAULIC VALVE (2-SPOOL)	SEE FOOTNOTE 1
	153-785	1	HYDRAULIC VALVE (SGL SPOOL)	SEE FOOTNOTE 1
	217-948		COIL, 12VDC	
	149-616		CAP NUT	
	499-445		COIL RETAINING NUT	
	159-505		SOLENOID TUBE	
	499-444		SOLENOID TUBE ASSM'Y	
	214-909		SOLENOID COIL	
	157-262		DUAL P.O. CHECK	
18.	307-074	1	BRACKET	
19.	106-354	3	FLG NUT (M12-1.75)	
20.	106-632	3	FLG LK SCREW (M12-1.75 X 35mm, SER)	
21.	106-385	4	FLG LK NUT (M6-1.00)	
22.	106-379	4	FLG LK SCREW (M6-1.00 X 20mm)	
23.	154-391	1	CONNECTOR (08S-100)	
24.	154-715	1	HOSE (040FX90-18"-3000)	
25.	154-222	1	CONNECTOR (060-08S)	
26.	115-811	2	ABRASION SLEEVE (1.59" X 20")	
27.	154-298	1	CONNECTOR (10S-10090)	
28.	515-129	1	HOSE (100FX90-30"-3000)	
29.	154-464	1	CONNECTOR (100-100)	
30.	157-343	-	HOSE (100FX90S-120"-3000)	REFER TO REF #3 ON PUMP DRIVE HYDRAULICS
31.	154-344	-	UN RUN TEE (060FX-060-060)	
32.	153-907	-	HOSE (100FX45-16"-3000)	
33.	149-851	-	HYD LINE (-10)	

