

**PARTS CATALOGUE  
FOR  
THE GREEN MACHINE  
SUCTION SWEEPER**

**414S2D, 414RS, 424TR & 424HS**

**ISSUE 12 – JUNE 2004**

**This Catalogue Part No.**

**CE**

**The information contained within this document conforms wherever possible to  
The European Machinery Directive 89/392/EEC as amended by Directive 91/368/EEC**

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**YM051**

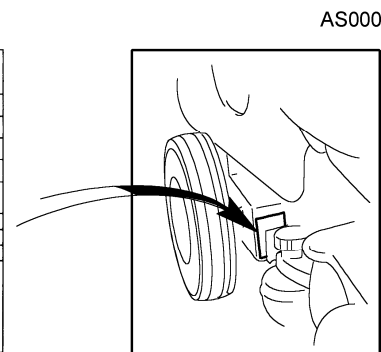
**When ordering parts from this catalogue, please ensure you can provide the following:**

1. The issue & revision number of the catalogue.
2. The Model number of the unit. (on the Chassis Plate)
3. The Chassis number of the unit. (on the Chassis Plate)
4. The CIN number of the unit. (on the Chassis Plate)
5. The part number of the part you require.

The catalogue Applies to Applied Sweepers 414 Green Machine Suction Sweepers Models 414S2D (Walk Behind) , 414RS (Ride on Seat) , 424TR & 424HS (High Speed)

From CIN: 123

Applied Sweepers LTD. Bankside Falkirk Scotland FK2 7XE Tel: 01324 611666		
MODEL	414RS	
CHASSIS		
ENGINE		
C.I.N.		
POWER AT 2800 RPM	9 kW	12 HP
WEIGHT	DRY	WET
	400 kg	460 kg
	882 lbs	1014 lbs
		
GM101		



Please check the section title at the bottom of the page for the relevant model number.

Where your machine has a CIN number prior to CIN 120, please refer to previous catalogues. YM018, YM016, YM011, YM023 & YM024, YM029. YM029a If in doubt please refer to your Applied Sweepers Authorised Distributor.

Threaded fasteners – Replacement Hexagon head threaded screws must be Grade 8.8 minimum and Socket head screws Grade 12.9 minimum except where stated otherwise.

All Nuts must be Grade 8 minimum.

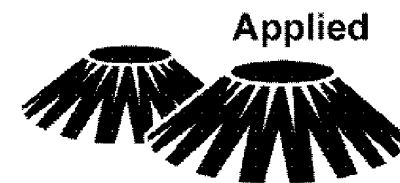
All fasteners must be zinc plated and passivated unless stated otherwise.

Applied Sweepers Limited reserve the right to change and or modify or discontinue to supply the parts listed in this catalogue without notice.

Applied Sweepers Limited cannot be held responsible for faults or delays due to parts suppliers.

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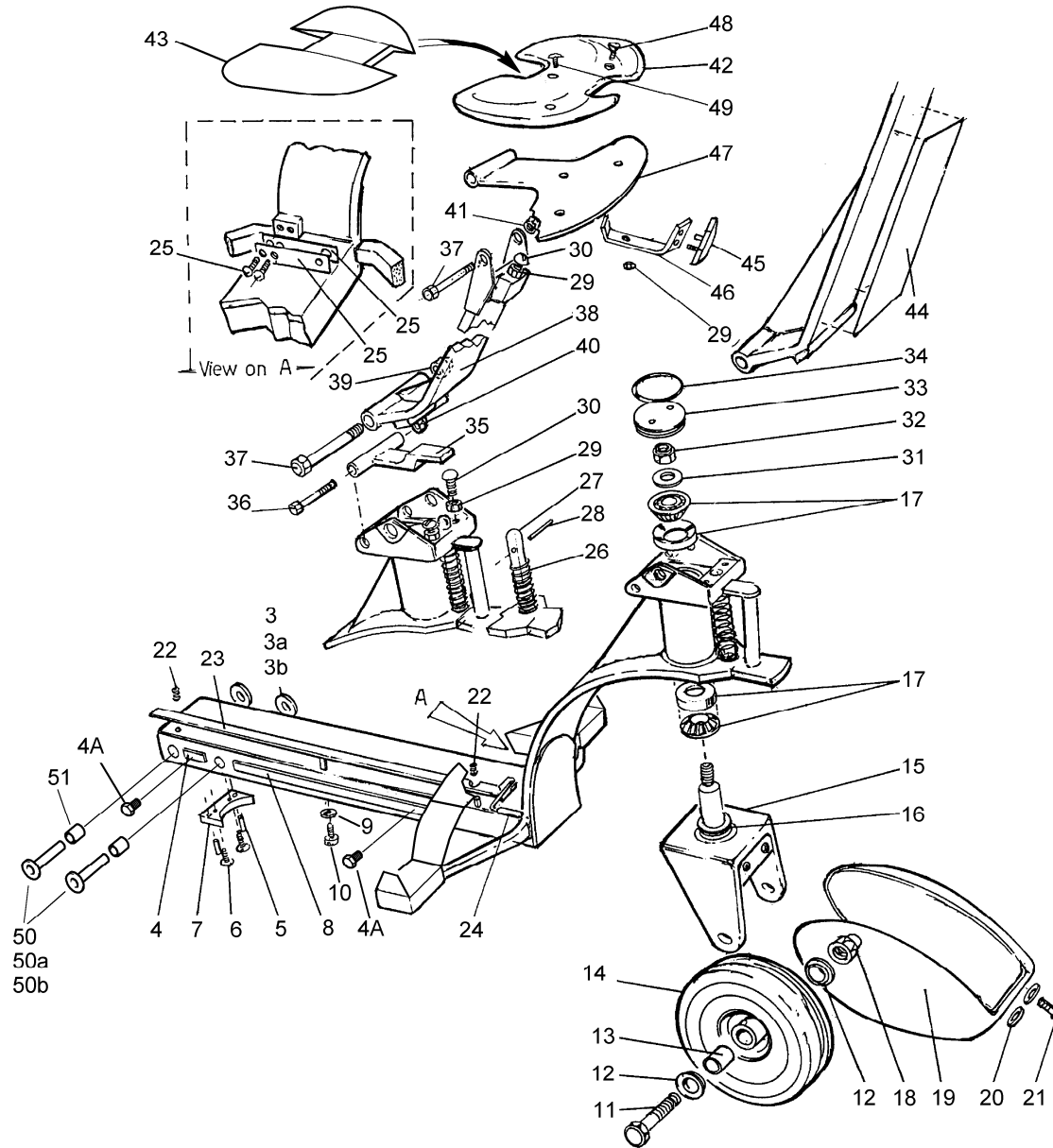
**SECTION 1**

**RS SEAT**

Item	Part No.	Description	Qty.
		For Lighted Seat option see also Pgs 9 to 12	
1	MA978	Trailer - includes items ,4,5,6,7,8,17,22 Plus swivel box MA321 (From CIN116)	1
3		Rollers not available separately, please order Swivel Box MA321	1
4	MA981	Guide - Nylon Short (from CIN116)	2
5	MA194	Dowel Pin - Solid 6 x 12	2
4a	GT149	Screw, C/S M4 x 12	12
6	GT170	Set Screw M5 x 12 C/sunk	2
7	MA133	End Stop	1
8	MA980	Guide - Nylon Large (from CIN116)	2
9	GW022	Washer, Form A - 3/16"	1
10		Set Screw M4 x 16 B/head	1
11	GT173	Bolt, M12 x 130 Hex.	1
12	MA039	Spacer – Castor	2
13	MA038	Sleeve – Castor	1
14	TW039	Wheel /Tyre Thornguard	1
15	MA041	Castor Fork Assembly	1
16	MA043	Seal – Bearing	1
17	MA042	Bearing - Fork Swivel	2
18	GN020	Nut, Nyloc - M12	1
19	MA053	Mudguard Moulding	1
20		Washer, Form A – M6 x 25	2
21		Set Screw M6 x 20 Hex.	2
22	MA091	Latch Peg	2
23	MA034	Release Lever	1
24	GG043	Plastic Cap	1
25	MA257	Spring Release Lever assembly	1

Item	Part No.	Description	Qty
26	MA051	Screw M4 x 6 Button Head	2
		Spring	1
27	MA050	Locking Plunger	1
28	GG127	Roll Pin, 3mm x 24 lg.	1
29		Nut, M8 Half Height	6
30		Set Screw M8 x 35 B/head	3
31	GW061	Thrust Washer	1
32		Nut, Nyloc M16	1
33	MA045	Bearing Sealing Cap	1
34	MA046	`O' Ring	1
35	MA049	Cam Assembly Locking Plunger	1
36		Bolt, M6 x 90 Hex.	1
37	GT209	Bolt, M10 x 100 Hex. Gd 10.9	2
38	MA048	Seat Upright Assembly	1
39		Nut, Nyloc - M10 Thin Type	1
40		Nut, Nyloc - M6	1
41		Nut, Nyloc - M10	2
42	MA052	Seat Moulding (Non Lighted)	1
43	MA282	Seat Cushion - Non Lighted	1
44	See Section 10	Label - Seat Deployment	1
45	MA340	Rear Reflector	2
46	MA226	Bracket Rear Reflector	2
47	MA047	Seat Plate Assembly	1
48		Set Screw M8 x 20 B/head	2
49		Set Screw M8 x 16 B/head	1
50		Rollers axles not available separately, Please order Swivel box MA321	1
51	GB030	Bush (from CIN 116)	4

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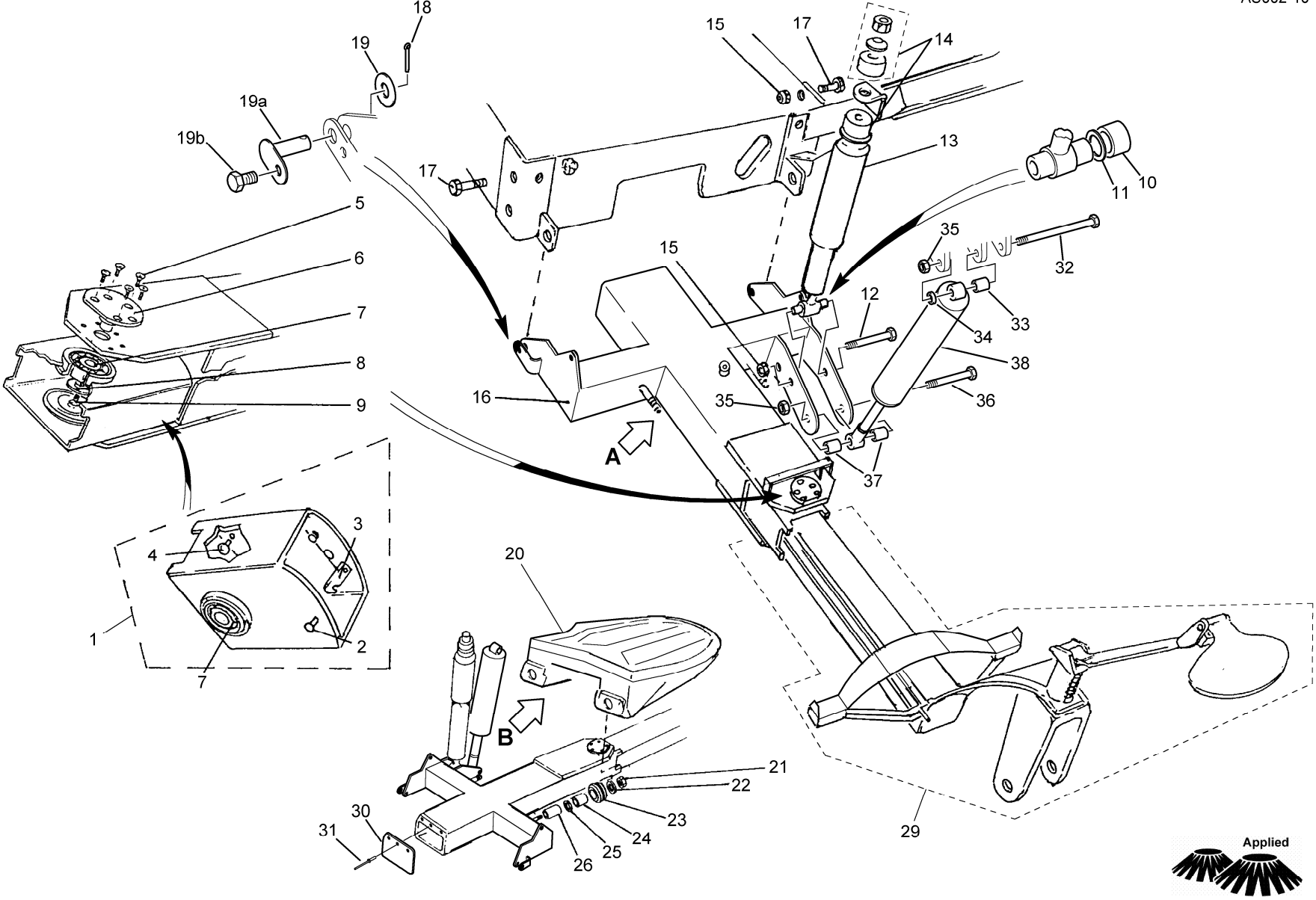


**SECTION 1**

**RS SEAT - NON LIGHTED**

Item	Part No.	Description	Qty.
1	MA321	Swivel Box Assembly, cpt. with Rollers	1
2	MA134	Pivot Lock Hook	1
3	MA143	Lock Hook Assembly	1
4	MA128	Nylon Button	1
5		Screw, Lowhead Cap M6 x 10	10
6	MA331	Pin – Bearing Swivel	2
7	MA028	Bearing Swivel	2
8	MA332	Washer, Stepped – Swivel Supplied complete with MA335 Update Kit ( S Item 6	2
9		Screw, Lowhead Cap M6 x 12	2
10	MA218	Spacer Damper Lower	2
11	MA217	Washer, Damper Lower	2
12		Bolt, M8 x 90 Hex.	1
13	MA056	Shock Absorber Assembly	1
14	MA286	Upper Bush Kit – Shock Absorber	1
15		Nut, Nyloc - M8	17
16	MA334	Tow Bar Assembly	1
17		Set Screw M8 x 35 Hex.	6
18	GG105	Split Pin	2
19	GW019	Washer – ½ “	2
19a	MA391	Clevis Pin	2
19b	GT203	Screw – self tap M6 x 12	2

Item	Part No.	Description	Qty
20	MA300	Hinged Bag Tray Assembly	1
21		Nut, Nyloc Thin M8	1
22		Washer, Form A – M8 x 30	1
23	GM104	Grommet 11 dia. x 19 x 25	1
24	GB017	Spacer - Tubular – 10 dia. x 8.5 x 12 lg	1
25		Washer, Form A – M8 x 25	1
26	GB035	Spacer - Tubular - 12 dia. x 8.5 x 34 lg - From Dec 98	2
29	See Page 1	Trailer Part-Assembly	1
30	MA290	Rubber Flap	1
31	GG143	Pop Rivet	3
32	GT158	Bolt –Hex Hd. M10 x 110	1
34	MA684	Spacer – Top Spring Strut	1
35	GN019	Nut – Nyloc M10	2
36		Bolt – Hex Hd. M10 x 90	1
37	MA685	Spacer – Bottom spring Strue	2
38	MA571	Spring Strut (see page 54)	1



**SECTION 1**

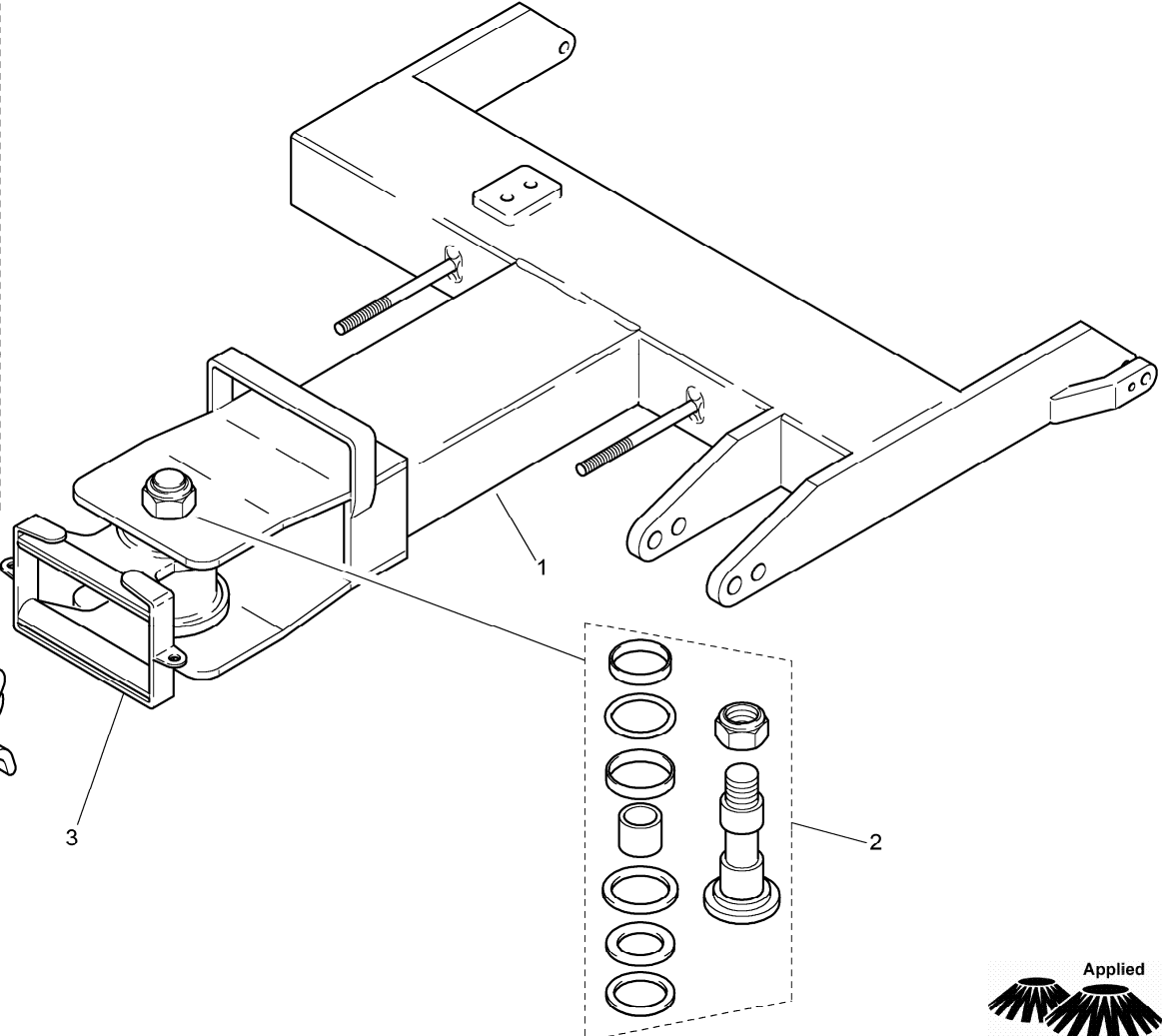
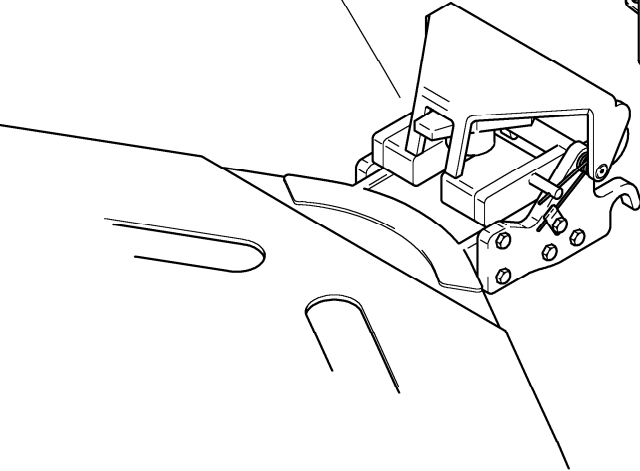
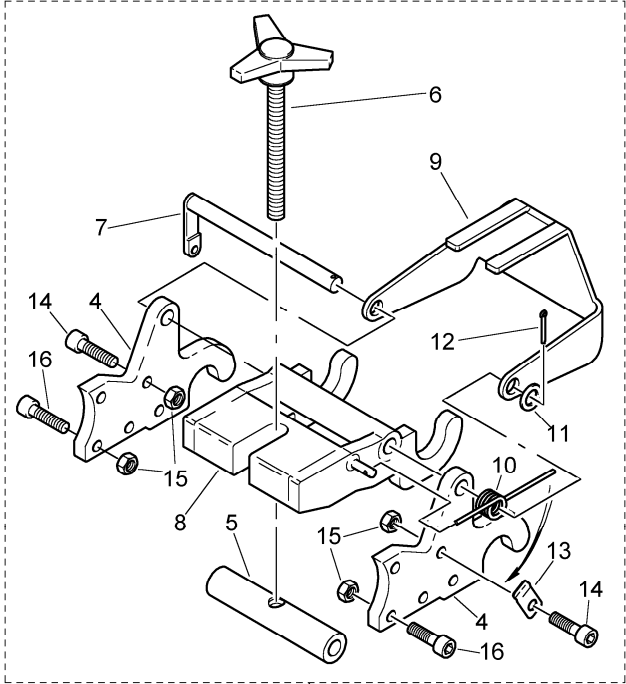
**HS and TR COUPLING AND FRAME**

Item	Part No.	Description	Qty.
		From CIN 114 – Prior to Chassis 011589 please contact our Spares Dept.	
1	MA913	Tow Bar * Requires adjustable stand	1
	MA825	MA776 for chassis no,s prior to 105217 MK 1 swivel lock pin kit (not shown) For machines to CIN113 inclusive	
2	MA815	Bearing/Seal Kit	1
3	MA836	Swivel Bar Weldment	1
4	MA830	Hook - Bottom Fixing	1
5	MA858	Pivot Bar	1
6	MA861	Screw - Lock Down	1
7	MA847	Pivot Pin - Top Hook	1
8	MA831	Top Fixing Hook Assembly	1
9	MA863	Safety Lock	1
10	AW074	Spring	1
11		Washer, M12 Plain	1
12		Split Pin - 3/32 x 3/4 st. st.	1
13		Tab Washer, M8 x 25 st. st.	1
14		Screw, M8 x 40 Cap Screw	2
15		Nut, M8, Nyloc	10
16		Screw, M8 x 35 Cap Screw	8

Item	Part No.	Description	Qty



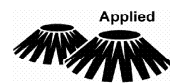
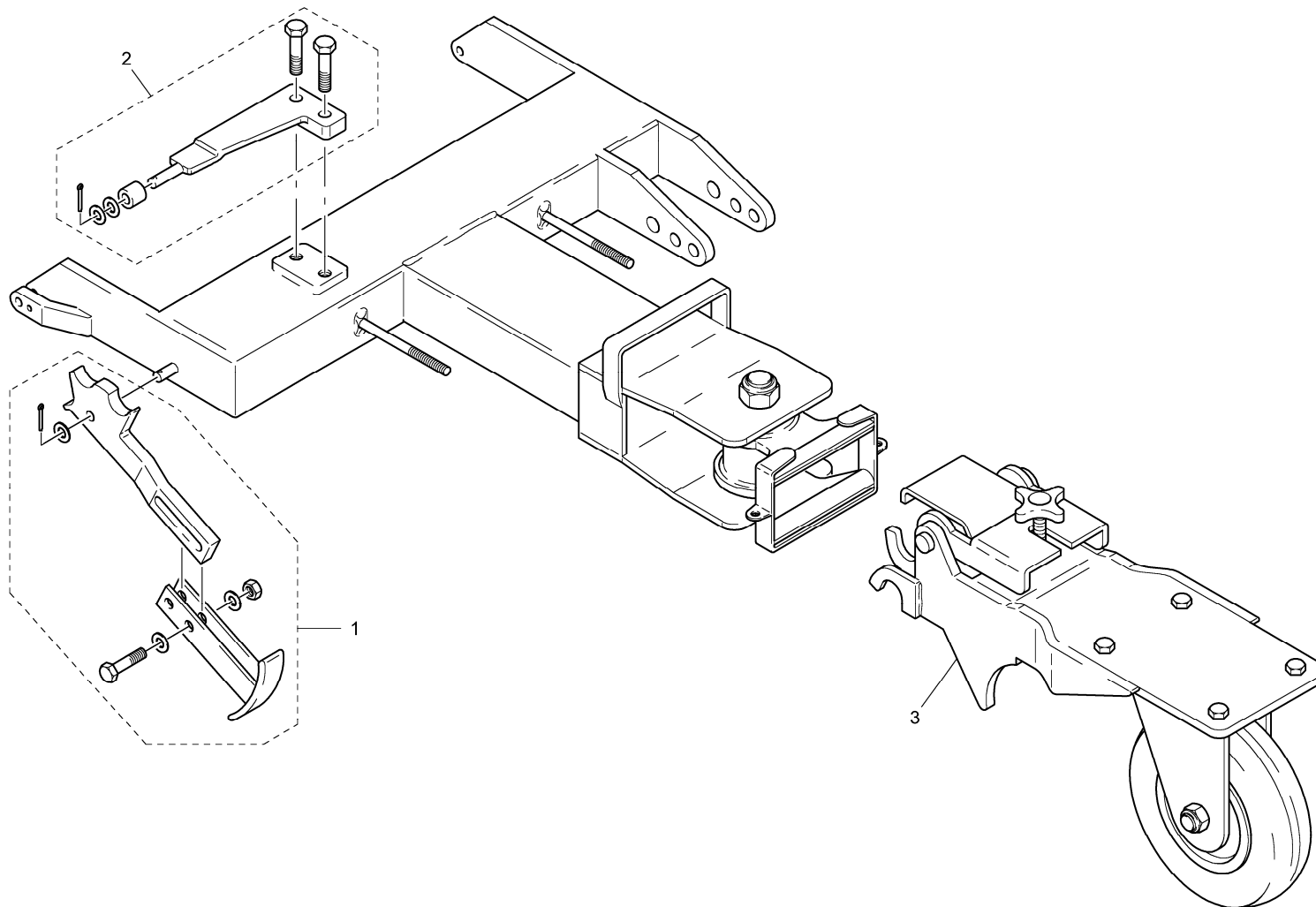
AS058-9a



Item	Part No.	Description	Qty.
1	MA776	Adjustable Stand (from chassis 105217)	1
2	MA957	Spring Plate assy. (from chassis 105217)	1
3	MA865	Caddy Wheel, MK2 - CPT (from CIN 114)	1
	CB561	Castor Wheel for Item 3	1

