

PARTS MANUAL

EXCEL 470 Reach Mower



Edition 1.2 - Dec 2011

PART No. 8999064

Spearhead

Spearhead Excel 470

Ordering Your Part's

When ordering parts please refer to your parts list to help your dealer with your order.

Part number and quantity
Description
Machine model number
Serial number of the machine
Delivery instructions (e.g. next day).

Delivery is normally via carrier direct to your dealer. Please check with your dealer for stock availability and arrangement of dispatch. Ensure you or your dealer has sufficient cover for parts required outside factory hours.

When ordering your seal kits please quote both codes stamped on the base of the cylinder.

Important Note

The information contained in this manual is correct at the time of publication. However, in the course of constant development, changes in specification are inevitable. Should you find the information given in this book different to the machine it relates to, please contact the "After Sales Department" for advice.

Key:

(LH) = Left hand
(RH) = Right hand

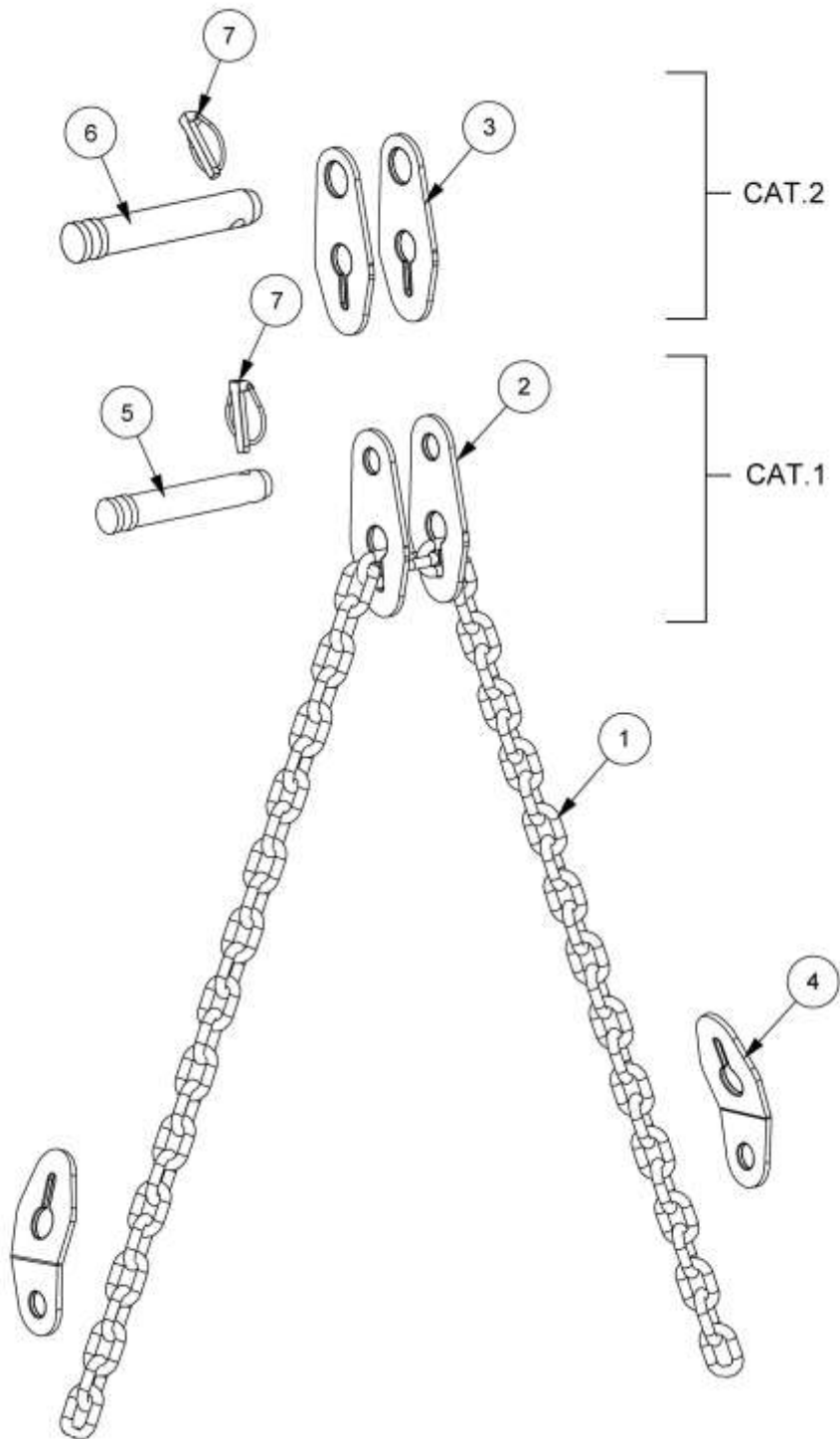
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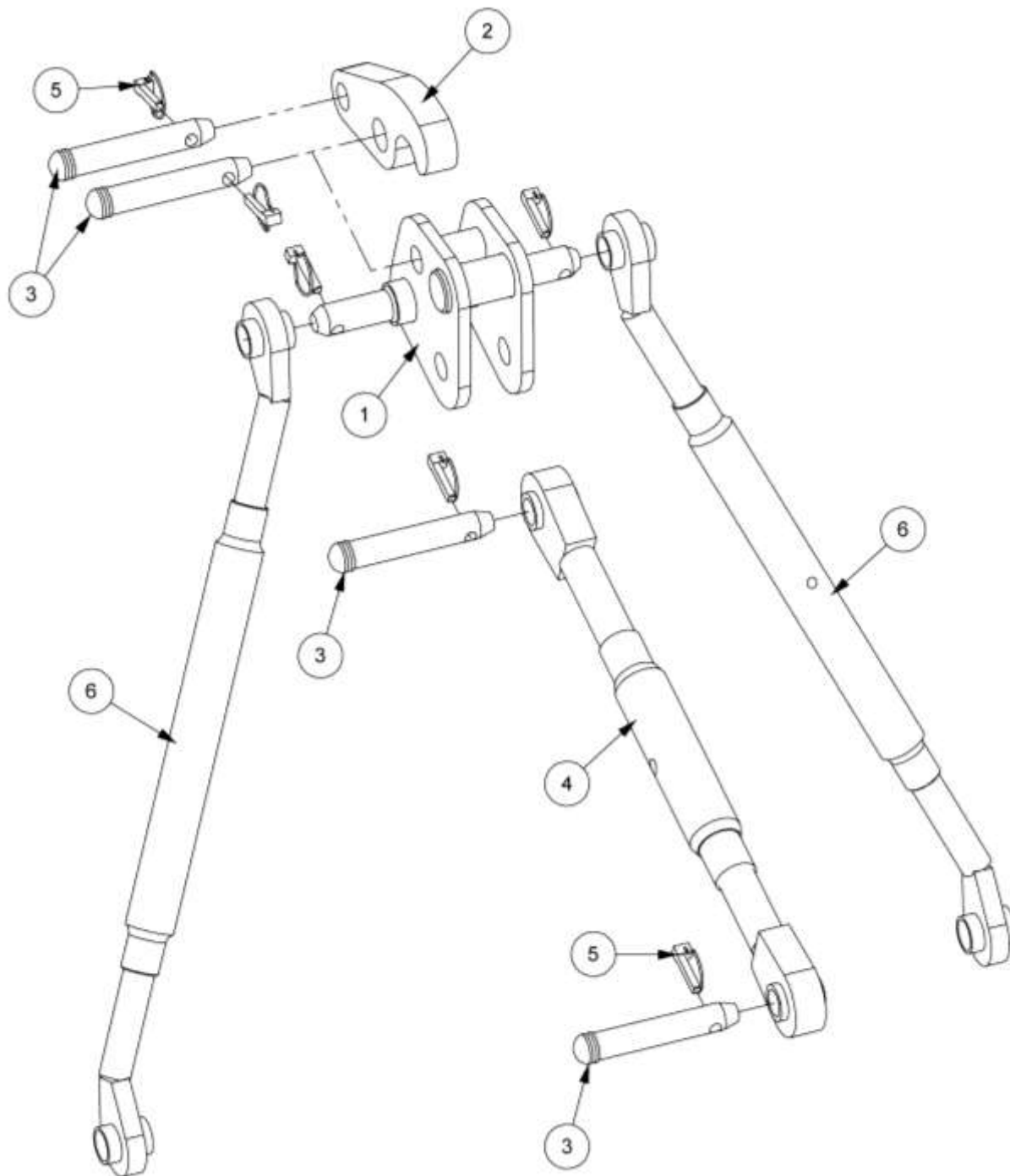
Stabiliser Kit – Chain Type



REF.	QTY.	PART No.	DESCRIPTION
		212.213	STABILISER KIT - Chain Type
1	1	10.105.01	CHAIN (1800mm)
2	2	10.100.01	STABILISER PLATE - CAT1
3	2	09.999.01	STABILISER PLATE - CAT2
4	2	09.998.01	STABILISER PLATE
5	1	03.874.01	PIN
6	1	03.873.01	PIN
7	4	0431217	LINCH PIN - MEDIUM

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Stabiliser Kit – Link Type
Module: 212.251



REF.	QTY.	PART No.	DESCRIPTION
		212.251	STABILISER KIT ASSEMBLY
1	1	46940.01	TOP LINK YOKE
2	1	46940.02	TOP LINK BRACKET
3	4	03.873.01	PIN
4	1	07.584.02	TOP LINK
5	6	00.372.01	LINCH PIN
6	2	46939.01	LINK ASSEMBLY

