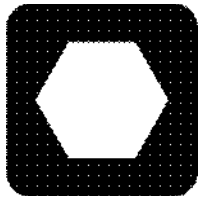


ST37X

Parts Manual



Ditch Witch[®]

ST37X

ISSUE NO. 05PL-03/18

For Replacement Copy Order **P/N 053-2969**

This product and its use may be covered by one or more patents at <http://patents.charlesmachine.works>

This manual contains information concerning the following models:
ST37X

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FOREWORD

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

- Descriptions 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.
- Part numbers enclosed in a box or marked as “obsolete” in the remarks column 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 referenced in footnotes are available through your local Ditch Witch dealer.
- 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 Ditch Witch 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 replacement parts.



A CHARLES MACHINE WORKS COMPANY

WARRANTY

DW WARRANTY Policy
August, 2016

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 Ditch Witch factory that fail due to a defect in material or workmanship within one (1) year of first commercial use. 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 Ditch Witch Product Support (DWPS) or its authorized dealer. DWPS will provide the location of its inspection facilities or it's nearest authorized dealer upon inquiry. DWPS 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 the Ditch Witch factory.

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 the DWPS, P.O. Box 66, Perry, OK 73077-0066, or contact your local dealer.

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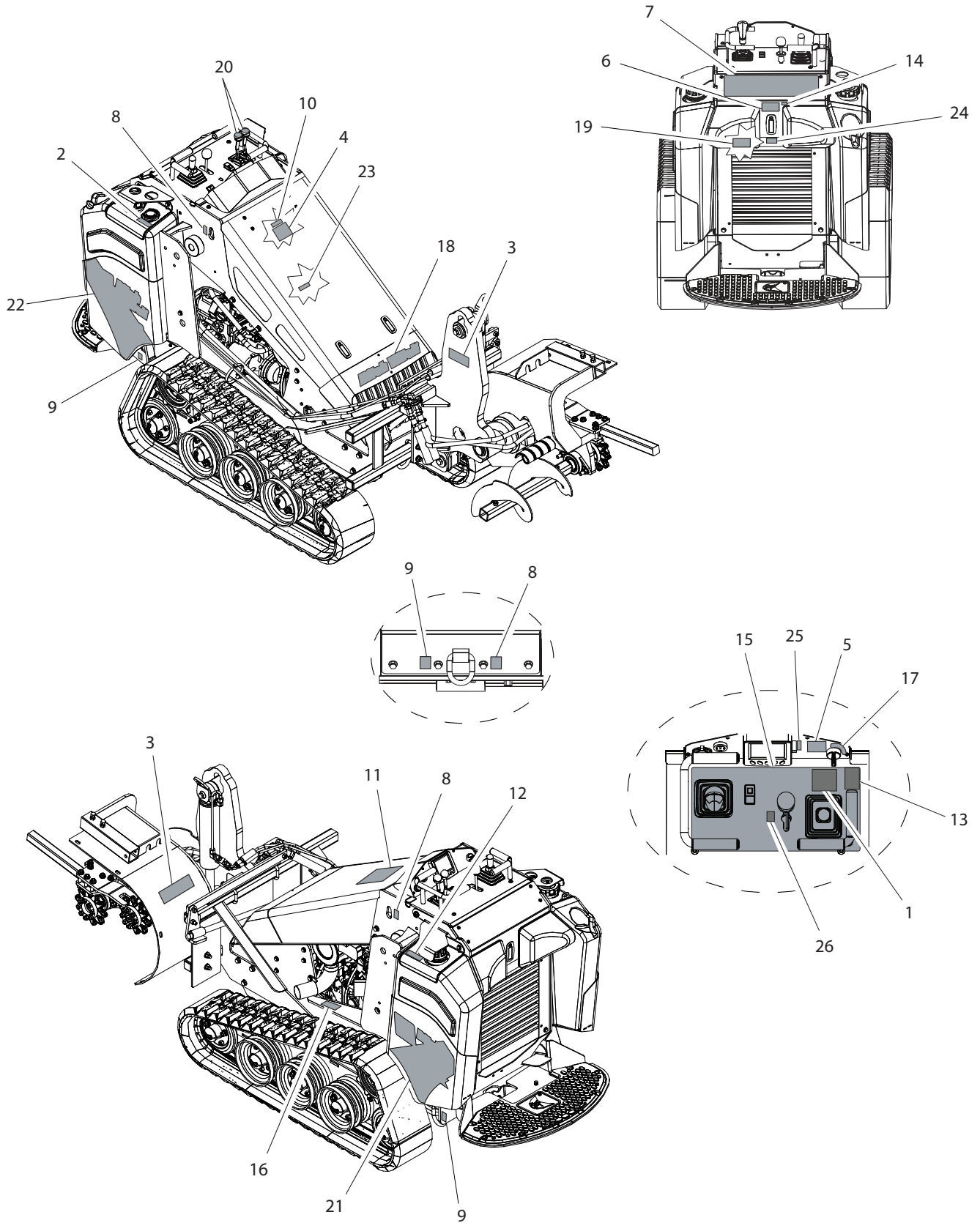
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DECALS

DECAL LOCATION ST37X



DECAL LOCATION

ST37X

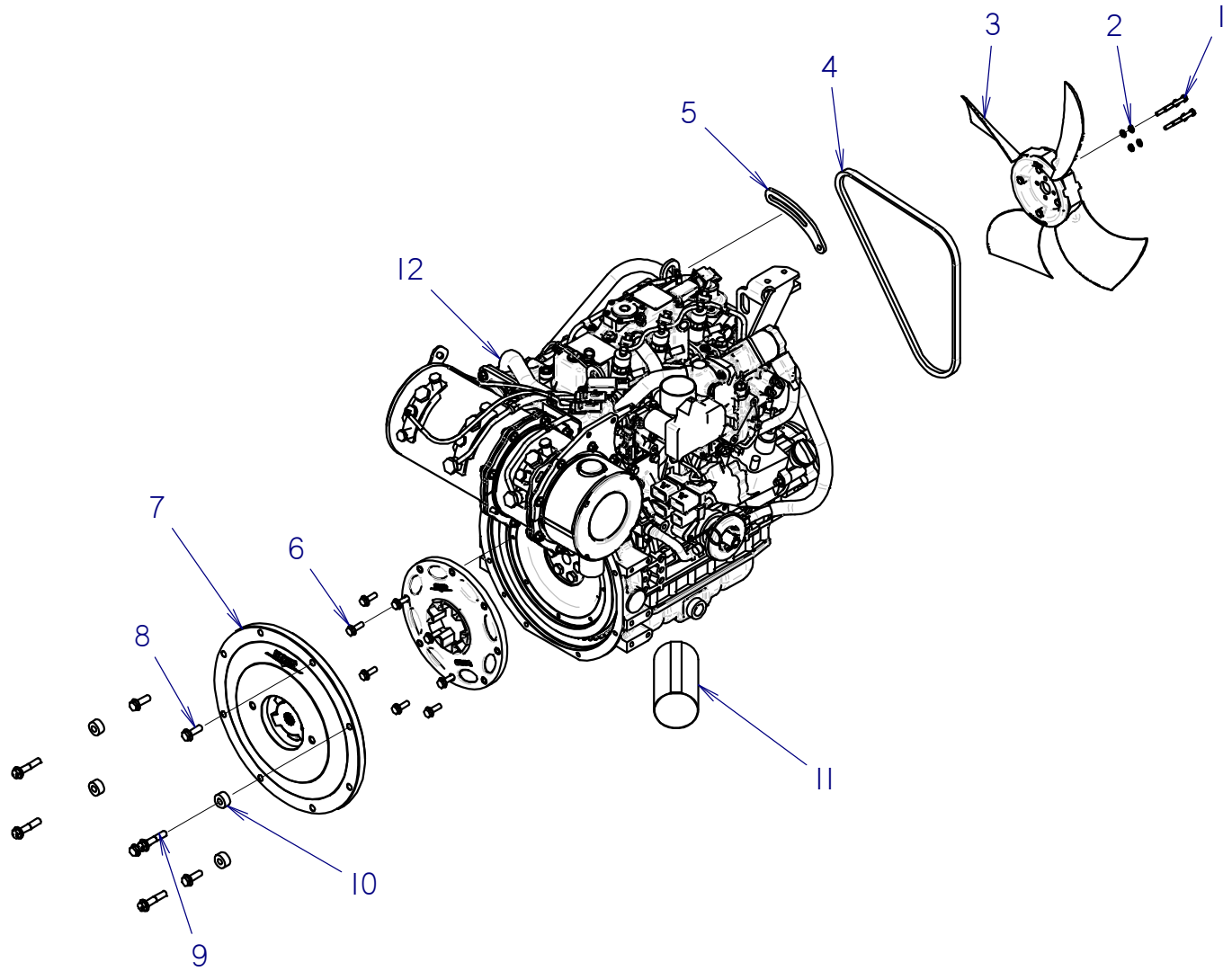
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	270-7395		ST37X SERVICE DECAL KIT	
1	270-6405	2	TRENCHER OVERLAY	
2	270-5338	1	ULTRA LOW SULFUR FUEL	
3	275-097	2	DANGER CHAIN & AUGER	
4	270-6312	1	LUBRICATION CHART	
5	700-133	1	WARNING ONE CALL NOTIFICATION	
6	273-475	1	WARNING READ OPERATOR MANUAL	
7	270-7436	1	OPERATOR INSTRUCTIONS	
8	274-442	3	LIFT LOCATION	
9	274-318	3	TIE DOWN LOCATION	
10	270-6291	1	FUSE/RELAY BLOCK	
11	270-6513	1	GRAY LOGO	
12	275-120	1	RESERVOIR (THF)	
13	700-009	1	CAUTION WEAR HEARING PROTECTION	
14	270-6406	1	OPERATOR MANUAL REPLACEMENT	
15	270-7310	1	CONTROL PANEL	
16	273-423	1	CAUTION HOT PARTS	
17	700-138	1	IGNITION SWITCH	
18	270-6871	1	GRAY LOGOTYPE 18.5" X 3.25"	
19	270-1023	1	NOTICE HYDRAULIC OIL LEVEL	
20	700-094	2	ORANGE KNOB COVER	
21	270-7375	1	ST37X LEFT MODEL ID	
22	270-7376	1	ST37X RIGHT MODEL ID	
23	273-459	1	WARNING NO ETHER/STARTER FLUID	
24	270-6773	1	PATENT	
25	270-6991	1	WORKLIGHTS	SEE FOOTNOTE I. USE WITH LIGHT OPTION KIT
26	270-7344	1	DUAL AUX CONTROL	SEE FOOTNOTE I. USE WITH DUAL AUX CONTROL OPTION KIT

FOOTNOTES

I. NOT PART OF KIT

ENGINE COMPONENTS

ENGINE



ENGINE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	106-093	4	SCREW (M6-1.00 X 45MM)	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 70 IN-LBS
2	105-079	4	LOCK WASHER (1/4)	
3	195-2148	1	FAN, 17" DIA PULLER	
4	170-475	1	BELT	
5	301-6658	1	ALTERNATOR BRACKET	
6	106-992	8	FLG LK SCREW (M8-1.25 X 25MM)	TORQUE TO 20 FT-LBS
7	195-2144	1	YANMAR PUMP MOUNT SAE B 13 TOOTH	
8	107-002	4	FLG LK SCREW (M10-1.50 X 30MM)	TORQUE TO 40 FT-LBS
9	105-1980	4	FLG SCREW (M10-1.50 X 50MM) 10.9 ZP	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 40 FT-LBS
10	184-317	4	ENGINE MOUNT SPACER	
11	117-1051	1	ABRASION BAG (3.0" X 8.0")	
12	195-2174	1	ENGINE - T4F YANMAR 3TNV88	

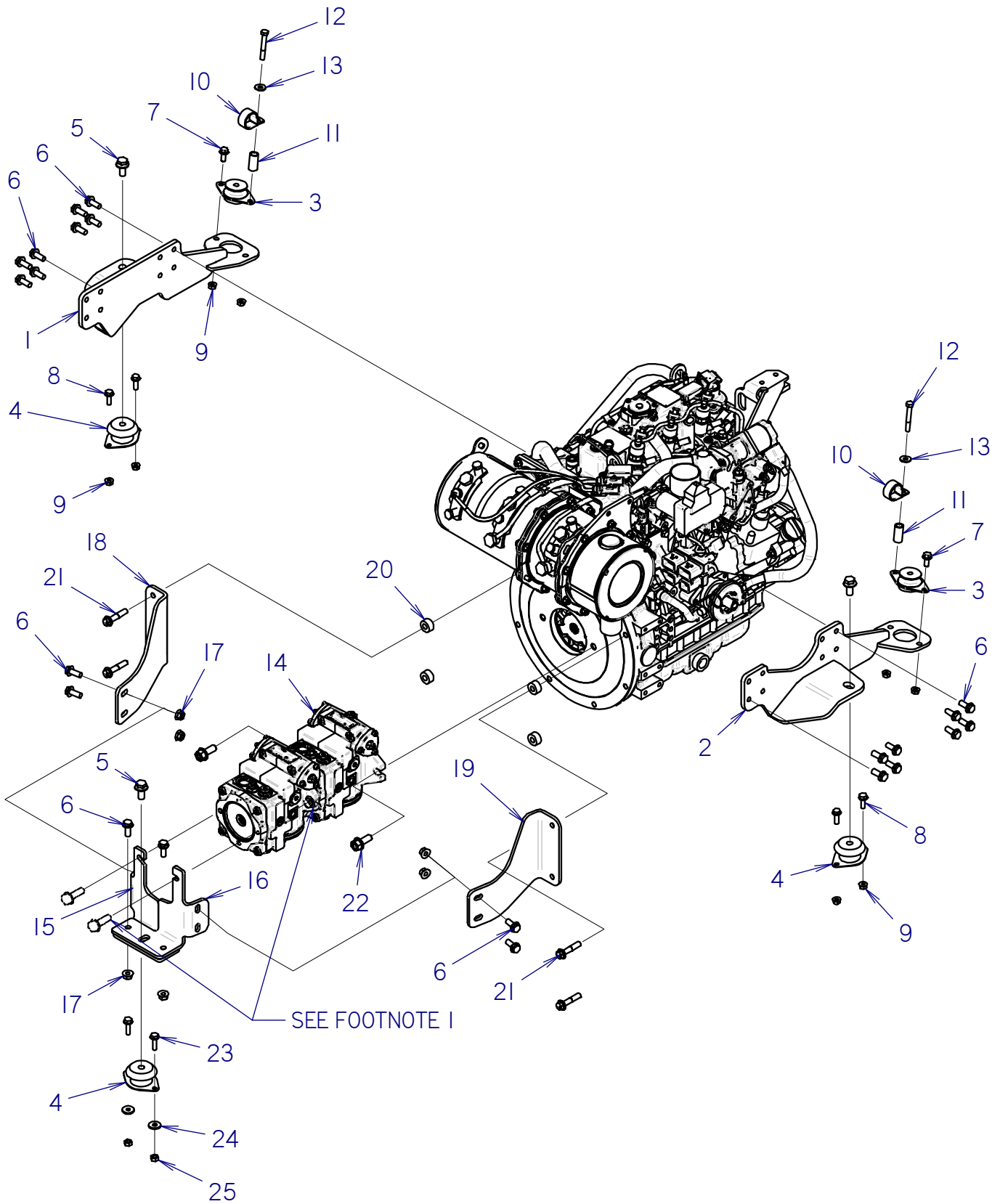
NOT SHOWN:

500-3015 ALTERNATOR
500-3268 FUEL FILTER

FOOTNOTES:

NOTE:

ENGINE MOUNTS



ENGINE MOUNTS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-4992	1	MOTOR MOUNT	
2	301-4995	1	MOTOR MOUNT	
3	116-539	2	ISOLATOR	
4	118-132	3	SHOCK MOUNT	
5	106-806	3	FLG LK SCREW (M12-1.75 X 25MM)	
6	106-724	22	FLG SCREW (M10-1.50 X 25MM)	
7	106-162	2	FLG SCREW (M8-1.25 X 20MM, GD8)	
8	105-1639	4	FLG BOLT (M8 - 1.25 X 25MM)	
9	106-386	8	FLG LOCKNUT (M8-1.25)	
10	105-1454	2	CLAMP, BOLT-ON ("P") 1 1/4"	
11	181-650	2	SPACER (1.395")	
12	106-570	2	SCREW (M8-1.25 X 60MM)	
13	105-117	2	WASHER (5/16")	
14	150-4230	1	TANDEM HYDRO PUMP	
15	301-7394	1	PUMP MOUNT	
16	301-7393	1	PUMP MOUNT	
17	106-387	6	FLG LOCKNUT (M10-1.50)	
18	301-7392	1	PUMP SUPPORT	
19	301-7391	1	PUMP SUPPORT PLT	
20	184-317	4	ENGINE MOUNT SPACER	
21	105-1980	4	FLG SCREW (M10-1.50 X 50MM) 10.9 ZP	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 40 FT-LBS
22	106-202	2	FLG BOLT (1/2-NC X 1-1/4",GD8)	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 60 FT-LBS
23	106-163	2	FLG SCREW (M8-1.25 X 30MM)	
24	106-261	2	WASHER (3/34")	
25	106-561	2	LOCKNUT (M8-1.25,PRV TRQ,10.9)	

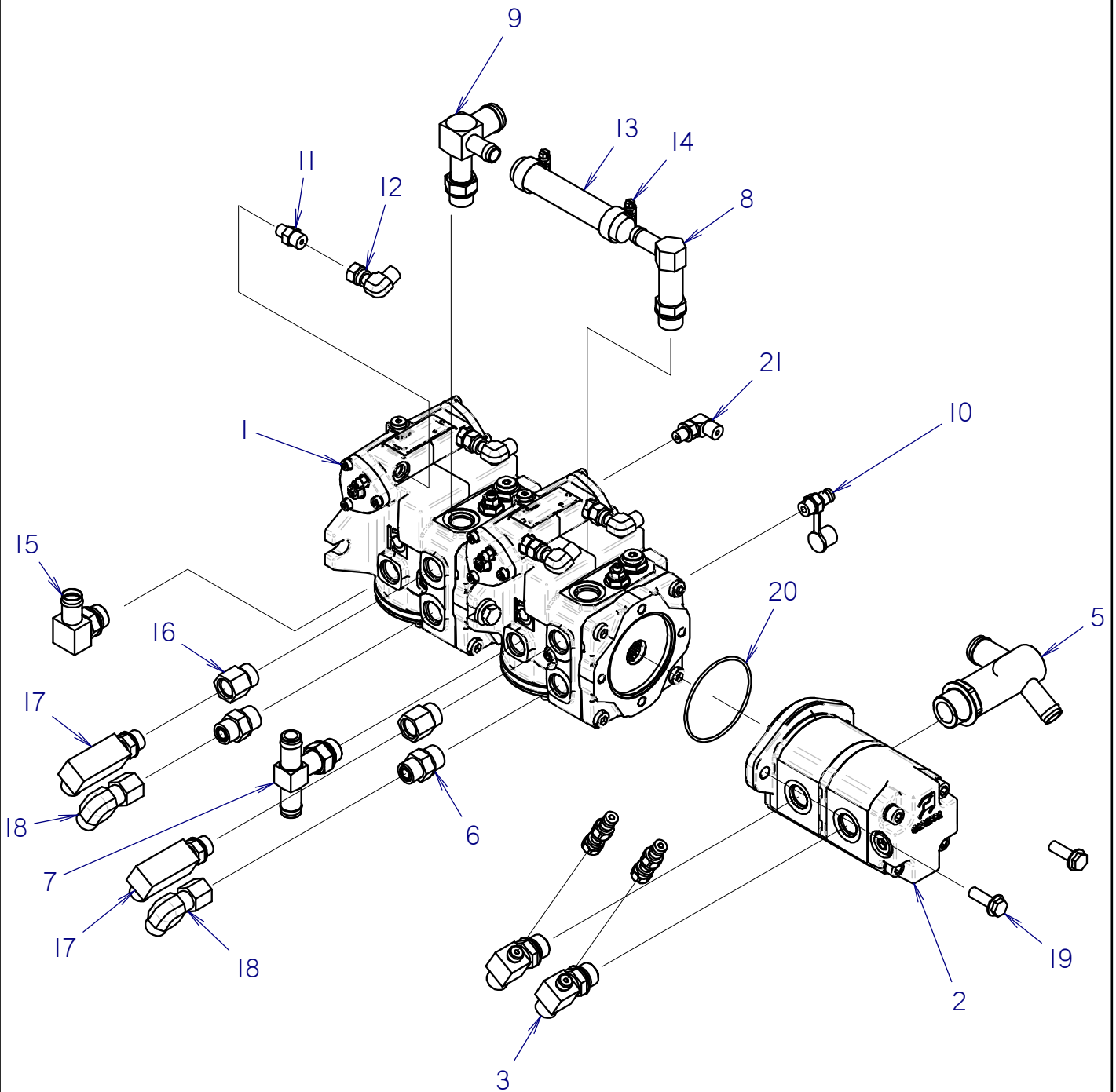
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FOOTNOTES:

1. USE EXISTING BOLTS IN PUMP TO FASTEN TO PUMP MOUNTS.

NOTE:

PUMP STACK



PUMP STACK

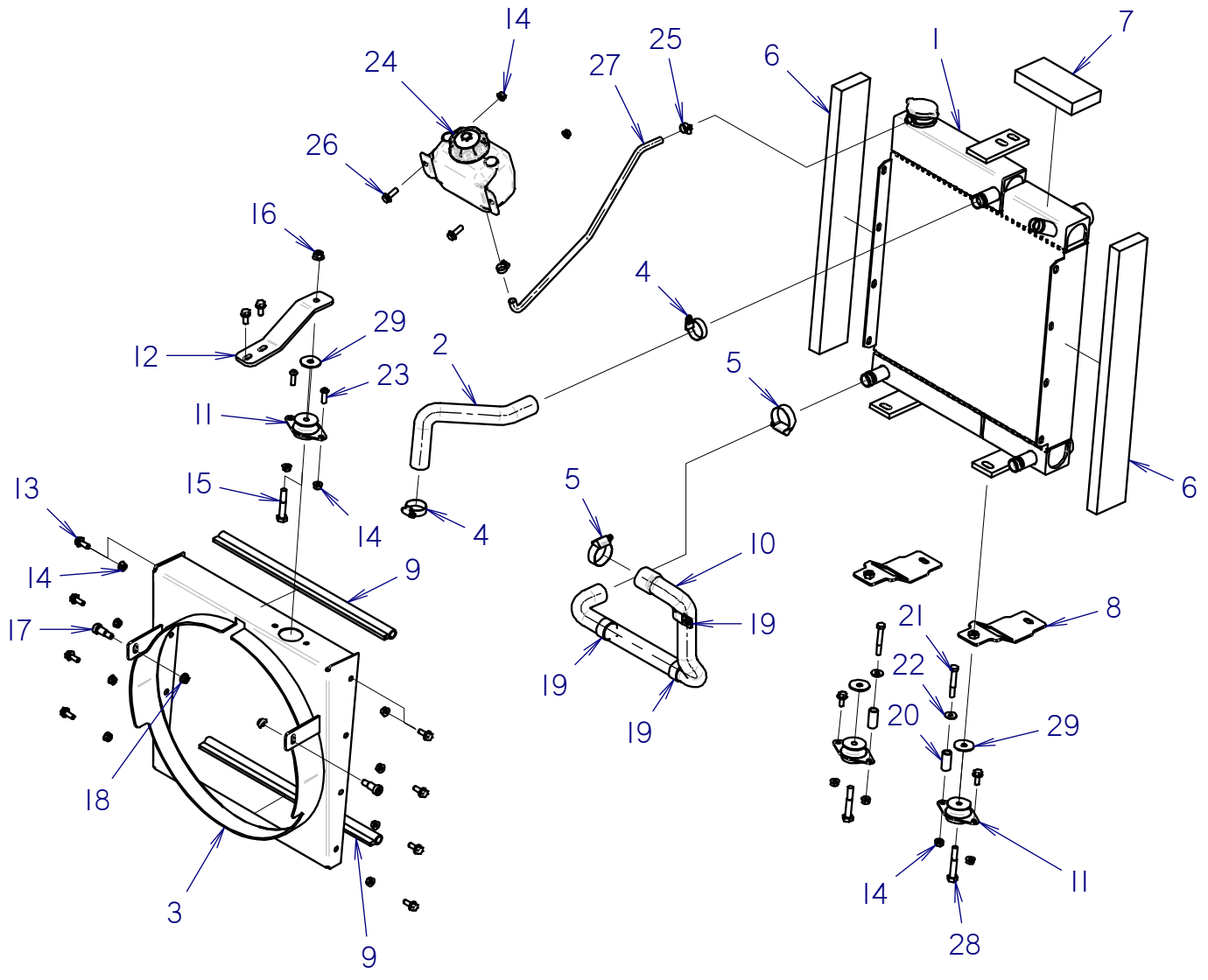
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	150-4230	1	TANDEM HYDRO PUMP	
2	150-4132	1	HYDRAULIC PUMP	USE O-RING 157-041
3	156-973	2	BRANCH TEE (080-040-10S)	
4*	159-156	2	QDC ADAPTER (02-040F)	
5	150-2693	1	S/O COUPLER (16S-16H90-12H90)	
6	154-279	2	CONNECTOR (080-10S)	
7	150-4938	1	S/O BR TEE (10S-12H90-12H90)	
8	150-1022	1	ELBOW (10S-10H, LONG)	
9	150-4231	1	S/O COUPLER (10S-16H90-10H90)	
10	150-2021	1	QDC ADAPTER (02-04S, VITON O-RING)	
11	156-069	4	CONNECTOR (04S-040, ORF)	
12	154-255	4	UNION (040-040FX90)	
13	116-044	6	BULK HOSE (5/8", SOLD PER 1")	
14	110-026	2	WORM CLAMP (1/2" TO 1-1/4")	
15	150-4939	1	S/O COUPLER (10S-12H90)	
16	155-193	2	REDUCER (10S-08SF)	
17	154-254	2	CONNECTOR (08S-08090, XL)	
18	154-256	2	UNION (080-080FX90)	
19	106-164	2	FLG LK SCREW (M10-1.50 X 30MM)	
20	157-041	0	O-RING (152 D70)	INCLUDED IN 150-4230 TANDEM HYDRO PUMP
21	154-252	1	CONNECTOR (04S-04090)	

NOT SHOWN:

FOOTNOTES:

NOTE:

ENGINE COOLING SYSTEM



ENGINE COOLING SYSTEM

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	195-1268	1	RADIATOR/OIL COOLER	
2	118-208	1	UPPER RADIATOR HOSE	
3	301-6657	1	FAN SHROUD	
4	110-353	2	WORM CLAMP (3/4" TO 1-1/2")	
5	111-011	2	WORM CLAMP (1" TO 1-3/4")	
6	118-168	2	SOUND INSULATION	
7	118-168		SOUND INSULATION	118-168 COMES IN 34" LENGTHS, USE LEFTOVER MATERIAL FROM ITEM 6
8	301-4998	2	NUT PLATE	
9	116-421	36	BULK EDGE (1/8", SOLD PER 1")	
10	195-2149	1	COOLANT HOSE	
11	116-539	3	ISOLATOR	IF UNIT IS NOT EQUIPPED WITH REF#29 SEE FOOTNOTE 1
12	301-6652	1	COOLER MOUNT	IF UNIT IS NOT EQUIPPED WITH REF#29 SEE FOOTNOTE 1
13	106-162	12	FLG SCREW (M8-1.25 X 20MM, GD8)	
14	106-386	16	FLG LOCKNUT (M8-1.25)	
15	106-628	1	SCREW (M10-1.50 X 60MM)	
16	106-387	1	FLG LOCKNUT (M10-1.50)	
17	107-646	2	SHLD BLT (1/2" X 3/4", 3/8-NC)	
18	105-834	2	FLG LOCKNUT (3/8-NC)	
19	105-1454	3	CLAMP, BOLT-ON ("P") 1 1/4"	
20	181-650	2	SPACER (1.395")	
21	106-570	2	SCREW (M8-1.25 X 60MM)	
22	105-117	2	WASHER (5/16")	
23	107-334	2	SCREW (M8-1.25 X 25MM,BUT SOC)	
24	362-2739	1	TANK W/ SPLASH GUARD (1 QT)	
25	110-249	2	WORM CLAMP (1/4" TO 5/8")	
26	106-381	2	FLG LK SCREW (M8-1.25 X 25MM)	
27	116-108	22	BULK HOSE (5/16", SOLD PER 1")	
28	106-642	2	SCREW (M10-1.50 X 65MM)	
29	105-2419	3	WASHER (1.50" X .406" X .089", HARDENED)	

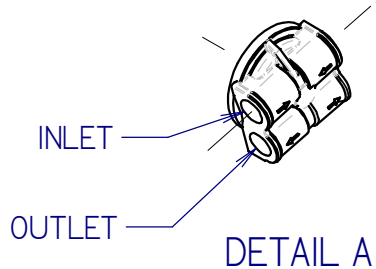
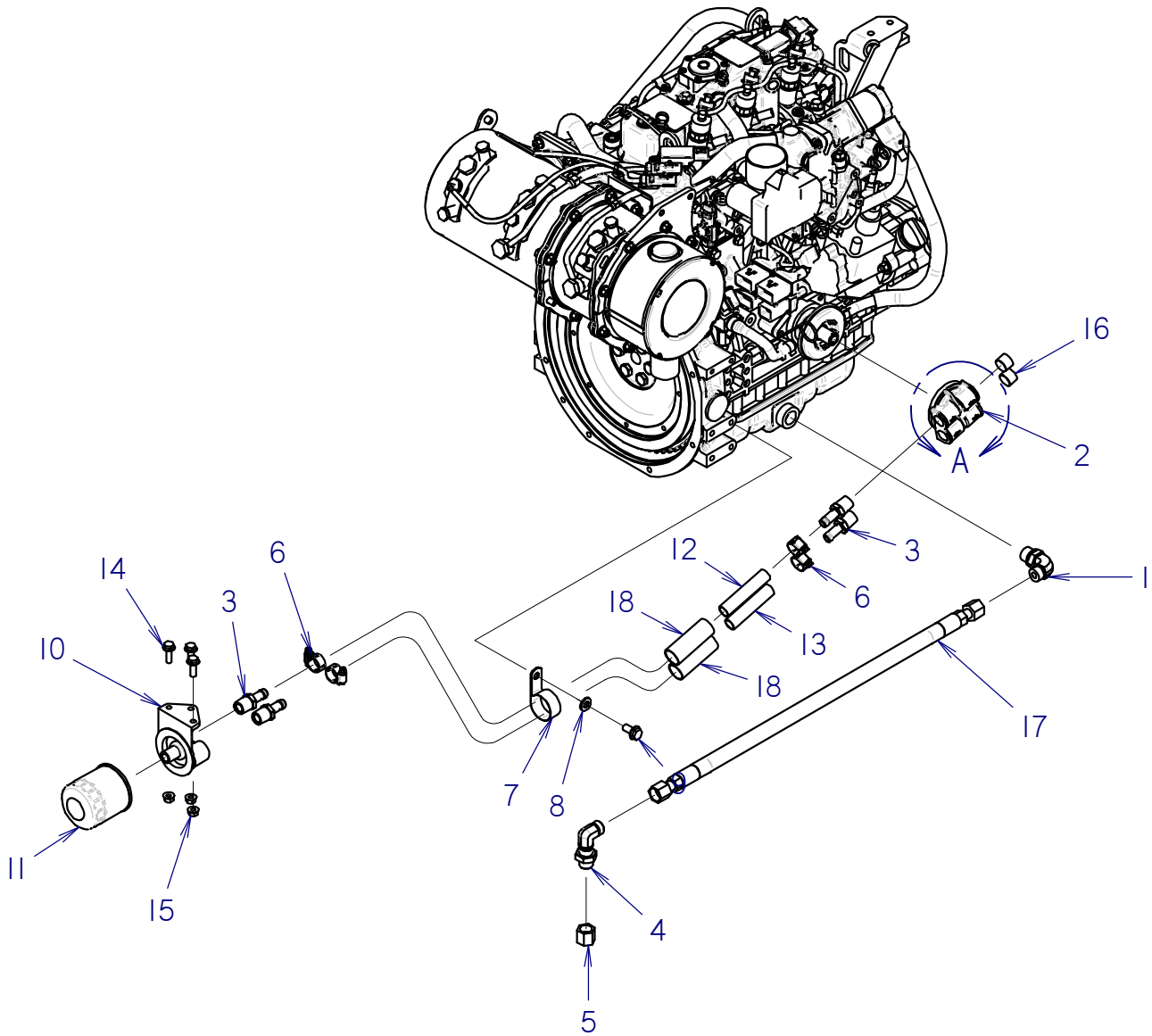
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FOOTNOTES:

1. WHEN REPLACING 116-539 ISOLATOR (REF# 11) AND/OR 301-6652 COOLER MOUNT (REF# 12) ORDER KIT 190-2718 WHICH INCLUDES REF#S 11, 12, & 29.

NOTE:

ENGINE OIL FILTER AND DRAIN



NOTE:
 INLET AND OUTLET MAY FLIP DEPENDING
 ON ORIENTATION OF ADAPTOR COVER, REFER
 TO ARROWS WHEN ATTACHING HOSES.