Item	Part No.	Description	Qty
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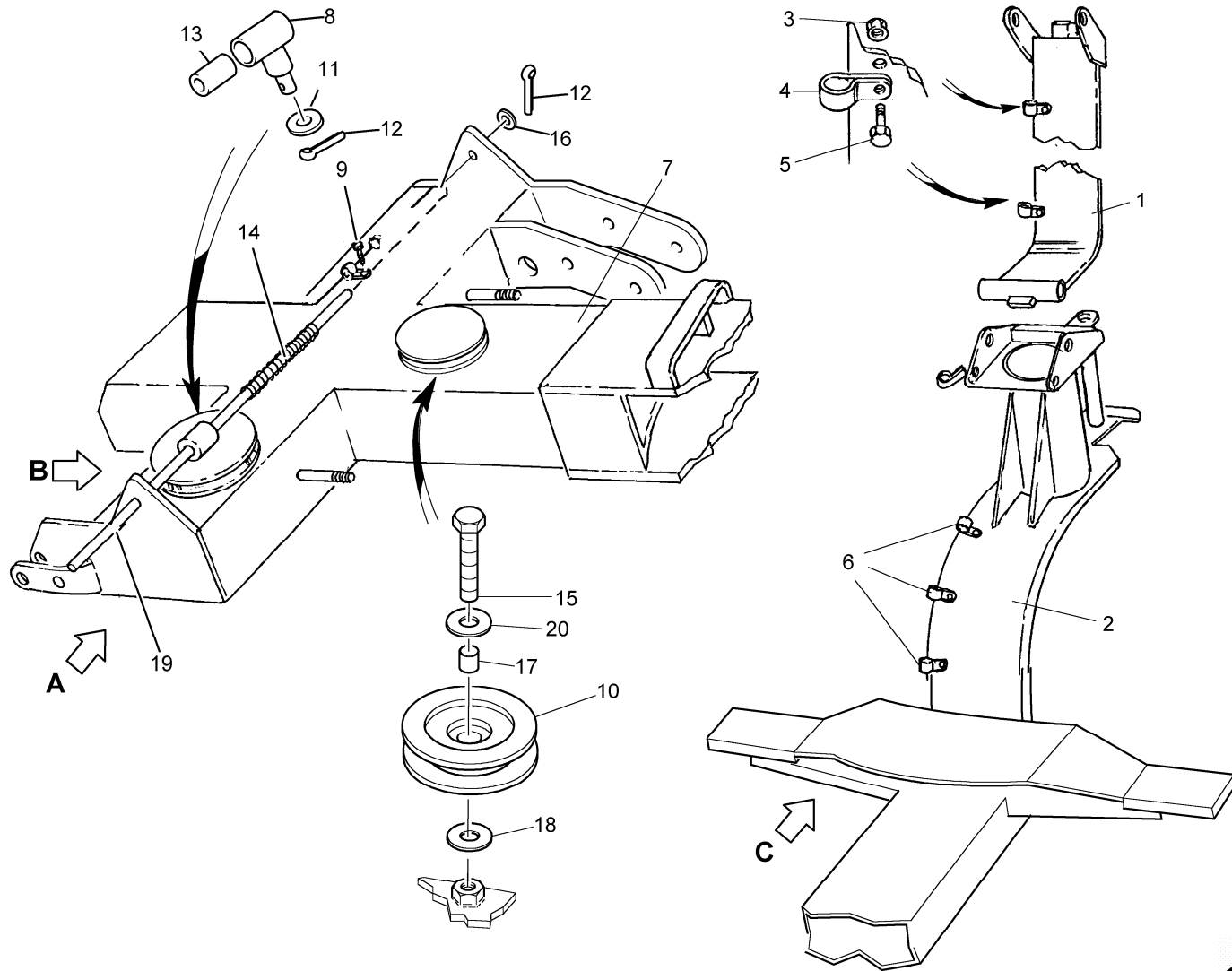


**SECTION 1**

**RS LIGHTS LOWER**

Item	Part No.	Description	Qty.
1	MA048	Seat Upright	1
2	See Page 1	Trailer Part-Assembly	1
3		Nut, Nyloc - M5	2
4	BB076	`P' Clip Rubber Lined 8mm	6
5		Set Screw M5 x 12 Hex.	2
6	GM011	Tie Strap – Small	3
7	See Page 4	Tow Bar Assembly	1
8	MA320	Pivot Pulley From CIN 93	1
9		Screw, Self Tapping Flg Hex. M5 x 8	2
10	MA304	Pulley Guide	2
11		Washer Form A - M10	1
12	GG132	Split Pin 3/32" x 3/4" St/St	3
13	GB037	Bush	1
14	MA236	Spring Compression	1
15		Set Screw M8 x 20 Hex.	1
16	GW006	Washer, Form A – M8	3
17	GB034	Bush, Oilite 8 i/d x 11 o/d x 8 lg	1
18	GW054	Washer, 18 o/d x 8.5 i/d x 4	1
19	MA354	Bar – Shuttle Rail	1
20	GW021	Washer, M8 x 25 o/d Stainless	1

Item	Part No.	Description	Qty



**SECTION 1**

**LIGHTED SEAT**

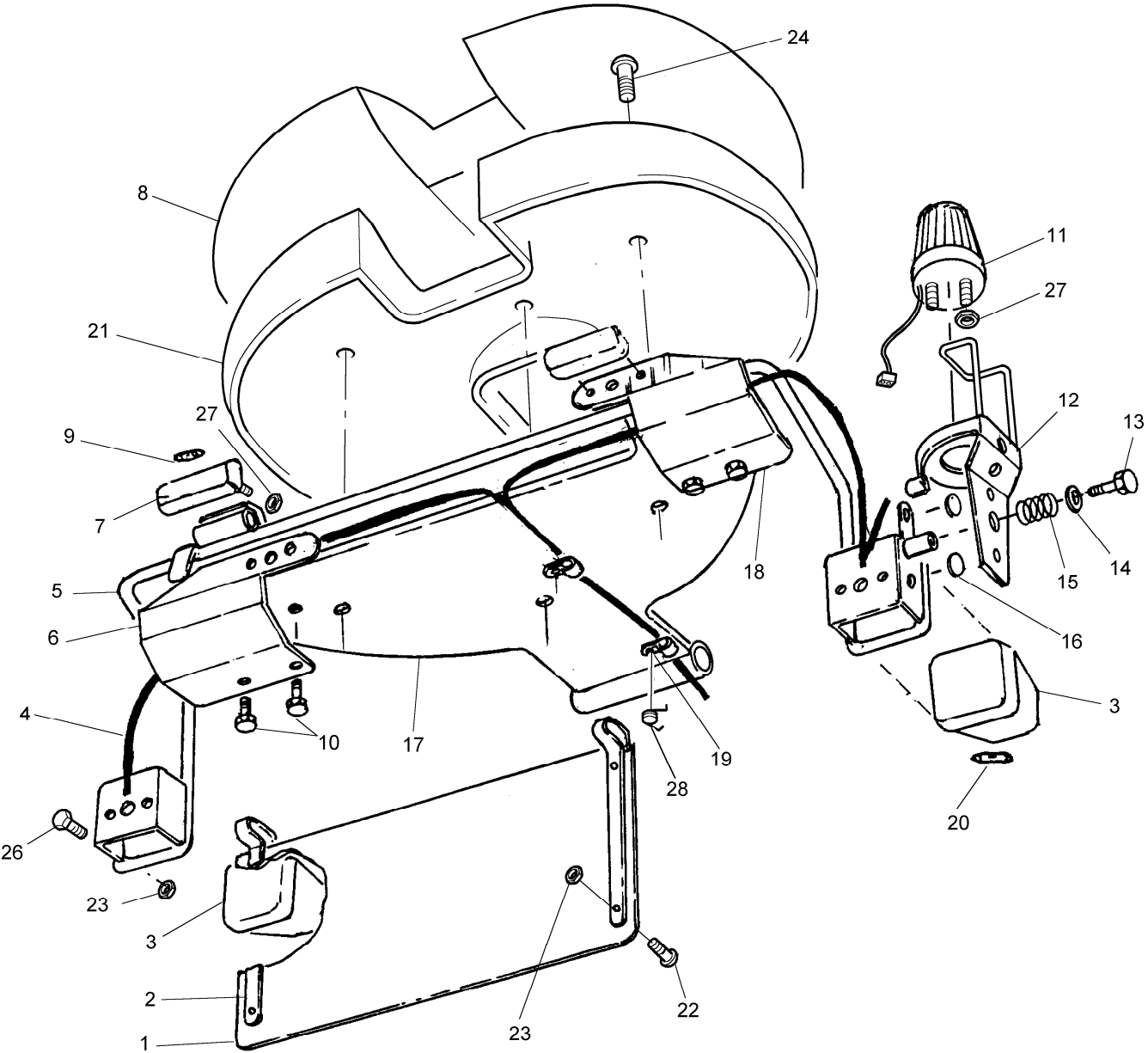
Item	Part No.	Description	Qty.
1	MA242	Backing Plate - No. Plate	1
2	MA246	Bracket, Hanging - No. Plate	2
3	ES050	Rear Light	2
4	EW062	Wiring Loom - Rear Seat Lights	1
5	MA241	Light Frame	1
6	MA247	Bracket, Mounting Left Hand - No. Plate Light	1
7	ES062	Light - No. Plate	2
8	MA281	Padded Seat - RS Rear Light	1
9	ES053	Bulb - Number Plate Light	2
10		Set Screw M6 x 16 B/head	4
11	ES137	Beacon Small - Rear Light (From May 99)	1
12	MA237	Bracket, Rear Seat Beacon	1
13		Set Screw M8 x 35 B/head	1
14		Washer, Form C - M8 x 21 o/d	1
15	MA238	Spring Compression	1
16	MA128	Button Nylon	2
17	MA240	Seat Plate	1
18	MA248	Bracket, Mtg Right Hand - No. Plate Light	1
19	BB076	'P' Clip Rubber Lined 8mm	2
20	ES053	Bulb - Rear Lights	2
21	MA239	Seat Moulding	1
22		Screw - M5 x 12 Button Head	4
23		1/2 Nut - Nyloc M5	8
24		Screw - M8 x 16 Button Head	3
25		Washer - M5 Plain	4
26		Screw - M5 x 20 Button Head	4

Item	Part No.	Description	Qty
27		Nut - Nyloc M5	6
28	MA369	Torsion Spring	1

LIGHTED SEAT

SECTION 1

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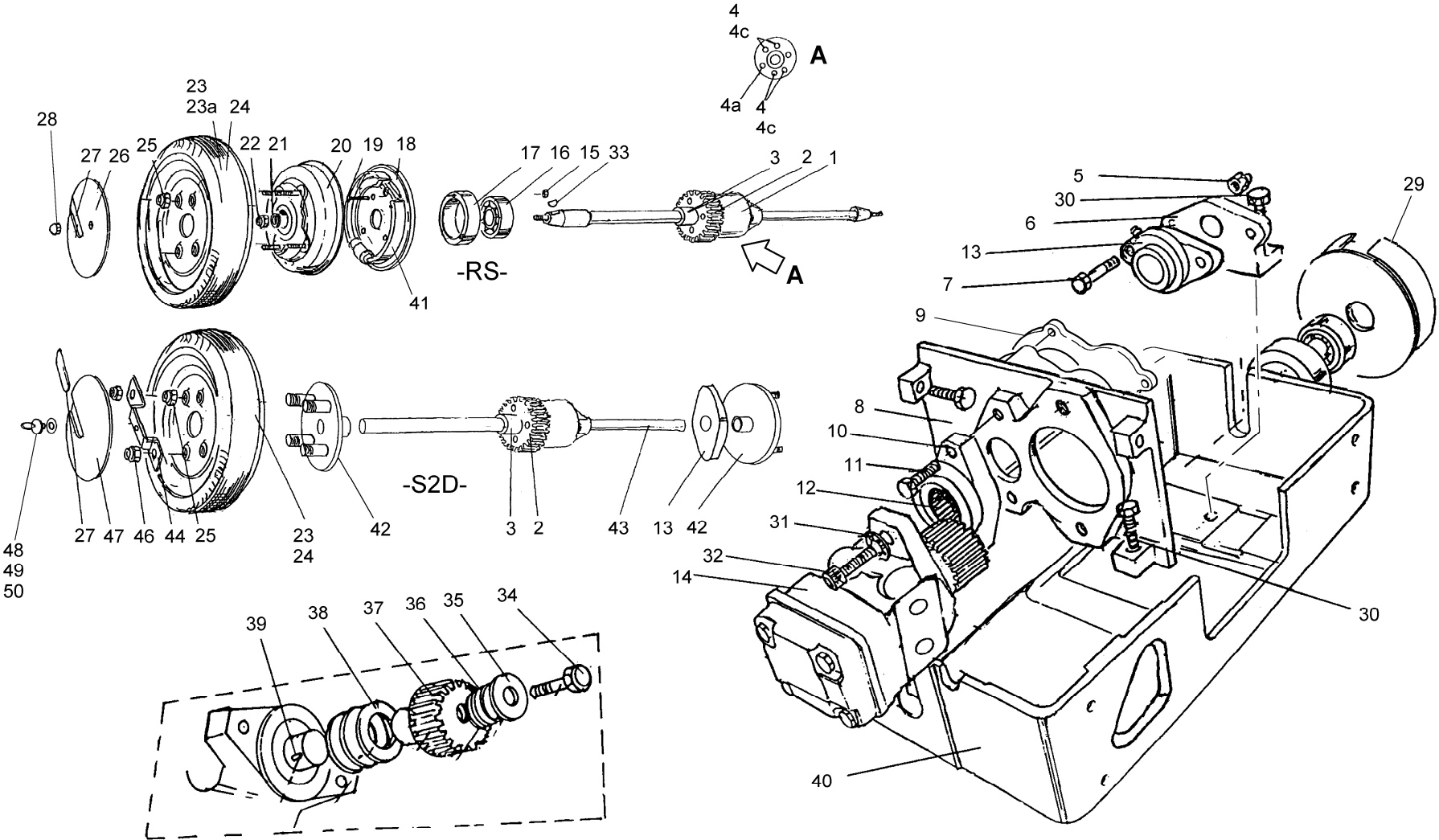


**SECTION 1**

**CHASSIS, DRIVE AXLE**

Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty
1 to 13	TT043	Axle Assembly - RS Spares, comprises Items 1 to 13 (+ CA072 for older chassis)	1	23	TW003	Wheel & Tyre Assembly	2
1	TT038	Differential - See Service Bulletin SB150 for Fitting Advice	1	23a	TW035	Wheel & Tyre – High Speed (Thornguard)	2
2	TT044	Drive Gear & Bolts Kit	1	24	TW034	Wheel & Tyre - Thornguard	2 opt
3	TT019	Inner Ring	1	25	GN017	Nut, Wheel 3/8" UNF	8
4	GT177	Bolt, 5/16" UNF x 3¾" SAE Gd8	4	26	TW020	Wheel Cover	2
4a	GT191	Bolt, 5/16" UNC x 2" SAE Gd8	2	27	TW016	Wheel Cover Label (Green)	2
4c		Washer, Form A - 5/16"	4	28		Nut, M12 Dome	2
5		Nut, Nyloc - M10	2	29	MA310	Back Plate Brake L.H.	1
6	CA016	Bracket, HD Bearing	1	30		Set Screw M10 x 25 Hex.	6
7		Set Screw, M10 x 40 Hex.	2	31	GW049	Washer, Schnorr Locking M12	2
8	CA071	Cross Brace - Chassis Machines built prior to 15 March 99 should also be supplied with CA072	1	32	GT271	Set Screw M12 x 40 Cap	2
9	CA113	Cover Plate Gearbox	1	33	MA125	Woodruff Key	2
10	CA030	Bearing Housing	1	34		Set Screw M8 x 25 Hex.	1
11		Set Screw M8 x 25 Hex.	2	35		Washer, 8mm i/d x 35mm o/d	1
12	TT018	Needle Bearing	1	36		Washer, M8 x 16	
13	TT004	Bearing Self Aligning ,RS (3 per on S2D)	1	37	TT009	Gear - Pinion	1
14	HM019	Drive Motor	1	38		Shim 25mm i/d x 35mm o/d	
14a	HM029	Drive Motor - HS	1	39	HM010S	Key - Drive Motor	1
15		Nut, Nyloc - M8	6	40	CA077	Chassis - Steel Fabrication - from CIN 101	1
16	MA057	Bearing Heavy Duty	2	41	MA322	Brake Shoes	1
17	MA058	Housing Heavy Duty	2	42	TT008A	Wheel Hub Assembly	2
18	MA309	Back Plate Brake R/H	1	43	TT041	Differential	1
19		Set Screw M8 x 45 Cap	6	44	TW014	Bracket, Wheel Cover	2
20	MA003	Brake Drum	2	45	GG042	Slip-on Receptacle	2
21	MA061	Washer, Form A - 36 o/d x 12.7 i/d	2	46		Nut, Nyloc 3/8" UNF	4
22		Nut, M12 Philidas Mk 5	2	47	TW015	Wheel Cover	2
				48	GG055	Washer, Plastic	4
				49	GG048	Ringhead Stud 14mm	2
				50	GG041	Washer, Retaining - Steel	2





**SECTION 1****BAG TROLLEY**

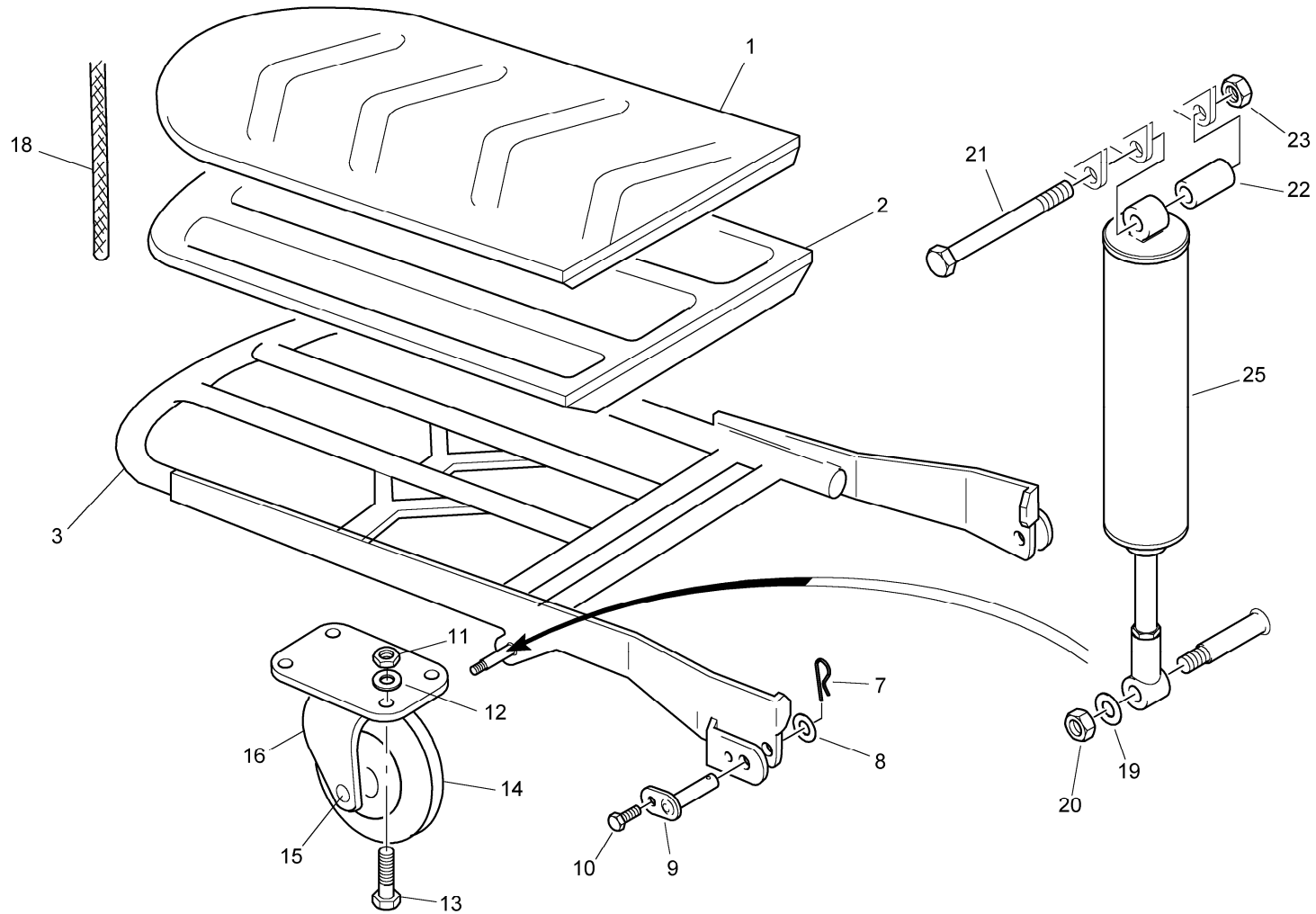
Item	Part No.	Description	Qty.
1	CB095	Drain Tray	1
2	CB094	Bag Tray	1
3	CB695	Bag Trolley Frame (from CIN117)	1
7	GG105	Split Pin - 1/8" x 1"	2
8	GW019	Washer – ½"	2
9	MA391	Clevis Pin	2
10	GT203	Screw – self tap M6 x 12	2
11		Nut - M6 Nyloc	4
12		Washer - M6 Form A	4
13		Screw - M6 x 40 Hex.	4
14	CB562	Wheel Only – Castor (from CIN117)	1
15	CB563	Axle Set - Rear Castor (from CIN117)	1
16	CB561	Castor - Rear Complete (from CIN117)	1
17	GT203	Screw – hex, Self tap M6 x 12 (CIN117)	2
18	GM019	Chain - Bag Trolley	1
19	GW021	Washer – M8 x25	1
20	GN043	Nut – Half, M8 nyloc	1
21	GT158	Bolt – Hex Hd. M10 x 110	1
22	CB708	Spacer – S2D spring strut	1
23	GN019	Nut – Nyloc, M10	1
24	MA571	Spring Strut – See Page 54	1

Item	Part No.	Description	Qty

# BAG TROLLEY

## SECTION 1

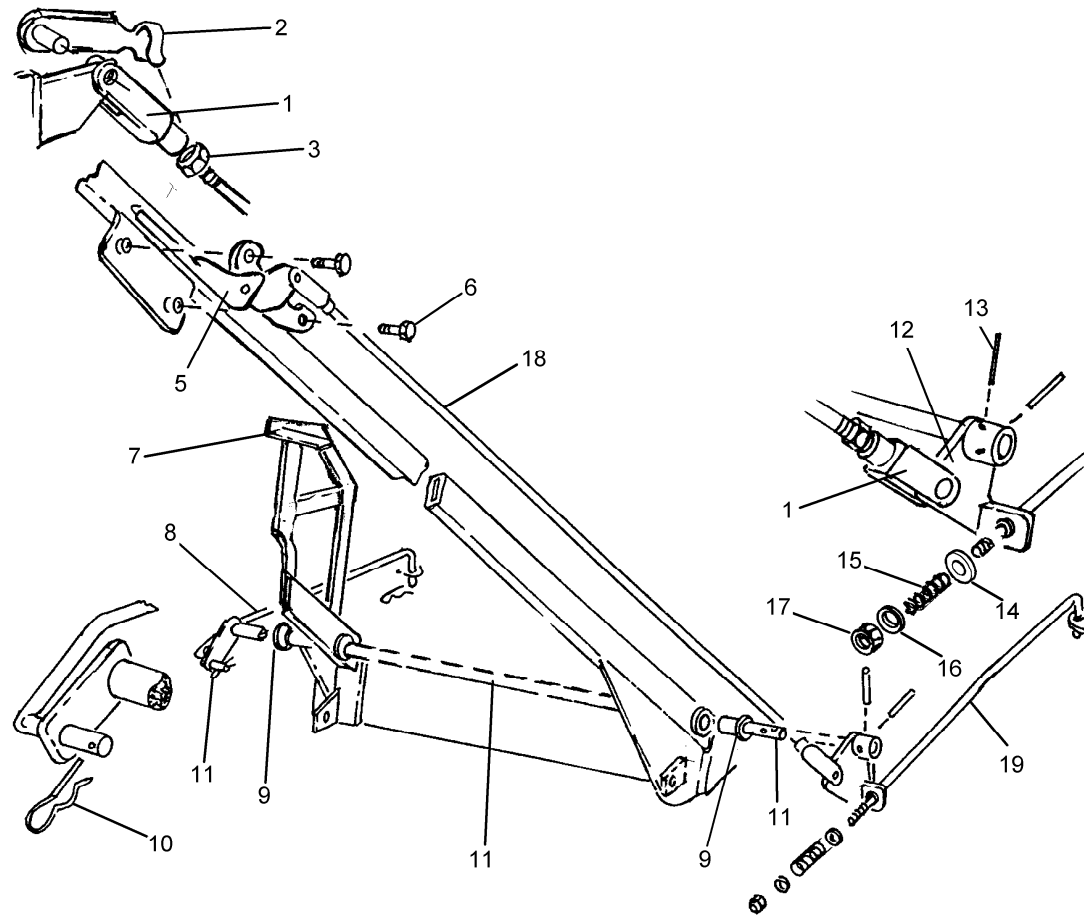
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**SECTION 1****HANDBRAKE**

Item	Part No.	Description	Qty.
1	BB006	Clevis – Yoke	2
2	BB022	Clevis - Pin Long	2
3		Nut, Half - M8	2
5	MA121	Lever Handbrake	1
6		Set Screw M8 x 20 Hex.	2
7	CB624	Bracket Air Filter (from CIN117)	1
8	MA191	Brake Link Left	1
9	MA123	Bearing Nylon	2
10	BB044	`R' Pin	3
11	MA161	Cross Shaft Assembly	1
12	MA163	Segment Lever	1
13		Roll Pin 4mm dia. x 20 lg	2
14		Washer, Plain - M6 x 25	1
15	MA158	Spring	1
16		Washer, Form A - M6	1
17		Nut, Nyloc - M6	1
18	MA828	Brake Rod	1
19	MA164	Brake Lever Right	1

Item	Part No.	Description	Qty
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**SECTION 1****AIR FILTER BRACKET**