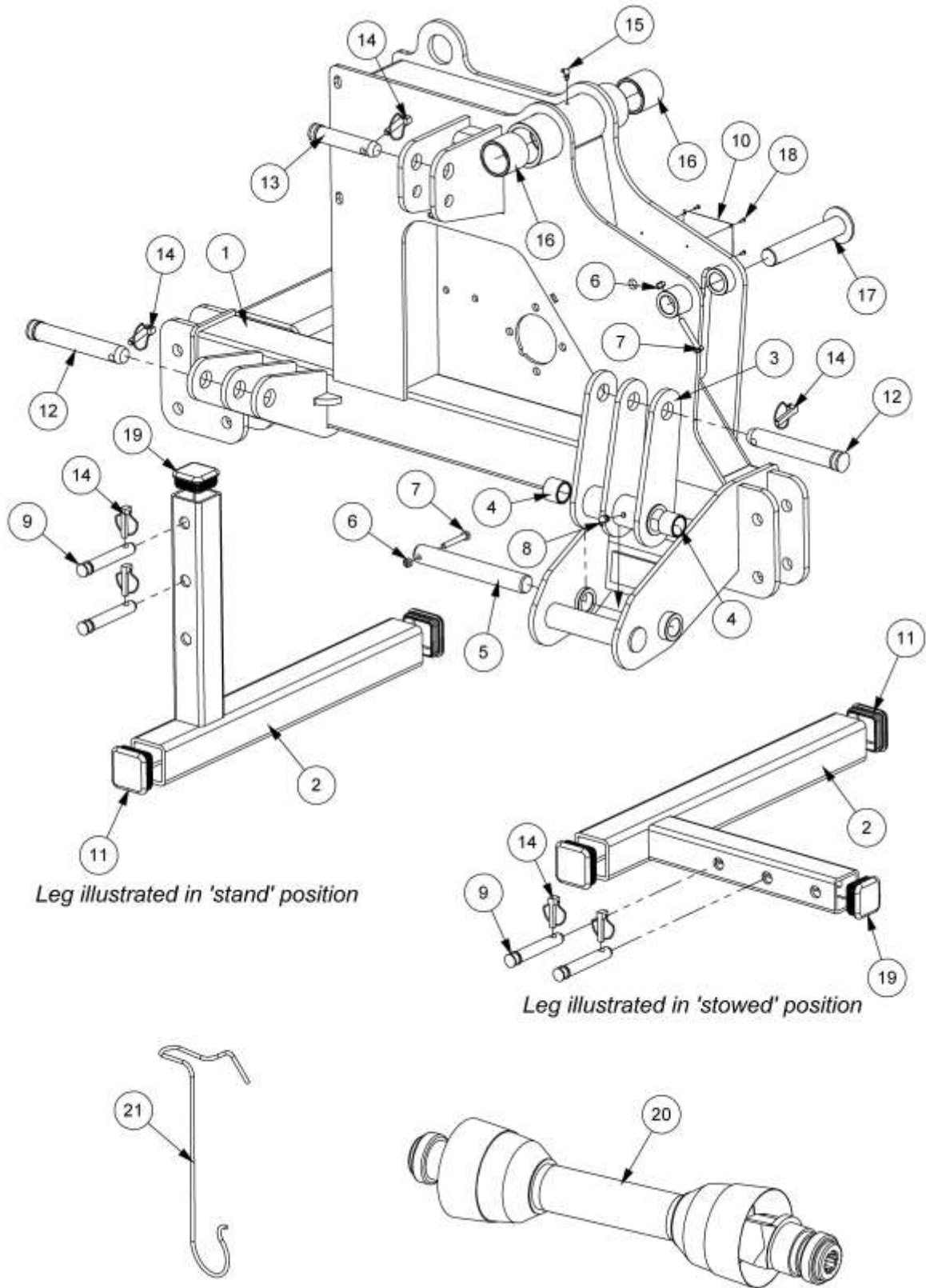
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Main Frame Assembly

Modules:

212.200 – L/H Build

212.252 – R/H Build



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Main Frame Assembly

REF.	QTY.	PART No.	DESCRIPTION
		212.200	MAIN FRAME ASSEMBLY - L/H Build
		212.252	MAIN FRAME ASSEMBLY - R/H Build
1	1	212.060	MAINFRAME - L/H Build
	1	212.067	MAINFRAME - R/H Build
2	2	212.015	STAND LEG
3	1	42118.01	BREAKOUT LINK - L/H Build
	1	42118.02	BREAKOUT LINK - R/H Build
4	2	08.297.04	BUSH
5	1	03.654.75	PIN
6	2	05.287.01	SELF-LOCKING NUT
7	2	05.291.06	BOLT
8	1	05.963.04	GREASE NIPPLE
9	4	T1657	LINKAGE PIN
10	1	45429.01	SERIAL No. PLATE
11	4	45210.01	PLASTIC PLUG
12	2	212.028	PIN
13	1	212.030	PIN
14	7	00.372.01	LINCH PIN
15	1	05.953.05	GREASE NIPPLE
16	2	08.297.01	BUSH
17	1	212.031	PIN
18	4	7103230	POP RIVET
19	2	7191108	PLASTIC PLUG
20	1	T7749	PTO SHAFT
21	1	21160.03	PTO HOOK SUPPORT

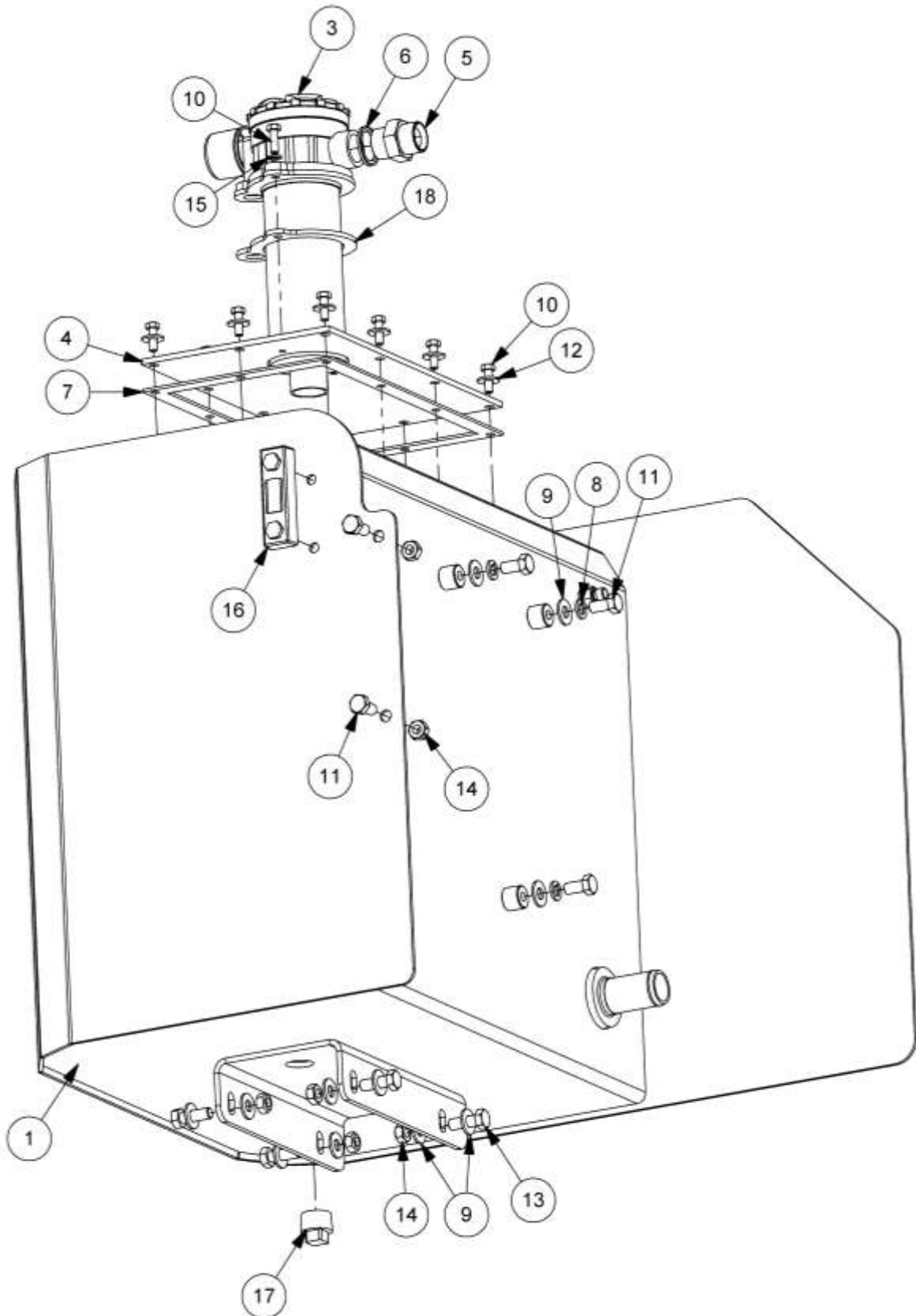
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Hydraulic Tank Assembly

Modules:

212.201 - L/H Build

212.253 - R/H Build



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Hydraulic Tank Assembly

REF.	QTY.	PART No.	DESCRIPTION
		212.201	TANK ASSEMBLY - L/H Build
		212.253	TANK ASSEMBLY - R/H Build
1	1	212.004	TANK - L/H Build
	1	212.066	TANK - R/H Build
2	1	8401095	STRAINER
3	1	212.013	FILTER ASSEMBLY c/w Breather
	1	8401096	BREATHER
4	1	212.029	PLATE
5	1	05.434.01	ADAPTOR
6	1	05.290.07	BONDED SEAL
7	1	08.605.01	GASKET
8	3	05.282.03	SPRING WASHER
9	11	05.281.03	FLAT WASHER
10	12	05.264.02	SETSCREW
11	5	05.264.22	SETSCREW
12	10	9100105	FLAT WASHER
13	4	05.264.24	SETSCREW
14	6	05.287.03	SELF-LOCKING NUT
15	2	05.282.01	SPRING WASHER
16	1	08.921.01	FLUID LEVEL GAUGE
17	1	8581203	PLUG
18	1	212.013.06	FILTER SEAL

REF.	QTY.	PART No.	DESCRIPTION
		212.013	TANK FILTER ASSEMBLY
1	1	212.013.01	FILTER BODY
2	1	212.013.02	FILTER HOUSING
3	1	8401095	FILTER
4	1	212.013.04	FILLER CAP
5	1	212.013.05	SPRING
6	1	212.013.06	FILTER SEAL
7	1	212.013.07	O RING
8	1	212.013.08	O RING
9	1	212.013.09	O RING
10	1	8401096	BREATHER

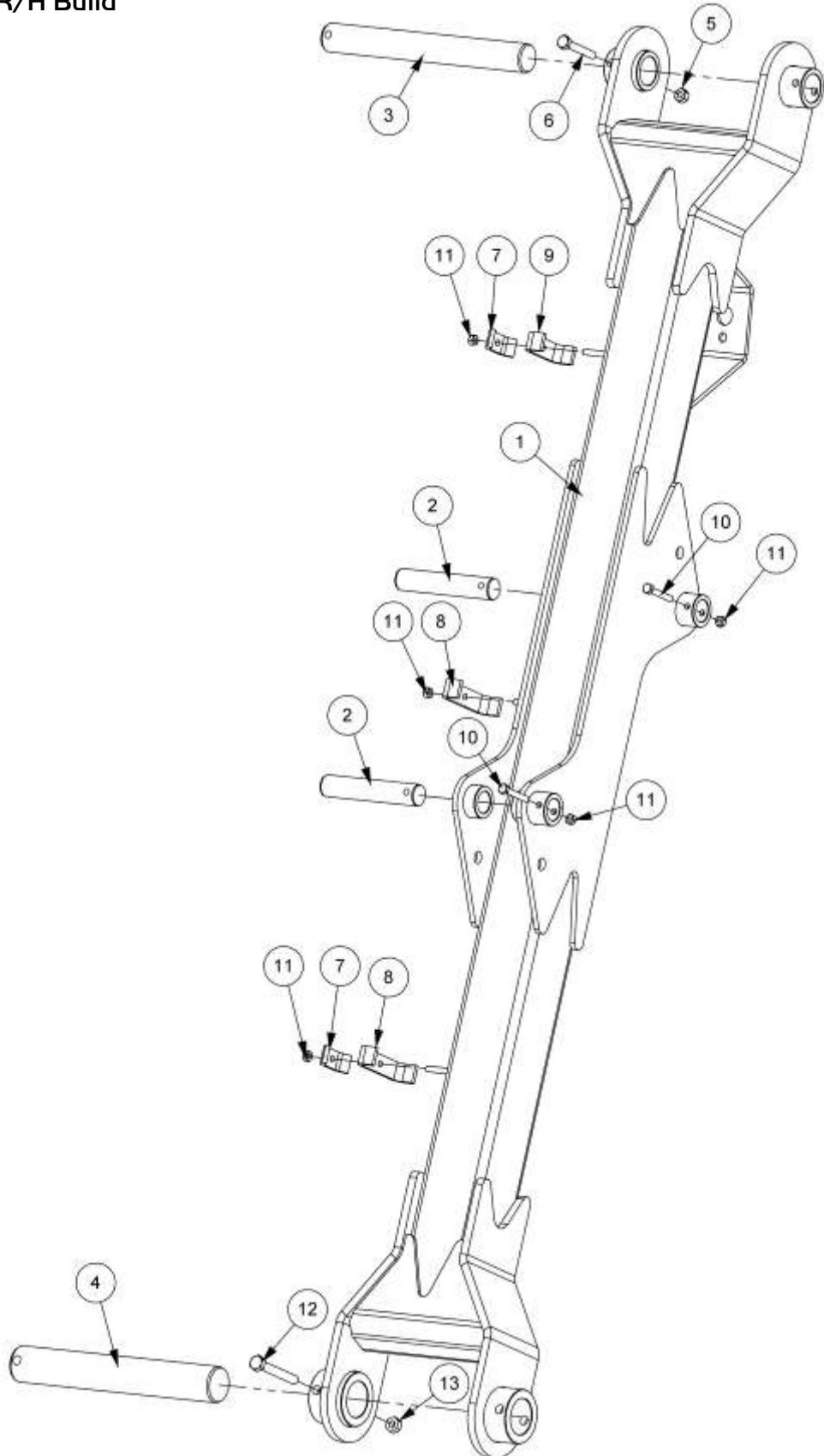
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Main Arm Assembly