ENGINE OIL FILTER AND DRAIN

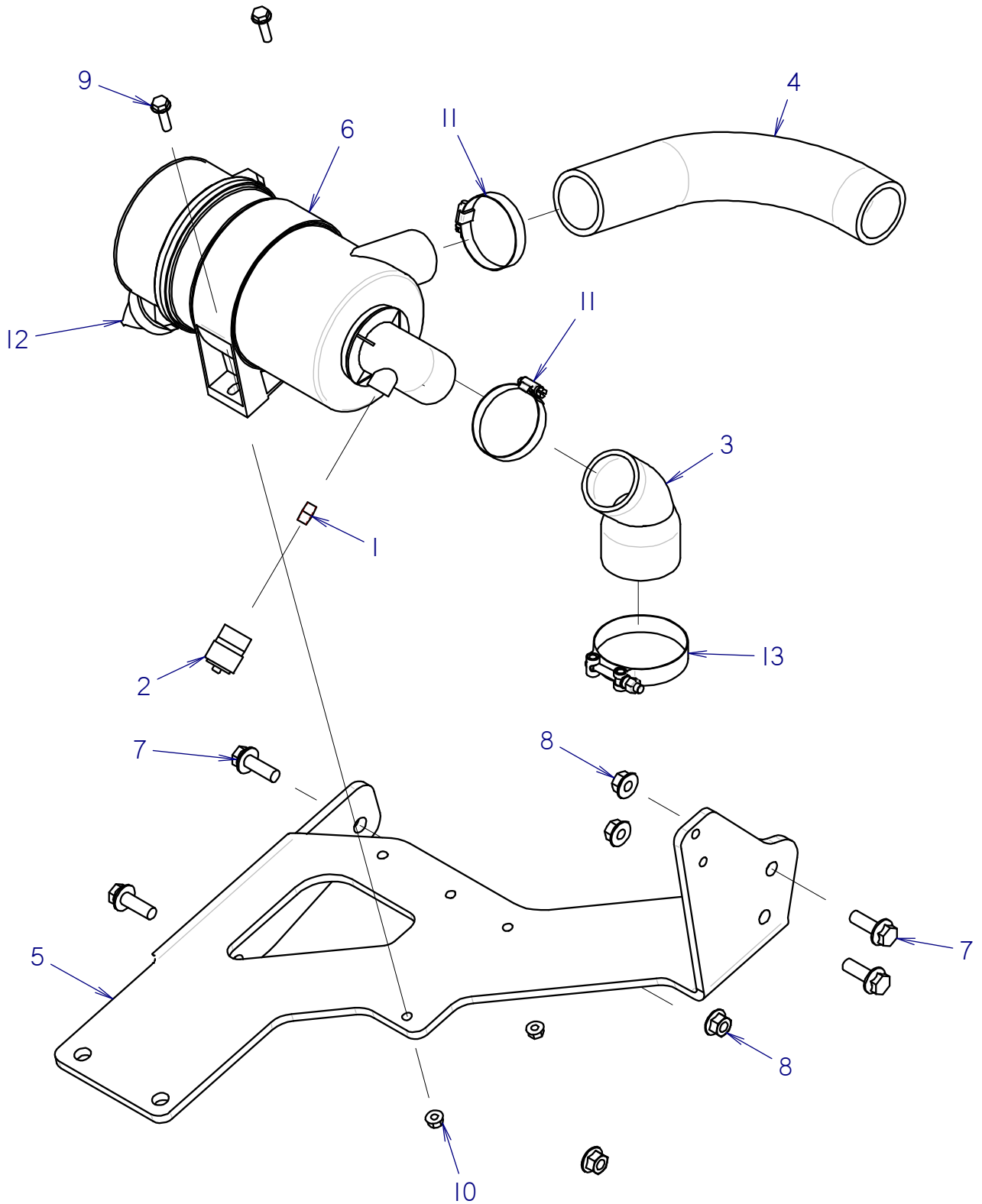
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	153-166	1	CONNECTOR (M22-1.50-08090)	
2	150-4139	1	REMOTE FILTER ADAPTER	
3	514-025	4	S/O COUPLER (08N-08H)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
4	154-396	1	BULKHEAD CONNECTOR (080-08090BK)	
5	154-327	1	CAP (080F)	
6	110-217	4	WORM CLAMP (7/16" TO 1")	
7	110-332	1	BOLT-ON CLAMP (1-5/8")	
8	106-396	1	WASHER (M10, HARDENED)	
9	106-382	1	FLG LK SCREW (M10-1.50 X 20MM)	
10	150-4140	1	REMOTE FILTER HOUSING	
11	500-2348	1	ENGINE OIL FILTER (Yanmar)	
12	116-286	25	BULK HOSE (1/2", SOLD PER 1")	
13	116-286	25	BULK HOSE (1/2", SOLD PER 1")	
14	106-381	3	FLG LK SCREW (M8-1.25 X 25MM)	
15	106-386	3	FLG LOCKNUT (M8-1.25)	
16	115-165	0	PLUG (08N, SOCI)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
17	150-1912	1	HOSE (080FX-26"-3000)	
18	117-989	2	ABRASION SLEEVE (1.00" X 24")	

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FOOTNOTES:

NOTE:

AIR FILTER MOUNTING



AIR FILTER MOUNTING

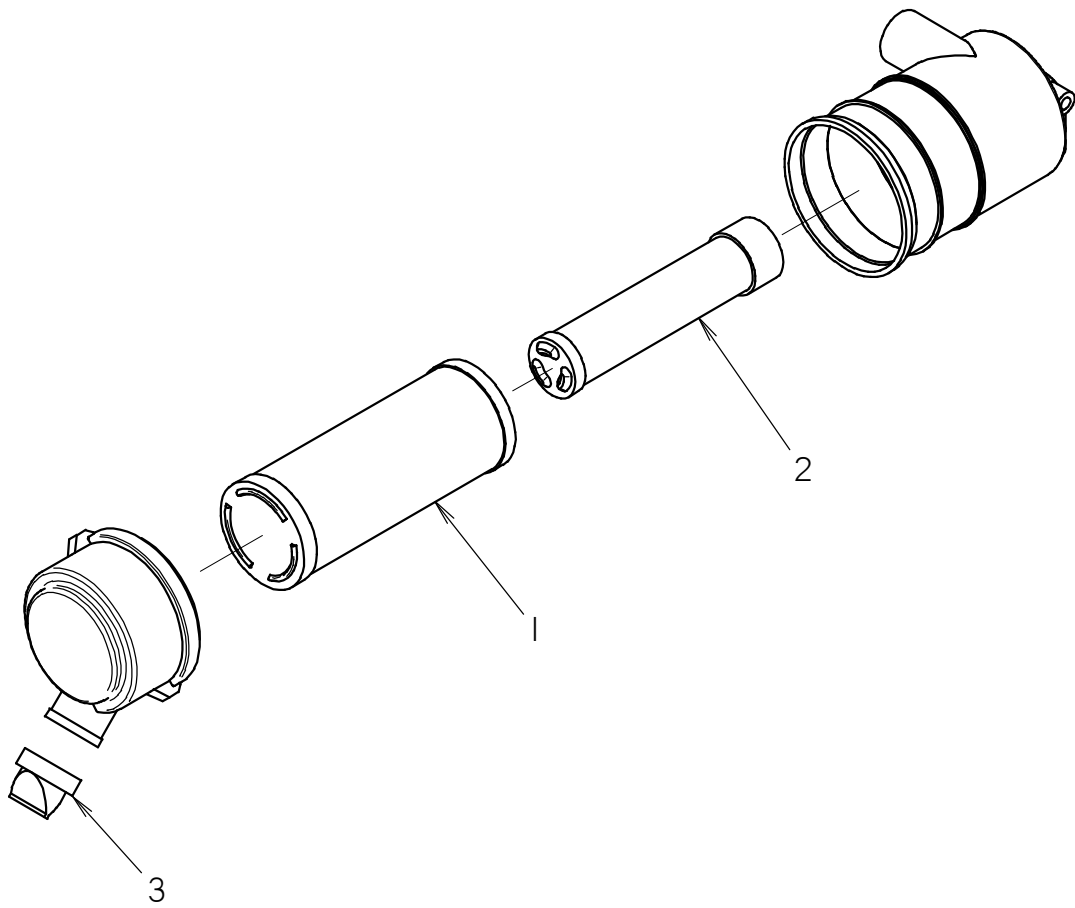
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	115-180	1	ALL THREAD (1/8-NPT)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
2	195-633	1	RESTRICTION INDICATOR (20"H20)	
3	157-814	1	HOSE 45 DEG. 2"-2.5"	
4	195-1201	1	HOSE, 2" AIR INTAKE ELBOW	
5	301-6761	1	BRACE	
6	194-343	1	MOUNTING CLAMP (5.750")	
7	106-632	4	FLG LK SCR (M12-1.75X35MM,SER)	
8	106-709	4	FLG LK NUT (M12-1.75)	
9	106-163	2	FLG SCREW (M8-1.25 X 30MM)	
10	106-386	2	FLG LOCKNUT (M8-1.25)	
11	110-134	2	WORM CLAMP (2.062" TO 2.750")	
12	194-093	1	AIR FILTER PARTS ASS'Y	
13	111-135	1	T-BOLT CLAMP	

NOT SHOWN:

FOOTNOTES:

NOTE:

AIR FILTERS



AIR FILTERS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	194-093	-	AIR FILTER PARTS ASS'Y	INCL. REF. #'S 1-3, SEE NOT SHOWN
1	194-038	1	FILTER ELEMENT, PRIMARY	
2	194-039	1	FILTER ELEMENT - SECONDARY	
3	194-761	1	DISCHARGE VALVE	

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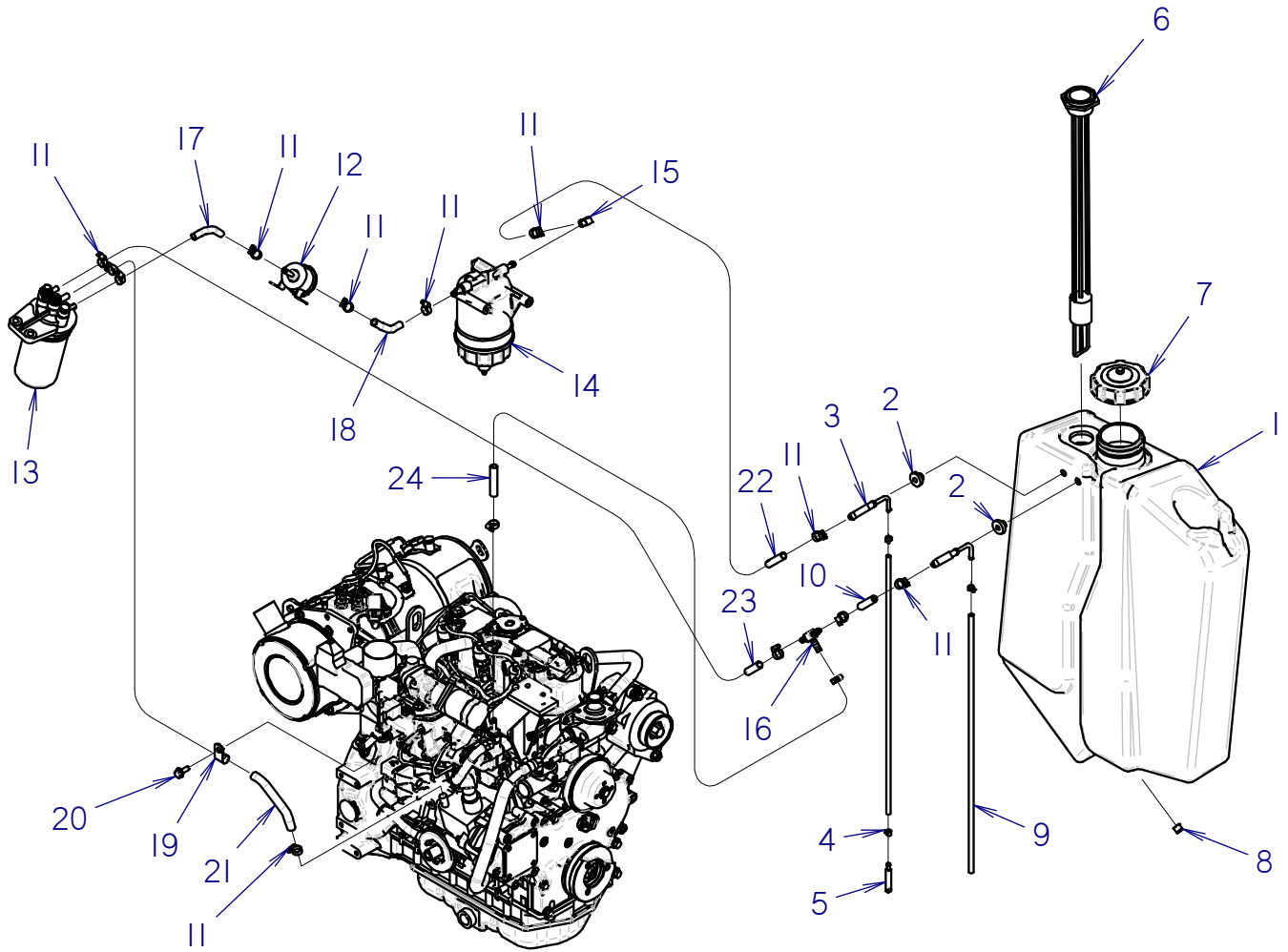
1- 195-1366 - AIR FILTER END CAP

SERVICE PART

FOOTNOTES:

NOTE:

FUEL TANK & FUEL LINES



FUEL TANK & FUEL LINES

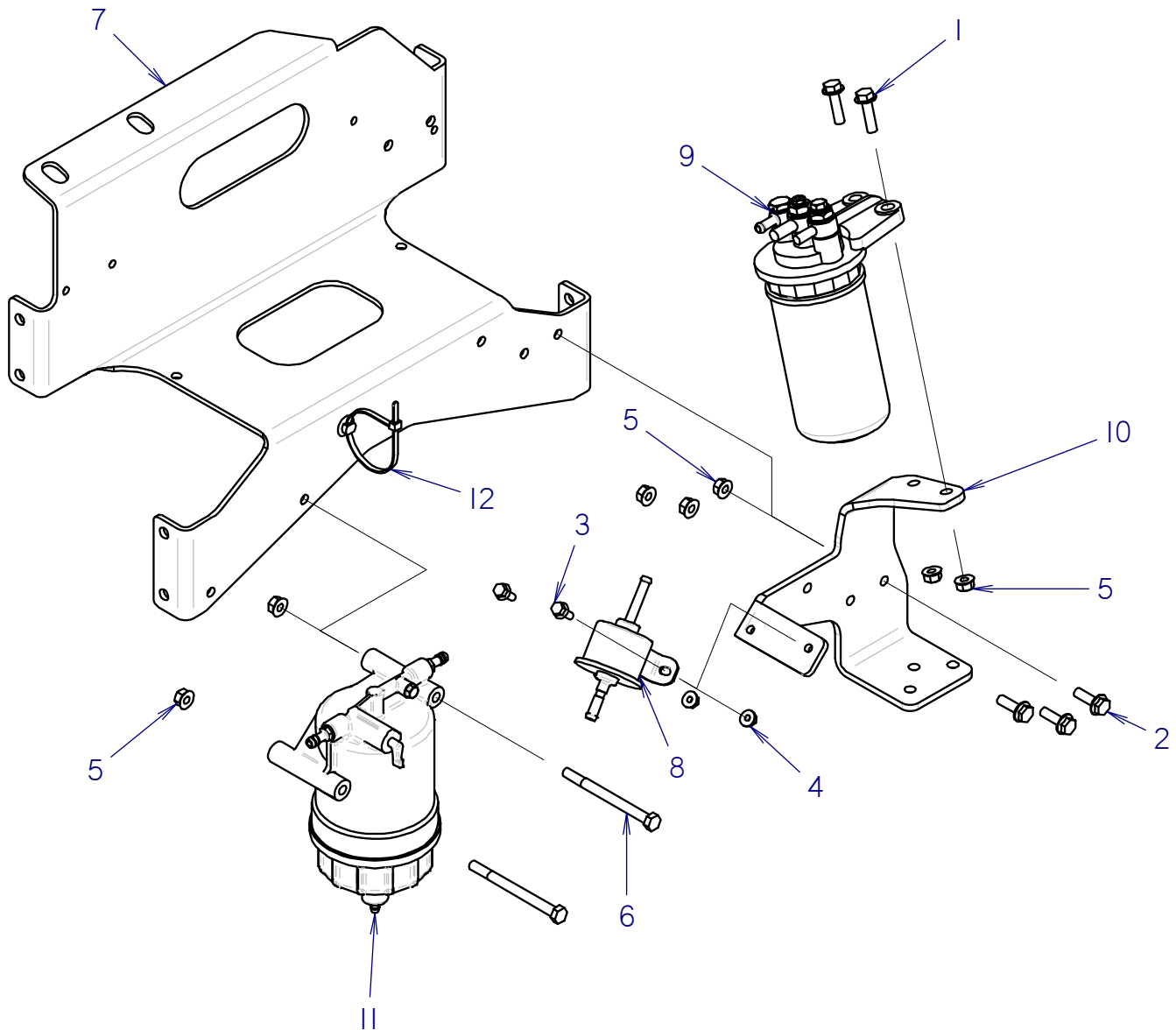
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	364-1009	1	FUEL TANK, 10.5 GAL	
2	116-325	2	GROMMET (362")	
3	150-3378	2	S/O COUPLER (04H90-05H90)	
4	110-563	3	SPRING CLAMP (3/8")	
5	194-505	1	FUEL PICKUP	
6	364-730	1	FUEL GAUGE	
7	362-1892	1	DIESEL CAP	
8	115-444	1	PLUG (04N, SOC, SSI)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
9	118-096	48	BULK FUEL TUBING (1/4",PER FT)	
10	116-108	3	BULK HOSE (5/16", SOLD PER 1")	
11	110-249	14	WORM CLAMP (1/4" TO 5/8")	
12	500-1239	0	FUEL PUMP YANMAR	
13	500-2349	0	FUEL FILTER ASM YANMAR	FILTER ONLY, BRACKET NOT INCLUDED
14	500-2532	0	WATER SEP	FILTER ONLY, CANISTER NOT INCLUDED
15	155-241	1	S/O COUPLER (02N-05H90)	
16	156-252	1	S/O TEE (05H-05H-05H)	
17	116-108	5	BULK HOSE (5/16", SOLD PER 1")	
18	116-108	4	BULK HOSE (5/16", SOLD PER 1")	
19	110-259	1	BOLT-ON CLAMP (.625")	
20	106-162	1	FLG SCREW (M8-1.25 X 20MM, GD8)	
21	116-881	52	BULK HOSE (3/8", SOLD PER FT)	
22	116-108	72	BULK HOSE (5/16", SOLD PER 1")	
23	116-108	85	BULK HOSE (5/16", SOLD PER 1")	
24	116-108	30	BULK HOSE (5/16", SOLD PER 1")	

NOT SHOWN:

FOOTNOTES:

NOTE:

FUEL SYSTEM MOUNTING



FUEL SYSTEM MOUNTING

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	106-163	2	FLG SCREW (M8-1.25 X 30MM)	
2	106-381	3	FLG LK SCREW (M8-1.25 X 25MM)	
3	106-712	2	FLG SCREW (M6-1.00 X 16MM)	
4	106-385	2	FLG LOCKNUT (M6-1.00)	
5	106-386	7	FLG LOCKNUT (M8-1.25)	
6	105-589	2	SCREW (M8-1.25 X 100MM)	
7	301-4981	1	BATTERY BASE	
8	500-1239	0	FUEL PUMP YANMAR	
9	500-2349	0	FUEL FILTER ASM YANMAR	
10	301-6886	1	FILTER MOUNT	
11	500-2532	0	WATER SEP	
12	105-1568	1	FIR TREE CABLE MOUNT	

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FOOTNOTES:

NOTE:

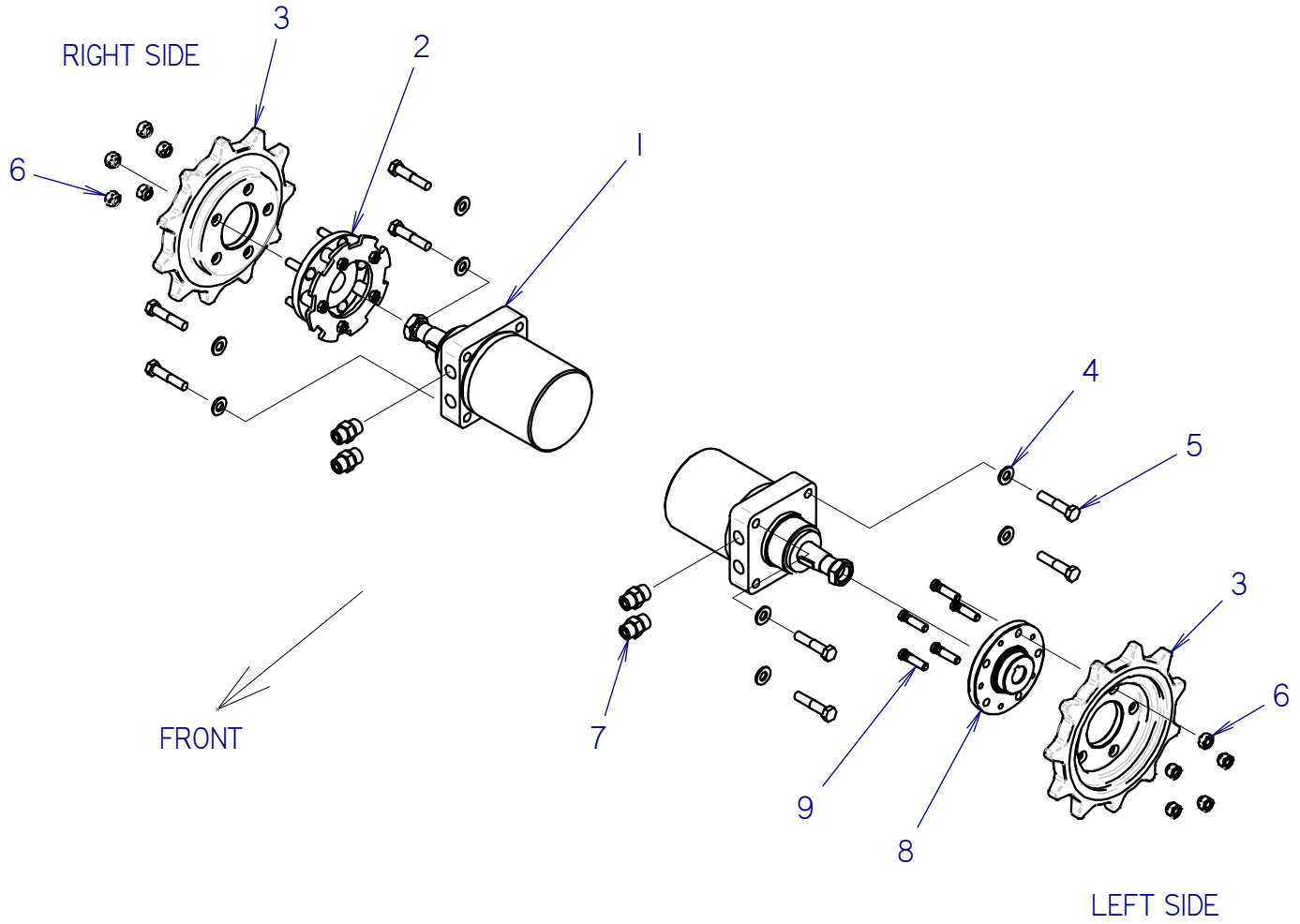
NOTES:

POWER TRAIN

TRACK MOTORS AND SPROCKETS

ENDS WITH: SEE NOTE 2

SEE NOTE 1



TRACK MOTORS AND SPROCKETS

ENDS WITH: SEE NOTE 2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	155-572	2	HYD MTR (GEROLERI 20.6 CID)	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 350 FT-LBS
2	350-1995	1	HUB W/ BRAKE ASM	
3	140-1227	2	SPROCKET, 11T, 72MM PITCH	
4	106-743	8	WASHER (.531", HARDENED)	
5	106-708	8	SCREW (M12-1.75 X 60MM, 10.9)	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 110 FT-LBS
6	105-054	10	LUG NUT (7/16-NF)	
7	154-279	4	CONNECTOR (080-10S)	
8	300-4341	1	HUB (MACHINED)	SEE FOOTNOTE 1
9	107-048	5	LUG BOLT (7/16-NF X 1-3/4")	SEE FOOTNOTE 1

NOT SHOWN:

FOOTNOTES:

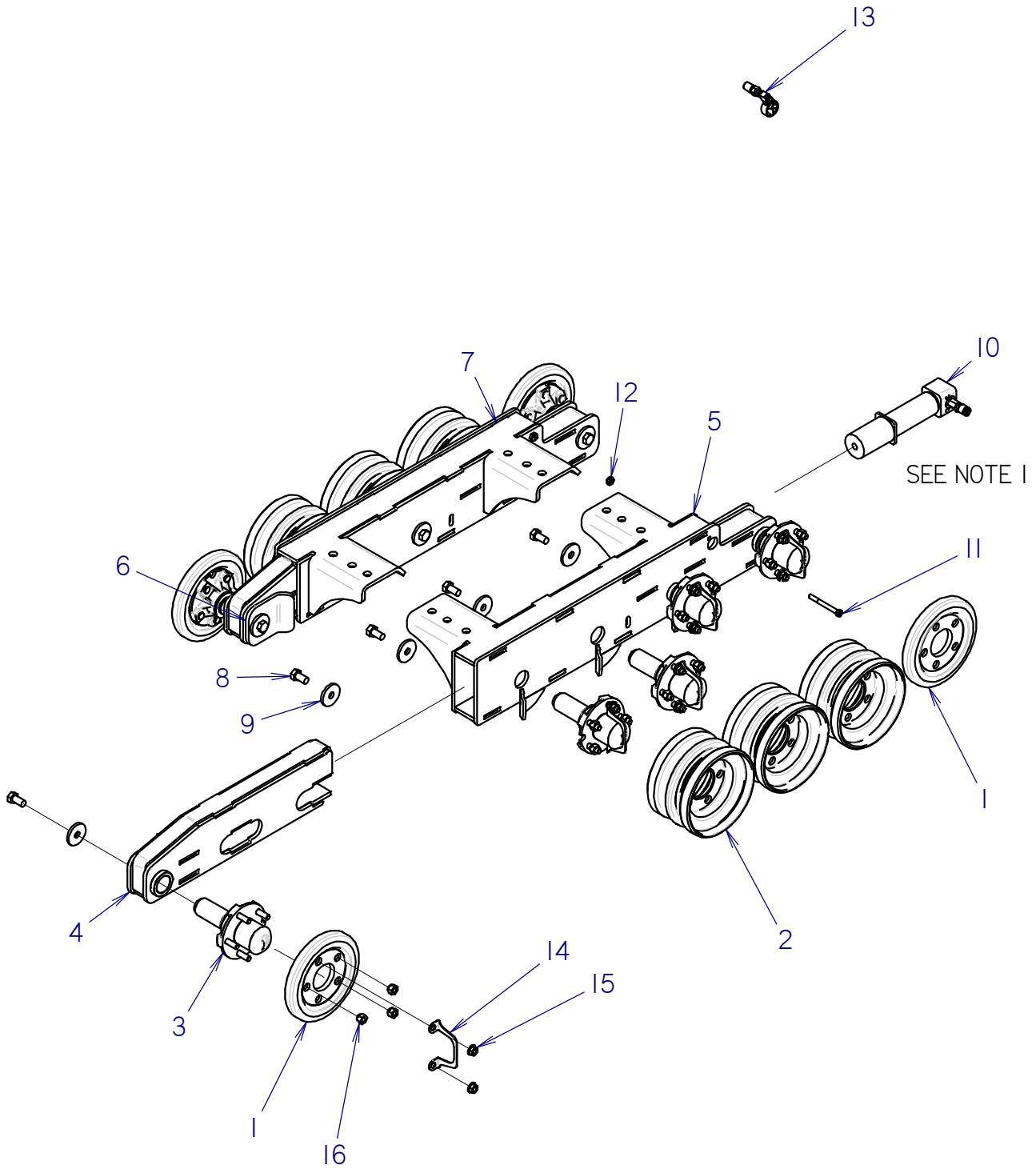
- ITEMS 8 AND 9 ARE INCLUDED IN 350-3798 WHEEL HUB (5 BOLT 7/16)

NOTE:

- SEE PAGE ID0461164 FOR UPDATED PAGE. CHANGES WERE MADE TO THE SK800 AND SK1050, THE SK752 AND SK850 WERE OUT OF PRODUCTION WHEN UPDATES WERE MADE.
- SK800 S/N: FALL/2017
SK1050 S/N: FALL/2017

TRACK ASSEMBLY

BEGINS WITH S/N:CMWSK750JF0001028; CMWSK755CF0001057; CMWSK850HF0000362
ENDS WITH S/N:



TRACK ASSEMBLY

BEGINS WITH S/N:CMWSK750JF0001028; CMWSK755CF0001057; CMWSK850HF0000362
ENDS WITH S/N:

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	160-1300	4	FORGED TRACK ROLLER	
2	301-0833	6	TRACK ROLLER	SUPERSEDES TRACK ROLLER 301-1795
3	205-1216	10	HUB AND SPINDLE ASSEMBLY (CREASED CAP)	SEE FOOTNOTE 2
4	301-0825	1	FRONT IDLER SUPPORT	
5	301-0820	1	LEFT TRACK FRAME	
6	301-0830	1	FRONT IDLER SUPPORT	
7	301-0815	1	RIGHT TRACK FRAME	
8	106-338	10	SCREW (M16-2.00 X 30MM)	USE LOCTITE 242
9	105-416	10	WASHER (5/8")	
10	150-4316	2	GREASE CYLINDER (1.75" DIA X 3.50")	SEE FOOTNOTE 1
11	105-258	2	BOLT (3/8-NC X 3-3/4")	
12	105-287	2	LOCKNUT (3/8 NC)	TORQUE TO 25 FT LBS
13	150-4328	1	GAUGE ADAPTER ASSEMBLY	LOCATED UNDER REAR PANEL
14	205-1304	10	DUST CAP RETAINER	SEE FOOTNOTE 2
15	105-2586	20	FLG LOCKNUT (1/2-NF)	SEE FOOTNOTE 2
16	105-114	30	LUG NUT (1/2-NF)	

NOT SHOWN:

FOOTNOTES:

1. 150-1937 ENDS WITH S/N: CMWSK850LF0000361
2. HUB & SPINDLE ASSEMBLY 205-1216 SUPERSEDES 205-1183. HUB ASSEMBLY 205-1216 USES DUST CAP RETAINER 205-1304 & NUT 105-2586. DUST CAP RETAINER 205-1304 SUPERSEDES RETAINER 205-1213.

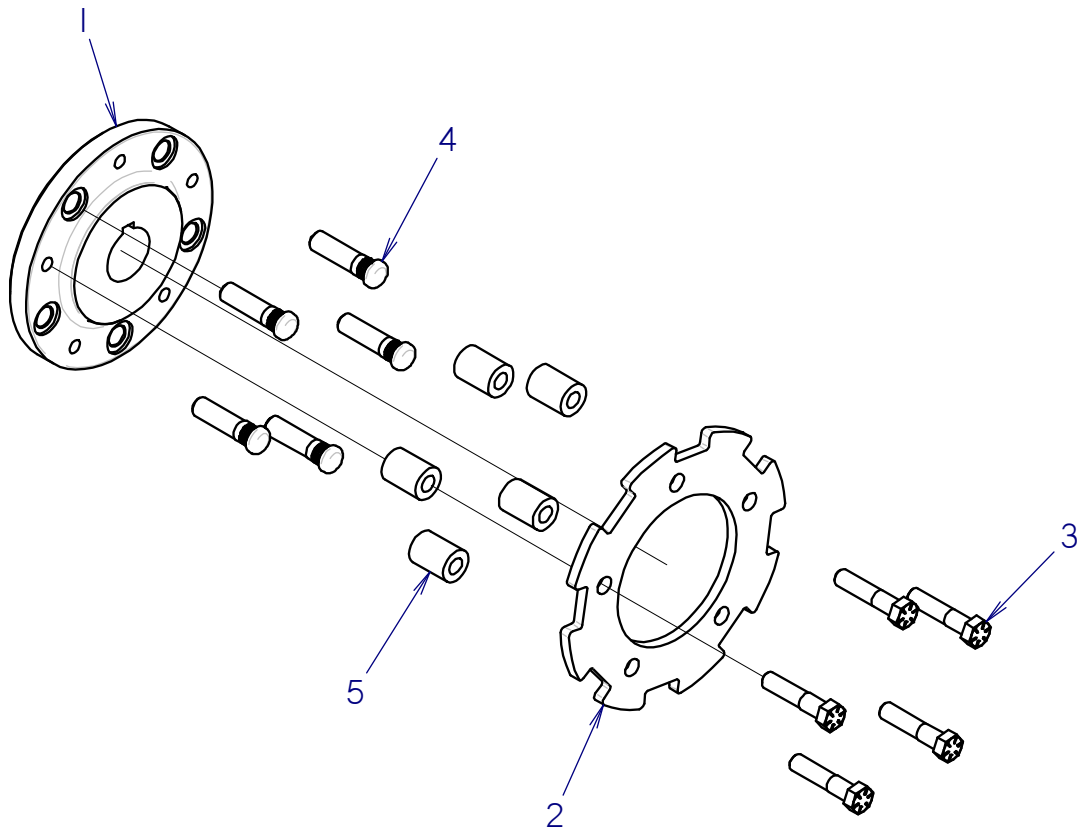
NOTE:

1. TORQUE LUG NUTS 80-90 FT-LB.

HUB AND BRAKE ROTOR

ENDS WITH: SEE NOTE 2

SEE NOTE 1



HUB AND BRAKE ROTOR

ENDS WITH: SEE NOTE 2

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	350-1995	-	HUB WITH BRAKE ASM	
1	300-4341	1	HUB (MACHINED)	
2	300-7528	1	BRAKE ROTOR	
3	105-286	5	BOLT (3/8-NC X 1-3/4")	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 35 FT-LBS
4	107-048	5	LUG BOLT (7/16-NF X 1-3/4")	
5	300-5985	5	SPACER (.75 X .375 X 1.00)	

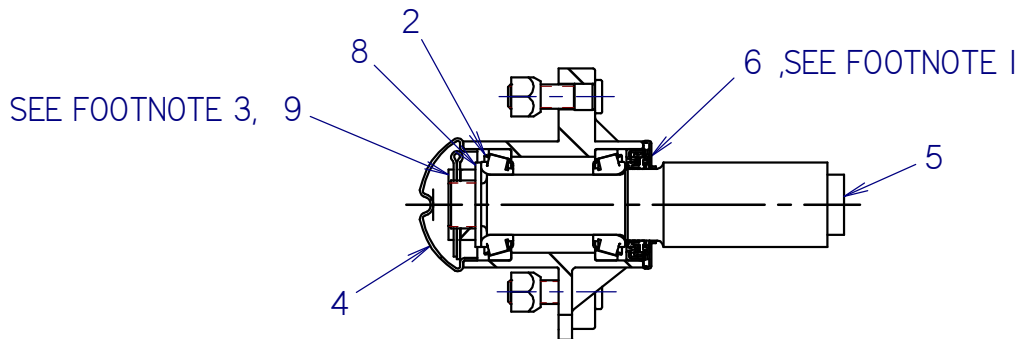
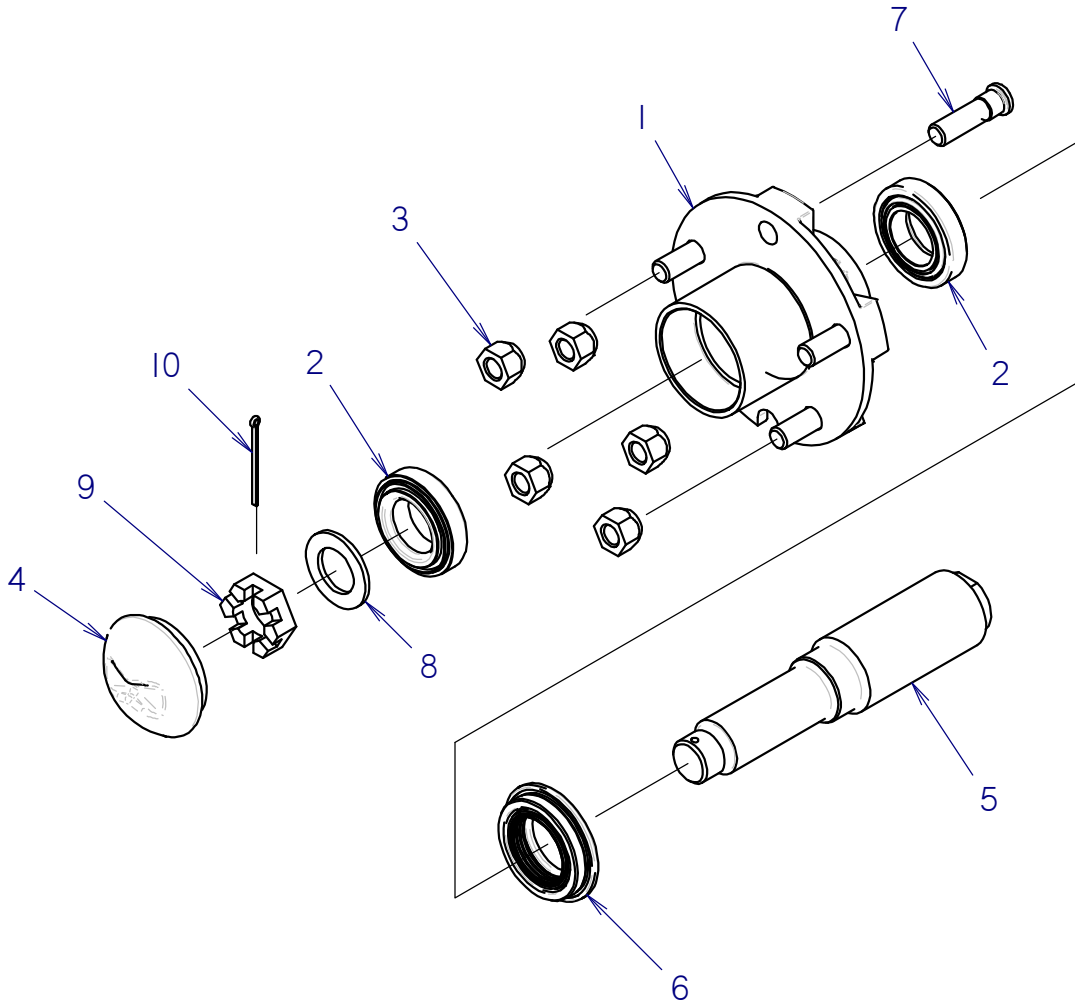
NOT SHOWN:

FOOTNOTES:

NOTE:

- SEE PAGE ID0461164 FOR UPDATED PAGE. CHANGES WERE MADE TO THE SK755, SK800 AND SK1050, THE SK750, SK752 AND SK850 WERE OUT OF PRODUCTION WHEN UPDATES WERE MADE.
- SK755 S/N: , SK800 S/N: , SK1050 S/N:

TRACK ROLLER HUB



TRACK ROLLER HUB

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	205-1216		HUB AND SPINDLE ASSY (CREASED CAP)	INCLUDES REF 1-10; SUPERCEDES 205-1183
1	205-1215		HUB (5 X 4.5", 1.25" ID, CREASED CAP)	INCLUDES REF 1-4 & 7; SUPERCEDES 205-1172
2	125-1058	2	TAPERED BEARING SET (1.250")	INCLUDES BEARING AND RACE
3	105-114	5	LUG NUT (1/2-NF)	SEE FOOTNOTE 4
4	205-1214	1	DUST CAP W/ CREASE (2.323")	SEE FOOTNOTES 2 & 4
5	160-1051	1	WHEEL SPINDLE	SUPERSEDES 301-0837 WHEEL SPINDLE
6	105-1749	1	OIL SEAL (1.500 X 2.328 X .631) W SHIELD	SEE FOOTNOTE 1
7	105-2196	5	LUG BOLT (1/2-20 X 1-13/16)	
8	106-016	1	SPINDLE WASHER (1.062")	
9	105-317	1	CASTLE NUT (1-NF)	SEE FOOTNOTE 3
10	105-501	1	COTTER PIN (1/25" X 2.0")	

NOT SHOWN:

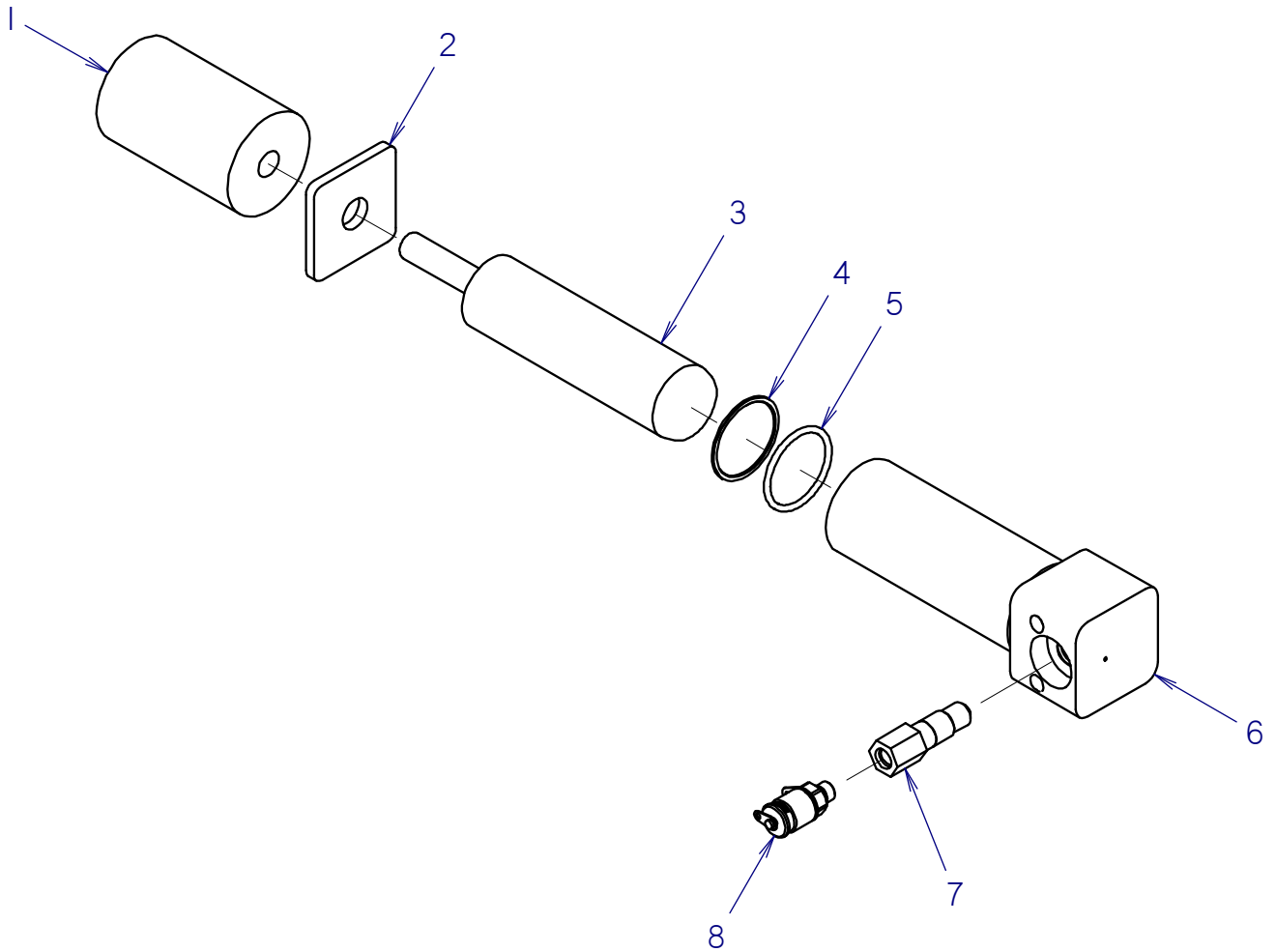
FOOTNOTES:

- OIL SEAL 105-1749 SUPERSEDES SEAL 105-1622, AND SPACER 105-1638 IS NO LONGER USED. THE SPACER HAS BEEN MADE OBSOLETE.
- MATING SURFACES OF REF 4 DUST CAP AND REF 2 HUB MUST BE CLEAN, DRY, AND FREE FROM GREASE OR OTHER LUBRICANTS PRIOR TO ASSEMBLY. APPLY LOCTITE 242 TO DUST CAPS. DRIVE CAP IN AS STRAIGHT AS POSSIBLE WITHOUT COCKING TO ONE SIDE OR THE OTHER.
- TIGHTEN REF 9 SPINDLE NUT 30-40 FT-LB (41-54 N-m) TO SEAT BEARINGS. LOOSEN SPINDLE NUT. TIGHTEN SPINDLE NUT BY HAND. IF A SLOT IN NUT ALIGNS WITH HOLE IN SPINDLE, INSTALL REF 10 COTTER PIN. IF HOLE IS VISIBLE IN SLOT, SLIGHTLY LOOSEN OR TIGHTEN NUT WITH WRENCH TO ALIGN SLOT WITH HOLE AND INSTALL COTTER PIN. IF NOT, LOOSEN TO NEXT AVAILABLE SLOT AND INSTALL COTTER PIN. AFTER ASSEMBLY, HUB END PLAY SHOULD NOT EXCEED .010" (.25MM).
- USE DUST CAP 205-1214 IN PLACE OF 205-1182. WHEN USING CAP 205-1214, USE RETAINER 205-1213 AND FLANGE LUG NUT 105-1602, WHICH ARE SHOWN ON PART PAGE ID0270368. NOTE THAT TWO OF THE 105-1602 LUG NUTS WILL REPLACE TWO OF THE 105-114 LUG NUTS ON EACH HUB.