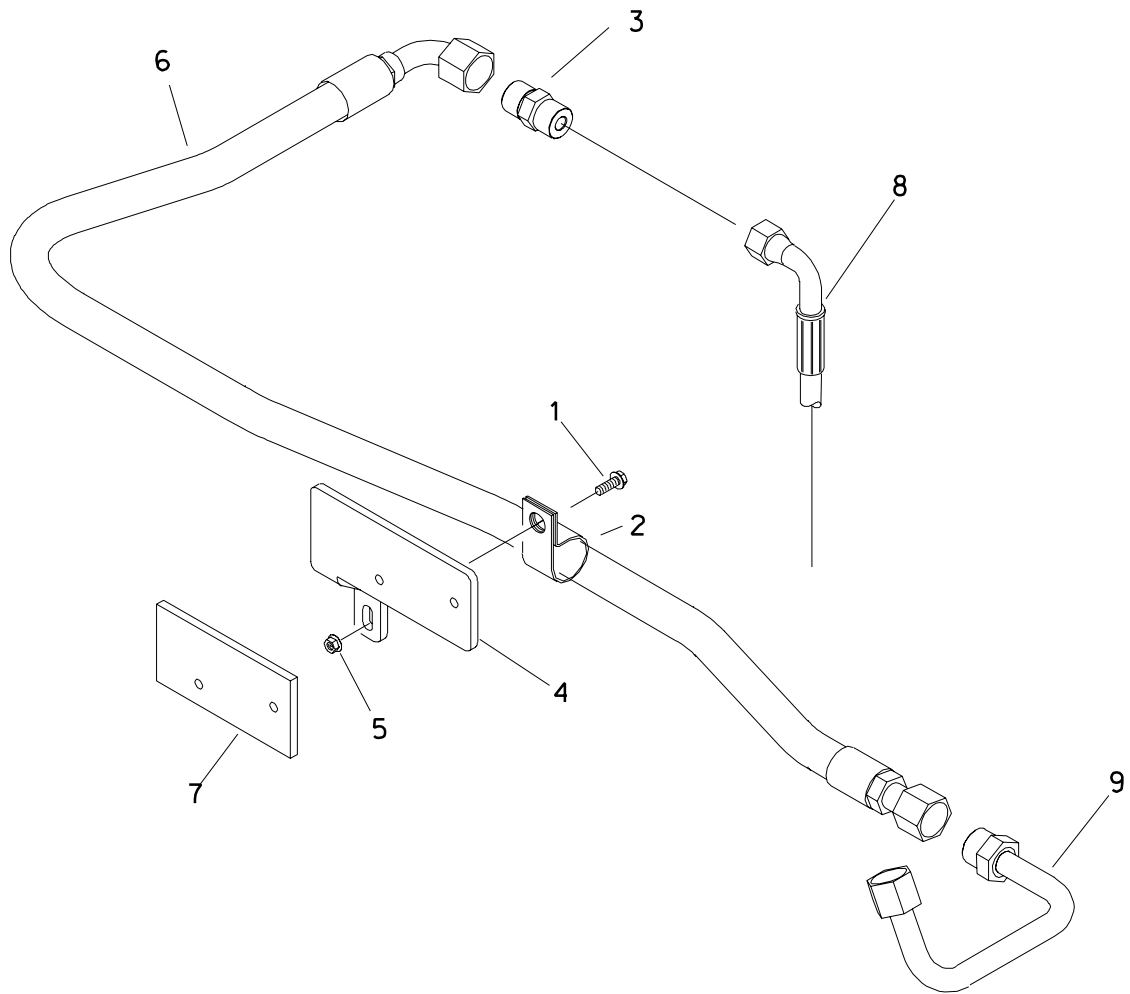
## FOOTNOTES

- 153-786 (2-SPOOL VALVE) IS USED WHEN FRAME TILT & REAR STEER OPTIONS ARE BOTH USED. SEE REAR STEER PARTS PAGE FOR REAR STEER OPTION.

## NOTE

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

NO FRAME TILT / NO REAR STEER OPTION



# NO FRAME TILT / NO REAR STEER OPTION

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	106-988	1	FLG LK SCREW (M6-1.00 X 20mm)	
2.	110-333	1	BOLT-ON CLAMP (1")	
3.	154-464	1	CONNECTOR (100-100)	
4.	315-176	1	SPACER BRACKET	SEE FOOTNOTE 1
5.	106-385	1	FLG LOCKNUT (M6-1.00)	
6.	154-939	1	HOSE (100FX90S-50"-3000)	
7.	306-885	-	MOUNT PLATE	
8.	157-343	-	HOSE (100FX90S-120"-3000)	
9.	149-851	-	HYD LINE (-10)	

### FOOTNOTES

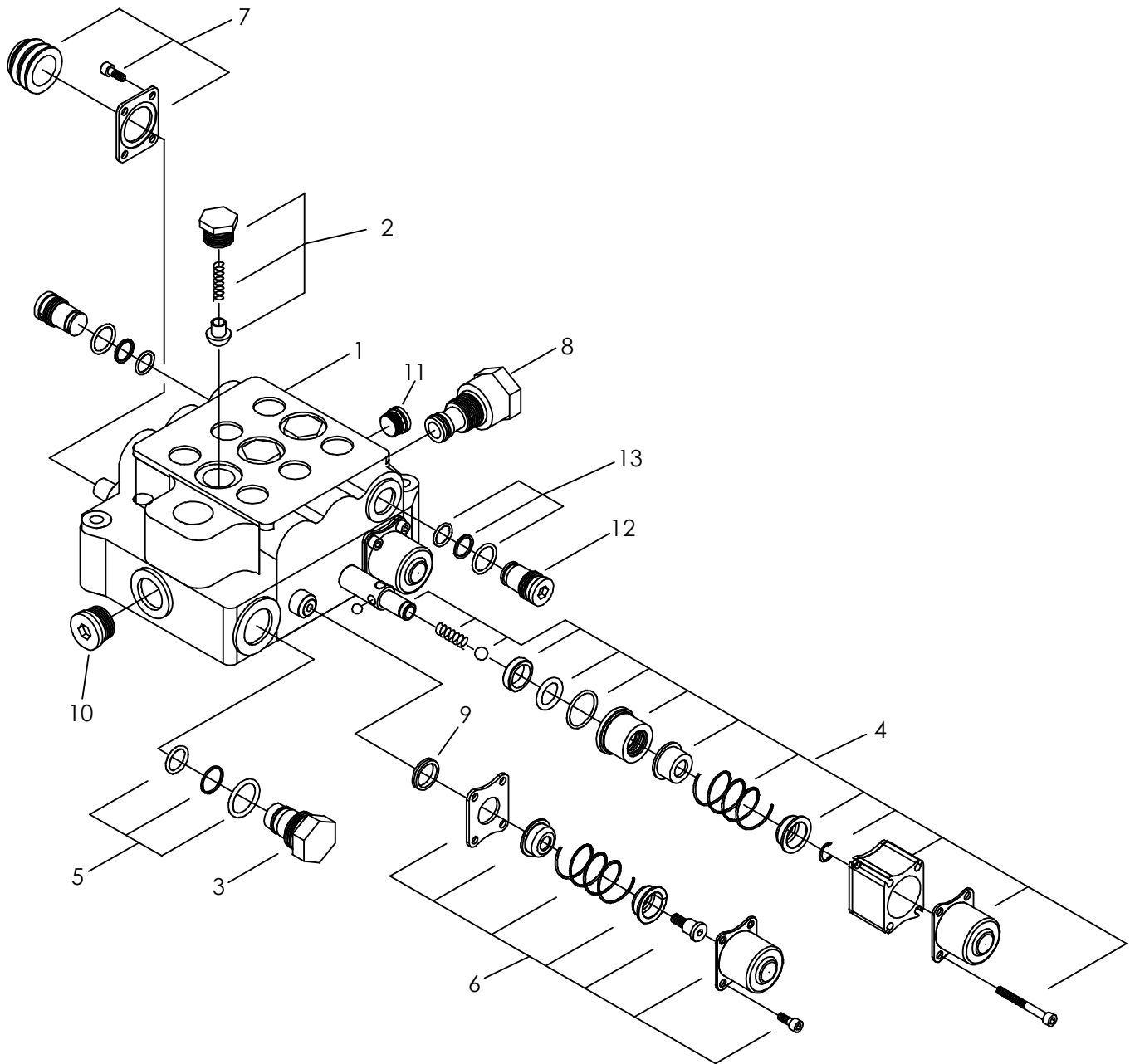
1. REFERENCE #4 (315-176) WILL REPLACE (1X) REFERENCE #2 ON PARTS PAGE "MOTOR SHIFT/DIFF LOCK HYD" WHEN "NO FRAME TILT/NO REAR STEER" IS USED.

