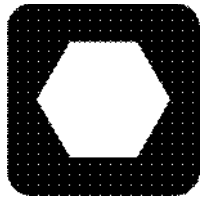


HT115

Parts Manual



Ditch Witch[®]


HT115

ISSUE NO. 07PL-08/11

For Replacement Copy Order **P/N 053-481**

This manual contains information concerning the following models:
HT115 Tractor

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FOREWORD

This manual contains illustrated parts lists to help you select quality ProTech[®] Replacement parts for your Ditch Witch[®] 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

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.

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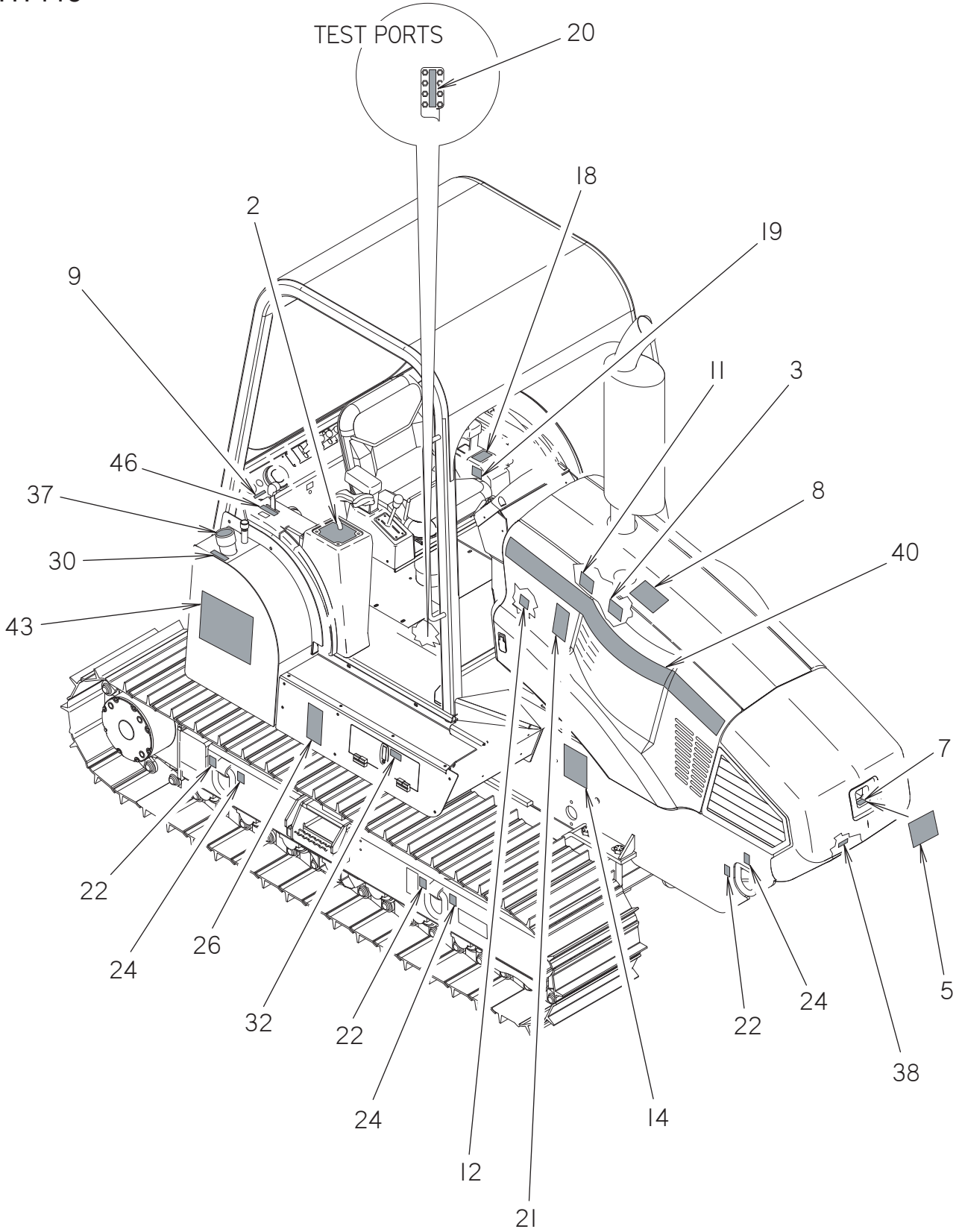
***See technical supplement for further electrical information #053-139**

Miscellaneous

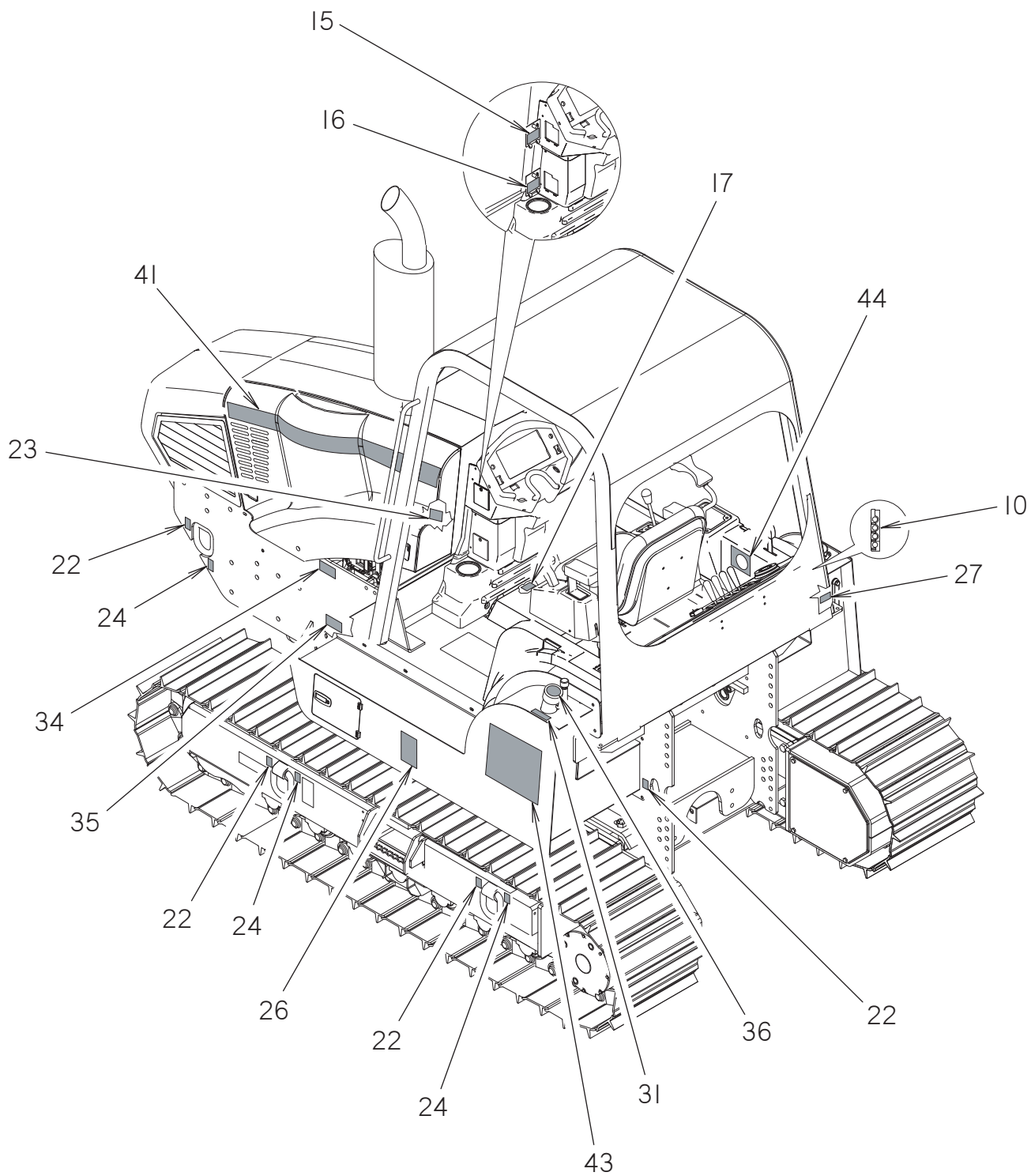
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DECALS

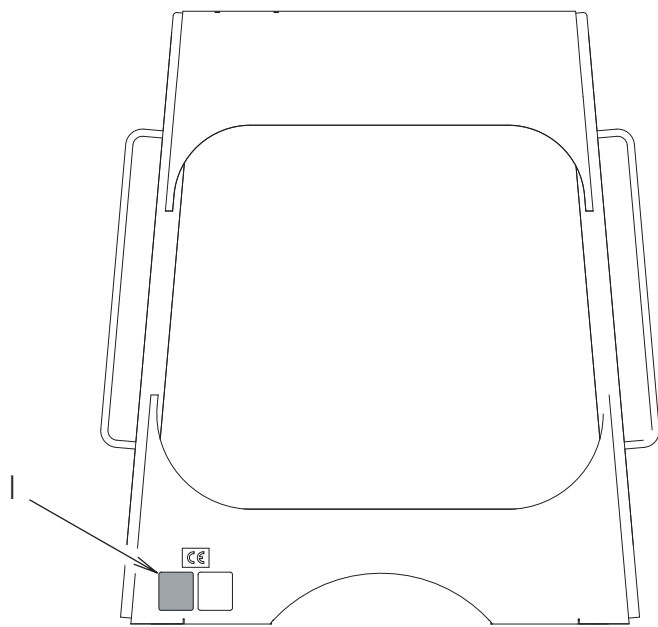
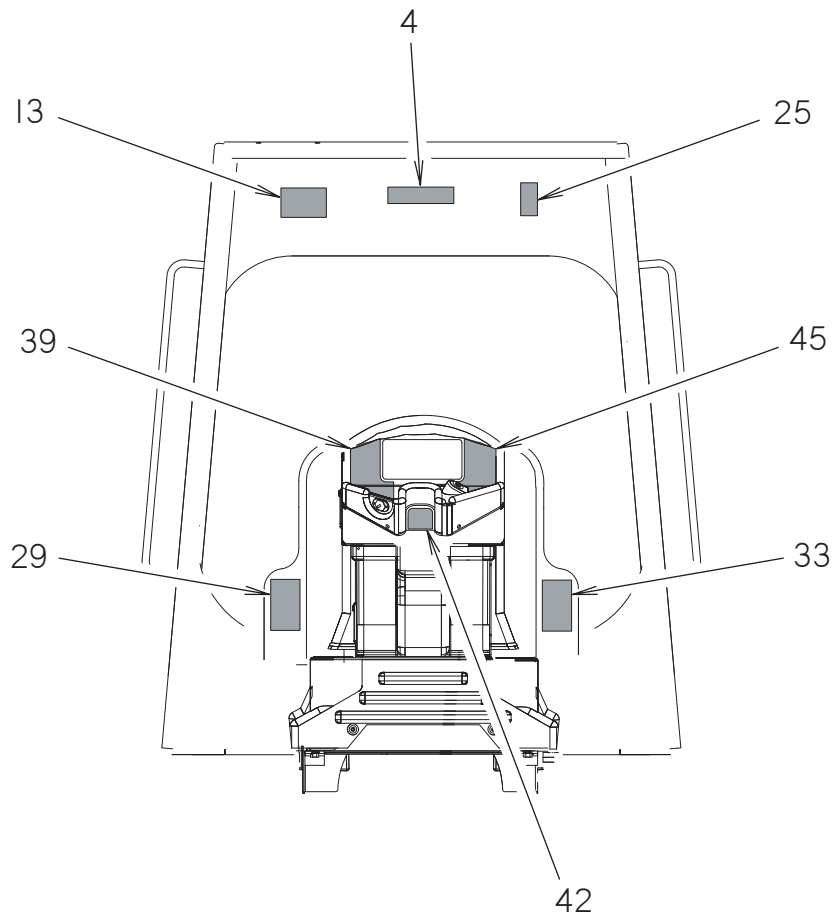
DECAL LOCATION HT115



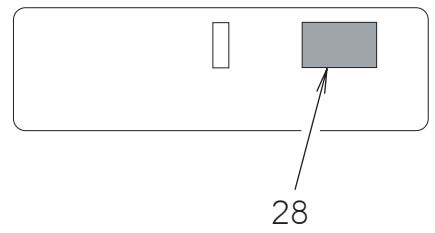
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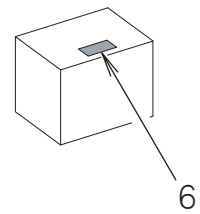
DECAL LOCATION HT115



INSIDE OF BATTERY DOOR



BATTERY



DECAL LOCATION

HT115

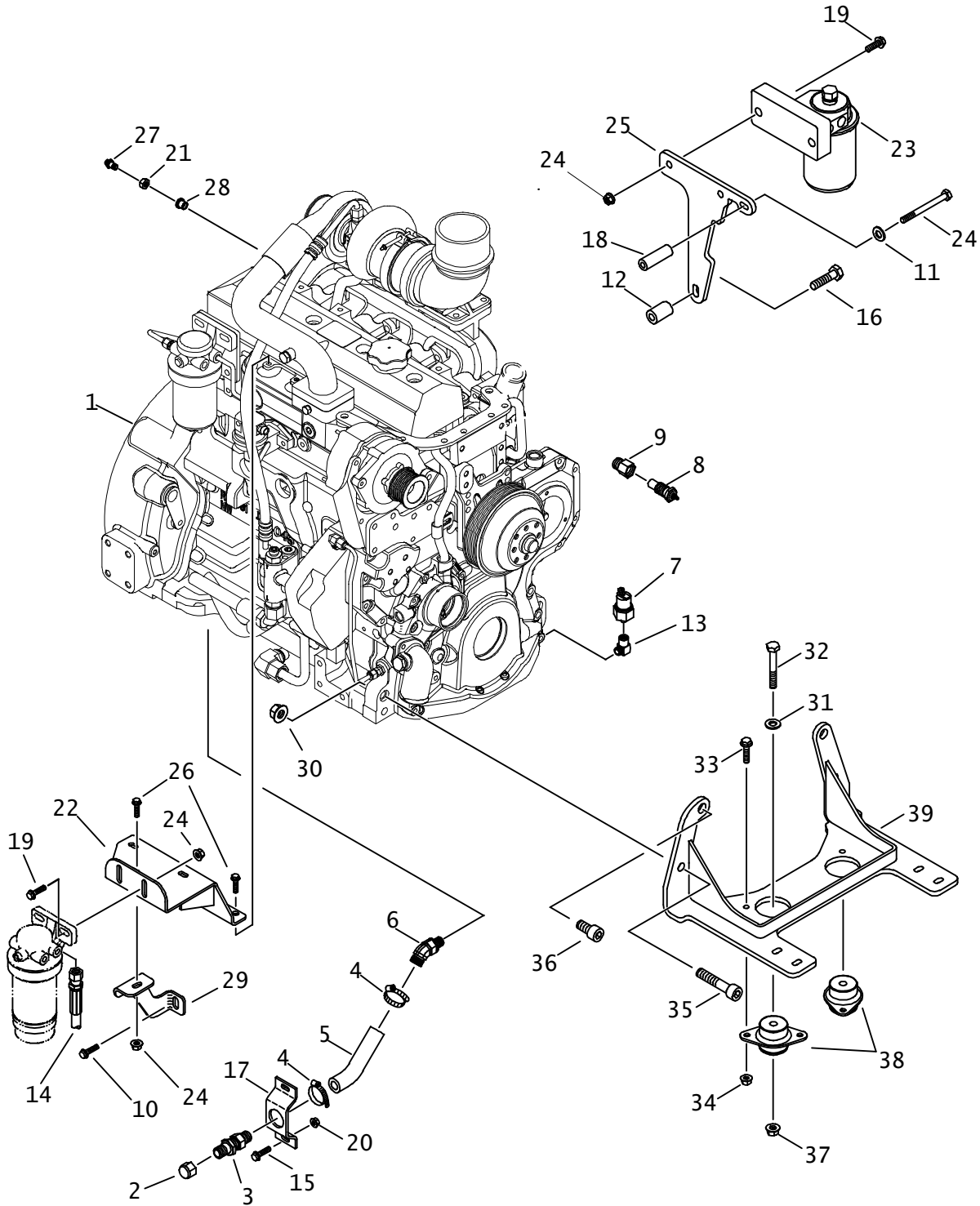
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	275-938		DECAL KIT - HT115	
1	273-016	1	SOUND POWER II	SEE FOOT NOTE 1
2	273-100	1	BFB FUNCTIONS	OPTION; SEE FOOT NOTE 2
3	273-146	1	NOTICE ADD COOLANT	
4	273-197	1	OVERHEAD CONSOLE	OPTION; SEE FOOT NOTE 3
5	273-246	1	RIGID LOGO PLACARD	
6	273-267	2	DITCH WITCH BATTERY	
7	273-292	1	FRAME NOSE CASTING WEIGHT	
8	273-452	1	NOTICE COOLANT	
9	273-457	1	DIAGNOSTIC GAUGE & CONNECTION	
10	273-448	1	CAN MULTIPORT MODULE	
11	273-459	1	NOTICE EXPLOSION POSSIBLE	
12	273-460	1	PREHEAT RELAY/SOLENOID	
13	273-475	1	NOTICE-READ MANUAL	
14	273-505	1	HT115 LUBE CHART	
15	273-506	1	HT115 FUSE PANEL	
16	273-507	1	HT115 RELAY PANEL	
17	273-508	1	HT115 TEST PORT LOCATIONS	
18	273-509	1	AUTO TRACK/GROUND SPEED	
19	273-510	1	AUTOTRACK JOYSTICK OVERLAY	
20	273-511	1	HT115 TEST PORTS	
21	274-206	1	STARTING FLUID HAZARD ALERT	
22	274-318	8	TIE DOWN LOCATION	
23	274-375	1	MASTER DISCONNECT SWITCH	
24	274-442	6	LIFT LOCATION	
25	274-724	1	ONE CALL NOTIFICATION	
26	274-482	2	WARNING SINGLE OPERATOR	
27	275-023	1	OIL LEVEL	
28	275-033	1	NOTICE ELECTRICAL SYSTEM	
29	275-070	1	WARNING RUNAWAY	
30	275-120	1	RESERVOIR (THF)	
31	275-148	1	FUEL TANK (DIESEL)	
32	275-203	1	BATTERY	
33	275-303	1	WARNING ROLLOVER	
34	275-400	1	NOTICE OIL LEVEL	
35	275-497	1	OIL DRAIN-ID	
36	700-062	1	DIESEL FUEL CAP	
37	700-063	1	HYDRAULIC OIL CAP	
38	700-064	1	POWER BEYOND/RETURN/PRESSURE	
39	700-125	1	ENGINE OVERRIDE/REEL CARRIER	
40	700-155	1	HT115 MODEL ID RT	
41	700-156	1	HT115 MODEL ID LT	
42	700-157	1	HT115 MIDDLE OVERLAY	
43	700-158	2	STACKED DITCH WITCH LOGOTYPE	
44	700-159	1	AUXILIARY OVERLAY	
45	700-160	1	HORN/PARKING BRAKE/IGNITION	
46	700-194	1	THROTTLE	

FOOTNOTES

1. NOT PART OF KIT.
2. NOT PART OF KIT. SEE BACKFILL BLADE KIT 104-083.
3. NOT PART OF KIT. SEE LIGHT KIT 601-329.

ENGINE COMPONENTS

DEERE ENGINE (TIER 2)



DEERE ENGINE (TIER 2)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-370	1	ENGINE 4045TF275115I JD	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	SEE FOOTNOTE 1
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.	106-396	1	WASHER (M10, HARDENED)	
12.	184-427	1	BOSS	
13.	156-241	2	STREET ELBOW (02N-02NF90)	
14.	159-625	1	FUEL FILTER HOSE (060)	
15.	106-989	2	FLG LK SCREW (M8-1.25 X 35mm)	
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.	106-386	2	FLG LOCKNUT (M8-1.25)	
21.	156-277	1	COMPRESSION NUT (05T)	
22.	323-634	1	FILTER MOUNT	
23.	194-478	-	ENGINE OIL FILTER	
24.	106-124	1	SCREW (M10-1.50 X 110mm)	
25.	315-543	1	FILTER MOUNT	
26.	106-382	4	FLG LK SCREW (M10-1.5 X 20mm)	
27.	156-275	1	TUBE CONNECTOR (04H-05T)	
28.	156-276	1	FERRULE (05T)	
29.	323-365	1	FILTER MOUNT SUPPORT	
30.	106-545	2	LOCKNUT (M16-2.0, PRV TRQ, 10.9)	
31.	105-475	2	WASHER (1/2")	
32.	106-336	2	SCREW (M12-1.75 X 90mm)	
33.	107-001	4	FLG LK SCREW (M10-1.50 X 25mm)	
34.	106-266	4	FLG NUT (M10-1.50)	
35.	107-723	2	SCREW (M16-2.00 X 70mm, SOC)	
36.	106-643	2	SCREW (M16-2.00 X 25mm, SOC)	
37.	106-709	2	FLG LK NUT (M12-1.75)	
38.	116-946	2	ENGINE SHOCK MOUNT	POSITION METAL FACE TO FRAME BOTTOM
39.	337-369	1	FRONT ENGINE BRACKET	

NOT SHOWN:

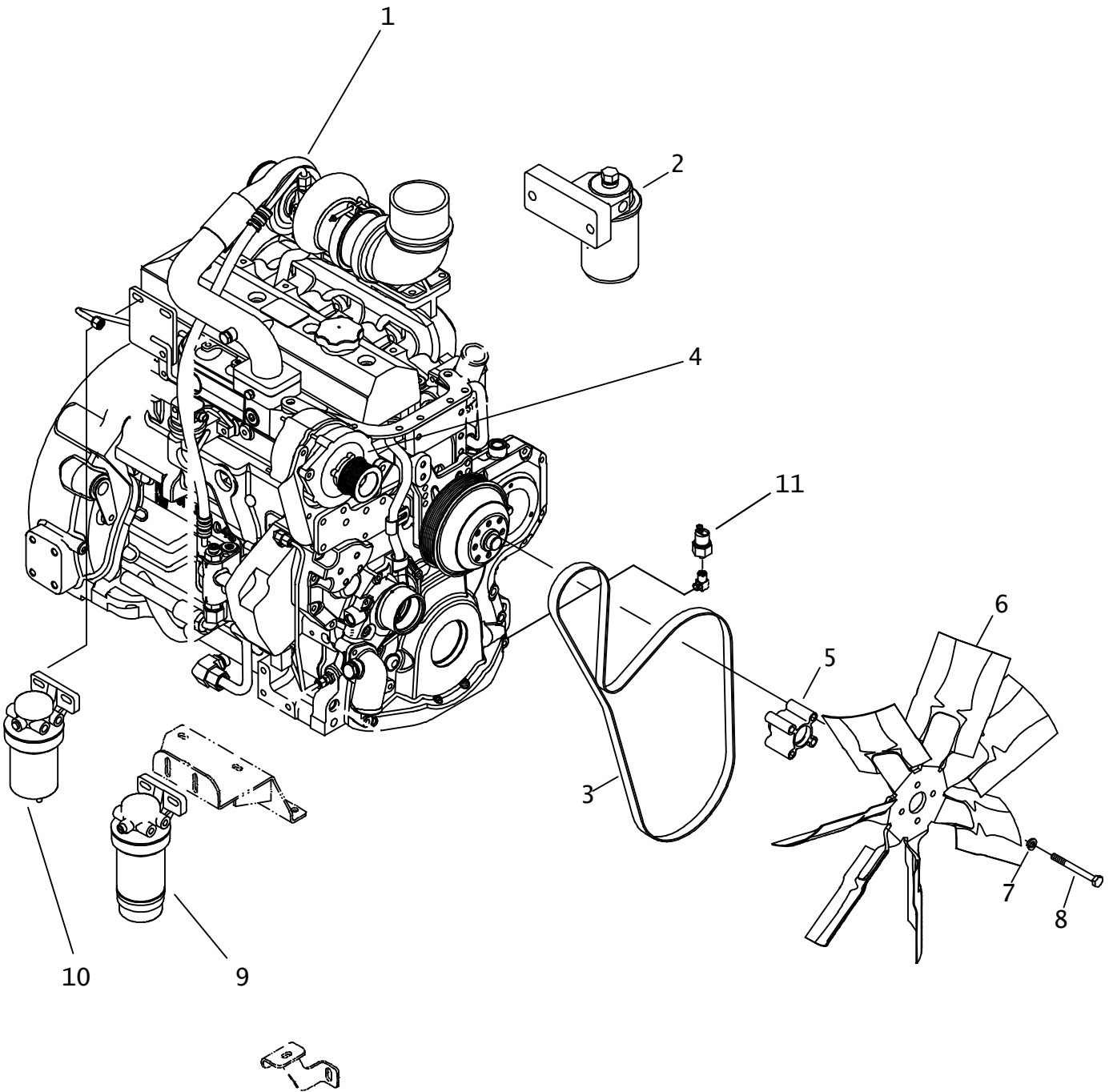
FOOTNOTES:

1. THE PRESSURE SENDER 215-1203 IS CONNECTED TO THE GAUGE DISPLAY AND THE PRESSURE SENSOR 213-083 (NOT SHOWN) IS CONNECTED TO THE ENGINE ECU.

NOTE:

REF #2 THRU #29 ARE SUPPLIED WITH ENGINE (194-370).

DEERE ENGINE SERVICE TIER 2



DEERE ENGINE SERVICE TIER 2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-370	-	ENGINE 4045TF275115I JD	OBSOLETE
2.	194-478	1	ENGINE OIL FILTER	
	499-944	-	OIL FILTER SEAL RING	
3.	171-010	1	FAN BELT	
4.	217-451	1	ALTERNATOR 95 AMP (REMAN)	
5.	194-442	1	FAN SPACER	
6.	194-394	1	22.5 DIA PULLER FAN	
7.	106-090	4	LOCK WASHER (M10)	
8.	106-206	4	SCREW (M10-1.50 X 90mm)	
9.	194-492	1	PRIMARY FUEL FILTER ELEMENT	
10.	194-498	1	SECONDARY FUEL FILTER	
11.	215-1203	1	SENDER, OIL PRESSURE (0-80PSI) SD	SEE FOOTNOTE I

NOT SHOWN:

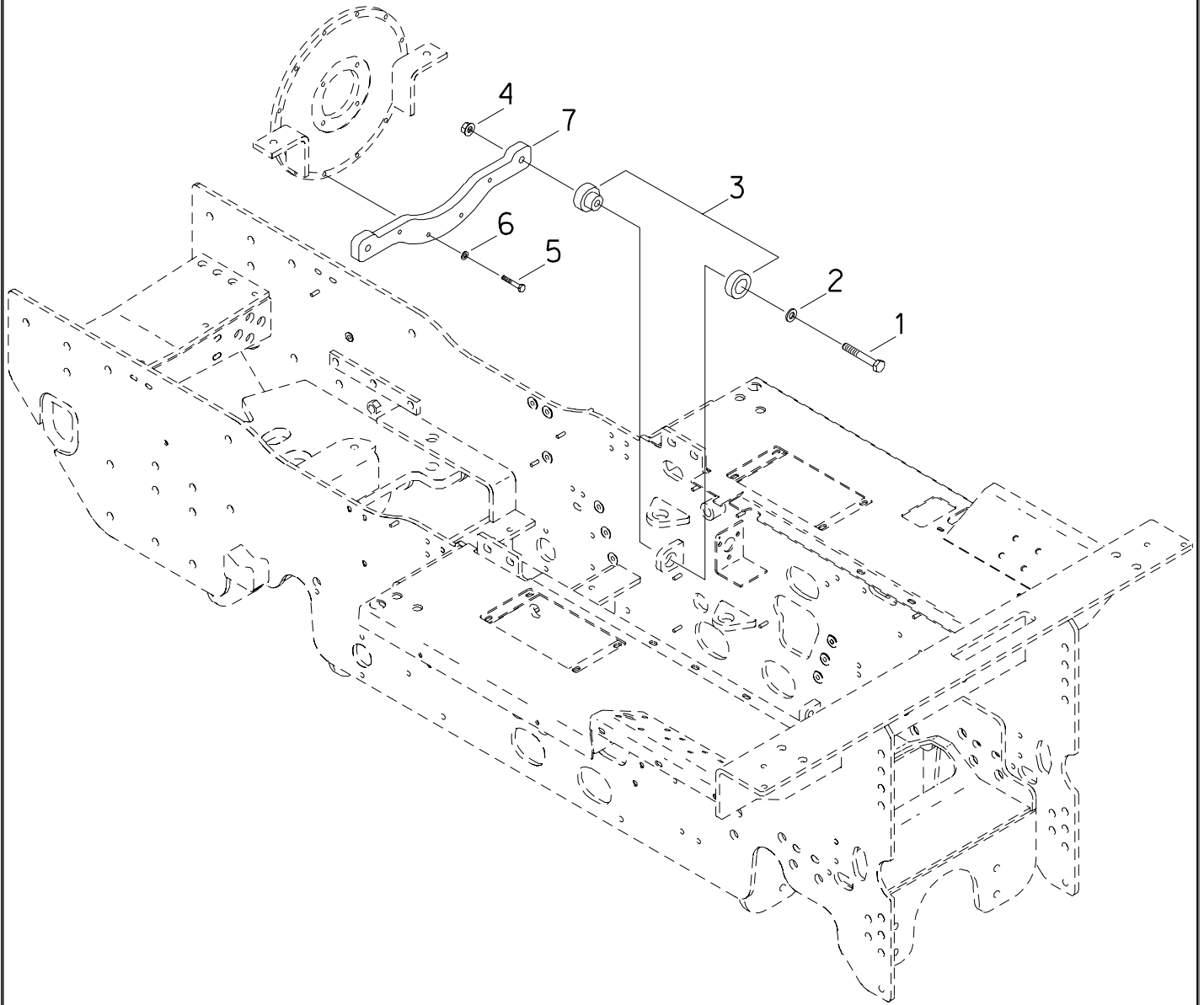
054-087	1	JOHN DEERE TIER II OPER MANUAL	
194-254	1	STARTER	
194-501	1	THERMOSTAT	
165-883	1	GASKET, THERMOSTAT	
213-080	2	WHEEL SPEED SENSOR	
213-081	1	COOLANT TEMPERATURE SENSOR	
213-082	1	ENGINE HEAD TEMPERATURE SENSOR	
159-586	-	SPEED SENSOR O-RING	
213-083	1	OIL PRESSURE SENSOR	SEE FOOTNOTE I
213-085	1	DIODE HARNESS	

FOOTNOTES

I. THE PRESSURE SENDER 215-1203 IS CONNECTED TO THE GAUGE DISPLAY AND THE PRESSURE SENSOR 213-083 (NOT SHOWN) IS CONNECTED TO THE ENGINE ECU.