NOTE:

GREASE CYLINDER

BEGINS WITH S/N: CMWSK850HF0000362



GREASE CYLINDER

BEGINS WITH S/N: CMWSK850HF0000362

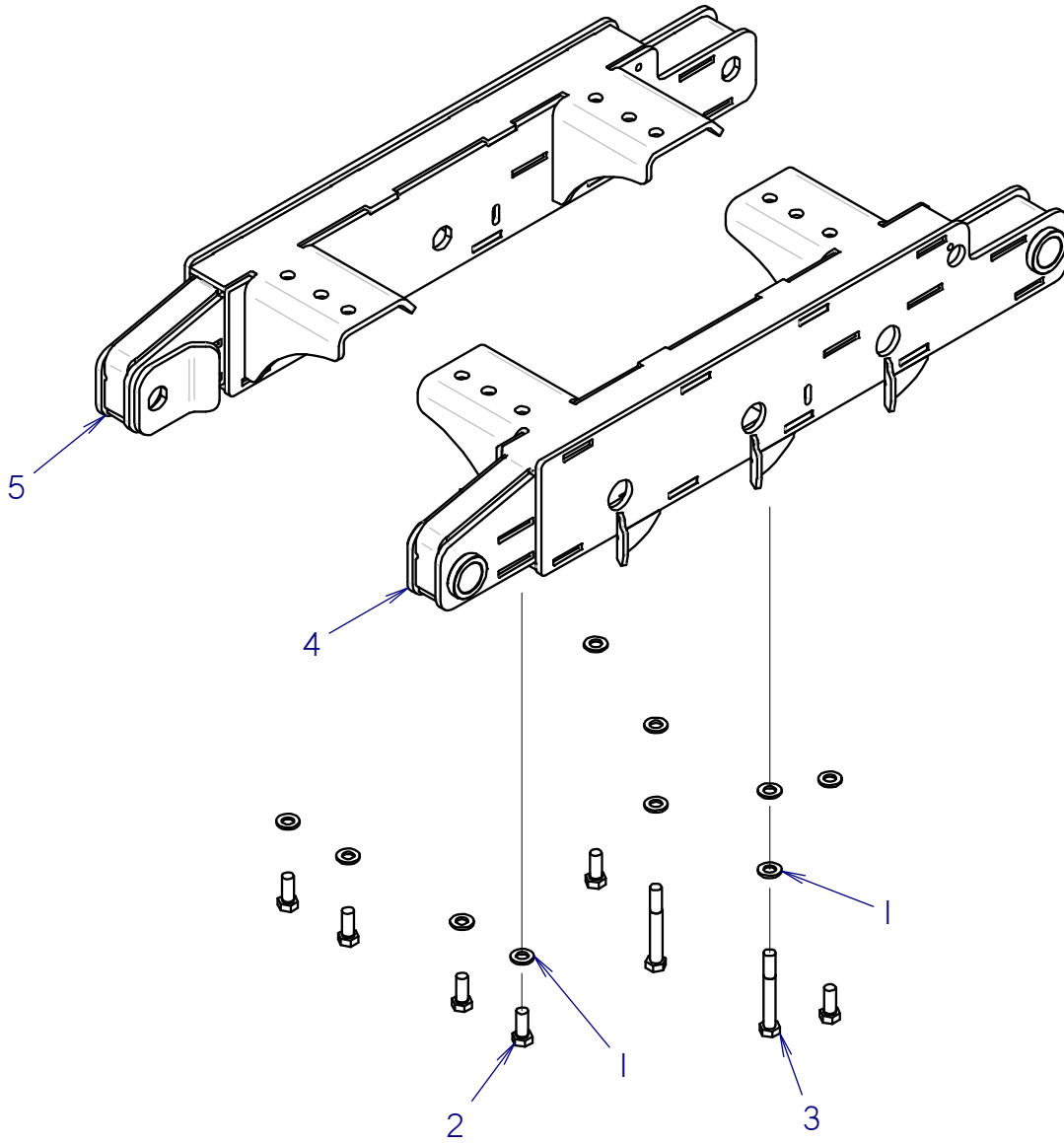
REF PART NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	150-4316	-	GREASE CYLINDER (1.75" DIA X 3.50")	
1	301-9232	1	URETHANE SPRING	
2	301-9233	1	WASHER	
3	150-4315	1	CYLINDER ROD	
4	155-732	1	BACKUP RING (224 D90)	
5	155-704	1	O-RING (224 D70)	
6	301-1516	1	GREASE CYLINDER	
7	301-9225	1	ADAPTER FITTING	
8	150-4313	1	TEST COUPLING (1-04 SAEM)	

NOT SHOWN:

FOOTNOTES:

NOTE:

TRACK FRAME INSTALLATION



TRACK FRAME INSTALLATION

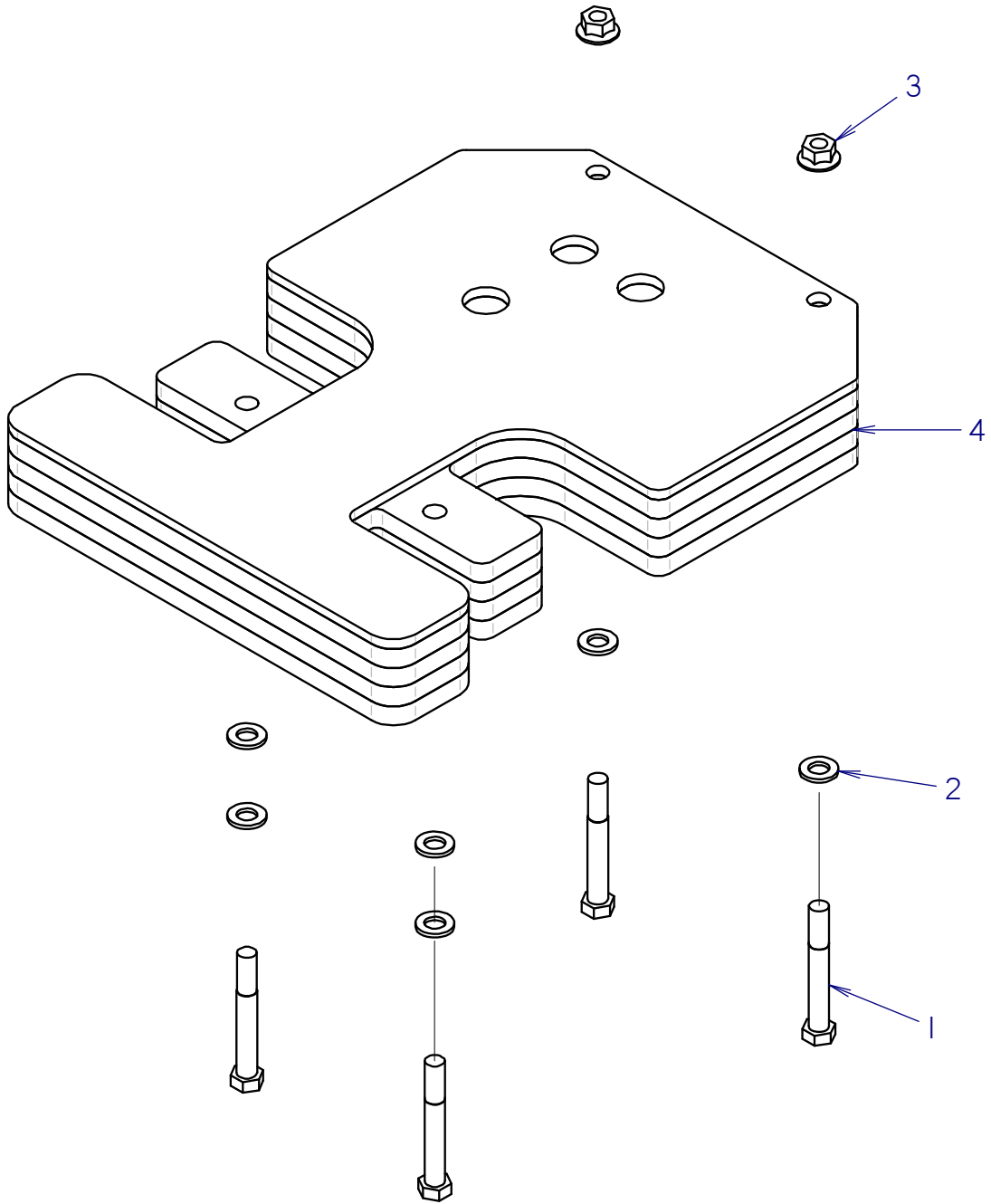
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	106-398	10	WASHER (M16, HARDENED)	
2	106-478	6	SCREW (M16-2.00 X 40MM, 10.9)	USE LOCTITE 242 OR EQUIVALENT, TORQUE TO 140 FT LBS
3	106-614	2	SCREW (M16-2.00 X 120MM, 10.9)	USE LOCTITE 242 OR EQUIVALENT
4	350-4203	1	LEFT TRACK FRAME / IDLER	
5	350-4204	1	RIGHT TRACK FRAME / IDLER	

NOT SHOWN:

FOOTNOTES:

NOTE:

WEIGHT KIT



WEIGHT KIT

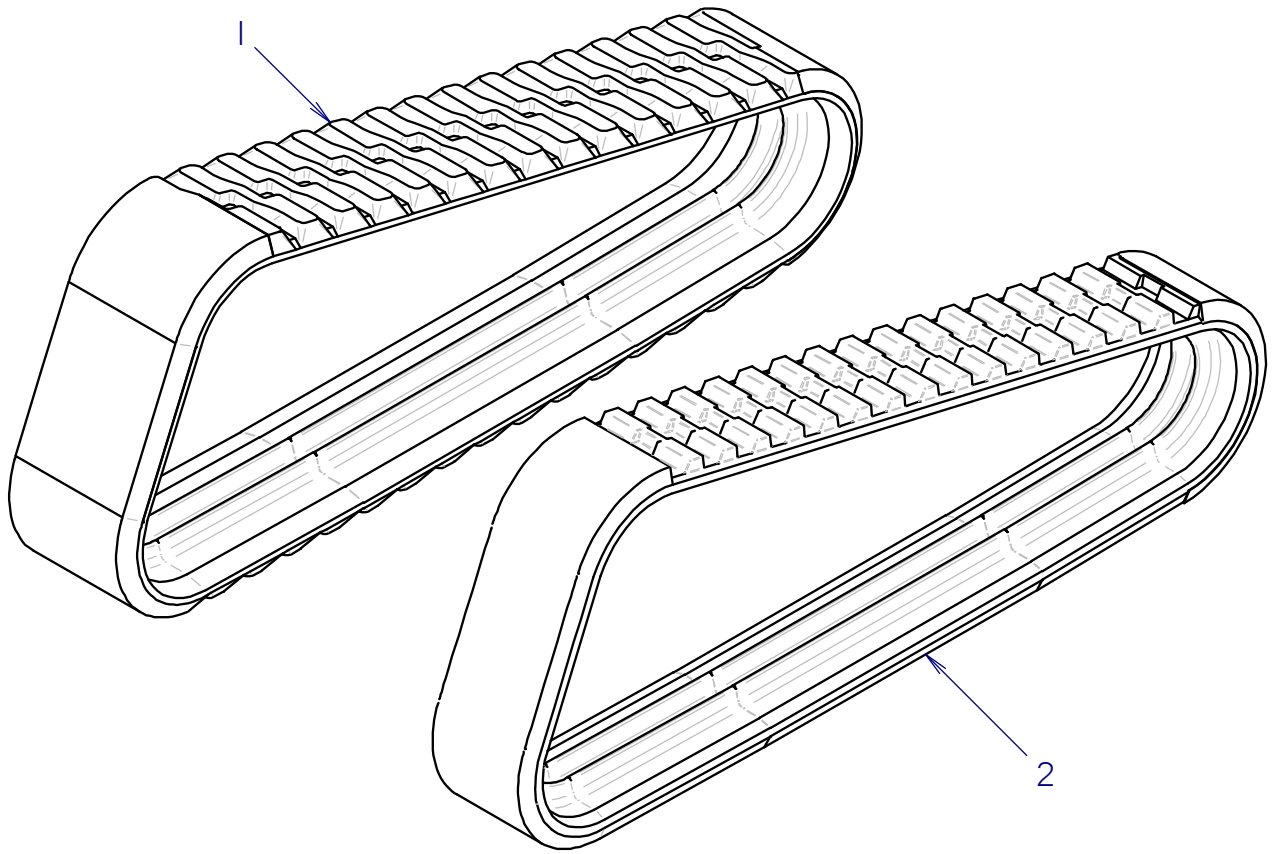
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	106-614	4	SCREW (M16-2.00 X 120MM, 10.9)	USE LOCTITE 242 OR EQUIVALENT
2	106-398	6	WASHER (M16, HARDENED)	
3	106-355	2	FLG NUT (M16-2.00, 10.9)	
4	302-2914	1	WEIGHT	USE 302-5757 FOR NARROW TRACK CONFIGURATION

NOT SHOWN:

FOOTNOTES:

NOTE:

RUBBER TRACK OPTIONS



RUBBER TRACK OPTIONS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-0842	0	RUBBER TRACK (230x72x44, GPI)	
2	302-6185	0	CAMSO RUBBER (180x72x44)	SUPERSEDES 301-0976, USE IN NARROW TRACK CONFIGURATION ONLY

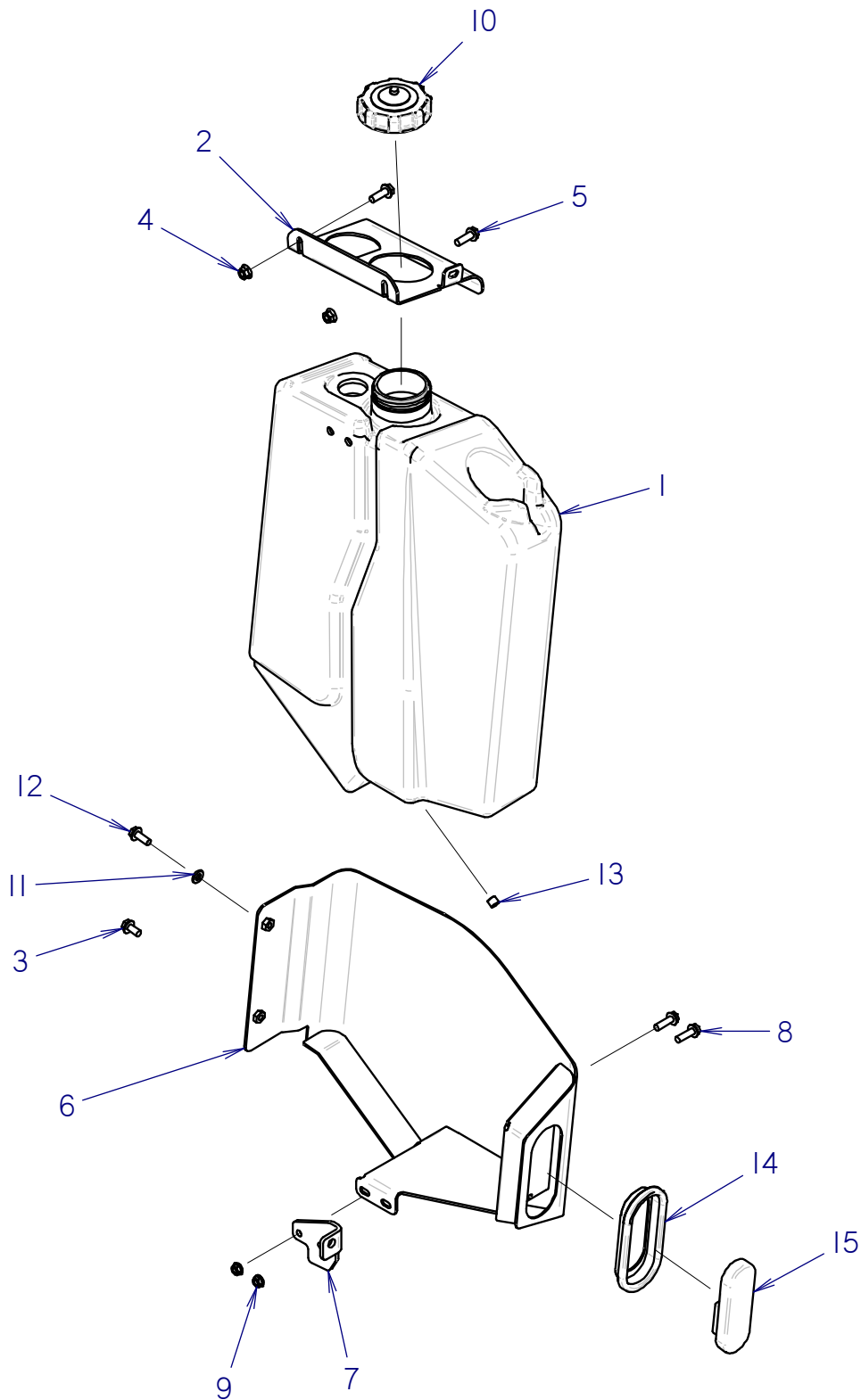
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FOOTNOTES:

NOTE:

FRAME COMPONENTS

FUEL TANK MOUNTING



FUEL TANK MOUNTING

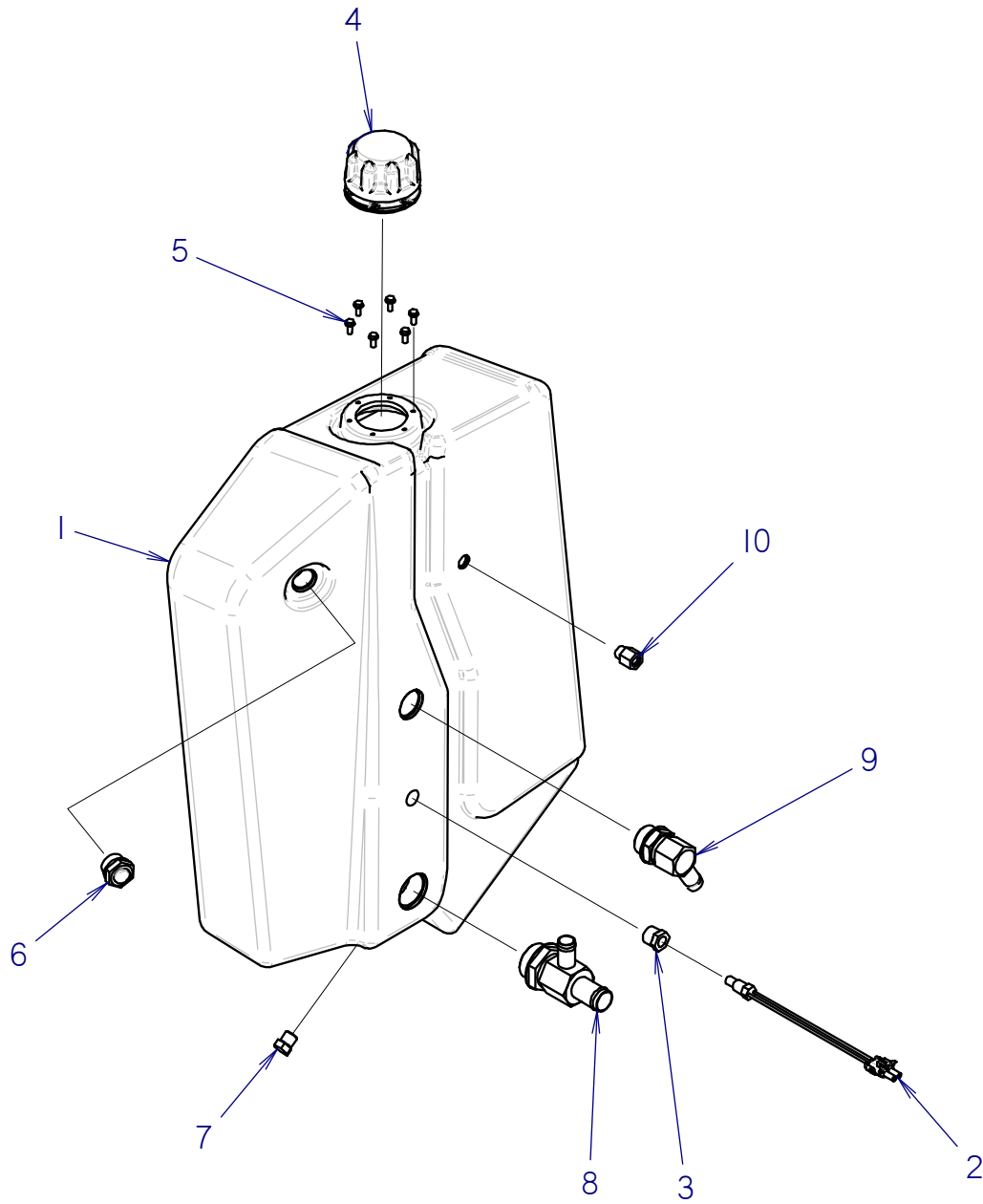
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	364-1009	1	FUEL TANK, 10.5 GAL	
2	301-2584	1	RETAINER BRACKET	
3	106-382	1	FLG LK SCREW (M10-1.50 X 20MM)	
4	106-387	2	FLG LOCKNUT (M10-1.50)	
5	106-383	2	FLG LK SCREW (M10-1.50 X 30MM)	
6	302-5734	1	RIGHT TANK SUPPORT W/LIGHT	USE 301-6659 RIGHT TANK SUPPORT FOR NO LIGHT KIT OPTION
7	301-8468	1	STOP PLATE	
8	105-827	2	FLG LK BOLT (3/8-NC X 1-1/4")	
9	105-834	2	FLG LOCKNUT (3/8-NC)	
10	362-1892	1	DIESEL CAP	
11	106-396	1	WASHER (M10, HARDENED)	
12	106-724	1	FLG SCREW (M10-1.50 X 25MM)	
13	115-444	1	PLUG (O4N, SOC, SSI)	
14	217-225	1	GROMMET (M60, LAMP MOUNT)	
15	215-2613	1	LED LAMP (WHITE)	

NOT SHOWN:

FOOTNOTES:

NOTE:

HYDRAULIC TANK ASSEMBLY



HYDRAULIC TANK ASSEMBLY

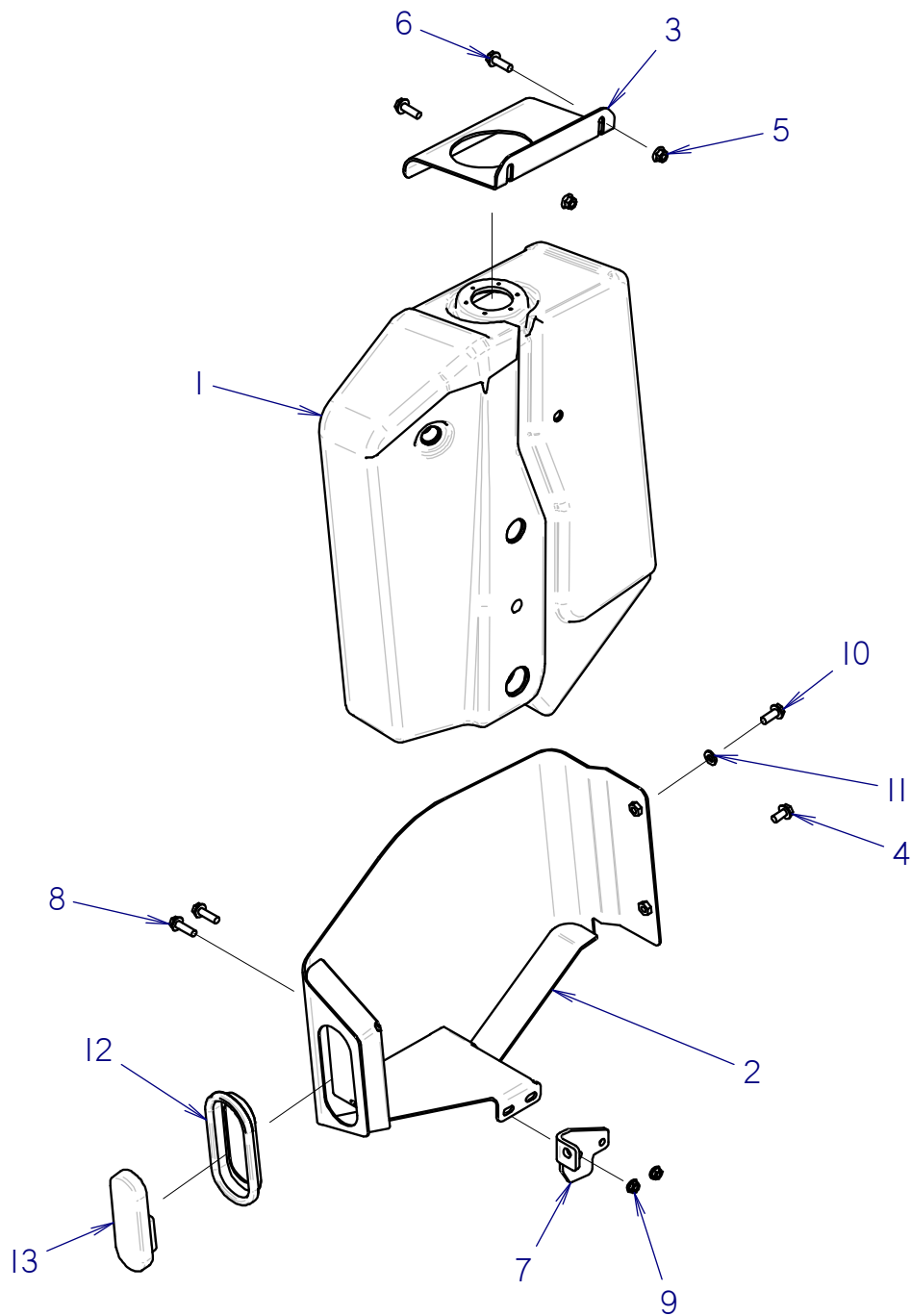
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	364-1011	1	HYDRAULIC TANK	
2	214-854	1	TEMPERATURE SWITCH(1/4NPT,MALE)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
3	115-286	1	REDUCER (08N-1/4-NF)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
4	150-2510	1	BREATHER CAP 3 PSI	
5	105-214	6	FLG SCREW (#10-24 X .5")	
6	150-5164	1	SIGHT GLASS W/ BALL	
7	155-130	1	PLUG (06S)	
8	159-638	1	S/O BR TEE (20S-16H-12H-06S)	
9	155-183	1	S/O COUPLER (16S-12H90)	
10	159-931	1	CONNECTOR (06S-06SF)	

NOT SHOWN:

FOOTNOTES:

NOTE:

HYDRAULIC TANK MOUNTING



HYDRAULIC TANK MOUNTING

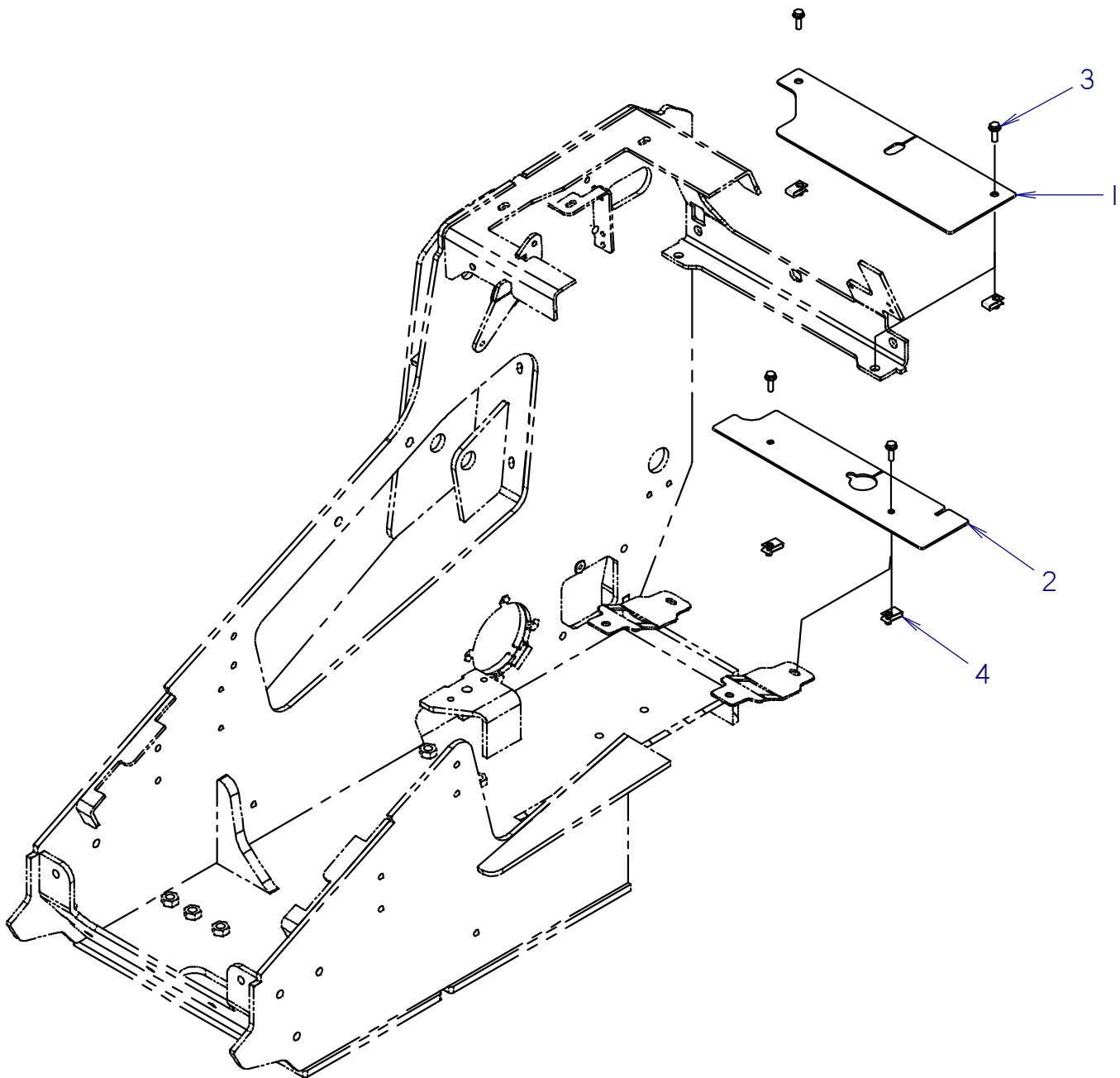
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	364-1011	1	HYDRAULIC TANK	
2	302-5732	1	LEFT TANK SUPPORT W/LIGHT	USE 301-6664 TANK SUPPORT LEFT FOR NO LIGHT KIT OPTION
3	301-2585	1	RETAINER BRACKET	
4	106-382	1	FLG LK SCREW (M10-1.50 X 20MM)	
5	106-387	2	FLG LOCKNUT (M10-1.50)	
6	106-383	2	FLG LK SCREW (M10-1.50 X 30MM)	
7	301-8279	1	STOP PLATE	
8	105-827	2	FLG LK BOLT (3/8-NC X 1-1/4")	
9	105-834	2	FLG LOCKNUT (3/8-NC)	
10	106-724	1	FLG SCREW (M10-1.50 X 25MM)	
11	106-396	1	WASHER (M10, HARDENED)	
12	217-225	1	GROMMET (M60, LAMP MOUNT)	
13	215-2613	1	LED LAMP (WHITE)	

NOT SHOWN:

FOOTNOTES:

NOTE:

ENGINE COMPARTMENT FLAPS



ENGINE COMPARTMENT FLAPS

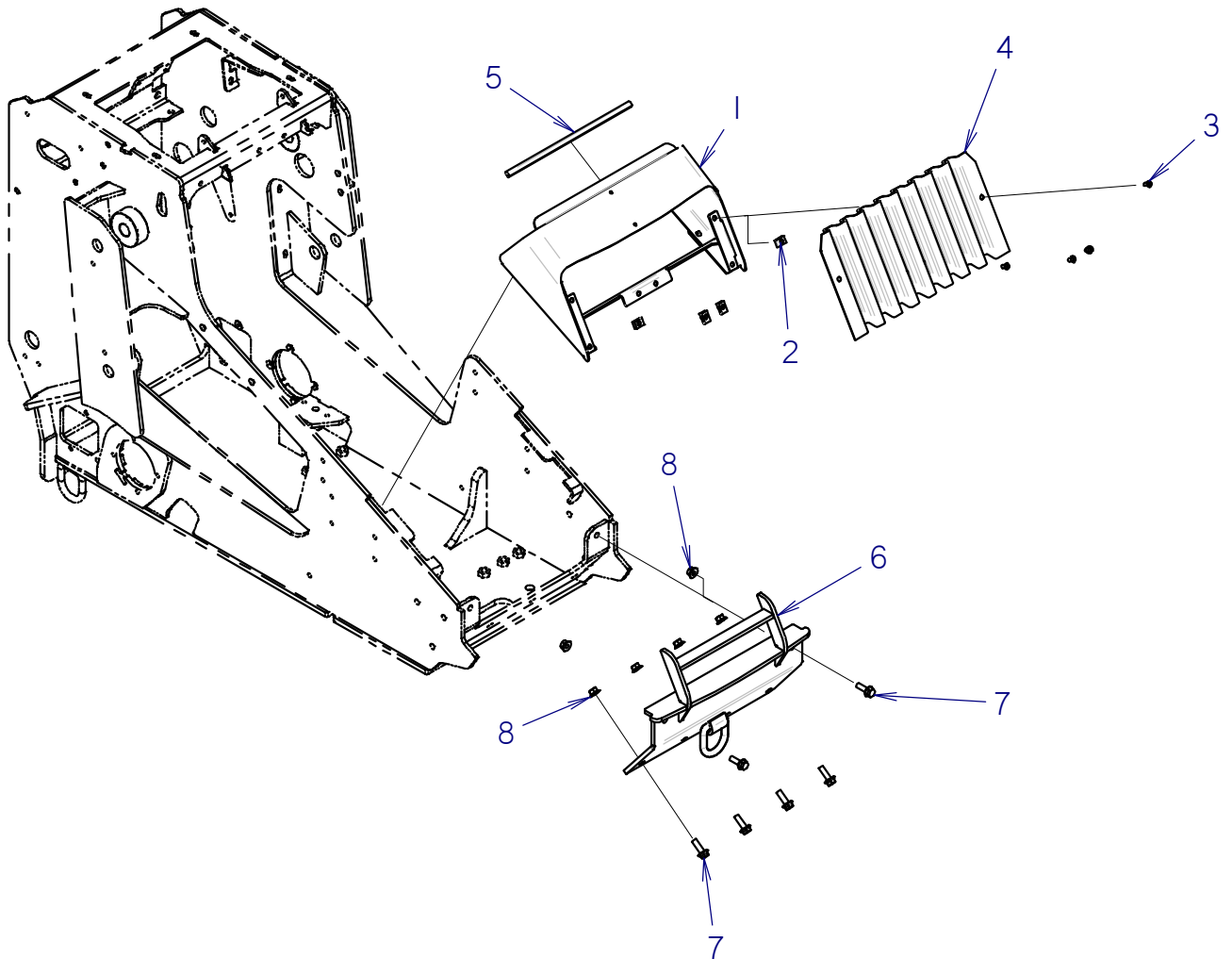
REF PART NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-6895	1	RUBBER FLAP	
2	301-6896	1	RUBBER FLAP LOWER	
3	106-381	4	FLG LK SCREW (M8-1.25 X 25MM)	
4	107-687	4	CLIP NUT M8-1.25, LONG, WIDE	

NOT SHOWN:

FOOTNOTES:

NOTE:

GRILLE



GRILLE

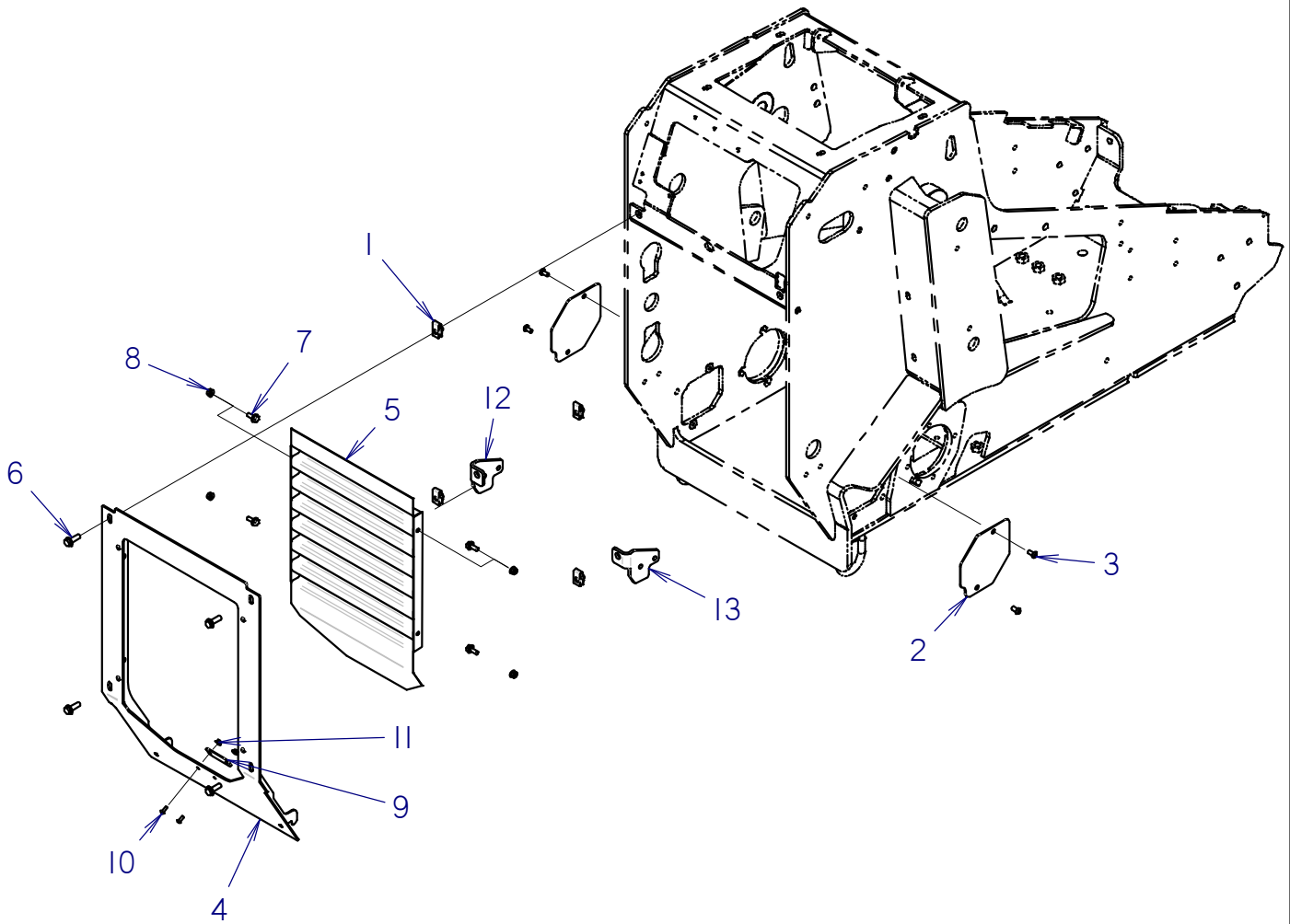
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-6864	1	NOSE PIECE	
2	106-551	4	CLIP NUT (M8-1.25)	
3	105-1979	4	BOLT (M8-1.25 X 16MM,BUT SOC)	
4	195-1757	1	PERFORATED GRILL	
5	115-686	16	BULK EDGE (5/32",SOLD PER 1")	
6	301-6695	1	GRILLE	
7	106-632	6	FLG LK SCR (M12-1.75X35MM,SER)	
8	106-709	6	FLG LK NUT (M12-1.75)	

NOT SHOWN:

FOOTNOTES:

NOTE:

REAR AND SIDE COVERS



REAR AND SIDE COVERS

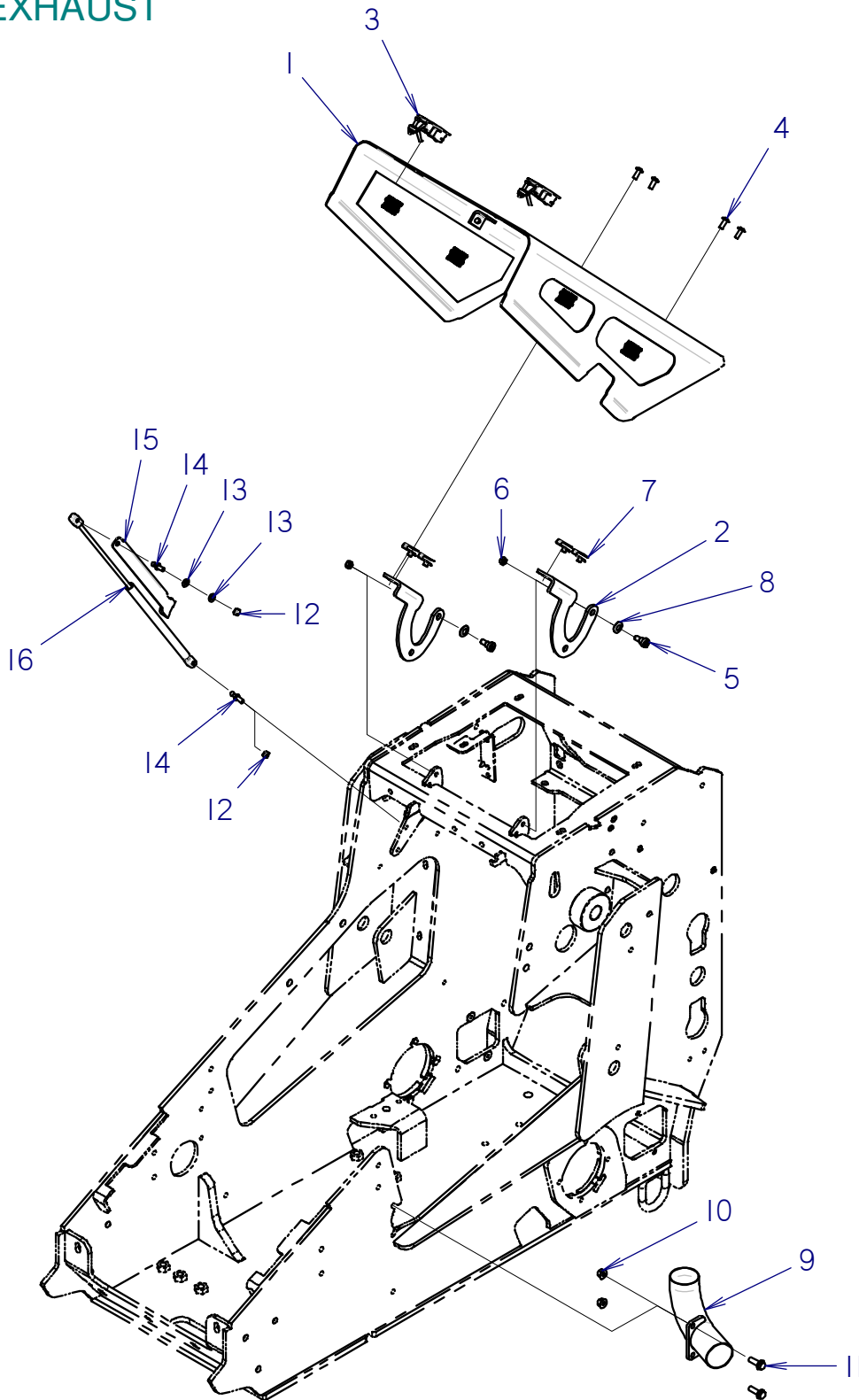
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	106-558	4	CLIP NUT (M10-1.50)	
2	301-0927	2	COVER	
3	106-774	4	BOLT (M8-1.25 X 16MM,BUT SOC)	
4	301-6894	1	BACK COVER	
5	301-3082	1	GRILLE	
6	106-383	4	FLG LK SCREW (M10-1.50 X 30MM)	
7	106-991	4	FLG LK SCREW (M8-1.25 X 20MM)	
8	106-386	4	FLG LOCKNUT (M8-1.25)	
9	322-362	1	BACKUP SPACER	
10	105-1577	2	SCREW (M6-1.00 X 14MM,BUT SOC)	
11	106-385	2	FLG LOCKNUT (M6-1.00)	
12	301-8279	1	STOP PLATE	
13	301-8468	1	STOP PLATE	

NOT SHOWN:

FOOTNOTES:

NOTE:

HOOD & EXHAUST



HOOD & EXHAUST

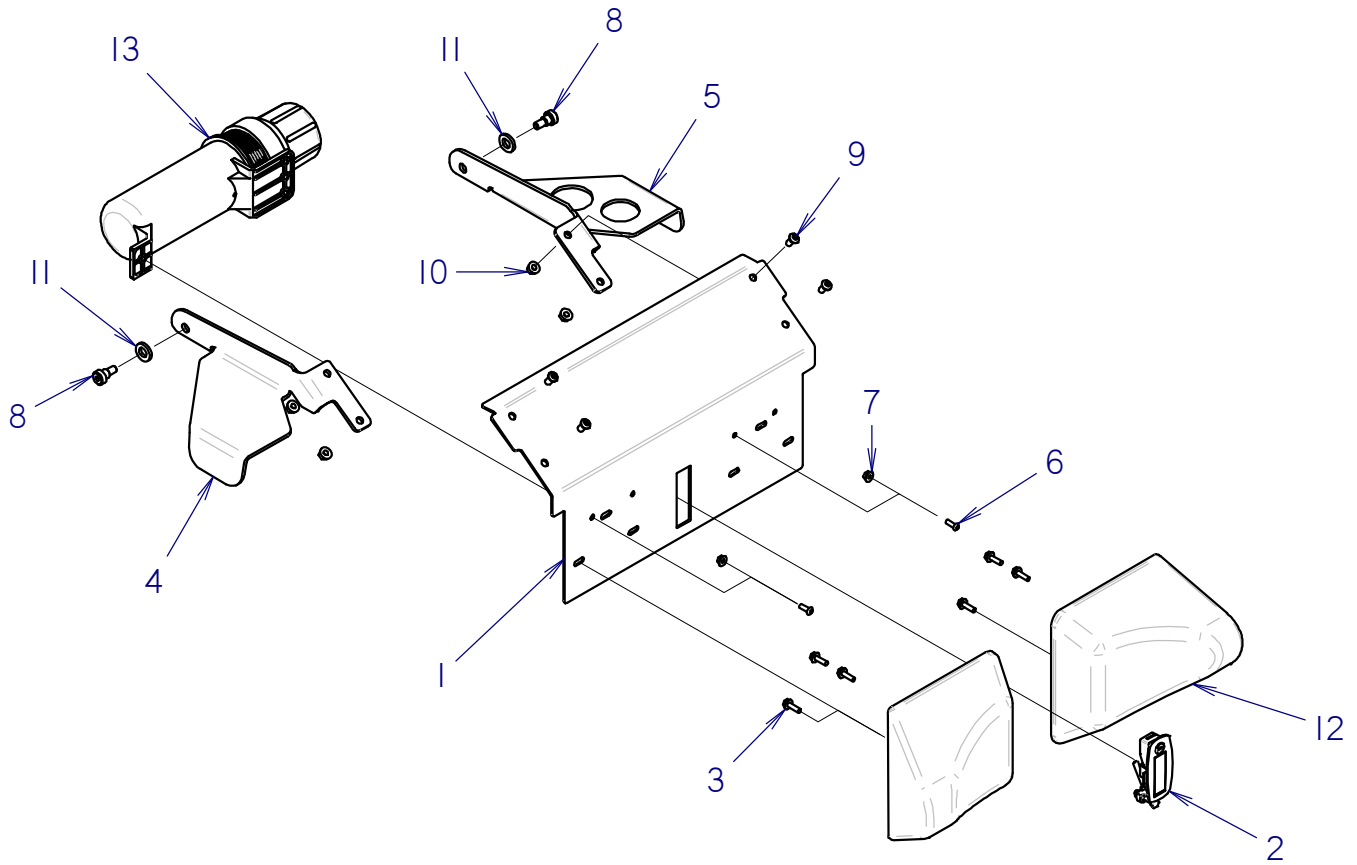
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	300-6843	1	SK HOOD	
2	301-2433	2	HINGE PLATE	
3	117-558	2	LATCH, ADJUST LEVER (LOCKING)	
4	106-767	4	SCREW (M8-1.25 X 20mm,BUT SOC)	
5	106-070	2	SHLD BLT (1/2" X 3/8", 3/8-NC)	
6	105-047	2	LOCKNUT (3/8-NC)	
7	107-687	4	CLIP NUT M8-1.25, LONG, WIDE	
8	105-058	2	BELLEVILLE WASHER (1/2")	
9	195-2508	1	EXHAUST	
10	106-387	2	FLG LOCKNUT (M10-1.50)	
11	106-383	2	FLG LK SCREW (M10-1.50 X 30MM)	
12	105-089	2	LOCKNUT (5/16-NC)	
13	105-226	2	WASHER (5/16")	
14	110-655	2	BALL SCREW (5/16-NC X 1/2")	
15	301-7650	1	STRUT STOP	
16	105-1078	1	STRUT	

NOT SHOWN:

FOOTNOTES:

NOTE:

REAR ACCESS COVER & MANUAL COMPARTMENT



REAR ACCESS COVER & MANUAL COMPARTMENT

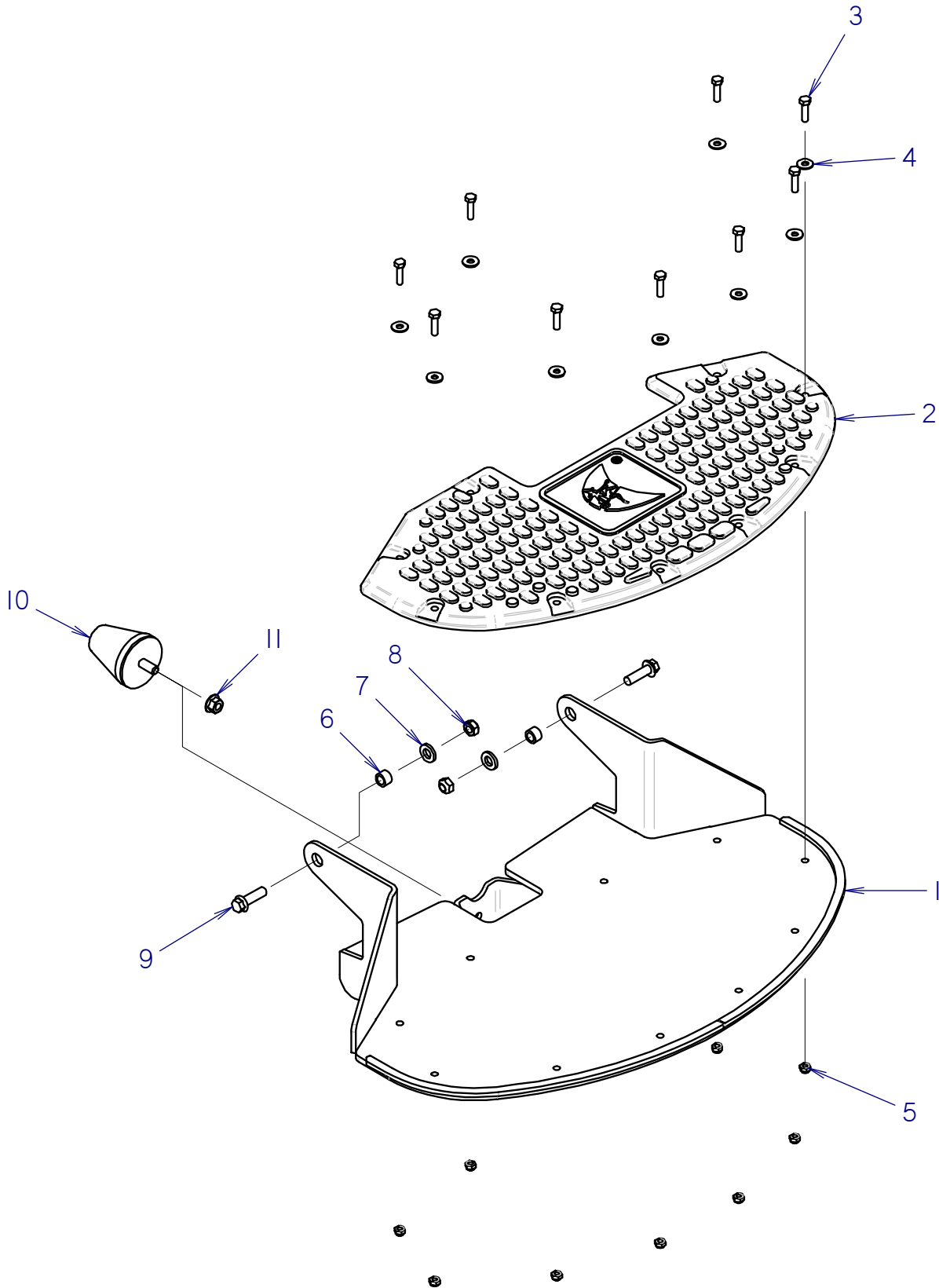
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-4984	1	REAR PANEL	
2	117-558	1	LATCH, ADJUST LEVER (LOCKING)	
3	106-379	6	FLG LK SCREW (M6-1.00 X 20MM)	
4	301-4982	1	HINGE COVER	
5	301-4983	1	HINGE COVER	
6	107-193	2	SCREW (M6-1.00 X 16MM,BUT SOC)	
7	106-385	2	FLG LOCKNUT (M6-1.00)	
8	106-070	2	SHLD BLT (1/2" X 3/8", 3/8-NC)	
9	105-1979	4	BOLT (M8-1.25 X 16MM,BUT SOC)	
10	106-386	4	FLG LOCKNUT (M8-1.25)	
11	106-397	2	WASHER (M12, HARDENED)	
12	362-1620	2	CUSHION	
13	250-063	1	MANUAL COMPARTMENT	

NOT SHOWN:

FOOTNOTES:

NOTE:

OPERATORS PLATFORM



OPERATORS PLATFORM

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-2580	1	OPERATOR PLATFORM	
2	362-1484	1	PLATFORM MAT	
3	106-327	9	SCREW (M8-1.25 X 30MM)	
4	105-117	9	WASHER (5/16")	
5	107-096	9	LOCKNUT (M8-1.25, NLK)	SEE FOOTNOTE 1
6	177-045	2	SPACER	
7	106-397	2	WASHER (M12, HARDENED)	
8	106-685	2	LOCKNUT (M12-1.75, PRV TRQ, 10.9)	
9	107-565	2	FLG LK SCREW (M12-1.75 X 40MM)	
10	115-431	1	MALE BUMPER	
11	106-709	1	FLG LK NUT (M12-1.75)	

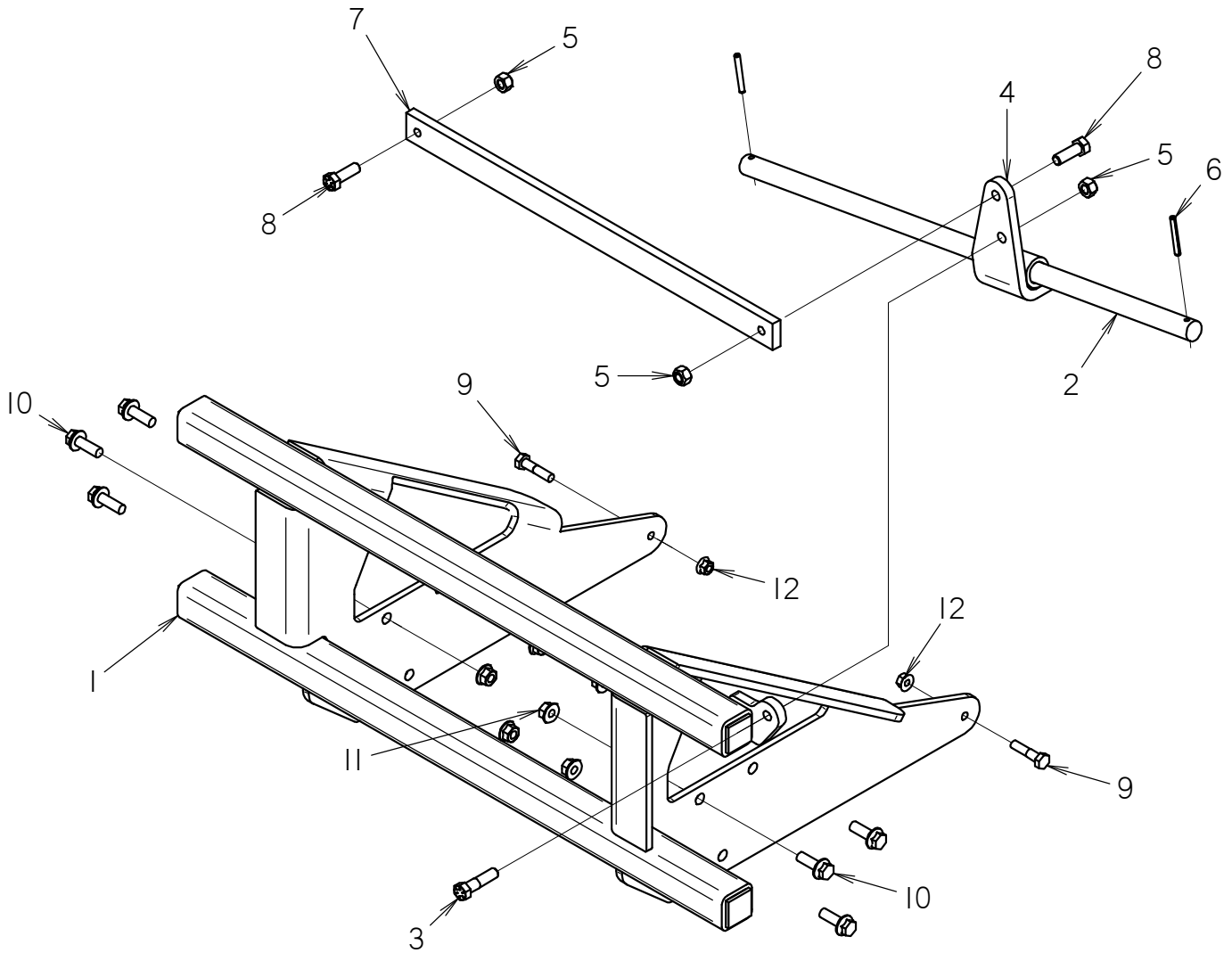
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FOOTNOTES:

1. TIGHTEN NUT UNTIL WASHER IS FIRMLY SEATED AGAINST PLATFORM MAT. DO NOT OVER-TIGHTEN OR MAT WILL BE DAMAGED.

NOTE:

SLIDE FRAME



SLIDE FRAME

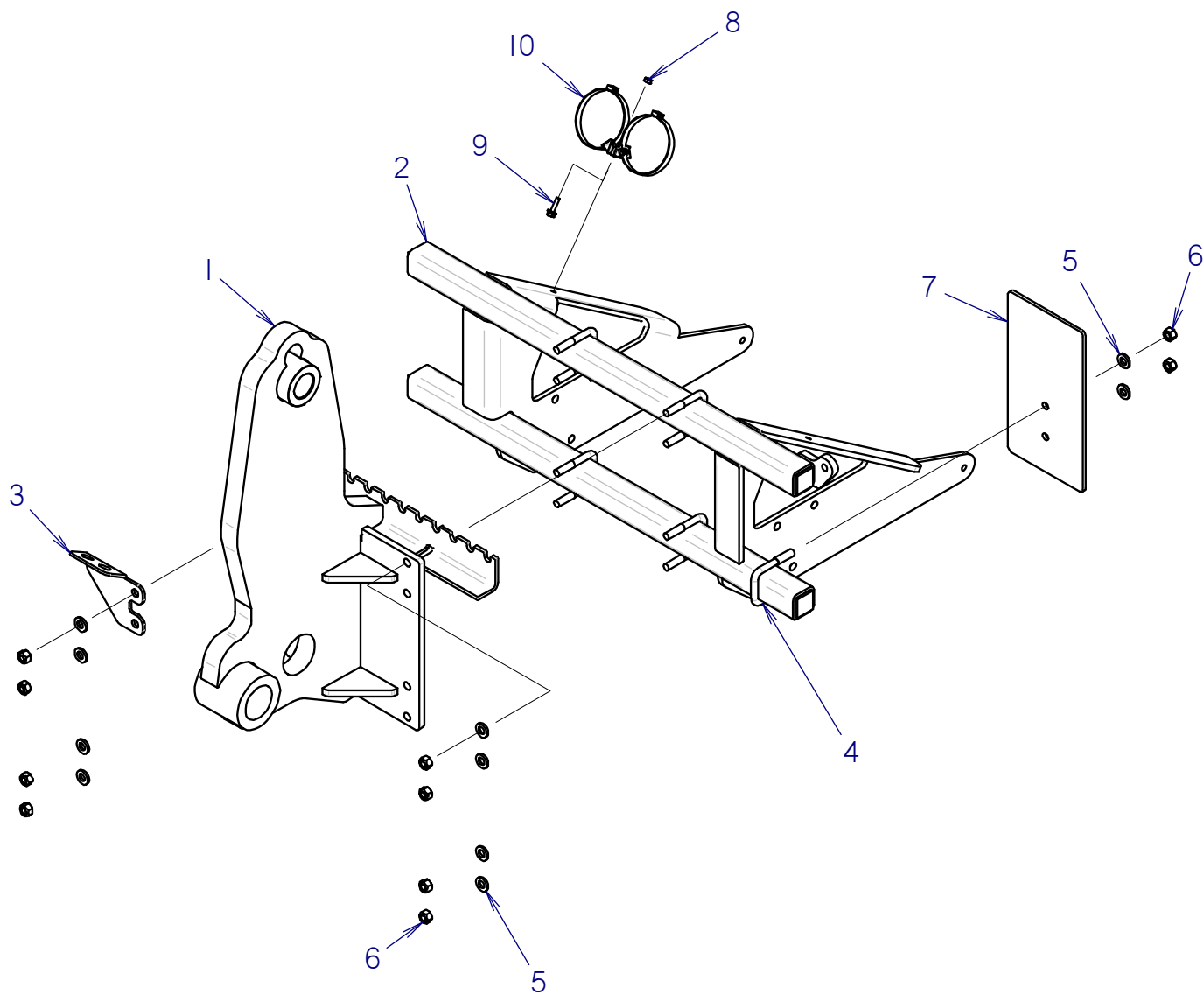
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-5827	1	MOUNT FRAME	
2	301-5891	1	PIN 30 X 1	
3	105-871	1	BOLT (1/2-NC X 2" GD8)	
4	301-5877	1	PIVOT	
5	105-065	3	LOCKNUT (1/2-NC)	
6	105-503	2	ROLL PIN (1/4" X 2")	
7	301-5880	1	CONNECTOR PLT	
8	105-1200	2	BOLT (1/2-NC X 1-1/2", GD 8)	
9	106-621	2	SCREW (M10-1.50 X 45MM, 10.9)	
10	106-632	6	FLG LK SCR (M12-1.75X35MM,SER)	
11	106-709	6	FLG LK NUT (M12-1.75)	
12	106-387	2	FLG LOCKNUT (M10-1.50)	

NOT SHOWN:

FOOTNOTES:

NOTE:

FRAME MOUNTING



FRAME MOUNTING

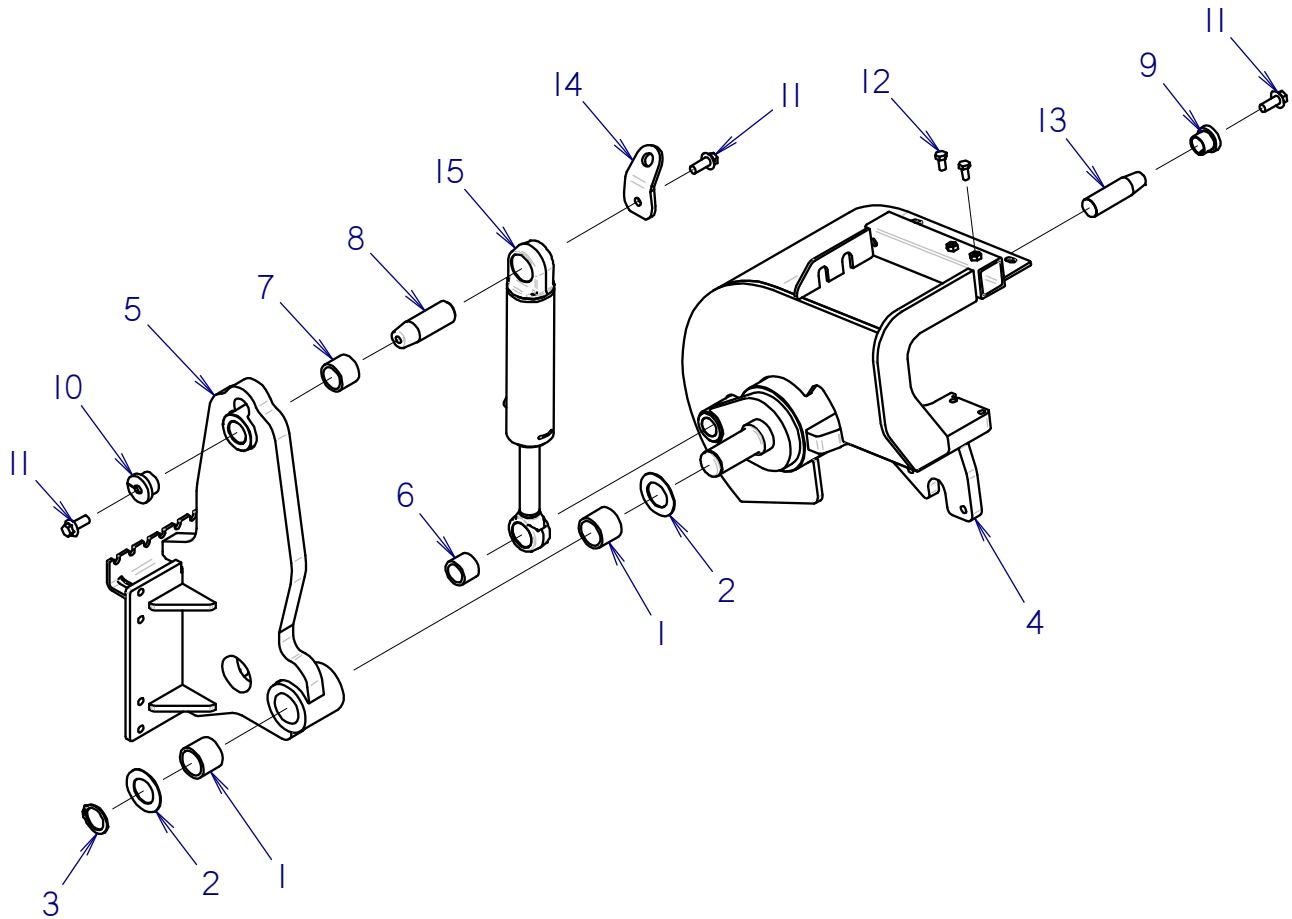
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-5845	1	PIVOT BASE	
2	301-5827	1	MOUNT FRAME	
3	301-5881	1	BULKHEAD BRACKET	
4	105-1770	5	U-BOLT 2 INCH SQUARE	
5	106-397	10	WASHER (M12, HARDENED)	
6	105-065	10	LOCKNUT (1/2-NC)	
7	301-5876	1	COVER	
8	105-078	1	NUT (1/4-NC)	
9	105-819	1	FLG LK BOLT (1/4-NC X 1")	
10	105-2322	1	TWO WAY SADDLE MOUNT	

NOT SHOWN:

FOOTNOTES:

NOTE:

PIVOT



PIVOT

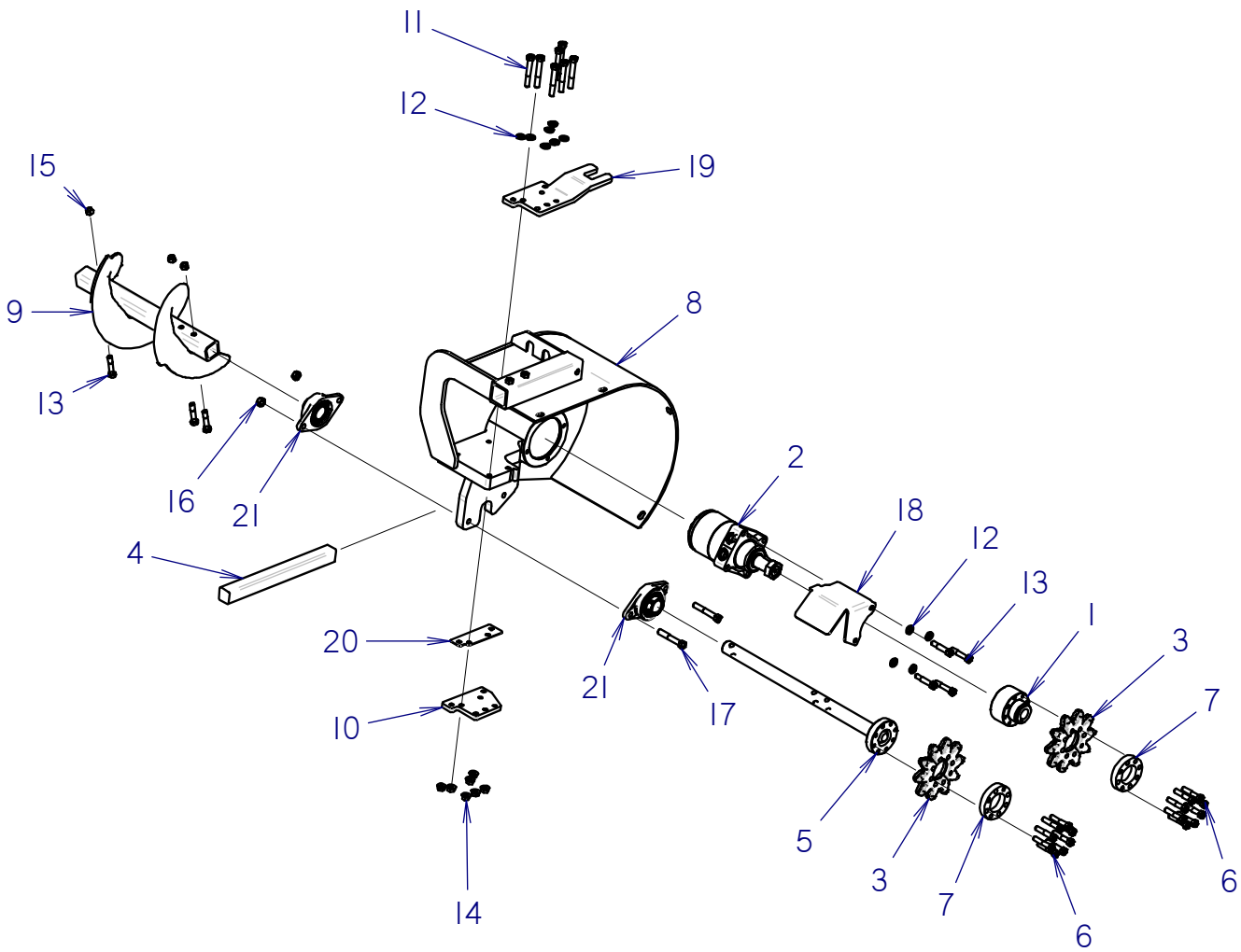
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	125-754	2	COMPOSITION BUSHING (2")	
2	106-522	2	THRUST WASHER	
3	115-542	1	SNAP RING	
4	301-5850	1	PIVOT	
5	301-5845	1	PIVOT BASE	
6	125-772	1	COMPOSITION BUSHING (1.5")	
7	125-773	1	COMPOSITION BUSHING (1.75")	
8	179-037	1	TAPERED PIN (44.45MM X 132MM)	
9	181-974	1	TAPERED INSERT (1.5")	
10	181-975	1	TAPERED INSERT (1.75")	
11	106-470	3	FLG SCREW (M16-2.0 X 40MM)	USE LOCTITE 242 OR EQUIVALENT
12	106-559	2	SCREW (M12-1.75 X 25MM)	
13	179-951	1	TAPERED PIN (38.1MM X 137MM)	
14	301-5879	1	LIFT POINT	
15	151-029	1	CYL (3.0 X 1.50 X 10.0)	

NOT SHOWN:

FOOTNOTES:

NOTE:

HEADSHAFT & AUGER DRIVE



HEADSHAFT & AUGER DRIVE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-5884	1	DRIVE HUB 50K	
2	150-3836	1	HYD MOTOR PARKER TH0240	
3	142-005	2	SPROCKET (2.000"AI0, SPLIT)	
4	140-1247	1	50K BOOM STUB (17")	
5	301-5897	1	AUGER DRIVE 50K	
6	105-1937	16	BOLT (1/2-NC X 2-1/2", GD8)	USE LOCTITE 242 OR EQUIVALENT
7	301-7491	2	SPACER	
8	301-5850	1	PIVOT	
9	140-1248	1	AUGER	
10	301-7488	1	CLAMP PLATE	
11	105-1923	7	BOLT (1/2-NF X 3-1/2", GD9)	USE LOCTITE 242 OR EQUIVALENT
12	106-397	11	WASHER (M12, HARDENED)	
13	106-197	7	BOLT (1/2-NC X 2-1/2", GD8)	
14	105-852	7	.5" LOCK NUT	
15	105-065	3	LOCKNUT (1/2-NC)	
16	105-948	2	LOCKNUT (9/16-NC)	
17	107-199	2	BOLT (9/16-NC X 3-1/2")	
18	301-5875	1	COVER	
19	301-7490	1	CLAMP PLATE 50K	
20	301-7489	1	SHIM	
21	125-1112	2	FLANGE BEARING (1.5")	