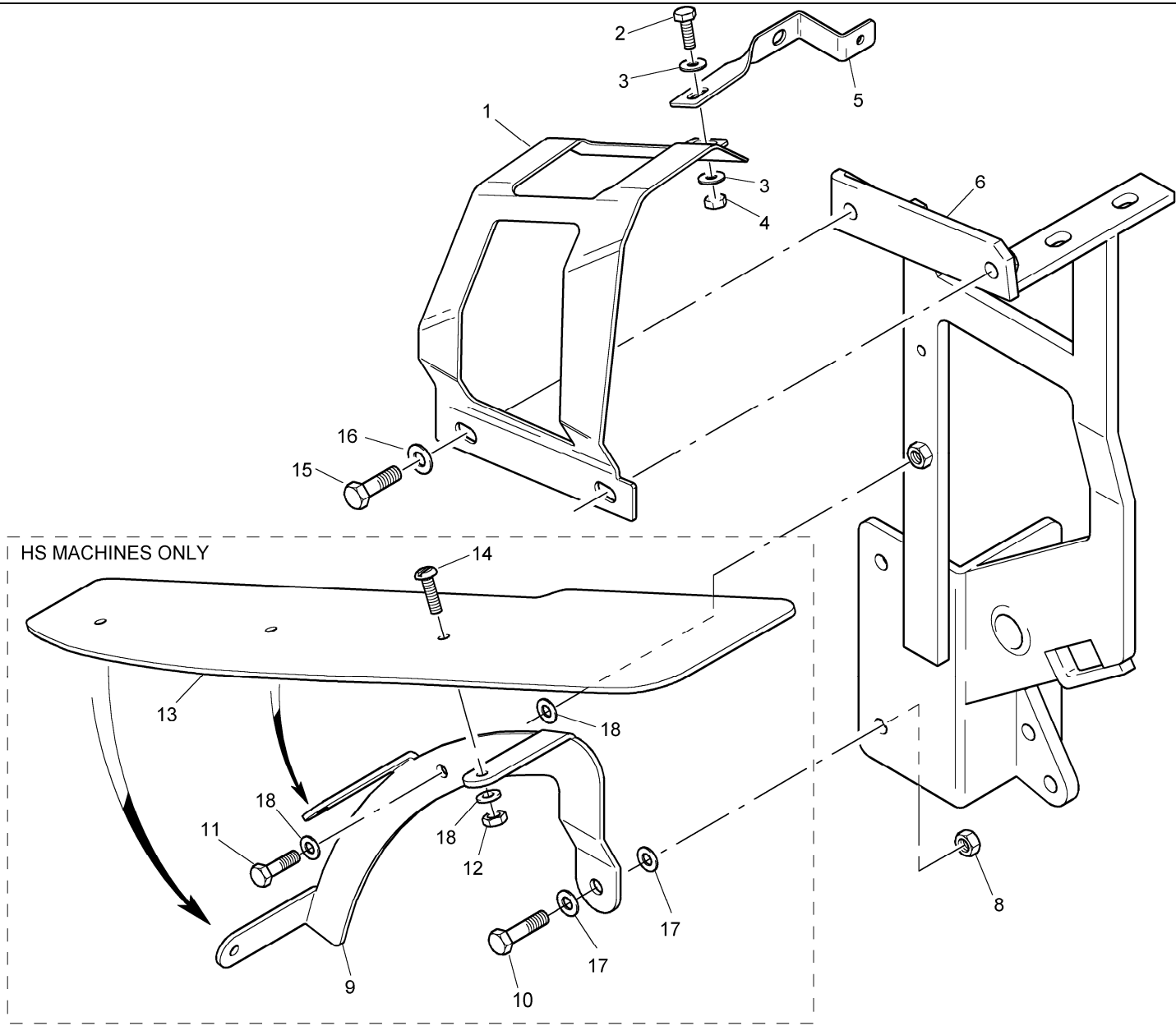
Item	Part No.	Description	Qty.
1	CB660	Support Bracket	1
2		Screw, Hex. M6 x 16	1
3		Washer, Plain, M6	2
4		Nut, Nyloc, M6	1
5	CB662	Bracket - Diesel Tank/Cover Lock	1
6	CB624	Air Filter Bracket	1
7		not used	2
8		Nut, Nyloc, M8	1
9	CB657	Mudflap Mounting Bracket	1
10		Screw, Hex, M8 x 25	1
11		Screw, Hex. M6 x 10	1
12		Nut, Nyloc, M6	3
13	MA553	Mudflap	1
14		Screw, Button Hd., M6 x 16	3
14a		Washer, Plain, M6	3
15		Screw, Hex. M8 x 20	2
16		Washer, M8 x 25	2
17		Washer, M8 Plain	2
18		Washer, M6 Plain	5

Item	Part No.	Description	Qty
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# AIR FILTER BRACKET

## SECTION 1

AS063-10



**SECTION 1**

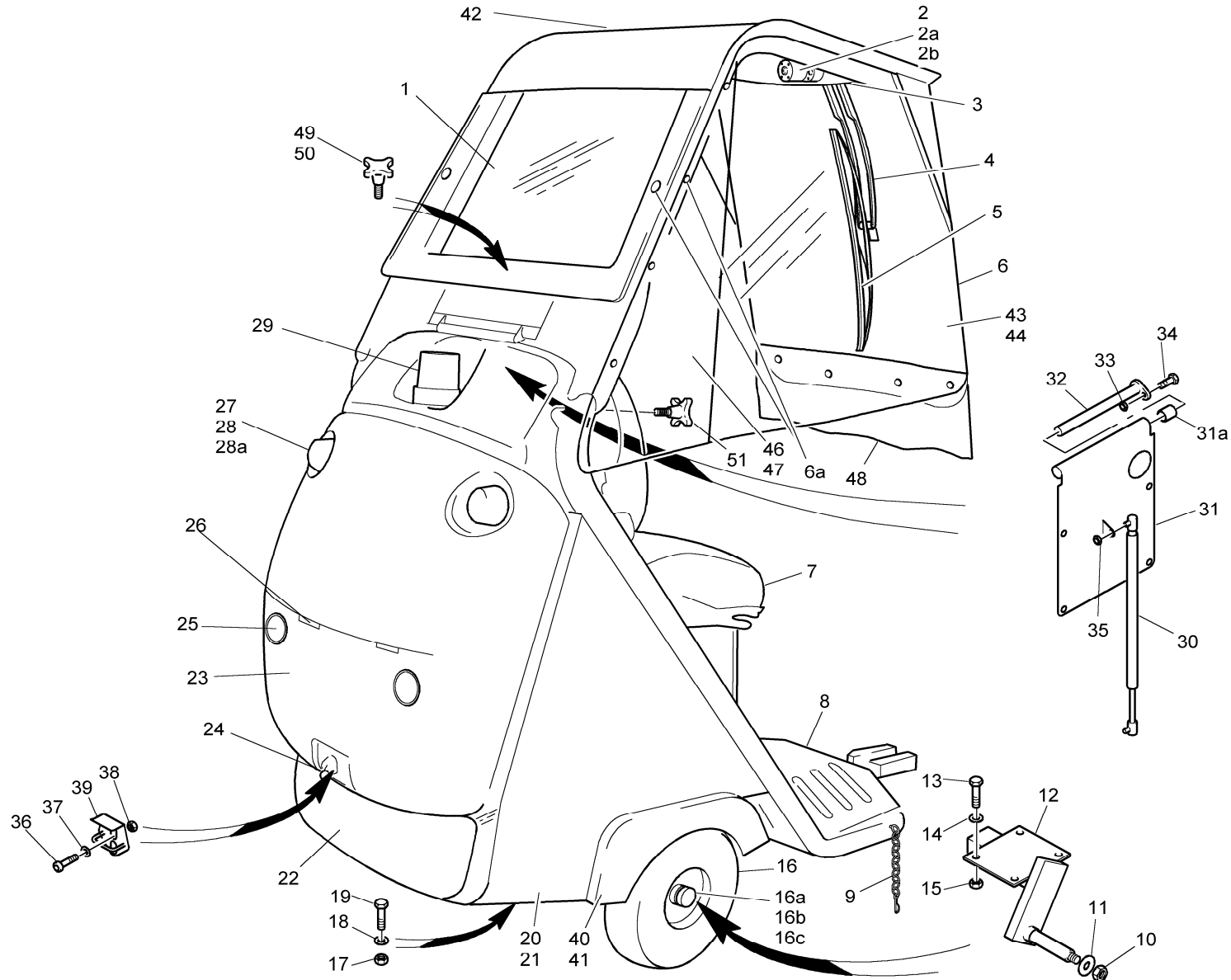
**CAB**

Item	Part No.	Description	Qty.
	EW133	Loom - Cab Wiring (not shown)	1
	EW132	Loom - Towbar/Tailgate (not shown)	1
	EW134	Loom - Tailgate (not shown)	1
	EW142	Loom - Wiper Switch to Motor	1
1	MA763	Screen - Rear	1
2	EC007	Motor - Wiper	1
2a	EC013	Guard (from CH 101006)	1
2b	GB067	Spacer (from CH 101006)	1
3	EC008	Switch - Wiper	1
4	EC009	Arm - Wiper	1
5	EC010	Blade - Wiper	1
6	MA761	Windscreen - Mudguard	1
6a	GG221	Rivet - Plastic Expansion - Screen	12
7	MA787	Seat - c/w Slides	1
8	MA643	Footplate Assembly	1
9	GG219	Chain - Safety	1
10	GN053	Nut, Hub - 12mm fine thread Nyloc	2
11	GW068	Washer - Stud Axle	2
12	MA888	Indespension Units/Stub Axle	1 pair
13		Screw, M8 x 20 Button Head	8
14		Washer, M8 Plain	8
15		Nut, M8 Nyloc	8
16	TW036	Wheel Assy - c/w Hub Cap (thornguard)	2
16a	TW030	Hub Cap	2
16b	GN053	Nut, Nyloc, M12 x 1.25 x 12	2
16c	GW068	Washer Stub Axle	2
17		Nut, M6 Nyloc	7
18		Washer, M6 Plain	7
19		Screw, M6 x 16 Button Head	7
20	MA654	Panel - L.H. Side	1
21	MA656	Panel - R.H. Side	1
22	CP172	Panel - Closure (Moulding)	1

Item	Part No.	Description	Qty
23	CP171	Tailgate (Moulding)	1
24	GG204	Lock - Tailgate	1
25	ES148	Reflector	2
26	ES149	Light - Number Plate -( BULB ES053 )	2
27	ES155	Light - Rear	2
27A	ES150	Bulb - Rear Light	2
28	ES147	Light - Rear + Indicator	2
28a	ES133	Bulb - Indicator	2
29	ES181	Beacon	1
30	GG203	Strut - Gas	1
31	MA734	Hinge Plate Assembly	1
31a	GB060	Bush	2
32	GG200	Pin - Hinge Assembly	1
33		Nut, M5 Nyloc	1
34		Screw, M5 x 20 Hex. Head	1
35		1/2 Nut, M8 Nyloc	2
36		Screw, M6 x 20 Button Head	2
37		Washer, M6 Plain	4
38		Nut, M6 Nyloc	2
39	MA737	Catch - Lock	1
40		Mudguard - L.H.	1
41		Mudguard - R.H.	1
42	GM225	Liner - Roof	1
43	MA766	Side Screen Assembly, R.H. (with former)	1
44	MA767	Side Screen Assembly, L.H. (with former)	1
45	GB027	Bush - Door Hinge Bar	2
46	MA910	1/4 Panel Assembly - R.H.	1
47	MA911	1/4 Panel Assembly - L.H.	1
48	MA912	Apron Assembly - Bottom Windscreen	1
49	GG210	Lock Down Stud Assembly	1
50		Retainer	1
51	GG222	Cab Clamp Stud Assembly	2



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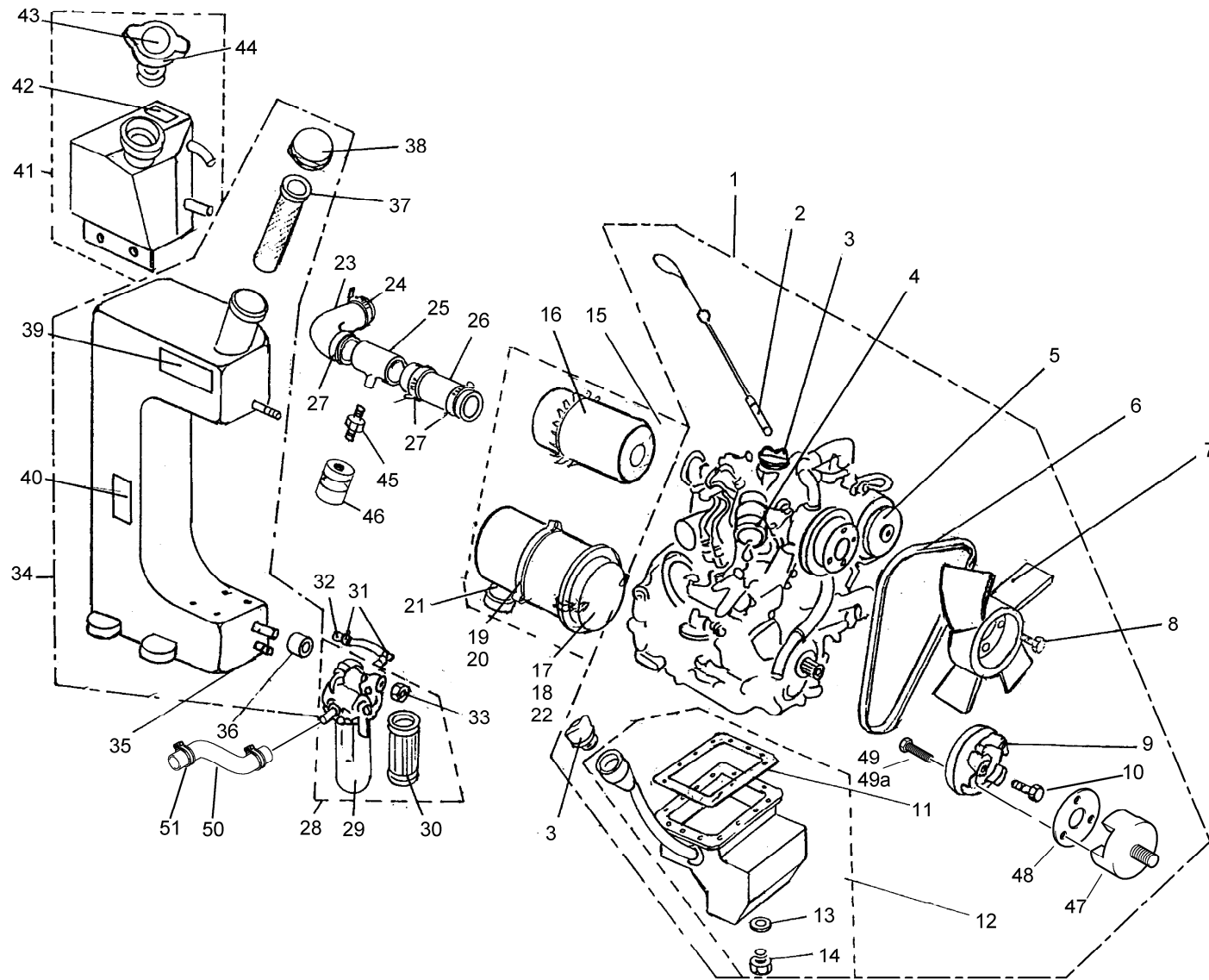


**SECTION 2**

**ENGINE COOLING SYSTEM**

Item	Part No.	Description	Qty.
1	PD003	Engine Assembly	1
2	PD018	Dipstick – Engine Oil	1
3	PD039	Cap – Engine Oil	2
4	PD031	Stop Solenoid	1
5	PD009	Alternator	1
6	PD244	Fan Belt - Large from CIN 87 >	1
7	PD189	Fan Cooling (300 dia)	3
8		Set Screw	4
9	PD223	Pulley Large 114 dia - Fan Drive >CIN 87	1
10	PD041	Bolt – Pulley	1
11	PD052	Sump Gasket	1
12	PD193	Sump	1
13	PD053	Gasket - Sump Plug	1
14	PD069	Sump Plug	1
15	PD170	Air Filter	1
16	PD060	Air Filter Element	1
17	PD179	Air Filter End Cap	1
18	PD184	Air Filter End Cap Inner	1
19	PD024	Air Cleaner Band	1
20	PD050	Rubber - Air Cleaner Band	1
21	PD228	Air Filter Strainer	1
22	PD176	Sealing `O` Ring Air Cleaner	1
23	PD025	Inlet Pipe	1
24	GG076	Jubilee Clip (55mm)	1
25	PD056	Pipe Air Cleaner	1
26	PC010-1	Pipe Extension	1
27	GG066	Jubilee Clip (50mm)	3
28	PD026	Fuel Assembly	1

Item	Part No.	Description	Qty
29	PD044	Fuel Filter Bowl	1
30	PD045	Fuel Filter Element	1
31	PD166	Clamp – Fuel Pipe	2
32	PD147	Fuel Pipe , pump to filter	1
33		Nut M8 Nyloc	1
34	PG039	Fuel Tank	1
35	PG036	Hose Tail	1
36	GB019	Spacer	1
37	PG027	Fuel Tank Strainer	1
38	PG038	Cap – Fuel Tank	1
39	See Page 73	Label - Diesel	1
40	See Page 73	Label - Engine Oil Only	1
41	PC042	Header Tank complete with Rubber Strips	1
42	See Page 73	Label - Header Tank	1
43	See Page 73	Label - Cap Header Tank	1
44	PC003	Cap - Header Tank	1
45	ES099	Nipple - Filter Minder	1
46	ES098	Filter Minder - Unswitched	1
47	TC001	Coupling Drive Assy.	1
48	TC014	Spacer ( from chassis 002111 )	1
49	GT168	Capscrew, M6 x 20 (from chassis 002111)	3
50	PG030	Fuel Hose, filter to tank	1
51	GG045	Jubilee Clip, 15 mm	2



**SECTION 2**

**ENGINE COOLING SYSTEM (acr)**

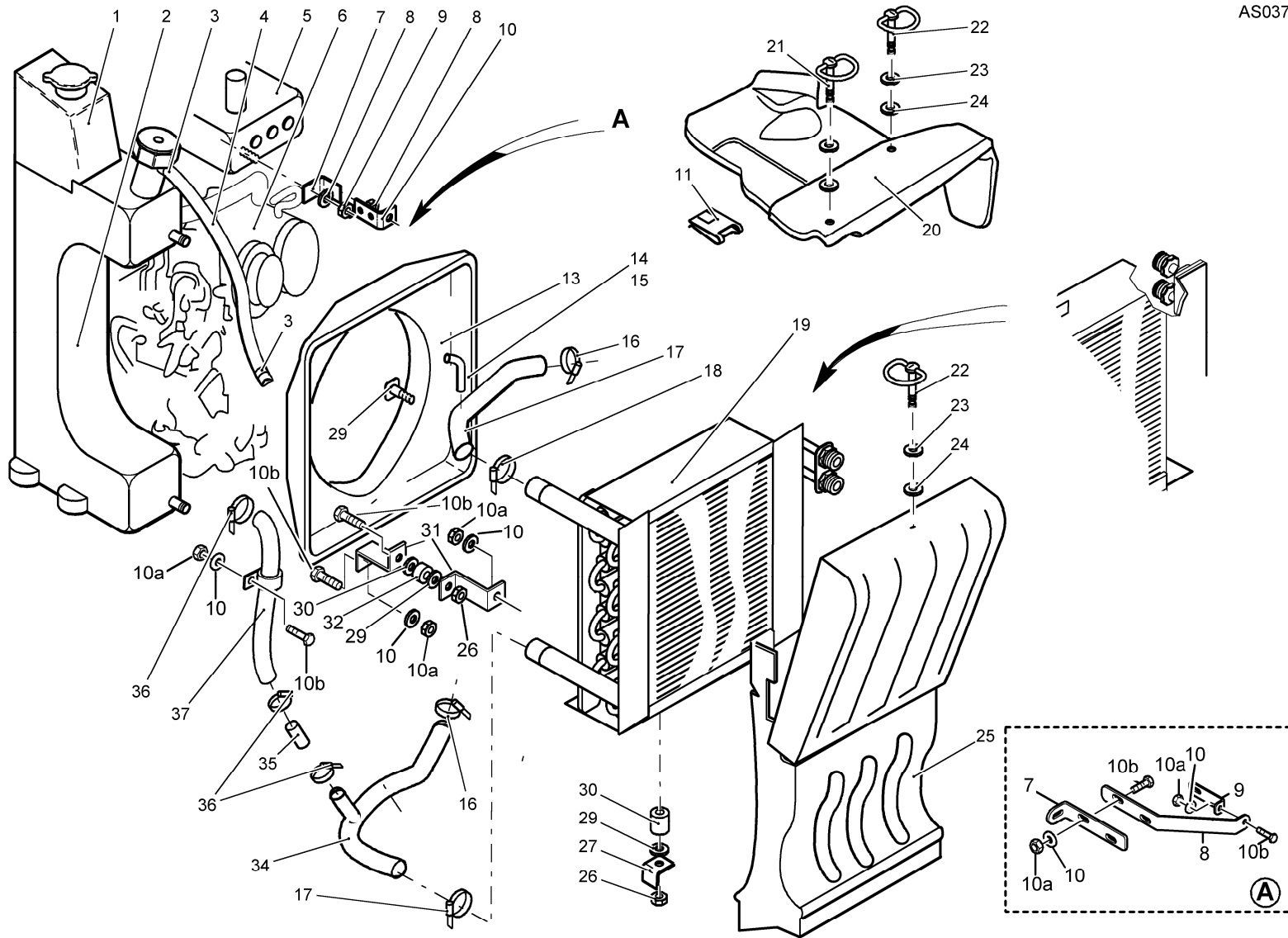
Item	Part No.	Description	Qty.
1	See Page 24	Header Tank	1
2	See Page 24	Fuel Tank	1
3	GG045	Jubilee Clip (16mm)	2
4	PG030	Hose Header Tank - Top Hose	1
5	See Page 46	Hydraulic Tank	1
6	See Page 27&29	Engine Assembly	1
7	CB091	Bracket, Hyd. Tank to Radiator	1
8	CB339	Bracket	1
9	CB130	Bracket	1
10		Washer M6 Form A	7
10a		Nut - M6 Nyloc	7
10b		Screw, M6 x 16	4
11	GG042	Slip-on Receptacle	3
12			
13	PC058	Fan Cowl	1
14	PC024	Elbow Top Hose - Header Tank	1
15	GG077	Jubilee Clip (22mm)	1
16	GG064	Jubilee Clip (35mm)	2
17	PC059	Hose, Top Radiator – Engine	1
18	GG111	Jubilee Clip (45mm)	2
19	PC082	Radiator/Oil Cooler(ACR) replaces PC070	1
20	PC078	Top Cover – Engine	1
21	GG048	Ring Head Stud 14mm	1

Item	Part No.	Description	Qty
22	GG110	Ring Head Stud 17mm	2
23	GG055	Washer Plastic	3
24	GG041	Retainer - Steel	3
25	PC057	Radiator Duct Assembly	1
26		Nut M10 Nyloc	3
27	CB336	Bracket, Radiator Mtg - L.H.	1
28	CB143	Bracket, Radiator Mtg - R.H.	1
29	GW027	Washer Dished	3
30	GG080	Rubber Bush Spigot	2
31	CB340	Bracket Radiator - Fuel Tank	2
32	GG054	Rubber Bush Plain	1
33		Washer, Plain - M10 30 o/d	1
34	PC060	Hose - Bottom Radiator	1
35	PC047	Spigot - Bottom Rad. Hose	1
36	GG090	Jubilee Clip (25mm)	3
37	PC026	Hose Header Tank - Radiator	1
38	HF007	Swivel Cplg 3/8 BSP M/F	1

# ENGINE COOLING SYSTEM (acr)

## SECTION 2

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**SECTION 2A**
**ENGINE/COOLING SYSTEM (Kubota)**

Item	Part No.	Description	Qty.
1	PD003	Engine Basic	
2	PD004	Oil Filter	
3	PD005	Oil Switch	
4	PD007	Rectifier	
5	PD008	Starter	
6	PD009	Alternator	
7	PD038	Pulley - Fan Drive (Small)	
9	PD011	Fan Belt (Small)	
11	PD012	Fan Cooling (Pusher 280mm)	
12	PD013	Pump, Lift Assembly	
13	PD015	Water Pump	
14	PD018	Dipstick, Engine Oil	
15	PD021	Flywheel Housing	
16	PD024	Air Cleaner Band	
17	PD025	Inlet Pipe	
18	PD026	Fuel Filter	
19	PD027	Starter Solenoid	
20	PD028	Exhaust Pipe	
21	PD029	Exhaust Clamp	
22	PD030	10 Sec Timer	
23	PD031	Diesel Stopper	
24	PD036	Muffler	
25	PD037	Oil Pickup Pipe	
26	PD039	Oil Filler Pipe	
27	PD041	Bolt Pulley	
28	PD042	Thermostat Cover	
29	PD044	Bowl Fuel Filter (Clear)	
30	PD045	Element Fuel Filter	
31	PD049	Gasket, Exhaust	

Item	Part No.	Description	Qty
32	PD050	Rubber Air Cleaner Band	
33	PD051	Exhaust Cover	
34	PD052	Gasket, Sump	
35	PD053	Gasket, Sump Plug	
36	PD054	Workshop Manual	
37	PD055	Parts Manual	
38	PD056	Pipe Air Cleaner	
39	PD057	Gasket, Cyl. Head	
40	PD058	Thermostat Assembly	
41	PD059	Glow Plug	
42	PD060	Element Air Cleaner	
43	PD061	Pump Injection	
44	PD062	`O' Ring Fuel Filter Small	
45	PD063	Nozzle Holder Assembly	
46	PD064	Connector Block Assembly	
47	PD066	`O' Ring Engine	
48	PD067	Pump Oil Assembly	
49	PD068	Gasket, Oil Pump	
50	PD069	Drain Plug	
51	PD070	`O' Ring Oil Pickup Pipe	
52	PD072	Exhaust Valve Guides	
53	PD075	Gasket, Gearcase	
54	PD076	Oil Seal Gearcase	
55	PD078	Gasket, Bearing Case	
56	PD079	Oil Seal Bearing Case	
57	PD080	Gasket, Bearing Case Cover	
58	PD083	Gasket, Head Cover	
59	PD084	Gasket	
60	PD085	`O' Ring Top Oil Filler	