NOTE:

REAR ENGINE SUPPORT



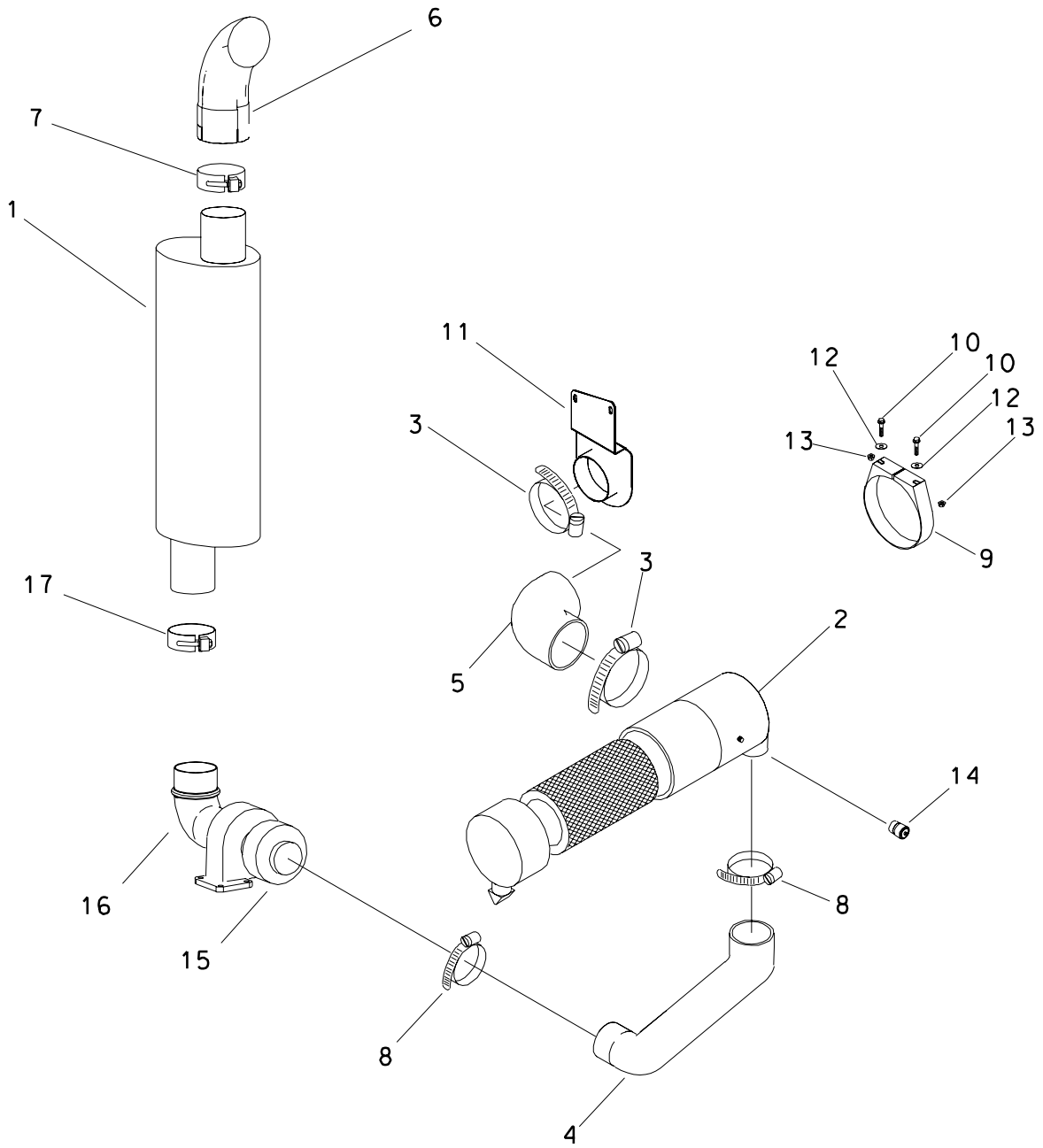
REAR ENGINE SUPPORT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-132		REAR ENGINE SUPPORT KIT	INCLUDES REF. NO'S 1 THRU 7
1.	105-386	2	BOLT (5/8-NC X 4-1/2")	
2.	105-416	2	WASHER (5/8")	
3.	116-151	2	SHOCK MOUNT	
4.	105-994	2	FLG LOCKNUT (5/8-NC)	
5.	105-839	4	SCREW (M10-1.50 X 55mm)	
6.	106-396	4	WASHER (M10, HARDENED)	
7.	313-646	1	BUMPER PLATE	

FOOTNOTES

1. REQUIRED OPTION FOR SAW ATTACHMENTS

MUFFLER AND AIR FILTER

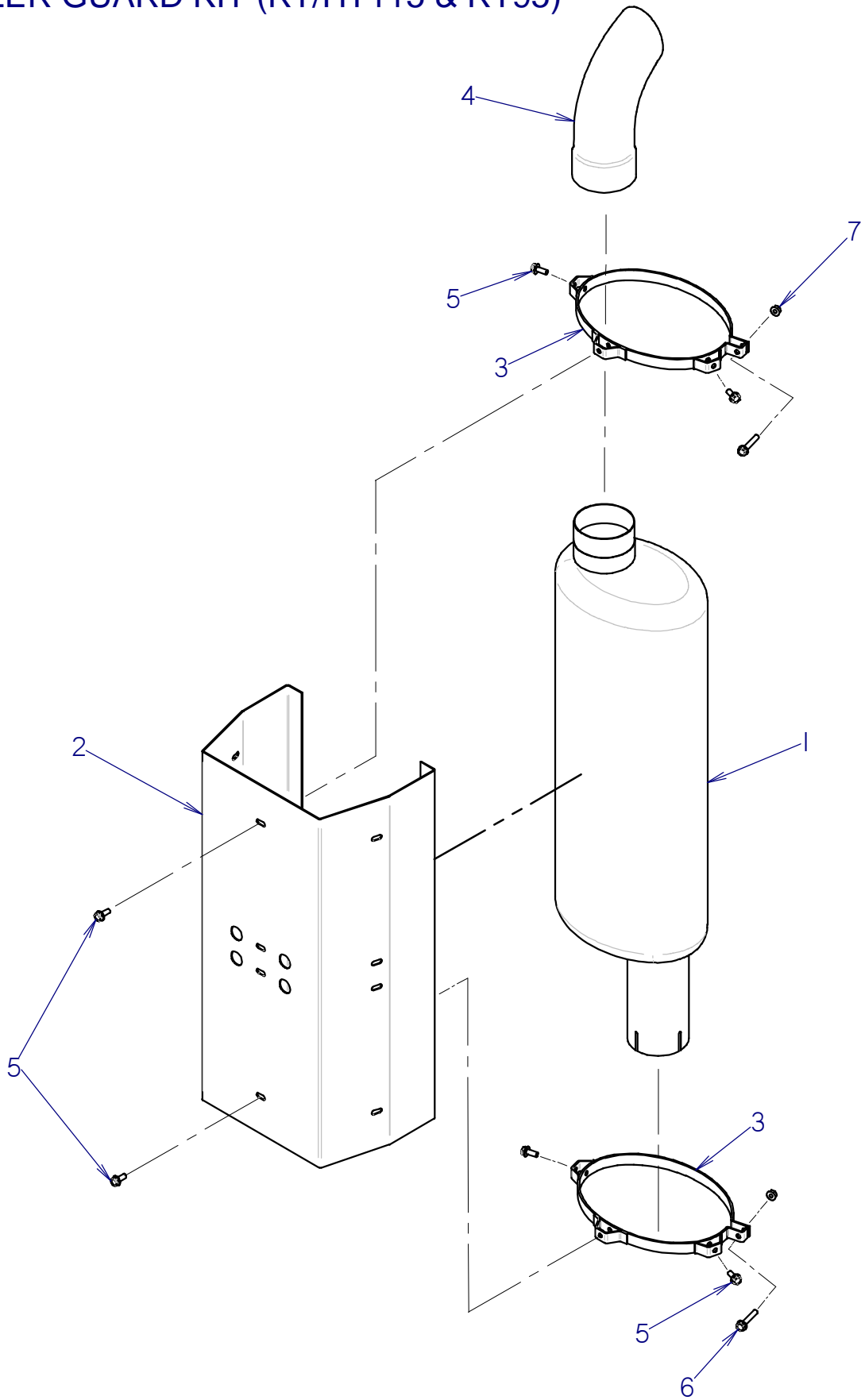


MUFFLER AND AIR FILTER

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 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)	

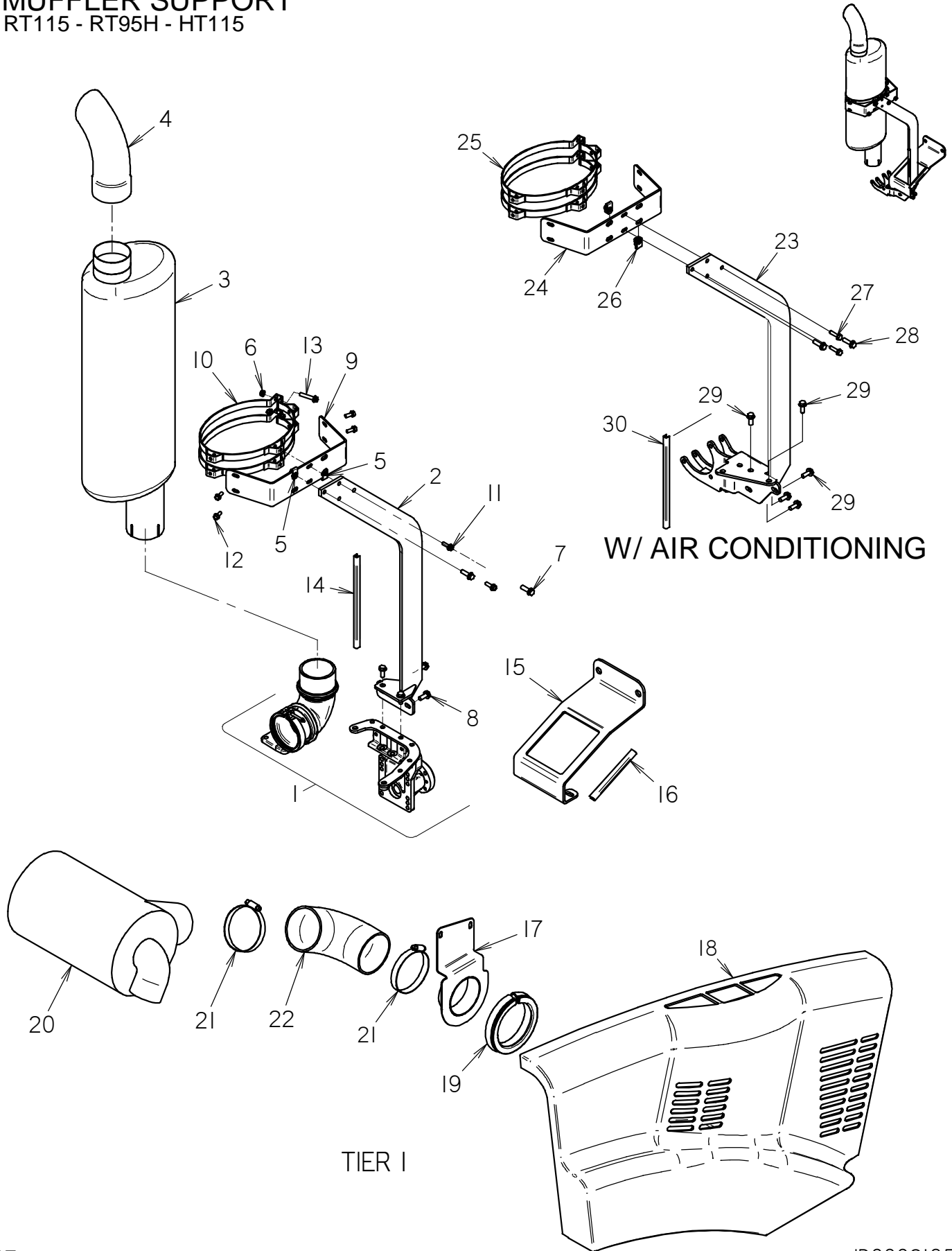
FOOTNOTES

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

NOTE:

MUFFLER SUPPORT

RT115 - RT95H - HT115



MUFFLER SUPPORT

RT115 - RT95H - HT115

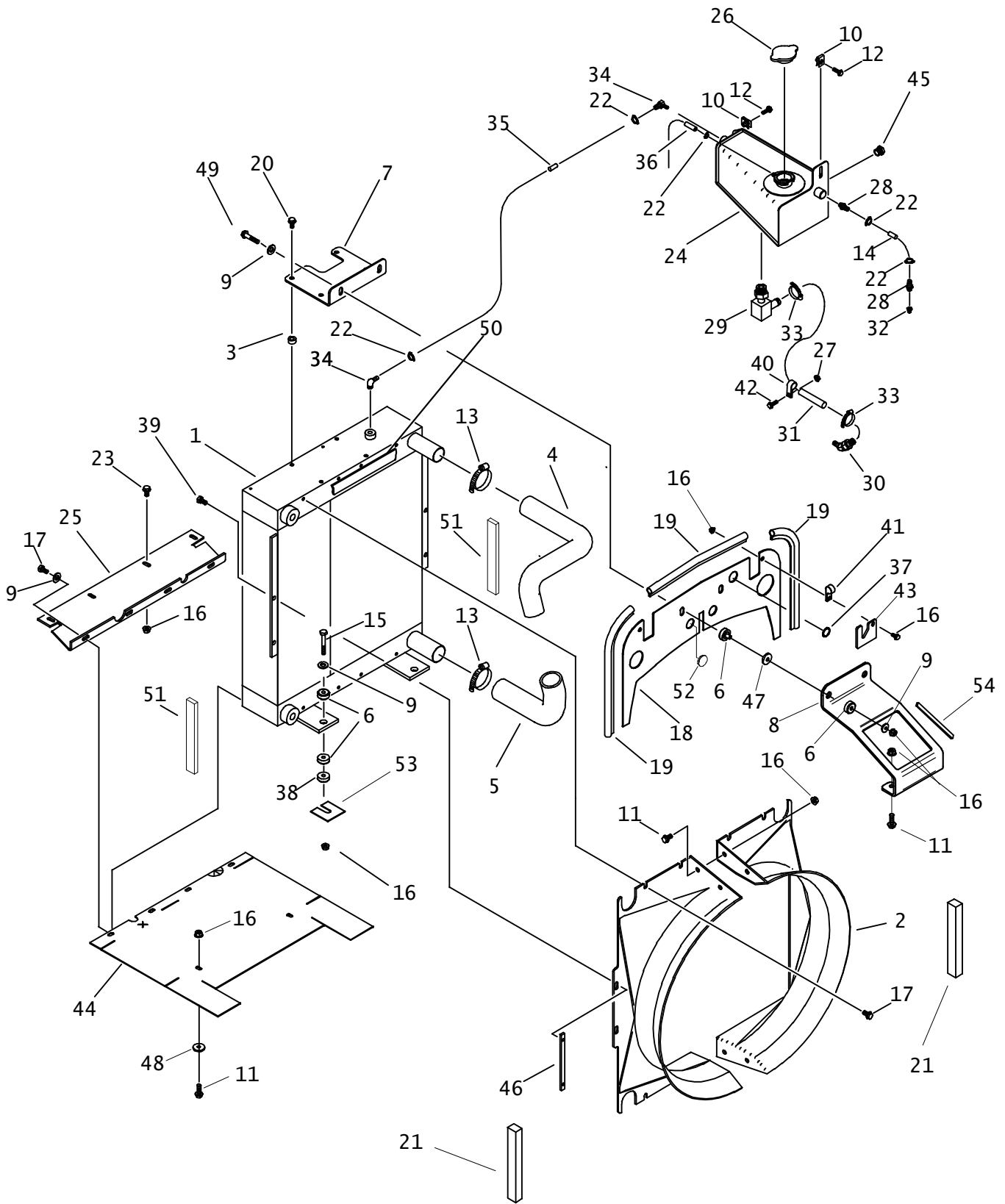
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-368		MUFFLER SUPPORT KIT	INCLUDES REF NO,S 2, 5, 7 - 11 & 14
1	194-370	1	ENGINE ASSY	OBSOLETE, EXHAUST ELBOW AND FAN MOUNT NOT PART OF KIT
2	320-494	1	FRONT SUPPORT	
3	194-201	1	MUFFLER	NOT PART OF KIT
4	196-351	1	EXHAUST TUBE (4" X 12")	NOT PART OF KIT
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:

RADIATOR/OIL COOLER (TIER 2)



RADIATOR/OIL COOLER (TIER 2)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	194-374	1	RADIATOR/OIL COOLER TIER 2 RTH	
2.	362-973	2	FAN SHROUD HALF (RT115)	
3.	184-317	4	ENGINE MOUNT SPACER	
4.	117-864	1	UPPER RADIATOR HOSE	
5.	117-862	1	LOWER RADIATOR HOSE	
6.	116-128	4	SHOCK MOUNT	
7.	318-956	1	FRONT SUPPORT	
8.	325-634	1	RADIATOR MOUNT	
9.	105-118	10	WASHER (3/8")	
10.	107-135	2	CLIP NUT (M8-1.25)	
11.	107-001	8	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	16	FLG NUT (M10-1.50)	
17.	106-999	14	FLG LK SCREW (M10-1.50 X 20mm)	
18.	319-729	1	BARRIER	
19.	116-421	AR	BULK EDGE (1/8", SOLD PER 1')	45", SEE FOOTNOTE 3
20.	106-497	4	FLG SCREW (M10-1.50 X 35mm)	
21.	116-107	AR	BULK STRIP (1.2", SOLD PER 1")	USE 2 @ 12"
22.	110-249	5	WORM CLAMP (1/4" X 5/8")	
23.	107-002	4	FLG LK SCREW (M10-1.50 X 30mm)	
24.	364-638	1	PRESSURE TANK	
25.	117-937	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 @ 24"
32.	115-286	1	REDUCER (08N-1/4-NF)	SEE FOOTNOTE 2
33.	110-217	2	WORM CLAMP (7/16" TO 1")	
34.	155-164	2	S/O COUPLER (04N-05H90)	
35.	116-108	AR	BULK HOSE (5/16", SOLD PER 1")	USE 1 @ 12"
36.	116-108	AR	BULK HOSE (5/16", SOLD PER 1")	USE 1 @ 31"

NOT SHOWN:

FOOTNOTES:

1. CONNECTS INTO ENGINE WATER PUMP
2. CONNECTS INTO ENGINE CYLINDER HEAD
3. REF 19 (116-421) USES THREE PIECES 15" LONG.

NOTE:

RADIATOR/OIL COOLER (TIER 2)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
37.	502-046	1	GROMMET (3/4")	
38.	179-608	2	SPACER	
39.	106-380	4	FLG LK SCREW (M8-1.25 X 16mm)	
40.	110-333	1	BOLT-ON CLAMP (1")	
41.	110-259	3	BOLT-ON CLAMP (.625")	
42.	106-162	1	FLG SCREW(M8-1.25 X 20mm, GD8)	
43.	117-819	2	FLAP	
44.	117-936	1	AIR BARRIER	
45.	110-549	1	SIGHT GAUGE (12N)	
46.	111-134	2	BOLT CLAMP	
47.	105-975	2	WASHER (3/4")	
48.	105-884	6	WASHER (.531")	
49.	106-997	2	FLG LK SCREW (M10-1.50 X 60MM)	
50.	115-380	AR	WEATHER STRIP (3/8" x 3/4")	
51.	117-888	AR	BULK STRIP (1/2", SOLD PER 1")	USE 2 @ 12"
52.	157-429	2	HOLE PLUG (1.125")	
53.	331-555	AR	SHIM	
54.	115-704	AR	BULK EDGE (1/4", SOLD PER 1")	USE 1 @ 7"

NOT SHOWN:

FOOTNOTES:

NOTE:

FUEL TANK

ENDS WITH S/N CMWHT115 P60000013

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	364-604	1	FUEL TANK WELDMENT	
2	111-052	1	HINGE	
3	111-051	1	HINGE	
4	364-623	1	TOOL BOX DOOR	
5	117-558	1	LATCH, ADJUST LEVER (LOCKING)	
6	111-021	1	BREATHER CAP (TANK)	
7	105-650	8	SCREW (M4-0.70 X 10MM)	
8	156-239	1	S/O SHUT-OFF (02N-05H90)	
9	214-985	1	FUEL SENDER	
10	115-152	1	PLUG (12N, SQ FM)	
11	105-649	5	BOLT (#10-32 X .75", BUT)	
12	117-671	1	ABRASION SLEEVE (1" X 12")	
13	106-709	12	FLG LK NUT (M12-1.75)	
14	106-387	2	FLG LOCKNUT (M10-1.50)	
15	106-724	2	FLG SCREW (M10-1.50 X 25MM)	
16	106-574	1	CLIP NUT (M6-1.00)	
17	107-629	3	WASHER (M8)	
18	107-778	2	SCREW (M8-1.25 X 30MM, BUT SOC)	
19	106-386	2	FLG LOCKNUT (M8-1.25)	
20	105-003	1	FLG LOCKNUT (5/16-NC)	
21	111-046	1	LOCKING CAP (NON-VENTED)	
22	106-632	12	FLG LK SCR (M12-1.75X35MM, SER)	
23	116-325	1	GROMMET (.362")	
24	156-269	1	S/O COUPLER (04H-05H90)	
25	118-096	1	BULK FUEL TUBING (1/4", PER FT)	USE 1 @ 12"
26	110-563	2	SPRING CLAMP (3/8")	
27	110-528	4	SNAP-ON CLAMP (.531" TO .593")	
28	116-108	1	BULK HOSE (5/16", SOLD PER 1')	USE 1 @ 65"
29	116-108	1	BULK HOSE (5/16", SOLD PER 1')	USE 1 @ 46.5"
30	194-505	1	FUEL PICKUP	

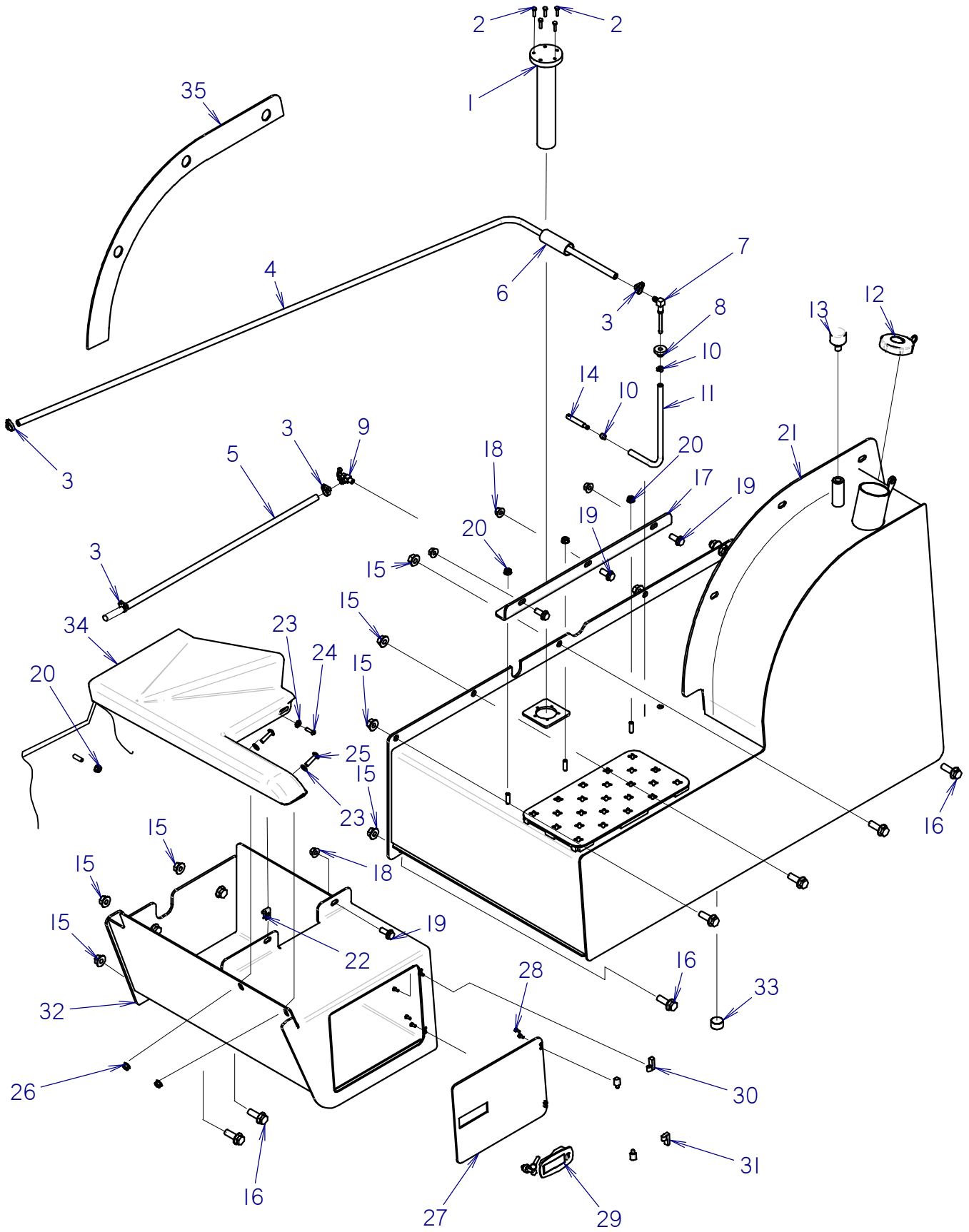
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FOOTNOTES:

NOTE:

FUEL TANK

BEGINS WITH S/N CMWHT115 P60000014



FUEL TANK

BEGINS WITH S/N CMWHT115 P60000014

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	214-985	1	FUEL SENDER	
2	106-506	5	BOLT (#10-24 X 3/4")	
3	110-528	4	SNAP-ON CLAMP (.531" TO .593")	
4	116-108	1	BULK HOSE (5/16", SOLD PER 1")	USE 1 @ 53"
5	116-108	1	BULK HOSE (5/16", SOLD PER 1")	USE 1 @ 83"
6	117-671	1	ABRASION SLEEVE (1" X 12")	
7	156-269	1	S/O COUPLER (04H-05H90)	
8	116-325	1	GROMMET (.362")	
9	156-239	1	S/O SHUT-OFF (02N-05H90)	
10	110-563	2	SPRING CLAMP (3/8")	
11	118-096	1	BULK FUEL TUBING (1/4",PER FT)	USE 1 @ 12"
12	111-046	1	LOCKING CAP (NON-VENTED)	
13	111-021	1	BREATHER CAP (TANK)	
14	194-505	1	FUEL PICKUP	
15	106-709	14	FLG LK NUT (M12-1.75)	
16	106-632	14	FLG LK SCR (M12-1.75X35MM,SER)	
17	300-1384	1	FLANGE	
18	106-387	4	FLG LOCKNUT (M10-1.50)	
19	106-724	4	FLG SCREW (M10-1.50 X 25MM)	
20	105-003	4	FLG LOCKNUT (5/16-NC)	ATTACHES COVER TO STUD ON FRAME
21	300-1401	1	FUEL TANK WELDMENT	
22	106-574	1	CLIP NUT (M6-1.00)	
23	107-629	3	WASHER (M8)	
24	106-640	1	SCREW (M6-1.00 X 20MM,BUT SOC)	
25	107-778	2	SCREW (M8-1.25 X 30MM,BUT SOC)	
26	106-386	2	FLG LOCKNUT (M8-1.25)	
27	300-2689	1	TOOL BOX DOOR	
28	105-650	8	SCREW (M4-0.70 X 10MM)	
29	117-558	1	LATCH, ADJUST LEVER (LOCKING)	
30	111-052	1	HINGE	
31	111-051	1	HINGE	
32	300-1390	1	TOOL BOX	
33	115-152	1	PLUG (12N, SQ FM)	
34	313-911	1	LEFT AIR DEFLECTOR	
35	300-2186	1	SPACER	REFER TO FOOTNOTE 1

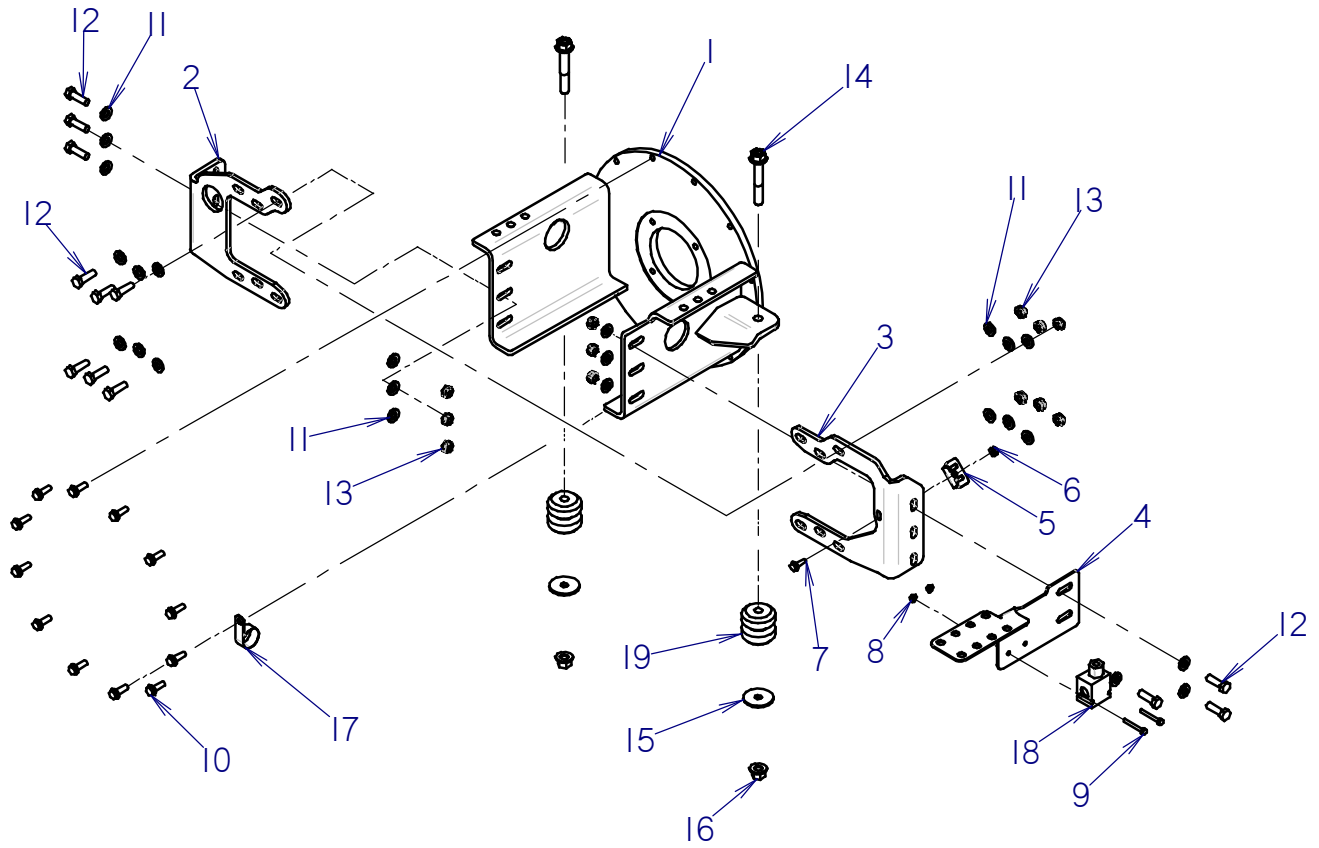
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FOOTNOTES:

1. SPACER (300-2186) IS USED "AS REQUIRED" DURING ASSEMBLY TO ADJUST THE SPACE BETWEEN THE TANK AND THE PLASTIC FENDER.

NOTE:

REAR ENGINE MOUNT



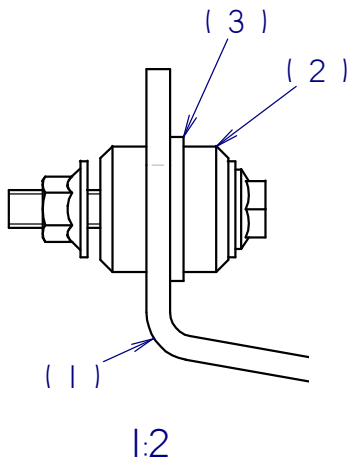
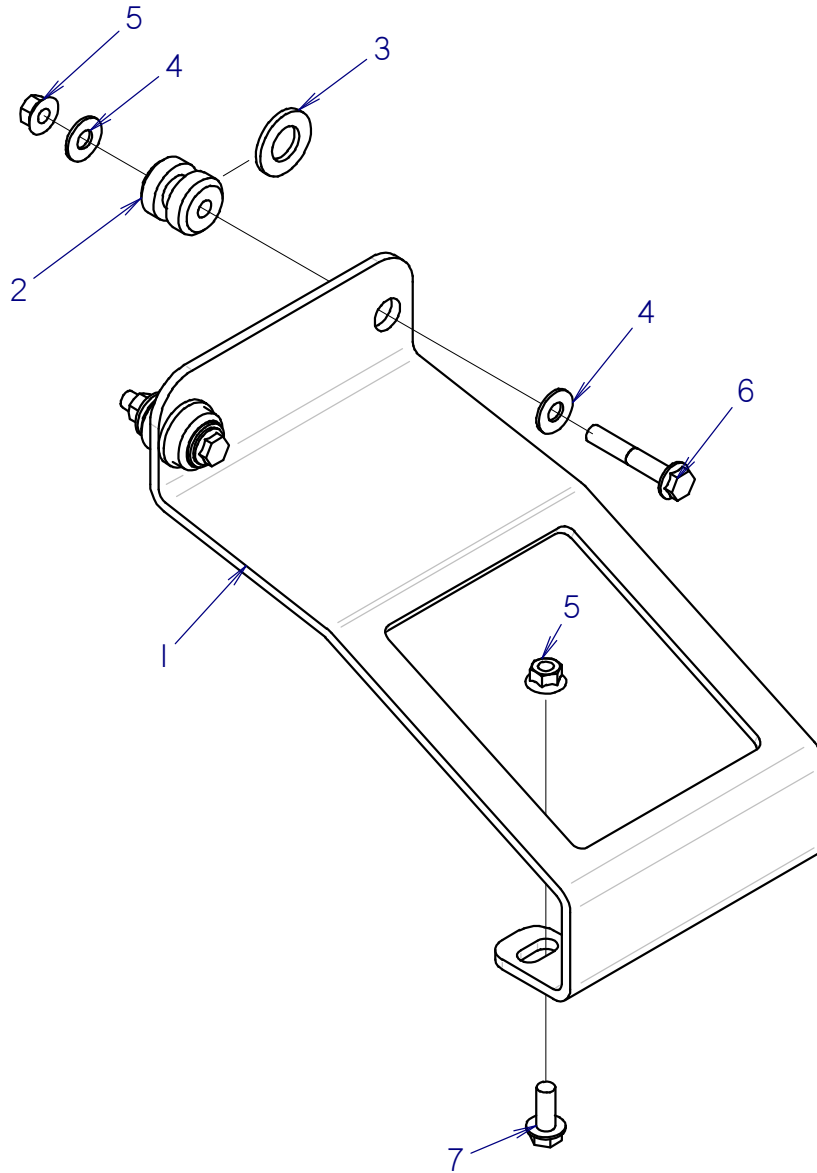
REAR ENGINE MOUNT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	323-401	1	REAR ENGINE MOUNT	
2	323-545	1	LEFT MOUNT FORK	
3	323-544	1	RIGHT MOUNT FORK	
4	323-891	1	RELIEF VALVE MOUNT	
5	323-970	1	ATTACHMENT BRACKET	
6	106-386	1	FLG LOCKNUT (M8-1.25)	
7	106-381	1	FLG LK SCREW (M8-1.25 X 25MM)	
8	106-385	2	FLG LOCKNUT (M6-1.00)	
9	107-025	2	SCREW (M6-1.00 X 50MM)	
10	106-383	12	FLG LK SCREW (M10-1.50 X 30MM)	
11	106-397	24	WASHER (M12, HARDENED)	
12	106-333	12	SCREW (M12-1.75 X 40MM, 8.8)	
13	106-031	12	LOCKNUT (M12-1.75, NLK)	
14	105-993	2	FLG BOLT (5/8-NC X 4")	
15	105-475	2	WASHER (1 1/2")	
16	105-994	2	FLG LOCKNUT (5/8-NC)	
17	110-332	1	BOLT-ON CLAMP (1-5/8")	
18	158-681	1	RELIEF VALVE (AUXILIARY)	
19	116-151	2	SHOCK MOUNT	

FOOTNOTES

NOTE:

RADIATOR MOUNT KIT HT/RT115



RADIATOR MOUNT KIT

HT/RT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	325-634	1	RADIATOR MOUNT	
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:

190-1081

RADIATOR MOUNT KIT

INCLUDES REF 1 THRU 7

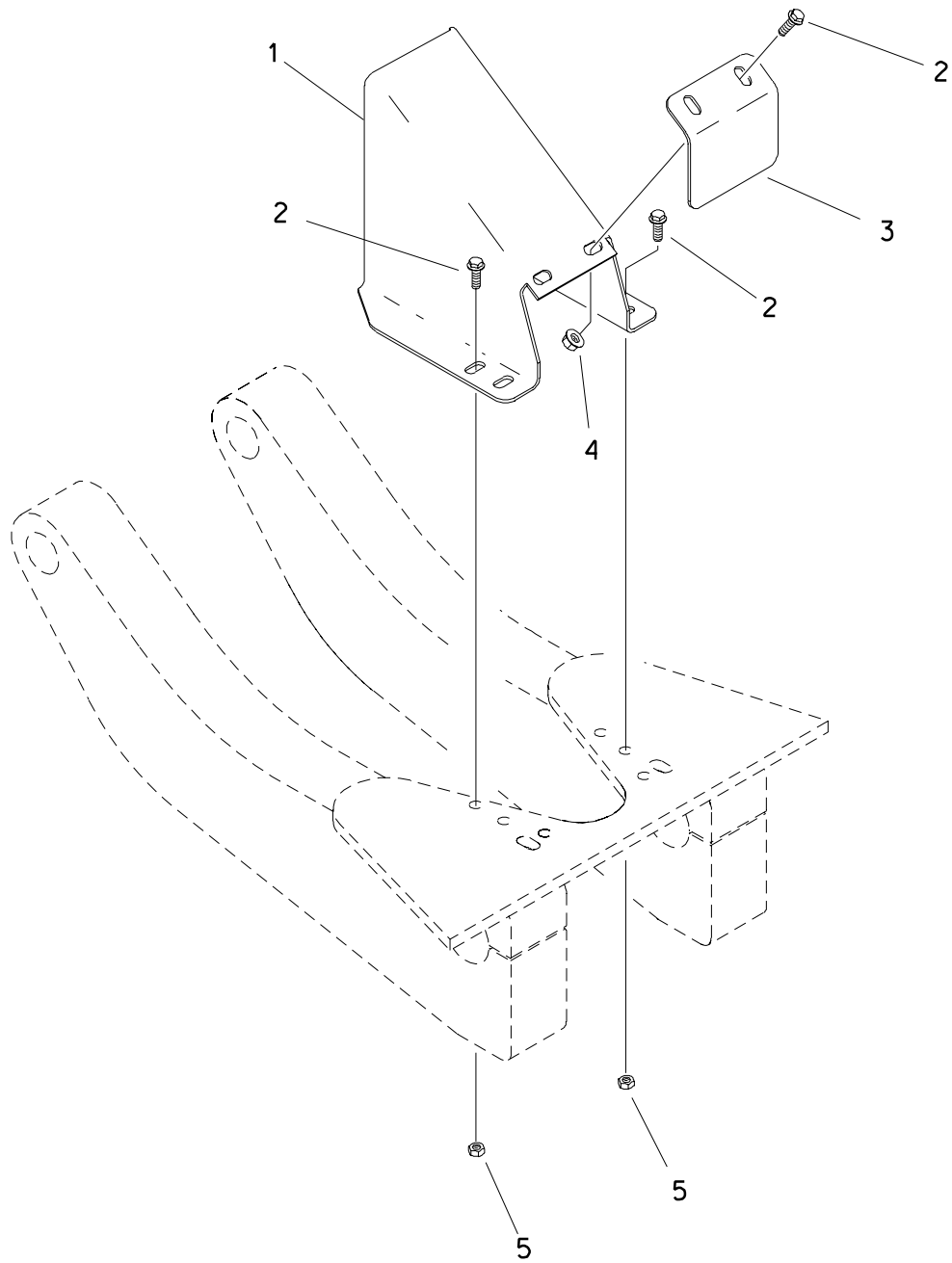
FOOTNOTES:

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

NOTE:

FRAME COMPONENTS

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)	

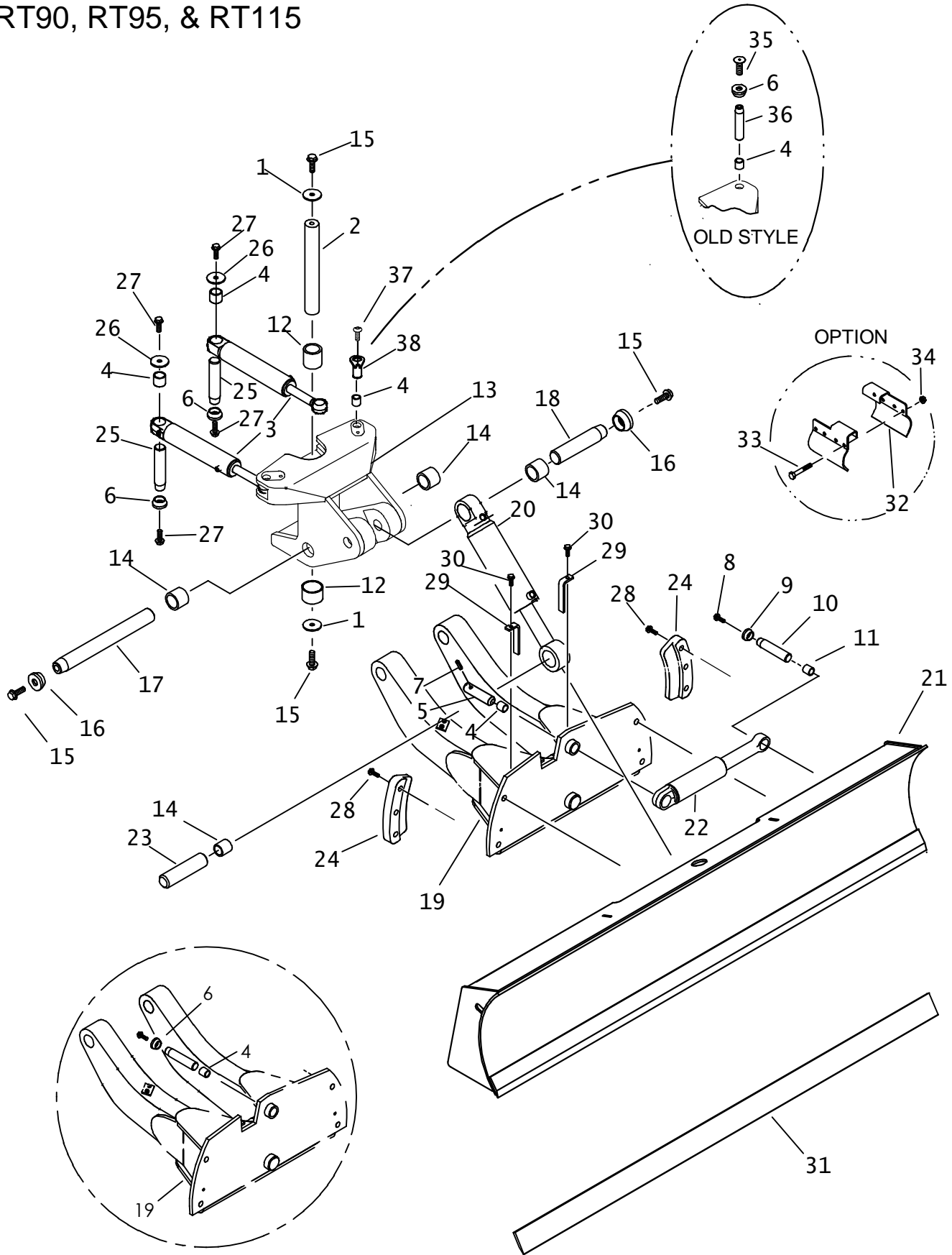
NOTE

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.

