

GEHL®

Form No.
50940205
Revision A
Oct. 2014

Model R165

Skid-Steer Loader



Parts Manual

INTRODUCTION

For your safety and continued proper operation, use only genuine GEHL® service parts. When ordering service parts, specify the correct part number, full description, quantity required, the unit model number and serial number.

The model and serial number decal for this unit is located on the left chassis upright. “Right” and “Left” are determined from a position sitting on the seat and facing forward.

Manitou Americas reserves the right to make changes or improvements in the design or construction of any part of the unit without incurring the obligation to install such changes on any previously delivered units.

NOTE: Purchase equivalent, quality tires for your loader. Contact your dealer for replacement tire information.

NOTE: Replacement batteries are not provided by the GEHL Company. Battery specifications are listed on the Chassis Electrical page where the battery is shown. **ALL REPLACEMENT BATTERIES MUST BE PURCHASED LOCALLY.**

Refer to the abbreviations table located on this page for the various fastener descriptions. Standard attaching hardware torque values are also provided on the inside back cover. **If a part requires lubrication or a non-standard torque value, it will be specified behind the part number description in parenthesis.**

Items shown in the parts list that do not have part numbers are shown for reference purposes only and are NOT available for purchase.

Dimensions are in inches unless otherwise specified.

The directional arrows shown on many of the parts page graphics point to the front, as determined by sitting in the operator’s seat and facing straight ahead. These directional arrows are added to aid in understanding the orientation of the various assemblies relative to the front of the machine.

NOTE: *The following abbreviations may be used herein:*

A.....	Ampere
AR.....	As Required
ASSY.....	Assembly
CB.....	Carriage Bolt
CP.....	Cotter Pin
CS.....	Cap Screw (Hexagon Head)
CYL.....	Cylinder
DIA.....	Diameter
FHCS.....	Flat Head Cap Screw
FOPS.....	Falling Object Protective Structure
G.....	Grams
GR.....	Grade
HB.....	Hex Bolt
HLN.....	Hex Lock Nut
HN.....	Hex Nut
HP.....	High Pressure
HYD.....	Hydraulic
INS.....	Insert
LN.....	Lock Nut
LT.....	Left
LW.....	Lock Washer
M.....	Meter or Meters
MM/mm.....	Millimeter
N/A.....	Not Available, Not Applicable
N•m.....	Newton meter
NPT.....	National Pipe Thread
OS.....	Oversized
ROPS.....	Roll Over Protective Structure
RT.....	Right
SHCS.....	Socket Head Cap Screw
SLTD.....	Slotted
SN.....	Serial Number or Slotted Nut
SQ.....	Square
TOPS.....	Tip Over Protective Structure
US.....	Undersized
V.....	Volt
W/.....	With
W/O.....	Without

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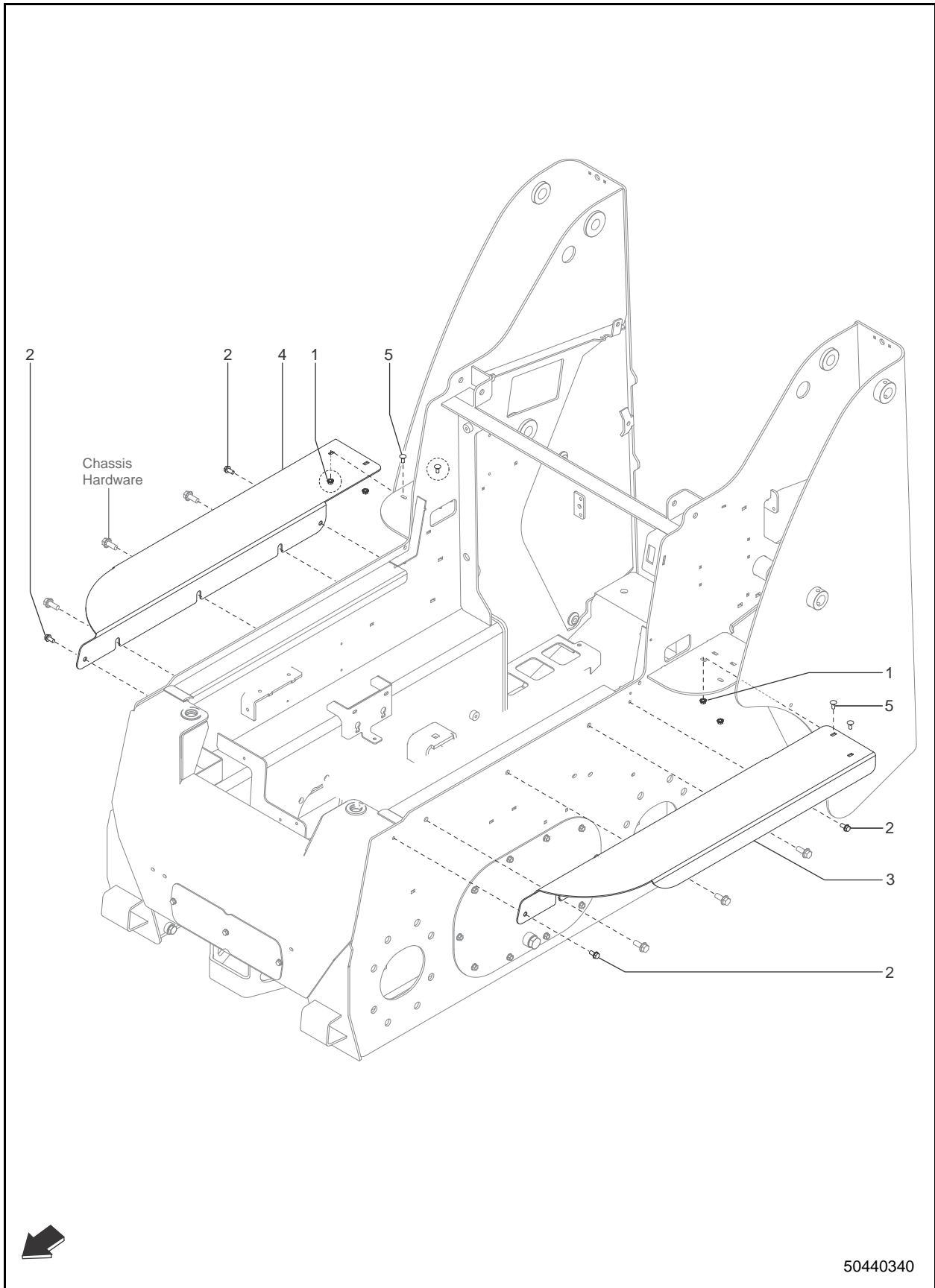
R165 - SPECIAL TOOLS, PAINT, ANALYSIS KITS

Ref.	No.	Part No.	Description	Qty.
	1	184467	HYDRAULIC GAUGE KIT	1
	2	50301126	TEST PORT R1/8K ADAPTER (used with test gauge kits)	1
	3	184472	TEST GAUGE, 1000PSI	1
	4	184473	TEST GAUGE, 6000PSI	1
	5	184474	TEST GAUGE, 10,000PSI	1
	6	184475	TEST HOSE, 120" (used with test gauge kits)	1
	7	420-34912	ROD SEAL INSTALL TOOL, 3/4" X 1-1/4" DIAMETER SEALS	1
	8	420-34913	ROD SEAL INSTALL TOOL, 1-1/2" X 2" DIAMETER SEALS	1
	9	420-34914	ROD SEAL INSTALL TOOL, 2" X 3" DIAMETER SEALS	1
	10	195348	SERVICE TOOL/FUEL INJECTOR PUMP TIMING KIT	1
	11	272806	HYDRAULIC OIL ANALYSIS KIT (GEHL) (use with appropriate pump and tubing)	Set of 10
	12	272809	ENGINE OIL ANALYSIS KIT (GEHL) (use with appropriate pump and tubing)	Set of 10
	13	272811	FUEL ANALYSIS KIT (GEHL)	1
	14	272812	COOLANT ANALYSIS KIT (GEHL) (use with appropriate pump and tubing)	Set of 10
	15	272813	FIELD TEST COOLANT STRIP (low level visual analysis)	1
	16	272814	OIL VACUUM PUMP (use with hydraulic oil and engine oil analy- sis kits)	1
	17	272815	COOLANT VACUUM PUMP (use with coolant analysis kit)	1
	18	272816	1/4" PLASTIC TUBING, 100' (bulk roll, use with hydraulic oil, engine oil and coolant analysis kits)	1
	19	167788	GEHL 4-PK QT CONSTRUCTION YELLOW	1
	20	167754	GEHL 4-PK QT GUNMETAL GRAY	1
	21	167792	GEHL 4-PK QT RED	1
	22	167789	GEHL 6-PK SPRAY CONSTRUC- TION YELLOW, 12.8 OZ.	1
	23	167755	GEHL 6-PK SPRAY GUNMETAL GRAY, 12.8 OZ.	1
	24	167793	GEHL 6-PK SPRAY RED, 12.8 OZ.	1

**R165 - CHASSIS
CHASSIS**

Ref.	No.	Part No.	Description	Qty.
	1	072343	FUEL SENDER GASKET	1
	2	090666	LN FL SERR 3/8 CZY	20
	3	092164	CS FL LOCK 1/2X1-1/4 C5ZY	8
	4	127342	HYDRAULIC RESERVOIR CAP	1
	5	131522	PLUG MORB12	4
	6	131529	PLUG MORB08	3
	7	134756	SIGHT PORT-OIL LEVEL ORB	1
	8	210-19470	LN FL SERR 5/16 CZY	1
	9	242675	COVER/CLEAN-OUT	1
	10	245238	SEAL/FILLER PLATE	2
	11	271468	CAP/FUEL FILLER	1
	77	50300934	COVER/DRAIN	1
	78	50301436	WDMT/ROPS FILLER RT	1
	81	50301438	WDMT/ROPS FILLER LT	1
	84	50301681	GASKET/CHAINCASE	2
	85	50302141	BREATHER/HYDRAULIC TANK	1
	86	50302215	WDMT/CHAINCASE COVER	2
	89	50302792	SENDER/FUEL	1
	90	50302910	PLATE/BUMPER	1
	91	50303092	PLATE/CUP HOLDER	1
	92	50303891	FOAM/CAB SEAL	2
	93	50303892	FOAM/CAB SEAL	2
	94	650687	CB 5/16X3/4 C5ZY	1
	95	651312	SCREW/THM CR #1024X1/2 Z	5
	96	651648	HWHTRS TAP/R 5/16X3/4 CZY	3
	97	L43846	PLUG MP08	2

R165 - CHASSIS FENDERS



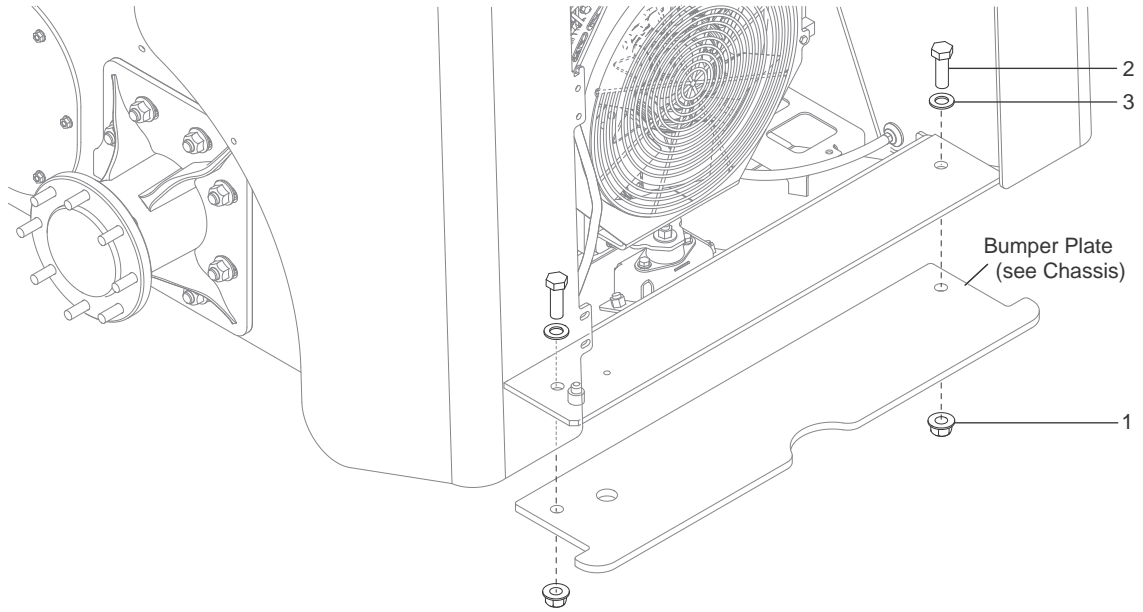
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**R165 - CHASSIS
FENDERS**

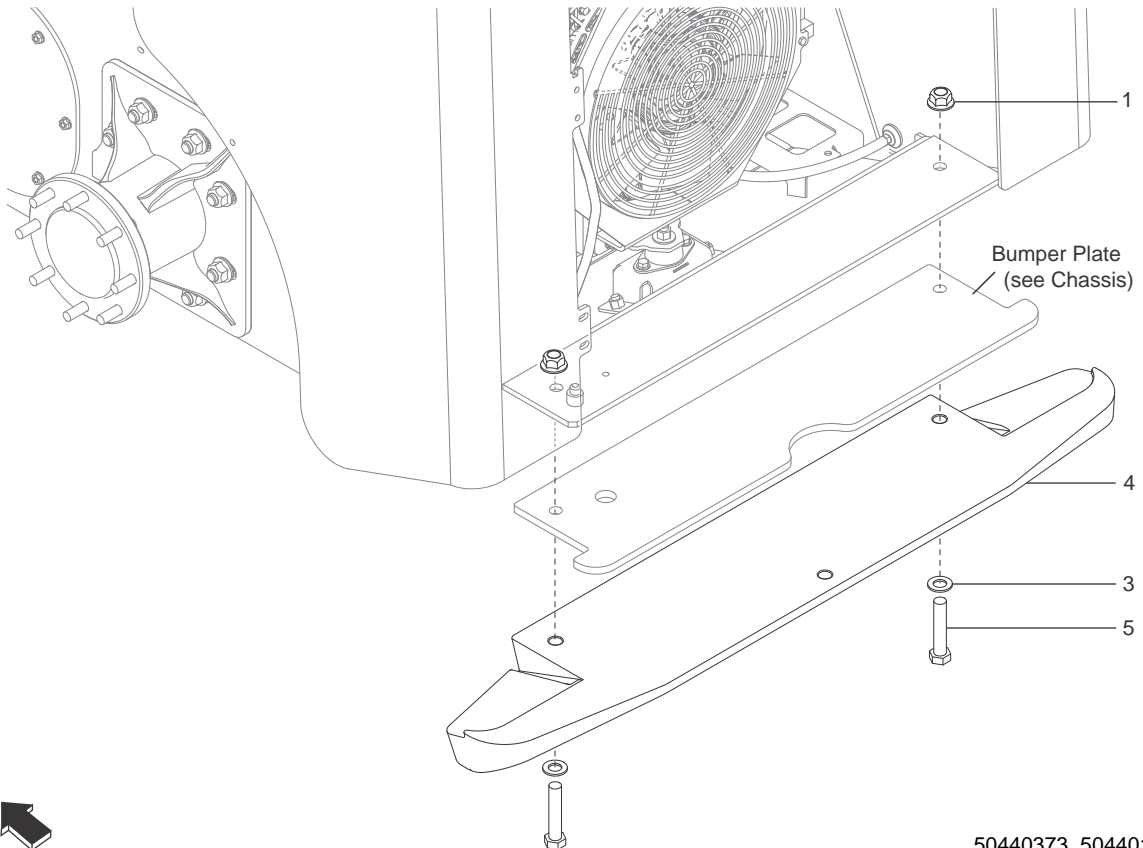
Ref.	No.	Part No.	Description	Qty.
1	131842	LN FL SPIRALOCK 5/16 CZY		4
2	195138	THWH TR 3/8 X 3/4 CZY		4
3	50300513	FENDER/LEFT		1
4	50300657	FENDER/RIGHT		1
5	650687	CB 5/16X3/4 C5ZY		4

R165 - CHASSIS BUMPER & COUNTERWEIGHT

BUMPER ONLY GROUP



COUNTERWEIGHT GROUP (OPTION)



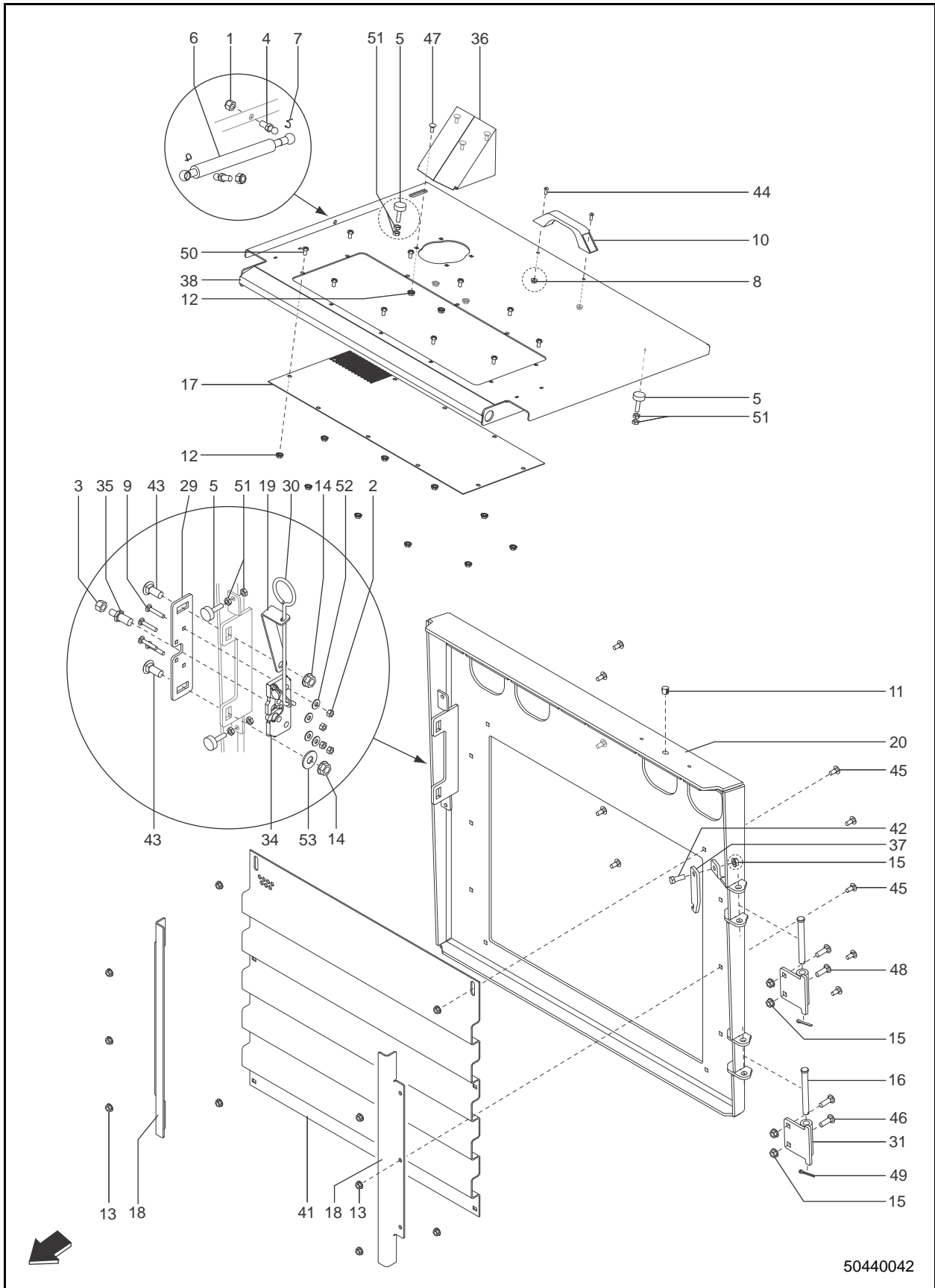
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R165 - CHASSIS BUMPER & COUNTERWEIGHT

Ref.	No.	Part No.	Description	Qty.
	1	50300777	HN FL TOP 3/4 CGZY	2
	2	650868	CS 3/4X2-1/4 C5ZY (used with Bumper Only group)	2
	3	651564	FW 3/4 HT ZY	2
	4	50302912	COUNTERWEIGHT	1
	5	651017	CS 3/4X3-3/4 C5ZY (used with Counterweight group)	2

NOTE: Quantities listed are per group. Parts that are unique to one group are noted in the part descriptions as well as having Ref. Nos. unique to that group.

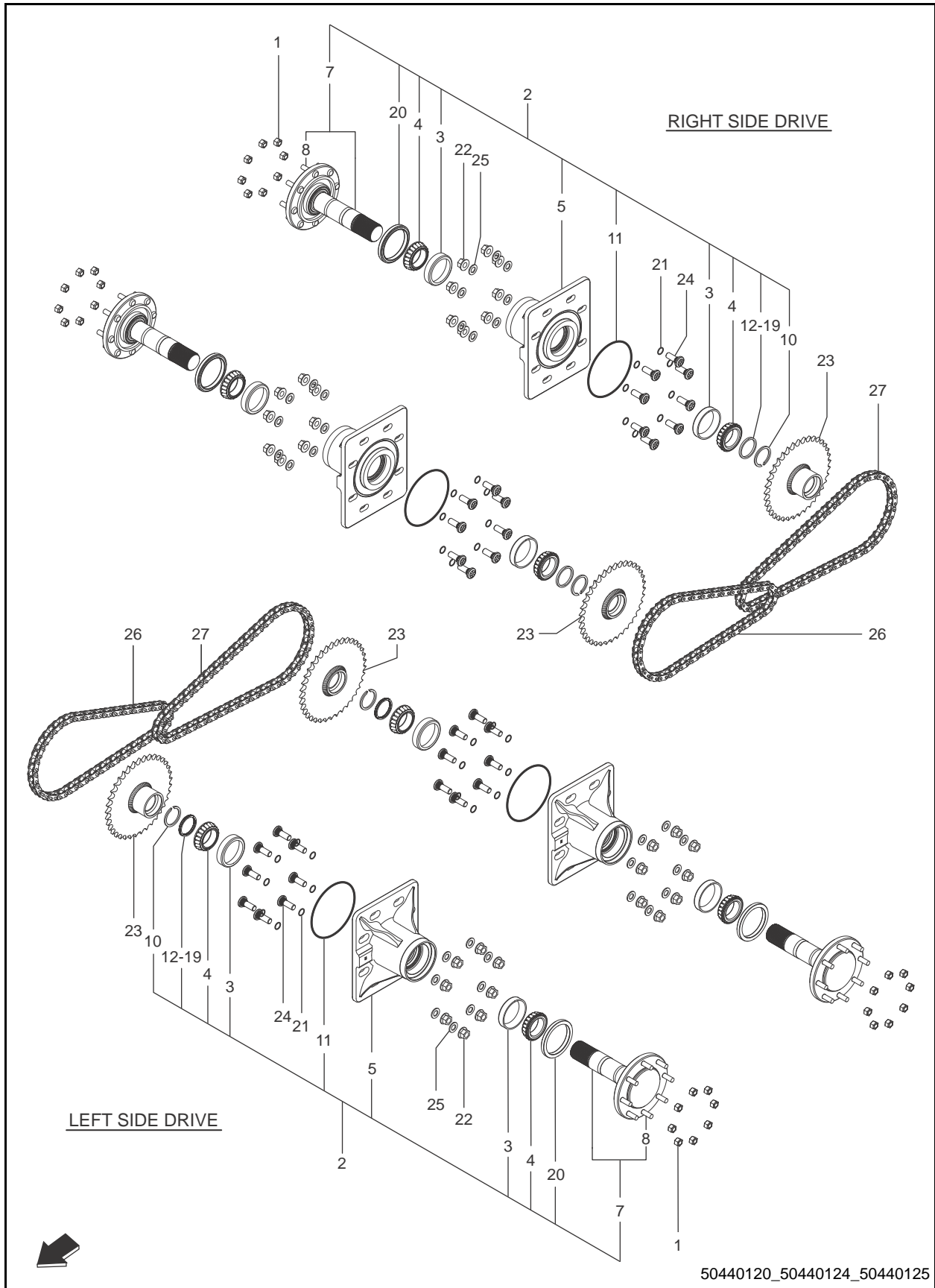
R165 - CHASSIS GRILLE AND COVERS



R165 - CHASSIS GRILLE AND COVERS

Ref. No.	Part No.	Description	Qty.
1	064260	HLN INST 5/16 CZY	2
2	071700	LN 1/4 CBZY	4
3	071705	LN 7/16 CBZY	1
4	122485	STUD/BALL 10MM	2
5	131913	BUMPER	4
6	132293	HOOD SHOCK	1
7	132493	CLIP/GAS SPRING	2
8	137797	NUT/SERRATED FLANGE 10-24NC	2
9	137959	CB 1/4X1-1/2 CBC	4
10	184023	HANDLE/GRAB/MOLDED	1
11	191826	HOLE PLUG/.50 DIA.	1
12	210-19469	LN FL SERR 1/4 CZY	14
13	210-19470	LN FL SERR 5/16 CZY	10
14	210-19532	LN FL CTR 1/2 CGZY	2
15	210-19533	LN FL CTR 3/8 CFZY	5
16	220-32536	PIN CLEVIS 1/2 DIA X 4 1/2	2
17	50300169	SCREEN (PAINTED)	1
18	50300373	BRKT/HINGE	2
19	50300440	PLATE/ROD SPPT	1
20	50300525	WDMT/REAR DOOR	1
29	50300856	PLATE/LATCH	1
30	50300857	ROD/LATCH	1
31	50301102	WDMT/HINGE	2
34	50301791	LATCH/DOOR	1
35	50301931	STRIKER/LATCH	1
36	50302707	HOOD/EXHAUST	1
37	50302826	PLATE/DOOR LOCK	1
38	50304292	WDMT/ENGINE COVER	1
41	50351072	PLATE/PERFORATED	1
42	650490	CS 3/8X1 C5ZY	1
43	650527	CB 1/2X1-1/4 C5ZY	2
44	650548	RHMS SLT #1024X1/2 CZY	2
45	650687	CB 5/16X3/4 C5ZY	10
46	650704	CB 3/8X1 C5ZY	2
47	650748	CB 1/4X5/8 C5ZY	4
48	650786	CB 3/8X1-1/4 C5ZY	2
49	650878	CP EPSC 5/32X1 Z	2
50	651307	PHMS CR 1/4X1/2 ZB	10
51	653034	HJN 5/16 C2ZY	8
52	654002	FW 1/4 AWZY	4
53	654009	FW 1/2 AWZY	1

R165 - CHASSIS WHEEL DRIVES

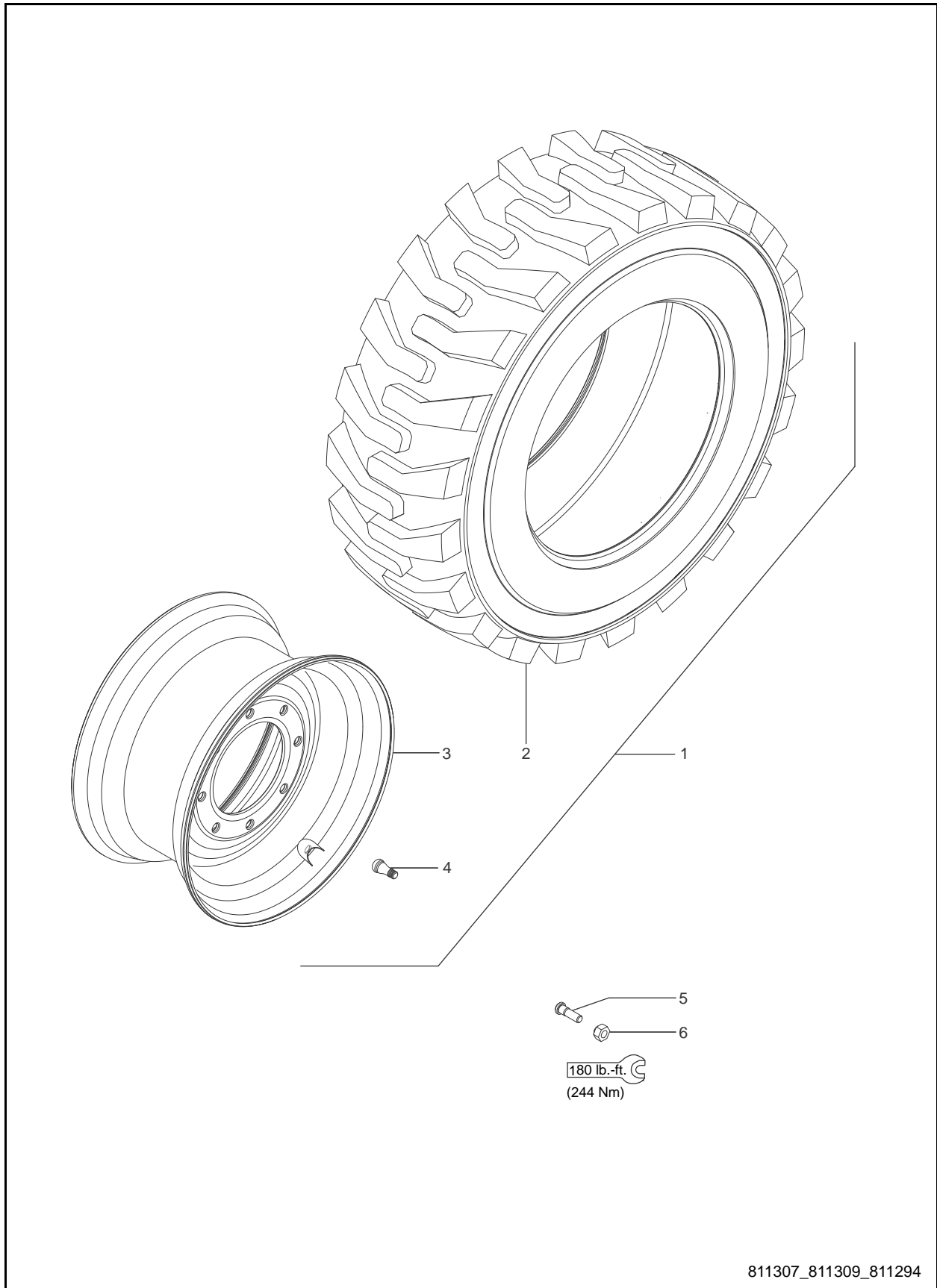


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R165 - CHASSIS WHEEL DRIVES

Ref.	No. Part No.	Description	Qty.
	1 079152	NUT/LUG 5/8 FZY	32
	2 194761	AXLE ASSEMBLY	4
	3 010-28854	BEARING CUP	2
	4 010-32401	BEARING CONE	2
	5 138759	HOUSING/AXLE MACHINED	1
	7 139587	AXLE ASSY W/STUDS	1
	8 137915	BOLT/WHEEL 5/8X2-3/8 F8ZY	8
	10 350-32539	SNAP RING, EXTERNAL	1
	11 350-32542	O-RING 369 N70	1
	12 400-32513	WASHER, SPECIAL .254 THICK	AR
	13 400-32514	WASHER, SPECIAL .250 THICK	AR
	14 400-32515	WASHER SPECIAL .246 THICK	AR
	15 400-32521	WASHER, SPECIAL .234	AR
	16 400-32522	WASHER, SPECIAL .230	AR
	17 400-32523	WASHER, SPECIAL .226	AR
	18 400-32555	WASHER SPECIAL .238 THICK	AR
	19 400-32556	WASHER SPECIAL .242 THICK	AR
	20 50351810	SEAL/AXLE 4.50	1
	21 50300766	O-RING 118 N70	32
	22 50300777	HN FL TOP 3/4 CGZY	32
	23 50301397	SPROCKET/80-37T	4
	24 50351821	BOLT/AXLE 3/4-10 X 2.13	32
	25 651564	FW 3/4 HT ZY	32
	26 50302867	CHAIN/ROLLER #80X62 LINKS (SINGLE SPEED)	2
	50302869	CHAIN/ROLLER #80X64 LINKS (2 SPEED)	2
	27 50302868	CHAIN/ROLLER #80X68 (SINGLE SPEED)	2
	50302870	CHAIN/ROLLER #80X70 (2 SPEED)	2

R165 - CHASSIS WHEELS & TIRES



811307_811309_811294

R165 - CHASSIS WHEELS & TIRES

Ref.	No.	Part No.	Description	Qty.
1	811307		ASSY/WHEEL 10X16.5 HD GEHL	1
	811309		ASSY/WHEEL 10X16.5 SD GEHL**	1
	811294		ASSY/WHEEL 12X16.5 HD GEHL**+	
2	N/A*		TIRE/HD 10X16.5 8 PLY TITAN HD 2	1
	N/A*		TIRE/SD 10X16.5 SD**	1
	N/A*		TIRE/HD 12.0X16.5 10 PLY HD2000 LI**+	1
3	240363		WHEEL/16.5X8.25 8-HOLE (used w/ 10x16.5 tires)	1
	240364		WHEEL/16.5X9.75 GEHL (used w/ 12x16.5 tire)	1
4	191020		VALVE STEM/RUBBER	1
5	030-20745		BOLT/WHEEL 9/16X1-7/8 F8Z	8
6	210-20746		NUT WHEEL BOLT 9/16-18NF	8

NOTE: Steel tracks for 10.00 tires only can be ordered through CEAttachments, Inc.

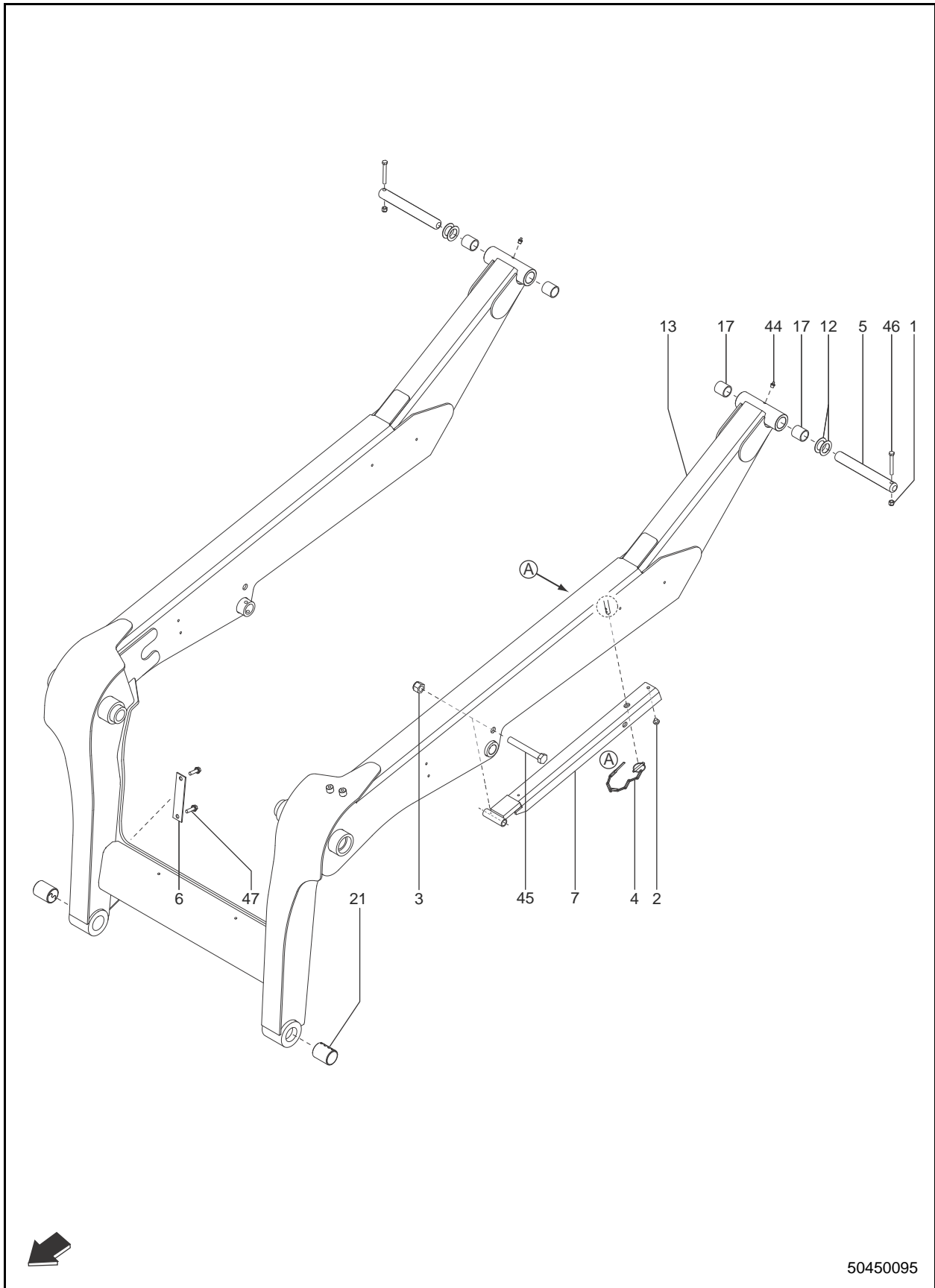
* Purchase equivalent quality tires for your skid-steer loader.

Contact your dealer for replacement tire information.

** Cannot use with tracks, warranty is voided.

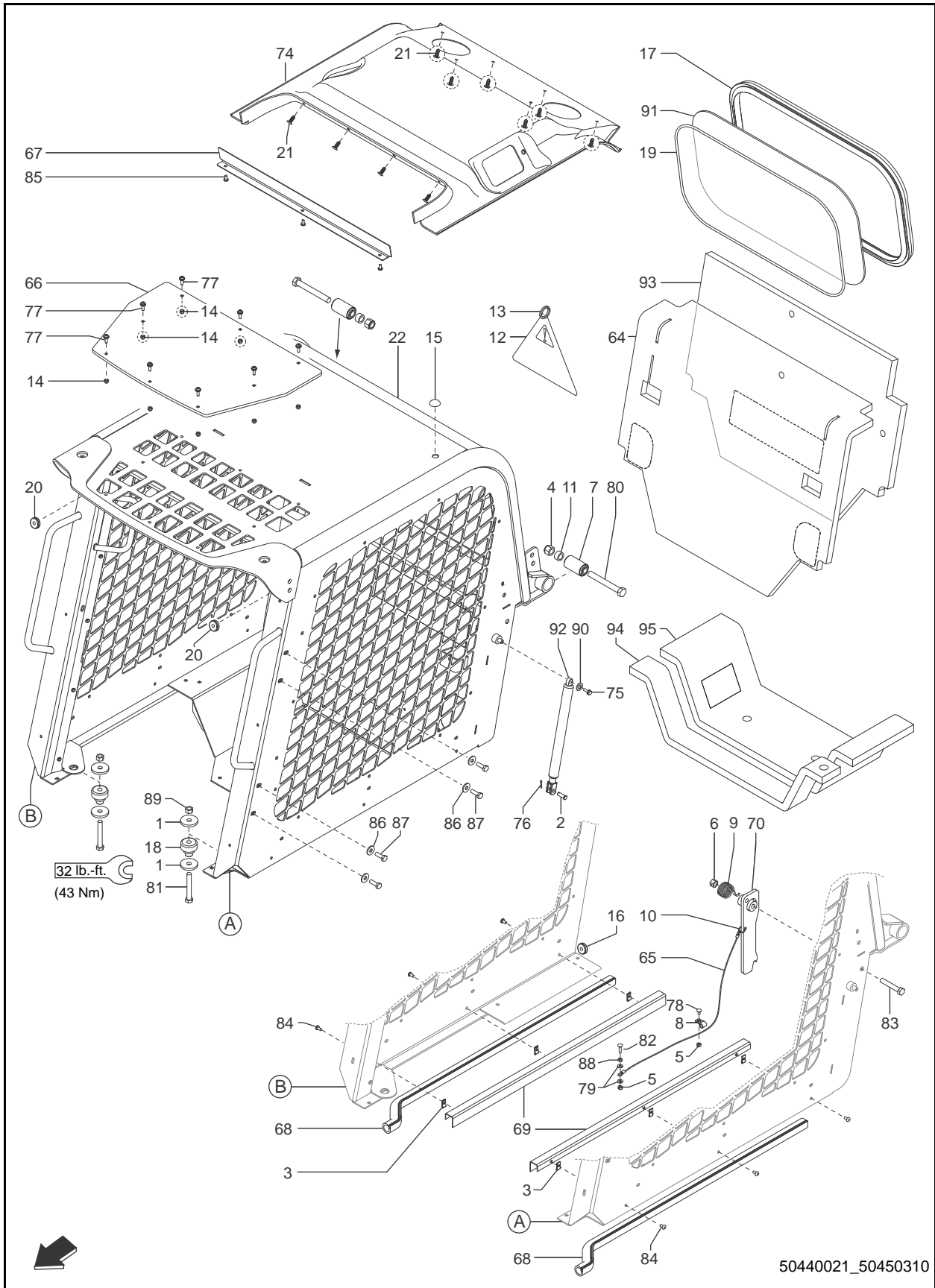
+ Use of These Larger Diameter Tires Will Increase Lift Height, Ground Clearance, and Bucket Heel Clearance by Approximately 1.25 inches. Recommend Low Heel Bucket Use Only.

R165 - LIFT ARM



Ref.	No.	Part No.	Description	Qty.
	1	067847	HLN INST 3/8 CZY	2
	2	074860	STEM/RUBBER	1
	3	079209	HLN INST 3/4 CZY	1
	4	089079	PIN/KLIK	1
	5	188983	PIN	2
	6	193069	SHIM	AR
	7	243045	ARM/SAFETY	1
	12	400-32412	FW 1-9/32	4
	13	50350929	LIFTARM/WLDMT (includes 17, 21)	1
	17	139734	BUSHING	4
	21	273677	BUSHING/SPRING	2
	44	570002	FITTING/GREASE 1/8 PTF	2
	45	650483	CS 3/4X5-1/2 C5ZY	1
	46	650818	CS 3/8X3 C5ZY	2
	47	650987	SCREW/THWH TC USL 3/8X1-1/2 CZY	AR

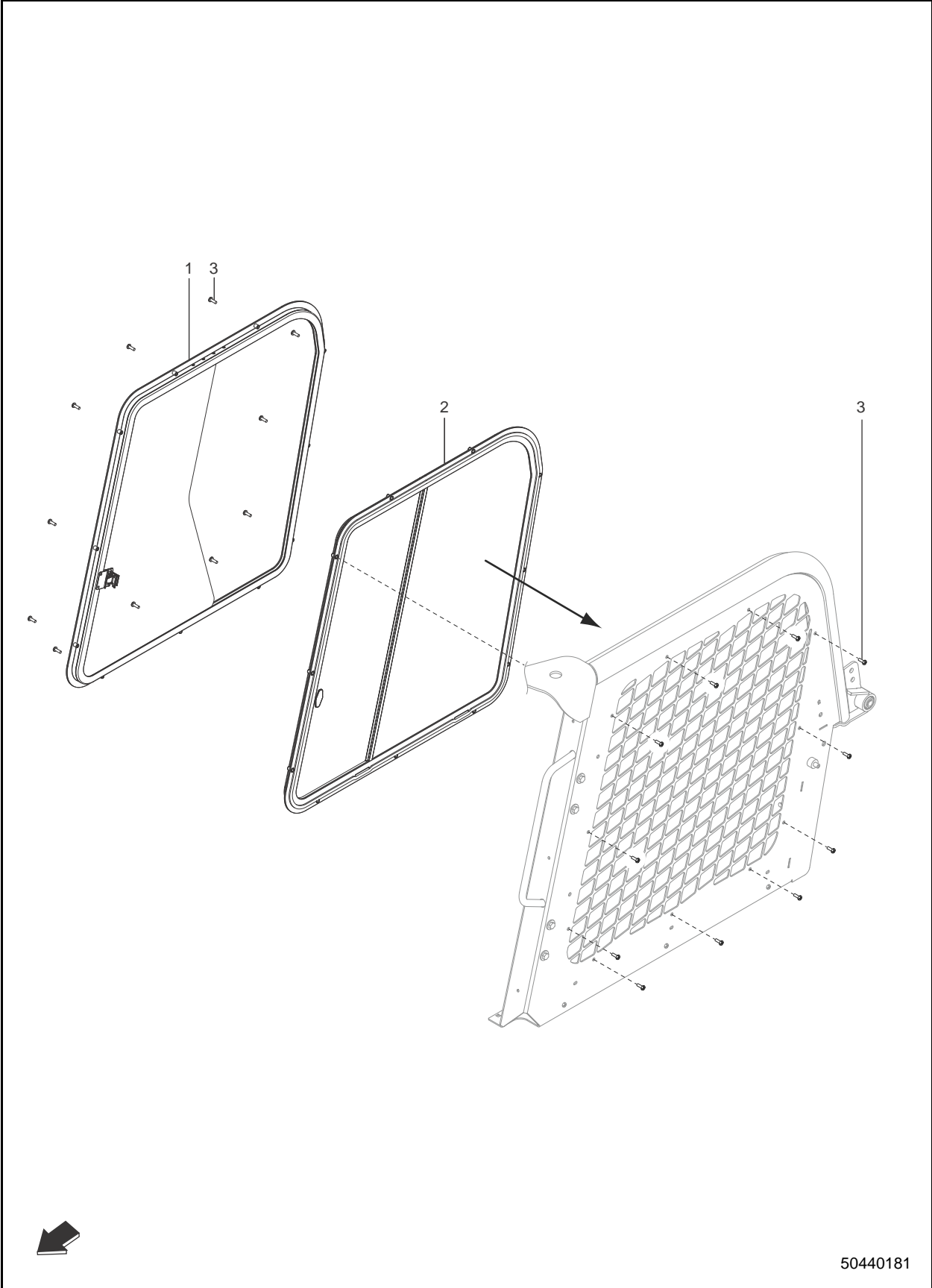
R165 - ROPS/FOPS ROPS/FOPS ASSEMBLY



R165 - ROPS/FOPS ROPS/FOPS ASSEMBLY

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	057557	FW 17/32 ZY	4	92	50301763	GAS SPRING (W/O GLASS DOOR) (see Page 20 for gas springs w/ glass door)	2
2	064239	PIN/CLEVIS 3/8X1-1/16 ZY	2	93	50303597	PAD/CAB REAR WALL (W/O HEATER)	1
3	067750	NUT/SPEED	6	94	50307188	PAD/SEAT PAN/FRONT	1
4	067823	HLN INST 5/8 CZY	2	95	50307189	PAD/SEAT PAN/REAR	1
5	071700	LN 1/4 CBZY	2				
6	071706	LN 1/2 CBZY	1				
7	072490	ISOLATOR/ROPS MTG	2				
8	076078	CLAMP/HOSE .38 X .34 HOLE	1				
9	077794	SPRING/TORSION	1				
10	078238	RING/SPLIT	1				
11	131945	BUSHING	2				
12	132166	TAG/RIP CORD	1				
13	132294	RING	1				
14	138825	NUT-HEX ACORN 1/4-20	8				
15	192182	PLUG/RUBBER	1				
16	192601	GROMMET .69ID .188GW 1.00GD	1				
17	240645	WEATHERSTRIP/WINDOW	1				
18	241354	MOUNT/ISOLATOR 22002-13	2				
19	241544	RIPCORD/WEATHERSTRIP	1				
20	242633	GROMMET .38ID .188GW 1.00GD SPLT	2				
21	420-36132	CLIP, CHRISTMAS TREE	10				
22	50300289	ROPS/WDMT	1				
64	50300974	PAD/ACOUSTIC REAR DECK	1				
65	50301349	CABLE/ROPS RELEASE	1				
66	50301387	WINDOW/SKYLIGHT	1				
67	50301405	COVER/CROSSMEMBER	1				
68	50301412	SEAL/ROPS TO CHASSIS	2				
69	50301968	BRKT/WIRE GUIDE	2				
70	50301971	ROPS SUPPORT/WDMT	1				
74	50353856	HEADLINER	1				
75	650448	CS 1/4X3/4 C5ZY	2				
76	650551	CP EPSC 3/32X3/4 Z	2				
77	50305374	PHMS CR 1/4X7/8 COCB SEM	8				
78	650771	CB 1/4X1/2 C5ZY	1				
79	650863	FW 1/4 ANZY	2				
80	650867	CS 5/8X5 C5ZY	2				
81	651082	CS 1/2X3-1/2 C8 ZY	2				
82	651086	CB 1/4X1 C5ZY	1				
83	651240	CS 1/2X3 C8ZY	1				
84	651307	PHMS CR 1/4X1/2 ZB	6				
85	651308	PHMS CR 1/4X3/4 ZB	3				
86	651659	FW M10 HARDENED ZB	4				
87	651821	CS M10-1.5X30 C8.8 ZB DIN933	4				
88	653005	HN 1/4 C2ZY	1				
89	653018	HN 1/2 C2ZY	2				
90	654002	FW 1/4 AWZY	2				
91	243270	WINDOW/REAR (W/O REAR WIPER)	1				

**R165 - ROPS/FOPS
SIDE WINDOWS (OPTION)**

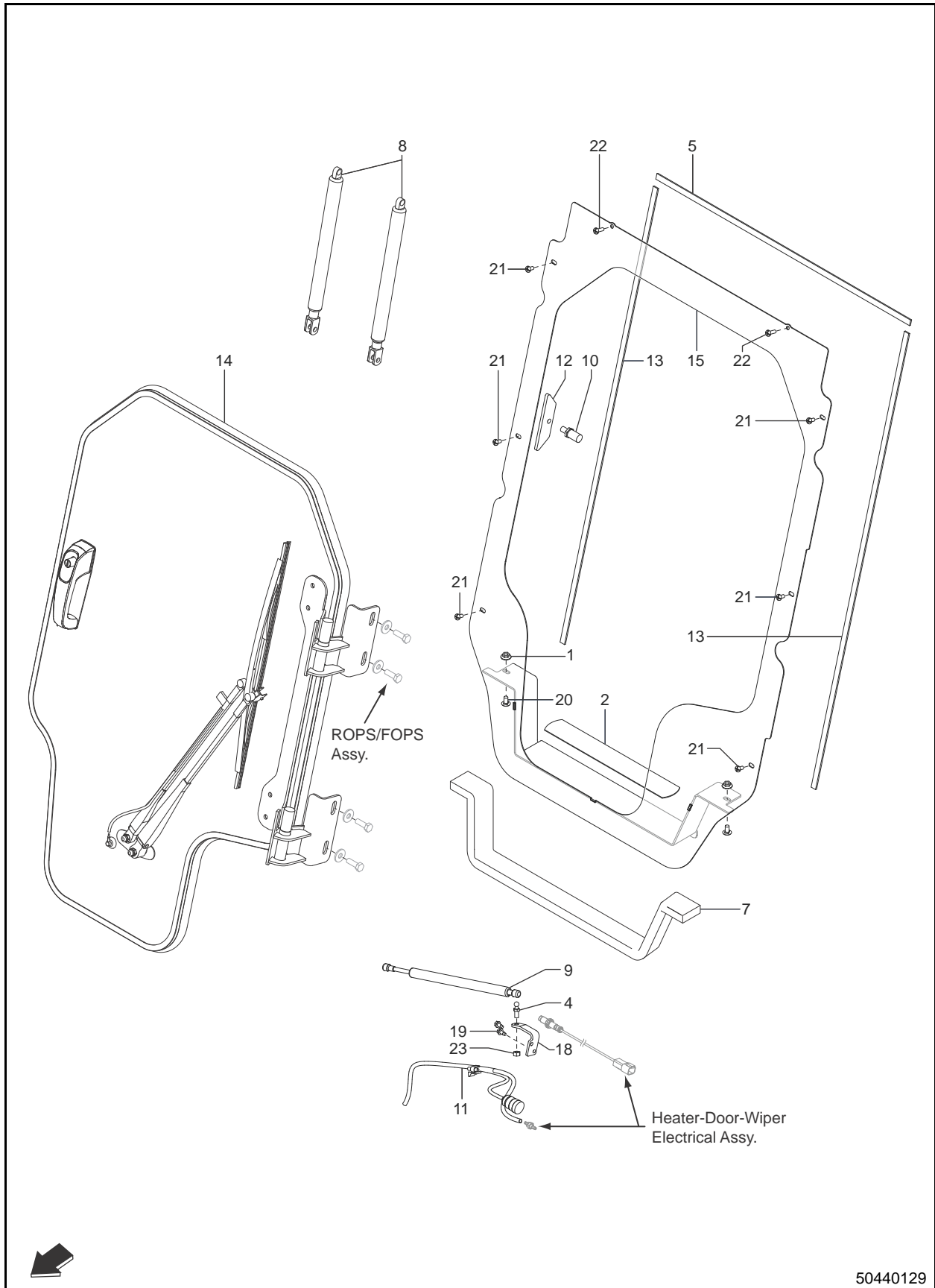


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**R165 - ROPS/FOPS
SIDE WINDOWS (OPTION)**

Ref.	No.	Part No.	Description	Qty.
1	50301848		ASSY/WINDOW/RIGHT	1
2	50301849		ASSY/WINDOW/LEFT	1
3	651308		PHMS SLT 1/4X3/4 ZB	22

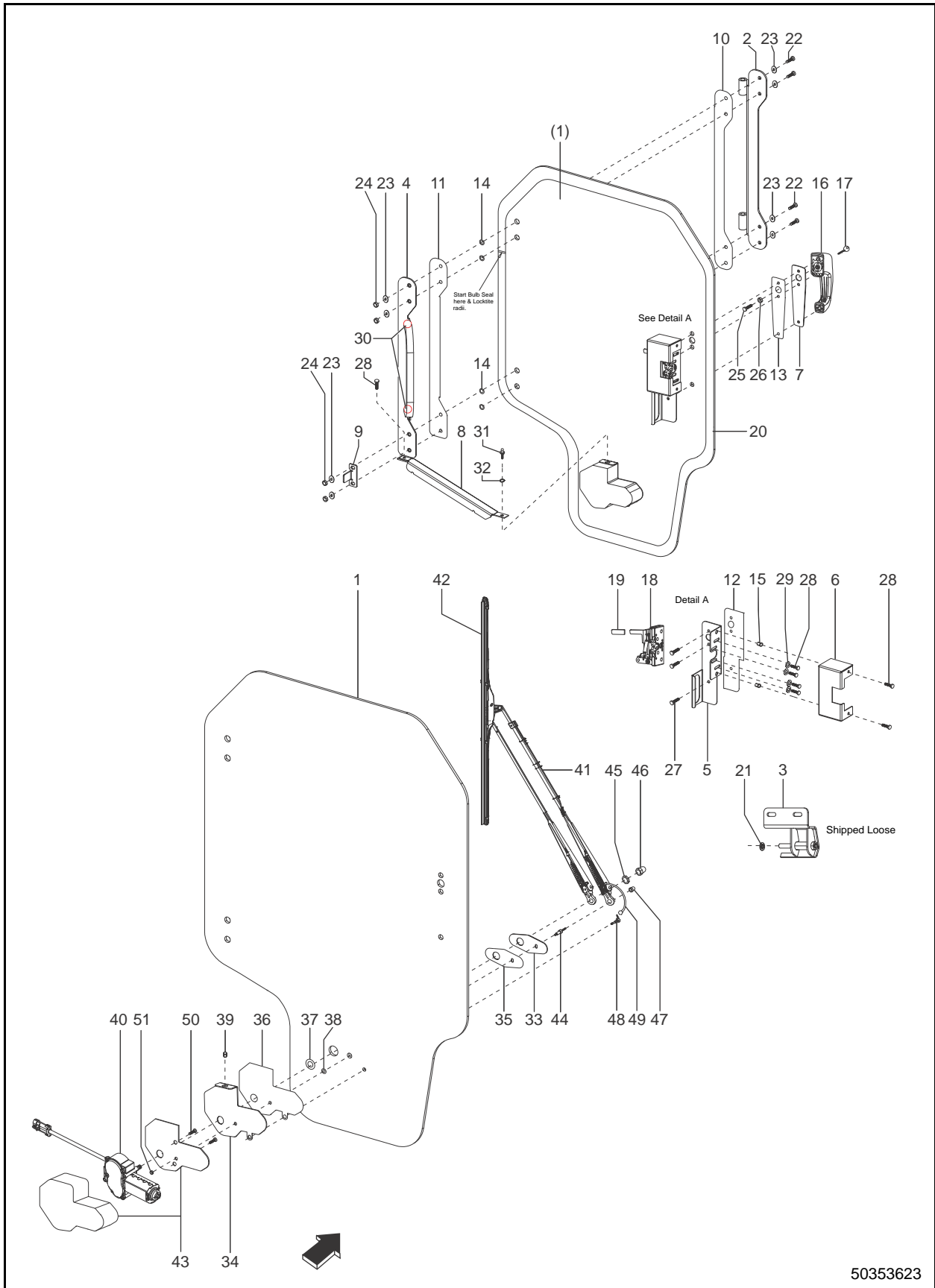
R165 - ROPS/FOPS GLASS DOOR (OPTION)



**R165 - ROPS/FOPS
GLASS DOOR (OPTION)**

Ref.	No.	Part No.	Description	Qty.
	1	070648	LN LG FL SERR 5/16 CZ	2
	2	073458	STRIP/NON-SKID SURFACE	1
	4	122485	STUD/BALL 10MM	1
	5	420-36151	GASKET, TOP WINDOW	1
	7	50302086	FOAM/CAB SEAL	1
	8	50302202	GAS SPRING	2
	9	50304032	SPRING/GAS	1
	10	50304035	STRIKER/LATCH	1
	11	50304053	HARNESS/FRONT WIPER JUMPER	1
	12	50306770	PLATE/STRIKER MOUNT	1
	13	50306780	SEAL/.12X.50X41.00	2
	14	50353623	DOOR/CAB	1
	15	50354456	PANEL/WLDMT/DOOR	1
	18	50354603	BRACKET/BALL STUD	1
	19	650315	SCREW/THWH TC USL 1/4X1/2 CZY	2
	20	650969	CB SN 5/16X5/8 C5ZY	2
	21	651307	PHMS CR 1/4X1/2 ZB	6
	22	651308	PHMS CR 1/4X3/4 ZB	2
	23	653007	HN 5/16 C2ZY	1