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**SECTION 2A**
**ENGINE/COOLING SYSTEM (Kubota)**

Item	Part No.	Description	Qty.
61	PD086	Washer	
62	PD087	Wing Nut	
63	PD089	Gasket, Inlet Manifold	
64	PD090	Gasket, Exhaust Manifold	
65	PD093	Cover Muffler Flange Back	
66	PD094	Cover Muffler Flange Front	
67	PD103	Valve Stem Seal	
68	PD105	Push Rod	
69	PD107	Key Camshaft	
70	PD110	Piston STD	
71	PD111	Piston +25	
72	PD112	Piston Ring Set STD	
73	PD113	Piston Ring Set +25	
74	PD114	Pin, Piston	
75	PD115	Circlip Piston Pin	
76	PD116	Connecting Rod Assembly	
77	PD117	Bush Piston Pin	
78	PD119	Metal Crank Pin STD	
79	PD122	Crankshaft Complete	
80	PD130	Metal Crankshaft STD	
81	PD133	Metal Side STD	
82	PD136	Metal Side STD	
83	PD140	Gasket, Injector	
84	PD141	Pipe Injection Short	
85	PD142	Pipe Injection Long	
86	PD143	Shim Injection Pump	
87	PD144	Shim Injection Pump	
88	PD145	Retaining Ring	
89	PD146	`O' Ring Fuel Filter Large	

Item	Part No.	Description	Qty
90	PD147	Pipe Fuel Assembly	
91	PD149	Gasket, Lift Pump	
92	PD151	Gasket	
93	PD153	Spring Start	
94	PD159	Gasket, Water Pump	
95	PD160	Gasket, Water Flange	
96	PD161	Gasket, Thermostat	
97	PD162	Switch Starter	
98	PD163	Key Starter (Pack of 2)	
99	PD164	Connector Set Rectifier	
100	PD169	Air Filter Strainer (Small)	
101	PD170	Air Cleaner Assembly (no Flange)	
102	PD172	Overflow Pipe Assembly	
103	PD173	Washer Injector Overflow	
104	PD174	Gasket, Kit Top	
105	PD175	Gasket, Kit Bottom	
106	PD176	`O' Ring Air Cleaner	
107	PD177	Fan Cooling (Puller 245mm)	
108	PD178	Sender Unit (Engine Temp.)	
109	PD179	End Cap Air Filter (Modified)	
110	PD184	End Cap Inner	
111	PD185	Gear Ring	
112	PD187	Pipe Water	
113	PD189	Fan Cooling (Dia. 300)	
114	PD193	Sump (Oil Pan)	
115	PD194	Stay Alternator	
116	PD228	Air Filter Strainer (Large)	
117	PD223	Pulley Fan Drive (Large)	
118	PD244	Fan Belt (Large)	



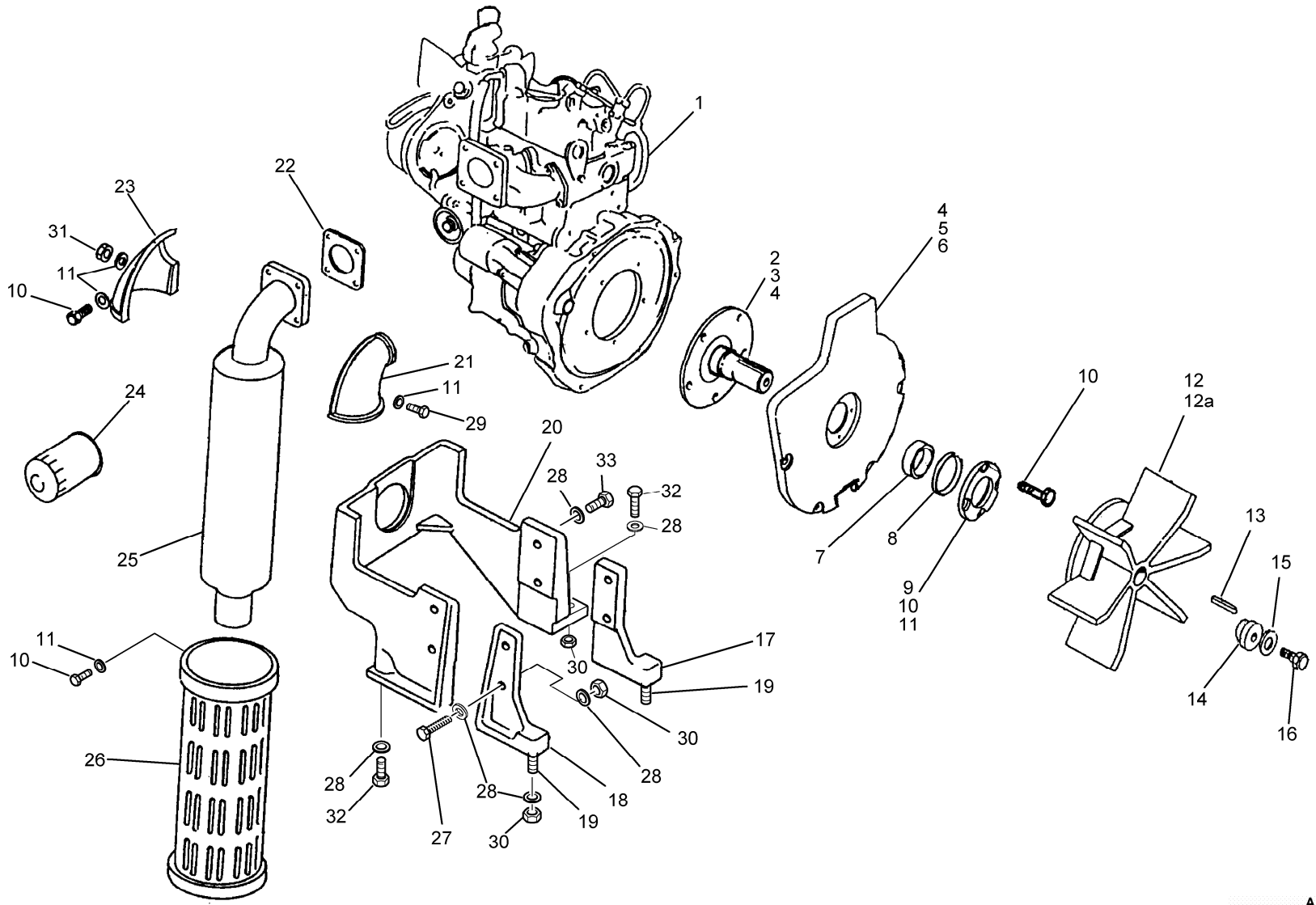
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**SECTION 3**

**ENGINE/IMPELLER SYSTEM**

Item	Part No.	Description	Qty.
1	See Pgs 27, 29	Engine Assembly	1
2	VF022	PTO Shaft	1
3		Set Screw M8 x 16 Hex.	5
4		Washer, Spring - M8	11
5	CA017	Adaptor Plate	1
6		Set Screw M8 x 20 Hex.	6
7	GM065	Journal Dust Seal	1
8	GM064	Seal Teflon	1
9	CA045	Seal Housing	1
10		Set Screw M6 x 12	3
11		Washer, Plain - M6	5
12	VF025	Impeller	1
12a	VF025_E	Impeller – Abro	Opt 1
13	GG070	Key – Impeller	1
14	GB013	Boss Impeller Retention	1
15	GG068	Washer, Disc Spring 12.2 x 25	2
16	GT109	Bolt, Impeller	1
17	CA088	Mounting – Engine L.H. From CIN101	1
18	CA087	Mounting – Engine R.H. From CIN101	1
19		Stud - M10 x 50	4
20	CA100	Mounting – Rear Engine From>CIN111 UK Only. From CIN113 All Machines	
21	PD094	Cover Exhaust Flange Front	1
22	PD049	Gasket Exhaust	1
23	PD093	Cover Exhaust Flange Rear	1
24	PD004	Filter – Oil	1
25	PD036	Muffler – Modified	1

Item	Part No.	Description	Qty
26	PD051	Muffler - Cover	1
27		Set Screw M10 x 30 Fine Hex.	4
28		Washer, Form A - M10	8
29		Screw - M6 x 30	2
30		Nut, Nyloc M10	8
31		Nut, Nyloc M6	2
32		Set Screw M10 x 20	2
33		Set Screw M10 x 20 fine	4



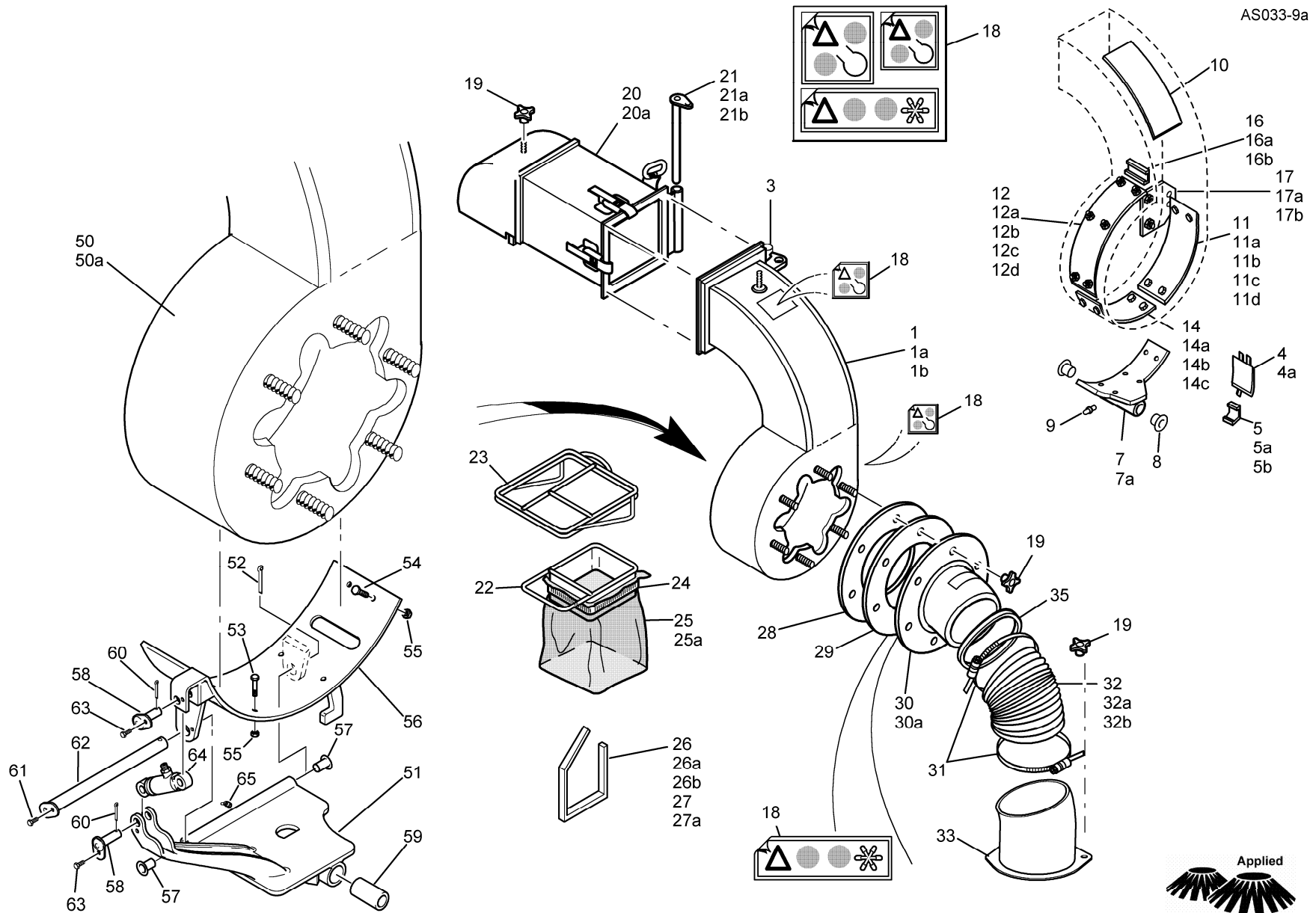
**SECTION 3**

**FAN CASING (HINGED) - ROTOMOULD TANK**

Item	Part No.	Description	Qty.
		From CIN 110 Robotic Casing fitted to UK machines & worldwide from CIN 112	
		ITEMS 1 to 16 for S2D, RS & TR ONLY	
1	CC209	Fan Casing Assy – With Fishplate CC137	1
1a	CC209_E	Fan Casing Assy - Abro,	1 opt
1b	CC148	Fan Casing Assy. – High Level	1
3	VT014	Gasket	1
4	CC061	Sludge Door	1
4a		High Speed	
5	GG097	Catch Plate	1
5a		Screw - M4 x 12 for Item 8	2
5b		Nut - Nyloc M4 for Item 8	2
7	CC137	Fish Plate – Bushed Assembly Turbo	1 opt
		From Chassis No. 810245 on Turbo and ALL machines from CIN 101	
8	GB026	Bush, Plain	2
9	GG039	Grease Nipple	1
10	CC134	Wearplate – Front Trunking Exit	1
11	CC125	Wearplate – LH Side	1
11a	CC125_E	Wearplate – LH Side Abro	1 opt
11b		Screw - M8 x 25 Button for Item 11	2
11c		Screw - M8 x 20 Button for Item 11	2
11d		Nut – Nyloc M8 for Item 11	4
12	CC127	Wearplate- RH Side	1
12a	CC127_E	Wearplate – RH Side Abro	1 opt

Item	Part No.	Description	Qty
12b		Screw - M8 x 20 Button for Item 13	4
12c		Screw - M8 x 25 Button for Item 13	2
12d		Nut – Nyloc M8 for Item 12	6
14	CC123	Wearplate – Bottom	
14a	CC123_E	Wearplate – Bottom Abro	1 opt
14b		Screw - M10 x 30 Button for Item 14	4
14c		Nut – Nyloc M10 for Item 14	4
16	CC011	Wearplate `L' Shaped	1
16a		Screw - M8 x 20 Button for Item 16	1
16b		Nut – Nyloc M8	1
17	AW088	Mounting Bracket – Boom	1
17a		Screw, Hex. Hd. Set - M6 x 16	2
17b		Nut, Nyloc - M6	2
18	GM183	Label Set - Fan Casing Warning	1
19	GG021	Knob	8
20	VT046	Back Trunking	1
20a	VT138	Back Trunking – High Level	1
21	CB420	Hinge Pin – Back Trunking	1
21a		Washer - Form A M10	1
21b		Split Pin - St/St. 1/8" x 1"	1

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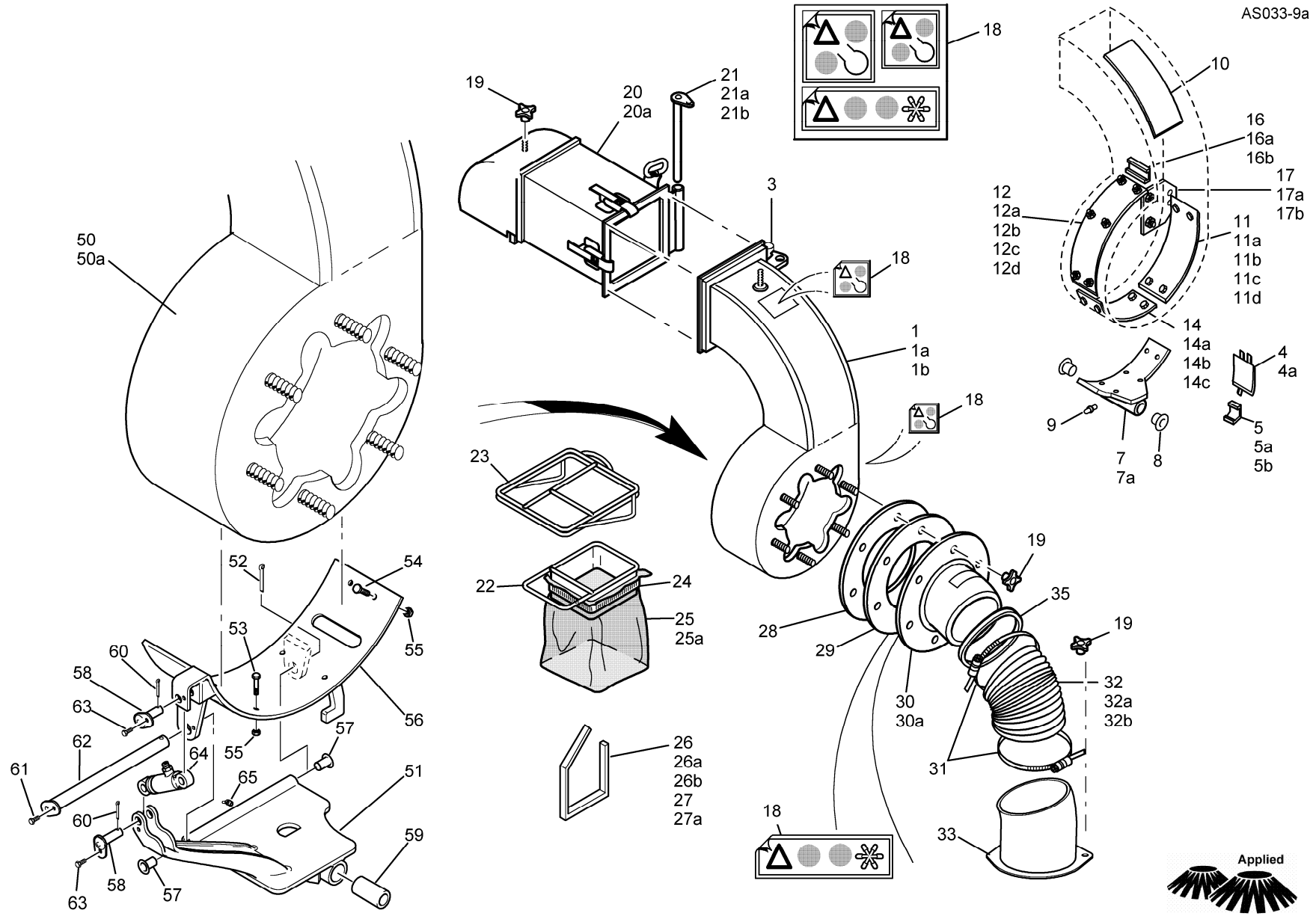
**SECTION 3**

**FAN CASING (HINGED) - ROTOMOULD TANK**

Item	Part No.	Description	Qty.
22	VT032	Flange – Sock	1
23	VT047	Sliding Frame	1
24	VT035	Jubilee Clip - 12½"	1
25	VB015	Nylon Sock	1
26	VT027	Strap – Bag	1
26b	VT016S	Foam Only	1
28	VT024	Gasket - Casing Ring	1
29	VT023	Casing Ring	1
30	AW122	Access Cover Assy	1
30a	VT107	Access Cover Assy Roto - Non Woosh	
31	GG015	Jubilee Clip 8½"	2
32	AW085_B	Hose – Front From Chassis 009482	1
32b	VT165	Hose – Front HS From Chassis 009482	1
34	VT042	Oval From Chassis 009482	2
35	GM013	Rubber Band	

Item	Part No.	Description	Qty
		ITEMS 50 to 63 for HS ONLY	
50	CC221	Casing & Wearplates c/w Item 56	1
50a	CC221_E	Casing & Wearplates c/w Item 56 (abro)	1 opt
51	CC174	Bracket, Lower Tilt c/w Item 57 & 59	1
52		Split Pin - 1" x 1/8	1
53		Screw, M8 x 20 Button	6
54	AW131	Screw, M8 x 30 Button	2
55		Nut, Nyloc, M8	8
56	CC162	Bracket , Upper Tilt	1
57	GB055	Bush , Pivot	2
58	CC212	Clevis Pin, Hyd. Cylinder Pivot	2
59	GB026	Bush, Fishplate	2
60		Split Pin - 3/32" x 3/4"	1
61		Screw, Hex. M8 x 15	2
62	CC190	Pin, Pivot Tilt	1
63		Self Tap, M6 x 12	1
64		See Hydraulics Page 48	
65	GG023	Grease Nipple, 45 deg.	1

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**SECTION 4**

**FRONT HEAD (ONE PIECE)**

Item	Part No.	Description	Qty.
1	NN090	One piece nozzle assy. From CIN 101 Nozzle Assembly - Includes Items 6, 14, 15, 18, 19, 20, 21, 22, 23	1
2	NN095	Counterbalance Weight - Top	2
3	NN099	Counterbalance Weight - Bottom	2
4			
5			
6	NN057	Horseshoe Wearplate	1
7			
8	GT115	M8 x 30 C/Sunk Skt. Head	
9	NF093	Blanking Plate	1
10		Screw - M8 x 40 Hex. Head	1
11		Screw - M8 x 30 Hex. Head	1
12		Washer - Plain M8	4
13		Nut - Nyloc M8	2
14	NC034	Pin - Removable Pivot	1
15	BB060	Pin - Lynch	1
16	GW016	Washer - 1" Plain	1
17		Bolt - M12 x 30 Hex. Head	1
18	MA061	Washer ( Was NC032 )	1
19	NC030	Bush - Castor	2
20	GN028	Nut - Castor Bush	2
21	NN028	Stud Adjuster	2
22	NN029	Nut - Stud Adjuster	2
23	NN051	Cap - Brush Arm Pins	4
24		Set Screw - M8 x 50 Hex.	8
25		Washer - Spring M8	4
26		Washer - M8 Plain	4
27	NN058	Flap	1
28	NN064	Hinge - L.H. Flap	1

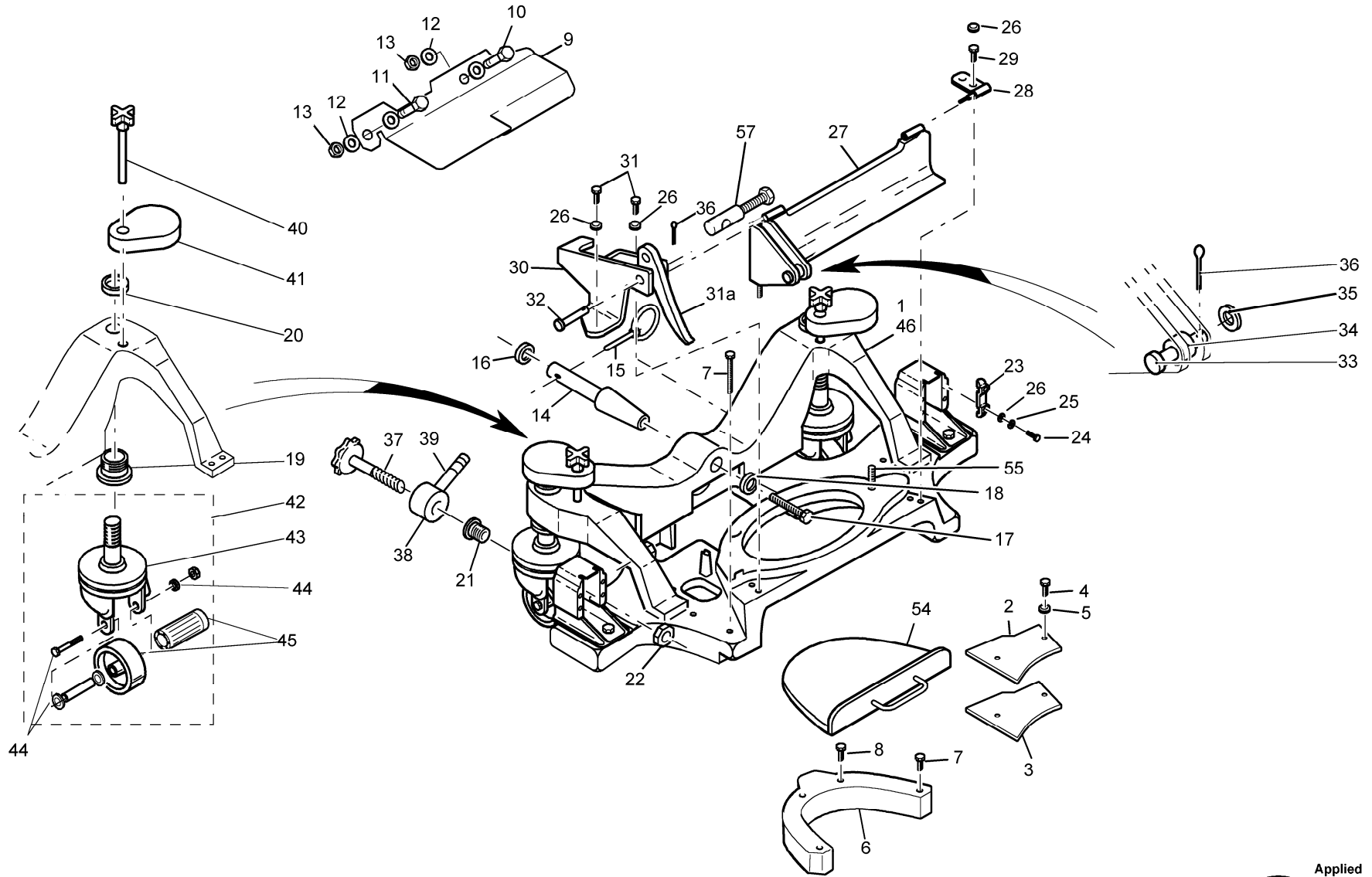
Item	Part No.	Description	Qty
29		Screw - M8 x 25 Hex.	2
30	NN059	Hinge - R.H. Flap	1
31		Screw - M8 x 20 Hex.	2
31a	NN104	Lever - Flap	1
32	GG130	Clevis Pin - 6mm x 23	1
33	GG135	Clevis Pin - 6mm x 30	1
34	GB029	Oilite Bush	1
35		Washer - M6 Form A	1
36		Split Pin - 1/16" x 5/8"	2
37	NF045	Adjuster - Side Brush	2
38	NF041	Locking Device	2
39	GG043	Plastic Cap	2
40	NC003A	Locking Pin Assembly	2
41	NN041	Top Cap	2
42	NC002	Castor - Front Assembly	2
43	NC022	Seal - Castor Top	2
44	NC020	Wheel & axle assembly kit	2
45	NC014	Wheel & Bearing	2
54	AW134	Blanking Plate - Horseshoe	2
55		Stud - M8 x 35	1
56	GG179	Adjuster (HS)	1
57	NN107	Cable Clamp , HS (includes screw)	1