### NOTE

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.

# HYDRAULIC CONTROL VALVE

## 3 SPOOL UPPER VALVE



# HYDRAULIC CONTROL VALVE

## 3 SPOOL UPPER VALVE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	158-033	1	HYD CONTROL VALVE (3-SPOOL)	ENDS WITH S/N_____. OBSOLETE
	159-809	1	HYD CONTROL VALVE (3-SPOOL)	BEGINS WITH S/N_____. USE FLOAT KIT 500-2020
2.	500-933	3	LOAD CHECK PLUG KIT	
3.	599-278	1	NR PLUG KIT	
4.	500-935	1	FLOAT POSITIONER KIT	
5.	191-149	1	PLUG SEAL KIT	
6.	500-934	2	SPOOL POSITIONER KIT	
7.	191-153	3	SPOOL BOOT KIT	
8.	191-157	1	POWER BEYOND SLEEVE	
9.	191-151	6	SPOOL LIP SEAL KIT	
10.	155-179	1	PLUG (10S, SOC)	
11.	154-384	1	PLUG (06S)	
12.	599-279	2	WORK PORT NR PLUG KIT	
13.	500-928	2	SEAL REPAIR KIT	

NOT SHOWN:

FOOTNOTES:

1. EARLY PRODUCTION VALVES HAVE A MACHINED WORK PORT WITH A PLUG INSTALLED, FUTURE PRODUCTION VALVES WILL NOT HAVE A MACHINED WORK PORT.

