

Parts Catalog

Armadillo 9X Sweeper Series

Models: 9X & 9XCE



PREFACE

Thank you for your purchase of the new industry standard for sweepers. Minuteman International, Inc. takes great pride in offering the most dependable, reliable, and best value in industrial power sweepers and scrubbers. We set the standard.

Our Customer Service Department would like to hear from you. If you see any errors, omissions or something that needs clarification in this Parts Catalog, please let us know. We are working hard towards continually improving our processes--to benefit you, our valued customer.

Please copy the form below, fill out and comment on how you found our manual.

Thank you!

The PowerBoss® Team

Name _____

Title: _____

Company Name: _____

Address: _____

Country: _____

Type of equipment or model number: _____

Comments: _____

Please return to:

Customer Service Manager
PowerBoss®, Minuteman International, Inc.
14N845 U.S. Route 20
Pingree Grove, Illinois 60140 USA

Phone: 800-323-9420

Email: tech@powerboss.com

This is the Parts Catalog for the PowerBoss® Armadillo 9X & 9XCE Sweeper Series.

This Catalog covers the Armadillo 9X & 9XCE machine variations beginning December 2014.

We believe this machine will provide excellent service for many years.

However, the best results will be obtained if:

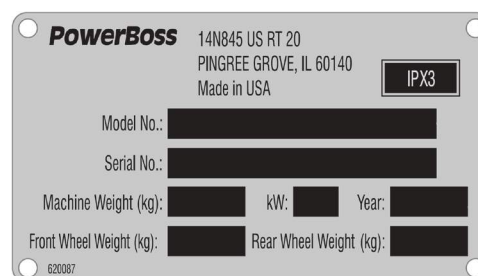
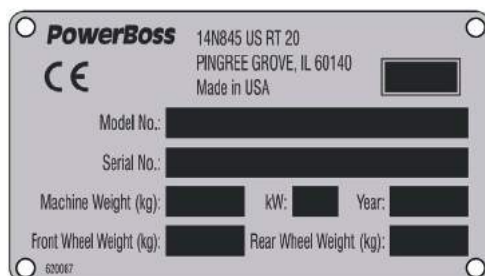
- The machine is operated with reasonable care.
- The machine is maintained regularly per the maintenance schedule provided in the User Manual.
- The machine is maintained with PowerBoss® supplied or equivalent parts.

All right side and left side references to the machine (except for engine) are determined by facing the direction of forward travel. The front of the engine or engine fan faces the rear of the machine. Some hardware considered to be common or locally available has been omitted from the parts section to make this manual clear. Be sure to use equivalent hardware when replacement becomes necessary.

The Model and Serial Number of your machine is shown on the I.D. name plate. This information is needed when contacting Technical Support or when ordering parts. The I.D. plate is mounted on the console of the machine, left of the operator and adjacent the main broom adjustment access door.

Parts may be ordered by phone, fax, or email from any PowerBoss® parts and service center. Before ordering parts or supplies, be sure to have your machine model number and serial number handy. For your convenience Fill out the data block on the next page for future reference.

Example I.D Plates:



MACHINE DATA	
Fill out at installation	
Serial Number:	_____
Engine Serial Number:	_____
Sales Rep.:	_____
Date of Install:	_____

All information contained in this catalog is current at the time of printing. Minuteman International, Inc. reserves the right to make changes at any time without notice.

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TECHNICAL SPECIFICATIONS

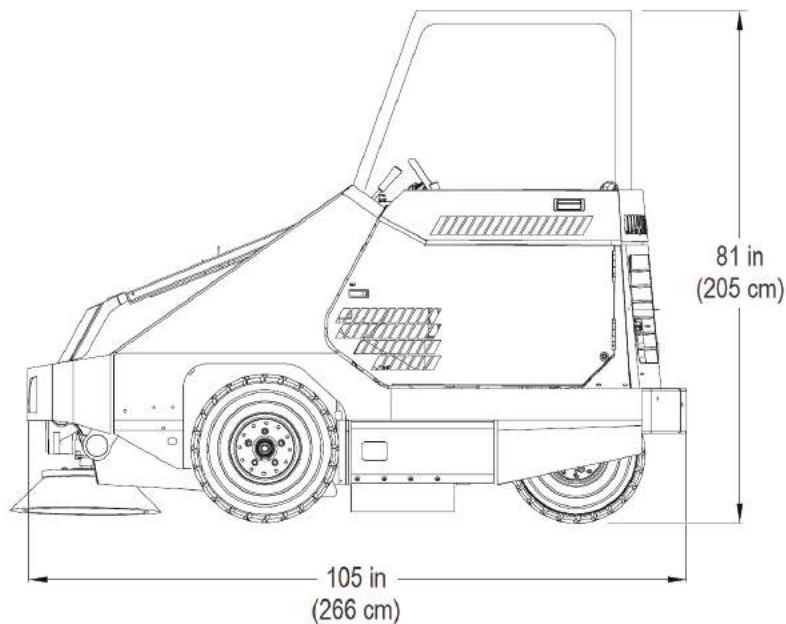
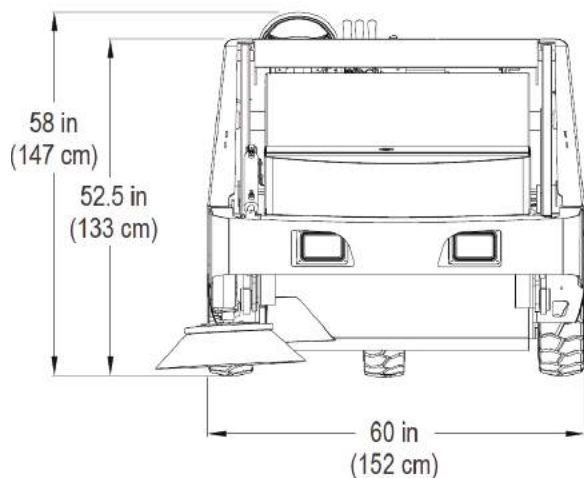
Model	Armadillo 9X Series
9X Model No.	SW9XKDSL; SW9XKGAS; SW9XKLPG
9X CE Model No.	9XRDSLCE; 9XRLPGCE

DIMENSIONS & WEIGHT

Length	105 in (267 cm)
width	60 in (152 cm)
height (machine)	52.5 in (133 cm)
height (w/steering wheel)	58 in (147 cm)
w/ overhead guard	81 in (206 cm)
w/ cab	81 in (206 cm)
weight	4090 lb (1855 kg)
Minimum U-turn	110 in (280 cm)

SWEEPING SYSTEM

productivity	184,800 ft²/hr (17,168 m²/hr)
sweep path	62 in (157 cm)
main broom	48 in (122 cm)
side broom	24 in (61 cm)
second side broom	optional 72 in path optional (183 cm) path
hopper type	RTR™ high dump
hopper volume	21.1 ft³ (0,59 m³)
hopper load capacity	1100 lb (498 kg)
dust control	110 ft² (10,22 m²)
high dump	64 in (162 cm)
RTR™ (Rotary Trash Relocation)	



dimensions shown in inches (cm)

STANDARD ABBREVIATIONS

°C-Degrees Celsius	INFO-Information
°F-Degrees Fahrenheit	INT-Internal or Interior
12V-12 Volts DC	LG-Long
AR-Abrasion Resistant	LH-Left Hand
ASSY-Assembly	LPG-Liquefied Petroleum Gas
ATO-Standard Auto Fuse Type	LP-Liquefied Petroleum
Also called ATC	M8x1-Indicates Metric threads,
BHSCS-Button Head Screw SS	8mm Dia with a 1mm thread pitch
BLK-Black	MM-Millimeters
BLT-Belt	MNT-Mount
BR-Brass or Broom or Brush	MS-Mid Size
BRM-Broom	OD-Outside Diameter
BRKT-Bracket	PLTD-Plated
CB-Curb Broom	REV-Reverse
CCW-Counter Clockwise	RH-Right Hand
CI-Cubic Inch	ROT-Rotation
CW-Clockwise Rotation	RTR-Rotary Trash Relocator
CYL-Cylinder	SCR-Screw
DEG-Degrees	SC-Scrubber
DIA-Diameter	SP-Service Part
DPDT-Double Pole Double Throw	SPDT-Single Pole Double Throw
ELEC-Electric	SPST-Single Pole Single Throw
ES-Elastic Stop, also Nyloc	SS-Stainless Steel
EXT-Exterior or Extended	STR-Straight
FI-Fuel Injection	ST-Straight
FS-Full Size	SUB-Sub Assembly
FTG-Fitting	THD-Thread
FWD-Forward	THK-Thick
REV-Reverse	THRU-Through
GAL-US Gallon (3.79 Liters)	UNC-Unified Nat'l Coarse Threads
GOV-Governor	UNF-Unified Nat'l Fine Threads
HD-Head	V1505-Kubota Diesel Engine
HD-Heavy Duty	W/-With
HOP-Hopper	WELD-Weldment
HSS-High Speed Steel	W/O-Without
HT-High Temperature	SP-Zinc Plated
HT-Height	
HYD-Hydraulic	
ID-Identification	
ID-Inside Diameter	
IMP-Impeller	

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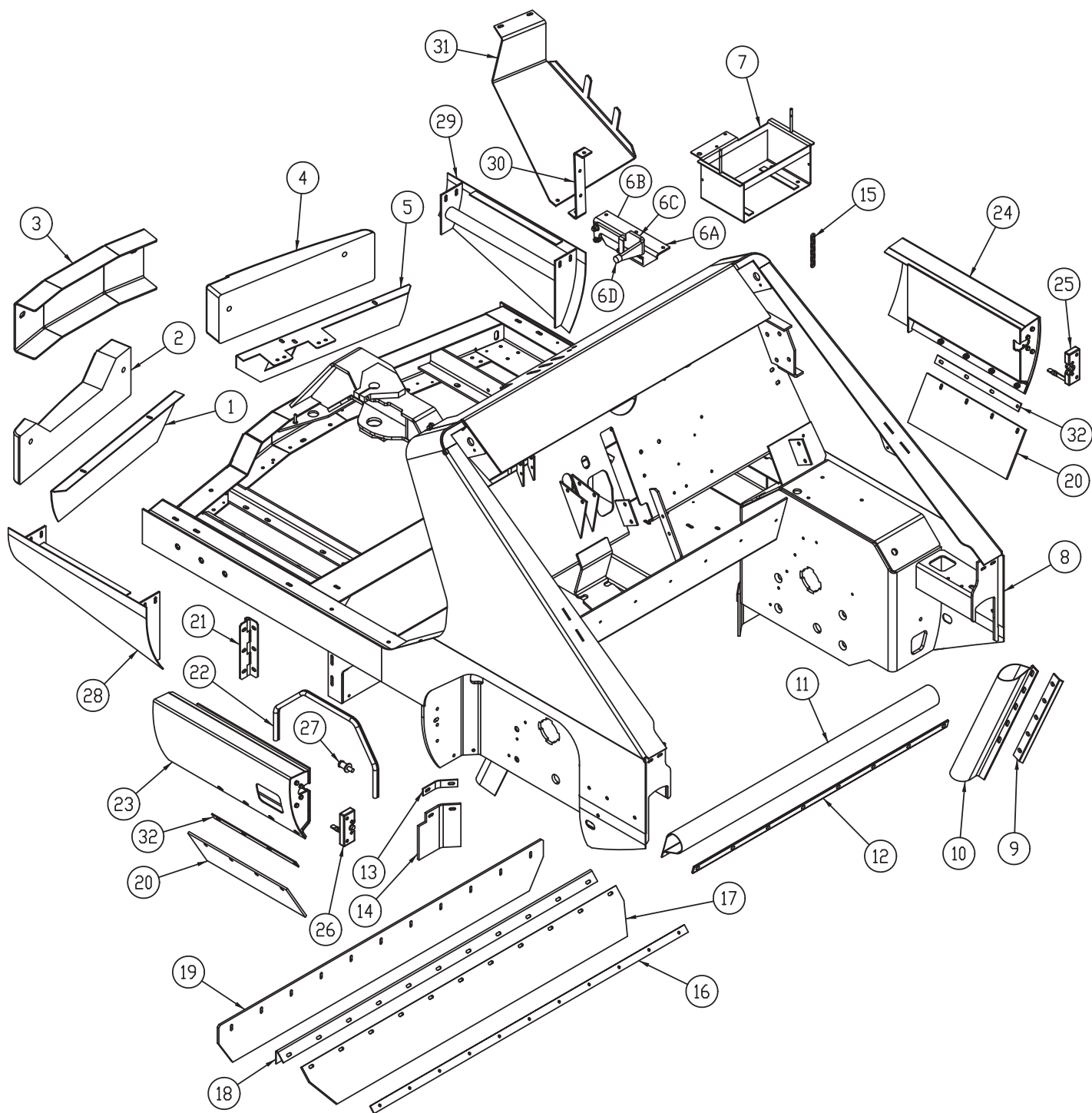
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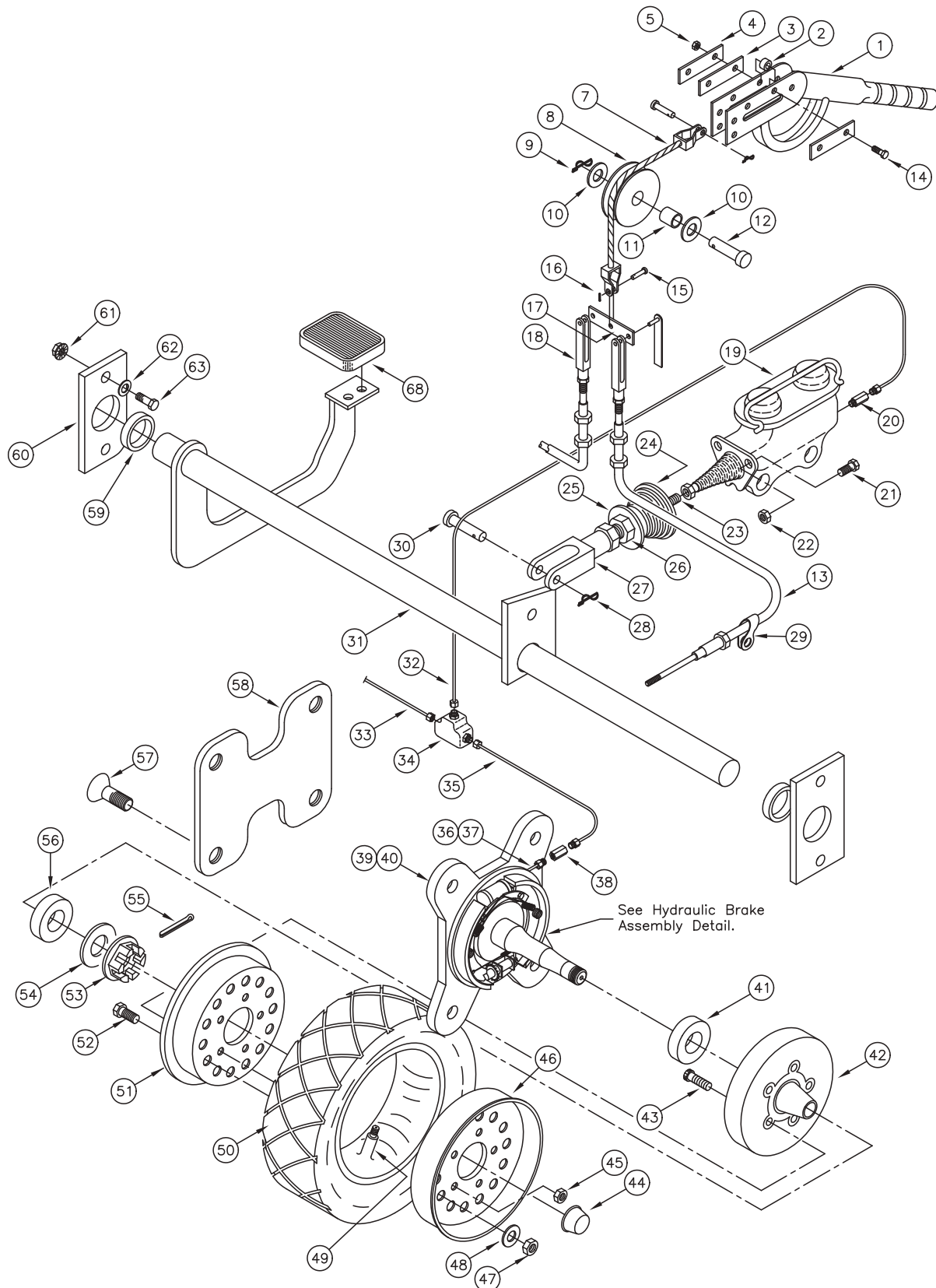
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FRAME ASSEMBLY ARMADILLO 9X



FRAME ASSEMBLY ARMADILLO 9X			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3332182M	1	SKIRT-RT REAR 9X, DARK GRAY
2	3309707	1	COUNTERWEIGHT-RH PAINTED
3	3332147P	1	COVER-COUNTER WEIGHT CENTER
4	3301046	1	COUNTERWEIGHT-LH PAINTED
5	3335397M	1	SKIRT-LH REAR, 9X, DARK GRAY
6A	3309740	1	MNT-ENG LOCK
6B	3301522	1	SPRING-EXT BRAKE ARM (NOT SHOWN)
6C	3309743	1	ARM-ENG LOCK
6D	430119	1	RUBBER CAP 1/2 ID
7	3321296	1	WELDMENT-BATTERY BOX (MODELS W/ENGINE SWING)
8	3335310M	1	WELD-FRAME, TIER 2,
9	3315203	2	RETAINER-HOPPER SIDE SEAL
10	3318143	2	FLAP-RUBBER HOPPER/FRAME SIDE
11	3307276	1	SEAL-FRAME HOPPER HORIZONTAL
12	3307281	1	STRAP-FRAME HOP FLAP PAINTED
13	3307287	2	STRAP-BROOM CORNER FLAP PAINTED
14	3307286	2	FLAP-BROOM CHAMBER CORNER
15	3307658	1	CHAIN-FRAME GROUNDING
16	3307283	1	STRAP-REAR FEED FLAP PAINTED
17	3307279	1	FLAP-REAR FEED
18	3307282	1	ANGLE-REAR FLAP PAINTED
19	3307278	1	FLAP-REAR HOPPER
20	3307280	2	FLAP-MAIN BROOM DOOR
21	3307275	2	HINGE-BROOM DOOR
22	3318739	2X 3.0'	WEATHERSTRIPPING-RUBBER SPONGE
23	3307265M	1	ASSY- BROOM DOOR RH
24	3307266M	1	ASSY- BROOM DOOR LH
25	3307246	1	LATCH-LH BROOM DOOR
26	3307247	1	LATCH-RH BROOM DOOR
27	3307248	2	BOLT-STRIKER BROOM DOOR LATCH
28	3307519M	1	SKIRT-RH SIDE
29	3307520M	1	SKIRT-LH SIDE
30	3307792	1	BAR-HOSE PAN SUPPORT
31	3307791	1	PAN-HOSE
32	3307284	2	STRAP - BROOM DOOR FLAP

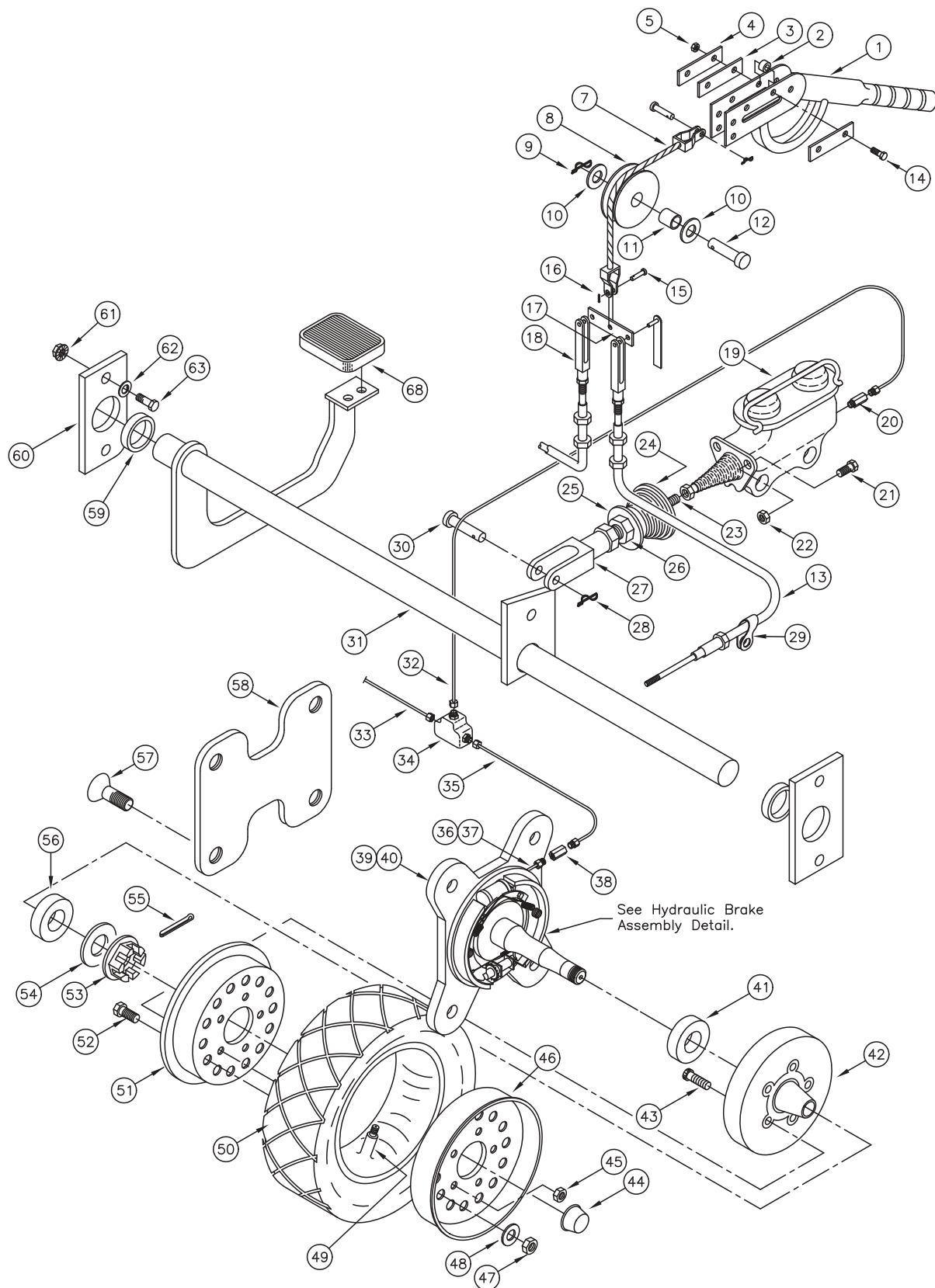
HYDRAULIC BRAKE ASSEMBLY



HYDRAULIC BRAKE ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3303169	1	LEVER-HAND BRAKE
2	3307241	1	SPACER-HAND BRAKE ZP SW/A
3	3307273	1	BAR-HAND BRAKE SPACER, ZP SW/A
4	3307895	1	SPACER-THIN HAND BRAKE, ZP
5	711380	1	NUT-NYLOC 3/8-16
7	3307632	1	CABLE-CENTER BRAKE, SW/A
8	3300367	1	PULLEY-2.50 DIA, BUSHED, BRAKE
9	3400125	1	PIN-COTTER 3/8 RUE-RING
10	3400088	2	WASHER-FLAT 5/16 IDx.688 ODx.065 THK
11	3303552	1	SLEEVE-HAND BRAKE ZP
12	3400185	1	PIN-CLEVIS 5/16x1-1/4 ZP
13	3321452	2	CABLE-8" PARKING BRAKE (HAND)
14	3400473	1	SCR-HEX,3/8-16x3.00 ZP F'THD
15	3400118	1	PIN-CLEVIS 5/16x7/8 ZP
16	3400125	1	PIN-COTTER 3/8 RUE-RING
17	3307232	1	BAR-BRAKE EQUALIZER ZP SW/A
18	3321470	2	CLEVIS-BRAKE 8MM
19	3316717	1	CYLINDER-BRAKE MASTER, ARMA
20	3307638	1	FTG-REDUCER NAPA #7909
21	3400028	1	SCR-HEX,3/8-16x1.50 ZP
22	711380	1	NUT-HEX 3/8-16 ES ZP
23	3307235	1	ROD-BRAKE MASTER CYLINDER, ZP
24	3313109	1	SPRING-PEDAL RETURN
25	3400278	4	WASHER-FENDER 3/8
26	3400075	2	NUT-HEX JAM 3/8-24 ZP
27	3301447	1	CLEVIS-CABLECRAFT AC-218
28	3400125	1	PIN-COTTER 3/8 RUE-RING
29	3332271	1	CLAMP-3/8 DIA INSULATED HALF (STRAP)
30	3400117	1	PIN-CLEVIS 3/8x1-1/8, ZP
31	3307224	1	WELDMENT-BRAKE TORQUE ARM PAINTED
32	3307637-1	1	ASSEMBLY-BRAKE LINE CENTER SW/A
33	3321457	1	BRAKE LINE-ARMA RH LONG
34	3306307	1	FTG-TEE HYD BRAKE
35	3321459	1	BRAKE LINE-ARMA LH LONG
36	3321455	1	BRAKE LINE-ARMA LH, SHORT
37	3321456	1	BRAKE LINE-ARMA RH, SHORT

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HYDRAULIC BRAKE ASSEMBLY - CONTINUED

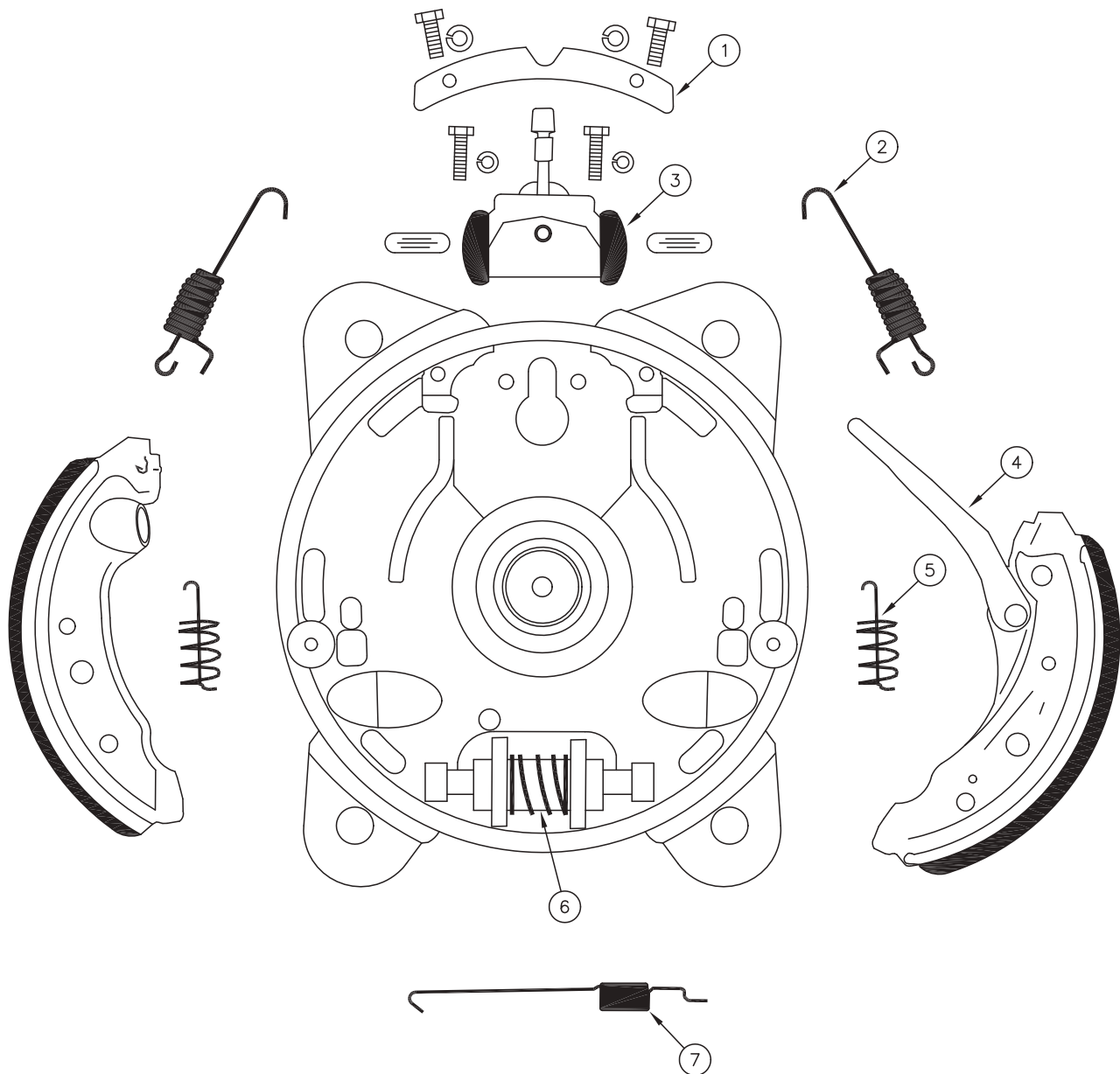


HYDRAULIC BRAKE ASSEMBLY - CONTINUED			
ITEM	PART NO.	REQ'D	DESCRIPTION
38	3400969	1	FTG-COUPLING, 3/16" OD HYD BRAKE, BRASS
39	3321450	1	ASSEMBLY-8" HYDRAULIC BRAKE LH
40	3321471	1	ASSEMBLY-8" HYDRAULIC BRAKE RH
41	3307238	1	BEARING-INNER WHEEL SW/A
42	3332483	1	BRAKE-DRUM 8" ARMA PAINTED
43	3307242	10	STUD-WHEEL, 1/2-20x1.75 LG
44	3300369	1	CAP-HUB, 2.44" DIA, ZP
45	3300411	5	NUT-WHEEL LUG, 1/2-20 UNF
46	3307255	1	RIM-FRONT OUTER SW/A PNTD
48	3400099	10	WASHER-LOCK 7/16 SPLIT ZP
49	3307253	2	TUBE-TIRE INNER, 650x10
50	3307252	2	TIRE-PNEUMATIC 650x10
51	3307254	1	RIM-FRONT INNER SW/A PNTD
52	3400015	10	SCR-FLT,7/16-14X1.50,SOC ZP
53	3400076	1	NUT-HEX JAM SLOTTED, 1-14 ZP
54	3307352	1	WASHER-1.016 IDx1.50 ODx.25 THK
55	3400120	1	PIN-COTTER 5/32 DIAx2.00 LG, ZP
56	3300467	1	BEARING-BALL 2.44 ODx1.18 ID
57	3402030	4	SCR-FLT,5/8-11x1.00, SOC ZP
58	3321453	1	PLT-8" BRAKE MOUNT RH&LH
59	3307220	2	BEARING-.88IDx1.00ODx.50LG
60	3307233	2	MOUNT-.88 DIA BEARING, ZP SW/A
61	711374	1	NUT-FLANGE LOCK 3/8-16
62	3400384	1	WASHER-CONICAL SPRING 3/8
63	3400035	1	SCR-HEX, 3/8-16x1.25 ZP
68	3300413	1	PAD-RUBBER BRAKE PEDAL