# FRONT HEAD (ONE PIECE)

# SECTION 4

AS012-10



**SECTION 4**

**FRONT BRUSH ASSEMBLY**

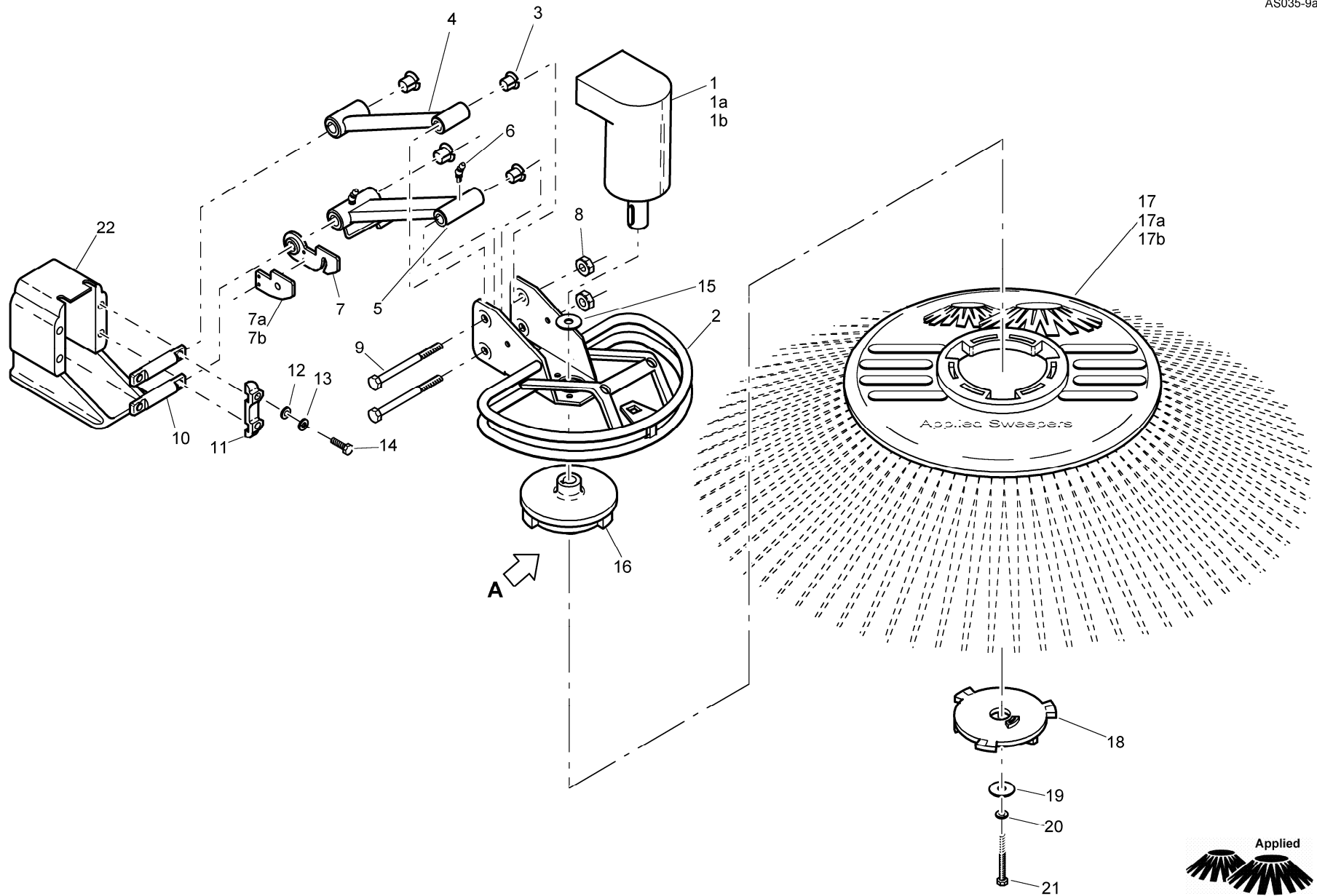
Item	Part No.	Description	Qty.
1	HM005	Brush Drive Motor – Eaton	2
1a	HF056	Key, Eaton Motor	1
1a	HF058	Seal Kit, Eaton Motor	1
2	NF032	Bumper – Sidebrush	2
3	GB033	Bush Kit (16 Bushes)	1
4	NF090	Link Arm Top Assembly	1
5	NF091	Link Arm Bottom Assembly	1
6		Grease Nipple - Included with Items 4 & 5	
7	NF062	Lockup Hook - Brush Arm	2
7a	NF087	Lockup Hook – R.H. HS & B/lift	1
7b	NF088	Lockup Hook - L.H. HS & B/lift	1
8		Nut - M12 Nyloc	4
9		Bolt - M12 x 100	4
10	NF056	Pin - Brush Arm	4
11	NN051	Cap - Brush Arm Pins	4
12		Washer - M8 Plain	8
13		Washer - M8 Spring	8
14		Set Screw - M8 x 50 Hex.	8
15	GW053	Washer, Plastic 34 o/d x 19.2 i/d	2
16	NB035	Drive Hub	2
17	NB046	Brush Fill - 2 Row Standard	2
	NB048	Brush Fill - 2 Row Pet	2 opt
	NB050	Brush Fill - Wire/Poly Mix	2 opt
18	NB036	Brush Lock Cam	2
19	GW062	Washer 25 o/d x 6.5 i/d x 3mm	2

Item	Part No.	Description	Qty
20		Washer - M6 Spring	2
21	GT240	Bolt - M6 x 35 Anaerobic (Eaton Motor)	2
21	GT210	Bolt - M6 x 30 Anaerobic (Danfos Motor)	2
22	NN050	Casting Support, Front Brush Arms	2

# FRONT BRUSH ASSEMBLY

## SECTION 4

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**SECTION 5**

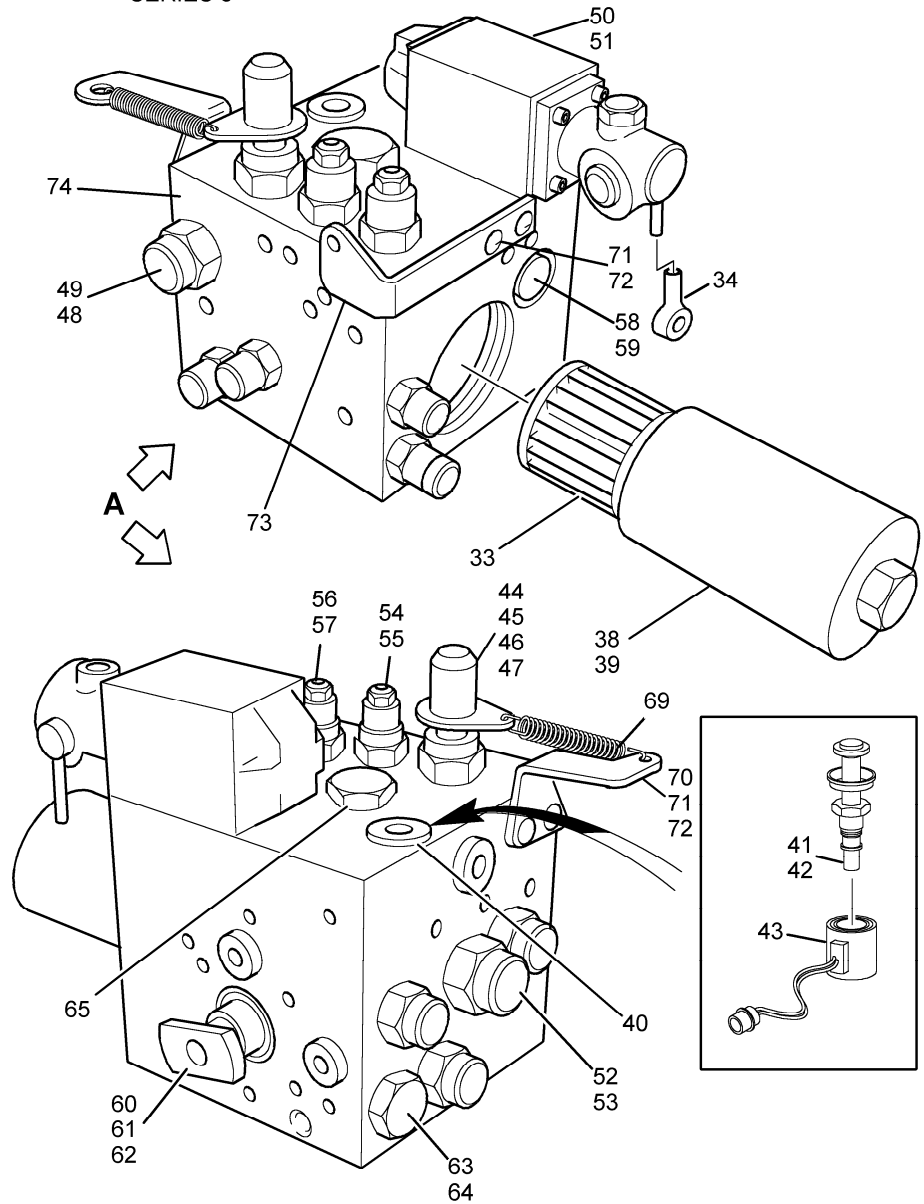
**HYDRAULIC SYSTEM series 3**

Item	Part No.	Description	Qty.
		<b>SERIES 3 PARTS ONLY:</b>	
		Fitted to all machines from CIN 108	
33	HC058	Filter	1
34	BB007	Rose Bearing	1
38	HC062	Filter Bowl	1
39	HC097	Seal Kit for Item 38	1
40	HF071	Plug – DEA Cavity	1
41	HV027	Valve, Solenoid complete with Coil DEA Machines Only	1 Opt
42	HV030	Seal Kit for Item 41	1
43	HV029	Coil for Item 41	1
44	HV035	Valve, Rotary - Brush Speed	1
45	HV037	Orifice Disc for Item 44	1
46	HV036	Seal Kit for Item 44	1
47	HV038	Lever Arm Kit for Item 44	1
48	HV039	Valve, Priority Flow Control	1
49	HV040	Seal Kit for Item 48	1
50	HV056	Valve, Rexroth Cetop Spool Open Centre	1
51	HC069	Seal Kit for Item 50	1
52	HV060	Valve, Reverse Speed Control	1
53	HV061	Seal Kit for Item 52	1
54	HV042	Valve, Reverse Counterbalance	1
55	HV043	Seal Kit for Item 54	1
56	HV041	Valve, Forward Counterbalance	1
57	HV043	Seal Kit for Item 56	1
58	HV062	Valve, Reverse Speed Check	1
59	HV045	Seal Kit for Item 58	1
60	HV049	Valve, Freewheel Shutoff	1
61	HV051	Seal Kit for Item 60	1

Item	Part No.	Description	Qty
62	HV050	Knob for Item 60	1
63	HV044	Valve, Oil Cooler Bypass Check	1
64	HV045	Seal Kit for Item 63	1
65	HF074	Plug, Reverse Override	1
66	HV046	Valve, Reverse Override Solenoid Cpt. With coil (if fitted)	1 opt
67	HV045	Seal Kit for Item 66	1
68	HV048	Coil for Item 66	1
69	GG160	Spring for Item 44	1
70	CB454	Spring Anchor Bracket	1
71		Screw – M5 x 12 Hex.	1
72		Washer - M5 Form A	1
73	CB450	Bracket, Brush Cable	1
74	HC095	Manifold, Hyd. Assembly (without rexroth Cetop Valve, DEA Solenoid Valve & Reverse Override Valve)	

SERIES 3

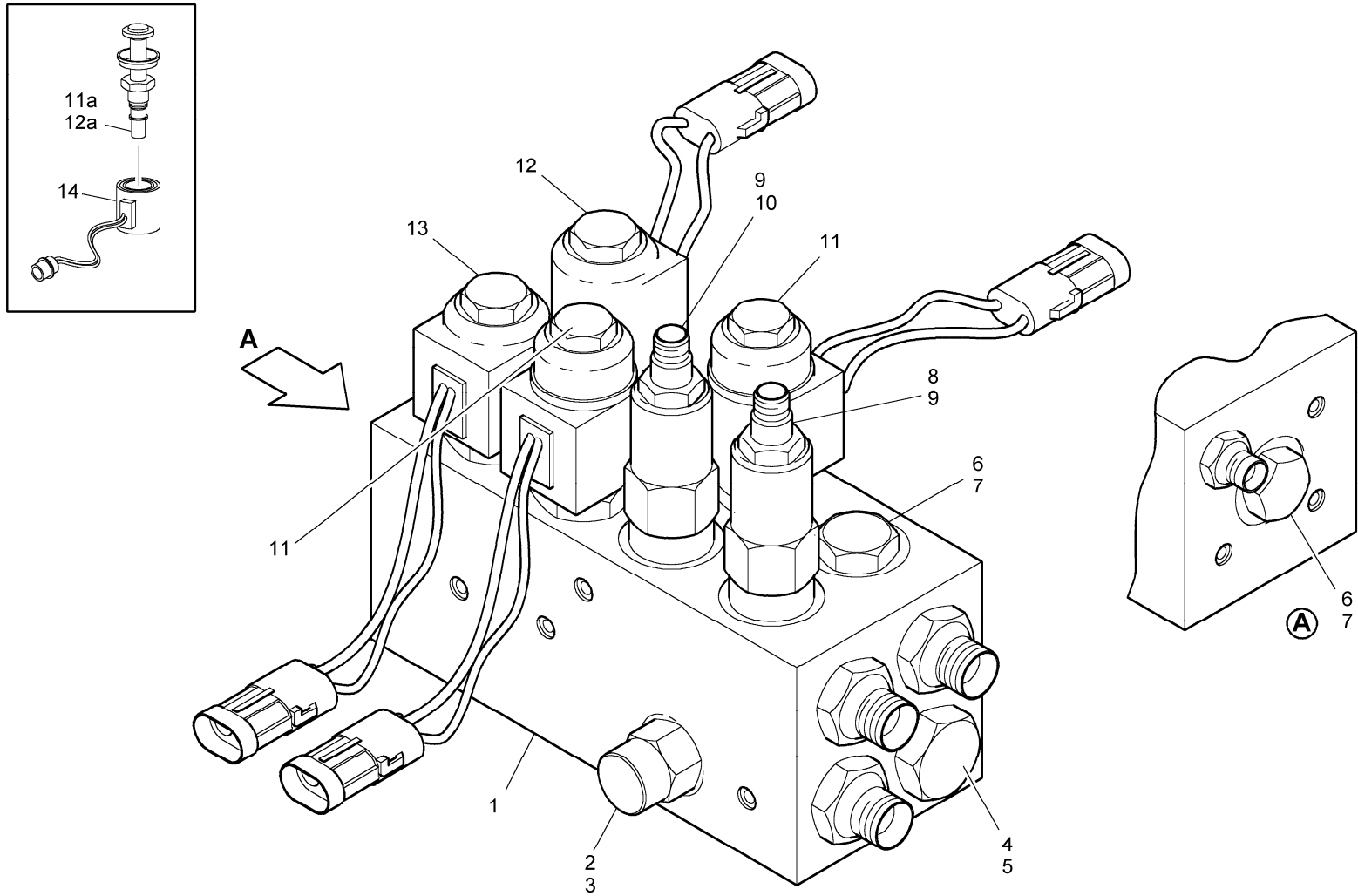
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**SECTION 5****HYDRAULIC SYSTEM series 3**

Item	Part No.	Description	Qty.
1	HC124	Hyd. Ancillary Block	1
2	HV060	Valve - Priority Flow Control	1
3	HV061	Seal Kit for Item 2	1
4	HV077	Filter Cartridge	1
5	HV078	Seal Kit for Item 4	1
6	HV062	Valve - Check	2
7	HV045	Seal Kit for Item 6	2
8	HV067	Valve - Main Pressure Relief	1
9	HV068	Seal Kit for Items 8 and 10	2
10	HV086	Valve - Priority Bypass Press Rel.	1
11	HV046	Valve - Solenoid, Priority and Speed	2
11a	HV045	Seal Kit for Item 11	2
12	HV085	Valve - Solenoid, Head Lower	1
12a	HV051	Seal Kit for Items 12 and 13	1
13	HV083	Valve - Solenoid, Head Lift	1
14	HV048	Solenoid Coil for Items 11, 12 and 13	4

Item	Part No.	Description	Qty
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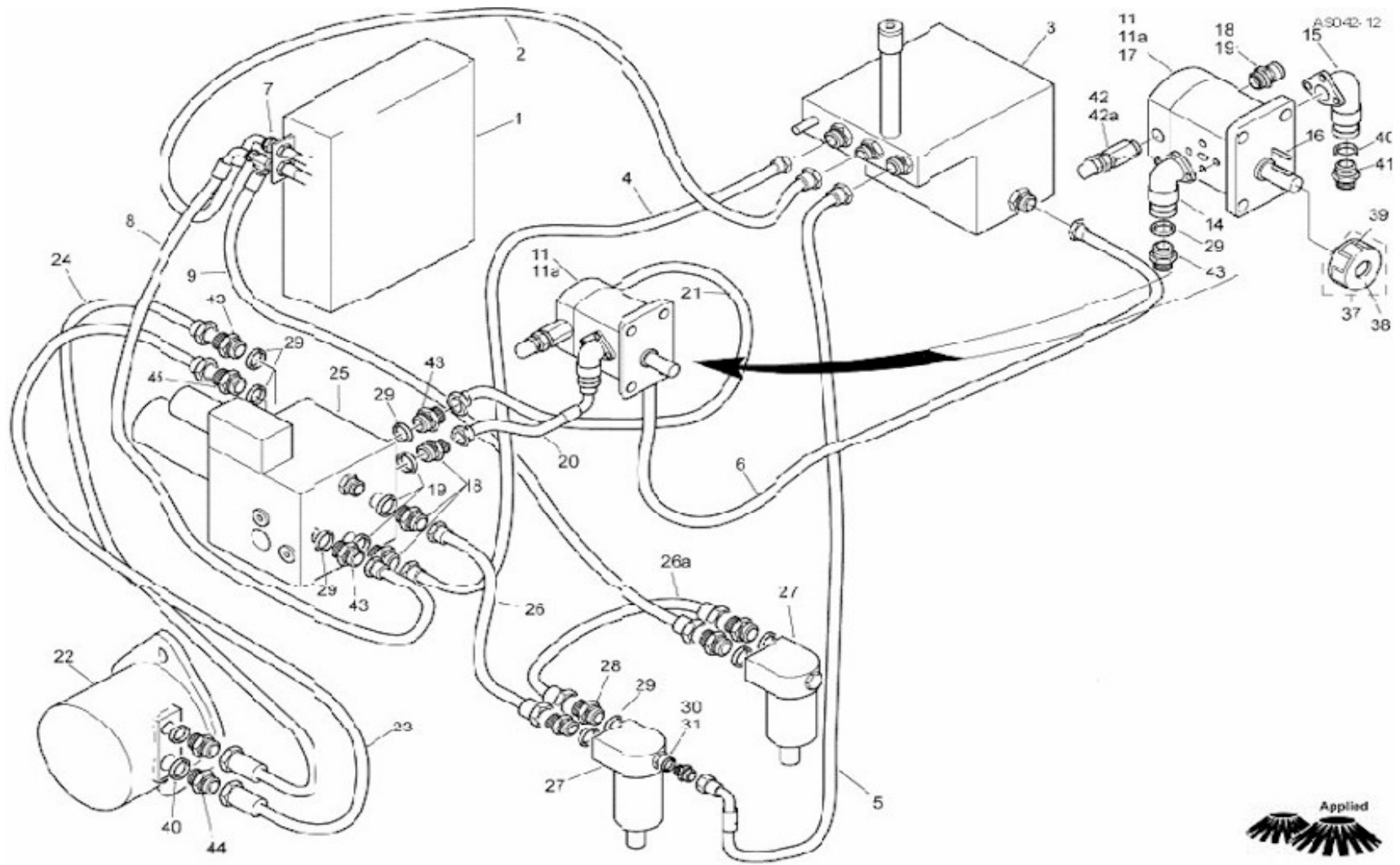
**SECTION 5**

**HYDRAULIC SYSTEM - SERIES 3**

Item	Part No.	Description	Qty.
1	See Section 2	Radiator/Oil Cooler	1
2	HJ105	Hose Hyd: Cooler to Tank	1
3	HT020	Hydraulic Tank	1
4	HJ044	Hose Hyd: Port T to Tank	1
5	HJ042	Hose Hyd: Brush Motor to Hyd. Tank	1
6	HJ043	Hose Hyd: Suction	1
7	HF049	Coupling - 3/8" BSP F/M/M	1
8	HJ105	Hose Hyd: Port C to Oil Cooler	1
9	HJ130	Hose Hyd: Oil Cooler to L.H. Brush Motor	1
10	Not used		1
11	HP012	Hydraulic Pump c/w Pressure Valve	1
11a	HP013	Seal kit for Item 11	1
14	HP011	Elbow Pump 90D 3/8", incl. Screws & Seal	1
15	HP010	Elbow Pump 90D 1/2", incl. Screws & Seal	1
16	HM017S	Key - for Item 11	1
17	Not used		
18	HF046	Coupling - 1/4" - 1/4" BSP M/M	3
19	HF044	Seal Dowty - 1/4" BSP	3
20	HJ123	Hose Hyd: Port P to Pump	1
21	HJ126	Hose Hyd: Port RD to Pump Relief	1
22	See Page 14	Drive Motor	1
23	HJ124	Hose Hyd: Port MA to Drive Motor	1
24	HJ125	Hose Hyd: Port MB to Drive Motor	1
25	See Page 42	Hydraulic Block Assembly	1
26	HJ047	Hose Hyd: Port BA to R.H. Brush Motor	2
26a	HJ046	Hose Hyd: R.H. to L.H. Brush Motor	1
27	See Page 40	Brush Motor	2
27a	HM005	Brush Motor (Back Brush)	1

Item	Part No.	Description	Qty
28	HF042	Coupling - 3/8" - 1/4" BSP M/M (6 req'd for Back Brush Machines)	4
29	HF010	Seal Dowty - 3/8" BSP Used (12 req'd for Back Brush Machines)	10
30	HF030	Coupling - Straight 1/8" - 1/8" BSP M/M (2 req'd for Back Brush Machines)	1
31	HF016	Seal Dowty - 1/8" BSP	1
37	TC001	Drive Coupling Assembly	1
38		NOT SOLD SEPARATELY	
39	TC008	Plastic Gear for Item 37	1
40	HF011	Seal Dowty - 1/2" BSP	1
41	HF036	Coupling 3/4" - 1/2" BSP	1
42	HV065	Valve - Pressure Relief	1
42A	HV066	Seal Kit for Item 42	1
43	HF006	Coupling, 3/8" - 3/8"	1
44	HF017	Coupling, 1/2" - 3/8"	1
45	HF005	Coupling, Bulkhead 3/8" - 3/8"	1



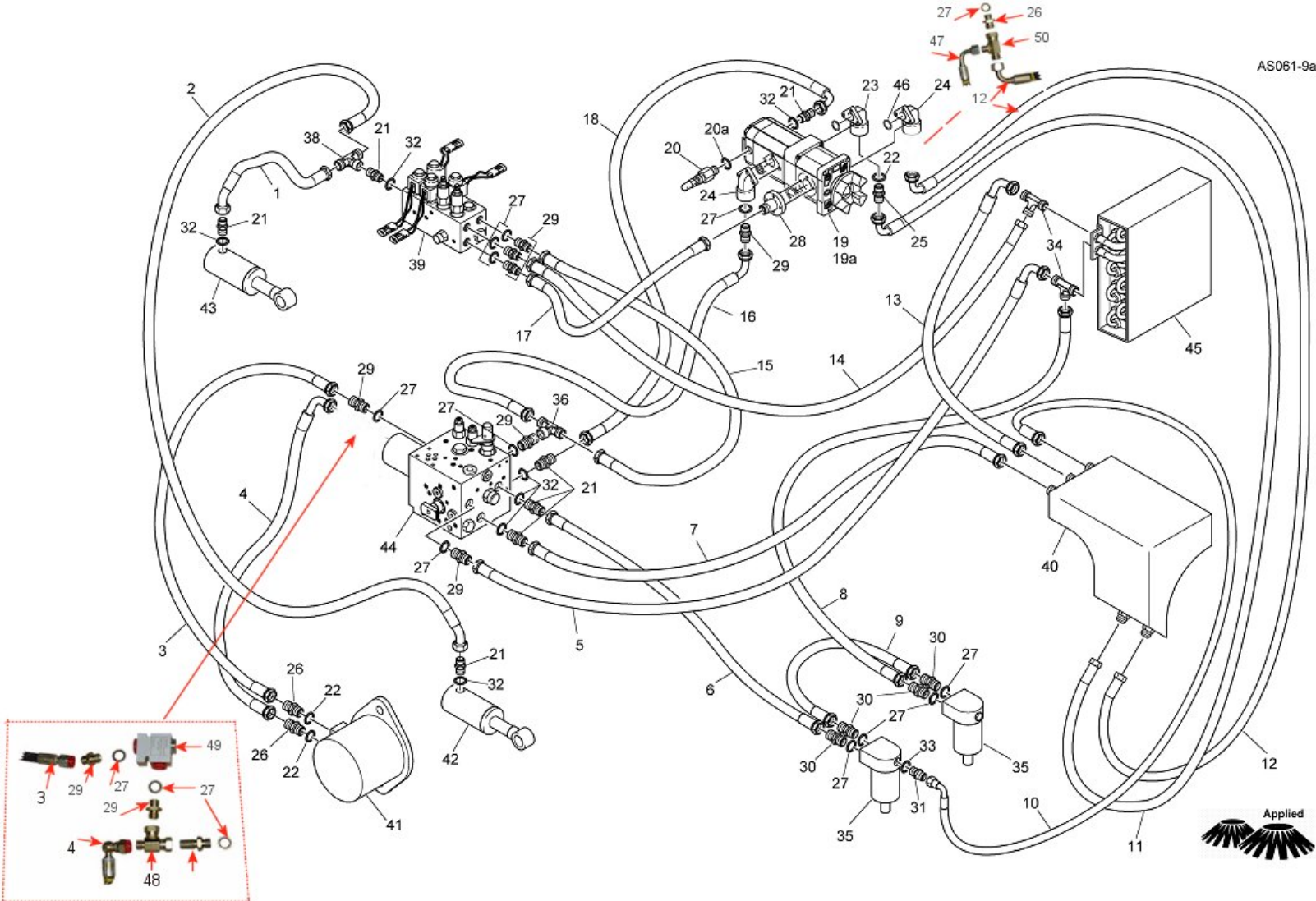


**SECTION 5**

**Hydraulics System – Series 3**

Item	Part No.	Description	Qty.
1	HJ155	Hose - Hyd. Anc Head/Pitch Cylinder	1
2	HJ154	Hose - Hyd. Anc Head/Pitch/Head Cylinder	1
3	HJ251	Hose - Hyd. 3/8 Block (MB)/Motor	1
4	HJ250	Hose - Hyd. 3/8 Block (MA)/Motor	1
5	HJ105	Hose - Hyd. 3/8 Block/Oil Cooler	1
6	HJ047	Hose - Hyd. 1/4 BA to RH Brush Motor	1
7	HJ044	Hose - Hyd. 3/8 Block/Tank	1
8	HJ130	Hose - Hyd. 1/4 LH Brush Motor/Cooler	1
9	HJ046	Hose - Hyd. 1/4 Brush/Brush Motor	1
10	HJ042	Hose - Hyd. 1/4 Brush Bleed	1
11	HJ146	Hose - Hyd. Tank/Primary Pump	1
12	HJ147	Hose - Hyd. Tank/Pump Secondary	1
13	HJ105	Hose - Hyd. Oil Cooler/Hyd Tank	1
14	HJ152	Hose - Hyd. Anc Block (T)/Tank	1
15	HJ151	Hose - Hyd. Anc Block (P1)/Main (P)	1
16	HJ149	Hose - Hyd. Pump Primary/Block (P)	1
17	HJ150	Hose - Hyd. Pump Second/Anc Block	1
18	HJ148	Hose - Hyd. Hyd Relief/Block (RD)	1
19	HP016	Pump - c/w Item 20	1
19a	HP017	Seal Kit for Item 19	1
20	HV065	Press Relief Valve	1
20a	HV066	Seal Kit for Item 20	1
21	HF046	CPLG - Stud 1/4 x 1/4	
22	HF011	Seal - Dowty 1/2" BSP	
23	HP010	Elbow - 1/2" BSP	1
24	HP011	Elbow - 3/8" BSP	2
25	HF036	CPLG - 3/4" M / 1/2M	
26	HF017	CPLG - 1/2" M - 3/8" M	
27	HF010	Seal - Dowty 3/8" BSP	