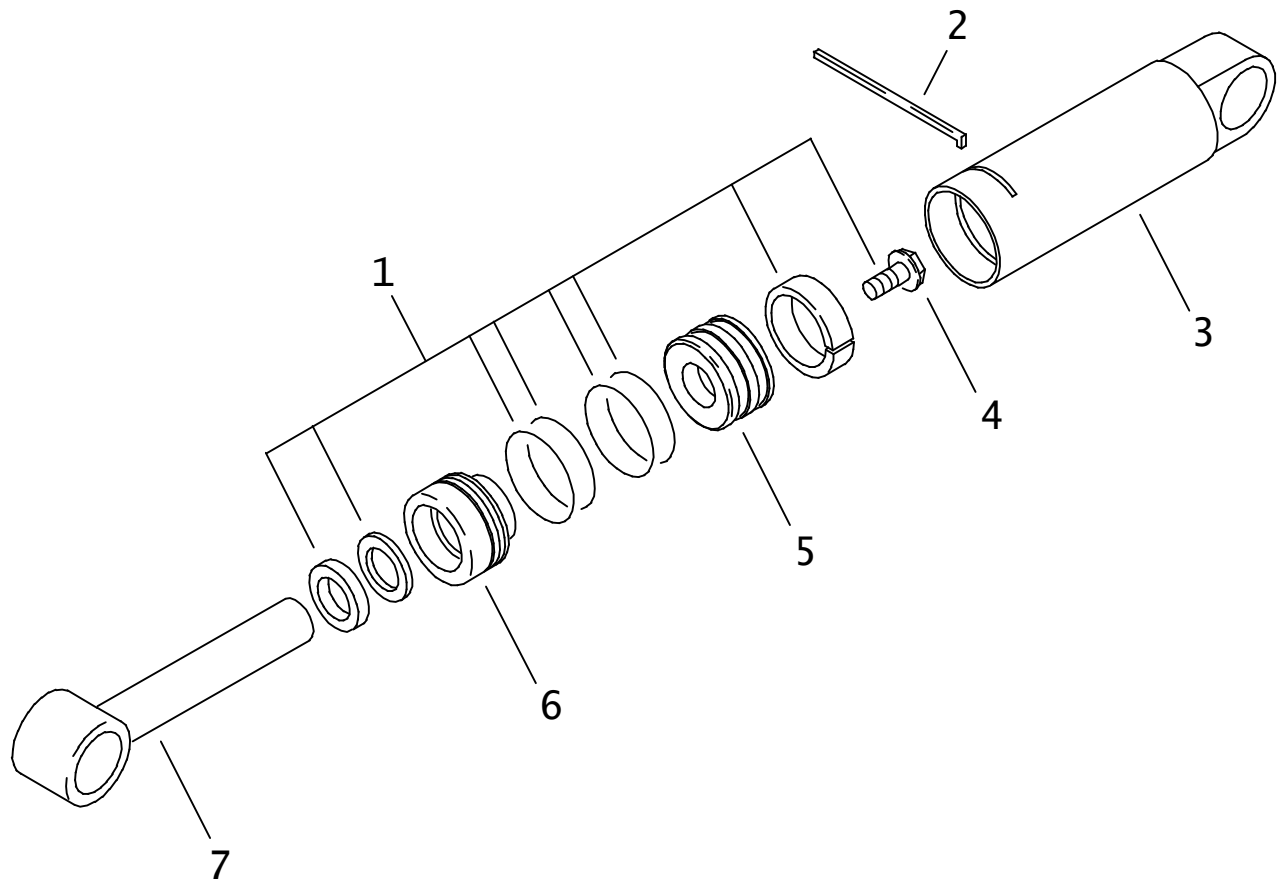
NOTE:

REFER TO O-RING CHART (800-301) IN BACK OF THE BOOK FOR REPLACEMENT OF O-RINGS.



# HYDRAULIC CYLINDER

2.0" X 1.00" X 3.38"



# HYDRAULIC CYLINDER

## 2.0" X 1.00" X 3.38"

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	151-202		HYD CYL (2" X 1" X 3.38")	INCLUDES REF NO'S 1 THRU 7
1.	190-165	1	SEAL REPAIR KIT (2" X 1")	
2.	150-778	1	LOCK RING (2")	
3.	150-700	1	CYLINDER BARREL	
4.	106-096	1	FLG BOLT (1/2-NC X 1-3/4",GD8)	SEE FOOTNOTE 1
5.	150-775	1	CYLINDER PISTON (2" X 1")	
6.	150-772	1	CYLINDER HEAD (2" X 1")	
7.	150-698	1	CYLINDER ROD	

### NOT SHOWN:

259-100	U-SEAL INSTALLER (1"-1.499")
259-188	CYL HEAD SPANNER - TWO PIN
259-239	WIPER SEAL INSTALLER (2")
259-241	PISTON INSTALLER (2")