End of Section

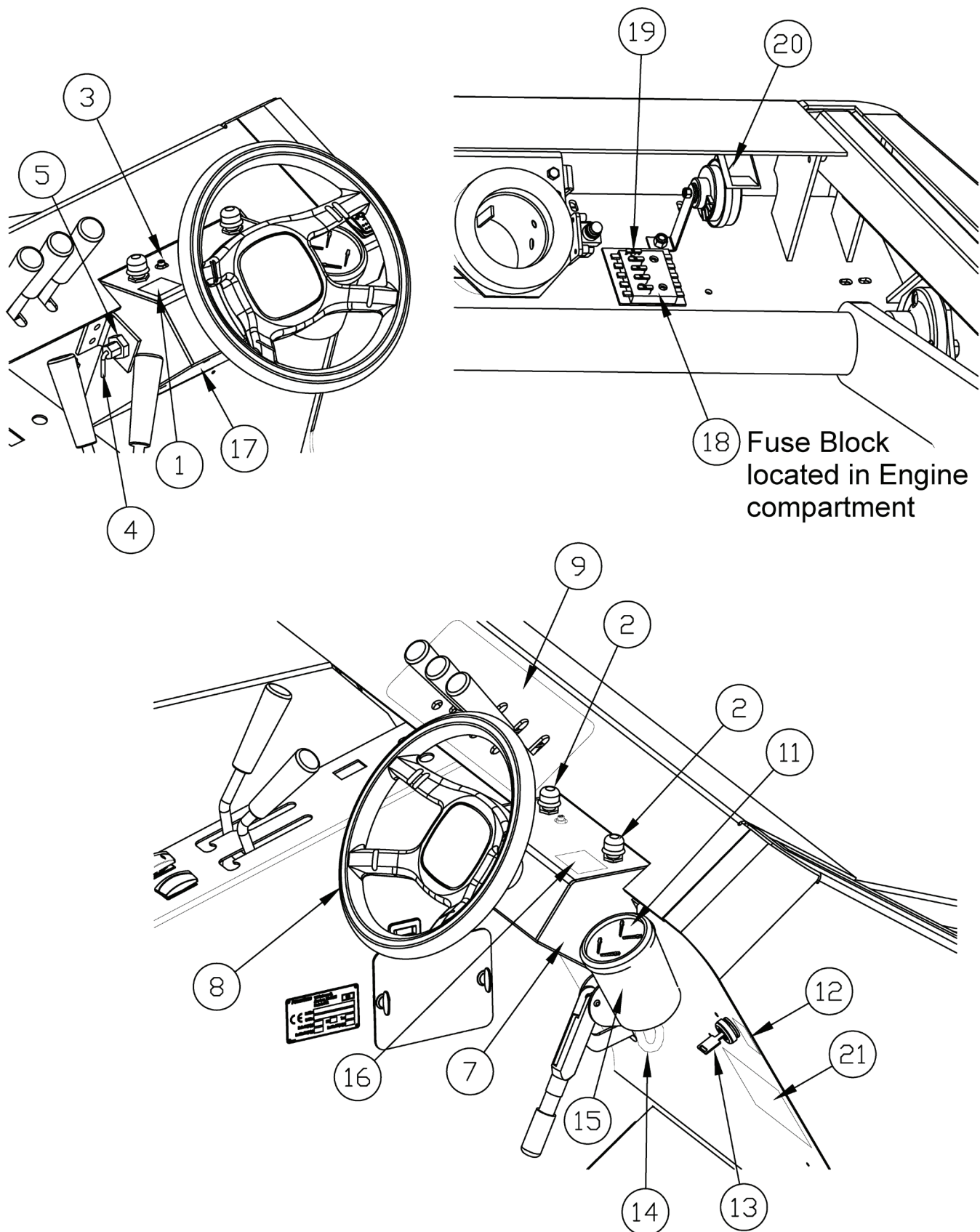
BRAKE - 8" ARMA L/H PN-3321450

BRAKE - 8" ARMA R/H PN-3321471

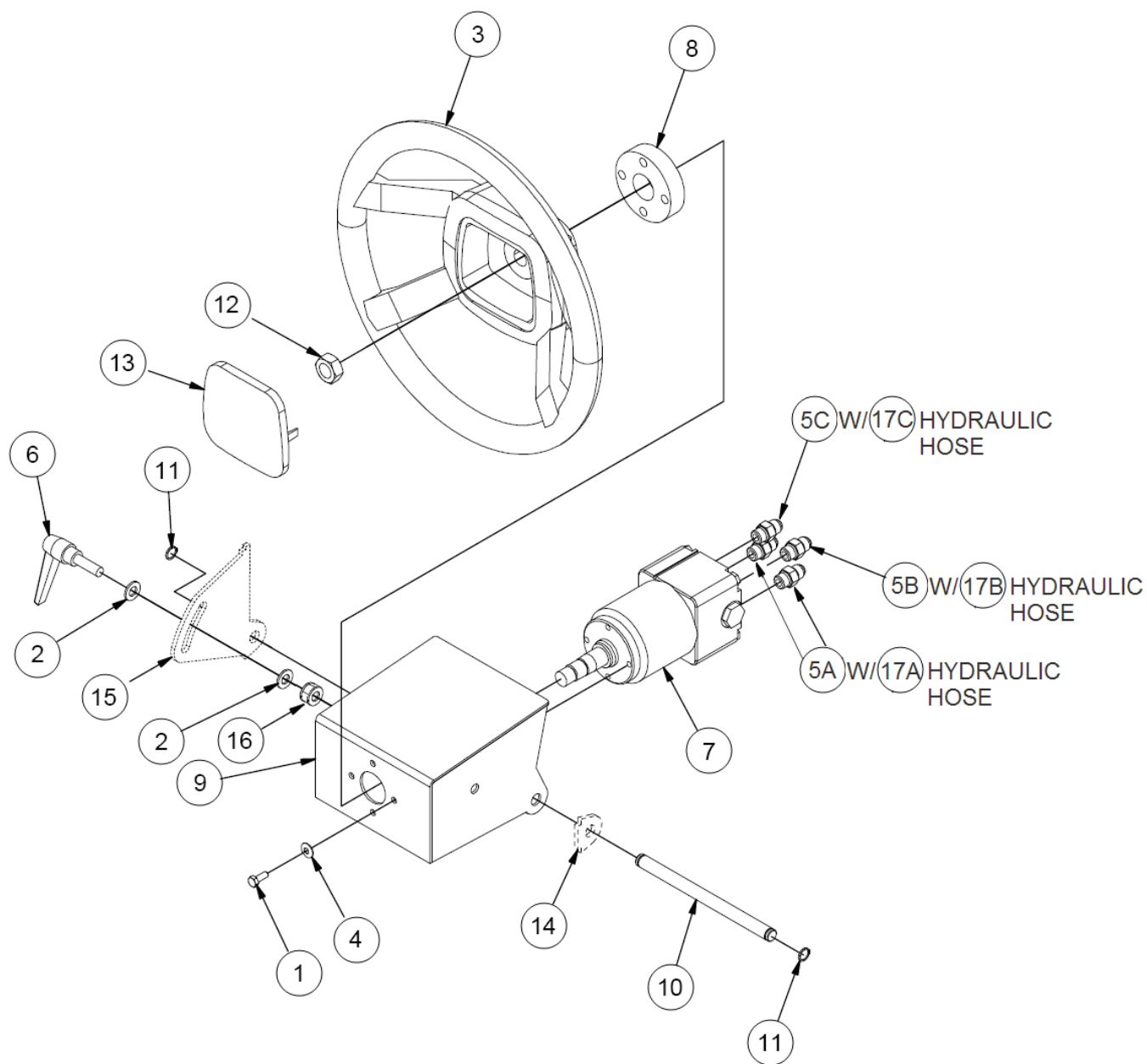


BRAKE - 8" ARMA L/H PN-3321450 BRAKE - 8" ARMA R/H PN-3321471			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3321462	1	RETAINER-BRAKE 8" PLATE
2	3321465	2	SPRING-TENSION
3	3321461	1	ASSEMBLY-WHEEL CYLINDER, 8" BRAKE
4	3321467	1	BRAKE SHOE SET-8" LH (SHOWN)
4	3334766	1	BRAKE SHOE SET-8" RH (NOT SHOWN)
5	3321466	2	SPRING-HOLD DOWN
6	3321463	1	ASSEMBLY-MANUAL BRAKE ADJUSTER
7	3321464	1	SPRING-RETURN, 8" BRAKE
-	3321450	1	BRAKE-ASSEMBLY, 8" ARMA LH (INCLUDES PARTS 1-7)
-	3321471	1	BRAKE-ASSEMBLY, 8" ARMA RH (INCLUDES PARTS 1-7)

STEERING WHEEL, GAUGES & FUSES

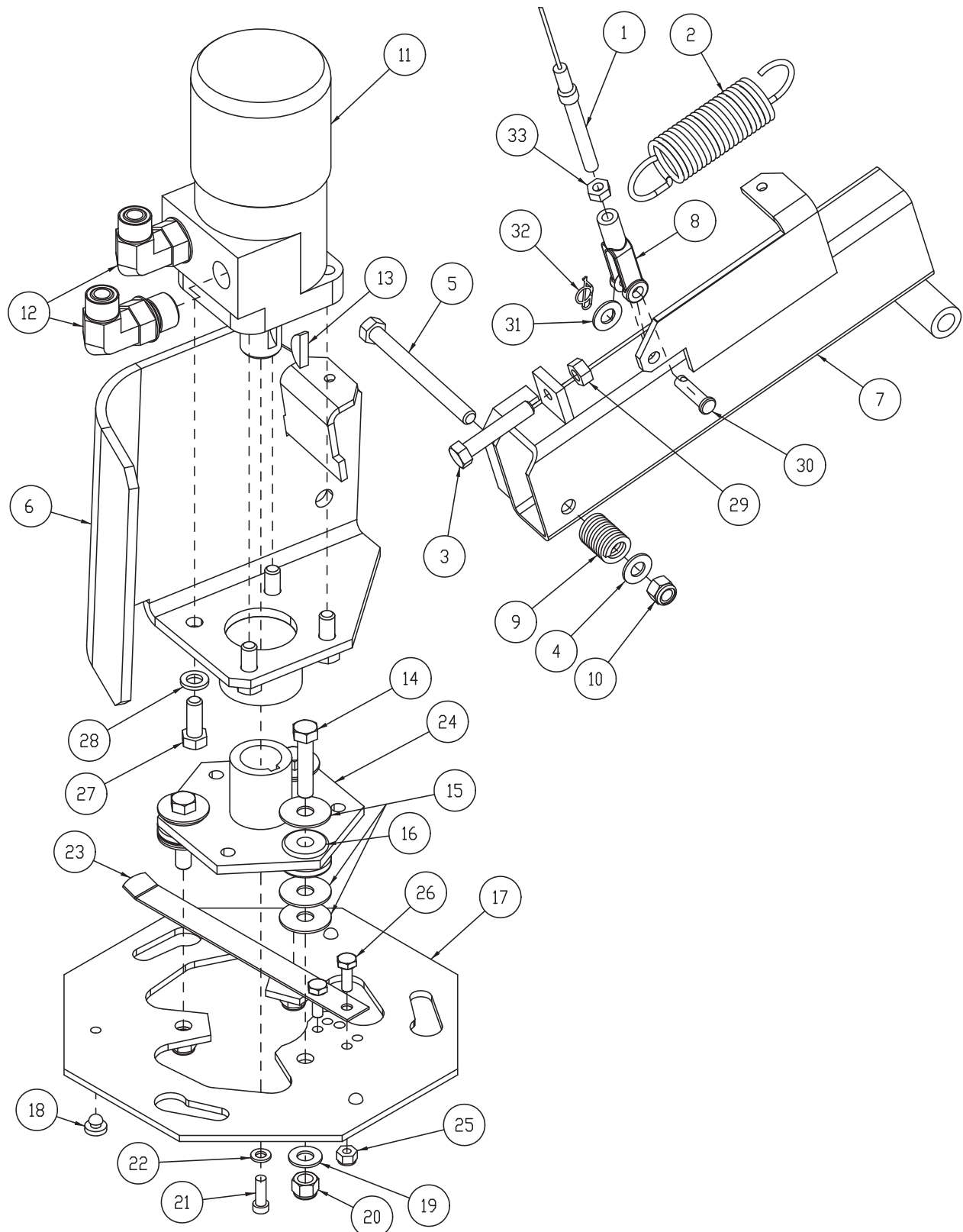


STEERING WHEEL, GAUGES & FUSES			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3302520	1	DECAL-"FILTER SHAKER"
2	3300441	2	SWITCH MOMENTARY 12V
3	3026924	1	CIRCUIT BREAKER-45 AMP
4	600260	1	KNOB LEVER
5A	3338622	1	WDT - TILT STEERING LOCK
5B	3400192	2	NUT-HEX JAM 5/8-11 ZP
5C	12310058	1	WSR-FLT M10.5 X 20 X 2 STL
7	3338616P	1	WDT - 9X TILT STEERING BOX
8	3338215	1	WHEEL-STEERING W/COVER SW
9	3307594	1	DECAL-FRONT PANEL SW/A
11	3333721	1	GAUGE-4 IN 1, 3.50" DIA
12	3307599	1	DECAL-IGNITION SW/A
13	3316100	1	SW-IGNITION, 3-POS, W/STARTER LOCKOUT
14	3335096	1	HARNESS-GAUGE
15	3333719P	1	WELDMENT-GAUGE MOUNT
16	3302525	1	DECAL-"HORN"
17	3338621P	1	COVER - PLT, TILT STEERING, 9X
18	3322599	1	FUSE BLOCK-ATO, 10 POSITON
19	3322601	5	FUSE-15 AMP AUTOMOTIVE PUSH IN
20	3300379	1	HORN-AUTOMOTIVE 12V STANDARD
21	3301854	1	DECAL-CAUTION



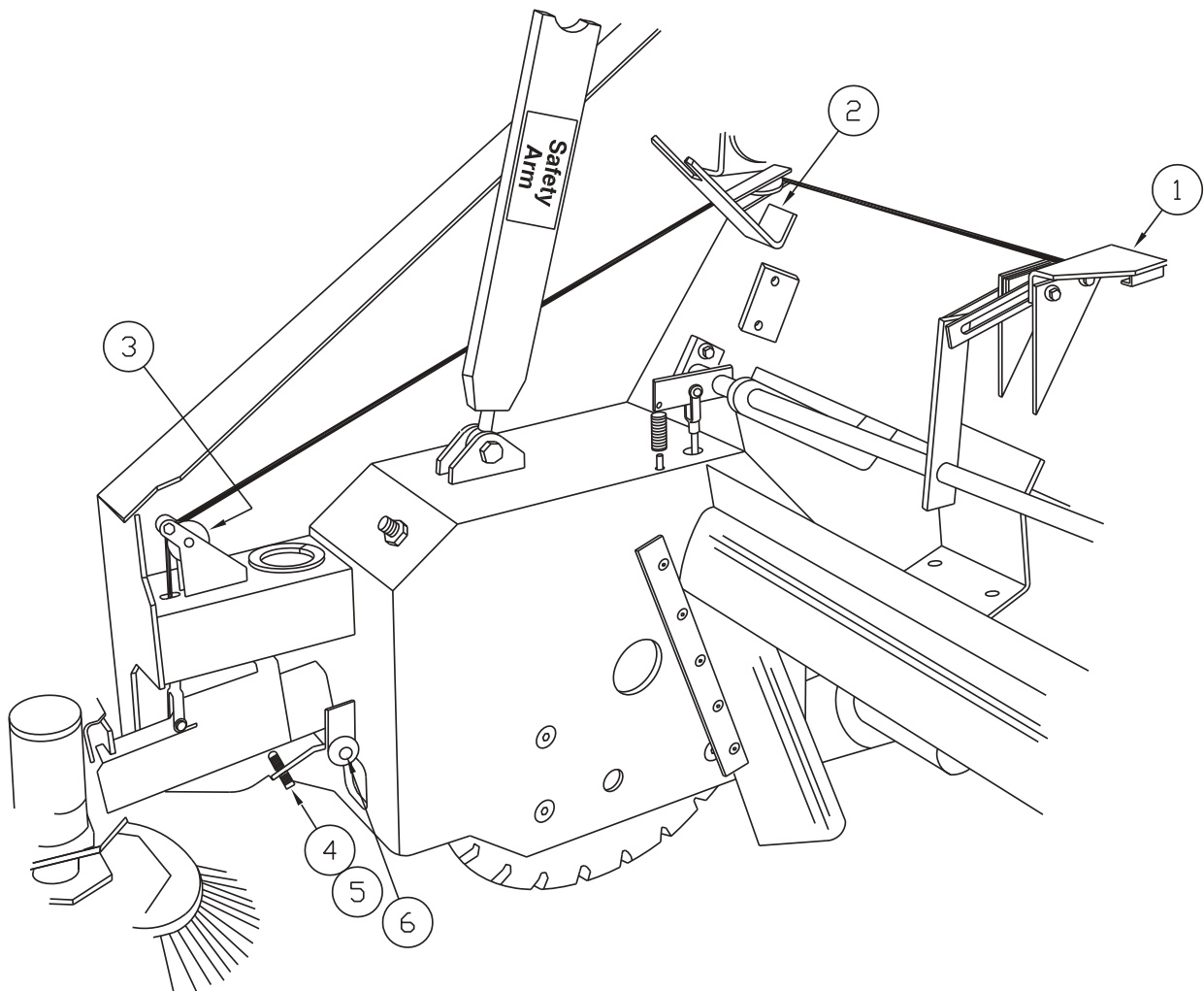
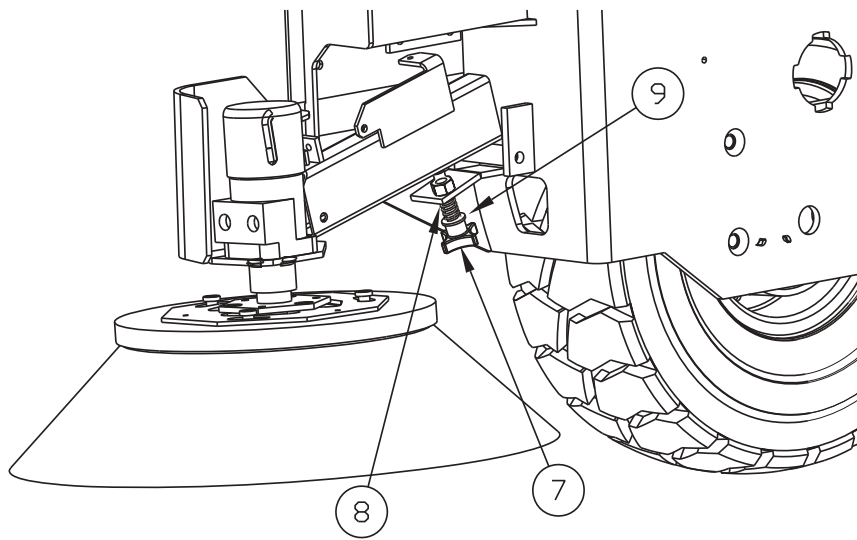
STEERING COLUMN			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	11038072	4	BOLT, M6-100 X 16H
2	12310058	2	WASHER, M10
3	3338215	1	STEERING WHEEL
4	3400383	4	WASHER, 1/4 BELLEVILLE
5A	675552	2	FTG-STR THD 45 -6 ORFS TO -6 SAE
5B	675511	1	FTG-STR THD CONNECTOR -4 ORFS TO -6 SA
5C	675552	1	FTG-STR THD CONNECTOR -6 ORFS TO -6 SA
6	600260	1	KNOB, LEVER
7	600368	1	STEERING UNIT
8	600389	1	STEERING RING
9	3338616P	1	WDT - 9X TILT STEERING BOX
10	750075	1	SHAFT - TILT STEERING PIVOT, 9X
11	600569	2	RETAINING RING, EXT .50 HD
12	620057	1	NUT, JAM M16-1.50 STL ZP
13	PART OF 3338215	1	COVER, STEERING WHEEL
14	REF	1	FRAME
15	REF	1	FRAME
16	3338622	1	WDT - TILT STEERING LOCK
17A	675411	2	HYD HOSE - PS UNIT TO ROT ACT P2
17B	675407	1	HYD HOSE - AUX PUMP TO PS UNIT
17C	675409	1	HYD HOSE - PS UNIT TO RESV

SIDE BROOM ASSEMBLY - DRIVE MOTOR, ARM, AND MOUNTING



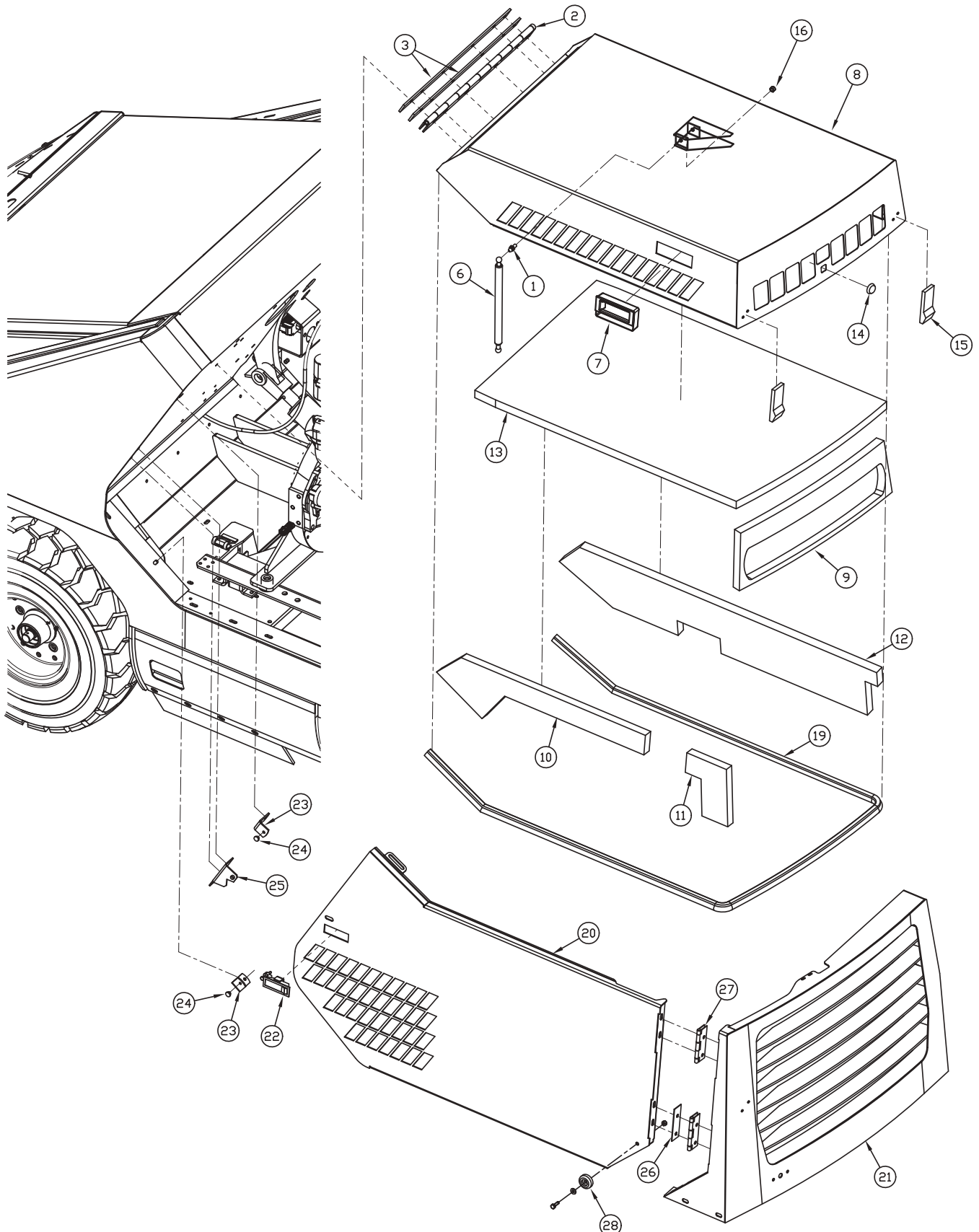
SIDE BROOM ASSEMBLY - DRIVE MOTOR, ARM, AND MOUNTING			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3335120	1	CABLE-SIDE BROOM
2	3302599	1	SPRING-EXT LOOPS-IN-LINE ZP
3	3401454	1	BOLT-HEX, TAP 3/8-16 X 2 ZP
4	3400087	1	WASHER-FLAT 3/8 STANDARD ZP
5	3400258	1	SCR-HEX,3/8-24X4.00 ZP
6	3307654P	1	RH SIDE BROOM MOUNT , 9X
7	3307527P	1	O/S WELD-RH CURB BROOM ARM, 9X
8	3307642	1	CLEVIS-5/16
9	3306179	1	SPRING-COMPRESSION, CURB BROOM
10	3400342	1	NUT-HEX 3/8-24 ES ZP
11	3316897	1	MOTOR-HYD CURB BROOM
12	675528	2	FTG-STR THD ELBOW -8 ORFS TO -10 SAE
13	3330338	1	KEY-SHAFT D-FOSS CB/MB/SC MTRS (REPLACEMENT)
14	3400027	3	SCR-HEX,3/8-16X1.75 ZP
15	3400278	9	WASHER-FENDER 3/8
16	3300465	3	ISOLATOR-RUBBER (.375IDx.81OD)
17	3301262	1	PLATE-GIMBAL SC HD
18	3300526	3	BUMPER-RUBBER 1/4IDx1/8 THK
19	3400087	3	WASHER-FLAT 3/8 STANDARD ZP
20	711380	3	NUT-NYLOC 3/8-16
21	3400049	1	SCR-SOCKET HEAD,1/4-20X0.75 NYLOCK
22	3400103	1	WASHER-LOCK 1/4 SPLIT ZP
23	3302058	1	BAR-CURB BROOM RETAINER
24	3300875	1	DRIVE HUB SC BR
25	711373	2	NUT-NYLOC 1/4-20
26	713002	2	BLT-HH 1/4-20 X .75 #5 ZINC
27	3400030	4	SCR-HEX,3/8-16X1.00, GRADE 5, ZP
28	3400101	4	WASHER-LOCK 3/8 SPLIT ZP
29	3400068	1	NUT-HEX 3/8-16 ZP
30	3400184	1	PIN-CLEVIS 5/16 X 1-1/8 ZP
31	3400087	1	WASHER-FLAT 3/8 STANDARD ZP
32	3400125	1	RING-RUE 3/8 COTTER PIN
33	3400069	1	NUT-HEX 5/16-24 ZP
-	3307033	-	SUB-CURB BROOM SUB ASSY (INCLUDES ALL ITEMS, EXCEPT: 1, 4, 8, 13, 30, 31, 33)

SIDE BROOM ASSEMBLY - ADJUSTMENT COMPONENTS



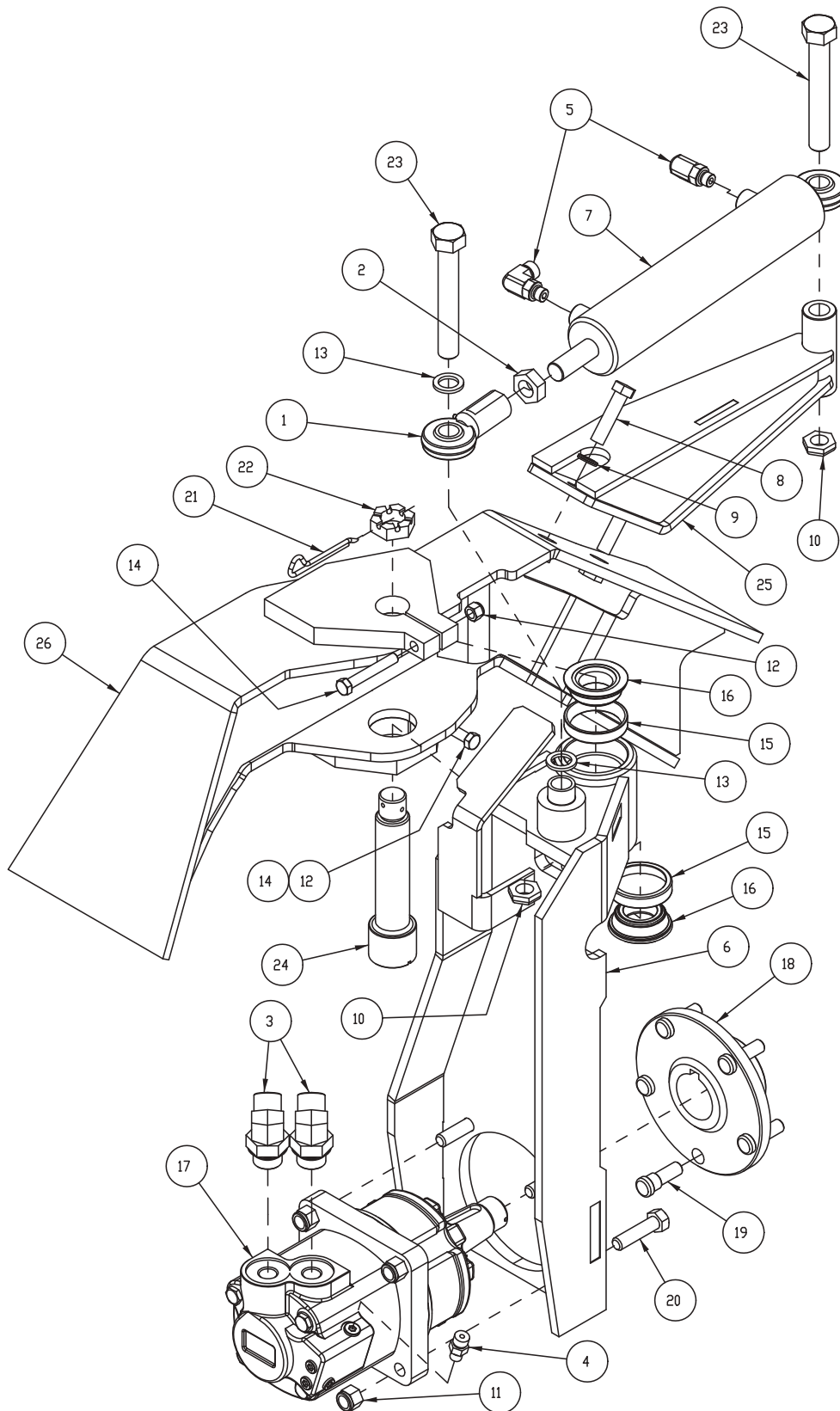
SIDE BROOM ASSEMBLY - ADJUSTMENT COMPONENTS			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3307861	1	WELDMENT-PULLEY MOUNT #3
2	3307865	1	WELDMENT-SAFETY ARM RETAINER/PULLEY MOUNT
3	3300368	3	PULLEY-PLASTIC ϕ 2", ϕ .25" GROOVE
4	3400404	1	SCR-SET, 1/2-20X3.00
5	3400449	1	NUT-HEX JAM 1/2-20 (NOT SHOWN)
6	3307794	1	PIN-CLEVIS 1/2 X 4-1/2
7	3400404	1	SCR-SET, 1/2-20X3.00
8	3400449	1	NUT-HEX JAM 1/2-20 ZP
9	3400086	1	WASHER-FLAT 1/2 STANDARD ZP