Item	Part No.	Description	Qty
28	HP018	Straight Adaptor - 1/2" BSPM	
29	HF006	CPLG - 3/8" / 3/8" MM	
30	HF042	3/8" x 1/4" MM	
31	HF030	CPLG - 1/8" BSP	
32	HF044	Seal - Dowty 1/4" BSP	
33	HF016	Seal - Dowty 1/8" BSP	
34	HF049	Tee Piece	2
35	HM005	Brush Motor	2
36	HF072	Tee Piece 3/8" BSP MMF	
37	HF005	Cplg, Bulkhead - 3/8" / 1/2" BSP MM	
38	HF084	Tee Piece - 1/4" BSP MMF	1
39	HC124	Ancillary Block	1
40	HT030	Hydraulic Tank	1
41	HM029	Drive Motor	1
42	HC128	Hyd. Cylinder - Head Lift	1
43	HC126	Hyd. Cylinder - Pitch Lock	1
44	HC098	Hyd. Block, Main	1
45	PC070	Radiator	1
46	HF055	O Ring	4
47			
48	HF129	Tee Piece	1
49	HV149	Check Valve	1
50	HF128	Tee Piece	1

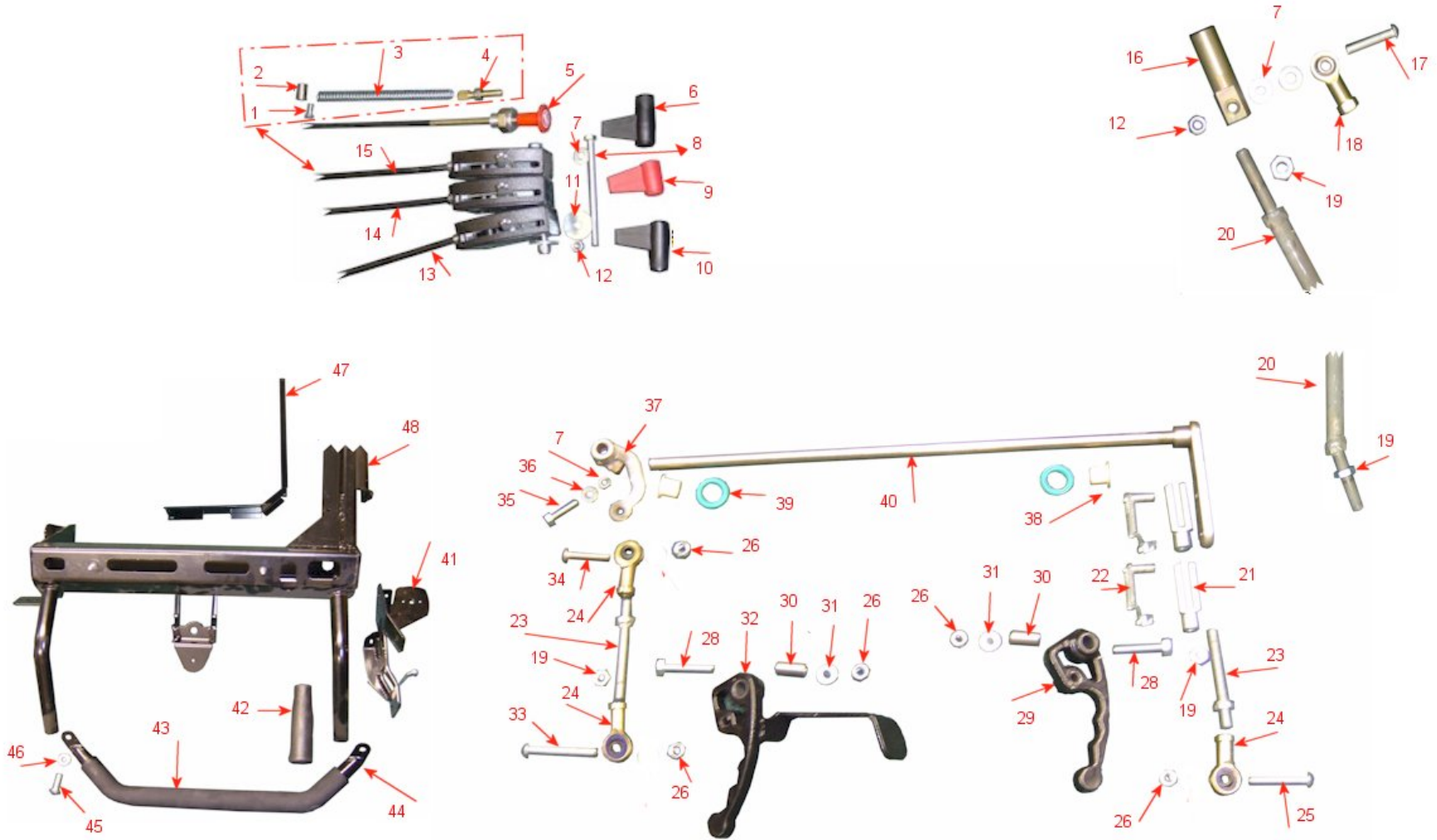


**SECTION 6**

**Handles & Controls**

Item	Part No.	Description	Qty.
1	GT075	SCREW, HEX HD SET - M5 x 12	
2	NN111	CLAMP, CABLE	1
3	BB029	SPRING COMPRESSION-FLAP CABLE	1
4	GG179	ADJUSTER - FLAP CABLE	1
5	BB058	CABLE – MANUAL STOP	1
6	BB114	BLACK HANDLE – FLAP CABLE	1
7	GW007	WASHER-PLAIN-1/4' /6mm	
8	GT150	M6 X 90 HEX BOLT	
9	BB112	RED HANDLE – THROTTLE CABLE	1
10	BB113	BLACK HANDLE – BRUSH CABLE	1
11	GW011	WASHER, 6.35 I/D x 25.4 O/D	
12	GN011	NUT, NYLOC - M6	
13	BB110	CABLE, BRUSH - TRIVEX FACIA	1
14	BB111	CABLE, THROTTLE - TRIVEX FACIA	1
15	BB109	CABLE, FRONT FLAP - TRIVEX FACIA	1
16	BB093	CONNECTOR	1
17	GT229	SCREW, BUTT HD HEX SKT - M6 x 30	
18	BB007	BEARING-ROSE	1
19	GN027	NUT, THIN - M8	
20	MA586	DRIVE ROD	1
21	BB006	CLEVIS YOKE - LONG	2
22	BB022	CLEVIS PIN - LONG	2
23	CB773	CONNECTOR ROD WELDMENT	2
24	BB108	BEARING - ROSE 8 DIA M8x1.25	3
25	GT265	SCREW, BUTTON HD SKT - M8 x 45	
26	GN004	NUT, NYLOC - M8	
27	GN027	NUT, THIN - M8	
28	GT092	SCREW, HEX HD SETM8 X 40	

Item	Part No.	Description	Qty
29	CB727	DRIVE LEVER, RH - ASSEMBLY	2
30	CB710	SLEEVE - DRIVE LEVER	2
31	GW006	WASHER-PLAIN-5/16'	
32	CB728	DRIVE LEVER, LH - ASSEMBLY	1
33	GT262	SCREW, BUTTON HD SKT - M8 x 55	
34	GT097	M8X35 ST/ST BUTTON	
35	GT066	SCREW, HEX HD SET - M6 x 25	
36	GW003	WASHER-SPRING-1/4'	
37	CB573	LEVER - LH INT. DRIVE	1
38	GB053	BUSH - IGUS 'J' FLG - 12x14x15	2
39	HC122	SCRAPER 20 X 26 X 4	2
40	CB614	CONNECTOR ROD / DRIVE LEVER	1
41	CB626	MOUNTING BRACKET	1
42	GM128	HANDLE GRIP	2
43	GM211	FOAM PROTECTION	1
44	CB526	CROSSBAR	1
45	GT216	SCREW, BUTTON HD SKT - M10 x 30	
46	GW013	WASHER, FORM A - M10	
47	CB463	CABLE COVER	1
48	CB767	FIXED HANDLE	1

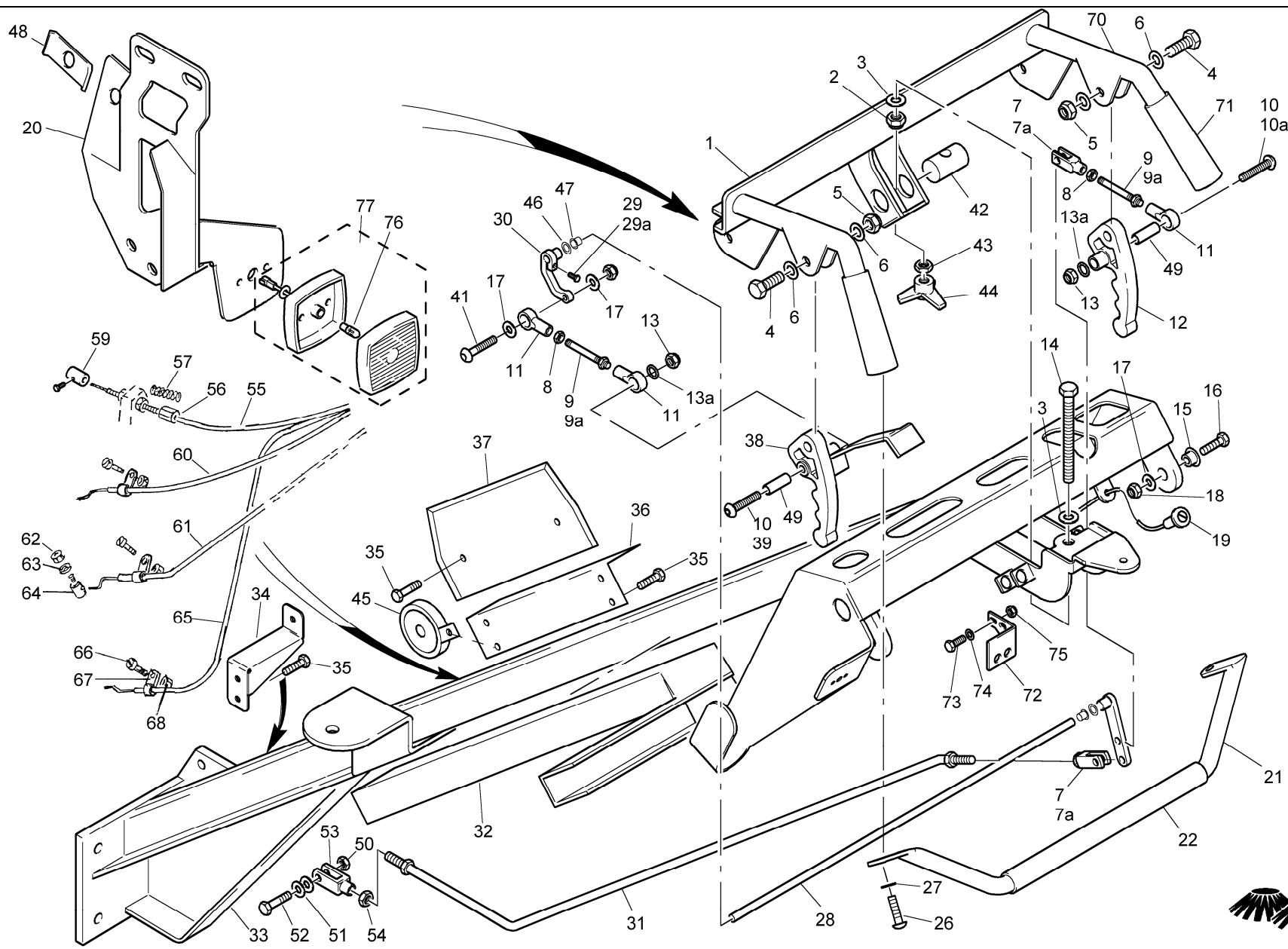


**SECTION 6**

**HANDLE & CONTROLS (cont,d)**

Item	Part No.	Description	Qty.
1	CB719	Handlebar – Adjustable (from CH 105216	1
2		Nut - Nyloc, M12	1
3	GW066	Washer – Nylon, 24 o/d x 13 i/d x 2.5	2
4	GT092	Screw – Hex, M8 x 40	2
5		Nut – Half Nyloc, M8	2
6		Washer – Plain, M8	4
7	BB006	Clevis Yoke	2
7a	BB022	Clevis Pin (not shown)	2
8		Nut - M8 Plain	2
9	CB652	Connector Rod, HS/TR	2
9a	CB773	Connector Rod S2D/RS	2
10	GT092	Screw – M8 x 40 (from chassis 105216 )	2
11	BB108	Bearing - Rose	3
12	CB668	Drive Lever RH	1
13		Nut, M8 1/2 Nut	2
13a		Washer, M8	2
14	CB609	Adjuster Screw	1
15	GB056	Bush - DU	2
16		Screw, M8 x 65	1
17		Washer, M8 Plain	1
18		Nut, M8 1/2 Nut	1
19	BB058	Stop Cable	1
20	CB626	Bracket - Side Panel/Rear Light	1
21	CB526	Crossbar - Adjuster Handle	1
22	GM211	Foam Grip	1
23			2
24			4
25			1
26	GW023	Screw, M10 x 25 Hex. Hd.	2

Item	Part No.	Description	Qty
27	GT086	Washer – Spring, M10	2
28	CB614	Connector Rod	1
29		Screw, M6 x 20	1
30	CB573	Connector - Drive Lever	1
31	MA586	Drive Rod	1
32	CB580	Cover - Cable Trough	1
33	CB634	Support - Main Handlebar	1
34	CB681	Bracket - Side Panel Lower	1
35		Tapfix – M6 x 12	10
36	CB670	Bracket – Mounting	1
37	CB672	Guard - Anc. Block	1
38	CB728	L.H. Drive Lever	1
39		Screw, M8 x 55 Button Hd.(to ch 105215)	1
41		Screw - M8 x 35 st. st. Button Hd.	1
42	CB648	Pivot Pin	1
43		Nut, Thin, M12 st. st.	1
44	GG174	Knob - Adjustable Handle	1
45	ES157	Horn	1
46	HC122	Scraper Seal	2
47	GB053	Bush	2
48	GG147	Recepticle	1
49	CB710	Bush	2
50		Nut – Nyloc, M6	2
51		Washer – M6	2
52		Screw – M6 x 30	1
53	BB093	Connector	1
54		Nut – Half, M8	2

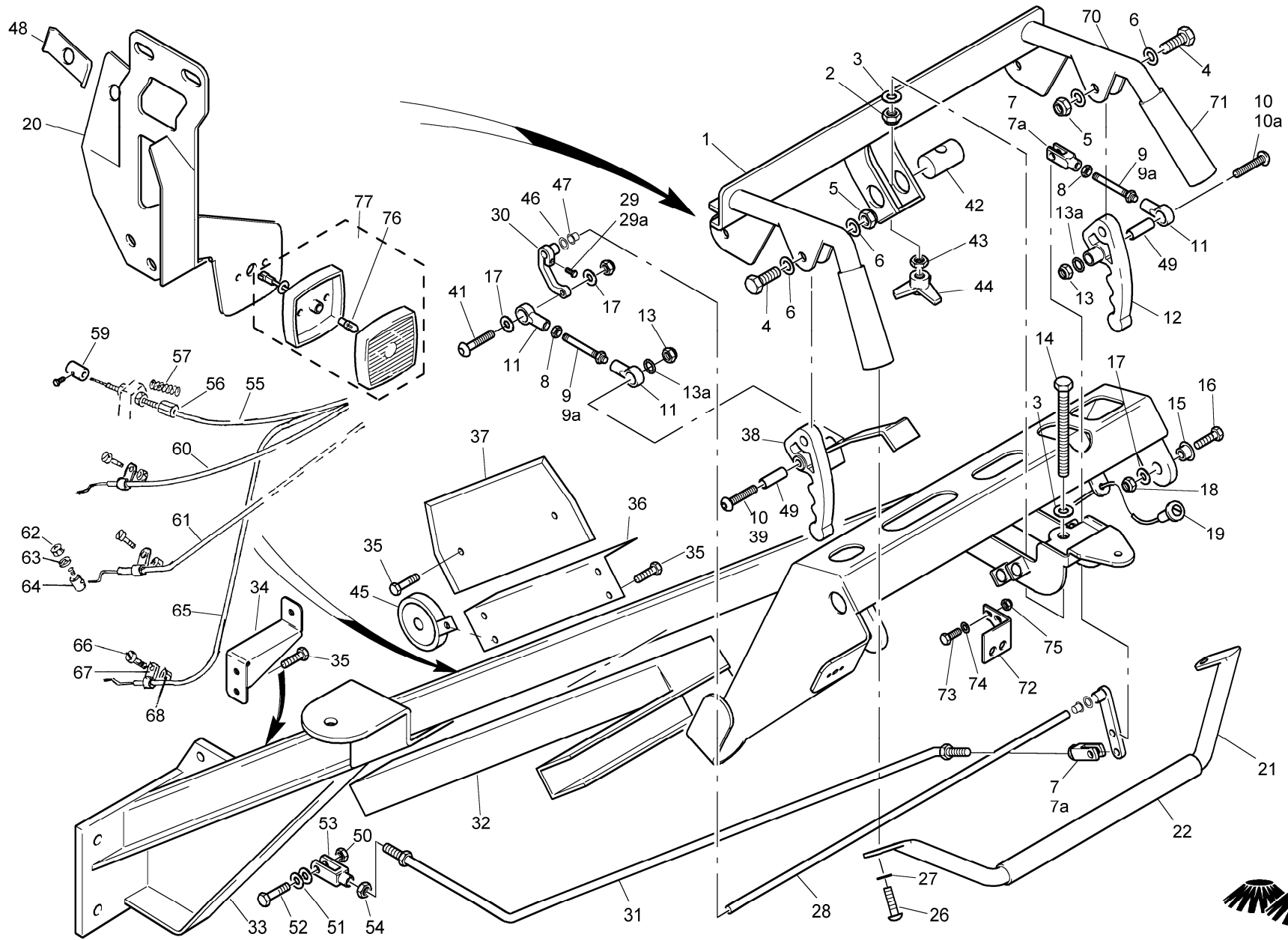


**SECTION 6****HANDLE & CONTROLS (cont,d)**

Item	Part No.	Description	Qty.
55	BB109	Flap Cable	1
56	GG179	Adjuster – Flap cable	1
57	BB029	Spring	1
58	Not used		1
59	NN107	Cable - Clamp Assy.	1
60	BB110	Cable - Brush Speed	1
61	BB058	Cable – Engine Stop	1
62		Nut – Nyloc, M5	1
63		Washer – Form A, M5	1
64	BB049	Nipple – Manual Stop Cable	1
65	BB111	Cable – Throttle	
66		Set Screw M6 x 16 B/Head	3
67	BB045	'R' Clip	3
68		Nut – Nyloc M6	3
69			
70	CB767	Handlebar – Fixed S2D/RS from CIN117	1
71	GM128	Handlegrips	2
72	CB150	Bracket – Water Valve	1
73	GT159	Screw – Button M6 x 16	1
74		Washer – M6	1
75		Nut – Nyloc M6	1
76	ES053	Bulb – Festoon 5w	2
77	ES050	Light - Rear	2

Item	Part No.	Description	Qty
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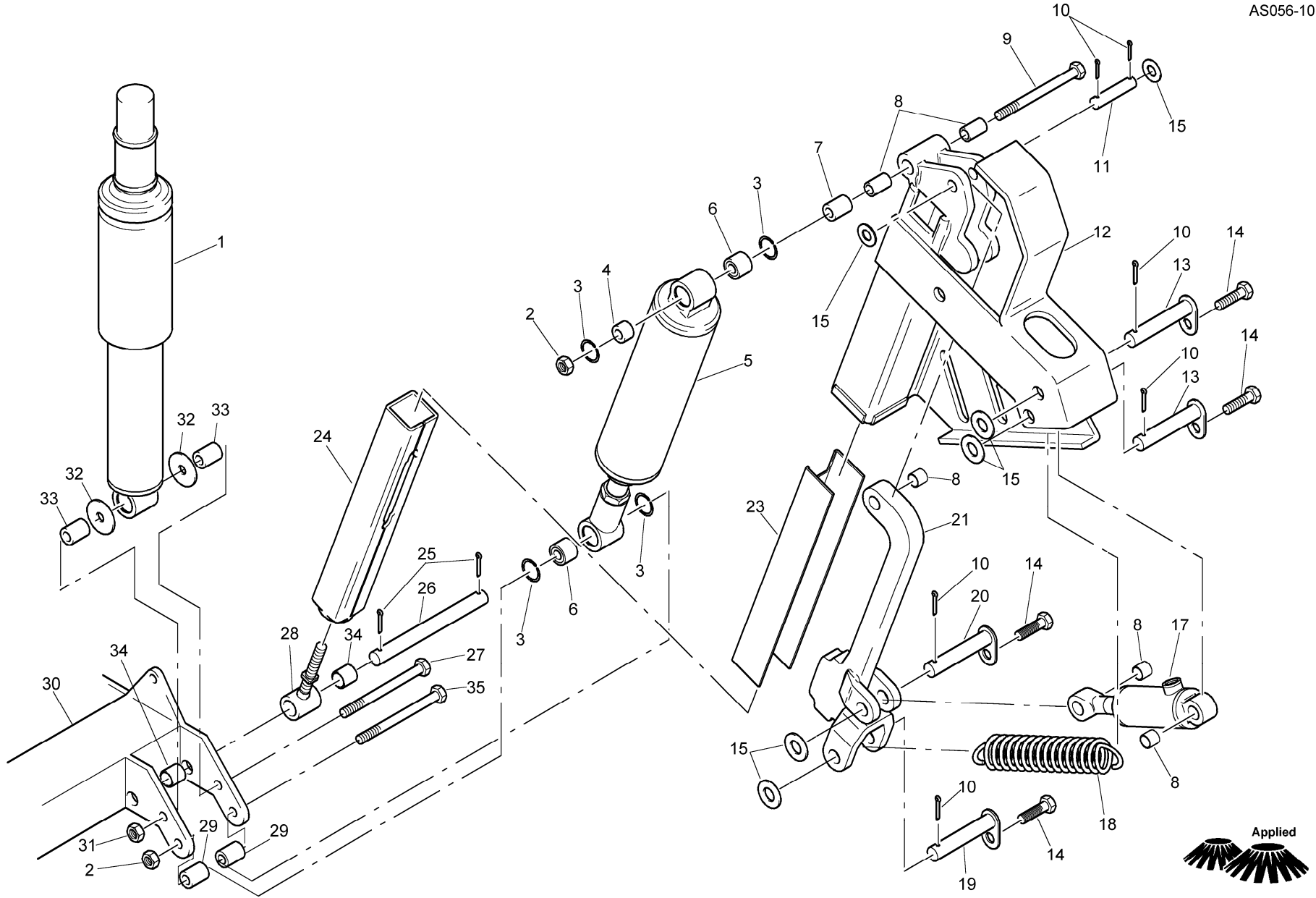


**SECTION 6**

**PITCH LOCK**

Item	Part No.	Description	Qty.
1	MA056	Shock Absorber	1
1a	MA286	Bush Kit for Shock Absorber	1
2		M10 Nut	2
3	GM210	Ring - Internal Snap	4
4	MA684	Spacer - Top Spring Strut	1
5	MA571	Spring Strut Assembly	1
6	HF085	Bearing Pivot	2
7	MA683	Spacer - Top Spring Strut	1
8	GB047	DU Bush 10 x 12 x 10	2
9		Bolt - M10 x 110	1
10		Split Pin 3/32 x 3/4 st. st.	6
11	CC219	Clevis Pin - Pitch Lock Lock Plate	1
12	MA527	Bracket - Pitchlock	1
13	CC193	Pivot Pin - Cylinder Anchor	2
14		Tapfix M6 x 12	4
15		M8 Plain Washer	5
16			2
17	HC126	Hydraulic Cylinder Assembly	1
18	GG180	Spring - Extension	1
19	CC196	Clevis Pin - Pitch Lock Return	1
20	MA391	Clevis Pin - Towbar	1
21	MA534	Locking Plate	1
22			1
23	MA548	Wearsleeve - Pitch Lock	1
24	MA541	Adjuster - Locking	1
* 25	GG105	Split Pin 1/8 x 1" lg.	2
* 26	MA929	Pin - Spring Strut Assembly (from chassis 105217)	1