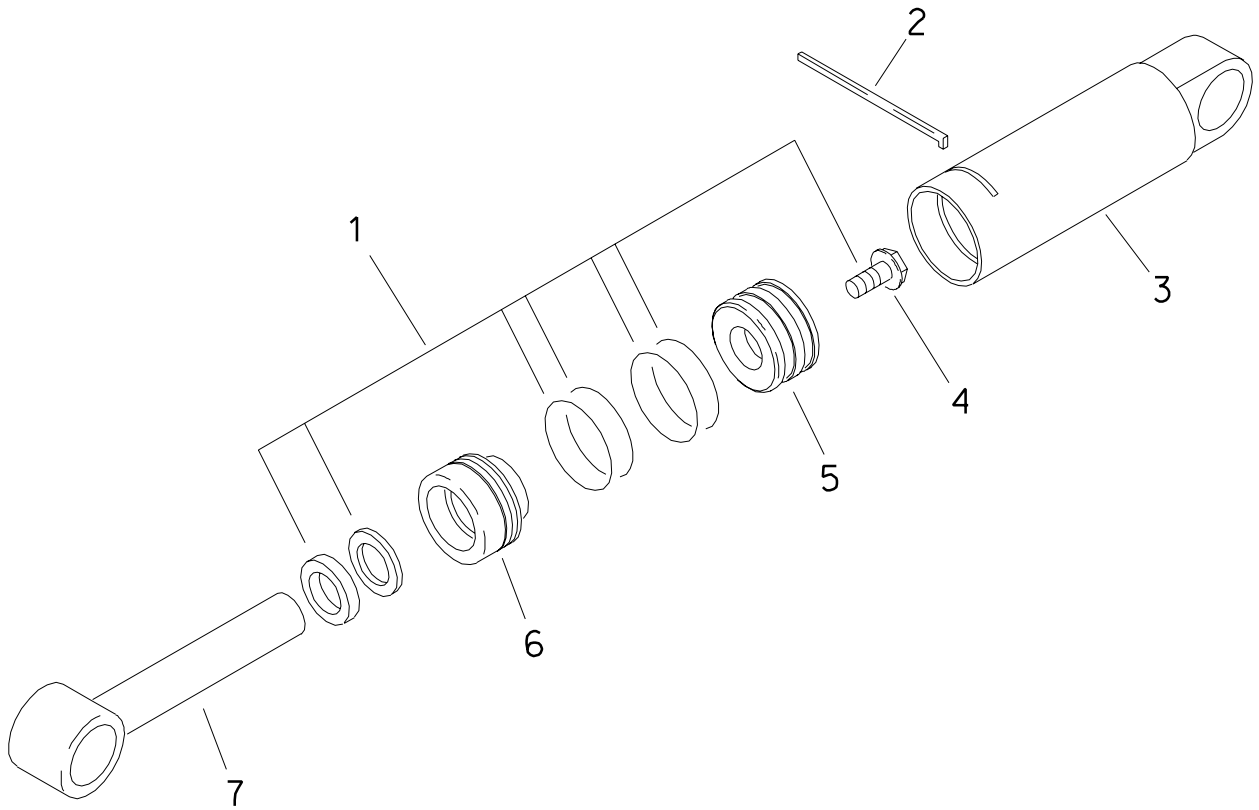
### FOOTNOTES

1. APPLY LOCTITE 271 OR 277. TORQUE TO 90-100 FT-LBS (120-135 N.M.)

### NOTE:

# HYDRAULIC CYLINDER

2" X 1.25" X 8"



# HYDRAULIC CYLINDER

2" X 1.25" X 8"

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	151-057		HYD CYLINDER (2" X 1.25" X 8")	INCL REF NO.'S 1 THRU 7
1.	190-169	1	SEAL REPAIR KIT (2.0" X 1.25")	
2.	150-778	1	LOCK RING (2.0")	
3.	150-285	1	CYLINDER BARREL (2")	
4.	106-097	1	FLG BOLT (5/8-NC X 1-3/4",GD8)	SEE FOOTNOTE 1
5.	150-771	1	CYLINDER PISTON (2" X 1.25")	SEE FOOTNOTE 2
6.	150-770	1	CYLINDER HEAD (2" X 1.25")	
7.	150-427	1	CYLINDER ROD	