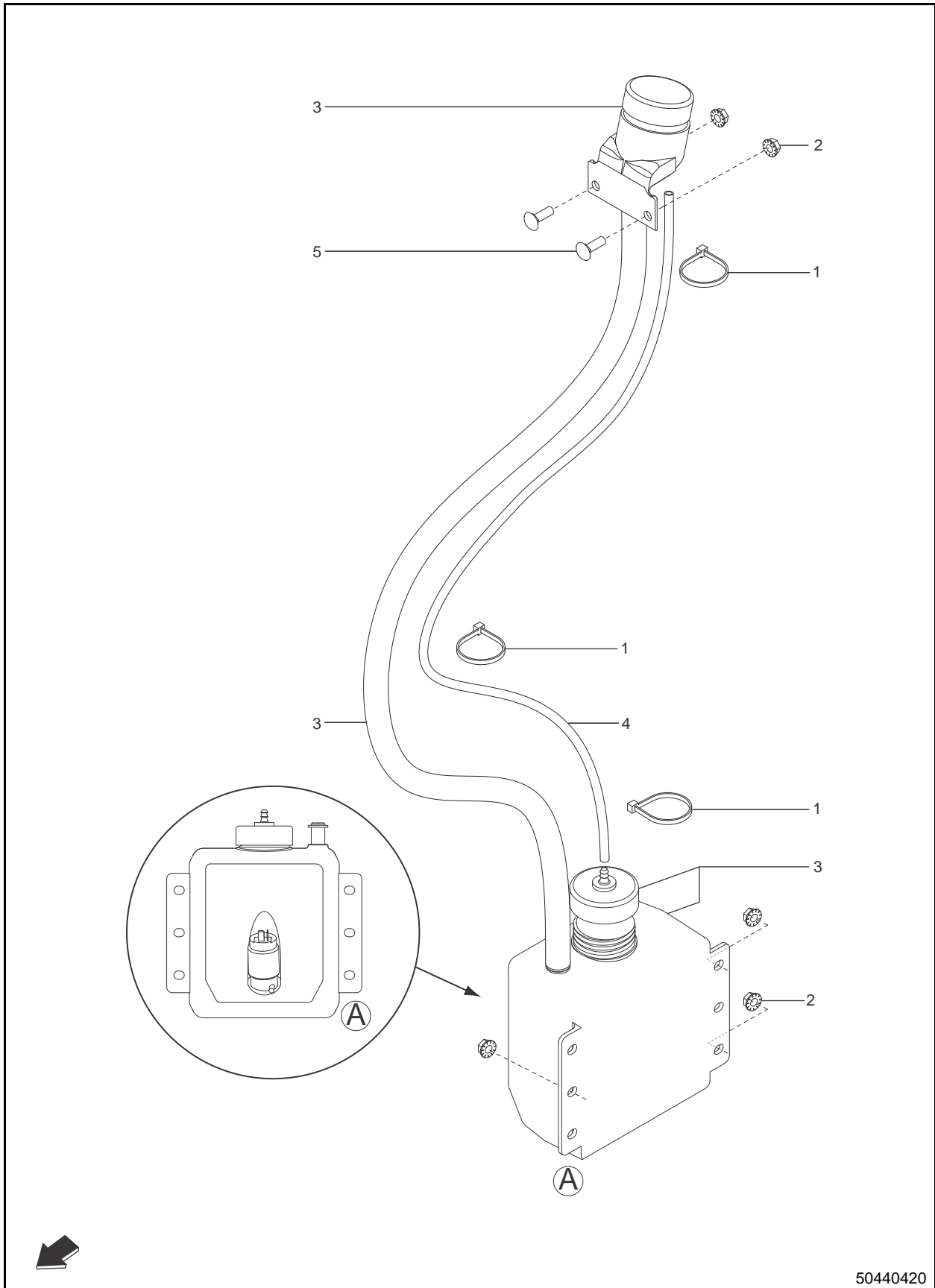
R165 - ROPS/FOPS GLASS DOOR COMPONENTS



R165 - ROPS/FOPS GLASS DOOR COMPONENTS

Ref. No.	Part No.	Description	Ref. No.	Ref. No.	Part No.	Description	Ref. No.
1	50305659	KIT/GLASS DOOR (includes items 1, 10-14, 20, 22-24, 27, 35-38)	1	46	242984	NUT/ACORN M8 BO	1
2	50307417	HINGE/DOOR/WLDMT	1	47	242985	NUT/ACORN M5 BO	1
3	50307418	HINGE BRACKET/DOOR/WLDMT	2	48	50307460	FITTING/COWL	1
4	50307420	BACKING PLATE WELDMENT/DOOR	1	49	50307463	WIPER/WET KIT	1
5	50307421	LATCH BRACKET/DOOR	1	50	50307466	SCREW/MR6-1.0X16	2
6	50307425	COVER/LATCH BOX	1	51	656100	HN M5-0.8 C8 ZY DIN934	1
7	50307426	HANDLE PLATE/DOOR	1				
8	50307428	WIRING CHANNEL/DOOR	1				
9	50304637	BRACKET/SENSOR TARGET	1				
10	50307429	GASKET W/PSA	1				
11	50307430	GASKET W/PSA	1				
12	50307431	GASKET W/PSA	1				
13	50307432	GASKET W/PSA	1				
14	50307433	GROMMET/5/8ODX5/16ID	4				
15	50307467	INSERT/1/4-20	2				
16	50305661	KIT/HANDLE (includes items 5, 7, 12, 13, 15, 16, 25-29)	1				
17	50280186	KEY/8001 (14603)	1				
18	50303453	LATCH	1				
19	50307480	RUBBER SLEEVE	1				
20	50307435	SEAL/BULB/1/4" GRIP	11				
21	50307436	WASHER/NYLON/WEAR	2				
22	50307469	SCREW/5/16-18X1.25	4				
23	242973	FW 5/16 BO	8				
24	242974	HLN INST 5/16-18 BO	4				
25	656082	CS M6-1X25 C8.8 ZY DIN933	1				
26	656047	HN M6-1 C8 ZY DIN934	1				
27	242978	PHMS M6 X 25 MM BO	3				
28	50307470	SCREW/1/4-20X3/4	7				
29	654002	FW 1/4 AWZY	4				
30	50307437	PLUG/5/8" HOLE/BLACK	2				
31	122485	STUD/BALL 10MM	1				
32	654004	FW 5/16 AWZY	1				
33	50307438	BRACKET/WIPER/DOOR	1				
34	50307439	BRACKET-WIPER MOTOR/DOOR	1				
35	50307451	GASKET W/PSA	1				
36	50307453	GASKET W/PSA	1				
37	50307456	GROMMET/1 1/16" OD X 11/16 ID	1				
38	50307457	GROMMET/1/2 OD X 1/4 ID	1				
39	50307465	INSERT/5/16-18	1				
40	50305665	KIT/WIPER MOTOR (includes items 35-38, 40, 44-47, 51)	1				
41	50307458	508MM SMALL PANTO WIPER ARM	1				
42	50307459	610MM BLADE ASSY	1				
43	242934	COVER/WIPER MOTOR	1				
44	50307464	MOUNTING PIN/WIPER	1				
45	242986	HN M18 BO	1				

**R165 - ROPS/FOPS
SINGLE PUMP WASHER BOTTLE (OPTION)**

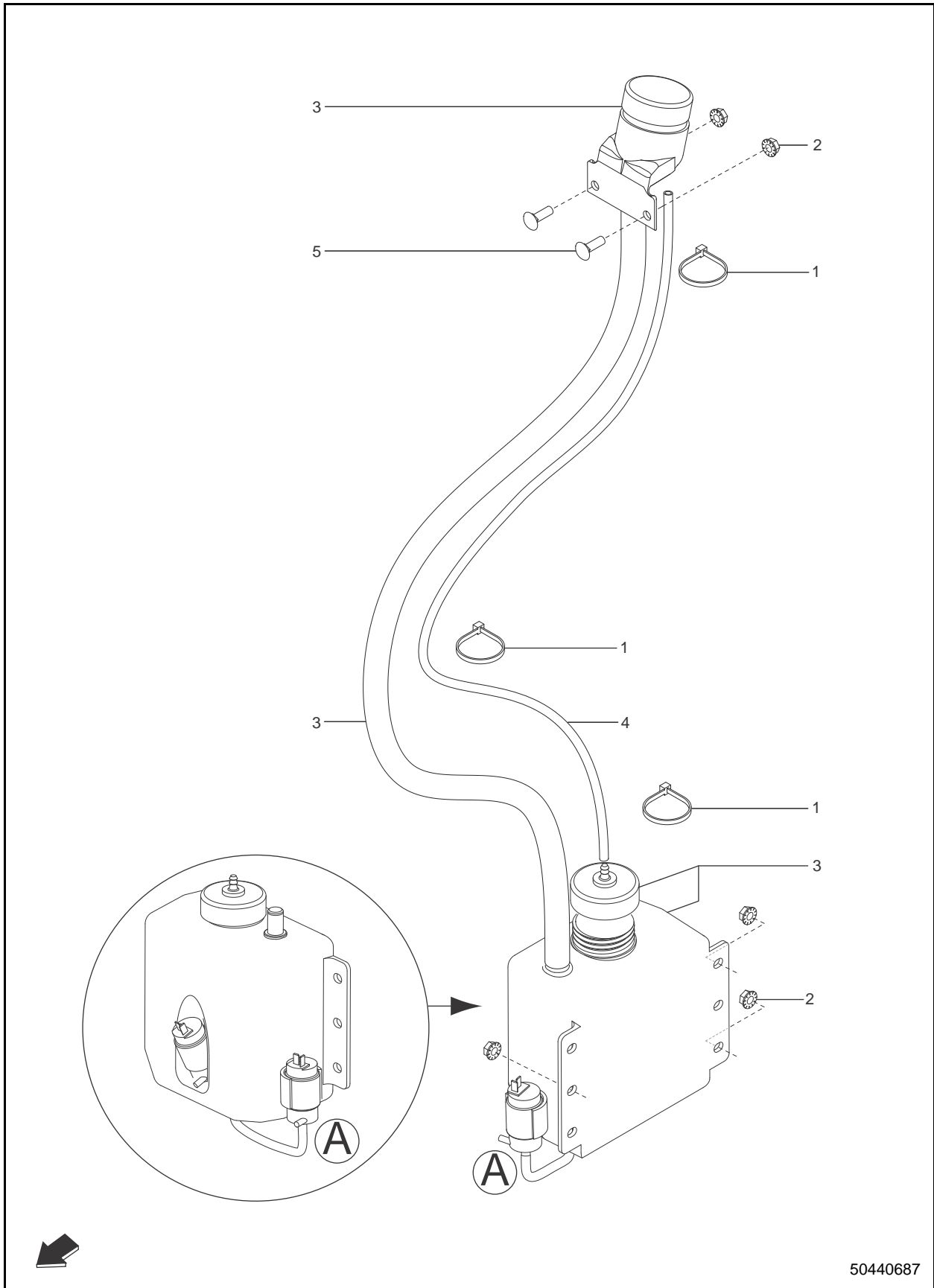


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**R165 - ROPS/FOPS
SINGLE PUMP WASHER BOTTLE (OPTION)**

Ref.	No.	Part No.	Description	Qty.
	1	055648	TIE/CABLE .19 X 7.50 BLACK	3
	2	210-19470	LN FL SERR 5/16 CZY	5
	3	50352945	RESERVOIR/3QRT/SNGL PMP	1
	4	50352975	TUBE/BREATHER	1
	5	650573	CB 5/16X1 C5ZY	2

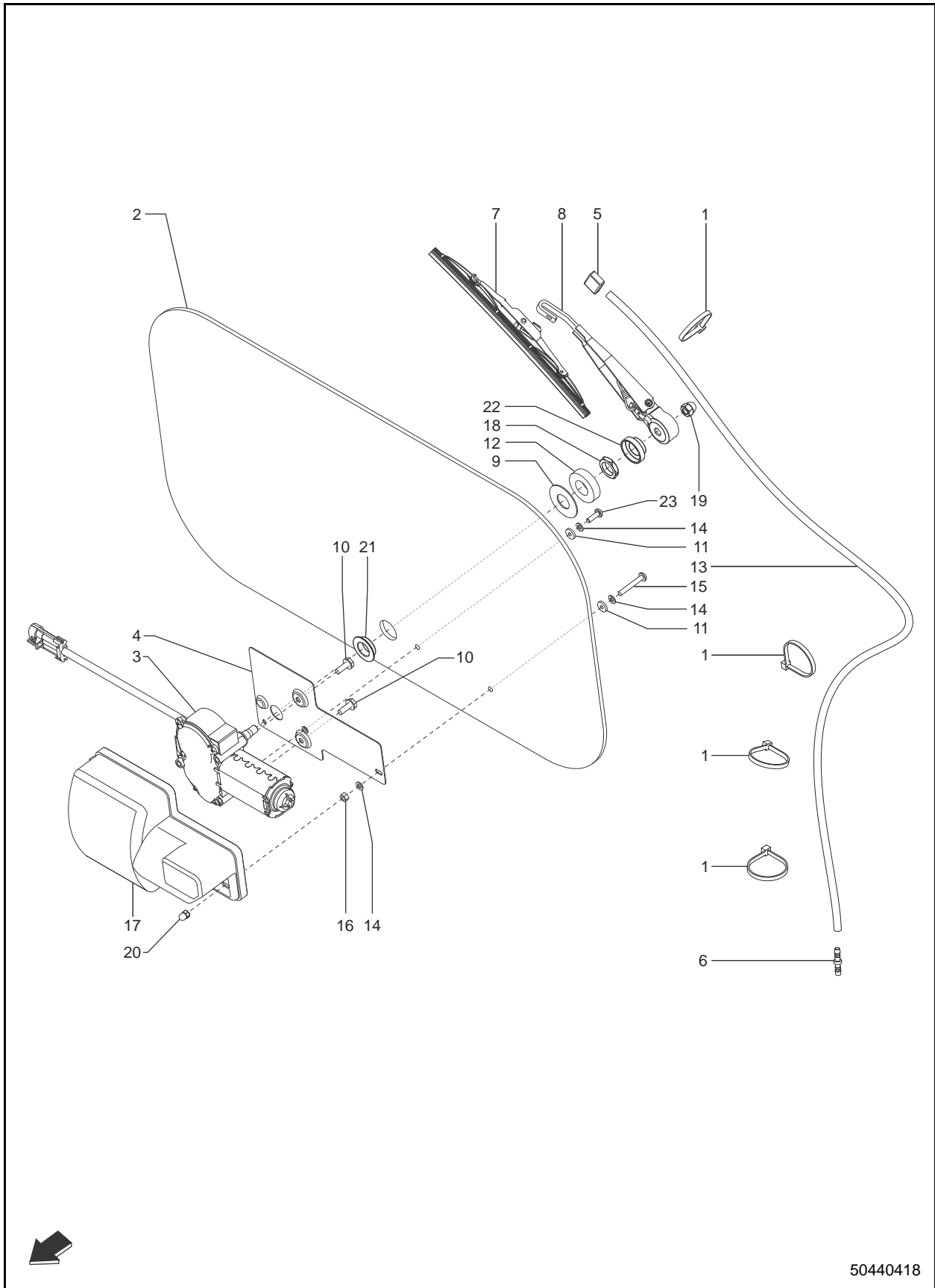
R165 - ROPS/FOPS DOUBLE PUMP WASHER BOTTLE (OPTION)



**R165 - ROPS/FOPS
DOUBLE PUMP WASHER BOTTLE (OPTION)**

Ref.			
No.	Part No.	Description	Qty.
1	055648	TIE/CABLE .19 X 7.50 BLACK	3
2	210-19470	LN FL SERR 5/16 CZY	5
3	50352897	RESERVOIR/3QRT/DUAL PUMP	1
4	50352975	TUBE/BREATHER	1
5	650573	CB 5/16X1 C5ZY	2

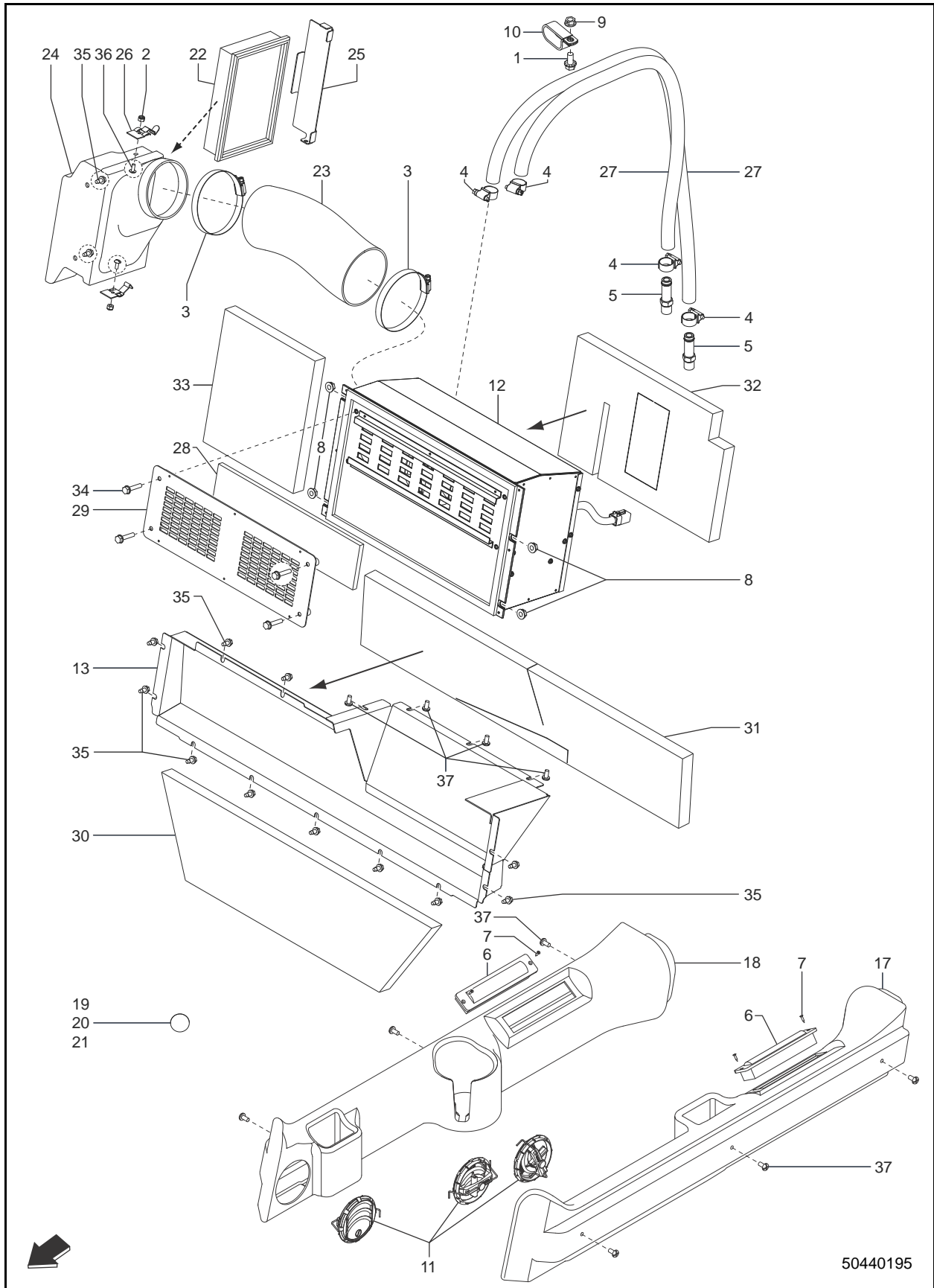
**R165 - ROPS/FOPS
REAR WIPER (OPTION)**



**R165 - ROPS/FOPS
REAR WIPER (OPTION)**

Ref.	No.	Part No.	Description	Qty.
	1	055648	TIE/CABLE .19 X 7.50 BLACK	4
	2	240055	WINDOW/REAR	1
	3	241900	MOTOR/REAR WIPER	1
	4	242801	PLATE/MTG WIPER MOTOR	1
	5	242947	HEAD/SPRITZER	1
	6	243450	BARB/HOSE	1
	7	243452	BLADE/WIPER	1
	8	243453	ARM/WIPER	1
	9	243456	WASHER/FIBER	1
	10	243512	SCREW/TAPTITE M6	2
	11	243546	WASHER/RUBBER #10	2
	12	50352710	SPACER/SHAFT	1
	13	50352911	HOSE/WASHER 46	1
	14	651809	FW M5 ZB DIN125	3
	15	651810	PHMS CR M5-0.8X35 CZB DIN7985	1
	16	656100	HN M5-0.8 C8 ZY DIN934	1
	17	L500696	COVER WIPER MOTOR	1
	18	L500697	NUT M18 HEX	1
	19	L500700	NUT / M8 PANTO PLATE	1
	20	L500706	NUT / M5 ACORN	1
	21	L500708	TOWER SEAL / TRICO WIPER	1
	22	L500709	RAIN SHIELD	1
	23	L500711	SCREW / M5 16MM	1

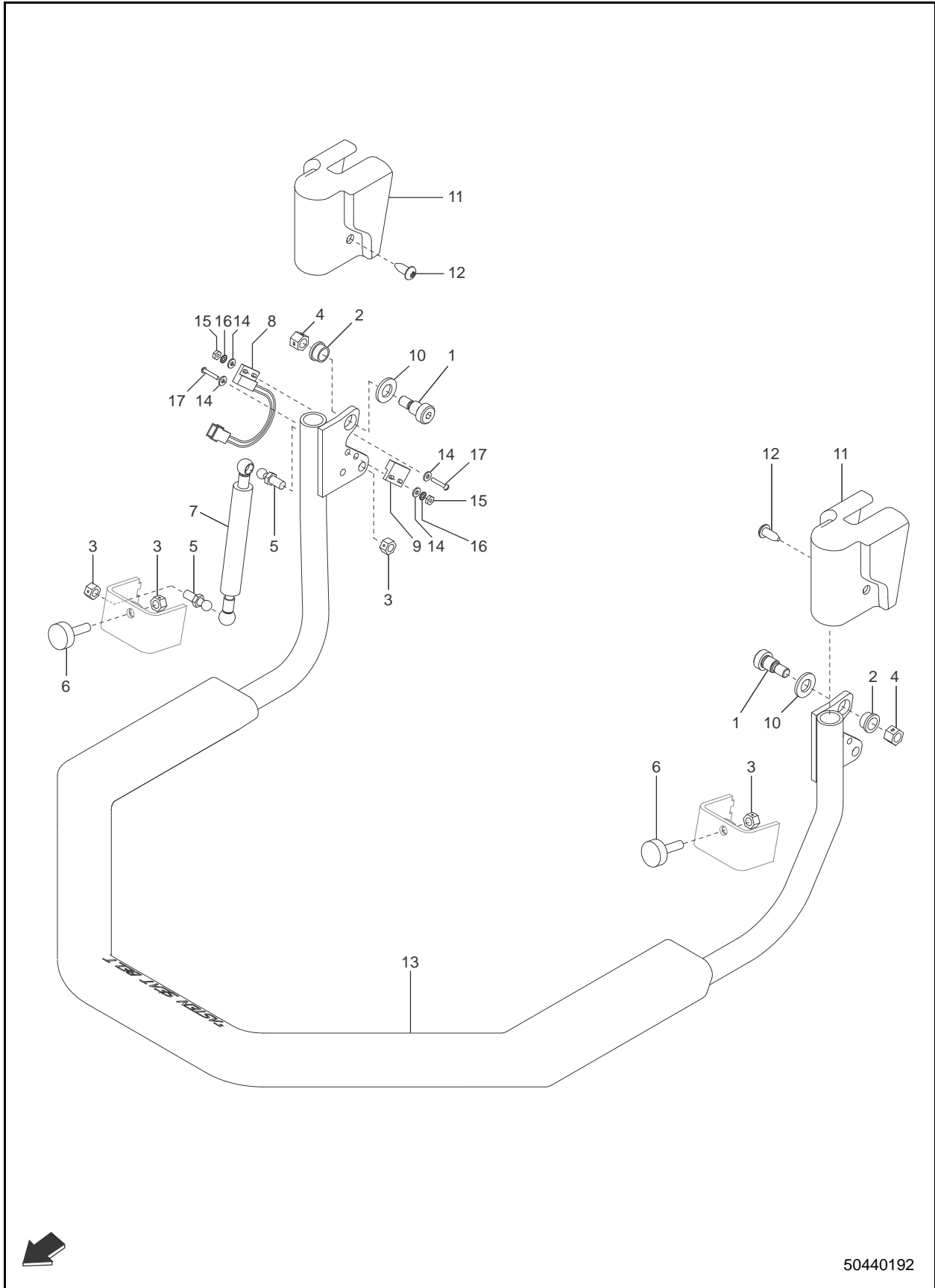
R165 - ROPS/FOPS HEATER COMPONENTS (OPTION)



R165 - ROPS/FOPS HEATER COMPONENTS (OPTION)

Ref.	No.	Part No.	Description	Qty.
	1	076588	CS FL LOCK 3/8X3/4 C5ZY	1
	2	084175	HLN INST #1024 CZY	2
	3	088937	CLAMP/HOSE #64	2
	4	095955	CLAMP/HOSE #10	4
	5	104052	ST-L HB10-MBSPT06	2
	6	137503	LOUVER/ROLL NOZZLE	2
	7	137822	SCREW/TFCH CR #440X1/2 CZY	4
	8	210-19470	LN FL SERR 5/16 CZY	4
	9	210-19533	LN FL CTR 3/8 CFZY	1
	10	271341	CLAMP/HOSE 1.00 X .41 HOLE DOU- BLE	1
	11	50302201	LOUVER/ROUND	3
	12	50302656	HEATER	1
	13	50302975	WDMT/HEATER PLENUM	1
	17	50302992	DUCT/HEATER/LEFT	1
	18	50302994	DUCT/HEATER/RIGHT	1
	19	50303585	DECAL/HOLE/GEHL	3
	20	50303586	DECAL/HOLE/MUSTANG	5
	21	50303587	DECAL/HOLE/GREY	2
	22	50303713	FILTER/FRESH AIR HEATER	1
	23	50303715	HOSE/HEATER INTAKE	1
	24	50303719	HOUSING/HEATER FILTER	1
	25	50303720	COVER/HEATER FILTER HOUSING	1
	26	50303721	LATCH/HEATER FILTER HOUSING	2
	27	50303734	HOSE/HEATER -10 X 43IN	2
	28	50303773	FILTER/HEATER RECIRC	1
	29	50303774	GRILLE/HEATER RECIRC	1
	30	50305331	FOAM/HEATER LOWER	1
	31	50305333	FOAM/HEATER DUCT	1
	32	50305334	FOAM/HEATER BOX	1
	33	50305335	FOAM/HEATER RH	1
	34	50657047	CS FL 1/4X1-1/4 C5ZY	4
	35	650315	SCREW/THWH TC USL 1/4X1/2 CZY	13
	36	651171	SCREW/THM SLT #1024X1/2 C2ZY	2
	37	651307	PHMS CR 1/4X1/2 ZB	10

R165 - ROPS/FOPS RESTRAINT BAR

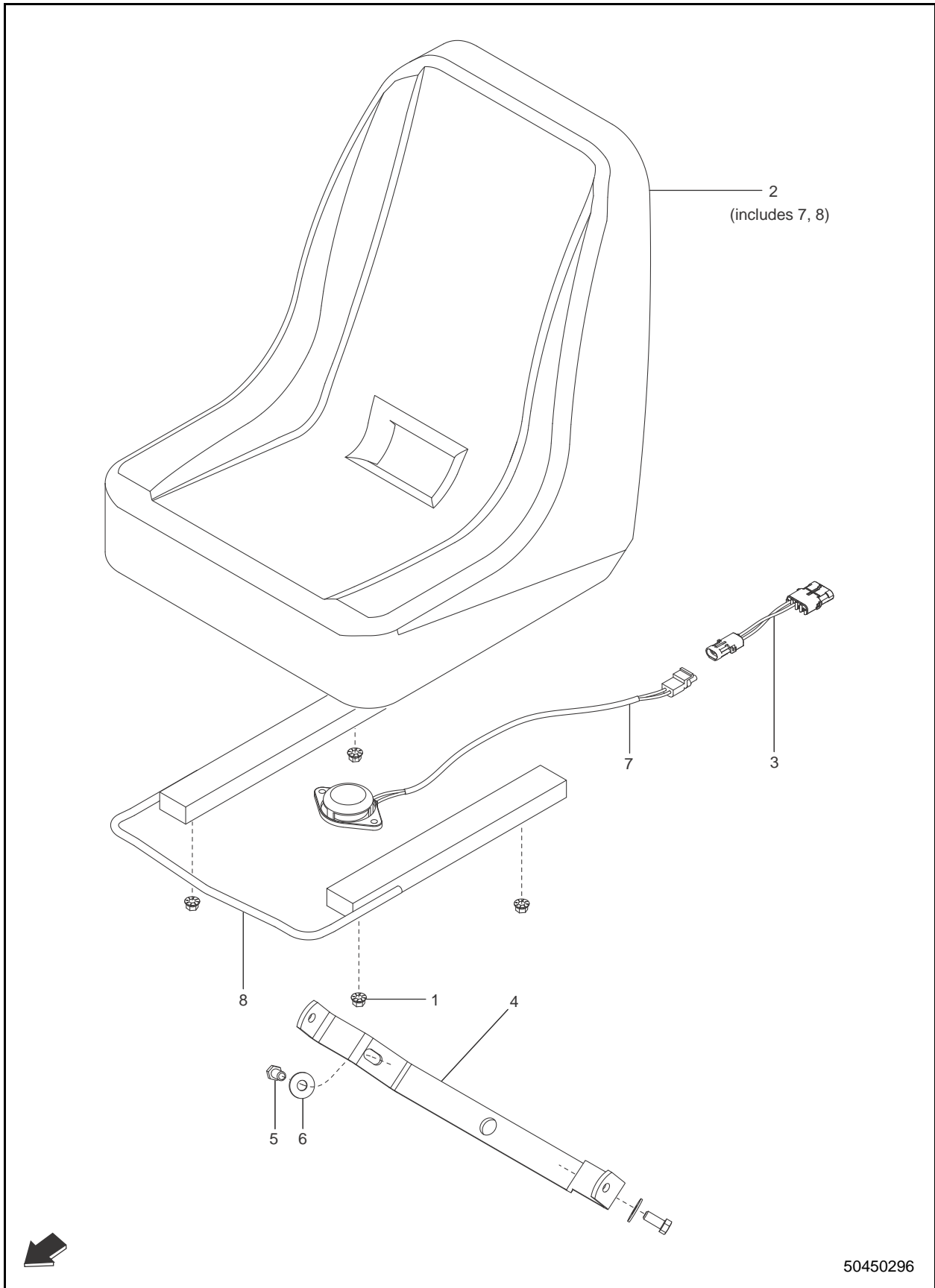


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**R165 - ROPS/FOPS
RESTRAINT BAR**

Ref.	No.	Part No.	Description	Qty.
	1	030-31926	SCREW/SHOULDER 1/2X1/2 8ZY	2
	2	045-31500	BUSHING, OILITE, FLANGED	2
	3	071701	LN 5/16 CBZY	4
	4	071703	LN CTR 3/8 CBZY	2
	5	122485	STUD/BALL 10MM	2
	6	131913	BUMPER	2
	7	170-35071	GAS SPRING, SEAT BAR	1
	8	193156	SWITCH/PROXIMITY	1
	9	193157	MAGNET/SWICH ACTUATOR	1
	10	400-32526	WASHER, SPECIAL	2
	11	50301991	COVER/HINGE/RIGHT	2
	12	50350776	BHSCS TR TRILOBE TRX 5/16X3/4 C8OCG	2
	13	50353452	BAR/RESTRAINT W/PAD	1
	14	650848	FW #6 AZY	8
	15	651213	HN MS #540 CZY	4
	16	651314	LW EXT T #6 AZY	4
	17	651575	RHMS SLT #540X3/4 CZY	4

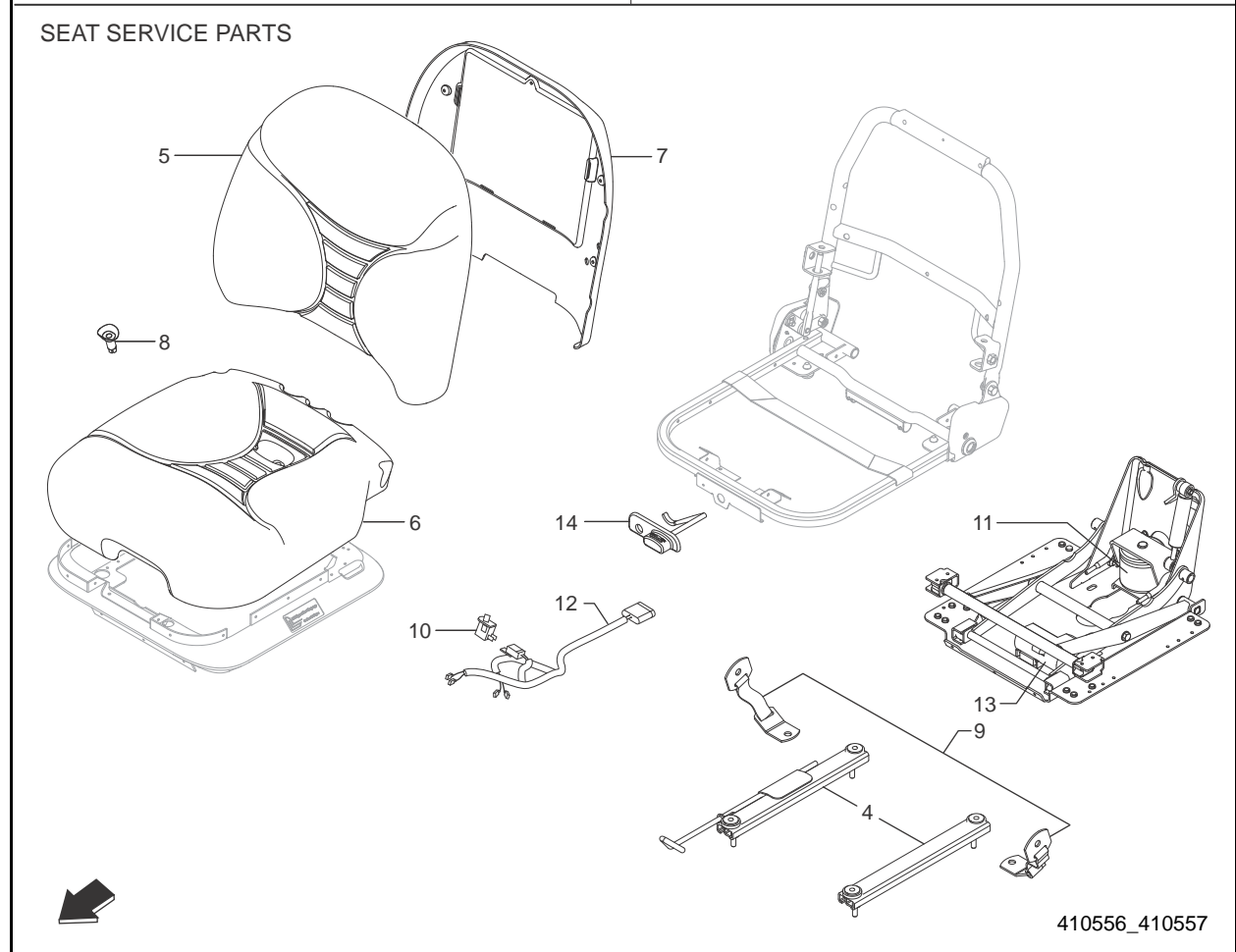
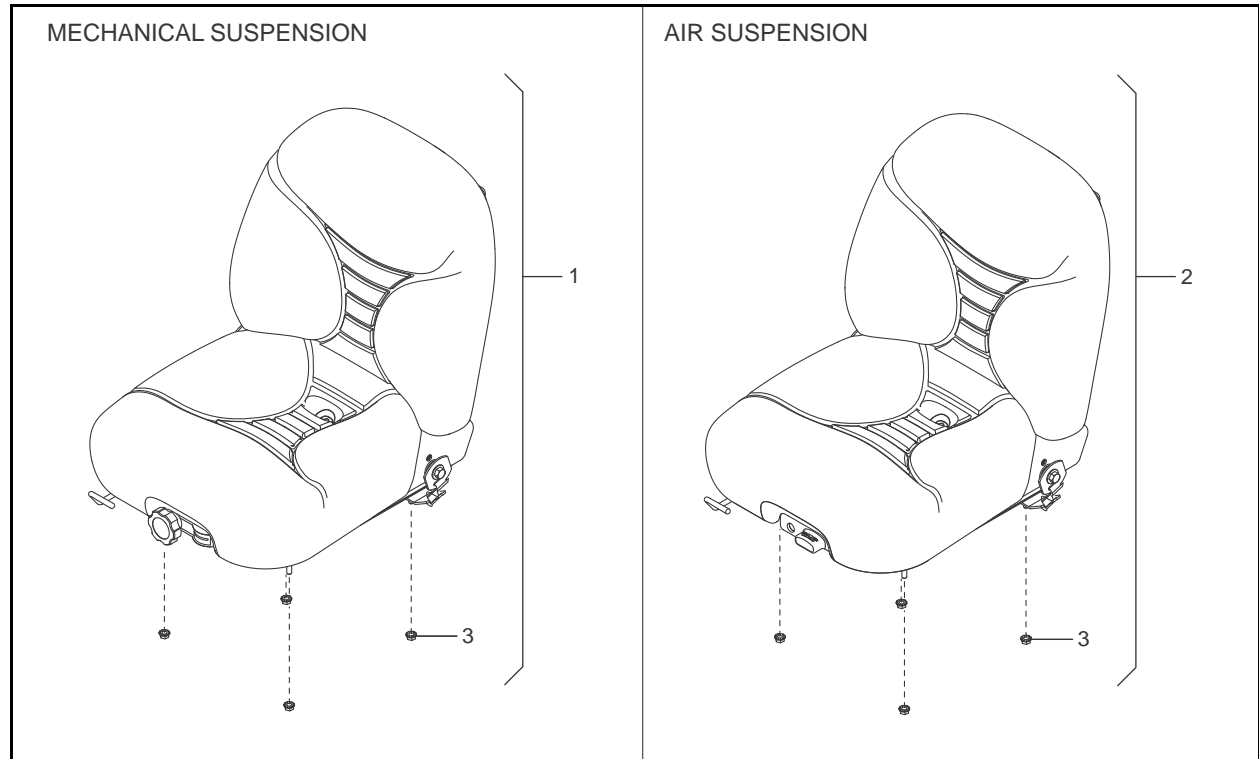
R165 - ROPS/FOPS NON-SUSPENSION SEAT



**R165 - ROPS/FOPS
NON-SUSPENSION SEAT**

Ref.	No.	Part No.	Description	Qty.
	1	137836	HN WLF M8-1.25 PL	4
	2	184017	SEAT/STANDARD (includes 7, 8)	1
	3	50352750	HARNES/JUMPER STD SEAT	1
	4	50354630	BRACKET/SEAT BELT	1
	5	650630	CS 7/16X1 F5ZY	2
	6	654046	FW 7/16 AWZY	2
	7	184034	SUSP/SWITCH/HARNES	1
	8	184036	LATCHING ADJ/BAR	1

R165 - ROPS/FOPS MECHANICAL & AIR SUSPENSION SEATS

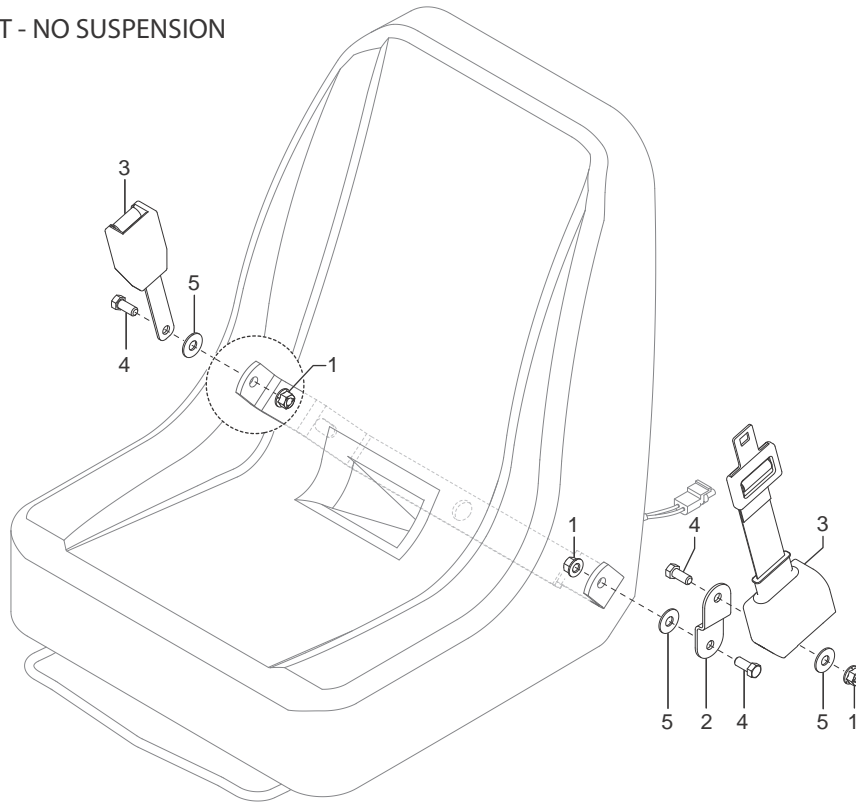


**R165 - ROPS/FOPS
MECHANICAL & AIR SUSPENSION SEATS**

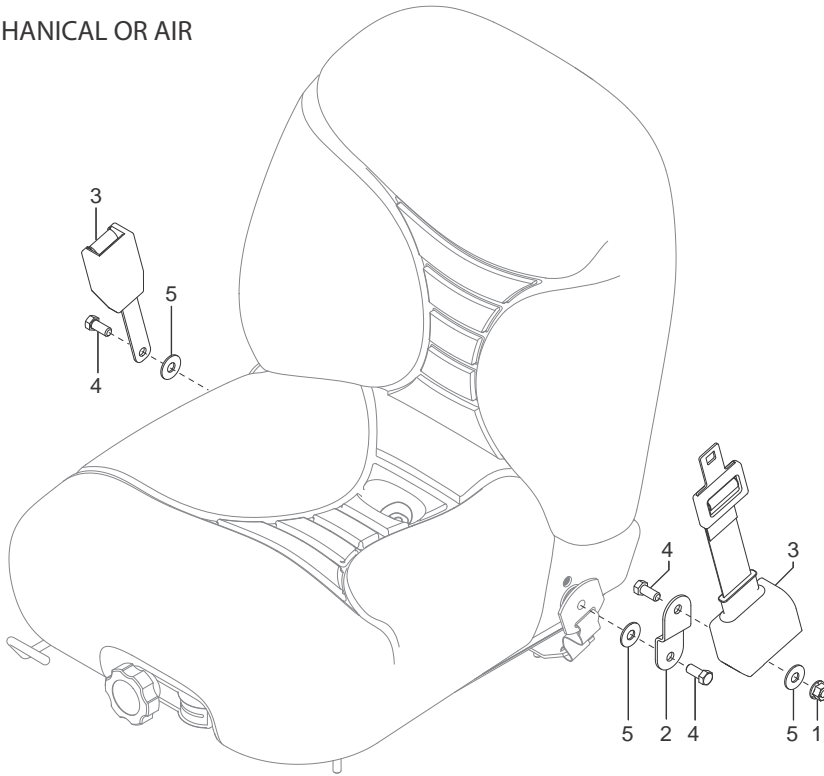
Ref.	No.	Part No.	Description	Qty.
1	242514		SEAT/MECH SUSPENSION (includes Ref. No. 3)	1
2	242629		SEAT/AIR SUSPENSION (includes Ref. No. 3)	1
3	210-19470		LN FL SERR 5/16 CZY (quantity is per seat)	4
4	243956		SLIDE KIT	1
5	243958		BACK CUSHION KIT/VINYL	1
6	243959		SEAT CUSHION KIT/VINYL	1
7	243960		BACK PANEL KIT	1
8	243961		WATER DRAIN	1
9	243965		TETHER KIT	1
10	243966		SAFETY SWITCH KIT	1
11	243955		SPRING AND SADDLE KIT (Air Suspension seat only)	1
12	243962		WIRE HARNESS/AIR SEAT (Air Suspension seat only)	1
13	243963		COMPRESSOR KIT (Air Suspension seat only)	1
14	243964		AIR VALVE KIT (Air Suspension seat only)	1

R165 - ROPS/FOPS SEAT BELT OPTIONS

STANDARD SEAT - NO SUSPENSION



SEAT WITH MECHANICAL OR AIR
SUSPENSION



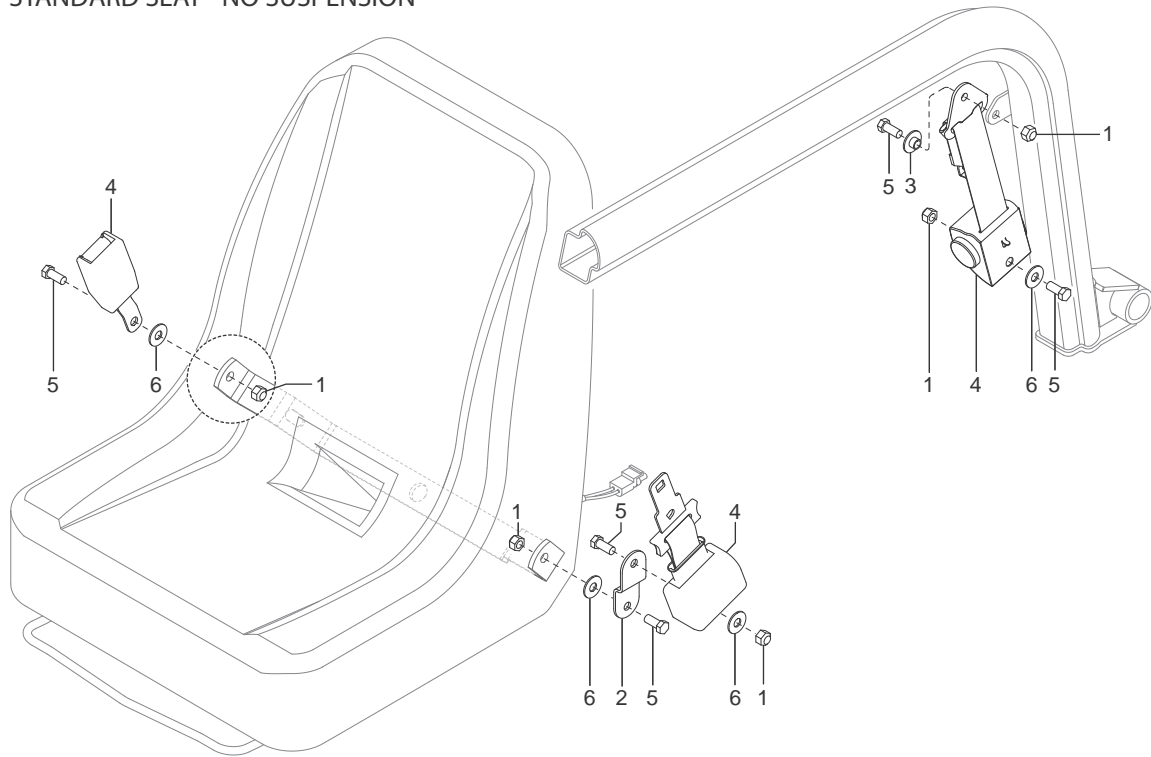
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**R165 - ROPS/FOPS
SEAT BELT OPTIONS**

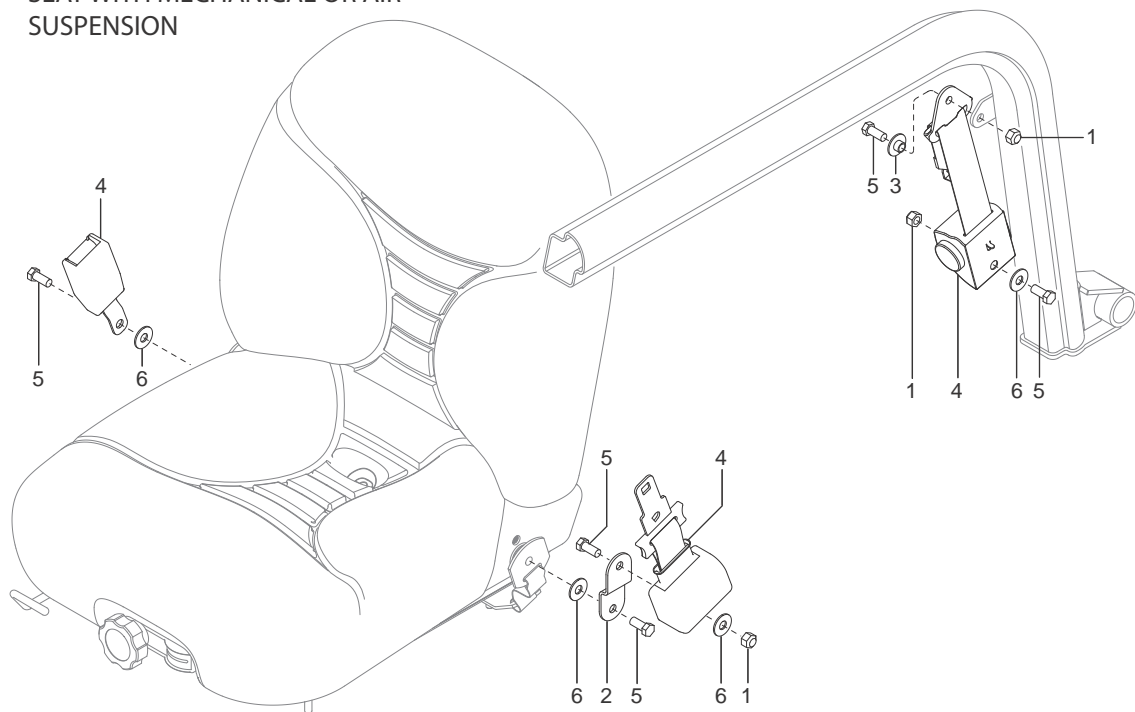
Ref.	No.	Part No.	Description	Qty.
1	081371		HN FL T-LOCK 7/16 FFZY (Standard Seat-no suspension)	3
	081371		HN FL T-LOCK 7/16 FFZY (Seat with mechanical or air suspension)	1
2	184007		TAB-RETRACTOR MOUNT	1
3	420-36086		SEAT BELT ASSY - 2 INCH	1
	420-36087		SEAT BELT ASSY - 3 INCH	1
4	650630		CS 7/16X1 F5ZY	3
5	654046		FW 7/16 AWZY	3

R165 - ROPS/FOPS THREE-POINT RESTRAINT OPTIONS

STANDARD SEAT - NO SUSPENSION



SEAT WITH MECHANICAL OR AIR
SUSPENSION



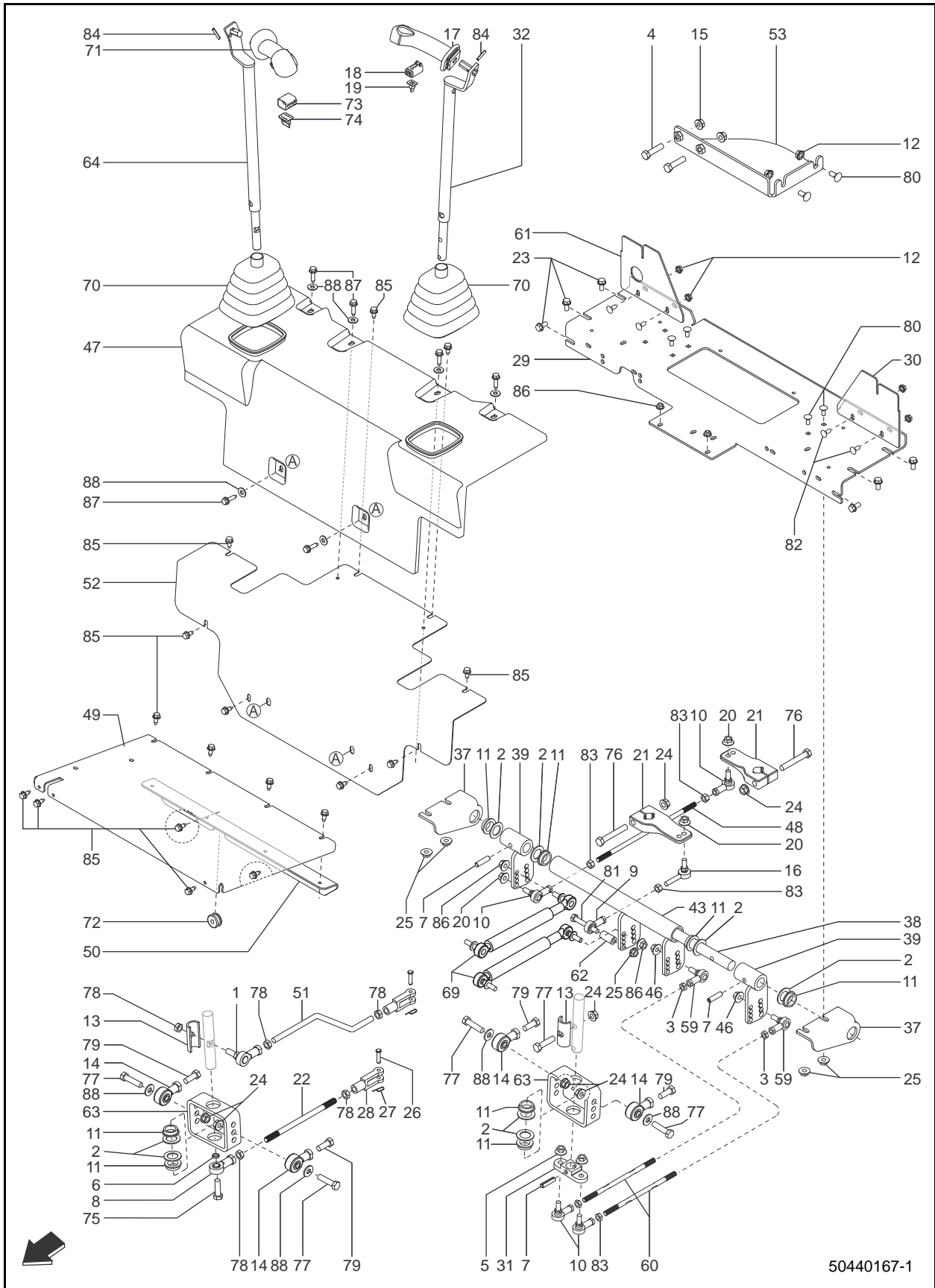
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R165 - ROPS/FOPS THREE-POINT RESTRAINT OPTIONS

Ref.	No.	Part No.	Description	Qty.
	1	081371	HN FL T-LOCK 7/16 FFZY (Standard Seat-no suspension)	5
		081371	HN FL T-LOCK 7/16 FFZY (Seat with mechanical or air suspension)	3
	2	184007	TAB-RETRACTOR MOUNT	1
	3	186834	SPACER/3PT D-RING MTG	1
	4	243284	3-PT RESTRAINT ASSY 2-IN.	1
		243289	3-PT RESTRAINT ASSY 3-IN.	1
	5	650630	CS 7/16X1 F5ZY	5
	6	654046	FW 7/16 AWZY	5

R165 - CONTROLS

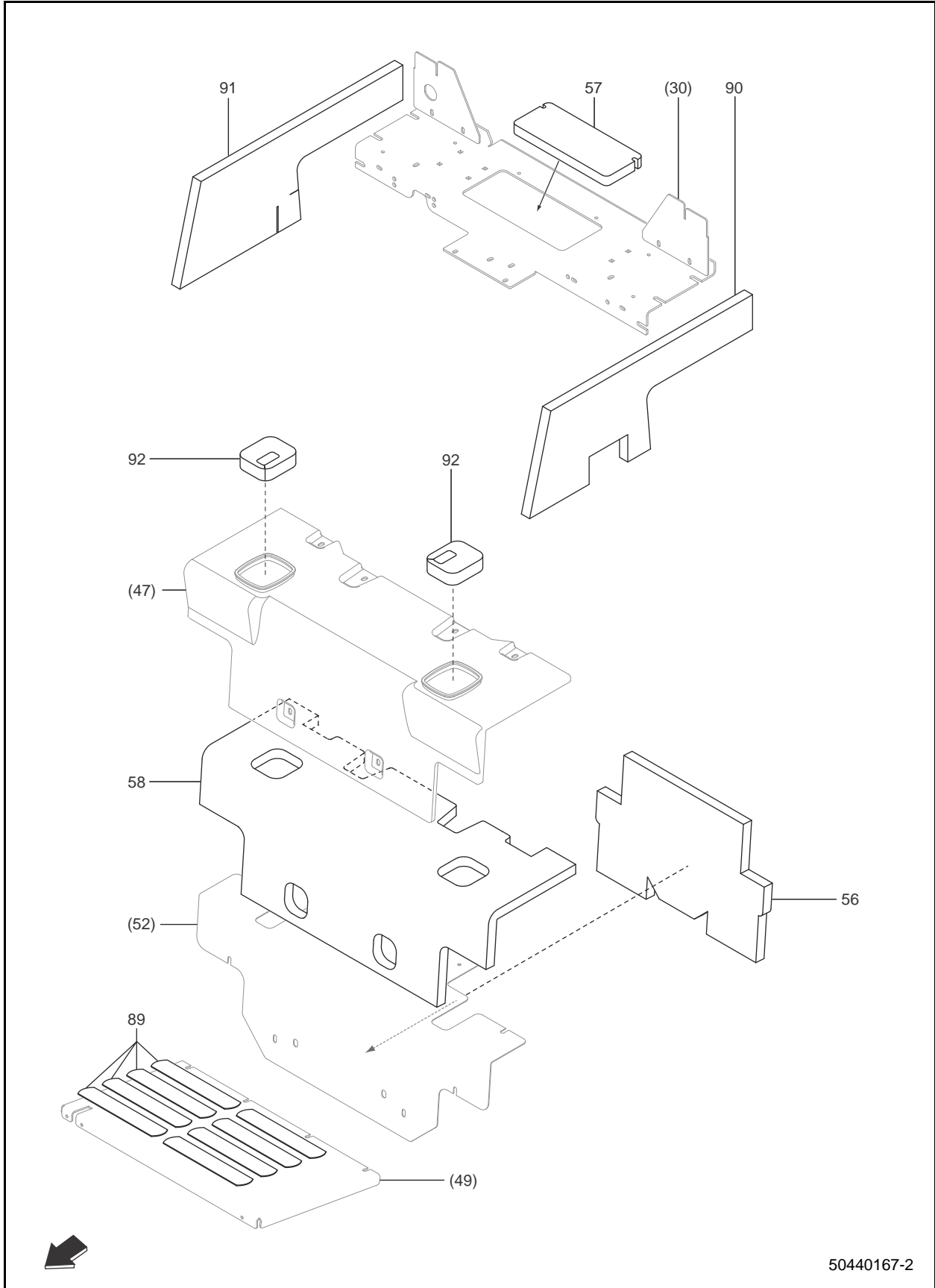
T-BAR CONTROLS (1 OF 2)



R165 - CONTROLS T-BAR CONTROLS (1 OF 2)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	054202	BALL JOINT	1	59	50303685	ROD END/STUDDDED/.375/LH	2
2	056937	FW 25/32 ZY	8	60	50303687	ROD/THREADED/.312/.375	2
3	070068	HN 3/8 F2 LH	2	61	50303716	PLATE/CORNER/CAN PLUG	1
4	071381	CS 3/8X1-1/2 C5ZY SP	2	62	50303717	SPACER	1
5	071702	LN 5/16 FBZY	2	63	50350605	PIVOT/CONTROL LEVER	2
6	074868	SPACER	1	64	50351675	LEVER CONTROL/RH	1
7	075288	PIN/SPRING 5/16X1-1/4	3	69	50351692	DAMPER/SELF-CENTERING	2
8	079039	ROD/END FEMALE THRD RIGHT	1	70	50351757	BOOT/RUBBER T-BAR	2
9	079042	ROD/END FEMALE THRD RIGHT	1	71	50351902	GRIP/CTRL MODULATION	1
10	079216	STUD FEMALE ROD END .312	4	72	50352741	GROMMET .38ID .375GW 1.00GD SPLT	1
11	128316	BEARING/BRONZE	8	73	50352787	PLUG/DT06-8S (RT grip wiring)	1
12	131842	LN FL SPIRALOCK 5/16 CZY	6	74	50352788	LOCKING WEDGE/W8S (RT grip wiring)	1
13	134327	T-BAR STOP	2	75	650491	CS 3/8X1-1/4 C5ZY	1
14	134792	ROD END ELASTOMERIC 3/8	4	76	650492	CS 3/8X2-1/2 C5 ZY	2
15	134852	LN FL SPIRALOCK 3/8 CZY	2	77	650533	CS 3/8X1-1/2 C5ZY	5
16	135787	ROD END MALE .312	1	78	653039	HJN 3/8 F2ZY	5
17	183147	KAWASAKI GRIP	1	79	650634	CS 3/8X1 F5ZY	4
18	184210	DEUTSCH 4PIN PLUG (LT grip wiring)	1	80	650687	CB 5/16X3/4 C5ZY	6
19	184211	DEUTSCH 4 PIN WEDGE (LT grip wiring)	1	81	650725	CS 5/16X2-1/4 C5ZY	1
20	187002	5/16-24 REG FLG TOP LOCK	3	82	650969	CB SN 5/16X5/8 C5ZY	4
21	189508	CONTROL ARM	2	83	651062	HN 5/16 F2Z	5
22	193710	ROD/CONTROL/LIFT	1	84	651467	PIN/SPRING M5X30	2
23	195138	THWH TR 3/8 X 3/4 CZY	6	85	651648	HWHTRS TAP/R 5/16X3/4 CZY	17
24	210-19533	LN FL CTR 3/8 CFZY	7	86	651711	LN FL CTR M8-1.25 C8 ZY DIN6927	4
25	210-31017	LN FL CTR 5/16 CFZY	5	87	651718	HWHTRS TAP/R 5/16X1-1/4 CZY	6
26	220-28739	PIN, CLEVIS	2	88	654004	FW 5/16 AWZY	10
27	220-32680	PIN, CLIP, RUE #8	2	89	121030	STRIP/NON-SKID SURFACE	8
28	250-32609	YOKE	2	90	50307116	FOAM/LARGE/LEFT	1
29	50301445	PLATE/CROSSMEMBER	1	91	50307117	FOAM/LARGE/RIGHT	1
30	50301475	PLATE/CORNER	1	92	50307130	FOAM/CONTROL OPENING	2
31	50301606	BAR/DRIVE	1				
32	50301608	WDMT/LEVER/LH CONTROL	1				
37	50301636	BRACKET/MOUNT	2				
38	50301694	SHAFT/PIVOT	1				
39	50301829	WDMT/PIVOT ARM	2				
43	50301831	WDMT/PIVOT ARM	1				
46	50302066	HN FL TOP 3/8 FGZY	2				
47	50302106	COVER/SOUND PAD	1				
48	50302389	THREADED ROD	1				
49	50302433	PLATE/FLOOR	1				
50	50302434	BRACKET/FLOOR PLATE	1				
51	50302544	ROD/THREADED/BENT	1				
52	50302609	COVER/CONTROLS/T-BAR	1				
53	50303128	WDMT/STOP/CTRL	1				
56	50303488	PAD/KICKPLATE/BEHIND	1				
57	50303490	PAD/KICKPLATE/UNDER	1				
58	50303643	PAD/KICKPLATE BACKER	1				

R165 - CONTROLS
T-BAR CONTROLS (2 OF 2)