Item	Part No.	Description	Qty
27		Bolt - M8 x 90 (from chassis 105217)	1
28	MA546	Adjuster Screw	1
29	MA685	Spacer – Spring Strut Bottom	2
30	MA913	Tow Bar TR/HS	1
31		M8 Nut Nyloc	1
32	MA218	Spacer - Shock Absorber Lower Mtg.	2
33		Washer - 3/4" I/D x 1/2" O/D	2
34	GB054	DU Bush - 16 I/D x 18 O/D x 20 lg.	2
35		Bolt - M10 x 90 (from chassis 105217)	1
		* Prior to chassis 105217 MA929 must be supplied with upgraded MA685	
		* Items 25 & 26 not required for TR	



**SECTION 7**

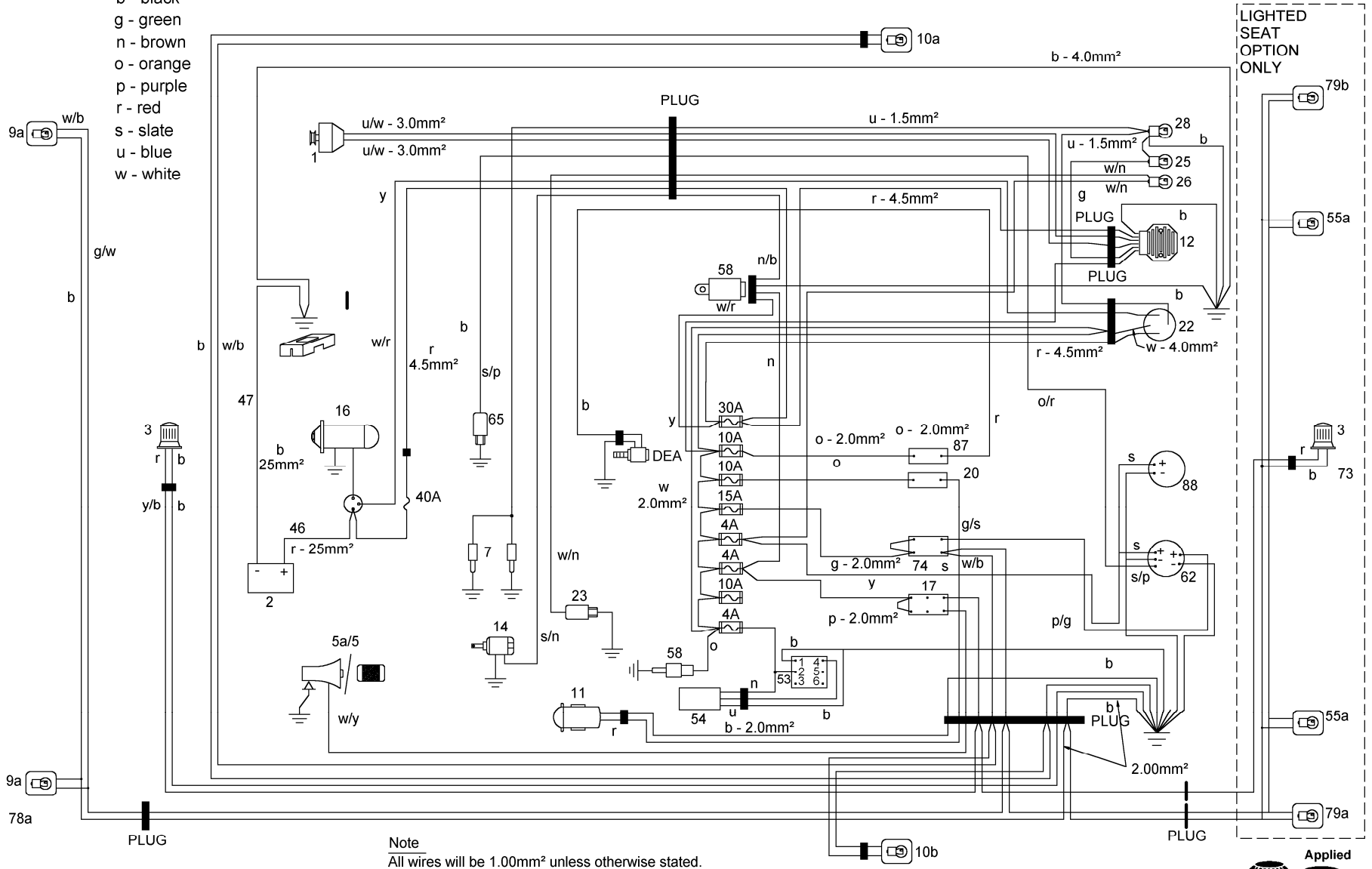
**ELECTRICAL**

Item	Part No.	Description	Qty.
1	PD009	Alternator	1
2	EM009	Battery - Type DIN 54579 Supplied Dry	1
2a	EM010	Battery Acid Pack	1
3	ES123	Beacon	1
5	ES038	Beeper – Horn	1
5a	ES331	Voice Box	1
7	PD059	Glow Plug	2
9	See Page 72	Front Light - S2D	2
9a	See Page 72	Front Light - RS	2
10a	See Page 52	Light Rear - Right	1
10b	See Page 52	Light Rear - Left	1
10c	See Page 12	Light Rear - RS Right	1
10d	See Page 12	Light Rear - RS Left	1
11	See Page 64	Water Pump	
12	PD245	Rectifier	
13	PD027	Solenoid - Starter Motor	
14	PD031	Solenoid - Fuel Cut Off	
16	PD008	Starter Motor (Includes Item 13)	
16a	ET060	Fuse – Blade - 40 amp (Starter Motor)	1
17	ES009	Switch - Beacon/Beeper	

Item	Part No.	Description	Qty
20	ES001	Switch - Water Pump	1
22	PD235	Switch - Ignition Assembly	1
23	PD005	Switch - Low Oil Pressure	1
24	PD030	Timer - Fuel Cut Off Solenoid	1
25	ES018	Warning Light - No Charge	1
26	ES018	Warning Light - Oil Pressure	1
28	ES017	Indicator Light - Glow Plug	1
32	EW059	Earth Wiring Loom - Rectifier	1

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- b - black
- g - green
- n - brown
- o - orange
- p - purple
- r - red
- s - slate
- u - blue
- w - white



Note  
All wires will be 1.00mm<sup>2</sup> unless otherwise stated.

ITEM NUMBERS REFER TO ITEMS ON PAGES 55, 57 AND 59



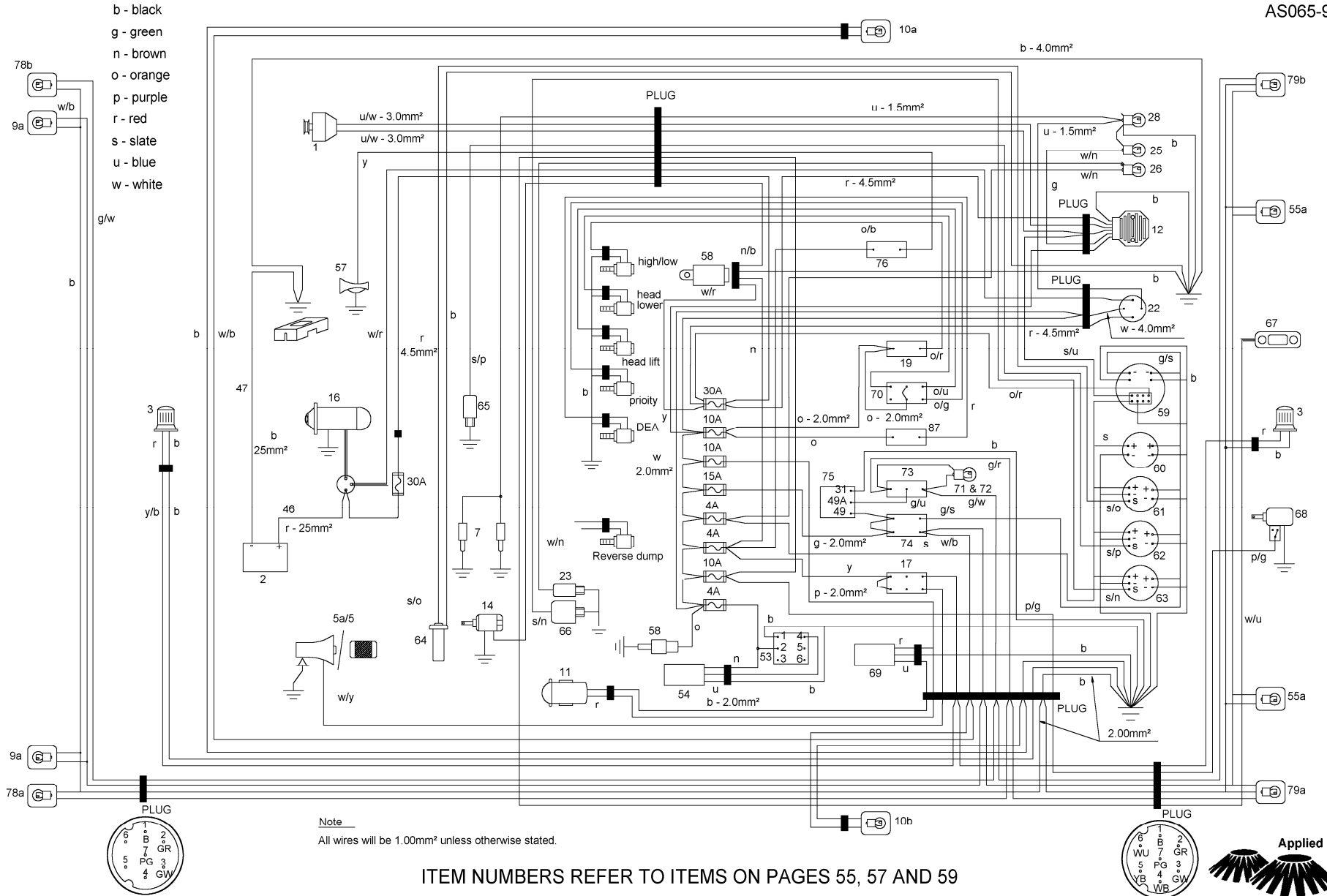
**SECTION 7**

**ELECTRICAL**

Item	Part No.	Description	Qty.
40	EW141	Wiring Loom – Main (Trivex Facia)	1
46	ET034	Battery Cable - Positive	1
47	ET035	Battery Cable - Negative	1
48	EW039	Wiring Loom - Front Lights c/w Plug	1
48a	ES025	Plug Only - Front Lights	1
49	EW042	Wiring Loom - Extension	1
49a	ES026	Socket Only - Front Lights	1
52	EW045	Wiring Loom - Beeper to Chassis	1
55	See Page 12	Lights - Number Plate	2
56	See Page 12	Beacon - RS	1

Item	Part No.	Description	Qty
	EW086	Wire Set - Control Panel	1
	ET036	Fuse Box - Only	1
	ET024	Fuse - Blade Type - 4 AMP	5
	ET027	Fuse - Blade Type - 10 AMP	2
	ET023	Fuse - Blade Type - 15 AMP	1
	ET037	Fuse - Blade Type - 30 AMP	1
	ES071	Switch - DEA	1 opt
	EW053	Wiring Loom - DEA	1 opt
57	ES157	Horn	1
58	EW125	Suppressor Diode	1
59	EH017	Tachometer / Hour Counter Gauge	1
59a	EH023	Hour Counter Gauge	1 opt
60	EH022	Voltage Gauge	1 opt
61	EH018	Fuel Level Gauge	1 opt
62	EH015	Water Temperature Gauge	1
63	EH020	Oil Gauge	1 opt
64	EH019	Fuel Level Sender	1 opt
65	EH016	Water Temperature Sender	1
66	EH021	Oil Pressure Sender	1 opt
68	EC003	Wiper Motor	1
69	ES158	Electronic Controller – Water Pump	1
70	ES152	Switch – Lift / Lower – Front Head	1
71	ES130	Lamp – Indicator Warning	1

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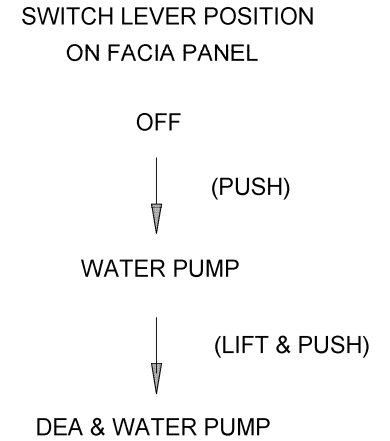
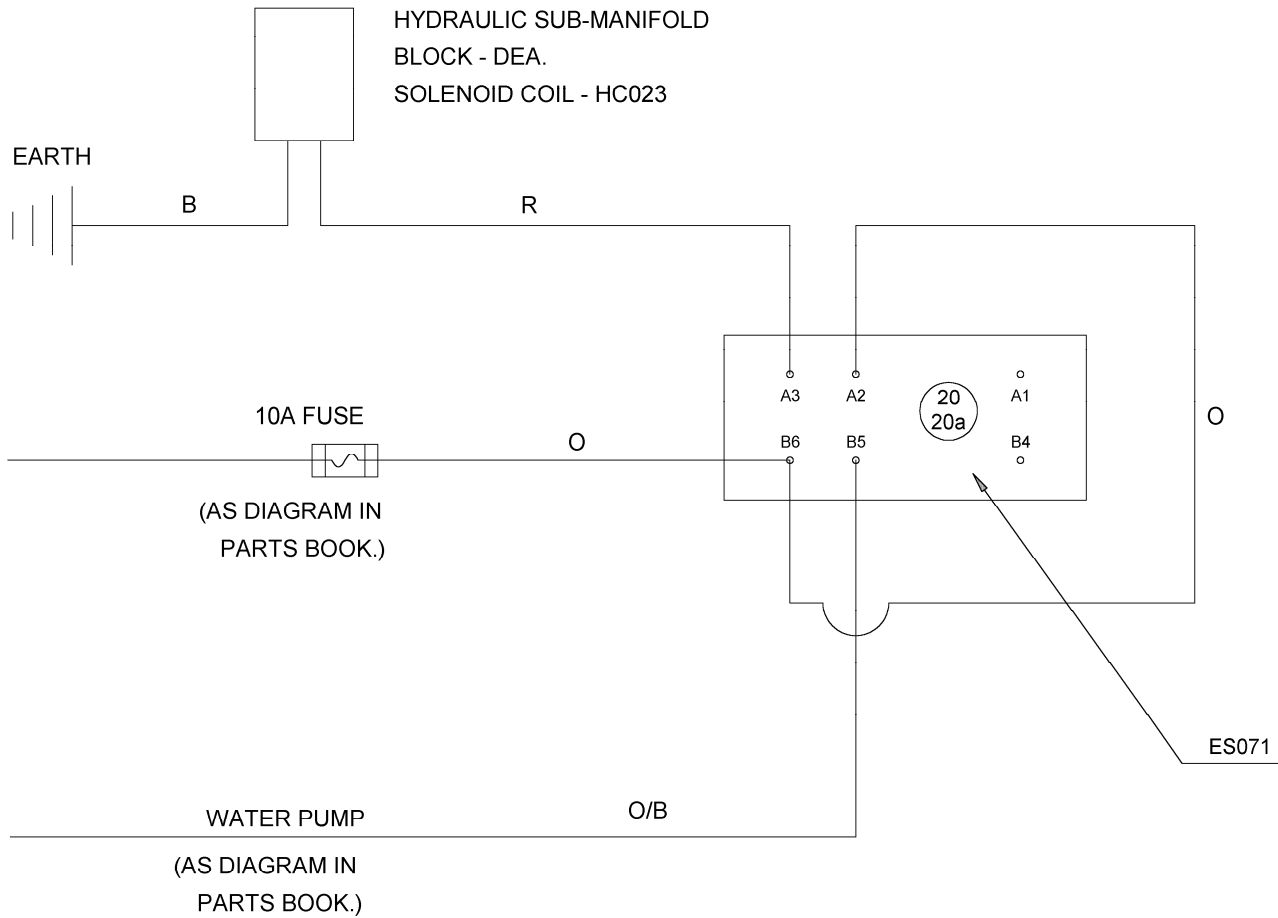
**SECTION 7**

**ELECTRICAL**

Item	Part No.	Description	Qty.
72	ES134	Bulb – Indicator Warning	1
73	ES154	Switch – Indicator	1
74	ES153	Switch – Lights – Double Pole	1
75	ES151	Flasher Unit Indicator Warning	1
76	ES156	Switch – Horn	1
77		Switch – Front Flap	1 opt
78	ES127	Light – Front Indicator (orange)	2
	ES133	Bulb – Indicator bulb	2
79	ES147	Light – Rear & Indicator (red / orange)	2
79a	ES155	Light – Rear (red)	2 opt
	ES150	Bulb – Rear light	2
	ES133	Bulb – Indicator bulb	2
80	EW115	Wiring loom - Main	1
81	EW116	Wiring loom – Hydraulic ancillary solenoids	1
82	EW119	Wiring loom – Facia panel	1
83	EW117	Wiring loom – Front box c/w indicators	1
84	EW118	Wiring loom – Sulky seat	1
85	EW122	Wiring loom – Seat, no indicators	1
86	EW123	Earth wire – Facia panel	1
87	ES159	Switch – DEA	1 opt 1

Item	Part No.	Description	Qty





NOTE  
 THE WATER PUMP SINGLE POLE SWITCH  
 USED ON A STANDARD MACHINE IS  
 REPLACED WITH A DOUBLE POLE SWITCH  
 C/W LOCKING DETAIL. THE WIRING DETAIL  
 ARE SHOWN ABOVE.



**SECTION 7**

**CONTROL PANEL**

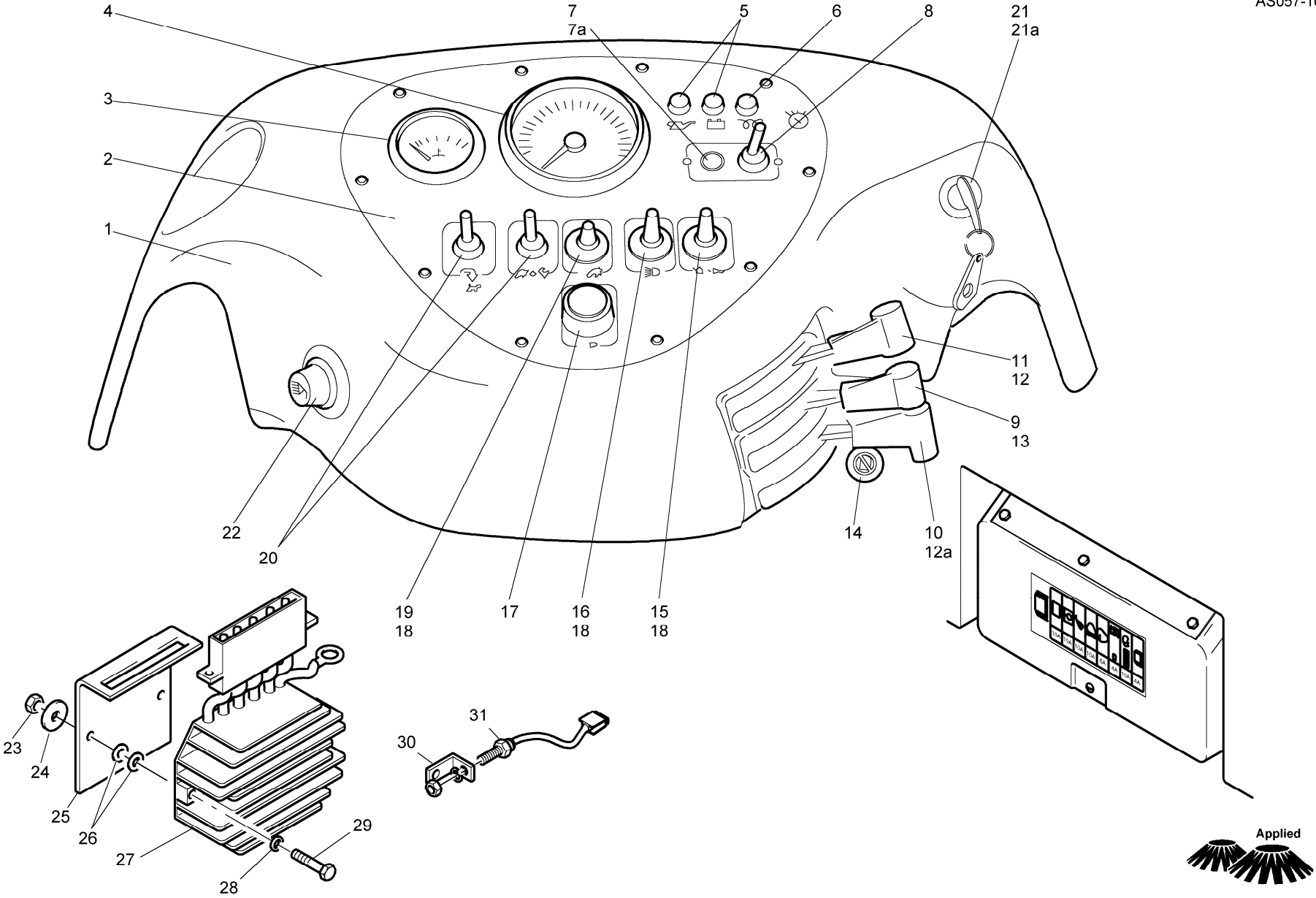
Item	Part No.	Description	Qty.
1	CP151	Control Panel Moulding Assy.	1
	ITEM 2	Facia Panels, c/w Switches & Lights	
2	EW135	Facia Panel Assembly - HS	1
	EW136	Facia Panel Assembly - TR	1
	EW137	Facia Panel Assembly - HS DEA	1
	EW138	Facia Panel Assembly - TR DEA	1
	EW139	Facia Panel Assembly - TR + indicators	1
	EW140	Facia Panel Assembly - TR DEA + indic,rs	1
	EW151	Facia Panel Assembly – Std S2D & RS	1
3	EH015	Temperature Gauge	1
4	EH017	Tacho/Hourmeter	1
5	ES018	Warning Light - Red	2
6	ES017	Warning Light - Amber	1
7	ES192	Warning Light - Indicators	1
		If amber light is currently fitted order ES193 also	
8	ES154	Switch – Indicators	1
9	BB111	Cable – Throttle	1
10	BB110	Cable – Brush	1
11	BB109	Cable – Flap	1
12	BB114	Handle – Black, Flap Cable	1
12a	BB113	Handle – Black, Brush Cable	1
13	BB112	Handle – Red	1
14	BB058	Stop Cable	1
15	ES009	Switch – Beacon	1
16	ES153	Switch – Lights	1
17	ES156	Horn Button	1

Item	Part No.	Description	Qty
18	ES002	Switch Cover	3
19	ES152	Switch - Head Lift/Lower	1
20	ES159	Switch - High/Low Speed or DEA	2
21	PD257	Ignition Switch & Key (Cobo)	1
21a	PD258	Ignition Key Only	Opt.
22	ES158	Water Controller	1
23		Nut , M6	2
24		Washer, M6 x 25	2
25	ES109	Heat Shield	1
26		Washer – Fibre M6	4
27	PD245	Rectifier, Heavy Duty	1
28		Washer – Brass M6	2
29		Screw – Brass M6 x 35	2
30	ES125	Bracket – Suppressor Diode	1
31	ES124	Suppressor Diode assy.	1

CONTROL PANEL

SECTION 7

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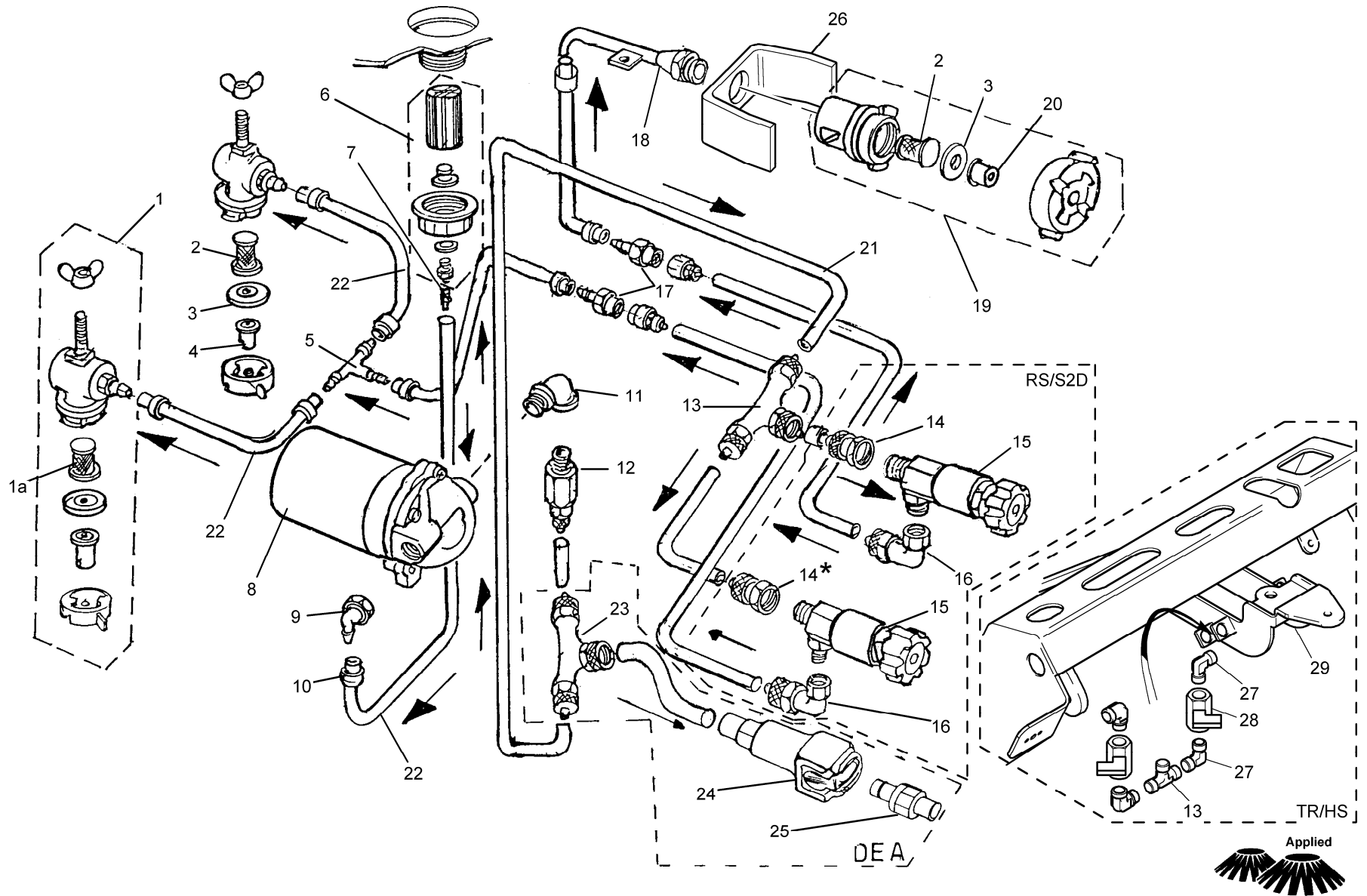