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:

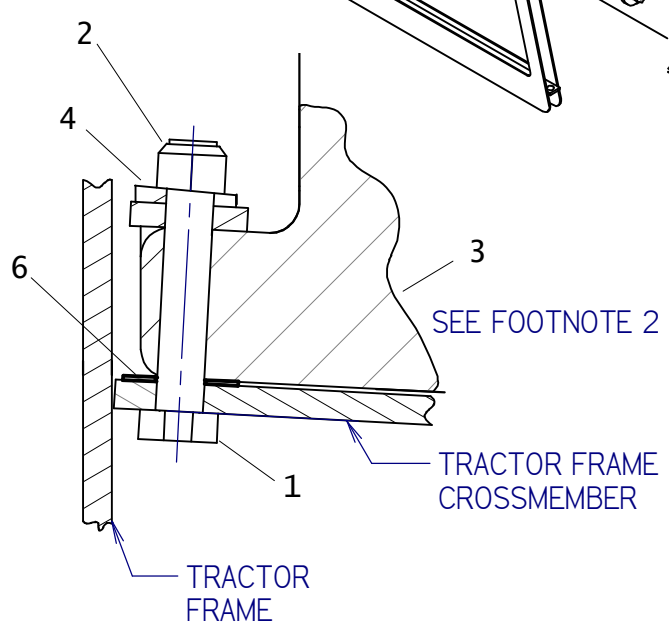
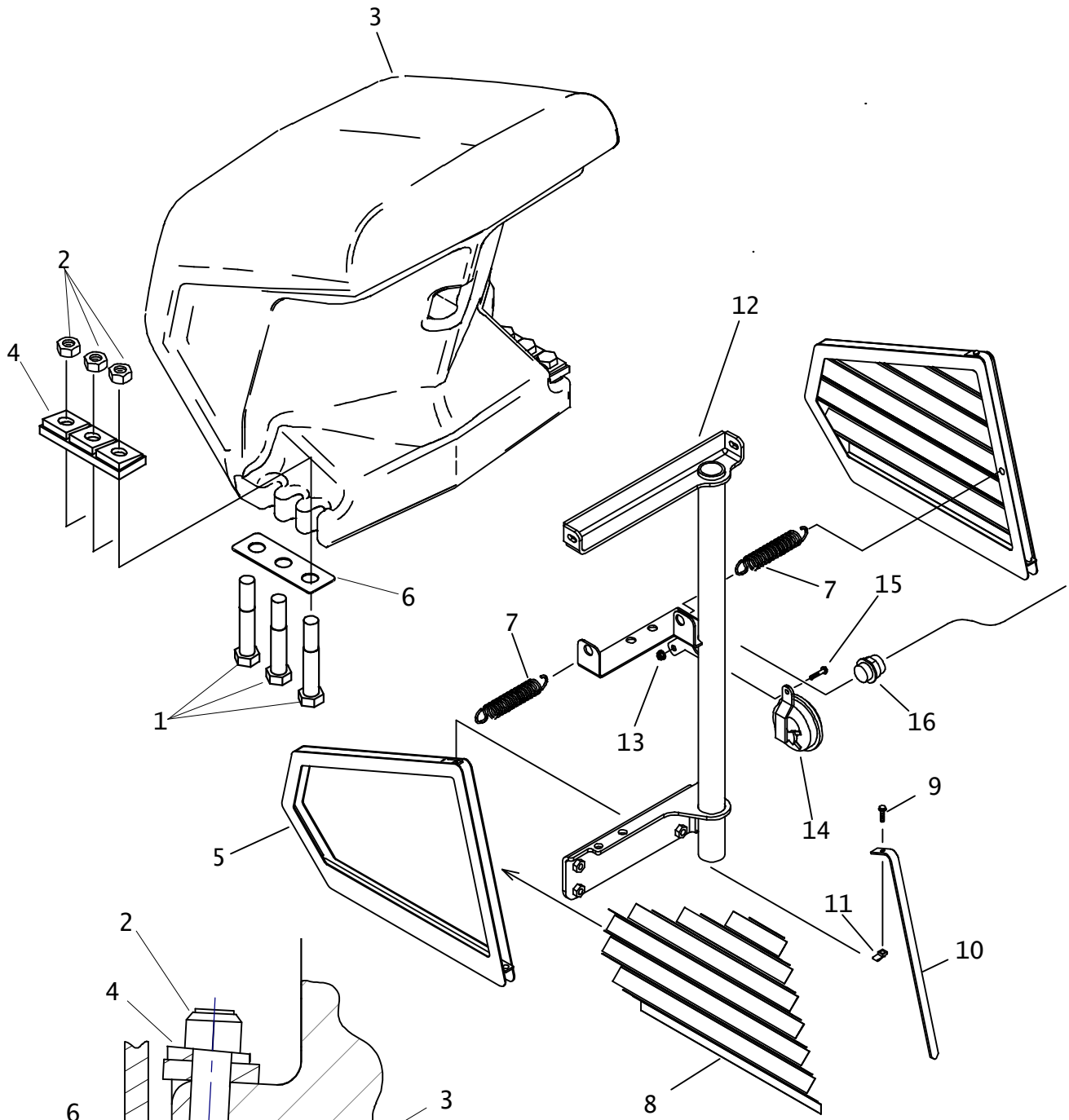
FOOTNOTES:

- 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:

COUNTERWEIGHT / GRILLE

ENDS WITH SERIAL NUMBER (SEE NOTES)



COUNTERWEIGHT / GRILLE

ENDS WITH SERAIL 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.	320-729	-	FRONT HOOD SUPPORT	
13.	106-385	1	FLG LOCKNUT (M6-1.00)	
14.	306-609	1	HIGH FREQUENCY HORN	
15.	106-161	1	FLG SCREW (M6-1.00 X 20MM)	
16.	214-971	1	FRAME HARNESS	

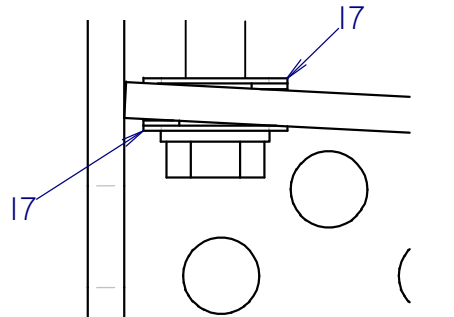
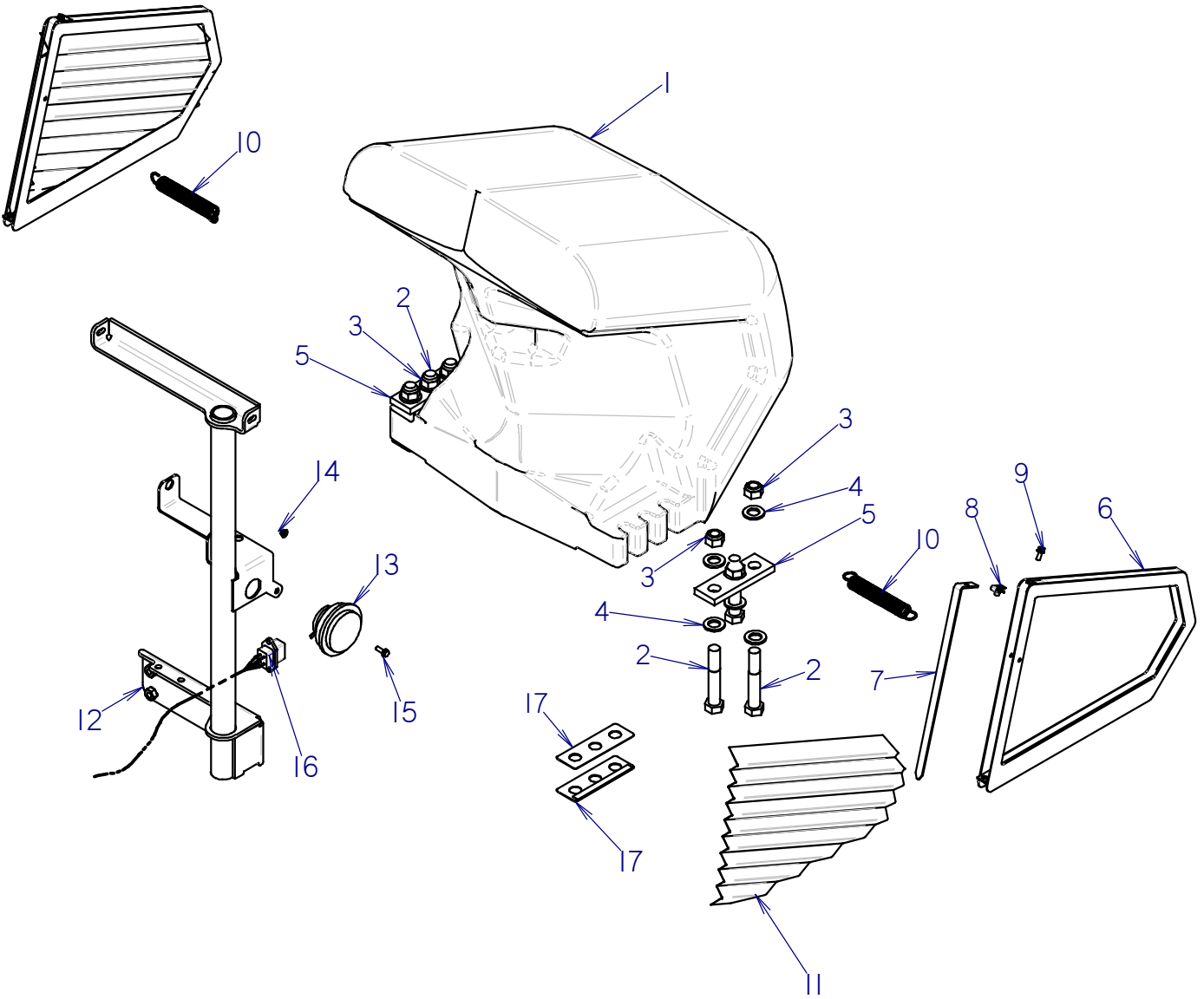
FOOTNOTES

- 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 INSTRUCTIONS 051-420.
- 4- 104-186, BOLT AND SHIM KIT, INCLUDES 1,2,4 & 6.

NOTE:

1. HT115 ENDS WITH S/N 5Z0675
2. RT115 ENDS WITH S/N 5Z0676

COUNTERWEIGHT/GRILLE BEGINS WITH S/N 5Z0677.



SEE FOOTNOTE 2

COUNTERWEIGHT/GRILLE BEGINS WITH S/N 5Z0677.

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	10	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	320-729	1	FRONT HOOD SUPPORT	
13	306-609	1	HIGH FREQUENCY HORN	
14	106-385	1	FLG LOCKNUT (M6-1.00)	
15	106-161	1	FLG SCREW (M6-1.00 X 20MM)	
16	214-971	1	FRAME HARNESS	
17	329-358	4	SHIM	SEE FOOTNOTE 2

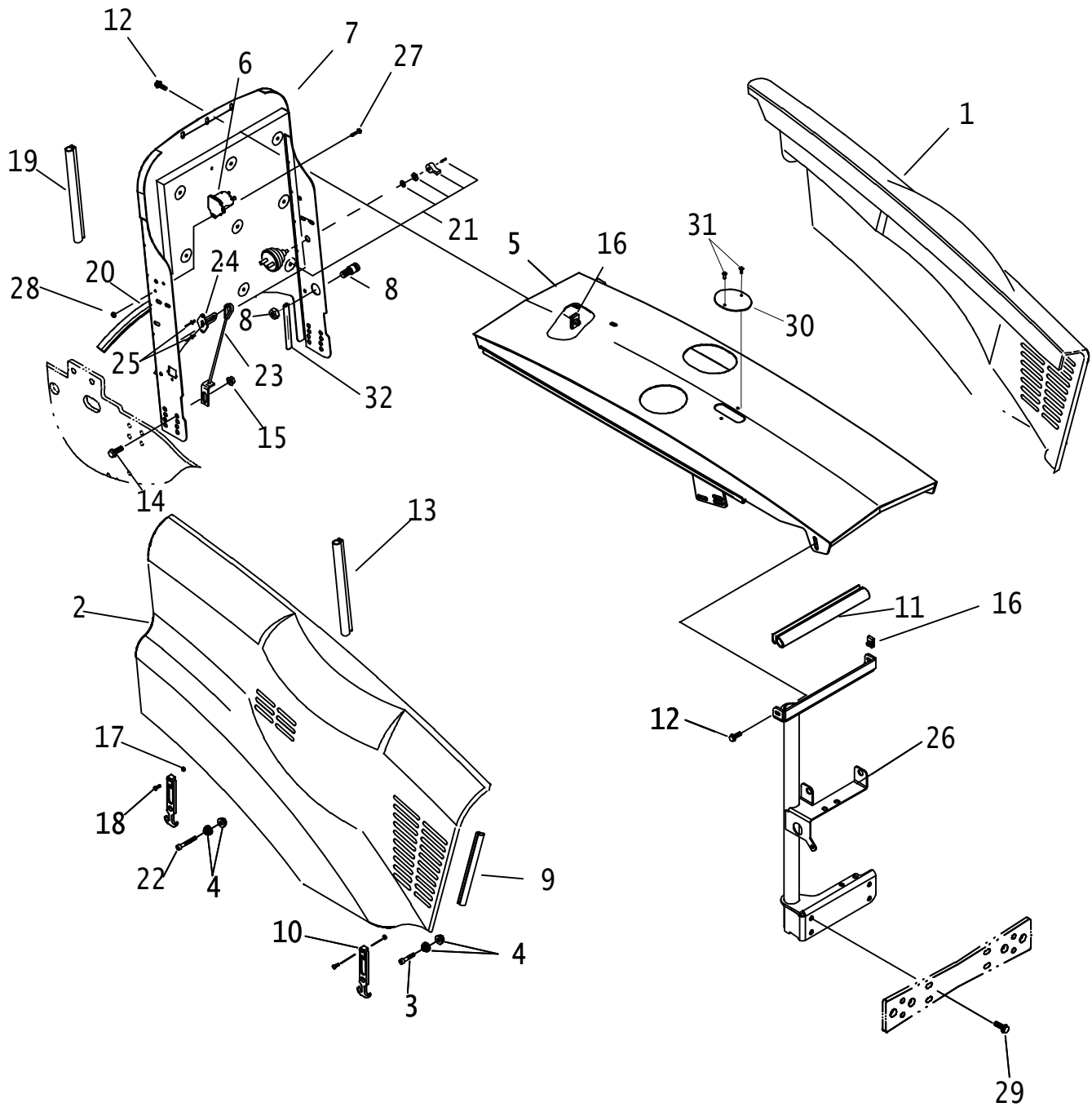
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FOOTNOTES

1. TORQUE BOLT TO 350 ft/lbs.
2. USE SHIMS (REF #17) WHEN MOUNTING NEW CAST NOSE (375-457) ONTO TRACTOR FRAME BEFORE S/N 5Z0676.
3. REFER TO NOSE CASTING INSTALLATION INSTRUCTIONS 051-420 FOR CORRECT TORQUE SEQUENCE.

NOTE

ENGINE ENCLOSURE



ENGINE ENCLOSURE

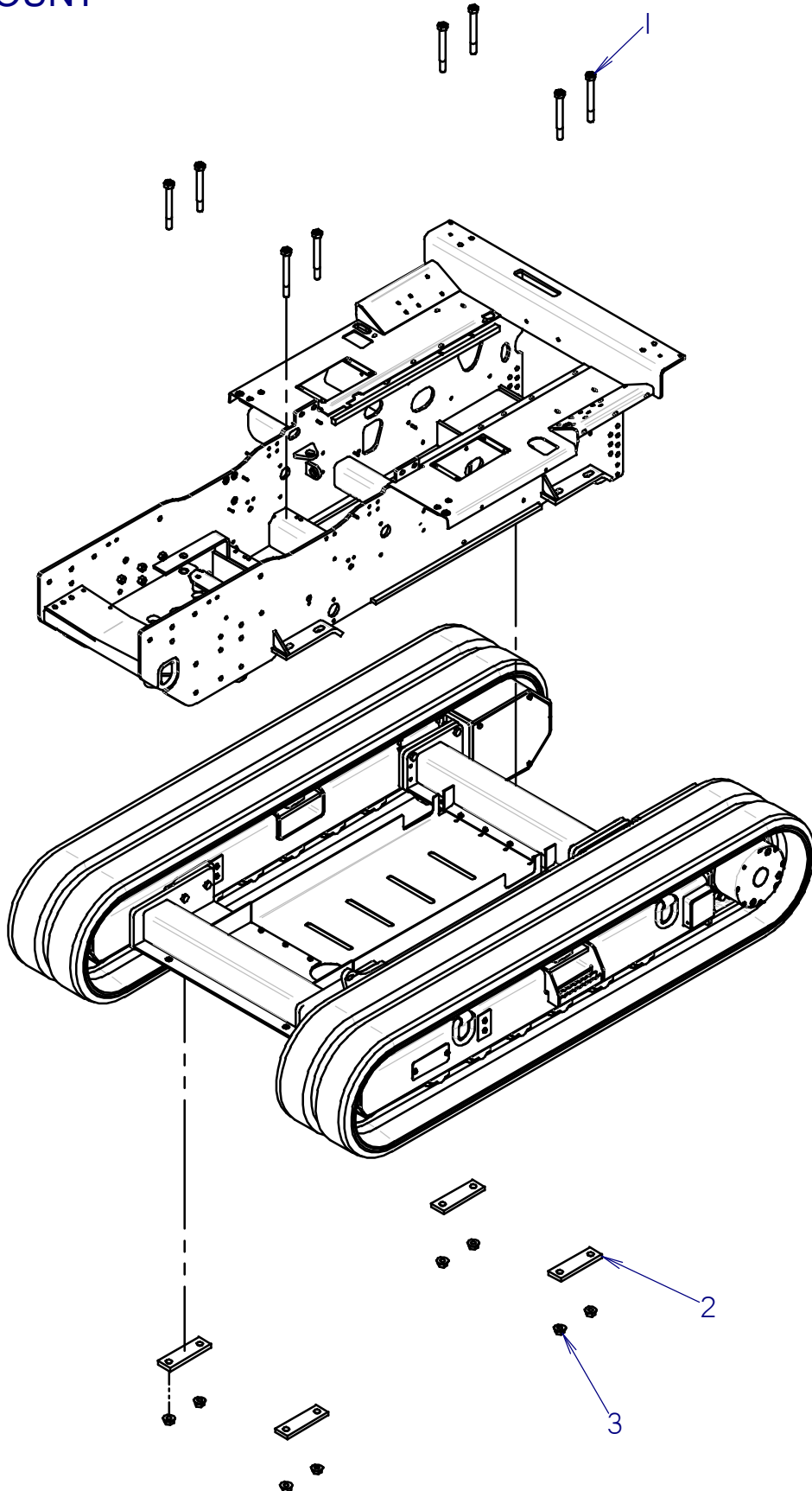
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-227		SIDE PANEL LOCK KIT	INCLUDES REF #'S 23,24 & 25.
1.	307-463	1	LEFT SIDE PANEL	
2.	320-738	1	RIGHT SIDE PANEL W/ AIR INTAKE	
3.	106-081	2	SCREW (M10-1.50 X	
4.	106-387	8	FLG LOCKNUT (M10-1.50)	
5.	319-808	1	MID HOOD	
6.	214-979	1	PREHEAT SOLENOID	
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.	320-729	1	FRONT HOOD SUPPORT	
27.	106-379	2	FLG LK SCREW (M6-1.00 X 20mm)	
28.	106-538	2	LOCKNUT (M6-1.00, PRV TRQ, 10.9)	
29.	105-831	4	FLG LK BOLT (1/2-NC X 1-1/2")	
30.	325-791	1	HOOD CAP	
31.	106-313	2	POP RIVET (1/8" X 3/8" ALUM)	
32.	115-686	2	BULK EDGE (5/32", SOLD PER 1')	5-1/2" EACH

NOT SHOWN:

FOOTNOTES:

NOTE:

FRAME MOUNT



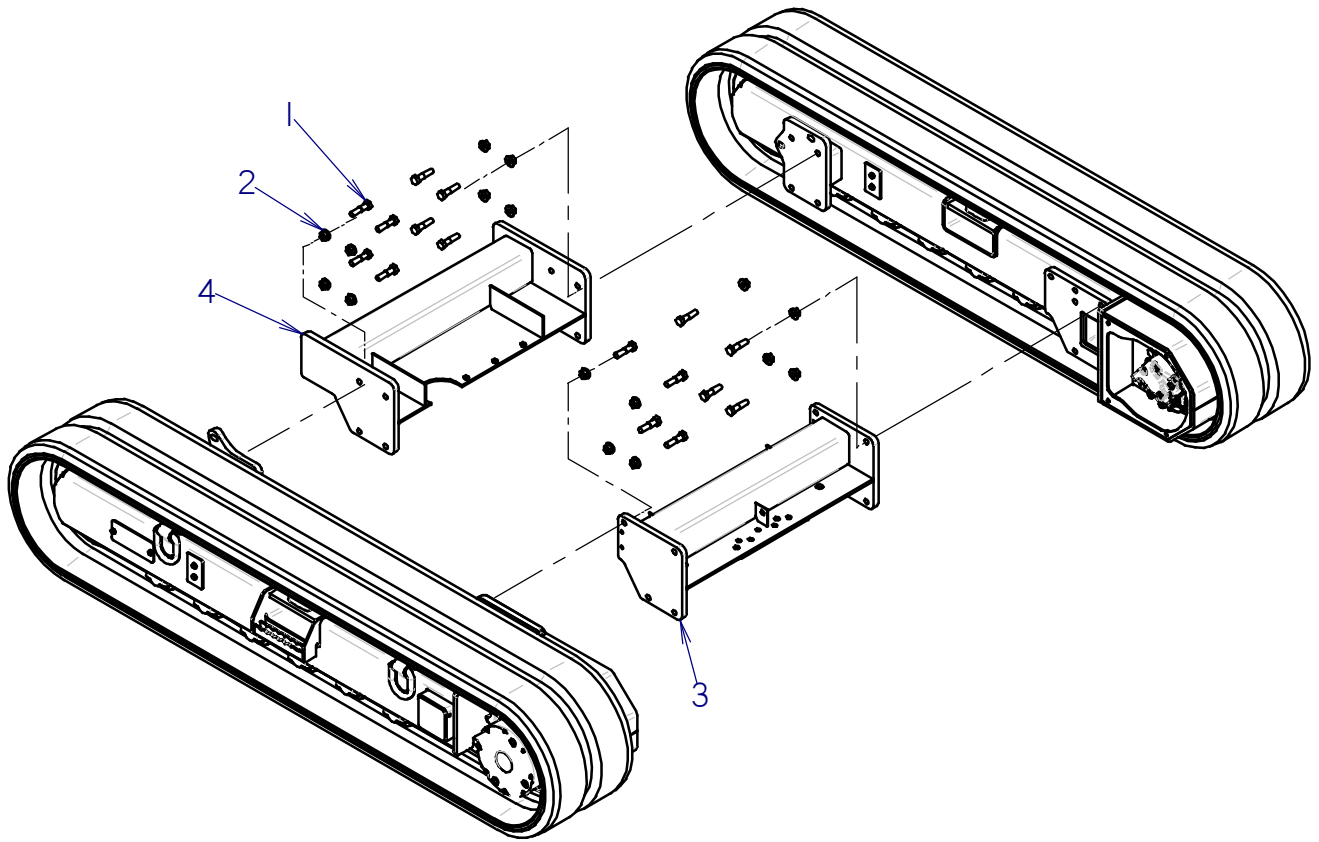
FRAME MOUNT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	105-973	8	BOLT (I-NC X 9")	
2	324-506	4	MOUNT BAR	
3	105-919	8	ID0011312.par	

FOOTNOTES

NOTE:

TRACK FRAME MOUNT



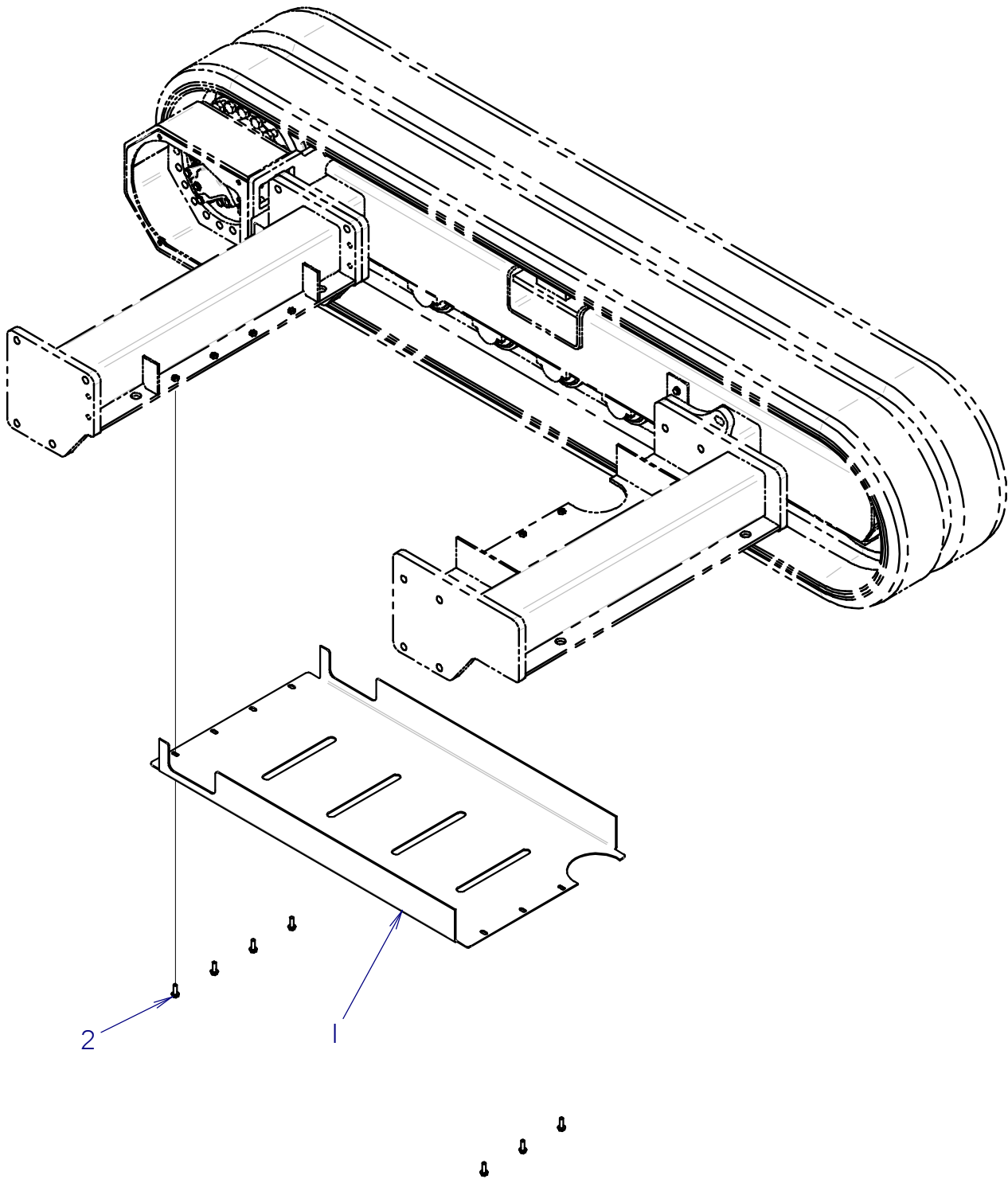
TRACK FRAME MOUNT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	107-127	16	SCREW (M20-2.50 X 80MM, 10.9)	
2	106-356	16	FLG NUT (M20-2.50, 10.9)	
3	323-498	1	REAR CROSSMEMBER	
4	323-499	1	FRONT CROSSMEMBER	

FOOTNOTES

NOTE:

SKID PLATE



SKID PLATE

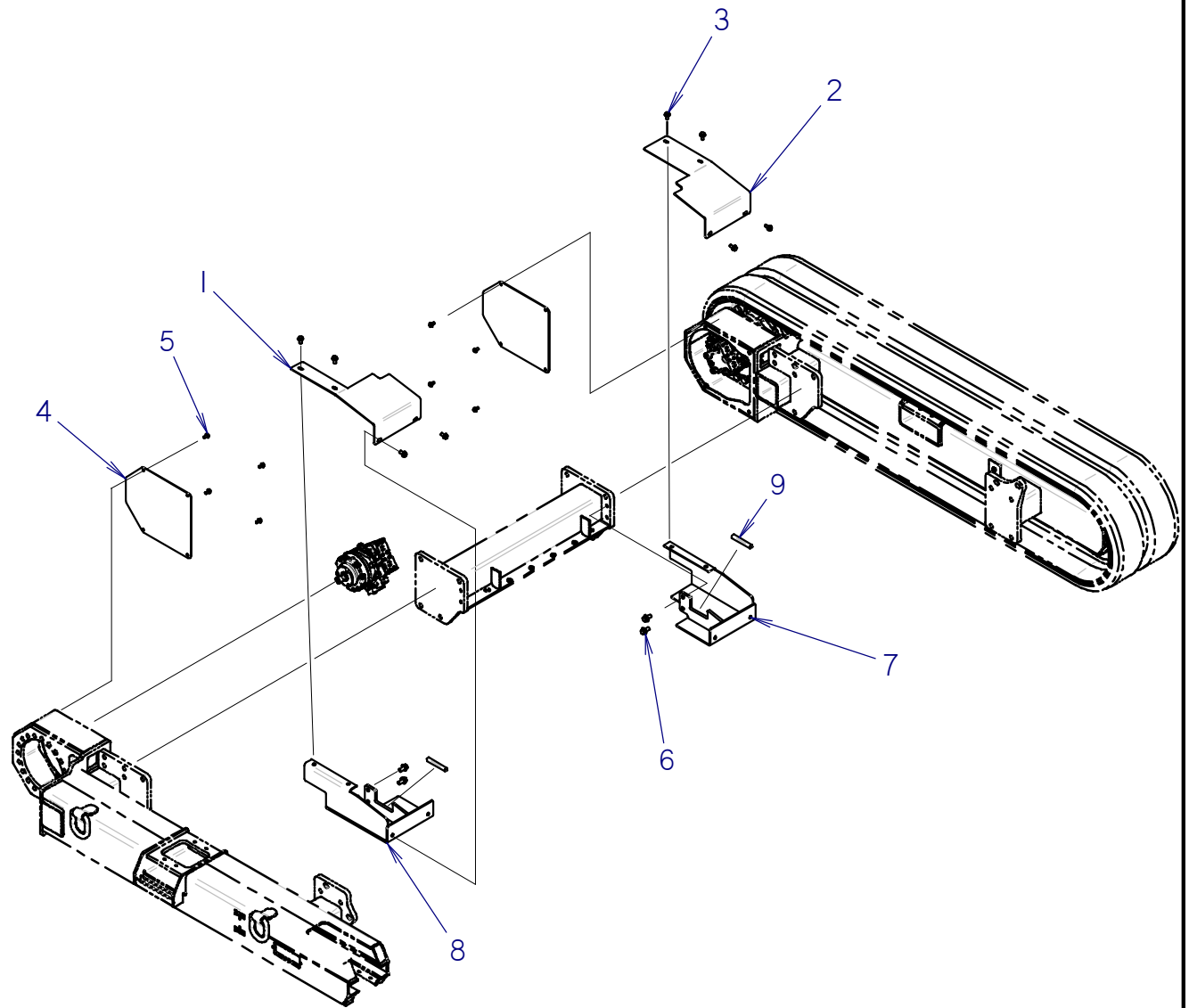
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	323-507	1	SKID PLATE	
2	106-164	7	FLG LK SCREW (M10-1.50 X 30MM)	