Modules:

212.244 - L/H Build

212.254 - R/H Build



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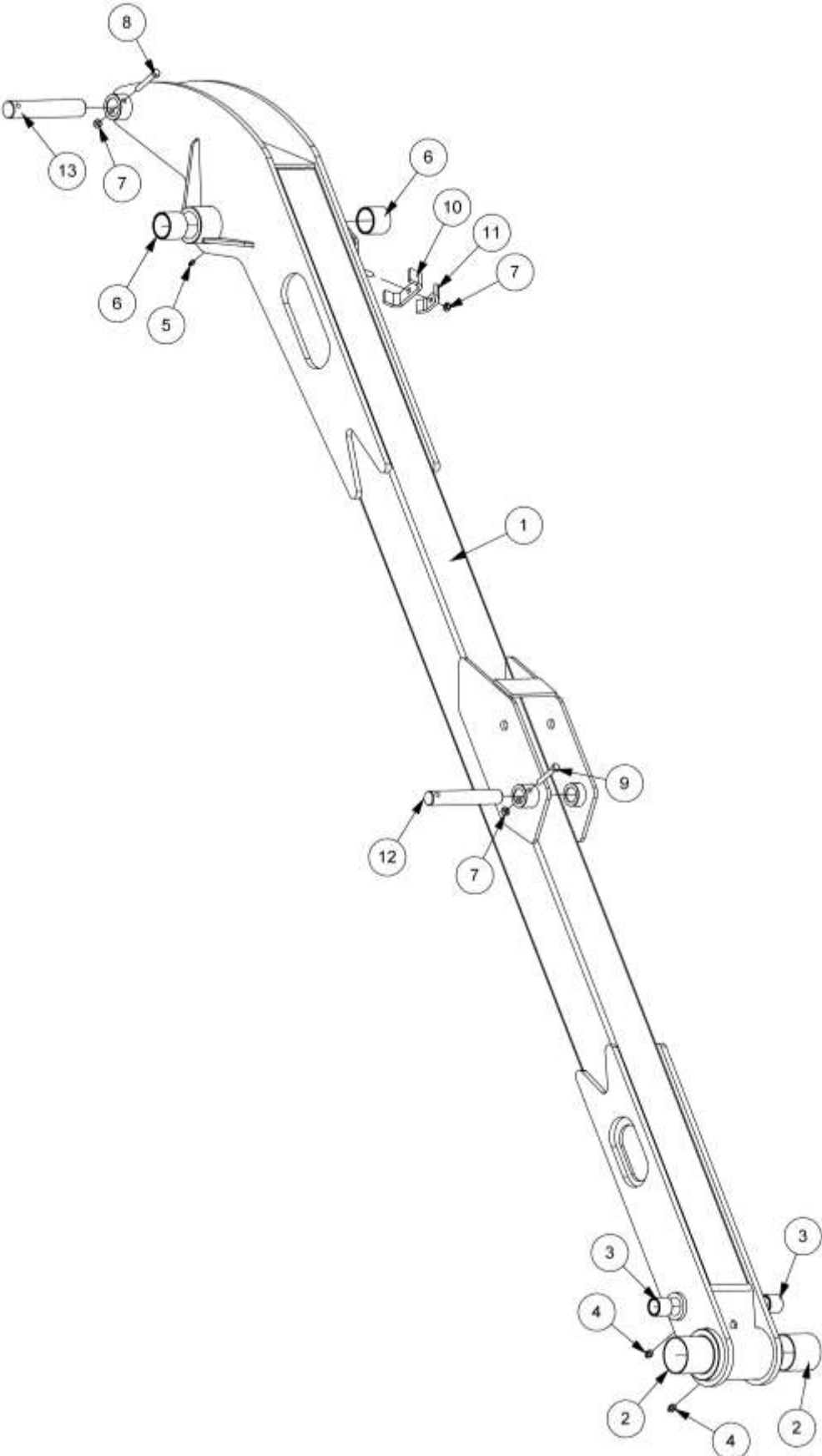
Main Arm Assembly

REF.	QTY.	PART No.	DESCRIPTION
		212.244	MAIN ARM ASSEMBLY - L/H Build
		212.254	MAIN ARM ASSEMBLY - R/H Build
1	1	212.054	MAIN ARM - L/H Build
	1	212.063	MAIN ARM - R/H Build
2	2	212.019	PIN
3	1	212.032	PIN
4	1	212.033	PIN
5	1	05.287.02	SELF-LOCKING NUT
6	1	05.291.19	BOLT
7	2	187.047	PIPE CLAMP
8	2	212.034	HOSE CLAMP
9	1	212.035	PIPE CLAMP
10	2	05.291.06	BOLT
11	5	05.287.01	SELF-LOCKING NUT
12	1	9213186	BOLT
13	1	9143006	SELF-LOCKING NUT

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Dipper Arm Assembly

Modules:
212.245 - L/H Build
212.2553 - R/H Build



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Dipper Arm Assembly

REF.	QTY.	PART No.	DESCRIPTION
		212.245	DIPPER ARM ASSEMBLY - L/H Build
		212.255	DIPPER ARM ASSEMBLY - R/H Build
1	1	212.055	DIPPER ARM - L/H Build
	1	212.064	DIPPER ARM - R/H Build
2	2	T7860	BUSH
3	2	30.207.70	BUSH
4	2	05.953.03	GREASE NIPPLE
5	1	05.953.01	GREASE NIPPLE
6	2	08.297.02	BUSH
7	3	05.287.01	SELF-LOCKING NUT
8	1	05.291.06	BOLT
9	1	05.291.05	BOLT
10	1	212.035	PIPE CLAMP
11	1	187.047	PIPE CLAMP
12	1	212.036	PIN
13	1	212.037	PIN
14	1	212.059	STUD

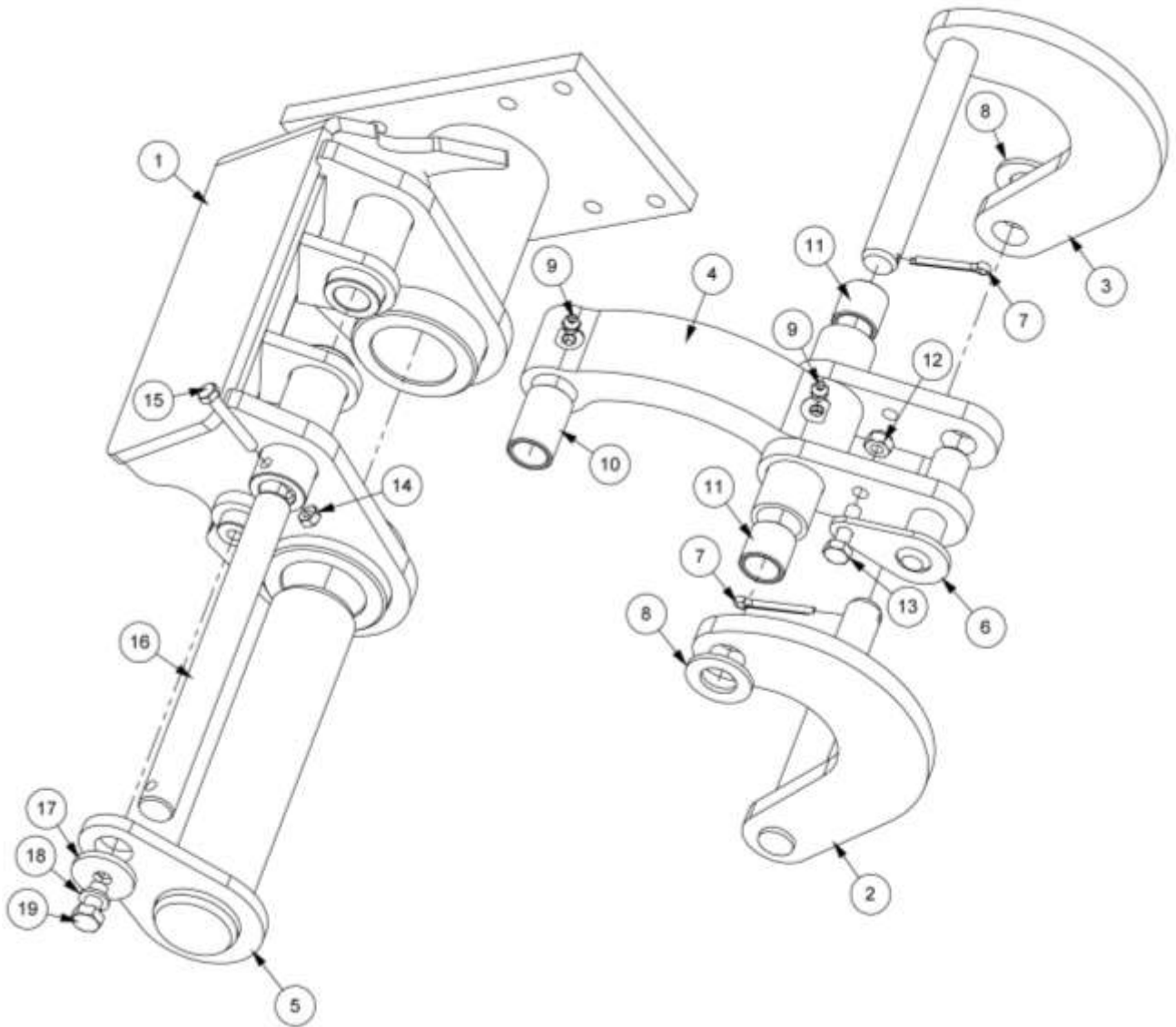
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Cowl Assembly (Head Angling Mechanism)