ENGINE COVER, SIDE DOOR, LATCH & REAR GRILL



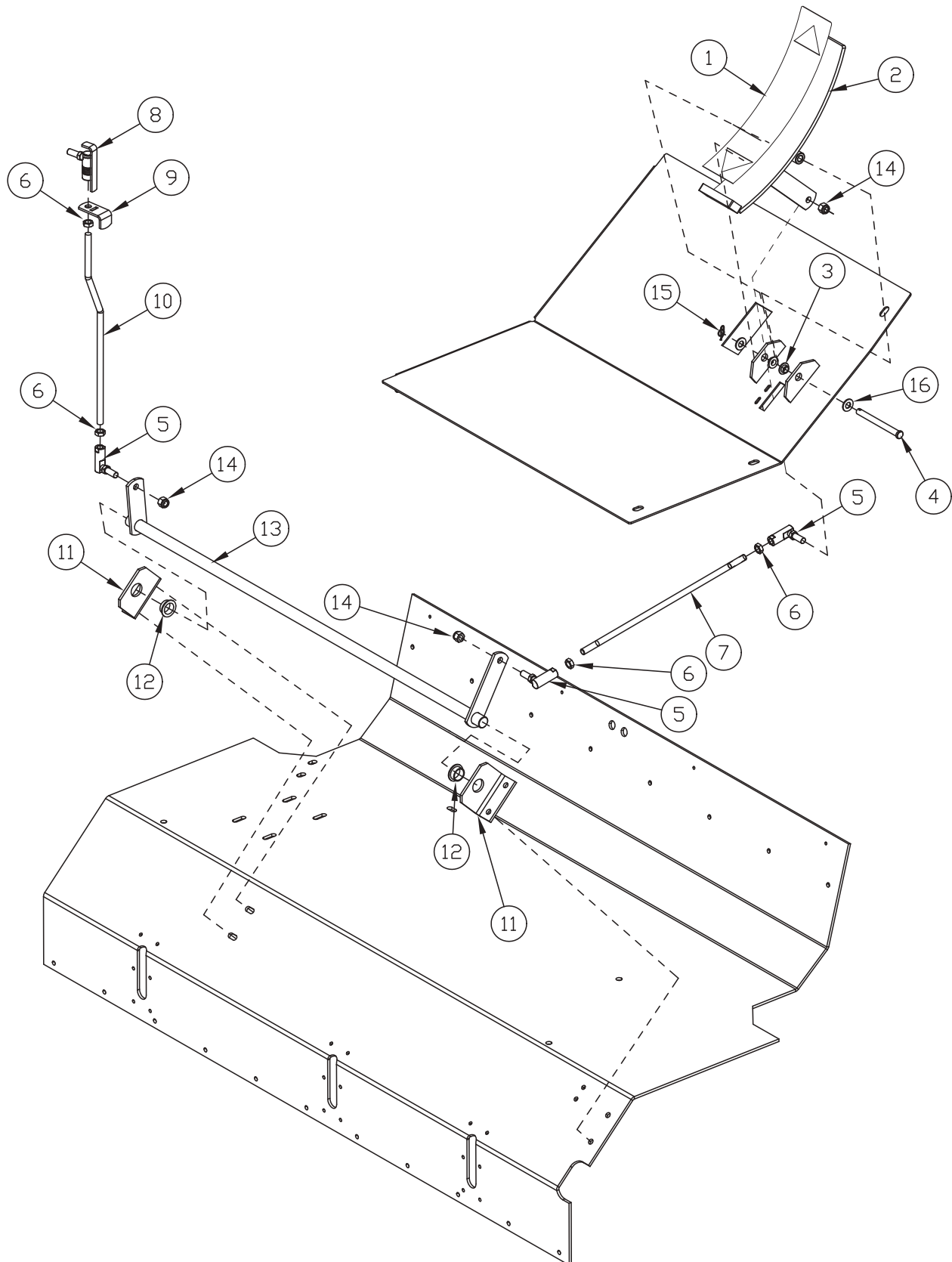
ENGINE COVER, SIDE DOOR, LATCH & REAR GRILL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3300376	1	STUD-BALL 10MM
2	3307503	1	HINGE ENGINE COVER
3	3307504	2	SPACER ENGINE COVER HINGE FRAME SIDE
6	3308767	1	GAS SPRING-8" STROKE
7	3335146	1	HANDLE - RECESSED NYLON INSET (.07-.13 WALL)
8	3336780M	1	ENGINE COVER 9X, ORANGE
9	3335547	1	INSULATION - ENG COVER BACK
10	3335597	1	INSULATION - ENG COVER LH FRONT PANEL
11	3335598	1	INSULATION - ENG COVER LH BACK PANEL
12	3335766	1	INSULATION - ENG COVER RT 9X
13	3335768	1	INSULATION - ENG COVER TOP 9X
14	3330356	1	PLUG-PLASTIC HOLE, 3/4, 7 GA
15	3307719	2	LATCH-RUBBER SOFT
16	3400080	1	NUT-HEX 5/16-18 ES
19	3500198	8.5'	SEAL-TRIM 90 DEG. MOUNT
20	3336786M	1	SIDE DOOR 9X, ORANGE
21	3335437M	1	RADIATOR GUARD 9X, ORANGE
22	3300380	1	LATCH ASSY-#C2-10-301-50
23	3335015	2	PLATE-STOP, SIDE DOOR, ARMA PLATED
24	3300526	2	BUMPER-RUBBER 1/4IDx1/8 THK
25	3335174	1	SIDE DOOR STRIKE ARMA
26	3307560	-	SPACER-METAL, 0.060" SIDE DOOR SW/A
27	3307513	2	HINGE-SIDE DOOR
28	3302482	1	BUMPER-RUBBER, 1.5" DIA, 5/8 THK

REAR DRIVE ASSEMBLY



REAR DRIVE ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	600178	1	ROD END FEM 3/4-16 W/ZERK
2	690939	1	NUT 3/4-16 JAM
3	675501	2	FTG-45 DEG STR ELBOW -10 ORFS TO -12 SAE
4	675508	1	FTG-STR THD CONNECTOR -4 ORFS TO -4 SA
5	675518	2	FTG-STR THD ELBOW -6 ORFS TO -5 SAE
6	690003	1	CYL STEERING FORK
7	690025	1	STEERING CYL
8	710120	2	SCREW, HHCS, 1/2-13 X 2 GRD 8
9	710121	2	WASHER, NORDLOCK (2PC), 1/2 CARBON STEEL
10	710122	2	NUT, 3/4-10, NYLON LOCKING, LOW PROFILE
11	711376	4	NUT-NYLOC 1/2-13
12	711380	2	NUT-NYLOC 3/8-16 NUT
13	712318	2	WSR- FLAT .75 X 1.12 X .12 PL
14	713048	2	BLT-HH 3/8-16 X 2 1/2 #5
15	3300470	2	BEARING-TAPERED ROL CUP
16	3300471	2	BEARING-TAPERED ROLCONE W/SEAL
17	3306809	1	MOTOR - HYD, 400 SERIES
18	3307347	1	HUB-REAR SW/A, BLACK
19	3307348	5	STUD - WHEEL, 1/2-20X 1.63 (REAR SW/A)
20	3400020	4	SCR-HEX, 1/2-13 X 2.00 ZP
21	3400120	1	PIN-COTTER 5/32 X 2.00 ZP
22	3400223	1	NUT-SLOTTED, 1-20 UNEF
23	3400422	2	SCR-HEX, 3/4-10 X 5.00 ZP
24	3307349P	1	PIN - REAR FORK
25	3317370P	1	WELDMENT-CYL STEERING MOUNT
26	REF	-	WELDMENT- FRAME, AM9D/9X

DIRECTIONAL CONTROL LINKAGE ASSEMBLY



DIRECTIONAL CONTROL LINKAGE ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3335609	1	PAD-FOOT PEDAL, ANTI-SKID, 2" X 9.5"
2	3332390	1	PEDAL - FWD/REV, 1-PC
3	3300414	2	BUSHING-PLASTIC FLANGED, .375IDx.50OD
4	711681	1	PIN-CLEVIS, 3/8x4
5	3300461	2	BALL JOINT-3/8-24
6	3400075	4	NUT-JAM, 3/8-24
7	3307222	1	ROD-DIRECTIONAL CONTROL, DIESEL
8	3307611	1	QUICK RELEASE- FWD/REV
9	3307613	1	HANDLE-QUICK RELEASE
10	3307938	1	ROD-DIRECTIONAL CONTROL DIESEL
11	3307223	2	MOUNT-DIRECTIONAL CONTROL BUSHING
12	3307220	2	BUSHING-PLASTIC FLANGED, .76IDx.88OD
13	3307215	1	DIRECTIONAL TORQUE TUBE
14	3400342	4	NUT-HEX 3/8-24 ES ZP
15	3400125	1	PIN-COTTER 3/8 RUE-RING
16	3400087	1	WASHER-FLAT 3/8 STANDARD ZP

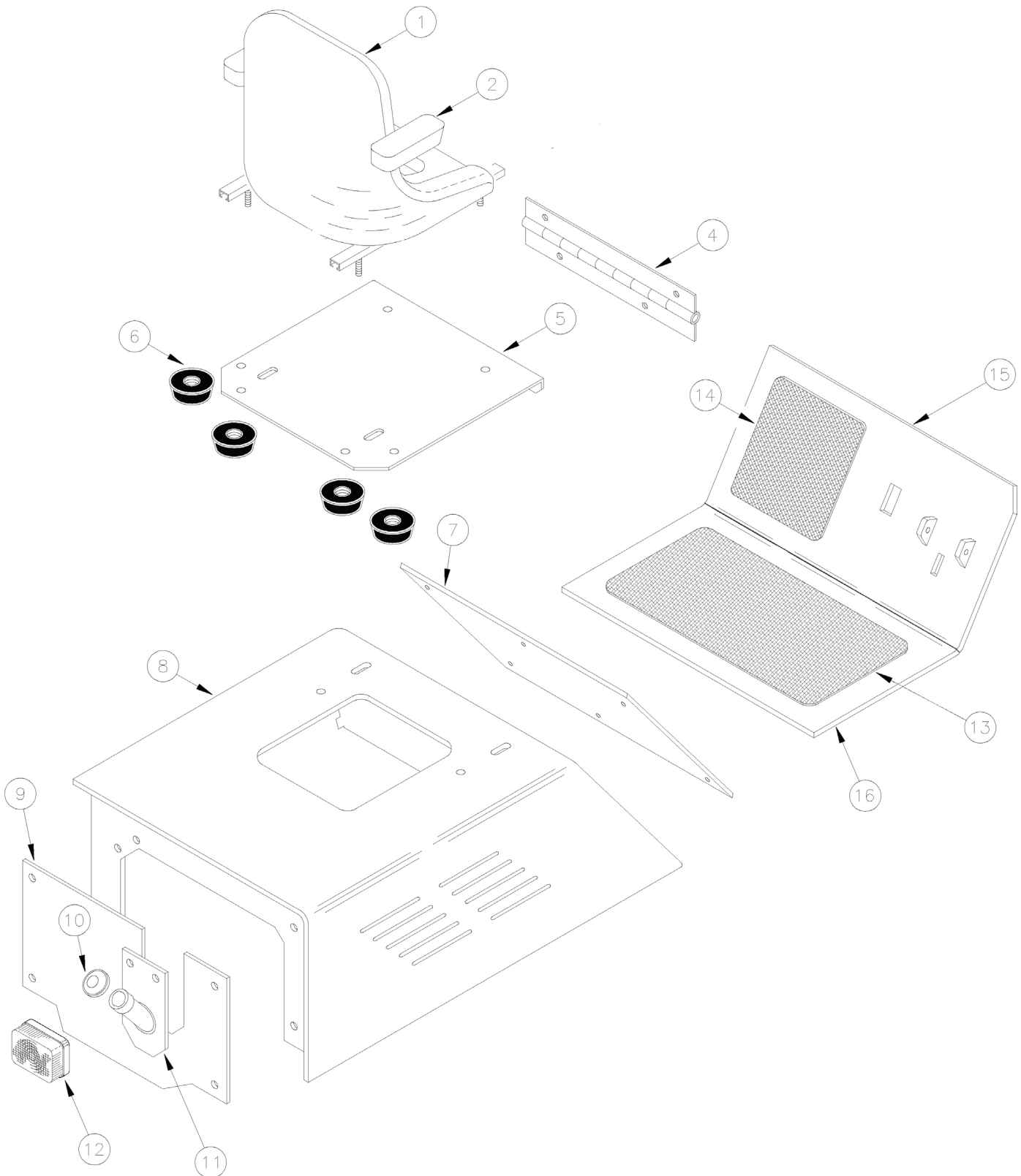
This exploded view diagram illustrates the assembly of a mechanical device, likely a portable electronic instrument. The components are numbered 1 through 37. The diagram shows the following parts and their assembly relationships:

- Top Housing (1):** The main upper enclosure, shown in an exploded position relative to the front panel (4) and back panel (14).
- Front Panel (4):** The main faceplate of the device, featuring a display area (12) and control elements.
- Back Panel (14):** The rear enclosure panel, which includes a carrying handle (13) and a mounting bracket (30).
- Internal Components:**
 - Control Panel (2):** Located inside the top housing, it includes a display (23), various buttons (25, 26, 28), and a power switch (22).
 - Power Section (3):** Includes a power input jack (36) and a power switch (37) mounted on the side of the top housing.
 - Internal Mounting (5, 6, 7, 8, 15, 16, 17, 18, 19, 20, 21, 24, 29, 31, 32, 33, 34, 35):** Various screws, brackets, and structural components that hold the internal electronics and panels in place.

The diagram uses dashed lines to indicate the alignment and assembly sequence of the various parts.

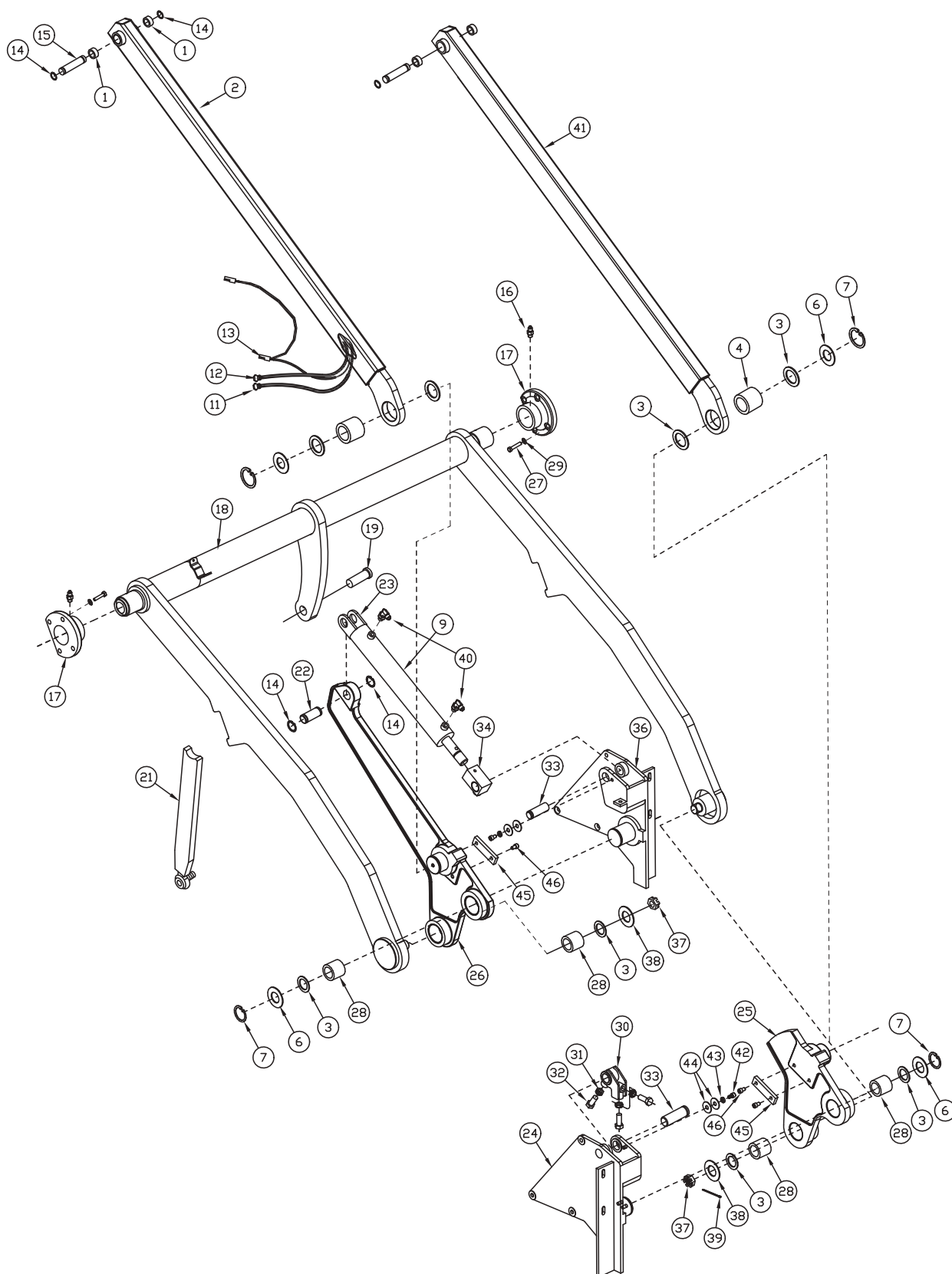
CONSOLE ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3300352	1	KNOB-MB LIFT ADJ
2	3300376	1	STUD-BALL, GAS SPRING, 5/16-18
3	3336094	1	GAUGE-HOURMETER, DIGITAL, SNAP (AFTER SN-18168059)
4	3300414	4	BUSHING-PLASTIC 3/8IDx1/2OD
5	600264	2	HANDLE CONTURED
6	3301147	2	SCR-5/16 ACME THD, WING HEAD,
7	3301155	2	CLIPNUT-5/16-18
8	711744	2	RETAINER 5/16 PUSH NUT BOLT
9	3301447	1	CLEVIS WITH PIN AND COTTER
10	3301669	1	PLUG-PLASTIC, 11/16 DIA
12	3307614	1	WELD-PIVOT SB LIFT
13	3307846	1	INSULATION-CONSOLE TOP
14	3307847	1	INSULATION-DRIVER COMP SIDE
15	3337966	1	CABLE- THROTTLE
16	3323529	1	PLUG-CARLING CONTURA SWITCH
17	3333672	1	SPACER-MB LIFT ROD
18	3334984	1	ROD-MAIN BROOM, LOWER
19	3338296	1	WELD-ROD,MAIN BROOM, UPPER, ZP
20	3338297	1	WELD-ROD,SIDE BROOM, UPPER, ZP
21	3335112	1	WELD-LIFT ARM, MAIN BROOM,
22	3342905	1	ASSY- INDICATOR LIGHT RED W/PACKARDTERMS
23	3342905	1	ASSY- INDICATOR LIGHT RED W/PACKARDTERMS
24	3335800	1	ID PLATE-SERIAL# INFO
25	3342705	1	SWITCH-BASE, DPST CONTURA ROCKER
26	3343912	1	SW-ROCKER CONTURA DPDT ON-OFF
28	3400080	3	NUT-HEX 5/16-18 ES
29	3400084	1	NUT-WING 1/2-13
30	3400087	4	WASHER-FLAT 3/8 STANDARD ZP
31	3400091	1	WASHER-FENDER 1/2 ZP
32	3400113	4	PIN-CLEVIS 3/8x5-1/2 ZP
33	3400125	4	PIN-COTTER 3/8 RUE-RING
34	3400185	2	PIN-CLEVIS 5/16x1-1/4
35	3500118		EDGING-VINYL TRIM 1/8" X 250' (Sold Per Foot)
36	3307554M	1	COVER BROOM ADJ, 9X ORANGE
37	3335003M	1	CONSOLE, 9X, ORANGE

SEAT, FLOOR PAN & TAIL LIGHT



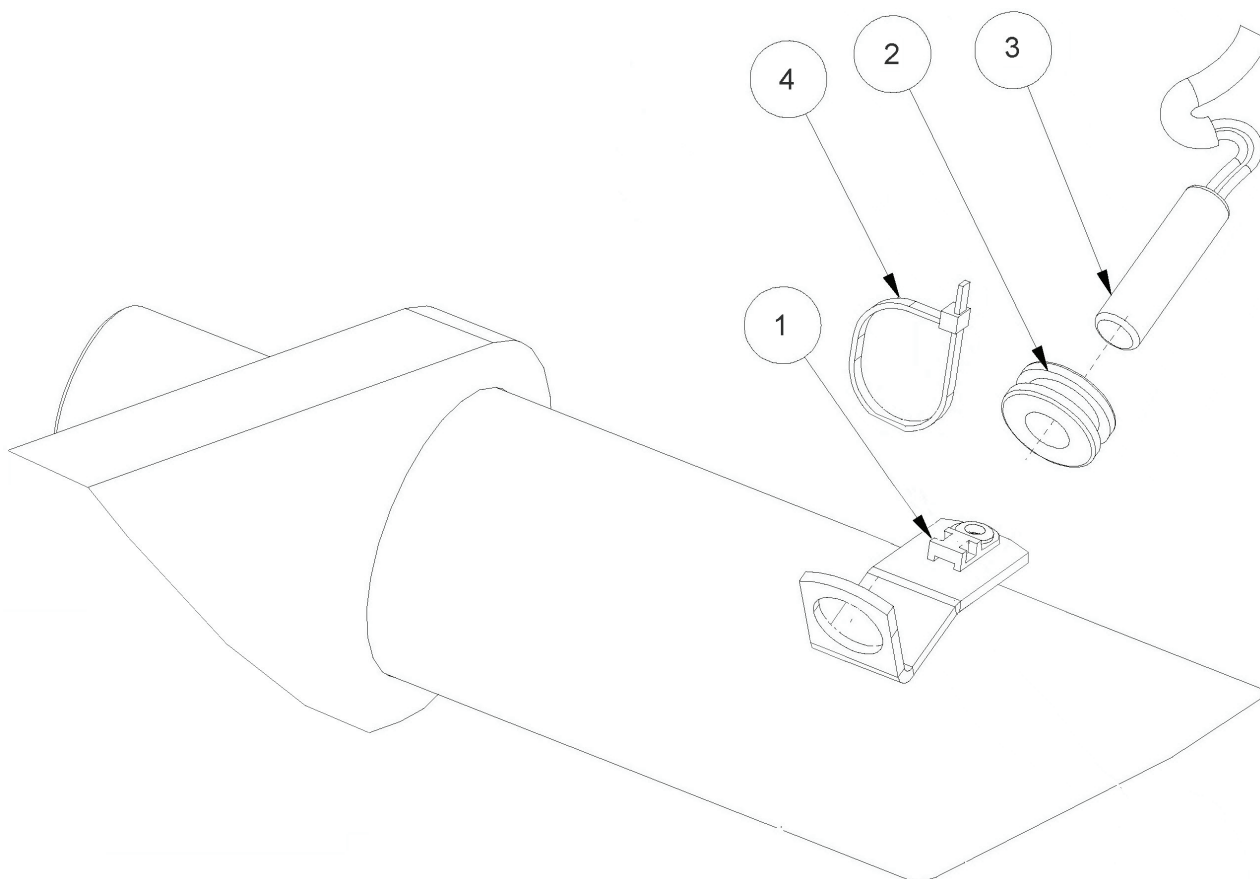
SEAT, FLOOR PAN & TAIL LIGHT			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	620219	1	SEAT STD W SEAT BELT RECEIVERS
2	620239	1	ARM-REST
4	3335033P	1	HINGE-UNIVERSAL SEAT MNT, 9X
5	3333729P	1	MNT-SEAT 9X DARK GRAY
6	3302482	4	BUMPER-RUBBER, 1.5" DIA, 5/8 THK
7	3333733P	1	PLATE-ACCESS SEAT CLIP, 9X
8	3335027M	1	CLIP, SEAT 9X, DARK GRAY
9	3309716P	1	PANEL-REAR COVER, 9X
10	3343413	1	CAP-FUEL TANK
11	3335010P	1	FUEL FILL, 9X
12	3303204-1	2	TAIL LIGHT - 12V COMBINATION ASSY
13	3307588	1	FLOOR MAT-LARGE
14	3307587	1	FLOOR MAT-SMALL
15	3337387P	1	FLOOR BOARD - UPPER
16	3337388P	1	FLOOR BOARD - LOWER

LIFT & ROTATION CYLINDERS, HYDRAULIC HOSES



LIFT & ROTATION CYLINDERS, HYDRAULIC HOSES			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3300837	4	BEARING-1.12 ODx1.00 IDx.75
2	3334551P	1	LIFT ARM-UPPER RH 9X
3	3400177	10	BEARING-THRUST 2.06 IDx3.25 OD
4	3300836	2	BEARING-2.18 ODx2.00 IDx.75
6	3300882	6	WASHER-HD 3.25 ODx2.00 ID
7	3301709	4	RING-RETAINING, EXT 2.00 DIA
9	3307243	1	CYLINDER-HYD HOPPER LIFT
11	675420	1	HYD HOSE - NEED VALVE TO ROT CYL
12	675421	1	HYD HOSE - ROT CYL TO CONT VALVE
13	3336963	1	HARNESS - LIFT ARM
14	3301998	6	RING-RETAINING, EXT .940 DIA
15	3307430	2	PIN-UPPER LIFT ARM, .998 DIA,
16	3400012	2	FTG-GREASE 3/16
17	3307605	2	ASSEMBLY-DUMP ARM MOUNT
18	3307305M	1	LIFT ARM-HOPPER 9X DARK GRAY
19	3335285	1	PIN, LIFT CYL, ROD END
21	3343821	1	ASSY- SAFETY ARM W/ BALL JOINT
22	3307607	1	PIN-ROTATION CYL, .998 DIA,
23	3316890	1	CYLINDER-HYD, ROTATION SINGLE
24	3335361	1	PIVOT-HOPPER LH
25	3332415	1	ARM-ROTATION
26	3317366	1	ARM-HOPPER ROTATION
27	712162	8	SCREW, SHCS 7/16-14 X 1-1/2 STEEL ZINC
28	3300840	6	BEARING-2.18 ODx2.00 IDx1.50
29	3401570-11	8	WASHER-NORD-LOCK, 7/16, ZP
30	3336997	1	WELD - HOPPER ROTATE STOP
31	3400449	3	NUT-HEX JAM 1/2-20 ES
32	3400306	3	SCR-HEX, 1/2-20X1.00 ZP
33	3307606	1	PIN-FRONT ROTATION CYL, .998 DIA,
34	3339955	1	CLEVIS-LIFT ARM 1.0 DIA. PIN 1.00-14 TD
36	3317364	1	PIVOT-HOPPER RH
37	3400076	2	NUT-HEX JAM SLOTTED, 1-14
38	3300879	2	WASHER-HD 3.25 ODx1.00 ID
39	3400122	2	PIN-COTTER 1/8 X 2.00 ZP
40	675518	2	FTG-STR THD ELBOW -6 ORFS TO -5 SAE
41	3334454P	1	LIFT ARM-UPPER LH 9X
42	3400219	2	SCR-SOC, 5/16-18X0.50 ZP
43	3400102	2	WASHER-LOCK 5/16 SPLIT ZP
44	3400278	4	WASHER-FENDER 3/8 ZP
45	3321377	2	TOP-ROTATION CYL MNT ARMA
46	711239	4	SCR-HEX 3/8-16 X 1.00 GR8 ZP

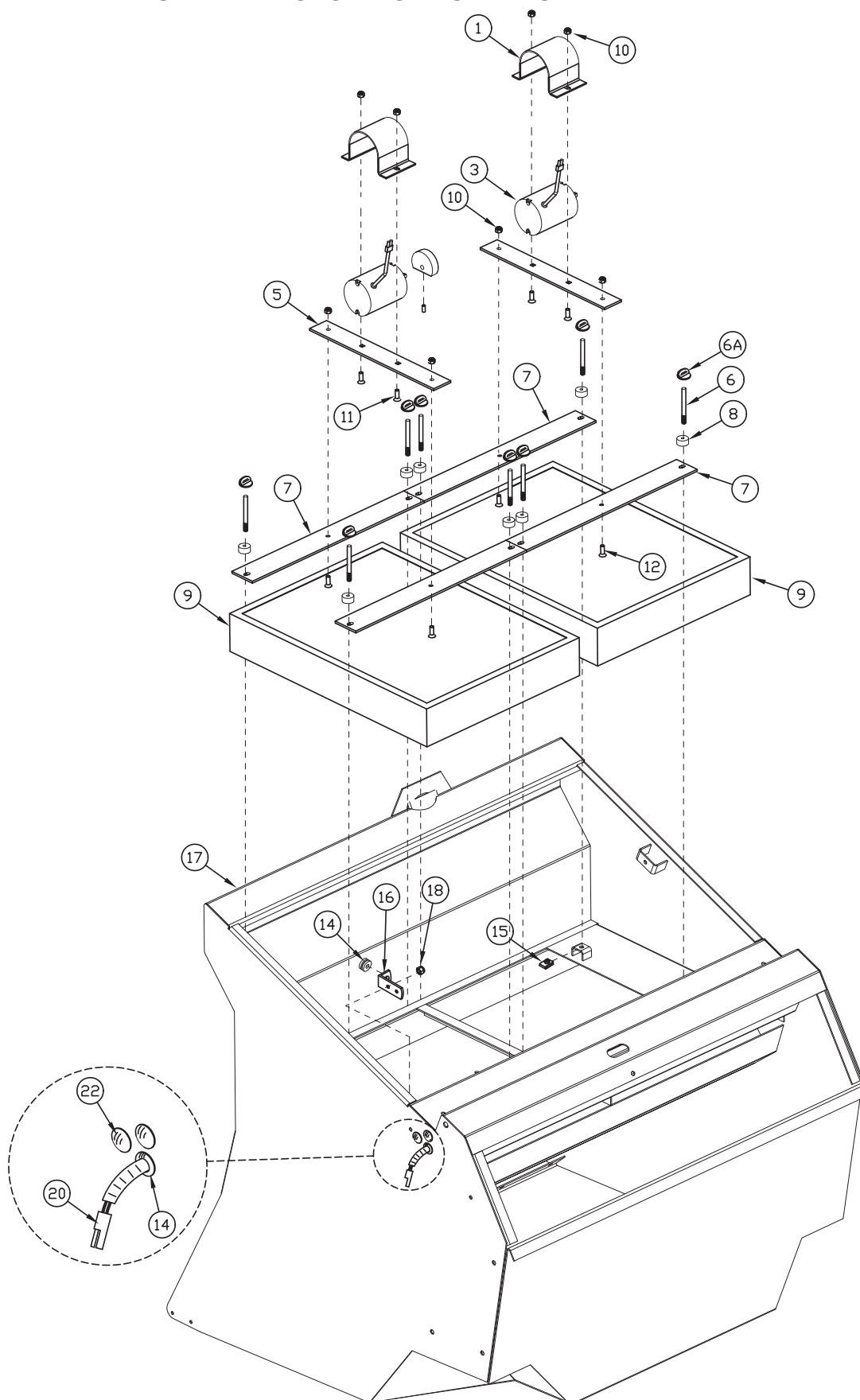
RTR SWITCH DETAIL LIFT ARM



RTR SWITCH DETAIL LIFT ARM			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3302472	1	MOUNT-WIRE TIE LOW PROFILE
2	3311564	1	GROMMET-RUBBER, 1/2 ID
3	3336963	1	HARNESS - LIFT ARM, ARMA TIER II
4	3302493	1	TIE-WIRE BLACK

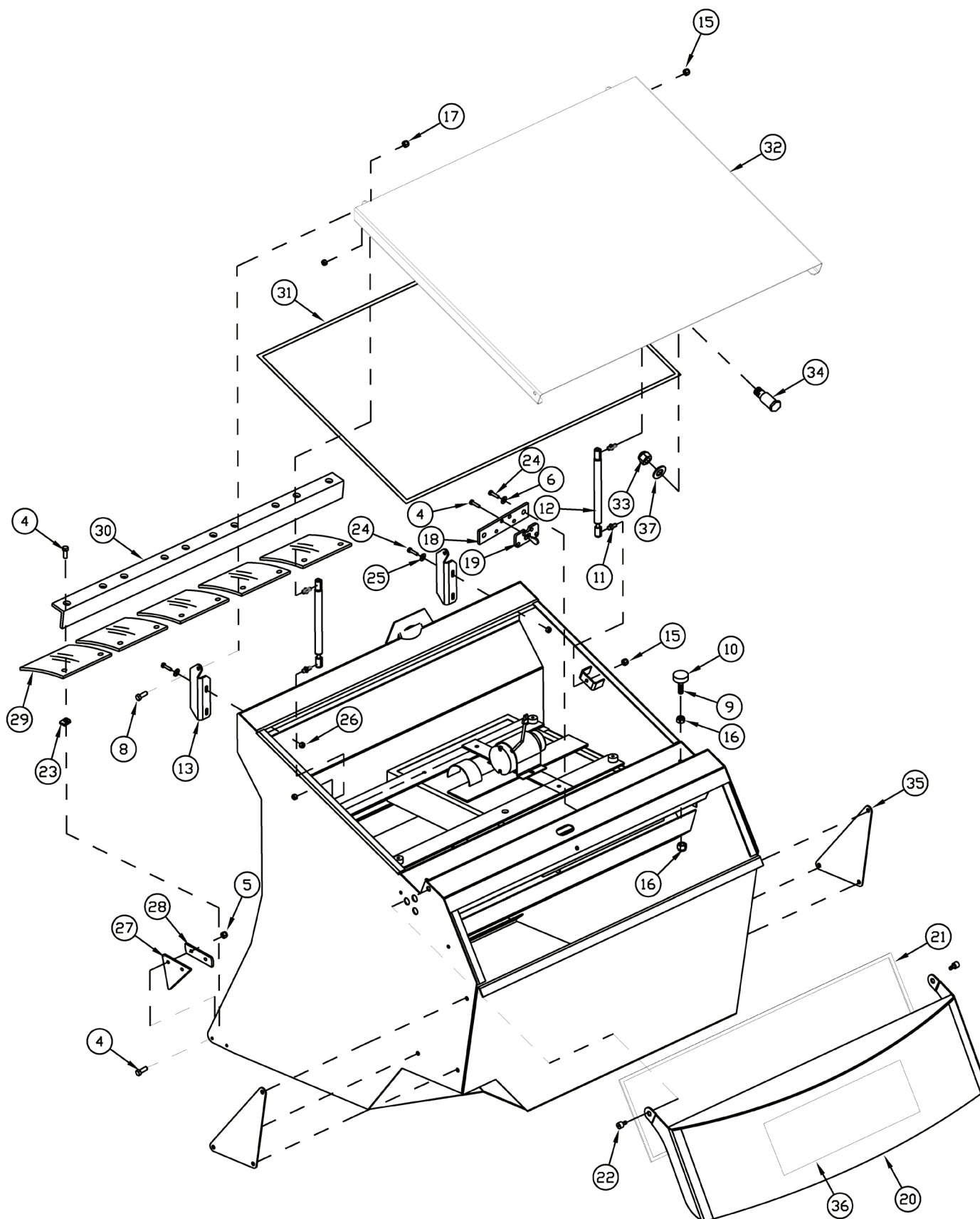
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HOPPER - FILTER AND SHAKER MOTOR COMPONENTS