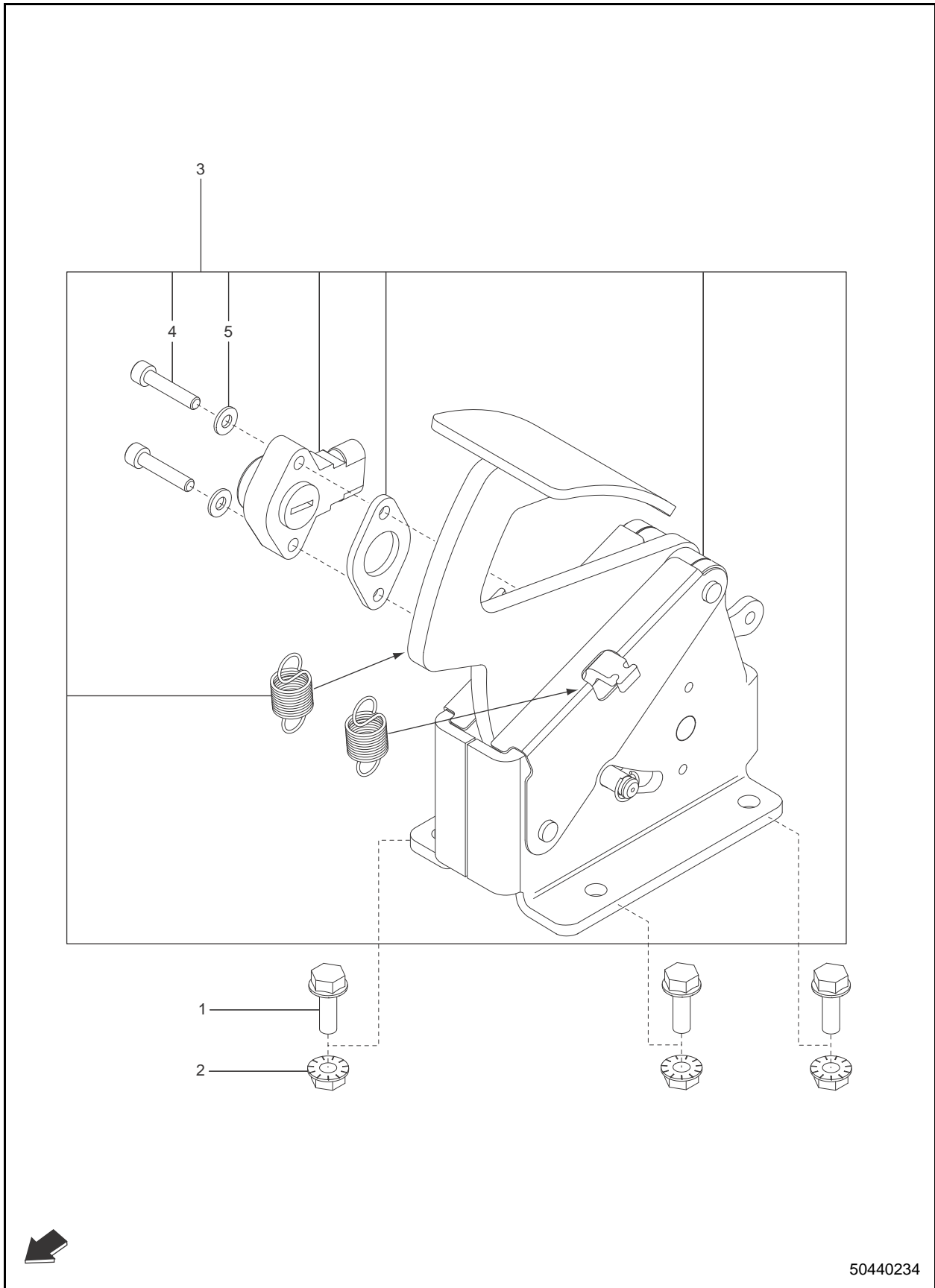


R165 - CONTROLS T-BAR CONTROLS (2 OF 2)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	054202	BALL JOINT	1	59	50303685	ROD END/STUDDDED/.375/LH	2
2	056937	FW 25/32 ZY	8	60	50303687	ROD/THREADED/.312/.375	2
3	070068	HN 3/8 F2 LH	2	61	50303716	PLATE/CORNER/CAN PLUG	1
4	071381	CS 3/8X1-1/2 C5ZY SP	2	62	50303717	SPACER	1
5	071702	LN 5/16 FBZY	2	63	50350605	PIVOT/CONTROL LEVER	2
6	074868	SPACER	1	64	50351675	LEVER CONTROL/RH	1
7	075288	PIN/SPRING 5/16X1-1/4	3	69	50351692	DAMPER/SELF-CENTERING	2
8	079039	ROD/END FEMALE THRD RIGHT	1	70	50351757	BOOT/RUBBER T-BAR	2
9	079042	ROD/END FEMALE THRD RIGHT	1	71	50351902	GRIP/CTRL MODULATION	1
10	079216	STUD FEMALE ROD END .312	4	72	50352741	GROMMET .38ID .375GW 1.00GD SPLT	1
11	128316	BEARING/BRONZE	8	73	50352787	PLUG/DT06-8S (RT grip wiring)	1
12	131842	LN FL SPIRALOCK 5/16 CZY	6	74	50352788	LOCKING WEDGE/W8S (RT grip wiring)	1
13	134327	T-BAR STOP	2	75	650491	CS 3/8X1-1/4 C5ZY	1
14	134792	ROD END ELASTOMERIC 3/8	4	76	650492	CS 3/8X2-1/2 C5 ZY	2
15	134852	LN FL SPIRALOCK 3/8 CZY	2	77	650533	CS 3/8X1-1/2 C5ZY	5
16	135787	ROD END MALE .312	1	78	653039	HJN 3/8 F2ZY	5
17	183147	KAWASAKI GRIP	1	79	650634	CS 3/8X1 F5ZY	4
18	184210	DEUTSCH 4PIN PLUG (LT grip wiring)	1	80	650687	CB 5/16X3/4 C5ZY	6
19	184211	DEUTSCH 4 PIN WEDGE (LT grip wiring)	1	81	650725	CS 5/16X2-1/4 C5ZY	1
20	187002	5/16-24 REG FLG TOP LOCK	3	82	650969	CB SN 5/16X5/8 C5ZY	4
21	189508	CONTROL ARM	2	83	651062	HN 5/16 F2Z	5
22	193710	ROD/CONTROL/LIFT	1	84	651467	PIN/SPRING M5X30	2
23	195138	THWH TR 3/8 X 3/4 CZY	6	85	651648	HWHTRS TAP/R 5/16X3/4 CZY	17
24	210-19533	LN FL CTR 3/8 CFZY	7	86	651711	LN FL CTR M8-1.25 C8 ZY DIN6927	4
25	210-31017	LN FL CTR 5/16 CFZY	5	87	651718	HWHTRS TAP/R 5/16X1-1/4 CZY	6
26	220-28739	PIN, CLEVIS	2	88	654004	FW 5/16 AWZY	10
27	220-32680	PIN, CLIP, RUE #8	2	89	121030	STRIP/NON-SKID SURFACE	8
28	250-32609	YOKE	2	90	50307116	FOAM/LARGE/LEFT	1
29	50301445	PLATE/CROSSMEMBER	1	91	50307117	FOAM/LARGE/RIGHT	1
30	50301475	PLATE/CORNER	1	92	50307130	FOAM/CONTROL OPENING	2
31	50301606	BAR/DRIVE	1				
32	50301608	WDMT/LEVER/LH CONTROL	1				
37	50301636	BRACKET/MOUNT	2				
38	50301694	SHAFT/PIVOT	1				
39	50301829	WDMT/PIVOT ARM	2				
43	50301831	WDMT/PIVOT ARM	1				
46	50302066	HN FL TOP 3/8 FGZY	2				
47	50302106	COVER/SOUND PAD	1				
48	50302389	THREADED ROD	1				
49	50302433	PLATE/FLOOR	1				
50	50302434	BRACKET/FLOOR PLATE	1				
51	50302544	ROD/THREADED/BENT	1				
52	50302609	COVER/CONTROLS/T-BAR	1				
53	50303128	WDMT/STOP/CTRL	1				
56	50303488	PAD/KICKPLATE/BEHIND	1				
57	50303490	PAD/KICKPLATE/UNDER	1				
58	50303643	PAD/KICKPLATE BACKER	1				

R165 - CONTROLS

FOOT THROTTLE - ELECTRICAL

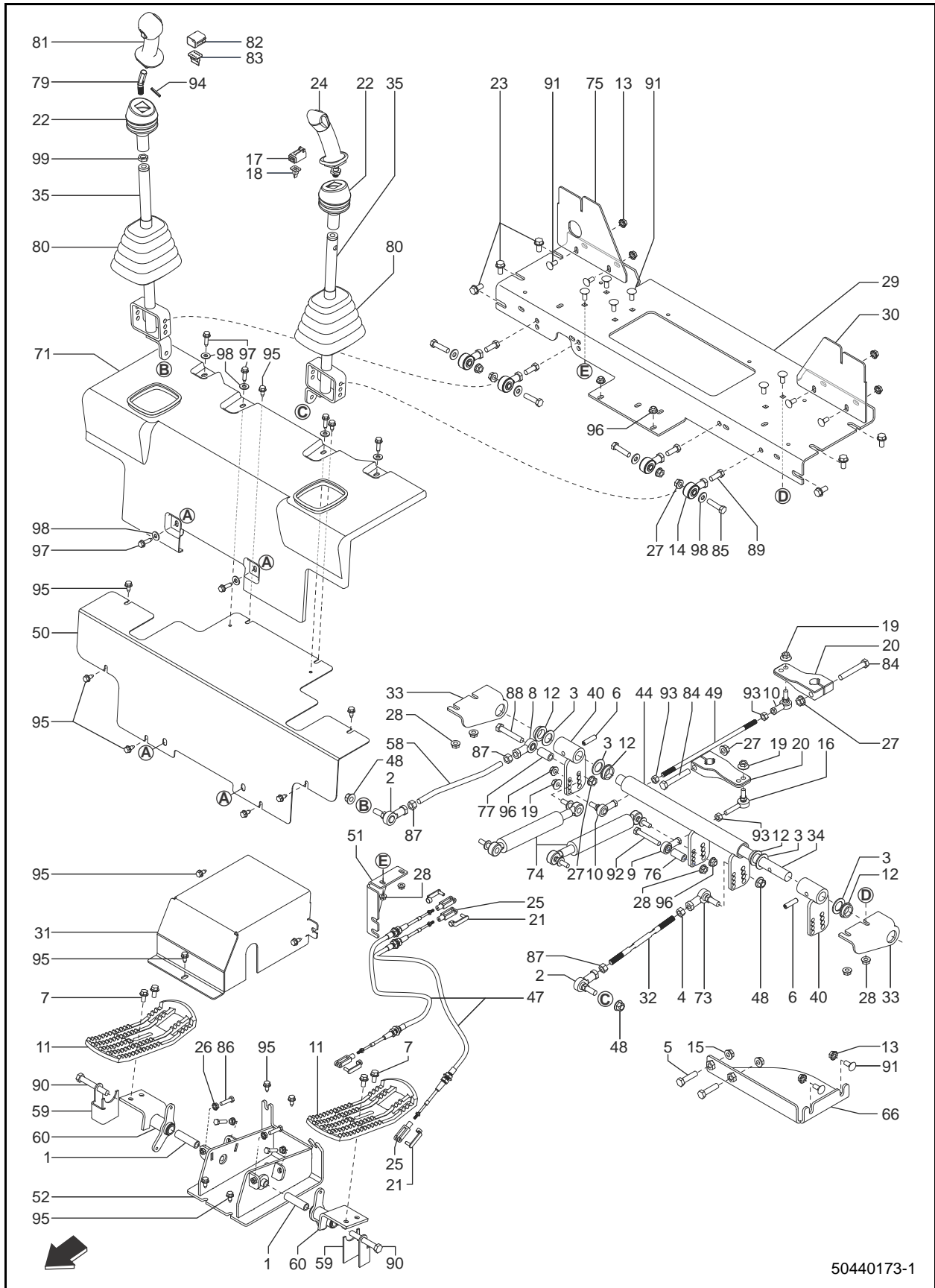


**R165 - CONTROLS
FOOT THROTTLE - ELECTRICAL**

Ref.	No.	Part No.	Description	Qty.
	1	072916	CS FL LOCK 1/4X3/4 C5ZY	3
	2	210-19469	LN FL SERR 1/4 CZY	3
	3	50302357	FOOT THROTTLE/ELECTRIC	1
	4	651751	SHCS M5-0.8X25 C8.8 OCB DIN912	2
	5	651809	FW M5 ZB DIN125	2

R165 - CONTROLS

HAND-FOOT CONTROLS (1 OF 2)



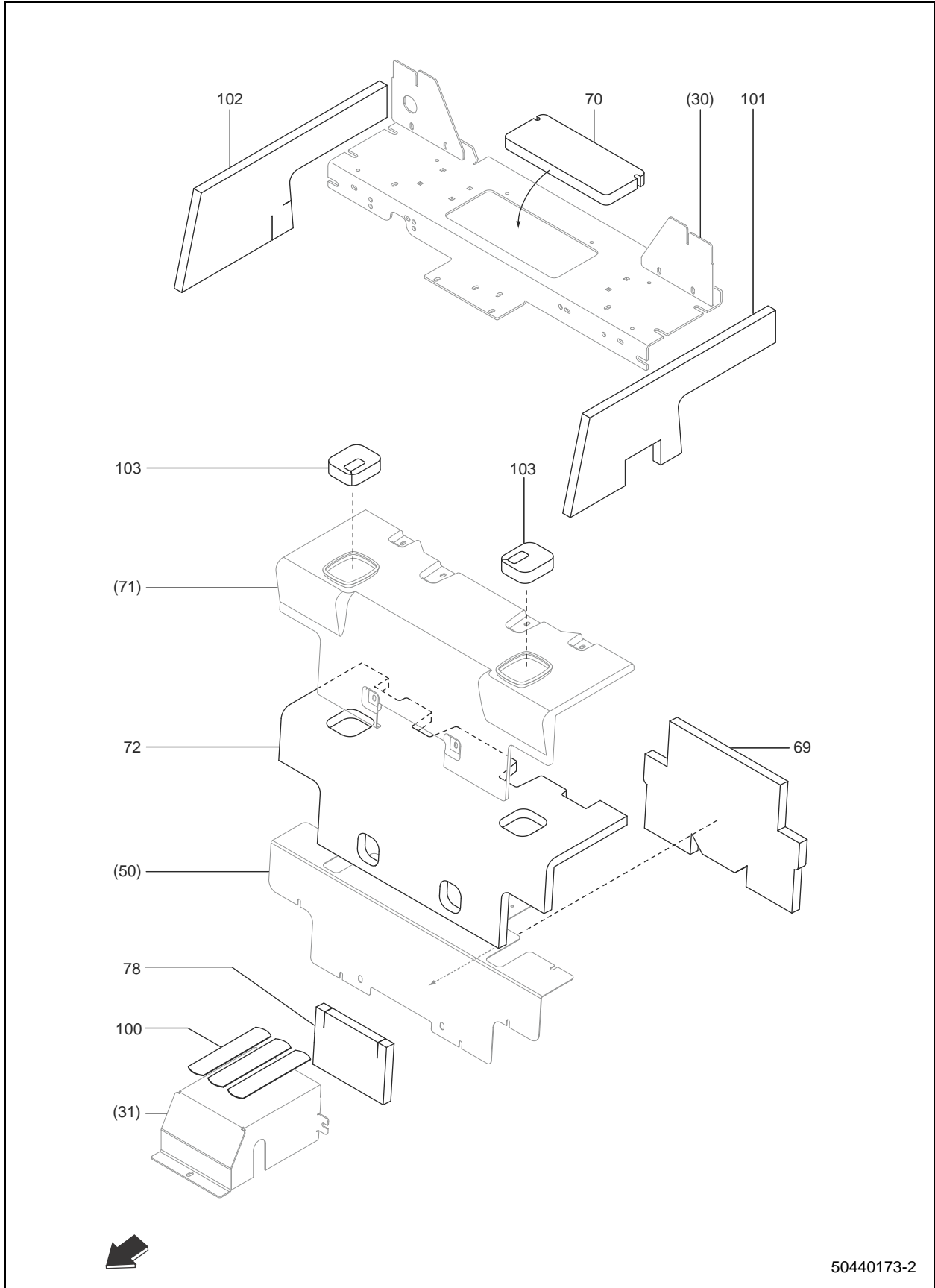
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R165 - CONTROLS HAND-FOOT CONTROLS (1 OF 2)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	045-31469	BUSHING, OILITE	2	69	50303488	PAD/KICKPLATE/BEHIND	1
2	054202	BALL JOINT	2	70	50303490	PAD/KICKPLATE/UNDER	1
3	056937	FW 25/32 ZY	4	71	50303555	COVER/SOUND PAD/H-F	1
4	070068	HN 3/8 F2 LH	1	72	50303643	PAD/KICKPLATE BACKER	1
5	071381	CS 3/8X1-1/2 C5ZY SP	2	73	50303685	ROD END/STUDDDED/.375/LH	1
6	075288	PIN/SPRING 5/16X1-1/4	2	74	50303704	CENTERING DEVICE/HD	2
7	076588	CS FL LOCK 3/8X3/4 C5ZY	4	75	50303716	PLATE/CORNER/CAN PLUG	1
8	079039	ROD/END FEMALE THRD RIGHT	1	76	50303717	SPACER	1
9	079042	ROD/END FEMALE THRD RIGHT	1	77	50304846	SPACER	1
10	079216	STUD FEMALE ROD END .312	2	78	50305509	FOAM/FOOT CONTROL COVER/ LARGE	1
11	090-30303	FOOT PEDAL	2	79	50351653	LEVER/JOYSTICK GRIP RH	1
12	128316	BEARING/BRONZE	4	80	50351757	BOOT/RUBBER T-BAR	2
13	131842	LN FL SPIRALOCK 5/16 CZY	6	81	50351902	GRIP/CTRL MODULATION	1
14	134792	ROD END ELASTOMERIC 3/8	4	82	50352787	PLUG/DT06-8S (RT grip wiring)	1
15	134852	LN FL SPIRALOCK 3/8 CZY	2	83	50352788	LOCKING WEDGE/W8S (RT grip wir- ing)	1
16	135787	ROD END MALE .312	1	84	650492	CS 3/8X2-1/2 C5 ZY	2
17	184210	DEUTSCH 4PIN PLUG (LT grip wiring)	1	85	650533	CS 3/8X1-1/2 C5ZY	4
18	184211	DEUTSCH 4 PIN WEDGE (LT grip wir- ing)	1	86	650545	CS 5/16X1-1/4 C5ZY	4
19	187002	5/16-24 REG FLG TOP LOCK	3	87	653039	HJN 3/8 F2ZY	3
20	189508	CONTROL ARM	2	88	650579	CS 3/8X1-3/4 C5ZY	1
21	191798	PIN/SPRING CLEVIS .25	4	89	650634	CS 3/8X1 F5ZY	4
22	194044	H-F PILOT BOOT	2	90	650650	CS 1/2X3-1/2 C5ZY	2
23	195138	THWH TR 3/8 X 3/4 CZY	6	91	650687	CB 5/16X3/4 C5ZY	12
24	195164	KAWASAKI GRIP W/STUD	1	92	650725	CS 5/16X2-1/4 C5ZY	1
25	200-32287	YOKE	4	93	651062	HN 5/16 F2Z	3
26	210-19470	LN FL SERR 5/16 CZY	4	94	651467	PIN/SPRING M5X30	1
27	210-19533	LN FL CTR 3/8 CFZY	7	95	651648	HWHTRS TAP/R 5/16X3/4 CZY	15
28	210-31017	LN FL CTR 5/16 CFZY	7	96	651711	LN FL CTR M8-1.25 C8 ZY DIN6927	4
29	50301445	PLATE/CROSSMEMBER	1	97	651718	HWHTRS TAP/R 5/16X1-1/4 CZY	6
30	50301475	PLATE/CORNER	1	98	654004	FW 5/16 AWZY	10
31	50301507	COVER/CONTROLS	1	99	656066	HJN M14-2 C4 ZY DIN439	1
32	50301630	ROD/THREADED	1	100	121030	STRIP/NON-SKID SURFACE	3
33	50301636	BRACKET/MOUNT	2	101	50307116	FOAM/LARGE/LEFT	1
34	50301694	SHAFT/PIVOT	1	102	50307117	FOAM/LARGE/RIGHT	1
35	50301801	WDMT/CONTROL LEVER/H-F	2	103	50307130	FOAM/CONTROL OPENING	2
40	50301829	WDMT/PIVOT ARM	2				
44	50301831	WDMT/PIVOT ARM	1				
47	50301841	CABLE HAND FOOT TILT	2				
48	50302066	HN FL TOP 3/8 FGZY	3				
49	50302389	THREADED ROD	1				
50	50302399	COVER/CONTROLS/H-F	1				
51	50302470	BRACKET/CABLE MOUNT	1				
52	50302488	WDMT/FOOT PEDAL MOUNT	1				
58	50302545	ROD/THREADED/BENT	1				
59	50302779	BRACKET/PEDAL SUPPORT	2				
60	50302781	WDMT/PIVOT/PEDAL	2				
66	50303128	WDMT/STOP/CTRL	1				

R165 - CONTROLS

HAND-FOOT CONTROLS (2 OF 2)

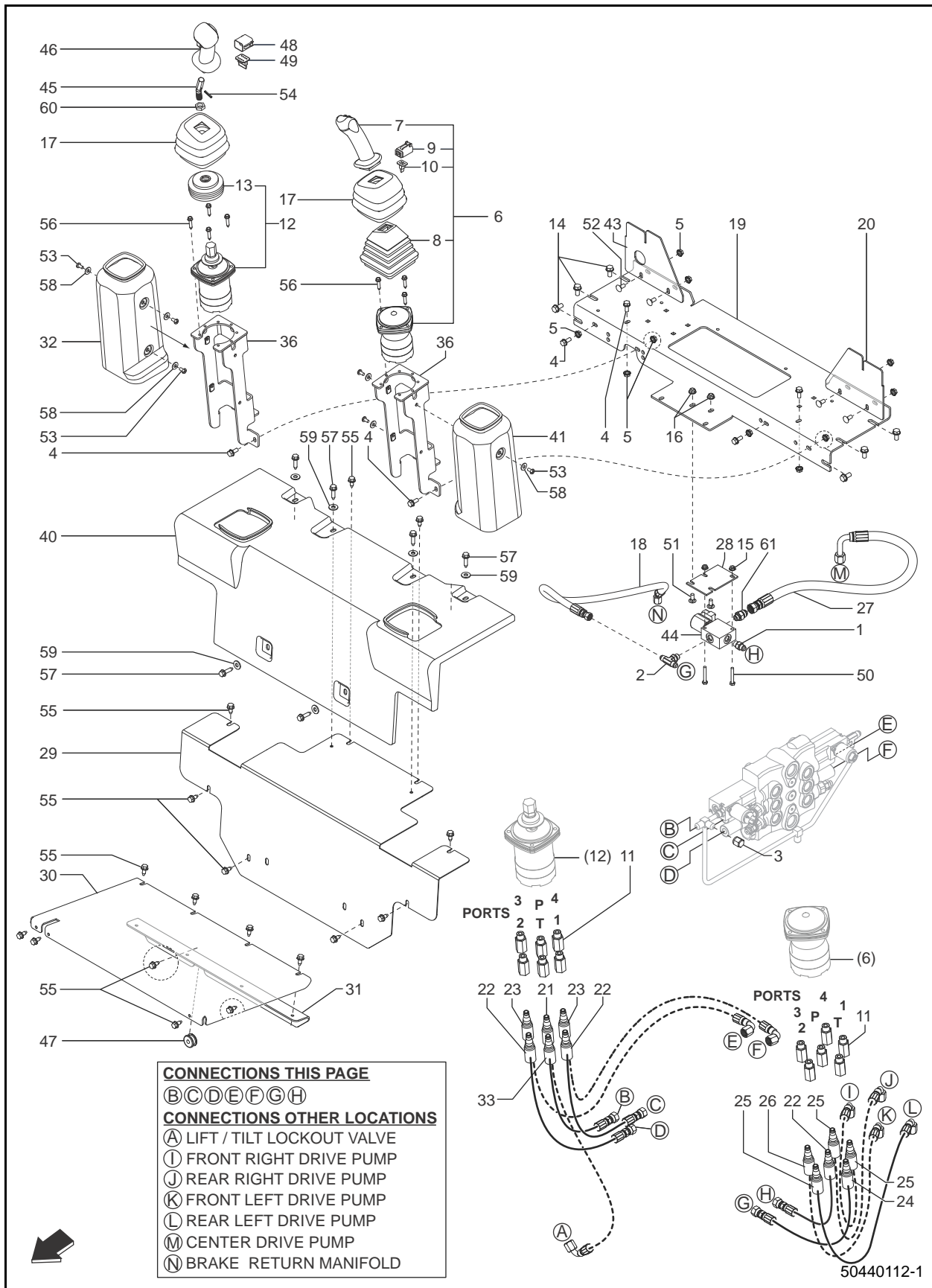


R165 - CONTROLS HAND-FOOT CONTROLS (2 OF 2)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	045-31469	BUSHING, OILITE	2	69	50303488	PAD/KICKPLATE/BEHIND	1
2	054202	BALL JOINT	2	70	50303490	PAD/KICKPLATE/UNDER	1
3	056937	FW 25/32 ZY	4	71	50303555	COVER/SOUND PAD/H-F	1
4	070068	HN 3/8 F2 LH	1	72	50303643	PAD/KICKPLATE BACKER	1
5	071381	CS 3/8X1-1/2 C5ZY SP	2	73	50303685	ROD END/STUDDDED/.375/LH	1
6	075288	PIN/SPRING 5/16X1-1/4	2	74	50303704	CENTERING DEVICE/HD	2
7	076588	CS FL LOCK 3/8X3/4 C5ZY	4	75	50303716	PLATE/CORNER/CAN PLUG	1
8	079039	ROD/END FEMALE THRD RIGHT	1	76	50303717	SPACER	1
9	079042	ROD/END FEMALE THRD RIGHT	1	77	50304846	SPACER	1
10	079216	STUD FEMALE ROD END .312	2	78	50305509	FOAM/FOOT CONTROL COVER/ LARGE	1
11	090-30303	FOOT PEDAL	2	79	50351653	LEVER/JOYSTICK GRIP RH	1
12	128316	BEARING/BRONZE	4	80	50351757	BOOT/RUBBER T-BAR	2
13	131842	LN FL SPIRALOCK 5/16 CZY	6	81	50351902	GRIP/CTRL MODULATION	1
14	134792	ROD END ELASTOMERIC 3/8	4	82	50352787	PLUG/DT06-8S (RT grip wiring)	1
15	134852	LN FL SPIRALOCK 3/8 CZY	2	83	50352788	LOCKING WEDGE/W8S (RT grip wir- ing)	1
16	135787	ROD END MALE .312	1	84	650492	CS 3/8X2-1/2 C5 ZY	2
17	184210	DEUTSCH 4PIN PLUG (LT grip wiring)	1	85	650533	CS 3/8X1-1/2 C5ZY	4
18	184211	DEUTSCH 4 PIN WEDGE (LT grip wir- ing)	1	86	650545	CS 5/16X1-1/4 C5ZY	4
19	187002	5/16-24 REG FLG TOP LOCK	3	87	653039	HJN 3/8 F2ZY	3
20	189508	CONTROL ARM	2	88	650579	CS 3/8X1-3/4 C5ZY	1
21	191798	PIN/SPRING CLEVIS .25	4	89	650634	CS 3/8X1 F5ZY	4
22	194044	H-F PILOT BOOT	2	90	650650	CS 1/2X3-1/2 C5ZY	2
23	195138	THWH TR 3/8 X 3/4 CZY	6	91	650687	CB 5/16X3/4 C5ZY	12
24	195164	KAWASAKI GRIP W/STUD	1	92	650725	CS 5/16X2-1/4 C5ZY	1
25	200-32287	YOKE	4	93	651062	HN 5/16 F2Z	3
26	210-19470	LN FL SERR 5/16 CZY	4	94	651467	PIN/SPRING M5X30	1
27	210-19533	LN FL CTR 3/8 CFZY	7	95	651648	HWHTRS TAP/R 5/16X3/4 CZY	15
28	210-31017	LN FL CTR 5/16 CFZY	7	96	651711	LN FL CTR M8-1.25 C8 ZY DIN6927	4
29	50301445	PLATE/CROSSMEMBER	1	97	651718	HWHTRS TAP/R 5/16X1-1/4 CZY	6
30	50301475	PLATE/CORNER	1	98	654004	FW 5/16 AWZY	10
31	50301507	COVER/CONTROLS	1	99	656066	HJN M14-2 C4 ZY DIN439	1
32	50301630	ROD/THREADED	1	100	121030	STRIP/NON-SKID SURFACE	3
33	50301636	BRACKET/MOUNT	2	101	50307116	FOAM/LARGE/LEFT	1
34	50301694	SHAFT/PIVOT	1	102	50307117	FOAM/LARGE/RIGHT	1
35	50301801	WDMT/CONTROL LEVER/H-F	2	103	50307130	FOAM/CONTROL OPENING	2
40	50301829	WDMT/PIVOT ARM	2				
44	50301831	WDMT/PIVOT ARM	1				
47	50301841	CABLE HAND FOOT TILT	2				
48	50302066	HN FL TOP 3/8 FGZY	3				
49	50302389	THREADED ROD	1				
50	50302399	COVER/CONTROLS/H-F	1				
51	50302470	BRACKET/CABLE MOUNT	1				
52	50302488	WDMT/FOOT PEDAL MOUNT	1				
58	50302545	ROD/THREADED/BENT	1				
59	50302779	BRACKET/PEDAL SUPPORT	2				
60	50302781	WDMT/PIVOT/PEDAL	2				
66	50303128	WDMT/STOP/CTRL	1				

R165 - CONTROLS

JOYSTICK CONTROLS (1 OF 2)



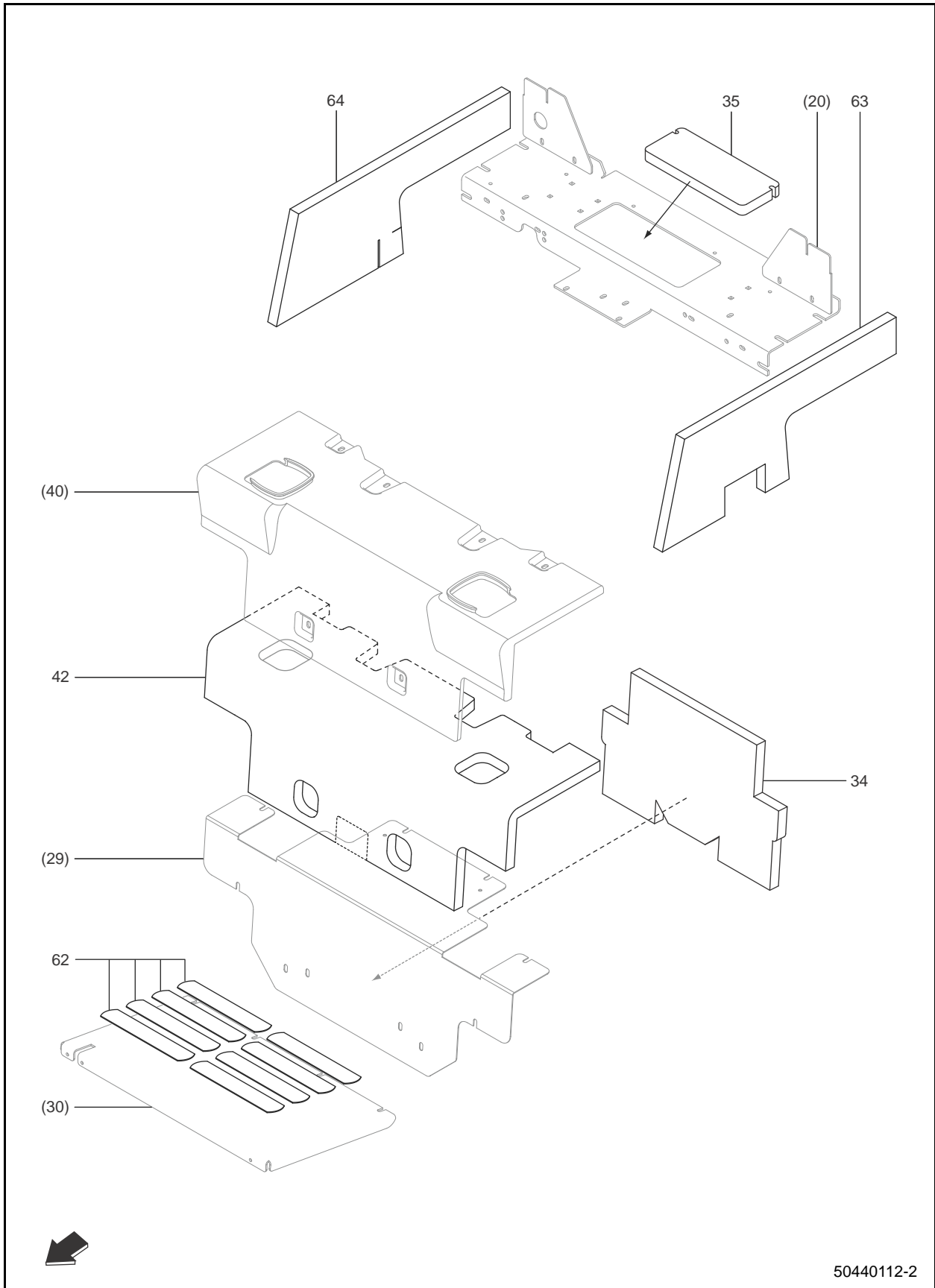
R165 - CONTROLS

JOYSTICK CONTROLS (1 OF 2)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	054994	ST MJ06-MORB06	1	49	50352788	LOCKING WEDGE/W8S	1
2	055981	TEE BR MJ06-MJ06-MAORB06	1	50	650419	CS 1/4X1-3/4 C5ZY	2
3	080556	CAP FJ06	1	51	650687	CB 5/16X3/4 C5ZY	2
4	081380	CS FL LOCK 5/16X3/4 C5ZY	6	52	650969	CB SN 5/16X5/8 C5ZY	4
5	131842	LN FL SPIRALOCK 5/16 CZY	10	53	651307	PHMS CR 1/4X1/2 ZB	6
6	183902	JOYSTICK/KAWASAKI/DRIVE	1	54	651467	PIN/SPRING M5X30	1
7	183147	KAWASAKI GRIP	0	55	651648	HWHTRS TAP/R 5/16X3/4 CZY	17
8	183723	BOOT/JOYSTICK	0	56	651660	HWHTRS TAP/R 1/4X1-1/4 CZY	7
9	184210	DEUTSCH 4PIN PLUG	0	57	651718	HWHTRS TAP/R 5/16X1-1/4 CZY	6
10	184211	DEUTSCH 4 PIN WEDGE	0	58	651807	FW 1/4 AWZB	6
11	189192	ST MORB06-FQL04	12	59	654004	FW 5/16 AWZY	6
12	190270	JOYSTICK/KAWASAKI W/OUT BOOT/ GRIP	1	60	656066	HJN M14-2 C4 ZY DIN439	1
13	191037	BOOT/KAWASAKI JOYSTICK	0	61	072803	ST MJ08-MORB06	1
14	195138	THWH TR 3/8 X 3/4 CZY	6	62	121030	STRIP/NON-SKID SURFACE	8
15	210-19469	LN FL SERR 1/4 CZY	2	63	50307116	FOAM/LARGE/LEFT	1
16	210-19470	LN FL SERR 5/16 CZY	2	64	50307117	FOAM/LARGE/RIGHT	1
17	242520	BOOT/CONTROL VALVE SQ	2				
18	275201	HOSE/ASSY/.38 X 38.00	1				
19	50301445	PLATE/CROSSMEMBER	1				
20	50301475	PLATE/CORNER	1				
21	50302261	HOSE/HYD -04 X 26IN	1				
22	50302262	HOSE/HYD -04 X 19.5IN	3				
23	50302263	HOSE/HYD -04 X 39IN	2				
24	50302264	HOSE/HYD -04 X 21IN	1				
25	50302267	HOSE/HYD -04 X 33IN	3				
26	50302268	HOSE/HYD -04 X 29IN	1				
27	191038	HOSE-MP .50 X 31"	1				
28	50302337	BRACKET/VALVE MOUNT	1				
29	50302432	COVER/CONTROLS/D-JOY	1				
30	50302433	PLATE/FLOOR	1				
31	50302434	BRACKET/FLOOR PLATE	1				
32	50302751	COVER/JOYSTICK/RH	1				
33	50303486	HOSE/HYD -04 X 16IN	1				
34	50303488	PAD/KICKPLATE/BEHIND	1				
35	50303490	PAD/KICKPLATE/UNDER	1				
36	50303494	WDMT/JOYSTICK/TOWER	2				
40	50303551	COVER/SOUND PAD/JOYSTICK	1				
41	50303573	COVER/JOYSTICK/LH	1				
42	50303643	PAD/KICKPLATE BACKER	1				
43	50303716	PLATE/CORNER/CAN PLUG	1				
44	50305164	VALVE/JOYSTICK SUPPLY (see Page 56 for internal components)	1				
45	50351653	LEVER/JOYSTICK GRIP RH	1				
46	50351902	GRIP/CTRL MODULATION	1				
47	50352741	GROMMET .38ID .375GW 1.00GD SPLT	1				
48	50352787	PLUG/DT06-8S	1				

R165 - CONTROLS

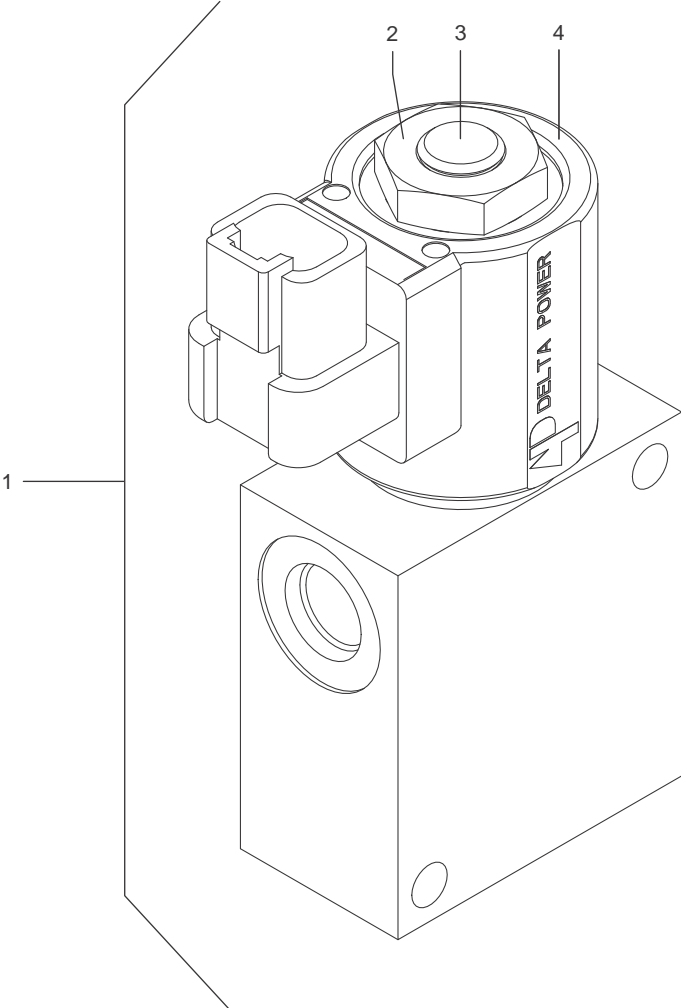
JOYSTICK CONTROLS (2 OF 2)



R165 - CONTROLS JOYSTICK CONTROLS (2 OF 2)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	054994	ST MJ06-MORB06	1	49	50352788	LOCKING WEDGE/W8S	1
2	055981	TEE BR MJ06-MJ06-MAORB06	1	50	650419	CS 1/4X1-3/4 C5ZY	2
3	080556	CAP FJ06	1	51	650687	CB 5/16X3/4 C5ZY	2
4	081380	CS FL LOCK 5/16X3/4 C5ZY	6	52	650969	CB SN 5/16X5/8 C5ZY	4
5	131842	LN FL SPIRALOCK 5/16 CZY	10	53	651307	PHMS CR 1/4X1/2 ZB	6
6	183902	JOYSTICK/KAWASAKI/DRIVE	1	54	651467	PIN/SPRING M5X30	1
7	183147	KAWASAKI GRIP	0	55	651648	HWHTRS TAP/R 5/16X3/4 CZY	17
8	183723	BOOT/JOYSTICK	0	56	651660	HWHTRS TAP/R 1/4X1-1/4 CZY	7
9	184210	DEUTSCH 4PIN PLUG	0	57	651718	HWHTRS TAP/R 5/16X1-1/4 CZY	6
10	184211	DEUTSCH 4 PIN WEDGE	0	58	651807	FW 1/4 AWZB	6
11	189192	ST MORB06-FQL04	12	59	654004	FW 5/16 AWZY	6
12	190270	JOYSTICK/KAWASAKI W/OUT BOOT/ GRIP	1	60	656066	HJN M14-2 C4 ZY DIN439	1
13	191037	BOOT/KAWASAKI JOYSTICK	0	61	072803	ST MJ08-MORB06	1
14	195138	THWH TR 3/8 X 3/4 CZY	6	62	121030	STRIP/NON-SKID SURFACE	8
15	210-19469	LN FL SERR 1/4 CZY	2	63	50307116	FOAM/LARGE/LEFT	1
16	210-19470	LN FL SERR 5/16 CZY	2	64	50307117	FOAM/LARGE/RIGHT	1
17	242520	BOOT/CONTROL VALVE SQ	2				
18	275201	HOSE/ASSY/.38 X 38.00	1				
19	50301445	PLATE/CROSSMEMBER	1				
20	50301475	PLATE/CORNER	1				
21	50302261	HOSE/HYD -04 X 26IN	1				
22	50302262	HOSE/HYD -04 X 19.5IN	3				
23	50302263	HOSE/HYD -04 X 39IN	2				
24	50302264	HOSE/HYD -04 X 21IN	1				
25	50302267	HOSE/HYD -04 X 33IN	3				
26	50302268	HOSE/HYD -04 X 29IN	1				
27	191038	HOSE-MP .50 X 31"	1				
28	50302337	BRACKET/VALVE MOUNT	1				
29	50302432	COVER/CONTROLS/D-JOY	1				
30	50302433	PLATE/FLOOR	1				
31	50302434	BRACKET/FLOOR PLATE	1				
32	50302751	COVER/JOYSTICK/RH	1				
33	50303486	HOSE/HYD -04 X 16IN	1				
34	50303488	PAD/KICKPLATE/BEHIND	1				
35	50303490	PAD/KICKPLATE/UNDER	1				
36	50303494	WDMT/JOYSTICK/TOWER	2				
40	50303551	COVER/SOUND PAD/JOYSTICK	1				
41	50303573	COVER/JOYSTICK/LH	1				
42	50303643	PAD/KICKPLATE BACKER	1				
43	50303716	PLATE/CORNER/CAN PLUG	1				
44	50305164	VALVE/JOYSTICK SUPPLY (see Page 56 for internal components)	1				
45	50351653	LEVER/JOYSTICK GRIP RH	1				
46	50351902	GRIP/CTRL MODULATION	1				
47	50352741	GROMMET .38ID .375GW 1.00GD SPLT	1				
48	50352787	PLUG/DT06-8S	1				

R165 - CONTROLS
SOLENOID VALVE 50305164

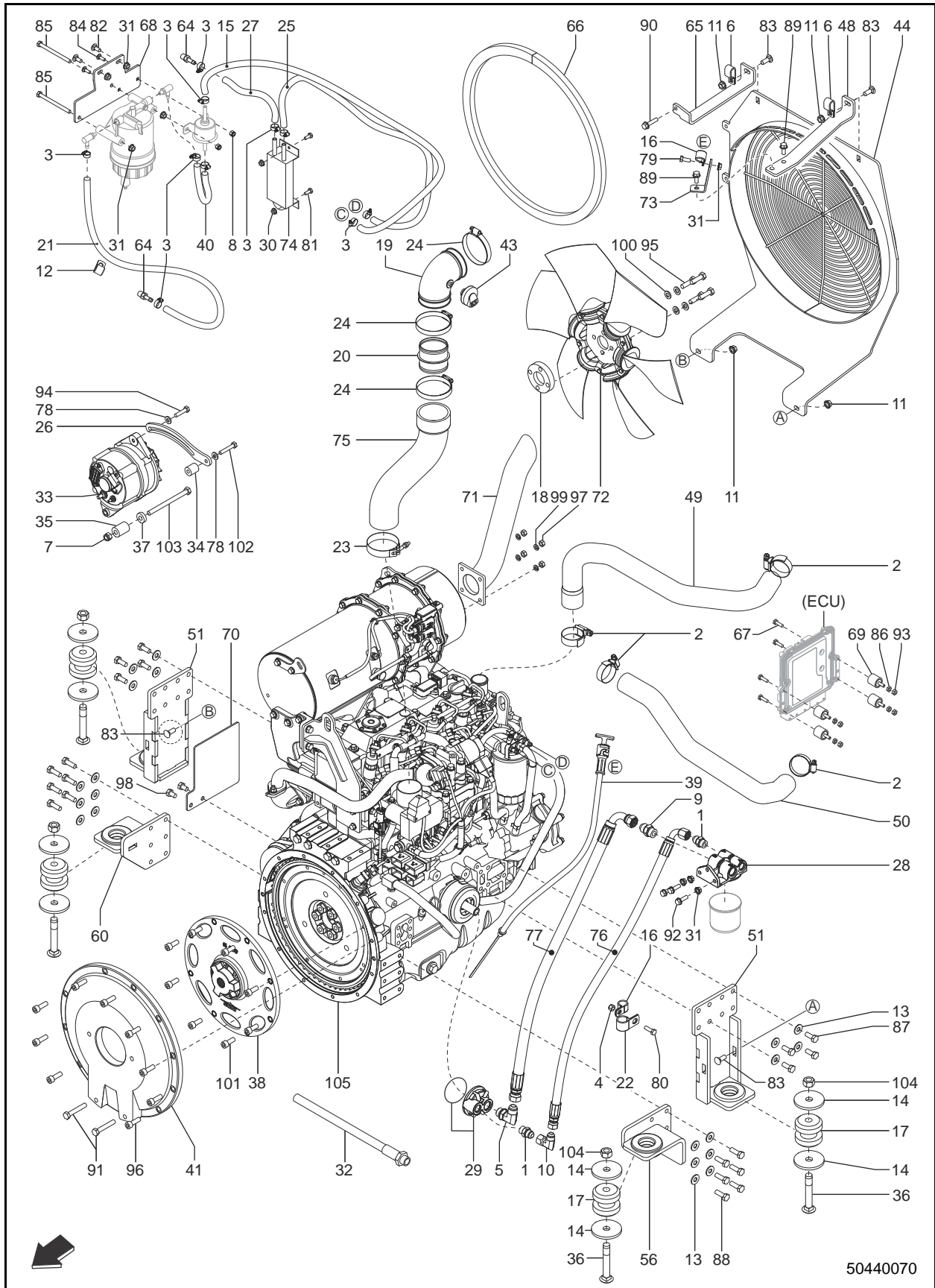


50305164

**R165 - CONTROLS
SOLENOID VALVE 50305164**

Ref.	No.	Part No.	Description	Qty.
1	50305164		VALVE/JOYSTICK SUPPLY	1
2	244272		NUT/SEALING VALVE SPOOL	1
3	50352380		CARTRIDGE	1
4	243249		COIL/12 VDC	1

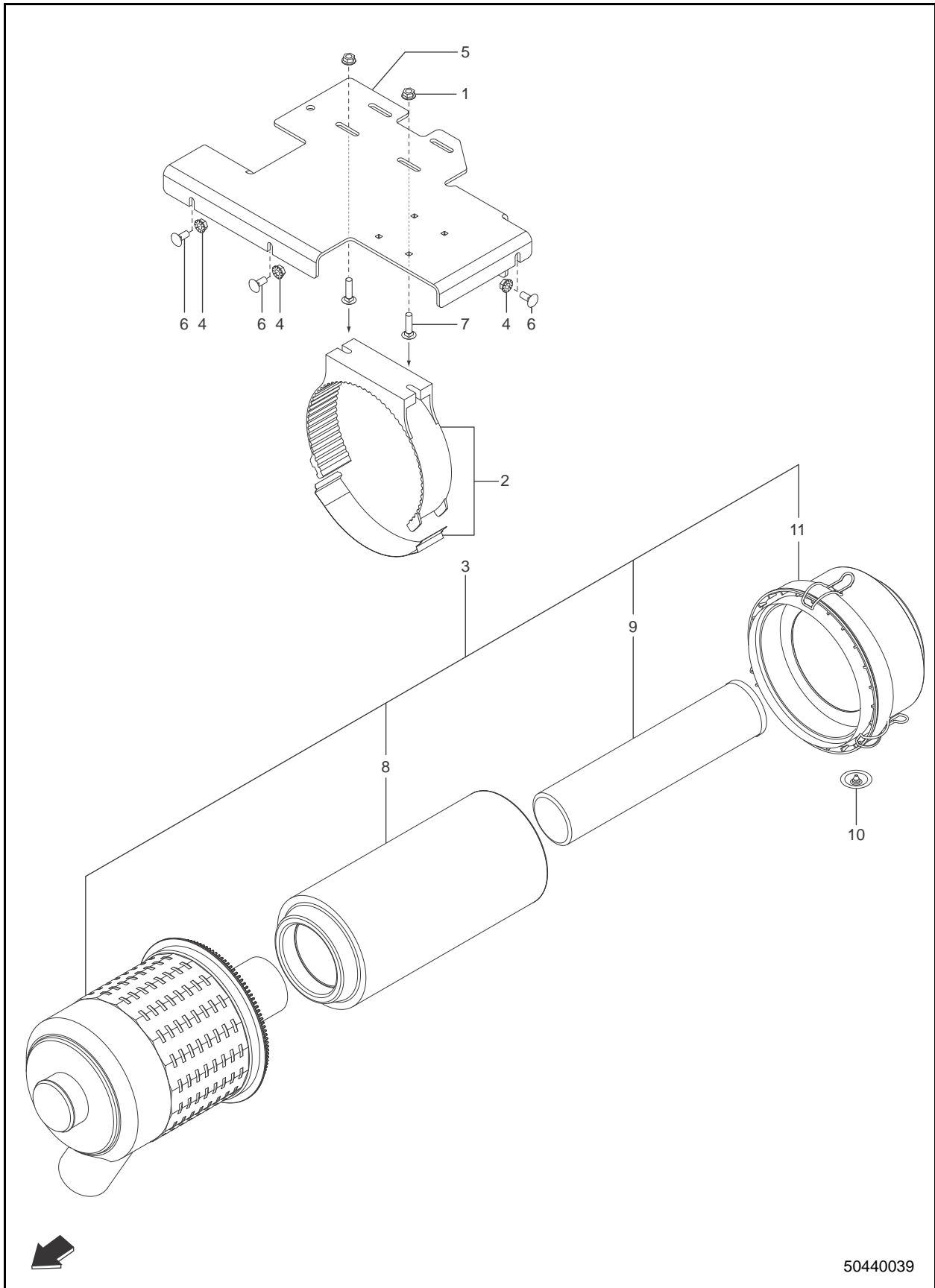
R165 - ENGINE ENGINE



R165 - ENGINE ENGINE

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	054626	ST MJ08-MORB08	2	50	50300582	HOSE/LOWER RAD	1
2	061946	CLAMP/HOSE #24	4	51	50300638	WDMT/ENGINE MOUNT	2
3	062023	CLAMP/HOSE #05 M	10	56	50301171	WDMT/ENGINE MOUNT	1
4	064260	HLN INST 5/16 CZY	1	60	50301172	WDMT/ENGINE MOUNT	1
5	067761	90 MJ10-MAORB10	1	64	50301450	ST HB05-MP04 SS	2
6	067880	CLAMP/HOSE .50 X .41 HOLE DOU- BLE	2	65	50301682	BRKT/SHROUD	1
7	071246	LN INST M10-1.50 C9 ZY DIN6924	1	66	50301734	SEAL/FOAM	1
8	071401	HLN INST 1/4 CZY	2	67	50301816	CS 1/4X7/8 C5ZY SP	4
9	072580	ST MJ10-MORB10	1	68	50302989	PLATE/FUEL PUMP	1
10	088442	90 MJ08-FJS08	1	69	50303047	ISOLATOR/1.00 X 1.00 NEOPRENE	4
11	090666	LN FL SERR 3/8 CZY	4	70	50303660	PLATE/HEAT SHIELD	1
12	128007	CLAMP/HOSE .62 X .41 HOLE	1	71	50304274	TUBE/EXHAUST	1
13	132707	FW 3/8 HT ZY	20	72	50306023	FAN/1Z/6BLADE/20PITCH	1
14	135427	WASHER ZY	8	73	50351380	DIPSTICK BRACKET LONG	1
15	136220	HOSE/FUEL 5/16 X 44	"1	74	50351523	COOLER/FUEL	1
16	136226	CLAMP/HOSE .75 X .41 HOLE	2	75	50352156	HOSE/MOLDED AIR FILTER	1
17	137063	ISOLATOR -11 RED-WHITE	4	76	50352309	HOSE/.50 X 35.00	1
18	138636	SPACER/FAN YANMAR	1	77	50352310	HOSE/.63 X 34.50	1
19	184099	ELBOW 90/W/INDICATOR TAP	1	78	612604	FW M8	2
20	184278	COUPLING-INTAKE HOSE	1	79	650486	CS 5/16X3/4 C5ZY	1
21	184289	HOSE/FUEL 5/16 X 36.5	1	80	650487	CS 5/16X1 C5ZY	1
22	184560	CLAMP/HOSE .94 X .53 HOLE	1	81	650663	CS 1/4X5/8 C5ZY	2
23	186906	CLAMP/T-BOLT 3.00	1	82	650687	CB 5/16X3/4 C5ZY	2
24	187581	CLAMP/HOSE #44 LINER	3	83	650704	CB 3/8X1 C5ZY	4
25	187604	HOSE/FUEL/5/16	1	84	650758	CB 1/4X3/4 C5ZY	2
26	193569	ALTERNATOR BRACKET	1	85	650814	CS 5/16X4 C5ZY	2
27	193620	HOSE/FUEL/.31 X 6.75	1	86	651270	HJN 1/4 C2ZY	4
28	193971	MOUNT/FILTER	1	87	651394	CS M10-1.5X25 C10.9 ZY DIN933	8
29	194068	ADAPTER/FILTER	1	88	651395	CS M10-1.5X30 C10.9 ZY DIN933	12
	191651	O-RING 230 N70	1	89	651689	CS FL M8-1.25X20 8.8 ZY DIN6921	2
30	210-19469	LN FL SERR 1/4 CZY	2	90	651720	CS FL M8-1.25X35 8.8 ZY DIN6921	1
31	210-19470	LN FL SERR 5/16 CZY	8	91	651773	CS M10-1.5X60 C10.9 ZY DIN931	2
32	240021	HOSE/ASSY/DRAIN	1	92	651799	CS FL 5/16X1 C5ZY	3
33	241459	ALT/LETRIKA/100AMP	1	93	653005	HN 1/4 C2ZY	4
34	241562	SPACER/ALTERNATOR	1	94	656002	CS M8-1.25X35 C8.8 ZY DIN933	1
35	241563	SPACER/ALTERNATOR	1	95	656009	CS M10-1.5X35 C8.8 ZY DIN933	4
36	241605	CB 5/8X4 C5ZY SP	4	96	656045	SHCS M10-1.5X30 C12.9 OCG DIN912	9
37	241932	SPACER/ALTERNATOR	1	97	656048	HN M8-1.25 C8 ZY DIN934	4
38	244365	COUPLER/FLEX	1	98	656090	CS M10-1.5X16 C8.8 ZY DIN933	2
39	244465	ASSY/DIPSTICK/ENGINE OIL/YAN- MAR	1	99	656110	LW M8 ZY DIN127	4
40	244955	HOSE/FUEL 5/16 X 8.00	1	100	656133	FW M10 ZY DIN125	4
41	245012	HOUSING/FLYWHEEL	1	101	656141	SHCS M10-1.5X25 C12.9 OCG DIN912	8
43	272299	INDICATOR/SERVICE	1	102	656154	CS M8-1.25X45 C8.8 ZY DIN931	1
44	275493	WDMT/FAN SHROUD	1	103	656173	CS M10-1.5X130 C8.8 ZY DIN931	1
48	50300553	BRKT/SHROUD	1	104	L50081	HN 5/8 C5ZY	4
49	50300581	HOSE/UPPER RAD	1	105	50303219	ENG/052KW/YAN/4TNV98C-NMS2/T4	1

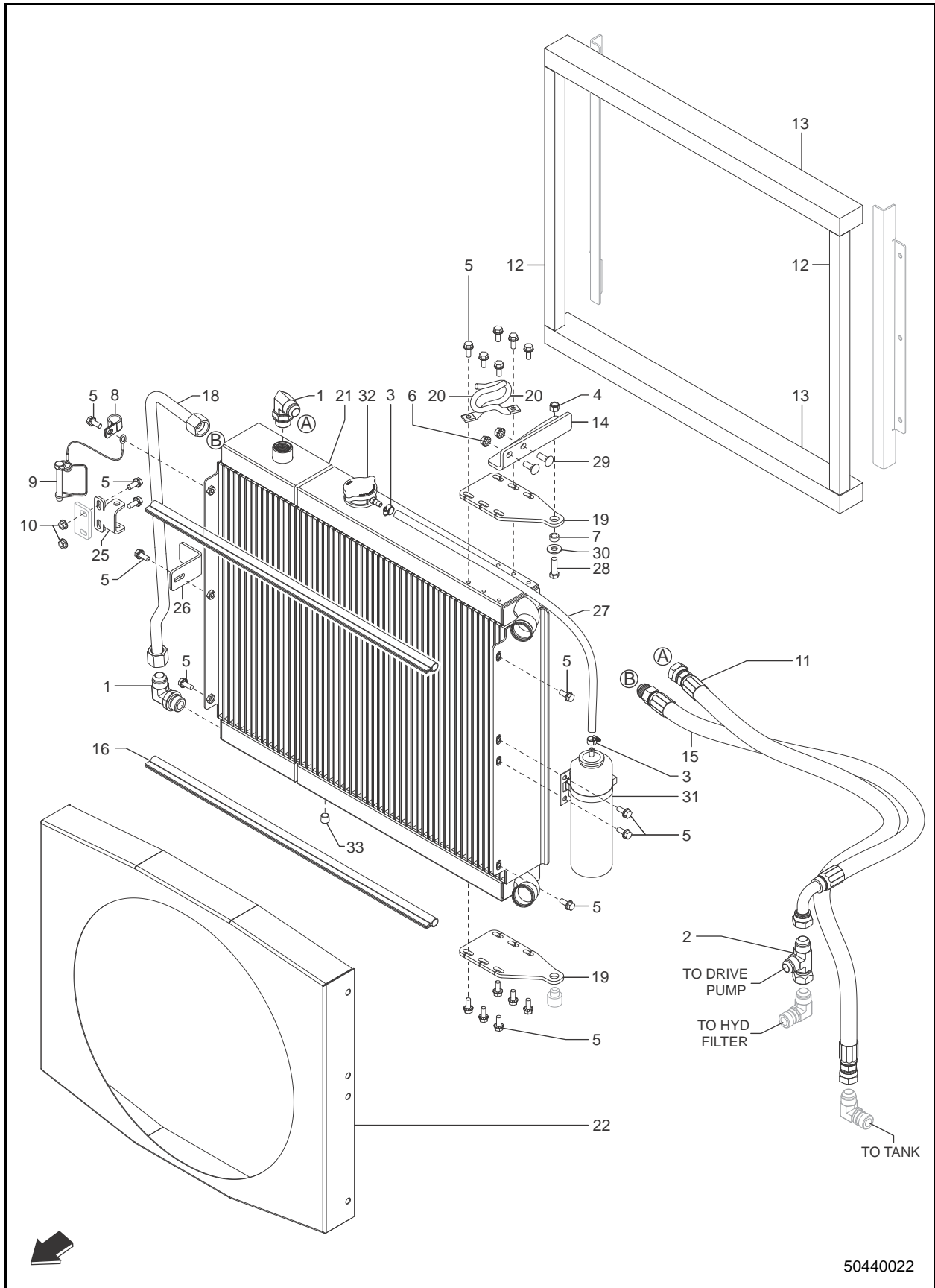
R165 - ENGINE INTAKE



R165 - ENGINE INTAKE

Ref.	No.	Part No.	Description	Qty.
	1	070648	LN LG FL SERR 5/16 CZ	2
	2	183998	CLAMP/AIR CLEANER	1
	3	186014	AIR CLEANER AS- MH	1
	4	210-19470	LN FL SERR 5/16 CZY	3
	5	50300896	PLATE/AIR CLEANER	1
	6	650687	CB 5/16X3/4 C5ZY	3
	7	650745	CB 5/16X1-1/4 C5ZY	2
	8	184146	FILTER ELEMENT/ PRIMARY	1
	9	184195	FILTER ELEMENT/SECONDARY	1
	10	187725	EVACUATOR VALVE	1
	11	187726	END CAP/AIR CLEANER	1

