

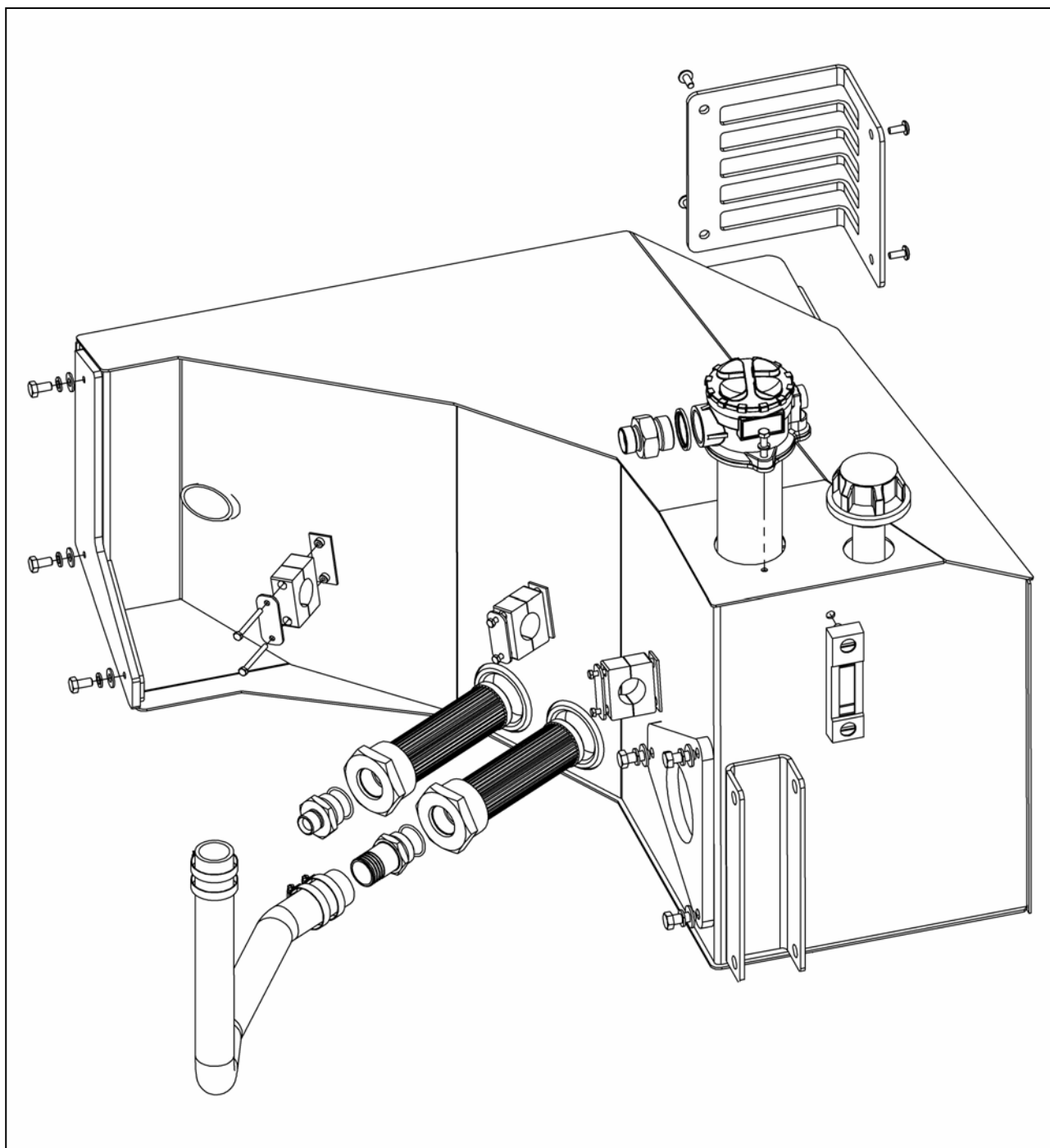
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Part No. 41571.23
Revision: 04.12.08

PA180

HEDGE / GRASS CUTTER



Parts Manual



Read The Book First

It is important that all operators or fitters that work with this machine have read and fully understood all aspects of this manual before attempting to operate or maintain the machine – the safety of yourself and others should be paramount at all times.

Always Use Genuine Parts

McConnel Genuine Parts are designed and tested specifically for use on our machines - the use of non-genuine parts is not advisable as this can affect both the performance and warranty on the machine.

Parts Ordering

When ordering parts please quote the following information:

- *Machine Model & Specification.*
- *Machine Serial No.*
- *Make & Model of tractor to which the machine is fitted.*
- *Dealer Order Number.*

This information will speed up the ordering process and ensure that the correct parts for the machine are ordered.

Parts can be ordered direct by:

Telephone: 01584 876888

Fax: 01584 876463

Email: parts@mcconnel.com

Online: www.mcconnel.com

We continually strive to better our products in both performance and value through a continual programme of re-design and testing – where applicable, if an existing part has been superseded by an updated version, the latter will always be supplied.



For best performance...

USE ONLY McCONNEL SERVICE PARTS

To be assured of the latest design improvements purchase your 'Genuine Replacements' from the Original Equipment Manufacturer:

McCONNEL LIMITED

through your local Dealer or Stockist.

Always quote:

- ***Machine Type***
- ***Serial Number***
- ***Part Number***

*Design Improvements may have altered some of the parts listed in this manual –
The latest part will always be supplied when it is interchangeable with an earlier one.*

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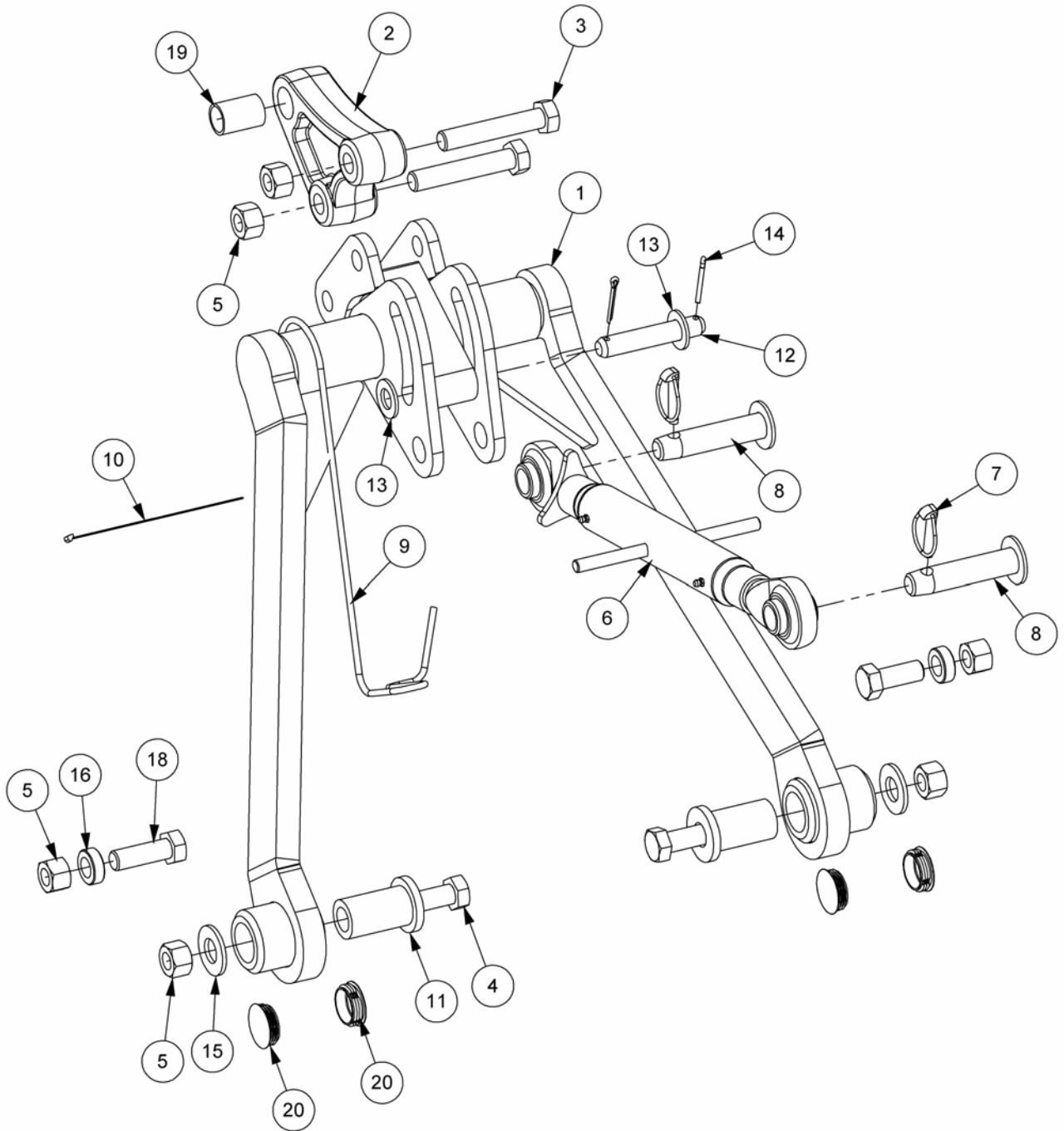
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Model: PA180



STABILIZER ASSEMBLY

Module:
7499632

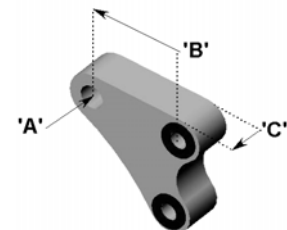


STABILIZER ASSEMBLY

REF.	QTY.	PART No.	DESCRIPTION
		7499632	STABILIZER ASSEMBLY
1	1	41205.11	STABILIZER
2	1	7499506C	STABIZER TONGUE - CAT.3
3	2	9213228	BOLT
4	2	9213148	BOLT
5	6	9143008	SELF-LOCKING NUT
6	1	21370.01	TOP LINK ASSEMBLY
7	2	0431217	LINCH PIN
8	2	7560144	TOP LINK PIN
9	1	21160.03	PTO HOOK
10	1	7196045	HOSE TIE
11	2	45999.02	SPACER
12	1	22072.01	QUADRANT PIN
13	2	9100108	FLAT WASHER
14	2	9501406	SPLIT PIN
15	2	9100109	FLAT WASHER
16	2	21601.03	SPACER
17	1	9213108	BOLT
18	1	9213128	BOLT
19	1	21883.01	SLEEVE - CAT.2 TO CAT.3
20	4	21388.01	PLASTIC INSERT

McCONNEL STABILISER TONGUES

'A' – Hole diameter
 'B' – Hole center spacing
 'C' – Stabiliser width



(Dimensions in mm)

Part No.	Description	'A'	'B'	'C'
7499501	Tongue: Standard – Cat. 2	27	107	45
7499500	Tongue: Special – Cat. 2 narrow	27	107	35
7499502	Tongue: Special – Cat. 2 long	27	217	45
7499503	Tongue: Special – Cat. 3 long	32	217	45
7499504	Tongue: Special – Cat. 1	19.5	107	35
7499505	Tongue: Special – Cat. 2 for Case TX tractors	25	120	50
7499506	Tongue: Special – Cat. 3	32	107	45
7499507	Tongue: Special – Cat. 3 narrow	32	107	30
7499508	Tongue: Special – for some Ford tractors	28.6	107	45
7499262	Tongue: Special – Cat. 2 extra long for Aebi	27	260	45
7499510	Tongue: Special – Cat. 2	27	107	40



AXLE BRACKET KIT

REF.	QTY.	PART No.	DESCRIPTION
		7418709	AXLE BRACKET KIT
1	2	0431217	LINCH PIN
2*	1	2020999	LATCH ASSEMBLY (PAIR)
3	1	21278.01	BRACKET FRAME
4	2	21358.01	CLAMP PLATE
5	1	43318.01	HITCH ARM - TYPE 1
6	1	43318.02	HITCH ARM - TYPE 2
7	2	45356.02	LIFT LINK
8	4	9100023	BINX NUT
9	2	9143009	SELF-LOCKING NUT
10	4	9200035	BOLT
11	2	9213139	BOLT
12	2	9501509	SPLIT PIN
13	1	186.162B	SPRUNG TOP LINK
14	1	7758.1	R/H THREADED TOP LINK EYE
15	1	21883.01	SLEEVE-CAT.2 TO CAT.3

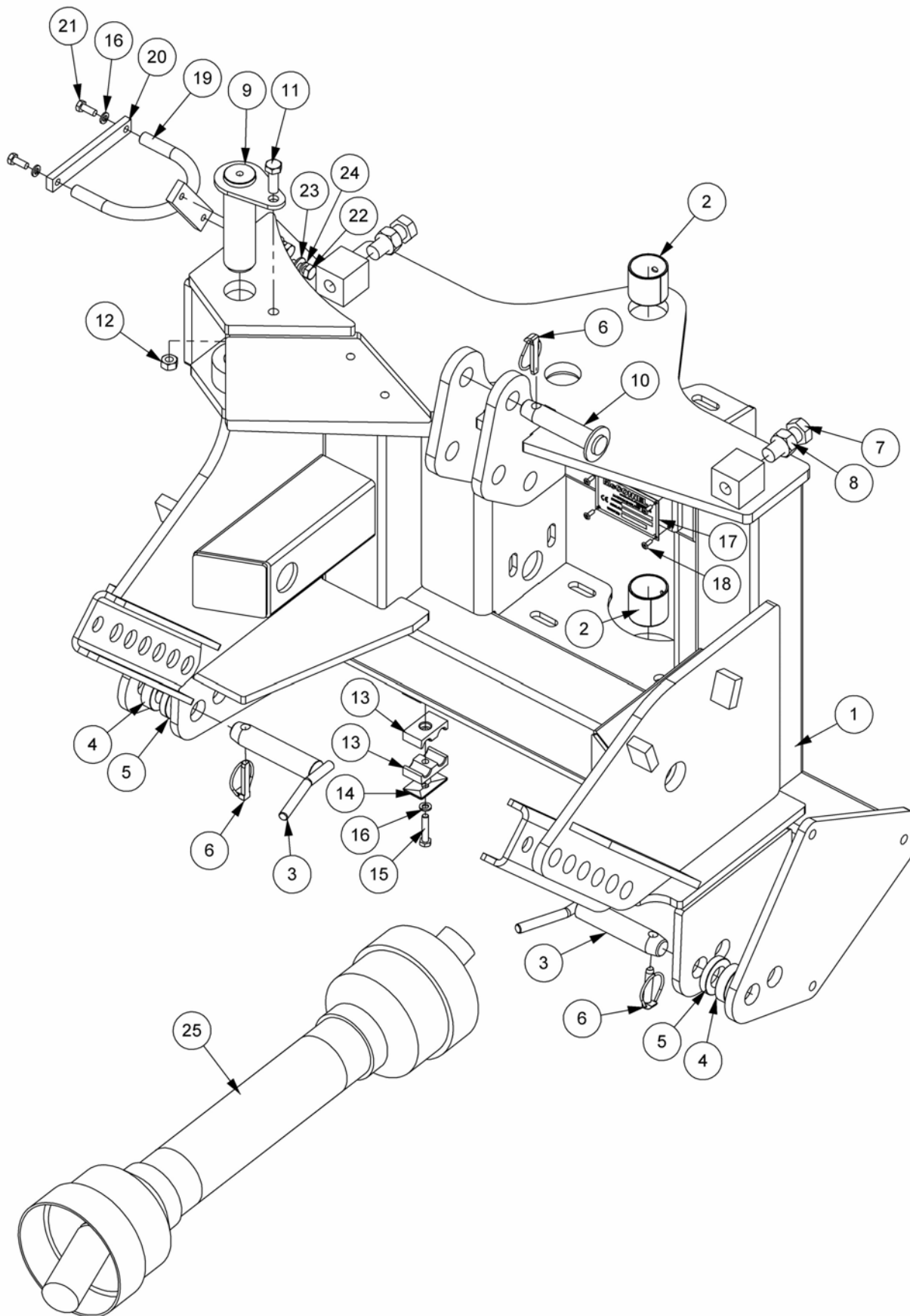
* Not Illustrated

Model: PA180



MAIN FRAME ASSEMBLY

Module:
7418700



MAIN FRAME ASSEMBLY

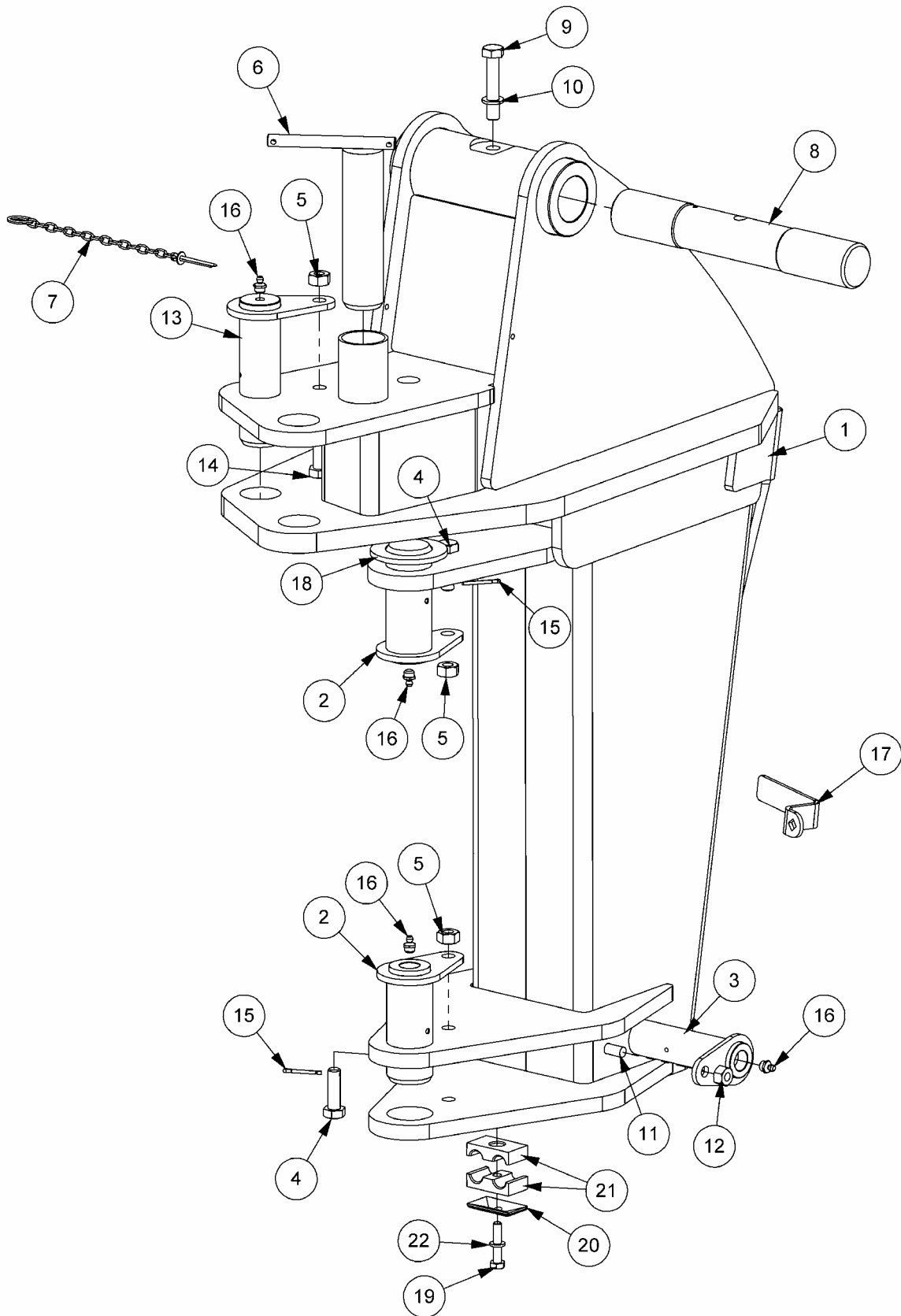
REF.	QTY.	PART No.	DESCRIPTION
		7418700	MAIN FRAME ASSEMBLY
1	1	22114.01	MAIN FRAME
2	2	21649.05	BUSH
3	2	41559.01	LINKAGE PIN - CAT 2.
4	2	43332.01	LINKAGE SPACER (15mm)
5	2	43332.02	LINKAGE SPACER (10mm)
6	3	0431217	LINCH PIN
7	2	9313118	SETSCREW
8	2	9113008	NUT
9	1	43324.02	PIN
10	1	7560144	TOP LINK PIN
11	1	9313076	SETSCREW
12	1	9143006	SELF-LOCKING NUT
13	2	42024.26	HOSE CLAMP (HALF)
14	1	7193066	CLAMP PLATE
15	1	9213084	BOLT
16	3	9100204	SPRING WASHER
17	1	1335246	SERIAL No. PLATE
18	4	1069088	POP RIVET
19	1	21653.01	HOSE LOOP
20	1	43048.04	RETAINING BAR
21	2	9313044	SETSCREW
22	2	9313065	SETSCREW
23	2	9100105	FLAT WASHER
24	2	9100205	SPRING WASHER
25	1	7550346	PTO SHAFT