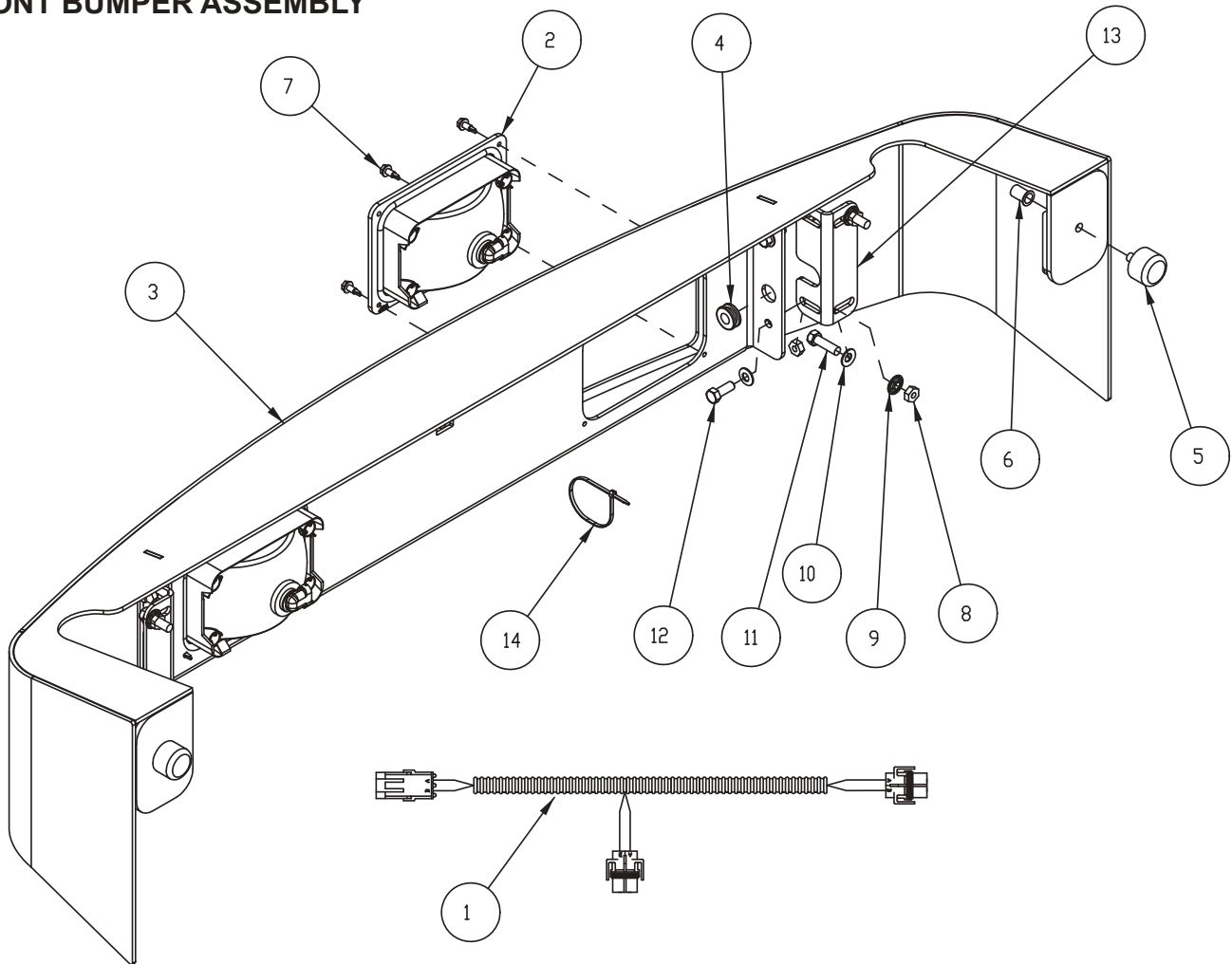
HOPPER - FILTER AND SHAKER MOTOR COMPONENTS			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	750073	2	BRACKET SHAKER MOTOR
3	748149-1	2	ASSY, SHAKER MOTOR W/CONNECTOR
5	3300917	2	BAR-FILTER RETAINER
6	3334676	8	ROD-5/16-18x4.63, FILTER TIE DOWN
6A	3334678	8	NUT-WING 5/16-18 NYLON INSERT
7	3300919	4	BAR-FILTER SHAKER
8	3307850	8	ISOLATOR-RUBBER, .25IDx1ODx.50THK, SW/A
9	3334070	2	FILTER-POLYESTER HOPPER 9XR (31x24x3.19)
10	711374	8	NUT-NYLOC 5/16-18
11	70-516-16	4	BLT-CARR 5/16-18 X 1 ZINC
12	3400329	4	SCR-FLT,5/16-18X.75,SLT ZP
14	3311564	3	GROMMET-RUBBER, 1/2 ID
-	3336964	1	SWITCH-BALL & HARNESS 12V, FOR RTR LIGHTS (Not Shown see RTR Detail)
15	832829	8	NUT-U TYPE 5/16-18
16	3336778	1	BRACKET- FOR SWITCH BALL (# 2 RTR LIGHT)
17	3307440M	1	HOPPER, 9X, DUAL FILTER, ORANGE
18	3400484	1	RIVET-AVDEL 3/16 X .602
20	3336964	1	HARNESS - HOPPER, ARMA TIER II
22	3330356	2	PLUG-PLASTIC HOLE, 3/4, 7 GA

HOPPER - COVER AND LATCH COMPONENTS



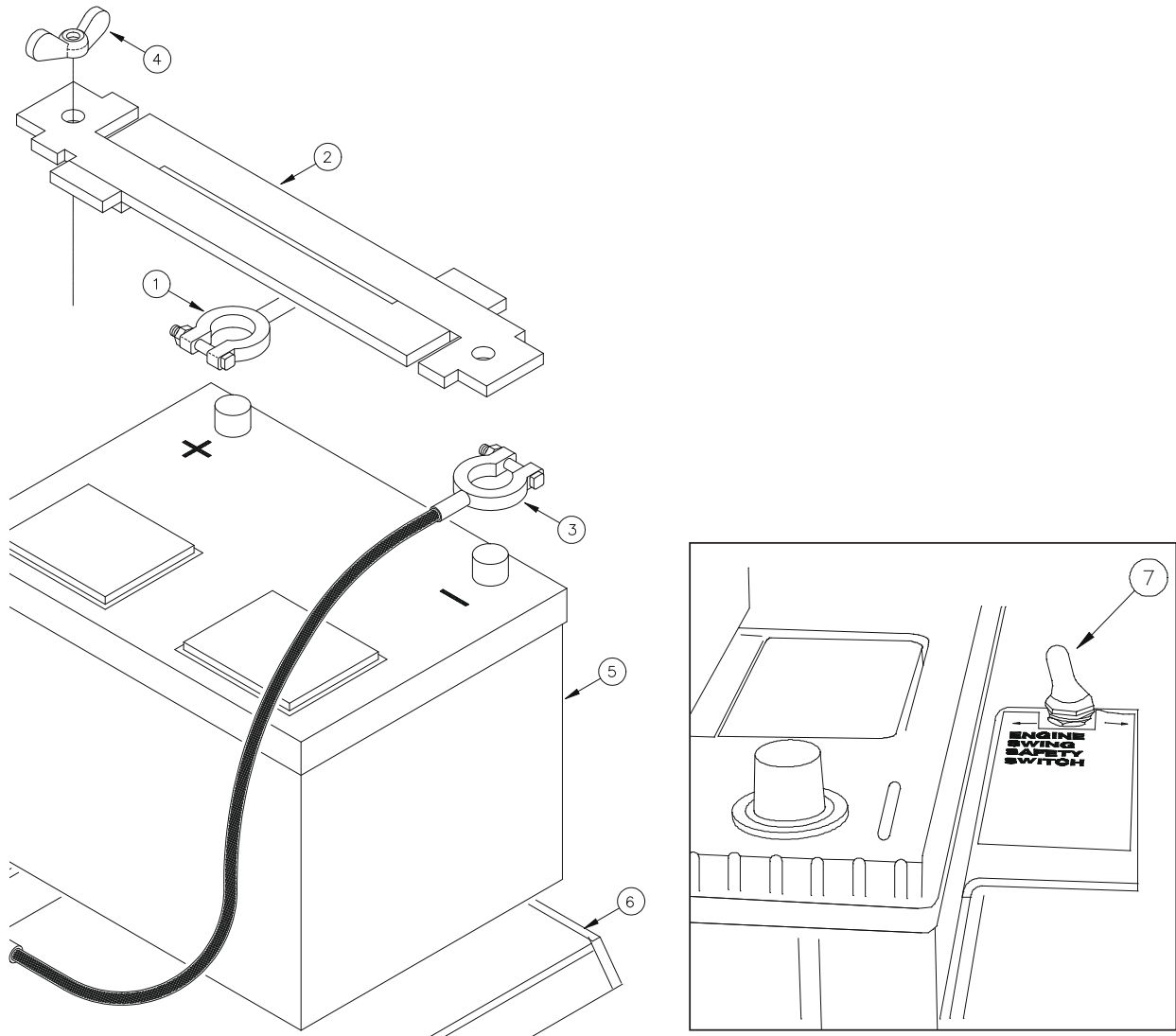
HOPPER - COVER AND LATCH COMPONENTS			
ITEM	PART NO.	REQ'D	DESCRIPTION
4	3400059	20	SCR-THM 1/4-20 X .75 SS
9	3400355	2	SCR-LEVEL BOLT, 3/8-16x2.50
10	3304624	2	CAP-RUBBER BUMPER, (USED WITH #10 ABOVE)
11	3300376	4	STUD-BALL, GAS SPRING, 5/16-18 THRD, .391 DIA.
12	3305006	2	SPRING-GAS 5" STROKE, 14.5" EXTENDED (100 LBF)
13	3307469	2	HINGE-FILTER COVER, ,
15	3400070	4	NUT-HEX 5/16-18 ZP
16	711439	2	NUT-FLANGED WIZZ 3/8-16
17	3401021	2	NUT-HEX ELASTIC JAM 1/4-20 #8 ZP
18	3307468	1	BAR-FILTER LATCH, ,
19	3307247	1	LATCH-RH BROOM DOOR
20	3316862M	1	LID-HOPPER 9X ORANGE
21	3318739	120"	WEATHERSTRIPPING-RUBBER SPONGE
22	3400170	2	SCR-HSS 1/2x.31,
23	3301146	10	CLIPNUT-1/4-20 ZP
24	3400059	4	SCR-SLOTTED THMS 1/4-20 X .75 18-8 SS
25	3400384	4	WASHER-CONICAL SPRING 5/16
26	711379	4	NUT-FLANGED WIZZ 5/16-18
27	3307842	2	FLAP-HOPPER SIDE
28	3307843	2	RETAINER-FLAP HOPPER SIDE
29	3307720	5	FLAP-HOPPER FRONT
30	3307721	1	RETAINER-HOPPER FLAP
31	3500198	134"	SEAL-TRIM 90 DEG. MOUNT
32	3307460M	1	HOOD-HOPPER 9X, ORANGE
33	3400394	1	NUT-FLANGE LOCK 7/16-14
34	3307248	1	BOLT-STRIKER BROOM DOOR LATCH
35	3307743	2	PLATE HOPPER BACKING
36	3334900	1	DECAL-"POWERBOSS" LOGO
37	3400386	1	WASHER-CONICAL SPRING 7/16

FRONT BUMPER ASSEMBLY



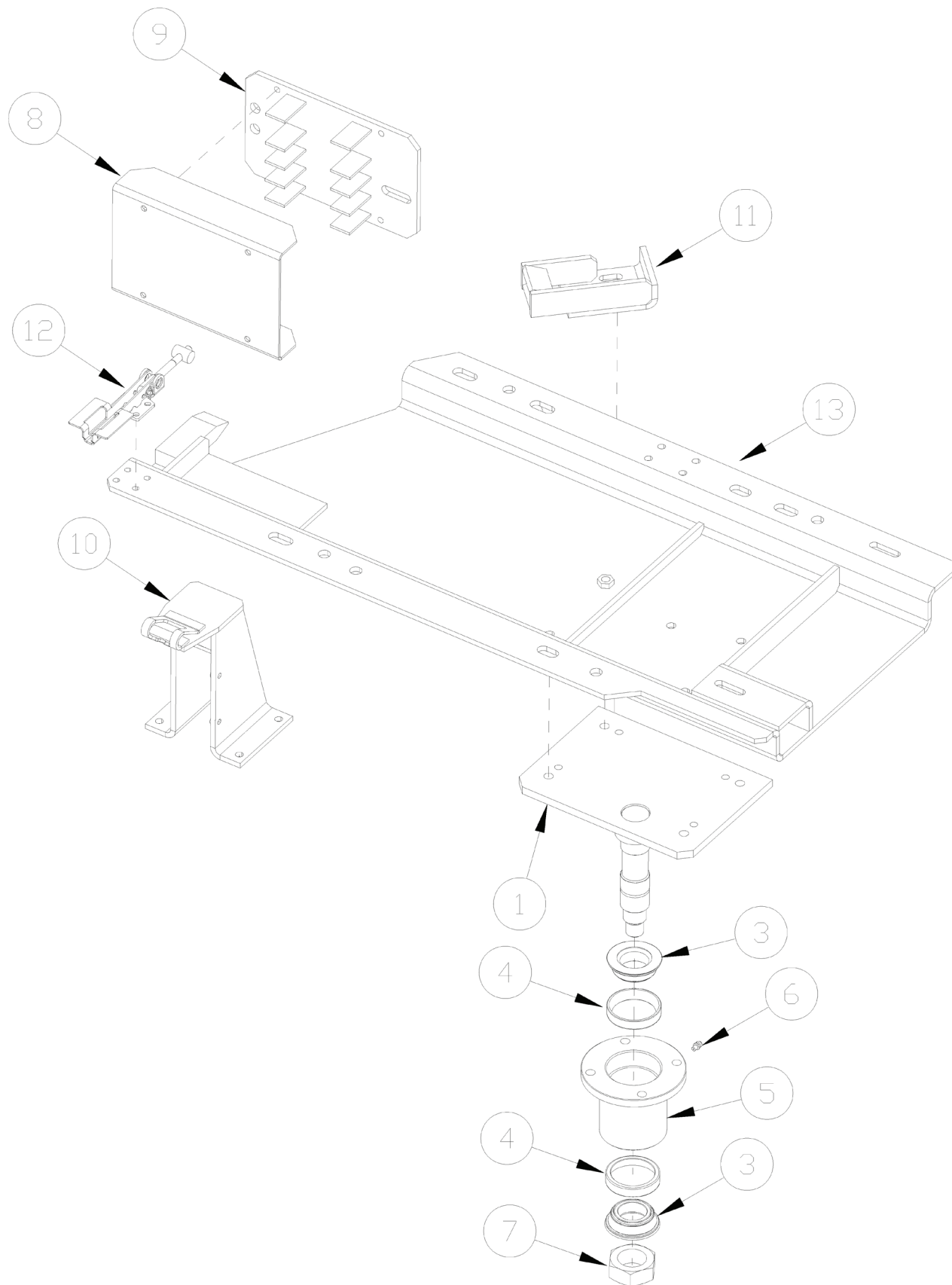
FRONT BUMPER ASSEMBLY

ITEM	PART NO.	REQ'D	DESCRIPTION
1	3335094	1	HARNESS-FRONT BUMPER HEADLIGHT
2	3315839	2	HEADLIGHT-HALOGEN 12V, FLUSH MOUNT
-	3315869	-	BULB-HALOGEN REPLACEMENT (NOT SHOWN)
3	3316865M	1	BUMPER-FRONT, 9X DARK GRAY
4	3311564	1	GROMMET-1/2" ID RUBBER
5	3316871	2	BUMPER-RUBBER, 1.50" DIA
6	3322186	2	INSERT-3/8-16 UNC
7	3311374	6	SCR-HEX,1/4-14X3/4 SELF TAP
8	711439	8	NUT-FLANGED WIZZ 3/8-16
9	3316981	2	RETAINER, PUSHNUT, 3/8 BOLT, 25/32 OD ZP
10	3400385	8	WASHER-CONICAL SPRING 3/8
11	711250	4	BLT-HH 3/8-16 X 1.25 STL ZINC
12	3400030	4	SCR-HEX,3/8-16X1.00, GRADE 5, ZP
13	3337303P	2	PLT-MOUNT, BUMPER, 9X
14	828062-B	1	CABLE TIE-LARGE (BLACK)

BATTERY COMPONENTS


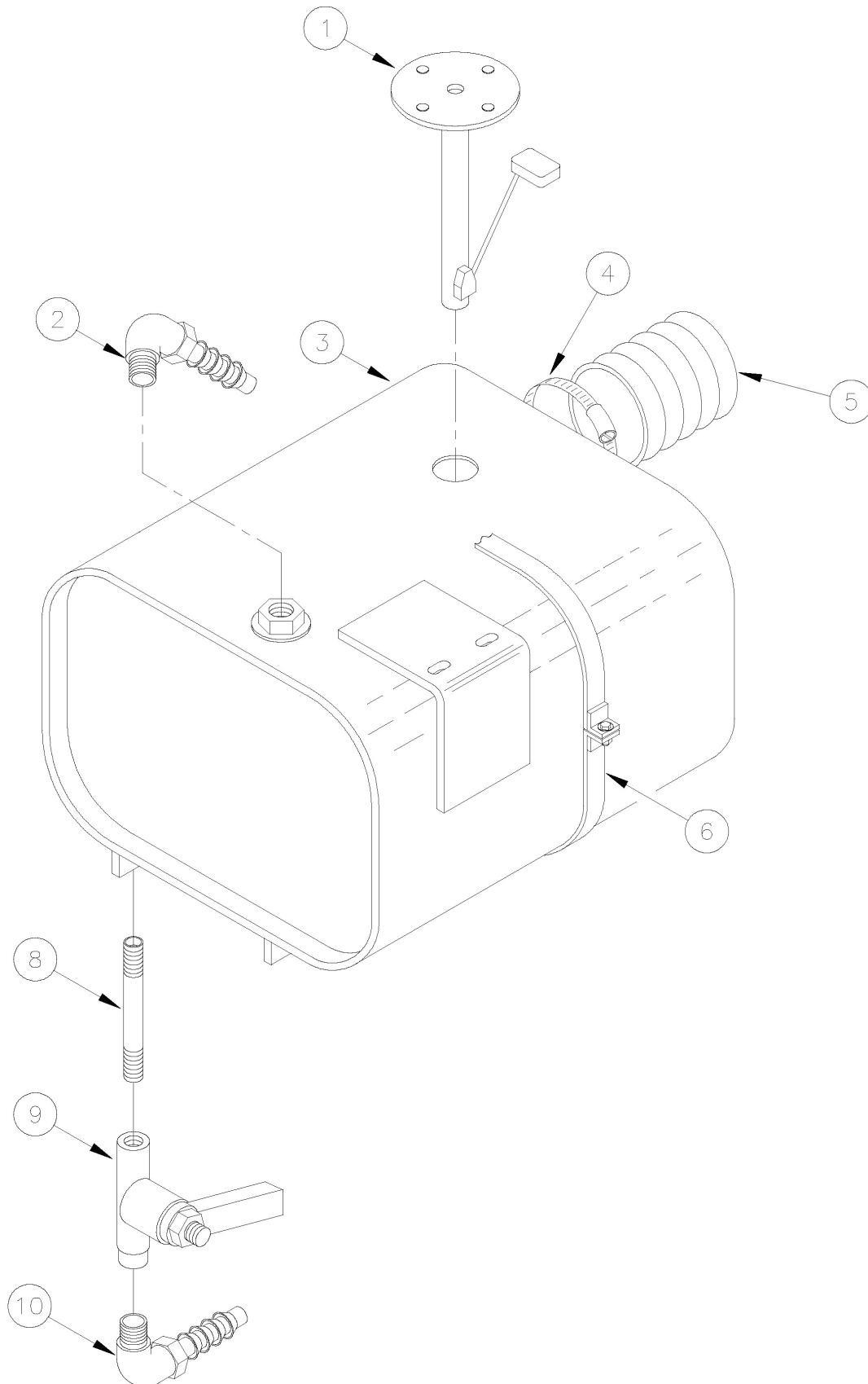
BATTERY COMPONENTS			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3307939	1	CABLE-BATTERY POSITIVE DIESEL ENGINE
2	3301076	1	HOLD DOWN-BATTERY 2-PIECE
3	3307634	1	CABLE BATTERY NEGATIVE
4	3400085	2	NUT-WING 1/4-20
5	3300440	1	BATTERY-GAS/LP/DIESEL, 12V, 650 CCA, 125 MIN RESERVE
6	3321296	1	WELD-BATTERY BOX
7	3329812	1	SWITCH-TOGGLE SPDT

ENGINE PAN, HYDRAULIC HOSE RETAINER & LATCH



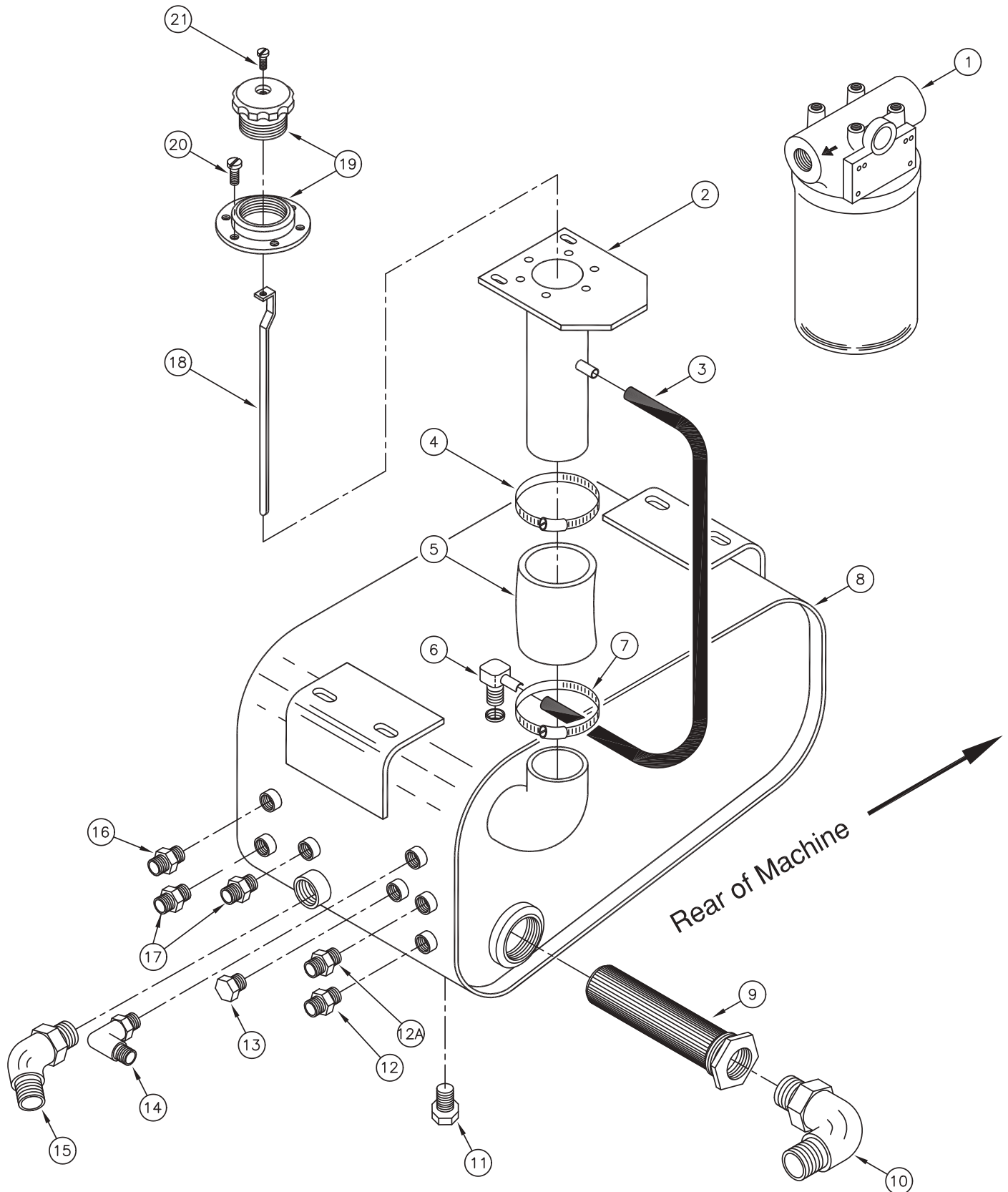
ENGINE PAN, HYDRAULIC HOSE RETAINER & LATCH			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3334951	1	WELDMENT-ENGINE PIVOT
3	3300471	1	BEARING-TAPERED ROLCONE W/SEAL
4	3300470	1	BEARING-TAPERED ROL CUP
5	3307326	1	BEARING MOUNT-ENGINE PIVOT
6	3400012	1	FTG-GREASE, $\phi 3/16$
7	3400083	1	NUT-HEX JAM, 1 1/4-12 ES
8	3333303	1	COVER-HOSE RETAINER SHORT
10	3335208	1	WELDMENT-ENGINE CATCH OUTER
11	3335183	1	WELDMENT-ENGINE CATCH INNER
12	3307377	1	LATCH-ENGINE ,
13	3334994	1	WELD-ENGINE PAN,

FUEL TANK GASOLINE AND DIESEL



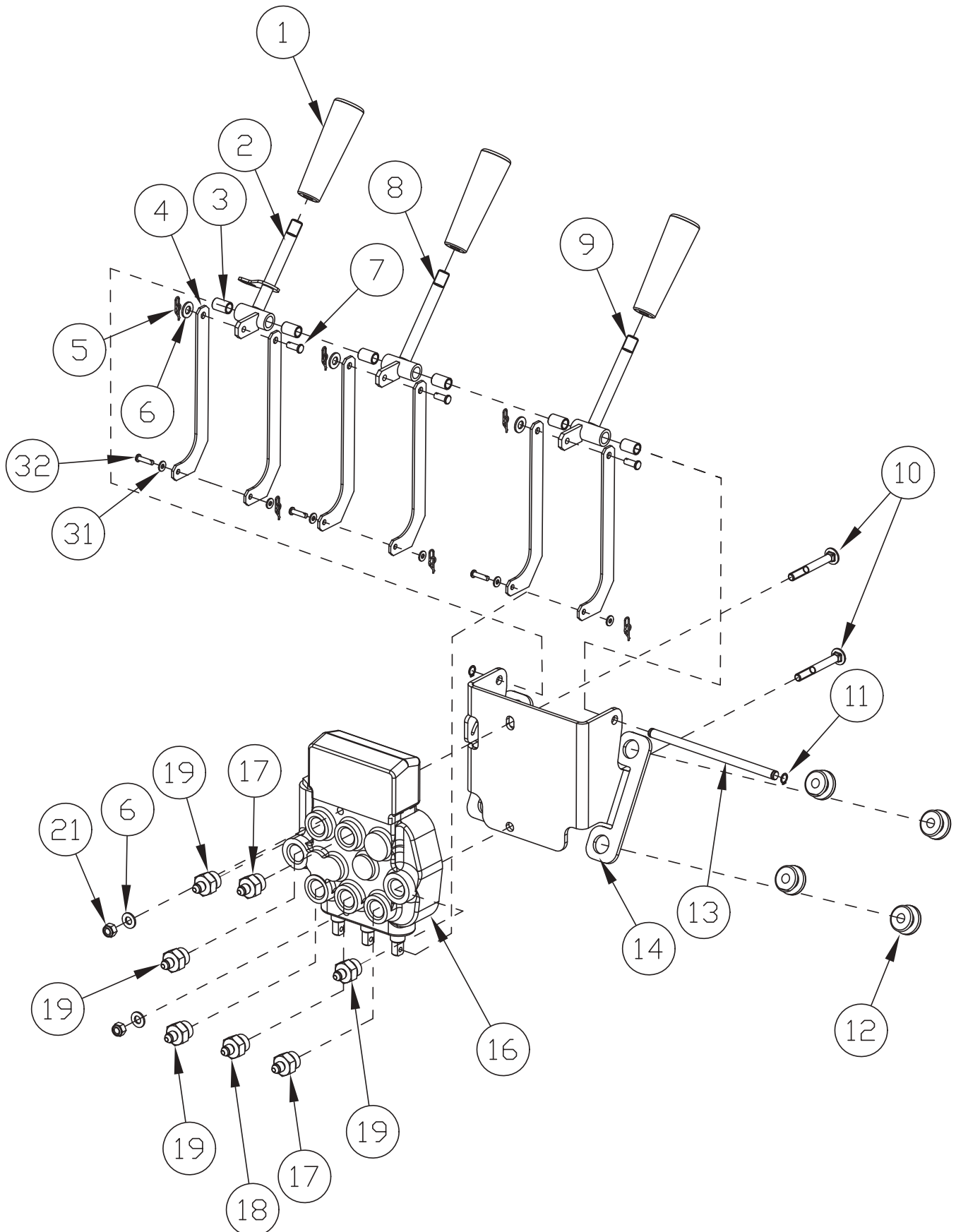
FUEL TANK GASOLINE AND DIESEL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3300388	1	SENDER-FUEL SHORT (5 INCH)
2	3402022	1	FTG-90 1/4 MPT X 1/4 HOSE BARB
3	3307575	1	TANK-FUEL, 7.64 US GAL,
4	3044112	1	CLAMP-HOSE, SS, 2.50 MAX
5	3303577	1	HOSE-RUBBER, 2.00IDx3.50 LG
6	3307731	1	STRAP-FUEL TANK
8	3400498	1	FTG-BRASS NIPPLE, 1/4 NPTx2.0 LG
9	3400499	1	VALVE-MINATURE 1/4 FPT BALL
10	3400793	1	FTG-90° 3/8 BARBx1/4 NPT