NOT SHOWN:

FOOTNOTES:

NOTE:

GROUND DRIVE HYDRAULIC MOUNT



GROUND DRIVE HYDRAULIC MOUNT

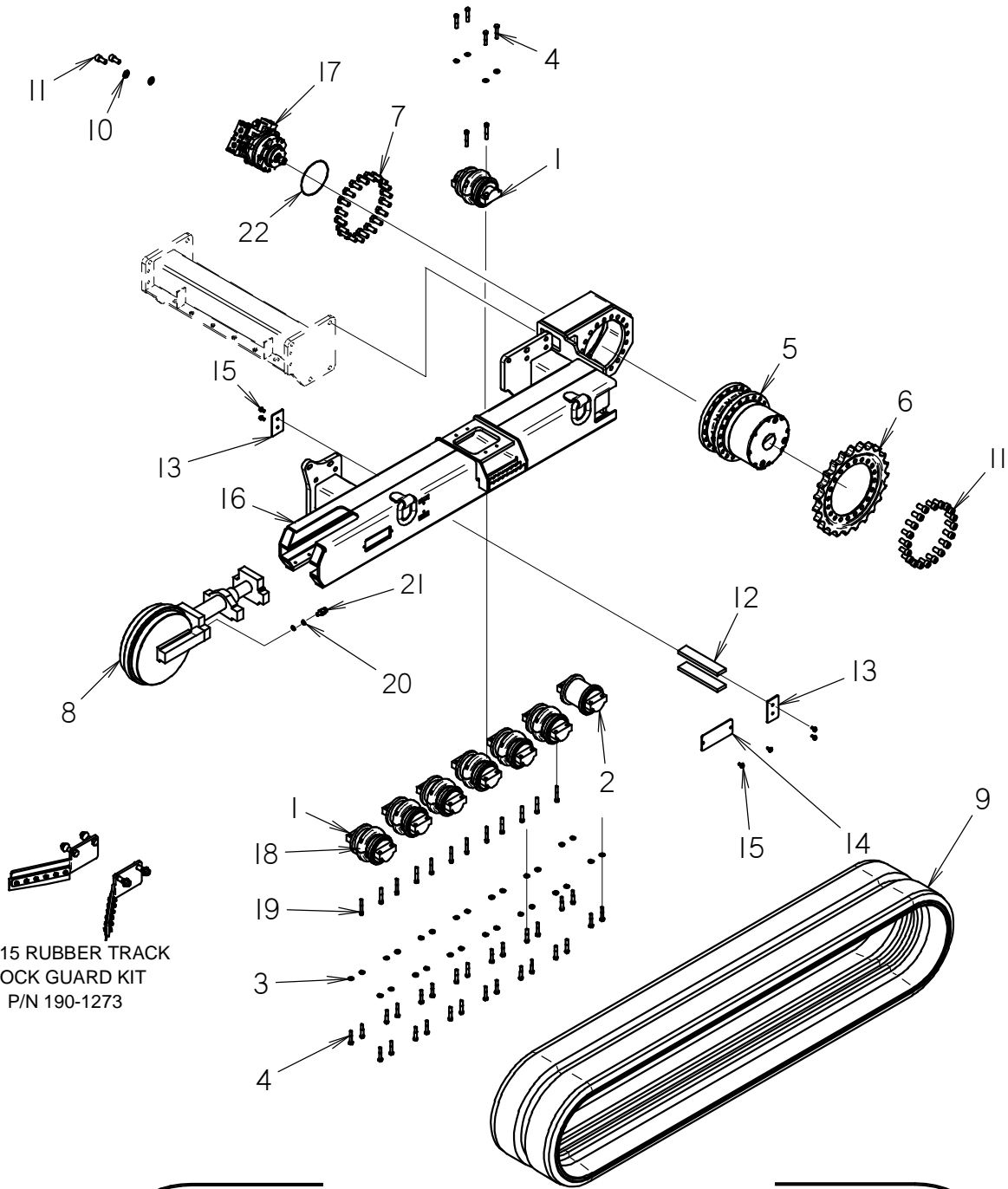
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	324-475	1	COVER	
2	324-476	1	COVER	
3	106-806	8	FLG LK SCREW (M12-1.75 X 25MM)	
4	323-504	2	COVER	
5	106-382	8	FLG LK SCREW (M10-1.50 X 20MM)	
6	106-471	4	FLG SCREW (M16-2.00 X 30MM)	
7	324-474	1	COVER MOUNT	
8	324-473	1	COVER MOUNT	
9	116-259	2	BULK EDGE (1/2", SOLD PER FT)	QTY 1-1/2 FEET, AND EACH PIECE IS 9" LONG

NOT SHOWN:

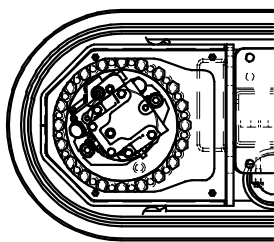
FOOTNOTES:

NOTE:

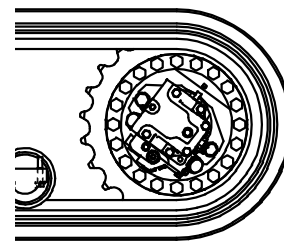
TRACK GROUP (RUBBER)



HT115 RUBBER TRACK
ROCK GUARD KIT
P/N 190-1273



LEFT MOTOR ORIENTATION DETAIL



RIGHT MOTOR ORIENTATION DETAIL

TRACK GROUP (RUBBER)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	324-956	7	TRACK ROLLER (MACHINED)	
2	324-955	1	TRACK ROLLER	
3	106-397	32	WASHER (M12, HARDENED)	
4	106-335	32	SCREW (M12-1.75 X 70MM)	USE LOCTITE 242 OR EQUIVALENT
5	166-535	1	GEARBOX & DRIVE PLANETARY	
6	141-770	1	SPROCKET, 23 TOOTH	
7	106-345	20	SCREW (M20-2.50 X 50MM)	USE LOCTITE 242 OR EQUIVALENT, SEE FOOTNOTE 4
8	324-960	1	IDLER	SEE FOOTNOTE 3, SPRING NOT SHOWN
9	349-004	1	RUBBER TRACK (450MM,88P,71MM)	
10	106-399	2	WASHER (M20, HARDENED)	
11	108-165	22	SCREW (M20-2.50 X 40MM, SOC)	TORQUE TO 500 FT-LBS, USE LOCTITE 242 OR EQU & SEE FOOTNOTE 4
12	324-574	2	RECOIL STOP BAR	SEE FOOTNOTE 2
13	349-324	2	COVER	
14	349-330	1	COVER	
15	106-382	6	FLG LK SCREW (M10-1.50 X 20MM)	
16	323-472	1	LEFT ROLLER FRAME	323-473 RIGHT ROLLER FRAME
17	159-722	1	HYDRAULIC MOTOR	
18	349-949	7	BELT RETAINER	
19	106-117	14	SCREW (M12-1.75 X 80MM, SOC)	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 95 FT-LBS
20	500-1342	2	SEAL	SEE FOOTNOTE 5
21	500-1343	1	LUBRICANT NIPPLE	SEE FOOTNOTE 5
22	500-1361	1	O-RING	SEE FOOTNOTE 6

NOT SHOWN:

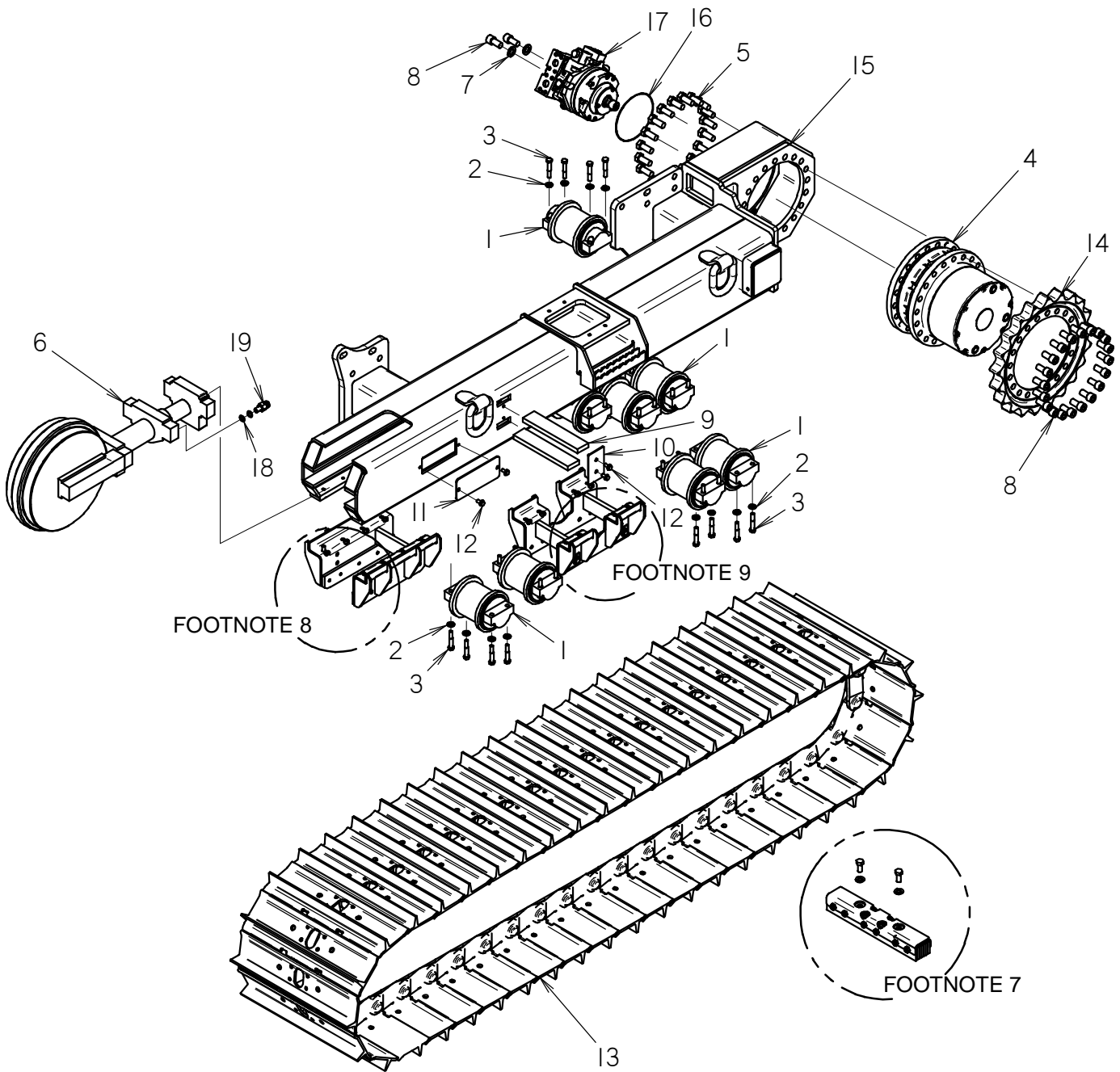
FOOTNOTES:

1. USE 115-258 (COUPLER) FOR TRACK TENSION ADJUSTMENTS, INCLUDED IN SHIP KIT.
2. COMPRESS IDLER SPRING UNTIL RECOIL STOP BAR ARE ABLE TO BE INSERTED IN WINDOW ON TRACK FRAME.
3. SERVICE PARTS: 115-023 SEAL WASHER (M17); 115-022 VALVE ZERK (M16-1.50)
4. THE CHANGING OF SCREW QUANTITIES ENDS WITH S/N 5Z0334 & BEGINS WITH S/N 5Z0443.
5. REF. #20, AND #21 ARE PART OF A SERVICE KIT #190-1192 FOR FRONT IDLER.
6. SERVICE PART ONLY. THE O-RING IS ALREADY ON NEW MOTORS, AND IT IS ALSO INCLUDED IN KIT #500-577.

NOTE:

1. TO REDUCE TRACK TENSION, RELEASE GREASE FROM CYLINDER BY LOOSENING FITTING WITH 1 1/16 INCH (27MM) WRENCH

TRACK GROUP (STEEL)



TRACK GROUP (STEEL)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	324-955	8	TRACK ROLLER	
2	106-397	48	WASHER (M12, HARDENED)	
3	106-335	32	SCREW (M12-1.75 X 70MM)	USE LOCTITE 242 OR EQUIVALENT
4	166-535	1	GEARBOX & DRIVE PLANETARY	
5	106-345	20	SCREW (M20-2.50 X 50MM)	USE LOCTITE 242 OR EQUIVALENT, SEE FOOTNOTE 4
6	324-960	1	IDLER	SEE FOOTNOTE 3, SPRING NOT SHOWN
7	106-399	2	WASHER (M20, HARDENED)	
8	108-165	22	SCREW (M20-2.50 X 40MM, SOCI)	TORQUE TO 500 FT-LBS, USE LOCTITE 242 OR EQU & SEE FOOTNOTE 4
9	323-505	2	RECOIL STOP BAR	
10	349-324	1	COVER	
11	349-330	1	COVER	
12	106-382	4	FLG LK SCREW (M10-1.50 X 20MM)	
13	305-869	1	STEEL TRACK 600mm	
14	141-769	1	SPROCKET (5.515" A2I)	
15	323-472	1	LEFT ROLLER FRAME	323-473 RIGHT ROLLER FRAME
16	500-1361	1	O-RING	
17	159-722	1	HYDRAULIC MOTOR	SEE FOOTNOTE 6
18	500-1342	2	SEAL	SEE FOOTNOTE 5
19	500-1343	1	LUBRICANT NIPPLE	SEE FOOTNOTE 5

FOOTNOTES:

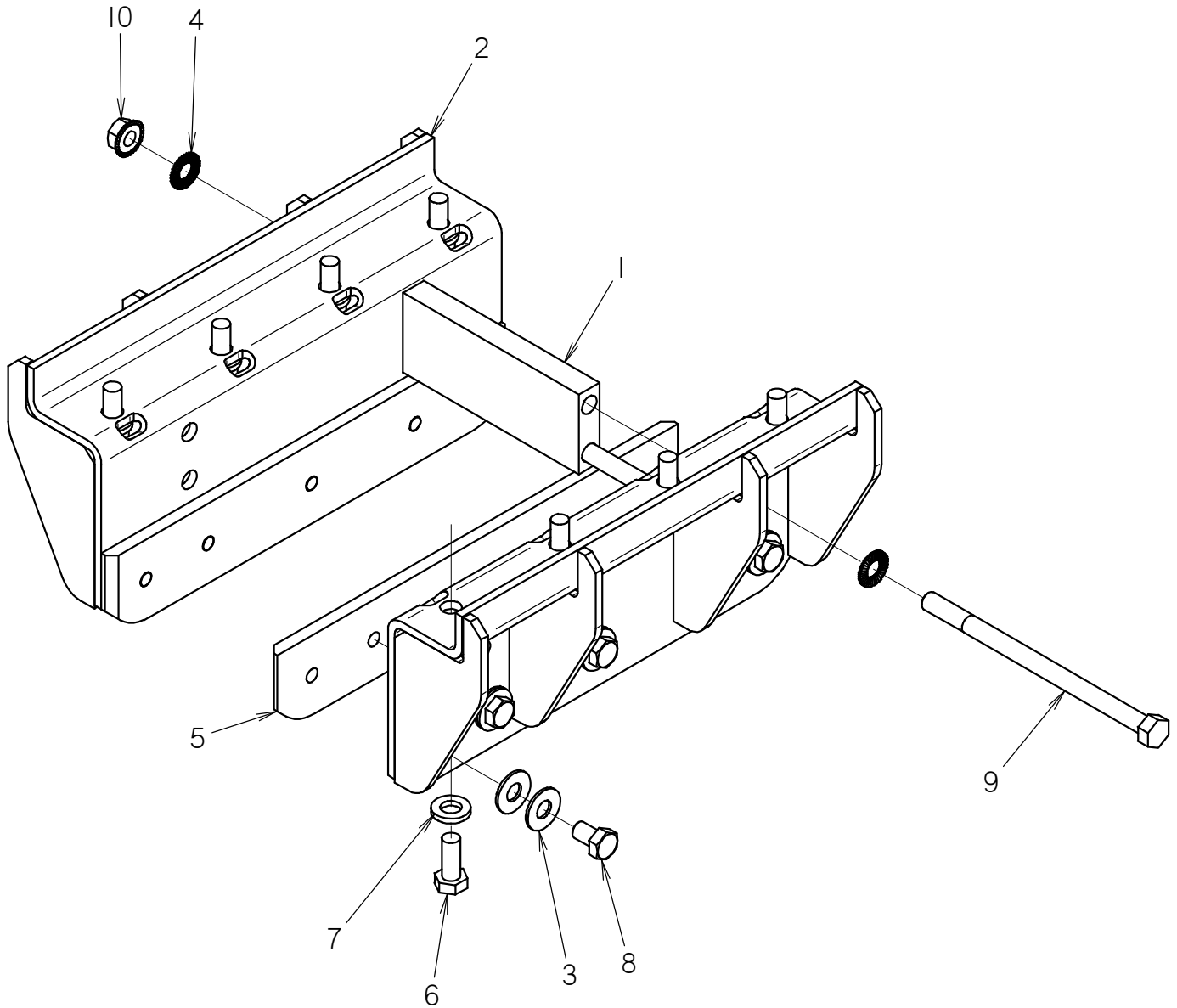
1. USE 115-258 (COUPLER) FOR TRACK TENSION ADJUSTMENTS, INCLUDED IN SHIP KIT.
2. COMPRESS IDLER SPRING UNTIL RECOIL STOP BAR ARE ABLE TO BE INSERTED IN WINDOW ON TRACK FRAME.
3. SERVICE PARTS: 115-023 SEAL WASHER KIT (M17); 115-022 VALVE ZERK (M16-1.50)
4. THE CHANGING OF SCREW QUANTITIES ENDS WITH S/N 5Z0334 & BEGINS WITH S/N 5Z0443.
5. REF #24, AND #25 ARE PART OF A SERVICE KIT #190-1192 FOR FRONT IDLER.
6. SERVICE PART ONLY. THE O-RING IS ALREADY ON NEW MOTORS, AND IT IS ALSO INCLUDED IN KIT #500-577.
7. STREET PAD KIT 191-402 INCLUDES 176X BOLT 105-302, 176X LOCK WASHER 105-385 & 88X RUBBER GROUSER PAD 118-291.
8. REFER TO "FRONT TRACK GUIDE" ID0181271 FOR MORE INFORMATION & HARDWARE LISTING FOR INSTALLING FRONT TRACK GUIDES.
9. REFER TO "MIDDLE TRACK GUIDE" ID0181272 FOR MORE INFORMATION & HARDWARE LISTING FOR INSTALLING MIDDLE TRACK GUIDES.

NOTE:

1. TO REDUCE TRACK TENSION, RELEASE GREASE FROM CYLINDER BY LOOSENING FITTING WITH 1/16 INCH (27 MM) WRENCH

FRONT TRACK GUIDE

HT115



FRONT TRACK GUIDE

HT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	300-4860	1	GUIDE BRACE	
2	300-4861	2	FRONT GUIDE	
3	105-794	8	WASHER (M12)	
4	105-159	2	CAM WASHER (1/2")	
5	300-4859	2	GUIDE WEAR BAR	
6	105-273	8	SCREW (M12-1.75 X 30MM)	TORQUE 72 FT-LB. SEE FOOTNOTE #1
7	106-397	5	WASHER (M12, HARDENED)	
8	107-521	8	SCREW (M12-1.75 X 20MM)	SEE FOOTNOTE #1
9	105-1177	2	BOLT (1/2-UNC X 8.0" GR. 8)	
10	105-833	1	FLG LOCKNUT (1/2-NC)	TORQUR NUT 180 FT-LBS. SEE FOOTNOTE #2

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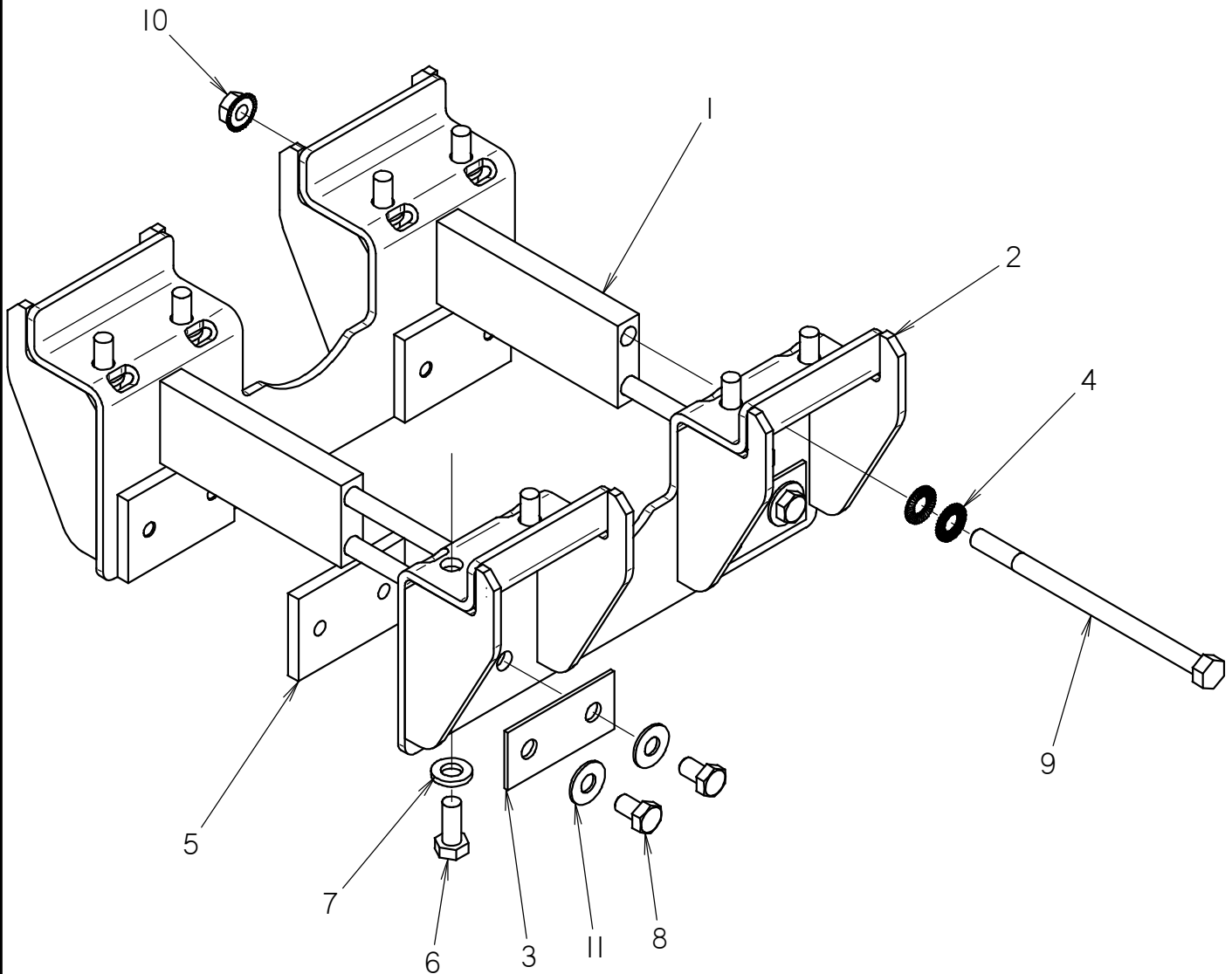
FOOTNOTES:

1. APPLY LOCTITE 242 OR EQUIVALENT.
2. APPLY LOCTITE 262 OR EQUIVALENT

NOTE:

MIDDLE TRACK GUIDE

HT115



MIDDLE TRACK GUIDE

HT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	300-4860	2	GUIDE BRACE	
2	300-4862	2	MIDDLE GUIDE	
3	177-001	2	SPACER BAR	
4	105-159	4	CAM WASHER (1/2")	
5	324-991	3	WEAR BAR	
6	105-273	8	SCREW (M12-1.75 X 30MM)	TORQUE 72 FT-LBS / SEE FOOTNOTE #1
7	106-397	5	WASHER (M12, HARDENED)	
8	107-521	8	SCREW (M12-1.75 X 20MM)	SEE FOOTNOTE #1
9	105-1177	4	BOLT (1/2-UNC X 8.0" GR. 8)	
10	105-833	1	FLG LOCKNUT (1/2-NC)	TORQUE NUT 180 FT-LBS SEE FOOTNOTE #2
11	105-794	3	WASHER (M12)	

NOT SHOWN:

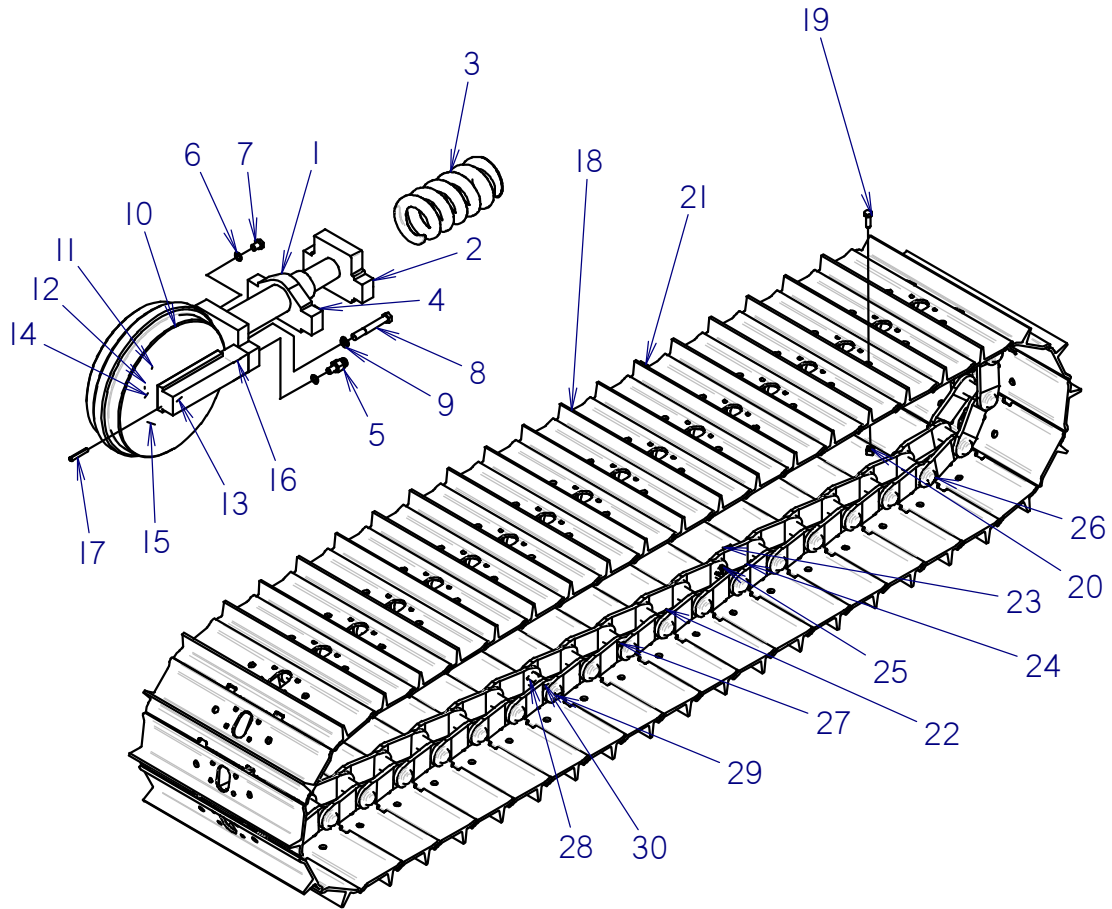
FOOTNOTES:

1. USE LOCTITE 242 OR EQUIVALENT
2. USE LOCTITE 262 OR EQUIVALENT

NOTE:

STEEL TRACK REPAIR PARTS

HT115



STEEL TRACK REPAIR PARTS

HT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	324-960	1	IDLER	INCLUDES ITEMS 2 THRU 17.
2	500-1526	1	TRACK SPRING PLATE	
3	500-1525	1	TRACK SPRING	
4	500-1524	1	TRACK TENSION GREASE CYLINDER	
5	500-1343	1	LUBRICANT NIPPLE	SEE FOOTNOTE I.
6	500-1342	2	SEAL	SEE FOOTNOTE I.
7	105-1242	1	SCREW (M16-1.5 X 20MM)	
8	106-614	2	SCREW (M16-2.00 X 120MM, 10.9)	
9	105-385	2	LOCK WASHER (5/8")	
10	500-1523	1	TRACK IDLER SHELL	
11	500-1522	2	TRACK IDLER BRONZE BUSHING	
12	500-1521	1	TRACK IDLER FILL/CHECK PLUG	
13	500-1520	1	TRACK IDLER SHAFT	
14	500-1519	2	TRACK IDLER RUBBER SEAL	
15	500-1518	2	TRACK IDLER FRICTION SEAL GROUP	
16	500-1517	2	TRACK IDLER SLIDING PLATE	
17	105-1243	2	ROLL PIN (10MM X 60MM)	
18	305-869	1	STEEL TRACK 600mm	INCLUDES ITEMS 19 THRU 22.
19	108-122	176	GROUSER SHOE SCREW	
20	108-123	176	GROUSER SHOE NUT	
21	500-1514	44	GROUSER SHOE	
22	500-1527	1	TRACK LINK ASSEMBLY	INCLUDES ITEMS 23 THRU 30.
23	500-1513	44	TRACK RH LINK	
24	500-1512	44	TRACK LH LINK	
25	500-1511	43	TRACK BUSHING	
26	370-505	43	TRACK PIN	
27	500-1510	86	TRACK PIN POLYURETHANE SEAL	
28	370-504	1	TRACK MASTER BUSHING	
29	370-506	1	TRACK MASTER PIN	
30	500-1507	2	TRACK MASTER BUSHING SPACER	

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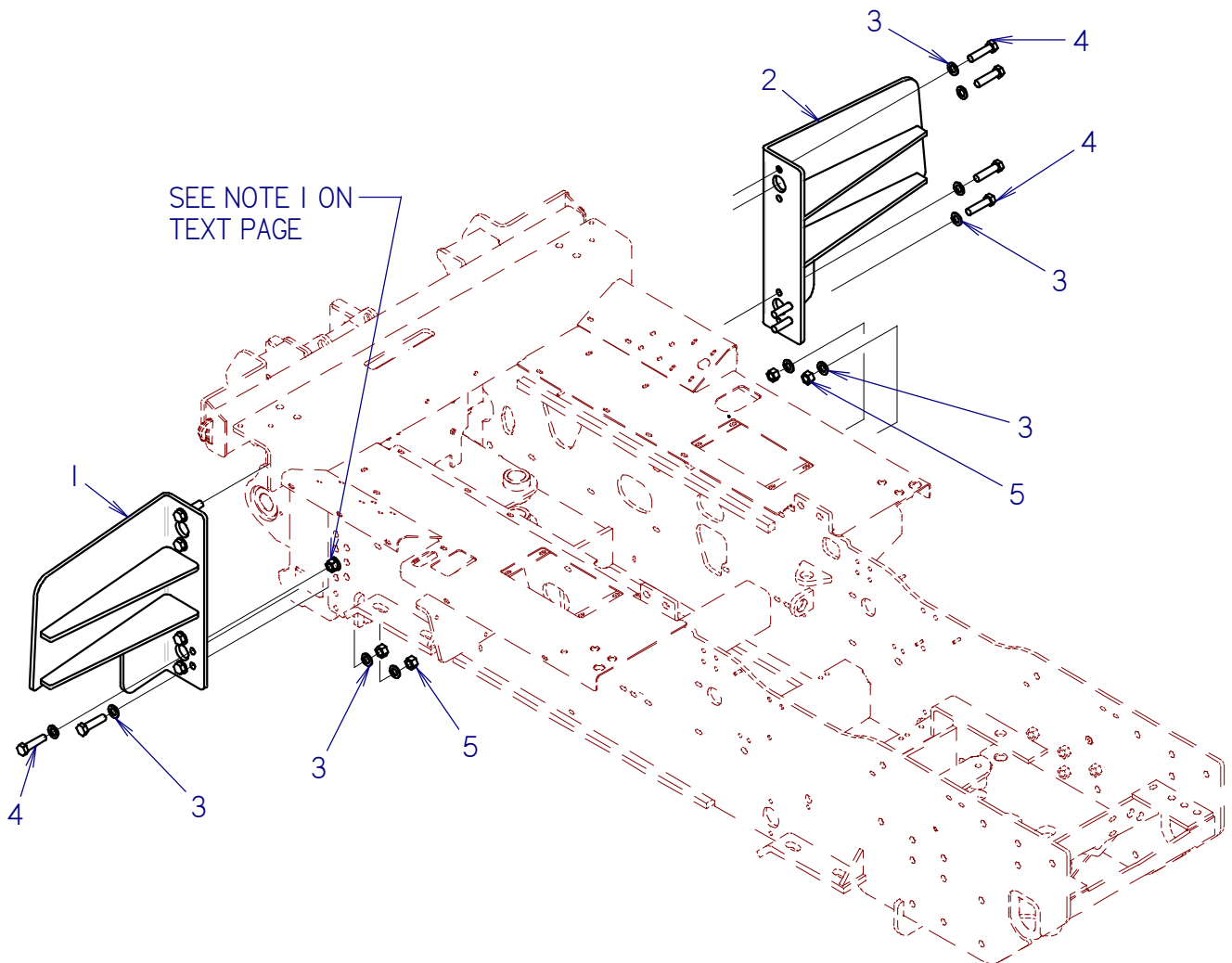
FOOTNOTES:

I. INCLUDED IN 190-1192, GREASE CYLINDER REPAIR KIT.

NOTE:

TRACK SCRAPER

HT115



TRACK SCRAPER

HT115

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	300-1750	1	SCRAPER RIGHT	REFER TO FOOTNOTE I
2	300-1751	1	SCRAPER LEFT	REFER TO FOOTNOTE I
3	106-399	24	WASHER (M20, HARDENED)	REFER TO FOOTNOTE I
4	105-625	12	SCREW (M20-2.50 X 80MM)	REFER TO FOOTNOTE I
5	106-374	12	HEX NUT (M20-2.50, 10.9) ZP	REFER TO FOOTNOTE I

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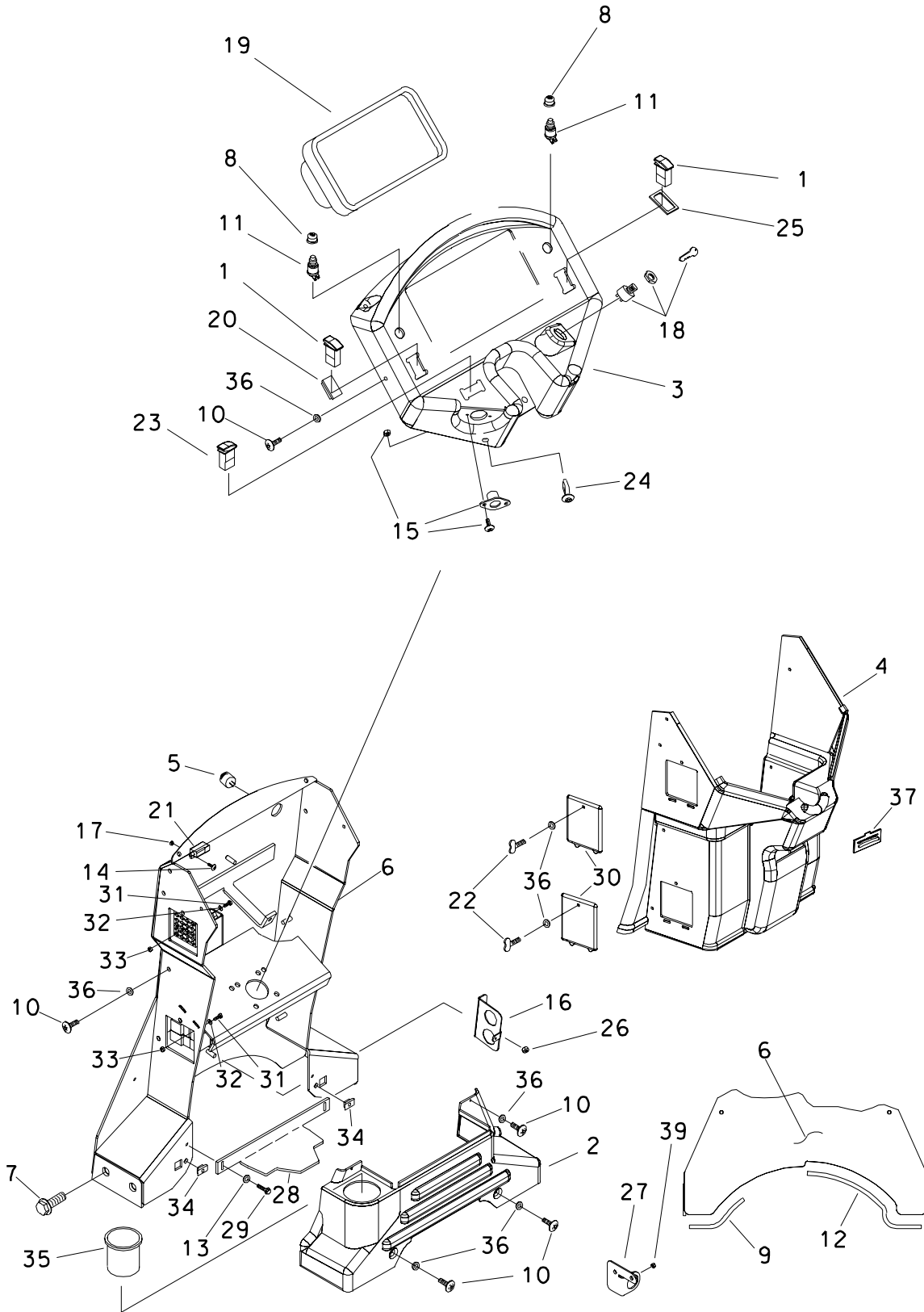
FOOTNOTES:

- I. SCRAPER KIT 190-1164 INCLUDES REF NUMBER 1 THRU 5.