Model: PA180



PILLAR ASSEMBLY

Module:
7418701



**PILLAR ASSEMBLY**

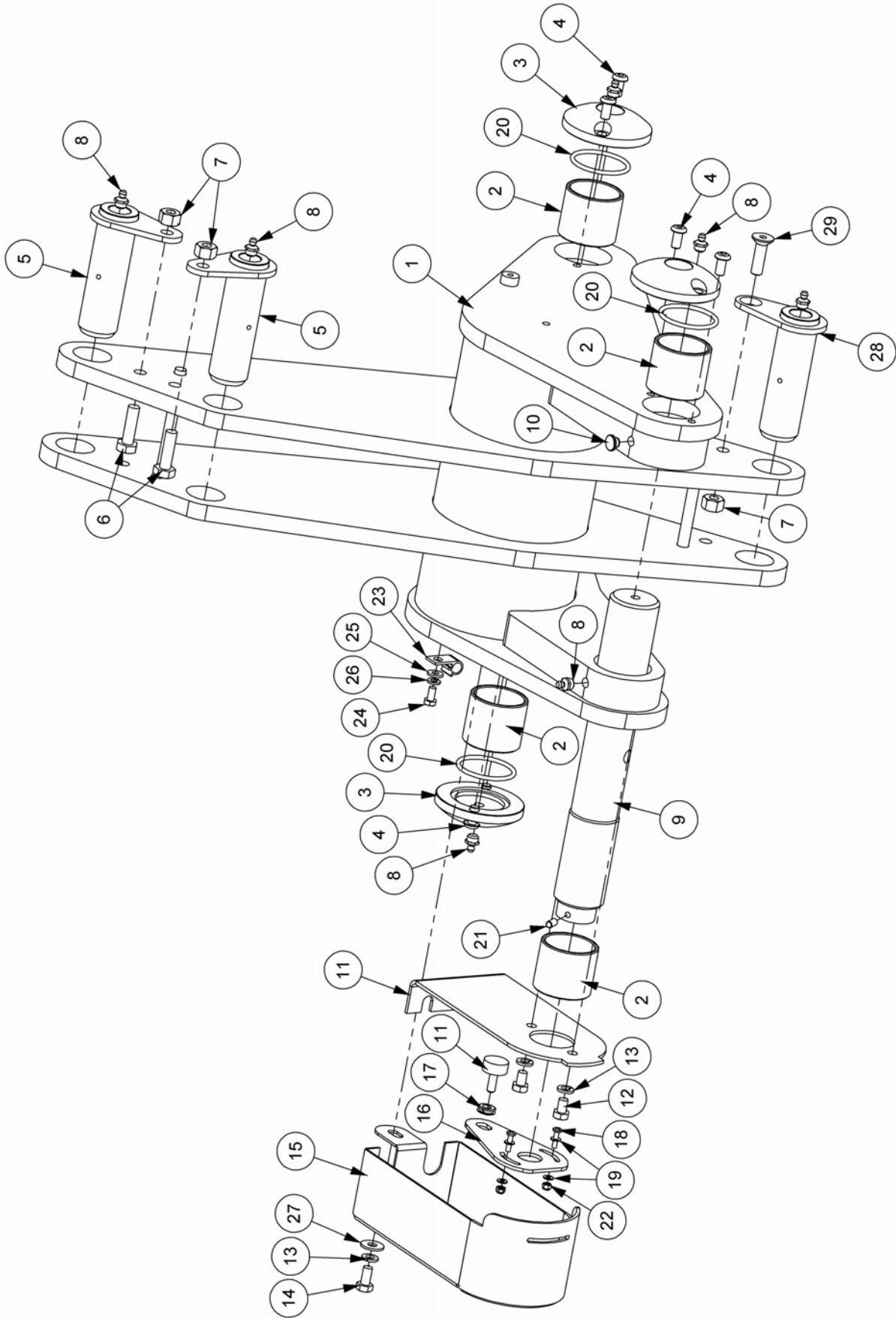
REF.	QTY.	PART No.	DESCRIPTION
		7418701	PILLAR ASSEMBLY
1	1	22115.01	PILLAR
2	2	45271.03	SLEW PIVOT PIN
3	1	45202.05	SLEW BASE PIN
4	2	42269.05	SPECIAL BOLT
5	3	9143006	SELF-LOCKING NUT
6	1	43323.02	SLEW LOCK PIN
7	1	03.255.05	CHAIN RING
8	1	45264.04	ARM PIVOT PIN
9	1	9213136	BOLT
10	1	9100206	SPRING WASHER
11	1	9313055	SETSCREW
12	1	9143005	SELF-LOCKING NUT
13	1	43324.02	PIN
14	1	9313076	SETSCREW
15	2	9501255	SPLIT PIN
16	4	0901121	GREASE NIPPLE
17	1	21193.01	TAP HANDLE
18	1	45298.02	THRUST WASHER
19	1	9213084	BOLT
20	1	7193066	CLAMP PLATE
21	2	42024.26	HOSE CLAMP (HALF)
22	1	9100204	SPRING WASHER

Model: PA180

ROCKER ASSEMBLY (EDS)



Module:
7418708



ROCKER ASSEMBLY (EDS)

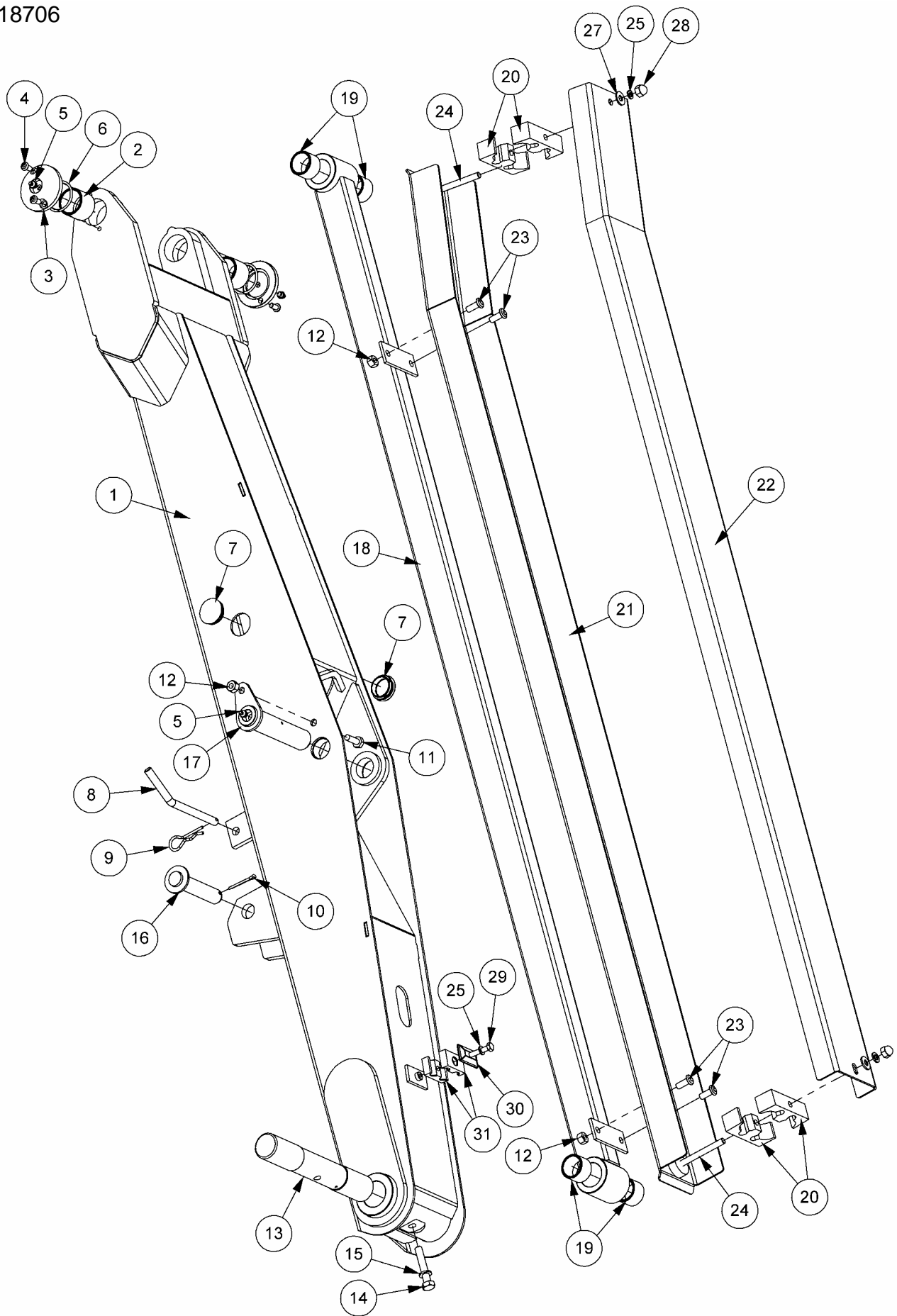
REF.	QTY.	PART No.	DESCRIPTION
		7418708	ROCKER ASSEMBLY (EDS)
1	1	45059.04	ROCKER
2	4	21385.03	BUSH
3	3	45266.01	PIN CAP
4	6	9300159	BUTTON SOCKET SCREW
5	2	45202.04	PIN
6	2	9313075	SETSCREW
7	3	9143005	SELF-LOCKING NUT
8	7	0901121	GREASE NIPPLE
9	1	45264.05	ARM PIVOT PIN (EDS)
10	1	42964.02	PLASTIC PLUG
11	1	45425.05	LOCATION PLATE
12	2	9313024	SETSCREW
13	3	9100204	SPRING WASHER
14	1	9313034	SETSCREW
15	1	45425.03	COVER
16	1	45425.06	SENSOR BRACKET
17	1	43356.01	GROMMET
18	2	9300162	POSI PANHEAD SCREW
19	4	9100101	FLAT WASHER
20	3	8600303	O RING
21	1	9363023	GRUB SCREW
22	2	05.948.33	SELF-LOCKING NUT
23	4	21151.01	D CLIP
24	4	9313023	SETSCREW
25	4	9100103	FLAT WASHER
26	4	9100203	SPRING WASHER
27	1	9100104	FLAT WASHER
28	1	45202.10	PIN
29	1	9353075	CAPSCREW
30	1	8650102	BONDED SEAL - <i>not illustrated</i>
31	1	8103005	ADAPTOR - <i>not illustrated</i>

Model: PA180



MAIN ARM ASSEMBLY

Module:
7418706



MAIN ARM ASSEMBLY

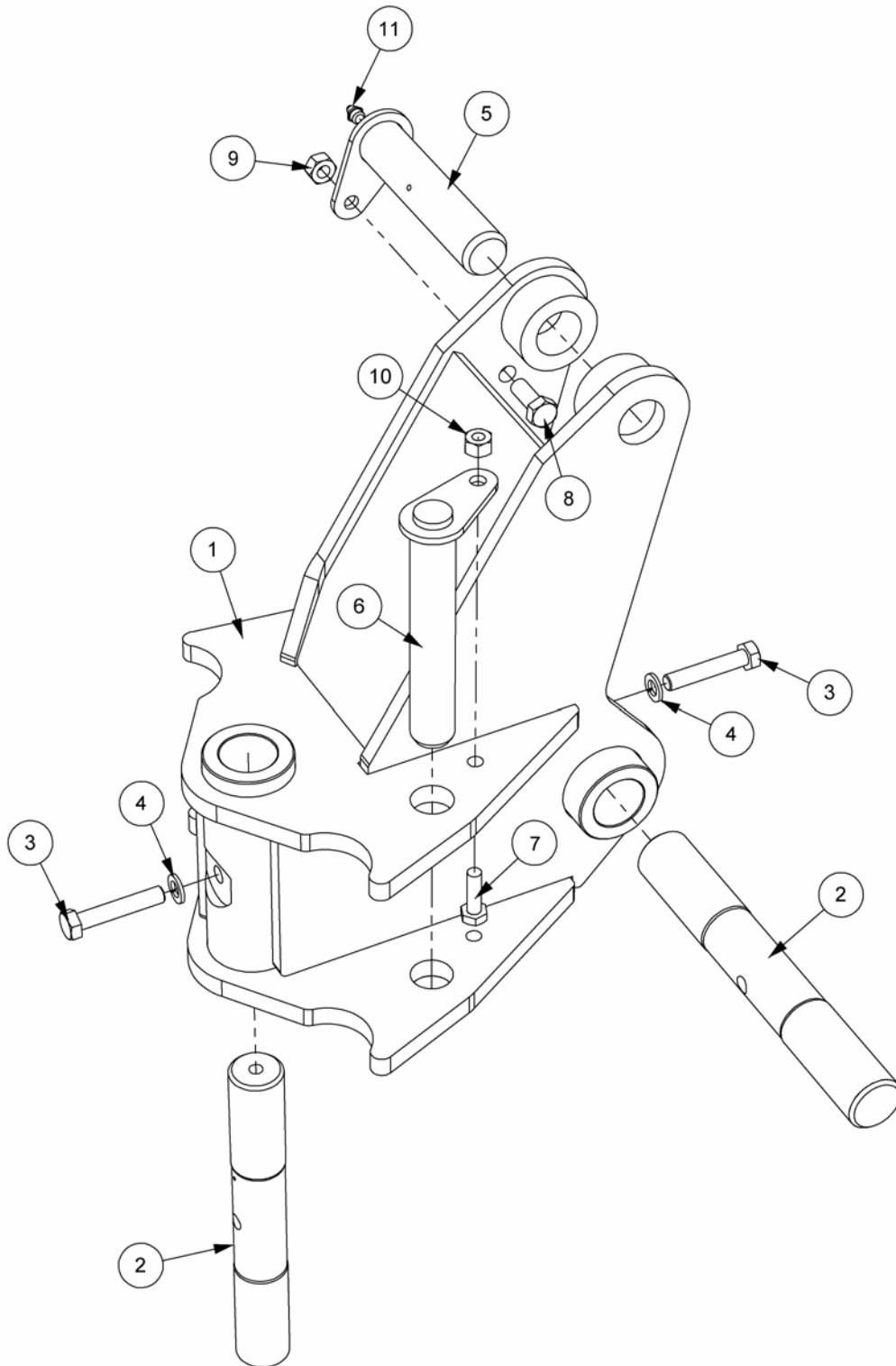
REF.	QTY.	PART No.	DESCRIPTION
		7418706	MAIN ARM ASSEMBLY
1	1	22119.01	MAIN ARM
2	2	21385.01	BUSH
3	2	45266.01	PIN CAP
4	4	9300159	BUTTON HEAD SOCKET SCREW
5	3	0901121	GREASE NIPPLE
6	2	8600303	O RING
7	2	21388.01	PLASTIC INSERT
8	1	43074.01	LOCK PIN
9	1	0431105	SPRING COTTER
10	1	9501406	SPLIT PIN
11	1	9313065	SETSCREW
12	5	9143005	SELF-LOCKING NUT
13	1	45264.04	ARM PIVOT PIN
14	1	9213146	BOLT
15	1	9100206	SPRING WASHER
16	1	43023.01	PIN
17	1	45202.08	PIN
18	1	21280.06	TENSION LINK
19	4	08.297.05	BUSH
20	4	06.430.19	HOSE CLAMP
21	1	22180.01	HOSE TRAY
22	1	22176.01	HOSE COVER
23	4	9300154	BUTTON HEAD SOCKET SCREW
24	2	04.282.69	STUD
25	2	9100204	SPRING WASHER
26	1	9100205	SPRING WASHER
27	2	9100105	FLAT WASHER
28	2	9100025	DOME NUT
29	1	9213084	BOLT
30	1	7193066	CLAMP PLATE
31	2	42024.26	HOSE CLAMP (HALF)