R165 - ENGINE RADIATOR - COOLER

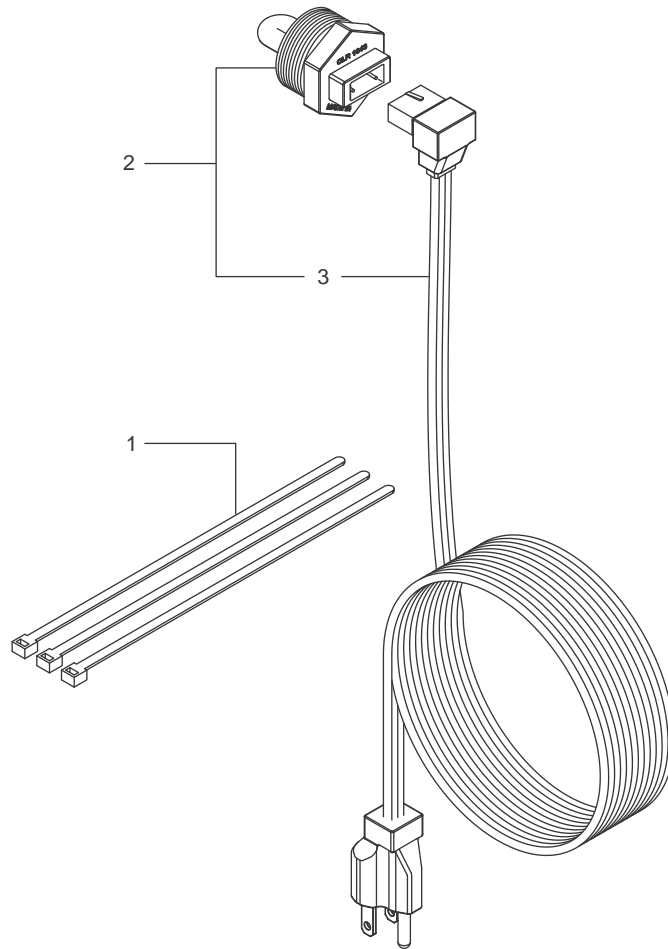


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R165 - ENGINE RADIATOR - COOLER

Ref.	No. Part No.	Description	Qty.
	1 055005	90 MJ12-MAORB12	2
	2 056089	TEE MJ12-FJS12-MJ12	1
	3 062023	CLAMP/HOSE #05 M	2
	4 067847	HLN INST 3/8 CZY	1
	5 081380	CS FL LOCK 5/16X3/4 C5ZY	21
	6 090666	LN FL SERR 3/8 CZY	2
	7 091716	SPACER	1
	8 136226	CLAMP/HOSE .75 X .41 HOLE	1
	9 184664	PIN/LOCK	1
	10 210-19470	LN FL SERR 5/16 CZY	2
	11 271276	HOSE/MP 12 X 50IN	1
	12 50300438	SEAL/FOAM	2
	13 50301789	SEAL/FOAM	2
	14 50301837	PLATE/COOLER SPPT	1
	15 50302282	HOSE/HYD -12 X 38IN	1
	16 50302410	SEAL/BULB .65 X 27.63IN	2
	18 50302714	TUBE/HYD -12 COOLER	1
	19 50302842	PLATE/COOLER SUPPORT	2
	20 50303072	BRKT/HOSE SUPPORT	2
	21 50303229	COOLER/TDI (includes 32, 33)	1
	22 50303449	WDMT/SHROUD TDI	1
	25 50304205	PLATE/COOLER LOCK	1
	26 50304210	PLATE/COOLER LATCH	1
	27 50352011	FUEL HOSE 5/16" X 26	1
	28 650491	CS 3/8X1-1/4 C5ZY	1
	29 650704	CB 3/8X1 C5ZY	2
	30 654006	FW 3/8 AWZY	1
	31 425-36233	BOTTLE/OVERFLOW ASSY	1
	32 184541	CAP/RADIATOR	1
	33 137907	PLUG HH MP04	1

**R165 - ENGINE
BLOCK HEATER (OPTION)**



805855

**R165 - ENGINE
BLOCK HEATER (OPTION)**

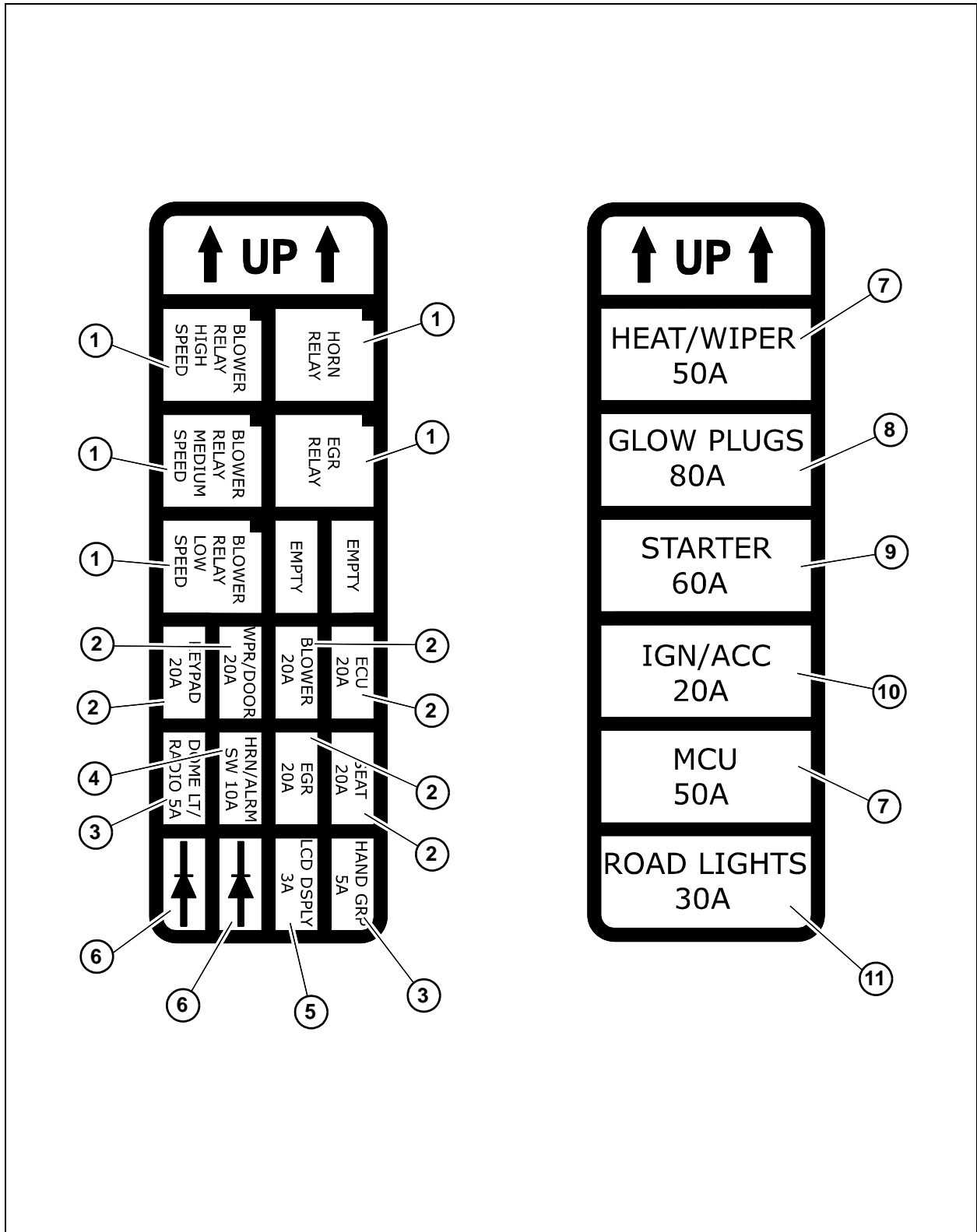
Ref.	No.	Part No.	Description	Qty.
1	055648		TIE/CABLE .19 X 7.50 BLACK	3
2	121480		HEATER/BLOCK (227-2148) PHIL- LIPS	1
3	121481		CORD/HEATER	1

R165 - ELECTRICAL CHASSIS ELECTRICAL

Ref.	No. Part No.	Description	Qty.
	1 064260	HLN INST 5/16 CZY	2
	2 067750	NUT/SPEED	4
	3 071401	HLN INST 1/4 CZY	1
	4 077685	ROD/BATTERY HOLDDOWN	2
	5 084175	HLN INST #1024 CZY	4
	6 088467	TIE/CABLE .30 X 14.50 BLACK	11
	7 122447	ANGLE/BAT HOLDDOWN LONG	1
	9 N/A	BATTERY/12 VDC WET *	1
	10 183814	HORN-WARNING	1
	11 241117	LIGHT / WHITE / 55W	2
	139529	LIGHT BULB REPLACE 55W	AR
	12 242386	LIGHT / RED / 35W	2
	139530	LIGHT BULB REPLACE 35W	AR
	13 310-32616	CS FL LOCK 3/8X1/2 C2ZY	2
	14 50302931	HARNESS/CHASSIS	1
	15 50302939	MODULE/MAIN CONTROL MODULE	1
	16 50302940	RELAY/MAIN POWER/200 AMP (some hardware included)	1
	17 50302941	CABLE/MOULDED 150 AMP FUSE	1
	18 50302950	HARNESS/REAR DOOR	1
	19 50303121	PLATE/FUSE BLOCKS	1
	20 50303646	TIE/CABLE .28X8.00 BLACK FIR TREE	2
	21 50657002	CB 1/4X7/8 C5ZY	1
	22 650810	FW 5/16 ANZY	2
	23 650815	RHMS SLT #1024X3/4 CZY	4
	24 650863	FW 1/4 ANZY	1
	25 651693	CS FL M6-1.00X20 8.8 ZY DIN6921	8
	26 L630004	STRAP GRND 4 GA X 14INCH SIL- VER	1
	27 L63546	GROMMET .62ID .250GW .88GD	1

NOTE: * Purchase locally. Group size 31, 950 CCA.

**R165 - ELECTRICAL
FUSES - RELAYS**

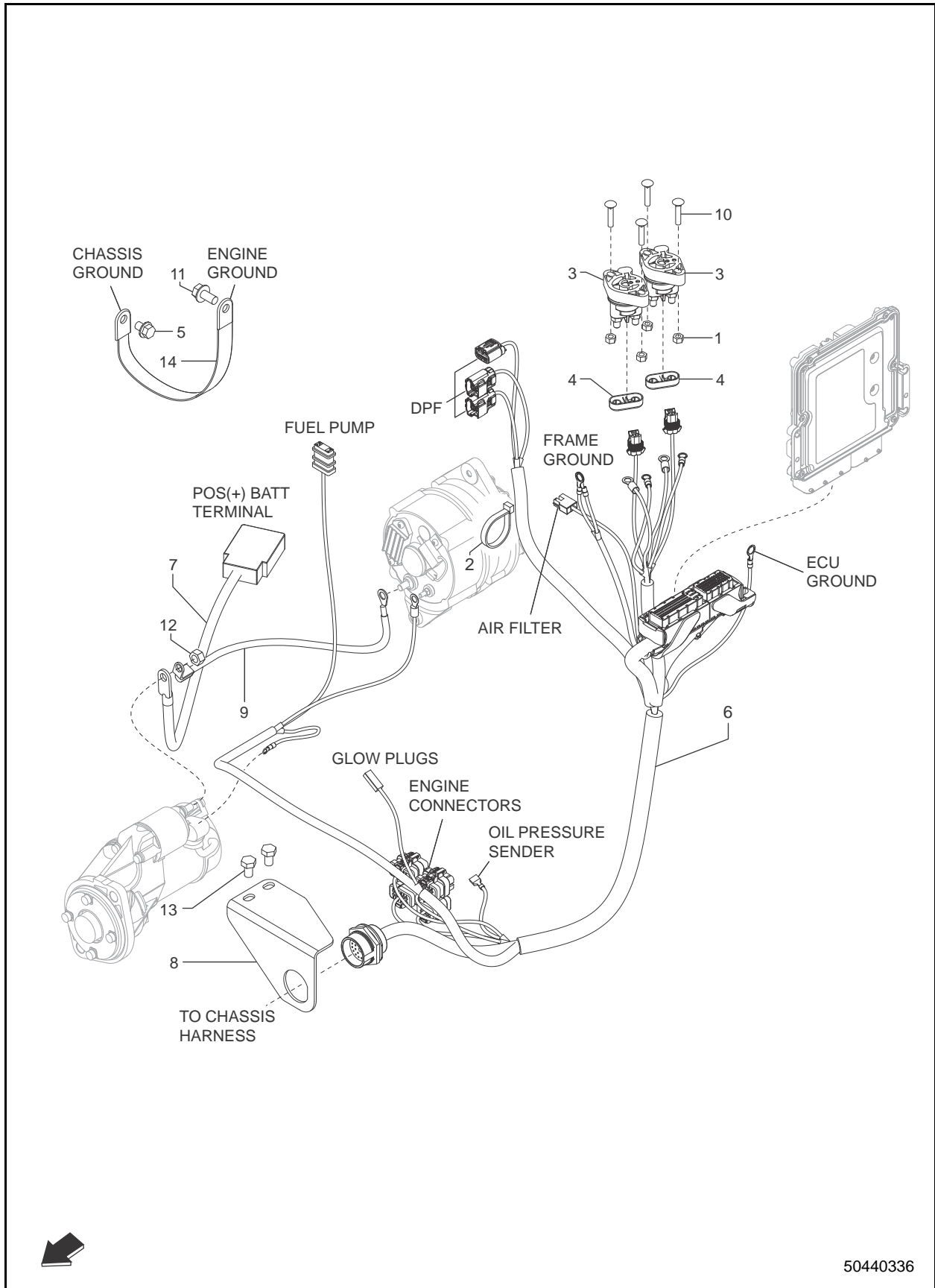


R165 - ELECTRICAL FUSES - RELAYS

Ref.	No.	Part No.	Description	Qty.
	1	50353620	RELAY/20AMP/ISO 280	5
	2	184629	FUSE/ATM/20 AMP	6
	3	184633	FUSE/ATM/5 AMP	2
	4	184631	FUSE/ATM/10 AMP	1
	5	420-35509	FUSE 3 AMP	1
	6	187347	DIODE/ATM/1 AMP	2
	7	184654	FUSE/MAXI/50 AMP	2
	8	242381	FUSE/MAXI/80 AMP	1
	9	195073	FUSE/MAXI/60AMP	1
	10	191332	FUSE/MAXI/20 AMP	1
	11	191331	FUSE/MAXI/30 AMP	1

R165 - ELECTRICAL

ENGINE ELECTRICAL



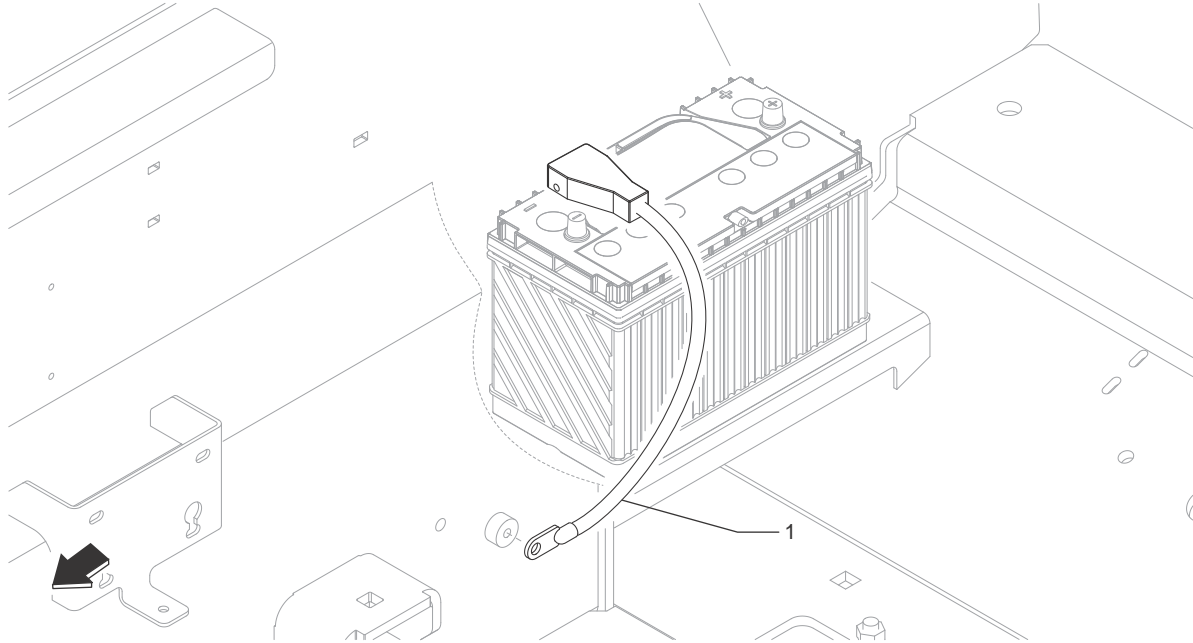
R165 - ELECTRICAL ENGINE ELECTRICAL

Ref.	No.	Part No.	Description	Qty.
	1	071700	LN 1/4 CBZY	4
	2	088467	TIE/CABLE .30 X 14.50 BLACK	1
	3	193856	SOLENOID	2
	4	195740	COVER/ELECTRICAL	2
	5	310-32616	CS FL LOCK 3/8X1/2 C2ZY	1
	6	50302933	HARNESS/ENGINE/TIER 4	1
	7	50303580	CABLE/BATTERY/POS/17IN	1
	8	50303609	BRACKET/HARNESS BULKHEAD	1
	9	50350892	CABLE/ALTERNATOR	1
	10	651094	CB 1/4X1-1/4 C5ZY	4
	11	651732	CS FL M10-1.50X20 8.8 ZY DIN6921	1
	12	656048	HN M8-1.25 C8 ZY DIN934	1
	13	656090	CS M10-1.5X16 C8.8 ZY DIN933	2
	14	L630004	STRAP GRND 4 GA X 14INCH SIL- VER	1

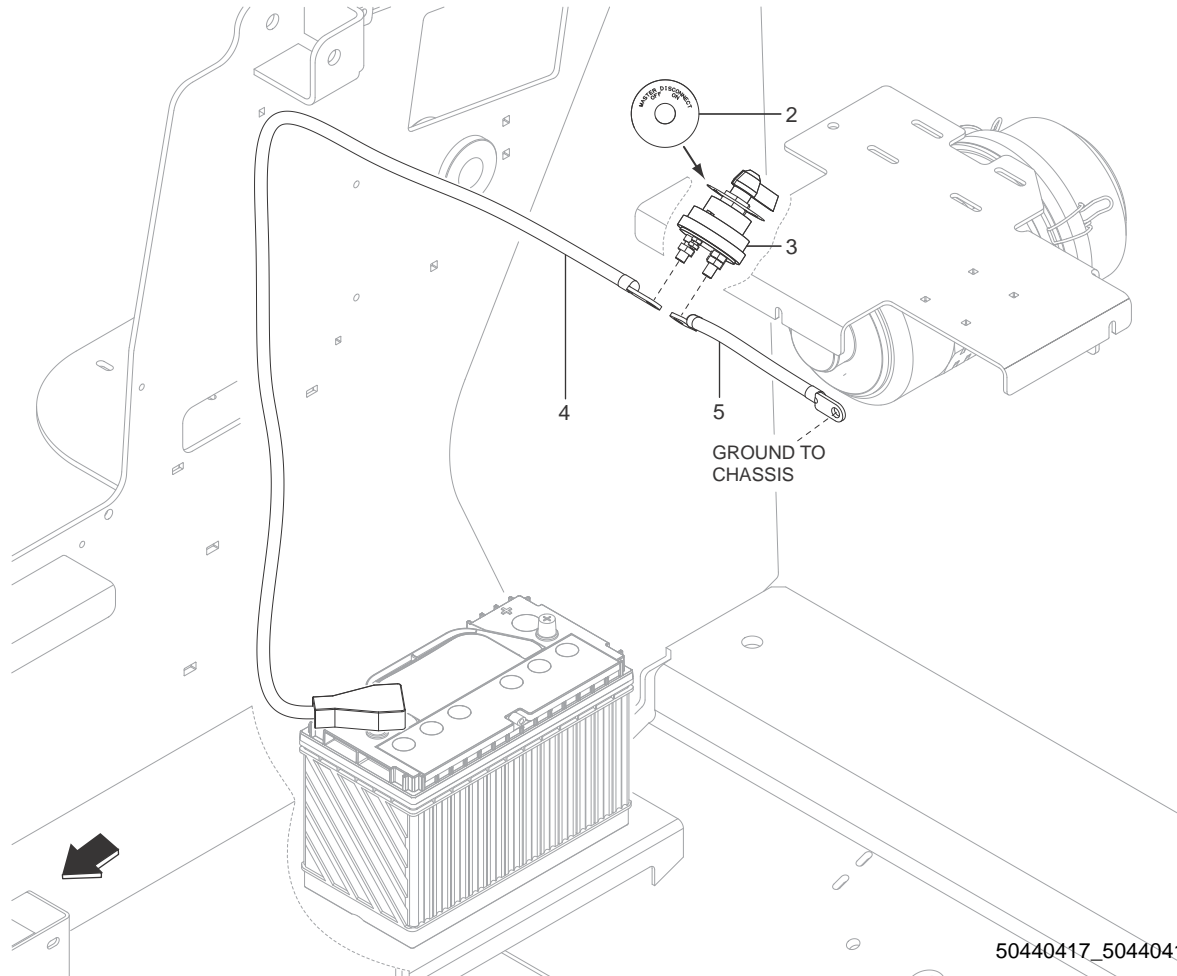
R165 - ELECTRICAL

BATTERY NEG. (-) CABLE / MASTER DISCONNECT

BATTERY NEG. (-) CABLE W/O MASTER DISCONNECT



BATTERY NEG. (-) CABLE / MASTER DISCONNECT (OPTION)

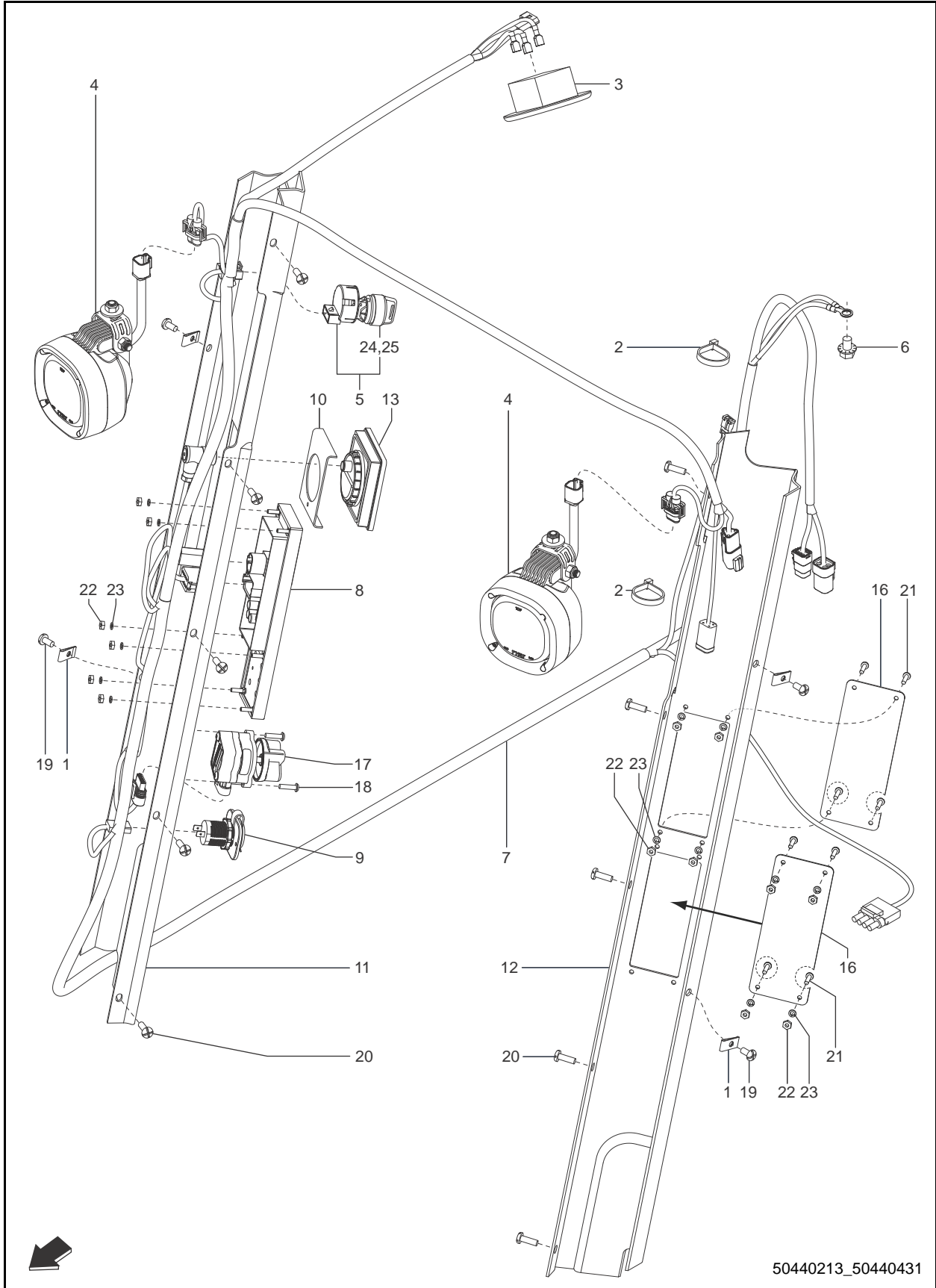


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R165 - ELECTRICAL
BATTERY NEG. (-) CABLE / MASTER DISCONNECT

Ref.	No.	Part No.	Description	Qty.
	1	50303108	CABLE/BATTERY/NEG/19IN (w/o master disconnect)	1
	2	091667	PLATE/FACE	1
	3	186863	SWITCH/DISCONNECT/DPOLE	1
	4	50303103	CABLE/BATTERY/NEG/24IN (w/ master disconnect)	1
	5	50303110	CABLE/SWITCH/NEG/9.75IN (w/ master disconnect)	1

R165 - ELECTRICAL ROPS ELECTRICAL



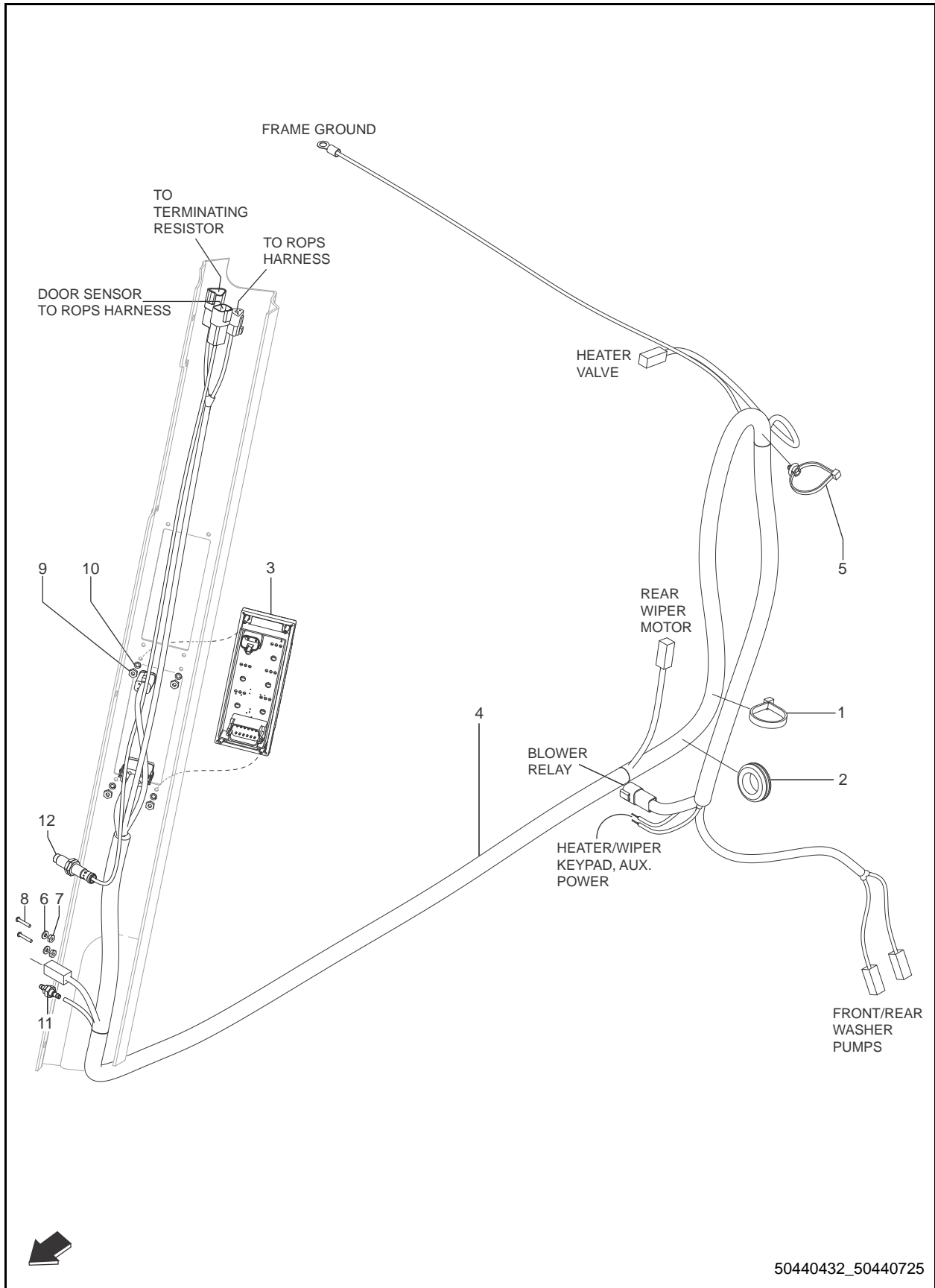
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**R165 - ELECTRICAL
ROPS ELECTRICAL**

Ref.	No.	Part No.	Description	Qty.
	1	067750	NUT/SPEED	4
	2	088467	TIE/CABLE .30 X 14.50 BLACK	2
	3	137497	LIGHT/DOME	1
	4	241117	LIGHT / WHITE / 55W	2
		139529	LIGHT BULB REPLACE 55W	AR
	5	272578	SWITCH/IGNITION	1
	6	310-32616	CS FL LOCK 3/8X1/2 C2ZY	1
	7	50302932	HARNESS/CAB	1
	8	50302936	MODULE/MAIN KEYPAD	1
	9	50303163	SOCKET/12V	1
	10	50303526	PLATE/DISPLAY MOUNT	1
	11	50303559	PANEL/CONTROL RH	1
	12	50303566	PANEL/CONTROL LH	1
	13	50303602	DISPLAY/PROGRAMMED	1
	16	50303711	COVER/OPTION CUTOUT/A-PILLAR	2
	17	50351312	THROTTLE	1
	18	50657022	BHSCS #1032X3/4 C8 OCG	2
	19	651307	PHMS CR 1/4X1/2 ZB	4
	20	651308	PHMS CR 1/4X3/4 ZB	10
	21	651778	PHMS CR #8-32X3/4 CBO	8
	22	653002	HN MS #832 CZY	14
	23	654035	LW #8 RZY	14
	24	50280186	KEY/8001 (14603)	1
	25	50280187	KEY COVER/RUBBER/8001 (14603)	1

R165 - ELECTRICAL

HEATER - DOOR - WIPER ELECTRICAL

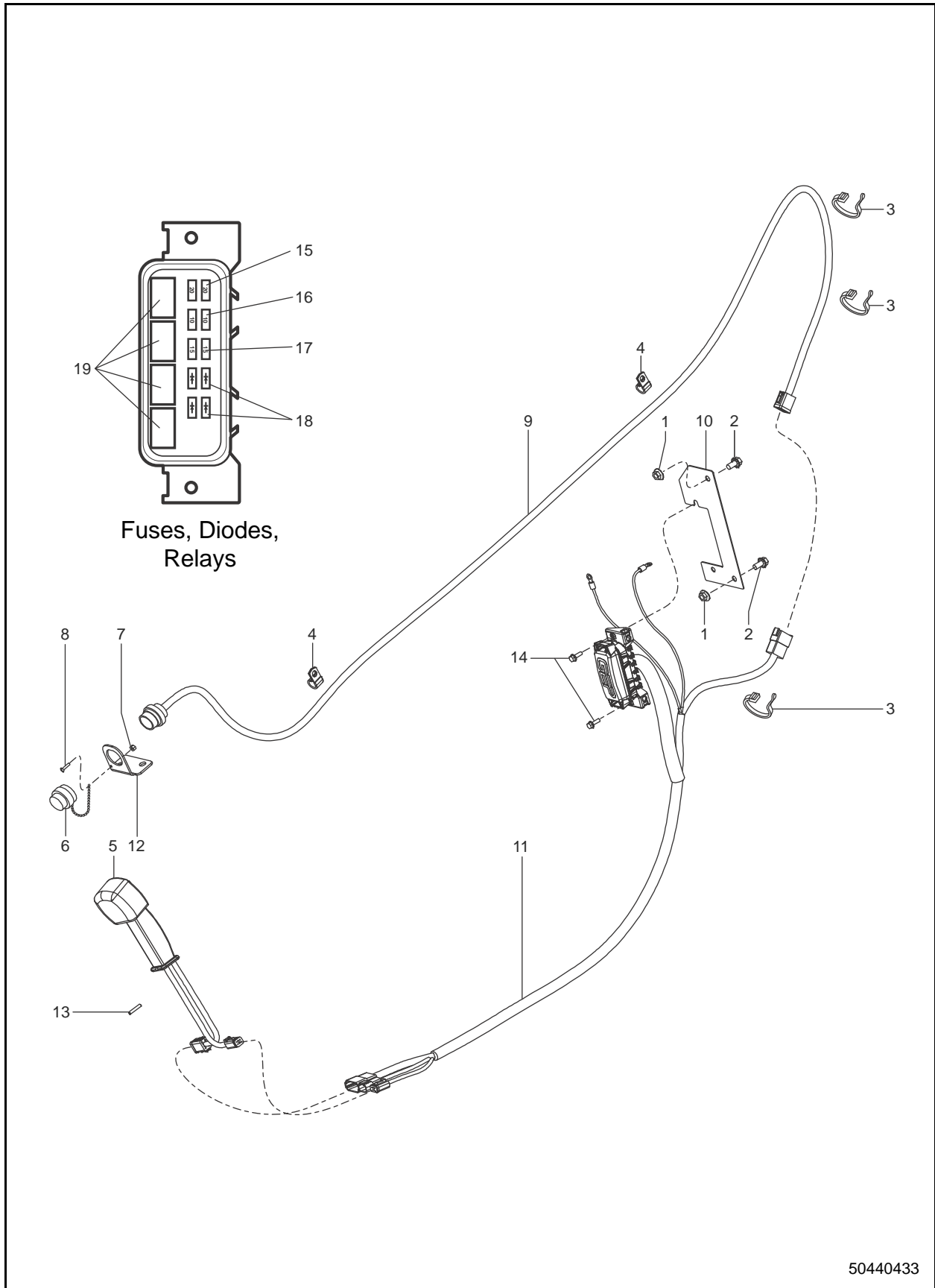


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**R165 - ELECTRICAL
HEATER - DOOR - WIPER ELECTRICAL**

Ref.			
No.	Part No.	Description	Qty.
1	088467	TIE/CABLE .30 X 14.50 BLACK	1
2	119888	GROMMET 1.00ID .125GW 1.38GD	1
3	50302937	MODULE/HEATER/WIPER KEYPAD	1
4	50302942	HARNESS/HEATER/WIPER	1
5	50352577	TIE/CABLE .19X8.00 BLACK FIR TREE	1
6	650848	FW #6 AZY	2
7	651213	HN MS #540 CZY	2
8	651575	RHMS SLT #540X3/4 CZY	2
9	653002	HN MS #832 CZY	4
10	654035	LW #8 RZY	4
11	50303572	HOSE SPLICE/BULKHEAD (machines with door)	1
12	50303614	SENSOR/INDUCTIVE/M12 (machines with door)	1

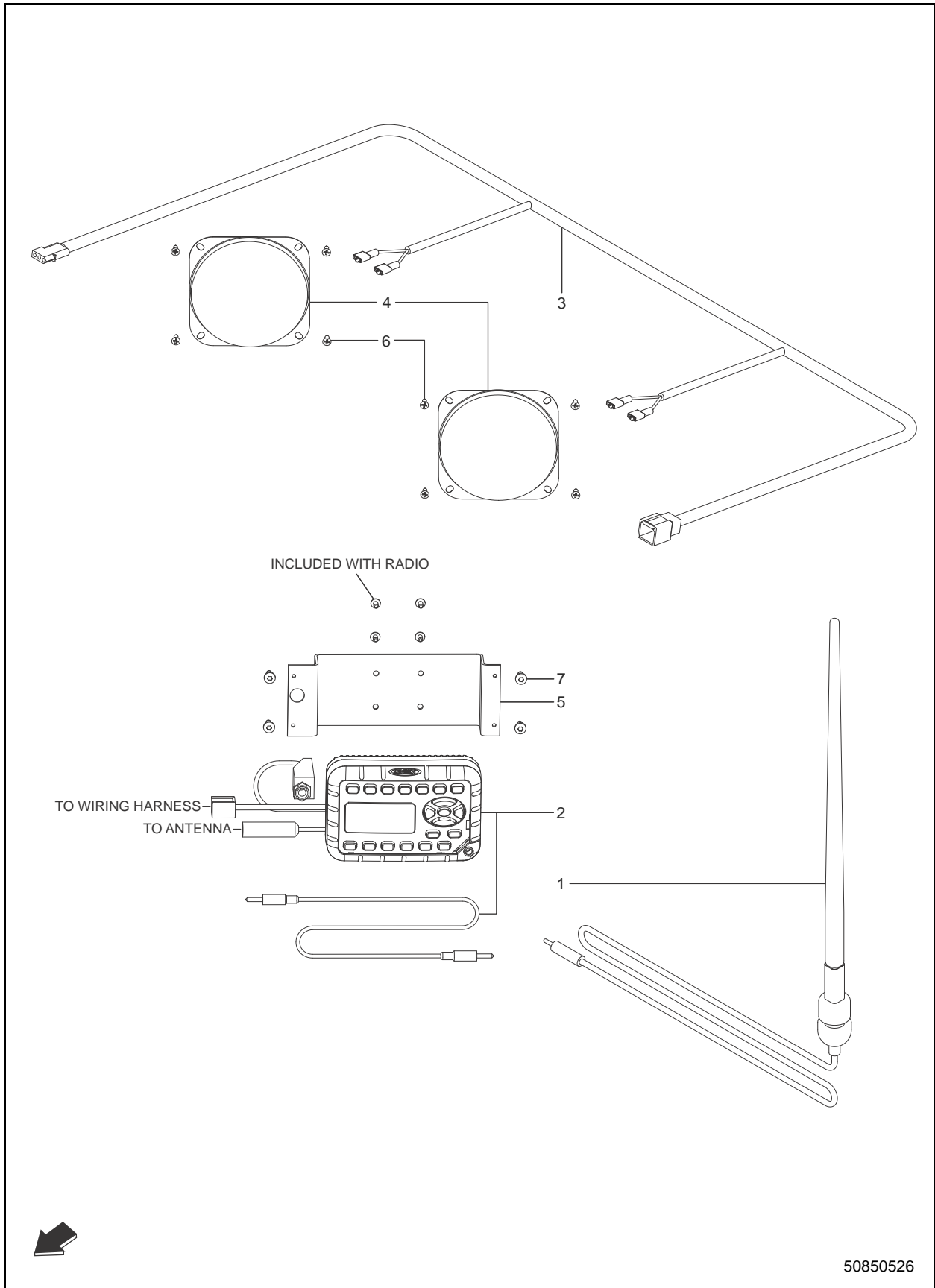
R165 - ELECTRICAL 14-PIN CONNECTOR (OPTION)



R165 - ELECTRICAL 14-PIN CONNECTOR (OPTION)

Ref.	No.	Part No.	Description	Qty.
	1	070856	LN LG FL SERR 3/8 CZ	2
	2	076588	CS FL LOCK 3/8X3/4 C5ZY	1
	3	088467	TIE/CABLE .30 X 14.50 BLACK	3
	4	128007	CLAMP/HOSE .62 X .41 HOLE	2
	5	193833	HANDLE/14 PIN AUX	1
	6	194507	DUST CAP W/CHAIN	1
	7	210-32183	NUT HEX,NYLON INSERT #8-32NC	1
	8	310-32288	SCREW SLOT RD HD #8-32 X 3/4	1
	9	50303741	HARNESS / 14 PIN CONN 100	1
	10	50303755	BRACKET/14 PIN ELECTRICAL BOX	1
	11	50303761	HARNESS/14 PIN AUX	1
	12	50353430	MOUNT/14 PIN CONNECTOR	1
	13	651467	PIN/SPRING M5X30	1
	14	651693	CS FL M6-1.00X20 8.8 ZY DIN6921	2
	15	184629	FUSE/ATM/20 AMP	2
	16	184631	FUSE/ATM/10 AMP	2
	17	184630	FUSE/ATM/15 AMP	2
	18	187347	DIODE/ATM/1 AMP	4
	19	272723	RELAY/ISO 280	4

R165 - ELECTRICAL AM/FM RADIO (OPTION)

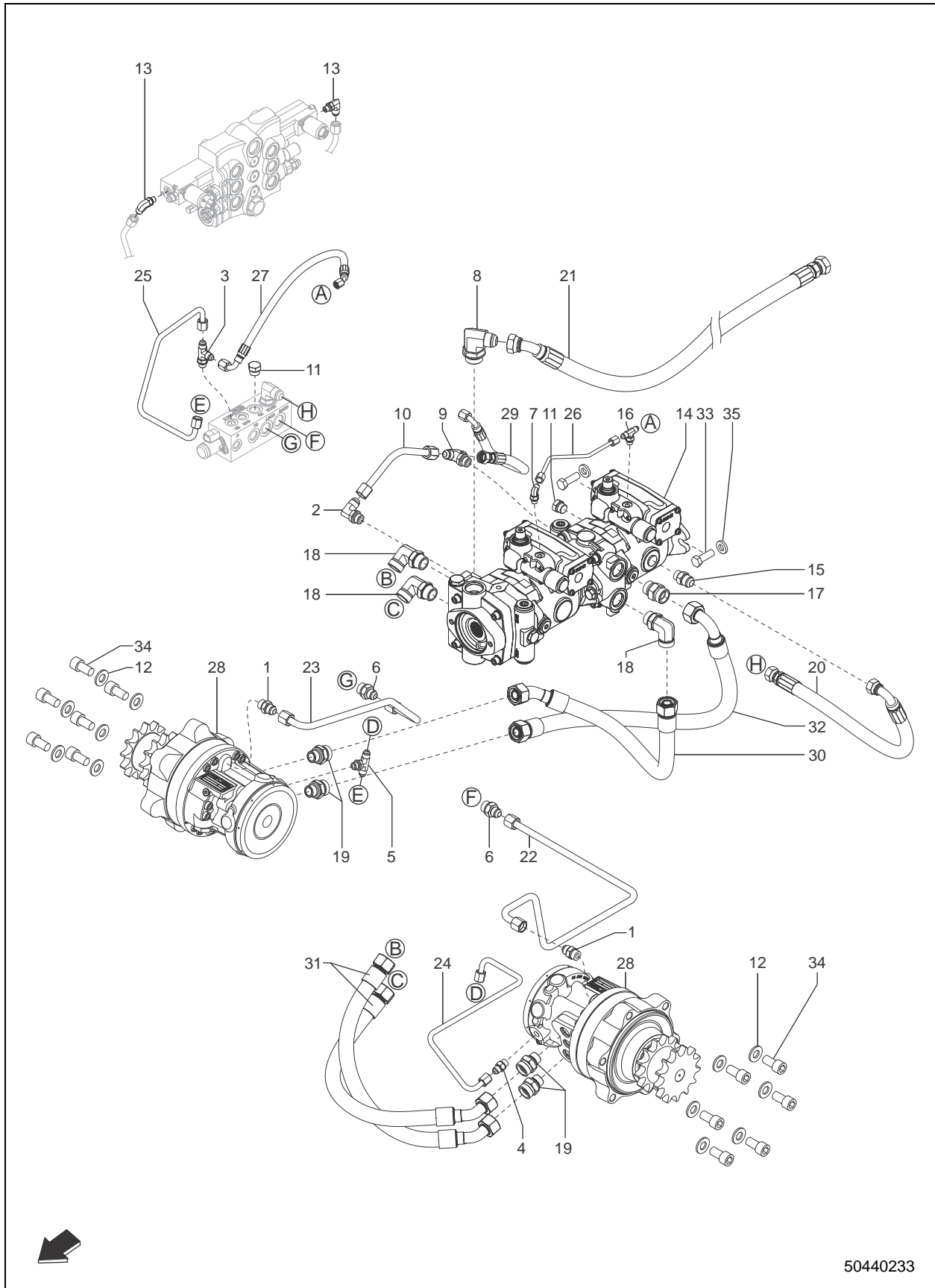


R165 - ELECTRICAL AM/FM RADIO (OPTION)

Ref.	No.	Part No.	Description	Qty.
	1	184507	ANTENNA/RADIO	1
	2	192454	RADIO/AM-FM-WB	1
	3	192456	WIRE HARNESS/RADIO	1
	4	50354582	SPEAKER/RADIO/4	2
	5	50353849	BRACKET/RADIO	1
	6	50657025	FCHM CR #632Z1/2 ZY	8
	7	651646	P TORX HTF #1032X1/2 FBZ TYPE F	4

R165 - HYDRAULICS

HYDROSTATICS W/ DRIVE MOTORS (1-SPEED, T-B/H-F CONTROLS)



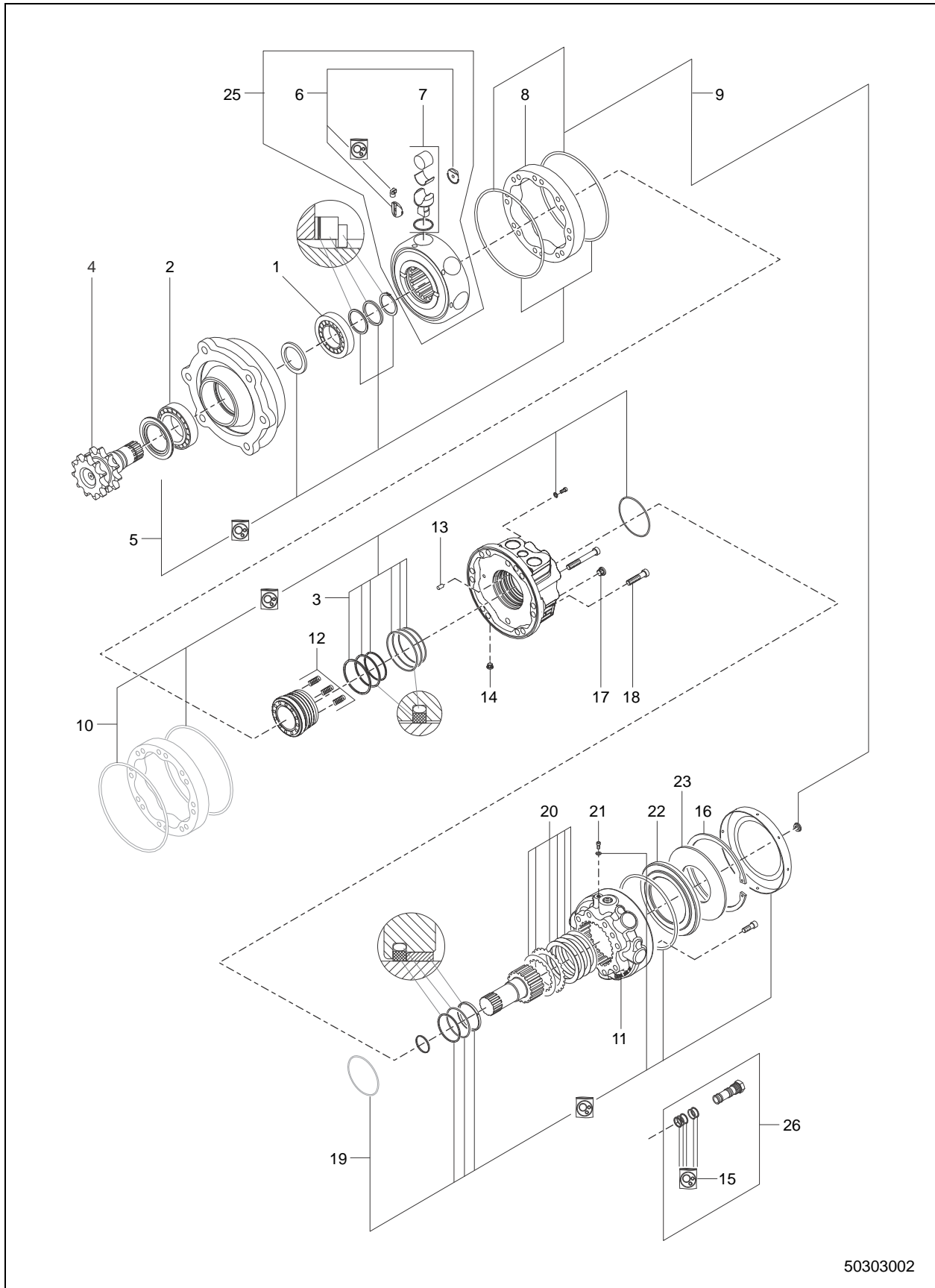
50440233

R165 - HYDRAULICS
HYDROSTATICS W/ DRIVE MOTORS (1-SPEED, T-B/H-F CONTROLS)

Ref. No.	Part No.	Description	Qty.
1	054626	ST MJ08-MORB08	2
2	054816	90 MJ08-MAORB08	1
3	054820	TEE RUN MJ06-MAORB06-MJ06	1
4	054994	ST MJ06-MORB06	1
5	055981	TEE BR MJ06-MJ06-MAORB06	1
6	089099	ST MJ08-MORB10	2
7	095601	90 MJ04-MAORB04	1
8	121684	90 MJ12-MAORB16	1
9	122340	TEE BR MJ08-MJ08-MAORB08	1
10	122641	TUBE/CHARGE	1
11	131529	PLUG MORB08	2
12	135773	WASHER 5/8 HT	12
13	137784	90 MJ06-MAORB04	2
14	186913	PUMP/TANDEM 2.48 SERVO (see Page 90 for internal components)	1
15	230-30569	ST MJ10-MORB08	1
16	230-32753	TEE BR MJ04-MJ04-MAORB04	1
17	272669	ST MC20-MORB12-S	1
18	272867	90 MC20-MAORB12-S	3
19	50301187	ST MC20-MORB10-S	4
20	50302257	HOSE/HYD -10 X 23IN	1
21	50302415	HOSE/HYD -12 X 53IN	1
22	50302833	TUBE/HYD -08 LH DRAIN	1
23	50302834	TUBE/HYD -08 RH DRAIN	1
24	50302835	TUBE/HYD -06 LH BRAKE	1
25	50302836	TUBE/HYD -06 RH BRAKE	1
26	50302858	TUBE/HYD -04 SERVO JUMPER	1
27	50302897	HOSE/HYD -04 X 20N	1
28	50303002	MOTOR/DRIVE HOS 13T (see Page 84 for internal components)	2
29	50303240	HOSE/HYD -06 X 15IN	1
30	50303438	HOSE/HYD -12 X 20IN	1
31	50303439	HOSE/HYD -12 X 23IN	2
32	50303443	HOSE/HYD -12 X 27IN	1
33	650453	CS 1/2X1-1/2 C5ZY	2
34	651620	SHCS M16-2X30 C12.9 OCB DIN912	12
35	P471548	WASHER/HARD .50	2

R165 - HYDRAULICS

ONE SPEED DRIVE MOTORS 50303002



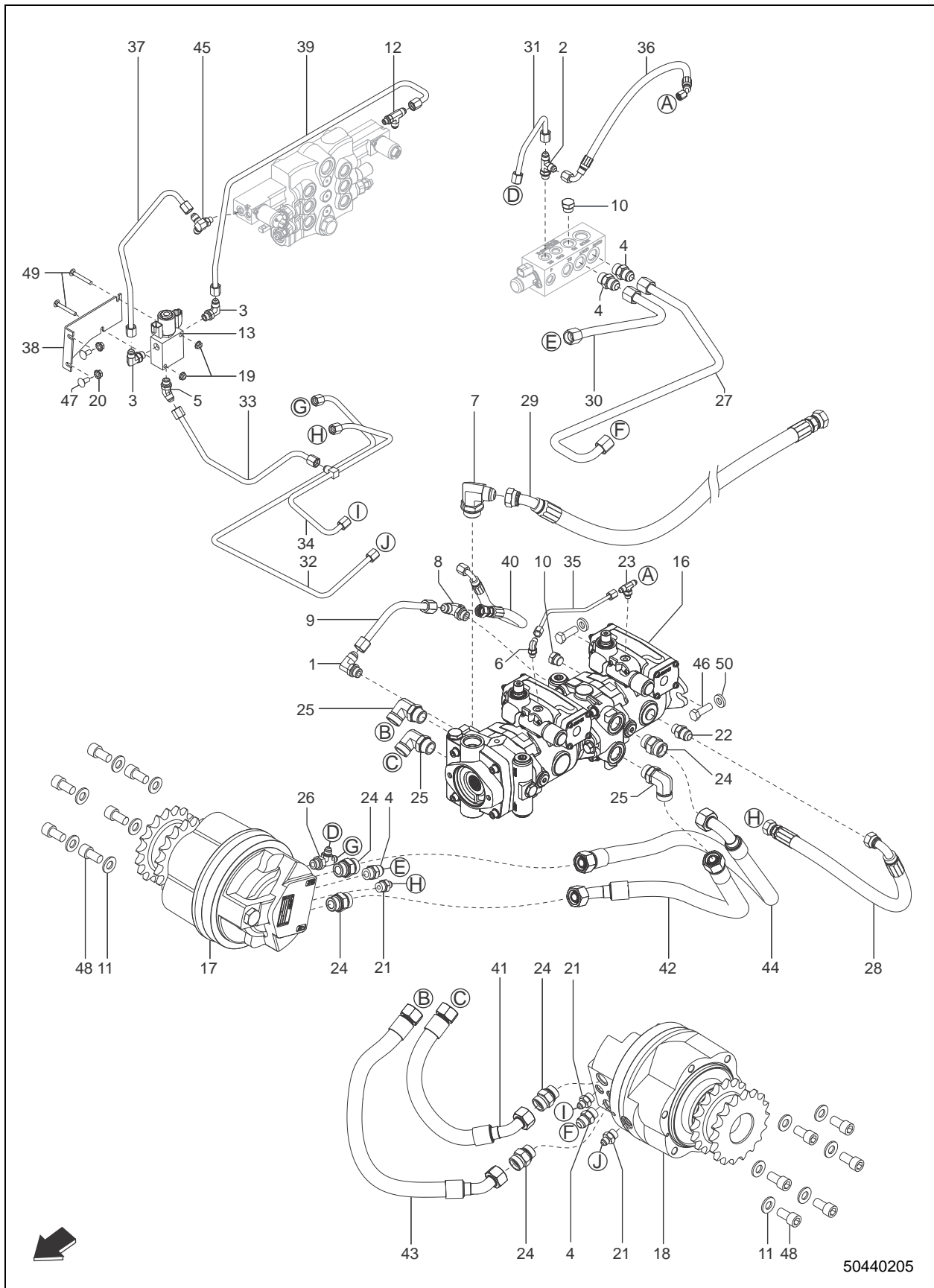
50303002

R165 - HYDRAULICS
ONE SPEED DRIVE MOTORS 50303002

Ref.	No.	Part No.	Description	Qty.
	0	50303002	MOTOR/DRIVE HOS 13T (complete)	2
	1	50351937	BEARING/ROLLER	1
	2	50351936	BEARING/ROLLER	1
	3	50351929	KIT/SEAL (VALVING)	1
	4	50286977	SHAFT SPROCKETS, 106 X 25	1
	5	50351945	KIT/SEAL (BEARING)	1
	6	50351880	KIT/CLIPS	1
	7	50286974	PISTON REPAIR KIT	8
	8	50351881	CAM	1
	9	50351882	KIT/SEAL (MOTOR)	1
	10	50351934	KIT/SEAL (COVER)	1
	11	50351861	HOUSING/BRAKE	1
	12	50286975	COMPRESSION SPRING KIT	1
	13	243144	PIN	1
	14	138412	PLUG	1
	15	184992	ML06 SHUTTLE SEAL KIT	1
	16	50351863	RING/SNAP	1
	17	50351933	PLUG/METALLIC	2
	18	243148	SCREW/CHC/M10-60-CL12.9	10
	19	50351867	KIT/SEAL (BRAKE)	1
	20	50351873	KIT/BRAKE DISC, SHIMS	1
	21	243161	SCREW/CHC/M6-10	1
	22	50351865	PISTON/STATIC BRAKE	1
	23	50351862	WASHER/SPRING	1
	24	50351943	KIT/SEAL (FULL)	1
	25	50351875	BLOCK/CYLINDER	1
	26	50286976	SHUTTLE VALVE, 8-15 BAR	1

R165 - HYDRAULICS

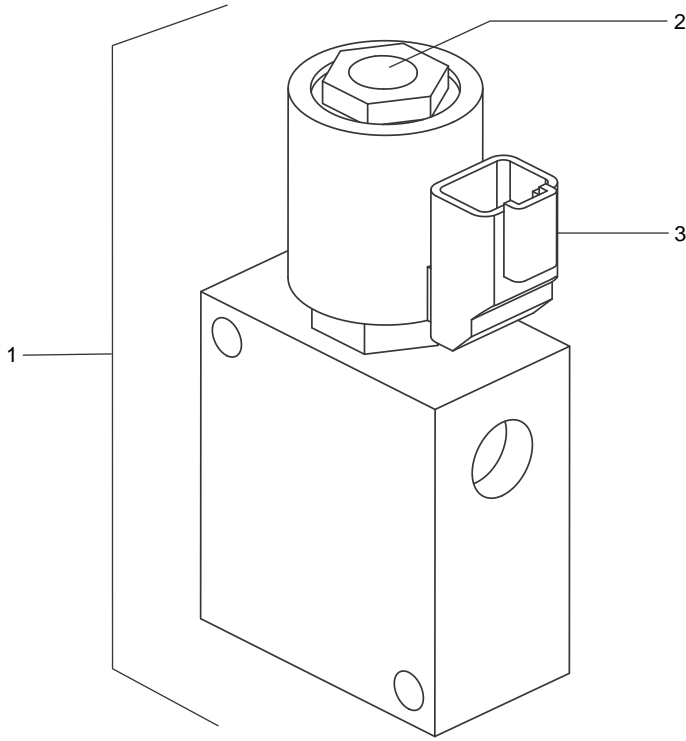
HYDROSTATICS W/ DRIVE MOTORS (2-SPEED, T-B/H-F CONTROLS)



R165 - HYDRAULICS HYDROSTATICS W/ DRIVE MOTORS (2-SPEED, T-B/H-F CONTROLS)

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	054816	90 MJ08-MAORB08	1	44	50303443	HOSE/HYD -12 X 27IN	1
2	054820	TEE RUN MJ06-MAORB06-MJ06	1	45	50303681	Y MJ06-MJ06-MAORB04	1
3	068938	90 MJ06-MAORB06	2	46	650453	CS 1/2X1-1/2 C5ZY	2
4	072580	ST MJ10-MORB10	4	47	650687	CB 5/16X3/4 C5ZY	2
5	079026	45 MJ06-MAORB06	1	48	651620	SHCS M16-2X30 C12.9 OCB DIN912	12
6	095601	90 MJ04-MAORB04	1	49	652140	CB 1/4X2 C5ZY	2
7	121684	90 MJ12-MAORB16	1	50	P471548	WASHER/HARD .50	2
8	122340	TEE BR MJ08-MJ08-MAORB08	1				
9	122641	TUBE/CHARGE	1				
10	131529	PLUG MORB08	2				
11	135773	WASHER 5/8 HT	12				
12	175377	TEE RUN MJ06-MAORB04-MJ06	1				
13	184102	VALVE/SOLENOID (see Page 88 for internal components)	1				
16	186913	PUMP/TANDEM 2.48 SERVO (see Page 90 for internal components)	1				
17	193672	MOTOR/2 SPEED RT (see Page 94 for internal components)	1				
18	193673	MOTOR/2 SPEED LT (see Page 94 for internal components)	1				
19	210-19469	LN FL SERR 1/4 CZY	2				
20	210-19470	LN FL SERR 5/16 CZY	2				
21	230-24749	ST MJ06-MORB08	3				
22	230-30569	ST MJ10-MORB08	1				
23	230-32753	TEE BR MJ04-MJ04-MAORB04	1				
24	272669	ST MC20-MORB12-S	5				
25	272867	90 MC20-MAORB12-S	3				
26	50300558	TEE RUN MJ06-MAORB08-MJ06	1				
27	50302254	TUBE/HYD -10 LH DRAIN	1				
28	50302257	HOSE/HYD -10 X 23IN	1				
29	50302415	HOSE/HYD -12 X 53IN	1				
30	50302813	TUBE/HYD -10 RH DRAIN	1				
31	50302819	TUBE/HYD -06 RH BRAKE	1				
32	50302820	TUBE/HYD -06 LH BRAKE	1				
33	50302821	TUBE/HYD -06 2 SP OUTLET	1				
34	50302822	TUBE/HYD -06 2 SP MOTOR	1				
35	50302858	TUBE/HYD -04 SERVO JUMPER	1				
36	50302897	HOSE/HYD -04 X 20N	1				
37	50303021	TUBE/HYD -06 2 SP PRESSURE	1				
38	50303087	BRACKET/2 SPEED VALVE	1				
39	50303220	TUBE/HYD -06 2 SP TANK	1				
40	50303240	HOSE/HYD -06 X 15IN	1				
41	50303437	HOSE/HYD -12 X 18.5IN	1				
42	50303438	HOSE/HYD -12 X 20IN	1				
43	50303439	HOSE/HYD -12 X 23IN	1				