Modules:

212.210 - L/H Build

212.211 - R/H Build



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Cowl Assembly (Head Angling Mechanism)

REF.	QTY.	PART No.	DESCRIPTION
		212.210	COWL ASSEMBLY - L/H Build
		212.211	COWL ASSEMBLY - R/H Build
1	1	212.080	COWL BRACKET - L/H Build
	1	212.081	COWL BRACKET - R/H Build
2	1	199.169	RADIUS ARM - OUTER
3	1	199.170	RADIUS ARM - INNER
4	1	199.007	SLAVE LINK
5	1	212.018	COWL PIVOT PIN
6	1	199.016	ANGLE PIN
7	2	05.284.14	SPLIT COTTER
8	2	05.281.16	FLAT WASHER
9	2	05.953.03	GREASE NIPPLE
10	1	08.297.09	BUSH
11	2	30.207.70	BUSH
12	1	9143005	CLEVELOK NUT
13	1	9313075	SETSCREW
14	1	05.287.01	SELF-LOCKING NUT
15	1	05.291.06	BOLT
16	1	212.026	PIN
17	1	05.234.01	WASHER
18	1	05.282.03	SPRING WASHER
19	1	05.264.22	SETSCREW

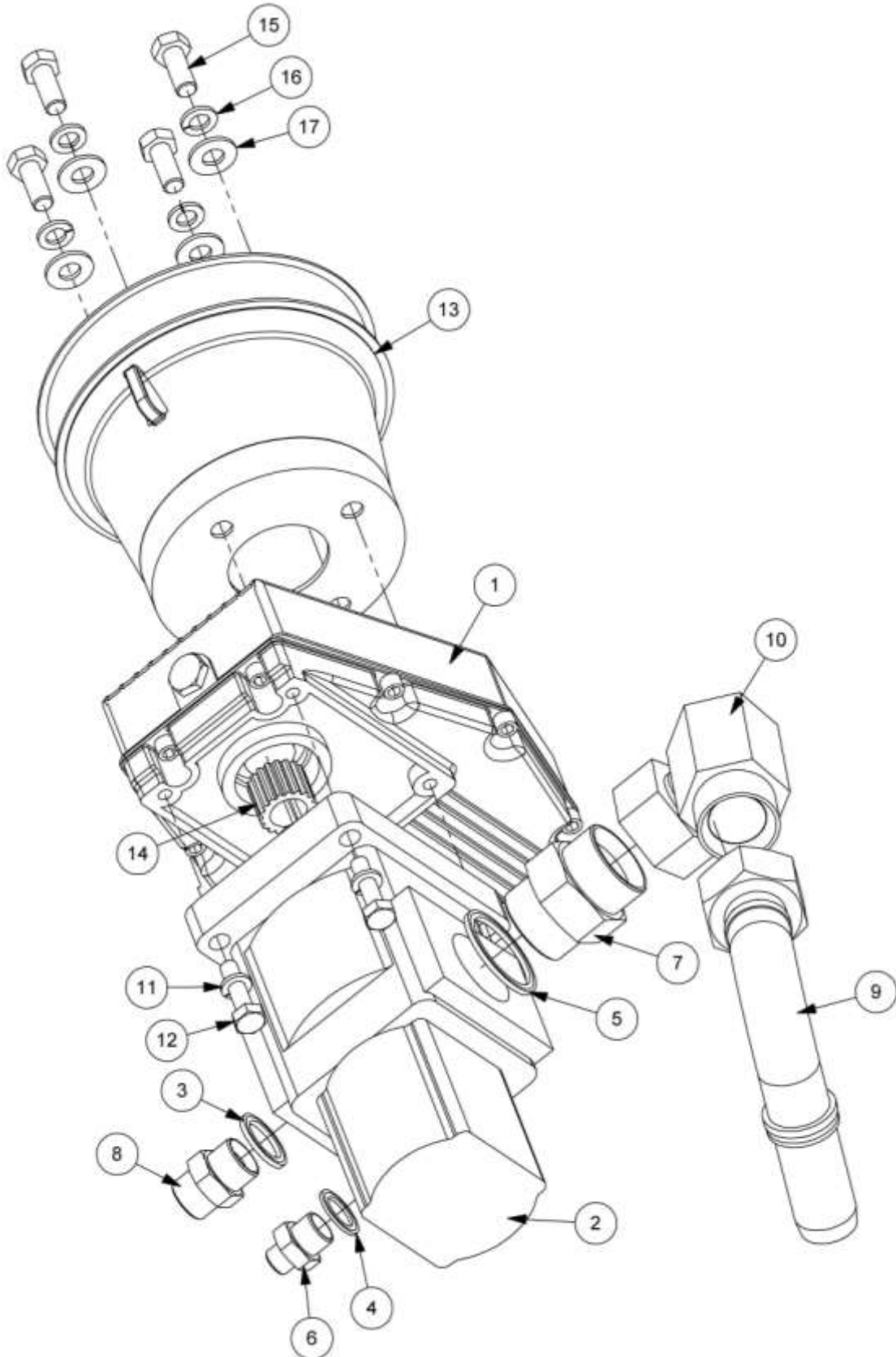
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Pump & Gearbox Assembly

Modules:

212.232 - L/H Build

212.260 - R/H Build



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Pump & Gearbox Assembly

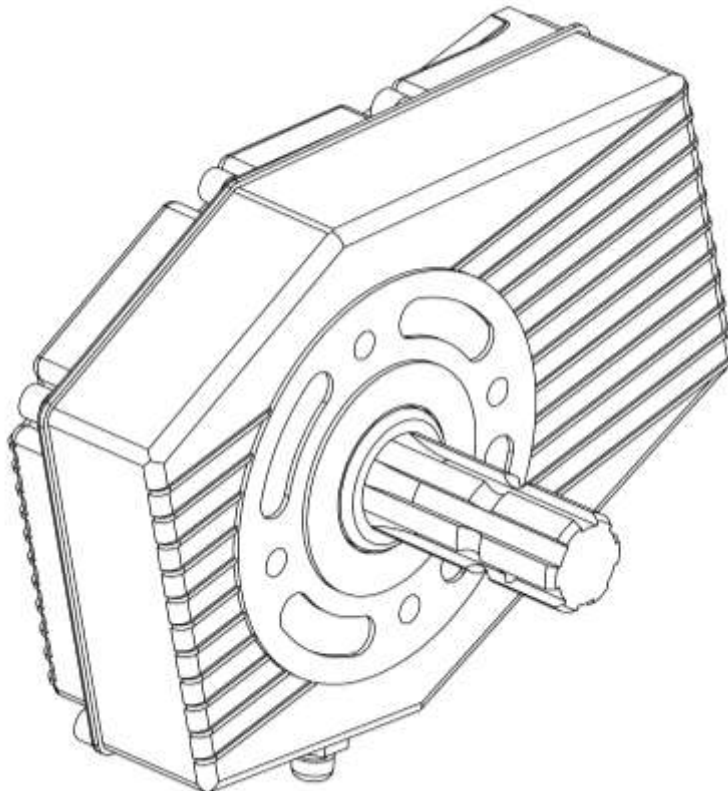
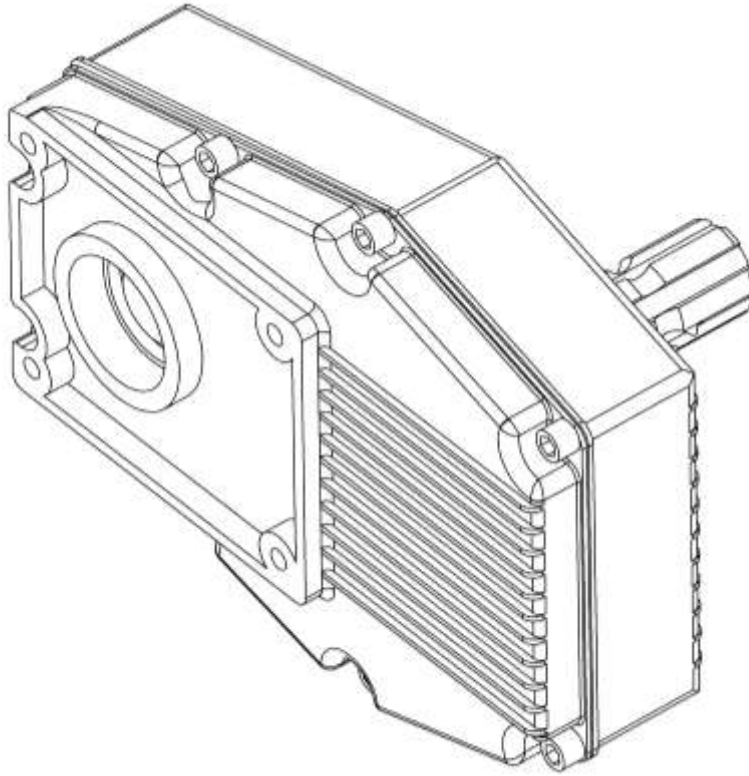
REF.	QTY.	PART No.	DESCRIPTION
		212.232	PUMP & GEARBOX ASSEMBLY - L/H Build
		212.260	PUMP & GEARBOX ASSEMBLY - R/H Build
1	1	8013339	GEARBOX 1:3.4
2	1	212.025	TANDEM PUMP
3	1	05.290.06	BONDED SEAL
4	1	05.290.05	BONDED SEAL
5	1	05.290.09	BONDED SEAL
6	1	05.123.01	ADAPTOR
7	1	05.374.01	ADAPTOR
8	1	05.377.01	ADAPTOR
9	1	212.027	ADAPTOR - 90° SWEPT
10	1	05.835.10	SWIVEL ADAPTOR - 90°
11	4	05.282.02	SPRING WASHER
12	4	05.291.13	BOLT
13	1	1469001	PTO GUARD
14	1	T7551	COUPLING
15	4	05.264.23	SETSCREW
16	4	05.282.03	SPRING WASHER
17	4	05.281.03	FLAT WASHER

Note: The component parts for both L/H & R/H builds are identical - the assemblies differ only in the orientation of the assembled components.