Model: PA180



DIPPER KNUCKLE ASSEMBLY

Module:
7418702



Model: PA180



DIPPER KNUCKLE ASSEMBLY

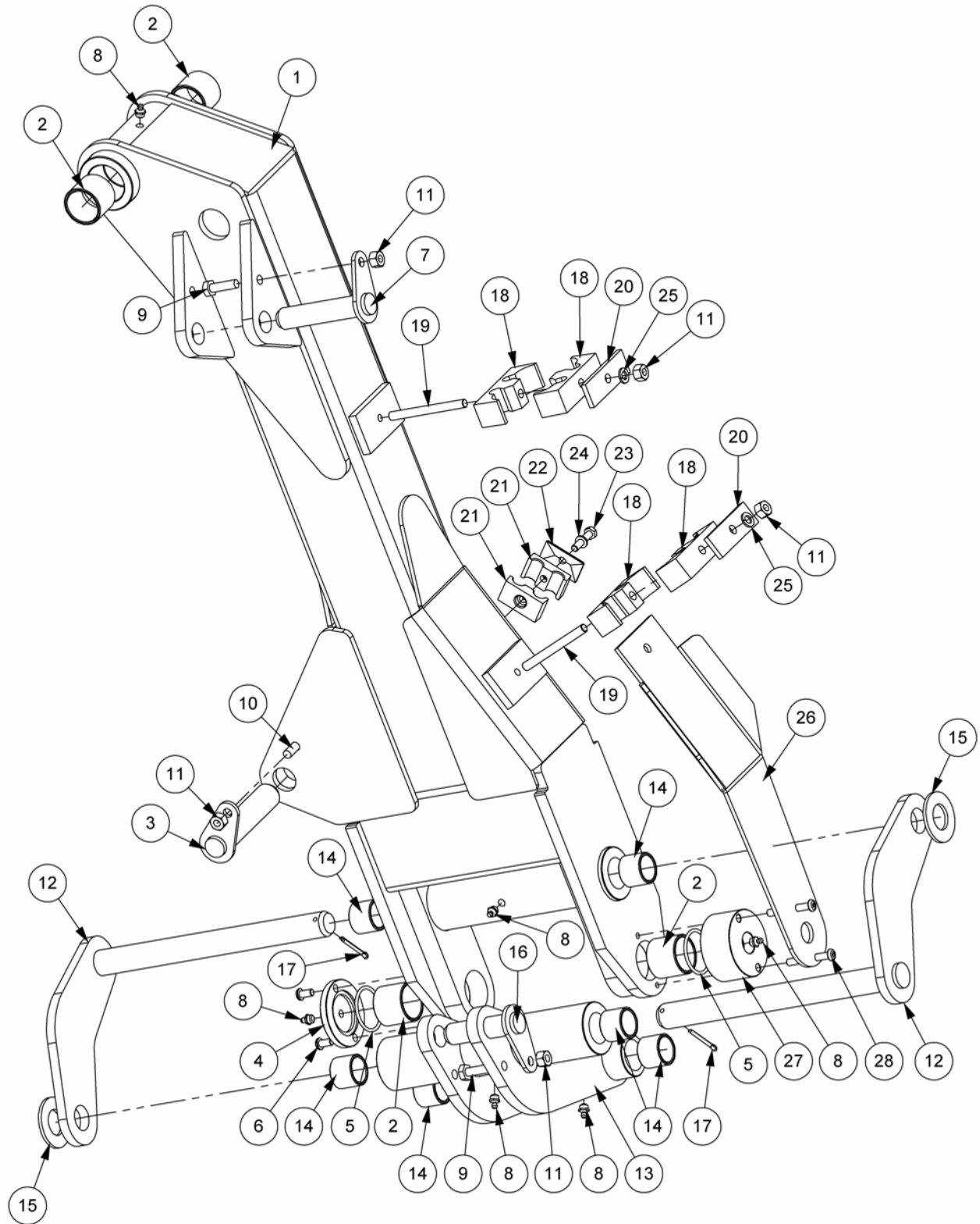
REF.	QTY.	PART No.	DESCRIPTION
		7418702	DIPPER KNUCKLE ASSEMBLY
1	1	22117.02	DIPPER UPPER
2	2	45264.01	MAIN PIVOT PIN
3	2	9213136	BOLT
4	2	9100206	SPRING WASHER
5	1	45202.08	PIN
6	1	22167.01	SLAVE LINK PIN
7	1	9313075	SETSCREW
8	1	9313066	SETSCREW
9	1	T8095	SELF-LOCKING NUT
10	1	9143005	SELF-LOCKING NUT
11	1	0901121	GREASE NIPPLE

Model: PA180



FORWARD EXTENSION

Module:
7418703



FORWARD EXTENSION

REF.	QTY.	PART No.	DESCRIPTION
		7418703	FORWARD EXTENSION ASSEMBLY
1	1	22118.02	FORWARD EXTENSION
2	4	08.297.02	BUSH
3	1	42684.08	PIN
4	1	45266.01	PIN CAP
5	2	8600303	O RING
6	2	9300159	BUTTON HEAD SOCKET SCREW
7	1	22168.01	RAM BASE PIN
8	6	0901121	GREASE NIPPLE
9	2	9313075	SETSCREW
10	1	9313065	SETSCREW
11	5	9143005	SELF-LOCKING NUT
12	2	22121.01	RADIUS ARM - TYPE 1
13	1	22120.01	SLAVE LINK
14	6	08.297.04	BUSH
15	2	05.281.18	FLAT WASHER
16	1	22168.02	PIN
17	2	9501406	SPLIT PIN
18	4	06.430.19	HOSE CLAMP
19	2	04.282.69	STUD
20	2	06.418.05	CLAMP PLATE
21	2	42024.26	HOSE CLAMP (HALF)
22	1	7193066	CLAMP PLATE
23	2	9213084	BOLT
24	1	9100204	SPRING WASHER
25	2	9100205	SPRING WASHER
26	1	22118.50	HOSE GUIDE PLATE
27	1	22118.51	PIN CAP
28	2	9300157	BUTTON HEAD SOCKET SCREW

DIPPER ARM ASSEMBLY

REF.	QTY.	PART No.	DESCRIPTION
		7418704	DIPPER ARM ASSEMBLY
1	1	45602.07	DIPPER ARM
2	2	21649.02	BUSH
3	1	45609.01	PIN
4	1	22129.01	HEAD PIVOT TUBE
5	1	22130.01	HEAD MOUNTING BRACKET
6	1	22132.01	CONTROL LINK
7	1	22131.01	SLAVE LINK
8	4	08.297.04	BUSH
9	2	21385.01	BUSH
10	4	8629218	LIP SEAL
11	2	8629219	ROTARY SHAFT SEAL
12	1	22169.01	RETAINING COLLAR
13	1	9501507	SPLIT PIN
14	1	22160.01	CLAMP WASHER
15	1	9213208	BOLT
16	1	9501406	SPLIT PIN
17	1	21585.03	KEY
18	1	42684.07	PIN
19	2	42684.12	PIN
20	1	42684.03	PIN
21	1	05.281.18	FLAT WASHER
22	4	9143005	SELF-LOCKING NUT
23	3	9313065	SETSCREW
24	1	9313075	SETSCREW
25	4	0901121	GREASE NIPPLE
26	1	9313066	SETSCREW
27	1	9143006	SELF-LOCKING NUT
28	1	43021.15	TRANSPORT CRADLE
29	2	43091.02	SIDE PAD
30	8	9353043	SOCKET CAPSCREW
31	4	04.282.69	STUD
32	10	45630.01	HOSE CLAMP
33	6	9100205	SPRING WASHER
34	1	04.282.84	STUD
35	3	06.418.05	CLAMP PLATE
36	1	22190.09	HOSE COVER
37	5	9100025	DOME NUT
38	1	22190.10	HEAD SPACER
39	4	9200034	BOLT
40	1	9100208	SPRING WASHER

Model: PA180

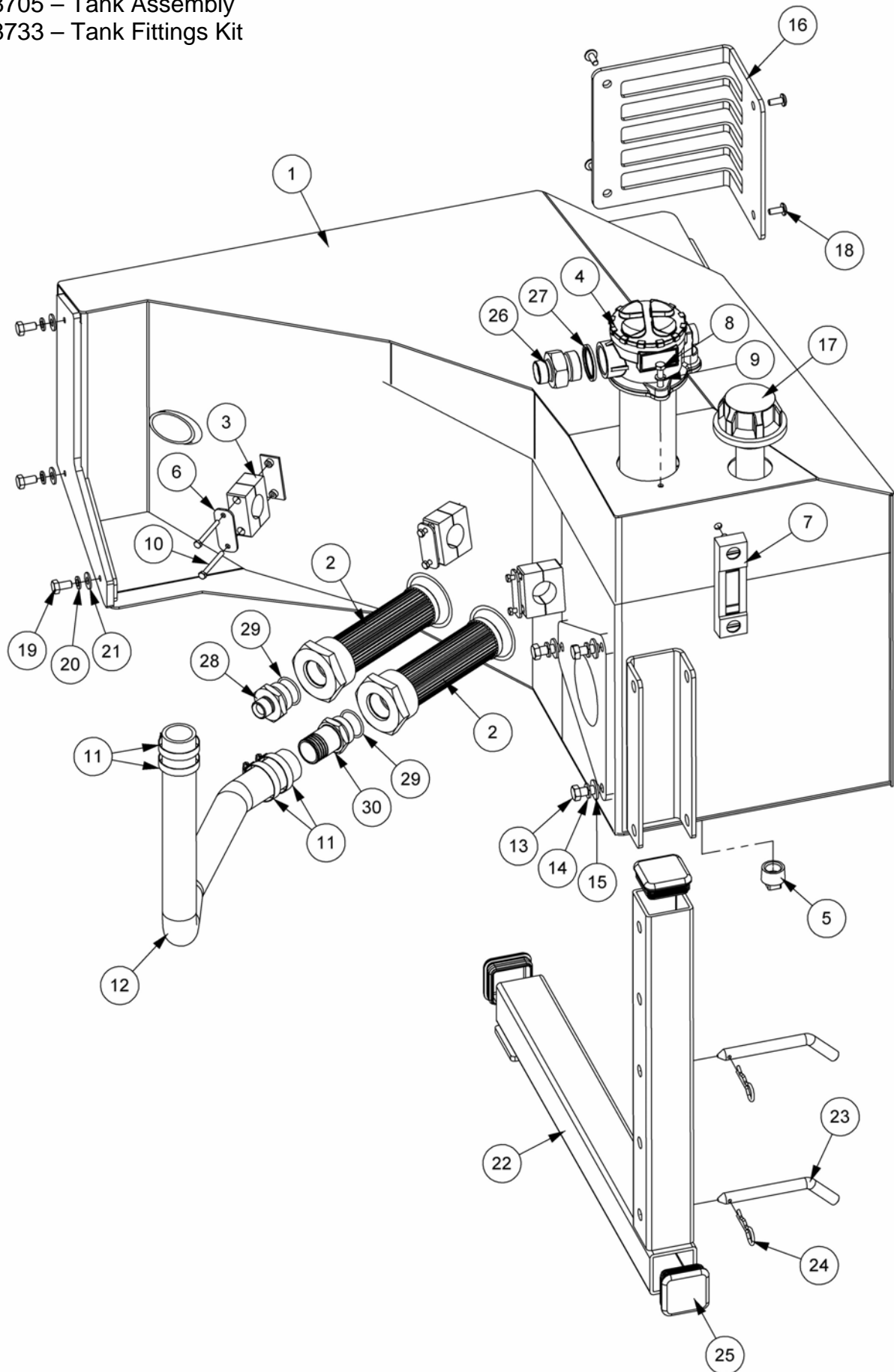


TANK ASSEMBLY & FITTING KIT

Module:

7418705 – Tank Assembly

7418733 – Tank Fittings Kit



TANK ASSEMBLY & FITTING KIT

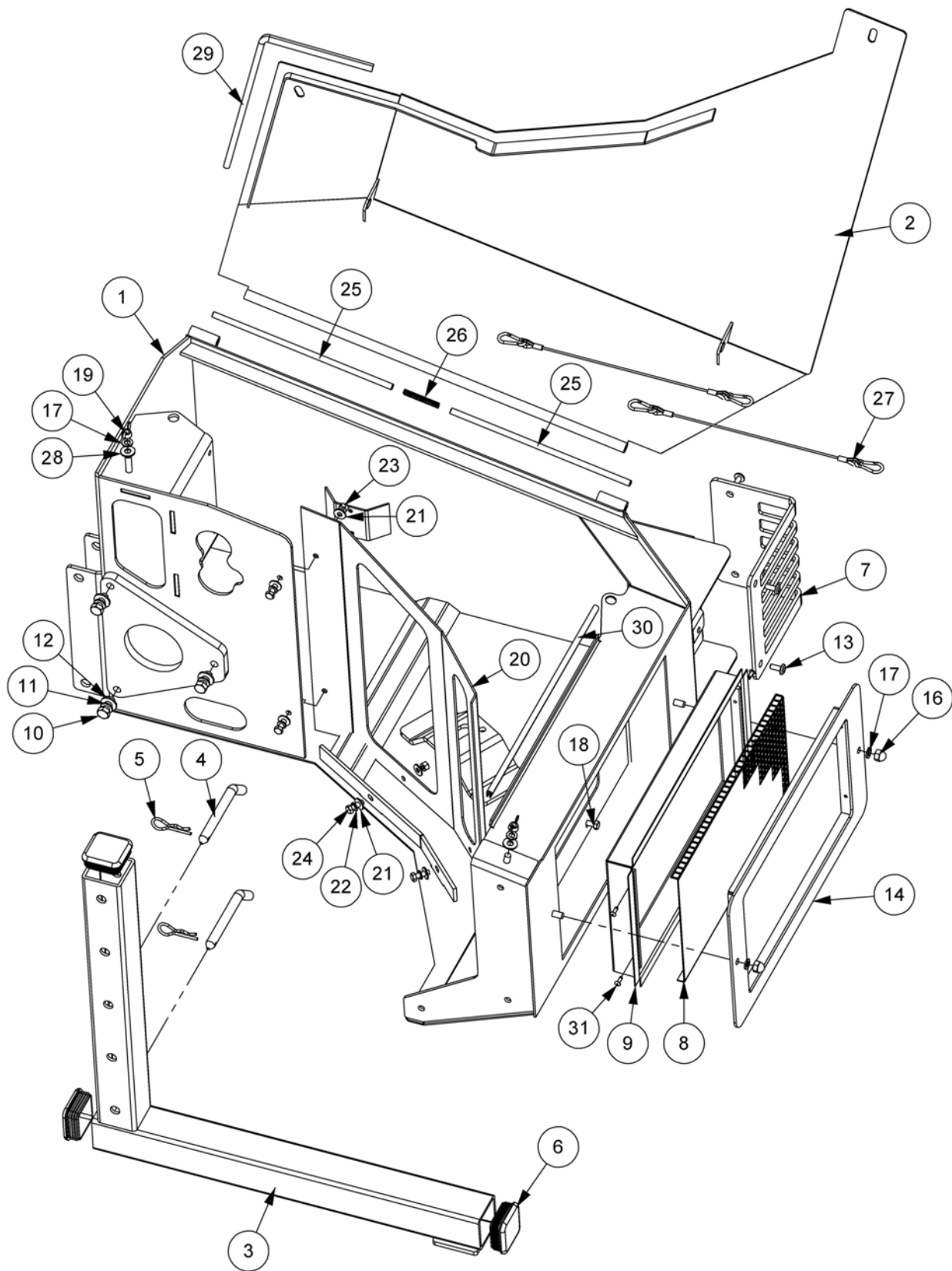
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		7418705	TANK ASSEMBLY
1	1	22133.01	TANK
2	2	8401091	STRAINER
3	3	42024.10	CLAMP (SINGLE PAIR)
4	1	8401088	FILTER ASSEMBLY <i>includes:</i>
	1	8401089	FILTER ELEMENT
	1	8401092	FILTER LID SPRING
	1	8401093	FILTER HOUSING SEAL
	1	8700235	O RING
	1	8700092	O RING
5	1	8581203	TAPER PLUG
6	3	EYC0035	CLAMP PLATE
7	1	8401048	LEVEL GAUGE
8	2	9313074	SETSCREW
9	2	9100204	SPRING WASHER
10	6	9213123	BOLT
11	4	0904107	HOSE CLIP
12	1	8501218-815	SUCTION HOSE
13	3	9313066	SETSCREW
14	3	9100206	SPRING WASHER
15	3	9100106	FLAT WASHER
16	1	22138.01	LIGHT GUARD
17	1	8401050	BREATHER
18	4	9373045	BUTTON HEAD BOLT
19	3	05.264.11	BOLT
20	3	9100205	SPRING WASHER
21	3	9100105	FLAT WASHER
22	1	22162.01	STAND LEG
23	2	43327.02	LEG PIN
24	2	0431105	SPRING COTTER
25	3	45210.01	PLASTIC PLUG
		7418733	TANK FITTINGS KIT
26	1	05.131.01	ADAPTOR
27	1	8650109	BONDED SEAL
28	1	T5342	ADAPTOR
29	1	8700784	O RING
30	1	8581260	ADAPTOR