R165 - HYDRAULICS
SOLENOID VALVE 184102



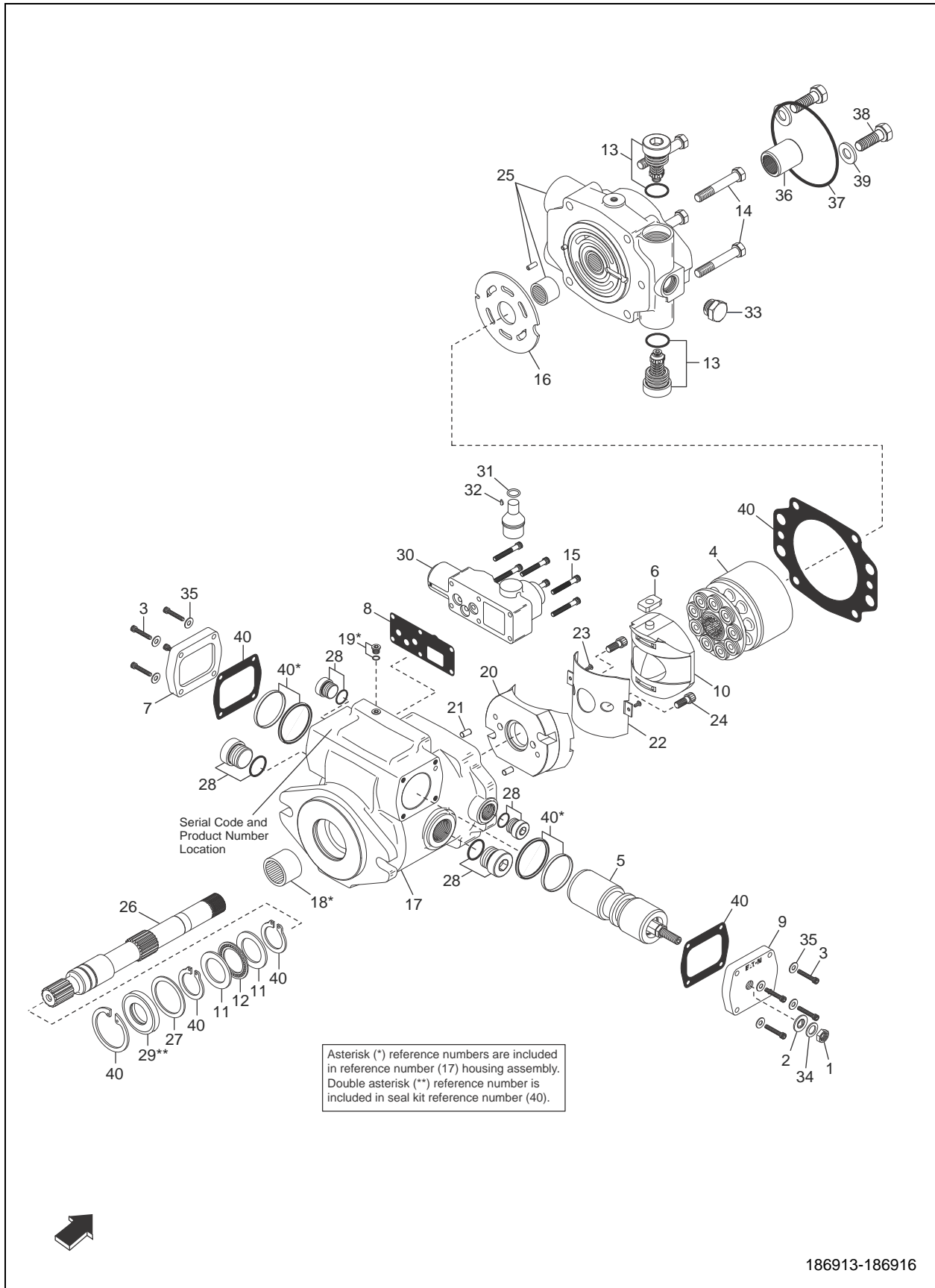
184102

**R165 - HYDRAULICS
SOLENOID VALVE 184102**

Ref.	No.	Part No.	Description	Qty.
1	184102		VALVE/SOLENOID (INCL. REFS. 2 & 3)	1
2	184117		CARTRIDGE (VALVE)	1
3	184104		COIL	1

R165 - HYDRAULICS

TANDEM PUMP 186913 / ENGINE END 186916



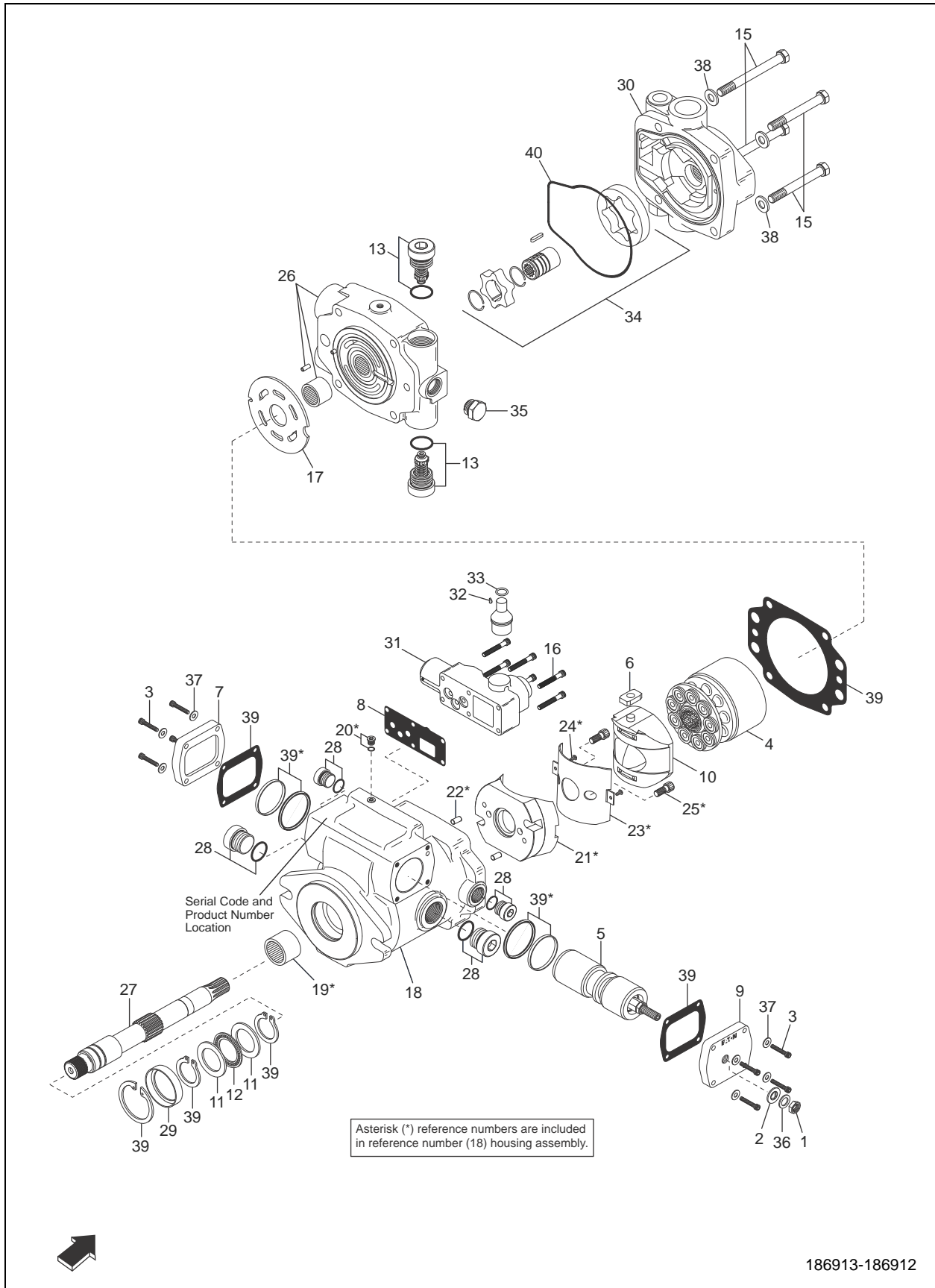
186913-186916

**R165 - HYDRAULICS
TANDEM PUMP 186913 / ENGINE END 186916**

Ref.	No.	Part No.	Description	Qty.
	0	186916	PUMP/SERVO ENGINE END	1
	1	123067	NUT/JAM	1
	2	123069	SEAL WASHER	1
	3	123122	SCREW/HSHC	8
	4	123070	ROTATING KIT	1
	5	136978	PISTON/SERVO	1
	6	128106	FOLLOWER/PISTON	1
	7	123073	COVER PLATE	1
	8	127989	GASKET/CONTROLLER	1
	9	123079	COVER PLATE	1
	10	123080	CAMPLATE	1
	11	060745	THRUST RACE	2
	12	060746	THRUST BEARING	1
	13	132647	RELIEF VALVE 5500 PSI	2
		048953	O-RING 912 N90	1
	14	650535	CS 3/8X2-1/4 C5ZY	4
	15	123123	SHSS #1224X1-1/2 C	6
	16	123084	VALVE PLATE	1
	17	187381	HOUSING ASSY/ENGINE END	1
	18	055306	BEARING	1
	19	136985	PLUG/SAE04	1
	20	136980	CRADLE	1
	21	127679	PIN/DOWEL	2
	22	136981	BUSHING/CAM	1
	23	136994	SCREW/CAP BUTTON HEAD	2
	24	136982	SCREW/CAP	2
	25	137016	ASSEMBLY/BACKPLATE	1
	26	123087	DRIVE SHAFT	1
	27	060748	WASHER	1
	28	131529	PLUG MORB08	4
	29	123093	SEAL	1
	30	187382	SERVO CONTROLLER W/EXT CHARGE (includes #31 and #32)	1
	31	127990	KEY	1
	32	136986	SEAL/WIPER	1
	33	136995	PLUG/SAE08	1
	34	123110	WASHER	1
	35	650854	FW #12 AZY	8
	36	123114	COUPLER	1
	37	132248	O-RING 045 N70	1
	38	650433	CS 1/2X1-1/4 C5	2
	39	654009	FW 1/2 AWZY	2
	40	128108	KIT/SEAL	1

R165 - HYDRAULICS

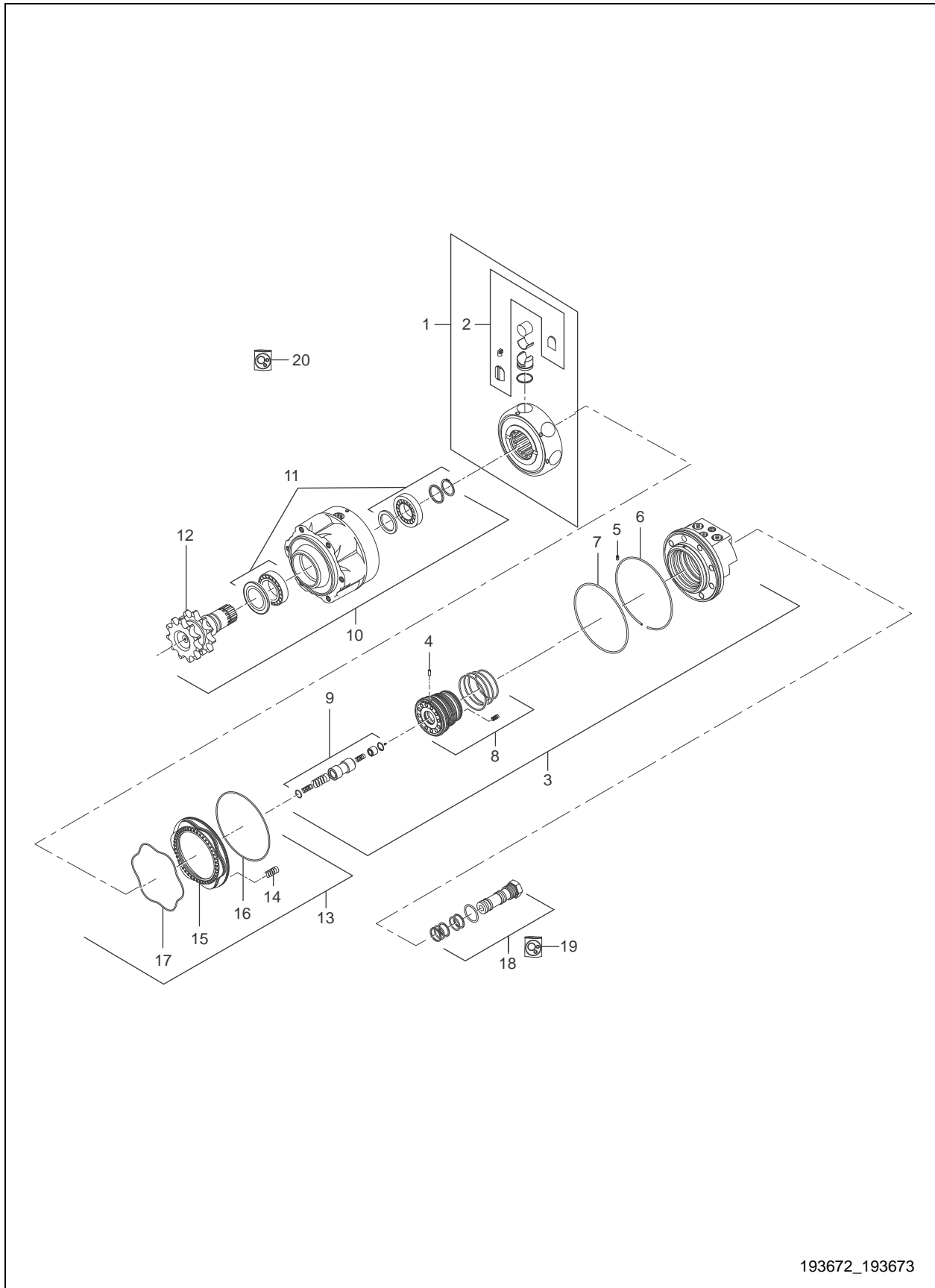
TANDEM PUMP 186913 / GEAR PUMP END 186912



**R165 - HYDRAULICS
TANDEM PUMP 186913 / GEAR PUMP END 186912**

Ref.	No.	Part No.	Description	Qty.
	0	186912	PUMP/SERVO G. PUMP END	1
	1	123067	NUT/JAM	1
	2	123069	SEAL WASHER	1
	3	123122	SCREW/HSHC	8
	4	123070	ROTATING KIT	1
	5	136978	PISTON/SERVO	1
	6	128106	FOLLOWER/PISTON	1
	7	123073	COVER PLATE	1
	8	127989	GASKET/CONTROLLER	1
	9	123079	COVER PLATE	1
	10	123080	CAMPLATE	1
	11	060745	THRUST RACE	2
	12	060746	THRUST BEARING	1
	13	132647	RELIEF VALVE 5500 PSI	2
		048953	O-RING 912 N90	1
	14	650731	CS 3/8X3-1/2 C5ZY	2
	15	650742	CS 3/8X4 C5ZY	2
	16	123123	SHSS #1224X1-1/2 C	6
	17	123084	VALVE PLATE	1
	18	187380	HOUSING ASSY/GP END	1
	19	055306	BEARING	1
	20	136985	PLUG/SAE04	1
	21	136980	CRADLE	1
	22	127679	PIN/DOWEL	2
	23	136981	BUSHING/CAM	1
	24	136994	SCREW/CAP BUTTON HEAD	2
	25	136982	SCREW/CAP	2
	26	136983	ASSEMBLY/BACKPLATE	1
	27	123129	DRIVE SHAFT	1
	28	131529	PLUG MORB08	4
	29	123094	SPACER	1
	30	135445	CHARGE ADAPTER ASSY	1
	31	187382	SERVO CONTROLLER W/EXT CHARGE (includes #32 and #33)	1
	32	127990	KEY	1
	33	136986	SEAL/WIPER	1
	34	136987	KIT/GEROTOR SEAL (includes O-Ring #40)	1
	35	136995	PLUG/SAE08	1
	36	123110	WASHER	1
	37	650854	FW #12 AZY	8
	38	136988	WASHER	4
	39	128108	KIT/SEAL	1
	40	123088	O-RING (included with Gerotor Kit #34)	1

R165 - HYDRAULICS
TWO-SPEED DRIVE MOTORS 193672-193673



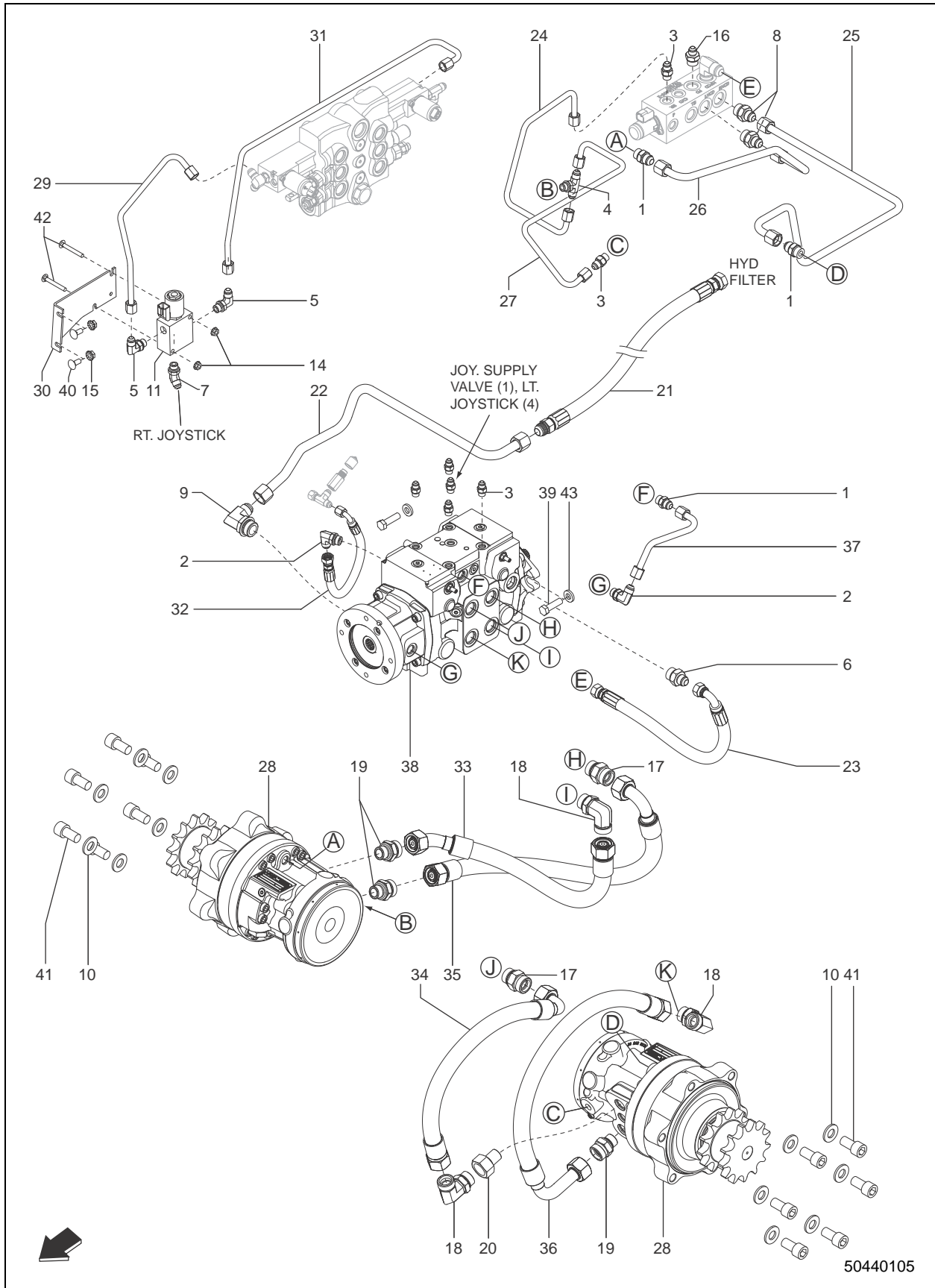
193672_193673

R165 - HYDRAULICS
TWO-SPEED DRIVE MOTORS 193672-193673

Ref.	No.	Part No.	Description	Qty.
	1	194233	ASSY/CYLINDER BLOCK	1
	2	194234	KIT/PISTON REPAIR	1
	3	194235	ASSY/VALVING COVER	1
	4	194236	PIN/DOWEL	1
	5	194237	PIN/DOWEL	1
	6	184986	WASHER/SPRING	1
	7	184987	O-RING	1
	8	194238	ASSY/VALVING	1
	9	194239	ASSY/TWO-SPEED SPOOL	1
	10	194240	ASSY/BEARING SUPPORT #80-18	1
	11	194244	KIT/BEARING	1
	12	194246	SHAFT #80-18 SPROCKETS	1
	13	194247	ASSY/BRAKE	1
	14	194248	SPRING/BRAKE	8
	15	194249	PISTON/BRAKE	1
	16	194250	O-RING/BRAKE PISTON	1
	17	186016	O-RING	1
	18	184991	VALVING/SHUTTLE	1
	19	184992	KIT/SEAL	1
	20	194251	KIT/SEAL COMPLETE	1

R165 - HYDRAULICS

HYDROSTATICS W/ DRIVE MOTORS (1-SPEED JOYSTICK CONTROLS)



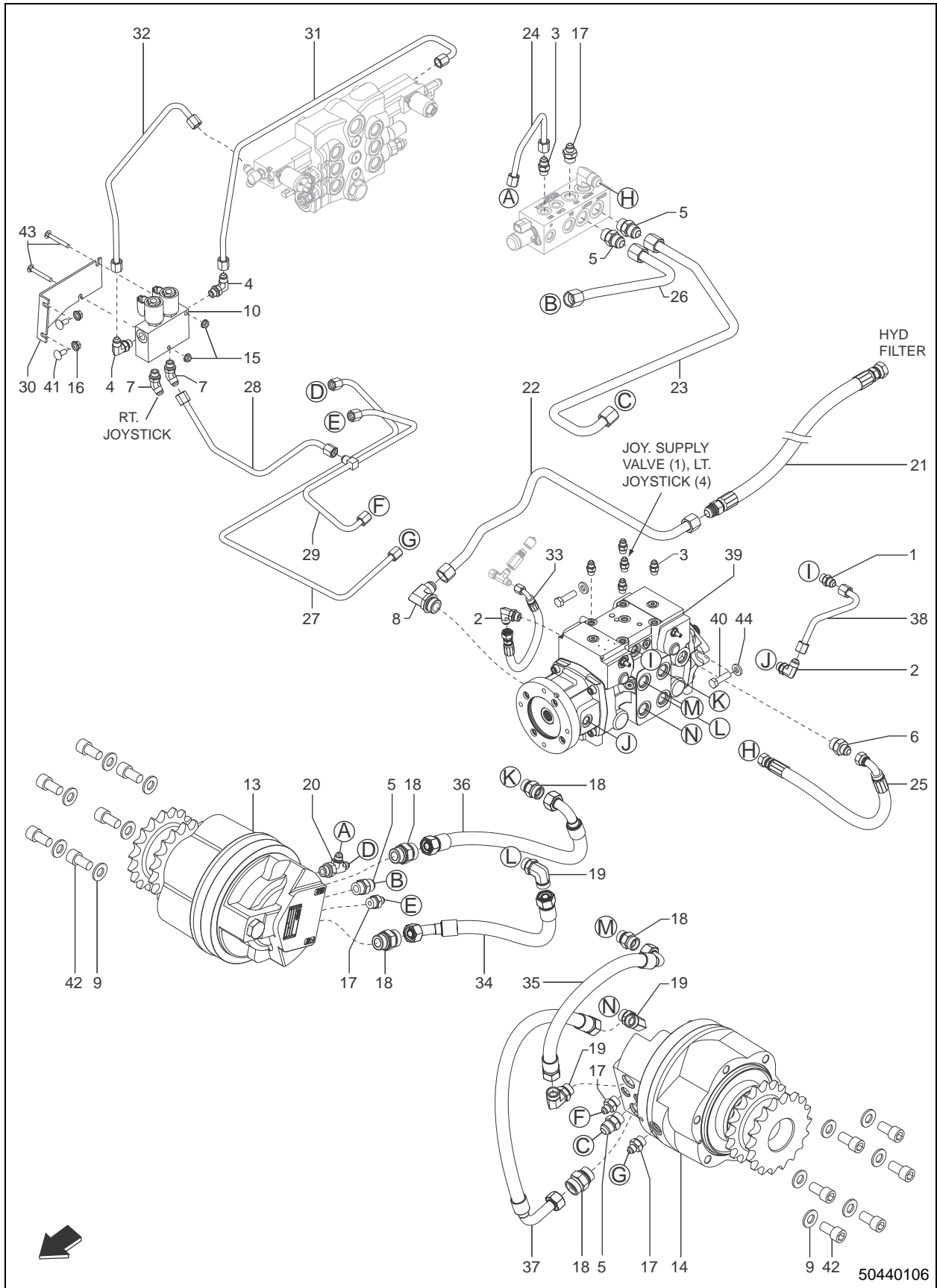
R165 - HYDRAULICS

HYDROSTATICS W/ DRIVE MOTORS (1-SPEED JOYSTICK CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	054626	ST MJ08-MORB08	3
	2	054816	90 MJ08-MAORB08	2
	3	054994	ST MJ06-MORB06	7
	4	055981	TEE BR MJ06-MJ06-MAORB06	1
	5	068938	90 MJ06-MAORB06	2
	6	072602	ST MJ10-MORB12	1
	7	079026	45 MJ06-MAORB06	1
	8	089099	ST MJ08-MORB10	2
	9	121684	90 MJ12-MAORB16	1
	10	135773	WASHER 5/8 HT	12
	11	184102	VALVE/SOLENOID (see Page 88 for internal components)	1
	14	210-19469	LN FL SERR 1/4 CZY	2
	15	210-19470	LN FL SERR 5/16 CZY	2
	16	230-24749	ST MJ06-MORB08	1
	17	272669	ST MC20-MORB12-S	2
	18	272867	90 MC20-MAORB12-S	3
	19	50301187	ST MC20-MORB10-S	3
	20	50301933	ST MORB10-FORB12	1
	21	50302249	HOSE/HYD -12 X 31IN	1
	22	50302250	TUBE/HYD -12 PUMP INLET	1
	23	50302257	HOSE/HYD -10 X 23IN	1
	24	50302421	TUBE/HYD -06 RH BRAKE	1
	25	50302833	TUBE/HYD -08 LH DRAIN	1
	26	50302834	TUBE/HYD -08 RH DRAIN	1
	27	50302835	TUBE/HYD -06 LH BRAKE	1
	28	50303002	MOTOR/DRIVE HOS 13T (see Page 84 for internal components)	2
	29	50303021	TUBE/HYD -06 2 SP PRESSURE	1
	30	50303087	BRACKET/2 SPEED VALVE	1
	31	50303220	TUBE/HYD -06 2 SP TANK	1
	32	50303240	HOSE/HYD -06 X 15IN	1
	33	50303438	HOSE/HYD -12 X 20IN	1
	34	50303440	HOSE/HYD -12 X 20.5IN	1
	35	50303443	HOSE/HYD -12 X 27IN	1
	36	50303445	HOSE/HYD -12 X 25IN	1
	37	50303508	TUBE/HYD -08 CHARGE JUMPER	1
	38	50351006	PUMP/TANDEM/A22 (see Page 100 for internal components)	1
	39	650569	CS 1/2X1-3/4 C5ZY	2
	40	650687	CB 5/16X3/4 C5ZY	2
	41	651620	SHCS M16-2X30 C12.9 OCB DIN912	12
	42	652140	CB 1/4X2 C5ZY	2
	43	P471548	WASHER/HARD .50	2

R165 - HYDRAULICS

HYDROSTATICS W/ DRIVE MOTORS (2-SPEED JOYSTICK CONTROLS)

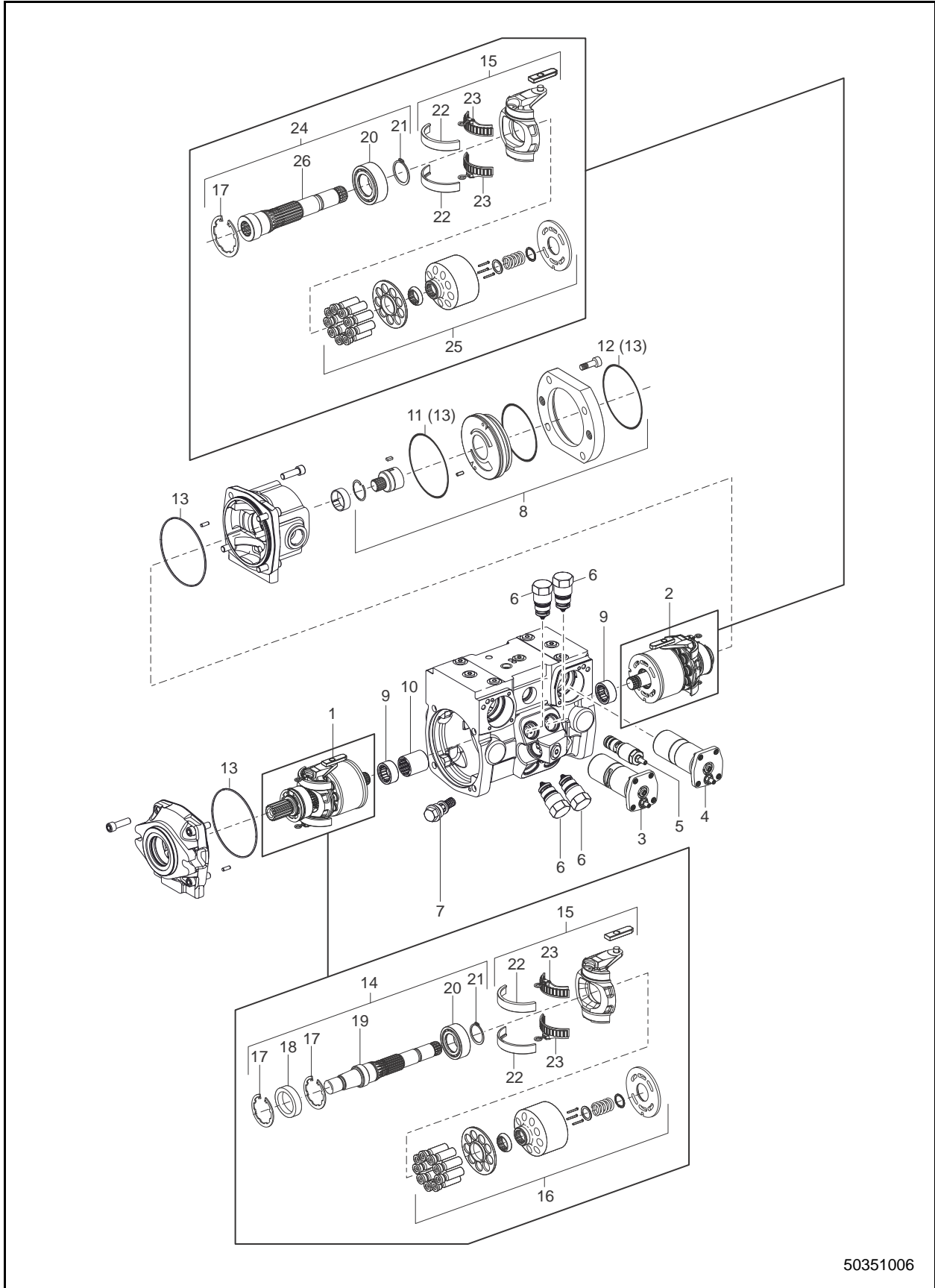


R165 - HYDRAULICS

HYDROSTATICS W/ DRIVE MOTORS (2-SPEED JOYSTICK CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	054626	ST MJ08-MORB08	1
	2	054816	90 MJ08-MAORB08	2
	3	054994	ST MJ06-MORB06	6
	4	068938	90 MJ06-MAORB06	2
	5	072580	ST MJ10-MORB10	4
	6	072602	ST MJ10-MORB12	1
	7	079026	45 MJ06-MAORB06	2
	8	121684	90 MJ12-MAORB16	1
	9	135773	WASHER 5/8 HT	12
	10	183978	MANIFOLD/VALVE (see Page 102 for internal components)	1
	13	193672	MOTOR/2 SPEED RT (see Page 94 for internal components)	1
	14	193673	MOTOR/2 SPEED LT (see Page 94 for internal components)	1
	15	210-19469	LN FL SERR 1/4 CZY	2
	16	210-19470	LN FL SERR 5/16 CZY	2
	17	230-24749	ST MJ06-MORB08	4
	18	272669	ST MC20-MORB12-S	5
	19	272867	90 MC20-MAORB12-S	3
	20	50300558	TEE RUN MJ06-MAORB08-MJ06	1
	21	50302249	HOSE/HYD -12 X 31IN	1
	22	50302250	TUBE/HYD -12 PUMP INLET	1
	23	50302254	TUBE/HYD -10 LH DRAIN	1
	24	50302256	TUBE/HYD -06 RH BRAKE	1
	25	50302257	HOSE/HYD -10 X 23IN	1
	26	50302813	TUBE/HYD -10 RH DRAIN	1
	27	50302820	TUBE/HYD -06 LH BRAKE	1
	28	50302821	TUBE/HYD -06 2 SP OUTLET	1
	29	50302822	TUBE/HYD -06 2 SP MOTOR	1
	30	50303087	BRACKET/2 SPEED VALVE	1
	31	50303220	TUBE/HYD -06 2 SP TANK	1
	32	50303222	TUBE/HYD -06 2 SP PRESSURE	1
	33	50303240	HOSE/HYD -06 X 15IN	1
	34	50303438	HOSE/HYD -12 X 20IN	1
	35	50303440	HOSE/HYD -12 X 20.5IN	1
	36	50303443	HOSE/HYD -12 X 27IN	1
	37	50303445	HOSE/HYD -12 X 25IN	1
	38	50303508	TUBE/HYD -08 CHARGE JUMPER	1
	39	50351006	PUMP/TANDEM/A22 (see Page 100 for internal components)	1
	40	650569	CS 1/2X1-3/4 C5ZY	2
	41	650687	CB 5/16X3/4 C5ZY	2
	42	651620	SHCS M16-2X30 C12.9 OCB DIN912	12
	43	652140	CB 1/4X2 C5ZY	2
	44	P471548	WASHER/HARD .50	2

R165 - HYDRAULICS
TANDEM DRIVE PUMP 50351006

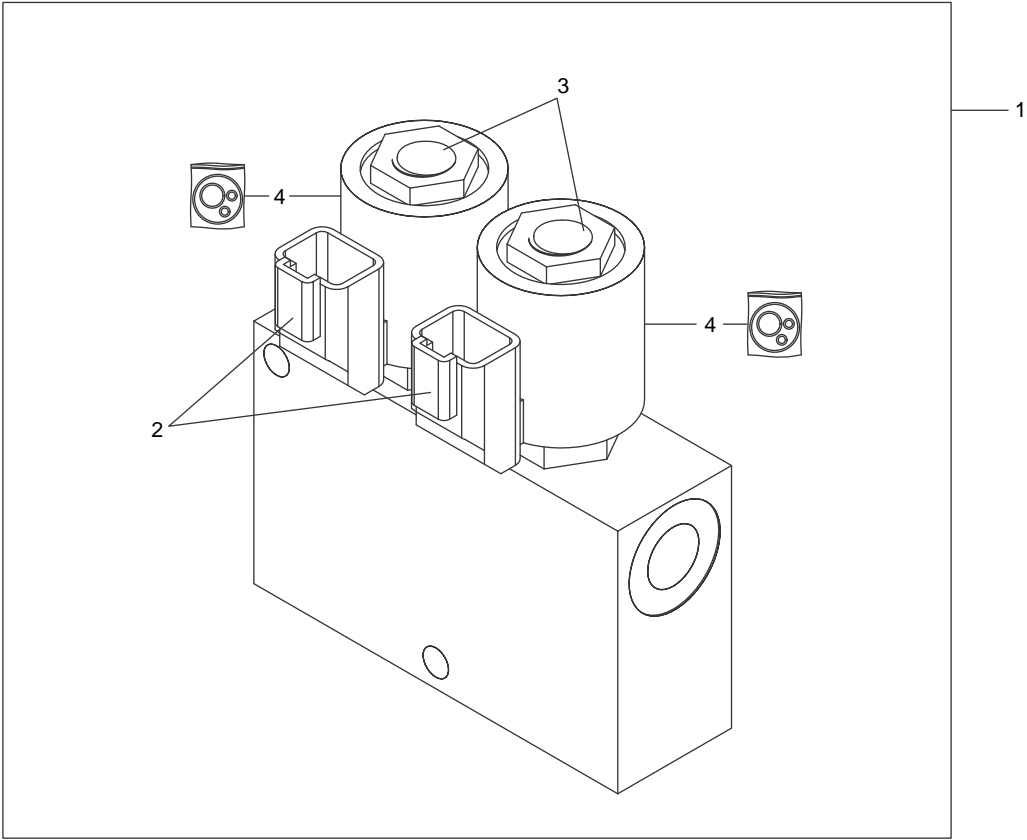


50351006

**R165 - HYDRAULICS
TANDEM DRIVE PUMP 50351006**

Ref.	No.	Part No.	Description	Qty.
1	50353716		GROUP/ROTARY RH ROTATION	1
2	50353717		GROUP/ROTARY LH ROTATION	1
3	50353721		CONTROL/HYDRAULIC	1
4	50286968		HYDRAULIC CONTROL	1
5	50353722		CARTRIDGE/CONTROL	1
6	230100		RELIEF VALVE/VALVE/PRESSURE RELIEF	4
7	50353719		VALVE/CHARGE PRESSURE RELIEF	1
8	191712		PUMP/GEAR/INTERNAL	1
9	191714		BEARING/PLAIN ROLLER	2
10	50353723		COUPLER	1
11	138916		O-RING	1
12	244517		O-RING 101.27MM X 2.62MM	1
13	50353724		KIT/SEAL (INCL. REFS. 11 & 12)	1
14	50353731		SHAFT/DRIVE ASSY (ENGINE END)	1
15	50353730		CRADLE ASSY	2
16	50353725		GROUP/ROTARY RH SUBASSY	1
17	191717		SEEGER-V-RING	3
18	191718		RING/SHAFT SEAL	1
19	191716		DRIVE SHAFT/RH ROTATION	1
20	50353727		BEARING	2
21	50286969		RETAINING RING	2
22	50353729		LINER/BEARING (SET OF 2)	4
23	50353728		BEARING/CRADLE (SET OF 2)	4
24	50353732		SHAFT/DRIVE ASSY (PUMP END)	1
25	50353726		GROUP/ROTARY LH SUBASSY	1
26	191720		DRIVE SHAFT/LH ROTATION	1

**R165 - HYDRAULICS
MANIFOLD VALVE 183978**



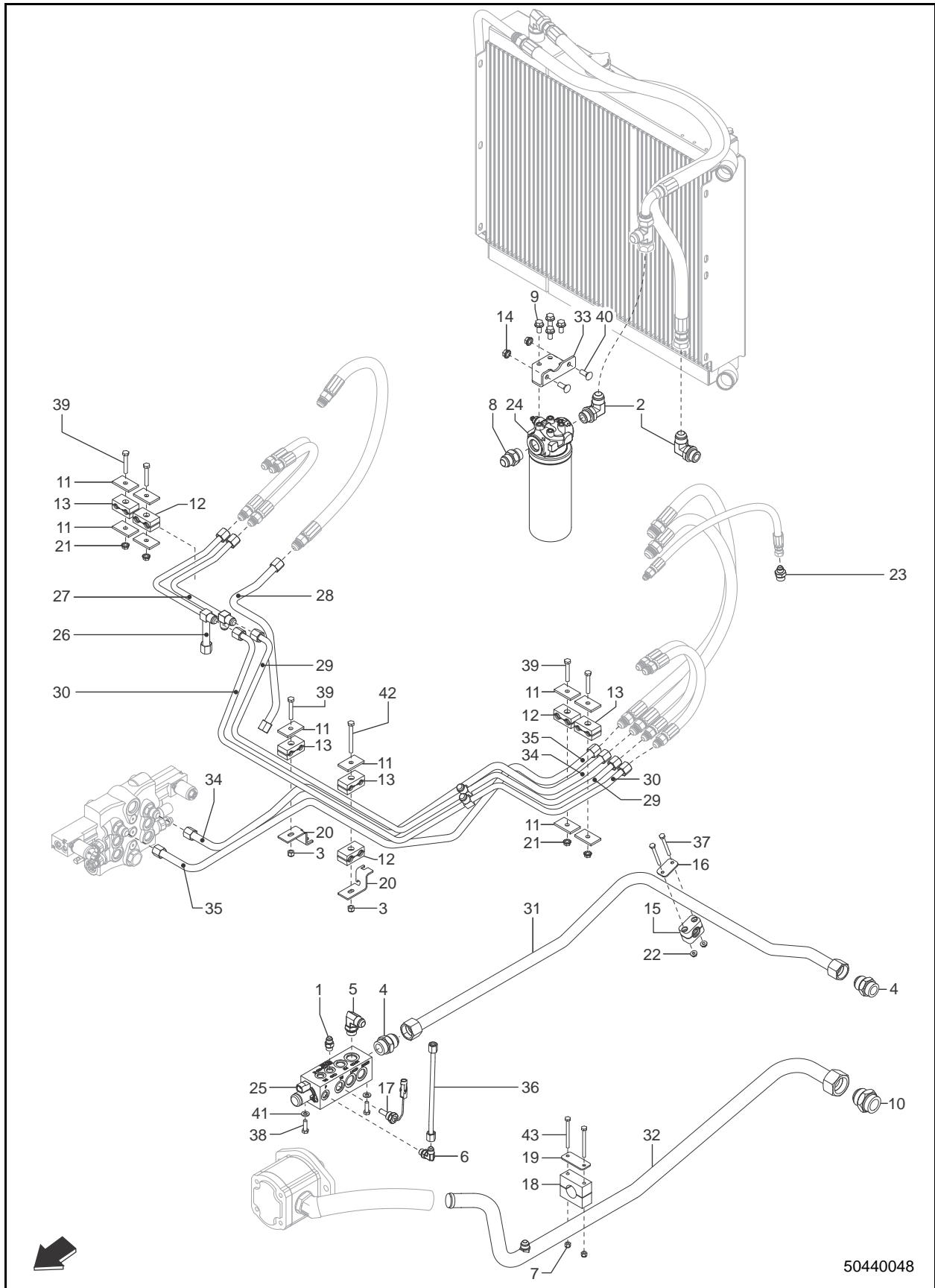
183978

**R165 - HYDRAULICS
MANIFOLD VALVE 183978**

Ref.	No.	Part No.	Description	Qty.
1	183978		MANIFOLD/VALVE	1
2	184104		COIL	2
3	184117		CARTRIDGE (VALVE)	2
4	132199		SEAL KIT	2

R165 - HYDRAULICS

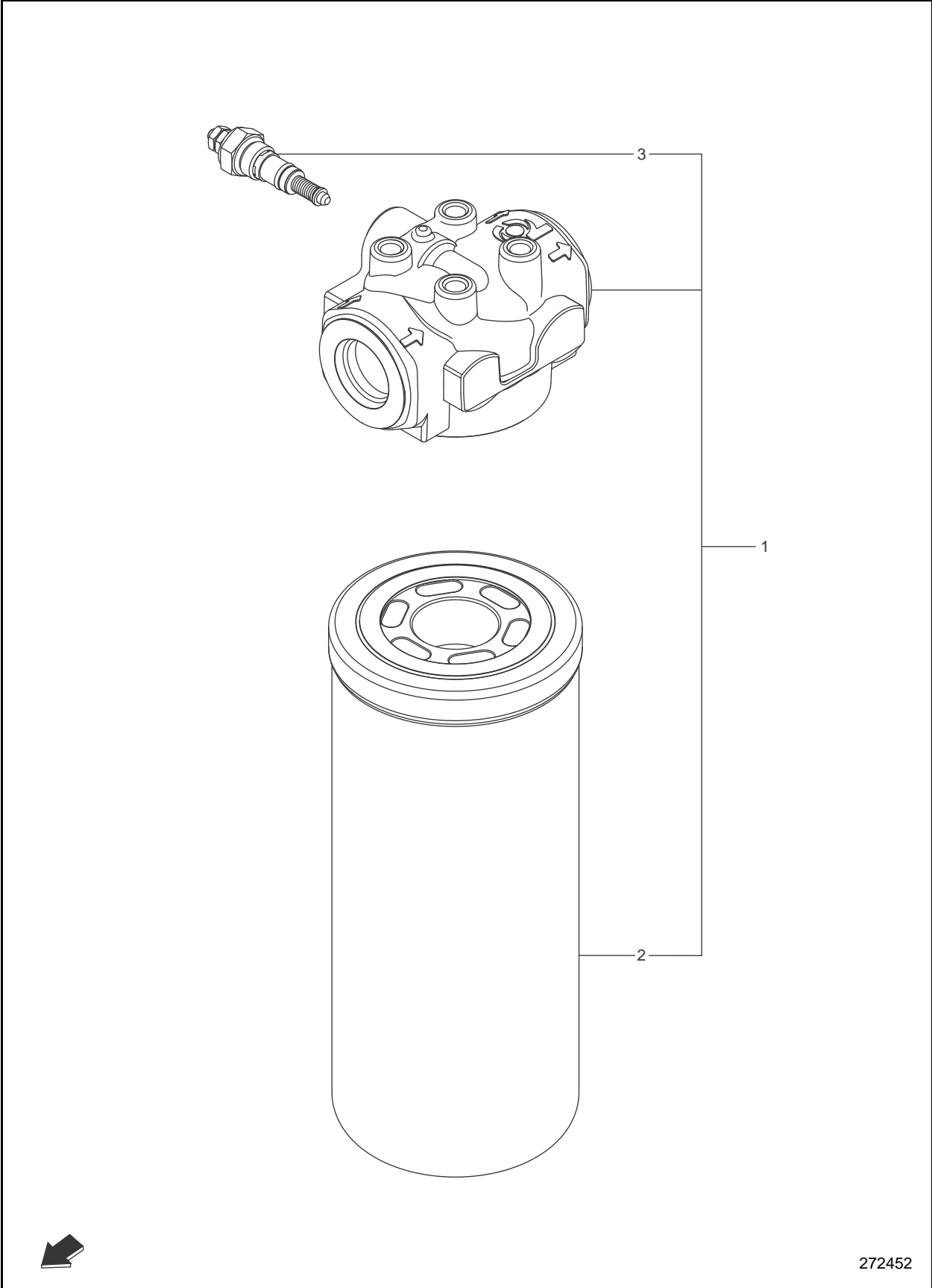
CHASSIS HYDRAULICS



R165 - HYDRAULICS CHASSIS HYDRAULICS

Ref.	No. Part No.	Description	Qty.
	1 054994	ST MJ06-MORB06	1
	2 055005	90 MJ12-MAORB12	2
	3 064260	HLN INST 5/16 CZY	2
	4 064644	ST MJ16-MORB16	2
	5 067761	90 MJ10-MAORB10	1
	6 068938	90 MJ06-MAORB06	1
	7 071401	HLN INST 1/4 CZY	2
	8 072587	ST MJ12-MORB12	1
	9 076588	CS FL LOCK 3/8X3/4 C5ZY	4
	10 079038	ST MJ20-MORB20	1
	11 079098	PLATE/TOP SIZE 2 TWIN FLAT	10
	12 079126	CLAMP/TUBE .62 TWIN	3
	13 088904	CLAMP/TUBE .50 TWIN	4
	14 090666	LN FL SERR 3/8 CZY	2
	15 102524	CLAMP/TUBE 1.00	1
	16 102525	PLATE/TOP SIZE 3 SINGLE	1
	17 132049	TEMPERATURE SWITCH	1
	18 186207	TUBE CLAMP 1 -1/4	1
	19 186254	TUBE CLAMP PLATE	1
	20 194528	BRKT/HARNESS	2
	21 210-19470	LN FL SERR 5/16 CZY	4
	22 210-32184	LN FL CTR 1/4 CZY	2
	23 230-24749	ST MJ06-MORB08	1
	24 272452	HYDRAULIC FILTER (see Page 106 for internal components)	1
	25 50301721	MANIFOLD/RETURN/BRAKE	1
	50290620	12 VDC, DROP IN 3/2 SOLENOID VALVE	1
	240197	SHCS, MS X .8 X 10 MM	2
	50290621	SEAL KIT	1
	26 50302233	TUBE/HYD -08 LOWER	1
	27 50302234	TUBE/HYD -08 LIFT	1
	28 50302236	TUBE/HYD -10 TILT DUMP	1
	29 50302237	TUBE/HYD -08 LIFT	1
	30 50302238	TUBE/HYD -08 LOWER	1
	31 50302286	TUBE/HYD -16 TANK RETURN	1
	32 50302287	TUBE/HYD -20 GP SUPPLY	1
	33 50302979	PLATE/FILTER SUPPORT	1
	34 50303199	TUBE/HYD -10 AUX	1
	35 50303200	TUBE/HYD -10 AUX	1
	36 50303226	TUBE/HYD -06 AUX PRESSURE	1
	37 650449	CS 1/4X2-1/2 C5ZY	2
	38 650487	CS 5/16X1 C5ZY	2
	39 650568	CS 5/16X2 C5ZY	5
	40 650704	CB 3/8X1 C5ZY	2
	41 650810	FW 5/16 ANZY	2
	42 650833	CS 5/16X3 C5ZY	1
	43 651089	CS 1/4X3 C5ZY	2

R165 - HYDRAULICS
HYDRAULIC FILTER

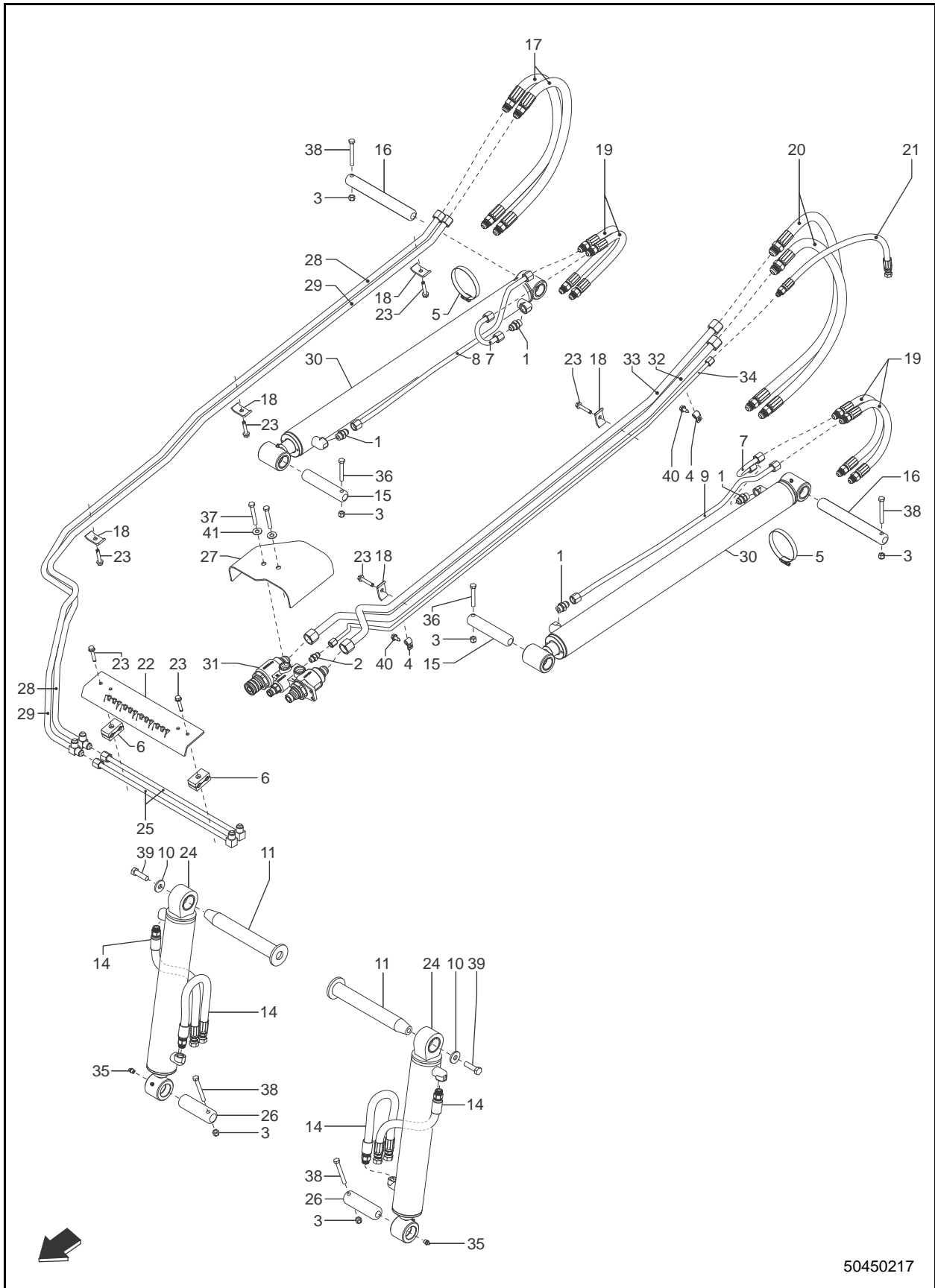


R165 - HYDRAULICS
HYDRAULIC FILTER

Ref.	No.	Part No.	Description	Qty.
1	272452		HYDRAULIC FILTER ASSY (complete)	1
2	074830		OIL FILTER	1
3	127747		SWITCH/INDICATOR	1

R165 - HYDRAULICS

LIFT ARM HYDRAULICS

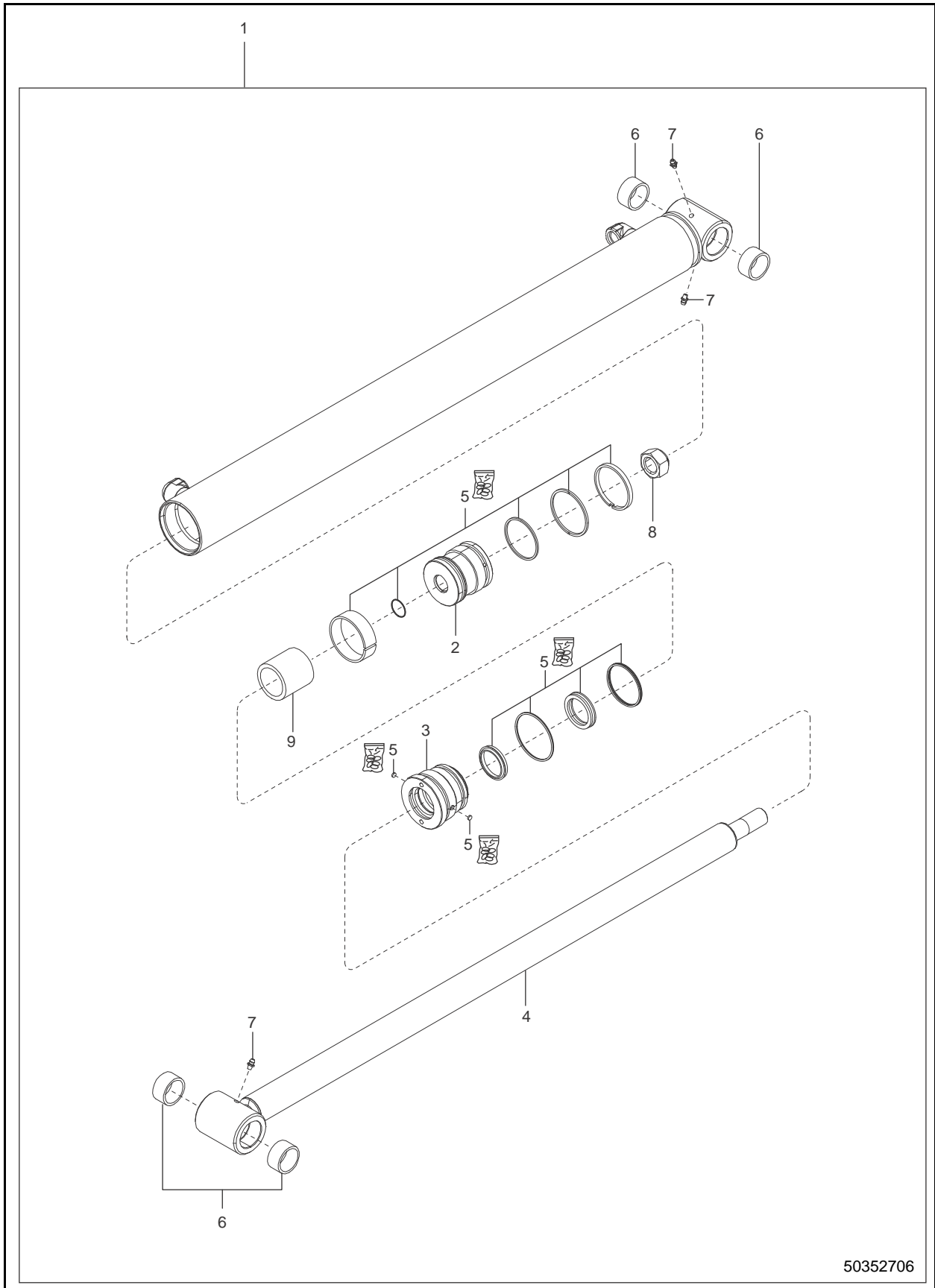


R165 - HYDRAULICS

LIFT ARM HYDRAULICS

Ref.	No.	Part No.	Description	Qty.
	1	054626	ST MJ08-MORB08	4
	2	054994	ST MJ06-MORB06	1
	3	067847	HLN INST 3/8 CZY	6
	4	076078	CLAMP/HOSE .38 X .34 HOLE	2
	5	087849	CLAMP/HOSE #52	2
	6	088904	CLAMP/TUBE .50 TWIN	2
	7	134511	TUBE/LIFT CYL	2
	8	134512	TUBE/LIFT CYL RT	1
	9	134513	TUBE/LIFT CYL LT	1
	10	134966	FW 1/2 HT ZY	2
	11	135306	PIN/TILT CYLINDER	2
	14	170-34709	HYDRAULIC HOSE ASSY	4
	15	188161	PIN	2
	16	188983	PIN	2
	17	194616	HOSE/MP .62 X 40.5	2
	18	390-15909	CLIP, HYDRAULIC LINE	5
	19	50302448	HOSE/HYD -08 X 16.5IN	4
	20	50302450	HOSE/HYD -10 X 47.5IN	2
	21	50302451	HOSE/MP 6 X 32IN	1
	22	50304462	PLATE/COVER	1
	23	50351222	HWHTFS 5/16X1-3/4 10.9ZY	7
	24	50351440	CYLINDER/2.75 X 14.68 (see PAGE 112 for internal components)	2
	25	50352224	TUBE/TILT	2
	26	50352296	PIN	2
	27	50352353	COVER/AUX COUPLER	1
	28	50352417	TUBE/HYD -10 TILT-OUTER	1
	29	50352418	TUBE/HYD -10 TILT-INNER	1
	30	50352706	CYLINDER/2.50 X 28.26 (see Page 110 for internal components)	2
	31	50352739	BLOCK/COUPLER (see Page 114 for internal components)	1
	32	50354067	TUBE/HYD -12 AUX-INNER	1
	33	50354072	TUBE/HYD -12 AUX-OUTER	1
	34	50354073	TUBE/HYD -06 AUX-RETURN	1
	35	570002	FITTING/GREASE 1/8 PTF	2
	36	650492	CS 3/8X2-1/2 C5 ZY	2
	37	650493	CS 3/8X2-3/4 C5ZY	2
	38	650818	CS 3/8X3 C5ZY	4
	39	651366	CS 1/2X1-3/4 C8Z	2
	40	651648	HWHTRS TAP/R 5/16X3/4 CZY	2
	41	654006	FW 3/8 AWZY	2