HYDRAULIC RESERVOIR ASSEMBLY



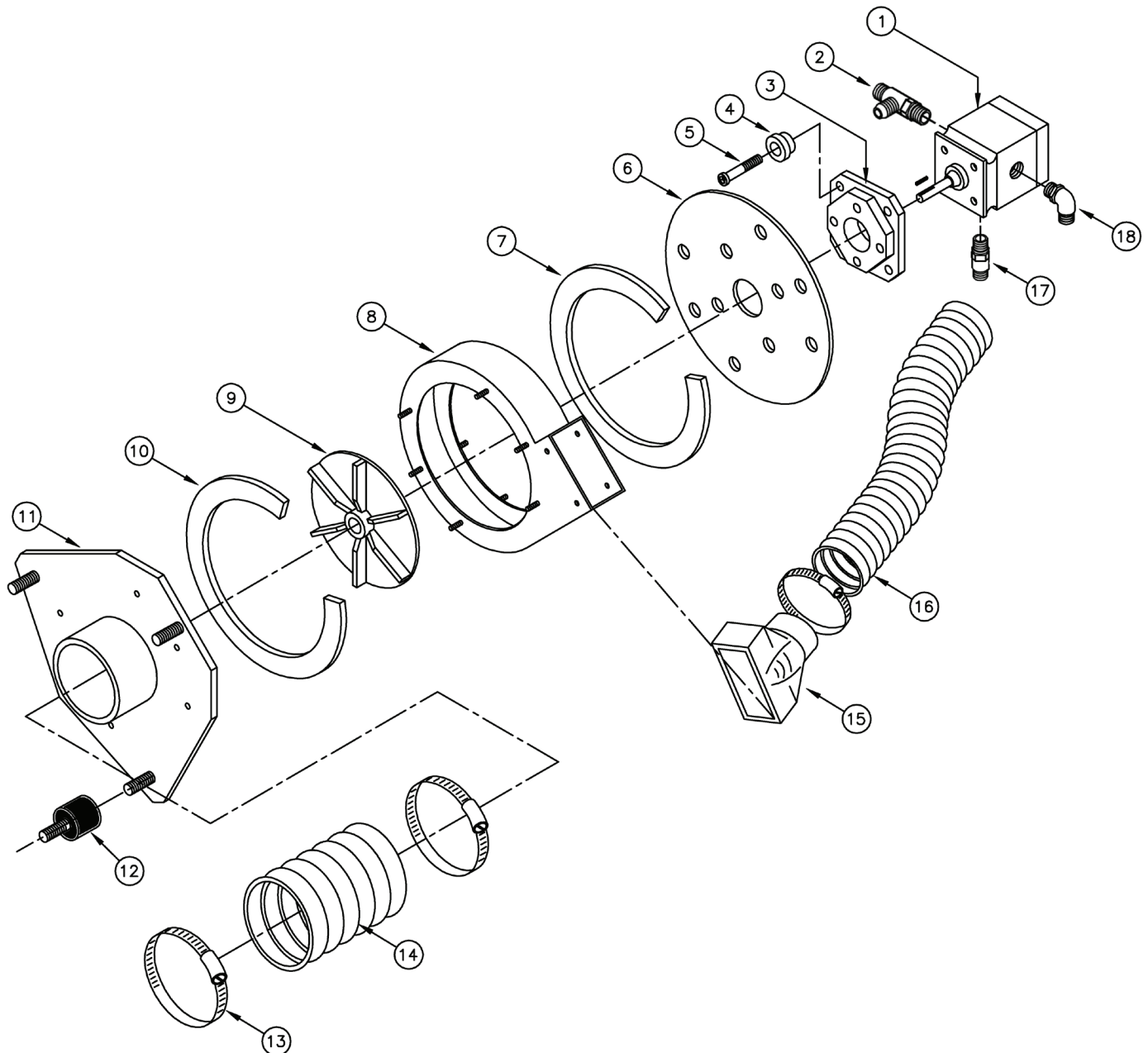
HYDRAULIC RESERVOIR ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3300358	1	SUB-HYD FILTER SW/9X (FILTER, MOUNT & FITTINGS)
-	3300359	1	FILTER-HYDRUALIC OIL (FILTER ONLY)
-	3304899	1	FTG-ADAPTER, 3/4-16 TO 1/2 OD TUBE (NOT SHOWN)
-	3400167	1	FTG-ADAPTER, 1 1/6-12 EXT TO (NOT SHOWN)
-	3400632	1	FTG-ADAPTER, RUN TEE 1-1/16-12 (NOT SHOWN)
-	3400636	1	FTG-ADAPTER, SWIVEL NUT 90° ELBOW (NOT SHOWN)
2	3310072	1	WELDMENT-HYD FILL TUBE
3	3500137	1	HOSE-1/8 ID EEC-PCV
4	3044112	1	CLAMP-HOSE, SS, 2.50 MAX WORM
5	3303577	1	HOSE-RUBBER, 2.00IDx3.50 LG
6	3307778	1	FTG-90° 1/8MPTx1/4 BARB
7	3044112	1	CLAMP-HOSE, SS, 2.50 MAX WORM
8	3335527	1	RESERVOIR-HYDRAULIC, 7.5 US GA
9	3343836	1	STRAINER-HYDRAULIC TM-14
10	675506	1	FTG-STR THD ELBOW -16 ORFS TO -20 SAE
11	3400453	1	FTG-PLUG 9/16-18 O-RING STEEL
12	675521	1	FTG-STR THD CONNECTOR -6 ORFS TO -8 SA
12A	675524	1	FTG-STR THD CONNECTOR -8 ORFS TO -8 SA
13	3400164	1	FTG-PLUG 3/4-16 O RING
14	675510	1	FTG-STR THD CONNECTOR -5 ORFS TO -4 SA
15	675504	1	FTG-45 DEG STR ELBOW -12 ORFS TO -16 SA
16	675519	1	FTG-STR THD CONNECTOR -6 ORFS TO -5 SA
17	675510	2	FTG-STR THD CONNECTOR -5 ORFS TO -4 SA
18	3307580	1	DIPSTICK-HYD RESEVOIR
19	3305576	1	ASSEMBLY-HYD OIL FILTER BREATHER
20	3400044	6	SCR-HEX,#10-32X0.75
21	3400045	1	SCR-PAN,#8-32X0.62,SLT

HYDRAULIC CONTROL VALVE DETAIL



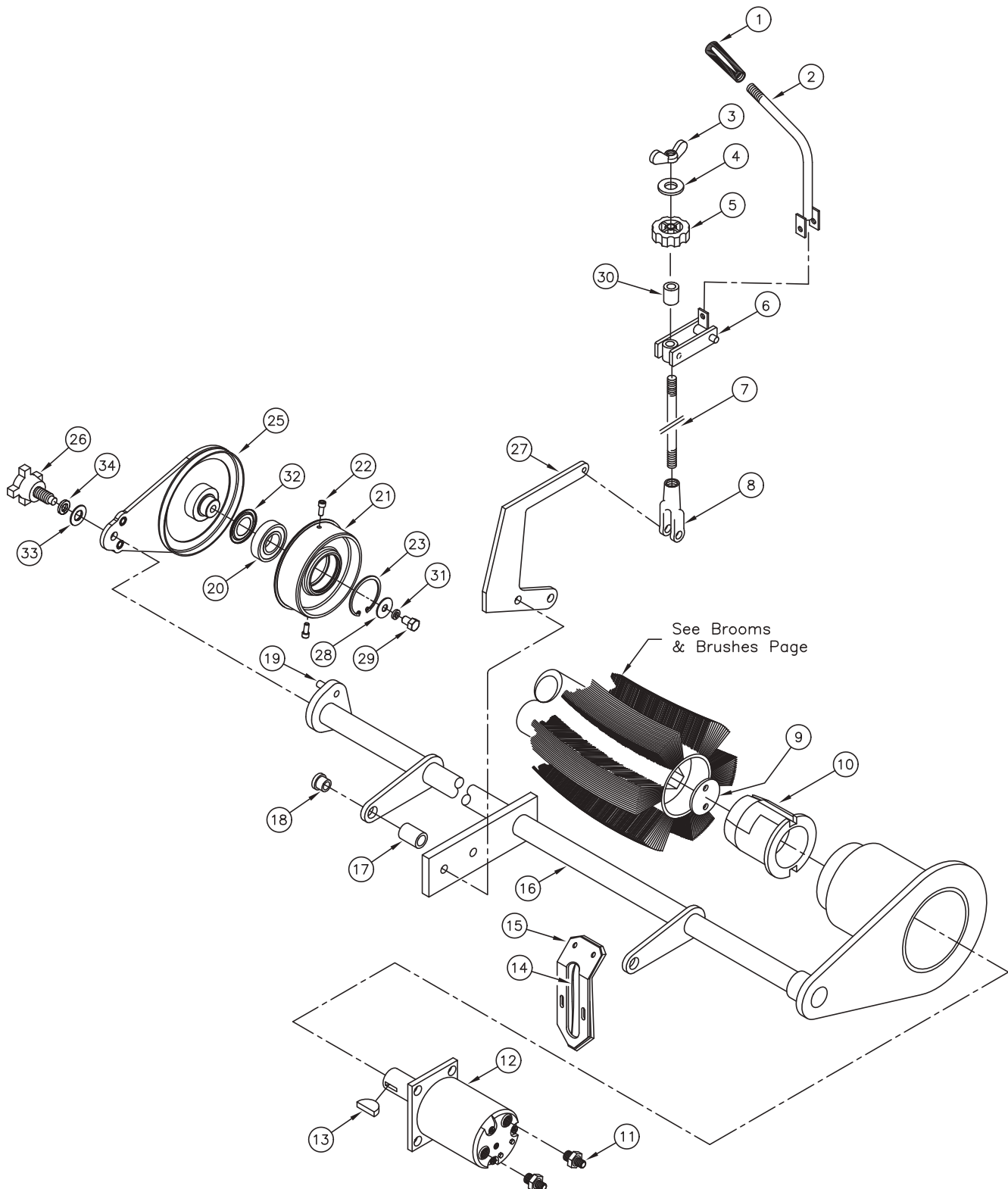
HYDRAULIC CONTROL VALVE DETAIL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	600263	3	KNOB-PLASTIC TAPERED #145 BLACK
2	3338603	1	WELD - HANDLE CONT VLV 3 PLTD
3	3303996	6	BEARING-PLASTIC 1/2X3/8X.75 LG
4	3338456P	6	LINK-HYD VLV SW/A PLTD
5	3400125	6	RUE RING-1/4 HEAVY ZP
6	3400096	5	WASHER-FLAT 5/16 IDx.688 ODx.065 THK
7	3400425	3	PIN-CLEVIS 1/4 X 5/8 ZP
8	3338458	1	HANDLE CONT VLV 2 PLTD
9	3338459	1	HANDLE CONT VLV 1 PLTD
10	3400466	1	SCR-CAR,5/16-18X2.75 ZP
11	711724	2	RING-RET EXT .38
12	3300465	4	ISOLATOR-RUBBER (.375IDx.81OD)
13	3300884	1	ROD-PIVOT CONTROL VALVE PLTD
14	3338455	1	MNT - HYD. SPOOL VALVE ARMA
16	3338213	1	VALVE-HYD CONTROL 3-SPOOL SW/A
17	675513	2	FTG - HYD. TEE #8JIC X #10 ORB X #8JIC
18	690006	1	ORIFICE-BRASS #332, .041" DIA, HYDRAULIC, 3/4-16 THD
19	675524	4	FTG-TEE SWIVEL RUN #4 JIC ARMA
21	3400080	2	NUT-HEX 5/16-18 ES ZP
31	3400088	6	WASHER-FLAT #8 ZP
32	450034	3	PIN-CLEVIS 3/16 X 3/4 ZP

IMPELLER ASSEMBLY



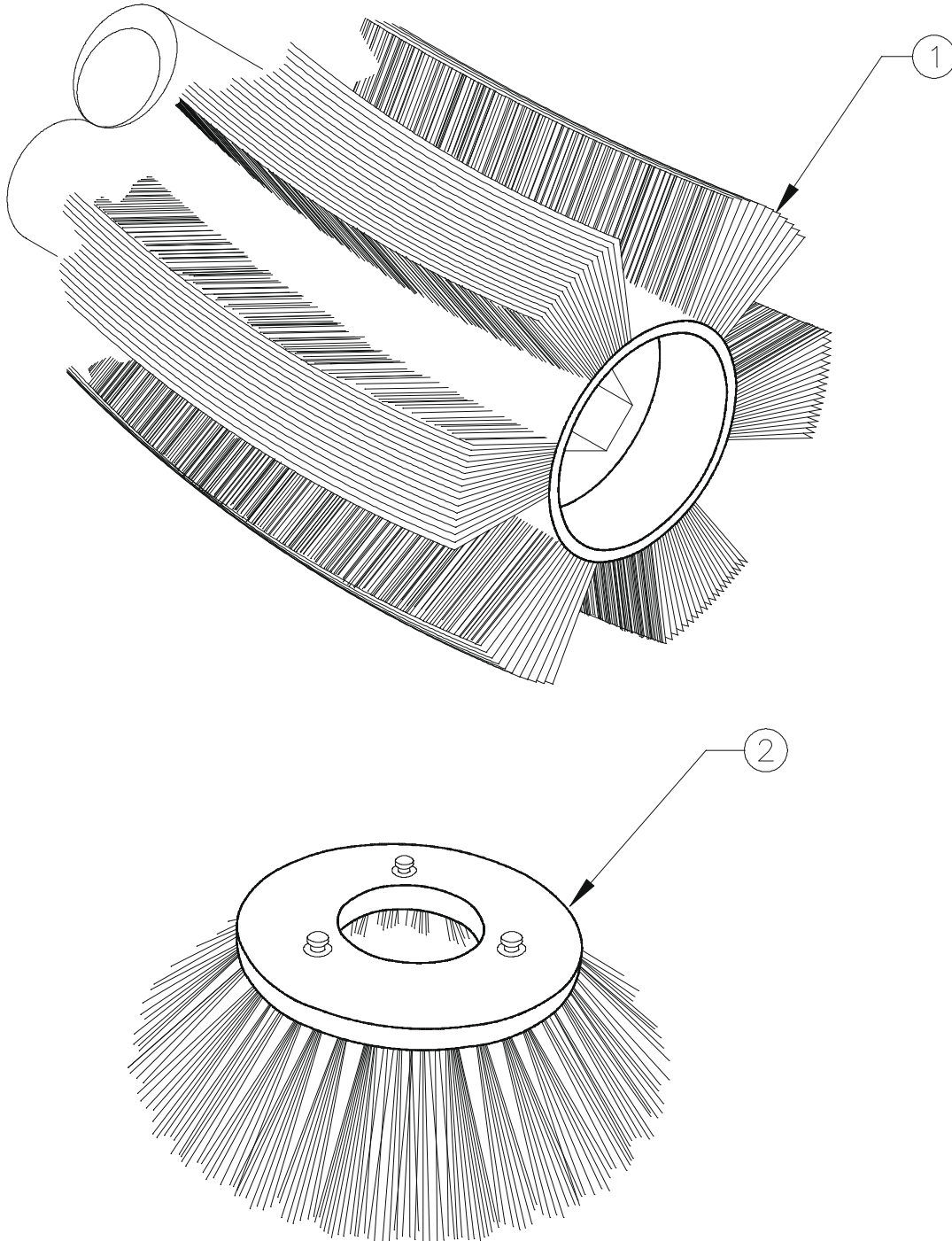
IMPELLER ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3316832	1	MOTOR-HYDRAULIC, .323CI, CCW ROTATION, IMPELLER
	3337905	1	SEAL KIT IMPELLER MOTOR
2	675525	2	FTG-STR THD RUN TEE -8 ORFS TO -8 SAE
3	3307152	1	MOUNT-IMPELLER MOTOR
4	3300465	4	ISOLATOR-RUBBER, .375 IDx.81 OD
5	3400028	4	SCR-HEX 3/8-16x1.50"
6	3322121	1	MOUNT-IMPELLER MOTOR, CIRCULAR
7	3335458	2.5'	GASKET-TOP IMPELLAR, ARMA
8	3307004	1	SHROUD-IMPELLER,
9	3307003	1	IMPELLER-8.88" DIA, ARMA BALANCED
10	3335459	2.5'	GASKET-BOTT IMPELLAR, ARMA
11	3335192	1	IMPELLER MOUNT, ARMA
12	3333915	3	ISOLATOR-RUBBER, ϕ 1.5x1" LG, 3/8-16 THREAD
13	3300351	3	CLAMP-HOSE, 4.5" DIA, SS
14	3307767	1	HOSE-IMPELLER, ϕ 4"x7.5" LONG
15	3315347	1	TRANSITION-PLASTIC IMPELLER EXHAUST
16	3318203	1	HOSE-IMPELLER EXHAUST, 3.5"IDx62" LONG
17	675508	1	FTG-STR THD CONNECTOR -4 ORFS TO -4 SA
18	675523	1	FTG-STR THD ELBOW -8 ORFS TO -8 SAE

MAIN BROOM ASSEMBLY



MAIN BROOM ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	600263	1	HANDLE GRIP
2	3338296	1	WELD-ROD, MAIN BROOM, UPPER, ZP
3	3400084	1	NUT-WING 1/2-13
4	3400091	1	WASHER-FENDER 1/2
5	3300352	1	KNOB-MAIN BROOM LIFT ADJUST
6	3335112	1	WELDMENT-MAIN BROOM PIVOT LIFT
7	3334984	1	ROD-LIFT MAIN BROOM
8	3301447	1	CLEVIS-CABLECRAFT AC-218
9	3301285	1	RETAINER-MAIN BROOM DRIVER HUB
10	3301050	1	HUB-MAIN BROOM DRIVE
11	675523	1	FTG-STR THD ELBOW -8 ORFS TO -8 SAE
12	3338661	1	MOTOR-HYD MAIN BROOM
13	3330338	1	KEY-SHAFT D-FOSS CB/MB/SC MOTORS
14	3307337	3'	GASKET-MAIN BROOM ARM
15	3307338	3'	RETAINER-GASKET MAIN BROOM ARM
16	3307207M	1	MAIN BROOM MNT 9X-M
17	3307181	1	SPACER-MAIN BROOM
18	3300432	2	BUSHING-FL-52-4
19	3300021	2	PIN-DOWL Ø.38x1.25 LONG
20	3305667	1	BEARING-MAIN BROOM
21	3305642	1	HUB-BROOM IDLER
22	3400047	2	SCR-SOCKET, 5/16-18x0.75
23	3305666	1	RING-RETAINING MAIN BROOM
25	3335220	1	MAIN BROOM PLT
26	3400748	1	KNOB-HAND 1/2-13x1-1/2 DOG POINT
27	3335196	1	PLATE-LIFT ARM, MAIN BROOM, ARMA
28	712305	1	WASHER, FENDER 5/8 X 2 X .125 ZINC
29	712003	1	SCREW, HHCS 5/8-11 X 0.75 ZINC
30	3333672	1	SPACER-MB LIFT ROD
31	712315	1	WASHER SR-HELICAL .64 X 1.26 X .06 ZINC
32	3335908	1	RING-NILOS, 2.55"OD
33	3400086	1	WASHER-FLAT 1/2 STANDARD ZP
34	3400098	1	WASHER-LOCK 1/2 SPLIT ZP

SIDE BROOM & MAIN BROOM



SIDE BROOM & MAIN BROOM			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3305818	1	BROOM-48"HIGH DEN FIBER & WIRE
	3305812	1	BROOM-48" NYLON
	3305665	1	BROOM-48" HIGH DENSITY NYLON
	3305814	1	BROOM-48" NYLON CHEVRON (PATROL)
	3315315	1	BROOM-48"STIFF NYLON
	3305663	1	BROOM-48" PROEX & WIRE
	3305824	1	BROOM-48" CRINKLE WIRE
	3332456	1	BROOM-48" STIFF POLY & WIRE
	3333483	1	BROOM-48" TRIPLE ROW POLY (CHEVRON PATTERN)
2	3300308	1	BROOM-SIDE 24" WHITE NYLON
	3300306	1	BROOM-SIDE 24" DIA. BLACK POLY
	3300309	1	BROOM-SIDE 26" WHITE NYLON
	3300307	1	BROOM-SIDE 26" BLACK POLY
	3300311	1	BROOM-SIDE 26" WIRE

NOTE: Part numbers that span more than one column apply to the models listed in the heading of the columns.

Main Broom User's Guide

Proex & Wire - Slightly encrusted soilage & dusty conditions. High heat.

Nylon - General purpose broom with long life bristles.

Poly Proex - All purpose broom that stands up well on rough surfaces.

High Density Nylon - Highly effective for small particle soilage. Severe dust environments.

Crinkle Wire - Stiff bristles for compacted grime, oil, grease or mud. Fair to good broom life.

Natural Fiber & Wire - Good all around broom. Good for high heat applications.

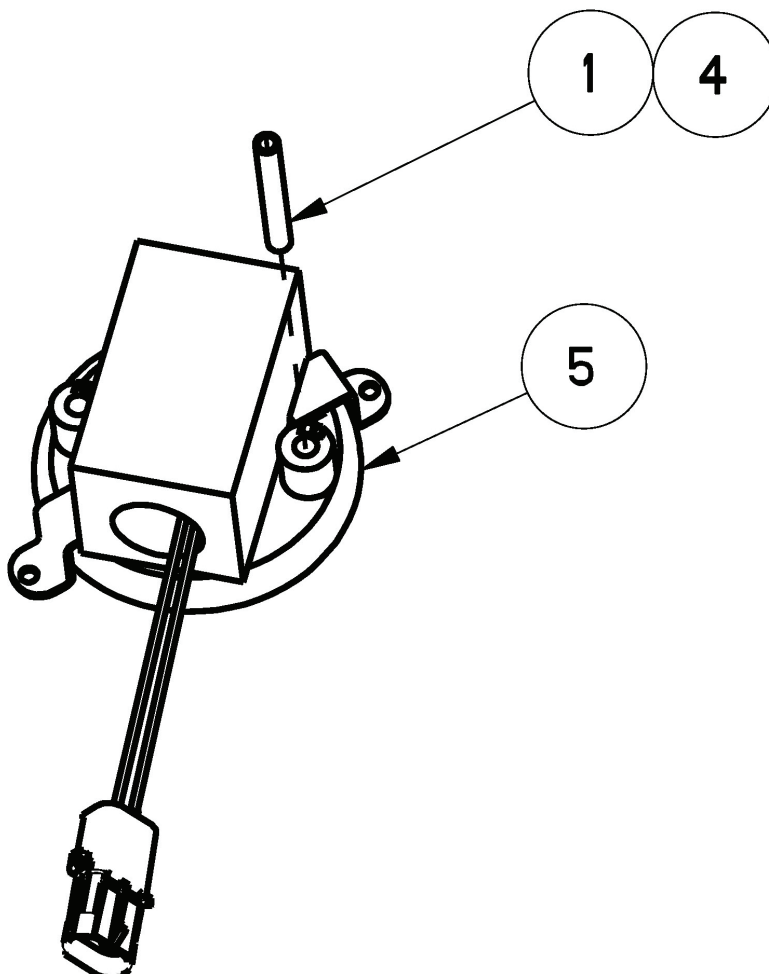
Side Broom User's Guide

Poly - Stiff bristles for aggressive sweeping of mainly heavy litter. Not suited for high heat.

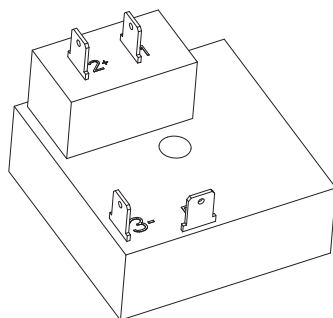
Nylon - Provides longest life. Recommended for tough sweeping jobs.

Wire (flat) - For areas of heavy grease build up or scarifying action. Used in high heat applications.

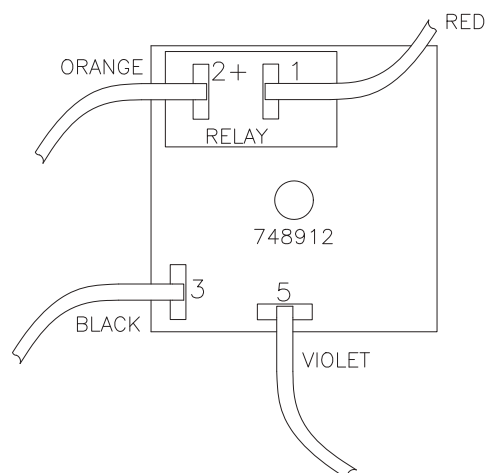
VACUUM SWITCH



VACUUM SWITCH			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3303105	1	FTG-NIPPLE 1/8"MPT X 2.00 LG
4	3401122	0.1	SEALANT-THREADED PIPE, 565 PST
5	3303327-1	1	CLOG FILTER - PRESSURE SWITCH ASSY
6	3400315	2	SCR-HEX,#10-32X0.50 (Not Shown)
7	3400172	2	NUT-HEX JAM #10-32 ES (Not Shown)

TIMER-FILTER SHAKER SEALED


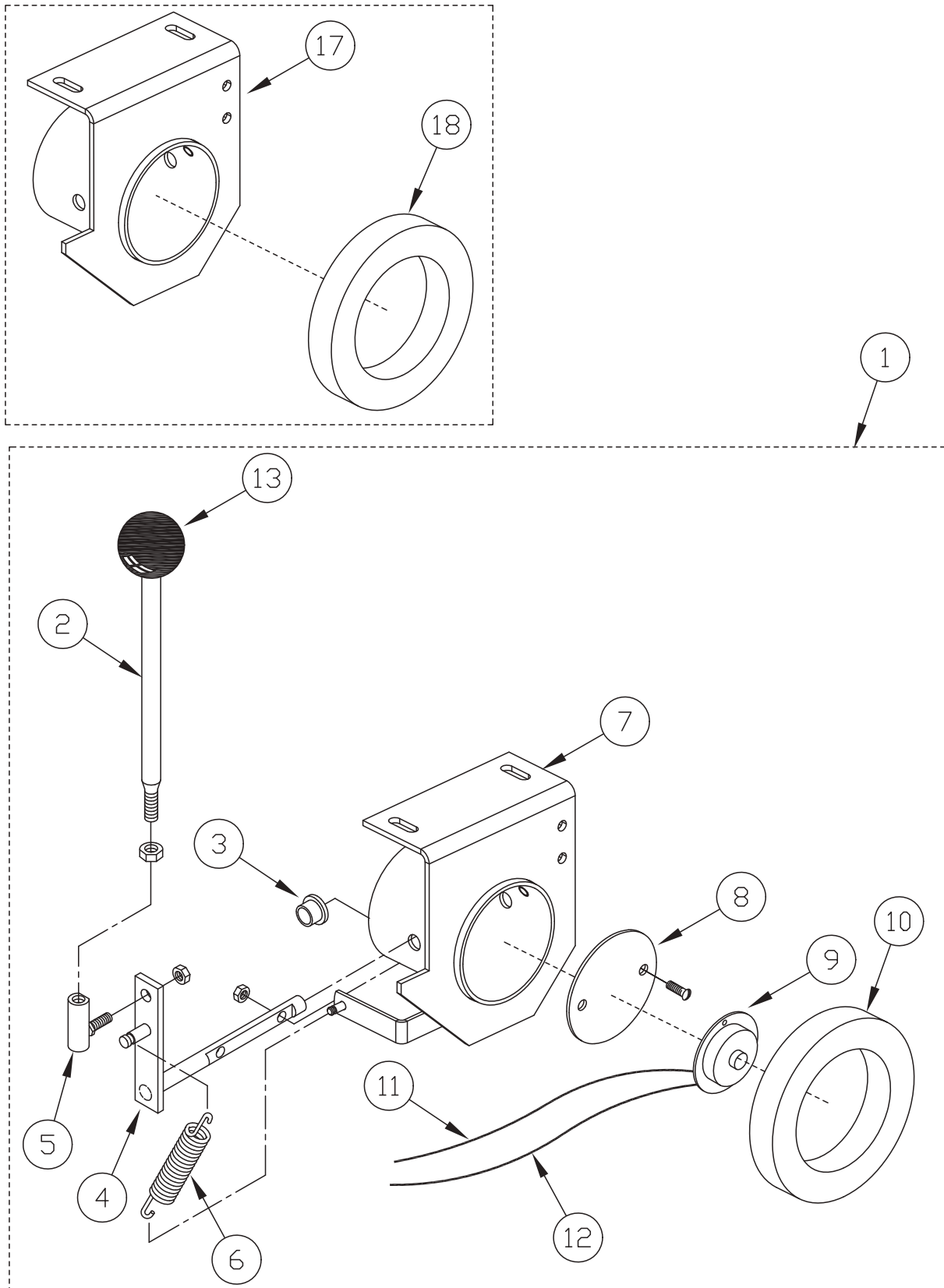
748912



748912 WIRE CONNECTIONS

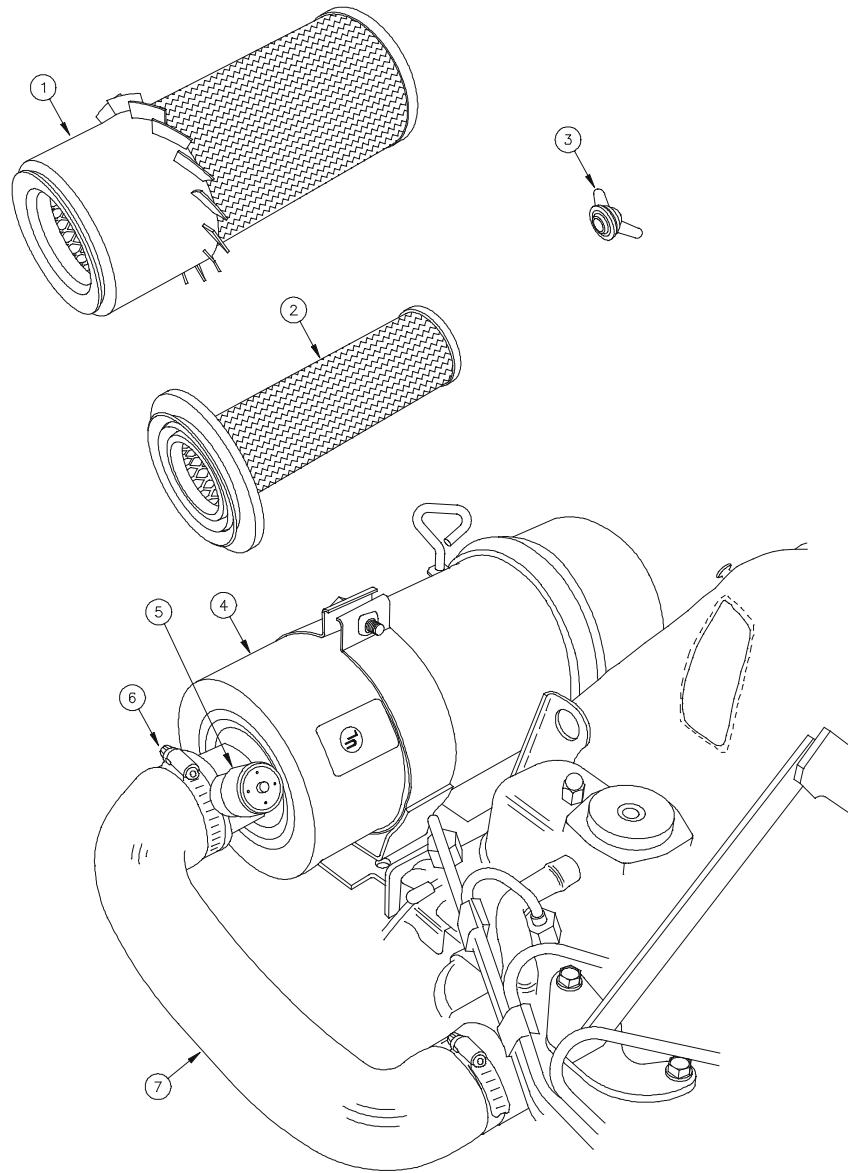
TIMER-FILTER SHAKER SEALED			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	748912	1	TIMER, OFF DELAY 12VDC 15A ONE SHOT 20