Model: PA180



VALVE HOUSING ASSEMBLY

Module:
7418707



VALVE HOUSING ASSEMBLY

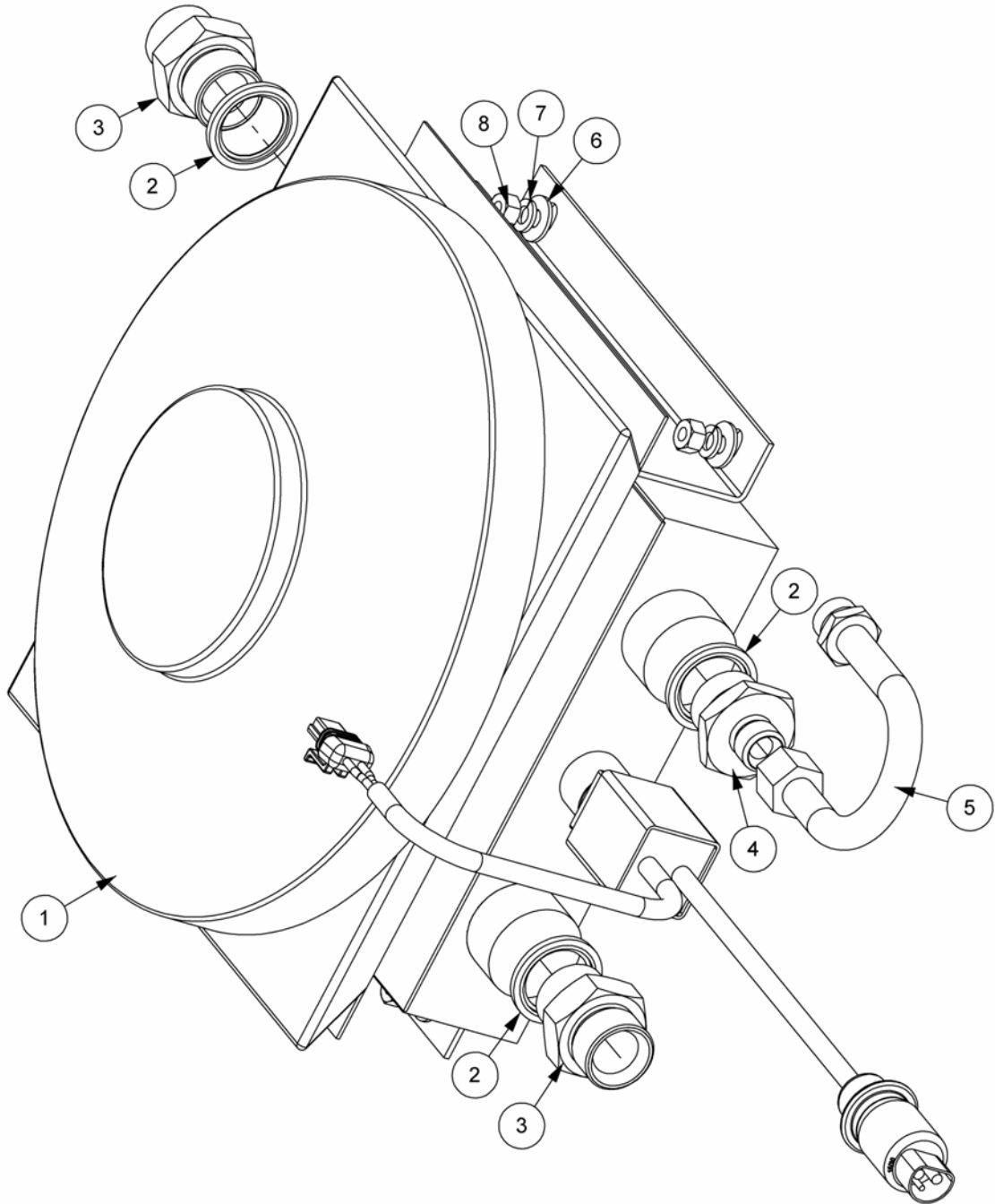
REF.	QTY.	PART No.	DESCRIPTION
		7418707	VALVE HOUSING ASSEMBLY
1	1	22139.01	VALVE HOUSING
2	1	22141.01	VALVE COVER
3	1	22162.01	STAND LEG
4	2	43327.02	LEG PIN
5	2	0431105	SPRING COTTER
6	3	45210.01	PLASTIC PLUG
7	1	22138.01	LIGHT GUARD
8	1	21465.03	DEBRIS SCREEN
9	1	21387.02	COOLER BASKET
10	3	9313066	SETSCREW
11	3	9100206	SPRING WASHER
12	3	9100106	FLAT WASHER
13	4	9373045	BUTTON HEAD BOLT
14	1	22152.01	COOLER MESH
15	2	22153.01	MESH RETAINER
16	2	9100025	DOME NUT
17	4	9100205	SPRING WASHER
18	4	9313044	SETSCREW
19	2	9193005	WING NUT
20	1	22139.45	VALVE HOUSING COVER PLATE
21	8	9100104	FLAT WASHER
22	4	9100204	SPRING WASHER
23	4	9143004	SELF-LOCKING NUT
24	4	9313054	SETSCREW
25	2	22141.33	COVER PIVOT ROD
26	1	21326.01	COMPRESSION SPRING
27	2	45444.01	RESTRAINT CABLE
28	2	9100105	FLAT WASHER
29	1	43468.14	RUBBER EDGING
30	1	43468.15	SEAL STRIP
31	4	21612.01	POP RIVET

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COOLER ASSEMBLY

Module:
7418732



Model: PA180



COOLER ASSEMBLY

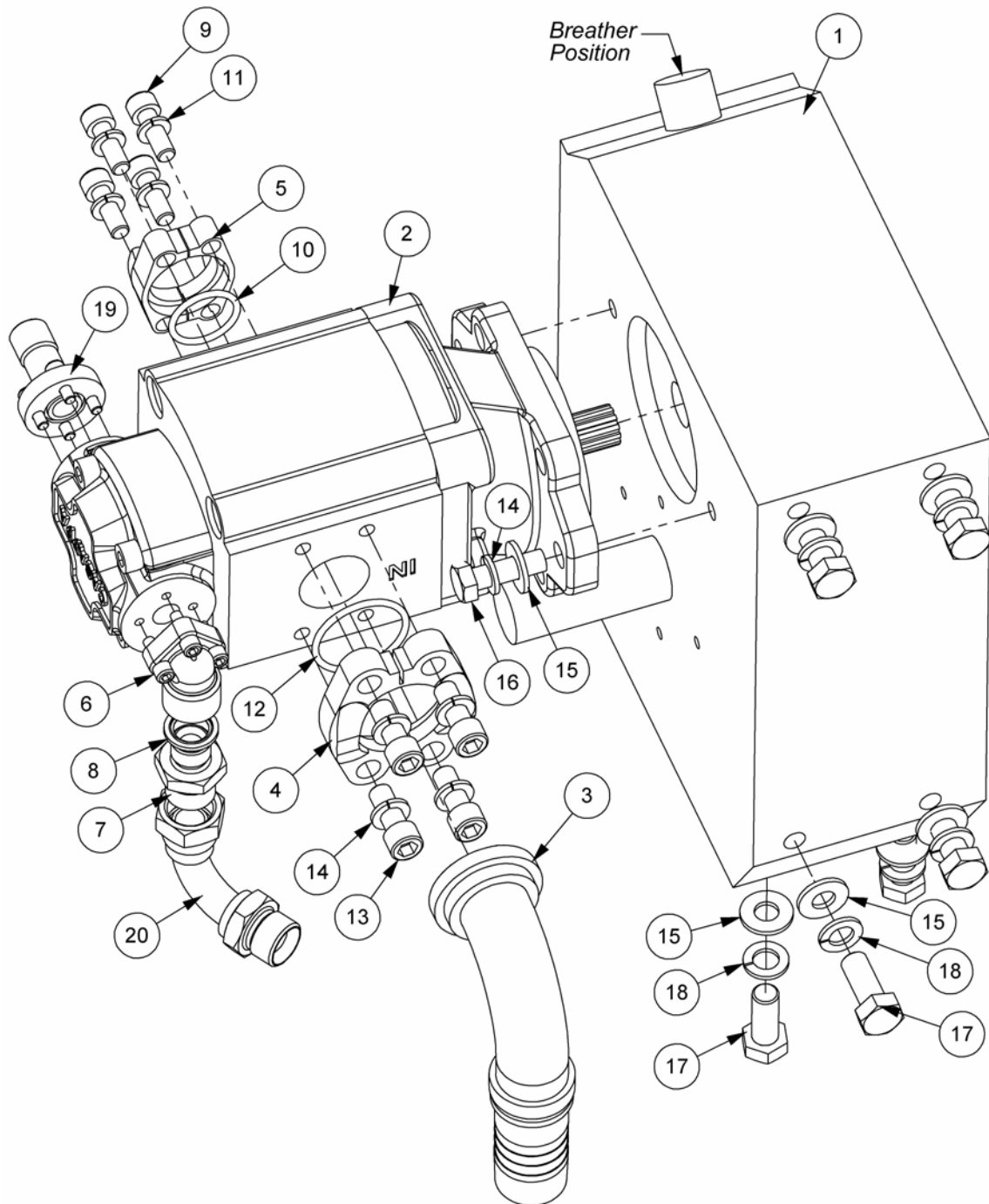
REF.	QTY.	PART No.	DESCRIPTION
		7418732	COOLER ASSEMBLY
1	1	8402379	OIL COOLER c/w THERMO SWITCH AND LOOM
2	3	8650108	BONDED SEAL
3	2	05.434.01	ADAPTOR
4	1	8581129	ADAPTOR
5	1	42782.32	PIPE (U BEND)
6	4	9100104	FLAT WASHER
7	4	9100204	SPRING WASHER
8	4	9143004	SELF-LOCKING NUT

Model: PA180

TI PUMP & GEARBOX ASSEMBLY



Module:
7418720



Model: PA180



TI PUMP & GEARBOX ASSEMBLY

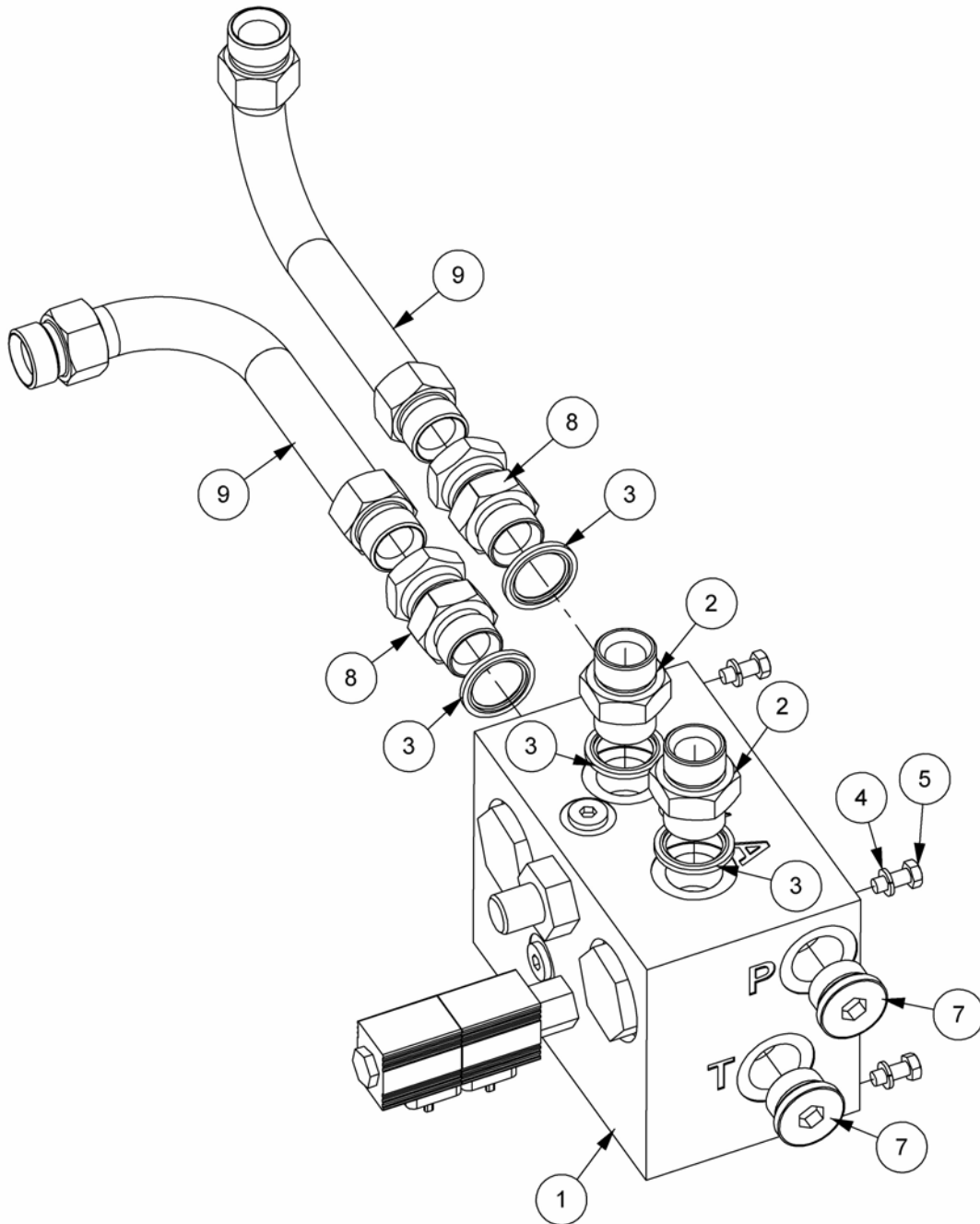
REF.	QTY.	PART No.	DESCRIPTION
		7418720	TI PUMP & GEARBOX ASSEMBLY
1	1	8013580	GEARBOX - 13 TOOTH (1:3.8 RATIO)
2	1	8201723	TANDEM PUMP (ANTICLOCKWISE)
3	1	8581489	ADAPTOR - LOW PRESSURE
4	1	41.294.01	SPLIT FLANGE (PAIR)
5	1	01.697.03	SPLIT FLANGE
6	2	8301045	ELBOW c/w CAPSCREWS & O RING
7	1	8581130	ADAPTOR
8	1	8650104	BONDED SEAL
9	4	9343065	CAPSCREW
10	1	8600124	O RING
11	4	9100205	SPRING WASHER
12	1	8600303	O RING
13	4	9343066	CAPSCREW
14	6	9100206	SPRING WASHER
15	10	9100106	FLAT WASHER
16	2	9313086	SETSCREW
17	8	05.839.01	BOLT
18	8	05.282.08	SPRING WASHER
19	1	8013127	PUMP CONNECTION
20	1	T3400	SWEPT ELBOW - 90°

Model: PA180

ELECTRIC RCV ASSEMBLY



Module:
7418724



Model: PA180



ELECTRIC RCV ASSEMBLY

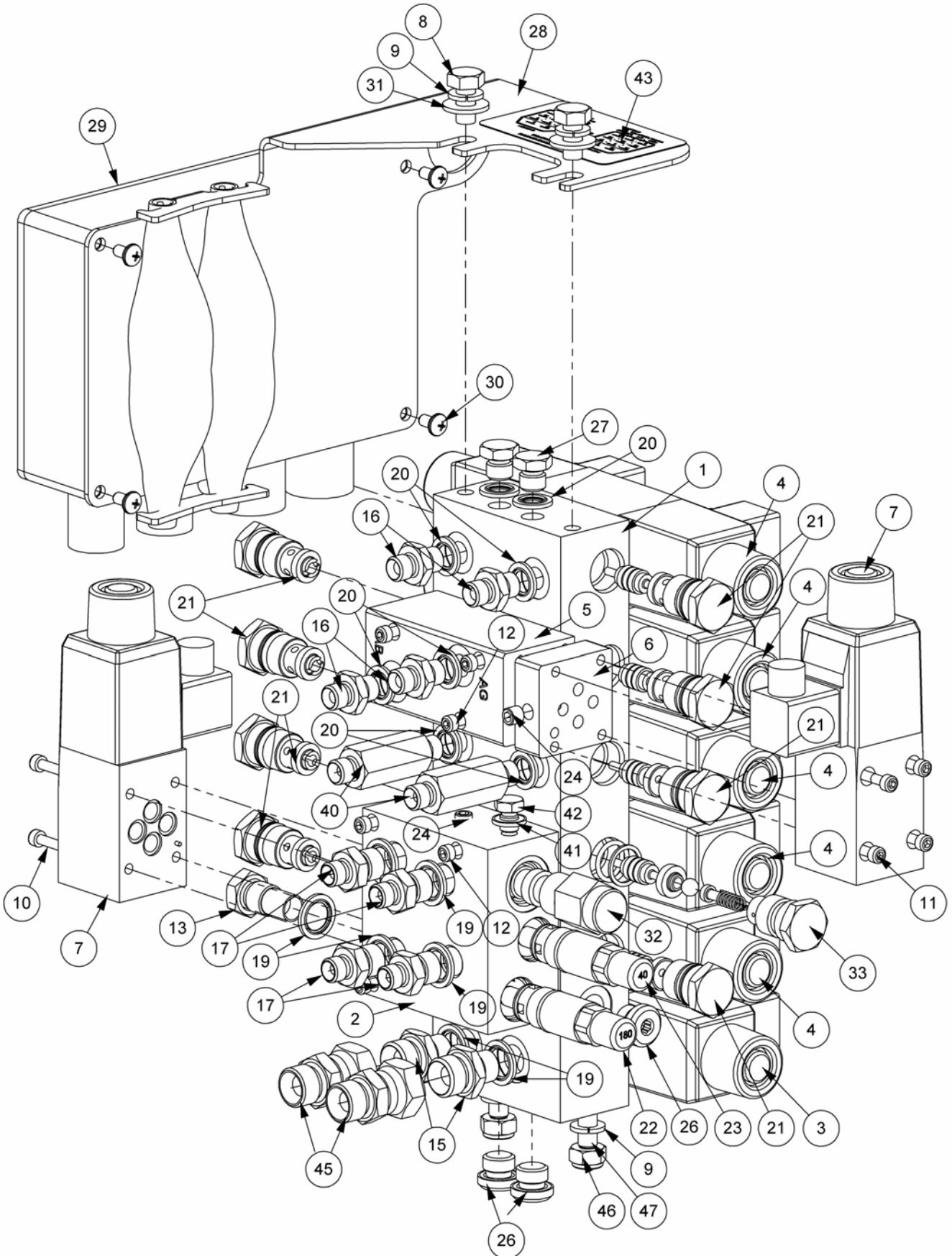
REF.	QTY.	PART No.	DESCRIPTION
		7418724	ELECTRIC RCV ASSEMBLY
1	1	42768.01	ELECTRIC ROTOR CONTROL VALVE
2	2	05.434.01	ADAPTOR
3	4	8650108	BONDED SEAL
4	4	9100204	SPRING WASHER
5	4	9313044	SETSCREW
6	1	43177.26	LOOM (ROTOR REVERSE)
7	2	8581389	PLUG
8	2	02.714.15	ADAPTOR
9	2	21053.07	RIGID PIPE ASSEMBLY

Model: PA180



PROP CONTROL VALVE (EDS)

Module:
7418722



PROP CONTROL VALVE (EDS)

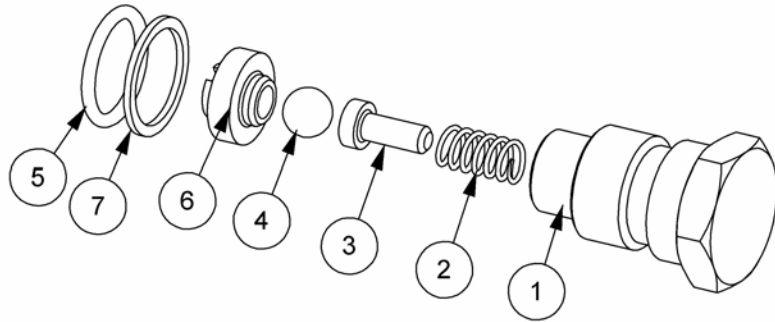
REF.	QTY.	PART No.	DESCRIPTION
		7418722	PROPORTIONAL CONTROL VALVE (EDS)
1	1	8132281	MANIFOLD BLOCK - 5 SERVICE
2	1	8132288	AUTO RESET BLOCK
3	1	8130456	CUT OFF SOLENOID VALVE
4	5	41784.46	DOUBLE SOLENOID PROPORTIONAL VALVE
5	1	8130323	FLOAT VALVE BLOCK
6	1	8126280	BRIDGING PLATE
7	2	8130457	SINGLE SOLENOID VALVE
8	2	9313045	SETSCREW
9	4	9100205	SPRING WASHER
10	28	9243062	CAPSCREW
11	4	9243102	CAPSCREW
12	8	9243082	CAPSCREW
13	1	8130032	RELIEF VALVE CAP
14	5	8130087	ACTUATOR
15	2	6000112	ADAPTOR
16	4	8581169	ADAPTOR
17	4	8581115	ADAPTOR
18	1	8130030	RELIEF VALVE - 210BAR
19	7	8650103	BONDED SEAL
20	8	8650102	BONDED SEAL
21	9	8130090	CHECK VALVE ASSEMBLY
22	1	G3812541	RELIEF VALVE - 180BAR
23	1	8130150	RELIEF VALVE - 40BAR
24	3	8582041	TAPER PLUG
25	11	8700511	O RING
26	3	8581436	PLUG - SOFT SEAL
27	2	520378	ADAPTOR PLUG
28	1	21170.01	CONTROLLER MOUNT BRACKET - L/H
29	1	21164.06	V4 ACB CONTROLLER
30	4	9300164	TAPTITE
31	2	9100105	FLAT WASHER
32	1	8130204	CARTRIDGE SPOOL VALVE
33	1	8130354	CHECK VALVE ASSEMBLY <i>comprising of:</i>
	1	8130209	RESTRICTED CHECK VALVE CAP
	1	8114045	SPRING
	1	8130089	SPRING GUIDE
	1	0905509	STEEL BALL
	1	8700644	O RING
	1	8130088	CHECK VALVE SEAT
	1	8709644	AE RING
34	1	8700525	O RING-METRIC
35	1	42989.07	RESTRICTOR - 1.6mm
36	3	42989.08	RESTRICTOR - 1.8mm
37	1	42989.02	RESTRICTOR - 0.9mm
38	2	42989.04	RESTRICTOR - 1.3mm
39	1	42989.03	RESTRICTOR - 1.15mm
40	2	8581279	ADAPTOR EXTENSION
41	1	05.290.01	BONDED SEAL
42	1	8581444	BLANKING PLUG
43	1	1290724	V4 ACB WIRING DECAL
44	1	8700522	O RING
45	2	270153	SWIVEL ADAPTOR
46	2	9143005	CLEVELOK NUT
47	2	42198.05	STUD