NOTE:

- I. THE FOUR (4) BOLTS THAT ALIGN WITH THE CLEARANCE HOLES IN THE SCRAPERS "ARE NOT" TO BE REMOVED TO INSTALL THE SCRAPERS. LEAVE THEM TIGHT TO SECURE THE ATTACHMENT WHILE THE SCRAPERS ARE ATTACHED WITH THE BOLTS, NUTS & WASHERS THAT COME WITH KIT 190-1164.

CONSOLE



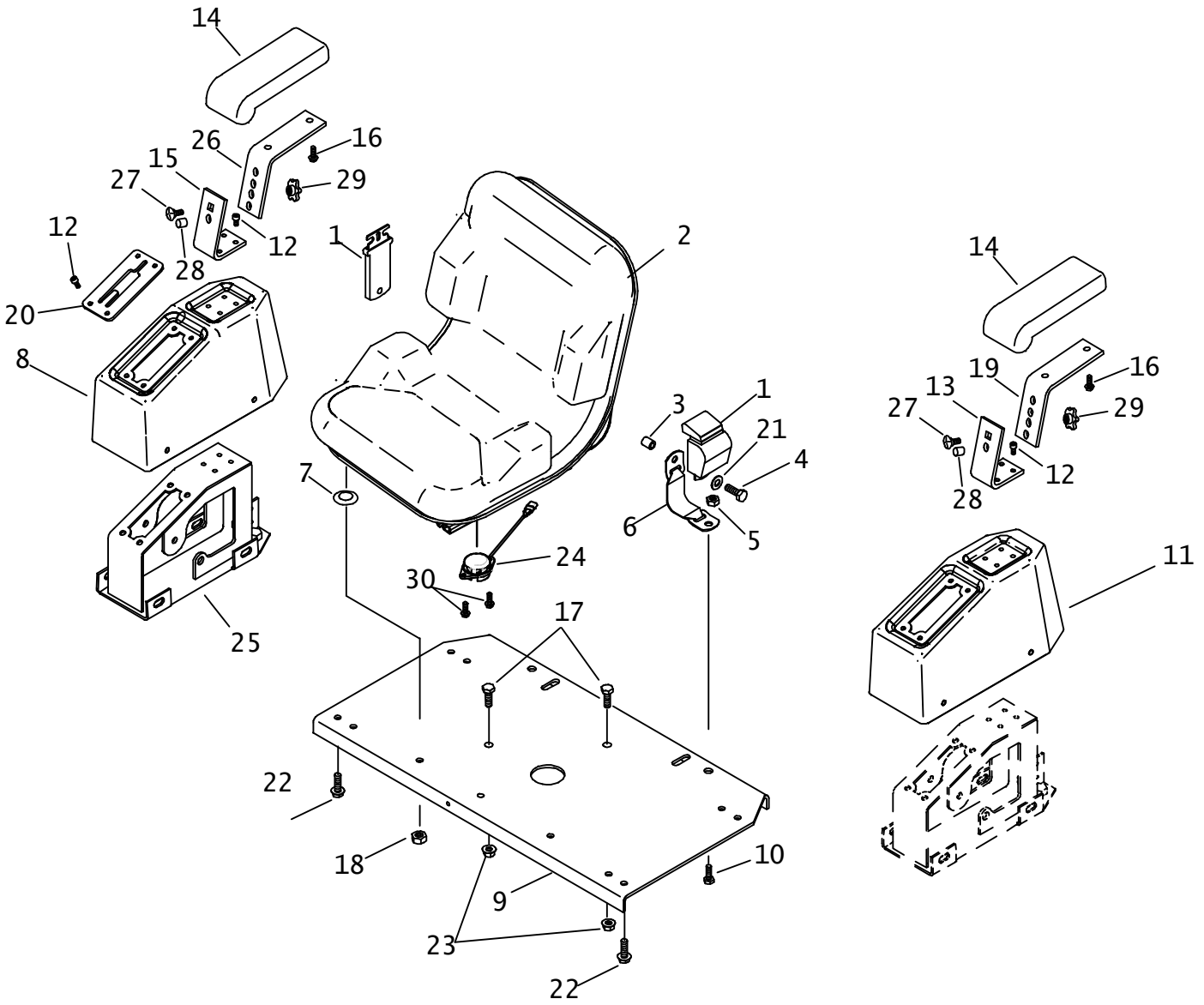
CONSOLE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	217-764	1	ROCKER SWITCH (SPDT)	QTY = 2 WITH REEL CARRIER OPTION
2.	318-557	1	CONSOLE BASE	
3.	324-383	1	MAIN CONSOLE	
4.	324-384	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	2	BUTTON COVER	
9.	115-686	13	BULK EDGE (5/32", SOLD PER 1")	
10.	107-312	14	SCREW (M6-1.00X25mm, BUT SOC)	
11.	306-607	2	HORN BUTTON	
12.	115-686	6	BULK EDGE (5/32", SOLD PER 1")	
13.	105-095	2	WASHER (1/4")	
14.	107-580	2	SCREW (M4-0.70 X 16mm, BUT SOC)	
15.	214-301	1	ACCESSORY SOCKET	
	105-185	2	BOLT (#10-24 X 1/2", RD SLT)	
	106-048	2	LOCKNUT (#10-24)	
16.	319-737	1	DEUTSCH BULKHEAD MOUNT	
17.	105-680	2	NUT (M4, W/LKWSHR)	
18.	214-852	1	IGNITION SWITCH	
19.	211-273	1	5-GAUGE CLUSTER	
20.	362-823	1	COVER	QTY = 0 WITH REEL CARRIER OPTION
21.	217-704	1	PLUNGER SWITCH	
22.	107-800	2	WING SCREW (M6-1 X 25mm)	
23.	217-762	1	ROCKER SWITCH (SPDT)	
24.	107-805	2	PLASTIC FASTENER	
25.	165-817	1	SWITCH GASKET	
26.	105-003	2	FLG LOCKNUT (5/16-NC)	
27.	319-849	1	BULKHEAD CONNECTOR MOUNT SHEET	SEE FOOTNOTE 1
28.	314-487	1	BRACE	
29.	106-987	2	FLG LK SCREW (M6-1.00 X 16mm)	
30.	318-560	2	ACCESS DOOR	
31.	107-280	9	SCREW (M5 X 14mm)	
32.	106-388	9	WASHER (M6)	
33.	106-850	9	LOCKNUT (M5-0.80)	
34.	106-574	2	CLIP NUT (M6-1.00)	
35.	308-888	1	CUP HOLDER	
36.	107-801	16	WASHER (M6)	
37.	110-208	1	LEVEL INDICATOR	

FOOTNOTES

1) MOUNT (1) TO FUEL TANK BOLT ON L/H SIDE

SEAT PLATFORM HT115



SEAT PLATFORM

HT115

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	
9.	314-594	1	SEAT BASE	
10.	105-273	2	SCREW (M12-1.75 X 30mm)	
11.	305-649	-	LEFT SEAT CONSOLE	
12.	107-312	20	SCREW (M6-1.00 X 25mm, BUT SOC)	
13.	324-662	1	LOWER ARMREST BRACKET	
14.	117-314	2	ARMREST	
15.	309-294	1	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.	324-661	1	UPPER ARMREST BRACKET	
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.	309-227	1	CONTROL LEVER FRAME	
26.	313-707	1	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

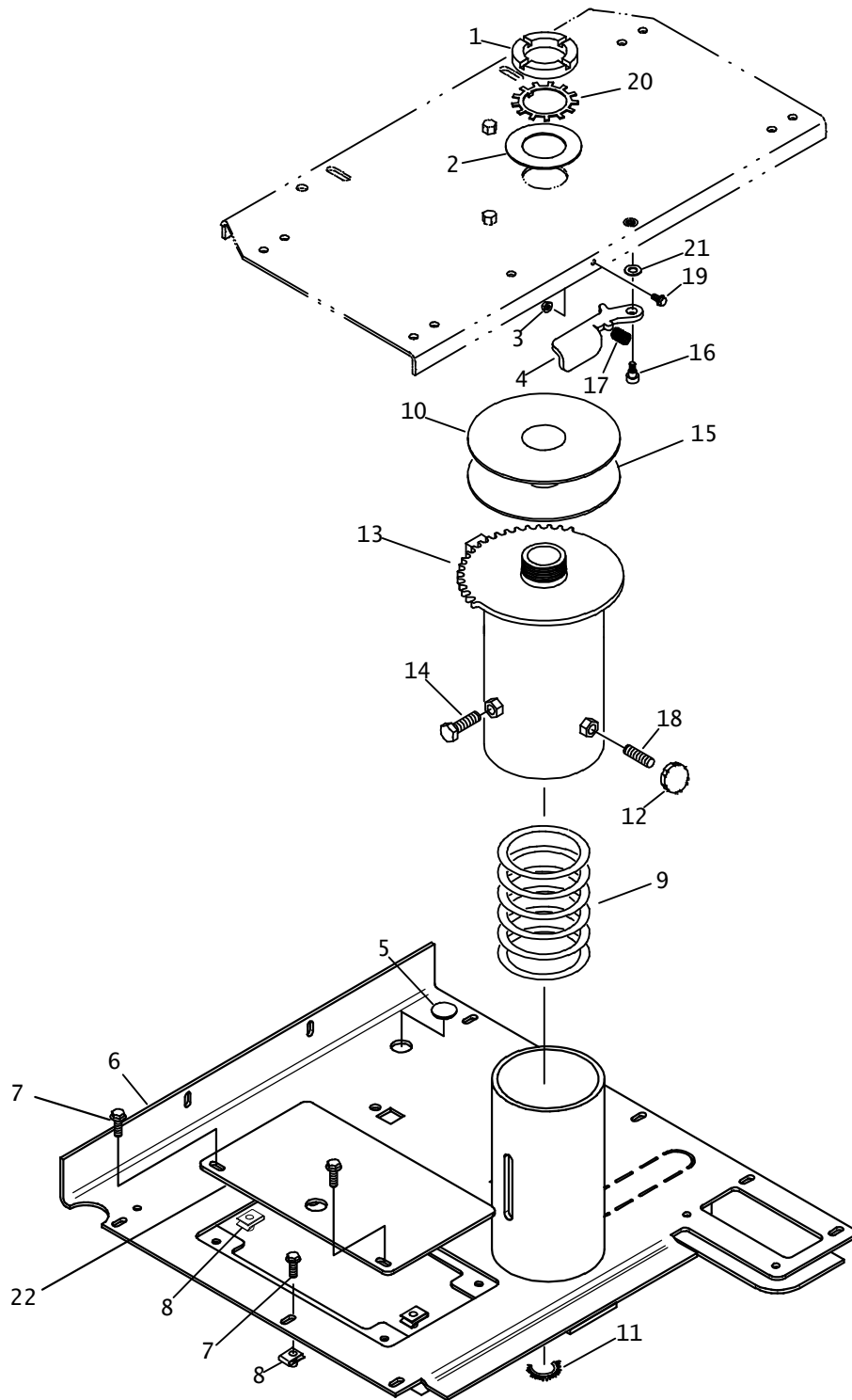
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FOOTNOTES:

1. USE LOCTITE 242 OR EQUIVALENT.

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

NOT SHOWN:

FOOTNOTES:

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

NOTE:

FENDERS AND COVERS

HT115 TIER 2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	319-746	1	REAR PANEL W/O AC DUCT	
	319-745	1	REAR PANEL W/ AC DUCT	
2.	324-651	1	LEFT FENDER	
3.	324-650	1	RIGHT FENDER	
4.	324-623	1	ACCESS PLATE	
5.	105-662	4	NUT (#4-40)	
6.	322-871	1	TDM COVER	
7.	110-854	1	SWITCH ACTUATOR GUARD	SEE FOOTNOTE 1
8.	324-566	1	FLOOR PLATE	
9.	107-461	1	LOCKING LATCH	
10.	120-085	4	ADJUSTABLE LOUVER (23-0005)	
11.	107-778	24	SCREW (M8-1.25 X 30mm,BUT SOC)	
12.	107-135	36	CLIP NUT (M8-1.25)	
13.	306-796	5	TAB	
14.	309-816	2	STRAP	
15.	217-762	1	ROCKER SWITCH (SPDT)	SEE FOOTNOTE 1
16.	106-992	8	FLG LK SCREW (M8-1.25 X 25mm)	
17.	307-644	1	COVER	
18.	107-358	10	WELLNUT (M4-0.7 X 12.67mm LG)	
19.	107-580	10	SCREW (M4-0.70 X 16mm,BUT SOC)	
20.	107-629	19	WASHER (M8)	
21.	107-269	4	SCREW (#4-40 X 3/4", PAN)	
22.	106-640	6	SCREW (M6-1.00 X 20mm, BUT. SOC.)	SEE FOOTNOTE 4
23.	106-574	5	CLIP NUT (M6-1.00)	
24.	306-795	1	TAB	
25.	309-434	4	TAB	
26.	106-385	2	FLG LOCKNUT (M6-1.00)	
27.	362-823	1	COVER	SEE FOOTNOTE 2
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.	107-744	2	WASHER (M6)	
34.	106-724	2	FLG SCREW (M10-1.50 X 25mm)	
35.	105-894	2	LOCKNUT(M10-1.50,PRV TRQ,10.9)	
36.	320-680	1	J-BOX MOUNT PLATE	
37.	110-590	1	KNOB (3/8-NC, ORANGE)	
38.	105-085	2	LOCKNUT (1/4-NC)	
39.	106-992	4	FLG LK SCREW (M8-1.25 X 25mm)	

FOOTNOTES:

- 1) 1 REQUIRED WITH REEL WINDER
- 2) 1 REQUIRED PER FOLLOWING OPTION NOT USED: REEL WINDER
- 3) 1 REQUIRED W/O BACKFILL BLADE KIT
- 4) 7 REQUIRED WITH BACKFILL BLADE KIT
- 5) BEGINS WITH S/N CMW HT115J70000047.
- 6) CAN DIAGNOSTIC TOOL 260-1062 - NOT SHOWN - BEGINS WITH S/N CMW HT115J70000047.

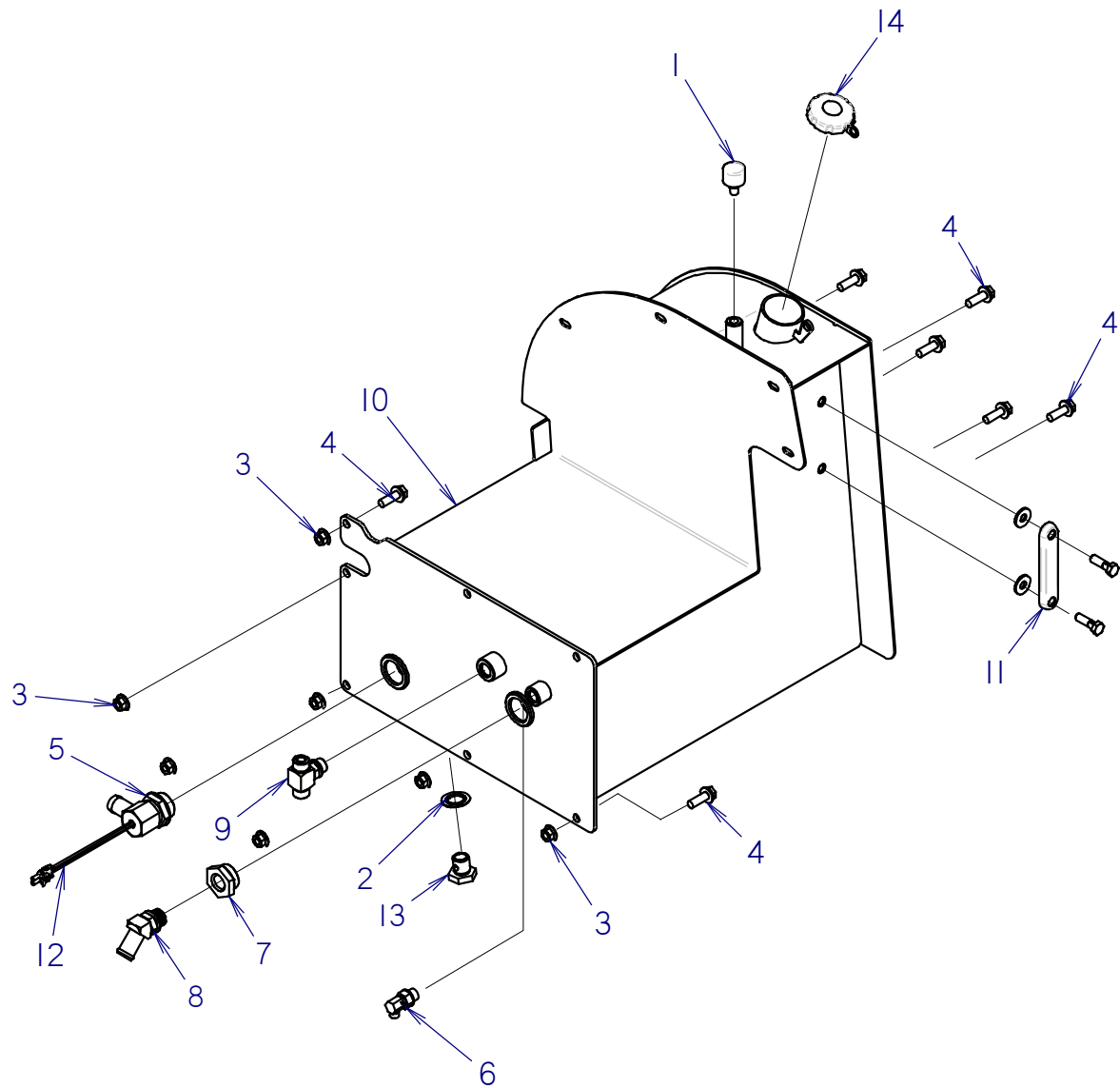
FENDERS AND COVERS

HT115 TIER 2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
40.	111-067	1	EXPANSION PLUG	SEE FOOTNOTES 5 & 6
41.	217-304	1	THROTTLE SENSOR	
42.	319-498	1	THROTTLE BRACKET	
43.	105-815	2	BOLT (#10-24 X 1", PAN SLT)	
44.	179-554	1	THROTTLE PIVOT PIN	
45.	106-598	1	WASHER (9/16", HARDENED)	
46.	107-529	2	WASHER (1.250", UHMW)	
47.	105-118	1	WASHER (3/8")	
48.	105-805	1	BELLEVILLE WASHER (3/8")	
49.	105-287	1	LOCKNUT (3/8-NC)	
50.	117-342	1	ROD	
51.	213-061	1	CAN MULTIPORT MODULE	
52.	505-070	2	BOLT (1/4-NC X 2", SOC)	
53.	116-458 AR		BULK TUBING (3/8",SOLD PER 1")	USE 1 @ .75"
54.	324-753	1	BFB COVER	SEE FOOTNOTE 3
55.	108-156	8	WASHER (5/16")	
56.	106-163	6	FLG SCREW (M8-1.25 X 30MM)	
57.	105-1549	7	SCREW (M6-1.00 X 20MM)	

FOOTNOTES:

HYDRAULIC TANK



HYDRAULIC TANK

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	111-021	1	BREATHER CAP (TANK)	
2	149-829	1	1" SEAL WASHER	
3	106-709	7	FLG LK NUT (M12-1.75)	
4	106-632	7	FLG LK SCR (M12-1.75X35MM,SER)	
5	157-987	1	S/O COUPLER (20S-16H90, 04NF)	
6	154-276	1	CONNECTOR (040-08S90)	
7	155-194	1	REDUCER (20S-12SF)	
8	155-197	1	REDUCER (12S-16H45)	SEE FOOTNOTE 1
9	154-318	1	BRANCH TEE (10S-100-100)	
10	364-671	1	HYDRAULIC TANK	
11	364-171	1	SIGHT GAUGE	
12	214-854	1	TEMPERATURE SWITCH(1/4NPT,MALE)	
13	149-398	1	DRAIN PLUG (1" W/.375 ORF)	
14	111-046	1	LOCKING CAP (NON-VENTED)	

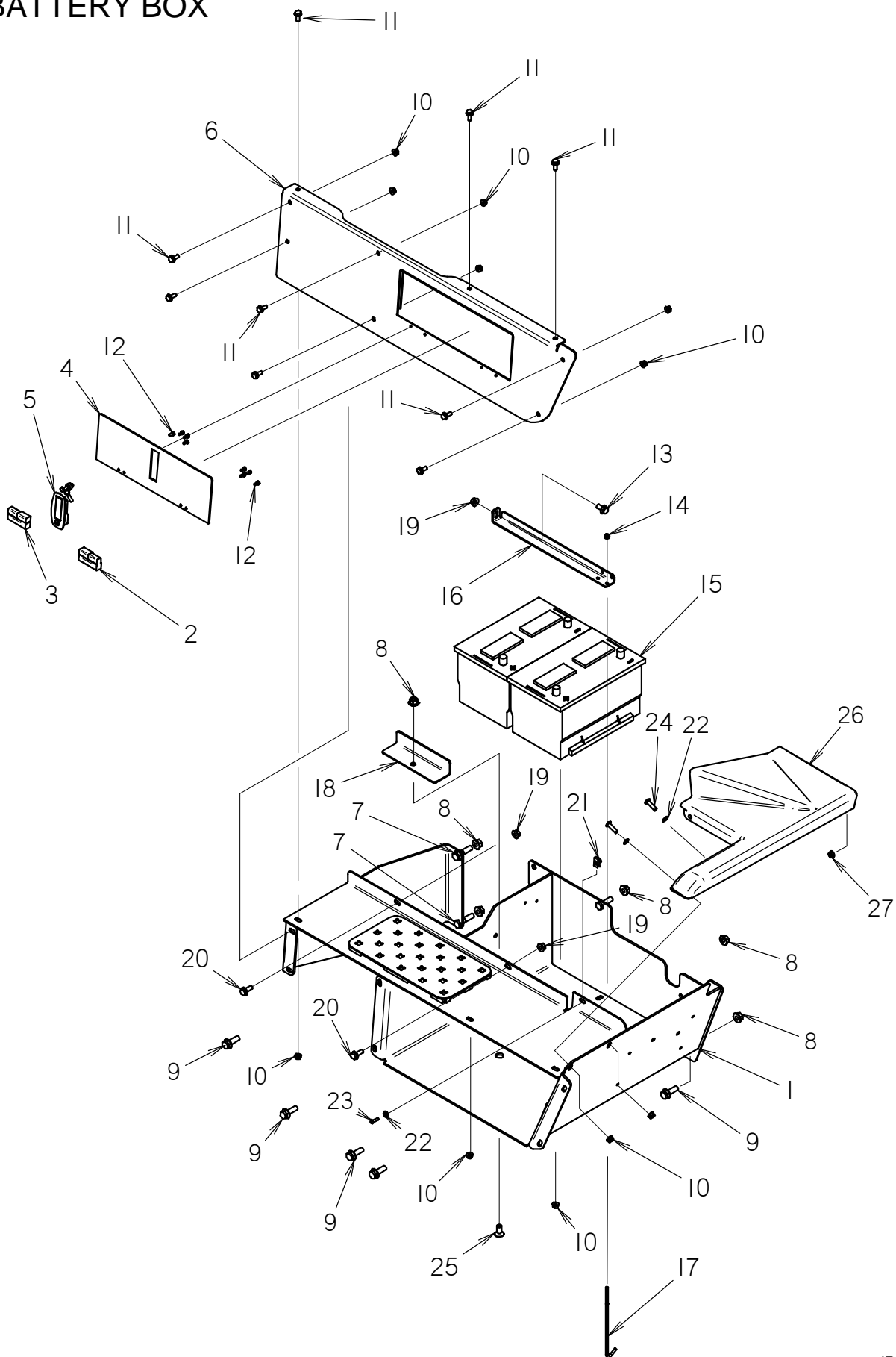
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FOOTNOTES:

1. REFER TO "PUMP DRIVE HYDRAULICS" REF #34, FOR DESTINATION OF THIS FITTING.

NOTE:

BATTERY BOX



BATTERY BOX

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	323-637	1	STEP AND BATTERY BOX	SEE FOOTNOTE 1
2	111-002	1	LIFT-OFF HINGE (OFF-SET)	
3	105-617	1	LIFT-OFF HINGE (OFF-SET)	
4	323-657	1	DOOR	
5	117-558	1	LATCH, ADJUST LEVER (LOCKING)	
6	324-505	1	FRONT COVER, BATTERY BOX	SEE FOOTNOTE 1
7	107-004	2	FLG LK SCREW (M12-1.75 X 45MM)	
8	106-709	9	FLG LK NUT (M12-1.75)	
9	106-632	6	FLG LK SCR (M12-1.75X35MM,SER)	
10	106-386	11	FLG LOCKNUT (M8-1.25)	
11	106-991	9	FLG LK SCREW (M8-1.25 X 20MM)	
12	106-228	8	SCREW (M5-0.80 X 10MM)	
13	106-999	1	FLG LK SCREW (M10-1.50 X 20MM)	
14	105-832	1	FLG LOCKNUT (1/4-NC)	
15	213-104	2	BATTERY (12V, 875CCA)	
16	322-951	1	BATTERY HOLD DOWN	
17	179-799	1	J-HOOK	
18	324-717	1	STOP	
19	106-387	3	FLG LOCKNUT (M10-1.50)	
20	106-724	2	FLG SCREW (M10-1.50 X 25MM)	
21	106-574	1	CLIP NUT (M6-1.00)	
22	107-629	3	WASHER (M8)	
23	106-640	1	SCREW (M6-1.00 X 20MM,BUT SOC)	
24	107-778	2	SCREW (M8-1.25 X 30MM,BUT SOC)	
25	107-221	1	SCREW (M12-1.75X20MM, CSK SOC)	
26	313-910	1	RIGHT AIR DEFLECTOR	
27	105-003	1	FLG LOCKNUT (5/16-NC)	ATTACHES COVER TO STUD ON FRAME

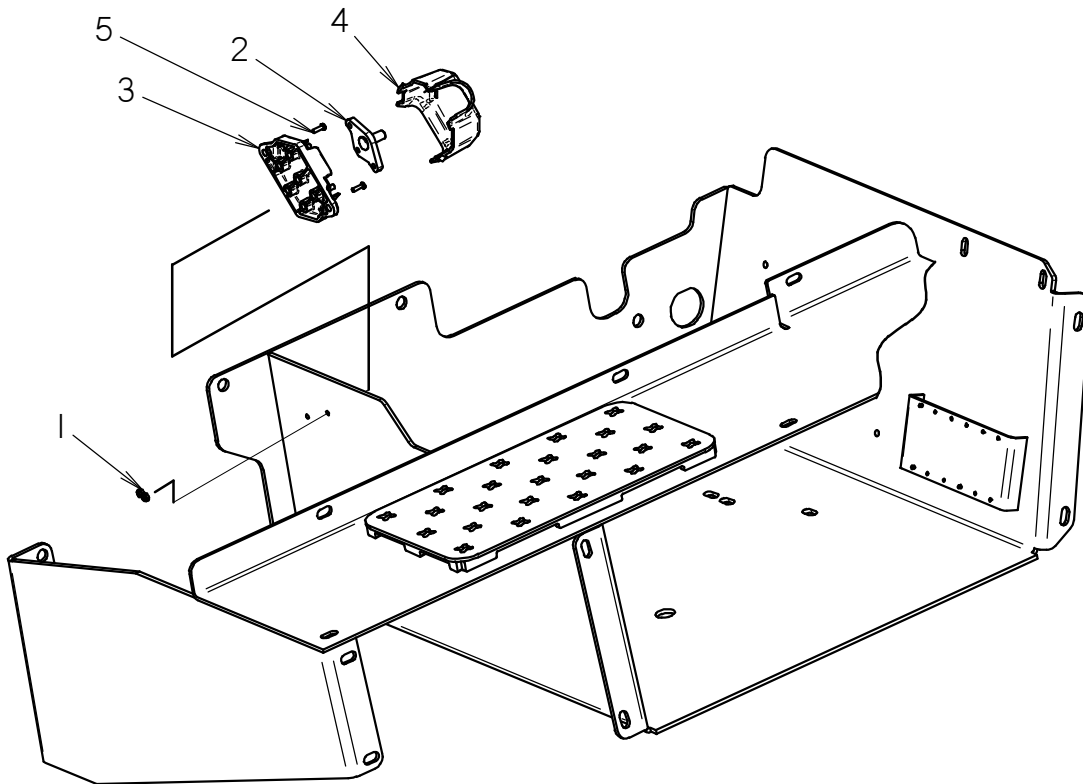
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FOOTNOTES:

1. REPLACE WITH 3001-9350. REQUIRES 300-8089 & 300-9373 AND MODIFICATION TO RIGHT DECK.

NOTE:

COMPONENT MOUNTING



COMPONENT MOUNTING

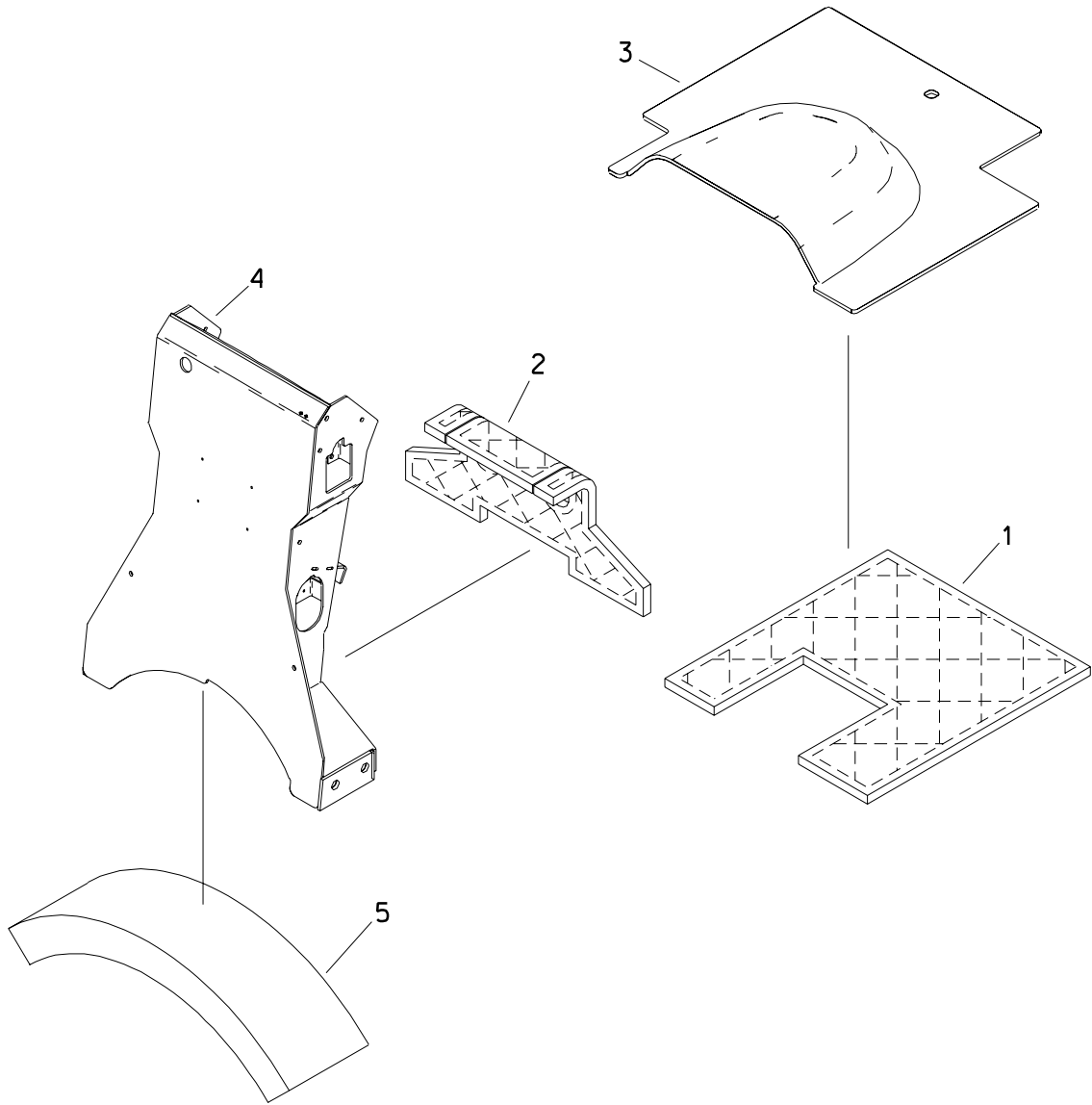
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	107-859	2	NUT, LOCK, #6-32, NYLON INSERT	
2	215-1011	1	BUSSBAR (MAIN FUSE HOLDER)	
3	215-1009	1	MAIN FUSE HOLDER BASE	
4	215-1010	1	MAIN FUSE HOLDER COVER	
5	106-367	2	SCREW (#6-32 X 1/2" PLPS SS)	

NOT SHOWN:

FOOTNOTES:

NOTE:

SOUND BLANKETS

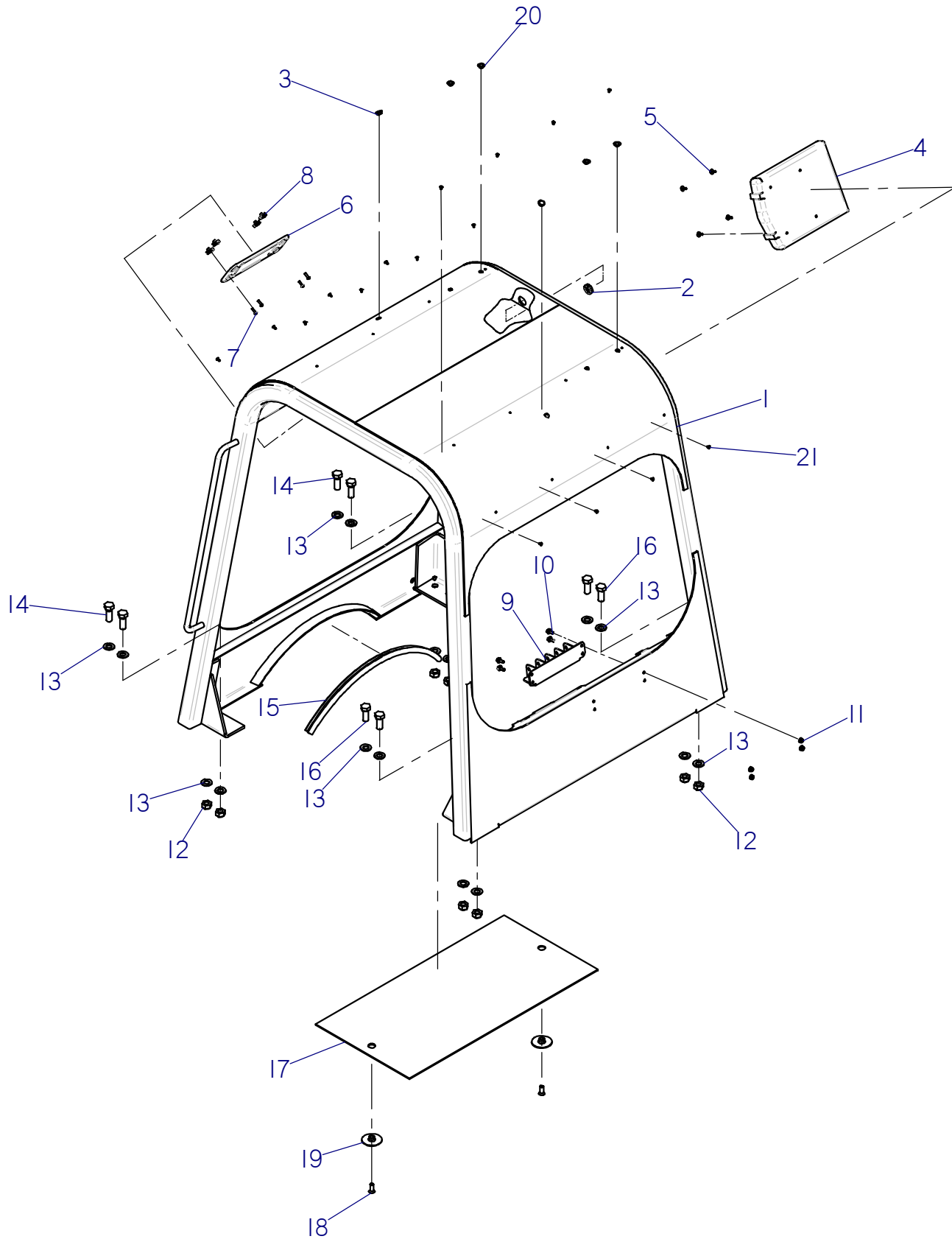


SOUND BLANKETS

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

ROPS



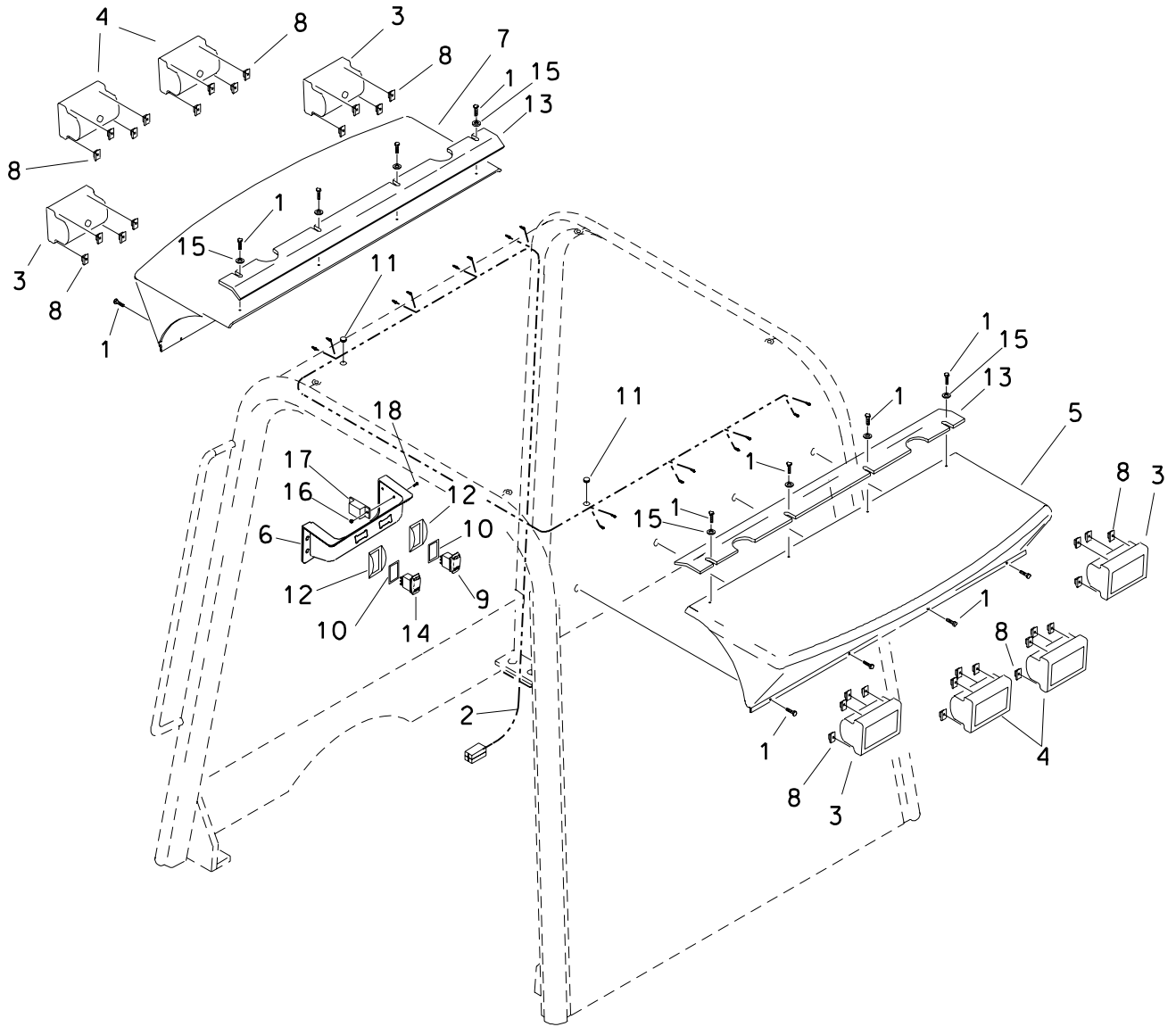
ROPS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	327-817	1	ROPS	
2	159-919	1	PLUG (1 3/8" SPLIT BUSHING)	
3	159-958	2	PLUG (3/4")	
4	318-588	1	MANUAL COMPARTMENT	
5	110-348	4	POP RIVET (3/16" X .664")	
6	324-921	1	COVER, PLASTIC	
7	106-640	4	SCREW (M6-1.00 X 20MM,BUT SOC)	
8	106-574	4	CLIP NUT (M6-1.00)	
9	324-396	1	BRACKET	
10	106-162	4	FLG SCREW (M8-1.25 X 20MM, GD8)	
11	106-386	4	FLG LOCKNUT (M8-1.25)	
12	106-665	8	LOCKNUT (M20-2.50, 10.9)	TORQUE NUT TO 250 FT-LBS
13	106-393	16	WASHER (M20)	
14	106-798	4	SCREW (M20-2.50 X 55MM, 10.9)	
15	116-421	1	BULK EDGE (1/8", SOLD PER 1')	
16	106-607	4	SCREW (M20-2.50 X 50MM, 10.9)	
17	118-300	1	HEADLINER	
18	195-611	2	BOLT (1/2-NC X 1-1/4",CSK SOC)	
19	115-038	2	RETAINER	
20	159-936	4	PLUG (5/8")	
21	159-976	16	PLUG (1/4")	

FOOTNOTES

NOTE:

CANOPY AND LIGHT KIT



CANOPY AND LIGHT KIT

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-180		LIGHT KIT	INCLUDES REF #'S 1-18
1.	108-161	16	SCREW (1/4"-14 X 1 1/4" SLF DR)	
2.	214-659	1	LIGHT KIT HARNESS	
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	GRDMET (1/2")	DRILL 2-23/32" HOLES ON DIMPLES; EXCEPT HT115
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	
18.	105-185	2	BOLT (#10-24 X 1/2", RD SLT)	

NOT SHOWN:

217-826 MINI RELAY (SPDT)

362-823 COVER

FOOTNOTES

CAB HEATER ASS'Y

RT115 / HT115 TIER 2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	191-358		A/C HEATER KIT	
	191-318		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.	106-386	-	FLG LOCKNUT (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")	
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	
	324-729	-	SEAT BASE	HT115 ONLY
35.	115-662	1	GROMMET EDGE (3/16" X 12.7")	
36.	319-745	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")	

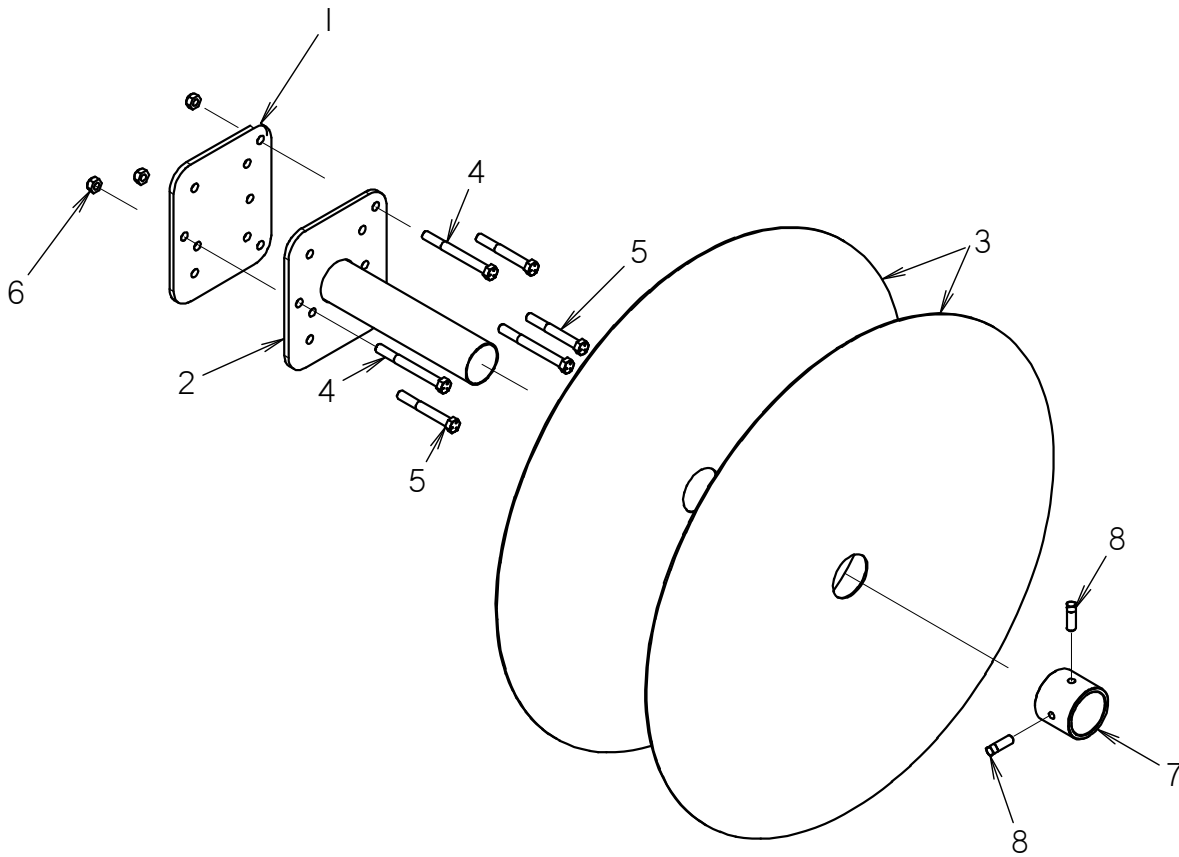
1. NOT SHOWN PARTS:

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

2. NOT SHOWN PARTS:

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)
 255-008 REFRIGERANT (30 LB. BOTTLE)

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)	

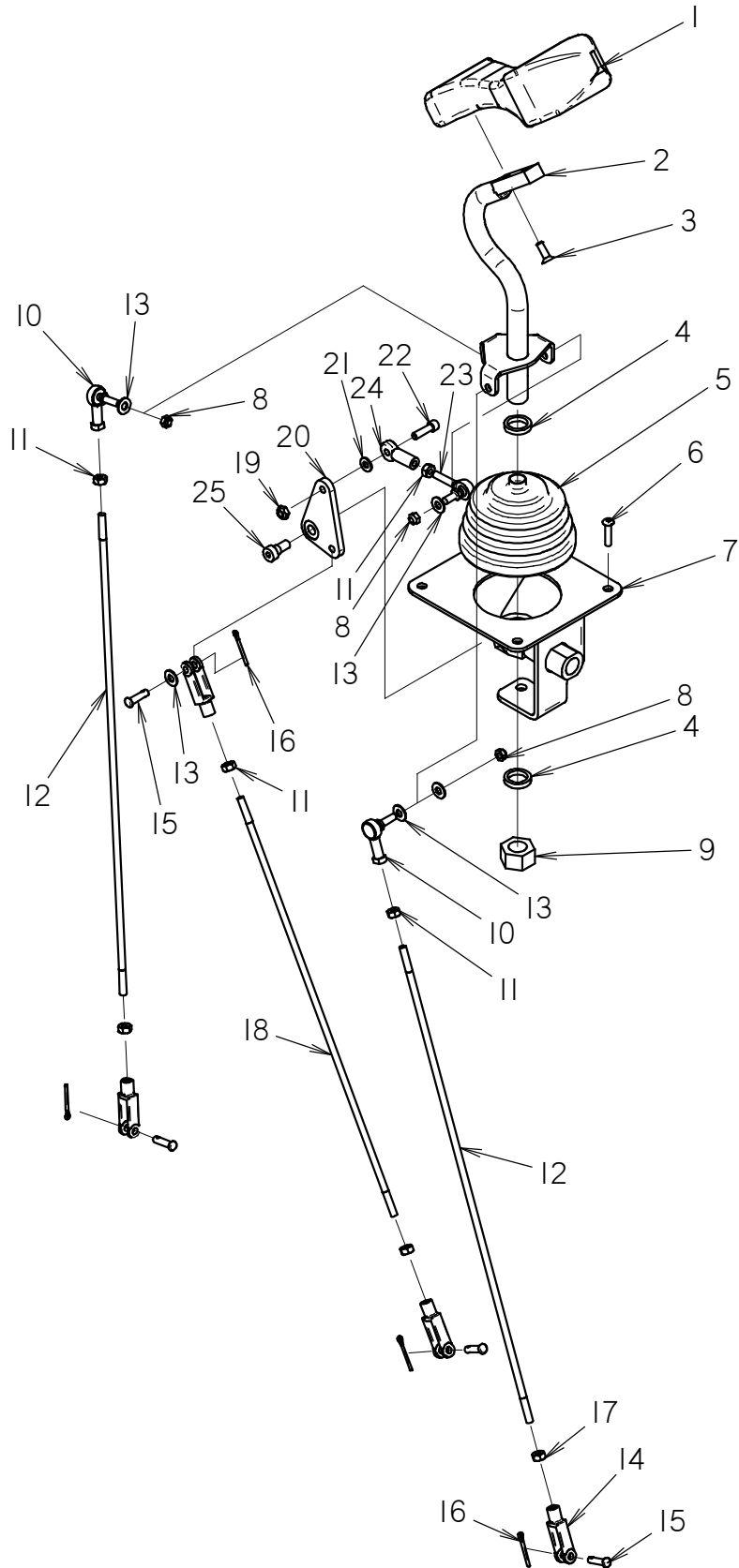
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FOOTNOTES:

NOTE:

CONTROL COMPONENTS

BFB BLADE CONTROLS



BFB BLADE CONTROLS

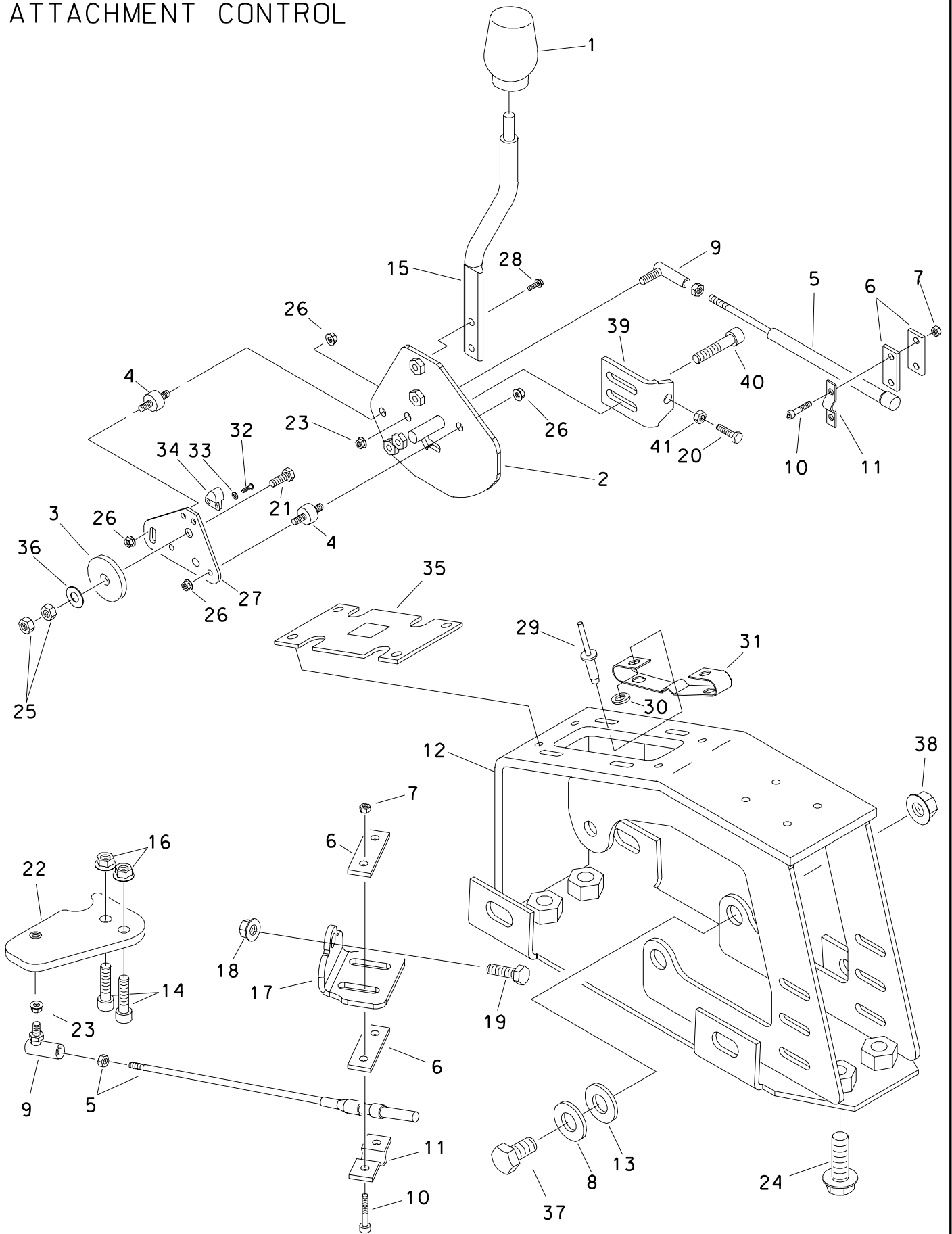
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	117-345	1	CONTROL HANDLE	
2	305-728	1	HANDLE ASSEMBLY	
3	105-263	2	BOLT (1/4-NC X 3/4", CSK, SOC)	
4	178-421	2	BUSHING	
5	110-330	1	DUST BOOT	
6	107-312	4	SCREW (M6-1.00 X 25MM, BUT SOC)	
7	305-727	1	MOUNT ASSEMBLY	
8	107-770	3	LOCKNUT (1/4-NF, NYL INSERT)	
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:

ATTACHMENT CONTROL



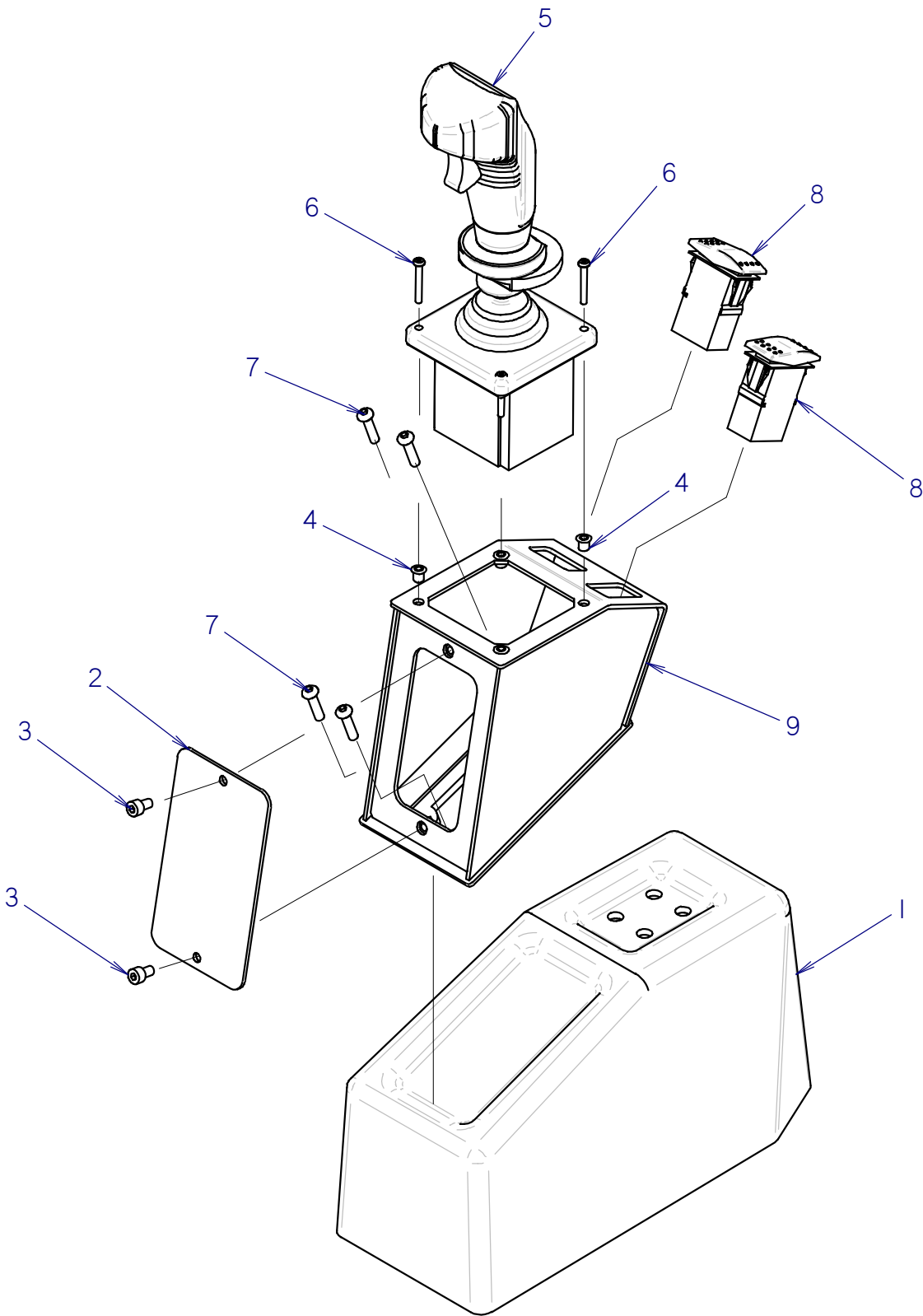
ATTACHMENT CONTROL

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	117-470	1	KNOB (3/8-NC, YELLOW)	
2.	325-425	1	HT ATT CONTROL LEVER	
3.	107-529	1	WASHER (1.250", UHMW)	
4.	116-980	2	SHOCK MOUNT	
5.	196-294	1	CONTROL CABLE	
	506-021	2	NUT (#10-32)	
6.	331-166	4	BOLT-ON BACK-UP (.360")	
7.	106-048	4	LOCKNUT (#10-24)	
8.	105-855	1	WASHER (7/16")	SEE FOOTNOTE 1
9.	110-318	2	BALL JOINT (#10-32, FM)	
10.	105-810	4	BOLT (#10-24 X 7/8", SOC)	
11.	110-697	2	BOLT-ON CLAMP (.360")	
12.	309-227	1	CONTROL LEVER FRAME	
13.	106-397	1	WASHER (M12, HARDENED)	
14.	107-322	2	SCREW (M6-1.00 X 25mm, SOC, 12.9)	
15.	117-519	1	CONTROL HANDLE	
16.	106-385	2	FLG LOCKNUT (M6-1.00)	
17.	323-970	-	ATTACHMENT BRACKET	
18.	106-386	-	FLG LOCKNUT (M8-1.25)	
19.	106-381	-	FLG LK SCREW (M8-1.25 X 25MM)	
20.	105-688	1	SCREW (M6-1.00 X 35mm)	SEE FOOTNOTE 1
21.	105-245	1	SCREW (M10-1.50 X 25mm)	
22.	308-901	1	LEVER EXTENSION	
23.	106-154	2	FLG LOCKNUT (1/4-NF)	
24.	107-001	4	FLG LK SCREW (M10-1.50 X 25mm)	
25.	107-769	2	JAM LOCKNUT (M10-1.50)	SEE FOOTNOTE 3
26.	105-832	4	FLG LOCKNUT (1/4-NC)	
27.	310-127	1	PIVOT PLATE	
28.	106-987	2	FLG LK SCREW (M6-1.00 x 16mm)	
29.	110-348	2	POP RIVET (3/16" X .664")	
30.	105-284	2	WASHER (3/16")	
31.	115-598	1	SPRING DETENT	
32.	106-271	2	SCREW (M5-0.80 X 8mm, PLPS)	SEE FOOTNOTE 2
33.	106-205	2	WASHER (.191")	
34.	315-149	1	DETENT TIP	
35.	316-476	1	TEMPLATE	
36.	106-396	1	WASHER (M10, HARDENED)	
37.	107-521	1	SCREW (M12-1.75 X 20mm)	SEE FOOTNOTE 1
38.	106-709	1	FLG LK NUT (M12-1.75)	SEE FOOTNOTE 1
39.	316-851	1	STOP	SEE FOOTNOTE 1
40.	106-528	2	SCREW (M6-1.00 X 20mm, SOC)	SEE FOOTNOTE 2
41.	106-106	1	NUT (M6-1.00)	SEE FOOTNOTE 1

FOOTNOTES

- 1- USE WITH H932
2- USE LOCTITE 242 OR EQUIVALENT
3- TORQUE TO 70IN/LBS.