GASKET MOUNT ASSEMBLY



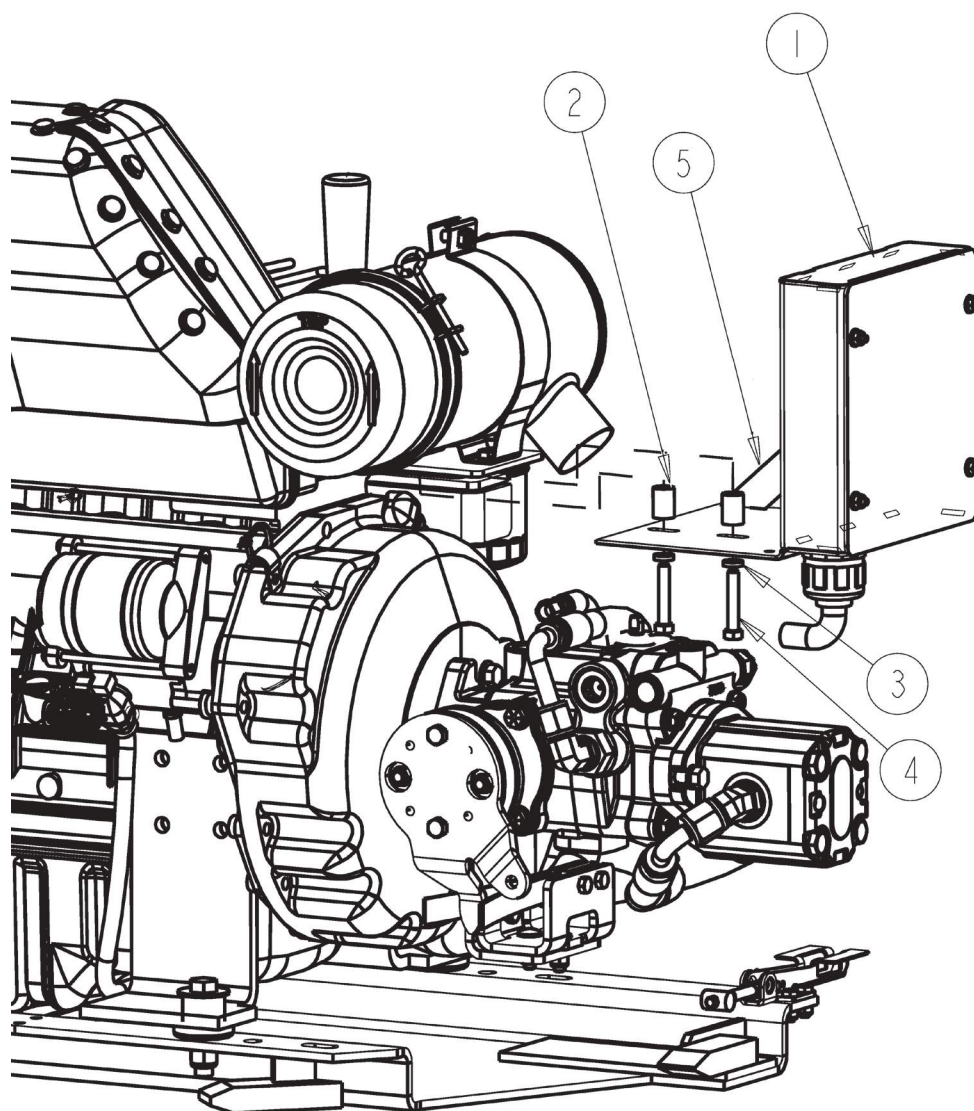
GASKET MOUNT ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3307018	1	GASKET MOUNT SUB 9XV (Includes Items 1-13)
2	3307173	1	ROD-IMPELLER BAFFLE
3	3300414	2	BUSHING-PLASTIC, 3/8IDx1/2OD
4	3307155	1	WELDMENT ROD GASKET MOUNT BAFFLE
5	3301199	1	BALL JOINT-1/4-28
6	3304160	1	SPRING-EXTENSION, 2.00 LG
7	3307182	1	WELDMENT-GASKET MOUNT,
8	3301498	1	DAMPER-HOPPER SHUTOFF,
9	3303003	1	DETECTOR-HEAT, 135°F TRIP (57°C), THERMOSTATIC TYPE
10	3307005	1	GASKET-IMPELLER
11	3310099	1	HARNESS-FIRE IN HOPPER INDICATOR
12	3307148	1	BAR-WD FRAME LINTEL BACKING
-	3303729	1	GROMMET-RUBBER, .25IDx.56ODx.12 GROOVE (Not Shown)
13	3300563	1	KNOB-PLASTIC BALL 1" DIA, BLACK
17	3307182	1	WELD-GASKET MNT SW/A/62E
18	3307005	1	GASKET-IMPELLER

ENGINE KUBOTA V1505 DIESEL - AIR CLEANER ASSEMBLY



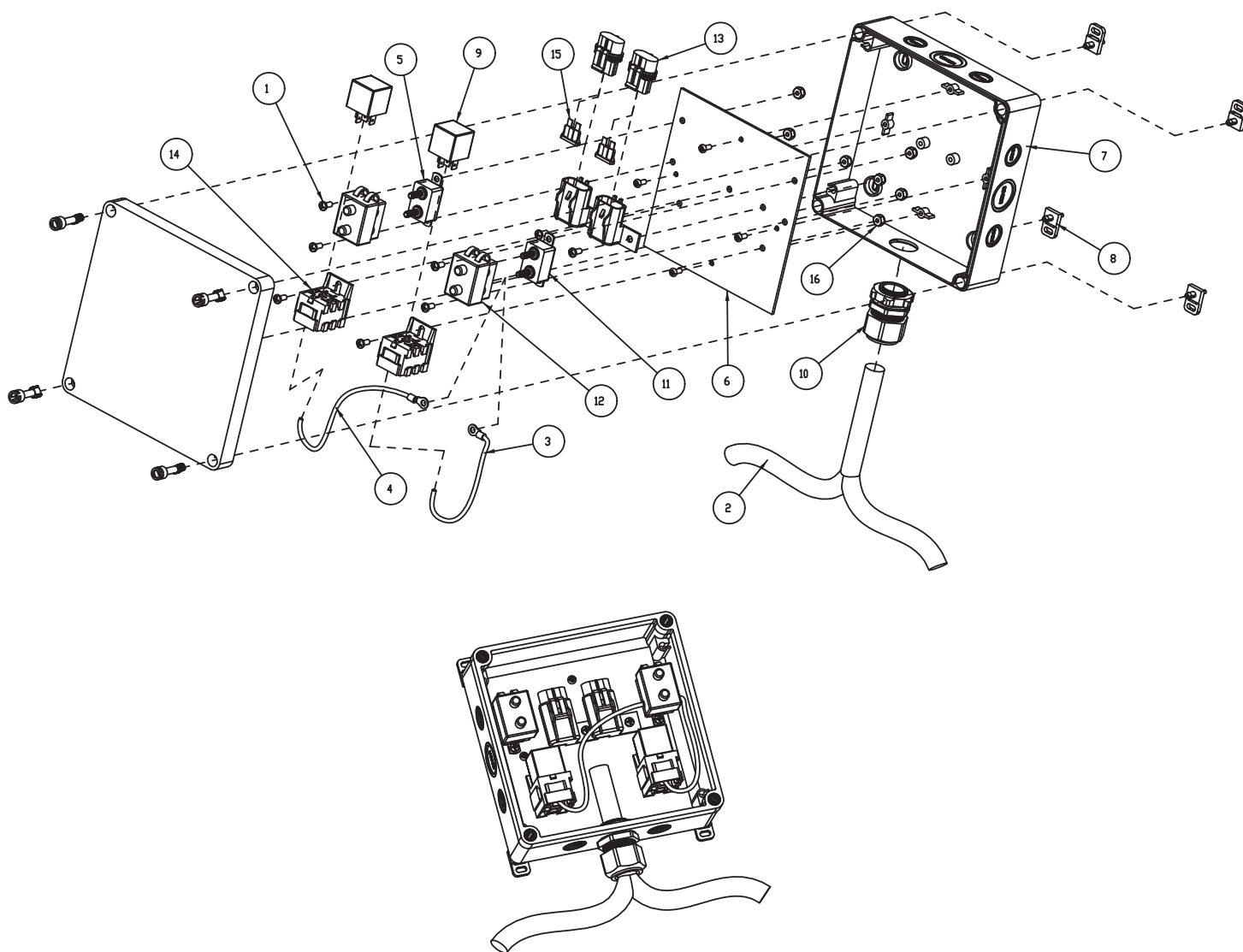
ENGINE KUBOTA V1505 DIESEL - AIR CLEANER ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3302842	1	ELEMENT-AIR CLEANER, PRIMARY
2	3302597	1	ELEMENT-AIR CLEANER, SAFETY
3	3303827	1	NUT-WING, DONALDSON AIR CLEANER
4	3303031	1	ASSEMBLY-DONALDSON HEAVY DUTY AIR CLEANER (Includes Items 1,2&3)
5	3303991	1	INDICATOR-AIR CLEANER RESTRICTION
6	3044112	2	CLAMP-HOSE, ϕ 2.5" SS
7	3333965	1	HOSE-RUBBER AIR INTAKE "U" V1505

ENGINE KUBOTA V1505 DIESEL - FUSE BOX ASSEMBLY



ENGINE KUBOTA V1505 DIESEL - FUSE BOX ASSEMBLY				
ITEM	PART NO.	REQ'D	DESCRIPTION	
1	748769	1	ASSY - DIESEL CONTROL BOX	
2	3342109	2	SPACER	
3	3400102	2	WASHER	
4	3401513	2	BOLT	
5	690042	1	BRACKET, MTG, WELD, DIESEL CONTROL BOX	

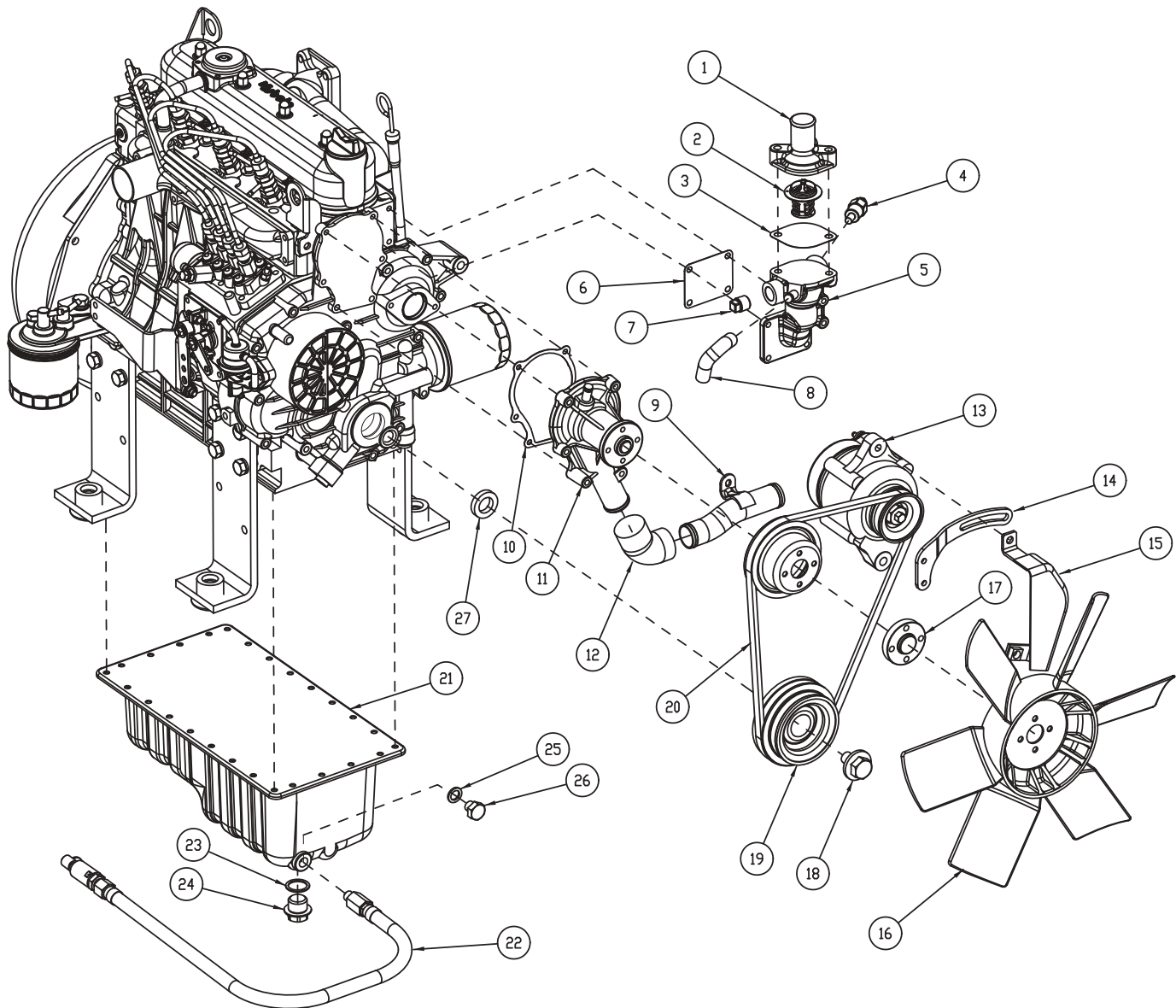
ENGINE KUBOTA V1505 DIESEL - FUSE BOX DETAILS



CONTROL BOX SHOWN WITHOUT TOP COVER

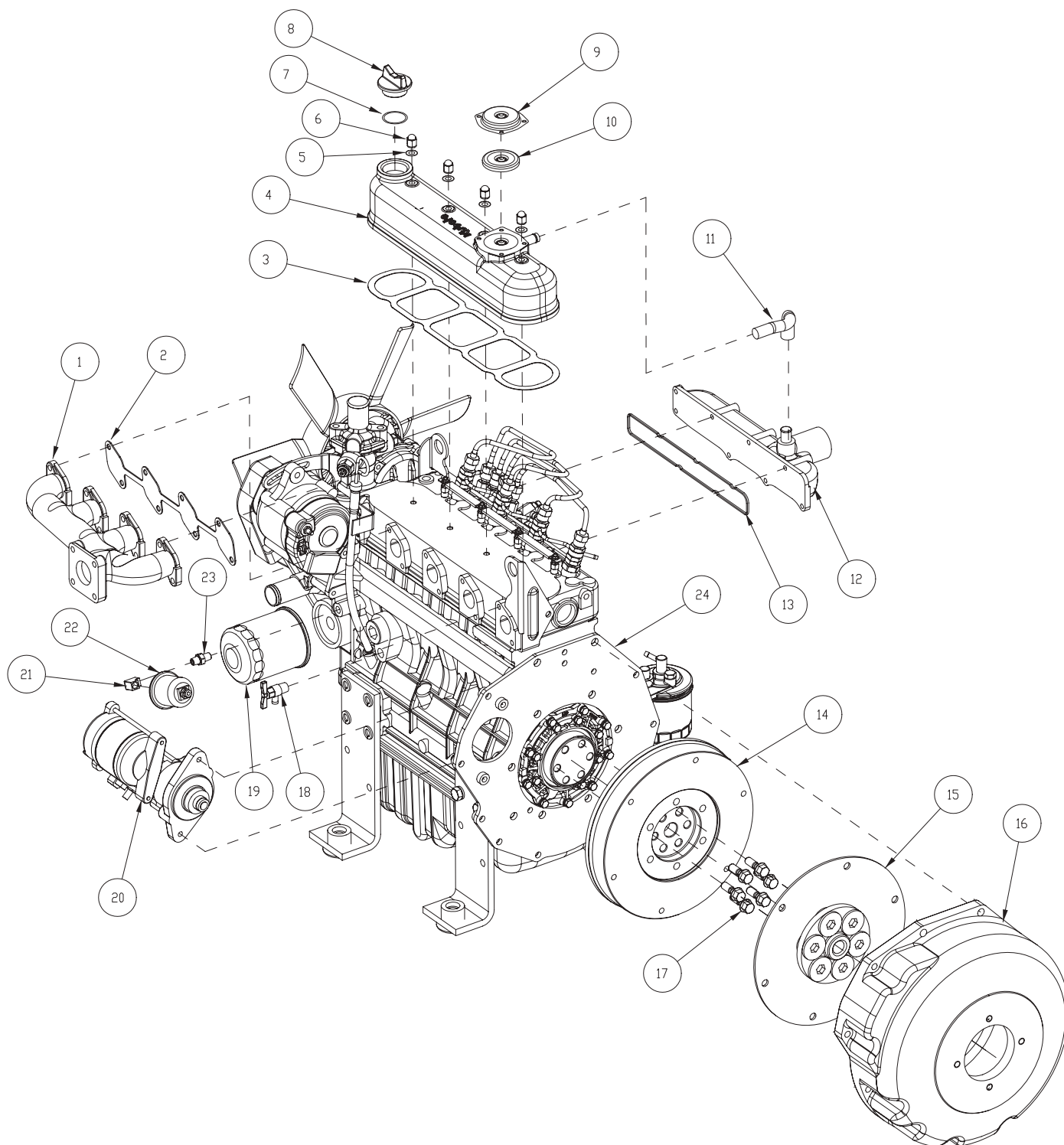
ENGINE KUBOTA V1505 - DIESEL CONTROL BOX			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	710328	8	SCR-MC 8-32 X .37 ZINC
2	748447	1	WIRING HARNESS, KUBOTA DSL CONTROL BOX
3	748447-1	1	WIRE ASSY, ORANGE
4	748447-2	1	WIRE ASSY, YELLOW
5	748762	1	CIRCUIT BREAKER, 12V 50A
6	748763-MCH	1	MOUNTING PLATE, MACHINED
7	748764	1	ENCLOSURE W/ METRIC KNOCKOUTS
8	748765	4	MTI, MOUNTING TAB
9	748767	2	RELAY, 14 VDC 50/30 A
10	748768	1	CORDGRIP, M25, LIQUID TIGHT
11	748962	1	CIRCUIT BREAKER, 12V 40A
12	748963	2	CIRCUIT BREAKER BOOT
13	748964-1	2	FUSE HOLDER
14	748967	2	SOCKET, RELAY
15	3335329	2	FUSE - 10 AMP AUTOMOTIVE
16	3400082	8	NUT-HEX #8-32 ES ZP
-	748769	-	DIESEL CONTROL BOX ASSEMBLY

ENGINE KUBOTA V1505 DIESEL - ALTERNATOR, WATER PUMP, FAN, AND OIL PAN



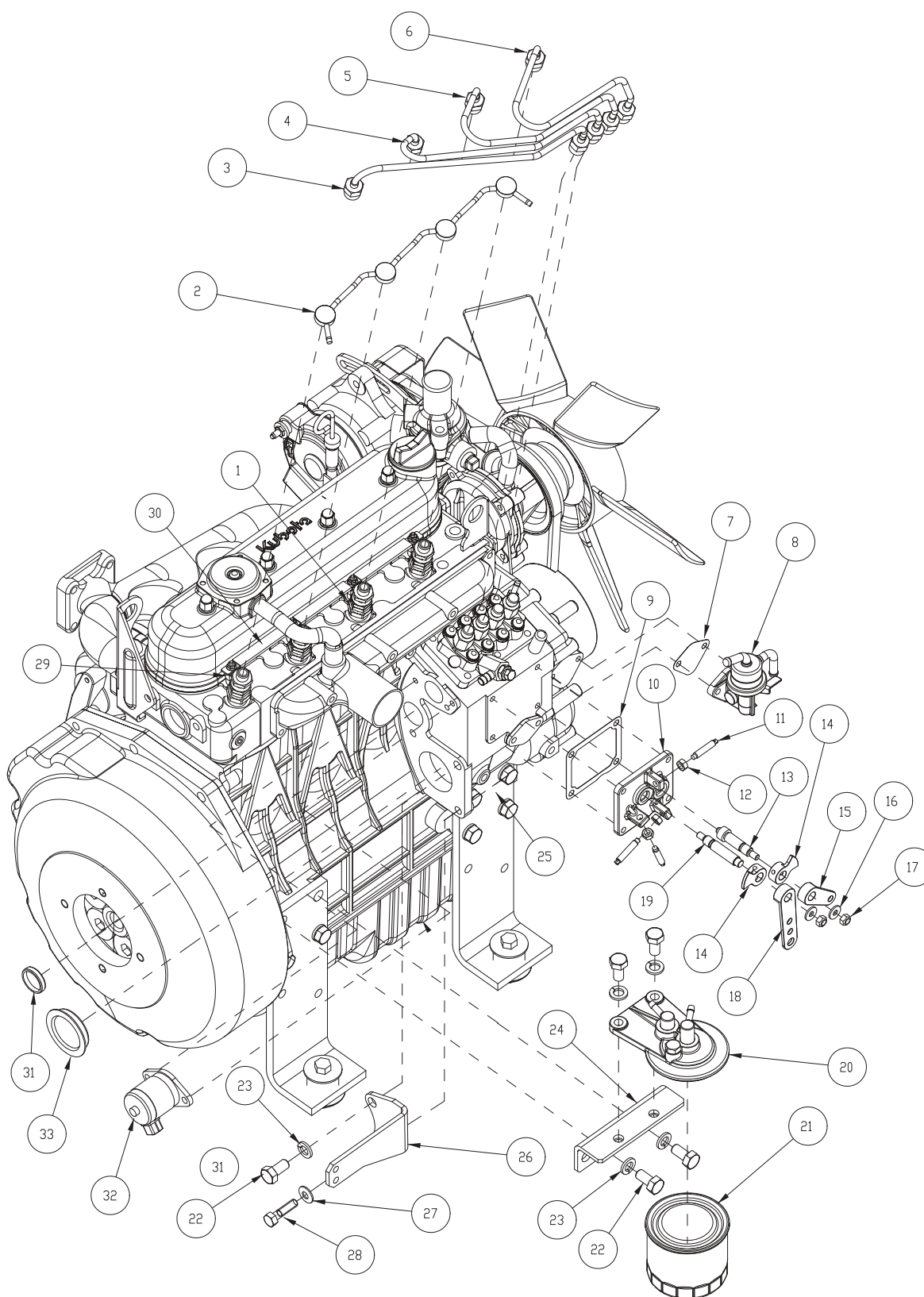
ENGINE KUBOTA V1505 DIESEL - ALTERNATOR, WATER PUMP, FAN, AND OIL PAN			
ITEM	PART NO.	QTY	DESCRIPTION
1	3336919	1	COVER-THERMOSTAT KUBOTA V1505
2	3350446	1	THERMOSTAT-KUBOTA V1505 & V2203
3	3336918	1	GASKET-THERMOSTAT KUBOTA V1505
4	3341070	1	SENDER-TEMPERATURE 12V KUBOTA V1505
5	3336939	1	HOUSING-THERMOSTAT KUBOTA V1505
6	3336915	1	GASKET-WATER FLANGE KUBOTA V1505
7	3336947	1	PLUG-THERMOSTAT HSG KUBOTA V1505
8	3336931	1	PIPE-WATER RETURN THERMOSTAT HSG
9	3336946	1	PIPE-WATER KUBOTA V1505
10	3330793	1	GASKET - KUBOTA V1505 WATER PUMP
11	3330792	1	PUMP - WATER, KUBOTA V1505
12	3336932	1	PIPE-WATER PUMP KUBOTA V1505
13	3329875	1	ALTERNATOR-KUBOTA V1505
14	3336067	1	STAY-DYNAMO
15	3331935	1	COVER-BELT
16	3330210	1	FAN - KUBOTA V1505 ENGINE (SP) 1
17	3336933	1	SPACER-FAN 10MM KUBOTA V1505
18	3336937	1	BOLT-PULLEY KUBOTA V1505
19	3336934	1	PULLEY-ENGINE KUBOTA V1505
20	3329867	1	BELT-KUBOTA V1505V
21	3336920	1	PAN-OIL KUBOTA V1505
22	661004	1	OIL DRAIN ASSY, V1505
23	3344822	1	DRAIN PLUG GASKET, KUBOTA
24	3338327	1	PLUG-DRAIN (BOTTOM)
25	3338328	1	GASKET-OIL PAN (ALTERNATE)
26	3344821	1	PLUG-DRAIN (SIDE) (ALTERNATE)
27	3337571	1	SEAL, OIL KUBOTA V1505

ENGINE KUBOTA V1505 DIESEL - FLYWHEEL, STARTER, HEAD COVER, AND EXHAUST



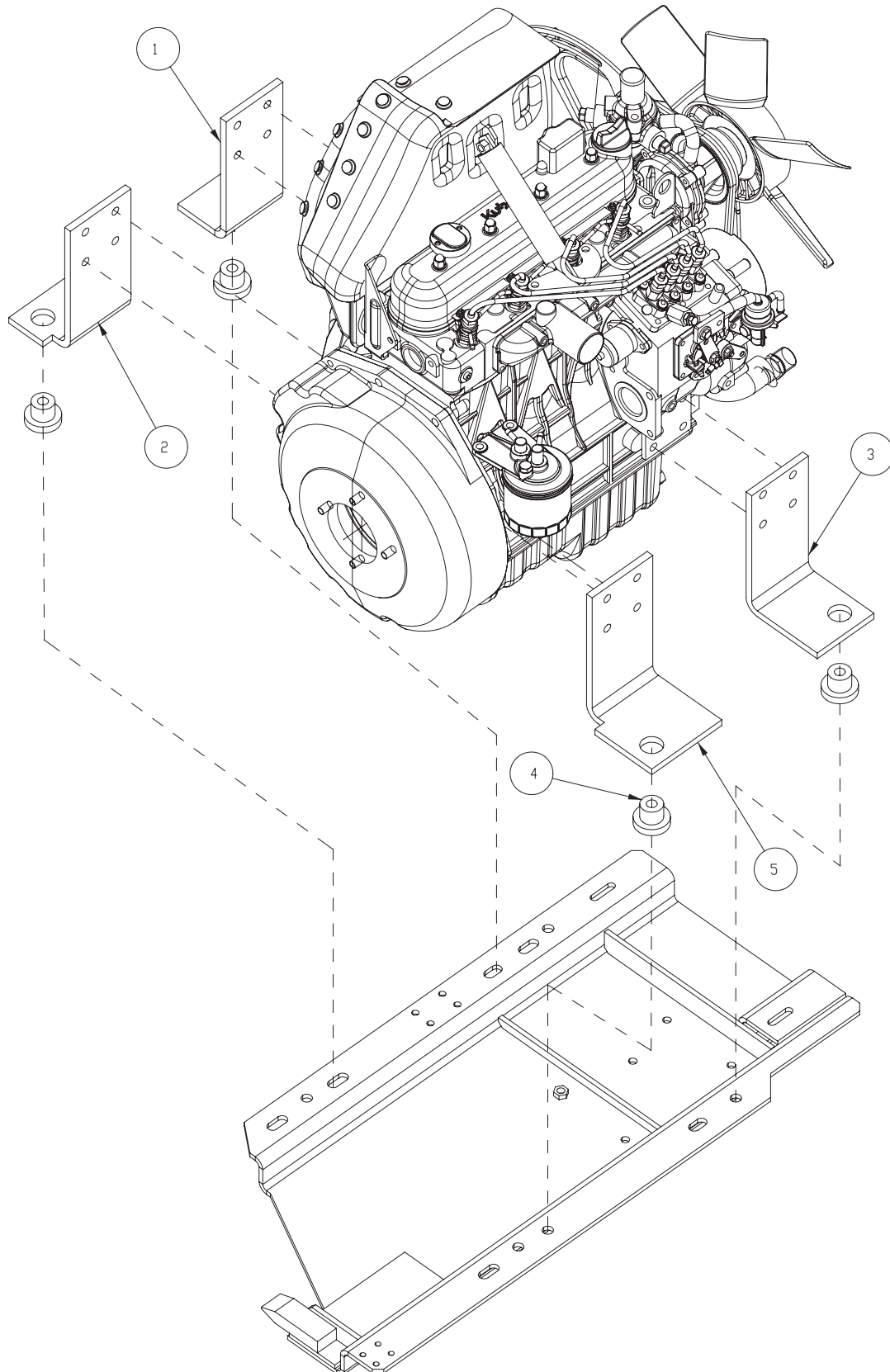
ENGINE KUBOTA V1505 DIESEL - FLYWHEEL, STARTER, HEAD COVER, AND EXHAUST			
ITEM	PART NO.	QTY	DESCRIPTION
1	3334041	1	MANIFOLD-EXHAUST KUBOTA V1505
2	3333964	1	GASKET-EX-MANIFOLD KUBOTA V1505
3	3334278	1	GASKET - VALVE COVER KUBOTA V1505
4	3336910	1	COVER-CYLHEAD KUBOTA V1505
5	3337572	4	GASKET KUBOTA V1505
6	3336916	4	NUT-CYLHEAD COVER KUBOTA V1505
7	3337573	1	O-RING KUBOTA V1505
8	3336926	1	PLUG-OIL FILLER KUBOTA V1505
9	3337574	1	COVER, BREATHER KUBOTA V1505
10	3337575	1	VALVE BREATHER KUBOTA V1505
11	3337576	1	TUBE BREATHER KUBOTA V1505
12	3336911	1	MANIFOLD-INLET KUBOTA 1505
13	3337577	1	GASKET INTAKE MANIFOLD KUBOTA V1505
14	3336935	1	COMP-FLYWHEEL KUBOTA V1505
15	3329956	1	COUPLING-KUBOTA DIESEL V1505/D905
16	3329957	1	BELL HOUSING KUBOTA V1505 DIESEL
17	3336938	6	BOLT-FLYWHEEL KUBOTA V1505
18	3339628	1	ASSY-COCK DRAIN V1505
19	3324129	1	FILTER - OIL, 1505/905 KUBOTA DIE
20	3330402	1	STARTER - KUBOTA V1505, 12V
21	3301720	1	FTG-90 EL 1/8 FPT
22	3341069	1	SENDER-OIL PRESSURE 12V
23	3305640	1	FTG-NIPPLE 1/8BPT-1/8NPT BRASS
24	3336917	1	PLATE-REAR END V1505