Model: PA180



CHECK VALVE ASSEMBLY

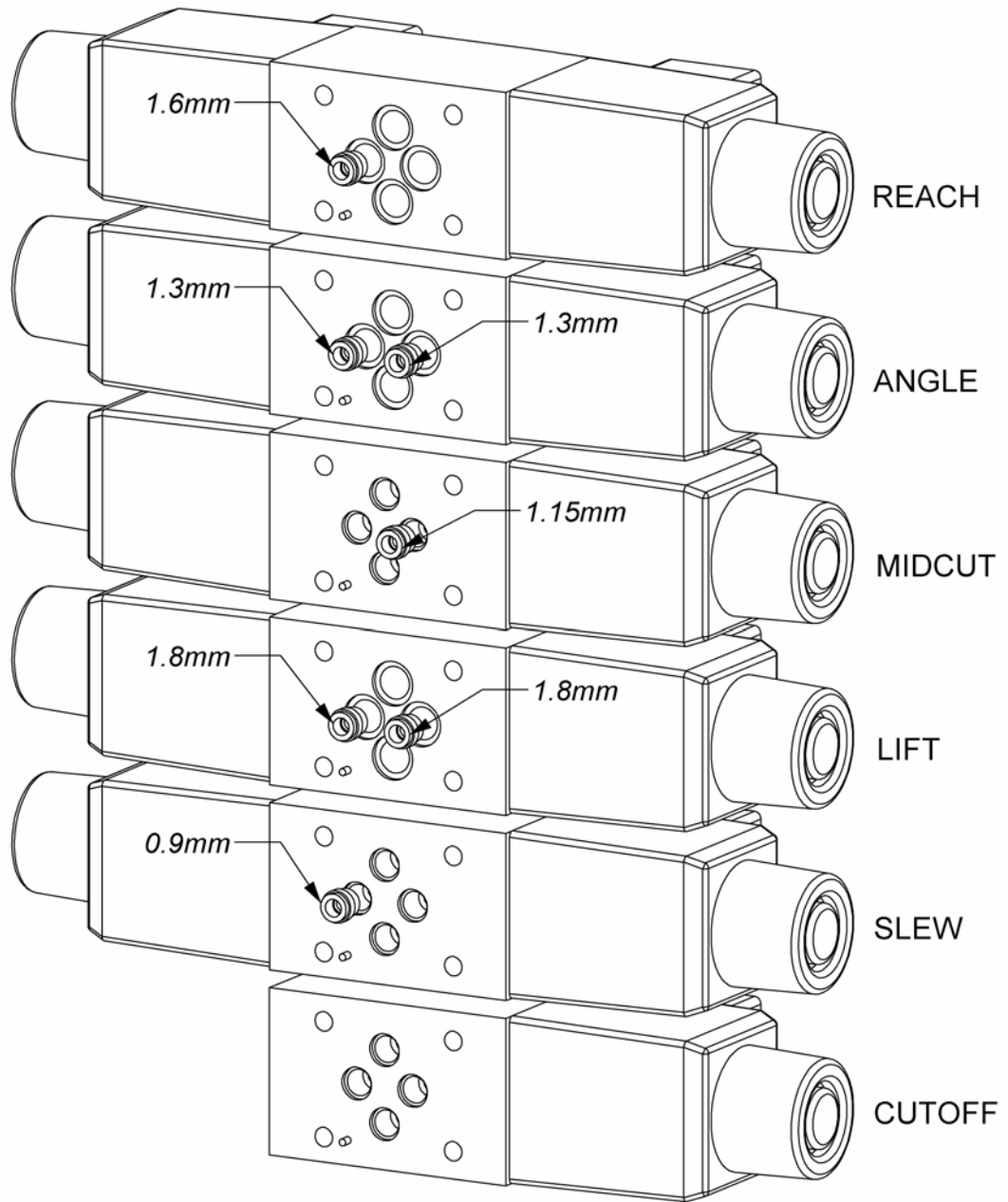
Module:
8130354 (Sub-component of 7418722)



REF.	QTY.	PART No.	DESCRIPTION
		8130354	CHECK VALVE ASSEMBLY
1	1	8130209	RESTRICTED CHECK VALVE CAP
2	1	8114045	SPRING
3	1	8130089	SPRING GUIDE
4	1	0905509	STEEL BALL
5	1	8700644	O RING
6	1	8130088	CHECK VALVE SEAT
7	1	8709644	AE RING

RESTRICTORS

Module:
7418722 (Sub-component)



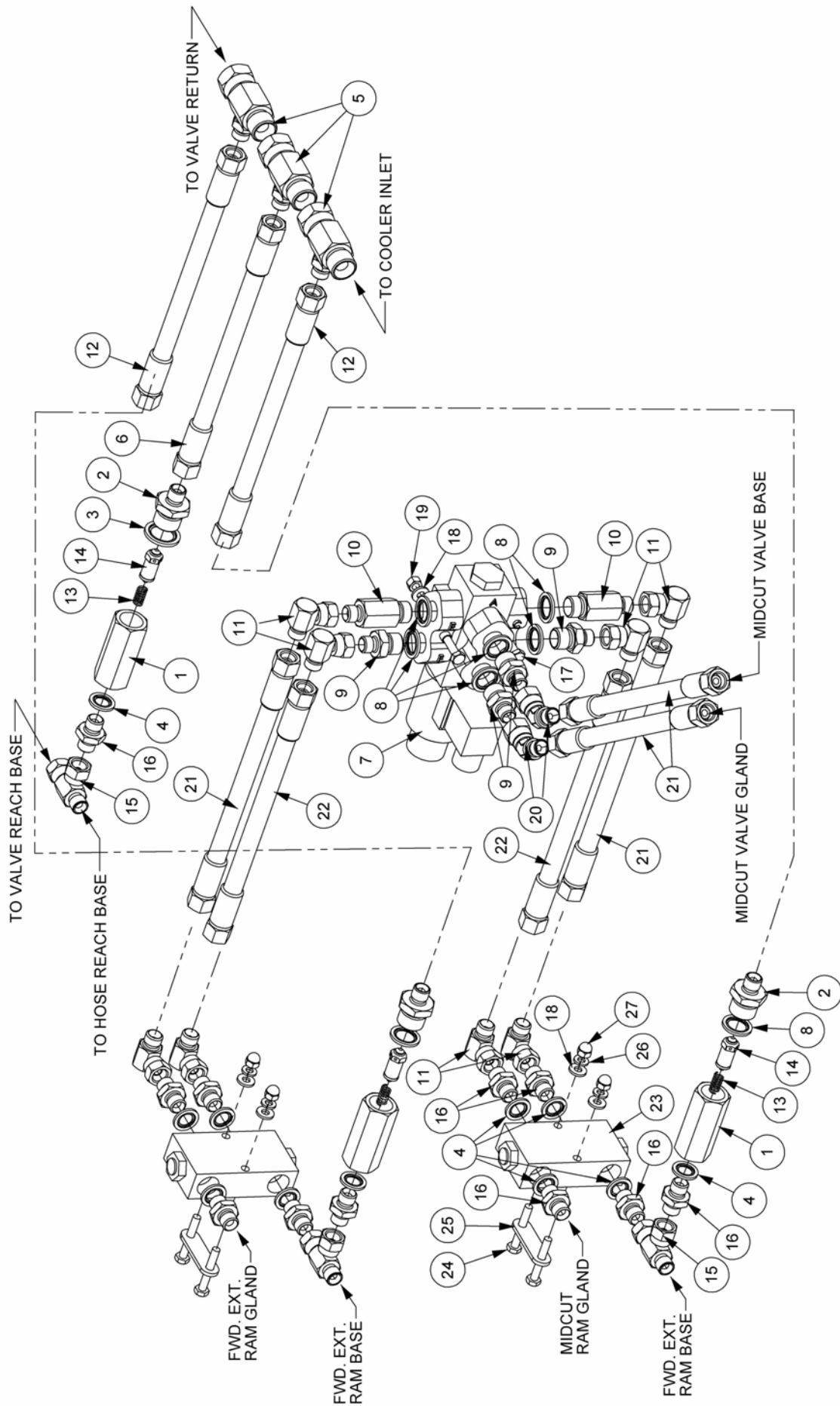
PART No.	DESCRIPTION
42989.02	RESTRICTOR - 0.9mm
42989.03	RESTRICTOR - 1.15mm
42989.04	RESTRICTOR - 1.3mm
42989.07	RESTRICTOR - 1.6mm
42989.08	RESTRICTOR - 1.8mm

Model: PA180



DIRECTION CONTROL VALVE

Module:
7418731



Model: PA180

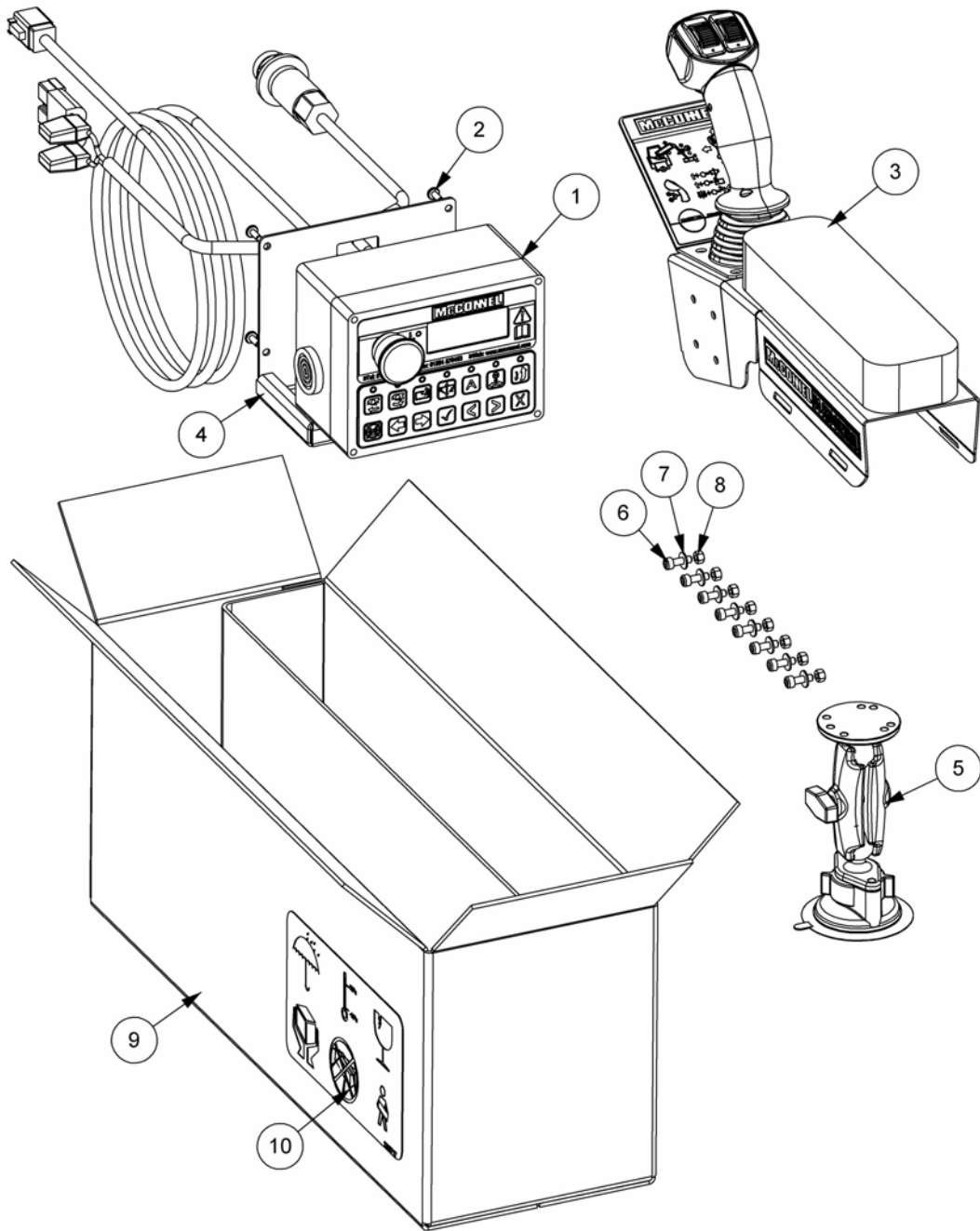


DIRECTION CONTROL VALVE

REF.	QTY.	PART No.	DESCRIPTION
		7418731	DIRECTION / MIDCUT RELIEF VALVE
1	3	8130156	RELIEF VALVE HOUSING
2	3	8130083	ADAPTOR RELIEF BODY
3	1	8650104	BONDED SEAL
4	11	8650102	BONDED SEAL
5	3	04.056.25	ADAPTOR TEE
6	1	10.001.12	HOSE - 1/4" BSP FS/FS x 600mm
7	1	41605.01	DIVERTER VALVE
8	8	8650103	BONDED SEAL
9	4	8581115	ADAPTOR
10	2	8581146	ADAPTOR EXTENSION
11	8	8581190	ADAPTOR ELBOW - 90°
12	2	10.001.11	HOSE - 1/4" BSP FS/FS x 550mm
13	3	8116011	SPRING
14	3	8130092	RELIEF VALVE - 190BAR
15	3	8581288	ADAPTOR TEE
16	11	8581169	ADAPTOR
17	2	9213113	BOLT
18	6	9100103	FLAT WASHER
19	2	9143003	SELF-LOCKING NUT
20	2	8581347	STEEL ELBOW - 135°
21	4	10.001.06	HOSE - 1/4" BSP FS/FS x 300mm
22	2	10.001.05	HOSE - 1/4" BSP FS/FS x 250mm
23	2	8132290	DOUBLE CHECK VALVE
24	4	9313083	SETSCREW
25	2	22139.48	BOLT PLATE
26	4	9100203	SPRING WASHER
27	4	9100034	DOME NUT

V4 ARMREST CONTROLS

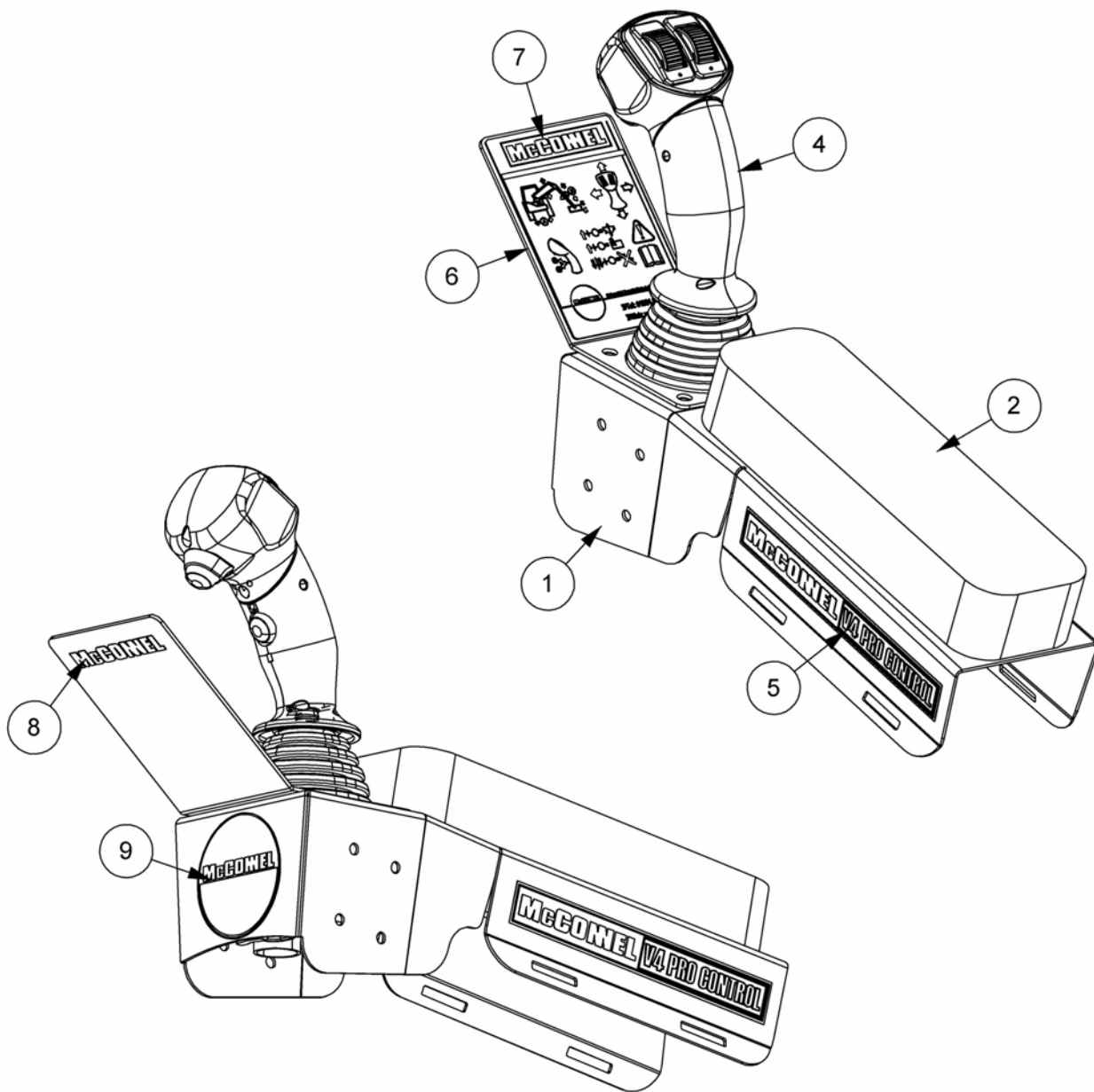
Module:
22073.01



REF.	QTY.	PART No.	DESCRIPTION
		22073.01	V4 CONTROLS WITH JC6000
1	1	22073.14	V4 CONTROL BOX (MK2)
2	4	2800243	SELF TAPPING SCREW
3	1	22073.03	V4 JOYSTICK ARMREST ASSEMBLY
4	1	22073.58	SCREEN MOUNT
5	1	22073.09	V4 SCREEN MOUNT KIT
6	8	9343032	CAPSCREW
7	8	9100102	FLAT WASHER
8	8	9143002	SELF-LOCKING NUT
9	1	8402700	WATER PROOF CARDBOARD BOX
10	1	1290717	BOX DECAL