R165 - HYDRAULICS LIFT CYLINDER

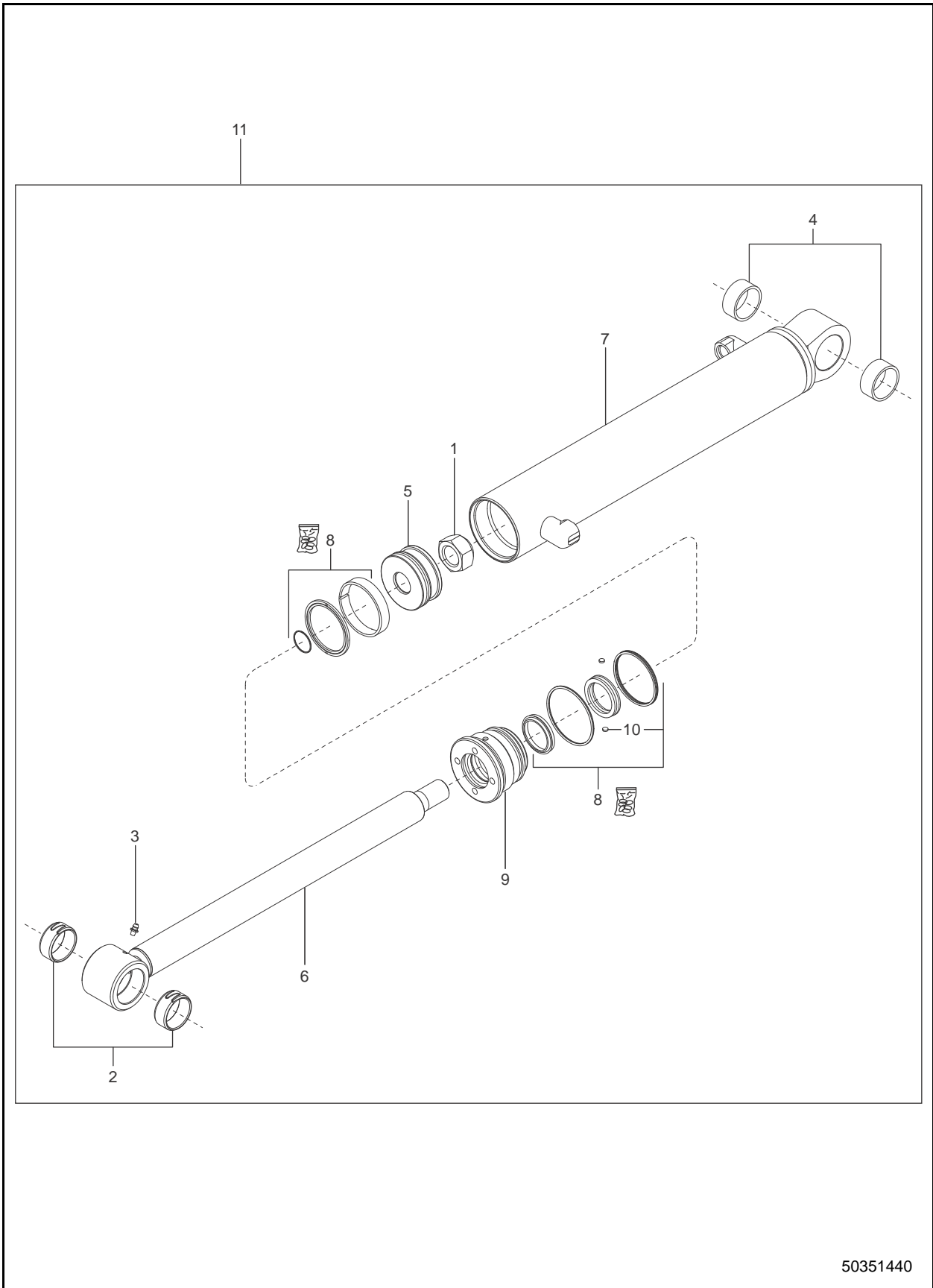


50352706

R165 - HYDRAULICS LIFT CYLINDER

Ref.	No.	Part No.	Description	Qty.
	1	50352706	CYLINDER/2.50 X 28.26 (Incl. Refs 2-9)	1
	2	170-35104	PISTON	1
	3	270458	HEAD GLAND	1
	4	50290596	CYLINDER ROD	1
	5	50280035	KIT/SEAL	1
	6	134844	SPRING BUSHING 1.50X1.25	4
	7	198178	ZERK/1/4-28 STR/SELF TAP	3
	8	075722	LN 7/8 FBZ	1
	9	50290597	SPACER	1

R165 - HYDRAULICS TILT CYLINDER

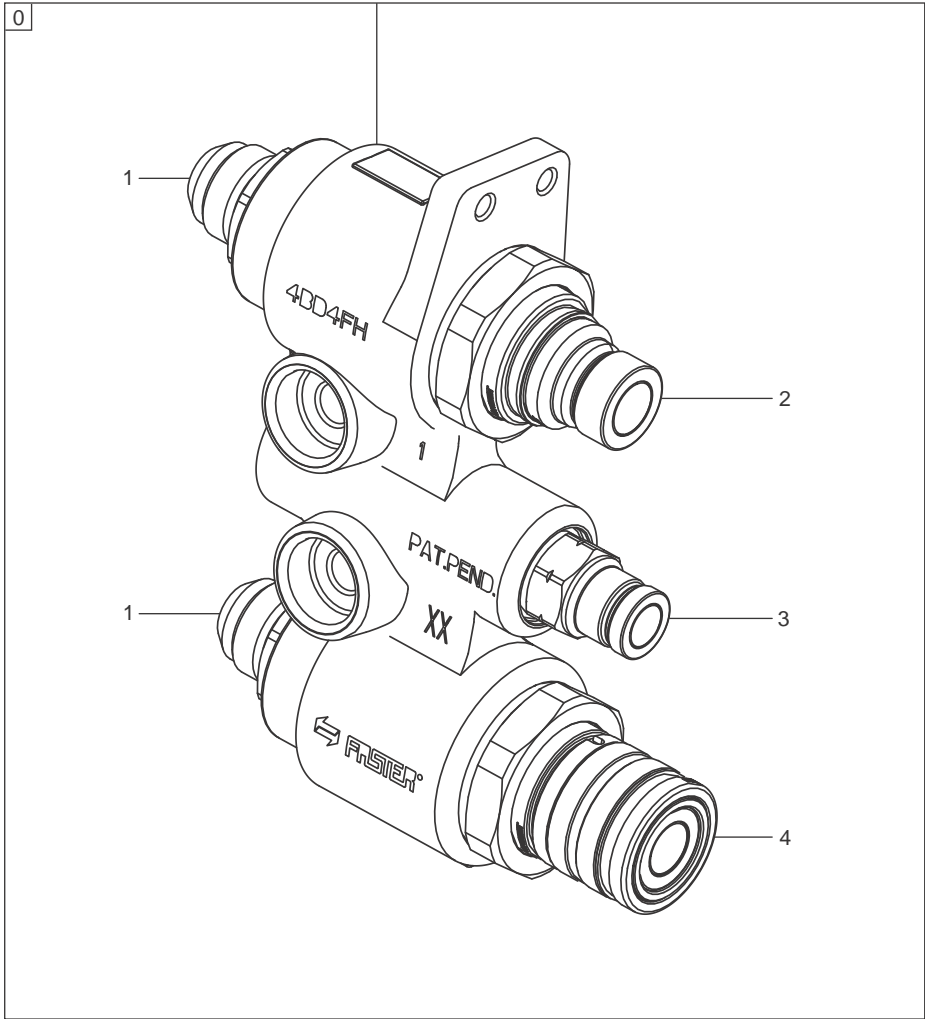


50351440

R165 - HYDRAULICS TILT CYLINDER

Ref.	No.	Part No.	Description	Qty.
	1	080313	NUT LOCK 1.00-14	1
	2	131488	BUSHING/CONNEX	2
	3	198178	ZERK/1/4-28 STR/SELF TAP	1
	4	50280034	BEARING/COMPOSITE	2
	5	50280044	PISTON	1
	6	50352232	ROD/WELDMENT	1
	7	50352233	TUBE/WELDMENT	1
	8	50352962	SEAL KIT 2.75 CYLINDER	1
	9	50280041	GLAND/HEAD	1
	10	50352965	INSERT/LOCKING	1
	11	50351440	TILT CYLINDER/2.75 X 14.68	1

**R165 - HYDRAULICS
COUPLER BLOCK**



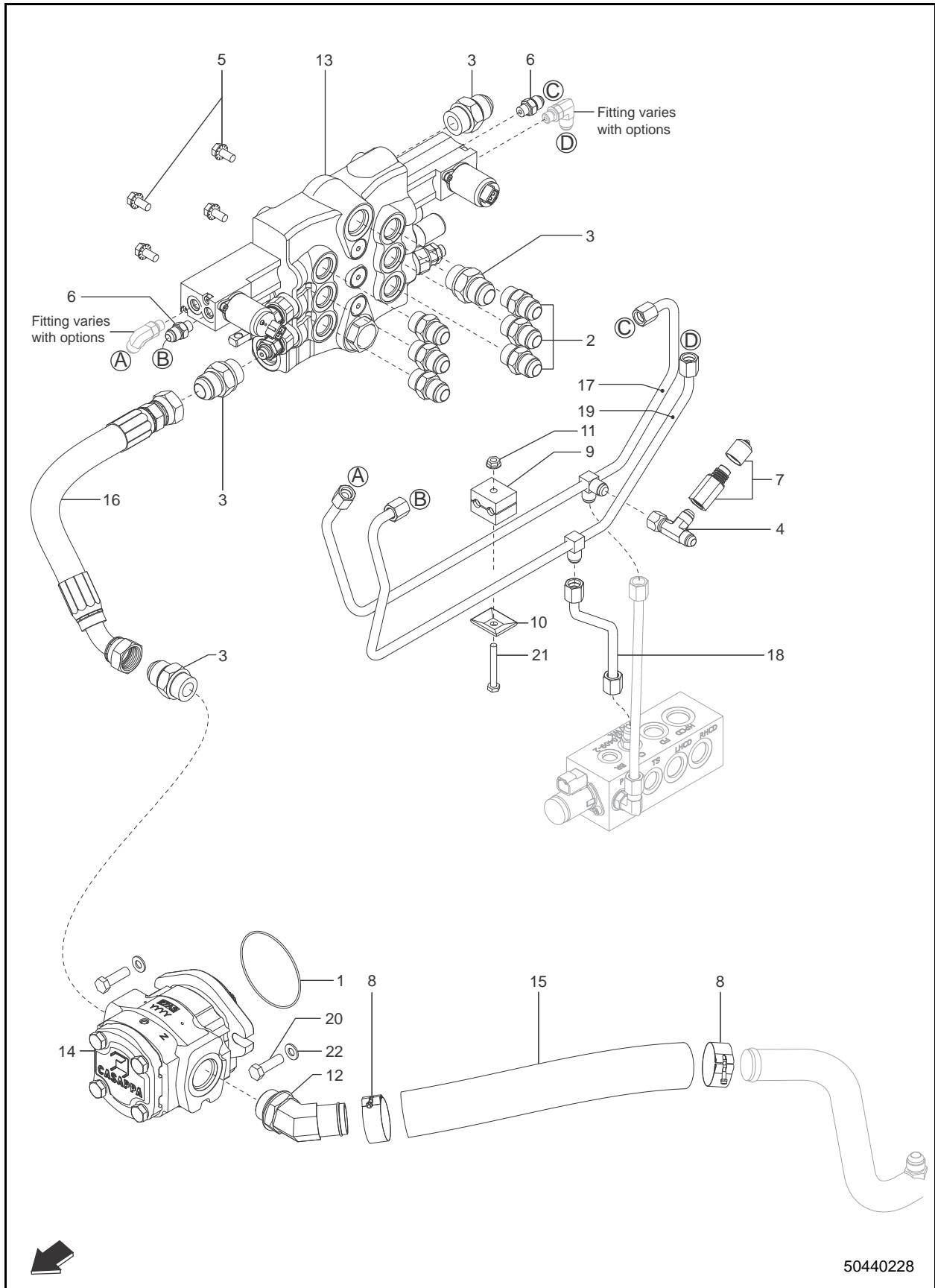
50352739

R165 - HYDRAULICS COUPLER BLOCK

Ref.	No.	Part No.	Description	Qty.
	0	50352739	BLOCK/COUPLER (complete)	1
	1	50352914	KIT/FITTING/3/4 SAE (includes fitting, spring and O-ring)	2
	2	50352909	COUPLER/MALE	1
	3	50352912	COUPLER/RETURN	1
	4	50352910	COUPLER/FEMALE	1

R165 - HYDRAULICS

AUXILIARY HYDRAULICS (T-B/H-F CONTROLS)

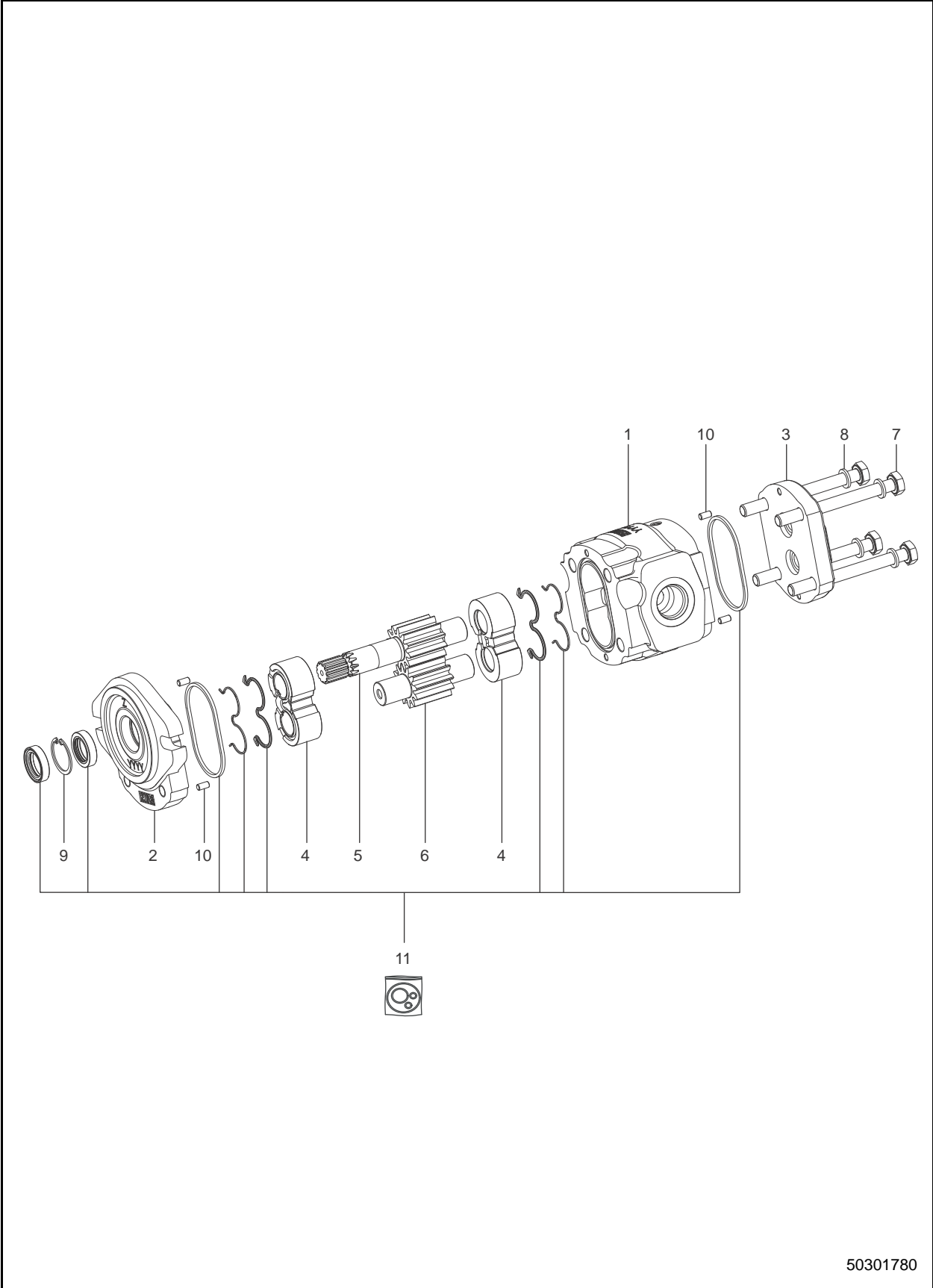


50440228

R165 - HYDRAULICS
AUXILIARY HYDRAULICS (T-B/H-F CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	061574	O-RING 042 N90	1
	2	072580	ST MJ10-MORB10	6
	3	072587	ST MJ12-MORB12	4
	4	072806	TEE MJ06-FJS06-MJ06	1
	5	076587	CS FL LOCK 5/16X5/8 C5ZY	4
	6	129124	ST MJ06-MORB04	2
	7	193169	TESTPORT	1
	8	193743	CLAMP/T-BOLT 1.75	2
	9	194309	CLAMP/TUBE .38 TWIN	1
	10	194380	PLATE/TOP SIZE 1 TWIN	1
	11	210-19469	LN FL SERR 1/4 CZY	1
	12	230-32356	45 HB20-MAORB16	1
	13	50301746	VALVE/CONTROL/3 SPOOL/EH AUX (see Page 120 for internal components)	1
	14	50301780	PUMP/GEAR/30CC (see Page 118 for internal components)	1
	15	50301999	HOSE/HYD -20 X 13IN	1
	16	50302916	HOSE/HYD -12 X 16IN	1
	17	50303224	TUBE/HYD -06 AUX CTRL	1
	18	50303225	TUBE/HYD -06 AUX DRAIN	1
	19	50303228	TUBE/HYD -06 AUX CTRL	1
	20	650491	CS 3/8X1-1/4 C5ZY	2
	21	650706	CS 1/4X2 C5ZY	1
	22	651562	FW 3/8 HT ZY	2

R165 - HYDRAULICS
GEAR PUMP (T-B/H-F CONTROLS)



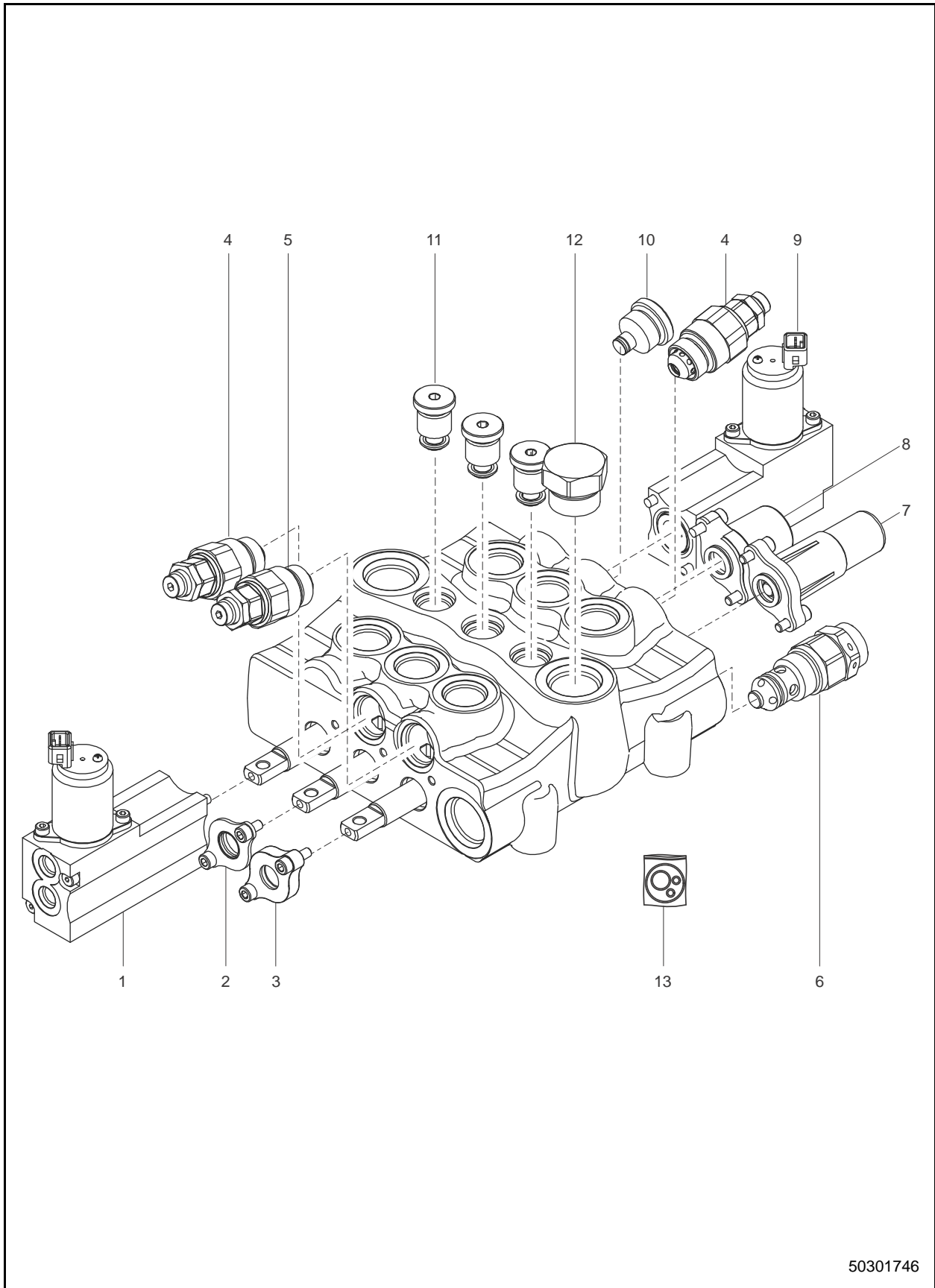
50301780

**R165 - HYDRAULICS
GEAR PUMP (T-B/H-F CONTROLS)**

Ref.			
No.	Part No.	Description	Qty.
0	50301780	PUMP/GEAR/30CC (complete pump)	1
1	50286979	GEAR HOUSING	1
2	50286980	FRONT COVER	1
3	50286981	REAR COVER	1
4	50286983	THRUST PLATE, AV R05	2
5	50286985	DRIVE SHAFT, PL20.30	1
6	50286991	DRIVEN GEAR, F-K-PL20.30	1
7	50286994	HHCS, 10 X 120	4
8	50286996	WASHER, 10 (10.5X16X2)	4
9	50286998	SNAP RING, 30MM	1
10	50286999	PIN, 0.5 X 10MM	4
11	50287000	SEAL KIT	1

R165 - HYDRAULICS

3-SPOOL CONTROL VALVE (T-B/H-F CONTROLS)



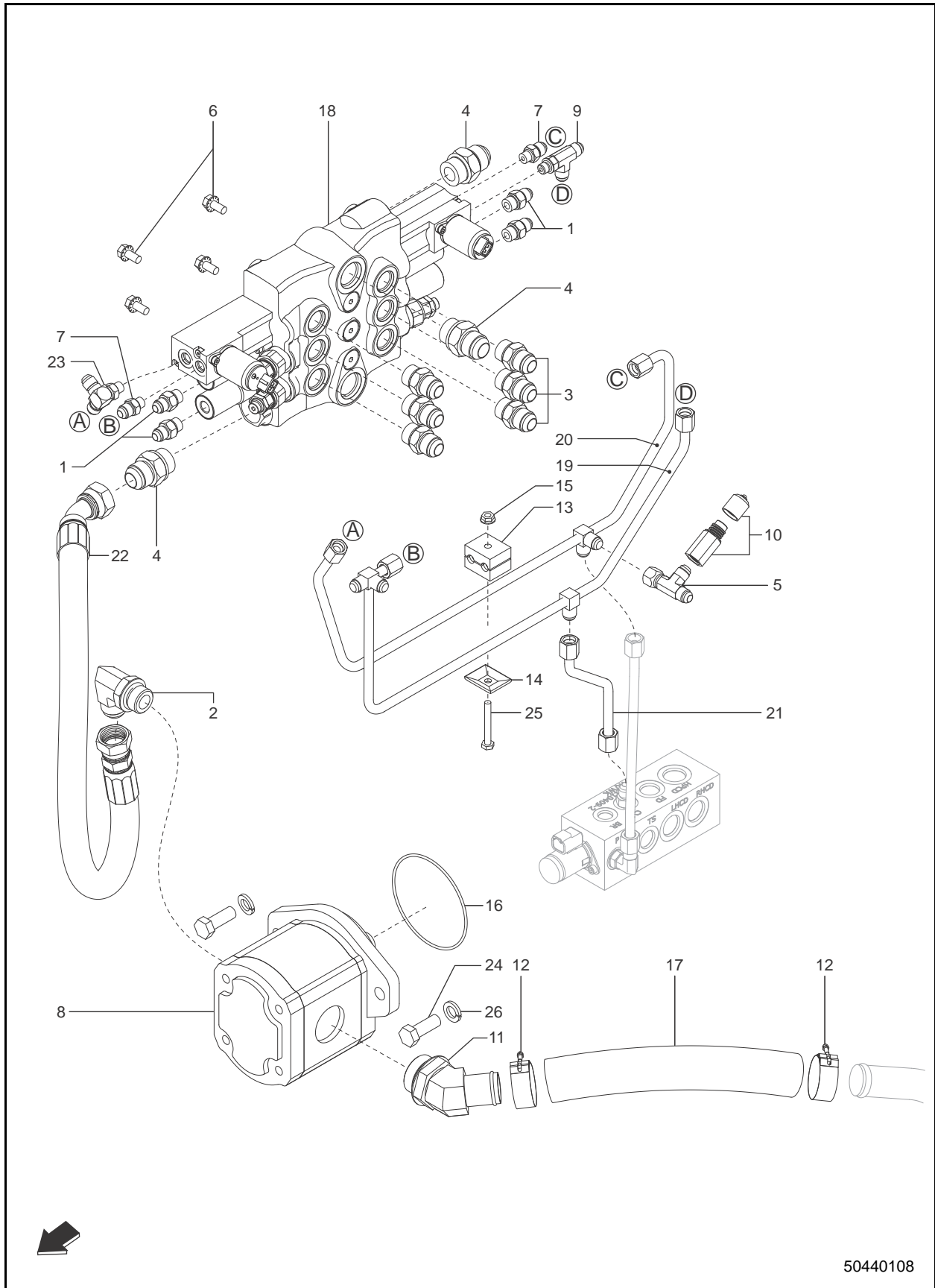
50301746

R165 - HYDRAULICS
3-SPOOL CONTROL VALVE (T-B/H-F CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	0	50301746	VALVE/CONTROL/3 SPOOL/EH AUX (complete)	1
	1	50353586	KIT ELECTRO HYD SPOOL 12V FRONT	1
	2	240289	SEAL RETAINER/FLOAT	1
	3	240288	SEAL RETAINER	1
	4	240278	COMBINATED VALVE (240-A BAR)	2
	5	50354512	PORT RELIEF/2350 PSI	1
	6	50280176	VALVE/MAIN RELIEF (210 BAR- 3045PSI)	1
	7	240286	DETENT KIT	1
	8	240287	SPOOL RETURN ACTION KIT	1
	9	50353575	KIT ELECTRO HYD SPOOL 12V REAR	3
	10	240274	PLUG KIT	1
	11	240272	CHECK VALVE KIT	3
	12	103060	PLUG KIT 1-1/16".12 UNF	1
	13	50287446	SEAL KIT	1

R165 - HYDRAULICS

AUXILIARY HYDRAULICS (JOYSTICK CONTROLS)

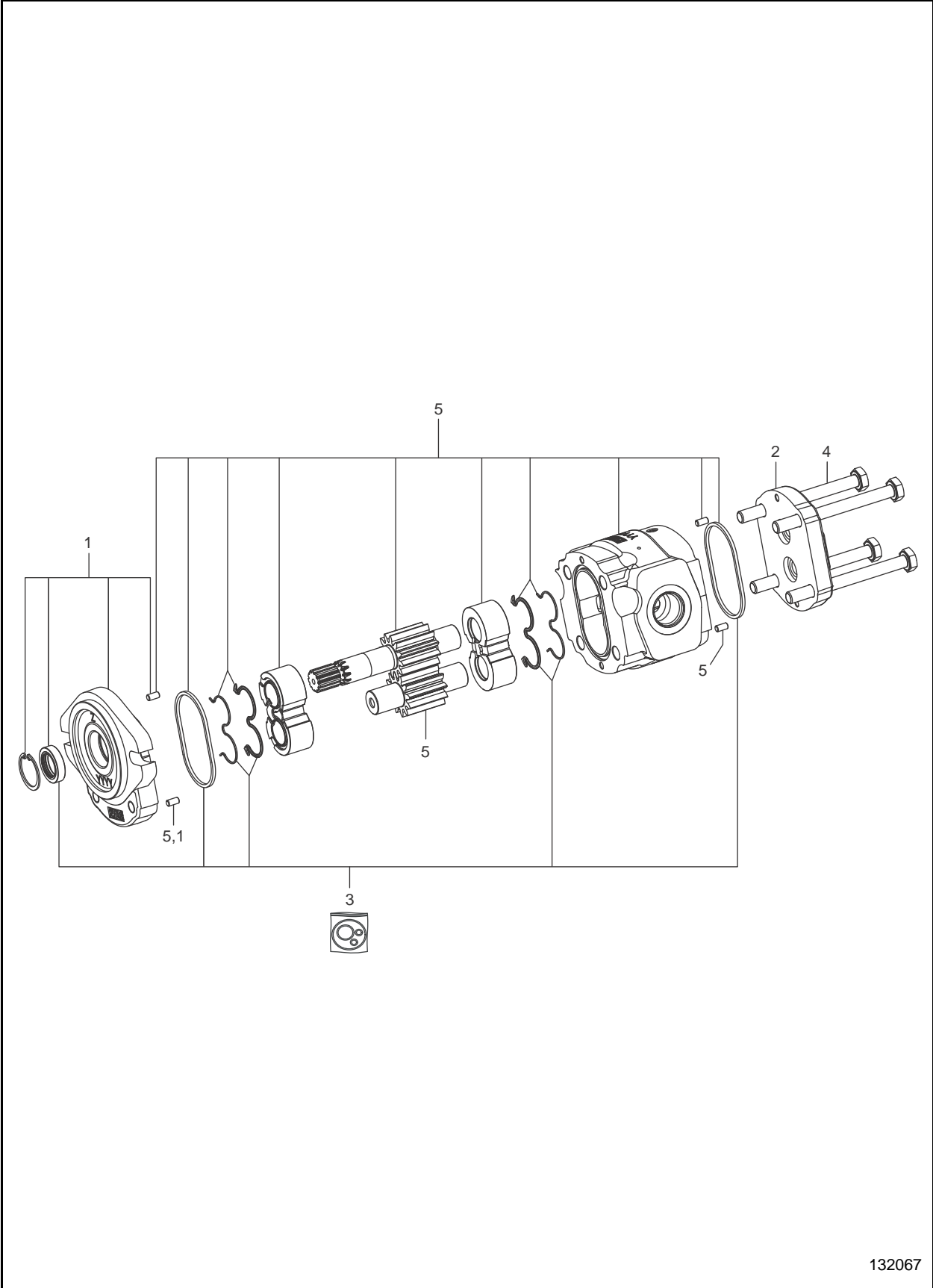


50440108

R165 - HYDRAULICS AUXILIARY HYDRAULICS (JOYSTICK CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	054994	ST MJ06-MORB06	4
	2	055005	90 MJ12-MAORB12	1
	3	072580	ST MJ10-MORB10	6
	4	072587	ST MJ12-MORB12	3
	5	072806	TEE MJ06-FJS06-MJ06	1
	6	076587	CS FL LOCK 5/16X5/8 C5ZY	4
	7	129124	ST MJ06-MORB04	2
	8	132067	GEAR PUMP/1.708 SINGLE (see Page 124 for internal components)	1
	9	175377	TEE RUN MJ06-MAORB04-MJ06	1
	10	193169	TESTPORT	1
	11	193665	45 HB20-MAORB20	1
	12	193743	CLAMP/T-BOLT 1.75	2
	13	194309	CLAMP/TUBE .38 TWIN	1
	14	194380	PLATE/TOP SIZE 1 TWIN	1
	15	210-19469	LN FL SERR 1/4 CZY	1
	16	244517	O-RING 101.27MM X 2.62MM	1
	17	50302276	HOSE/HYD -20 X 10IN	1
	18	50303156	VALVE/CONTROL/PILOT (see Page 126 for internal components)	1
	19	50303223	TUBE/HYD -06 AUX CTRL	1
	20	50303224	TUBE/HYD -06 AUX CTRL	1
	21	50303225	TUBE/HYD -06 AUX DRAIN	1
	22	50303255	HOSE/HYD -12 X 30IN	1
	23	50303681	Y MJ06-MJ06-MAORB04	1
	24	50657014	CS 1/2X1-3/8 C5ZY	2
	25	650706	CS 1/4X2 C5ZY	1
	26	654030	LW 1/2 RZY	2

R165 - HYDRAULICS
GEAR PUMP (JOYSTICK CONTROLS)



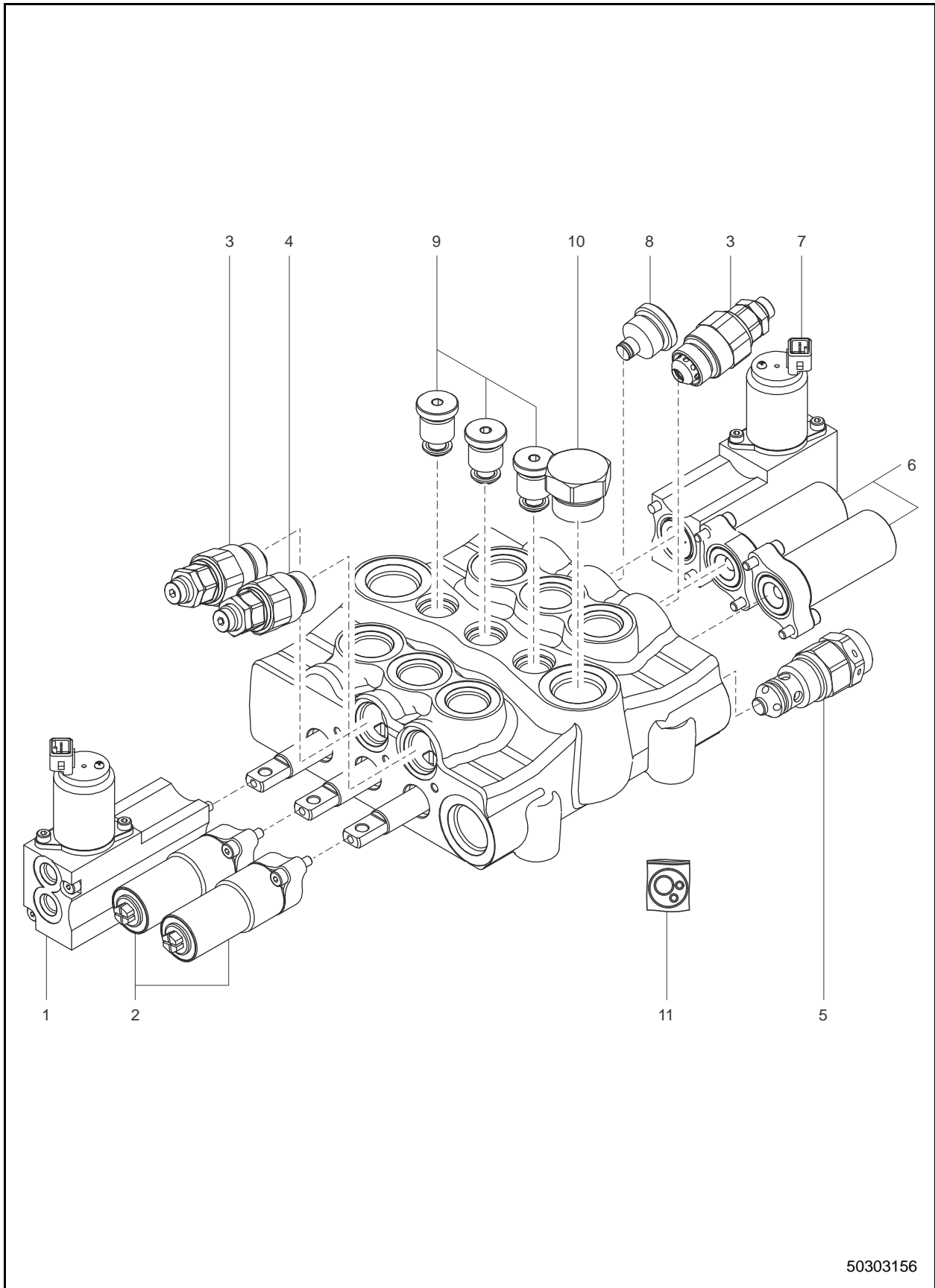
132067

R165 - HYDRAULICS GEAR PUMP (JOYSTICK CONTROLS)

Ref.	No.	Part No.	Description	Qty.
0	132067		GEAR PUMP / 1.708 SINGLE (complete pump)	1
1	132546		KIT/FLANGE (includes items below)	1
			FLANGE	1
			SHAFT SEAL	1
			SNAP RING	1
			DOWEL PIN	2
2	132547		ENDCOVER	1
3	132541		KIT/SEAL (includes items below)	1
			SHAFT SEAL	1
			O-RING	2
			E-SEAL	2
			BACKUP RING	2
4	132548		SCREW/CAP M12 X 121MM	4
5	132551		KIT/HOUSING (includes items below)	1
			HOUSING	1
			DOWEL PIN	4
			O-RING	2
			GEAR NO. 1	1
			GEAR NO. 2	1
			BEARING	2
			E-SEAL	2
			BACKUP RING	2

R165 - HYDRAULICS

CONTROL VALVE (JOYSTICK CONTROLS)



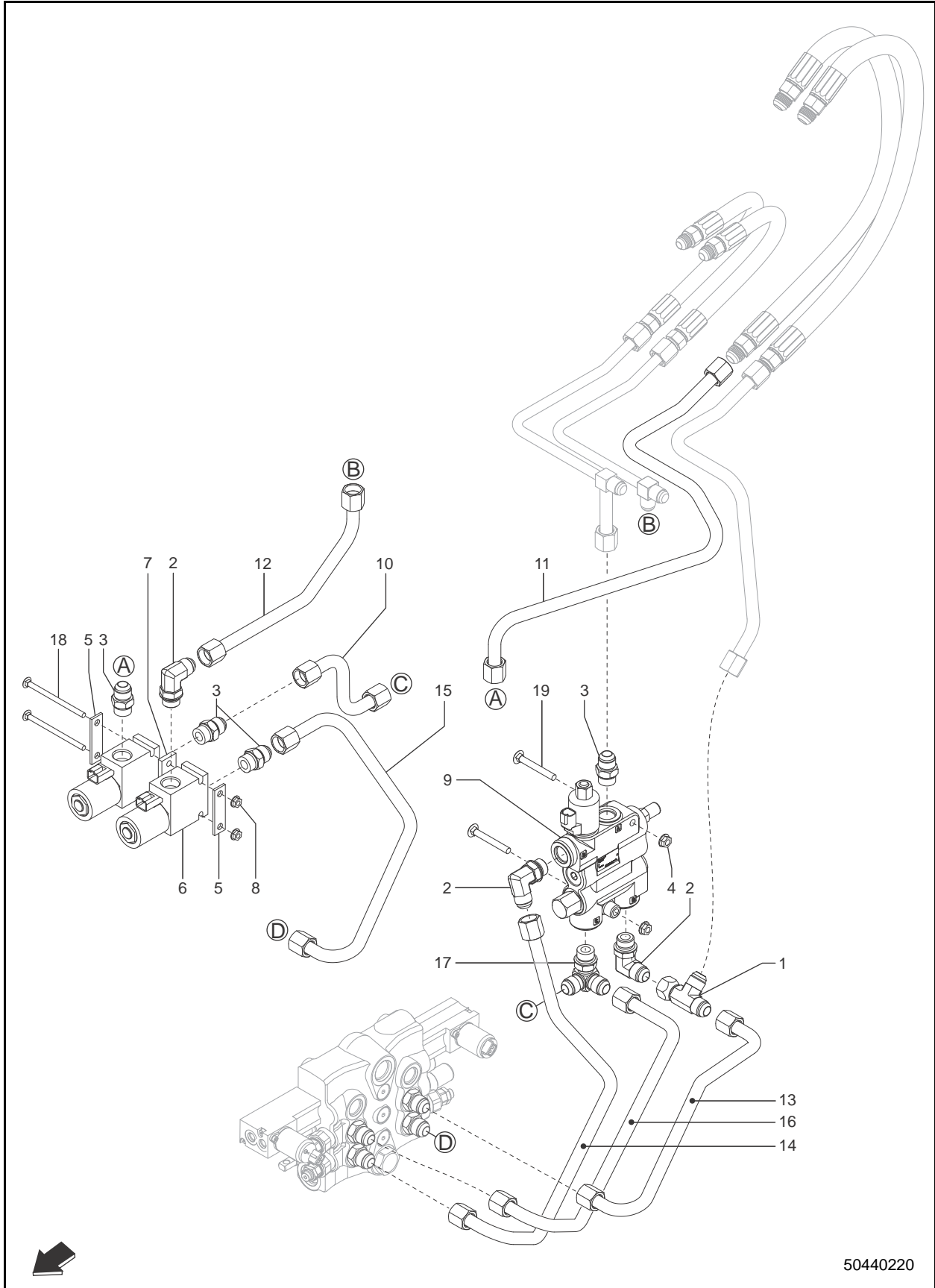
50303156

R165 - HYDRAULICS CONTROL VALVE (JOYSTICK CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	0	50303156	VALVE/CONTROL/PILOT (complete)	1
	1	50353586	KIT ELECTRO HYD SPOOL 12V FRONT	1
	2	240276	ANTERIOR HYDRAULIC CONTROL	2
	3	240278	COMBINATED VALVE (240 BAR)	2
	4	50354512	COMBINATED VALVE (160 BAR)	1
	5	50280176	COMBINATED VALVE (205 BAR)	1
	6	240273	REAR HYDRAULIC CONTROL	2
	7	50353575	KIT ELECTRO HYD SPOOL 12V REAR	2
	8	240274	PLUG KIT	1
	9	240272	CHECK VALVE KIT	3
	10	103060	PLUG KIT 1-1/16".12 UNF	1
	11	50287450	SEAL KIT	1

R165 - HYDRAULICS

HYDRAULICS, SELF-LEVELING (T-B/H-F CONTROLS)

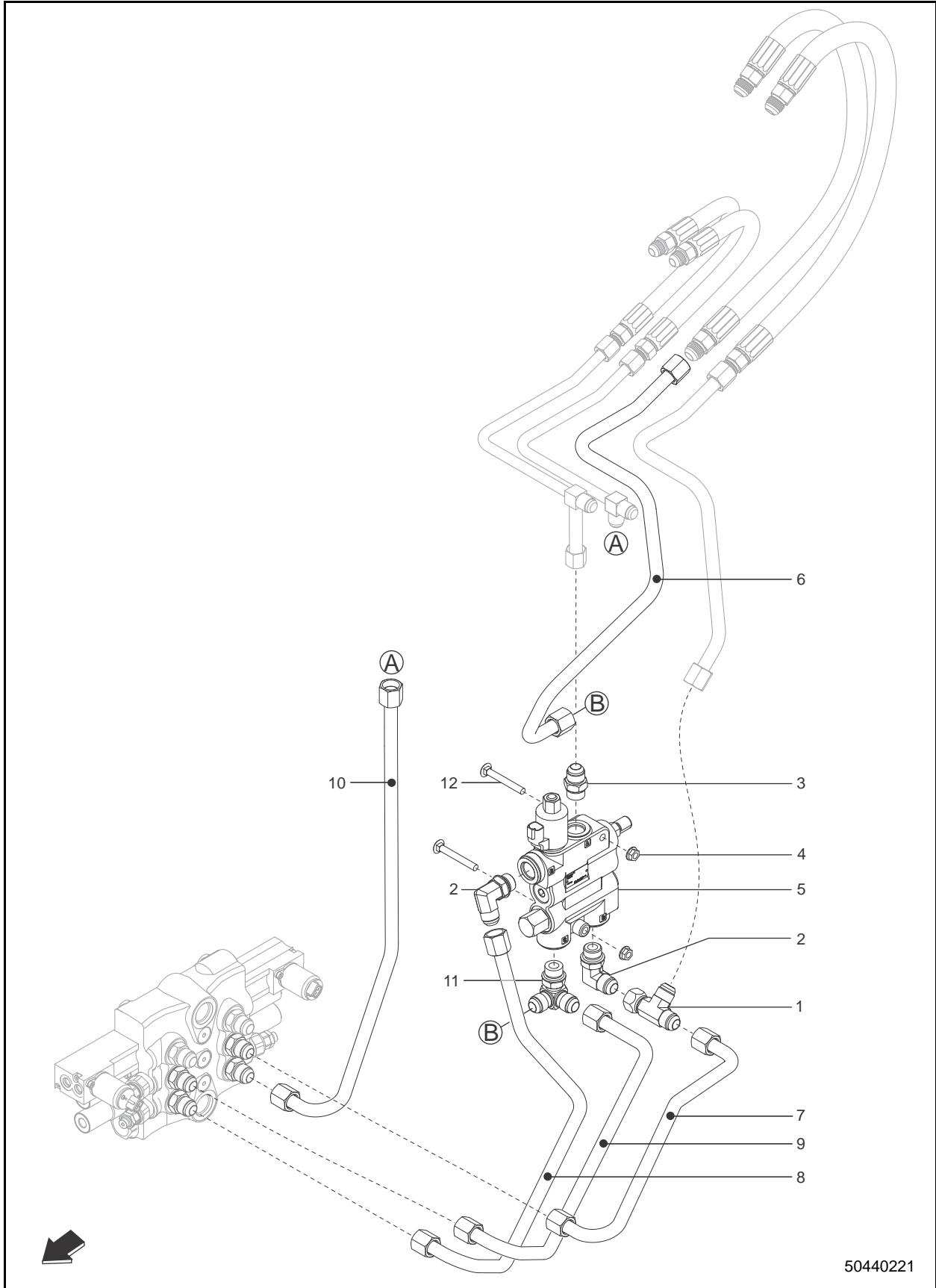


R165 - HYDRAULICS
HYDRAULICS, SELF-LEVELING (T-B/H-F CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	058610	TEE MJ10-FJS10-MJ10	1
	2	067761	90 MJ10-MAORB10	3
	3	072580	ST MJ10-MORB10	4
	4	131842	LN FL SPIRALOCK 5/16 CZY	2
	5	135331	STRAP	2
	6	184101	VALVE/SOL SV10-24 10T (see Page 134 for internal components)	2
	7	194513	SPACER/SOLENOID LIFT	1
	8	210-19469	LN FL SERR 1/4 CZY	2
	9	271958	VALVE/SELF LEVEL W/BYPASS (see Page 132 for internal components)	1
	10	50302016	TUBE/HYD -10 TILT DUMP	1
	11	50302235	TUBE/HYD -10 TILT ROLLBACK	1
	12	50302245	TUBE/HYD -10 LIFT	1
	13	50303193	TUBE/HYD -10 TILT DUMP	1
	14	50303194	TUBE/HYD -10 LOWER	1
	15	50303195	TUBE/HYD -10 LIFT	1
	16	50303196	TUBE/HYD -10 TILT ROLLBACK	1
	17	50351125	Y MJ10-MJ10-MORB10	1
	18	50657049	CB 1/4X4 C5Z	2
	19	652040	CB 5/16X2-1/2 C5ZY	2

R165 - HYDRAULICS

HYDRAULICS, SELF-LEVELING (JOYSTICK CONTROLS)

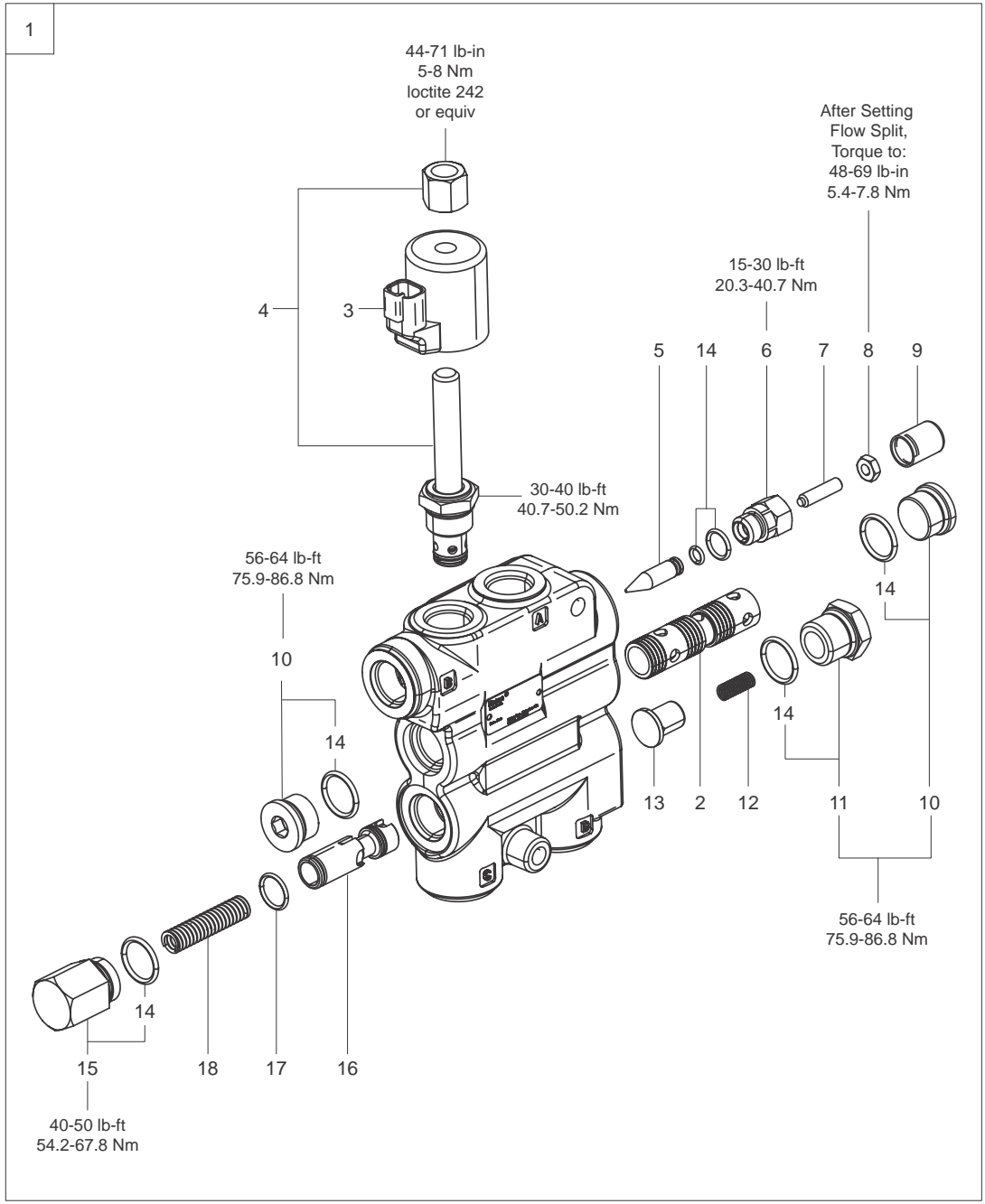


R165 - HYDRAULICS
HYDRAULICS, SELF-LEVELING (JOYSTICK CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	058610	TEE MJ10-FJS10-MJ10	1
	2	067761	90 MJ10-MAORB10	2
	3	072580	ST MJ10-MORB10	1
	4	131842	LN FL SPIRALOCK 5/16 CZY	2
	5	271958	VALVE/SELF LEVEL W/BYPASS (see Page 132 for internal components)	1
	6	50302246	TUBE/HYD -10 TILT ROLLBACK	1
	7	50303193	TUBE/HYD -10 TILT DUMP	1
	8	50303194	TUBE/HYD -10 LOWER	1
	9	50303196	TUBE/HYD -10 TILT ROLLBACK	1
	10	50303197	TUBE/HYD -10 LIFT	1
	11	50351125	Y MJ10-MJ10-MORB10	1
	12	652040	CB 5/16X2-1/2 C5ZY	2

R165 - HYDRAULICS

SELF-LEVEL VALVE



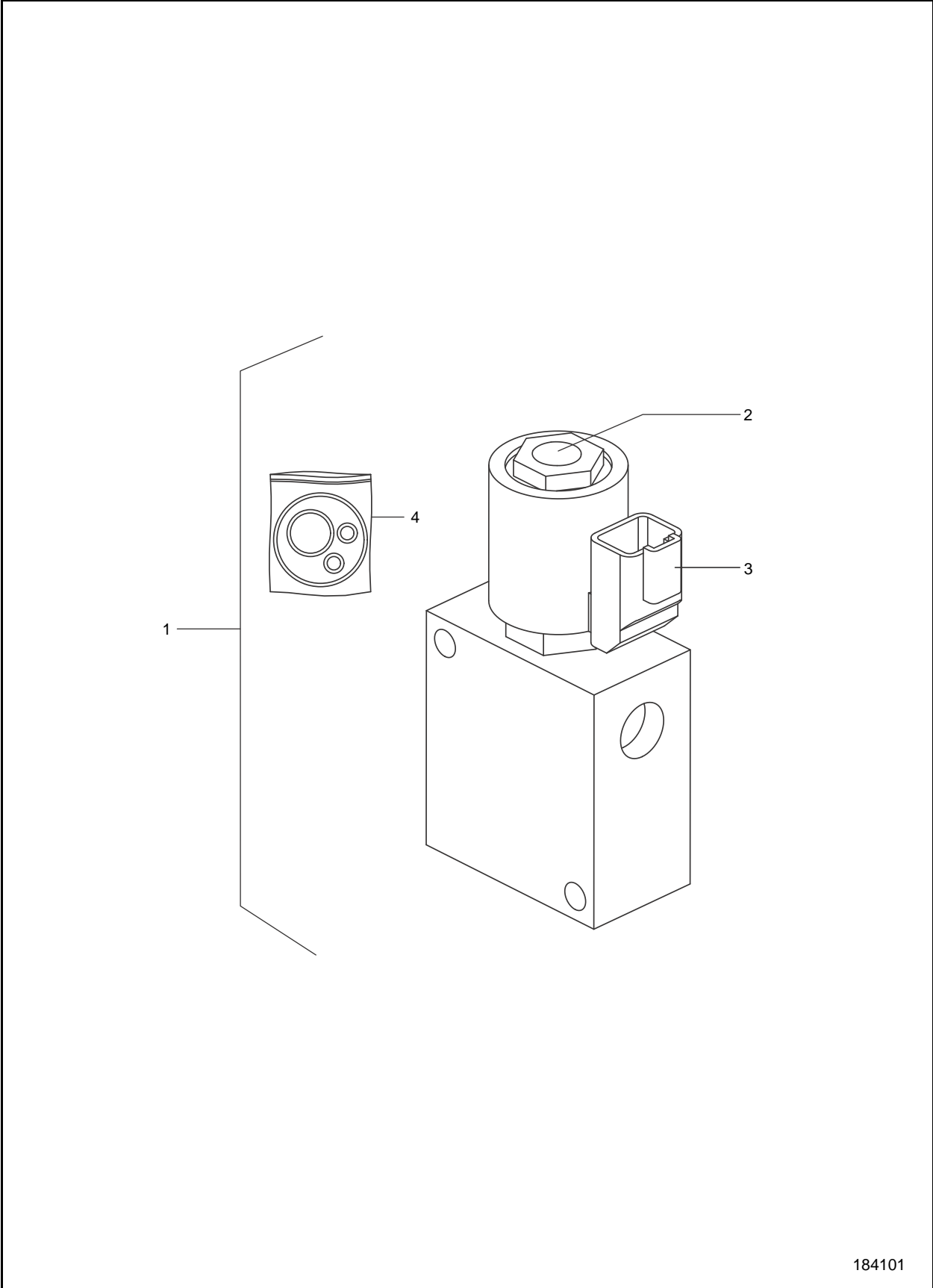
271958

R165 - HYDRAULICS

SELF-LEVEL VALVE

Ref.	No.	Part No.	Description	Qty.
	1	271958	VALVE/SELF LEVEL W/BYPASS	1
	2	50286966	FLOW DIVIDER SPOOL	1
	3	50280058	COIL	1
	4	50280059	CARTRIDGE	1
	5	080808	PIN	1
	6	080809	CAP	1
	7	080811	SET SCREW	1
	8	080810	NUT	1
	9	420-34798	COVER, TAMPER PROOF	1
	10	080813	PLUG ASSEMBLY	2
	11	088472	PLUG ASSEMBLY	1
	12	088471	SPRING	1
	13	088473	LOAD CHECK	1
	14	129066	SEAL KIT	N/A
	15	129004	PLUG ASSEMBLY	1
	16	50286967	UNLOADING SPOOL	1
	17	350-27299	RETAINING RING	1
	18	380-32420	SPRING	1

R165 - HYDRAULICS
SOLENOID VALVE 184101



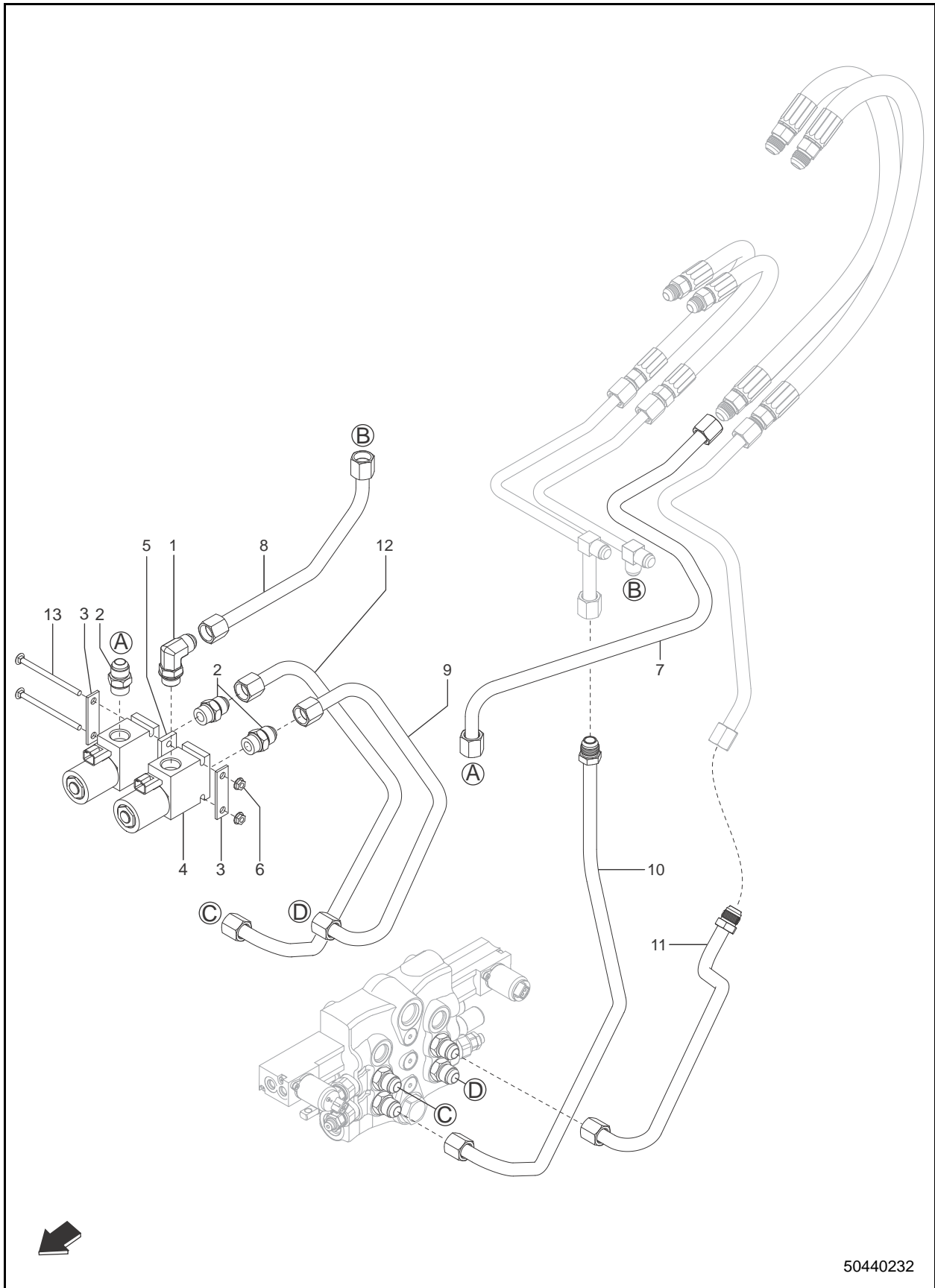
184101

**R165 - HYDRAULICS
SOLENOID VALVE 184101**

Ref.	No.	Part No.	Description	Qty.
1	184101		VALVE/SOL SV10-24 10T (Incl. Refs. 2-4)	1
2	122840		CARTRIDGE/SOLENOID VALVE SV10-24-0-	1
3	184105		COIL	1
4	121897		SAFETY SOLENOID VALVE SEAL KIT	1