ENGINE KUBOTA V1505 DIESEL - FUEL SYSTEM AND SPEED CONTROL



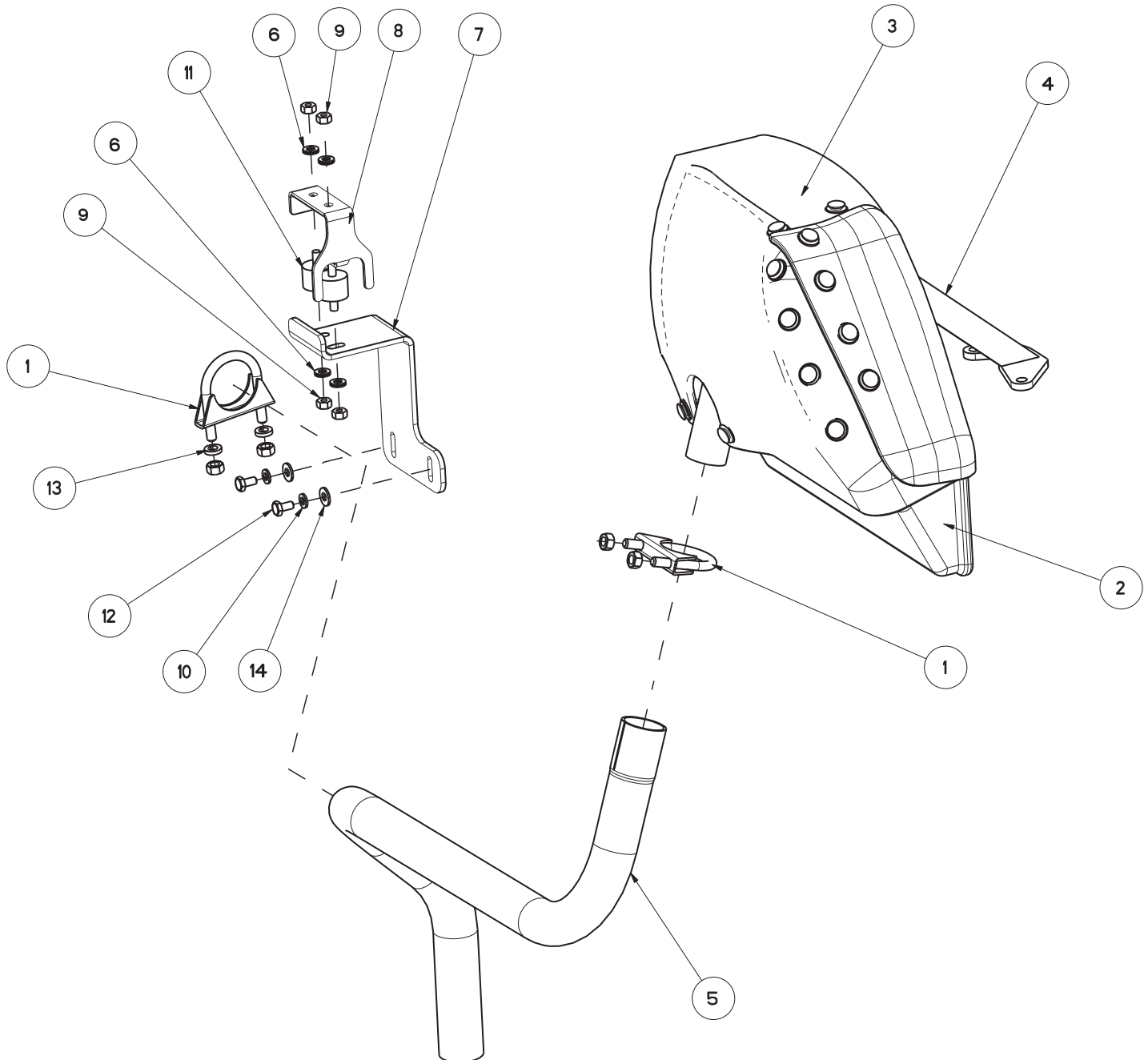
ENGINE KUBOTA V1505 DIESEL - FUEL SYSTEM AND SPEED CONTROL			
ITEM	PART NO.	QTY	DESCRIPTION
1	3330106	4	INJECTOR-KUBOTA V1505 DIESEL
2	3333567	1	FUEL LINE-KBA 1505 LEAK OFF LINE
3	3334998	1	PIPE INJECTION-KUBOTA V1505
4	3334997	1	PIPE INJECTION-KUBOTA V1505
5	3334996	1	PIPE INJECTION-KUBOTA V1505
6	3334995	1	PIPE INJECTION-KUBOTA V1505
7	3330693	1	KUBOTA 1505-FUEL PUMP GASKET
8	3330692	1	PUMP - FUEL, KUBOTA V1505 DIESEL
9	3336924	1	GASKET-CONTROL PLATE KUBOTA V1505
10	3336943	1	PLATE-SPEED CONTROL KUBOTA V1505
11	3336944	3	BOLT-ADJUSTING SPEED CONTROL KUBOTA
12	3336976	3	HUT-HEX JAM 6MM
13	3336948	1	SHAFT-LEVER STOP SPEED CONTROL KUBOTA
14	3336942	2	LEVER-SPEED CONTROL KUBOTA V1505
15	3336945	1	LEVER-ENGINE STOP KUBOTA V1505
16	3336969	2	WASHER-PLAIN 15MM OD X 6MM ID X 1
17	3336970	2	NUT-HEX LOCK 6MM
18	3336941	1	LEVER-SPEED CONTROL KUBOTA V1505
19	3336949	1	LEVER-GOVERNOR KUBOTA V1505
20	3305882	1	MOUNT, FUEL FILTER KUBOTA PNTD
21	3303324	1	FILTER - FUEL KUBOTA DSL (SP)
22	3400293	5	SCR-HEX 10MMX1.25PX20MM ZP
23	3401458	5	WSH-LOCK, 10 MM ZP
24	3336912	1	BRACKET-FUEL FILTER KUBOTA V1505
25	3400390	1	NUT-FLANGE LOCK 5/16-18
26	3350331	1	MOUNT-THROTTLE KBA 1505 DSL
27	3400384	1	WASHER CONICAL SPRING 5/16
28	3400034	1	SCR-HEX,5/16-18X1.25 ZP
29	3330795	4	GLOW PLUG KUBOTA V1505
30	3337578	1	CORD GLOW PLUG KUBOTA V1505
31	3336927	1	PLUG-ENGINE KUBOTA V1505
32	3334549	1	KIT-SOLENOID FUEL SHUT-OFF W/ JUMPER
33	3336925	1	COVER HYDRAULIC PUMP-ENGINE KUBOTA V1505

ENGINE KUBOTA V1505 DIESEL - STARTER, FAN, FUEL PUMP, MOTOR MOUNTING



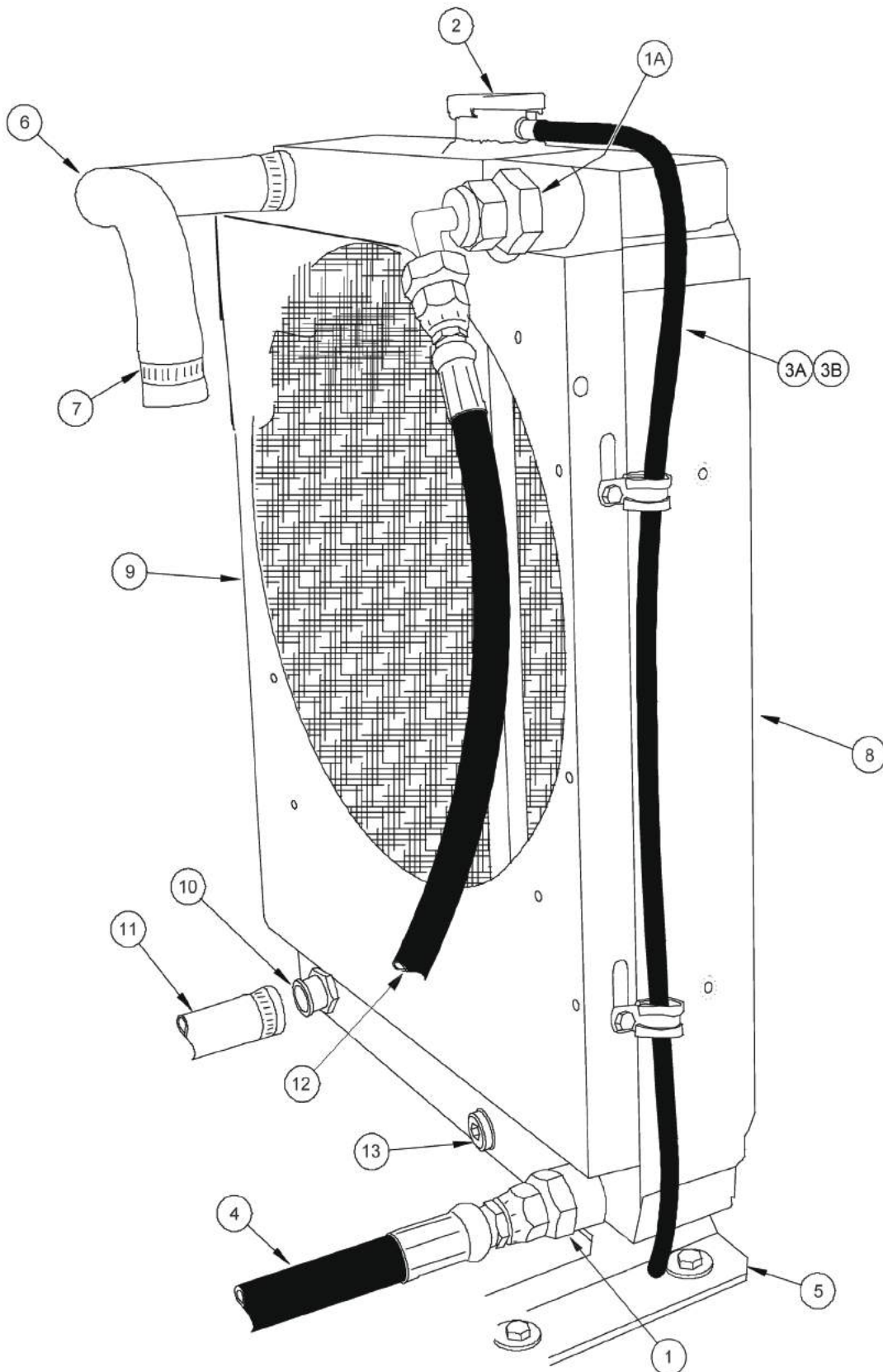
ENGINE KUBOTA V1505 DIESEL - STARTER, FAN, FUEL PUMP, MOTOR MOUNTING			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3316962	1	MOUNT-MOTOR, INNER LEFT REAR 9X V1505 KUBOTA DIESEL
2	3316961	1	MOUNT-MOTOR, LEFT FRONT V1505 KUBOTA DIESEL
3	3316964	1	MOUNT-MOTOR, RIGHT FRONT 9X V1505 KUBOTA DIESEL
4	3300464	4	ISOLATOR-RUBBER, 1.24 DIAx1.25 LG
5	3316963	1	MOUNT-MOTOR, RIGHT REAR V1505 KUBOTA DIESEL
-	3350329	1	BRACKET-HOSE RETAINER, FRONT, KUBOTA V1505 DIESEL (NOT SHOWN)
-	3333301	1	BRACKET-HOSE RETAINER, REAR, KUBOTA V1505 DIESEL (NOT SHOWN)

ENGINE KUBOTA V1505 DIESEL - EXHAUST DETAIL



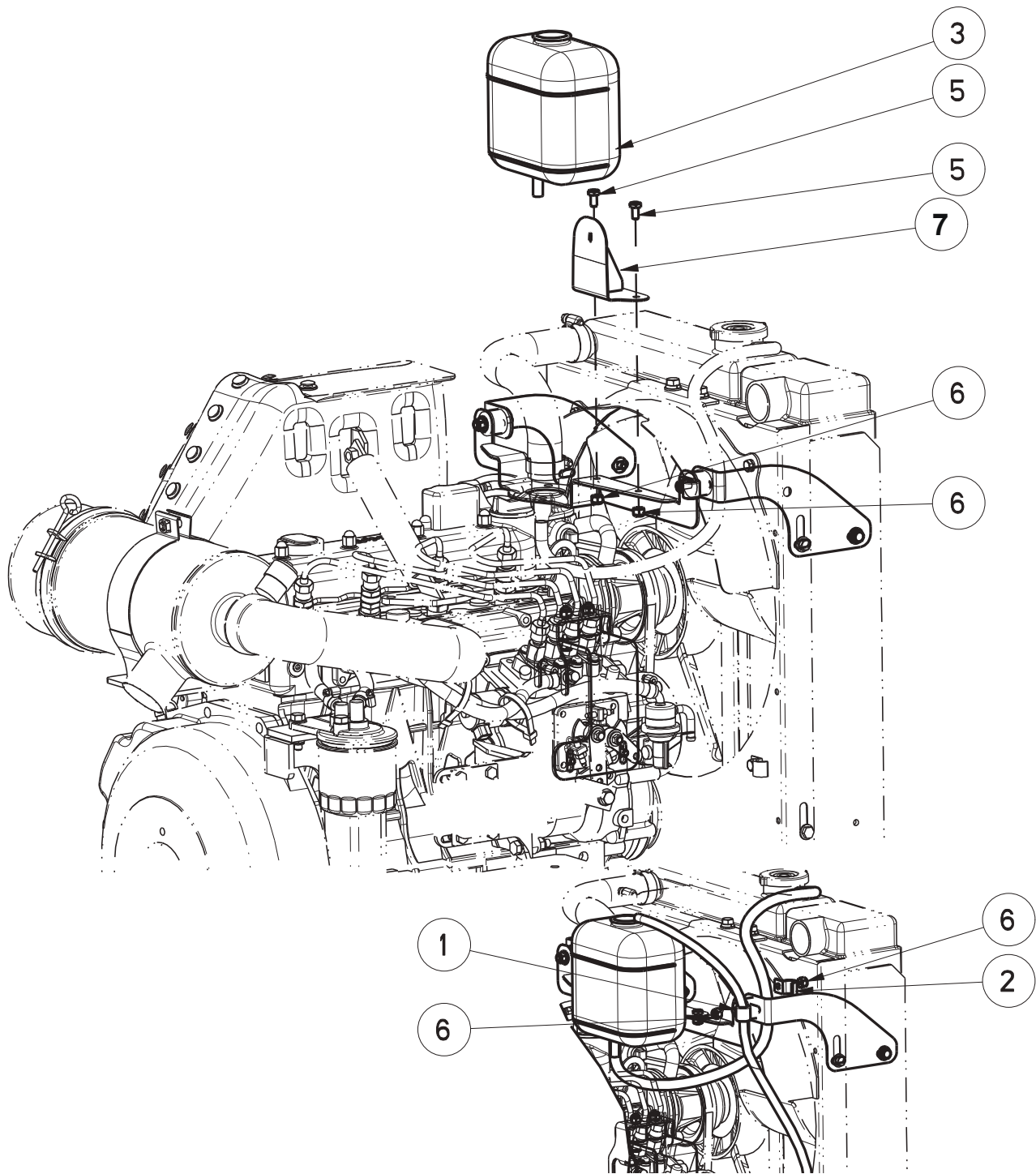
ENGINE KUBOTA V1505 DIESEL - EXHAUST DETAIL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3301641	2	CLAMP-EXHAUST 1 1/2
2	3330627	1	MUFFLER-KUBOTA V1505 BOX
3	3330629	1	BLANKET-KUBOTA V1505E BOX EXHAUST
4	EPS2655	1	STAY MUFFLER
5	3335036	1	EXHAUST-KUBOTA V1505 9X
6	3401570-7W	4	WASHER-NORD-LOCK, 1/4, 0.53 OD
7	3336632	1	PLT - EXHAUST MNT BRKT
8	3336633	1	PLT - EXHAUST MNT, UPPER BRKT
9	3400071	4	NUT-HEX 1/4-20
10	3400103	2	WASHER-LOCK 1/4 SPLIT
11	3344112	2	ISO-CYL, 1 DIA X 3/4 X 1/4-20,
12	3400043	2	SCR-HH 1/4-20 X .50 ZINC
13	3400102	2	WASHER-LOCK 5/16 SPLIT
14	3400089	2	WASHER-FLAT 1/4 STANDARD

ENGINE KUBOTA V1505 DIESEL - RADIATOR DETAIL



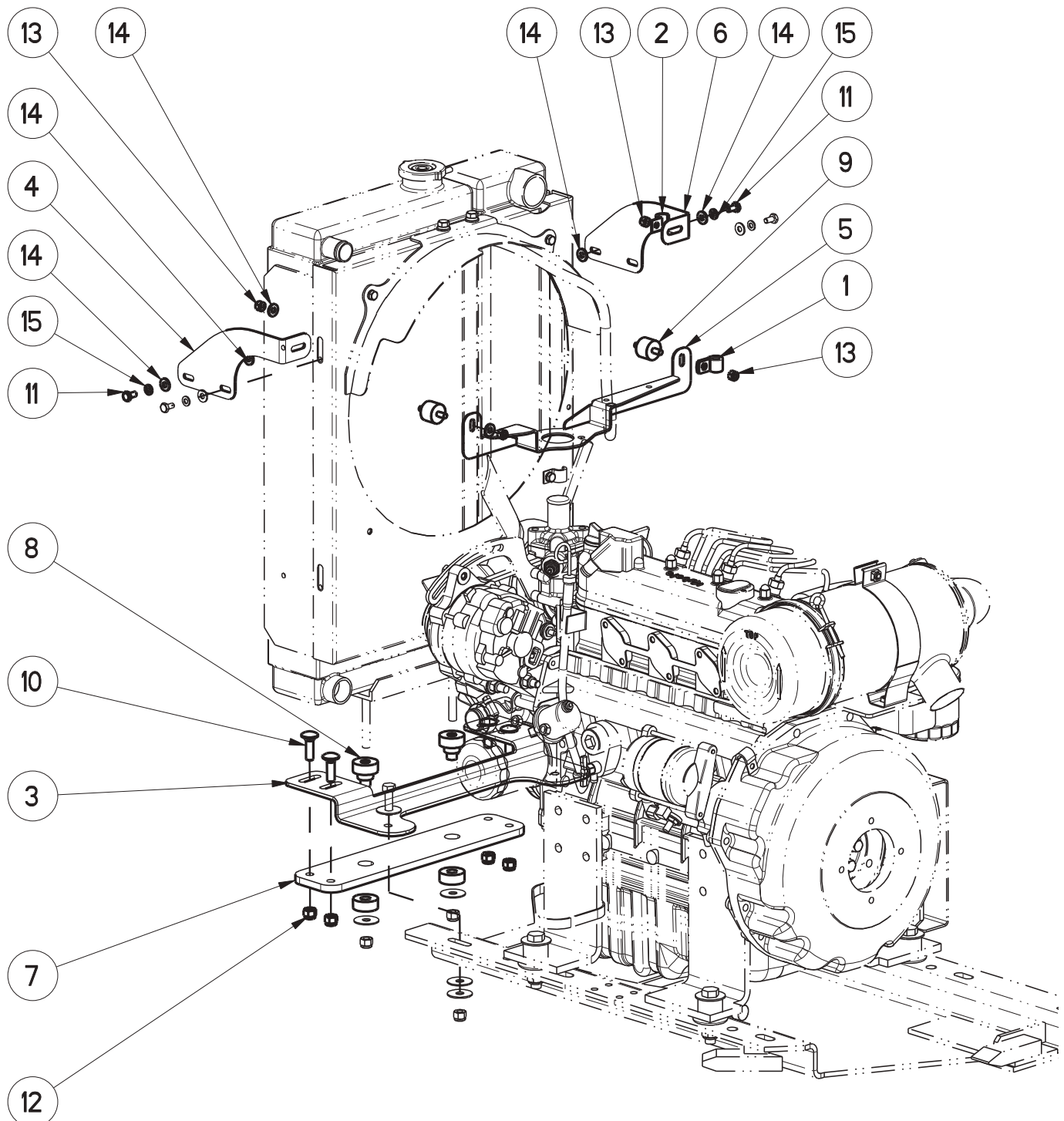
ENGINE KUBOTA V1505 DIESEL - RADIATOR DETAIL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	675503	1	FTG-STR THD CONNECTOR -12 ORFS TO -16 S
1A	675530	1	FTG-STR THD CONNECTOR -8 ORFS TO -16 S
2	3336527	1	RADIATOR CAP
3A	690019	21"	HOSE, RADIATOR TO OVERFLOW BOTTLE, 21" LENGTH
3B	690019	36"	HOSE, OVERFLOW BOTTLE EXIT, 36" LENGTH
4	675419	1	HYD HOSE - RAD OUT TO RESV
5	3333259	1	MOUNT-RADIATOR HYD W/COOLER
6	3332643	2	HOSE-UPPER RADIATOR, KUBOTA 1505
7	3303255	4	CLAMP-HOSE 1.75 DIA NOMINAL
8	3336103	1	RADIATOR-OIL COOLER COMBO
9	3336522	1	SHROUD-CG13/KUBOTA 1505 RADIATOR
10	3333489	1	FTG-RADIATOR HOSE
11	3332644	2	HOSE-LOWER RADIATOR KUBOTA 1505
12	675418	1	HYD HOSE - FILTER OUT TO RAD
13	3333488	1	FTG-PLUG, RADIATOR

ENGINE KUBOTA V1505 DIESEL - RADIATOR COOLANT TANK & MOUNT



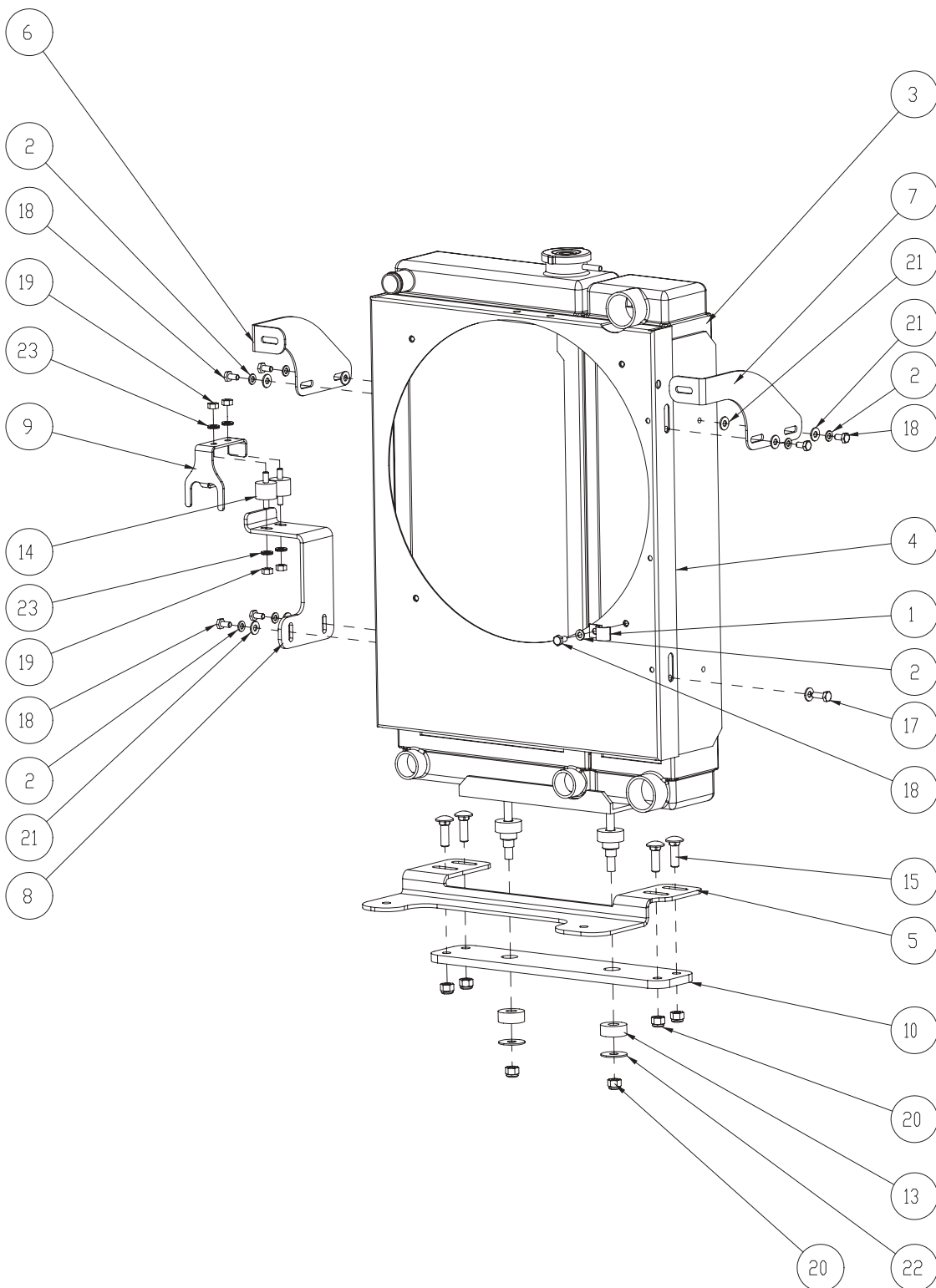
ENGINE KUBOTA V1505 DIESEL - RADIATOR COOLANT TANK & MOUNT			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3301837	1	CLAMP-CABLE 1/2
2	3302543	1	CLAMP-SADDLE TYPE 5/16" DIA.
3	3344101	1	RESERVOIR 5.5" X 3.5" X 5.5"
4	3344112	4	ISOLATOR- CYLINDRICAL, 1 DIA X 3/4 X 1/4-20,
5	3400043	6	SCR-HH 1/4-20 X .50 ZINC
6	3400081	10	NUT-HEX 1/4-20 ES
7	3336669	1	WELD - BRKT TANK COOLANT OVERFLOW MNT

ENGINE KUBOTA V1505 DIESEL - RADIATOR MOUNTS DETAIL



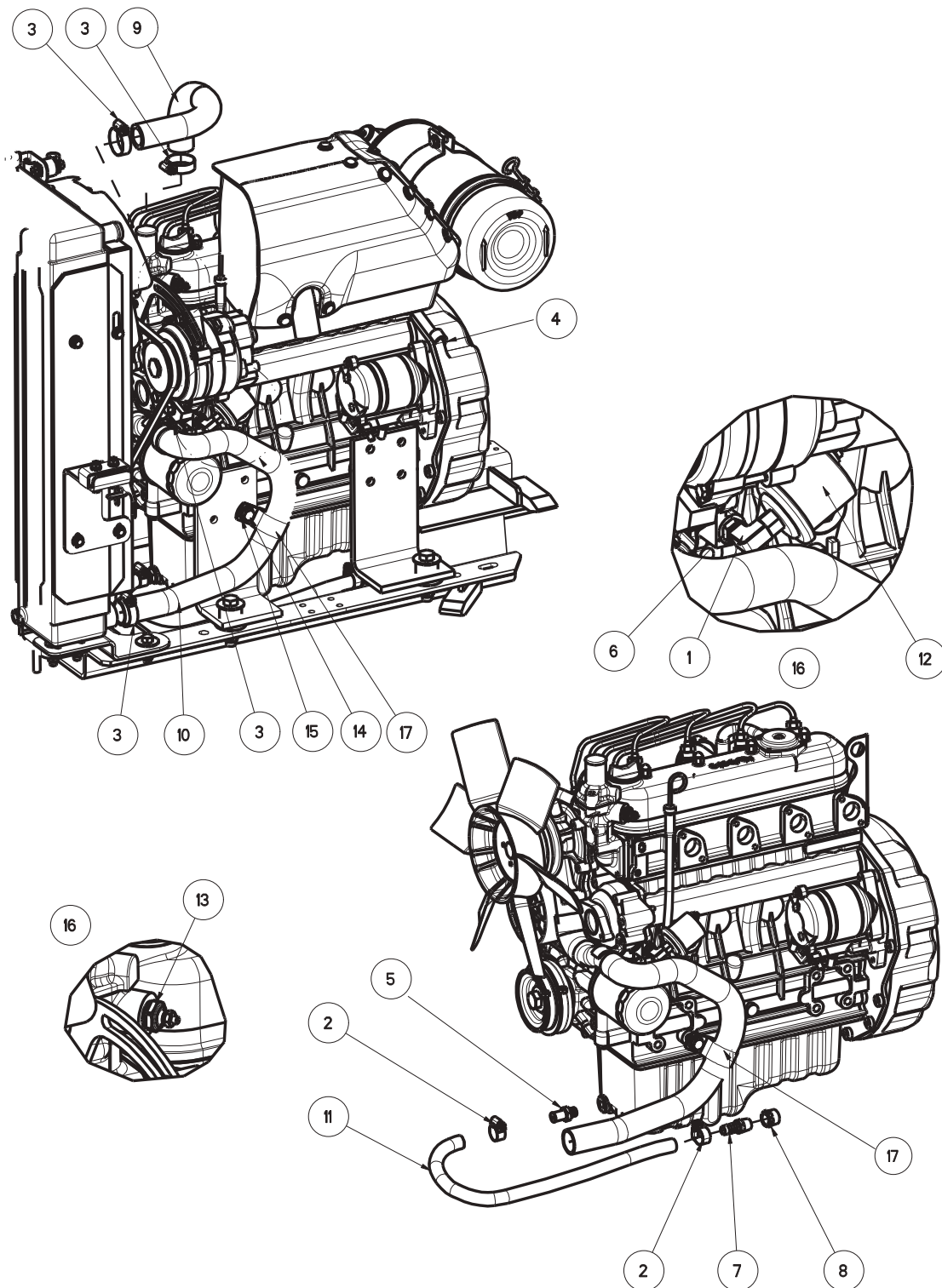
ENGINE KUBOTA V1505 DIESEL - RADIATOR MOUNTS DETAIL			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3301837	1	CLAMP-CABLE 1/2
2	3302543	1	CLAMP-SADDLE TYPE 5/16" DIA.
3	3336626	1	PLT- BASE, RADIATOR MOUNT
4	3336627	1	PLT-RADIATOR MNT, RH TOP
5	3336628	1	WELD - RADIATOR MNT, UPPER, DS
6	3336629	1	PLT - RADIATOR MNT, LH TOP
7	3336634	1	PLT - RADIATOR MNT
8	3344110	2	ISOLATOR-BONDED BUSHING BOTTOM
9	3344112	4	ISOLATOR- CYLINDRICAL, 1 DIA X 3/4 X 1/4-20,
10	3400007	4	SCR-CAR,3/8-16X1.25
11	3400043	6	SCR-HH 1/4-20 X .50 ZINC
12	3400079	4	NUT-HEX 3/8-16 ES
13	3400081	10	NUT-HEX 1/4-20 ES
14	3400089	8	WASHER-FLAT 1/4 STANDARD
15	3400103	4	WASHER-LOCK 1/4 SPLIT

ENGINE KUBOTA V1505 DIESEL - RADIATOR ASSEMBLY & MOUNTING BRACKETS



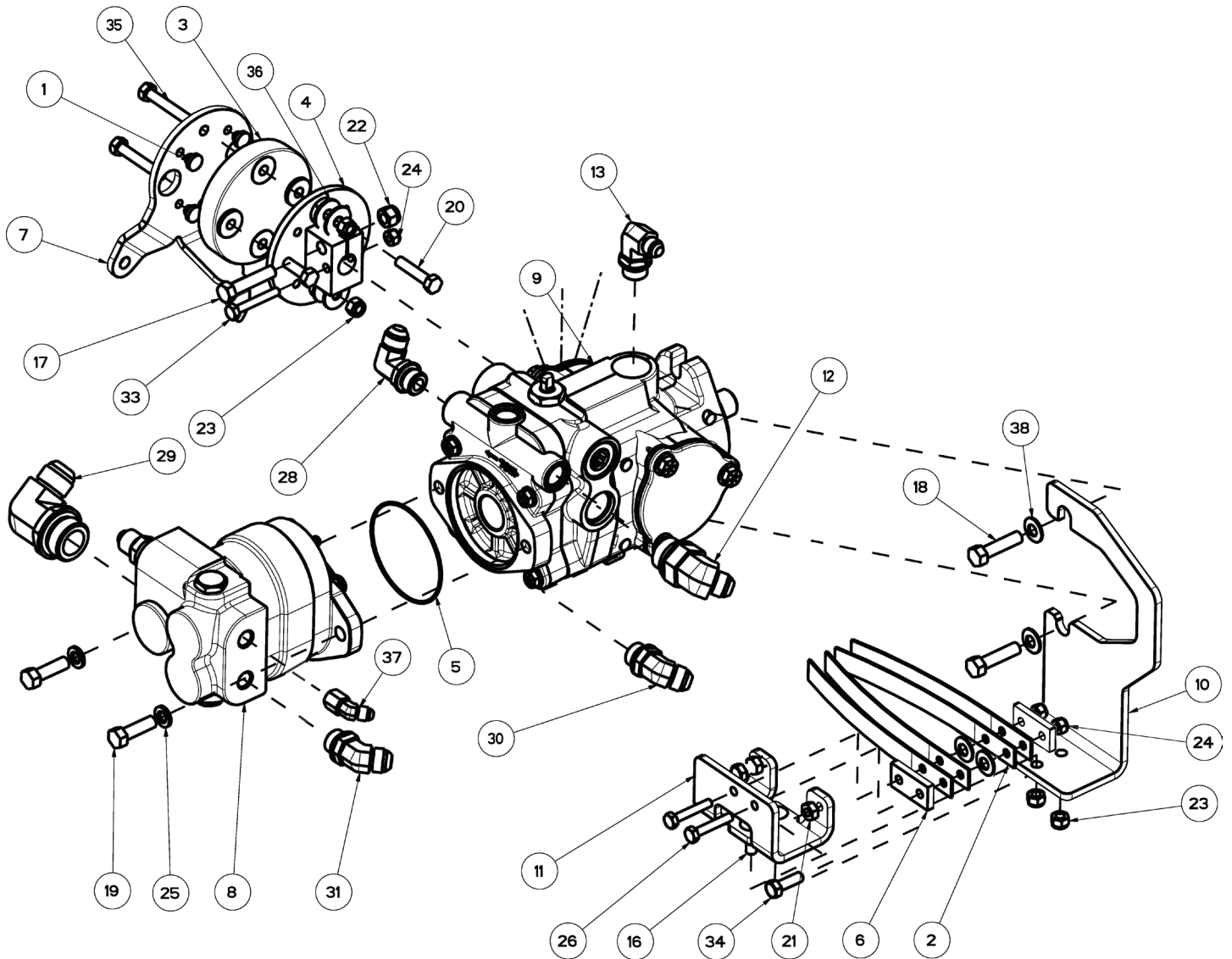
ENGINE KUBOTA V1505 DIESEL - RADIATOR ASSEMBLY & MOUNTING BRACKETS			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3302543	1	CLAMP-SADDLE TYPE 5/16" DIA.
2	3400103	7	WASHER-LOCK 1/4 SPLIT
3	3336103	1	RADIATOR-OIL COOLER COMBO
4	3336522	1	SHROUD-KUBOTA V1505 RADIATOR
5	3336626	1	PLT- BASE, RADIATOR MOUNT
6	3336627	1	PLT-RADIATOR MNT, RH TOP
7	3336629	1	PLT - RADIATOR MNT, LH TOP
8	3336632	1	PLT - EXHAUST MNT BRKT
9	3336633	1	PLT - EXHAUST MNT, UPPER BRKT
10	3336634	1	PLT - RADIATOR MNT
12	3344101	1	RESERVOIR 5.5" X 3.5" X 5.5"
13	3344110	2	ISOLATOR-BONDED BUSHING BOTTOM RADIATOR
14	3344112	2	ISOLATOR- CYLINDRICAL, 1 DIA X 3/4 X 1/4-20,
15	3400007	4	SCR-CAR,3/8-16X1.25
16	3400036	2	SCR-HEX, 5/16-18x0.75
17	3400042	1	SCR-HEX,1/4-20X0.75
18	3400043	7	SCR-HH 1/4-20 X .50 ZINC
19	3400071	4	NUT-HEX 1/4-20
20	3400079	6	NUT-HEX 3/8-16 ES
21	3400089	9	WASHER-FLAT 1/4 STANDARD
22	3400278	2	WASHER-FENDER 3/8
23	3401570-7W	4	WASHER-NORD-LOCK, 1/4, 0.53 OD