JOYSTICK CONTROL



JOYSTICK CONTROL

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	305-649	1	LEFT SEAT CONSOLE	
2	324-558	1	COVER	
3	106-941	2	SCREW (M6-1.00 X 10MM, SOC)	
4	107-635	4	NUTSERT (M4 X 0.7)	
5	215-1389	1	12V DUAL AXIS JOYSTICK (EMC)	
6	107-414	4	SCREW (M4-0.70 X 30MM,BUT SOC)	
7	107-312	4	SCREW (M6-1.00 X 25MM, BUT SOC)	
8	217-764	2	ROCKER SWITCH (SPDT)	
9	324-548	1	JOYSTICK MOUNT	

NOT SHOWN:

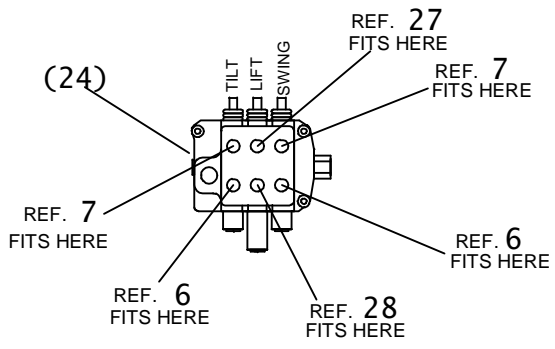
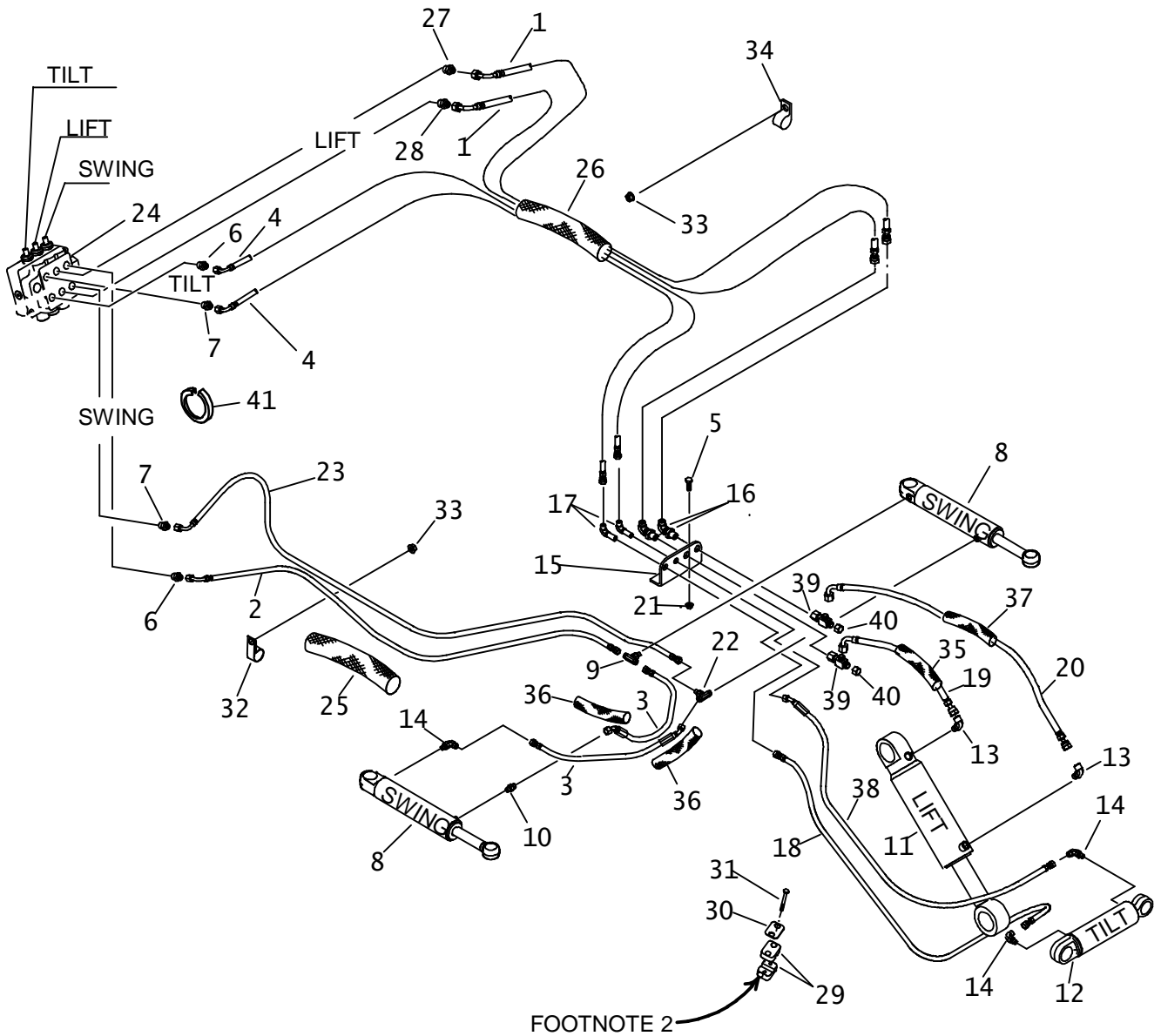
FOOTNOTES:

NOTE:

HYDRAULICS

BACKFILL BLADE HYDRAULICS

HT115



BACKFILL BLADE HYDRAULICS HT115

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
	159-809	-	HYD. CONTROL VALVE (3-SPOOL)	BEGINS WITH S/N 5Y0447
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 @ 12" & SEE FOOTNOTE 4

NOT SHOWN:

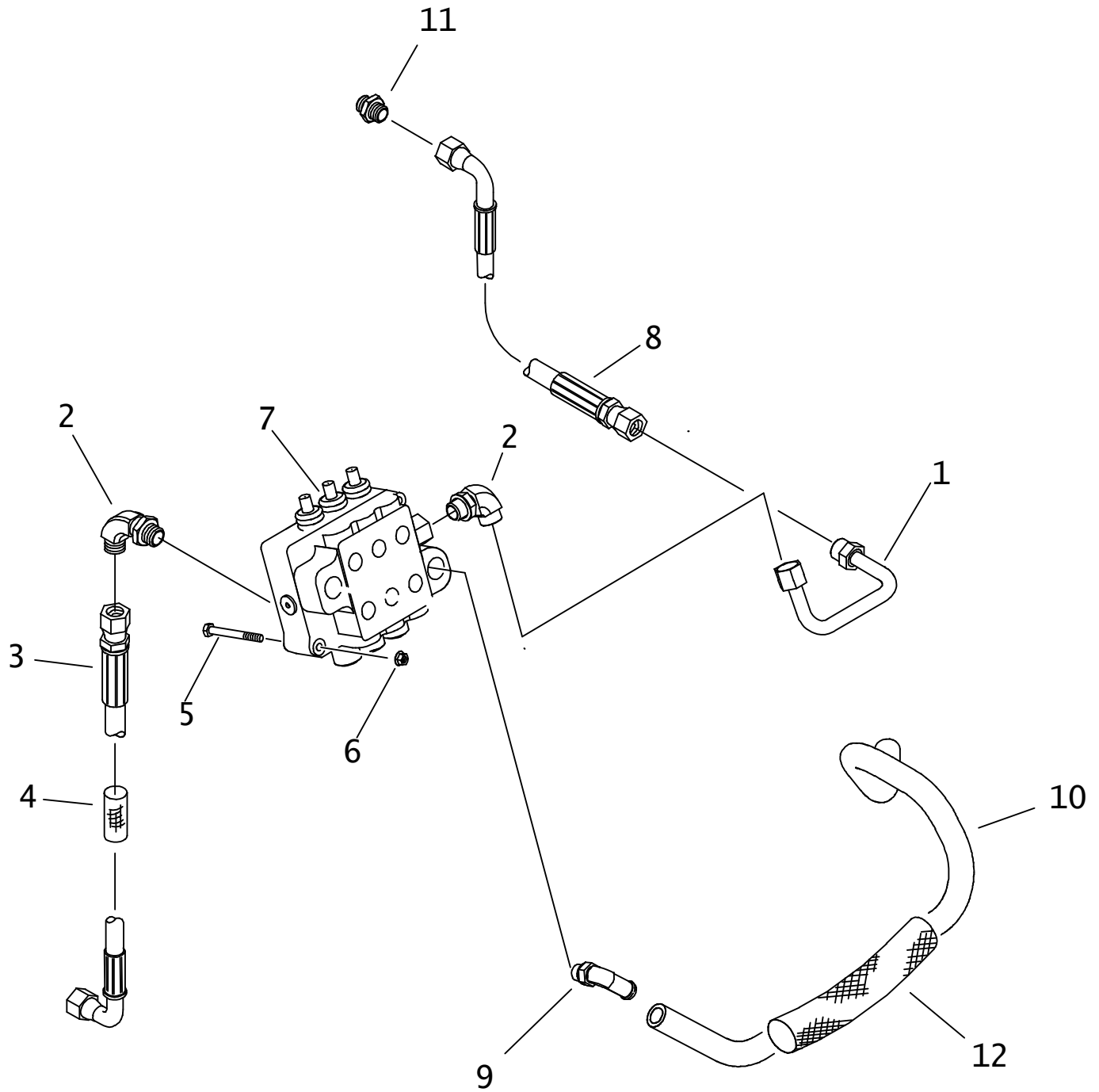
FOOTNOTES:

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



SEE FOOTNOTE 1

NOTE:
REFER TO AUX. HYD.

BACKFILL BLADE VALVE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	149-851	1	HYD LINE (-10)	
2.	154-298	2	CONNECTOR (10S-10090)	
3.	515-047	1	HOSE (100FX90-22"-3000)	
4.	117-622	1	ABRASION SLEEVE (1.25" X 20")	
5.	105-292	3	SCREW (M8-1.25 X 75mm)	
6.	106-386	3	FLG LOCKNUT (M8-1.25)	
7.	159-809	1	HYD. CONTROL VALVE (3-SPOOL)	USE FLOAT KIT 500-2020
8.	154-939	1	HOSE (100FX90S-50"-3000)	
9.	154-362	-	S/O COUPLER (10S-12H90)	
10.	116-636	-	BULK HOSE (3/4", SOLD PER 1')	USE 1 @ 40"
11.	154-464	1	CONNECTOR (100-100)	
12.	115-687	1	ABRASION SLEEVE(SOLD PER FOOT)	USE 1 @ 35"

NOT SHOWN:

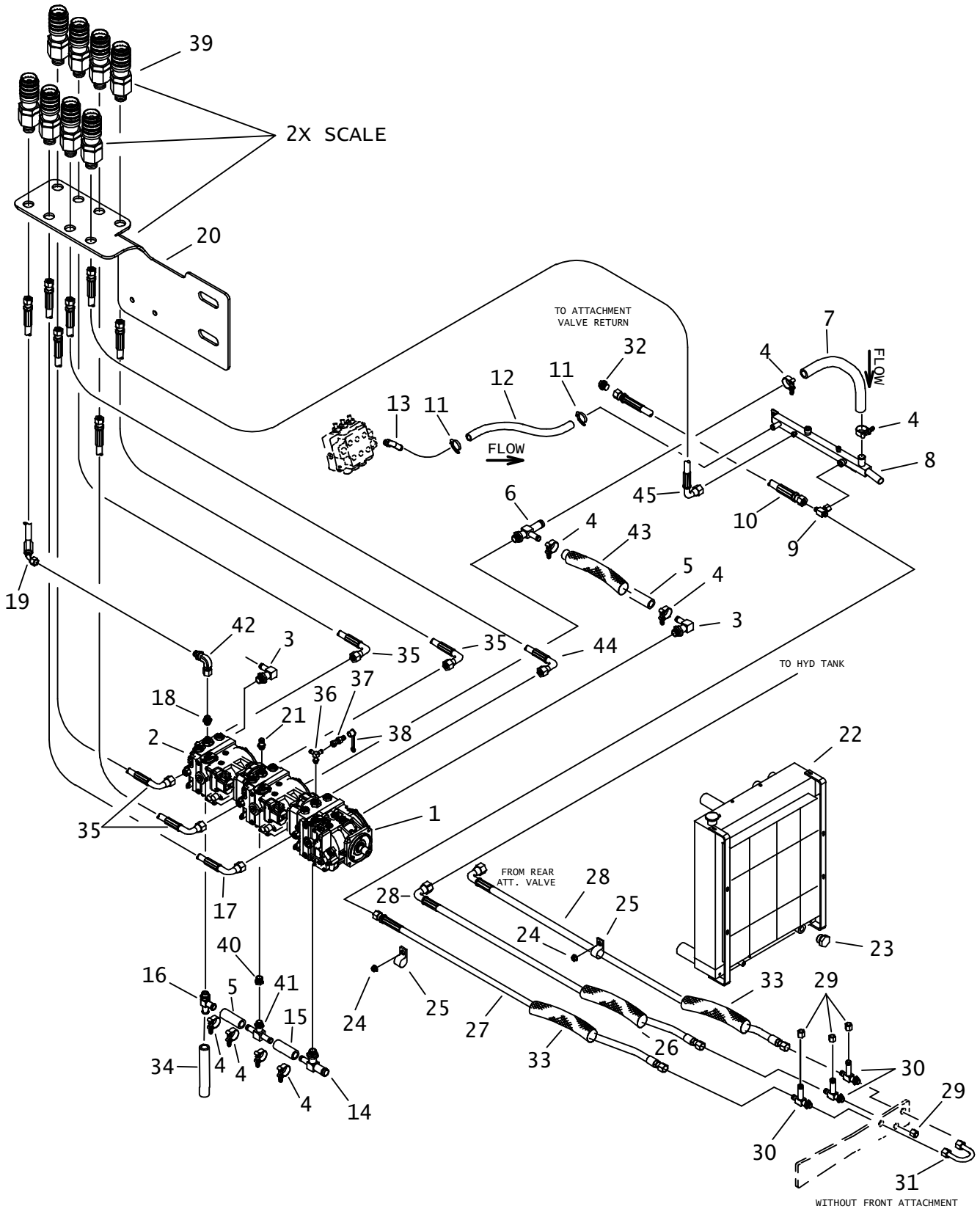
FOOTNOTES:

1. FOR BFB VALVE RETURN HOSE'S REFER TO PAGE "PUMP DRIVE HYDRAULICS"

NOTE:

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

PUMP DRIVE HYDRAULICS



PUMP DRIVE HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	159-702	1	HYDRAULIC PUMP - PISTON	
	190-806	-	SEAL KIT	
	500-763	-	MULTIFUNCTION VALVE - RELIEF	(#7)
	500-764	-	MULTIFUNCTION VALVE (#1)	
2.	159-703	2	HYDRAULIC PUMP - PISTON	
	190-679	-	SEAL REPAIR KIT	
	149-368	-	HYDRAULIC VALVE	
3.	155-146	2	S/O COUPLER (12S-16H90)	
4.	111-027	8	T-BOLT CLAMP (1.25"-1.50")	
5.	116-460	AR	BULK HOSE (1", SOLD PER FT)	2 @ 11.5"
6.	154-412	1	S/O RUN TEE (12S-16H-16H)	
7.	116-460	AR	BULK HOSE (1", SOLD PER FT)	1 @ 19"
8.	307-535	1	RETURN MANIFOLD	
9.	154-325	1	UN BR TEE (100FX-100-100)	
10.	154-956	1	HOSE (100FX-12"-3000)	
11.	110-353	2	WORM CLAMP (3/4" TO 1-1/2")	
12.	116-636	AR	BULK HOSE (3/4", SOLD PER FT)	1 @ 40" W/BACKFILL BLADE; 1 @ 3" W/O BACKFILL BLADE
13.	154-362	1	S/O COUPLER (10S-12H90)	W/BACKFILL BLADE
	159-980	1	HOSE BARB PLUG (-12)	W/O BACKFILL BLADE
14.	155-217	1	S/O BR TEE (16S-16H-24H)	
15.	116-460	AR	BULK HOSE (1", SOLD PER FT)	1 @ 12"
16.	149-908	1	RUN TEE (16S-16H-16H)	
17.	159-876	1	HOSE (040FX90-21"-7350)	
18.	154-220	6	CONNECTOR (040-06S)	
19.	154-934	1	HOSE (040FX45-18"-3000)	
20.	323-891	1	RELIEF VALVE MOUNT	
21.	159-147	1	QDC ADAPTER (02-06S)	
22.	306-459	-	RADIATOR/OIL COOLER	
23.	155-184	1	PLUG (16S)	
24.	105-003	2	FLG LOCKNUT (5/16-NC)	SEE FOOTNOTE 1
25.	110-333	2	BOLT-ON CLAMP (1")	SEE FOOTNOTE 1
26.	117-392	1	ABRASION SLEEVE (1.25" X 60")	
27.	154-915	1	HOSE (100FX-70"-3000)	
28.	157-343	2	HOSE (100FX90S-120"-3000)	
29.	154-324	4	CAP (100F)	
30.	153-984	3	BK RUN TEE (100-100-100L)	
31.	149-821	1	HYD LINE (-10)	W/O FRONT ATTACHMENT
32.	154-332	1	PLUG (100)	
33.	117-764	2	ABRASION SLEEVE (1.59" X 90")	
34.	116-460	AR	BULK HOSE (1", SOLD PER FT)	USE 1 @ 17"
35.	515-448	4	HOSE (040FX90-26"-7350)	
36.	154-230	1	BRANCH TEE (06S-040-040)	
37.	159-156	1	QDC ADAPTER (02-040F)	
38.	159-148	1	DUST CAP (1/8")	
39.	155-260	8	BK QDC ADAPTER (02-040BK)	
40.	155-222	1	REDUCER (16S-12SF)	
41.	154-361	1	S/O BR TEE (12S-16H-16H)	
42.	154-255	1	UNION (040-040FX90)	
43.	115-687	AR	ABRASION SLEEVE(SOLD PER FOOT)	1 @ 5"
44.	515-665	1	HOSE (040FX90-34"-7350)	
45.	154-702	1	HOSE (040FX-30"-3000)	

FOOTNOTES

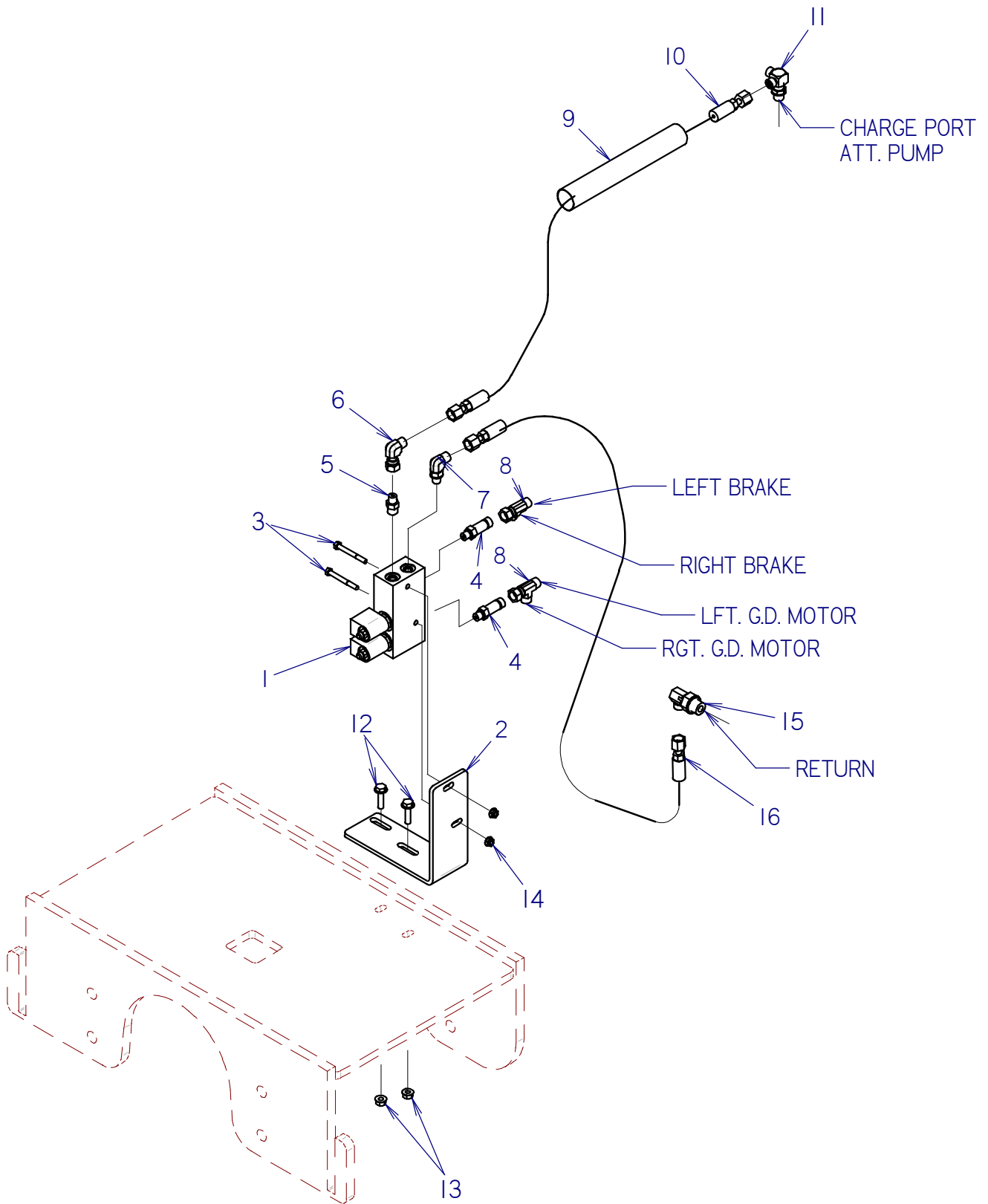
- #110-333 & #105-003 ATTACH TO STUD BOLTS ON LEFT FRAME PLATE.

NOTE

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

MOTOR SHIFT/PARK BRAKE HYDRAULICS

BEGINS WITH S/N: CMW HT115 C5000001



MOTOR SHIFT/PARK BRAKE HYDRAULICS

BEGINS WITH S/N: CMW HT115 C50000001

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	157-246	1	MANIFOLD (2-SP)	
2	329-172	1	BRACKET	PART OF KIT 190-1109
3	106-893	2	SCREW (M6-1.00 X 55MM)	PART OF KIT 190-1109
4	154-403	2	CONNECTOR (O4S-040, XL)	
5	154-278	1	CONNECTOR (O4S-040)	
6	154-255	1	UNION (O40-040FX90)	
7	154-252	1	CONNECTOR (O4S-04090)	
8	154-265	2	UNION RUN TEE (O40FX-040-040)	
9	117-324	1	ABRASION SLEEVE (1.25" X 48")	
10	515-180	1	HOSE (O40FX-48"-3000)	
11	154-230	1	BRANCH TEE (O6S-040-040)	
12	106-163	2	FLG SCREW (M8-1.25 X 30MM)	PART OF KIT 190-1109
13	106-386	2	FLG LOCKNUT (M8-1.25)	PART OF KIT 190-1109
14	106-353	2	FLG NUT (M6-1.00)	PART OF KIT 190-1109
15	154-276	1	CONNECTOR (O40-08S90)	
16	154-682	1	HOSE (O40FX-17"-3000)	

NOT SHOWN:

190-1109

MOTOR SHIFT/PARK BRAKE KIT

INCL. REF NUMBERS 2, 3, 12, 13 & 14

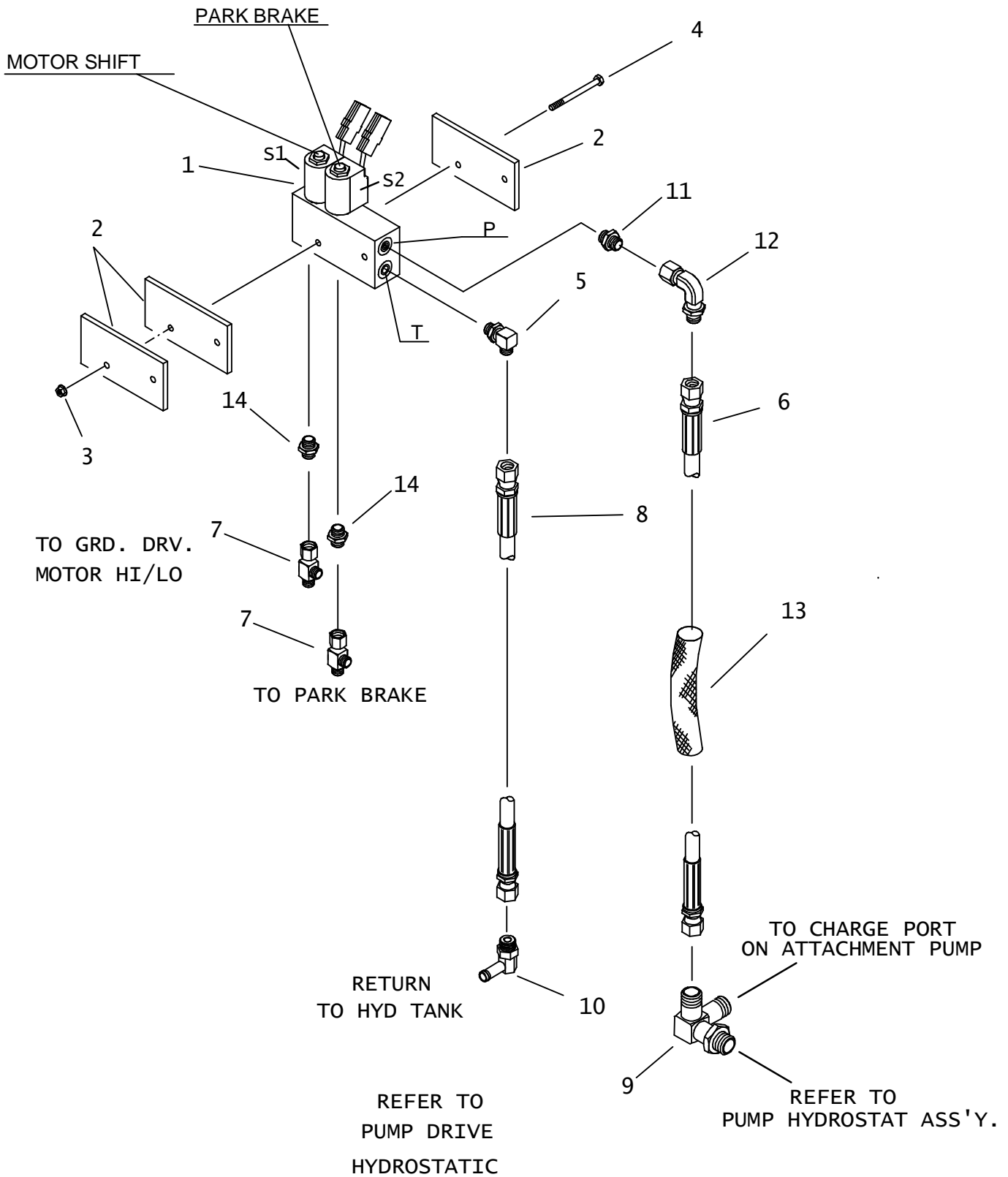
FOOTNOTES:

NOTE:

I. PARTS NOT PART OF KIT 190-1109 ARE THE SAME AS "ENDS WITH S/N....." PAGE (ID0042702).

MOTOR SHIFT/PARK BRAKE HYDRAULICS

ENDS WITH S/N 5Z0676



MOTOR SHIFT/PARK BRAKE HYDRAULICS ENDS WITH S/N 5Z0676

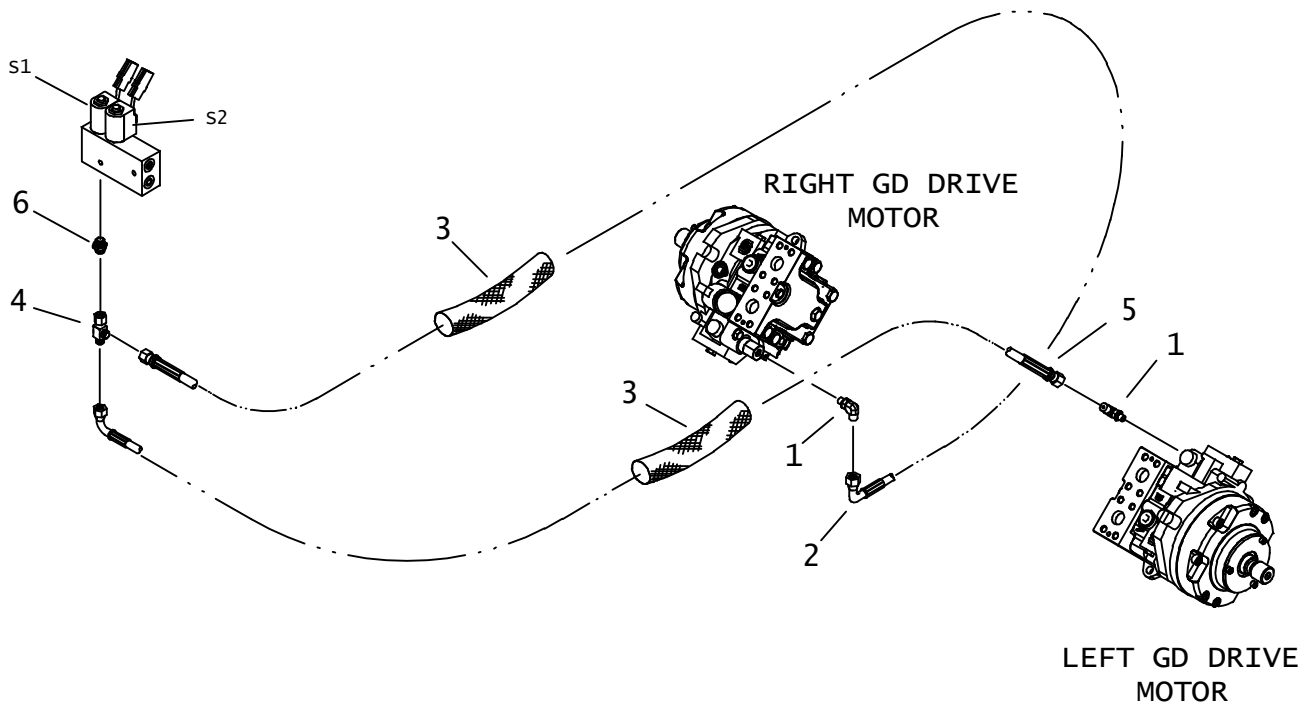
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	157-246	1	MANIFOLD (2-SP)	
	214-491		COIL, 12V	
	499-446		SOLENOID (3 WAY-2 POS VALVE)	
2.	306-885	3	MOUNT PLATE	
3.	106-385	2	FLG LOCKNUT (M6-1.00)	
4.	106-566	2	SCREW (M6-1.00 X 70mm)	
5.	154-252	1	CONNECTOR (04S-04090)	
6.	515-180	1	HOSE (040FX-48"-3000)	
7.	154-265	2	UNION RUN TEE (040FX-040-040)	
8.	154-682	1	HOSE (040FX-17"-3000)	
9.	154-230	1	BRANCH TEE (06S-040-040)	
10.	154-276	1	CONNECTOR (040-08S90)	
11.	154-278	1	CONNECTOR (04S-040)	
12.	154-255	1	UNION (040-040FX90)	
13.	117-324	1	ABRASION SLEEVE (1.25" X 48")	
14.	154-403	2	CONNECTOR (04S-040, XL)	

NOT SHOWN:

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

NOTE:

HI/LOW (GROUND DRIVE)



HI/LOW (GROUND DRIVE)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	154-252	2	CONNECTOR (04S-04090)	
2.	515-074	1	HOSE (040FX90S-77"-3000)	
3.	117-686	-	ABRASION SLEEVE (1.75" X 43")	SEE FOOTNOTE 1
4.	154-265	-	UNION RUN TEE (040FX-040-040)	
5.	154-900	1	HOSE (040FX90S-62"-3000)	
6.	154-403	-	CONNECTOR (04S-040, XL)	

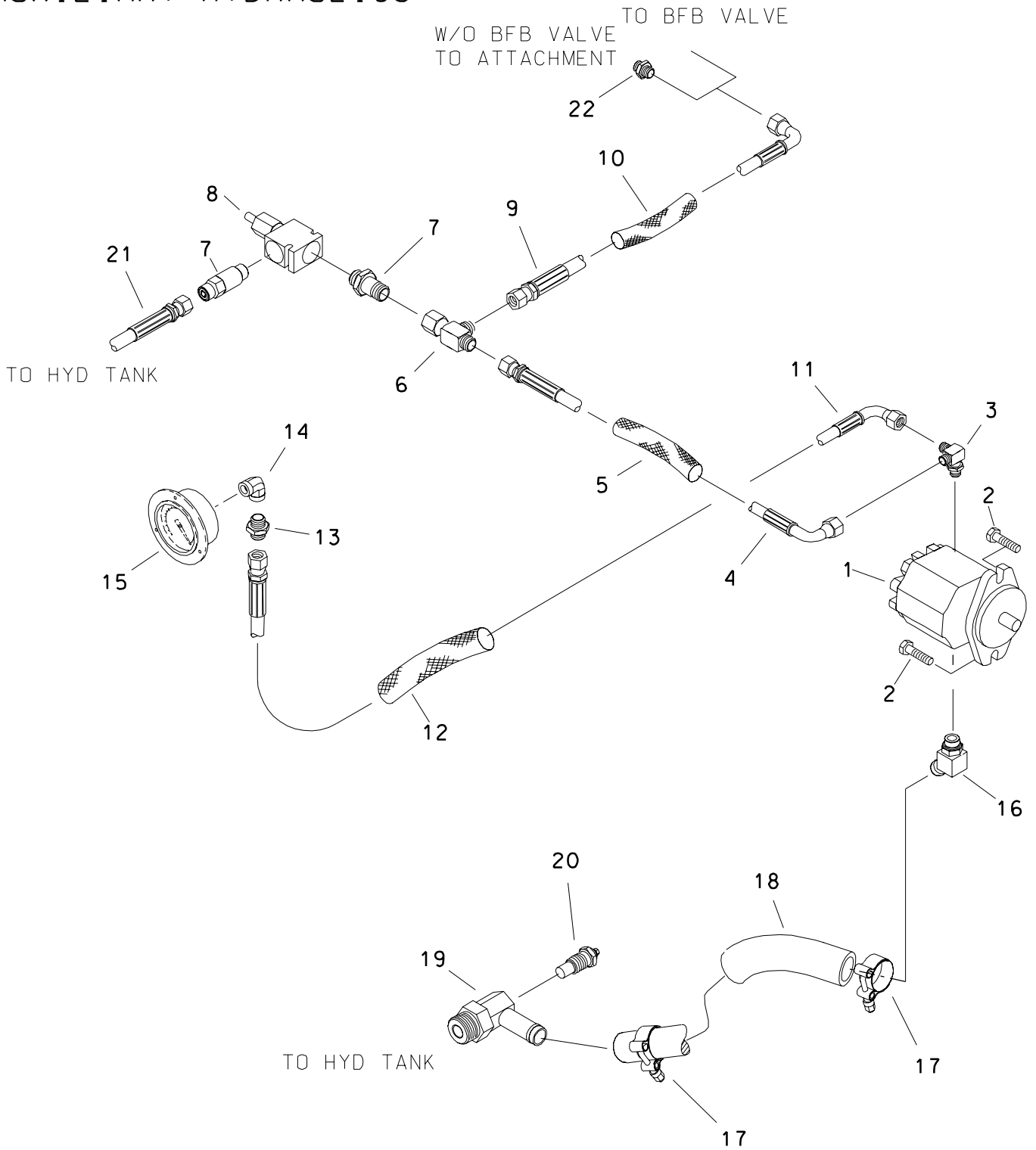
NOT SHOWN:

FOOTNOTES:

1. ABRASION SLEEVE TO INCLUDE CASE DRAIN AND PARK BRAKE HOSES.

NOTE:

AUXILIARY HYDRAULICS



AUXILIARY HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	153-807	1	HYDRAULIC PUMP (AUX)	
	500-966		SEAL REPAIR KIT	
2.	105-876	2	SCREW (M10-1.50 X 35mm)	
3.	153-787	1	TEE (100-10S-040)	
4.	153-956	1	HOSE (100FX90-50"-3000)	
5.	117-395	1	ABRASION SLEEVE (1.25" X 50")	
6.	154-325	1	UN BR TEE (100FX-100-100)	
7.	154-391	2	CONNECTOR (08S-100)	
8.	158-681	1	RELIEF VALVE (AUXILIARY)	PRE SET TO 2500 PSI
9.	515-047	1	HOSE (100FX90-22"-3000)	W/ BACKFILL BLADE
	515-082	1	HOSE (100FX90S-60"-3000)	W/O BACKFILL BLADE
10.	118-260	1	ABRASION SLEEVE (.750" X 21")	W/ BACKFILL BLADE
11.	515-075	1	HOSE (040FX90S-82"-3000)	
12.	117-218	1	ABRASION SLEEVE (1.00" X 52")	
13.	154-339	1	CONNECTOR (04N-040)	
14.	149-896	1	STREET ELBOW (04NF-04NF90)	
15.	217-551	1	PRESSURE GAUGE (3000 PSI)	SEE FOOTNOTE 1
16.	155-230	1	S/O COUPLER (16S-16H45)	
17.	111-027	2	T-BOLT CLAMP (1.25"-1.50")	
18.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 60"
19.	157-987	1	S/O COUPLER (20S-16H90, 04NF)	
20.	214-854	1	TEMPERATURE SWITCH	
21.	153-145	1	HOSE (100FX-25"-3000)	
22.	154-464	1	CONNECTOR (100-100)	W/O BACKFILL BLADE