R165 - HYDRAULICS

HYDRAULICS, NO SELF-LEVELING (T-B/H-F CONTROLS)

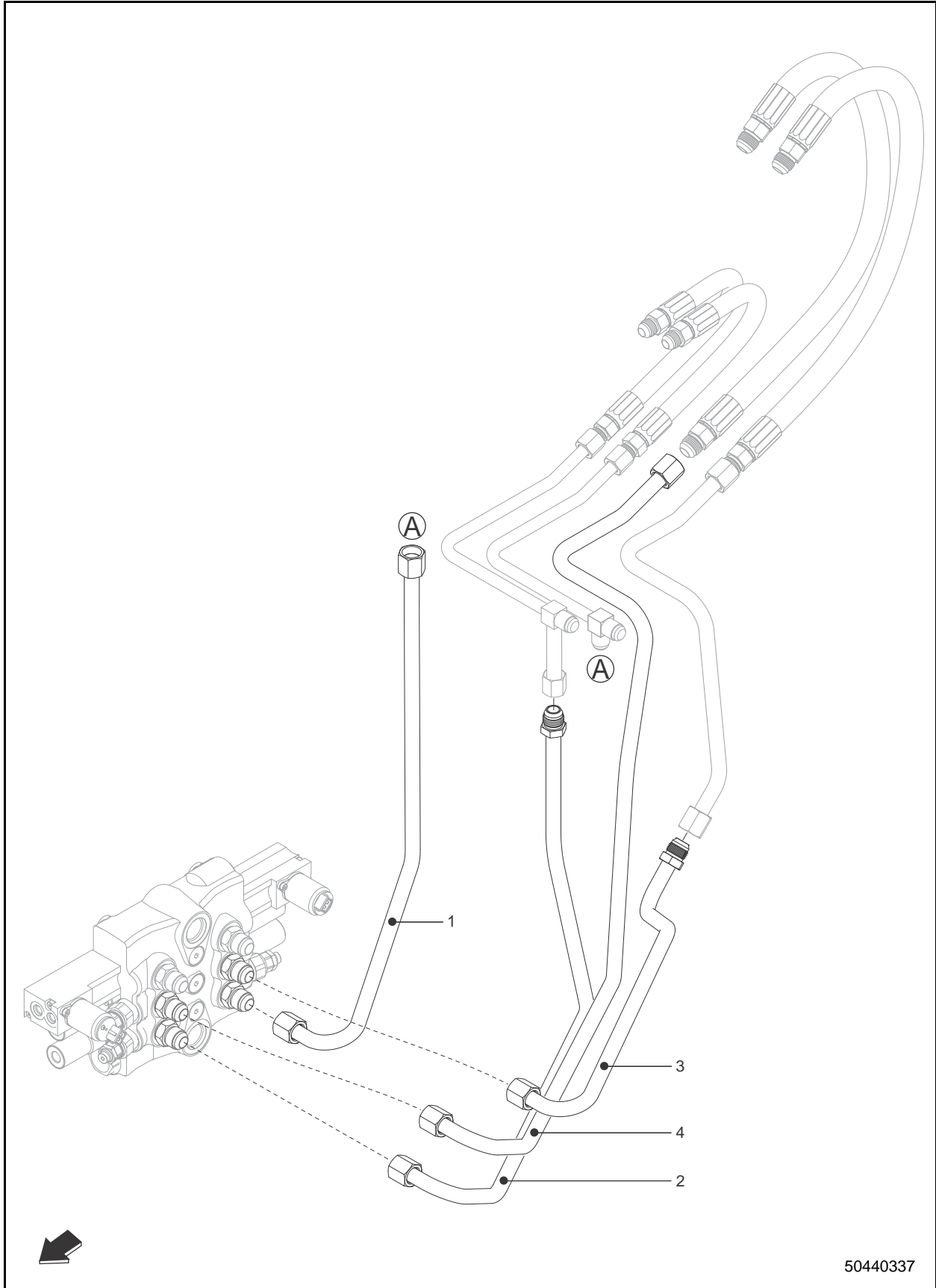


R165 - HYDRAULICS
HYDRAULICS, NO SELF-LEVELING (T-B/H-F CONTROLS)

Ref.	No.	Part No.	Description	Qty.
	1	067761	90 MJ10-MAORB10	1
	2	072580	ST MJ10-MORB10	3
	3	135331	STRAP	2
	4	184101	VALVE/SOL SV10-24 10T (see Page 134 for internal components)	2
	5	194513	SPACER/SOLENOID LIFT	1
	6	210-19469	LN FL SERR 1/4 CZY	2
	7	50302235	TUBE/HYD -10 TILT ROLLBACK	1
	8	50302245	TUBE/HYD -10 LIFT	1
	9	50303195	TUBE/HYD -10 LIFT	1
	10	50303206	TUBE/HYD -10 LOWER	1
	11	50303207	TUBE/HYD -10 TILT DUMP	1
	12	50303208	TUBE/HYD -10 TILT ROLLBACK	1
	13	50657049	CB 1/4X4 C5Z	2

R165 - HYDRAULICS

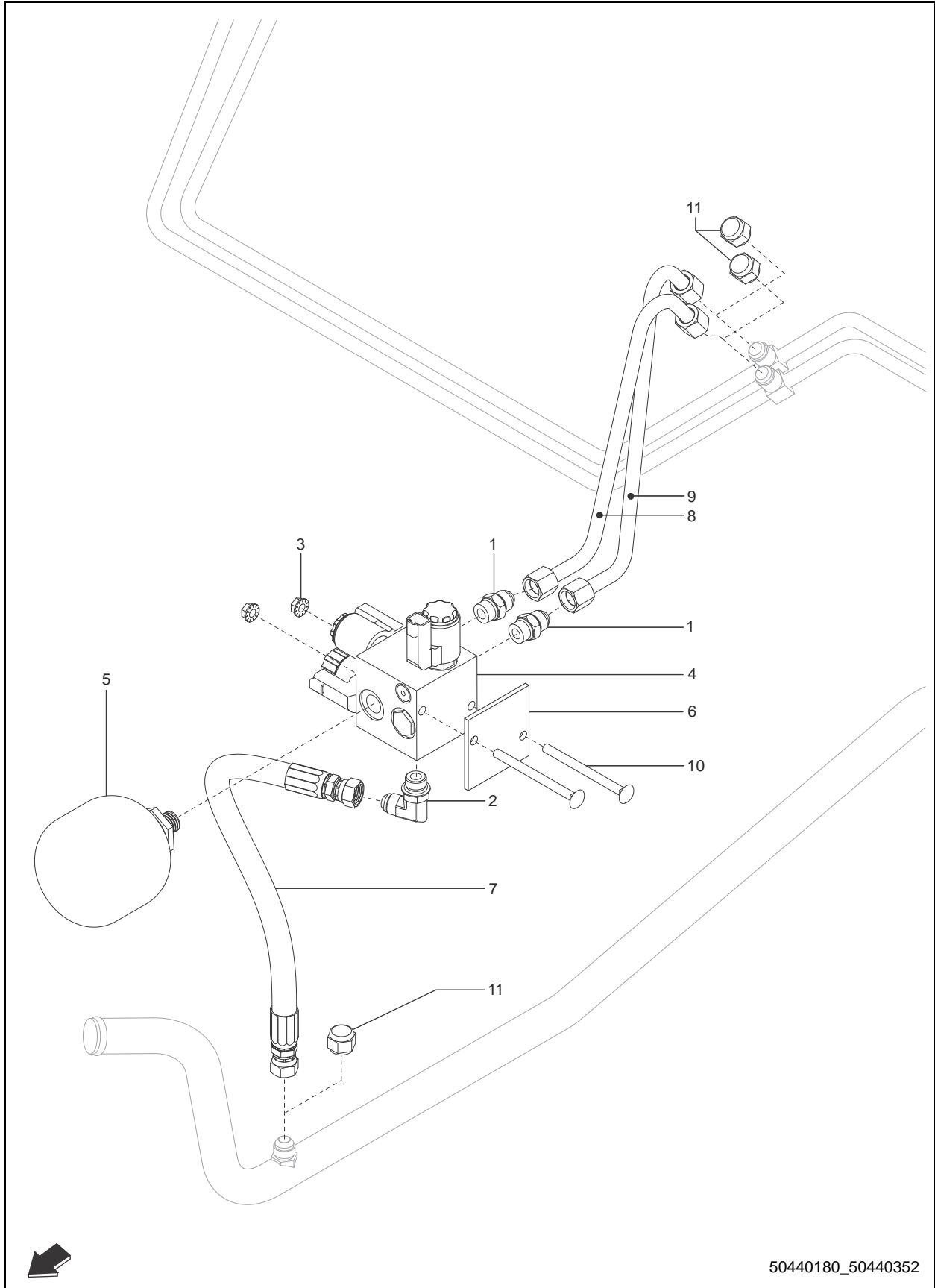
HYDRAULICS, NO SELF-LEVELING (JOYSTICK CONTROLS)



R165 - HYDRAULICS
HYDRAULICS, NO SELF-LEVELING (JOYSTICK CONTROLS)

Ref.			
No.	Part No.	Description	Qty.
1	50303197	TUBE/HYD -10 LIFT	1
2	50303206	TUBE/HYD -10 LOWER	1
3	50303207	TUBE/HYD -10 TILT DUMP	1
4	50303210	TUBE/HYD -10 TILT ROLLBACK	1

R165 - HYDRAULICS
HYDRAULICS, HYDRAGLIDE - NO HYDRAGLIDE

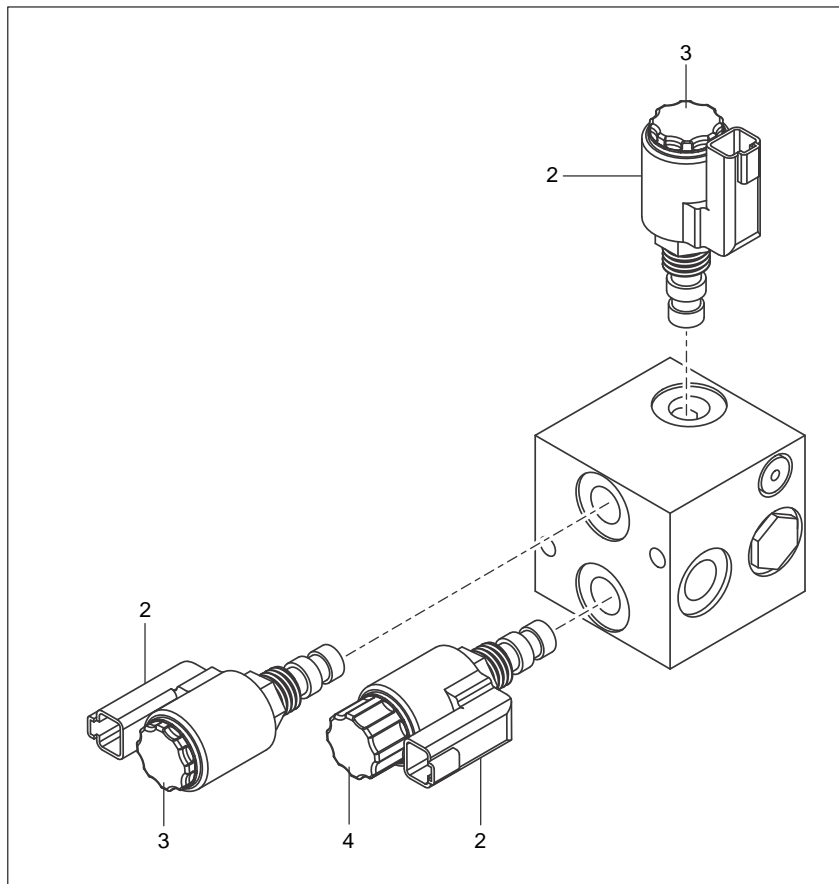


50440180_50440352

R165 - HYDRAULICS
HYDRAULICS, HYDRAGLIDE - NO HYDRAGLIDE

Ref.	No.	Part No.	Description	Qty.
	1	054626	ST MJ08-MORB08	2
	2	054816	90 MJ08-MAORB08	1
	3	131842	LN FL SPIRALOCK 5/16 CZY	2
	4	184363	ASSY/MANIFOLD (see Page 142 for internal components)	1
	5	184415	ACCUMULATOR	1
	6	184843	PLATE-SPACER (VALVE)	1
	7	194269	HOSE-MP .50 X 20.5	1
	8	50302289	TUBE/HYD -08 TILT HYDRAGLIDE	1
	9	50302290	TUBE/HYD -08 LIFT HYDRAGLIDE	1
	10	651712	CB 5/16X4 C5ZY	2
	11	076879	CAP FJ08 (used with No-Hydraglide option)	3

R165 - HYDRAULICS
MANIFOLD ASSY 184363

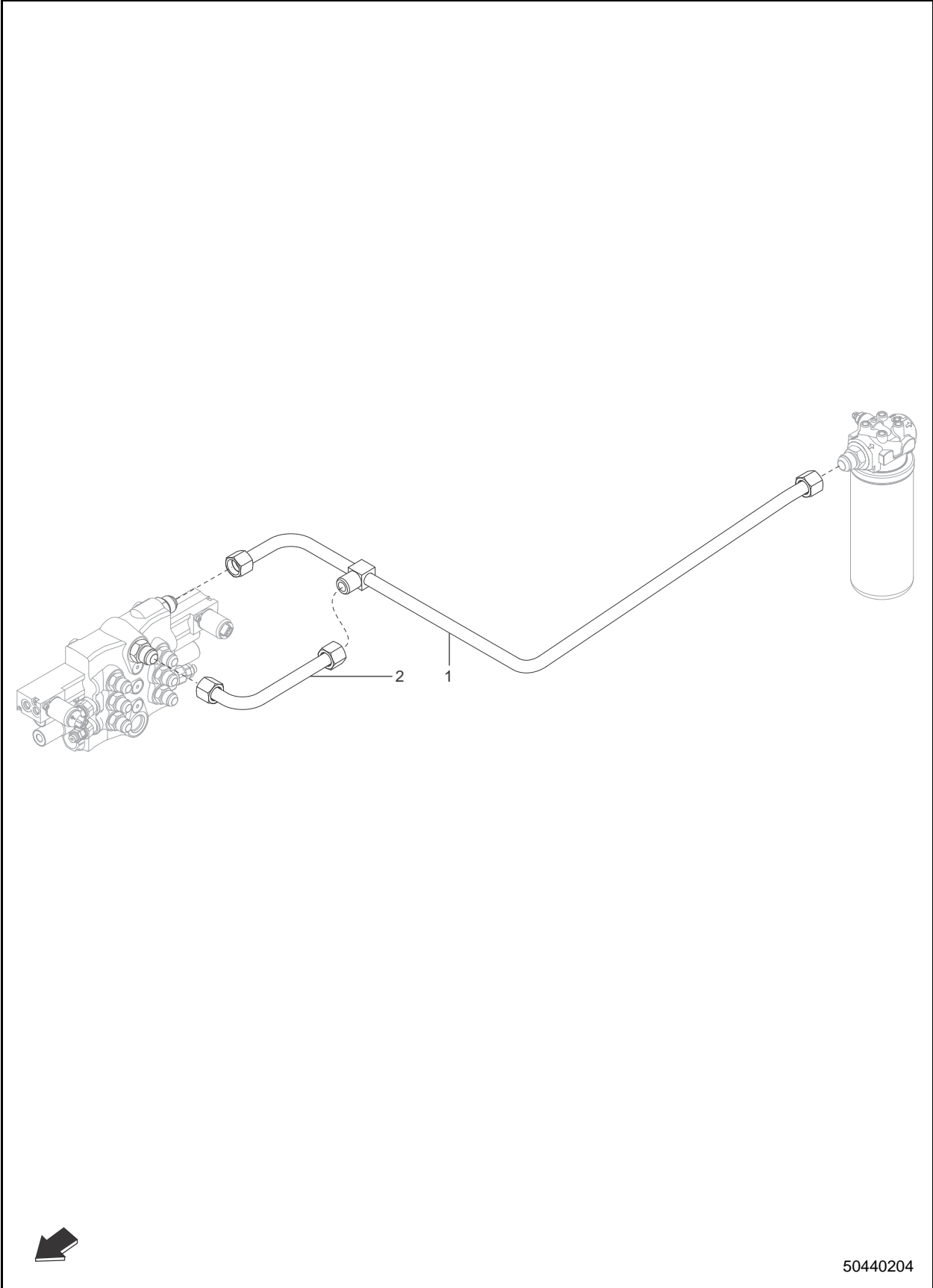


184363

**R165 - HYDRAULICS
MANIFOLD ASSY 184363**

Ref.	No.	Part No.	Description	Qty.
1	184363		ASSY/MANIFOLD (Includes Refs. 2-4)	1
2	184384		COIL	3
3	184389		CARTRIDGE	2
4	184388		CARTRIDGE	1

R165 - HYDRAULICS
HYDRAULICS, NO POWER-A-TACH

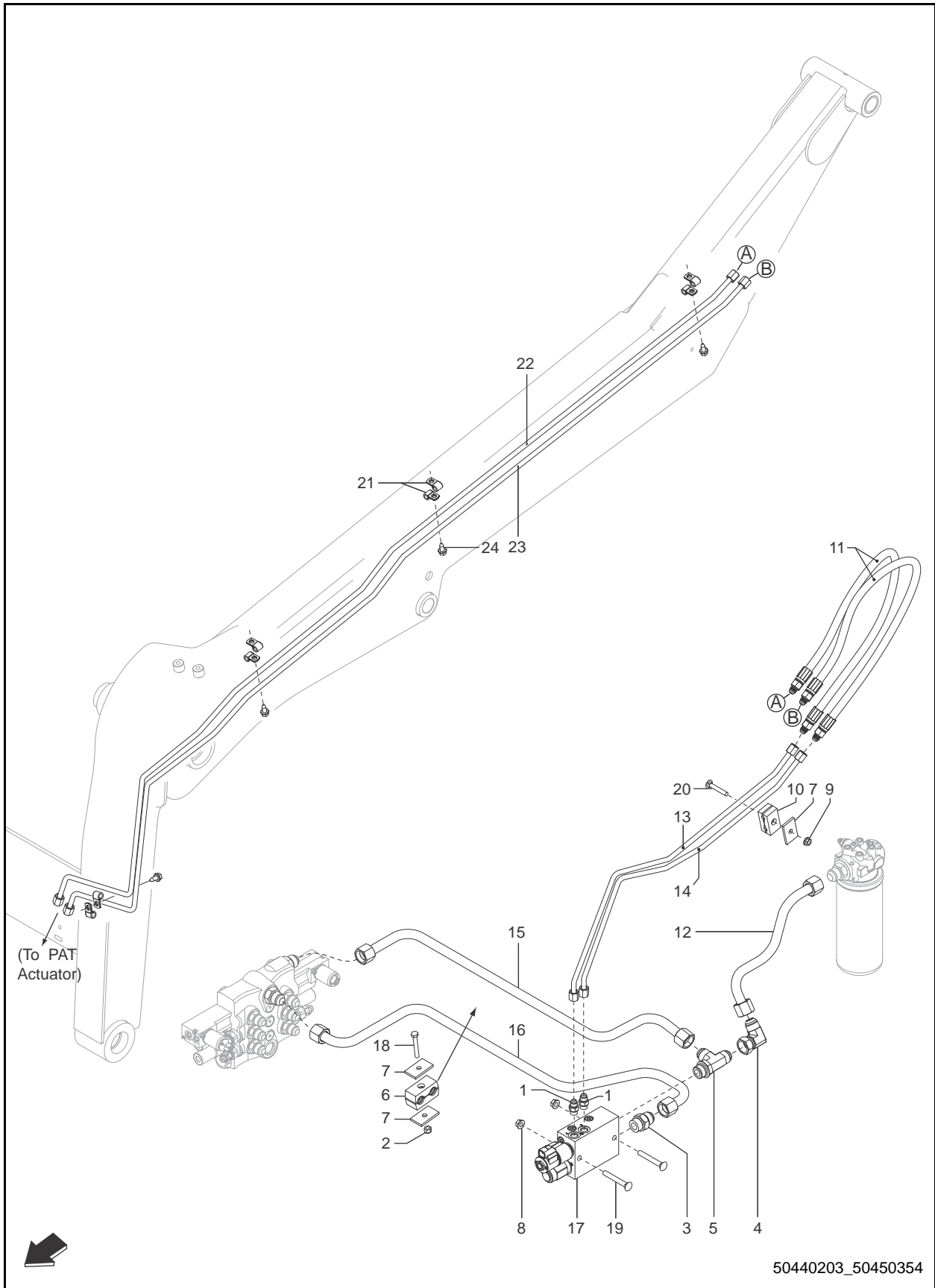


**R165 - HYDRAULICS
HYDRAULICS, NO POWER-A-TACH**

Ref.	No.	Part No.	Description	Qty.
1	50303189	TUBE/HYD -12 NO PAT		1
2	50303190	TUBE/HYD -12 NO PAT		1

R165 - HYDRAULICS

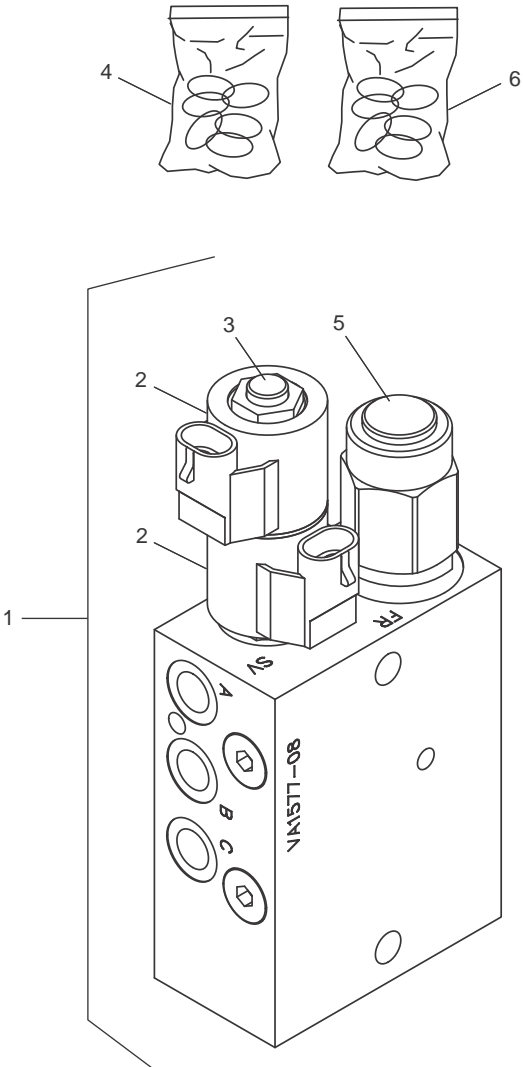
POWER-A-TACH HYDRAULICS



R165 - HYDRAULICS POWER-A-TACH HYDRAULICS

Ref. No.	Part No.	Description	Qty.
1	054994	ST MJ06-MORB06	2
2	064260	HLN INST 5/16 CZY	1
3	072587	ST MJ12-MORB12	1
4	075235	90 MJ12-FJS12	1
5	079092	TEE RUN MJ12-MAORB12-MJ12	1
6	079097	CLAMP/TUBE .75 TWIN	1
7	079098	PLATE/TOP SIZE 2 TWIN FLAT	3
8	090666	LN FL SERR 3/8 CZY	2
9	210-19470	LN FL SERR 5/16 CZY	1
10	245180	CLAMP/TUBE .38 TWIN	1
11	50302156	HOSE/HYD -06 X 36.5IN	2
12	50303522	TUBE/HYD -12 PAT TANK	1
13	50303523	TUBE/HYD -06 PAT VALVE OUT	1
14	50303524	TUBE/HYD -06 PAT VALVE OUT	1
15	50303527	TUBE/HYD-12 PAT TANK	1
16	50303528	TUBE/HYD -12 PAT VALVE IN	1
17	50303702	POWER ATTACH VALVE - PAT (see Page 148 for internal components)	1
18	650725	CS 5/16X2-1/4 C5ZY	1
19	651097	CB 3/8X2-3/4 C5ZY	2
20	652036	CB 5/16X2 C5ZY	1
21	076078	CLAMP/HOSE .38 X .34 HOLE	8
22	50303402	TUBE/HYD -06 P-TACH-INNER	1
23	50303403	TUBE/HYD -06 P-TACH-OUTER	1
24	651648	HWHTRS TAP/R 5/16X3/4 CZY	4

**R165 - HYDRAULICS
POWER-A-TACH VALVE**



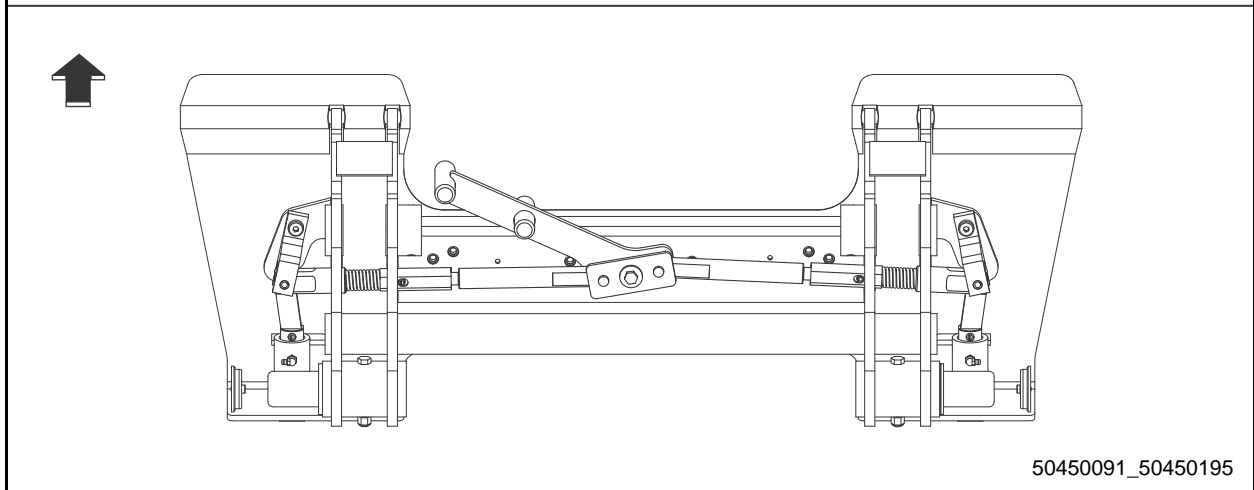
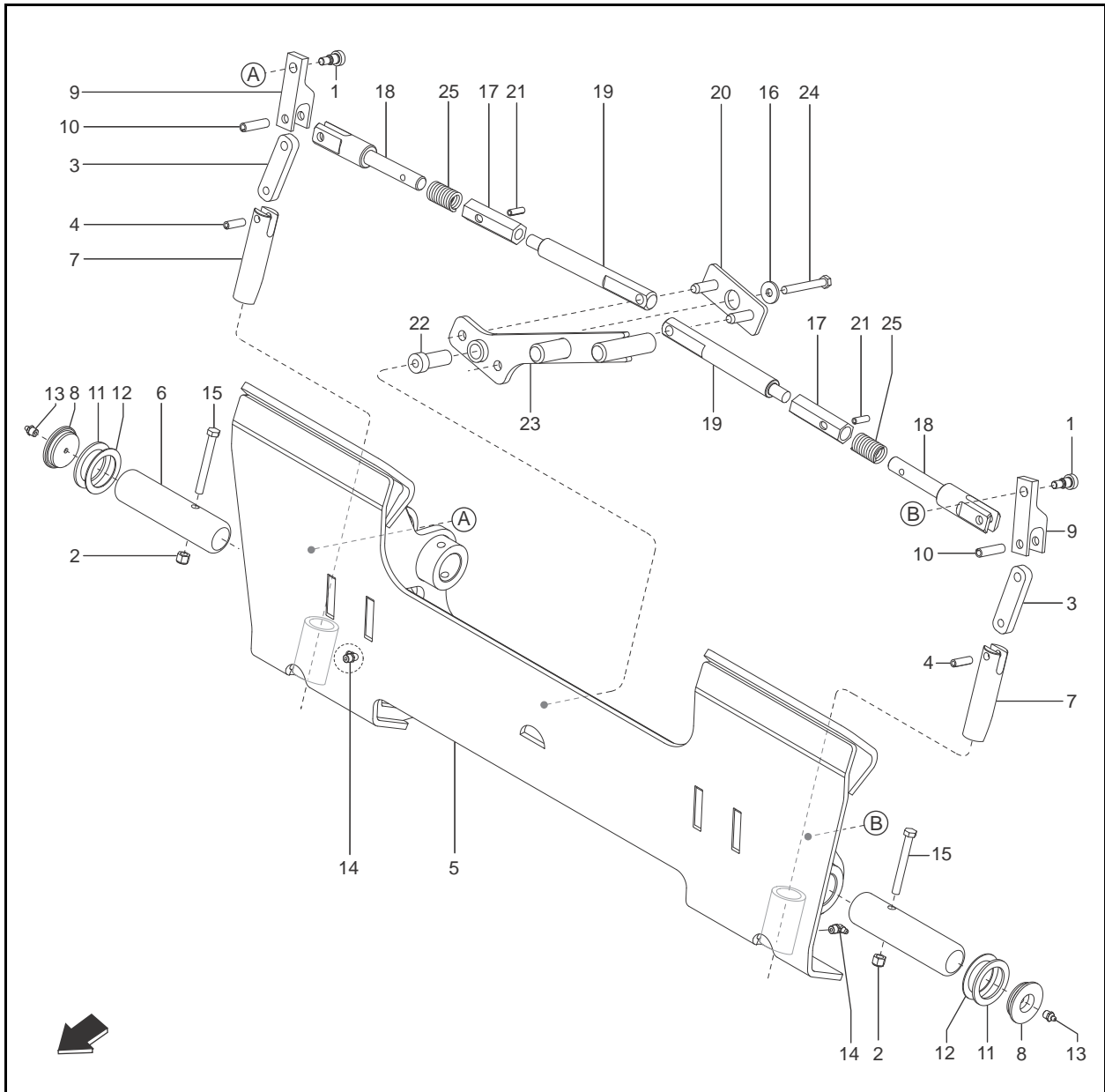
50303702

**R165 - HYDRAULICS
POWER-A-TACH VALVE**

Ref.	No.	Part No.	Description	Qty.
1	50303702		POWER ATTACH VALVE - PAT	1
2	50280194		COIL/12VDC	2
3	50280403		VALVE/SPOOL/3P4W	1
4	50280195		SEAL KIT/SPOOL VALVE	1
5	50280404		REGULATOR/PRIORITY FLOW	1
6	50280405		SEAL KIT/PRIORITY FLOW REGULA- TOR	1

R165 - ATTACHMENTS

ALL-TACH AND MANUAL ACTUATOR

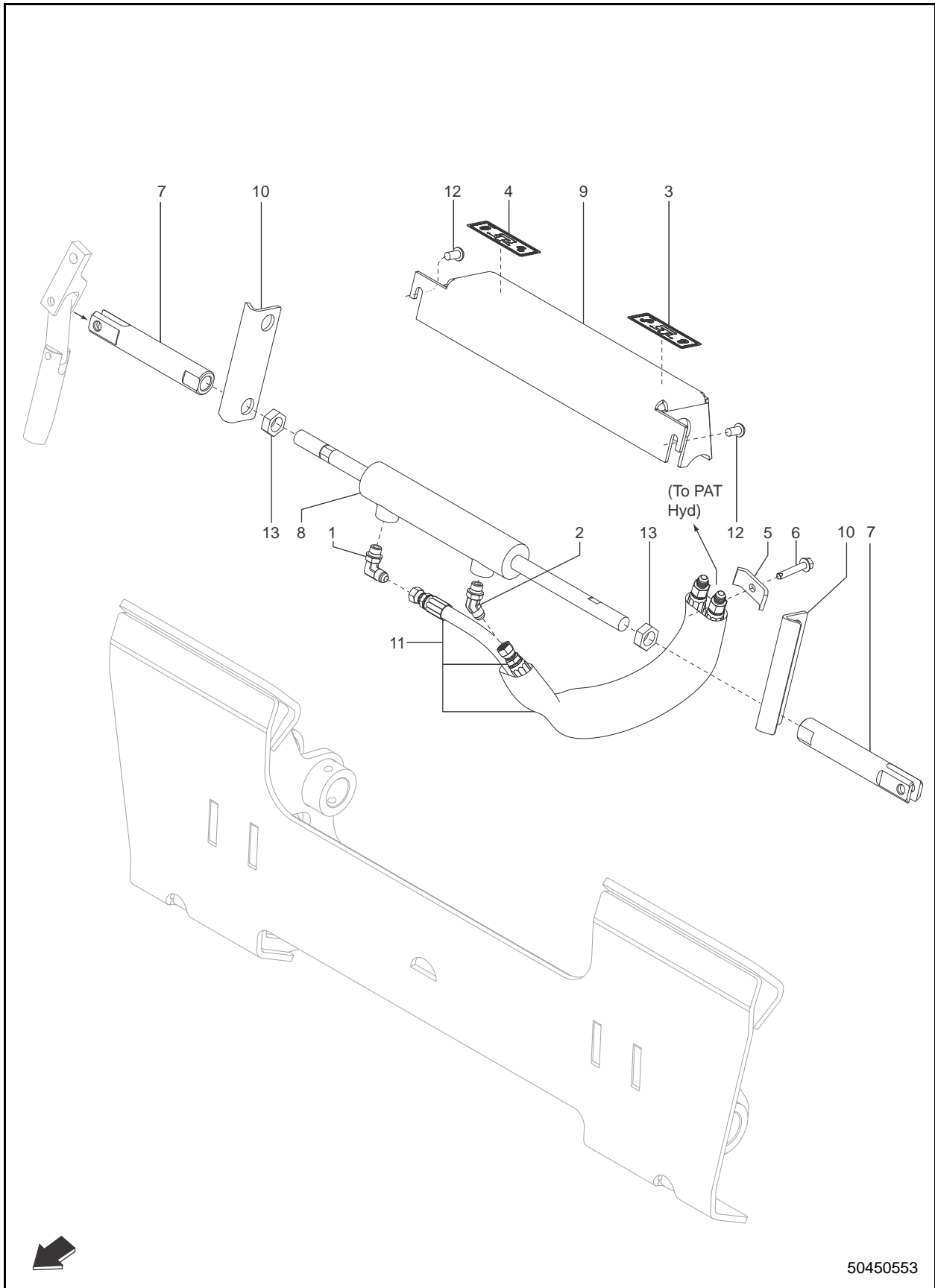


50450091_50450195

**R165 - ATTACHMENTS
ALL-TACH AND MANUAL ACTUATOR**

Ref.	No.	Part No.	Description	Qty.
	1	030-31926	SCREW/SHOULDER 1/2X1/2 8ZY	2
	2	067847	HLN INST 3/8 CZY	2
	3	137168	PIN LINK	2
	4	137386	PIN/SPRING 3/8X1-1/4	2
	5	50351472	ALL-TACH/WLDMT/MID-SIZE	1
	6	50351473	PIN/ PIVOT	2
	7	50351599	PIN/LATCH	2
	8	50351661	GREASE CAP	2
	9	50351671	LATCH LINK	2
	10	50352348	PIN/SPRING 7/16X1-3/4	2
	11	50352363	SHIM/1.78 ID .13 THK	AR
	12	50352364	SHIM/1.78 ID .06 THK	AR
	13	570002	FITTING/GREASE 1/8 PTF	2
	14	570005	FITTING/GREASE 1/8 PTF 90	2
	15	650629	CS 3/8X3-1/4 C5ZY	2
	16	088912	FW 13/32 ZY	1
	17	137158	LINK/SPRING STOP	2
	18	137164	LINK/SPRING SLIDE	2
	19	137167	LINK ADJUSTABLE END	2
	20	137379	WELD/PIN PLATE	1
	21	137385	PIN/SPRING 5/16X1	2
	22	138752	HANDLE PIVOT	1
	23	50351677	WELDMENT/HANDLE	1
	24	650581	CS 3/8X3 C8ZY	1
	25	H8049	SPRING/STALK GUIDE	2

R165 - ATTACHMENTS POWER-A-TACH ACTUATOR

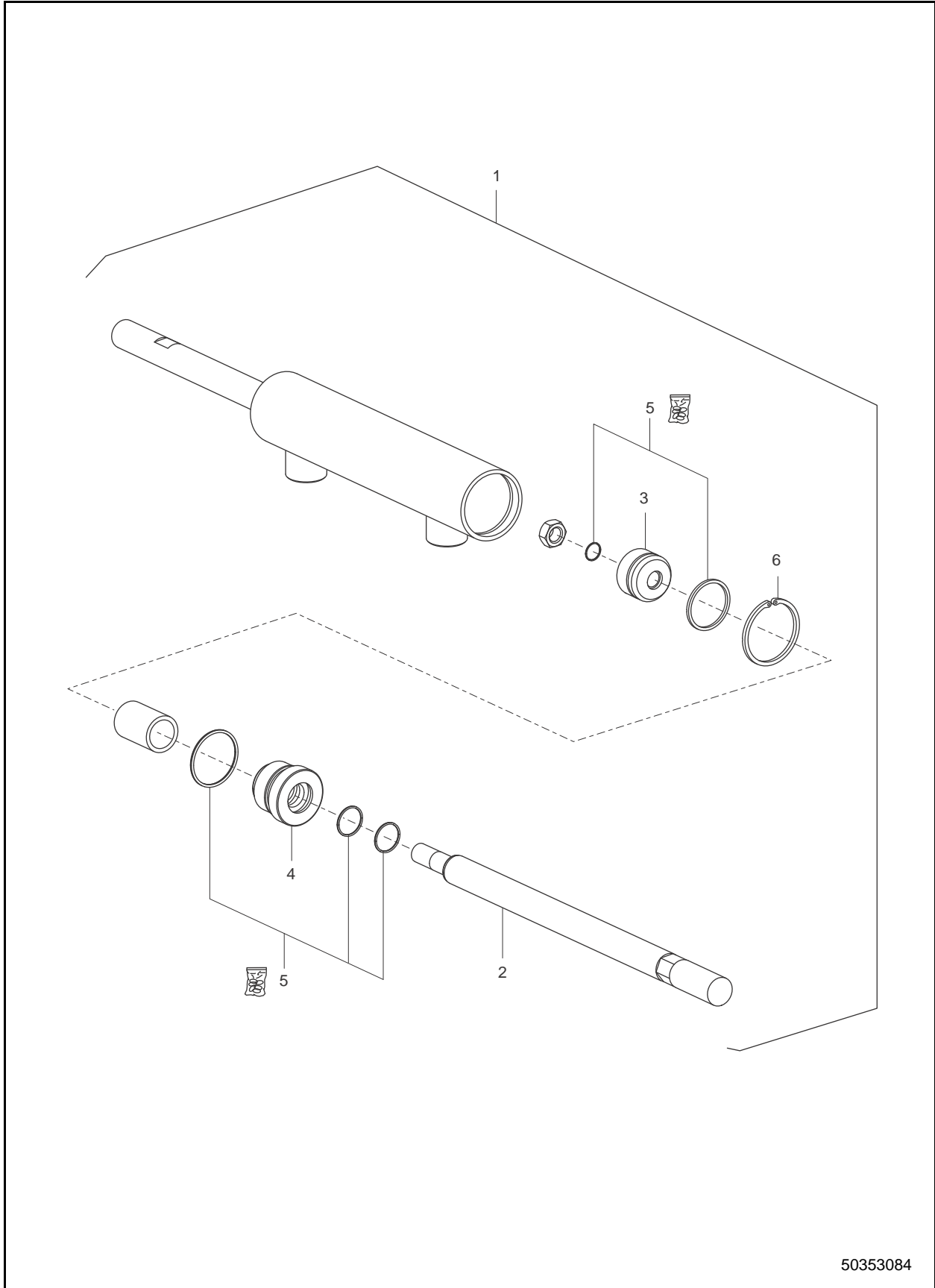


50450553

R165 - ATTACHMENTS POWER-A-TACH ACTUATOR

Ref.	No.	Part No.	Description	Qty.
	1	068938	90 MJ06-MAORB06	1
	2	079026	45 MJ06-MAORB06	1
	3	139107	DECAL-LATCHING (LEFT)	1
	4	139109	DECAL-LATCHING (RIGHT)	1
	5	390-15909	CLIP, HYDRAULIC LINE	1
	6	50351222	HWHTFS 5/16X1-3/4 10.9ZY	1
	7	50351718	LINK/SPRING SLIDE	2
	8	50353084	CYLINDER/HYD POWER F-A-T (see Page 154 for internal components)	1
	9	50353228	GUARD/CYLINDER	1
	10	50353229	STOP/P-TACH	2
	11	50354433	HOSE/ASSY/W-SLEEVE	1
	12	651739	BHSCS 3/8X3/4 C8 OCG	2
	13	653053	HJN 3/4 F2ZY	2

R165 - ATTACHMENTS POWER-A-TACH CYLINDER



50353084

**R165 - ATTACHMENTS
POWER-A-TACH CYLINDER**

Ref.	No.	Part No.	Description	Qty.
	1	50353084	CYLINDER/HYD POWER F-A-T	1
	2	50287438	ROD	1
	3	50287439	PISTON	1
	4	50287441	HEAD GLAND	1
	5	50287442	SEAL KIT	1
	6	184800	SNAP RING	1

DECALS

GENERAL INFORMATION

Decal location information is provided to assist in the proper selection and application of new decals, in the event the original decals become damaged or the machine is repainted. Refer to the listing for the illustration reference number, part number, description and quantity of each decal. Refer to the appropriate illustrations for replacement locations.

To ensure proper selection of the correct replacement decals, compare all of the various closeup location drawings to your machine before starting to refinish the unit. Then circle each decal shown (applicable to your machine) while checking off its part number in the listing.

NOTE: Refer to the *SAFETY* chapter of the *Operator's Manual* for specific information provided on the various safety decals.

NEW DECAL APPLICATION

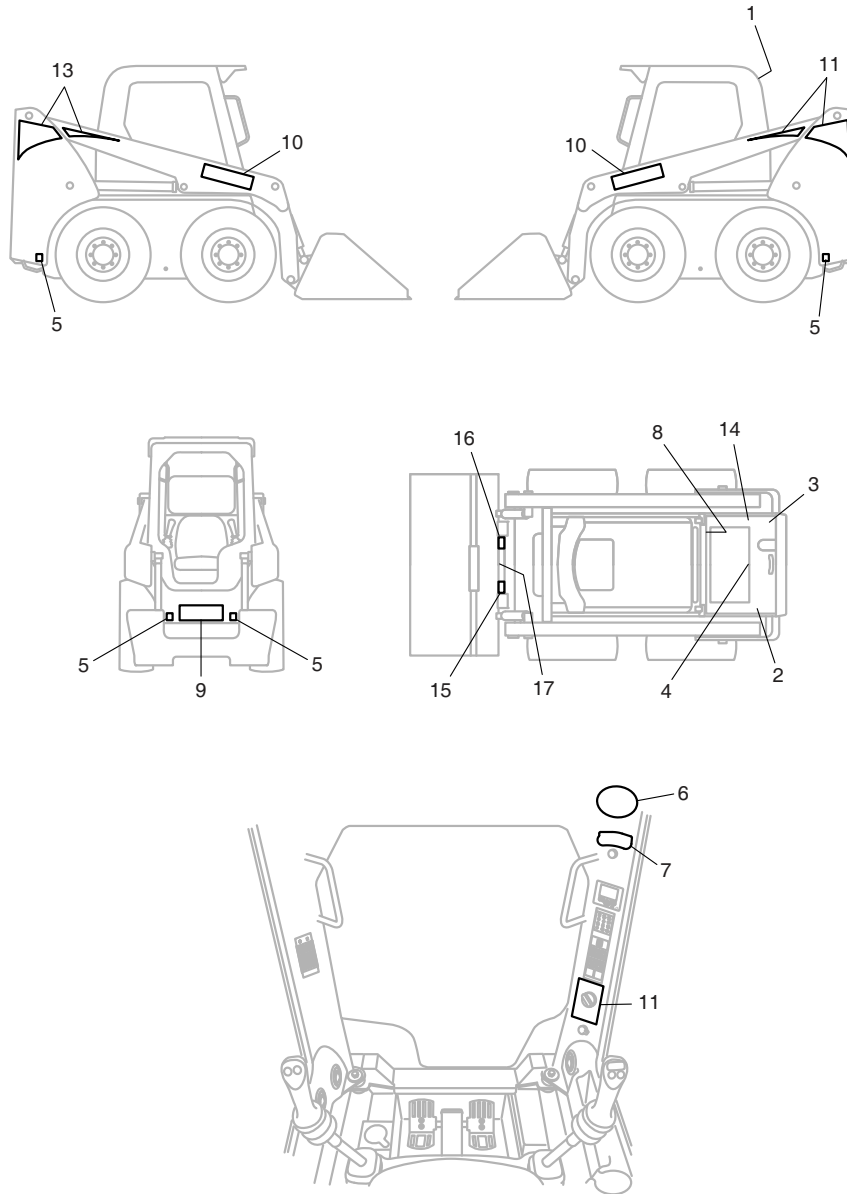
If there is a decal on a part that is to be replaced, be sure that the decal is applied to the replacement part. Surfaces **MUST** be free from dirt, dust, grease and other foreign material before applying the new decal. To apply, remove the smaller portion of the decal backing paper and apply this part of the exposed adhesive backing to the clean surface while maintaining proper position and alignment. Peel the other portion of the backing paper off slowly while applying hand pressure to smooth out the decal surface.



CAUTION

ALWAYS follow safety precautions on decals. Replace decals if they are damaged, or if the unit is repainted. If repainting, **BE SURE** all applicable decals are affixed to the unit.

R165 - DECALS

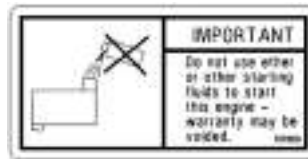


①



Located on the back of the cab.

④



Located inside the engine compartment.

②



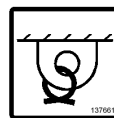
Located near the hydraulic fluid reservoir filler neck.

③




Located next to the fuel filler neck.

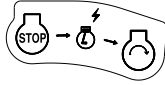
⑤

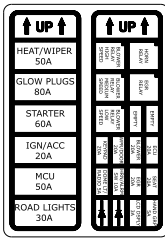



Located on the bottom of the side panels behind the rear wheels (both sides), and on the bottom outside corners of the front panel (both sides).

50440364, 50440367

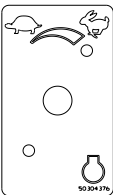
6  Located near the top of the right door pillar, facing the operator.

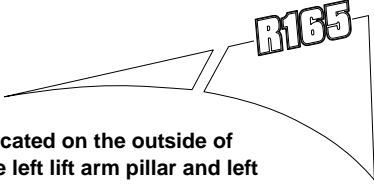
7  Located over the ignition switch on the right door pillar, facing the operator.

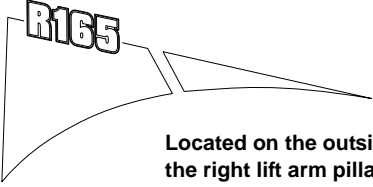
8  Located inside the fuse boxes inside the engine compartment

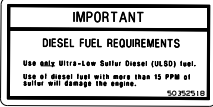
9  Located on the front of the machine.

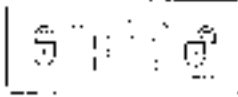
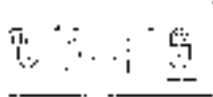
10 Located on the outsides of the lift arm.

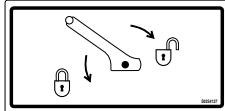
11  Located around the hand throttle on the right door pillar, facing the operator.

12  Located on the outside of the left lift arm pillar and left lift arm.

13  Located on the outside of the right lift arm pillar and left lift arm.

14  Located near the fuel filler neck.





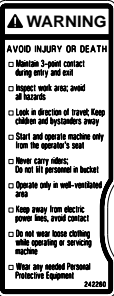

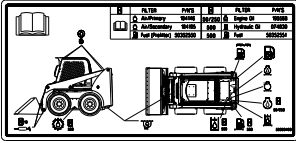

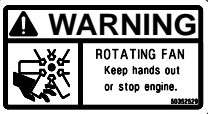
15  **16** 
Located on attachment bracket (power hitch only).

17  Located on attachment bracket (manual hitch only).

50440364, 50440367

Ref. No.	Part No.	Description	Qty.
1	50353116	DECAL REAR CAB	1
2	137632	DECAL/HYDRAULIC OIL	1
3	137634	DECAL/DIESEL FUEL	1
4	137660	DECAL/ETHER	1
5	137661	DECAL/TIE DOWN	4
6	190646	DECAL/HYDRALOC	1
7	242152	DECAL/IGNITION SWITCH	1
8	50303217	DECAL/FUSE PANEL/RELAY BLOCK	1
9	50303615	DECAL/GEHL 3.69 X 15.92	1

Ref. No.	Part No.	Description	Qty.
10	50303562	DECAL/GEHL 5.20 X 22.61	2
11	50304376	DECAL/THROTTLE CONTROL	1
12	50305081	DECAL/R165 LEFT	1
13	50305082	DECAL/R165 RIGHT	1
14	50352518	DECAL/ULSD FUEL	1
15	139107	DECAL-LATCHING (LEFT)	1
16	139109	DECAL-LATCHING (RIGHT)	1
17	50354137	DECAL/LATCHING	1

<p>6</p> 	<p>Located on the front of the lift arm cross-member.</p>	<p>11</p> 	<p>Located on the side of the ROPS/FOPS.</p>
<p>7</p>  	<p>Located on the left door pillar, facing the operator.</p>	<p>12</p> 	<p>Located on the left door pillar, facing the operator.</p>
<p>8</p> 	<p>Located behind the operator's seat above rear window.</p>	<p>13</p> 	<p>Located on the inside of the left lift arm pillar.</p>
<p>9</p> 	<p>Located inside the engine compartment.</p>		
<p>10</p> 	<p>Located inside the engine compartment.</p>		

50440364, 50440367

Ref. No.	Part No.	Description	Qty.
1	137637	DECAL/DANGER LIFT ARM	2
2	137655	DECAL/DANGER NO RIDERS	1
3	137657	DECAL/WARNING GENERAL	1
4	137683	DECAL/SAFETY SHUTDOWN	1
5	184214	DECAL/WARNING ROPS	1
6	50354117	DECAL/ATTACH BRACKET	1
7	242397	DECAL/DANGER WARNING	1
8	242582	DECAL/WARNING MANUAL	1

Ref. No.	Part No.	Description	Qty.
9	50352528	DECAL/DANGER HOT SURFACE	1
10	50352529	DECAL/DANGER FAN HAZARD	1
11	50352637	DECAL/ROPS LOCK	1
12	242260	DECAL/WARNING GENERAL	1
13	50303483	DECAL/SERVICE	1
14	137545	DECAL/REFLECTOR (NOT SHOWN)	2

R165 - FITTINGS / O-RINGS / SEAL RINGS

FITTINGS / O-RING COMPATIBILITY

Fitting Part Number	Compatible O-Ring Part Number
054626	055896
054816	055896
054820	055897
054994	055897
055005	048953
055064	048953
055981	055897
064644	058674
067761	055898
068938	055897
072580	055898
072587	048953
072602	048953
072615	048953
072803	055897

Fitting Part Number	Compatible O-Ring Part Number
076031	055898
079026	055897
079038	077970
079092	048953
089099	055898
095601	50302301
121684	058674
122340	055896
129124	50302301
131522	048953
131529	055896
137784	50302301
175377	50302301
189192	055897
193665	077970

Fitting Part Number	Compatible O-Ring Part Number
272669	048953
272867	048953
50300558	055896
50301187	055898
50301933	055898
50301975	048953
50303681	50302301
50351125	055898
230-24749	055896
230-30569	055896
230-32356	058674
230-32753	50302301
L51572	055898
L51763	055898

HOSE / O-RING COMPATIBILITY

Hose Part Number	Compatible O-Ring Part Number
50303437	270545 (2)
50303438	270545 (2)
50303439	270545 (2)
50303440	270545 (2)

Hose Part Number	Compatible O-Ring Part Number
50303441	270545 (2)
50303443	270545 (2)
50303444	270545 (2)
50303445	270545 (2)

Hose Part Number	Compatible O-Ring Part Number
170-34709	055896

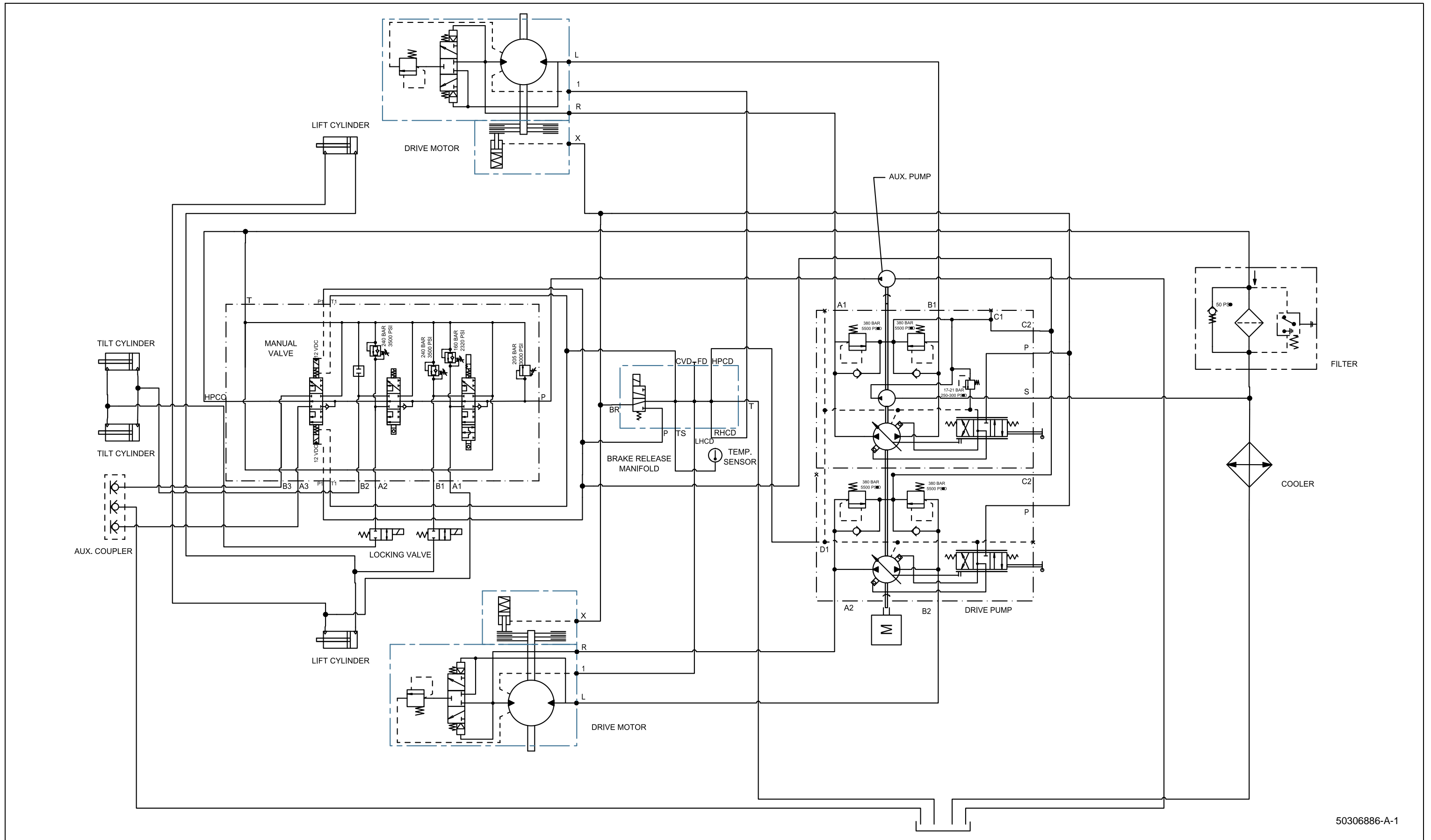
R165 - ABBREVIATIONS AND DESCRIPTIONS FOR FITTINGS

ABBREVIATIONS AND DESCRIPTIONS FOR FITTINGS

Abbrev.	Description
45	45 Degree
90	90 Degree
A	Adjustable (Within Other Abbrev.)
BLKHD	Bulkhead
BR	Branch (Tee Type)
FJ	Female JIC
FJS	Female JIC Swivel
FORB	Female O-Ring Boss
FQL	Female Quick Lock
HB	Hose Barb
-L	Medium Pressure

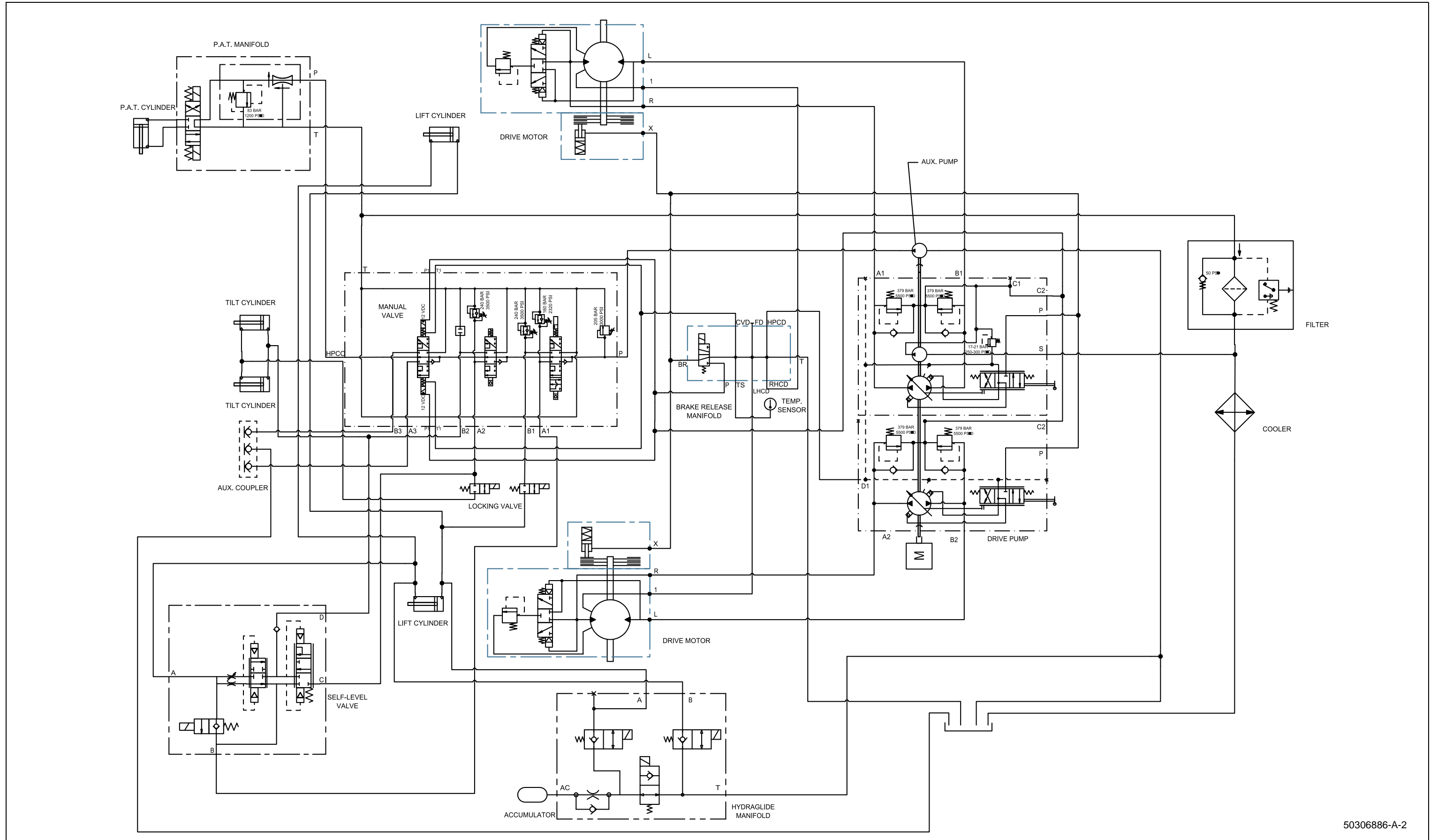
Abbrev.	Description
MBSPT	Male British Standard Pipe Taper
MC	Male Cone
MJ	Male JIC
MORB	Male O-Ring Boss
MP	Male Pipe
RUN	Tee type
-S	High Pressure
SS	Stainless Steel
ST	Straight

R165 - SCHEMATICS
 HYDRAULIC SCHEMATIC - T-BAR OR HAND/FOOT CONTROLS (SINGLE SPEED)