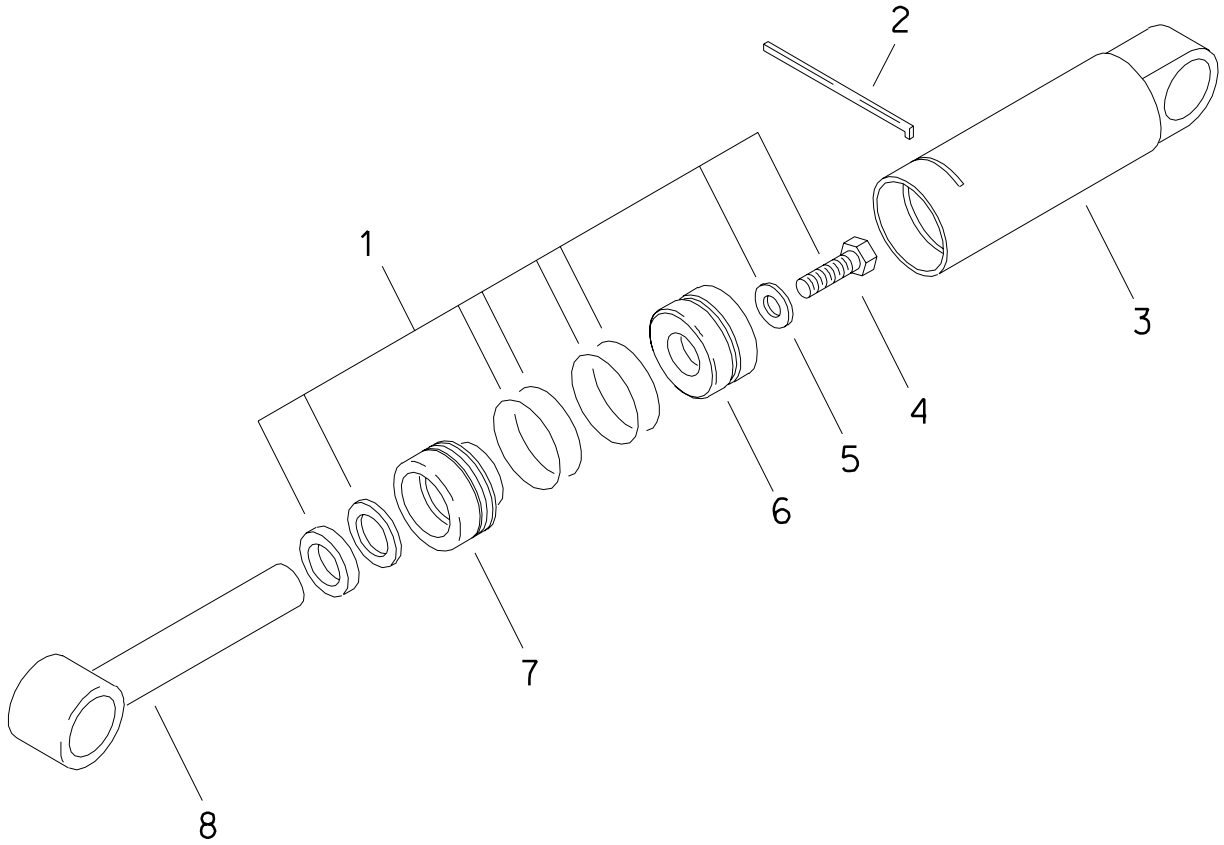
NOT SHOWN:

	259-100		U-SEAL INSTALLER (1"-1.499")	
	259-236		WIPER INSTALLER (1.25")	
	259-239		WIPER/SEAL INSTALLER (2")	
	259-241		PISTON INSTALLER (2")	
	259-188		CYLINDER HEAD SPANNER - TWO PIN	

- FOOTNOTES
1. USE LOCTITE 277, AND TORQUE TO 180-200 FT-LBS (245-270 N.M)
  2. INCLUDES MOLDED-ON WEAR RING, H.P. SEAL, AND O-RING.