V4 ARMREST ASSEMBLY

Module:
22073.03



REF.	QTY.	PART No.	DESCRIPTION
		22073.03	V4 JOYSTICK ARMREST ASSEMBLY
1	1	22073.44	JOYSTICK ARMREST MOUNT
2	1	22073.45	ARM REST FOAM
3	2	7106187	NYLON STRAP <i>(Not Illustrated)</i>
4	1	22073.16	JOYSTICK c/w THUMB SWITCHES
5	2	1290740	DECAL - V4 PRO CONTROL
6	1	22073.59	DECAL MOUNT
7	1	1290739	DECAL - V4 OPERATIONS
8	1	1290741	DECAL - McCONNEL
9	1	1290742	DECAL - McCONNEL ROUNDEL

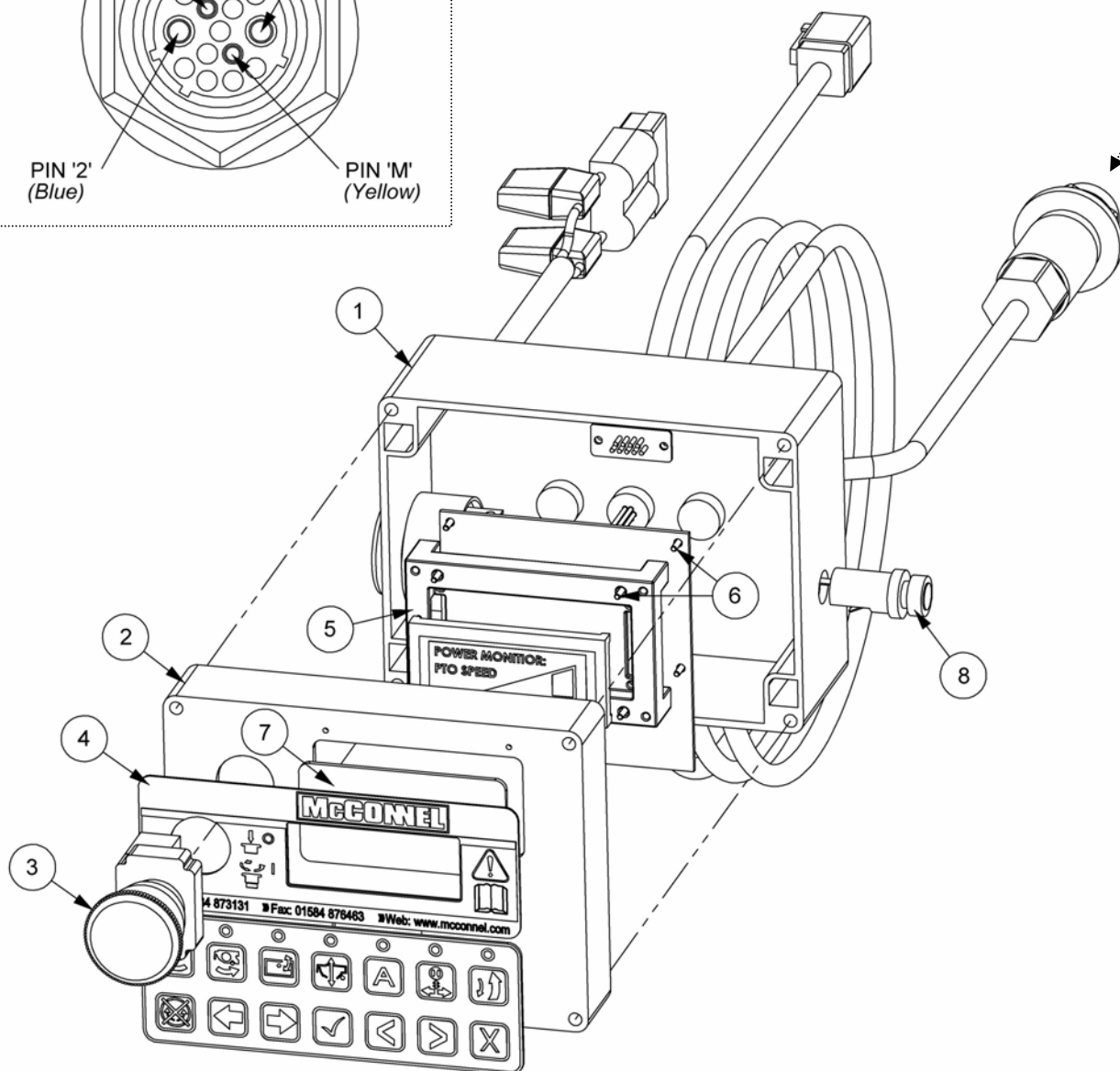
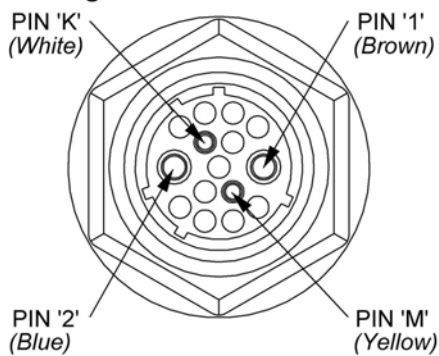
Model: PA180



V4 CONTROL BOX (Mk2)

Module:
22073.14

Signal Lead Connections



Model: PA180



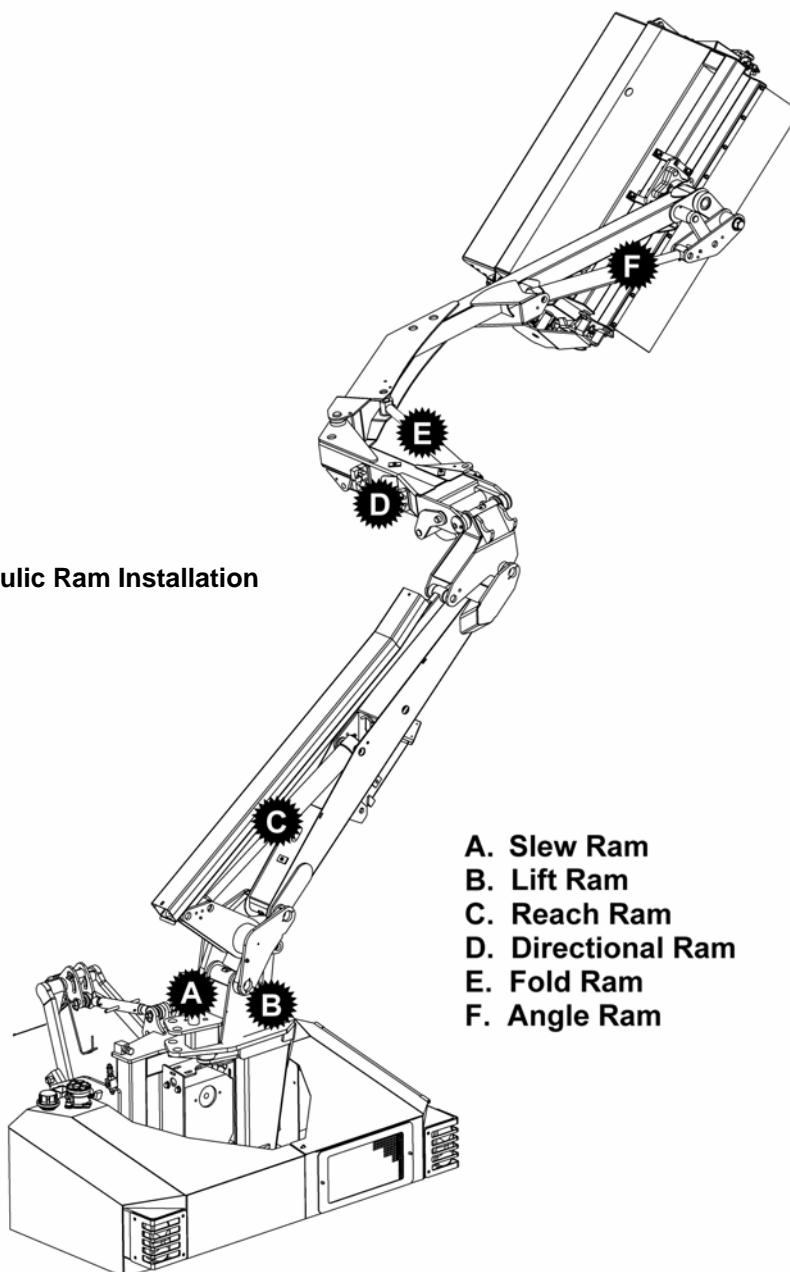
V4 CONTROL BOX (Mk2)

REF.	QTY.	PART No.	DESCRIPTION
		22073.14	V4 CONTROL BOX ASSEMBLY (Mk2)
1	1	22073.62	V4 CONTROL BOX
2	1	22073.32	BOX LID
3	1	41786.33	SWITCH / EMERGENCY STOP
4	1	22073.35	V4 DECAL
5	1	22073.39	V4 SCREEN MOUNT
6	8	22073.42	SELF-TAPPING SCREW
7	1	22073.40	SCREEN COVER
8	1	22073.41	FUSE HOLDER - BAYONET CAP (10A)

HYDRAULIC INSTALLATION

REF.	QTY.	PART No.	DESCRIPTION
		7418740	HYDRAULIC INSTALLATION - PA180
1	1	43316.04	SLEW RAM ASSEMBLY
2	1	45895.09	LIFT RAM ASSEMBLY
3	1	21340.01	REACH RAM ASSEMBLY
4	1	43317.07	ANGLE RAM ASSEMBLY
5	1	43317.08	FOLD RAM ASSEMBLY
6	1	7120419	DIRECTIONAL RAM ASSEMBLY
7	3	7135084	HOSE TIE - 180mm
8	4	7196045	HOSE TIE - 350mm
9	1	22289.90	SPLIT SLEEVE
10	4	05.434.01	ADAPTOR
11	2	8581190	ADAPTOR ELBOW
12	4	8581169	UNION

Hydraulic Ram Installation



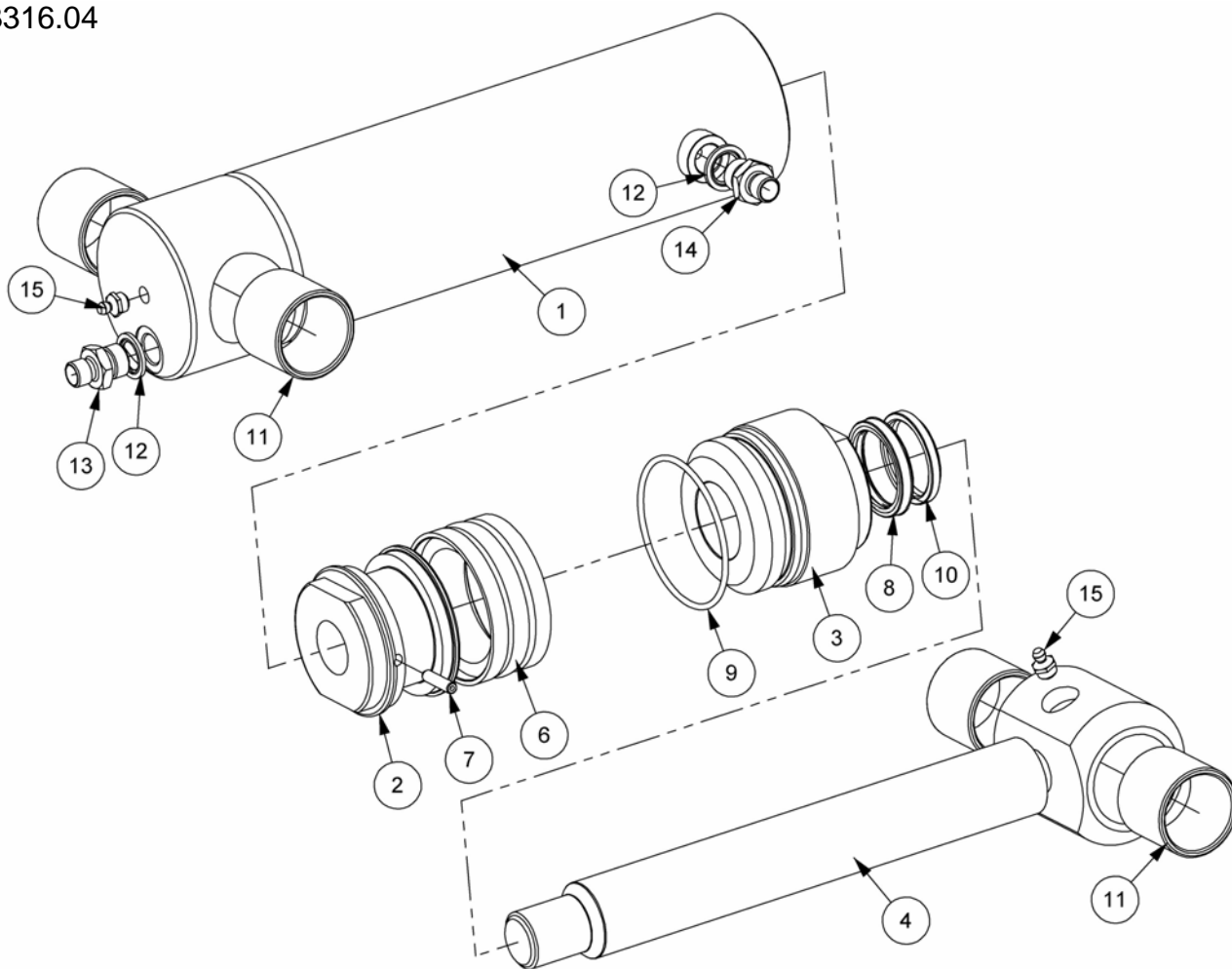
- A. Slew Ram
- B. Lift Ram
- C. Reach Ram
- D. Directional Ram
- E. Fold Ram
- F. Angle Ram

Model: PA180



SLEW RAM ASSEMBLY

Module:
43316.04



REF.	QTY.	PART No.	DESCRIPTION
		43316.04	SLEW RAM ASSEMBLY
1	1	43316.40	RAM BARREL
2	1	43316.31	PISTON
3	1	43316.32	GLAND HOUSING
4	1	43316.41	PISTON ROD
5	1	8600301	O RING
6	1	8638740	PISTON SEAL
7	1	42775.01	DOWEL
8	1	8629225	GLAND SEAL
9	1	8700740	O RING
10	1	8629208	SCRAPER RING
11	4	08.297.02	BUSH
12	2	8650103	BONDED SEAL
13	1	8581145	ADAPTOR
14	1	8130066	RESTRICTOR
15	2	0901121	GREASE NIPPLE
		43316.01	SEAL KIT

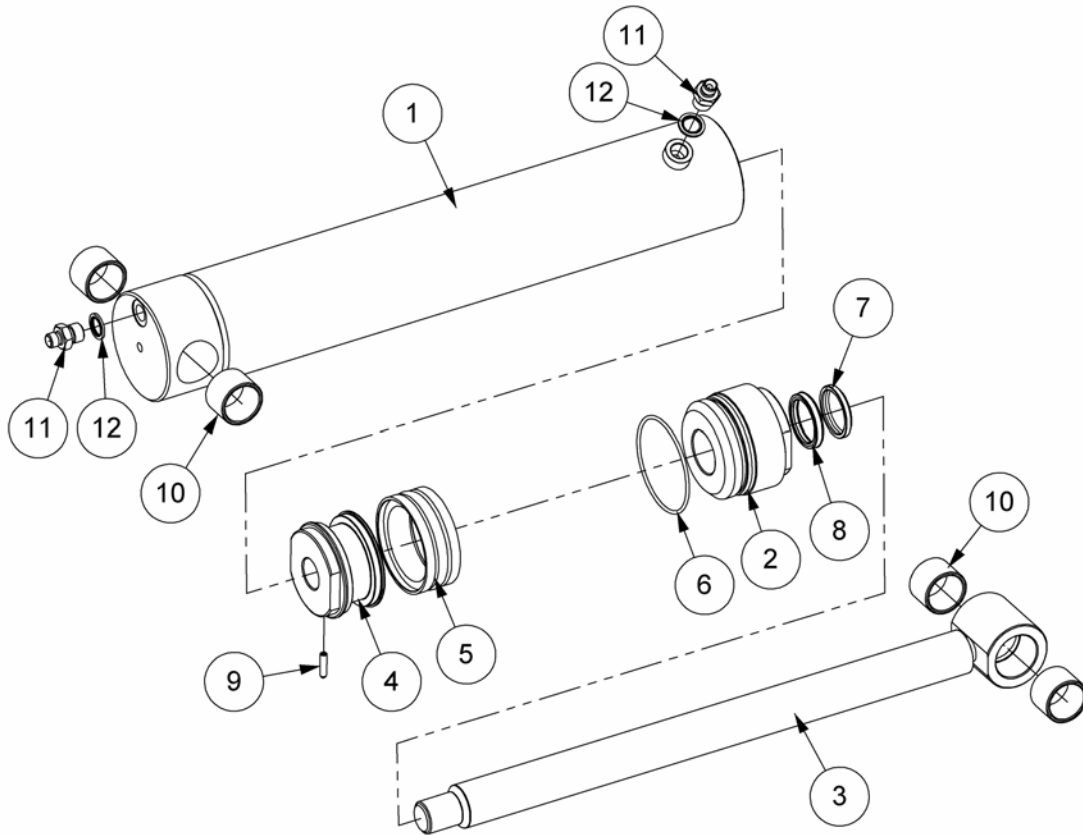
LIFT RAM ASSEMBLY

REF.	QTY.	PART No.	DESCRIPTION
		45895.08	LIFT RAM ASSEMBLY - STD Build
		45895.09	LIFT RAM ASSEMBLY - EDS Build
1	1	45895.43	RAM BARREL - Standard Build
	1	45895.43	RAM BARREL - EDS Build
2	1	45275.02	PISTON ROD
3	1	43315.31	PISTON
4	1	43315.32	GLAND HOUSING
5	1	42775.01	DOWEL
6	2	8600301	O RING
7	1	8638742	PISTON SEAL
8	1	8629225	GLAND SEAL
9	1	8629208	SCRAPER RING
10	5	08.297.05	BUSH
11	2	6000113	ADAPTOR
12	7	8650103	BONDED SEAL
13	2	8581178	ADAPTOR - SWIVEL
14	2	08.200.01	ISOLATING VALVE
15	2	8581115	ADAPTOR
16	1	05.433.01 *	HEX PLUG
17	1	8103005	ADAPTOR - EDS Build only
18	1	8650102	BONDED SEAL - EDS Build only
		43315.01	SEAL KIT