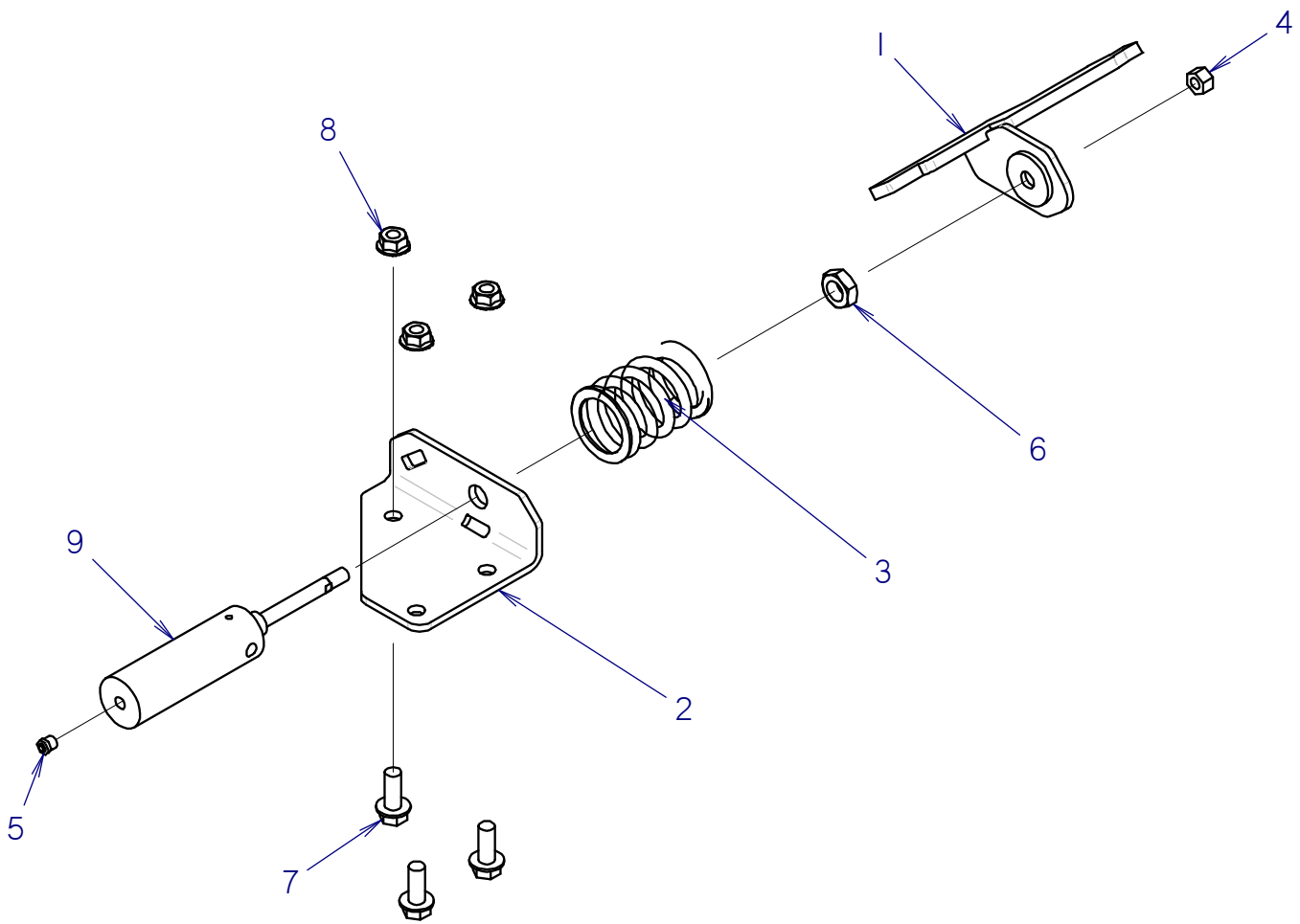
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FOOTNOTES:

NOTE:

CONTROL COMPONENTS

PARKING BRAKE



PARKING BRAKE

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-4987	1	BRAKE PIN	
2	301-4988	1	BRAKE MOUNT PLT	
3	116-869	1	SPRING	
4	105-188	1	LOCKNUT (7/16-NF)	SEE FOOTNOTE 1
5	155-912	1	AIR VENT (02N)	
6	105-404	0	JAM NUT (3/4-NF)	COMES WITH ITEM# 9 (151-097), USE LOCTITE 242 OR EQUIVALENT
7	105-830	3	FLG LK BOLT (1/2-NC X 1-1/4")	
8	105-833	3	FLG LOCKNUT (1/2-NC)	
9	151-097	1	CYL (1.5" X 0.43" X 2.500")	

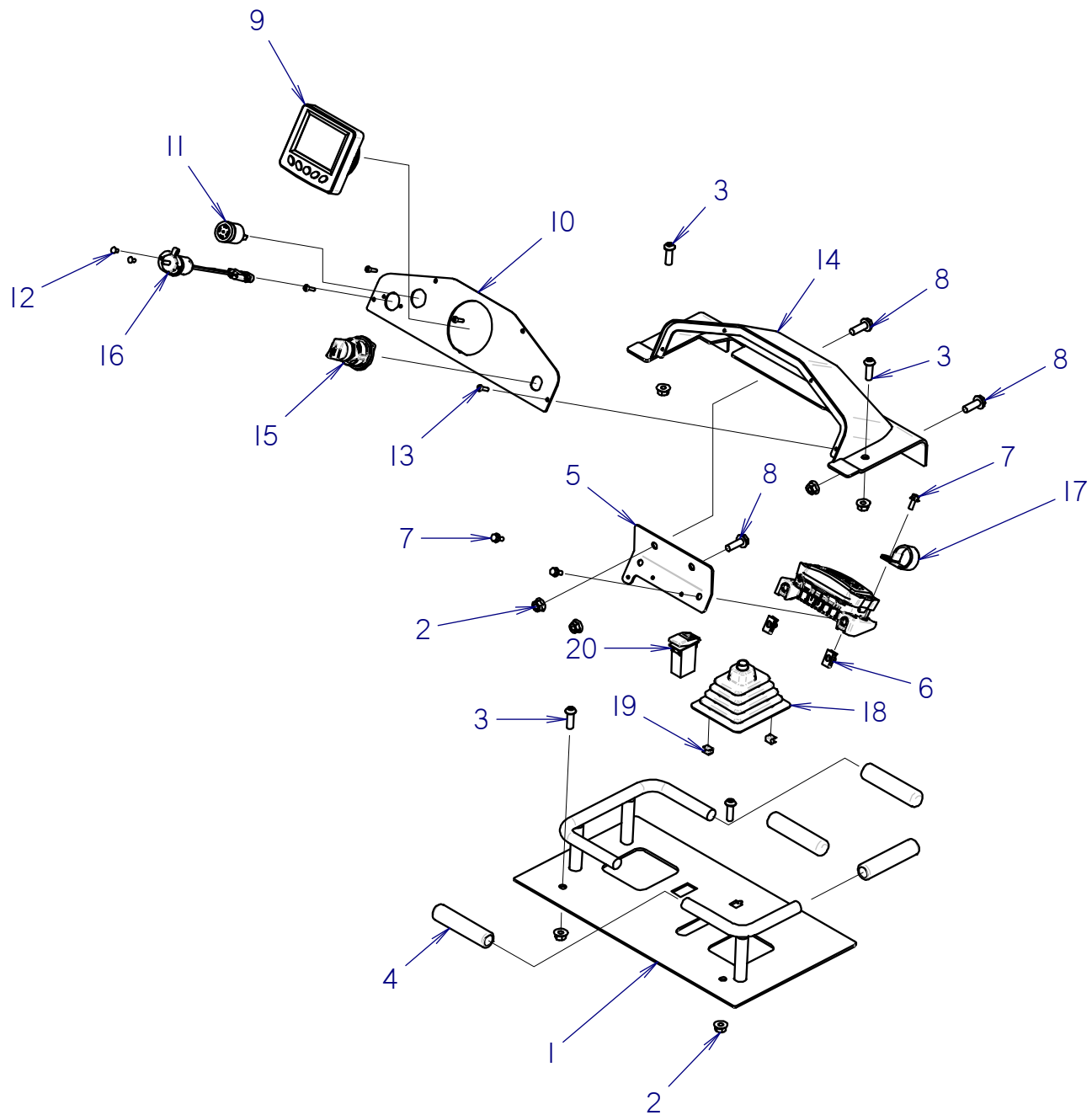
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FOOTNOTES:

1. PREVENT SHAFT FROM ROTATING WHILE TIGHTNING #4 LOCKNUT. WRENCH FLATS PROVIDED ON END OF SHAFT.

NOTE:

CONSOLE



CONSOLE

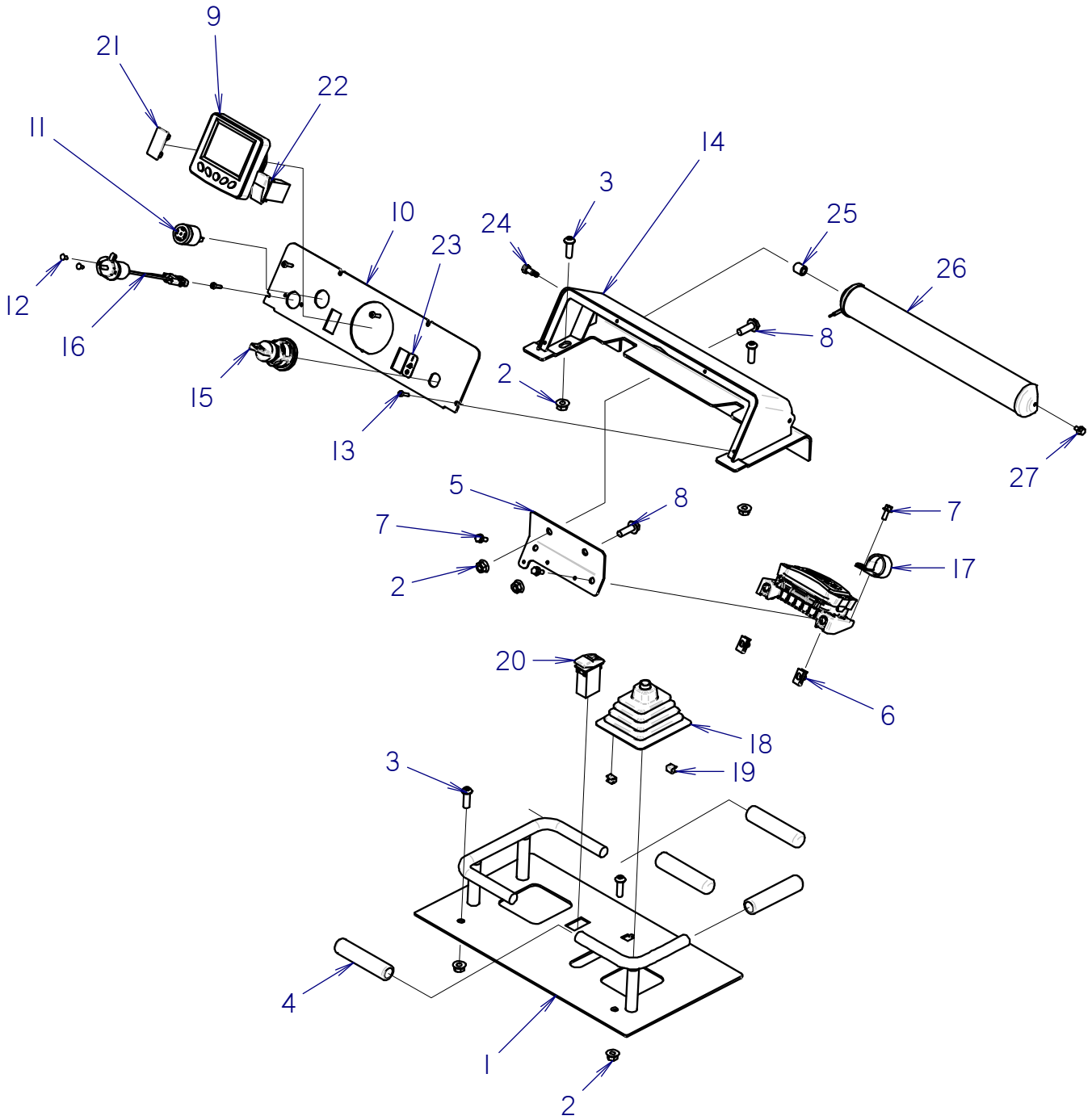
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	302-5095	1	CONTROL REFERENCE BAR	
2	106-387	7	FLG LOCKNUT (M10-1.50)	
3	105-1098	4	BOLT (M10-1.50 X 30MM,BUT SOC)	
4	362-1942	4	GRIP (.75 X 4.5)	USE LOCTITE 495 OR EQUIVALENT
5	301-6885	1	BRACKET	
6	106-574	2	CLIP NUT (M6-1.00)	
7	106-712	3	FLG SCREW (M6-1.00 X 16MM)	
8	106-164	3	FLG LK SCREW (M10-1.50 X 30MM)	
9	220-2555	1	PV380 V2 DISPLAY	
10	301-6884	1	PANEL	
11	306-603	1	AUDIO ALARM	
12	110-560	2	POP RIVET (3/16" X 1/2", ALUM)	
13	105-687	4	SCREW (#10-24 X 3/4",PAN TORX)	USE LOCTITE 242 OR EQUIVALENT
14	301-6691	1	CONTROL PANEL	
15	215-2013	1	IGNITION SWITCH	
16	214-301	1	ACCESSORY SOCKET	
17	105-1454	1	CLAMP, BOLT-ON ("P") 1 1/4"	
18	362-1148	1	BOOT	
19	362-1269	2	U-CLIP	
20	215-1597	1	ROCKER SWITCH (DPST) ON-OFF (W/ LOCK)	

NOT SHOWN:

FOOTNOTES:

NOTE:

CONSOLE WITH LIGHTS



CONSOLE WITH LIGHTS

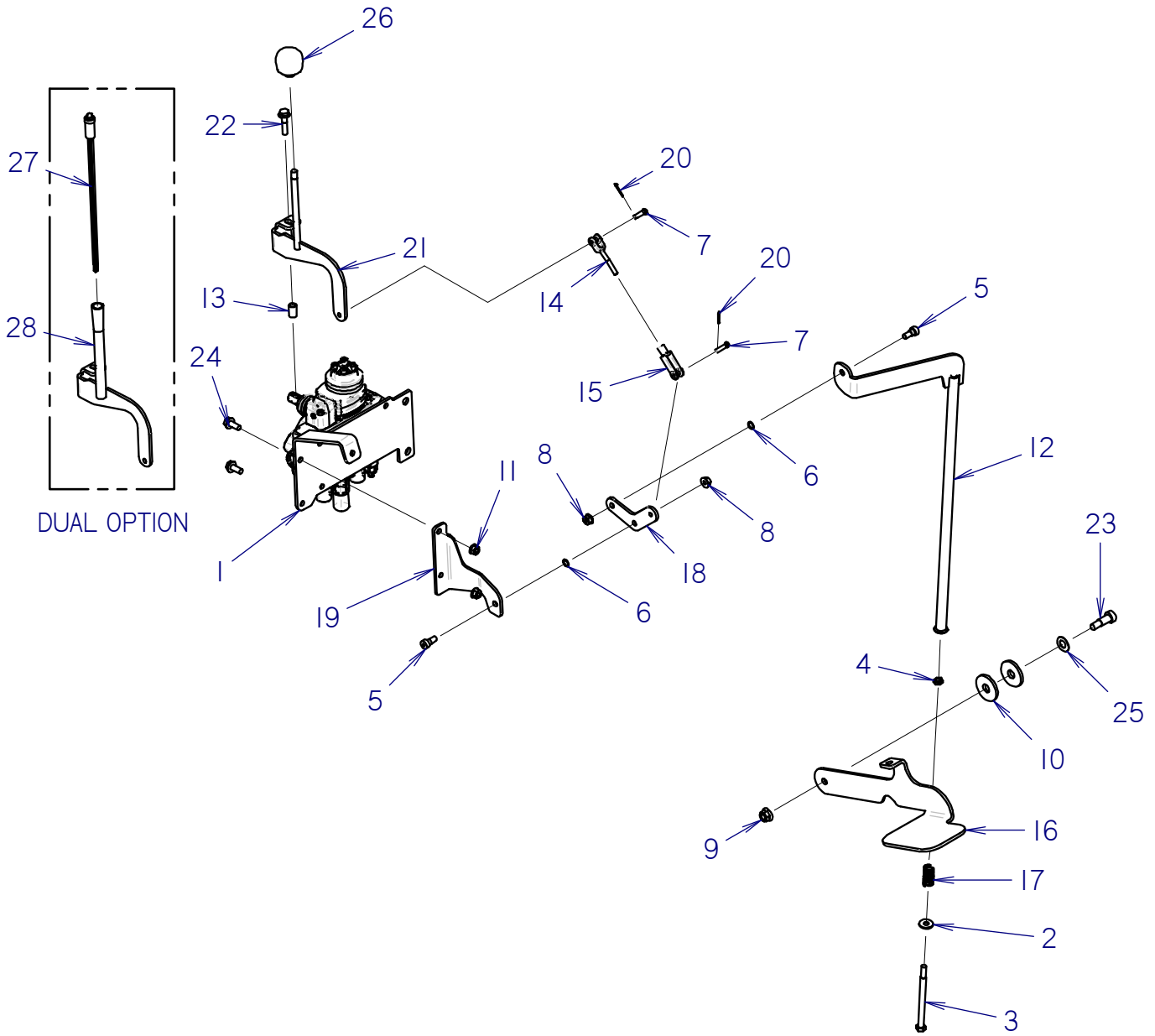
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	302-5095	1	CONTROL REFERENCE BAR	
2	106-387	6	FLG LOCKNUT (M10-1.50)	
3	105-1098	4	BOLT (M10-1.50 X 30MM,BUT SOC)	
4	362-1942	4	GRIP (.75 X 4.5)	
5	301-6885	1	BRACKET	
6	106-574	2	CLIP NUT (M6-1.00)	
7	106-712	3	FLG SCREW (M6-1.00 X 16MM)	
8	106-164	2	FLG LK SCREW (M10-1.50 X 30MM)	
9	220-2555	1	PV380 V2 DISPLAY	
10	302-5727	1	PANEL	
11	306-603	1	AUDIO ALARM	
12	110-560	2	POP RIVET (3/16" X 1/2", ALUM)	
13	105-687	4	SCREW (#10-24 X 3/4",PAN TORX)	
14	302-5726	1	CONSOLE W/LIGHT	
15	215-2013	1	IGNITION SWITCH	
16	214-301	1	ACCESSORY SOCKET	
17	105-1454	1	CLAMP, BOLT-ON ("P") 1 1/4"	
18	362-1148	1	BOOT	
19	362-1269	2	U-CLIP	
20	215-1597	1	ROCKER SWITCH (DPST) ON-OFF (W/ LOCK)	
21	362-823	1	COVER	
22	217-762	1	ROCKER SWITCH (SPDT)	
23	270-6991	1	WORKLIGHTS	
24	105-2403	1	SHLD BLT (M8 X 12MM, M6-1.00)	
25	116-881	1	BULK HOSE (.375", SOLD PER 1')	
26	215-3005	1	LED LIGHT BAR (17")	
27	106-224	1	FLG SCREW (M6-1.00 X 10MM)	

NOT SHOWN:

FOOTNOTES:

NOTE:

AUXILIARY CONTROL FOOT PEDAL



AUXILIARY CONTROL FOOT PEDAL

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-6665	1	VALVE MOUNT	
2	105-117	1	WASHER (5/16")	
3	106-160	1	SCREW (M8-1.25 X 120MM)	
4	106-539	1	JAM NUT (M8-1.25)	
5	107-582	2	SHLD BOLT(3/8" X 1/4",5/16-NC)	
6	106-711	2	WASHER (13/32")	
7	110-082	2	CLEVIS PIN (1/4 X 11/16)	
8	105-003	2	FLG LOCKNUT (5/16-NC)	
9	106-387	1	FLG LOCKNUT (M10-1.50)	
10	105-088	2	WASHER (9/16")	
11	106-386	2	FLG LOCKNUT (M8-1.25)	
12	301-6668	1	CONTROL ROD	
13	184-655	1	BUSHING (BREAK-OUT WRENCH)	
14	105-1189	1	CLEVIS MALE THREAD (1/4 NF)	
15	110-067	1	CLEVIS (1/4-NF)	
16	301-6670	1	PEDAL	
17	117-003	1	COMPRESSION SPRING - INSTALLED HEIGHT	
18	301-6667	1	PIVOT PLT	
19	301-6666	1	PIVOT MOUNT	
20	105-512	2	COTTER PIN (094 X .750)	
21	301-8851	1	AUX CONTROL LEVER	
22	106-989	1	FLG LK SCREW (M8-1.25 X 35MM)	
23	106-739	1	SHLD BLT (M12 X 20MM,M10-1.50)	
24	105-1795	2	FLG LK SCREW (M8-1.25 X 20mm) SERRATED	
25	107-605	1	WASHER (1/2", HARDENED)	
26	362-1135	1	KNOB	
27	215-0089	1	ILLUMINATED PUSH BUTTON SWITCH (SPDT)	DUAL AUX OPTION
28	302-5093	1	SWITCH CONTROL LEVER	DUAL AUX OPTION

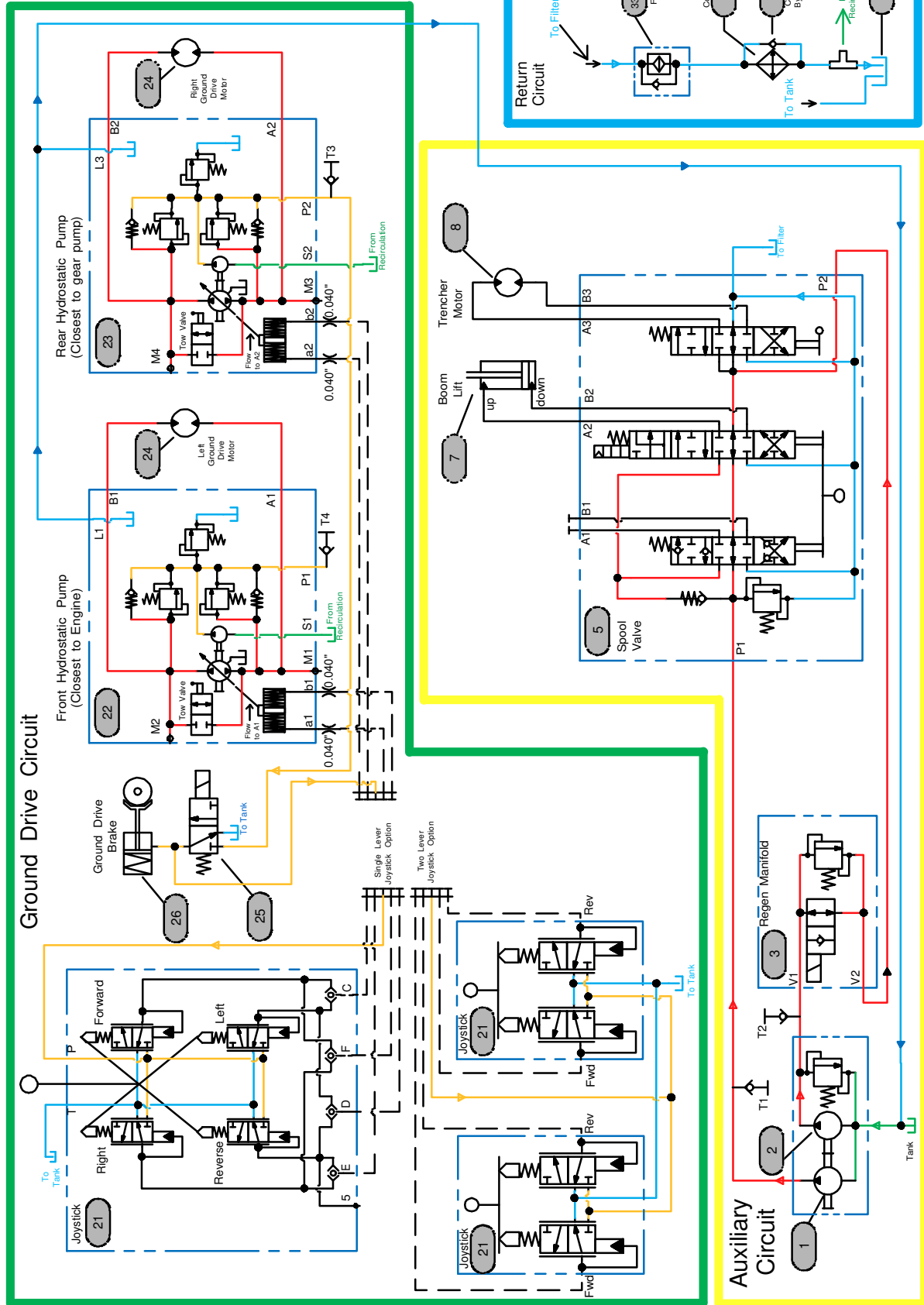
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FOOTNOTES:

NOTE:

HYDRAULICS

HYDRAULIC SCHEMATIC ST37X



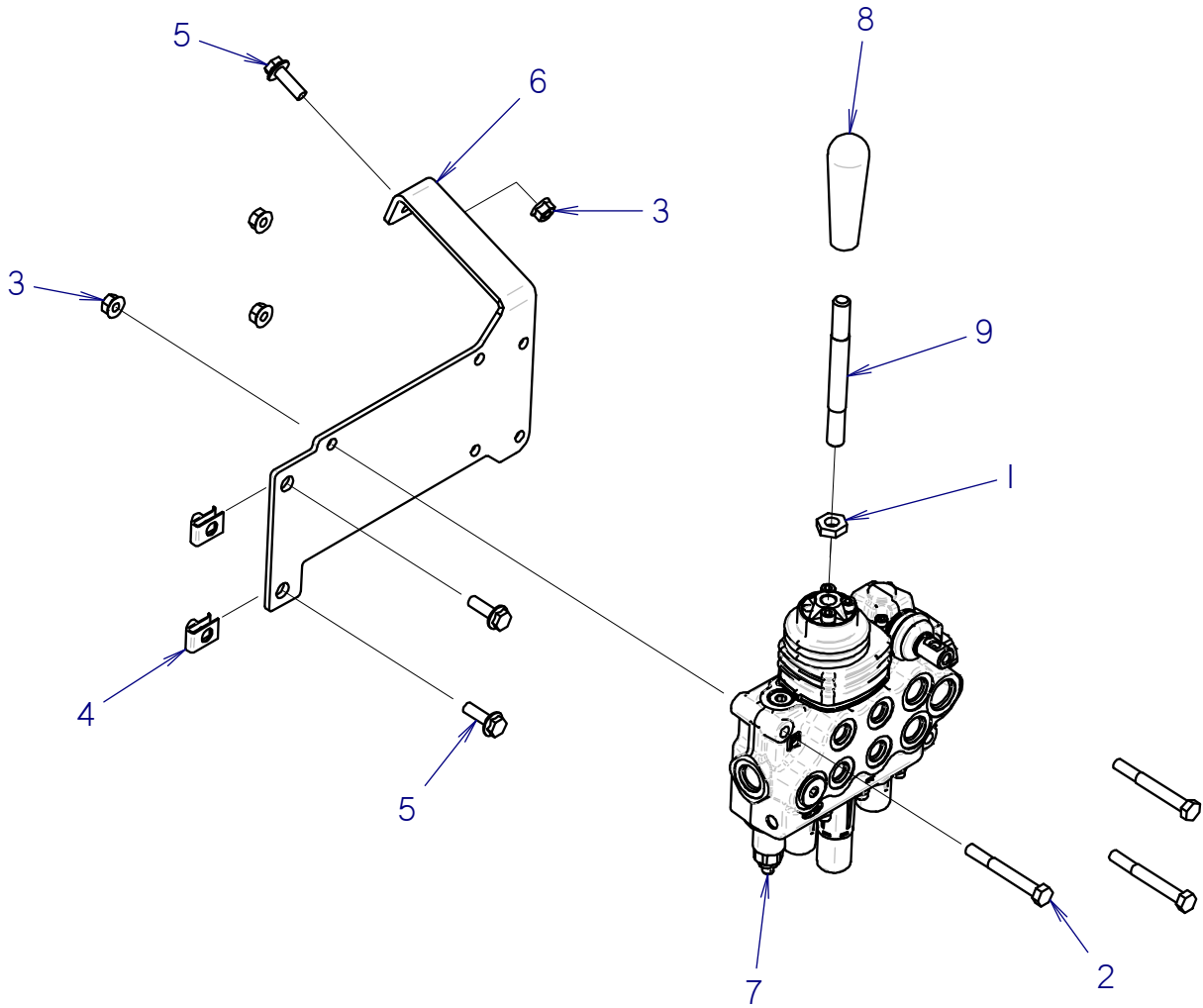
HYDRAULIC SCHEMATIC

ST37X

Item no.	Qty		Component	Notes:
1	1		Auxiliary Double Gear Pump	Front Pump
2	1		Auxiliary Double Gear Pump	Rear Pump
3	1		Stationary Regen Valve	
5	1		Loader & Auxiliary Valve	
7	1		Loader Boom Cylinder	
8	1		Trencher Motor	
21	1		Ground Drive Pilot Valve	Single Lever Option
21	1		Ground Drive Pilot Valve	Dual Lever Option
22	1		Dual Hydrostatic Pump	Front Pump
23	1		Dual Hydrostatic Pump	Rear Pump
24	2		Ground Drive Motors	
25	1		Brake Control Valve	
26	1		Park Brake Cylinder	
31	1		Hydraulic Cooler	
32	1		Hydraulic Cooler Bypass	
33	1		Filter Head	
34	1		Filter Element	
35	1		Hydraulic Reservoir	

	Circuit	Test port	Description	Value
	Auxilliary (Pump 1)	T1	Relief: (in spool valve)	3500 psi
	Auxilliary (Pump 2)	T2	Relief (#2 Pump's Internal Relief)	3625 psi
	Charge Circuits	T3	Charge Pressure (Rear Pump)	330 psi
	Charge Circuits	T4	Charge Pressure (front pump)	330 psi

CONTROL VALVE MOUNTING



CONTROL VALVE MOUNTING

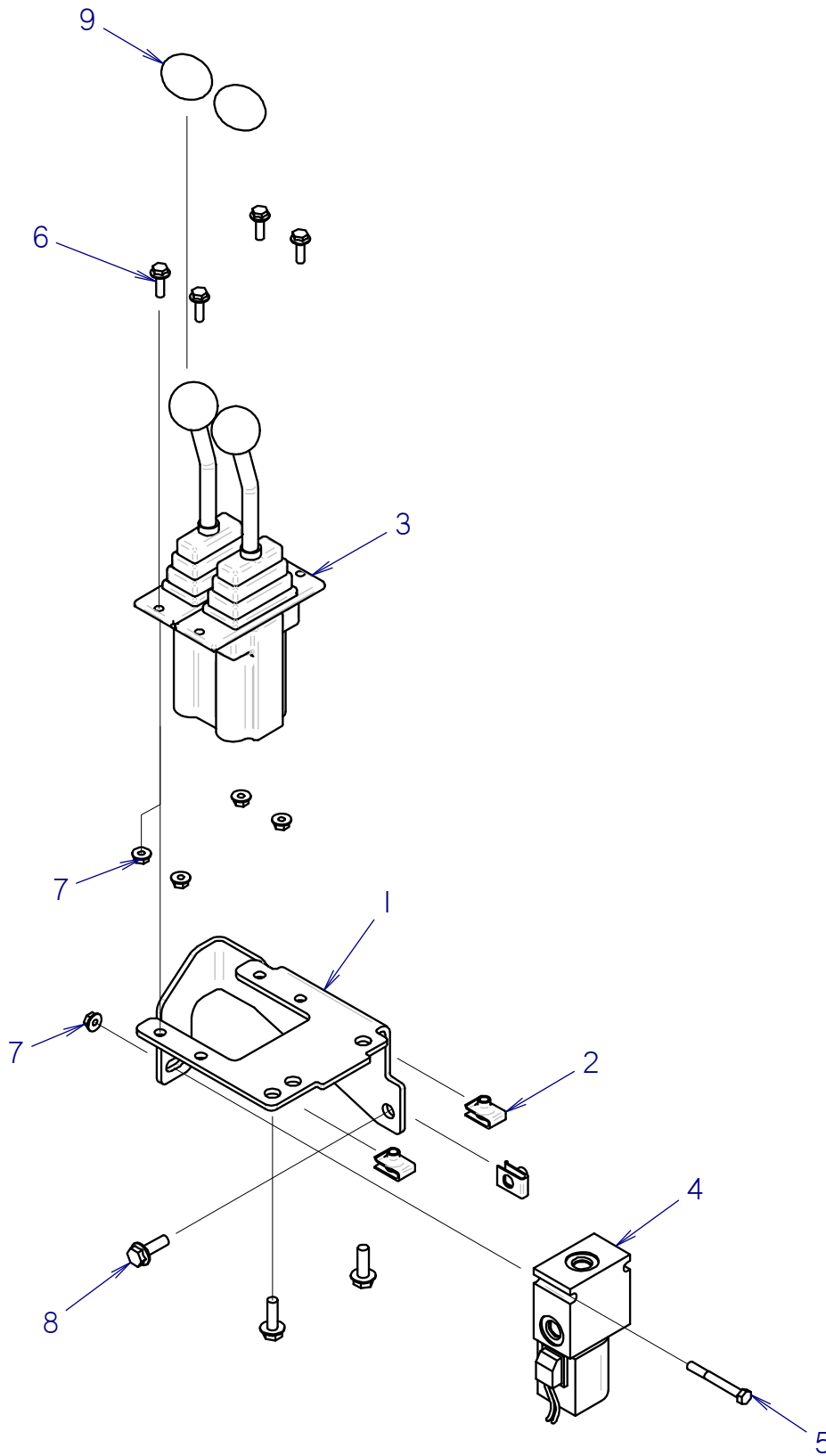
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	107-669	1	JAM NUT (M12-1.75)	
2	106-330	3	SCREW (M8-1.25 X 70MM)	
3	106-386	4	FLG LOCKNUT (M8-1.25)	
4	106-551	2	CLIP NUT (M8-1.25)	
5	106-381	3	FLG LK SCREW (M8-1.25 X 25MM)	
6	301-6665	1	VALVE MOUNT	
7	150-4131	1	VALVE SD5-3	
8	110-530	1	HANDLE (1/2-NC, GREEN)	
9	301-7109	1	LEVER	

NOT SHOWN:

FOOTNOTES:

NOTE:

DUAL JOYSTICK MOUNTING



DUAL JOYSTICK MOUNTING

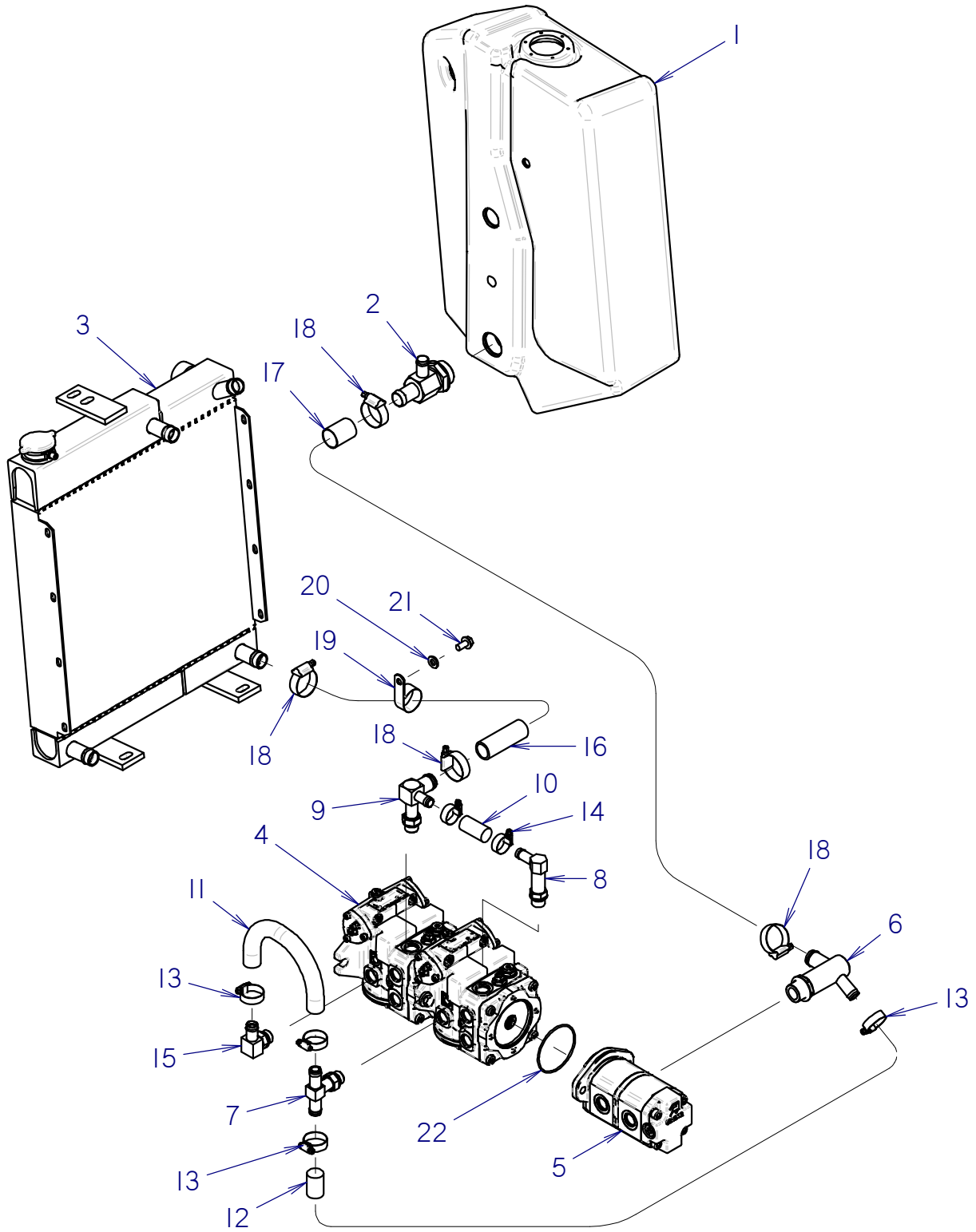
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	301-6671	1	MOUNTING BRACKET	
2	106-551	3	CLIP NUT (M8-1.25)	
3	159-945	1	PILOT CONTROL VALVE	FOR SK752 USE 150-5752 PILOT CONTROL VALVE
4	158-627	1	SOLENOID VALVE	
5	106-893	1	SCREW (M6-1.00 X 55MM)	
6	106-161	4	FLG SCREW (M6-1.00 X 20MM)	
7	106-385	5	FLG LOCKNUT (M6-1.00)	
8	106-381	3	FLG LK SCREW (M8-1.25 X 25MM)	
9	105-2364	2	ROUND KNOB	USE LOCTITE 495 OR EQUIVALENT

NOT SHOWN:

FOOTNOTES:

NOTE:

SUPPLY HYDRAULICS



SUPPLY HYDRAULICS

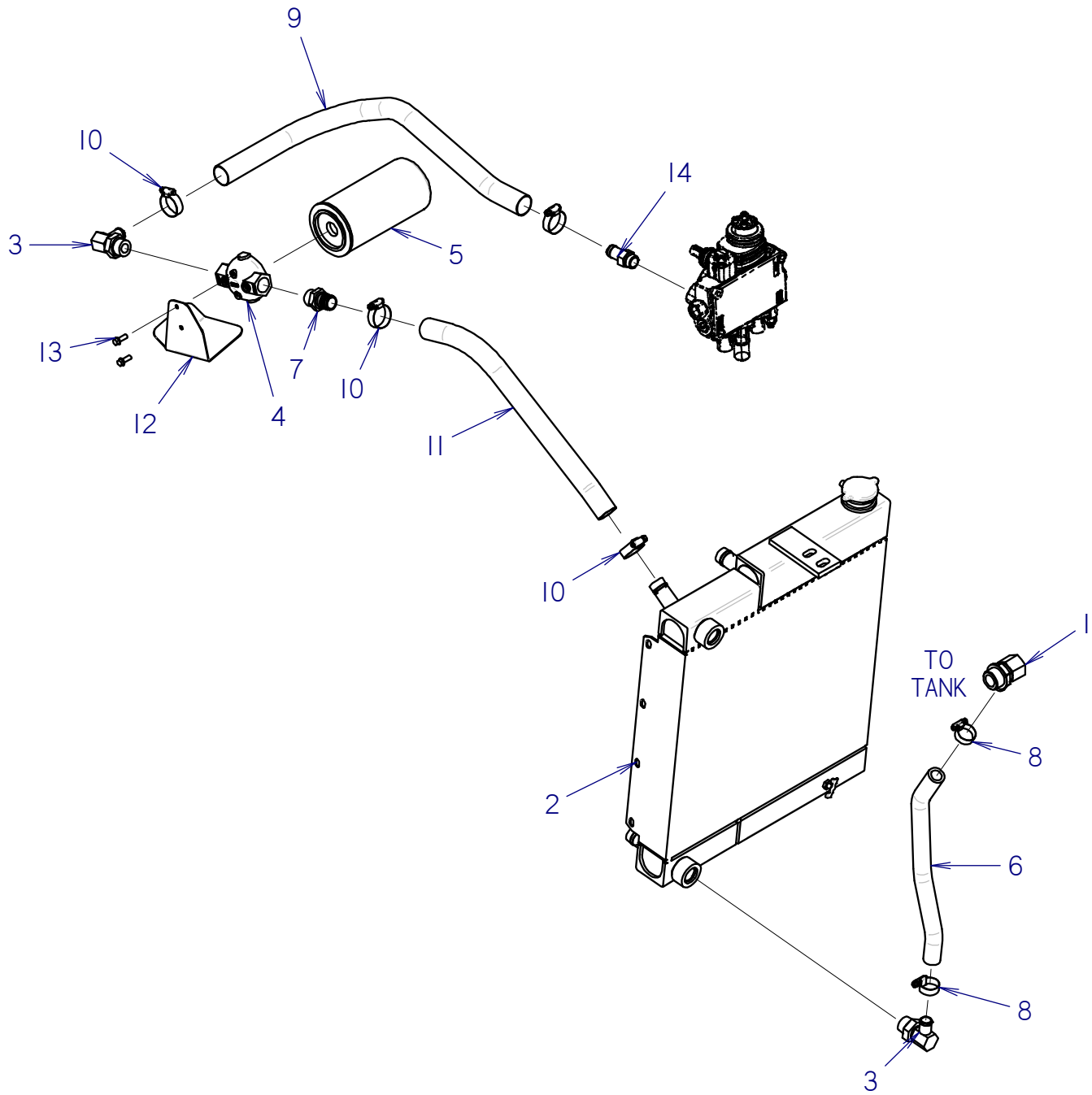
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	364-1011	1	HYDRAULIC TANK	
2	159-638	1	S/O BR TEE (20S-16H-12H-06S)	
3	195-1268	1	RADIATOR/OIL COOLER	
4	150-4230	1	TANDEM HYDRO PUMP	
5	150-4132	1	HYDRAULIC PUMP	
6	150-2693	1	S/O COUPLER (16S-16H90-12H90)	
7	150-4938	1	S/O BR TEE (10S-12H90-12H90)	
8	150-1022	1	ELBOW (10S-10H, LONG)	
9	150-4231	1	S/O COUPLER (10S-16H90-10H90)	
10	116-044	6	BULK HOSE (5/8", SOLD PER 1')	
11	116-636	12	BULK HOSE (3/4", SOLD PER FT)	
12	116-636	21	BULK HOSE (3/4", SOLD PER FT)	
13	110-353	4	WORM CLAMP (3/4" TO 1-1/2")	
14	110-026	2	WORM CLAMP (1/2" TO 1-1/4")	
15	150-4939	1	S/O COUPLER (10S-12H90)	
16	116-460	44	BULK HOSE (1", SOLD PER FT)	
17	116-460	61	BULK HOSE (1", SOLD PER FT)	
18	111-011	4	WORM CLAMP (1" TO 1-3/4")	
19	110-332	1	BOLT-ON CLAMP (1-5/8")	
20	106-396	1	WASHER (M10, HARDENED)	
21	106-382	1	FLG LK SCREW (M10-1.50 X 20MM)	
22	157-041	0	O-RING (152 D70)	INCLUDED IN 150-4230 TANDEM HYDRO PUMP

NOT SHOWN:

FOOTNOTES:

NOTE:

RETURN & FILTER HYDRAULICS



RETURN & FILTER HYDRAULICS

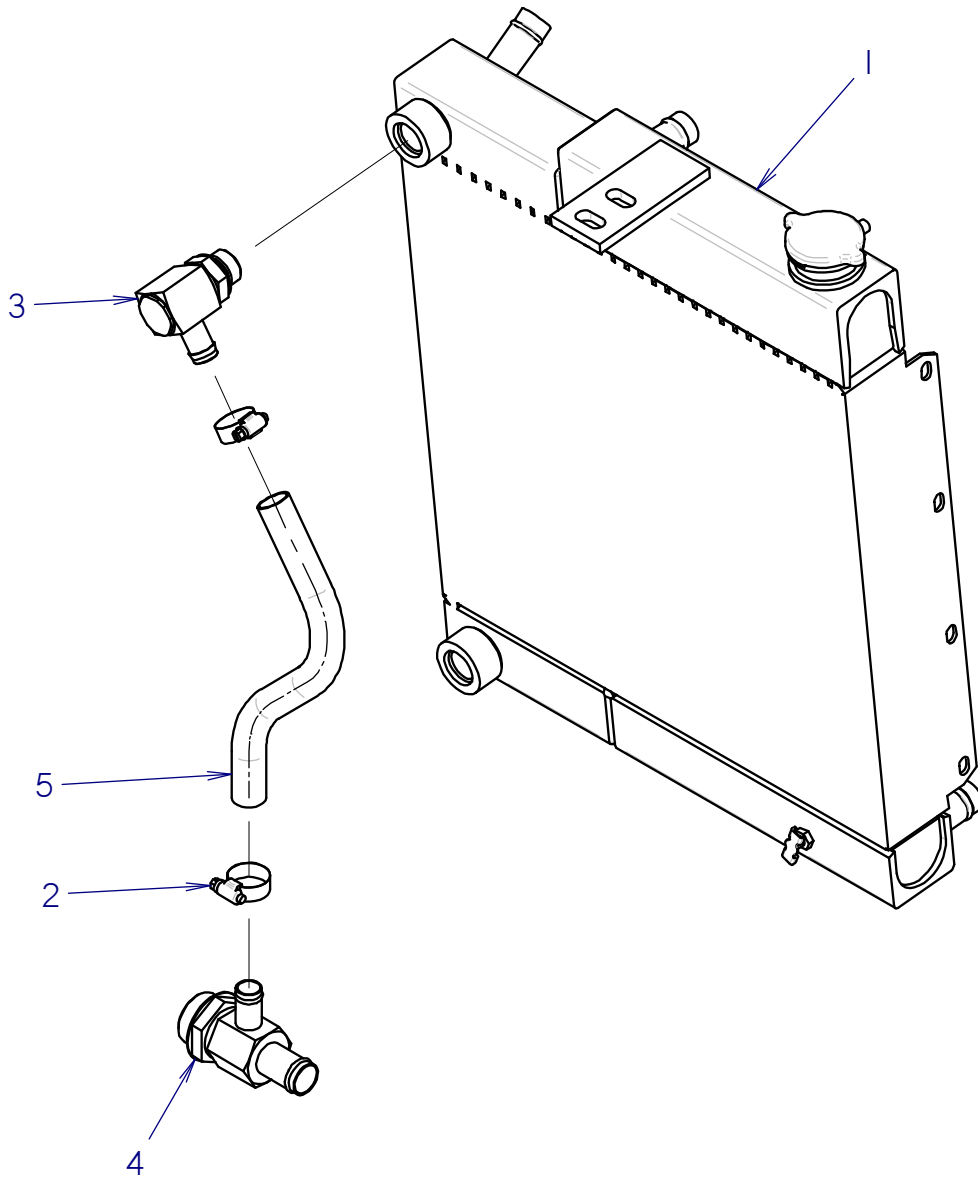
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	155-183	1	S/O COUPLER (16S-12H90)	
2	195-1268	1	RADIATOR/OIL COOLER	
3	155-174	2	S/O COUPLER (12S-12H90)	
4	159-386	1	FILTER HEAD (12SF-12SF)	
5	149-412	1	FILTER ELEMENT (1-UNF)	
6	116-636	16	BULK HOSE (3/4", SOLD PER FT)	
7	155-161	1	S/O COUPLER (12S-16H)	
8	110-026	2	WORM CLAMP (1/2" TO 1-1/4")	
9	116-636	28	BULK HOSE (3/4", SOLD PER FT)	
10	110-353	4	WORM CLAMP (3/4" TO 1-1/2")	
11	116-460	20	BULK HOSE (1", SOLD PER FT)	
12	301-6763	1	CATCH TRAY	
13	106-159	2	FLG SCREW (1/4-NC X 3/4")	
14	514-128	1	S/O COUPLER (10S-12H)	

NOT SHOWN:

FOOTNOTES:

NOTE:

COOLER BY-PASS HYDRAULICS



COOLER BY-PASS HYDRAULICS

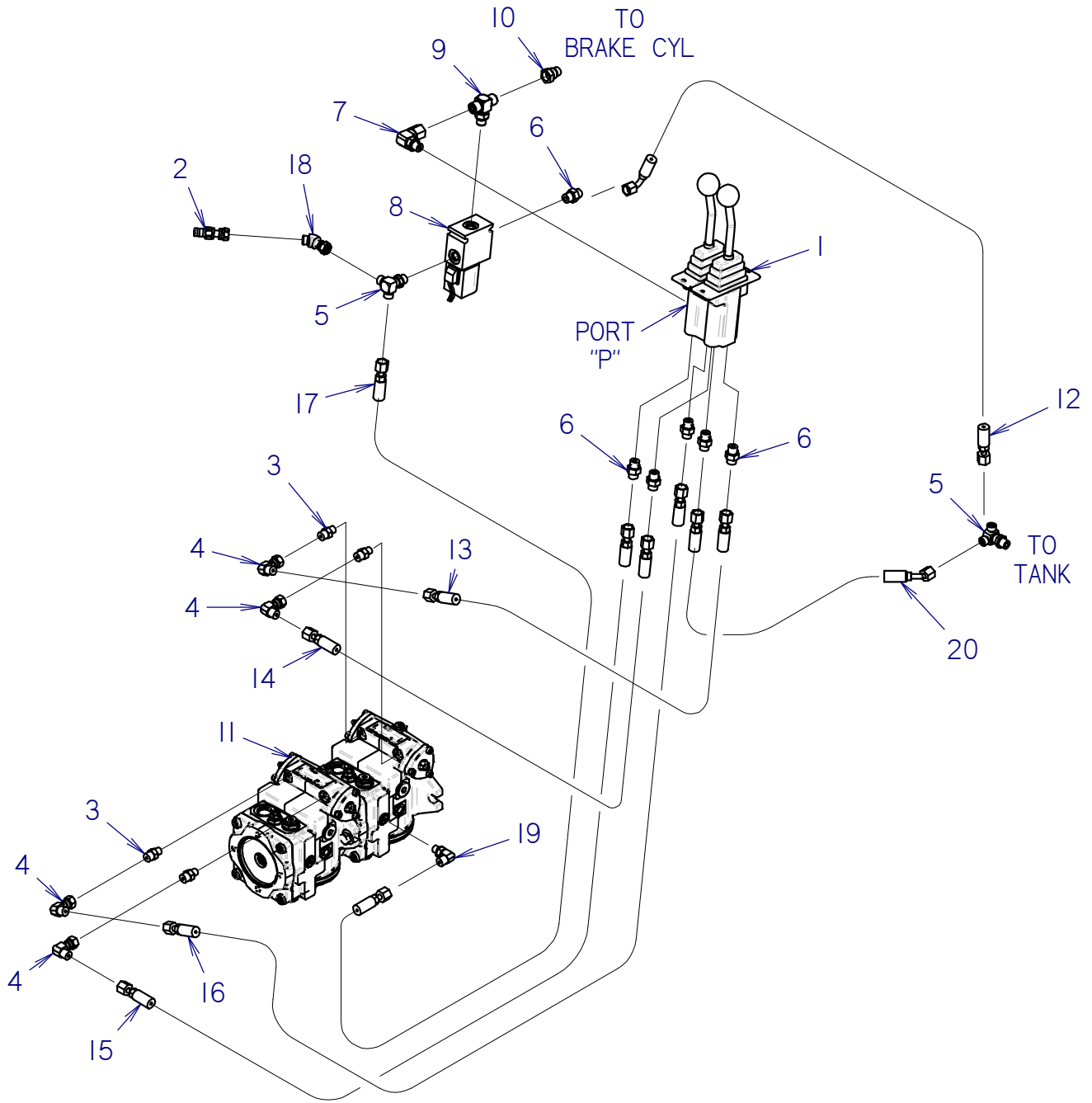
REF PART NO. NUMBER	QTY	DESCRIPTION	REMARKS
1 195-1268	1	RADIATOR/OIL COOLER	
2 110-026	2	WORM CLAMP (1/2" TO 1-1/4")	
3 150-2604	1	S/O COUPLER (12S-12H90) W/ CHECK	
4 159-638	1	S/O BR TEE (20S-16H-12H-06S)	
5 116-636	13	BULK HOSE (3/4", SOLD PER FT)	

NOT SHOWN:

FOOTNOTES:

NOTE:

PILOT CONTROL HYDRAULICS



PILOT CONTROL HYDRAULICS

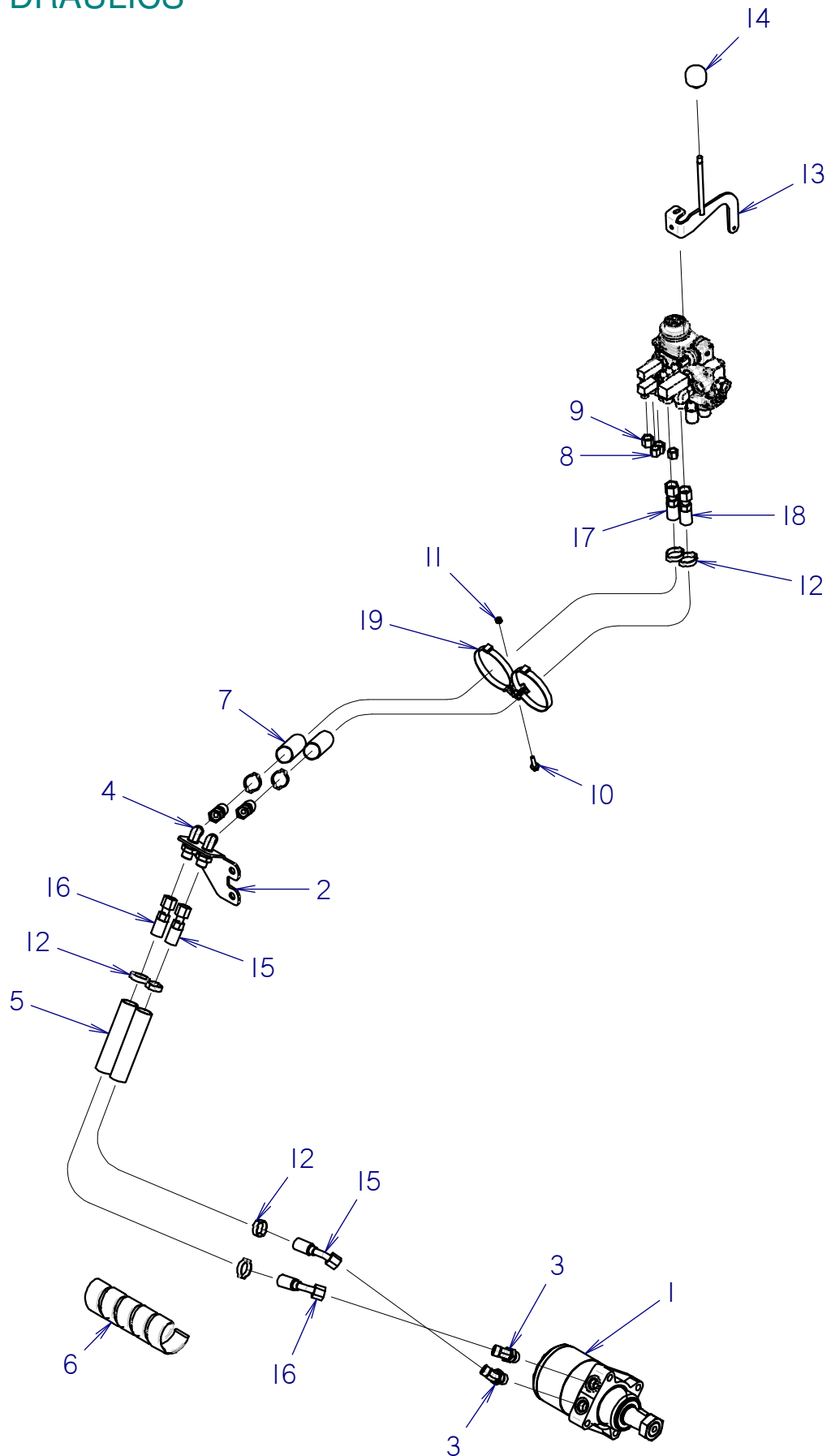
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	159-945	1	PILOT CONTROL VALVE	FOR SK752 USE 150-5752 PILOT CONTROL VALVE
2	159-156	1	QDC ADAPTER (02-040F)	
3	156-069	4	CONNECTOR (04S-040, ORF)	
4	154-255	4	UNION (040-040FX90)	
5	154-230	2	BRANCH TEE (06S-040-040)	
6	154-220	6	CONNECTOR (040-06S)	
7	154-343	1	UNION (06S-060FX90)	
8	158-627	1	SOLENOID VALVE	
9	154-346	1	BRANCH TEE (06S-060-060)	
10	154-373	1	REDUCER (040-060F)	
11	150-4230	1	TANDEM HYDRO PUMP	
12	515-065	1	HOSE (040FX90S-14"-3000)	
13	515-054	1	HOSE (040FX-74"-3000)	
14	515-054	1	HOSE (040FX-74"-3000)	
15	515-054	1	HOSE (040FX-74"-3000)	
16	515-054	1	HOSE (040FX-74"-3000)	
17	515-054	1	HOSE (040FX-74"-3000)	
18	150-1959	1	CONNECTOR (040-040FX45)	
19	154-252	1	CONNECTOR (04S-04090)	
20	150-5444	1	HOSE (040FX45-11"-3000)	

NOT SHOWN:

FOOTNOTES:

NOTE:

MOTOR HYDRAULICS



MOTOR HYDRAULICS

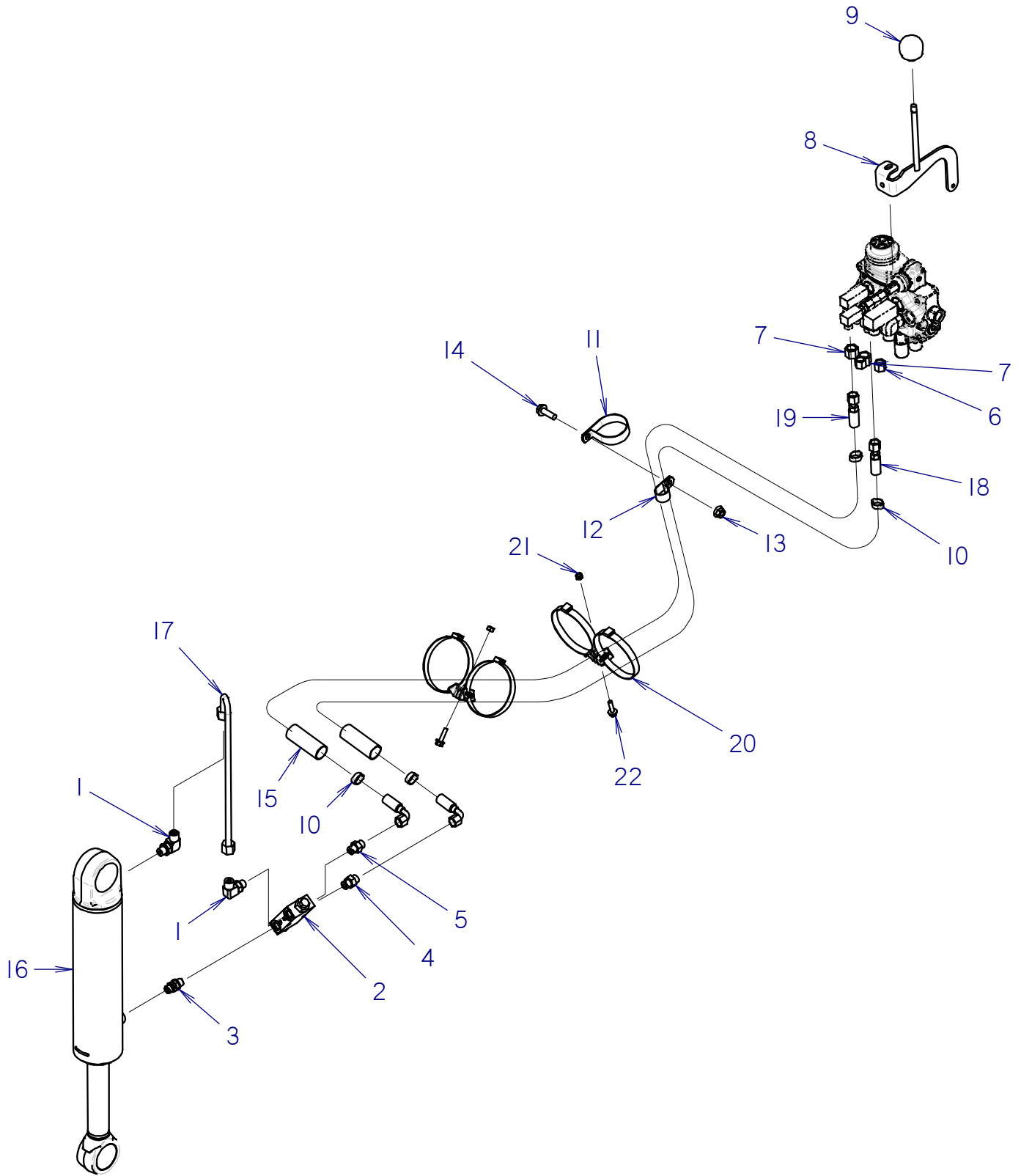
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	150-3836	1	HYD MOTOR PARKER TH0240	
2	301-5881	1	BULKHEAD BRACKET	
3	154-264	2	CONNECTOR (080-10S45)	
4	154-396	2	BULKHEAD CONNECTOR (080-08090BK)	
5	117-396	2	ABRASION SLEEVE (1.25" X 28")	
6	110-930	16	SPIRAL WRAP (1.5",SOLD PER FT)	USE 16"
7	117-244	2	ABRASION SLEEVE (1.25" X 78")	
8	154-296	2	CAP (040F)	
9	154-326	2	CAP (060F)	
10	105-819	1	FLG LK BOLT (1/4-NC X 1")	
11	105-078	1	NUT (1/4-NC)	
12	105-2265	8	PINCH CLAMP (27MM TO 31MM)	
13	301-8851	1	AUX CONTROL LEVER	
14	362-1135	1	KNOB	
15	154-943	1	HOSE (080FX45-30"-3000)	
16	154-943	1	HOSE (080FX45-30"-3000)	
17	150-4611	1	HOSE (080FX-74"-4000)	
18	150-4611	1	HOSE (080FX-74"-4000)	
19	105-2322	1	TWO WAY SADDLE MOUNT	

NOT SHOWN:

FOOTNOTES:

NOTE:

LIFT HYDRAULICS



LIFT HYDRAULICS

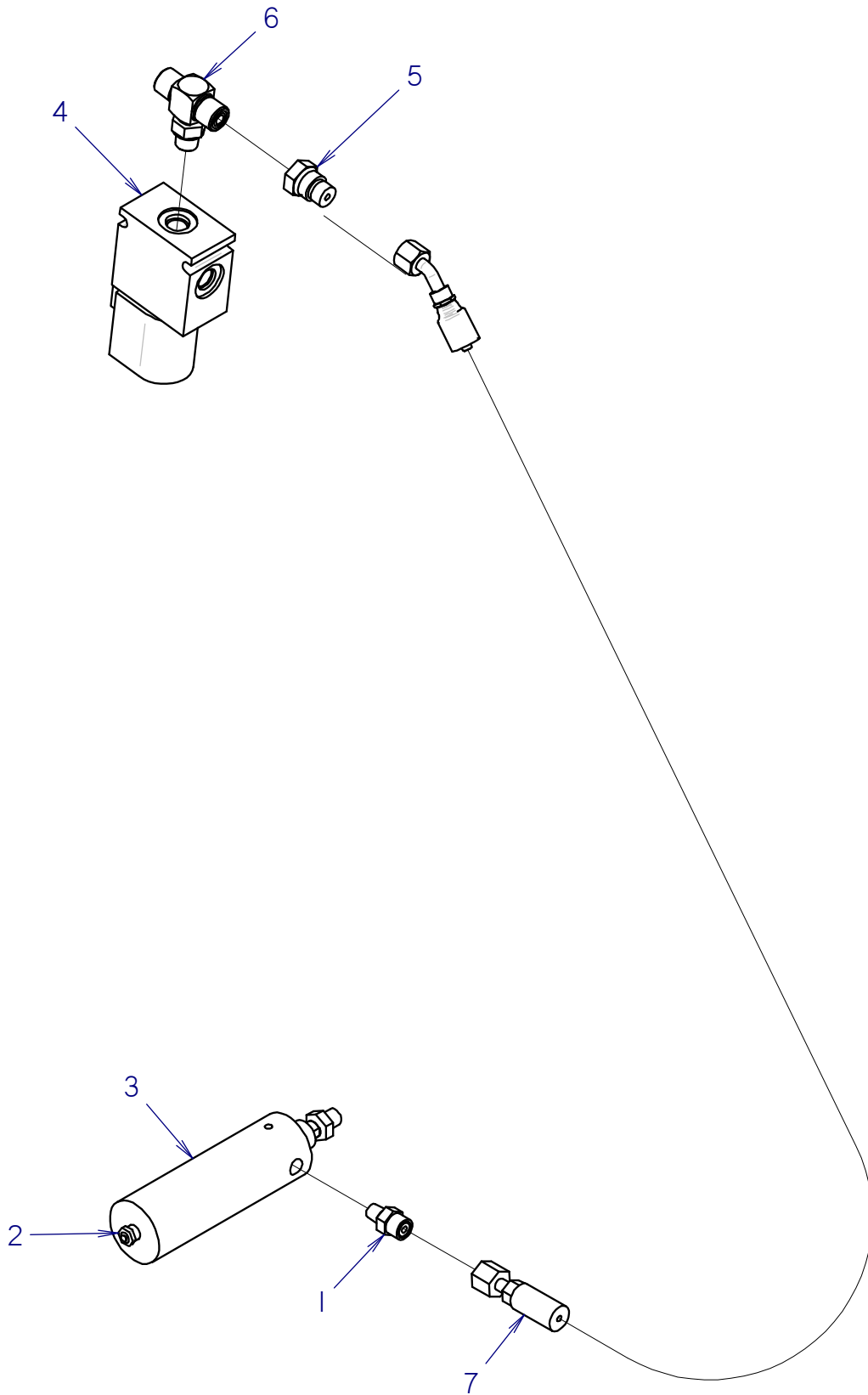
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	154-342	2	CONNECTOR (06S-06090)	
2	149-136	1	HYD LOCKOUT VALVE	
3	155-153	1	CONNECTOR (06S-06S)	
4	154-220	1	CONNECTOR (040-06S)	
5	150-1320	1	CONNECTOR (06S-040, .035 ORF)	
6	154-296	2	CAP (040F)	
7	154-326	2	CAP (060F)	
8	301-8851	1	AUX CONTROL LEVER	
9	362-1135	1	KNOB	
10	105-2266	4	PINCH CLAMP (18MM TO 22MM)	
11	110-555	1	CLAMP (1-7/8")	
12	110-333	1	BOLT-ON CLAMP (1")	
13	106-387	1	FLG LOCKNUT (M10-1.50)	
14	106-383	1	FLG LK SCREW (M10-1.50 X 30MM)	
15	117-213	2	ABRASION SLEEVE (1.00" X .96")	
16	151-029	1	CYL (3.0 X 1.50 X 10.0)	
17	150-3837	1	HARD LINE (-06)	
18	515-137	1	HOSE (040FX90-90"-3000)	
19	515-137	1	HOSE (040FX90-90"-3000)	
20	105-2322	2	TWO WAY SADDLE MOUNT	
21	105-078	2	NUT (1/4-NC)	
22	105-819	2	FLG LK BOLT (1/4-NC X 1")	

NOT SHOWN:

FOOTNOTES:

NOTE:

PARK BRAKE HYDRAULICS



PARK BRAKE HYDRAULICS

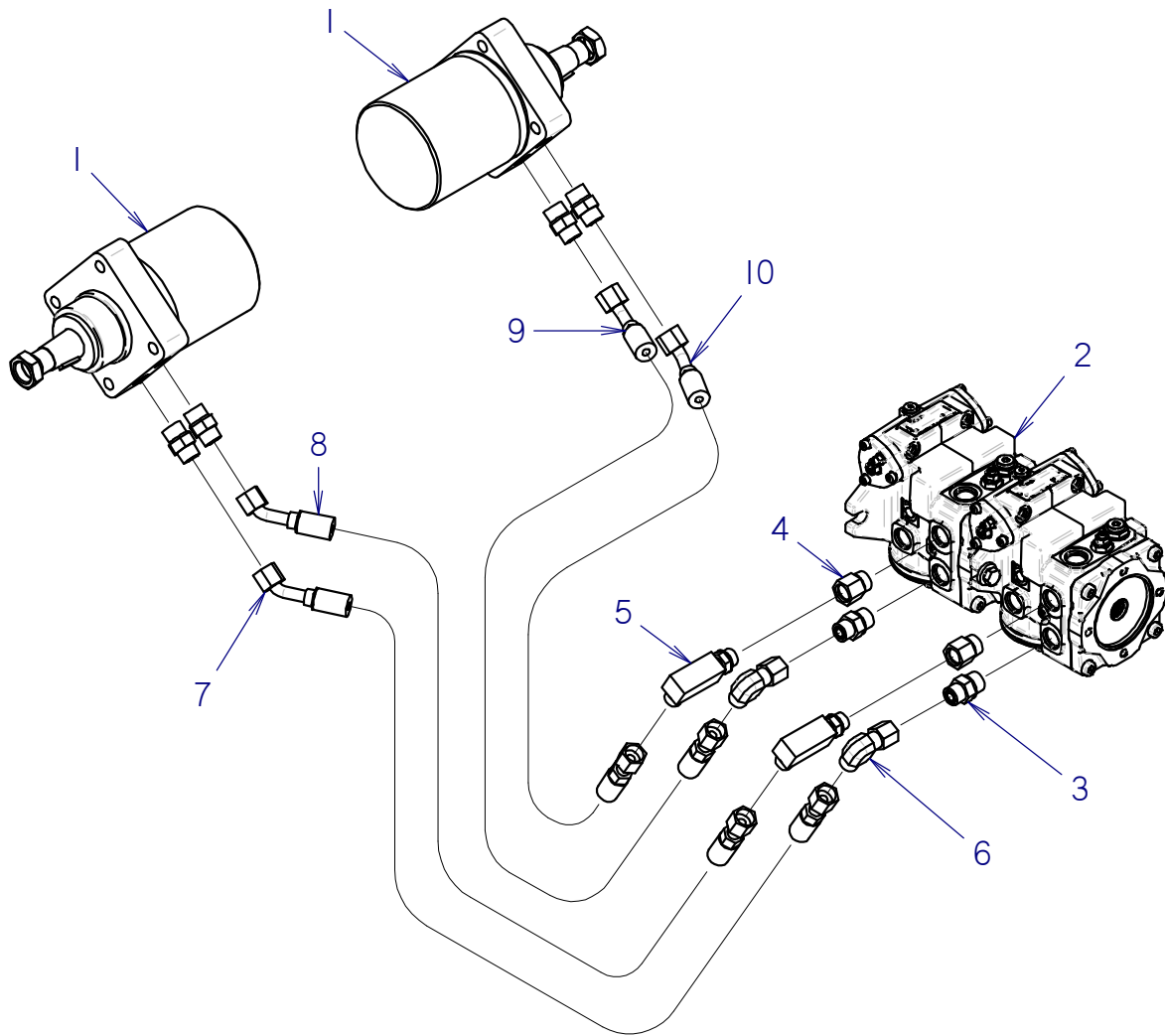
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	153-241	1	CONNECTOR (040-02N)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
2	155-912	1	AIR VENT (02N)	USE LOCTITE 567 THREAD SEALANT OR EQUIVALENT
3	151-097	1	CYL (1.5" X 0.43" X 2.500")	
4	158-627	1	SOLENOID VALVE	
5	154-373	1	REDUCER (040-060F)	
6	154-346	1	BRANCH TEE (06S-060-060)	
7	150-1422	1	HOSE (040FX45-44"-3000)	

NOT SHOWN:

FOOTNOTES:

NOTE:

GROUND DRIVE HYDRAULICS



GROUND DRIVE HYDRAULICS

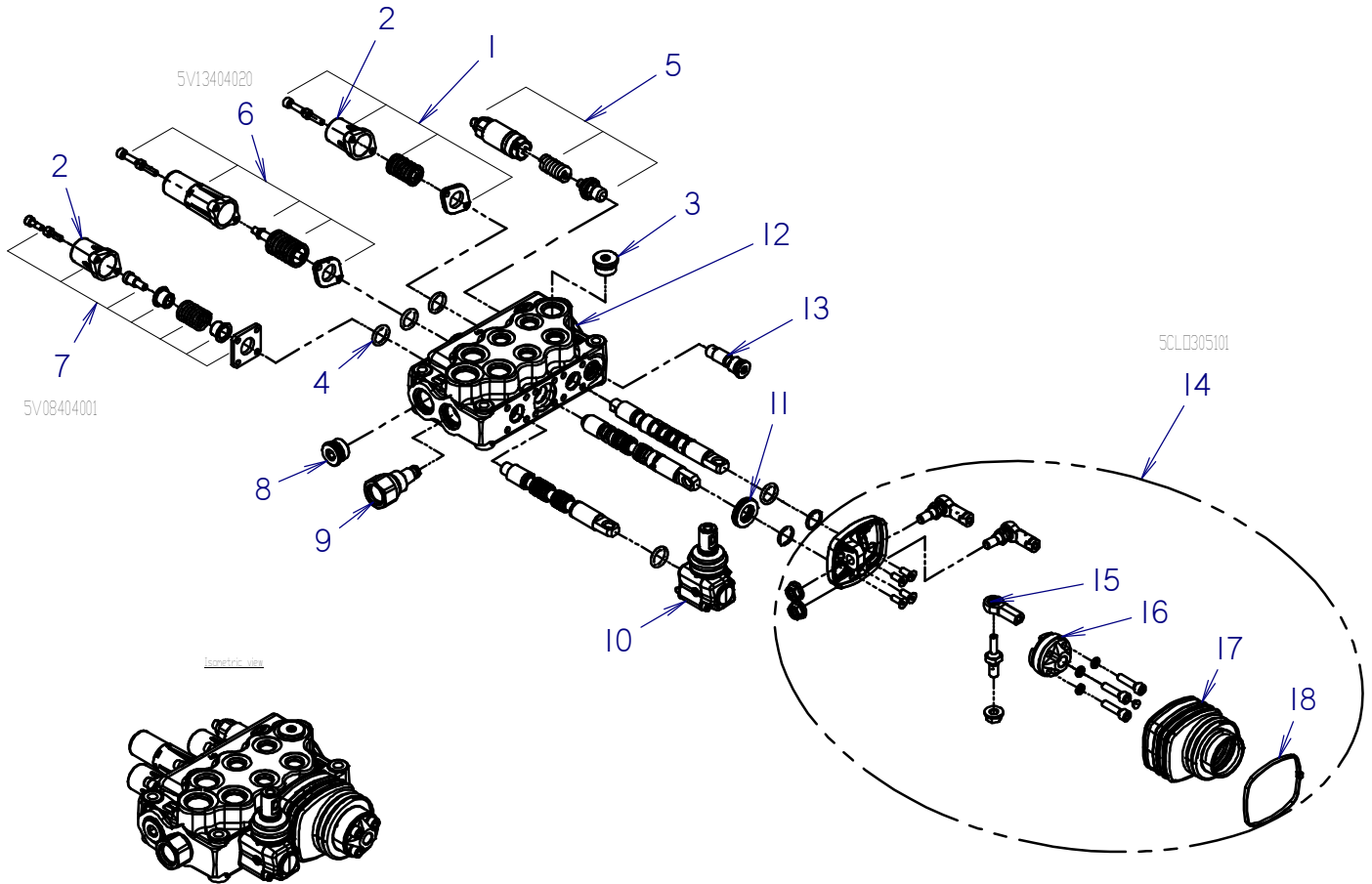
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	155-572	2	HYD MTR (GEROLERI) 20.6 CID	
2	150-4230	1	TANDEM HYDRO PUMP	
3	154-279	6	CONNECTOR (080-10S)	
4	155-193	2	REDUCER (10S-08SF)	
5	154-254	2	CONNECTOR (08S-08090, XL)	
6	154-256	2	UNION (080-080FX90)	
7	154-943	1	HOSE (080FX45-30"-3000)	
8	154-943	1	HOSE (080FX45-30"-3000)	
9	150-4307	1	HOSE (080FX45-33"-3000)	
10	150-4307	1	HOSE (080FX45-33"-3000)	

NOT SHOWN:

FOOTNOTES:

NOTE:

HYDRAULIC CONTROL VALVE



HYDRAULIC CONTROL VALVE

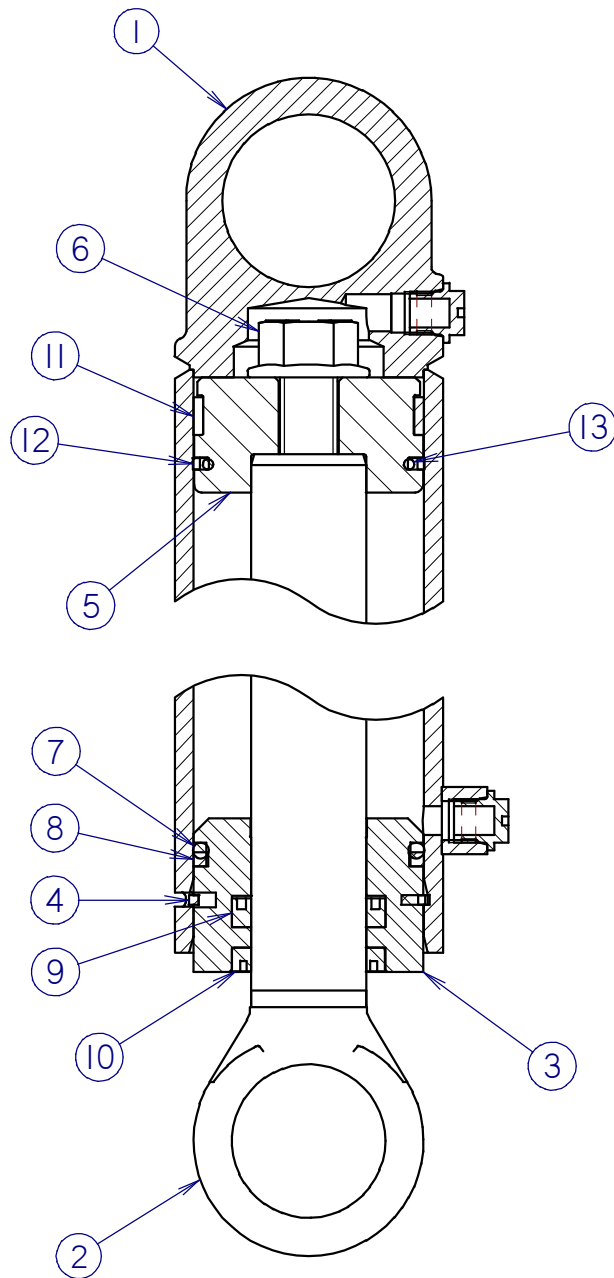
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	150-4131		VALVE SD5-3	
1.	500-1165		SPRING RETURN KIT (SD4)	
2.	500-731		SPOOL BONNET	
3.	500-1435		PLUG (SD5 THD)	
4.	157-218		O-RING	
5.	150-1799		RELIEF VALVE SD5 DIRECT ACTING	
6.				VENDER P/N: 5V13404020
7.				VENDER P/N: 5V08404001
8.	500-736		PLUG (SD5 THD)	
9.	500-1170		LP SLEEVE (SD5-SAE8)	
10.	499-143		LEVER	
11.	500-1437		RING (5PY)	
12.	500-1436		VALVE BODY	INCLUDES REF NO. 13
13.	149-664		CHECK VALVE	
14.			JOYSTICK LEVER ASSEMBLY	INCLUDES REF NO.S 15 THRU 18, VENDER P/N: 5CLO305101
15.	499-138		ROD END	
16.	499-134		ARTICULATION HOLDER	
17.	499-135		RUBBER BELLOW	
18.	499-137		BELLOW CAP	

NOT SHOWN:

FOOTNOTES:

NOTE:

HYDRAULIC CYLINDERS (3.0" X 1.5")



HYDRAULIC CYLINDERS (3.0" X 1.5")

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	149-682	-	CYL (3.0 X 1.5 X 2.5)	SEE FOOTNOTES 1 & 2
1	149-804	1	CYLINDER BARREL (3.0 X 2.5)	
2	149-731	1	CYLINDER ROD (1.50 X 2.5)	
	151-049	-	CYL (3.0 X 1.5 X 3.0)	SEE FOOTNOTES 1 & 2
1	150-299	1	CYLINDER BARREL (3.0 X 3.0)	
2	150-431	1	CYLINDER ROD (1.50 X 3.0)	
	151-054	-	CYL (3.0 X 1.5 X 4.0)	SEE FOOTNOTES 1 & 2
1	152-004	1	CYLINDER BARREL (3.0 X 4.0)	
2	150-434	1	CYLINDER ROD (1.50 X 4.0)	
	151-179	-	CYL (3.0 X 1.5 X 5.0)	SEE FOOTNOTES 1 & 2
1	152-068	1	CYLINDER BARREL (3.0 X 5.0)	
2	153-038	1	CYLINDER ROD (1.50 X 5.0)	
	151-086	-	CYL (3.0 X 1.5 X 6.0)	SEE FOOTNOTES 1 & 2
1	152-008	1	CYLINDER BARREL (3.0 X 6.0)	
2	153-003	1	CYLINDER ROD (1.50 X 6.0)	
	151-136	-	CYL (3.0 X 1.5 X 8.0)	SEE FOOTNOTES 1 & 2
1	152-014	1	CYLINDER BARREL (3.0 X 8.0)	
2	153-027	1	CYLINDER ROD (1.50 X 8.0)	
	151-029	-	CYL (3.0 X 1.5 X 10.0)	SEE FOOTNOTES 1 & 2
1	150-284	1	CYLINDER BARREL (3.0 X 10.0)	
2	150-416	1	CYLINDER ROD (1.50 X 10.0)	
	151-043	-	CYL (3.0 X 1.5 X 12.0)	SEE FOOTNOTES 1 & 2
1	150-293	1	CYLINDER BARREL (3.0 X 12.0)	
2	150-426	1	CYLINDER ROD (1.50 X 12.0)	
	151-034	-	CYL (3.0 X 1.5 X 16.0)	SEE FOOTNOTES 1 & 2
1	150-288	1	CYLINDER BARREL (3.0 X 16.0)	
2	150-419	1	CYLINDER ROD (1.50 X 16.0)	
	151-117	-	CYL (3.0 X 1.5 X 20.0)	SEE FOOTNOTES 1 & 2
1	152-054	1	CYLINDER BARREL (3.0 X 20.0)	
2	150-669	1	CYLINDER ROD (1.50 X 20.0)	
3	150-774	1	CYLINDER HEAD (3.0 X 1.50)	
4	150-911	1	LOCK RING (3.0)	
5	150-777	1	CYLINDER PISTON (3.0 X 1.50)	
6	106-098	1	FLG BOLT (3/4-NC X 2", GD8)	SEE FOOTNOTE 3
7	155-734	1	O-RING (334 D90)	
8	155-733	1	BACKUP RING (334 D90)	
9	157-542	1	U-SEAL (1.500")	
10	157-539	1	WIPER SEAL (1.500")	
11	125-776	1	WEAR RING	
12	157-536	1	BACKUP RING (230 D90)	
13	157-020	1	O-RING (230 D90)	

NOT SHOWN:

259-040	U-SEAL INSTALLER (1.5" - UPI)
259-237	ROD WIPER INSTALLER (1.5")
259-065	PISTON SEAL INSTALLER (3")
259-066	PISTON INSTALLER (3")
259-188	CYL HEAD SPANNER - TWO PIN

FOOTNOTES:

- REF. #1 & #2 ARE SPECIFIC TO EACH CYLINDER, REF. #3 THRU #13 ARE COMMON FOR ALL THE ABOVE LISTED CYLINDERS.
- SEAL REPAIR KIT P/N: 190-167
- APPLY LOCTITE 277 OR EQUIVALENT, TORQUE TO 290-325 FT-LBS

NOTE:

ELECTRICAL

See loose-leaf schematic included with this manual.

ELECTRICAL SCHEMATIC

SK1050/ST37X - YANMAR

Circuit	Wire Color	Function
0	wht	Spare fuse 30a
1	blk	High current ground
2	red	Battery circuit
2a	red/wht	Alternator to inline 80 amp Maxi Fuse to Battery
2b	yel/grn	Starter Soleniod to GEP (22) Start Relay(30)
3	red/wht	GEP (11) Starter Relay (87) to GEP (70) F3 30a Start Relay
4	red/blk	GEP (2) ERG Valve Relay (30) to GEP (69) F4 20a ERG Fuse
5	red/org	Ignition (1) to GEP (55) F8 10a Fuel Pump fuse
6	blu	Ignition (3) to GEP (65) Accy F2 10a
7	brn	ECU "K" (35) to Ignition (2)
8	red/brn	Ignition (4) to GEP (50) F7 10a Display fuse
9	org	Alt. (2) to GEP (44)
10	org/blu	Alt.(1) to ECU"K" (66)
11	wht/blk	ECU A (12) to DPF Pressure Sensor (4)
12	gry/wht	ECU "K" (77) to DPF Pressure/MID/ Inlet Grnd (2,1,1)
13	org/grn	FMS (@ Sig) to GEP (38,Diode D1)
14	red/wht	ECU "K" (63) to DPF Pressure Sensor (5)
15	brn/yel	ECU "K" (24) to DPF Pressure Sensor (3)
16	red/grn	ECU "K" (68) to GEP (8) EGR Valve Relay (86)
17	red/blu	ECU "K" (81) to TO DPF Inlet Temp (2)
18	red/blk	ECU "K" (80) to TO DPF Mid. Temp (2)
19	red/brn	ECU "K" (73) to GEP (10) Start Relay (86)
20	red/yel	ECU "K" (28) to GEP (23) Start Relay (85)
21	yel/org	ECU "K" (70) to GEP (34) Glow Plug Relay (86)
22	yel	ECU "K" (75) to Display (2) & Reisor Pack (a)
23	grn	ECU "K" (53) to Display (3) & Reisor Pack (b)
24	pur	GEP (46) Glow Plug Relay (30) to Glow plug Buss Bar
25	org/red	ECU "K" (1,3,5) to GEP (68) F5 20a Controller fuse
26	pur/yel	glow plug ring to GEP (35) F11 50amp
27	blk/yel	Display (1) to GEP (56) F7 10a Display
28	wht/brn	GEP (7) EGR Valve Relay (87) to Engine (Red,(1))
29	tan	ECU "K" (54) to Engine (Red,(2))
30	pnk/blk	ECU "K" (76) to Engine (Red,(3))
31	blu/org	ECU "K" (88) to Remote E-Stop (B) from Fuel Pump (1)
32	pnk/blu	Dual Aux. Solenoid (1) to Dual Aux. Switch (1)
33	gry/blk	ECU "K" (45) to Engine (Red,(1))
34	blu	ECU "K" (85) to Engine (Red,(2))
35	blu/red	FMS (1 B+)signal to F1 3a fuse
36	wht/grn	GEP (71) F2 10 a Accy Fuse to ACCY. Socket (a)
37	org/wht	ECU "K" (39) to Engine (Red,(3))
38	gry/yel	ECU "K" (74) to Engine (Red,(4))
39	gra/blk	ECU "K" (15) to EOP Switch & GEP (32) R1 resistor 120ohm

ELECTRICAL SCHEMATIC

SK1050/ST37X - YANMAR

Circuit #	Wire Color	Description
40	org/pur	ECU "K" (79) to Engine (Red,(5))
41	pur/wht	ECU "K" (21) to Engine (Red,(6))
42	brn/yel	ECU "A" (28) to Engine (Red, (7))
43	grn/blu	ECU "A" (29) to Engine (Red, (8))
44	brn/yel	ECU "K" (86) to Park Brake switch (6)
45	org/pur	ECU "K" (87) to Park Brake switch (5)
46	blu/wht	ECU "K" (23) to Engine (Red, (5))
47	tan/blk	ECU "K" (20) to Engine (Red, (6))
48	pur/org	ECU "K" (52) to Engine (Red, (7))
49	blu/yel	ECU "A" (19) to Engine (Red, (8))
50	blu/org	ECU "A" (20) to Engine (Red, (9))
51	grn/blu	ECU "A" (59) to Engine (Red, (10))
52	pur/wht	ECU "K" (33) to Engine (Red, (11))
53	blk/yel	ECU "K" (56) to Engine (Gry,(10))
54	org/yel	Timer (6) to Neutral Valve (1)
55	pnk/blk	Timer (1) to Plunger Switch (1) to Detent Switch (2)
56	pnk	Detent Switch (3) to Aux Valve (1)
57	pnk/blu	ECU "A" (11) to Engine (Gry,(11))
58	pnk/wht	ECU "A" (51) to Engine (Gry,(12))
59	tan/red	ECU "A" (7) to Engine (Gry,(1))
60	pur/blk	ECU "A" (26) to Engine (Gry,(2))
61	wht/pnk	ECU "A" (25) to Engine (Gry,(3))
62	blk	ECU "A" (39)Twisted to Engine (Gry,(7))
63	org/gry	ECU "A" (54)Twisted to Engine (Gry,(8))
64	wht/tan	ECU "A" (8) to Engine (Gry,(4))
65	wht/grn	ECU "A" (37) to Engine (Gry,(5))
66	wht/gry	ECU "A" (52) To Engine (Gry,(6))
67	wht/blu	ECU "A" (33) to Engine (Yel, (7))
68	grn/red	ECU "A" (16) to Engine (Yel, (8))
69	grn/blu	ECU "A" (47) to Engine (Yel, (5))
70	brn	ECU "A" (17) to Engine (Yel, (6))
71	wht/pur	ECU "A" (48) to Engine (Yel, (3))
72	tan/grn	ECU "A" (18) to Engine (Yel, (4))
73	brn/org	ECU "A" (4) to Engine (Yel, (9,10))
74	brn/yel	ECU "A" (5) To Engine (Yel, (11,12))
75	wht/gry	ECU "A" (50) to GEP (26) resistor R1 120ohm
76	yel/wht	Park valve switch (3) to Park Valve (a)
77	gry/wht	ECU "K" (90) to YDT (1,B+)
178	org/yel	ECU "K" (65) to YDT (4,GND)
79	org/grn	Backhoe Option Switch
80		
81		
82	blu/yel	GEP (31) R2 resistor 5.1k to H.O.T Switch
83	gry/org	GEP (25) R2 resistor5.1k to Display (5)
84	bare	ECU "A" (38) Cable to Engine (Gry, (9))
85	grn/org	Load Valve (1) to Regen Load Relay
86	blu/org	GEP (20) Load Valve Relay (86) to Display (4)
87	blu/gry	Display (2) 5v to Warning Alarm (positive +)
201	pur/wht	Remote E-Stop Jumper

ELECTRICAL SCHEMATIC

SK1050/ST37X - YANMAR

Ref. #	Part #	Component	Notes
B1	See Notes	Starter	(Supplied by YANMAR, 129136-770011, 12V-1.7kW), S13-332, 12v, 36J
BT1	215-1165	Battery	12v, 800CCA, 1000CA, RED Top
D1	211-299	Diode	1Amp MINI ATC
E1	214-301	Accessory Socket	
F1	211-289	FMS Fuse	3A MINI FUSE
F2	211-291	Accessory Fuse	10A MINI FUSE
F3	211-295	Start Fuse	30A MINI FUSE
F4	211-293	EGR Fuse	20A MINI FUSE
F5	211-293	Controller Fuse	20A MINI FUSE
F6	211-291	Main Fuse	10A MINI FUSE
F7	211-291	Display Fuse	10A MINI FUSE
F8	211-291	Fuel Pump Fuse	10A MINI FUSE
F9	211-1000	Alternator Fuse	80A AMI
F10	211-310	Primary Fuse	60A AMI
F11	211-310	Glow Plug Fuse	60A AMI
G1	See Notes	Alternator	12V-55amps, (Supplied by YANMAR, 129961-77200)
J1	n/a	YDT	Yanmar Diagnostic Connection
K1	211-298	Start Relay	G8W-1C7T-R-DC12 Mini
K2	211-298	Glow Plug Relay	G8W-1C7T-R-DC12 Mini
K3	211-297	EGR Valve Relay	G8VA-1A4T-R-DC12 Mini
K4	211-297	Load Valve Relay	G8VA-1A4T-R-DC12 Mini
K5	n/a	Remote Engine Stop Relay	Backhoe Option
L1	158-627	solenoid Valve	
L2	150-4134	Unload Relief Solenoid Valve	
L3	150-4917	Aux. Valve	
LS1	306-603	Audio Alarm	
R2	215-2294	Resistor	121 Ohm
R1	215-2237	Resistor	5.1k ohm, 1/4watt, (Blue)
R3	215-1711	Resistor pac	120 Ohm
S1	215-2013	Ignition Switch	keys Provided
S2	215-2636	Battery Disconnect	
S3	214-854	Hyd. Oil Temp. Sensor Switch	
S4	214-301	Accessory Socket	
S5	214-912	Park Brake Switch	DPST, 12v, 20A
S6	n/a	Remote Engine Stop Switch	Backhoe Option
SP1	n/a	Engine Oil Pressure Switch	Yanmar Provided (No CMW Service Part Aval.)
SP2	n/a	DPT Pressure Sensor	Yanmar Provided (No CMW Service Part Aval.)
ST1	n/a	DPF Mid Temp	Yanmar Provided (No CMW Service Part Aval.)
ST2	n/a	DPF Inlet Temp	Yanmar Provided (No CMW Service Part Aval.)
U1	n/a	ECU	YANMAR(EDC17:Bosch)No CMW Service Part Aval.
U2	220-2555	Display	PV380 V2, unprogrammed unit
U3	215-1637	Fleet Management System	Optional
U4	220-2271	Timer	12v to 12v 2sec timer

ELECTRICAL SCHEMATIC

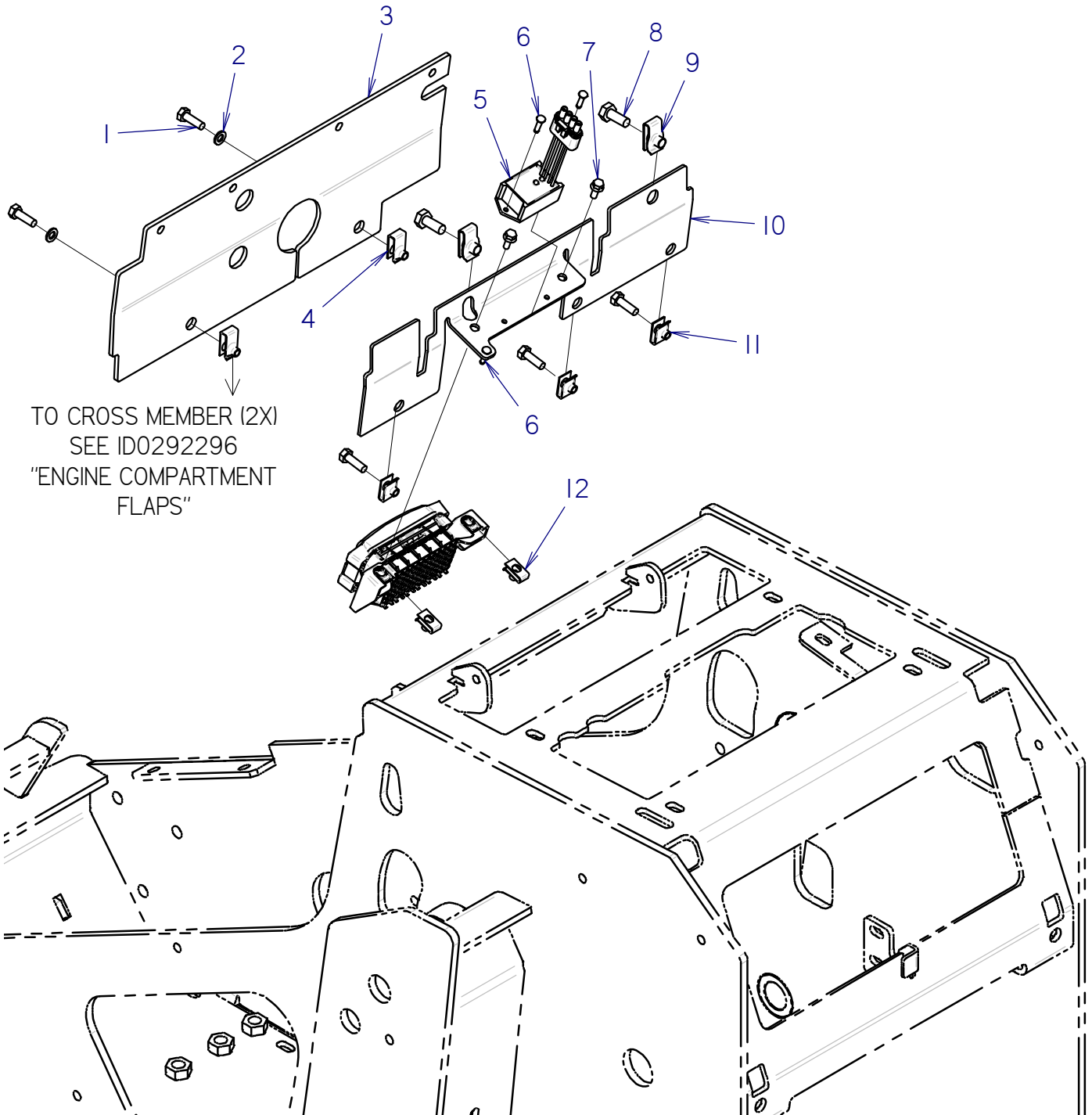
SK1050/ST37X - YANMAR

Ref. #	Part #	Quantity	Description
1	215-0085	1	Yanmar Engine/Frame Harness
2	215-0084	1	Pos.(+) Battery Cable 1 Ga. X 26.0", (Red)(Disconnect to Fuse Panel)
3	215-0082	1	Pos.(+) Battery Cable 1 Ga. X 30.0", (Red)(Lug to Disconnect)
4	215-0083	1	Pos.(+) Battery Cable 1 Ga. X 26.0", (Red)(Starter to Disconnect)
5	215-0081	1	Neg.(-) Battery Cable 1 Ga. X 27.0", (Blk) (Batt. To Engine Ground)

RELAY PANEL

SK750 / SK755

BEGINS WITH: CMWSK755VG0001093



TO CROSS MEMBER (2X)
SEE ID0292296
"ENGINE COMPARTMENT
FLAPS"

RELAY PANEL**SK750 / SK755****BEGINS WITH: CMWSK755VG0001093**

REF PART

NO. NUMBER QTY DESCRIPTION REMARKS

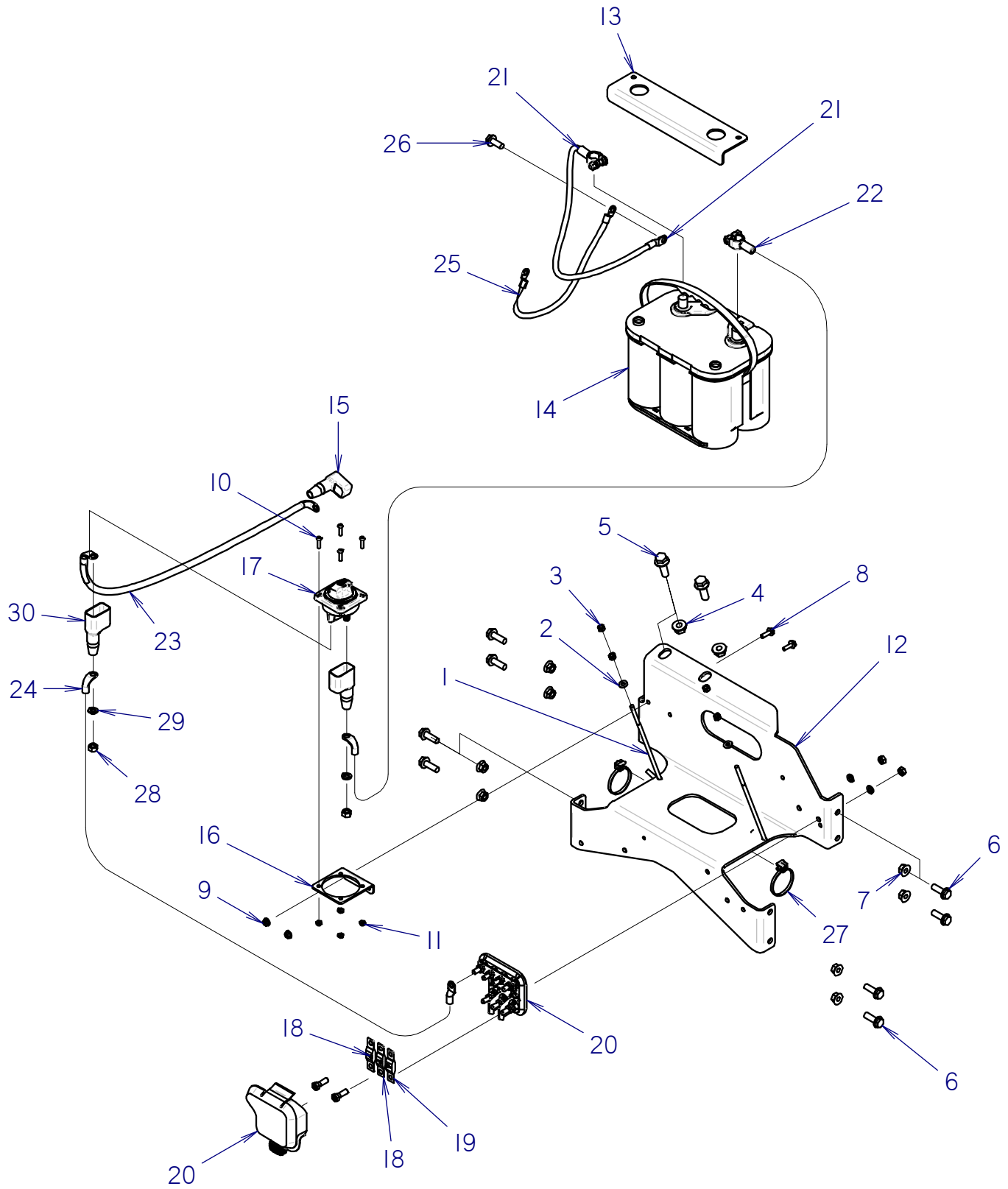
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	105-806	5	SCREW (M8-1.25 X 25MM)	
2	106-389	2	WASHER (M8)	
3	301-0953	1	FLAP	
4	107-687	2	CLIP NUT M8-1.25, LONG, WIDE	
5	220-2210	1	START BYPASS DELAY TIMER	
6	110-449	3	POP RIVET (3/16" X .690")	
7	106-712	2	FLG SCREW (M6-1.00 X 16MM)	
8	105-245	2	SCREW (M10-1.50 X 25MM)	
9	106-558	2	CLIP NUT (M10-1.50)	
10	301-8169	1	BRACKET	
11	106-551	3	CLIP NUT (M8-1.25)	
12	106-574	2	CLIP NUT (M6-1.00)	

NOT SHOWN:

FOOTNOTES:

NOTE:

BATTERY AND FUSE BLOCK



BATTERY AND FUSE BLOCK

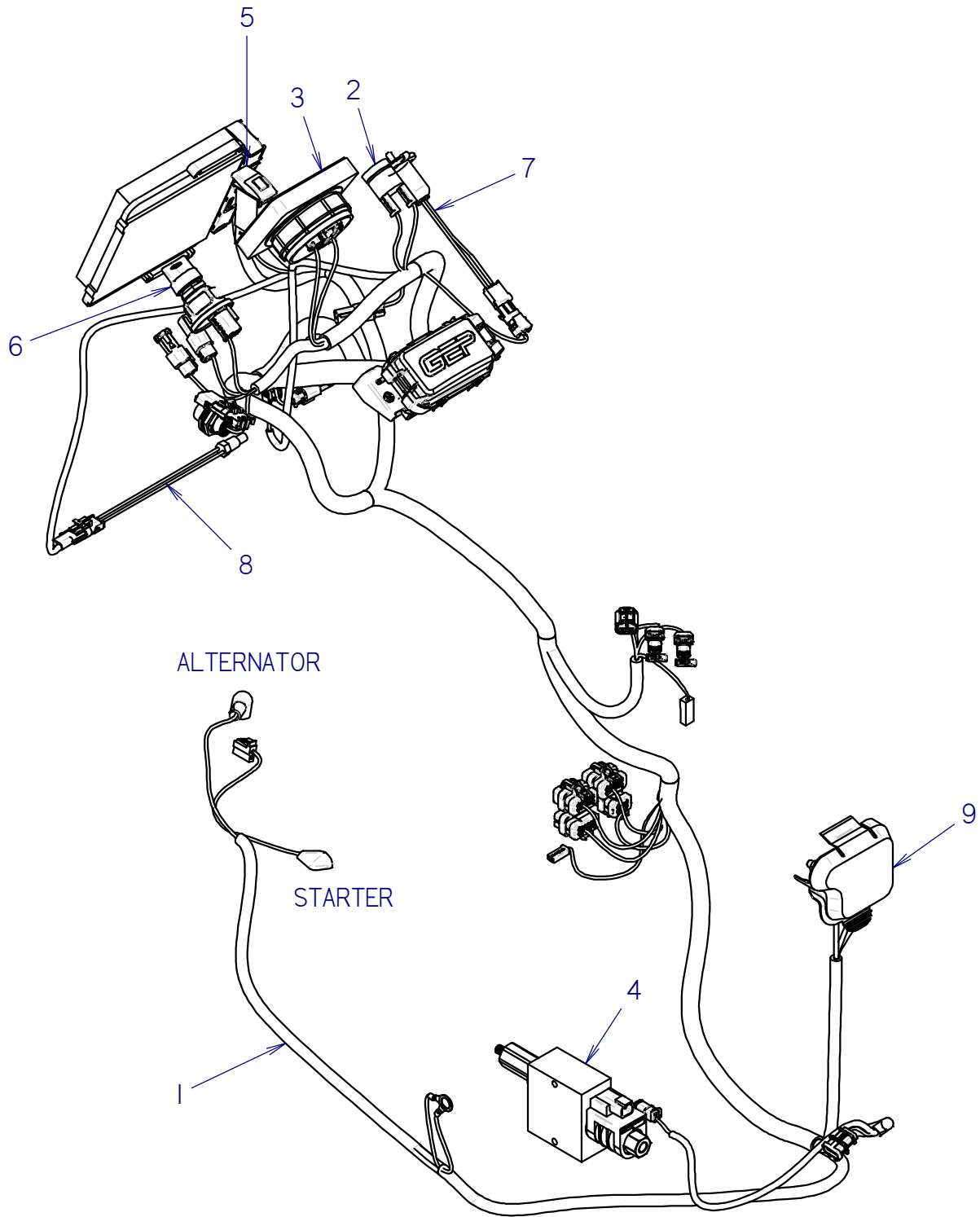
REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	300-4334	2	J-HOOK (PLATED)	
2	106-076	2	WASHER (1/4")	
3	105-078	4	NUT (1/4-NC)	
4	106-709	2	FLG LK NUT (M12-1.75)	
5	106-632	2	FLG LK SCR (M12-1.75X35MM,SER)	
6	106-164	8	FLG LK SCREW (M10-1.50 X 30MM)	
7	106-387	8	FLG LOCKNUT (M10-1.50)	
8	106-379	2	FLG LK SCREW (M6-1.00 X 20MM)	
9	106-385	2	FLG LOCKNUT (M6-1.00)	
10	105-687	4	SCREW (#10-24 X 3/4",PAN TORX)	
11	106-048	4	LOCKNUT (#10-24)	
12	301-4981	1	BATTERY BASE	
13	301-6883	1	BATTERY HOLD DOWN	
14	215-1165	1	OPTIMA BATTERY	
15	215-2129	1	STARTER BOOT	
16	302-3189	1	MOUNT	
17	215-2636	1	SQUARE DISCONNECT SWITCH (300A)	
18	215-0088	2	MEGA 60A FUSE	
19	215-0087	1	MEGA 80A FUSE	
20	215-0086	1	COOPER BUSSMAN (3) FUSE HOLDER	
21	215-0081	1	NEG (-) BATT CABLE (1GAX27, BLK)	
22	215-0082	1	BAT CABLE (1 GA X 40"RED)	
23	215-0083	1	POS (+) BATT CABLE (1GAX 26", RED) RINGS	
24	215-0084	1	POS (+) BATT CABLE (1GAX 23", RED) RINGS	
25	215-1626	1	BATTERY GROUND STRAP	
26	106-724	1	FLG SCREW (M10-1.50 X 25MM)	
27	105-2129	2	EDGE CLIP SIDE HORIZONTAL (12-.24)	
28	105-053	2	NUT (3/8 NC) HEX	
29	105-072	2	LOCK WASHER (3/8")	
30	215-2308	2	STARTER BOOT	

NOT SHOWN:

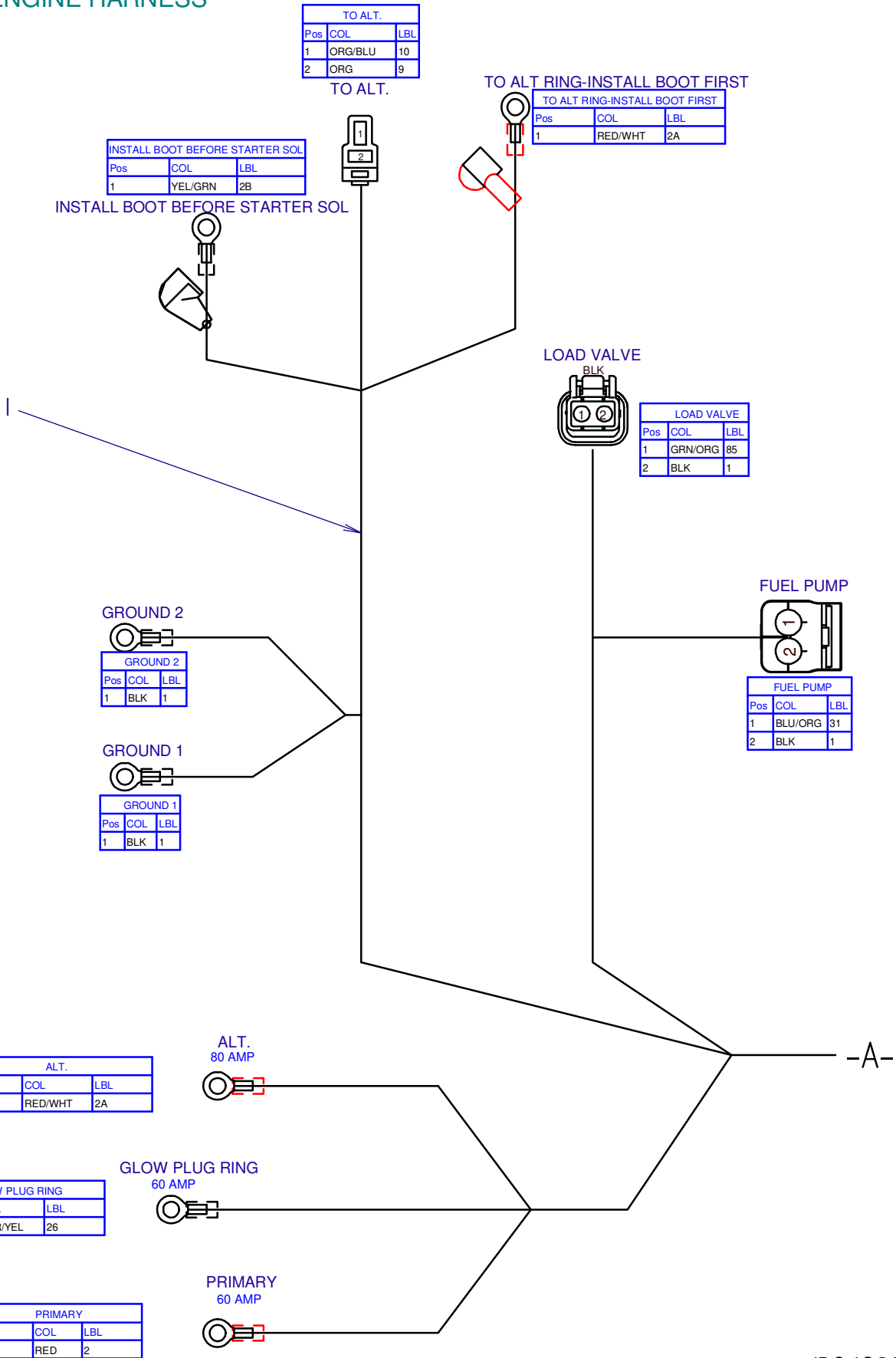
FOOTNOTES:

NOTE:

ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS

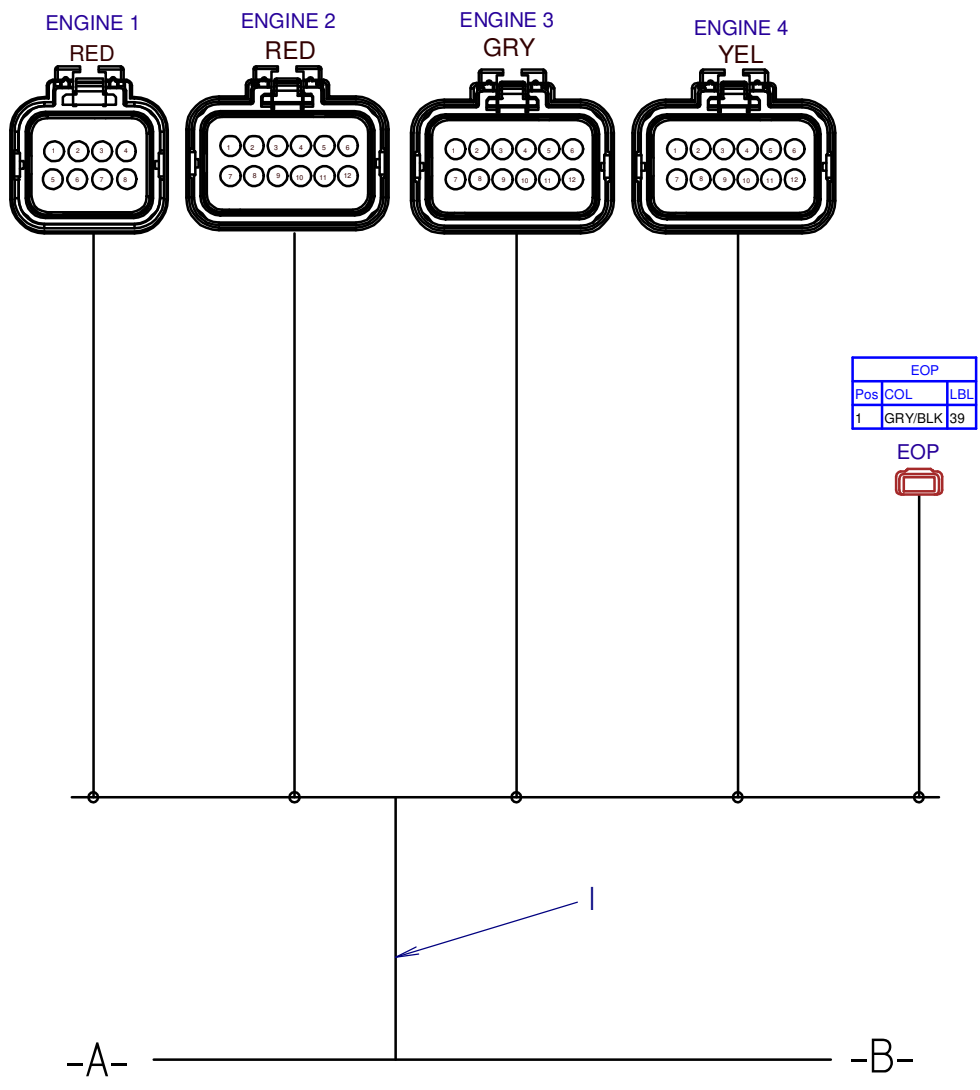


ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS

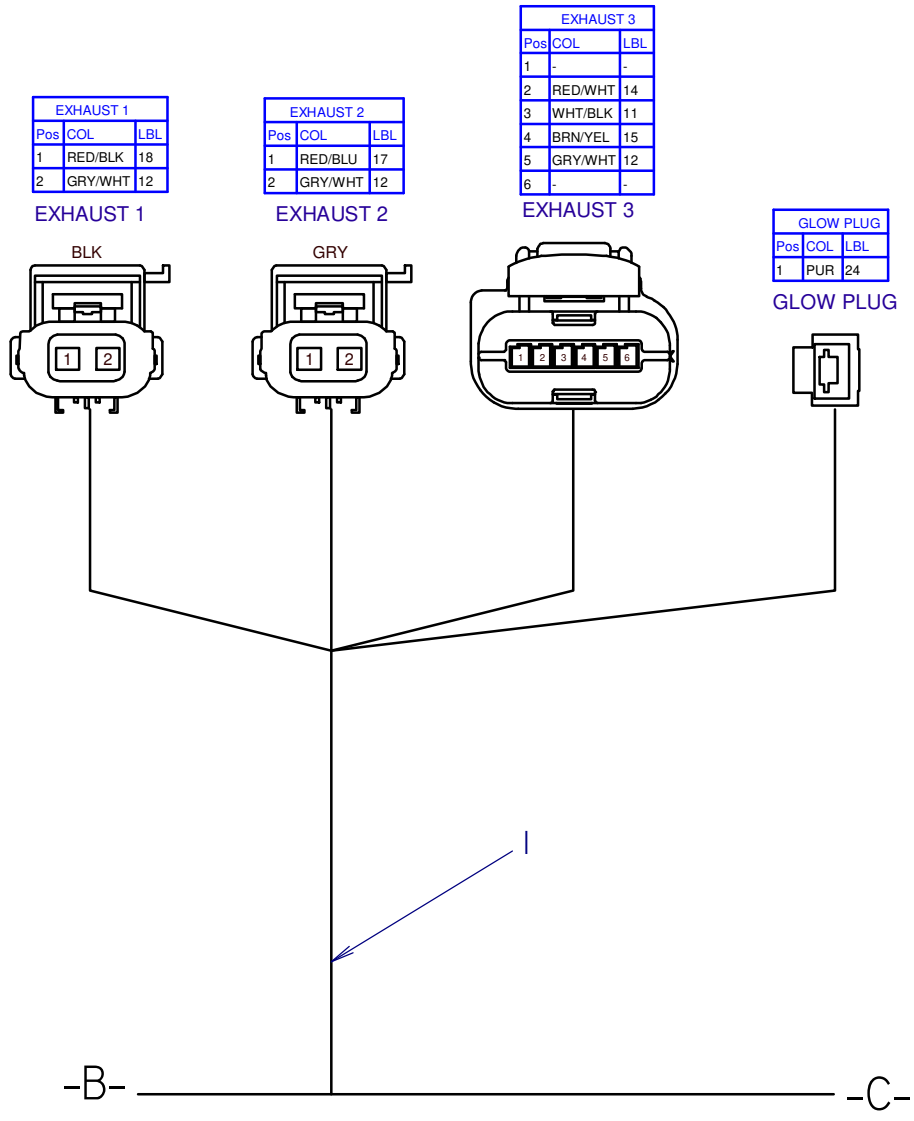


ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS

ENGINE 1			ENGINE 2			ENGINE 3			ENGINE 4		
Pos	COL	LBL	Pos	COL	LBL	Pos	COL	LBL	Pos	COL	LBL
1	GRY/BLK	33	1	WHT/BRN	28	1	TAN/RED	59	1	-	-
2	BLU	34	2	TAN	29	2	PUR/BLK	60	2	-	-
3	ORG/WHT	37	3	PNK/BLK	30	3	WHT/PNK	61	3	WHT/PUR	71
4	GRY/YEL	38	4	BLK	1	4	WHT/TAN	64	4	TAN/GRN	72
5	ORG/PUR	40	5	BLU/WHT	46	5	WHT/GRN	65	5	GRN/BLU	69
6	PUR/WHT	41	6	TAN/BLK	47	6	WHT/GRY	66	6	BRN	70
7	BRN/YEL	42	7	PUR/ORG	48	7	BLK	62	7	WHT/BLU	67
8	GRN/BLU	43	8	BLU/YEL	49	8	RED	63	8	GRN/RED	68
			9	BLU/ORG	50	9	DRN	84	9	BRN/ORG	73
			10	GRN/BLU	51	10	BLK/YEL	53	10	BRN/ORG	73
			11	PUR/WHT	52	11	PNK/BLU	57	11	BRN/YEL	74
			12	-	-	12	PNK/WHT	58	12	BRN/YEL	74



ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS

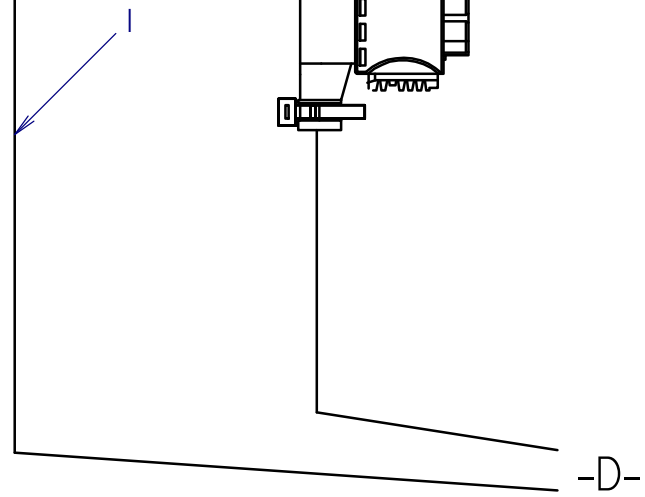
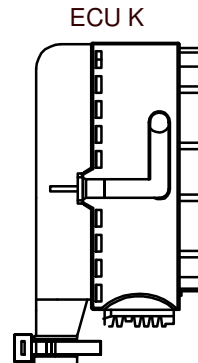
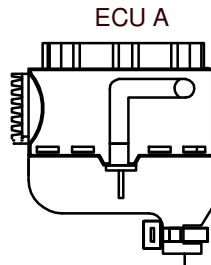
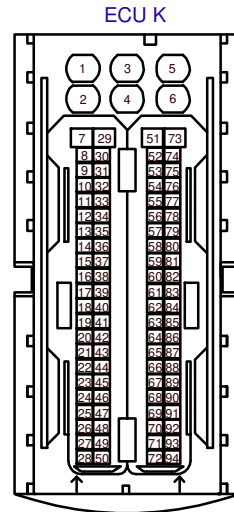
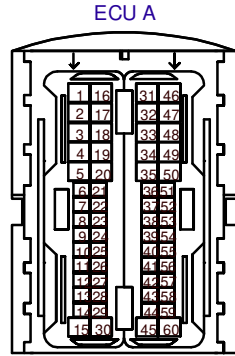


ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS

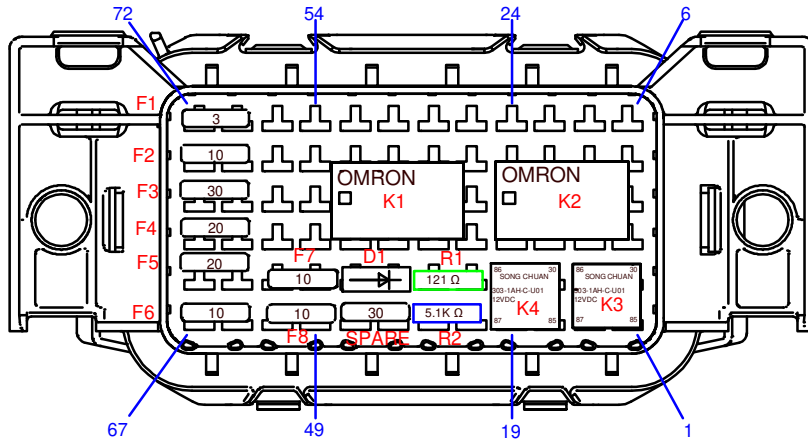
ECU K			ECU K			ECU K		
Pos	COL	LBL	Pos	COL	LBL	Pos	COL	LBL
1	ORG/RED	25	21	PUR/WHT	41	41	-	-
2	BLK	1	22	-	-	42	-	-
3	ORG/RED	25	23	BLU/WHT	46	43	-	-
4	BLK	1	24	BRN/YEL	15	44	-	-
5	ORG/RED	25	25	-	-	45	GRY/BLK	33
6	BLK	1	26	-	-	46	-	-
7	-	-	27	-	-	47	-	-
8	-	-	28	RED/YEL	20	48	-	-
9	-	-	29	-	-	49	-	-
10	-	-	30	-	-	50	-	-
11	-	-	31	-	-	51	-	-
12	-	-	32	-	-	52	PUR/ORG	48
13	-	-	33	PUR/WHT	52	53	GRN	23
14	-	-	34	-	-	54	TAN	29
15	GRY/BLK	39	35	BRN	7	55	-	-
16	-	-	36	-	-	56	BLK/YEL	53
17	-	-	37	-	-	57	-	-
18	-	-	38	-	-	58	-	-
19	-	-	39	ORG/WHT	37	59	-	-
20	TAN/BLK	47	40	-	-	60	-	-

ECU K			ECU K		
Pos	COL	LBL	Pos	COL	LBL
61	-	-	81	RED/BLU	17
62	-	-	82	-	-
63	RED/WHT	14	83	-	-
64	-	-	84	-	-
65	ORG/YEL	178	85	BLU	34
66	ORG/BLU	10	86	BRN/YEL	44
67	-	-	87	ORG/PUR	45
68	RED/GRN	16	88	BLU/ORG	31
69	-	-	89	-	-
70	YEL/ORG	21	90	GRY/WHT	77
71	-	-	91	-	-
72	-	-	92	-	-
73	RED/BRN	19	93	-	-
74	GRY/YEL	38	94	-	-
75	YEL	22			
76	PNK/BLK	30			
77	GRY/WHT	12			
78	-	-			
79	ORG/PUR	40			
80	RED/BLK	18			

ECU A			ECU A			ECU A		
Pos	COL	LBL	Pos	COL	LBL	Pos	COL	Type LBL
1	-	-	21	-	-	41	-	-
2	-	-	22	-	-	42	-	-
3	-	-	23	-	-	43	-	-
4	BRN/ORG	73	24	-	-	44	-	-
5	BRN/YEL	74	25	WHT/PNK	61	45	-	-
6	-	-	26	PUR/BLK	60	46	-	-
7	TAN/RED	59	27	-	-	47	GRN/BLU	69
8	WHT/TAN	64	28	BRN/YEL	42	48	WHT/PUR	71
9	-	-	29	GRN/BLU	43	49	-	-
10	-	-	30	-	-	50	WHT/GRY	75
11	PNK/BLU	57	31	-	-	51	PNK/WHT	58
12	WHT/BLK	11	32	-	-	52	WHT/GRY	66
13	-	-	33	WHT/BLU	67	53	-	-
14	-	-	34	-	-	54	RED	63
15	-	-	35	-	-	55	-	-
16	GRN/RED	68	36	-	-	56	-	-
17	BRN	70	37	WHT/GRN	65	57	-	-
18	TAN/GRN	72	38	DRN	84	58	-	-
19	BLU/YEL	49	39	BLK	62	59	GRN/BLU	51
20	BLU/ORG	50	40	-	-	60	-	-



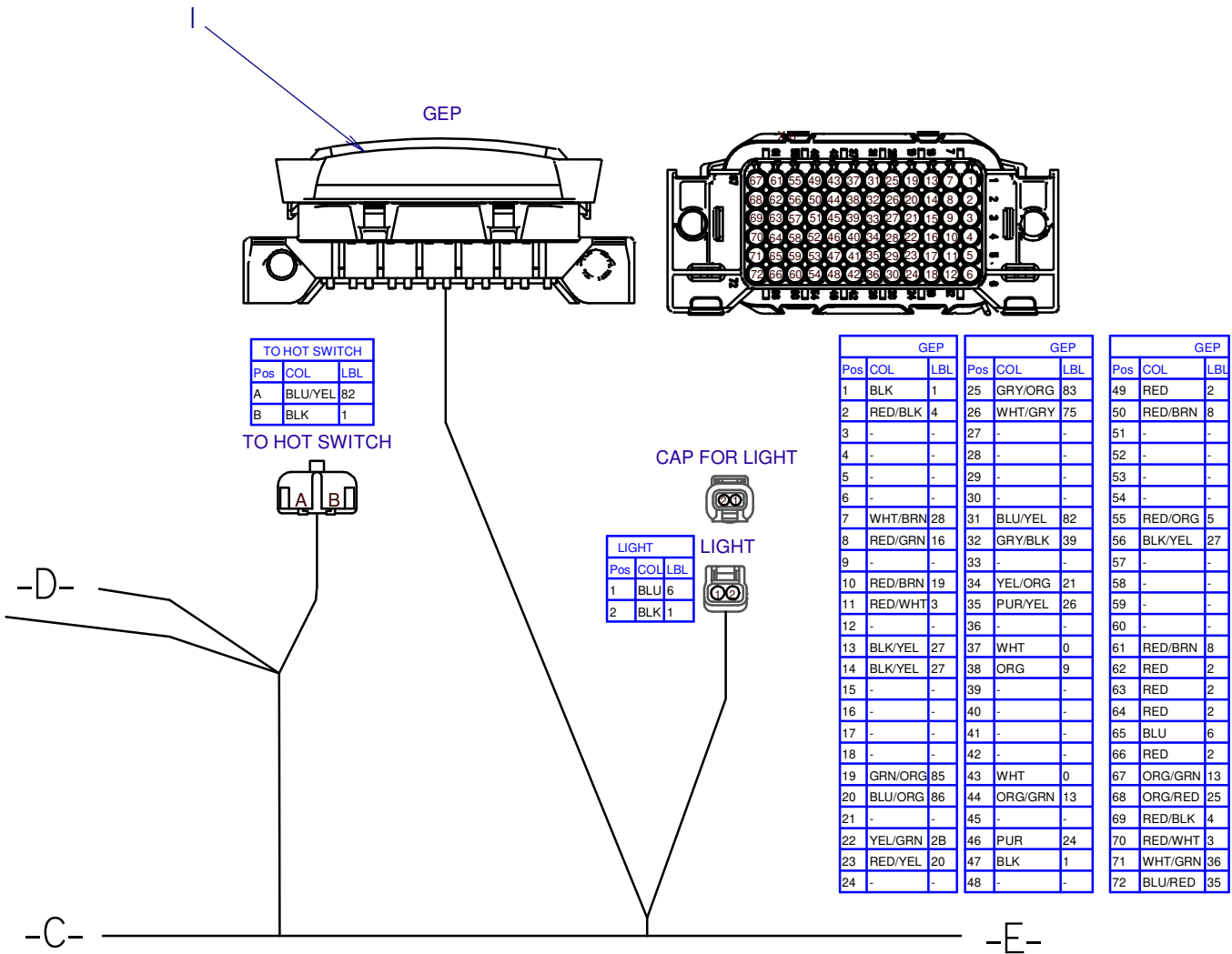
ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS



- K1- START RELAY
- K2-GLOW PLUG RELAY
- K3-EGR VALVE RELAY
- K4-REGEN RELOAD RELAY
- K5-POWER RELAY

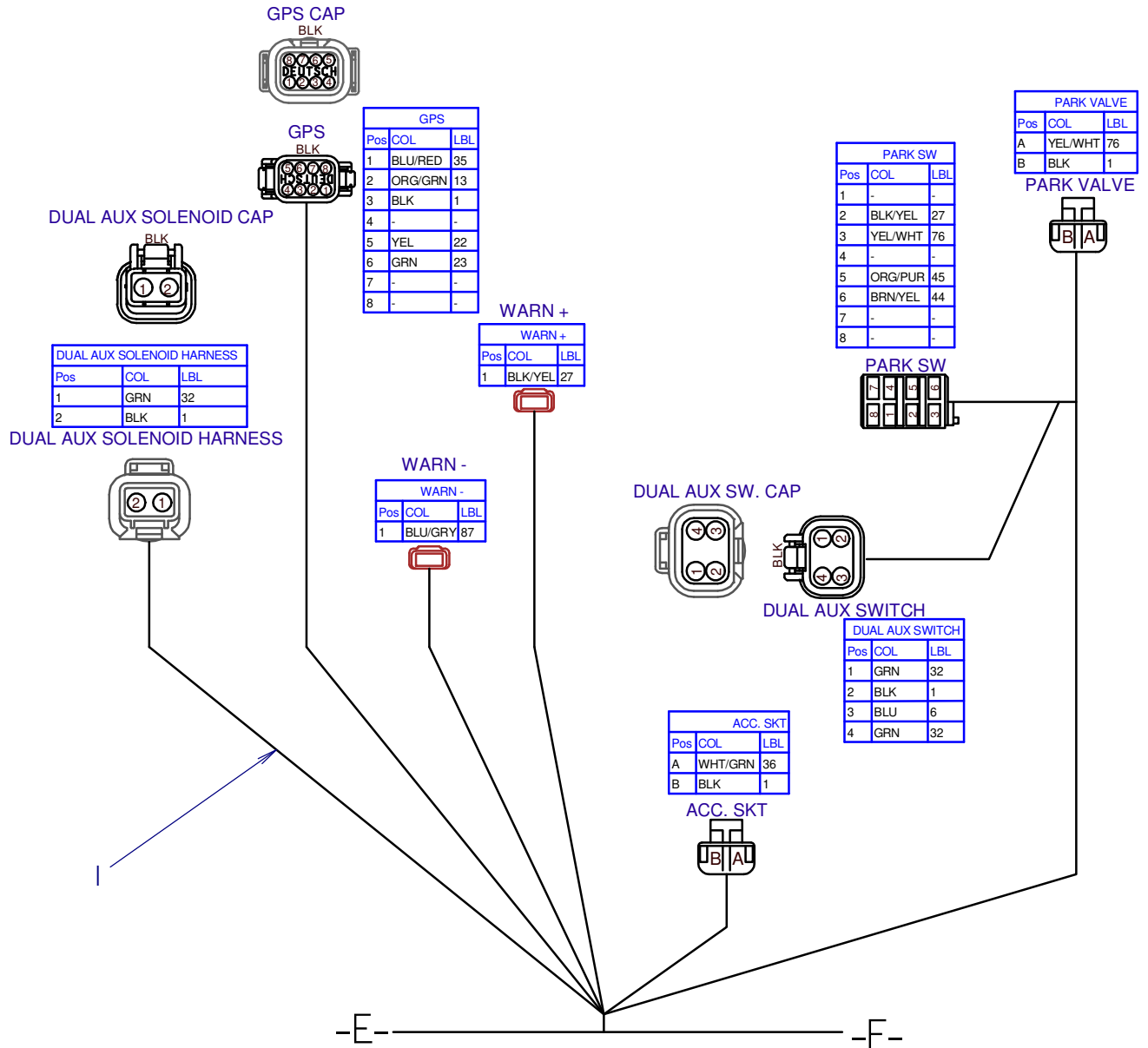
- F1-3A-FMS
- F2-15A-ACCY.
- F3-30A-START
- F4-20A-EGR
- F5-20A-CONTROLLER
- F6-10A-FUEL PUMP
- F7-10A-DISPLAY
- F8-10A-MAIN
- F9-30A-POWER RELAY

- R1-121 OHM RESISTOR
- R2-5.1K OHM RESISTOR
- D1-DIODE LEFT ARROW



GEP			GEP			GEP		
Pos	COL	LBL	Pos	COL	LBL	Pos	COL	LBL
1	BLK	1	25	GRY/ORG	83	49	RED	2
2	RED/BLK	4	26	WHT/GRY	75	50	RED/BRN	8
3	-	-	27	-	-	51	-	-
4	-	-	28	-	-	52	-	-
5	-	-	29	-	-	53	-	-
6	-	-	30	-	-	54	-	-
7	WHT/BRN	28	31	BLU/YEL	82	55	RED/ORG	5
8	RED/GRN	16	32	GRY/BLK	39	56	BLK/YEL	27
9	-	-	33	-	-	57	-	-
10	RED/BRN	19	34	YEL/ORG	21	58	-	-
11	RED/WHT	3	35	PUR/YEL	26	59	-	-
12	-	-	36	-	-	60	-	-
13	BLK/YEL	27	37	WHT	0	61	RED/BRN	8
14	BLK/YEL	27	38	ORG	9	62	RED	2
15	-	-	39	-	-	63	RED	2
16	-	-	40	-	-	64	RED	2
17	-	-	41	-	-	65	BLU	6
18	-	-	42	-	-	66	RED	2
19	GRN/ORG	85	43	WHT	0	67	ORG/GRN	13
20	BLU/ORG	86	44	ORG/GRN	13	68	ORG/RED	25
21	-	-	45	-	-	69	RED/BLK	4
22	YEL/GRN	2B	46	PUR	24	70	RED/WHT	3
23	RED/YEL	20	47	BLK	1	71	WHT/GRN	36
24	-	-	48	-	-	72	BLU/RED	35

ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS



ELECTRICAL DIAGRAM YANMAR ENGINE HARNESS

NEW V380 12S		
Pos	COL	LBL
1	-	-
2	BLU/GRY	87
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-

NEW V380 6S		
Pos	COL	LBL
1	BLK/YEL	27
2	YEL	22
3	GRN	23
4	BLU/ORG	86
5	GRY/ORG	83
6	BLK	1

NEW V380 12S
GRA



NEW V380 6S



REMOTE E-STOP CAP



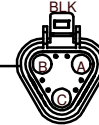
REMOTE E-STOP CAP		
Pos	COL	LBL
A	PUR/WHT	201
B	PUR/WHT	201
C	-	-

REMOTE E-STOP



REMOTE E-STOP		
Pos	COL	LBL
A	ORG/GRN	13
B	BLU/ORG	31
C	BLK	1

RESISTOR



RESISTOR		
Pos	COL	LBL
A	YEL	22
B	GRN	23
C	-	-

CAP FOR RESISTOR



YDT



YDT		
Pos	COL	LBL
1	GRY/WHT	77
2	YEL	22
3	GRN	23
4	ORG/YEL	178
5	-	-
6	-	-

CAP FOR YDT

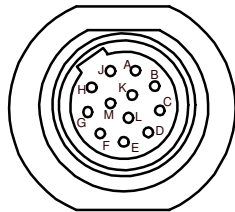


START SW



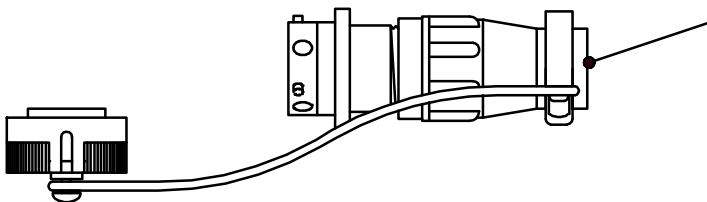
START SW		
Pos	COL	LBL
1	RED/ORG	5
2	BRN	7
3	BLU	6
4	RED/BRN	8
5	RED/BRN	8
6	-	-

DISPLAY DIAG.



DISPLAY DIAG.		
Pos	COL	LBL
A	GRY/WHT	77
B	ORG/YEL	178
C	-	-
D	-	-
E	-	-
F	GRN	23
G	-	-
H	-	-
J	-	-
K	-	-
L	-	-
M	YEL	22

-F-



ELECTRICAL DIAGRAM

YANMAR ENGINE HARNESS

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
1	215-0085	1	YANMAR ENG/FRAME HARNESS	
2	306-603	1	AUDIO ALARM	
3	220-2555	1	PV380 V2 DISPLAY	
4	150-4134	1	UNLOADING RELIEF VALVE	
5	215-1597	1	ROCKER SWITCH (DPST) ON-OFF (W/ LOCK)	
6	215-2013	1	IGNITION SWITCH	
7	214-301	1	ACCESSORY SOCKET	
8	214-854	1	TEMPERATURE SWITCH(1/4NPT,MALE)	
9	215-0086	1	COOPER BUSSMAN (3) FUSE HOLDER	

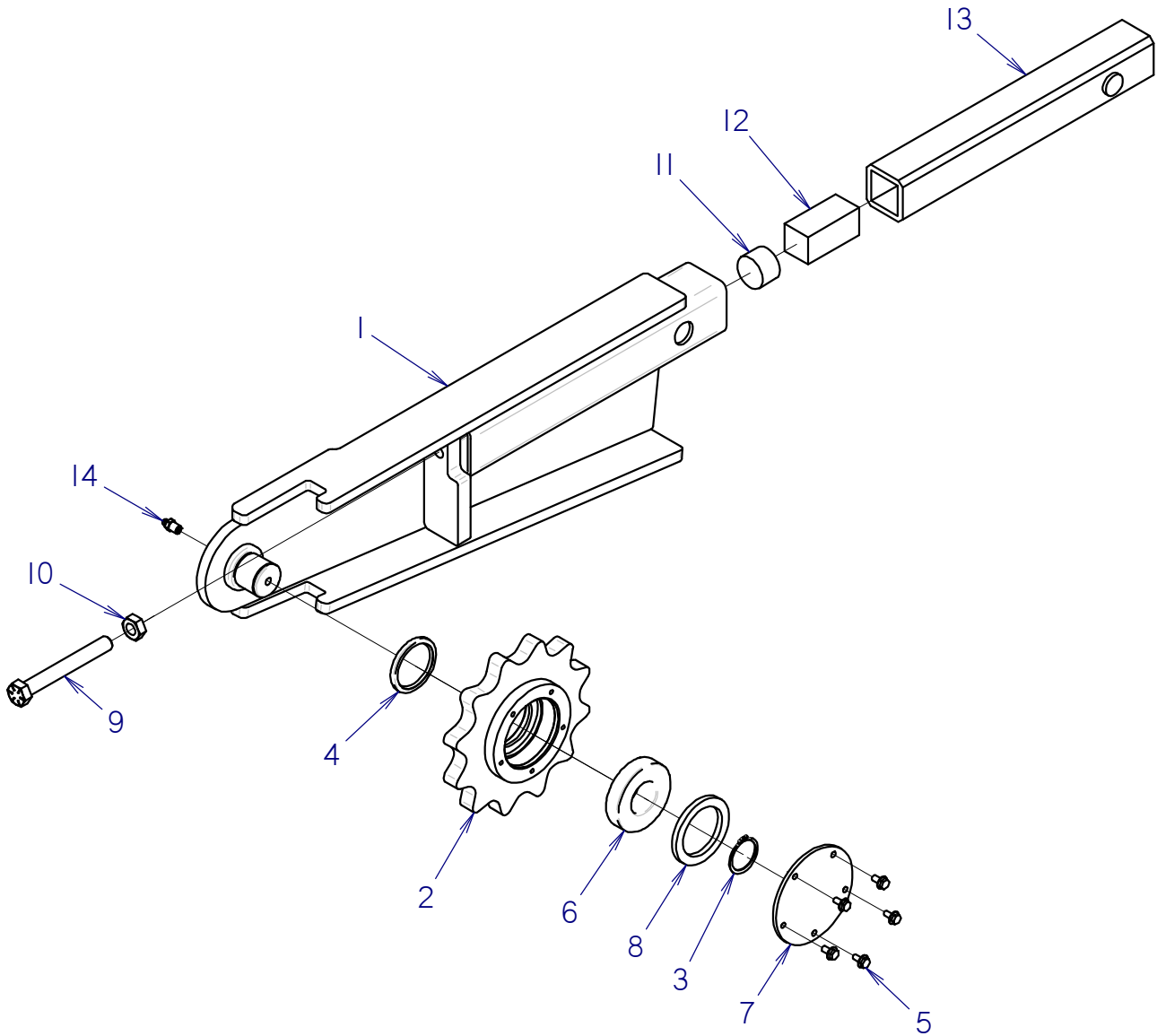
NOT SHOWN:

FOOTNOTES:

NOTE:

ACCESSORIES

BOOM ASSEMBLIES 50K (LUBE)



BOOM ASSEMBLIES 50K (LUBE)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	140-1241	-	24 INCH BOOM ASSEMBLY 50K	SEE FOOTNOTE 1; SUPERSEDED BY 140-1409
1	301-5849	1	24 INCH BOOM WELDMENT	
	140-1257	-	30 INCH BOOM ASSEMBLY 50K	SEE FOOTNOTE 1; SUPERSEDED BY 140-1410
1	140-1246	1	30 INCH BOOM WELDMENT	
	140-1258	-	36 INCH BOOM ASSEMBLY 50K	SEE FOOTNOTE 1; SUPERSEDED BY 140-1411
1	140-1249	1	36 INCH BOOM WELDMENT	
	140-1242		ROLLER ASM 50K	INCLUDES REF NO'S 2 THRU 8
2	140-1243	1	ROLLER WELDMENT 50K	
3	115-466	1	EXTERNAL SNAP RING (1.500")	
4	149-967	1	INTERNAL SEAL	
5	106-378	5	FLG LK SCREW (M6-1.00 X 12MM)	
6	125-1106	1	BEARING	
7	301-5868	1	CAP	
8	301-5867	1	WASHER	
9	105-1445	1	BOLT (5/8 NC X 5 FULL THREAD, HHCS)	
10	105-403	1	JAM NUT (5/8-NC)	
11	301-5567	1	SPACER	SEE FOOTNOTE 2
12	362-1686	1	URETHANE SPRING	SEE FOOTNOTE 2
13	362-1681	1	URETHANE SLEEVE (1.56" X 14.75")	
14	115-019	1	ZERK (O2N)	

NOT SHOWN:

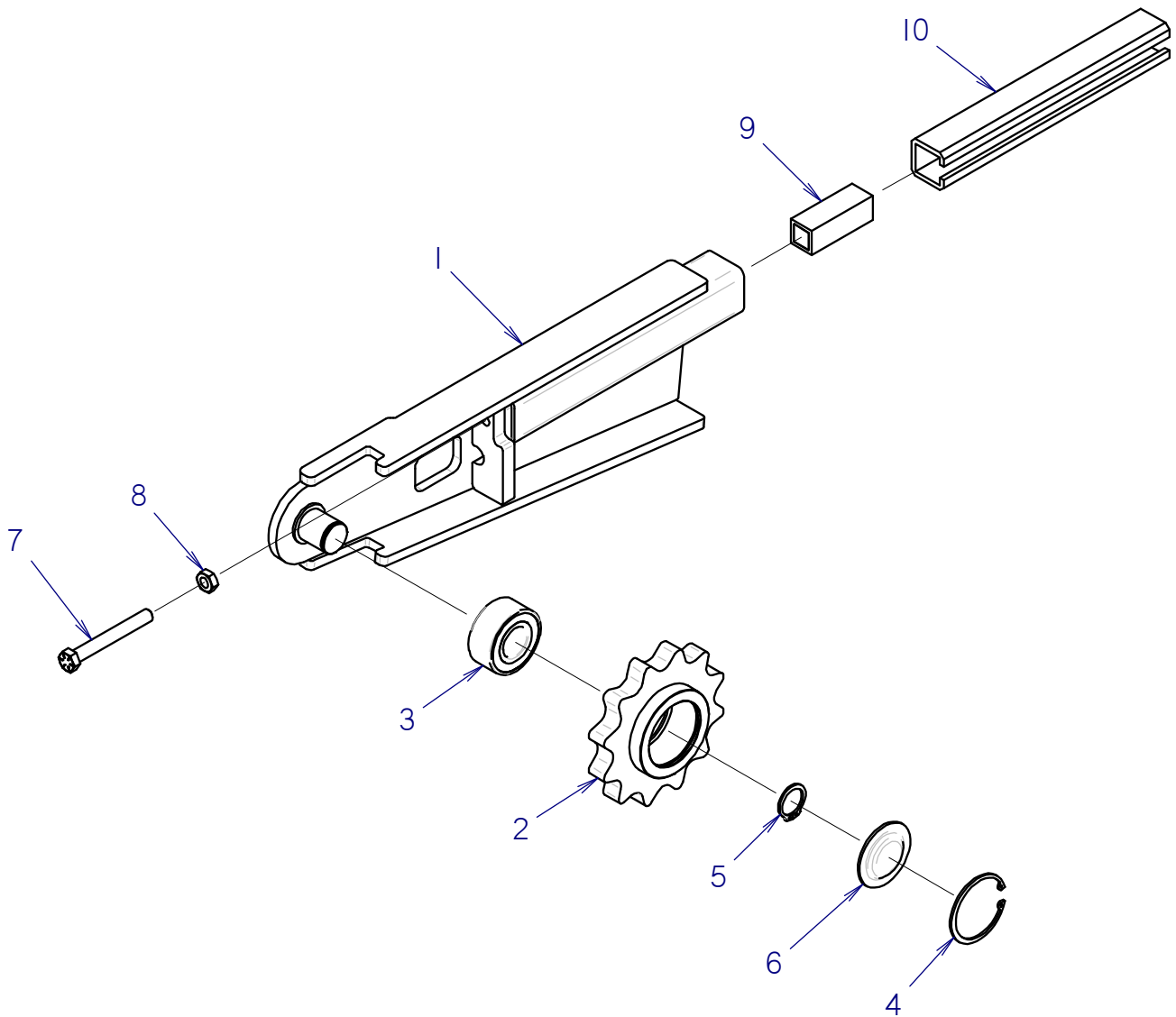
141-337	-	PERSONEL RESTRAINT BAR	FOR 24 INCH BOOM
141-329	-	RESTRAINT BAR	FOR 30 INCH BOOM
141-755	-	RESTRAINT BAR	FOR 36 INCH BOOM

FOOTNOTES:

- REF. #1 IS SPECIFIC TO EACH BOOM ASSEMBLY, REF. #2 THRU #14 ARE COMMON FOR ALL THE ABOVE LISTED BOOM ASSEMBLIES.
- 105-2065 SUPERSEEDS REF NO'S 11; 301-5567 & 12; 362-1686

NOTE:

BOOM ASSEMBLIES 50K (NON-LUBE)



BOOM ASSEMBLIES 50K (NON-LUBE)

REF NO.	PART NUMBER	QTY	DESCRIPTION	REMARKS
	140-1409	-	50K BOOM ASSEMBLY (24")	SEE FOOTNOTE 1
1	140-1386	1	BOOM WELDMENT (24")	
	140-1410	-	50K BOOM ASSEMBLY (30")	SEE FOOTNOTE 1
1	140-1387	1	BOOM WELDMENT (30")	
	140-1411	-	50K BOOM ASSEMBLY (36")	SEE FOOTNOTE 1
1	140-1388	1	BOOM WELDMENT (36")	
	140-1398		ROLLER ASM 50K (NON-LUBE)	SEE FOOTNOTE 2. INCLUDES REF NO'S 2 THRU 6
2	140-1389	1	SPROCKET WELDMENT 50K (NON-LUBE)	
3	125-1125	1	BALL BEARING (1.575")	
4	115-451	1	INTERNAL SNAP RING (3.343")	
5	118-021	1	EXTERNAL SNAP RING (1.500")	
6	302-1838	1	DUST COVER	
7	105-1445	1	BOLT (5/8 NC X 5 FULL THREAD, HHCS)	
8	105-403	1	JAM NUT (5/8-NC)	
9	105-2065	1	LONG SPRING (INSERT)	METAL PART OF SPRING TO GO AGAINST TENSION BOLT
10	362-1681	1	UHMW SLEEVE (1.56" X 14.75")	

NOT SHOWN:

141-337	-	PERSONEL RESTRAINT BAR	FOR 24 INCH BOOM
141-329	-	RESTRAINT BAR	FOR 30 INCH BOOM
141-755	-	RESTRAINT BAR	FOR 36 INCH BOOM

FOOTNOTES:

- REF. #1 IS SPECIFIC TO EACH BOOM ASSEMBLY, REF. #2 THRU #10 ARE COMMON FOR ALL THE ABOVE LISTED BOOM ASSEMBLIES.
- FILL HUB WITH GREASE BEFORE INSTALLING DUST CAP.

NOTE:

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	620	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.

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

ST37X

Related Publications

Component	Ass'y	P/N
Model:		
ST37X Parts Manual		053-2969
ST37X Operators Manual.....		053-2977
ST37X Technical Supplement		
Engine:		
Yanmar 36.9 hp Parts Manual – 3TNV88C-DDT.....		195-2174.....

Filters

Engine:		
Air Filter Parts Assembly		194-093
Element (primary)		194-038
Element (secondary)		194-039
Oil Filter Element (spin-on) – (YANMAR)		500-2348
Water Separator Paper Filter		500-2332
Fuel Filter Element (spin-on) – (YANMAR)		500-2349
Hydraulic Oil Filter:		
Filter Element (1-UNF)		149-412

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[®]

Parts Manual Change Request

(Please print clearly)

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1. _____ - _____	1. _____
2. _____ - _____	2. _____
3. _____ - _____	3. _____

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**A Note To
Ditch Witch
Equipment Owners:**

If your equipment was purchased through a Ditch Witch dealer, there is no need to read further.

However, if you purchased from any other source, please fill out the form on the reverse side and return it to us.

This will enable you to receive updates on this equipment as well as information on new products of interest.

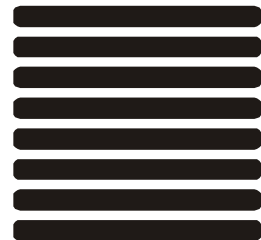
Thanks for using Ditch Witch equipment.

(Please Fold Along This Line And Seal At Bottom With Tape)



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NECESSARY
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Ditch Witch[®] Registration Card

Please Type or Print All Information

Purchaser's Company Name

Attention

Street Address or P.O. Box

City

County

State

Zip

Nation

()

Phone Number With Area Code

Model

Serial Number

Attachments/Accessories

Serial Numbers

Attachments/Accessories

Serial Numbers

Attachments/Accessories

Serial Numbers

Name of Ditch Witch Dealership

Your Signature