ENGINE KUBOTA V1505 DIESEL - RADIATOR ASSEMBLY, CLAMPS, HOSES & SENDERS



ENGINE KUBOTA V1505 DIESEL - RADIATOR ASSEMBLY, CLAMPS, HOSES & SENDERS			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3301720	1	FTG-90 ELL 1/8 FPT
2	3302144	2	CLAMP-HOSE 1/2 NOM
3	3302193	4	CLAMP-HOSE 1.25 NOM
4	3302543	1	CLAMP-SADDLE TYPE 5/16" DIA.
5	3303961	1	FTG-OIL PAN DRAIN KUBOTA
6	3305640	1	FTG-NIPPLE 1/8BPT-1/8NPT BRASS
7	3307829	1	FTG-HOSE BARB 1/2 X 3/8 MPT
8	3307830	1	FTG-CAP 3/8 FPT
9	3332643	1	HOSE-RAD UPPER 1505
10	3332644	1	HOSE-RAD LOWER 1505
11	3335639	1	HOSE - 1/2" ID X 24" PCV OIL DRAIN
12	3341069	1	SENDER-OIL PRESSURE 12V
13	3341070	1	SENDER-TEMPERATURE 12V
14	3400293	2	SCR-HEX, 10MMX1.25PX20MM
15	3400385	1	WASHER-CONICAL SPRING 3/8
16	3401122	0.100	565 PST. Thrd Slnt 50ml (WHITE LOCTITE 565)
17	3402005	1	CLAMP-HOSE SUPPORT

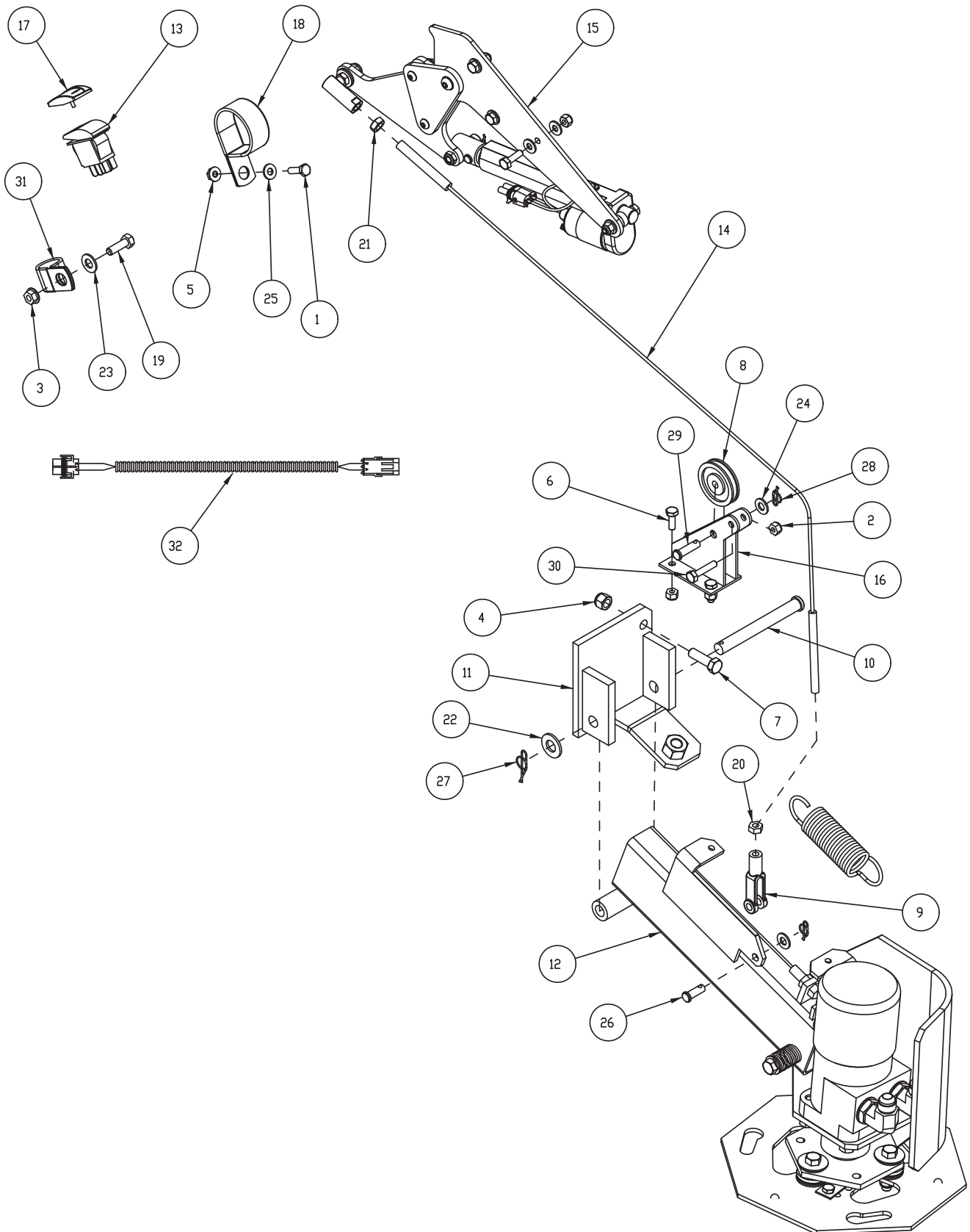
ENGINE KUBOTA V1505 DIESEL - HYDRAULIC PUMP DETAIL



ENGINE KUBOTA V1505 DIESEL - HYDRAULIC PUMP DETAIL

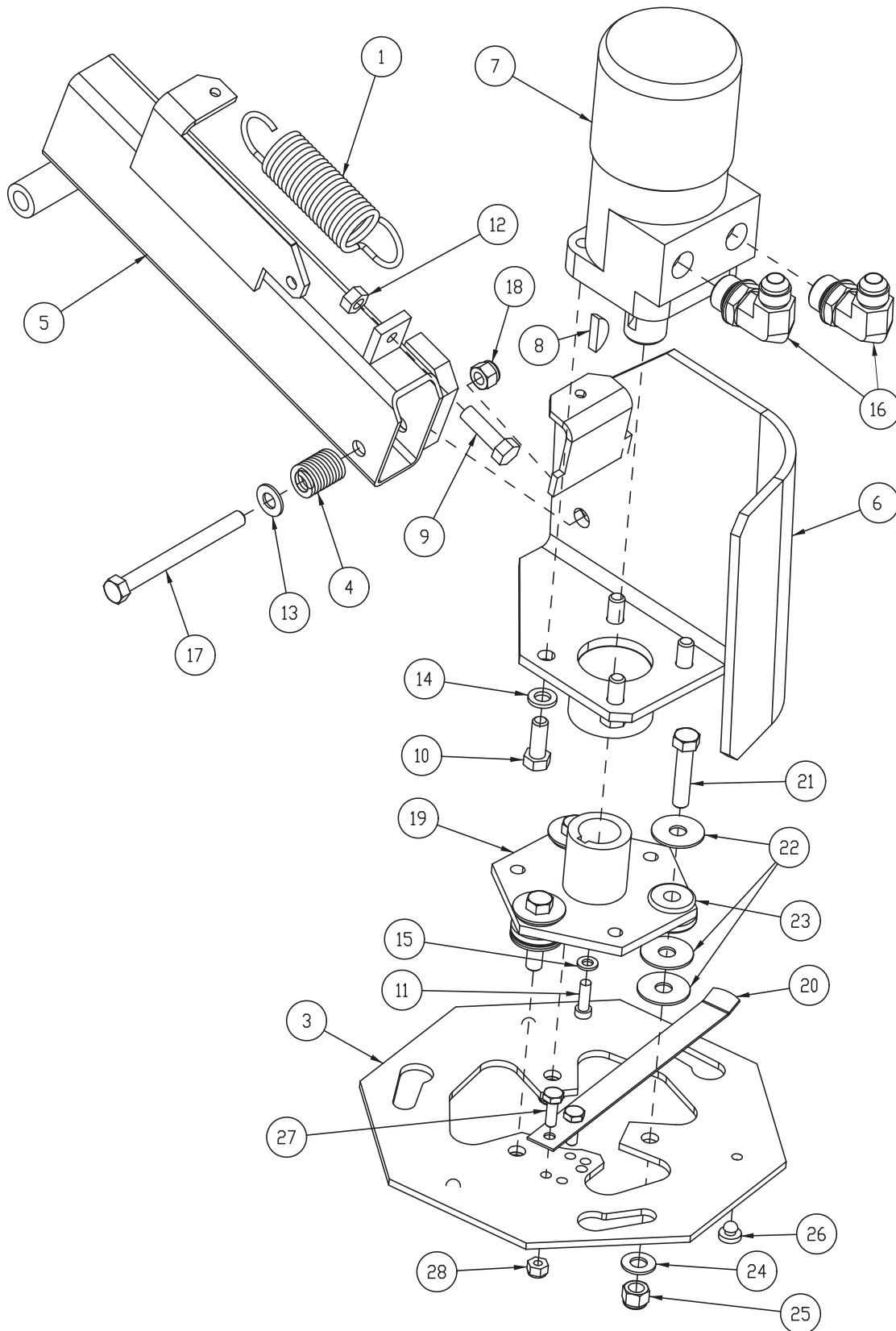
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3300526	8	BUMPER-RUBBER 1/4 ID X 1/8 THK
2	3300543	4	SPRING-FWD/REV RETURN
3	3301507	1	COUPLING-RUBBER, DIR CONTROL
4	3301544	1	WELD-DISC FWD/REV
5	3303711	1	O RING-STATIC SEAL 3.239 ID
6	3303918	2	SPACER-FWD/REV BRACKET
7	3307219	1	PLT-DIRECTIONAL CONT PLTD
8	3321397	1	PUMP-HYDRAULIC AUX W/FLOW DIVIDER
9	3335072	1	PUMP-PISTON, VARIABLE, 1.44 CI
10	3335200	1	PLT - FWD/REV SPRING MNT V1505
11	3335301	1	BRACKET - FWD/REV . 9X
12	675527	1	FTG-45 DEG STR THREAD ELBOW -8 ORFS TO
13	675520	1	FTG-STR THD ELBOW -6 ORFS TO -8 SAE
16	70-516-16	2	BLT-CARR 5/16-18 X 1 ZINC
17	3400027	1	SCR-HEX,3/8-16X1.75
18	3400028	2	SCR-HEX,3/8-16x1.50
19	3400029	2	SCR-HEX, 3/8-16x1.25
20	3400033	2	SCR-HEX,5/16-18X1.50
21	3400069	2	NUT-HEX 5/16-24
22	711380	1	NUT-NYLOC 3/8-16
23	711374	6	NUT-NYLOC 5/16-18
24	711373	3	NUT-NYLOC 1/4-20
25	3400101	2	WASHER-LOCK 3/8 SPLIT
26	3400149	2	SCR-HEX,1/4-20x1.50
28	675500	1	FTG-STR ELBOW -10 ORFS TO -12 SAE
29	675505	1	FTG-STR THD CONNECTR -16 ORFS TO -16 SAE
30	675502	1	FTG-45 DEG STR ELBOW -12 ORFS TO -12 SAE
31	675512	1	FTG-STR THD ELBOW -4 ORFS TO -8 SAE
33	3400173	1	SCR-HEX,1/4-20X1.75
34	3400221	2	SCR-HEX,5/16-24X1.00
35	3400231	2	SCR-HEX,5/16-18X2.0
36	3400233	4	WASHER-FENDER 5/16 1.00 OD
37	675528	1	FTG-STR THD ELBOW -8 ORFS TO -10 SAE
38	3400385	2	WASHER-CONICAL SPRING 3/8

OPTION - LH CURB BROOM KIT ASSEMBLY



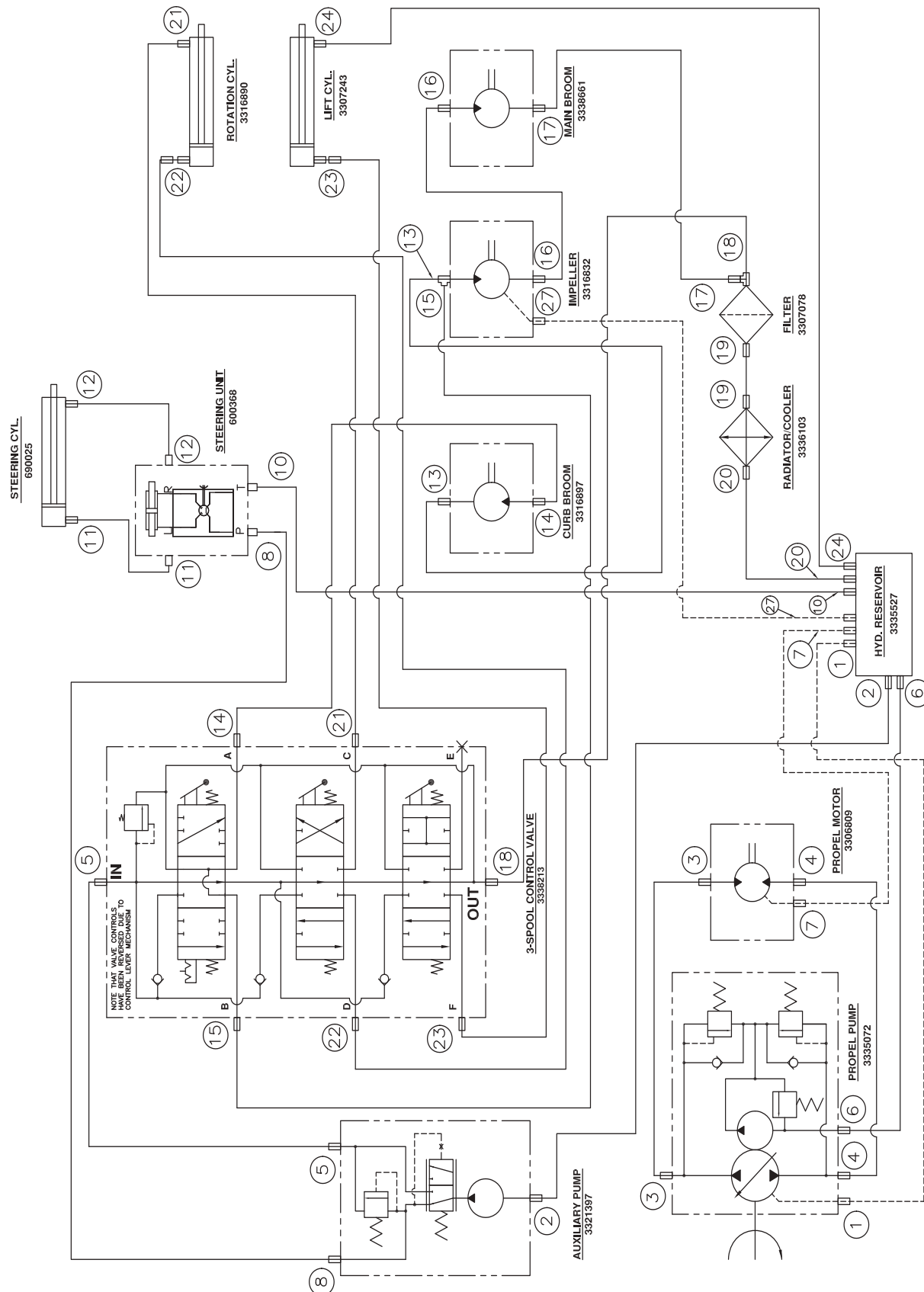
3338666 OPTION - LH CURB BROOM KIT ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	711206	1	BLT-HH 1/4-20 X .87 STL ZINC
2	711373	3	NUT-NYLOC 1/4-20
3	711379	1	NUT-FLANGED WIZZ 5/16-18
4	711380	2	NUT-NYLOC 3/8-16
5	711425	1	NUT-FLANGED WIZZ 1/4-20 STL ZP
6	713002	2	BLT-HH 1/4-20 X .75 #5 ZINC
7	713043	2	BLT-HH 3/8-16 X 1.25 #5
8	3300368	1	PULLEY-PLASTIC 2" x .25" GROOVE
9	3307642	1	CLEVIS-5/16 PLTD SW/A
10	3307794	1	PIN-CLEVIS 1/2 X 4-1/2 ZP
11	3317214	1	MNT-DUAL CURB BROOM PNTD
12	3319421	1	ASSY-DUAL CURB BROOM (SEE DETAIL, PAGES 90-91)
13	3332713	1	SWITCH-DOUBLE SCRUB BROOM
14	3334946	1	CABLE-SIDE BROOM, 33" LG, 1/8"D
15	3335420	1	ASSY- SIDE BROOM LIFT LH
16	3335422	1	WELD-PULLEY LH SIDE BROOM
17	3342273	1	COVER-SWITCH, CARLING, BLACK W/LENS
18	3343539	1	CLAMP-P TYPE, 2 DIA
19	3400035	1	SCR-HEX,5/16-18X1.00 ZP
20	3400069	1	NUT-HEX 5/16-24 ZP
21	3400075	1	NUT-HEX JAM 3/8-24 ZP
22	3400086	1	WASHER-FLAT 1/2 STANDARD ZP
23	3400087	1	WASHER-FLAT 3/8 STANDARD ZP
24	3400088	2	WASHER-FLAT 5/16 IDx.688 ODx.065 THK
25	3400089	1	WASHER-FLAT 1/4 STANDARD ZP
26	3400118	1	PIN-CLEVIS 5/16x7/8 ZP
27	3400124	1	PIN-COTTER 5/8 RUE-RING
28	3400125	2	RING-RUE 3/8 COTTER PIN
29	3400184	1	PIN-CLEVIS 5/16 X 1-1/8 ZP
30	3400227	1	SCR-HEX,1/4-20X1.25 ZP
31	3400999	1	CLAMP-HOSE 1-1/8" DIA STEEL VINYL COATE
32	3317219P	1	HARNESS-DUAL CURB BRM, 9X
-	675427	1	HOSE-LH CB MTR IN TO RT CB OUT 170" (NOT SHOWN)
-	675428	1	HOSE-LH CB MTR OUT TO IMP TEE 100" (NOT SHOWN)
-	3338666	-	ASSY - DUAL CURB BROOM

OPTION - DUAL CURB BROOM SUB-ASSEMBLY



DUAL CURB BROOM SUB-ASSEMBLY			
ITEM	PART NO.	REQ'D	DESCRIPTION
1	3302599	1	SPRING-EXT LOOPS-IN-LINE ZP
3	3301262	1	PLATE-GIMBAL SC HD
4	3306179	1	SPRING-COMPRESSION, CURB BROOM
5	3309778	1	LH CURB BROOM ARM PNTD
6	3309782	1	LH SIDE BROOM MOUNT PNTD
7	3316897	1	MOTOR-HYD CURB BRM
8	3330338	1	KEY-SHAFT D-FOSS CB/MB/SC MTRS (REPLACEMENT)
9	3400029	1	SCR-HEX, 3/8-16x1.25 ZP
10	3400030	4	SCR-HEX,3/8-16X1.00, GRADE 5, ZP
11	3400049	1	SCR-SOCKET HEAD,1/4-20X0.75 ZP NYLOCK
12	3400068	1	NUT-HEX 3/8-16 ZP
13	3400087	1	WASHER-FLAT 3/8 STANDARD ZP
14	3400101	4	WASHER-LOCK 3/8 SPLIT ZP
15	3400103	1	WASHER-LOCK 1/4 SPLIT ZP
16	3400155	2	FTG-90, 7/8-14 TO #8
17	3400258	1	SCR-HEX,3/8-24X4.00 ZP
18	3400342	1	NUT-HEX 3/8-24 ES ZP
19	3300875	1	DRIVE HUB SC BR
20	3302058	1	BAR-CURB BROOM RETAINER
21	3400027	3	SCR-HEX,3/8-16X1.75 ZP
22	3400278	9	WASHER-FENDER 3/8
23	3300465	3	ISOLATOR-RUBBER (.375IDx.81OD)
24	3400087	3	WASHER-FLAT 3/8 STANDARD ZP
25	711380	3	NUT-NYLOC 3/8-16
26	3300526	3	BUMPER-RUBBER 1/4IDx1/8 THK
27	713002	2	BLT-HH 1/4-20 X .75 #5 ZINC
28	711373	2	NUT-NYLOC 1/4-20
-	3319421	1	SUB-ASSY DUAL CURB BROOM

HYDRAULIC SCHEMATIC 9X



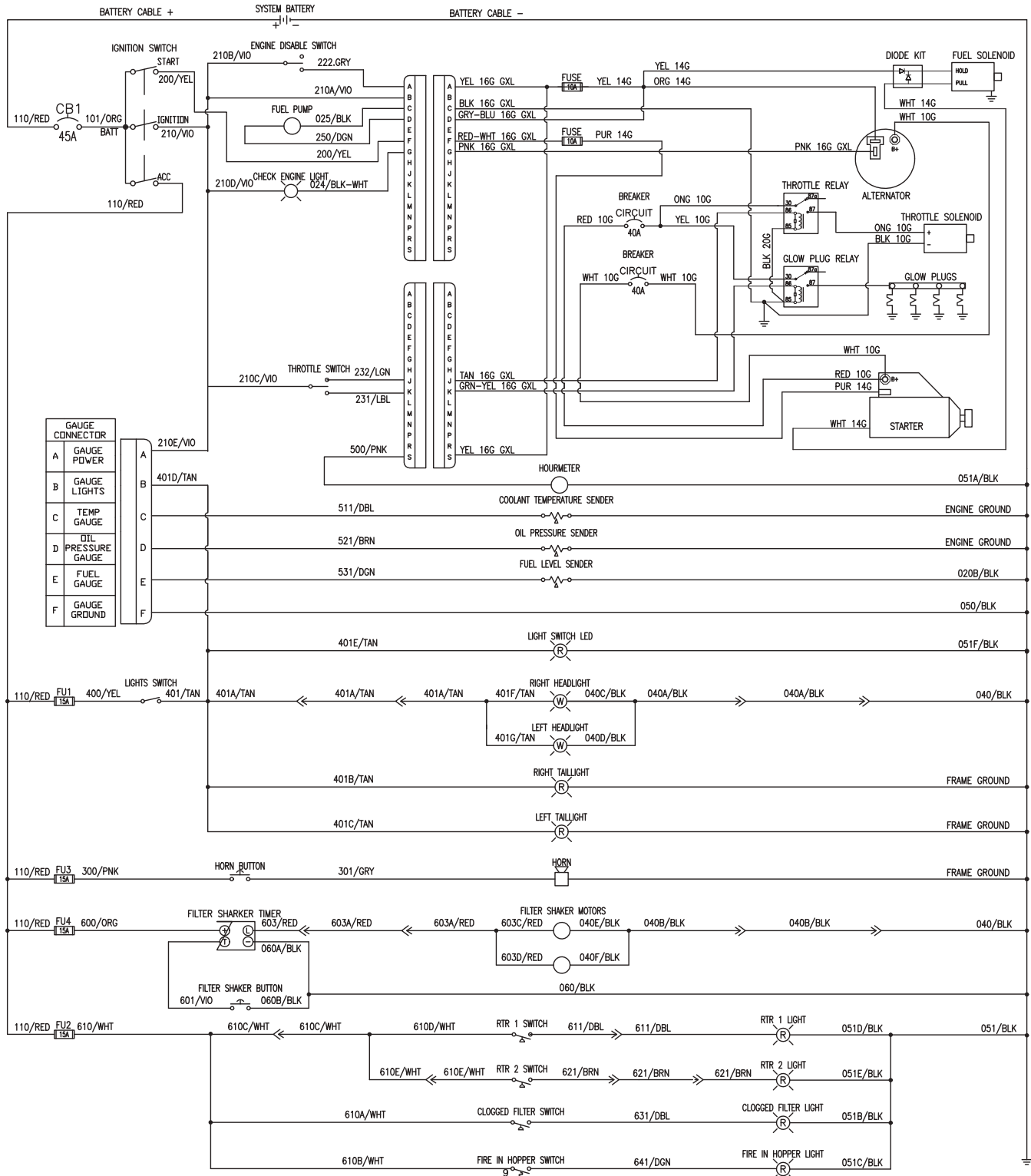
3334846, Sheet 1 of 2, Rev A, 12/12/2014

HYDRAULIC SCHEMATIC 9X

Adapter Assignment																	
No.	Adapter 1	hose assy #	Adapter 2	RESV	HYD PUMP	AUX PUMP	RW MTR	CONT VALVE	PS UNIT	ROT ACT	CB MTR	IMP MTR	MB MTR	FILTER RAD	ROT CYL	LIFT CYL	Comments:
1	675524	675400	675527	1	2												Reservoir to Propel pump inlet.
2	675506	675401	675505	1		2											Reservoir to Aux pump inlet.
3	675500	675402	675501		1		2										Propel pump drivers side to Propel motor port A.
4	675501	675403	675502		2		1										Propel motor port B to Propel pump passenger side.
5	675528	675404	675524			1		2									Aux pump to 3-spool control vavle port IN.
6	675520	675405	675521	2	1												Propel pump to reservoir.
7	675508	675406	675510	2			1										Propel motor to reservoir, case drain.
8	675512	675407	675511			1			2								Aux pump to Steering unit port P.
9																	
10	675552	675409	675519	2					1								Steering unit to reservoir.
11	675552	675410	675518						1	2							Steering unit L port to port P1 on steering cylinder.
12	675515	675411	675518						1	2							Steering unit R port to port P2 on steering cylinder.
13		675412	675528								1	2					Inlet tee to curb broom out.
14	675524	675413	675528					2			1						Valve port A to curb motor inlet port A.
15	675524	675414	675525					1			2						Control valve outlet to Impeller inlet tee. See hose 13 for details.
16	675523	675415	675523								1	2					From impeller out port to Main broom in port A.
17	675523	675416	675529 / 675526										1	2			From main broom outlet Port B to filter inlet.
18	675524	675417						1						2			From T port on control valve to filter inlet tee. See hose 17.
19	675537	675418	675530											1	2		From filter outlet to Cooler inlet (top of cooler pack).
20	675503	675419	675503	2											1		From cooler outlet (bottom of cooler) to reservoir.
21	675513	675420	675507					1								2	From control valve port C to rod end of rotate cylinder.
22	675507 / 675547	675421	675513					2								1	From piston end of rotate cylinder to control valve port D.
23	675518 / 675550	675422	675513					2									From piston end of lift cylinder to control valve port F.
24	675518	675423	675510	2												1	From rod end of lift cylinder to reservoir.
27	675508	675426	675510	2								1					From impeller case drain to reservoir.

3334846, Sheet 2 of 2, Rev A, 12/12/2014

ELECTRICAL SCHEMATIC WITH KUBOTA V150S



3336093, Rev *, 02/08/2011

WARRANTY

Revision J
 Effective January 2014
 PowerBoss Made Simple Industrial Limited Warranty

Minuteman International owner of PowerBoss warrants to the original purchaser/user that the product is free from defects in workmanship and materials under normal use. PowerBoss will, at its option, repair or replace without charge, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals. All warranty claims must be submitted through and approved by factory authorized repair stations.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care. Parts not manufactured by PowerBoss are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman International for procedures in warranty claims against these manufacturers.

Special warning to purchaser -- Use of replacement parts not manufactured by PowerBoss or its designated licensees, will void all warranties expressed or implied. A potential health hazard exists without original equipment replacement.

All warranted items become the sole property of Minuteman International or PowerBoss or its original manufacturer, whichever the case may be.

PowerBoss disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. PowerBoss assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. PowerBoss is not responsible for costs or repairs performed by persons other than those specifically authorized by PowerBoss. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctions of the product. If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

This warranty gives you specific legal rights, and you may have other rights, which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

	Travel *	Labor	Parts	Engine	Extended Warranty	Costs
Walk Behind						****
Battery Sweepers	90 Days	12 months	12 months	N/A	N/A	-
IC Sweepers	90 Days	12 months	12 months	Through Eng. Mfg.	N/A	-
Battery Scrubbers	90 Days	24 months	36 months	N/A	N/A	-
Riders						
Battery Scrubbers	90 Days	24 months	36 months or 2000 hr.	N/A	36 months parts + 24 labor (or 3000 Hours)	5%
IC Sweeper/Scrubbers 82 & 90	90 Days	6 months	24 months or 2000 hr.	24 months or 3000 hrs**	36 months parts + 24 months labor (or 3000 Hours) + 180 days travel	5%
I.C. Sweepers 9X, 10X	90 days	6 months	48 months or 3000 hrs.	60 months or 3000 hrs**	48 months parts + 24 months labor (or 3000 Hours) + 180 days travel	5%
NAUTILUS Scrubber	180 Days	24 months	36 months or 2000 hr.	36 months or 2000 hrs**	48 months parts + 24 months labor (or 3000 Hours) + 180 days travel	3%
All Rider, I.C. (excluding APEX series)					Bumper to Bumper 5000 hr max. 48 months parts, 48 months labor, 180 days travel	8%
Exceptions						
Apex Series Sweeper	90 Days	12 months	12 months or 1000 hr.	12 months or 1000 hrs**	24 months parts + 24 months labor (or 2000 Hours)	5%
6X Sweeper	90 Days	6 months	24 months or 2000 hr.	24 months or 2000 hours**	36 months parts + 24 months labor (or 3000 Hours) + 180 day travel	5%

Tank Bladders

Polyethylene plastic tanks

Batteries

Chargers

Aftermarket Replacement parts

*Two-Hour Cap Per Service Call

**Through Engine Manufacturer. See Section 3 of Warranty Manual for Engine Warranty Exceptions

*** Based Upon Dealer's Certification Status:

Extended Warranty MUST Be Signed Up Within 30 Days of Delivery to End User

(Dealer Has 1 Year From Receiving Machine To Sign Up For Extended Warranty)

Eight years/ no additional labor

Ten years/ no additional labor

0-3 months full replacement, 4-12 prorated credit

One-year replacement

Ninety days from date of purchase

***All above labor and travel reimbursed at 65% or 75% of the published shop rate.



“The Power of Clean”

**PowerBoss® Is a Full Line Manufacturer of Sweepers and Scrubbers,
for Industrial Facilities.**

PowerBoss®, Minuteman International, Inc. 14N845 U.S. Route 20 Pingree Grove, Illinois 60140

Phone: 800-323-9420 www.PowerBoss.com email: tech@powerboss.com

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