* *Item 16 replaces items 17 & 18 for blanking purposes (EDS Builds only).*

REACH RAM ASSEMBLY

Module:
21340.01



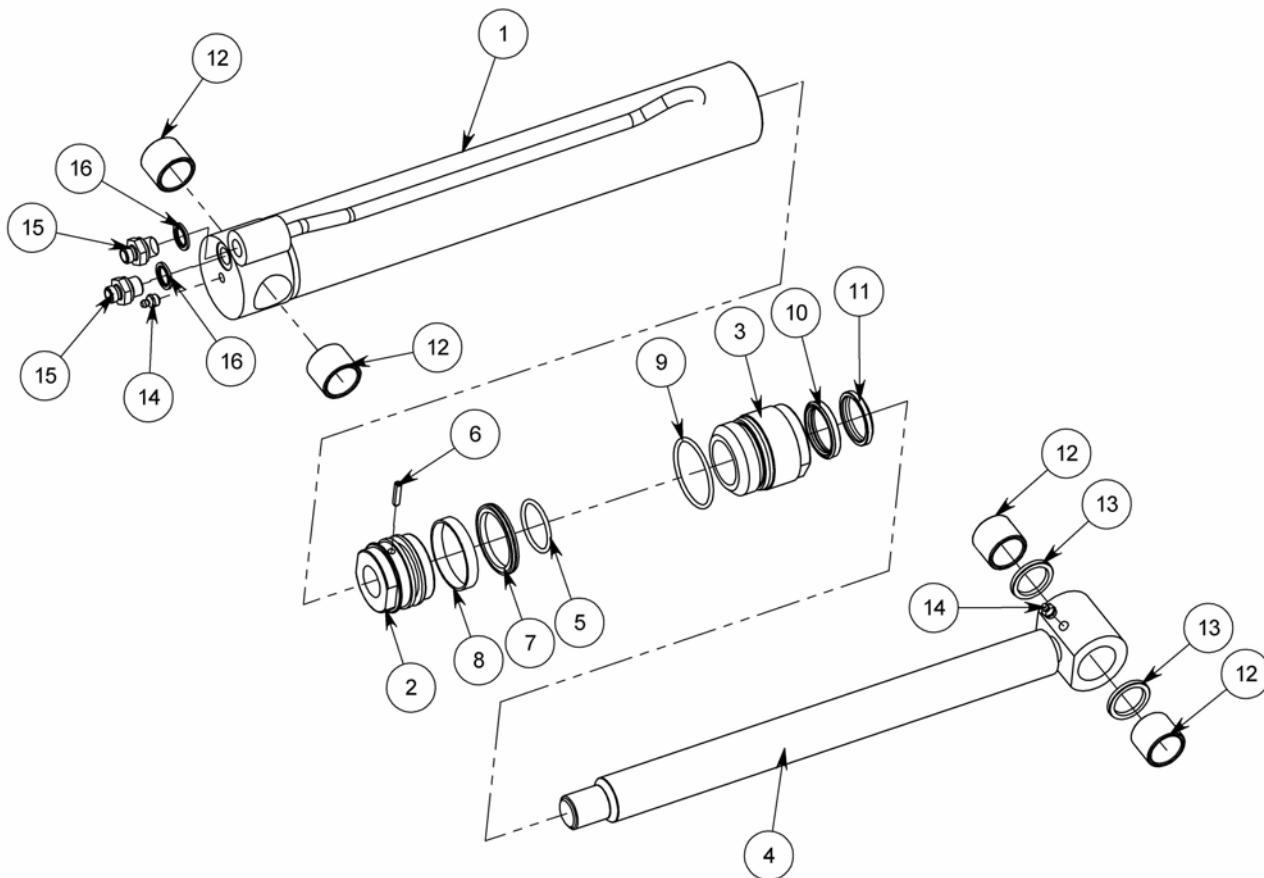
REF.	QTY.	PART No.	DESCRIPTION
		21340.01	REACH RAM ASSEMBLY
1	1	21340.31	RAM BARREL
2	1	43315.32	GLAND HOUSING
3	1	21340.34	PISTON ROD
4	1	43315.31	PISTON
5	1	8638742	PISTON SEAL
6	1	8600742	O RING
7	1	8629208	SCRAPER RING
8	1	8629225	GLAND SEAL
9	1	42775.01	DOWEL
10	4	08.297.05	BUSH
11	2	8581115	ADAPTOR
12	2	8650103	BONDED SEAL

Model: PA180



ANGLING RAM ASSEMBLY

Module:
43317.07



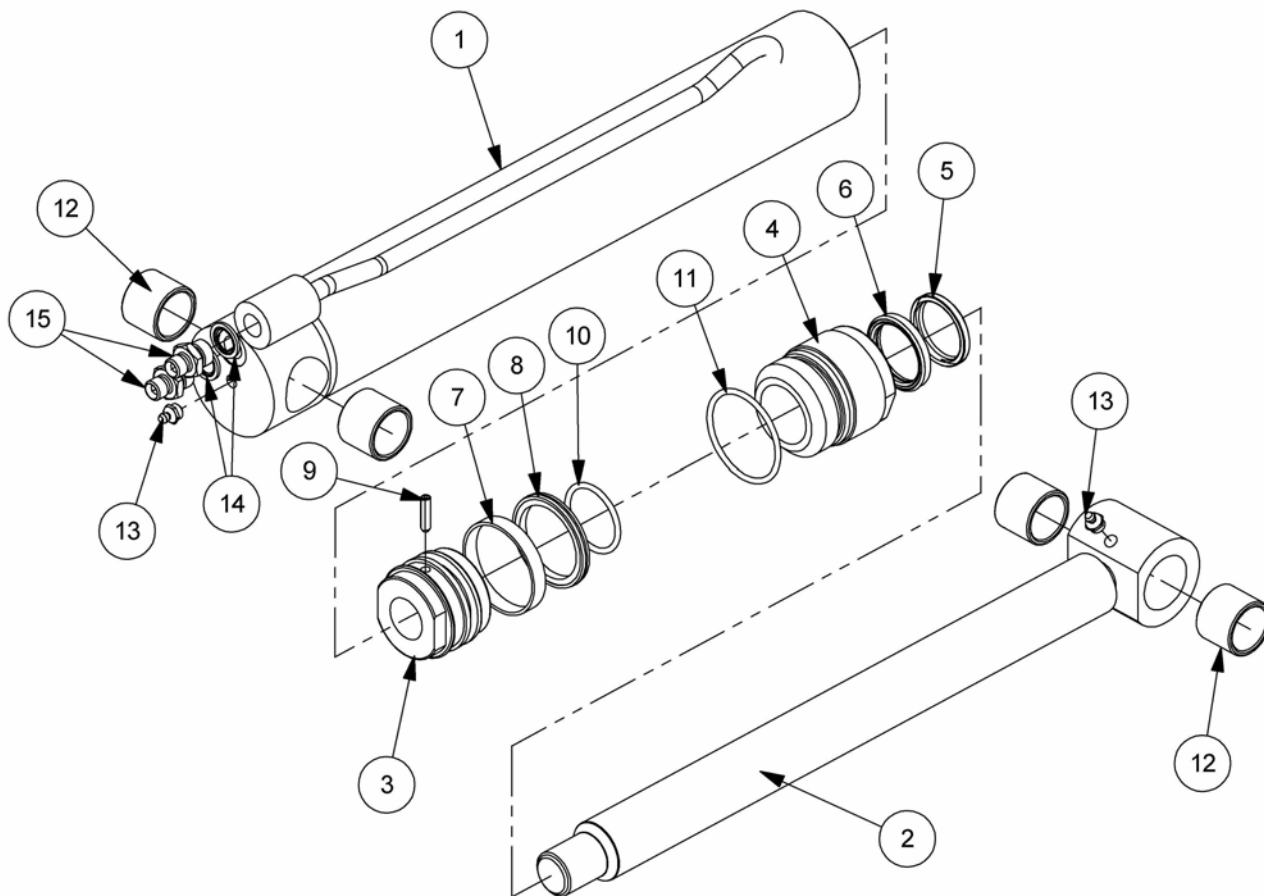
REF.	QTY.	PART No.	DESCRIPTION
		43317.07	ANGLING RAM ASSEMBLY
1	1	43317.33	BARREL
2	1	43317.31	PISTON
3	1	43317.32	GLAND HOUSING
4	1	43317.35	PISTON ROD
5	1	8600301	O RING
6	1	42775.01	DOWEL
7	1	8629156	PISTON SEAL
8	1	8629157	PISTON GUIDE RING
9	1	8600306	O RING
10	1	8629225	ROD GLAND SEAL
11	1	8629208	ROD SCRAPER RING
12	4	08.297.04	BUSH
13	2	8629218	SEAL
14	2	0901121	GREASER
15	2	8581115	ADAPTOR
16	2	8650103	BONDED SEAL
		43317.01	SEAL KIT

Model: PA180



FOLD RAM ASSEMBLY

Module:
43317.08



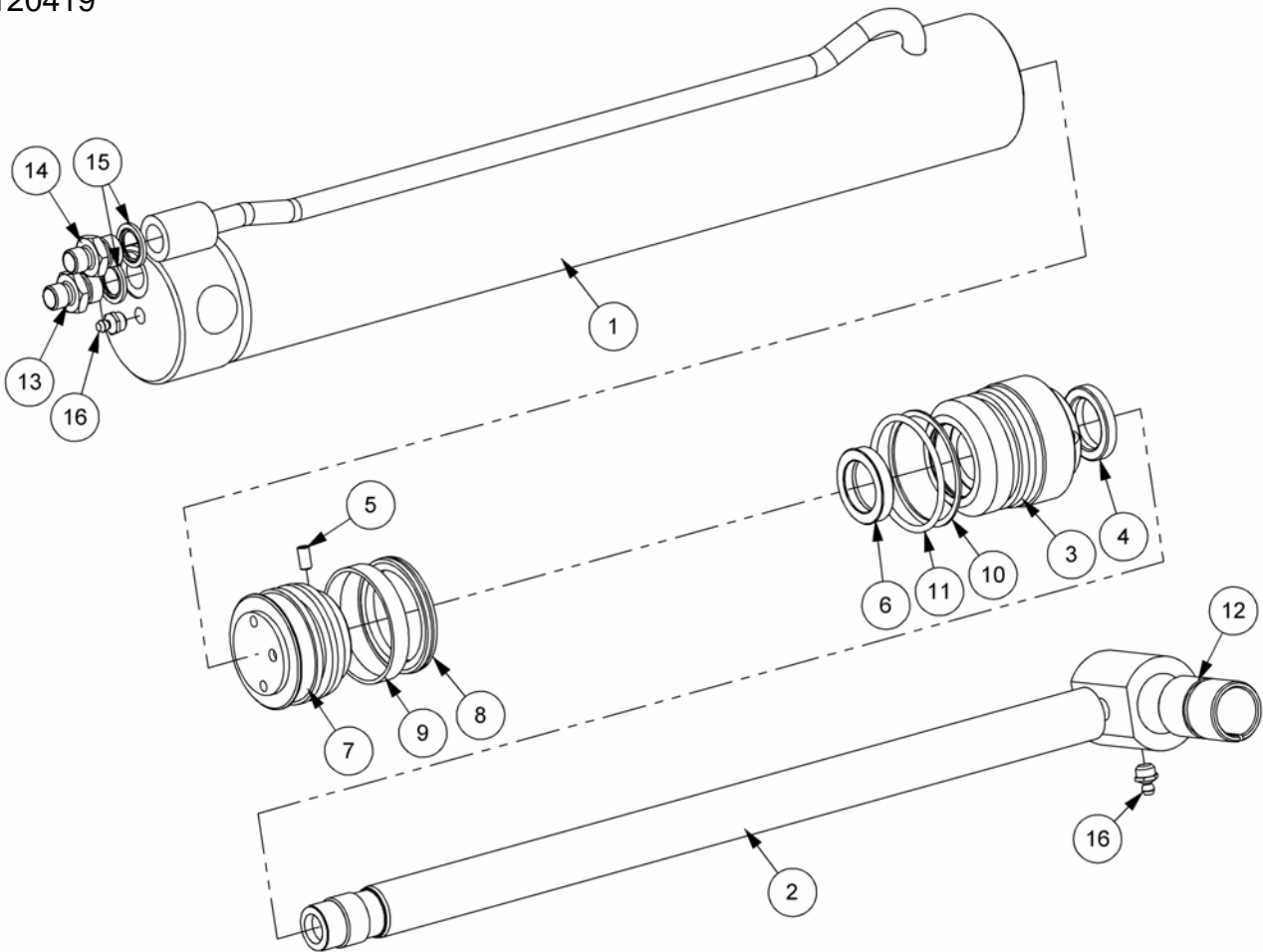
REF.	QTY.	PART No.	DESCRIPTION
		43317.08	FOLD RAM ASSEMBLY
1	1	43317.40	BARREL
2	1	43317.43	PISTON ROD
3	1	43317.31	PISTON
4	1	43317.32	GLAND HOUSING
5	1	8629208	SCRAPER RING
6	1	8629225	GLAND SEAL
7	1	8629157	GUIDE RING
8	1	8629156	PISTON SEAL
9	1	42775.01	DOWEL
10	1	8600301	O RING
11	1	8600306	O RING
12	4	08.297.04	BUSH
13	2	0901121	GREASE NIPPLE
14	2	8650103	BONDED SEAL
15	2	8581115	ADAPTOR
		43317.01	SEAL KIT

Model: PA180



DIRECTIONAL RAM ASSEMBLY

Module:
7120419



REF.	QTY.	PART No.	DESCRIPTION
		7120419	RAM ASSEMBLY
1	1	7120420	RAM BARREL
2	1	7120027	PISTON ROD
3	1	7136312	GLAND HOUSING
4	1	8629149	SCRAPER RING
5	1	9363023	GRUB SCREW
6	1	8629148	GLAND SEAL
7	1	7120368	PISTON
8	1	8629156	PISTON SEAL
9	1	8629157	GUIDE RING
10	1	8609306	AE RING
11	1	8600306	O RING
12	1	7105050	ROD END BUSH
13	1	8130066	RESTRICTOR
14	1	8130068	RESTRICTOR
15	2	8650103	BONDED SEAL
16	2	0901121	GREASE NIPPLE

Model: PA180

HYDRAULIC HOSE KIT





HYDRAULIC HOSE KIT

REF.	QTY.	PART No.	DESCRIPTION
		74187220	HYDRAULIC HOSE KIT - PA180 Model
1	1	10.010.18	HOSE - 3/4" BSP FS/F90 x 900mm
2	1	10.006.23	HOSE - 1/2" BSP FS/F90 x 1300mm
3	1	10.005.23	HOSE - 1/2" BSP FS/FS x 1300mm
4	1	10.012.24	HOSE - 1" BSP FS/F90 x 1400mm
5	1	8501319	HOSE - 1" SAE 90° x 1" BSP FS x 850mm
6	1	10.011.17	HOSE - 1" BSP FS/FS x 850mm
7	1	10.012.36	HOSE - 1" BSP FS/F90 x 2600mm
8	1	10.012.37	HOSE - 1" BSP FS/F90 x 2700mm
9	1	10.011.56	HOSE - 1" BSP FS/FS x 4600mm
10	2	10.011.43	HOSE - 1" BSP FS/FS x 3300mm
11	1	10.011.57	HOSE - 1" BSP FS/FS x 4700mm
12	1	10.001.34	HOSE - 1/4" BSP FS/FS x 2400mm
13	1	10.001.34	HOSE - 1/4" BSP FS/FS x 2400mm
14	1	10.001.30	HOSE - 1/4" BSP FS/FS x 2000mm
15	1	10.002.32	HOSE - 1/4" BSP FS/F90 x 2200mm
16	1	10.001.50	HOSE - 1/4" BSP FS/FS x 4000mm
17	1	10.002.55	HOSE - 1/4" BSP FS/F90 x 4500mm
18	2	10.001.71	HOSE - 1/4" BSP FS/FS x 6100mm
19	2	10.001.73	HOSE - 1/4" BSP FS/FS x 6300mm
20	2	10.001.44	HOSE - 1/4" BSP FS/FS x 3400mm
21	2	10.001.57	HOSE - 1/4" BSP FS/FS x 4700mm

LOCATION OF HOSES ON THE MACHINE

1	2ND PUMP SUCTION - TANK TO PUMP	12	LIFT BASE
2	2ND PUMP - PUMP TO VALVE	13	LIFT GLAND
3	VALVE TO COOLER HEADER PIPE	14	SLEW BASE
4	COOLER TO TANK	15	SLEW GLAND
5	PUMP TO RCV	16	REACH BASE
6	ELEC RCV TO COOLER	17	REACH GLAND
7, 8	ELEC RCV TO MAIN ARM	18	DIRECTIONAL BASE/GLAND
9	MAIN ARM TO DIPPER	19	MIDCUT BASE/GLAND
10	DIPPER TO HEAD	20	ANGLE-VALVE TO MAIN ARM
11	MAIN ARM TO DIPPER	21	ANGLE MAIN ARM TO RAM

NOTE: It is advisable when replacing hoses to run the new hose alongside the old one prior to its removal - this will help to ensure the correct routing of the hose is achieved.