# HYDRAULIC CYLINDER

3" X 1.75" X 8"



# HYDRAULIC CYLINDER

3" X 1.75" X 8"

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	151-070		CYL (3.0" X 1.75" X 8.0")	INCL REF NO.'S 1 THRU 7
1.	190-172	1	SEAL REPAIR KIT (3.0" X 1.75")	INCL REF NO.'S 4 THRU 5
2.	150-911	1	LOCK RING (3")	
3.	152-014	1	CYLINDER BARREL (3")	
4.	106-122	1	BOLT (7/8-NC X 2-1/4", GD8)	SEE FOOTNOTE 1
5.	105-363	1	WASHER (7/8")	
6.	150-765	1	CYLINDER PISTON (3" X 1.75")	INCL MOLDED-ON WEAR RING
7.	150-763	1	CYLINDER HEAD (3" X 1.75")	
8.	150-436	1	CYLINDER ROD (1.75")	

NOT SHOWN:

- 259-040 U-SEAL INSTALLER (1.5" - UP)
- 259-238 WIPER INSTALLER (1.75")
- 259-065 PISTON SEAL INSTALLER (3")
- 259-066 PISTON INSTALLER (3")
- 259-188 CYL HEAD SPANNER - TWO PIN

FOOTNOTES

1. CLEAN & DRY THREADS. APPLY RED LOCTITE (RC 271 OR RC 272). TORQUE TO 410-460 FT-LBS (560-625 N.M.)



# **ELECTRICAL**

**SEE TECHNICAL SUPPLEMENT FOR FURTHER  
ELECTRICAL INFORMATION**





# MISCELLANEOUS

# SAE Bolt and Nut Torque Value Chart

## Grade 5: UNC or UNF Thread

Size	Hex nut, or bolt tapped into hex nut, or d&t hole		Hex top deformed locknut		Flange nut, locknut, or bolt tapped into flange nut or d&t* hole	
	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m
1/4	12	16	8	11	20	27
5/16	25	34	15	20	45	60
3/8	40	54	25	34	75	100
7/16	65	90	40	55	125	170
1/2	100	135	60	80	190	260
9/16	150	200	90	125	270	370
5/8	200	270	120	165	370	500
3/4	350	475	210	285	650	880
7/8	560	760	340	460	1250	1425
1	840	1140	500	680	1580	2145
1-1/8	1030	1400	320	840	1950	3645
1-1/4	1460	1980	880	1195	2760	3475

## Grade 8: UNC or UNF Thread

Size	Hex nut, or bolt tapped into hex nut, or d&t hole		Hex top deformed locknut		Flange nut, locknut, or bolt tapped into flange nut or d&t* hole	
	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m
1/4	14	19	10	14	24	33
5/16	30	40	18	25	50	70
3/8	55	73	35	50	90	125
7/16	85	115	50	70	140	190
1/2	130	175	80	110	220	300
9/16	190	260	110	150	310	420
5/8	260	355	160	245	430	585
3/4	450	610	270	365	750	1015
7/8	730	990	440	600	1210	1640
1	1090	1480	650	880	1320	2465
1-1/8	1550	2100	930	1260	2580	3500
1-1/4	2180	2955	1310	1780	3640	4935

\*drilled and tapped

# Metric Bolt and Cap Screw Torque Values

Size	Class 4.8				Class 8.8 and 9.8				Class 10.9				Class 12.9			
	Lubricated		Dry		Lubricated		Dry		Lubricated		Dry		Lubricated		Dry	
	N•m	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m	ft•lb	N•m	ft•lb
M6	4.8	3.5	6	4.5	9	6.5	11	8.5	13	9.5	17	12	15	11.5	19	14.5
M8	12	8.5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	225	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1600	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	2200	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

Do not use these values if a different torque value or tightening procedure is given for specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class fasteners.

Fasteners should be replaced with the same or higher property class. If higher property class fasteners are used, these should only be tightened to strength of original.

Make sure fastener threads are clean and that the threads are properly started. This will prevent them from cross threading or galling when tightened.

Tighten plastic insert or crimped type steel locknuts to approximately 50% of dry torque indicated on chart. Apply torque to the nut - not the bolt head. Tighten toothed or serrated type locknuts to full torque value.

LUBRICATED means coated with lubricant. DRY means plain or zinc plated without any type of lubricant.