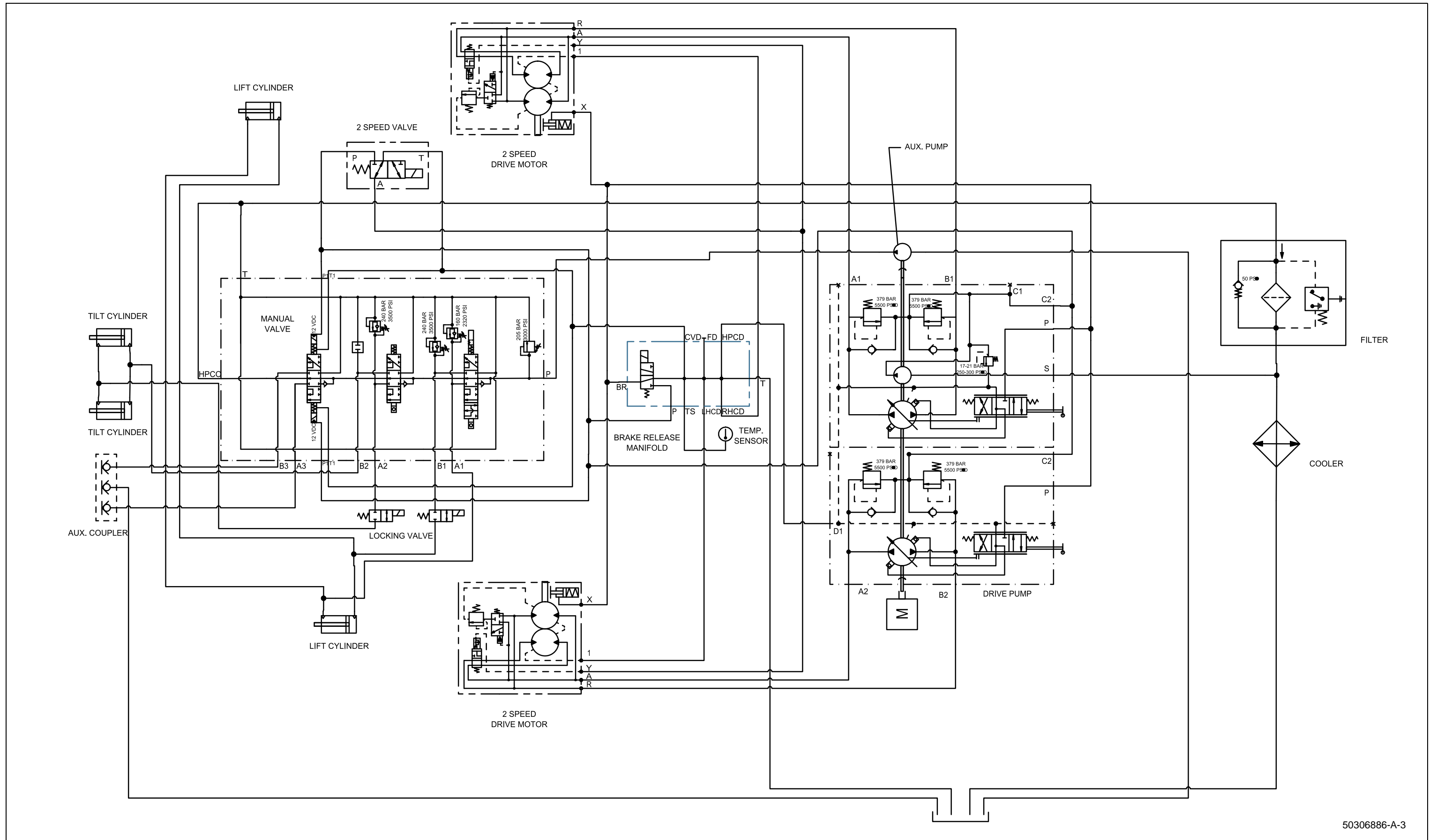


R165 - SCHEMATICS

HYDRAULIC SCHEMATIC - T-BAR OR HAND/FOOT CONTROLS (SINGLE SPEED) WITH POWER-A-TACH, HYDRAGLIDE AND SELF-LEVEL



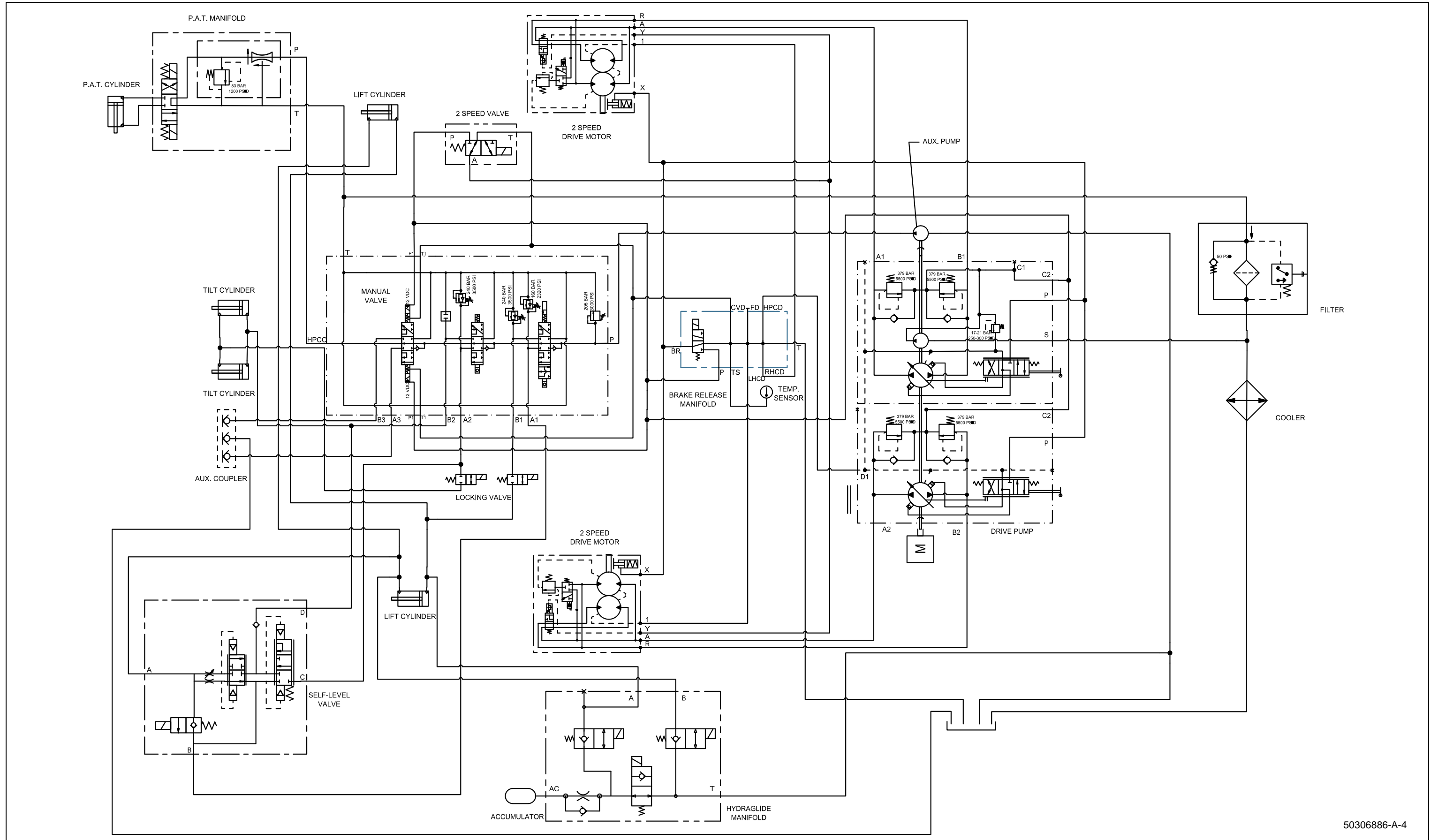
R165 - SCHEMATICS
 HYDRAULIC SCHEMATIC - T-BAR OR HAND/FOOT CONTROLS (TWO SPEED)



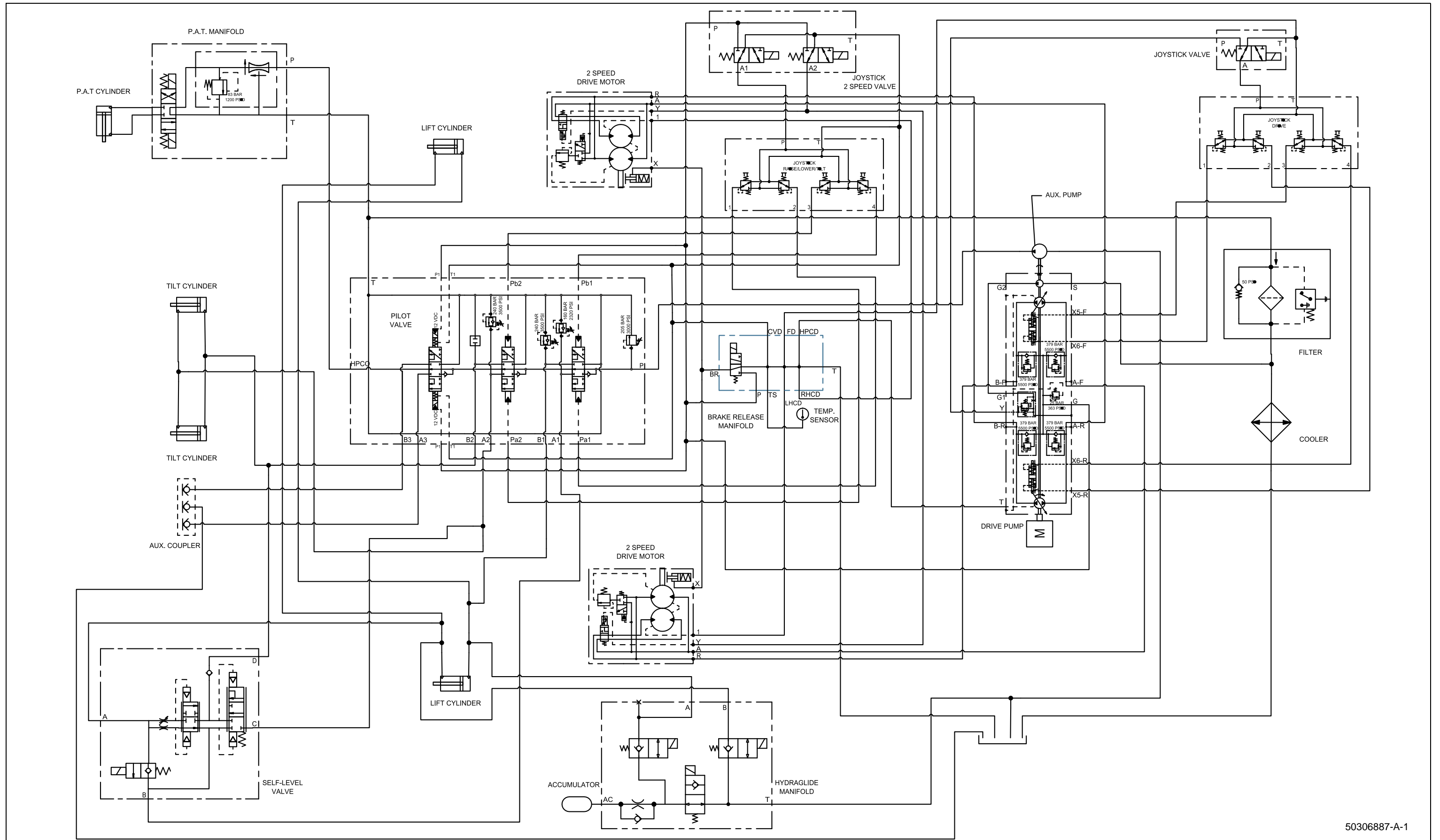
50306886-A-3

R165 - SCHEMATICS

HYDRAULIC SCHEMATIC - T-BAR OR HAND/FOOT CONTROLS (TWO-SPEED) WITH POWER-A-TACH, HYDRAGLIDE AND SELF-LEVEL

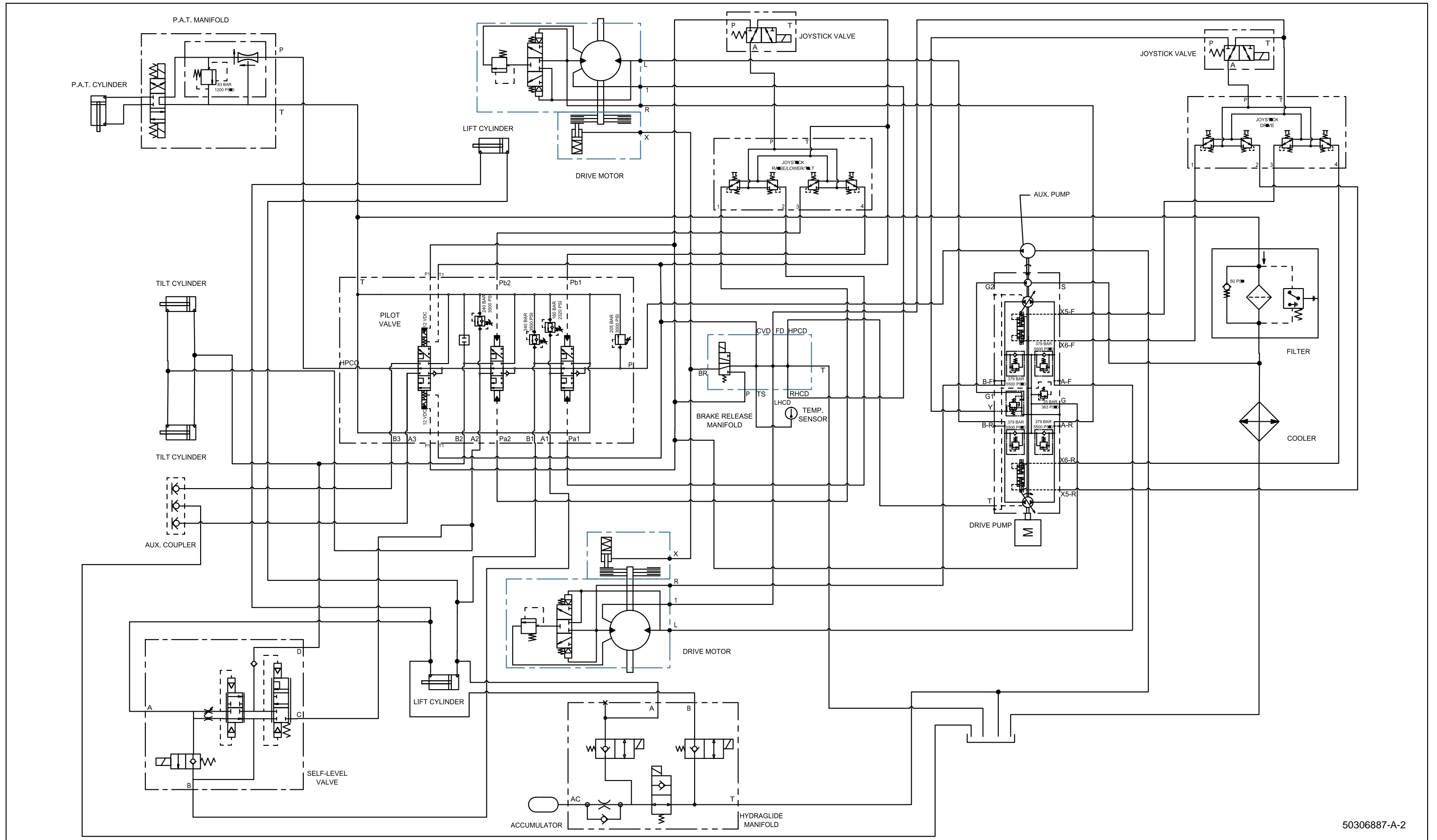


R165 - SCHEMATICS
HYDRAULIC SCHEMATIC - JOYSTICK CONTROLS (SINGLE SPEED)



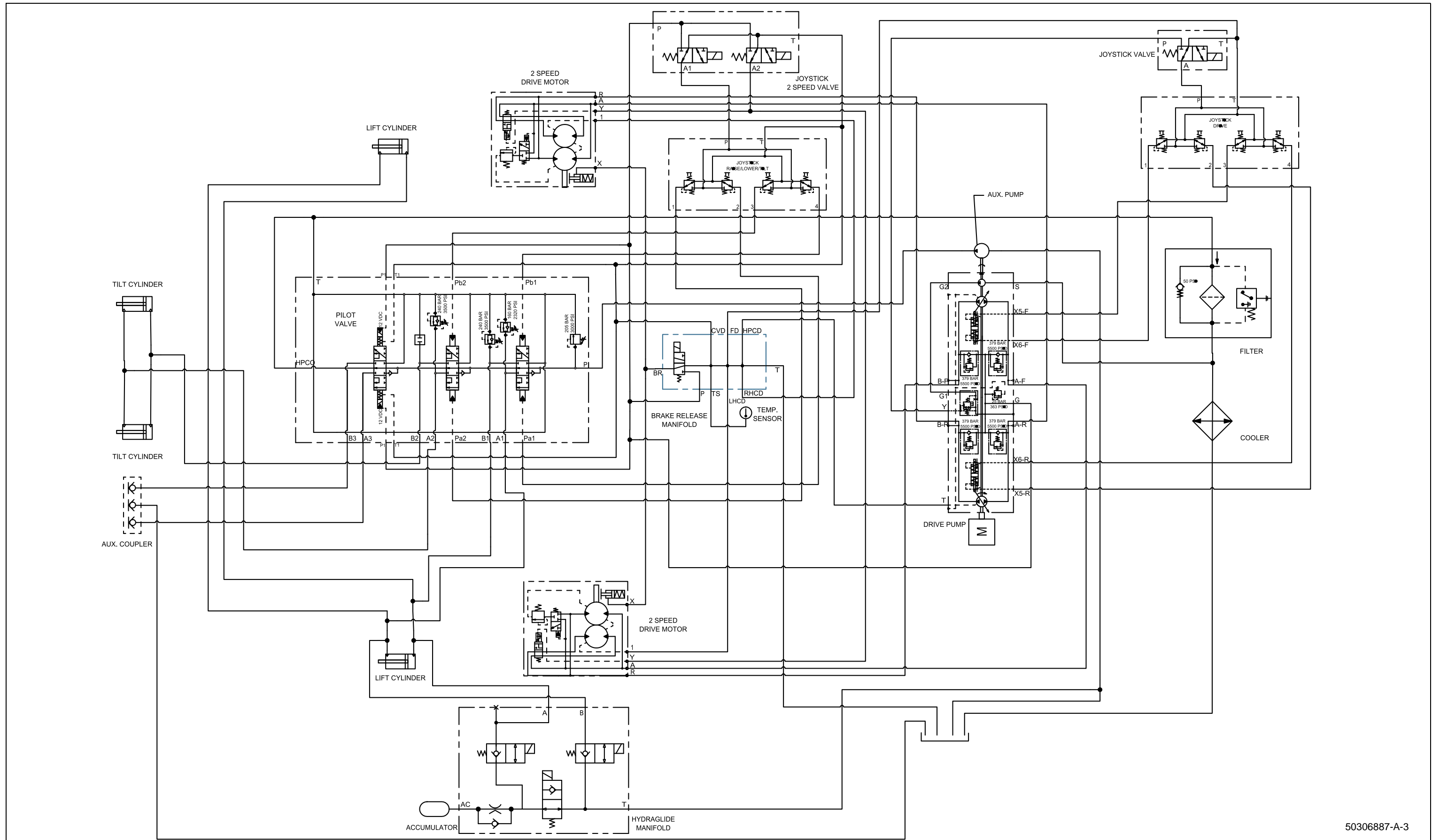
R165 - SCHEMATICS

HYDRAULIC SCHEMATIC - JOYSTICK CONTROLS (SINGLE SPEED) WITH POWER-A-TACH, HYDRAGLIDE AND SELF-LEVEL

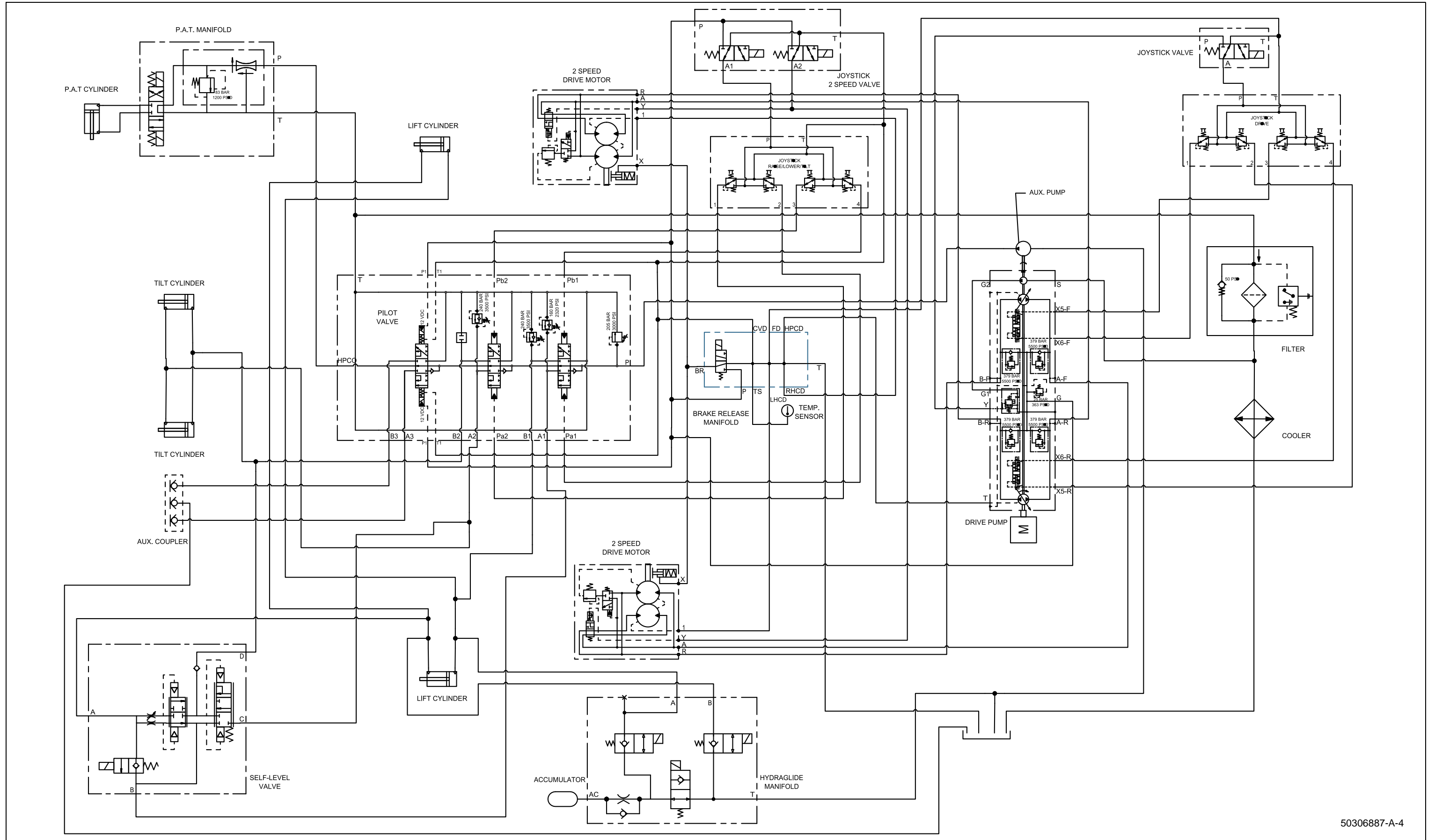


50306887-A-2

R165 - SCHEMATICS
 HYDRAULIC SCHEMATIC - JOYSTICK CONTROLS (TWO-SPEED)



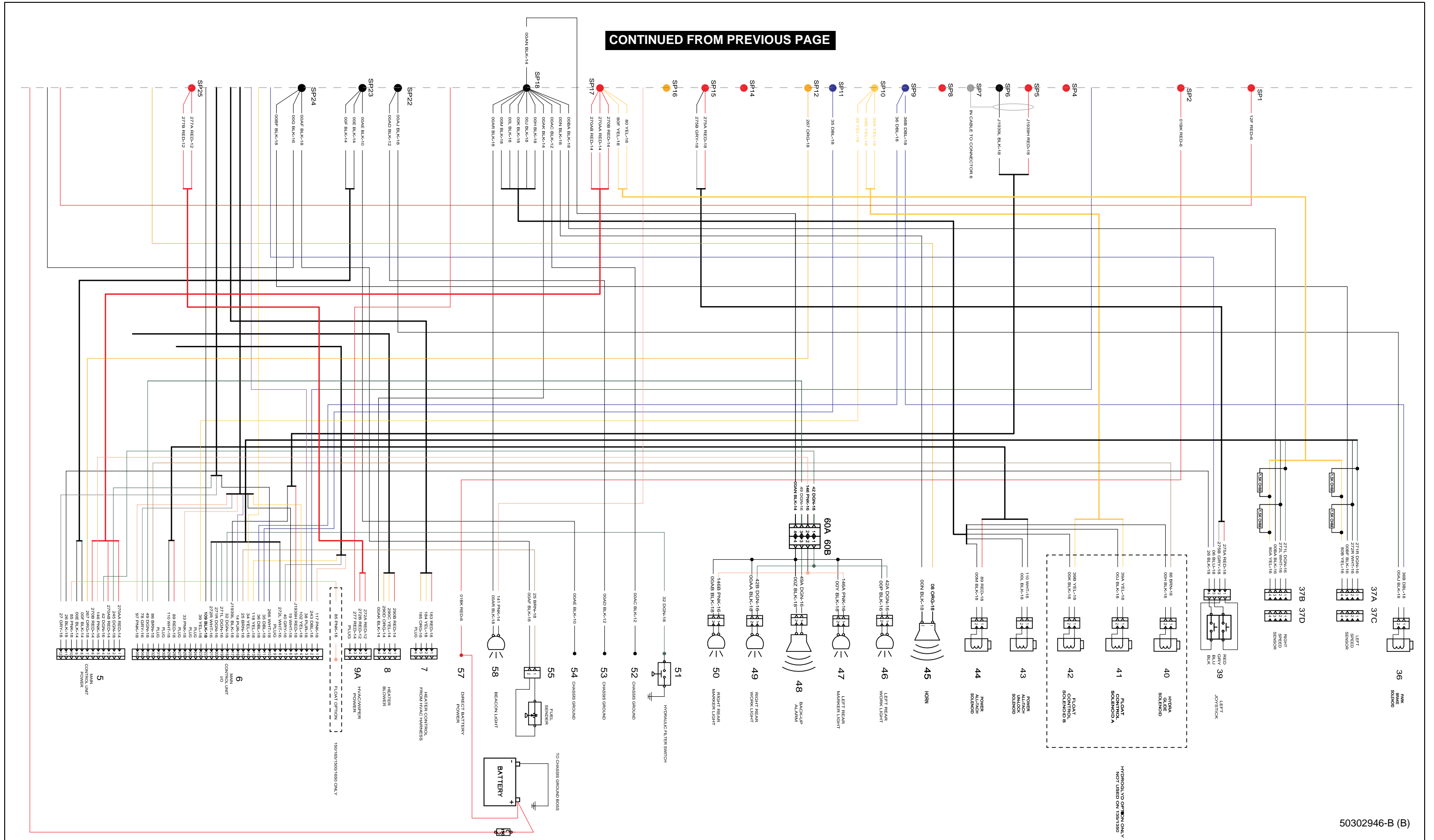
R165 - SCHEMATICS
HYDRAULIC SCHEMATIC - JOYSTICK (TWO-SPEED) WITH POWER-A-TACH, HYDRAGLIDE AND SELF-LEVEL



50306887-A-4

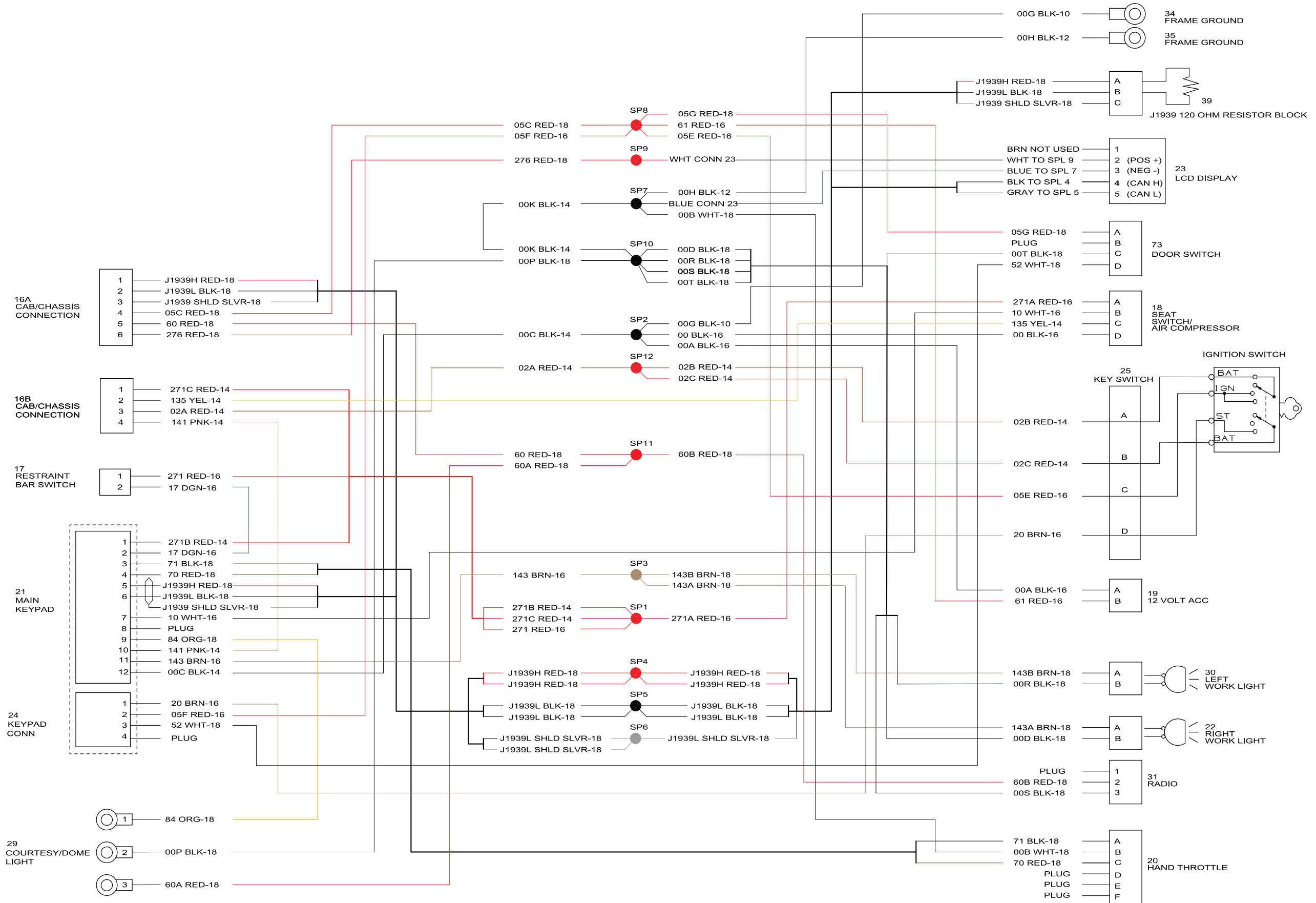
R165 - SCHEMATICS

ELECTRICAL SCHEMATIC - CHASSIS (2 OF 2)

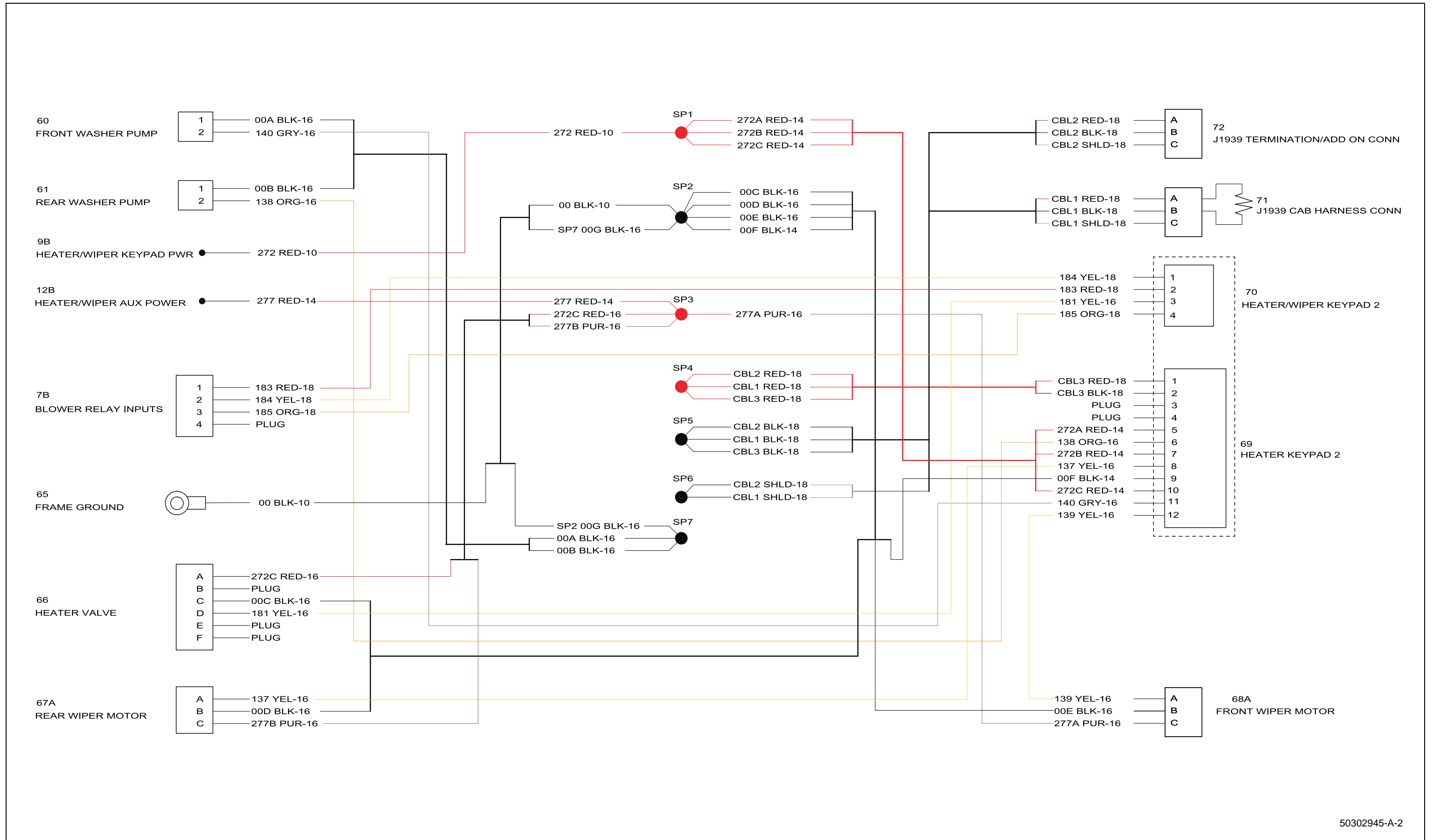


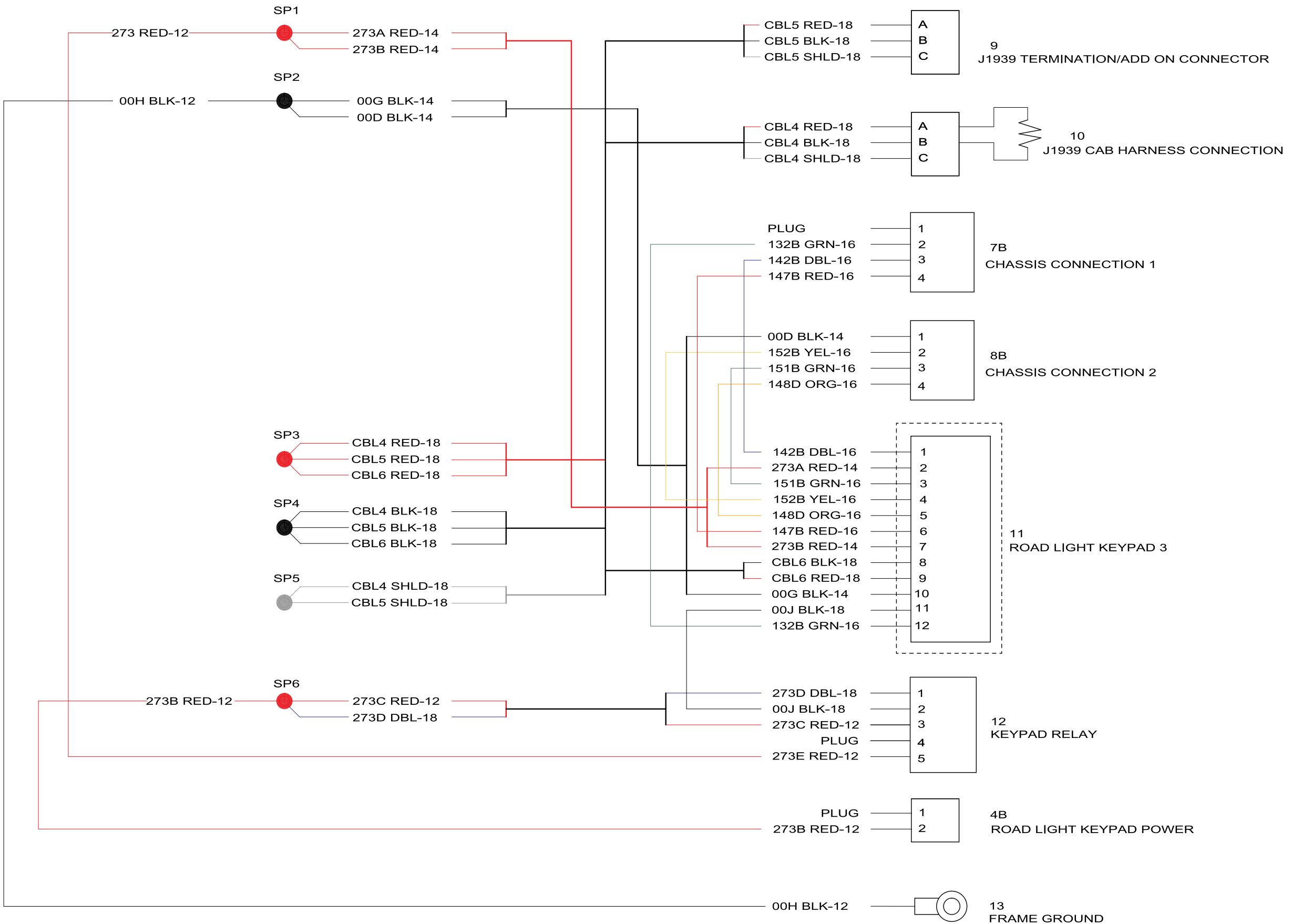
R165 - SCHEMATICS

ELECTRICAL SCHEMATIC - ROPS (1 OF 3)



R165 - SCHEMATICS
ELECTRICAL SCHEMATIC - ROPS (2 OF 3)

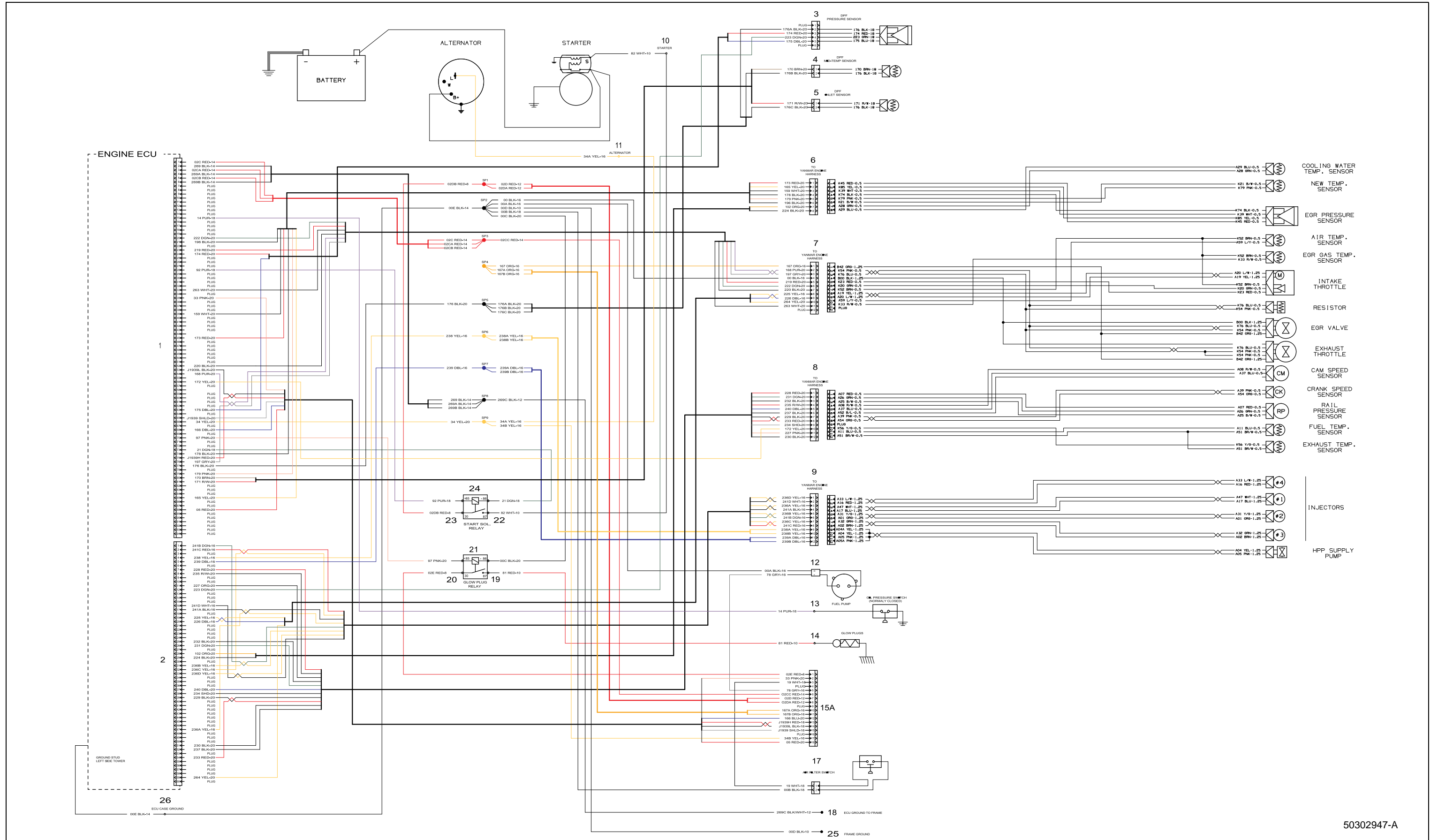




50302945-A-3

R165 - SCHEMATICS

ELECTRICAL SCHEMATIC - ENGINE



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054626	99	1	060745	91	11	070648	61	1
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054816	83	2	060746	93	12	071381	43	4
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054994	53	1	064260	9	1	071700	9	2
054994	55	1	064260	59	4	071700	17	5
054994	83	4	064260	67	1	071700	71	1
054994	97	3	064260	105	3	071701	33	3
054994	99	3	064260	147	2	071702	43	5
054994	105	1	064644	105	4	071702	45	5
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055306	91	18	067761	131	2	072580	87	4
055306	93	19	067761	137	1	072580	99	5
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650833	105	42	651308	21	22	651711	45	86
650848	33	14	651308	75	20	651711	49	96
650848	77	6	651312	3	95	651711	51	96
650854	91	35	651314	33	16	651712	141	10
650854	93	37	651366	109	39	651718	43	87
650863	17	79	651394	59	87	651718	45	87
650863	67	24	651395	59	88	651718	49	97
650867	17	80	651467	43	84	651718	51	97
650868	7	2	651467	45	84	651718	53	57
650878	9	49	651467	49	94	651718	55	57
650969	21	20	651467	51	94	651720	59	90
650969	43	82	651467	53	54	651732	71	11
650969	45	82	651467	55	54	651739	153	12
650969	53	52	651467	79	13	651751	47	4
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650987	15	47	651564	7	3	651778	75	21
651017	7	5	651564	11	25	651799	59	92
651062	43	83	651575	33	17	651807	53	58
651062	45	83	651575	77	8	651807	55	58
651062	49	93	651620	83	34	651809	29	14
651062	51	93	651620	87	48	651809	47	5
651082	17	81	651620	97	41	651810	29	15
651086	17	82	651620	99	42	651821	17	87
651089	105	43	651646	81	7	652036	147	20
651094	71	10	651648	3	96	652040	129	19
651097	147	19	651648	43	85	652040	131	12
651171	31	36	651648	45	85	652140	87	49
651213	33	15	651648	49	95	652140	97	42
651213	77	7	651648	51	95	652140	99	43
651240	17	83	651648	53	55	653002	75	22
651270	59	86	651648	55	55	653002	77	9
651307	9	50	651648	109	40	653005	17	88
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653039	45	78	656133	59	100	50286999	119	10
653039	49	87	656141	59	101	50287000	119	11
653039	51	87	656154	59	102	50287438	155	2
653053	153	13	656173	59	103	50287439	155	3
654002	9	52	811294	13	1	50287441	155	4
654002	17	90	811307	13	1	50287442	155	5
654002	23	29	811309	13	1	50287446	121	13
654004	23	32	50280034	113	4	50287450	127	11
654004	43	88	50280035	111	5	50290596	111	4
654004	45	88	50280041	113	9	50290597	111	9
654004	49	98	50280044	113	5	50290620	105	25
654004	51	98	50280058	133	3	50290621	105	25
654004	53	59	50280059	133	4	50300169	9	17
654004	55	59	50280176	121	6	50300289	17	22
654006	63	30	50280176	127	5	50300373	9	18
654006	109	41	50280186	23	17	50300438	63	12
654009	9	53	50280186	75	24	50300440	9	19
654009	91	39	50280187	75	25	50300513	5	3
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654035	75	23	50280195	149	4	50300553	59	48
654035	77	10	50280403	149	3	50300558	87	26
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654046	41	6	50286966	133	2	50300582	59	50
656002	59	94	50286967	133	16	50300638	59	51
656009	59	95	50286968	101	4	50300657	5	4
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656048	71	12	50286976	85	26	50300856	9	29
656066	49	99	50286977	85	4	50300857	9	30
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656066	53	60	50286980	119	2	50300934	3	77
656066	55	60	50286981	119	3	50300974	17	64
656082	23	25	50286983	119	4	50301102	9	31
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50301387	17	66	50301746	121	0	50302215	3	86
50301397	11	23	50301763	17	92	50302233	105	26
50301405	17	67	50301780	117	14	50302234	105	27
50301412	17	68	50301780	119	0	50302235	129	11
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50301445	45	29	50301801	51	35	50302238	105	30
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50301475	53	20	50301837	63	14	50302256	99	24
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50301507	49	31	50301841	51	47	50302257	87	28
50301507	51	31	50301848	19	1	50302257	97	23
50301606	43	31	50301849	19	2	50302257	99	25
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50301636	43	37	50301999	117	15	50302263	55	23
50301636	45	37	50302016	129	10	50302264	53	24
50301636	49	33	50302066	43	46	50302264	55	24
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50301682	59	65	50302066	51	48	50302268	53	26
50301694	43	38	50302086	21	7	50302268	55	26
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50302470	51	51	50302868	11	27	50303128	49	66
50302488	49	52	50302869	11	26	50303128	51	66
50302488	51	52	50302870	11	27	50303156	123	18
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50303195	137	9	50303439	87	43	50303559	75	11
50303196	129	16	50303440	97	34	50303562	159	10
50303196	131	9	50303440	99	35	50303566	75	12
50303197	131	10	50303443	83	32	50303572	77	11
50303197	139	1	50303443	87	44	50303573	53	41
50303199	105	34	50303443	97	35	50303573	55	41
50303200	105	35	50303443	99	36	50303580	71	7
50303206	137	10	50303445	97	36	50303585	31	19
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50303207	137	11	50303449	63	22	50303587	31	21
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50303210	139	4	50303486	53	33	50303609	71	8
50303217	159	8	50303486	55	33	50303614	77	12
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50303220	97	31	50303488	49	69	50303643	45	58
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50303222	99	32	50303488	53	34	50303643	51	72
50303223	123	19	50303488	55	34	50303643	53	42
50303224	117	17	50303490	43	57	50303643	55	42
50303224	123	20	50303490	45	57	50303646	67	20
50303225	117	18	50303490	49	70	50303660	59	70
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50303228	117	19	50303490	55	35	50303685	43	59
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50303240	83	29	50303494	55	36	50303685	49	73
50303240	87	40	50303508	97	37	50303685	51	73
50303240	97	32	50303508	99	38	50303687	43	60
50303240	99	33	50303522	147	12	50303687	45	60
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50303402	147	22	50303524	147	14	50303702	149	1
50303403	147	23	50303526	75	10	50303704	49	74
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50303761	79	11	50307116	55	63	50307466	23	50
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50303774	31	29	50307117	45	91	50307469	23	22
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50305081	159	12	50307425	23	6	50351312	75	17
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50351692	43	69	50352348	151	10	50352945	25	3
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50351718	153	7	50352363	151	11	50352965	113	10
50351757	43	70	50352364	151	12	50352975	25	4
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50351867	85	19	50352706	111	1	50353575	127	7
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50351882	85	9	50352741	45	72	50353716	101	1
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50354630	35	4	210-19470	37	3	230-32753	87	23
50657002	67	21	210-19470	49	26	250-32609	43	28
50657014	123	24	210-19470	51	26	250-32609	45	28
50657022	75	18	210-19470	53	16	310-32288	79	8
50657025	81	6	210-19470	55	16	310-32616	67	13
50657047	31	34	210-19470	59	31	310-32616	71	5
50657049	129	18	210-19470	61	4	310-32616	75	6
50657049	137	13	210-19470	63	10	350-27299	133	17
010-28854	11	3	210-19470	87	20	350-32539	11	10
010-32401	11	4	210-19470	97	15	350-32542	11	11
030-20745	13	5	210-19470	99	16	380-32420	133	18
030-31926	33	1	210-19470	105	21	390-15909	109	18
030-31926	151	1	210-19470	147	9	390-15909	153	5
045-31469	49	1	210-19532	9	14	400-32412	15	12
045-31469	51	1	210-19533	9	15	400-32513	11	12
045-31500	33	2	210-19533	31	9	400-32514	11	13
090-30303	49	11	210-19533	43	24	400-32515	11	14
090-30303	51	11	210-19533	45	24	400-32521	11	15
170-34709	109	14	210-19533	49	27	400-32522	11	16
170-35071	33	7	210-19533	51	27	400-32523	11	17
170-35104	111	2	210-20746	13	6	400-32526	33	10
200-32287	49	25	210-31017	43	25	400-32555	11	18
200-32287	51	25	210-31017	45	25	400-32556	11	19

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TORQUE SPECIFICATIONS

Note: Use these torque values when tightening hardware (excluding: locknuts and self-tapping, thread forming and sheet metal screws) unless specified otherwise.

Hydraulic fittings with various seals (light application). All torque values are in lb.-ft. (Nm) unless marked otherwise.

Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M10X1.0	7 (9)	13 (18)	11 (15)	13 (18)	0.4 in. (10 mm)
M12X1.5	15 (20)	18 (25)	18 (25)	18 (25)	0.5 in. (12 mm)
M14X1.5	26 (35)	33 (45)	26 (35)	26 (35)	0.6 in. (14 mm)
M16X1.5	33 (45)	41 (55)	30 (40)	37 (50)	0.6 in. (16 mm)
M18X1.5	41 (55)	52 (70)	33 (45)	52 (70)	0.7 in. (18 mm)
M22X1.5	48 (65)	92 (125)	44 (60)	92 (125)	0.9 in. (22 mm)
M27X2.0	66 (90)	133 (180)	74 (100)	107 (145)	1.0 in. (27 mm)
M33X2.0	111 (150)	229 (310)	118 (160)	155 (210)	1.3 in. (33 mm)
M42X2.0	177 (240)	332 (450)	155 (210)	266 (360)	1.7 in. (42 mm)
M48X2.0	214 (290)	398 (540)	192 (260)	398 (540)	1.9 in. (48 mm)
G1/8A	7 (9)	13 (18)	11 (15)	13 (18)	0.4 in. (9.73 mm)
G1/4A	26 (35)	26 (35)	22 (30)	26 (35)	0.5 in. (13.16 mm)
G3/8A	33 (45)	52 (70)	33 (45)	37 (50)	0.7 in. (16.66 mm)
G1/2A	48 (65)	66 (90)	41 (55)	48 (65)	0.8 in. (20.96 mm)
G3/4A	66 (90)	133 (180)	74 (100)	103 (140)	1.0 in. (26.44 mm)
G1A	111 (150)	229 (310)	118 (160)	140 (190)	1.3 in. (33.25 mm)
G1 1/4A	177 (240)	332 (450)	155 (210)	266 (360)	1.7 in. (41.91 mm)
G1 1/2A	214 (290)	398 (540)	192 (260)	398 (540)	1.9 in. (47.80 mm)

Hydraulic fittings with various seals (heavy application). All torque values are in lb.-ft. (Nm) unless marked otherwise.

Thread	Straight pipe fitting with thread and screwed plug (GE)			Non-return valve with elastic seal	Identification aid outside Ø
	Sealing washer	Elastic seal	O-ring		
M12X1.5	15 (20)	26 (35)	26 (35)	26 (35)	0.5 in. (12 mm)
M14X1.5	26 (35)	41 (55)	33 (45)	33 (45)	0.6 in. (14 mm)
M16X1.5	33 (45)	52 (70)	41 (55)	41 (55)	0.6 in. (16 mm)
M18X1.5	41 (55)	66 (90)	52 (70)	52 (70)	0.7 in. (18 mm)
M20X1.5	41 (55)	92 (125)	59 (80)	74 (100)	0.8 in. (20 mm)
M22X1.5	48 (65)	100 (135)	74 (100)	92 (125)	0.9 in. (22 mm)
M27X2.0	66 (90)	133 (180)	125 (170)	100 (135)	1.0 in. (27 mm)
M33X2.0	111 (150)	229 (310)	229 (310)	155 (210)	1.3 in. (33 mm)
M42X2.0	177 (240)	332 (450)	243 (330)	266 (360)	1.7 in. (42 mm)
M48X2.0	214 (290)	398 (540)	310 (420)	398 (540)	1.9 in. (48 mm)
G1/8A	26 (35)	41 (55)	33 (45)	33 (45)	0.5 in. (13.16 mm)
G1/4A	33 (45)	59 (80)	44 (60)	44 (60)	0.7 in. (16.66 mm)
G3/8A	48 (65)	85 (115)	55 (75)	74 (100)	0.8 in. (20.96 mm)
G1/2A	66 (90)	133 (180)	125 (170)	107 (145)	1.0 in. (26.44 mm)
G3/4A	111 (150)	229 (310)	229 (310)	192 (260)	1.3 in. (33.25 mm)
G1A	177 (240)	332 (450)	243 (330)	266 (360)	1.7 in. (41.91 mm)
G1 1/4A	214 (290)	398 (540)	310 (420)	398 (540)	1.9 in. (47.80 mm)

English coarse and fine pitch threads. All torque values are in lb.-ft. (Nm) unless marked otherwise.

Values marked with an asterisk (*) are in lb-in., values marked (**) are in Kg-Cm

Thread - Pitch	Grade 2		Grade 5		Grade 8	
	Dry	Lubed	Dry	Lubed	Dry	Lubed
8-32	19* (21**)	14* (16**)	30* (34**)	22* (25**)	41* (47**)	31* (35**)
8-36	20* (23**)	15* (17**)	31* (35**)	23* (26**)	43* (49**)	32* (36**)
10-24	27* (31**)	21* (24**)	43* (49**)	32* (36**)	60* (69**)	45* (51**)
10-32	31* (35**)	23* (26**)	49* (56**)	36* (41**)	68* (78**)	51* (58**)
1/4-20	66* (76**)	50* (57**)	9 (12)	75* (86**)	12 (16)	9 (12)
1/4-28	76* (87**)	56* (64**)	10 (14)	86* (99**)	14 (19)	10 (14)
5/16-18	11 (1.5)	9 (12)	17 (23)	13 (18)	25 (34)	18 (24)
5/16-24	12 (16)	9 (12)	19 (26)	14 (19)	25 (34)	20 (27)
3/8-16	20 (27)	15 (20)	30 (41)	23 (31)	45 (61)	35 (47)
3/8-24	23 (31)	17 (23)	35 (47)	25 (34)	50 (68)	35 (47)
7/16-14	32 (43)	24 (33)	50 (68)	35 (47)	70 (95)	55 (75)
7/16-20	36 (49)	27 (37)	55 (75)	40 (54)	80 (108)	60 (81)
1/2-13	35 (47)	35 (47)	75 (102)	55 (75)	110 (149)	80 (108)
1/2-20	40 (54)	40 (54)	90 (122)	65 (88)	120 (163)	90 (122)
9/16-12	55 (75)	55 (75)	110 (149)	80 (108)	150 (203)	110 (149)
9/16-18	60 (81)	60 (81)	120 (163)	90 (122)	170 (230)	130 (176)
5/8-11	75 (102)	75 (102)	150 (203)	110 (149)	220 (298)	170 (230)
5/8-18	85 (115)	85 (115)	180 (244)	130 (176)	240 (325)	180 (244)
3/4-10	130 (176)	130 (176)	260 (353)	200 (271)	380 (515)	280 (380)
3/4-16	150 (203)	150 (203)	300 (407)	220 (298)	420 (569)	320 (434)
7/8-9	125 (169)	125 (169)	430 (583)	320 (434)	600 (813)	460 (624)
7/8-14	140 (190)	140 (190)	470 (637)	360 (488)	660 (895)	500 (678)
1-8	190 (258)	190 (258)	640 (868)	480 (651)	900 (1220)	680 (922)
1-14	210 (285)	210 (285)	710 (963)	530 (719)	1000 (1356)	740 (1003)

With coarse-pitch thread. All torque values are in lb.-ft. (Nm) unless marked otherwise.

Thread	Threads according to DIN 912, DIN 931, DIN 933, etc.			Threads according to DIN 7984	
	8.8	10.9	12.9	8.8	10.9
M5	4.1 (5.5)	6 (8)	7 (10)	4 (5)	5 (7)
M6	7 (10)	10 (14)	13 (17)	6.3 (8.5)	9 (12)
M8	18 (25)	26 (35)	31 (42)	15 (20)	22 (30)
M10	33 (45)	48 (65)	59 (80)	30 (40)	44 (59)
M12	64 (87)	81 (110)	108 (147)	51 (69)	74 (100)
M14	100 (135)	133 (180)	170 (230)	81 (110)	118 (160)
M16	155 (210)	203 (275)	258 (350)	125 (170)	184 (250)
M18	207 (280)	302 (410)	354 (480)	181 (245)	254 (345)
M20	302 (410)	420 (570)	509 (690)	251 (340)	361 (490)
M22	406 (550)	575 (780)	686 (930)	339 (460)	487 (660)
M24	524 (710)	738 (1000)	878 (1190)	435 (590)	620 (840)
M27	767 (1040)	1092 (1480)	1305 (1770)	642 (870)	922 (1250)
M30	1047 (1420)	1482 (2010)	1770 (2400)	885 (1200)	1254 (1700)

With fine-pitch thread. All torque values are in lb.-ft. (Nm) unless marked otherwise.

Thread	Threads according to DIN 912, DIN 931, DIN 933, etc.			Threads according to DIN 7984	
	8.8	10.9	12.9	8.8	10.9
M8X1.0	18 (25)	27 (37)	32 (43)	16 (22)	24 (32)
M10X1.0	37 (50)	55 (75)	65 (88)	32 (43)	48 (65)
M10X1.25	36 (49)	52 (71)	61 (83)	31 (42)	46 (62)
M12X1.25	64 (87)	96 (130)	111 (150)	55 (75)	81 (110)
M12X1.5	61 (83)	92 (125)	107 (145)	53 (72)	77 (105)
M14X1.5	100 (135)	148 (200)	173 (235)	89 (120)	129 (175)
M16X1.5	155 (210)	229 (310)	266 (360)	133 (180)	195 (265)
M18X1.5	232 (315)	332 (450)	391 (530)	199 (270)	284 (385)
M20X1.5	325 (440)	465 (630)	538 (730)	277 (375)	391 (530)
M22X1.5	435 (590)	620 (840)	723 (980)	369 (500)	524 (710)
M24X2.0	546 (740)	789 (1070)	922 (1250)	465 (630)	664 (900)
M27X2.0	811 (1100)	1143 (1550)	1328 (1800)	679 (920)	959 (1300)
M30X2.0	1106 (1500)	1586 (2150)	1844 (2500)	959 (1300)	1364 (1850)

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