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Gearbox Assembly

Modules:
8013339



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Gearbox Assembly

REF.	QTY.	PART No.	DESCRIPTION
		8013339	GEARBOX ASSEMBLY
1	1	8013060	PINION
2	1	8013062	GEAR
3	1	8013063	GEARBOX CASING
4	1	8013064	GEARBOX COVER PLATE
5	1	8013065	MALE STUB SHAFT
6	1	8013058	GASKET
7	2	0600047	BEARING
8	2	0600048	BEARING
9	2	8013066	ROLLER
10	1	8629139	SEAL
11	1	8629140	SHAFT SEAL
12	1	0401250	EXTERNAL CIRCLIP
13	8	9343064	SOCKET CAPSCREW
14	1	8013067	EXPANSION PLUG
15	1	8013068	BREATHER VALVE
16	1	8013069	OIL LEVEL PLUG
17	1	8013070	DRAIN PLUG

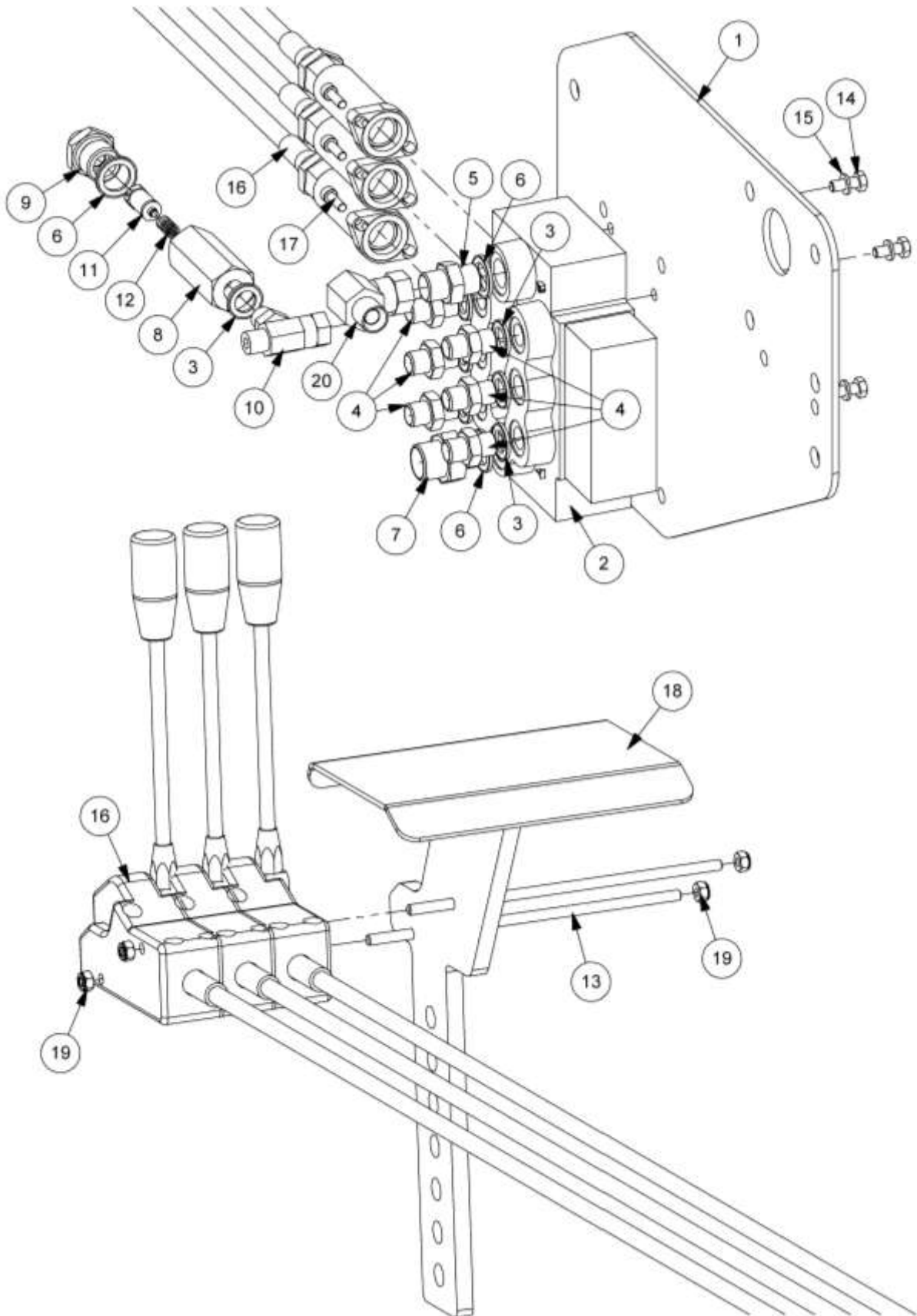
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Cable Control Valve Assembly

Modules:

212.233 - L/H Build

212.258 - R/H Build



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Cable Control Valve Assembly

REF.	QTY.	PART No.	DESCRIPTION
		212.233	CONTROL VALVE ASSEMBLY - L/H Build
		212.258	CONTROL VALVE ASSEMBLY - R/H Build
1	1	212.024	PLATE
2	1	212.008	3 PORT SPOOL VALVE
3	7	05.290.02	BONDED SEAL
4	6	05.129.01	ADAPTOR
5	1	05.124.01	ADAPTOR
6	3	05.290.04	BONDED SEAL
7	1	05.123.01	ADAPTOR
8	1	8130156	ADAPTOR RELIEF HOUSING
9	1	8130083	ADAPTOR RELIEF BODY
10	1	04.056.10	TEE ADAPTOR
11	1	8130164	RELIEF VALVE - 50BAR
12	1	8116011	SPRING
13	2	04.282.70	STUD
14	3	05.839.05	SETSCREW
15	3	05.282.07	SPRING WASHER
16	3	47531.11	LEVER & CABLE ASSEMBLY - 3.0M
17	3	47532.01	CABLE FIXING KIT
18	1	212.058	CABLE MOUNT BRACKET
19	4	9163003	NYLOC NUT
20	1	05.835.01	SWIVEL ADAPTOR - 90°
21*	1	212.208	RCV ASSEMBLY - L/H Build
	1	212.259	RCV ASSEMBLY - R/H Build

* *Not shown - refer to specific Rotor Control Valve page for illustration and part list.*

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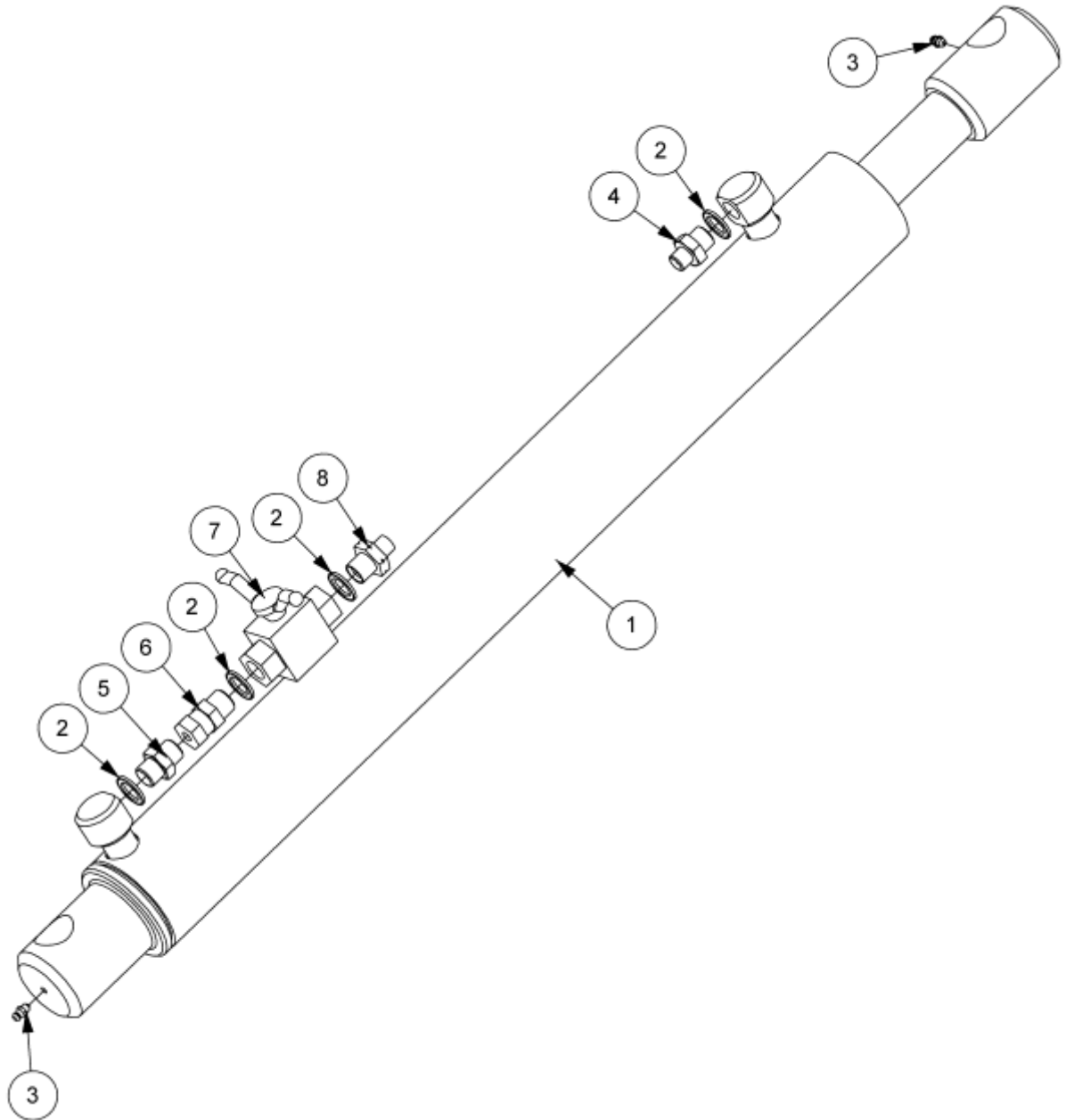
Rotor Control Valve Assembly

REF.	QTY.	PART No.	DESCRIPTION
		212.208	ROTOR CONTROL VALVE - L/H Build
		212.259	ROTOR CONTROL VALVE - R/H Build
1	1	8125421	ROTOR VALVE - L/H Build
	1	8125420	ROTOR VALVE - R/H Build
2	5	8650106	BONDED SEAL
3	3	8581136	ADAPTOR
4	1	8002086	ADAPTOR
5	1	8581130	ADAPTOR
6	1	8581215	1/2"BSP MF 90 SWEPT
7	1	T3400	ADAPTOR - SWEPT 90°
8	2	9343033	CAPSCREW
9	2	9213085	BOLT
10	2	9163005	NYLOC NUT
11	1	30.052.66	SWEPT ELBOW
12	1	47539.01	CABLE FIXING KIT
13	1	47531.05	CONTROL LEVER & CABLE (3.2M)

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First Ram Assembly – Lift Ram