## Hydraulic Cylinder Bolt Torque Chart

Bolt Size (inch)	Bolt Part No.	Cylinder Repair Kit Part No.	Torque (ft•lb)	Torque (N•m)
1/2	106-096	190-165	90-100	120-135
5/8	106-097	190-166 & 190-169	180-200	245-270
3/4	106-098	190-167 & 190-170	290-325	395-440
7/8	106-122	190-172 & 190-174	410-640	550-625
1	106-145	190-175 & 190-189	630-700	855-950
1-1/8	106-146	190-177	770-850	1045-1170

As a general rule:

- 1/2-inch bolts are used in cylinders with 1-inch rods
- 5/8-inch bolts are used in cylinders with 1 1/4-inch rods
- 3/4-inch bolts are used in cylinders with 1 1/2-inch rods
- 7/8-inch bolts are used in cylinders with 1 3/4-inch rods
- 1-inch bolts are used in cylinders with 2-inch rods (one with 1 3/4-inch)
- 1-1/8-inch bolts are used in cylinders with 2-1/4-inch rods

**IMPORTANT:** Do not reuse cylinder piston bolts when rebuilding a hydraulic cylinder. Each cylinder repair kit contains a new bolt. Use it. Lubricate lightly and torque to value shown on chart.

# SAE & ORS Hydraulic Fitting Replacement O-Ring Chart

Fraction Size	Dash Size	SAE (Port Seal O-Ring)		ORS (Face Seal O-Ring)	
		Thread Size	O-Ring P/N	Thread Size	O-Ring P/N
1/16	1	NA	NA	NA	NA
1/8	2	5/16 - 24	NA	NA	NA
3/16	3	3/8 - 24	NA	NA	NA
1/4	4	7/16 - 20	155-760	9/16 - 18	157-037
5/16	5	1/2 - 20	NA	NA	NA
3/8	6	9/16 - 18	155-705	11/16 - 16	157-038
1/2	8	3/4 - 16	155-706	13/16 - 16	157-039
5/8	10	7/8 - 14	155-707	1 - 14	157-040
3/4	12	1-1/16 - 12	155-709	1-3/16 - 12	157-017
7/8	14	1-3/16 - 12	155-747	NA	NA
1	16	1-5/16 - 12	155-748	1-7/16 - 12	155-714
1-1/4	20	1-5/8 - 12	155-702	1-11/16 - 12	NA
1-1/2	24	1-7/8 - 12	157-001	2 - 12	NA
2	32	2-1/2 - 12	NA	NA	NA
2-1/2	40	3 - 12	NA	NA	NA
3	48	3-1/2 - 12	NA	NA	NA

Thread size indicates the diameter of the threaded area in fractions of an inch and number of threads per inch.

NA = not a current CMW part numbered o-ring, or dash size does not occur in current CMW applications

SAE = straight thread fitting that seals by sandwiching a hard o-ring between a shoulder on the male part and an angular surface at the mouth of the female port.

ORS = o-ring face seal; a type of fitting that seals by compressing a hard, captive o-ring between two flat parallel faces, one grooved for the o-ring and the other plain to act as the sealing surface

# RT95M

## Related Publications

Component	Ass'y	P/N
<b>Model:</b>		
RT95 ..... Parts Manual .....		053-122
RT95 ..... Operators Manual .....		054-127
RT95 ..... Repair Guide (Service Manual) .....		N/A
RT95 ..... Technical Supplement .....		053-1029
RT95 ..... Special Tools Guide .....		052-901
<b>Engine:</b>		
John Deere ..... Operators Manual – 4045TF270 .....	194-511 ....	054-087

## Filters

<b>Engine:</b>		
Air Filter Parts Ass'y .....		194-121
Element (primary) .....		194-147
Element (secondary) .....		194-148
Oil Filter Element (spin-on) - John Deere .....		194-478
Fuel Strainer (04H) Tank .....		156-268
Primary Filter Sediment Bowl .....		194-493
Fuel Filter Element-John Deer(Primary) .....		194-588
Fuel Filter Element-John Deer(Secondary) .....		159-255
<b>Transmission:</b>		
Oil Filter Element (spin-on) .....		159-509
<b>Hydraulic:</b>		
Oil Filter Element (1-1/2-UNF, spin-on, Replacement) .....		149-641

## Optional Kits

O-ring Repair Kit - FLG, ORS & SAE (15 different O-rings) .....	190-051
O-ring Repair Kit - Field Service (46 different O-rings) .....	190-052



# Ditch Witch®

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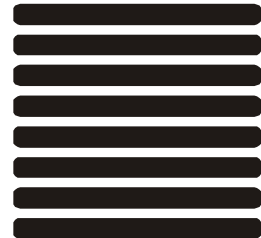
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