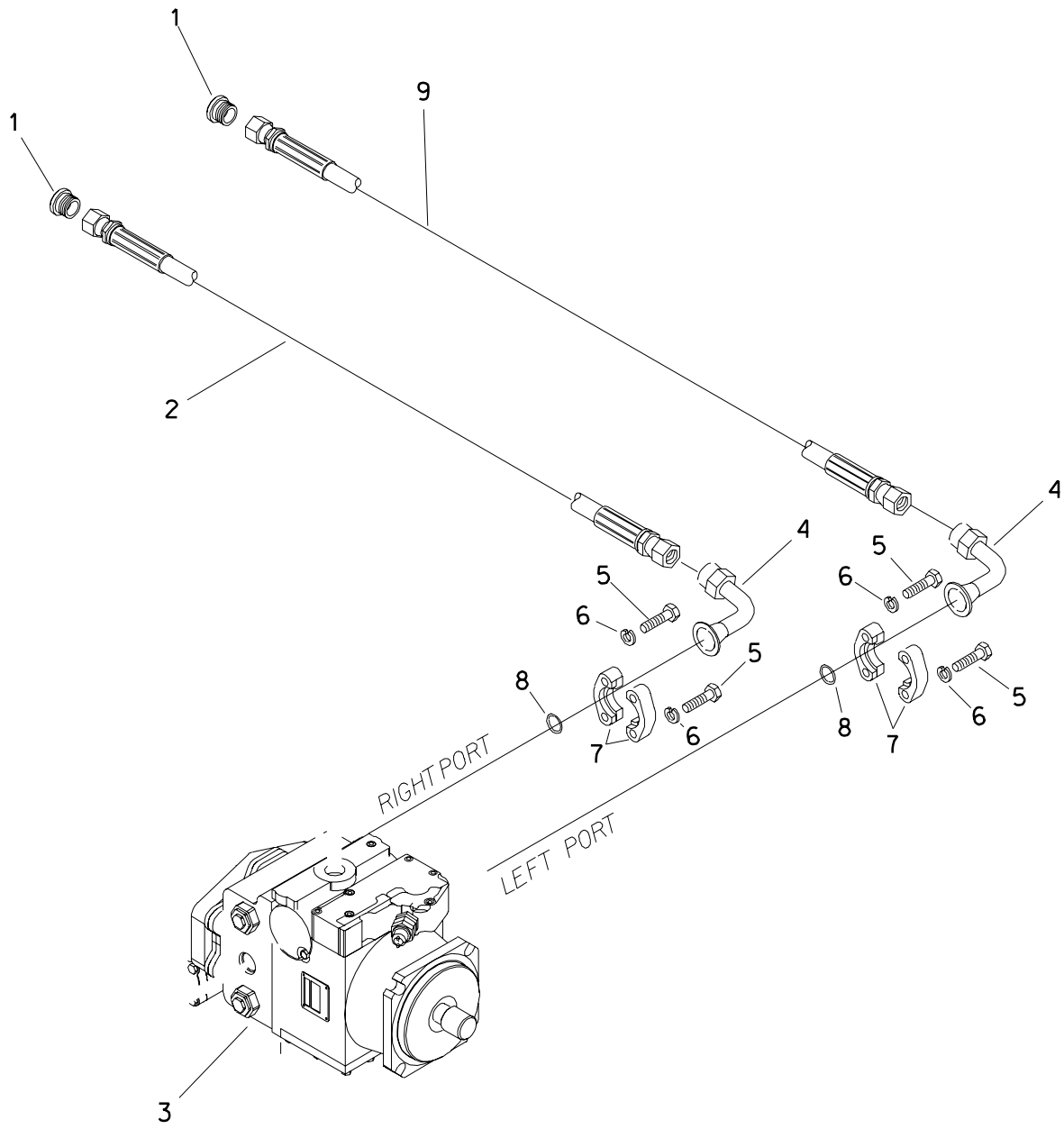
FOOTNOTES

1. REF. #25 (217-551) IS DEPICTED WITH FACE OF GAUGE SHOWING, ACTUALLY IT FITS INSIDE THE FENDER AND FACES THE OPERATOR.

NOTE

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

HYDROSTATIC PUMP ATTACHMENT HYDRAULICS

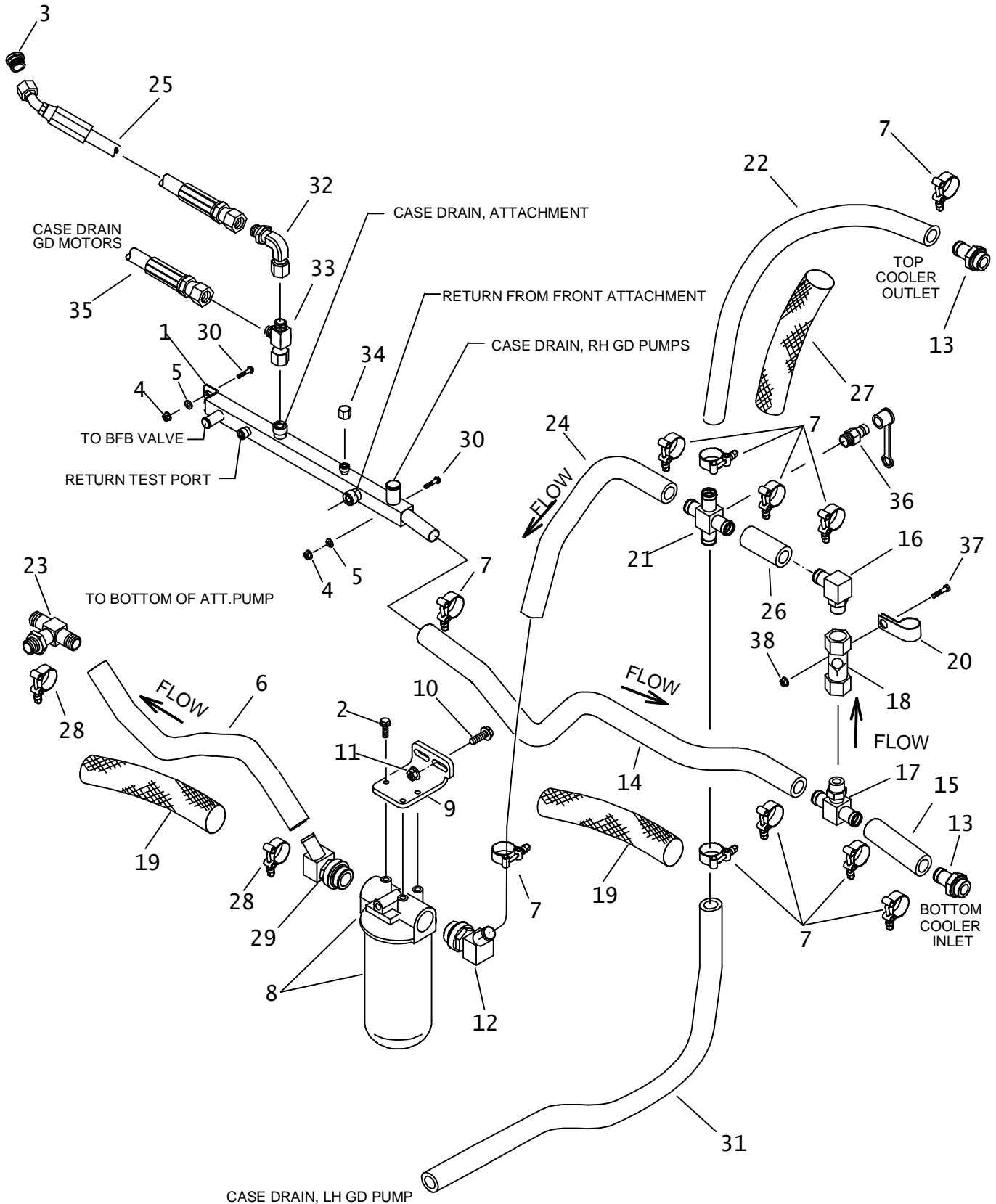


HYDROSTATIC PUMP ATTACHMENT HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	154-334	2	PLUG (160)	
2.	515-621	1	HOSE (160FX-50"-6000)	
3.	159-702	-	HYDRAULIC PUMP - PISTON	
4.	154-404	2	CONNECTOR (160-16FL90)	
5.	105-222	8	BOLT (7/16-NC X 1-3/4")	
6.	105-073	8	LOCK WASHER (7/16")	
7.	159-077	2	SPLIT FLANGE (16SFL)	
8.	157-029	2	O-RING (219 D90)	
9.	159-928	1	HOSE (160FX90S-56"-6000)	

FOOTNOTES

HYDRAULIC FILTER HT115 TIER 3



HYDRAULIC FILTER

HT115 TIER 3

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	307-535	1	RETURN MANIFOLD	
2.	105-826	3	FLG LK BOLT (3/8-NC X 1")	
3.	154-331	1	PLUG (080)	
4.	105-003	2	FLG LOCKNUT (5/16-NC)	
5.	105-881	2	WASHER (5/16")	
6.	116-588	AR	BULK HOSE (1-1/2",SOLD PER FT)	USE 1 @ 19"
7.	111-027	11	T-BOLT CLAMP (1.25"-1.50")	
8.	157-345	1	HYD OIL FILTER (20SF-20SF)	SEE FOOTNOTE 1
	153-792		FILTER ELEMENT (10 MICRON)	
	153-791		FILTER ELEMENT (5 MICRON)	SEE FOOTNOTE 2
	217-765		INDICATOR SWITCH	
9.	306-862	1	BRACKET	
10.	107-003	2	FLG LK SCREW (M12-1.75 X 35mm)	
11.	106-709	2	FLG LK NUT (M12-1.75)	
12.	153-110	1	S/O COUPLER (20S-16H45)	
13.	514-088	2	S/O COUPLER (16S-16H)	
14.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 44"
15.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 4.5"
16.	154-188	1	S/O COUPLER (16S-16H90)	
17.	155-231	1	S/O BR TEE (16S-16H-16H)	
18.	153-888	1	CHECK VALVE (16SF-16SF, 25 PSI)	
19.	115-733	AR	ABRASION SLEEVE (SOLD PER FOOT)	USE 2 @ 12"
20.	110-332	1	BOLT-ON CLAMP (1-5/8")	
21.	159-877	1	CROSS 16H-16H-16H-16H-04SAE	
22.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 30"
23.	155-217	1	S/O BR TEE (16S-16H-24H)	
24.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 20"
25.	149-223	1	HOSE (080FX45-40"-3000)	
26.	116-460	AR	BULK HOSE (1", SOLD PER 1')	USE 1 @ 4.5"
27.	117-224	1	ABRASION SLEEVE (1.59" X 26")	
28.	111-028	2	T-BOLT CLAMP (1.75"-2.00")	
29.	155-148	1	S/O COUPLER (20S-24H)	
30.	108-208	2	FLG BOLT (5/16-NC X 1-1/2")	
31.	116-460	AR	BULK HOSE (1", SOLD PER FT)	USE 1 @ 62"
32.	154-256	1	UNION (080-080FX90)	
33.	154-266	1	UNION RUN TEE (080FX-080-080)	
34.	154-326	1	CAP (060F)	
35.	515-333	1	HOSE (080FX90-22"-3000-AR)	USE 1 @ 15" & SEE FOOTNOTE 3
36.	159-154	1	QDC ADAPTER (02-04S)	
37.	107-380	1	CARRIAGE BOLT(M8-1.25X30MM,BX)	
38.	106-386	1	FLG LOCKNUT (M8-1.25)	

NOT SHOWN:

115-687 AR ABRASION SLEEVE(SOLD PER FOOT)

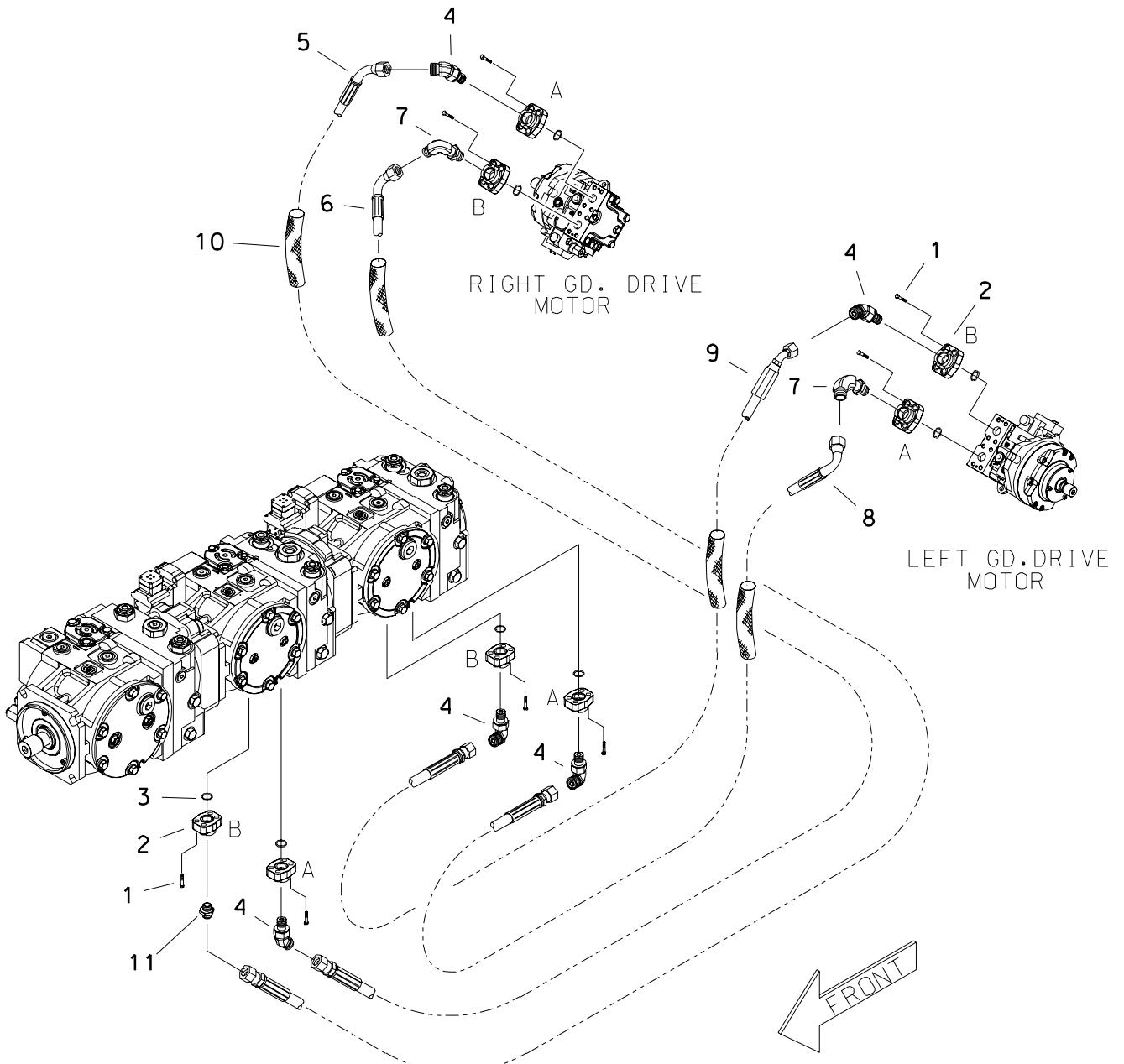
FOOTNOTES:

- 157-345 IS THE FILTER HEAD AND REGULAR ELEMENT 153-792.
- IF THE HYDRAULIC SYSTEM IS EXPOSED TO CONTAMINATES, A NEW BREAK-IN FILTER 153-791 IS INSTALLED FOR 50 HOURS.
- PLACE 115-687 OVER REFERENCE 24, HOSE 116-460

NOTE:

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

GROUND DRIVE HYDRAULICS



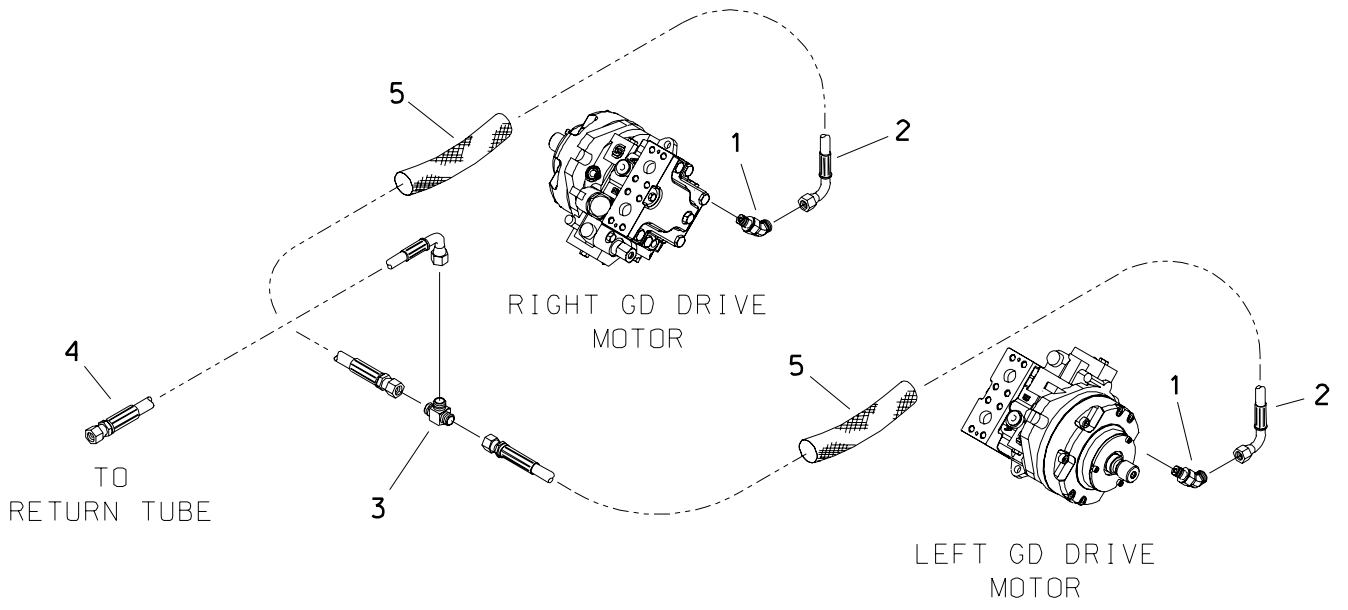
GROUND DRIVE HYDRAULICS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	105-918	32	BOLT (7/16-NC X 1-1/2", SOC)	
2.	514-245	8	HEAD FLANGE (16HFL-16SF)	
3.	157-029	8	O-RING (219 D90)	
4.	154-358	5	CONNECTOR (120-16S45)	
5.	159-895	1	HOSE (120FX45S-58"-6000)	
6.	159-894	1	HOSE (120FX90S-58"-6000)	
7.	154-286	2	CONNECTOR (120-16S90)	
8.	159-896	1	HOSE (120FX90S-53"-6000)	
9.	159-897	1	HOSE (120FX45S-50"-6000)	
10.	117-686	4	ABRASION SLEEVE (1.75" X 43")	FROM MOTOR THROUGH SKID PLATE
11.	154-367	1	CONNECTOR (120-16S)	

FOOTNOTES

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

CASE DRAIN (GROUND DRIVE)



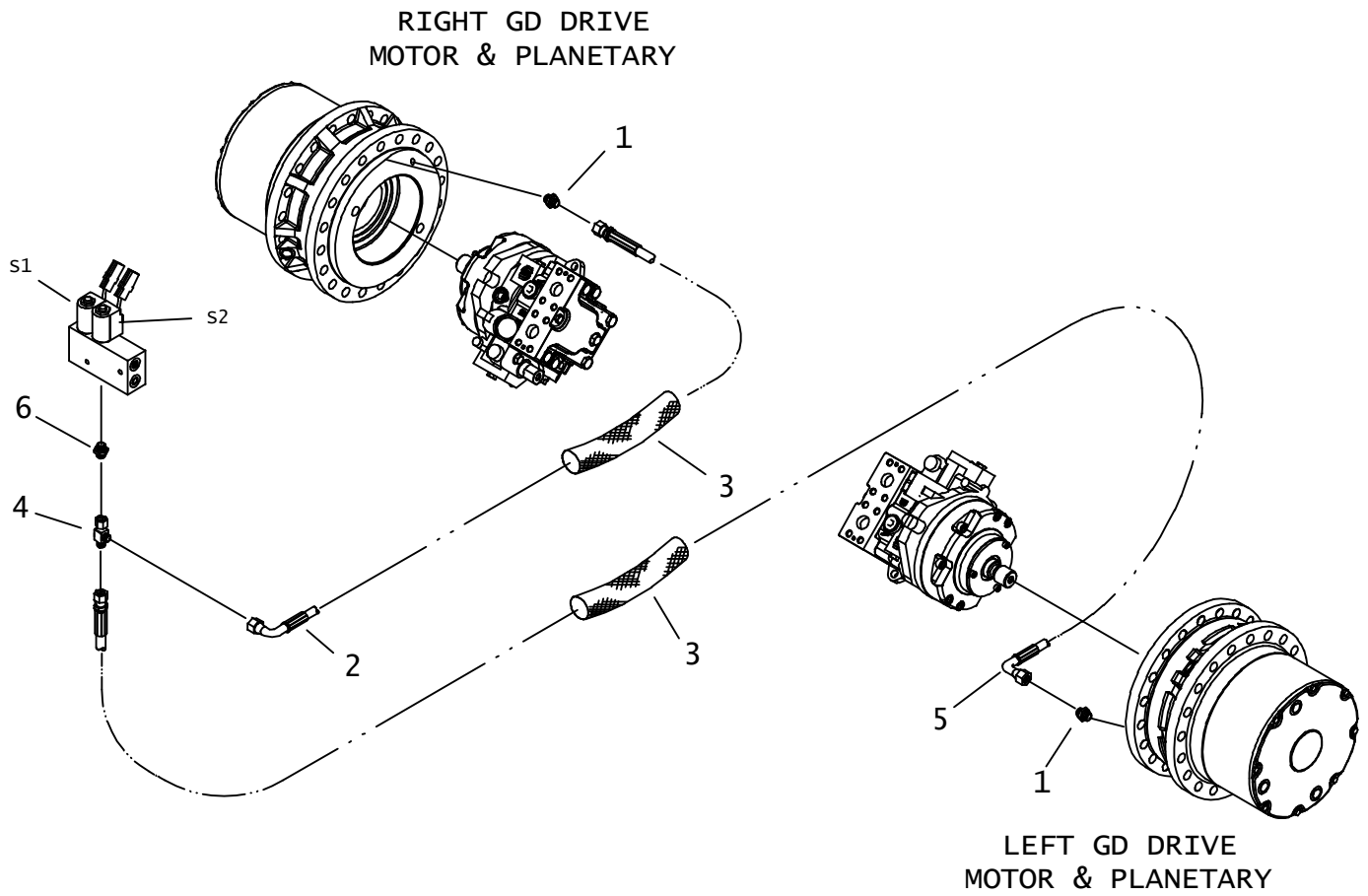
CASE DRAIN (GROUND DRIVE)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	154-264	2	CONNECTOR (080-10S45)	
2.	154-884	2	HOSE (080FX90-60"-3000)	
3.	154-258	1	TEE (080)	
4.	515-333	1	HOSE (080FX90-22"-3000-AR)	
5.	117-686	2	ABRASION SLEEVE (1.75" X 43")	SEE FOOTNOTE 1

FOOTNOTES

1. ABRASION SLEEVE TO INCLUDE PARK BRAKE AND HI/LOW HOSES.

PARK BRAKE (GROUND DRIVE)



PARK BRAKE (GROUND DRIVE)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1.	514-301	2	CONNECTOR (040-M12-1.50)	
2.	154-900	2	HOSE (040FX90S-62"-3000)	
3.	117-686	-	ABRASION SLEEVE (1.75" X 43")	SEE FOOTNOTE 1
4.	154-265	-	UNION RUN TEE (040FX-040-040)	
5.	515-074	1	HOSE (040FX90S-77"-3000)	
6.	154-403	-	CONNECTOR (04S-040, XL)	

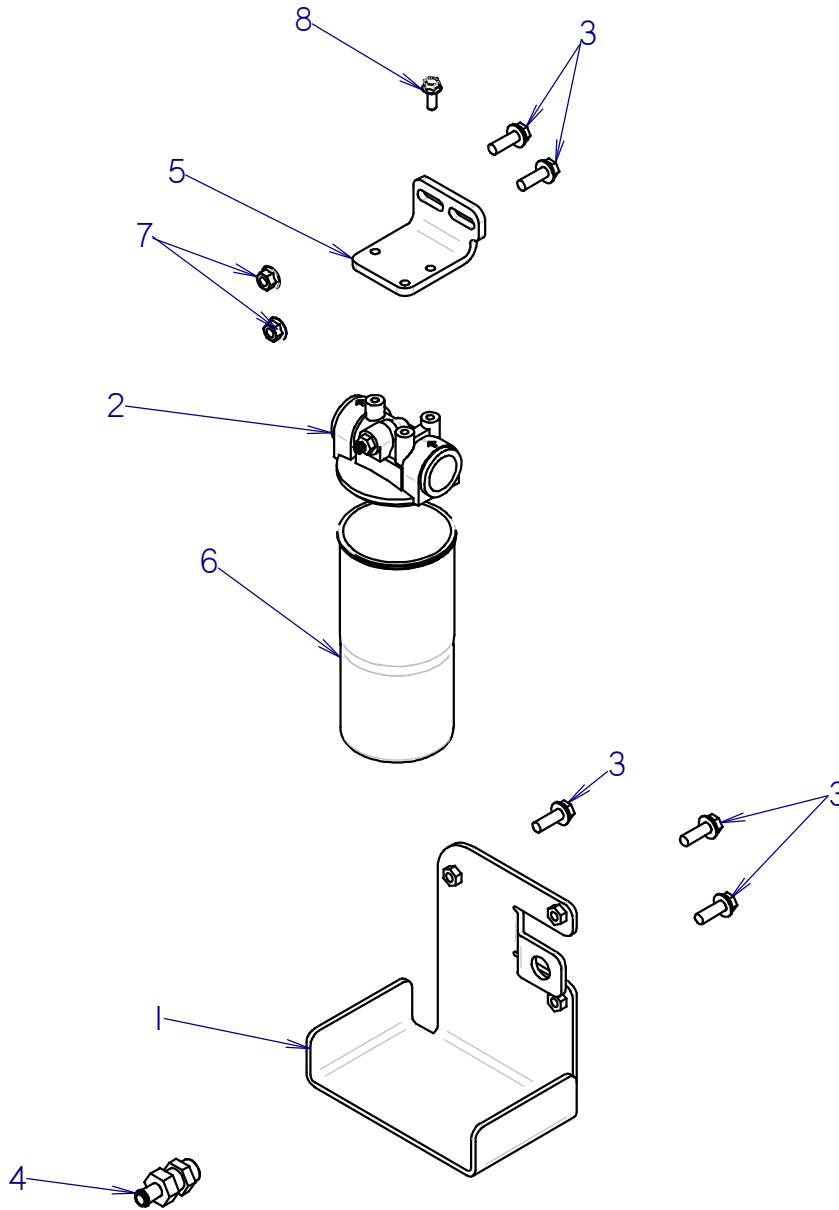
NOT SHOWN:

FOOTNOTES:

1. ABRASION SLEEVE TO INCLUDE CASE DRAIN AND HI/LOW HOSES.

NOTE:

HYDRAULIC FILTER GUARD



HYDRAULIC FILTER GUARD

REF PART
NO. NUMBER QTY DESCRIPTION REMARKS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	322-662	1	HYD FILTER GUARD	
2	157-345	1	FILTER HEAD	REFER TO FOOTNOTE 1
3	107-003	5	FLG LK SCREW (M12-1.75 X 35MM)	REFER TO FOOTNOTE 1
4	149-624	1	BK S/O COUPLER (100-10H)	REFER TO FOOTNOTE 1
5	306-862	1	BRACKET	REFER TO FOOTNOTE 1
6	153-792	1	FILTER ELEMENT (10 MICRON)	REFER TO FOOTNOTE 1
7	106-709	2	FLG LK NUT (M12-1.75)	REFER TO FOOTNOTE 1
8	105-826	3	FLG LK BOLT (3/8-NC X 1")	REFER TO FOOTNOTE 1

FOOTNOTES

1. FOR MORE DETAILS ON REF NO:S 2 THRU 8 REFER TO PARTS PAGE "HYDRAULIC FILTER".

NOTE:

HYDRAULIC FILTER GUARD KIT #191-342 CONSIST OF 1X REF #1 AND 3X REF #3.

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:

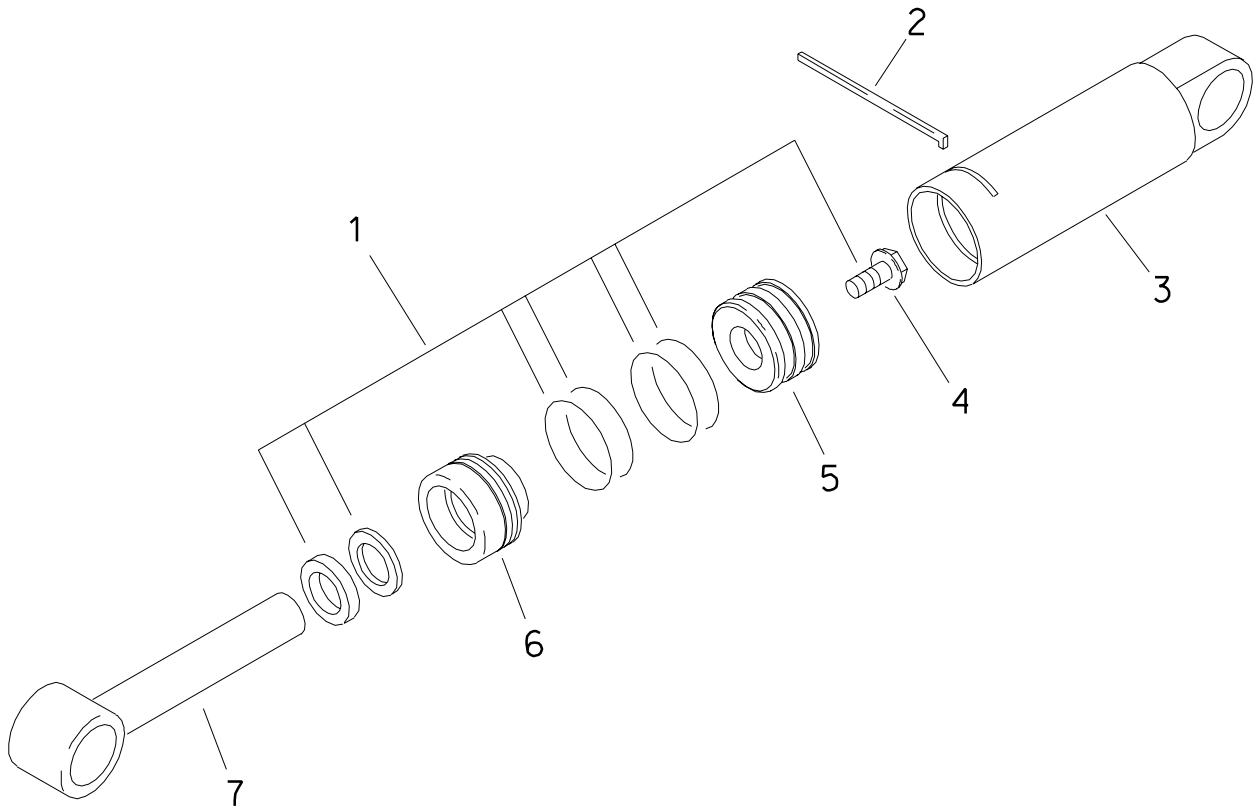
1. EARLY PRODUCTION VALVES HAVE A MACHINED WORK PORT WITH A PLUG INSTALLED, FUTURE PRODUCTION VALVES WILL NOT HAVE A MACHINED WORK PORT.

NOTE:

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

HYDRAULIC CYLINDER

2" 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	

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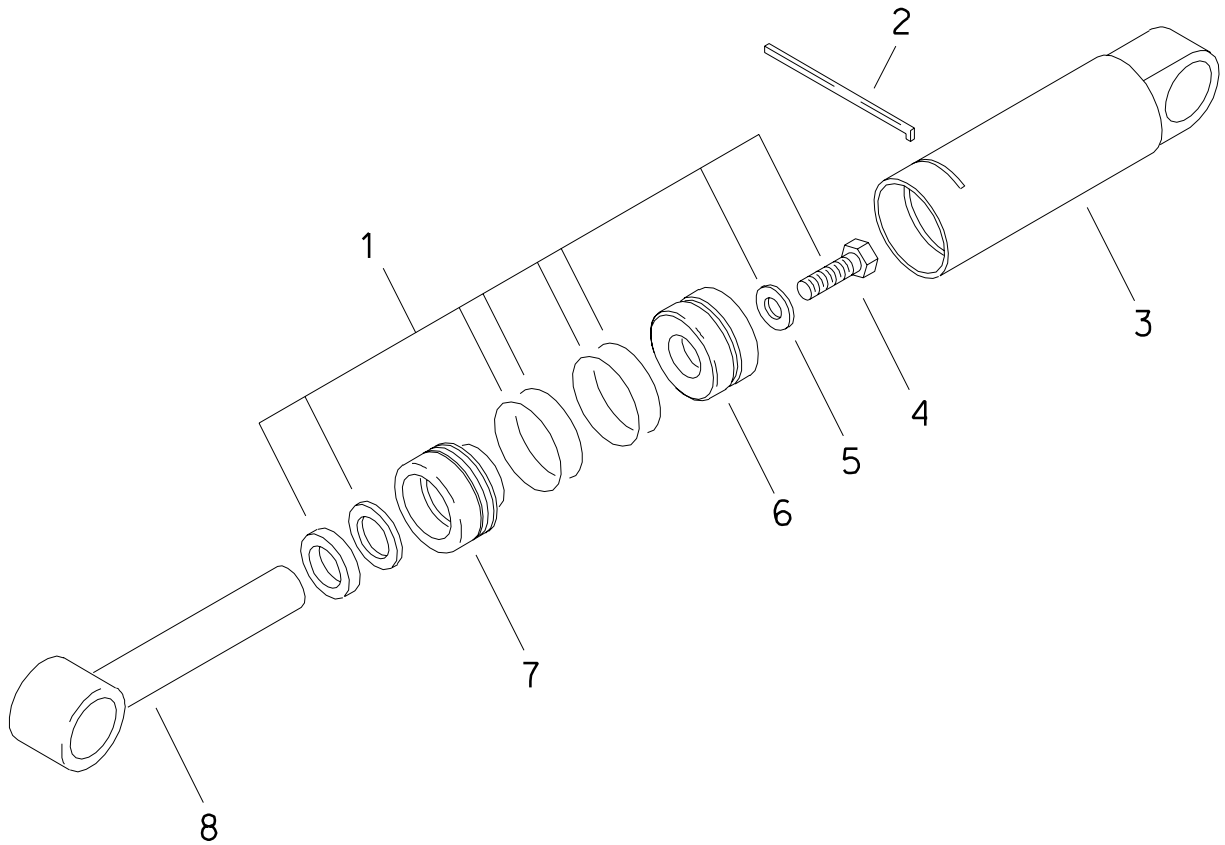
- 259-100 U-SEAL INSTALLER (1"-1.499")
- 259-236 WIPER INSTALLER (1.25")
- 259-239 WIPER/SEAL INSTALLER (2")
- 259-241 PISTON INSTALLER (2")
- 259-188 CYLINDER HEAD SPANNER - TWO PIN

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

HT115

Related Publications

Component	Ass'y	P/N
Model:		
HT115 Parts Manual		053-481
HT115 Operators Manual		054-126
HT115 Repair Guide (Service Manual)		N/A
HT115 Technical Supplement		053-139
Engine:		
John Deere Operators Manual - 4045TF275	194-370	054-087

Filters

Engine:		
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 Filter Element (slip-on) -		155-941
Primary Filter Sediment Bowl		194-493
Primary Fuel Filter Element-John Deere		194-492
Secondary Fuel Filter Element – John Deere		194-498
Hydraulic:		
Oil Filter Element (1-1/2-UNF, spin-on, Replacement)		153-792
Element (1-1/2-UNF, spin-on, Break-In)		153-791

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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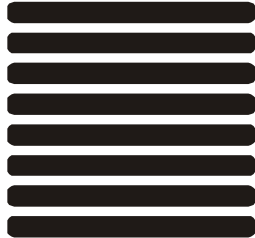
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