Modules:
212.205

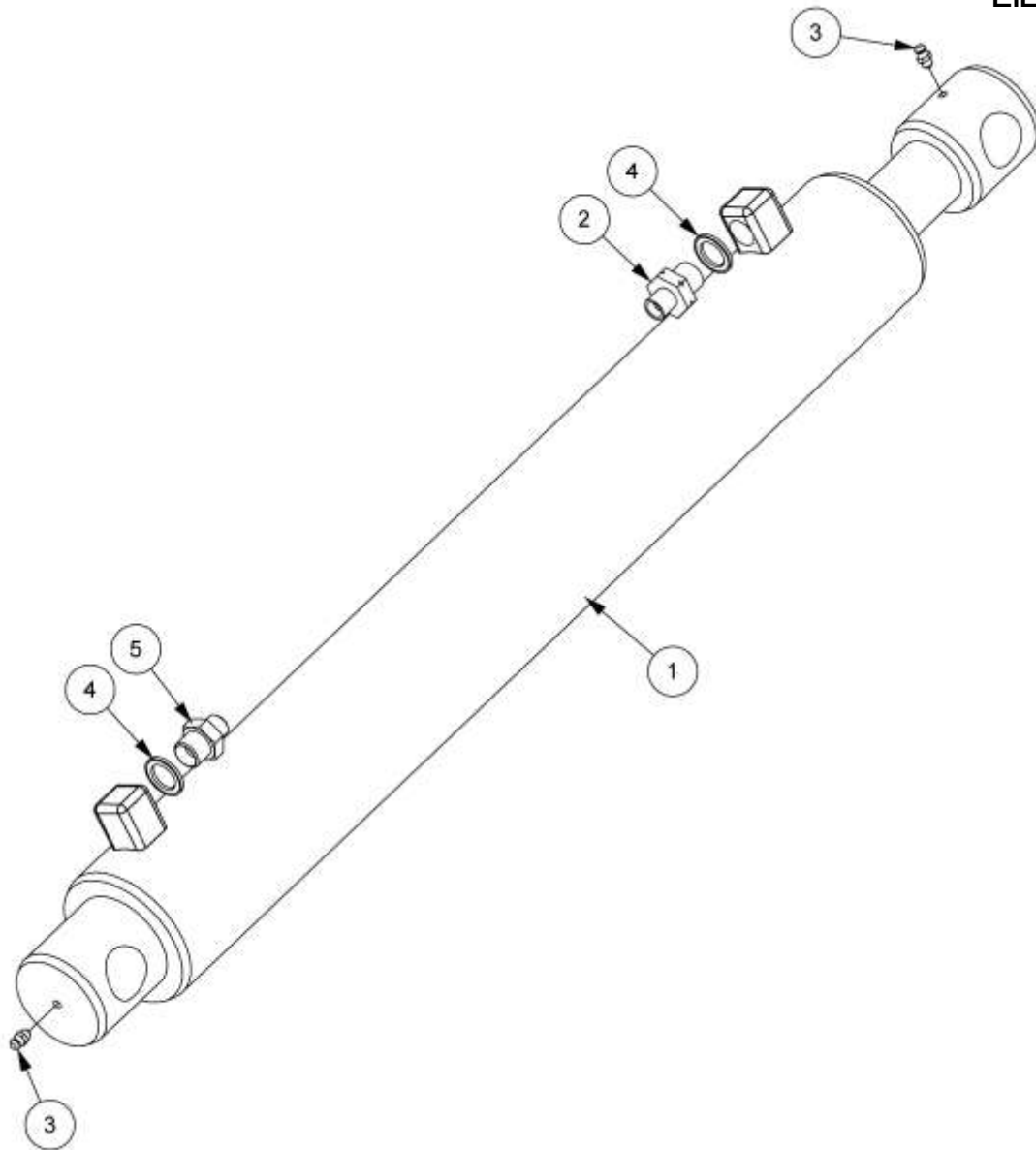


REF.	QTY.	PART No.	DESCRIPTION
		212.206	REACH RAM ASSEMBLY
1	1	41099.04	HYDRAULIC RAM
2	1	46518.08	RESTRICTOR
3	2	05.953.01	GREASE NIPPLE
4	2	05.290.04	BONDED SEAL
5	1	01.099.01	ADAPTOR

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Second Ram Assembly – Reach Ram

Modules:
212.206

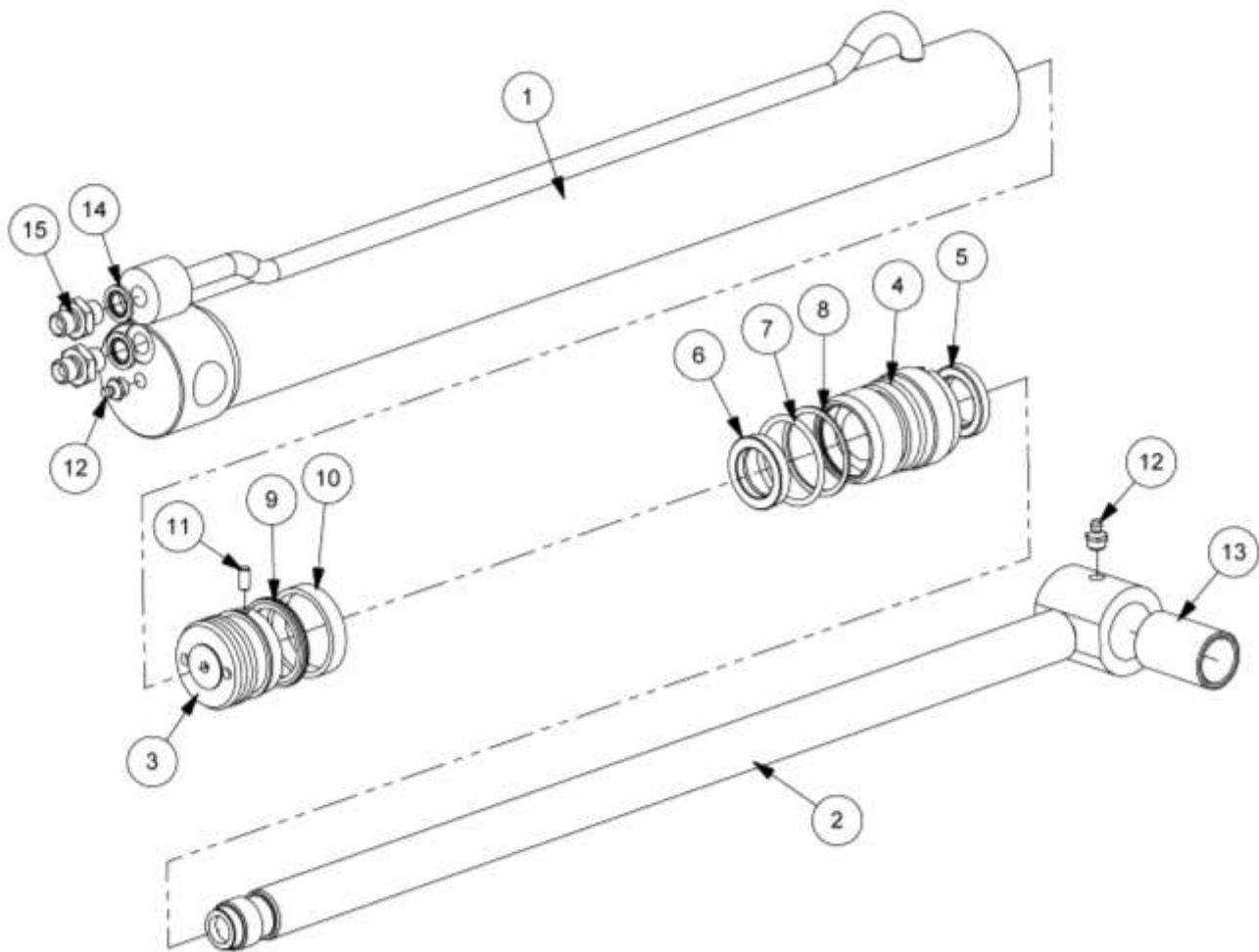


REF.	QTY.	PART No.	DESCRIPTION
		212.206	REACH RAM ASSEMBLY
1	1	41099.04	HYDRAULIC RAM
2	1	46518.08	RESTRICTOR
3	2	05.953.01	GREASE NIPPLE
4	2	05.290.04	BONDED SEAL
5	1	01.099.01	ADAPTOR

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Angling Ram Assembly

Modules:
199.119



REF.	QTY.	PART No.	DESCRIPTION
		199.119	ANGLING RAM ASSEMBLY
1	1	199.119.31	RAM BARREL
2	1	199.119.34	PISTON ROD
3	1	7560095	PISTON
4	1	7135291	GLAND HOUSING
5	1	8629149	SCRAPER RING
6	1	8629148	GLAND SEAL
7	1	8600302	O RING
8	1	8609302	AE RING
9	1	8629187	PISTON SEAL
10	1	8629188	GUIDE RING
11	1	9363023	GRUB SCREW
12	2	0901121	GREASE NIPPLE
13	1	08.297.09	BUSH
14	2	8650102	BONDED SEAL
15	2	8581169	ADAPTOR

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Hydraulic Installation

REF.	QTY.	PART No.	DESCRIPTION
		212.209	HYDRAULIC INSTALLATION
1	1	212.205	LIFT RAM ASSEMBLY
2	1	212.206	REACH RAM ASSEMBLY
3	1	199.119	ANGLING RAM ASSEMBLY
4	14	7135084	HOSE TIE
5	4	7196045	HOSE TIE
6	1	8501192	SUCTION HOSE
7	4	0904107	HOSE CLIPS
8	1	00900913	HOSE SLEEVING - 2500mm
9	2	05.313.01	BLANKING PLUG

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Hydraulic Hose Kit

REF.	QTY.	PART No.	DESCRIPTION
		212.3002	HYDRAULIC HOSE KIT - L/H Build
1	2	10.009.67	HOSE - 3/4" BSP FS/FS x 5700mm
2	2	10.001.31	HOSE - 1/4" BSP ST/ST x2100mm
3	2	10.001.51	HOSE - 1/4" BSP FS/FS x 4100mm
4	2	10.001.26	HOSE - 1/4" BSP ST/ST x 1600mm
5	1	10.004.12	HOSE - 3/8" BSP FS/F90 x 600mm
6	1	10.006.07	HOSE - 1/2" BSP FS/F90 x 350mm
7	1	10.002.06	HOSE - 1/4" BSP FS/F90 x 300mm
8	1	10.012.13	HOSE - 1" BSP ST/90 x 650mm
9	1	10.010.10	HOSE - 3/4" BSP FS/F90 x 500mm

REF.	QTY.	PART No.	DESCRIPTION
		212.3003	HYDRAULIC HOSE KIT - R/H Build
1	2	10.009.67	HOSE - 3/4" BSP FS/FS x 5700mm
2	2	10.001.31	HOSE - 1/4" BSP ST/ST x2100mm
3	2	10.001.51	HOSE - 1/4" BSP FS/FS x 4100mm
4	2	10.001.26	HOSE - 1/4" BSP ST/ST x 1600mm
5	1	10.004.09	HOSE - 3/8" BSP FS/F90 x 450mm
6	1	10.006.07	HOSE - 1/2" BSP FS/F90 x 350mm
7	1	10.002.06	HOSE - 1/4" BSP FS/F90 x 300mm
8	1	10.012.13	HOSE - 1" BSP ST/90 x 650mm
9	1	10.010.09	HOSE - 3/4" BSP FS/F90 x 350mm