Model: PA180

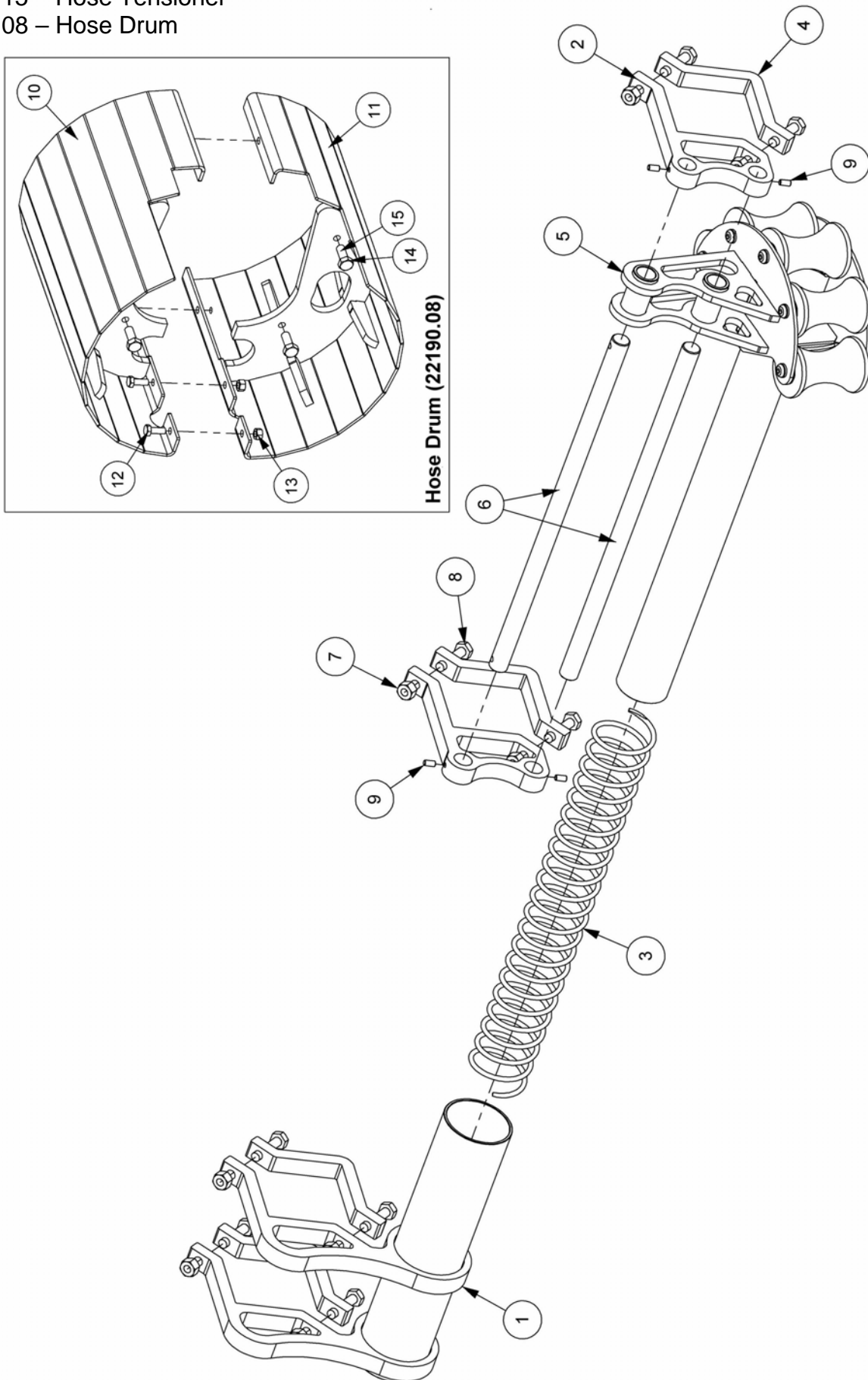


HOSE TENSIONER & DRUM

Module:

22190.15 – Hose Tensioner

22190.08 – Hose Drum

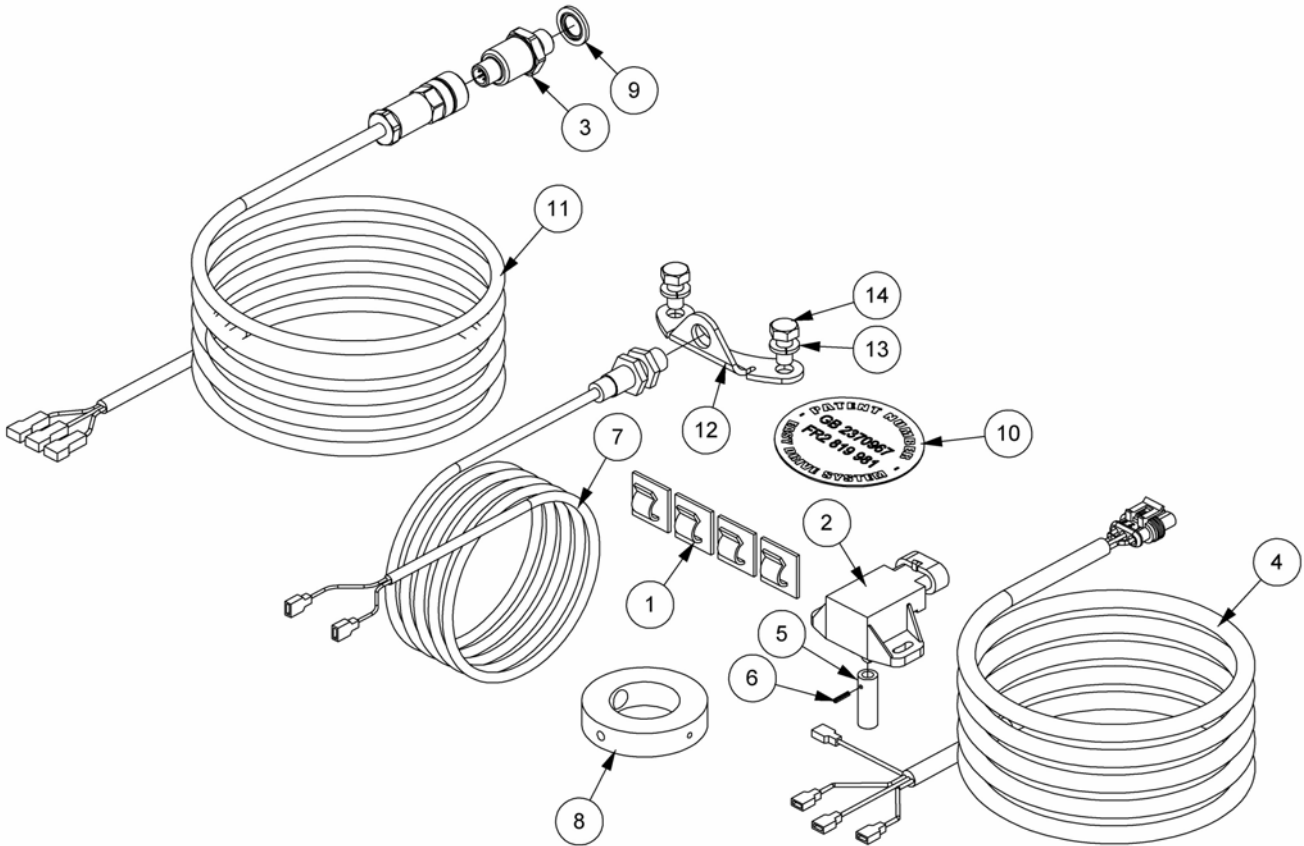


HOSE TENSIONER & DRUM

REF.	QTY.	PART No.	DESCRIPTION
		22190.15	HOSE TENSIONER ASSEMBLY
1	1	22190.14	TUBE GUIDE
2	2	22190.72	TUBE MOUNT
3	1	22190.41	HOSE COMPRESSION SPRING
4	4	22190.69	CLAMP
5	1	22190.13	HOSE TENSIONER ASSEMBLY
6	2	22190.39	GUIDE BAR
7	8	9143005	SELF-LOCKING NUT
8	8	9313095	SETSCREW
9	4	9363023	GRUB SCREW WITH TUFLOCK
		22190.08	HOSE DRUM ASSEMBLY
10	1	22190.06	HOSE DRUM TOP
11	1	22190.07	HOSE DRUM BOTTOM
12	2	9313033	SETSCREW
13	2	9143003	SELF-LOCKING NUT
14	4	9313044	SETSCREW
15	4	9100204	SPRING WASHER

EDS SENSOR KIT

Module:
7556714



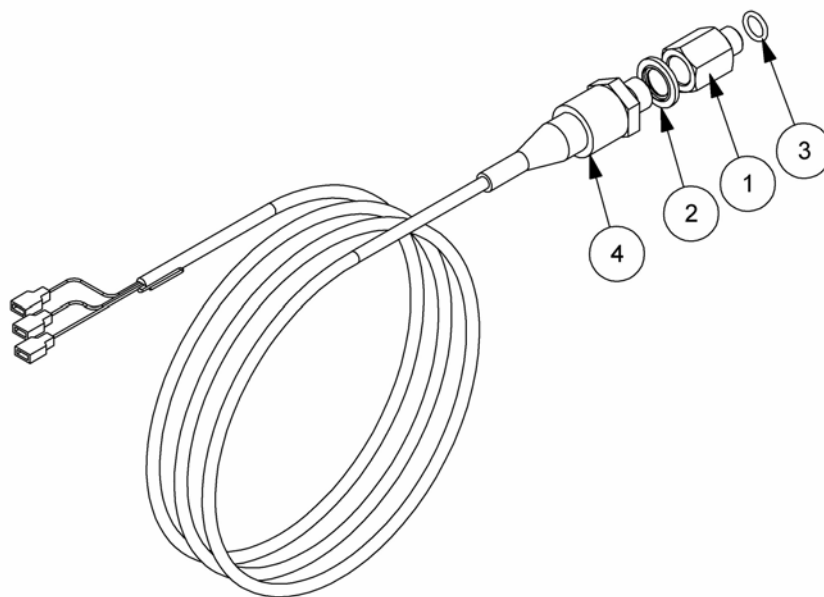
REF.	QTY.	PART No.	DESCRIPTION
		7556714	EDS SENSOR KIT
1	4	43357.01	CLIP (SELF ADHESIVE)
2	1	8402235	REACH SENSOR
3	1	8402253	PRESSURE SENSOR (0 TO 250 BAR)
4	1	21163.01	REACH SENSOR LOOM
5	1	45425.07	SENSOR EXTENSION
6	1	0430110	SPRING DOWEL
7	1	8402251	PTO SENSOR
8	1	8402252	PTO MAGNETIC RING
9	1	8650102	BONDED SEAL
10	1	21365.01	PATENT DECAL
11	1	43177.52	LOOM - PRESSURE TRANSDUCER
12	1	21170.07	SENSOR MOUNT
13	2	9100204	SPRING WASHER
14	2	9313034	SETSCREW

Model: PA180

POWER MONITOR SENSOR KIT



Module:
7556711



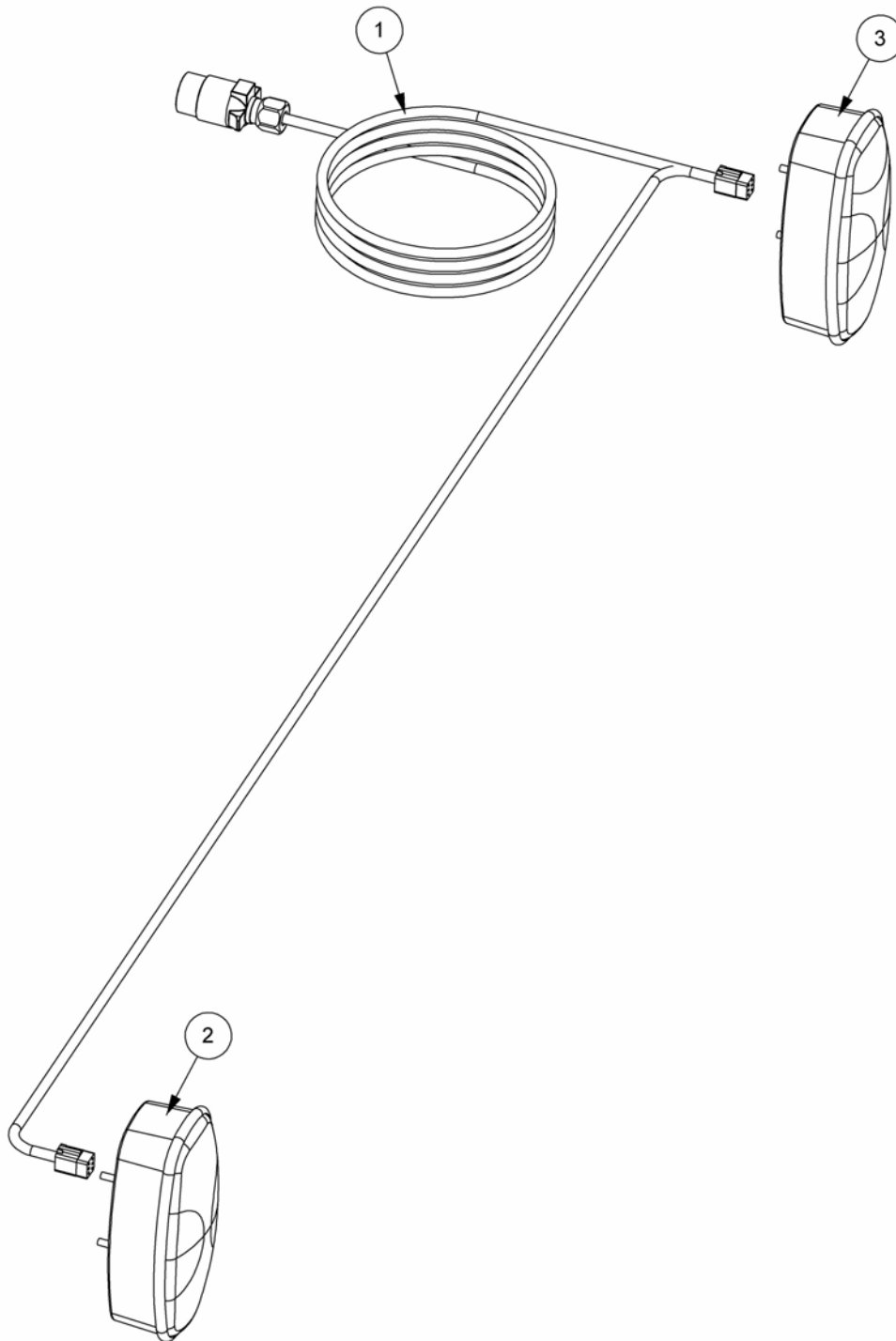
REF.	QTY.	PART No.	DESCRIPTION
		7556711	POWER MONITOR SENSOR KIT
1	1	8581458	ADAPTOR
2	1	8650102	BONDED SEAL
3	1	8600904	O RING
4	1	8402257	PRESSURE SENSOR (0 TO 250 BAR)

Model: PA180



LIGHTING KIT

Module:
7418734



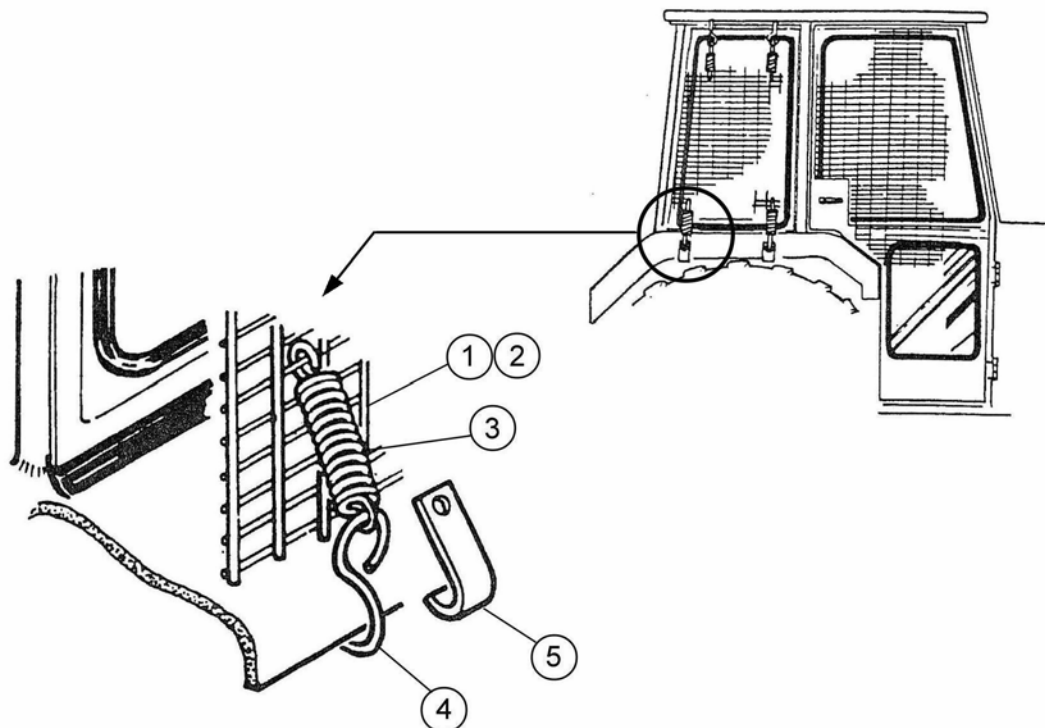
REF.	QTY.	PART No.	DESCRIPTION
		7418734	LIGHTING KIT
1	1	43177.65	LIGHTING HARNESS
2	1	21392.01	REAR LAMP - L/H
3	1	21392.02	REAR LAMP - R/H

Model: PA180



CAB GUARD KIT

Module:
7313324



REF.	QTY.	PART No.	DESCRIPTION
		7313324	CAB GUARD & MOUNTING KIT
1	1	7313049	GUARD PANEL - LARGE
2	1	7313050	GUARD PANEL - SMALL
3	12	6001064	SPRING
4	6	6001065	HOOK
5	6	7313051	HOOK

Model: PA180



Module:

DECALS KITS

REF.	QTY.	PART No.	DESCRIPTION
		7418736	PA180 BASIC DECAL KIT
1	1	7105130	DECAL - WARNING
2	1	1290352	DECAL - CAB (ENGLISH/FRENCH)
3	1	1290391	DECAL - GENERAL SAFETY
4	1	00756494	DECAL - DRIVELINE HAZARD
5	6	02962764	DECAL - SPECIFIC PINCH POINTS
6	1	1290571	DECAL - QUEENS AWARD
7	1	09.811.03	DECAL - PTO SPEED (500RPM)
8	1	7135295	DECAL - TIGHTEN CHECK CHAINS
9	1	1290403	DECAL - BREAKAWAY WARNING
10	2	1290074	DECAL - SLING HERE
11	1	1290406	DECAL - TRANSPORT WARNING
12	1	8402135	DECAL - CAUTION LABEL
13	1	1290023	DECAL - OIL FILTER
14	1	1290255	DECAL - McCONNEL (BLACK)
15	1	1290614	DECAL - McCONNEL (WHITE)
		7418735	PA180 EDS DECAL KIT
16	1	1290614	DECAL - McCONNEL (WHITE)
17	1	1290719	DECAL - PA180E (WHITE)
18	1	1290720	DECAL - PA180E (BLACK)
19	1	1290518	DECAL - EDS (BLACK)
20	1	1290700	DECAL - EDS (WHITE)



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