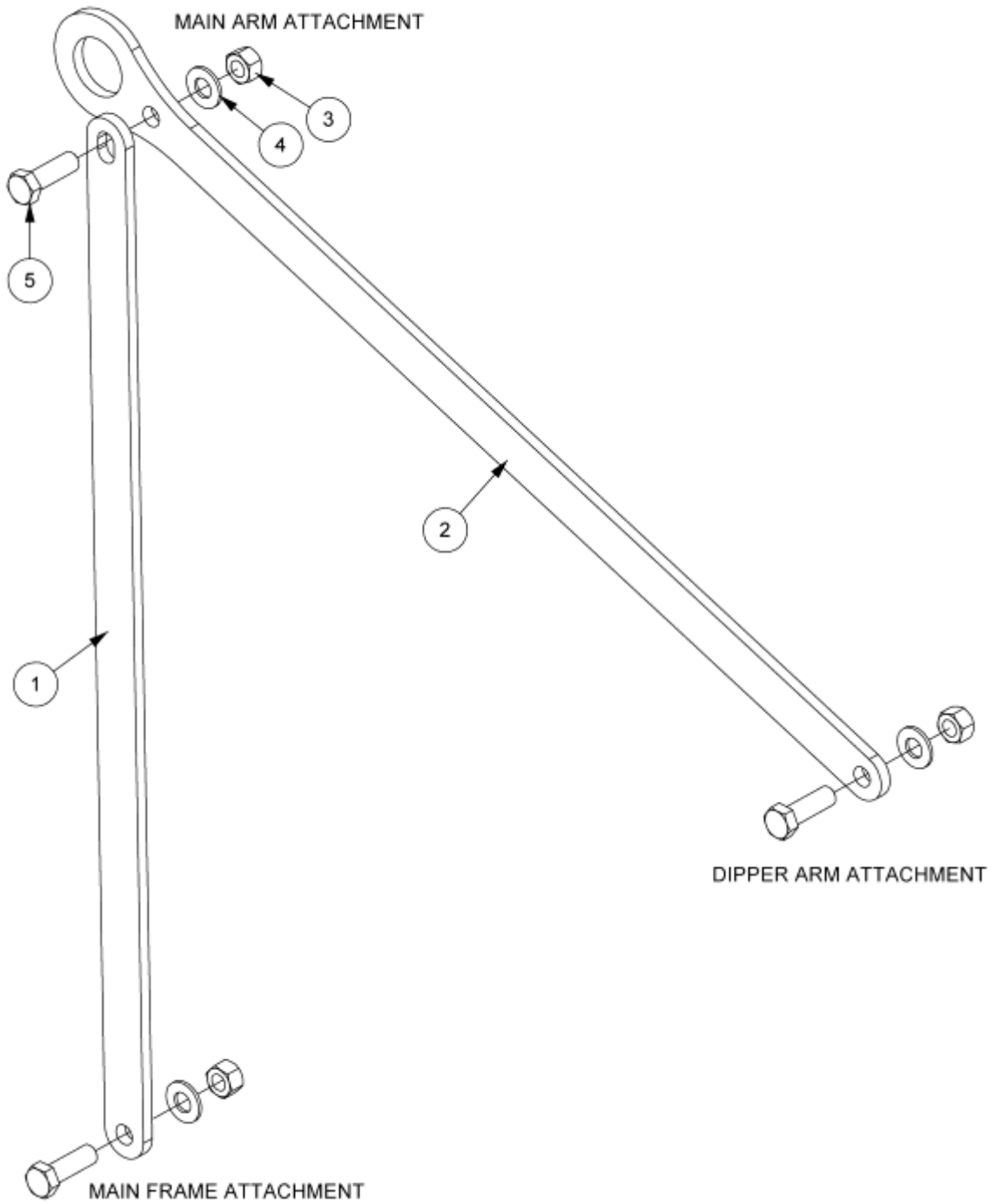
LOCATION / FUNCTION

- 1 Rotor Control Valve to Flailhead Motor
- 2 Control Valve to Reach Ram
- 3 Control Valve to Angling Ram
- 4 Control Valve to Lift Ram
- 5 Pump to Control Valve
- 6 Valve to Rotor Control Valve
- 7 Lift Base Relief Valve to Tank
- 8 Rotor Control Valve to Tank
- 9 Pump to Rotor Control Valve

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Transport Strap Kit

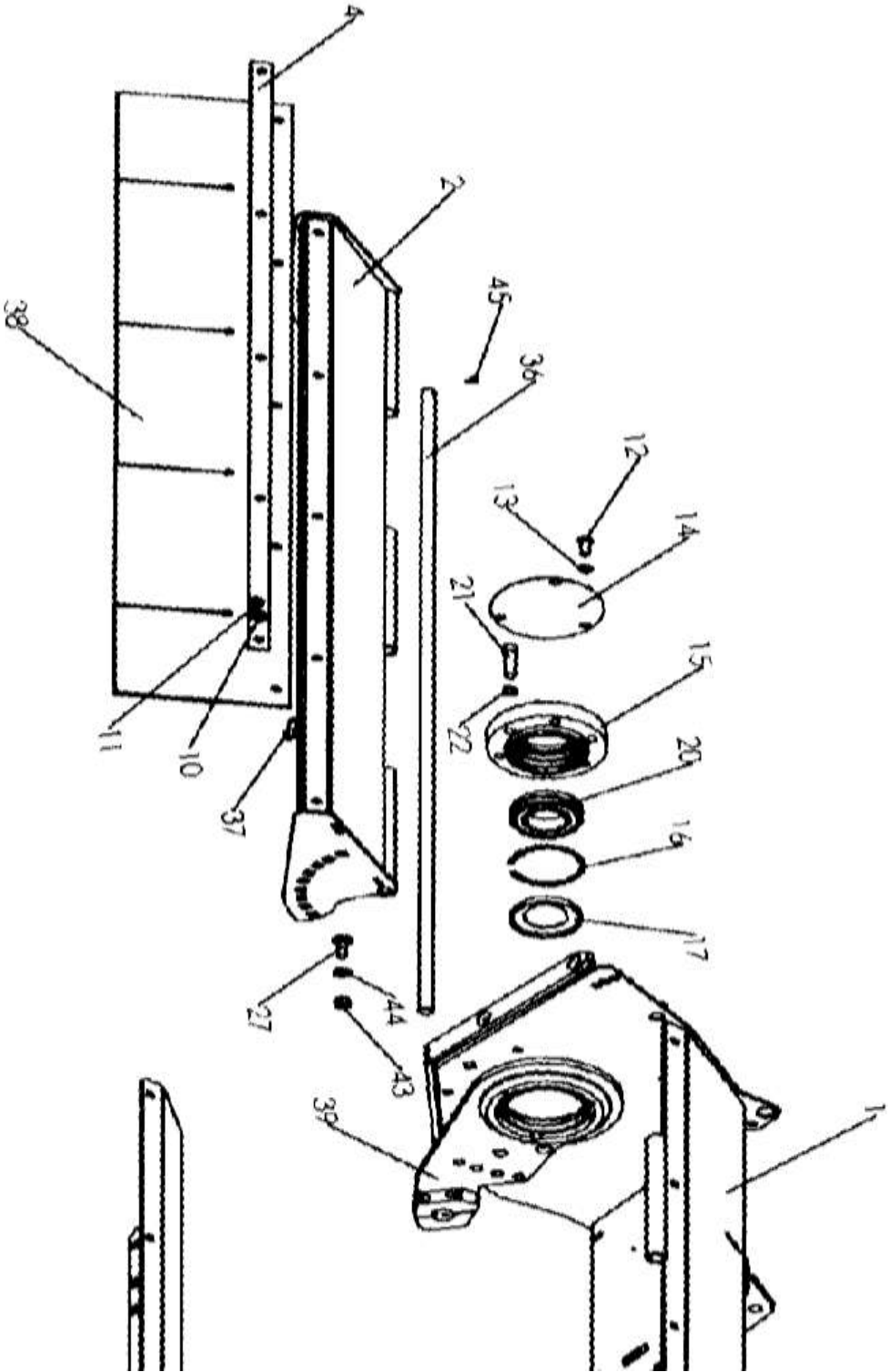
Modules:
212.230



REF.	QTY.	PART No.	DESCRIPTION
		212.230	TRANSPORT STRAP KIT
1	1	212.061	1st ARM TRANSPORT STRAP
2	1	212.038	2nd ARM TRANSPORT STRAP
3	3	05.287.04	SELF-LOCKING NUT
4	3	05.281.04	FLAT WASHER
5	3	05.264.37	SETSCREW

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Direct Drive MP Head



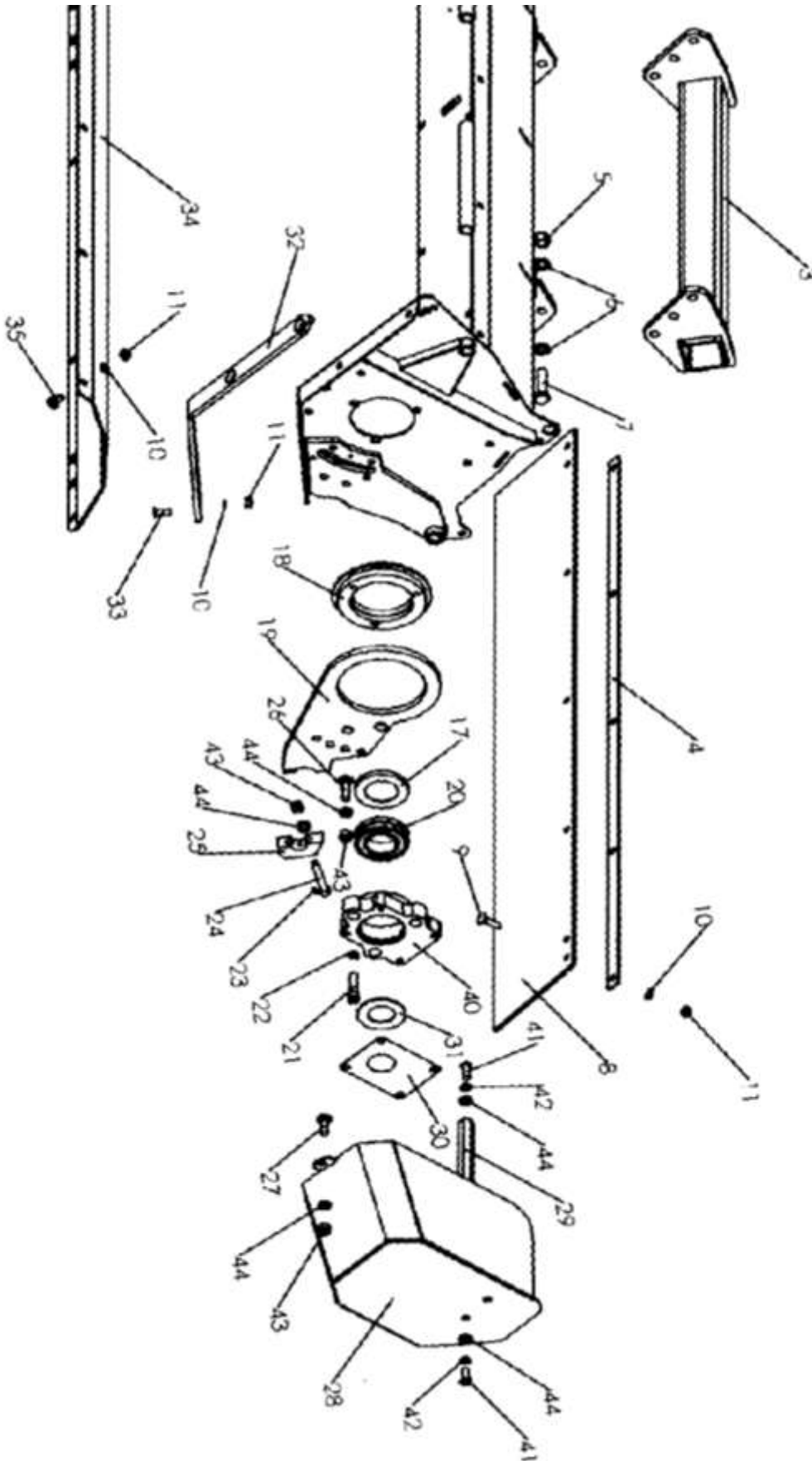
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Direct Drive MP Head

Ref.	Part No.	Description
1	1800183	HEAD SHELL – 1.2M
2	1778064	FRONT HOOD – 1.2M
3	1800184	HEAD MOUNT BRACKET
4	1777398	RETAINING BAR 1.2M
5	2770447	LOCKNUT
6	2770454	FLAT WASHER
7	2770425	BOLT
8	8400207B	REAR FLAP 1.2M
9	2770257	BOLT
10	2770434	FLAT WASHER
11	2770412	LOCKNUT
12	9300148	SCREW
13	2770442	SPRING WASHER
14	1800186	NON DRIVE COVER
15	1800187	BEARING HOUSING
16	2777521	CIRCLIP
17	3570676	SEAL
18	1800188	PROTECTION RING
19	1778060L	LH ROLLER PLATE
20	4770666	BEARING
21	2770337	SCREW
22	2770457	SPRING WASHER
23	2770467	GREASE NIPPLE
24	2770347	SCREW
25	040000D	ROLLER CLAMP
26	2770259	BOLT
27	2770258	BOLT
28	1800255	LH MOTOR GUARD
	1800256	RH MOTOR GUARD
29	1800250	MOUNTING PIN
30	3151019	GASKET
31	1777806	CENTRING WASHER 90MM
32	1777543	SKID
33	2770509	BOLT
34	1800257	INNER SKIN 1.2M
35	2770261	BOLT
36	1800194	HINGE BAR 1.2M
37	2770396	BOLT
38	8400204	FRONT FLAP 1.2M
39	1778060R	RH ROLLER PLATE
40	1800198	BEARING HOUSING
41	05.625.10	BOLT
42	2770442	WASHER
43	2770417	NUT
44	2770436	WASHER
45	05.969.02	SCREW

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Direct Drive MP Head



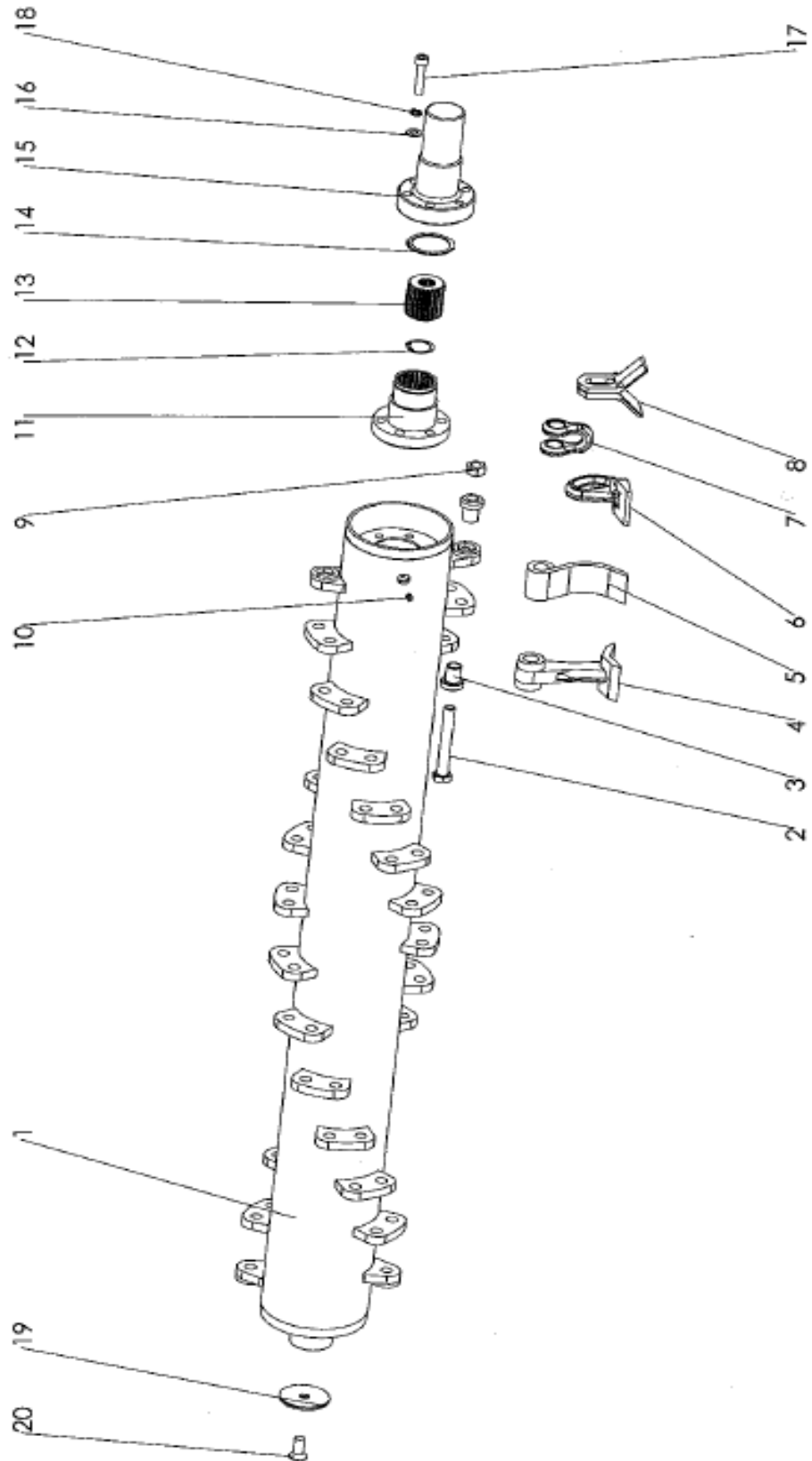
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Direct Drive MP Head

Ref.	Part No.	Description
1	1800183	HEAD SHELL – 1.2M
2	1778064	FRONT HOOD – 1.2M
3	1800184	HEAD MOUNT BRACKET
4	1777398	RETAINING BAR 1.2M
5	2770447	LOCKNUT
6	2770454	FLAT WASHER
7	2770425	BOLT
8	8400207B	REAR FLAP 1.2M
9	2770257	BOLT
10	2770434	FLAT WASHER
11	2770412	LOCKNUT
12	9300148	SCREW
13	2770442	SPRING WASHER
14	1800186	NON DRIVE COVER
15	1800187	BEARING HOUSING
16	2777521	CIRCLIP
17	3570676	SEAL
18	1800188	PROTECTION RING
19	1778060L	LH ROLLER PLATE
20	4770666	BEARING
21	2770337	SCREW
22	2770457	SPRING WASHER
23	2770467	GREASE NIPPLE
24	2770347	SCREW
25	040000D	ROLLER CLAMP
26	2770259	BOLT
27	2770258	BOLT
28	1800255	LH MOTOR GUARD
	1800256	RH MOTOR GUARD
29	1800250	MOUNTING PIN
30	3151019	GASKET
31	1777806	CENTRING WASHER 90MM
32	1777543	SKID
33	2770509	BOLT
34	1800257	INNER SKIN 1.2M
35	2770261	BOLT
36	1800194	HINGE BAR 1.2M
37	2770396	BOLT
38	8400204	FRONT FLAP 1.2M
39	1778060R	RH ROLLER PLATE
40	1800198	BEARING HOUSING
41	05.625.10	BOLT
42	2770442	WASHER
43	2770417	NUT
44	2770436	WASHER
45	05.969.02	SCREW

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Rotor Assembly MP



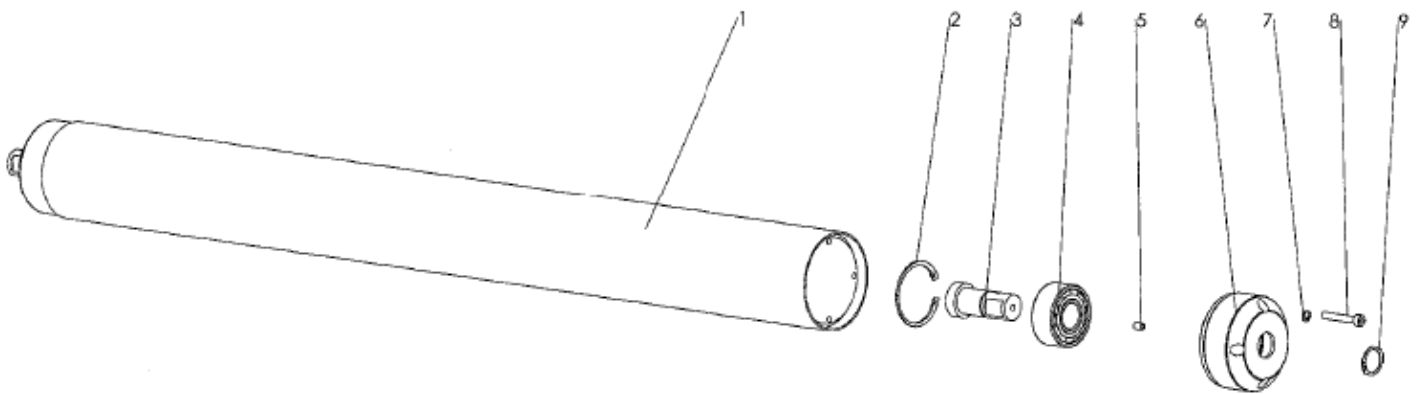
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Rotor Assembly MP

Ref.	Part No.	Description
1	1800260	1.2M ROTOR – T FLAIL
	1800261	LH 1.2M ROTOR – C FLAIL
	1800262	RH 1.2M ROTOR – C FLAIL
	1800263	LH 1.2M ROTOR – BOOT FLAIL
	1800264	RH 1.2M ROTOR – BOOT FLAIL
	1800265	1.2M ROTOR – B2B FLAIL
2	2770599	BOLT
3	1777721	BUSH
4	7770713	T FLAIL
5	7770699	C FLAIL
6	7770723A	BOOT FLAIL
7	7770722	SHACKLE
8	7770725	BACK 2 BACK
9	05.968.06	NUT
10	2770467	GREASE NIPPLE
11	1777975	DIRECT DRIVE SHAFT
12	N/A	CIRCLIP
13	N/A	ADAPTOR (PISTON MOTOR)
14	2777511	CIRCLIP
15	N/A	BELT DRIVE SHAFT
16	2770434	WASHER
17	2772293	BOLT
18	2770469	SPRING WASHER
19	1777208	WASHER
20	2770506	SCREW

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Rear Roller MP



Ref .	Part No.	Description
	SA05112	1.2M X 5" ROLLER ASSEMBLY
	SA06112	1.2M X 6" ROLLER ASSEMBLY
1	1800199	1.2M X 5" TUBE
1	1800298	1.2M X 6" TUBE
2	2771108	CIRCLIP
3	1800196	SHAFT
4	4771608	BEARING
5	2770239	SCREW
6	1800195	5" END CAP
6	1800299	6" END CAP
7	2770433	SPRING WASHER
8	05.625.29	BOLT
9	2777519	CIRCLIP

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