**SECTION 8**

**WATER SYSTEM**

Item	Part No.	Description	Qty.
1	WP108	Spray Jet Holder Assembly Front	2
1a	WP020	Filter for HS	
2	WP115	Filter - Spray Nozzle	3
3	WP118	Sealing Disc	3
4	WP060	Spray Jet AN 0.75 (Brown or Green)	2
5	WP005	Tee Piece - Plastic	1
6	WA036	Drain Cap Assembly	1
7	WA012	Hose Fitting - Quick Release	1
8	WP044	Water Pump	1
9	WP110	Elbow – Hose Tail 3/8" Nylon	1
10	PG008	`O' Clip - 1/2"	10
11	WP112	Elbow - 3/8" M - 3/8F Nylon	1
12	WP128	Coupling - 3/8" - 6/4mm Tube	1
13	WP095	Coupling Tee - 6/4mm Tube	1
14	WP094	Coupling - 1/4"F - 6/4mm Tube	5
15	WP106	Needle Valve - 1/8" Panel Mount	2
16	WP100	Elbow - 1/8" - 6/4mm Tube	1
17	WP025	Hose Tail 1/4"	2
17a	WP094	Female Stud Coupling 1/4"	2
18	WP137	Bag Spray Nozzle Bracket	1
19	WP109	Nozzle Assembly (Bag Spray)	1

Item	Part No.	Description	Qty
20	WP121	Spray Jet Casing - Blue	1
21	WA040	Water Tube 6mm o/d Nylon Black	10 mt
22	WA004	Water Hose 6mm i/d Rubber Black	Mtr
23	WP095	Coupling Tee - 6/4mm Tube	Opt 1
24	WP134	Coupling Quick Release Female	Opt 1
25	WP135	Coupling Quick Release Male	Opt 1
26	CB399	Guard Spray Nozzle Casing	1
27	WP101	Elbow	4
28	WP131	Valve	2
29	See page 50	Handle	

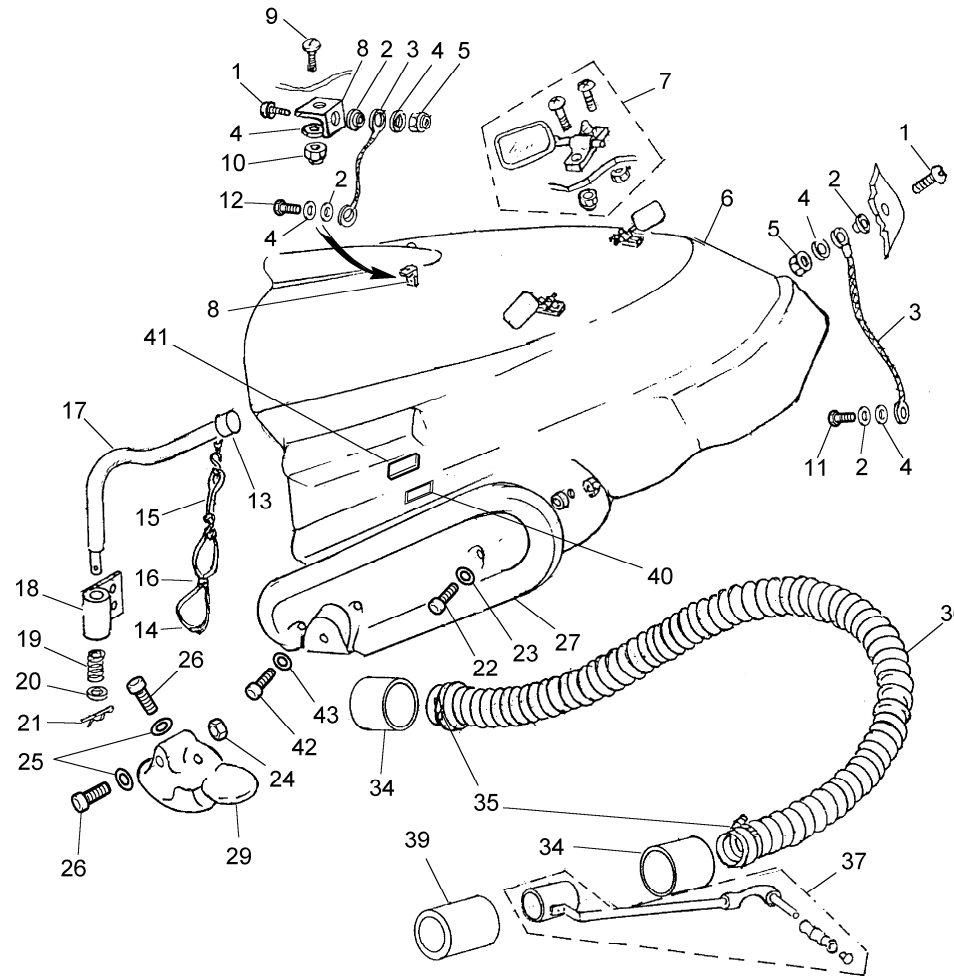


**SECTION 9**

**TOP COVER ASSEMBLY**

Item	Part No.	Description	Qty.
1		Set Screw M5 x 20 B/head	4
2	GG078	Washer, Top Hat	4
3	GG034	Retention Strap	2
4		Washer, Form A - M5	6
5		Nut, Nyloc - M5	4
6	CP154	Top Cover TR and HS & RS/S2D FROM CIN117	1
7	MA001	Wing Mirror (see note a)	2
8	CP043	Bracket, Front Retention Strap	1
9		Set Screw M8 x 20 B/head	1
10		Nut, Nyloc - M8	1
11		Screw - Self Tap 8 x 3/4	1
12		Screw - M5 x 16 Button	1
13	AW050	End Cap - Boom	1
14	AW009	Fastener Rubber & Hook	1
15	GM154	Snap Clip - 46mm (Snowplough Only)	1 opt
16	PG008	`O' Clip 11-13	1
17	AW013	Boom	1
18	AW012	Bracket, Boom Mounting	1
19	AW083	Spring, Boom Return	1
20		Washer, Form A - M12	1
21	BB028	`R' Pin	1
22		Screw - M6 x 35	1
23		Washer - 1/4" X 1"	1
24		Nut - M8 Nyloc	2
25	GW021	Washer - M8 X 25	2
26		Screw, M8 x 35 Hex.	2

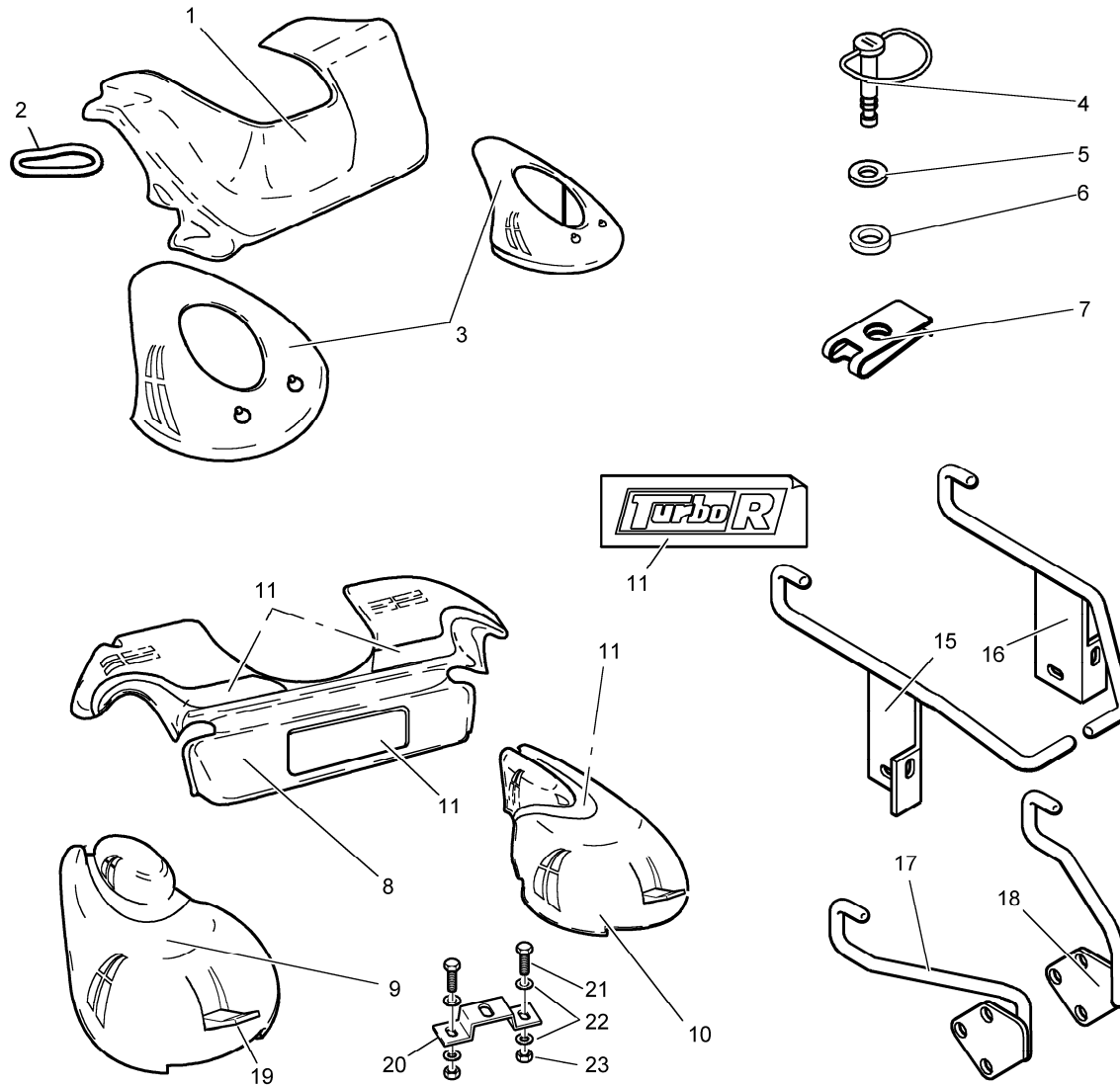
Item	Part No.	Description	Qty
27	AW092	Whoosh, Hose Carrier	1
29	CP119	Whoosh - Male Hose Carrier	1
31		Screw - M6 x 35 Hex.	1
32		Washer - Plain 1/4" x 1"	6
33		Screw - M6 x 16 Hex.	2
34	AW040	Rubber Band 4"	2
35	GG086	Jubilee Clip 110mm-140mm	2
36	AW053	Hose - Woosh 4.5 x 2.4 mts.	1
37	AW136	Handle Assy	1
39	AW006	Cuff Hose End	1
40	GG172	Adjustable Catch HS/TR	1
40a	CB858	Reinforcing Plate - Top Cover	1
41	CP051	Pad - Top Cover/Boom	1
42		Screw - M6 x 16	2
43		Washer	2







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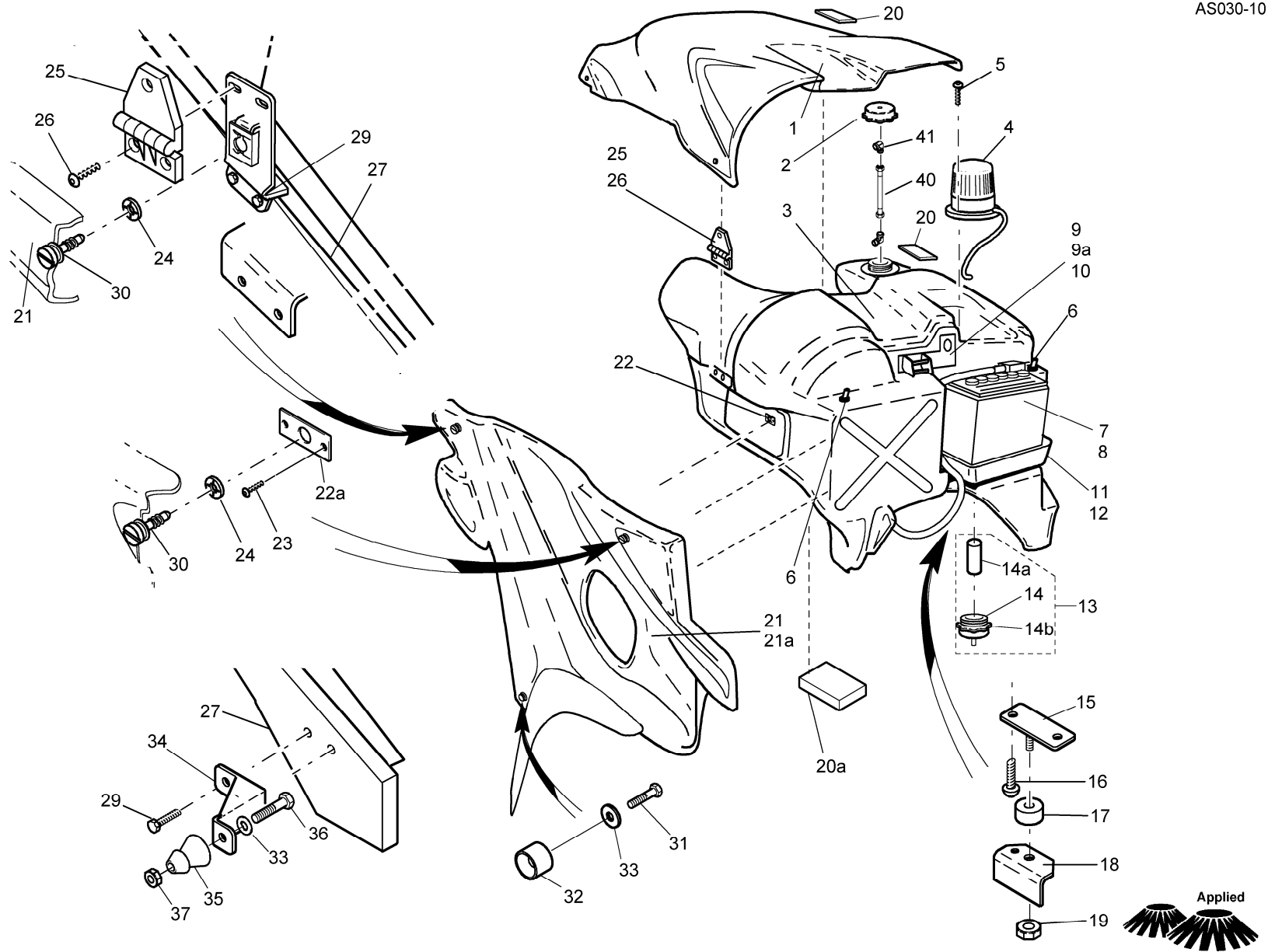


**SECTION 9**

**COVERS AND BODY PANELS**

Item	Part No.	Description	Qty.
1	See Page 66	Top Cover, Whoosh – Roto Tank	1
2	WA037	Filler Cap	1
3	CP121	Water Tank – Rotomould (See Note 2)	1
4	ES123	Beacon Assembly. Prior to Chassis 904174 an Additional Adaptor ES120 and 3 x M4 x 10 St/St Screws are req'd	1
5		Screw, Button Hd Skt - M5 x 16	3
6	CP042	Location Pin	2
7	EM009	Battery – Dry	1
8	EM010	Battery - Acid Pack	1
9	CB320	Bracket - Front Box Lock S2D/RS	1
9a	CB564	Bracket - Front Box Lock HS/TR	1
10		Screw - M5 x 8 Button Head	2
11	CP028	Battery Tray	1
12		Screw, Hex. Head Tapfix - M5 x 8	2
13	WA036	Drain Cap Assembly (comprises Items 14, 14a and 14b)	1
14	WP037	Drain Cap	1
14a	WA041	Strainer	1
14b	WA011	Coupling, Quick Release	1
15	CB406	Bracket, Tank to Fan Casing	1
16		Screw, Button Hd. Skt - M8 x 20	2
17	GG054	Bush – Rubber	1
18	CP023	Bracket - Fan Casing to Tank	1
19		Nut, Nyloc - M8	1
20	CP051	Rubber Pad - 3mm Thk	2
20a	GG144	Rubber Pad - 12mm Thk S2D/RS/TR	1
20b	GG197	Rubber Pad – 6mm Thk HS	1
21a	CP150	Side Panel (From CIN117)	1

Item	Part No.	Description	Qty
22	CB689	Receptacle – Modified HS/TR	1
23		Screw, Button Hd. Skt – M8 x 5	2
24	GG148	Retainer	1
25	CP041	Hinge - Top Cover	
26		Screw, Button Hd. Skt - M8 x 16	6
27	See Page 50	Handlebar	1
29		Screw, Tapfix, Hex. Flg - M6 x 12	1
30	GG146	Knurled Fasteners	4
31		Screw, Hex. Hd. Set - M6 x 12	1
32	GG044	Door Stop – Female	1
33		Washer, Form A - M6	1
34	CB371	Bracket - S/Panel Lower Fixing	1
35	GG033	Door Stop – Male	1
36		Screw, Dome Head - M6 x 30	
37		Nut, Nyloc - M6	2
39	GG147	'U' Type Recepticle	
40	PC081	Water Level Tube	
41	CP090	1/8" Elbow	
	NOTE 1	When ordering standard coloured fibreglass panels, please add _G for GREEN or _W for WHITE	
	NOTE 2	Rotomould Tanks are now supplied in Grey only	



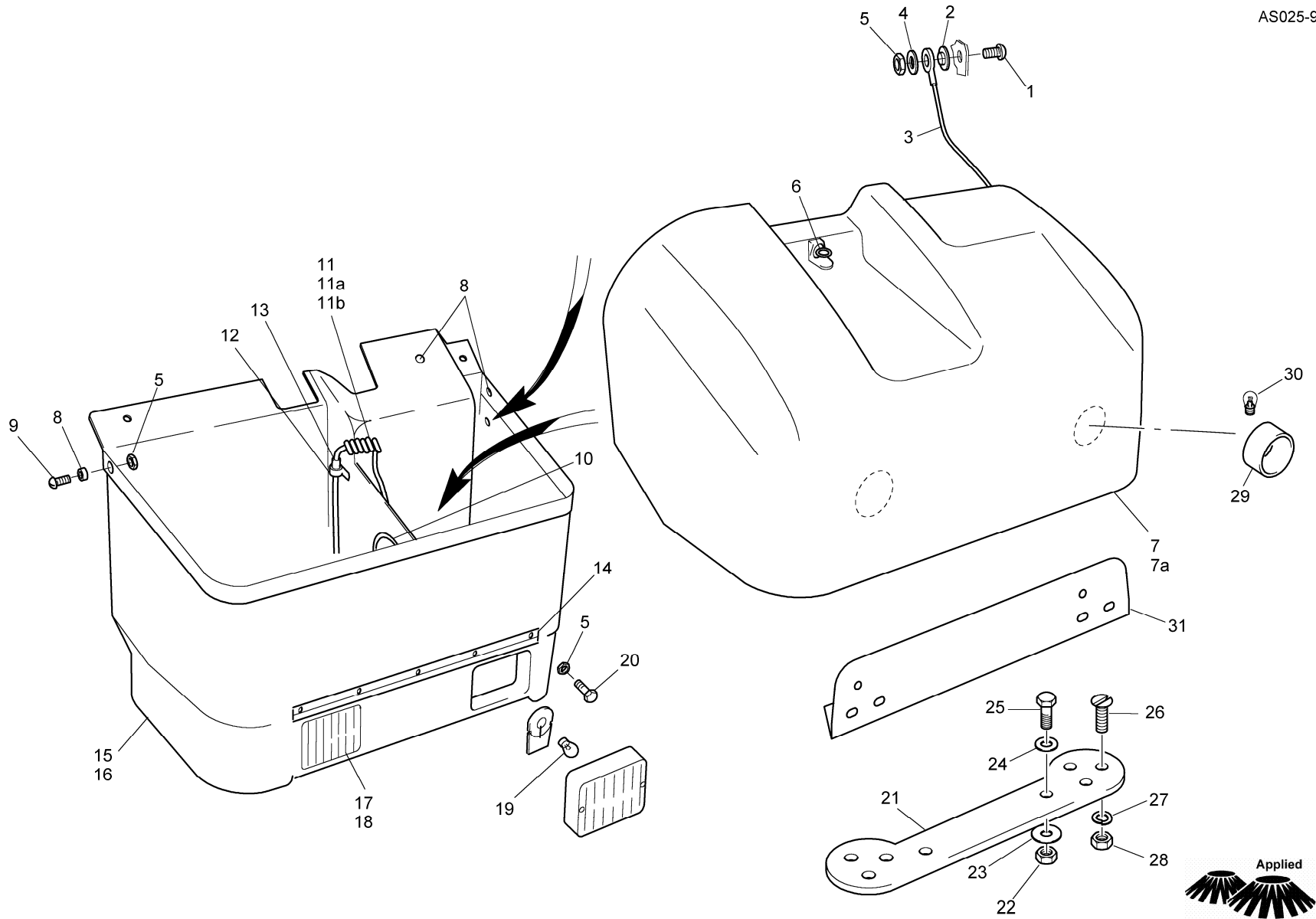
**SECTION 9**

**FRONT BOX ASSEMBLY**

Item	Part No.	Description	Qty.
1		Set Screw M5 x 20 B/head	6
2	GG078	Washer, Top Hat	2
3	GG034	Retention Strap	1
4		Washer, Form A - M5	15
5		Nut, Nyloc - M5	15
6	GG204	Push Lock - Front Box	1
7	CP134	Front Box Lid From > CIN 92 S2D/RS/TR	1
7a	CP156	Front Box Lid – HS (& TR with Indicators)	1
8	GG081	Location Pad	3
9		Set Screw M5 x 16 B/head	3
10	GG035	Tite in Fast – Black	
11	EW039	Wiring Loom Fr, Lights , c/w It 13 S2D/RS	1
11a	EW130	Wiring loom – TR (no indicators)	1
11b	EW117	Wiring Loom – HS (& TR with indicators)	1
12	GM081	`P' Clip – White	2
13	ES025	Plug - Front Lights (See Item 11)	1
14	GG057	Piano Hinge	1
14a		Screw - M5 x 16 Hex. for Item 14	9
15	CP138	Front Box Base RS/HS/TR Rotomould From > CIN 92 Was CP133	1
16	CP137	Front Box Base S2D Rotomould From > CIN 92 Was CP132	1
17	ES047	Front Light RS, HS & TR	2
18	AE030	Front Lights S2D	2
19	ES032	Bulb Front Light – 12V, 21W	2
20	GT112	Screw, Button Hd M5 x 15	2

Item	Part No.	Description	Qty
21	MA620	Mounting Plate –HS(& TR with Indicators	1
22		Nut – M6 Nyloc	2
23		Washer - !" x ¼ Plain	2
24		Washer – M6 Plain	2
25		Screw – M6 x 20 Hex	2
26		Screw – C/sunk, M5 x 16	4
27		Washer – M5 Plain	4
28		Nut – M5 Nyloc	4
29	ES127	Indicator	2
30	ES133	Bulb – Indicator	2
31	CB664	Mounting Plate, DEA HS ( or TR no indicators)	1

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**SECTION 10**

**LABELS AND DECALS**

Item	Part No.	Description	Qty.
		Note: Specify Language & Colour When Ordering	
1	GM155	Composite Label Set - All 414,/424	1
2	GM069	Decal S2D ( _W for Green Machines)	3
3	GM113	Decal RS ( _W for Green Machines)	3
4	GM079	Royal Warrant	1
5	GM067	Label - USA Supply	1
6	GM122	Decals - DEA	2
6a	GM234	Decal - DCA France	2
7	GM127	Decals - 828 RS	2
8	GM132	Label - AF France	1
9	GM133	Label - AK Germany	1
10	GM135	Decal - Brush Lift Lever	1
11	GM137	Decal DEA Manifold Filter	1
12	GM139	Decal Applied Facia - Odometer	1
13	GM141	Label - Guidance for Bearing Housing	1
14	GM185	Label – LH Brush Cover - Regenair	1
15	GM186	Label – RH Brush Cover - Regenair	1
16	GM187	Label – LH Front Hose Cover – Regenair	1
17	GM188	Label – RH Front Hose Cover - Regenair	1
18	GM189	Decal – “TURBO R”	1
19	GM183	Labels – Fan Casing Warning Kit	1
20	GM223	Aux Label Set - HS (also requires Item1)	1
21	GM236	Decal - HS Seat L.H.	1
22	GM237	Decal - HS Seat R.H.	1

Item	Part No.	Description	Qty
23	GM207	Decal - Front Box HS	1
23a	GM244	Decal - Front Box HS (France)	1
24	GM205	Decal - Top Cover HS	2
24a	GM243	Decal - Top Cover HS (France)	2
25	GM208	Decal - Front Box TR	1
26	GM206	Decal - Top Cover TR	2
27	GM209	Decal - 424 Brushes F/Box	1
28	GM241	Decal – LH 424 Cab (France)	1
29	GM242	Decal – RH 424 Cab (France)	1

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**SECTION 11**

**GENERAL SPARES AND ACCESSORIES**

Item	Part No.	Description	Qty.
1	VB037	Filter Bag Assembly	1
2	VB038	Filter Bag - Single Handle	1
3	VB049	Filter Bag – High Level Trunking	1
4	VB039	Hoop - Filter Bag	1
5	VB028	Spring Assembly - Filter Bag	1
6	VB003H	Zip (Main) - 1520mm	1
7	VB010	Zip (Side) - 250mm	1
8	VB004	Hessian Sack - 70 litre	1
9	VB007	Leafbag	1
10	VB060	Blue Sack Liner	1
11	VB017	Plastic Sacks - Roll (20)	1
12	VB024	DEA Inner Bag Set (Pack of 10)	1
13	AE020A	Bag Wash Frame	1
14	KT001	Service Kit - 100 Hr	1
15	KT002	Service Kit - 400 Hr	1
16	KT003	Service Kit - 800 Hr	1
17	RM005	Actobac - 25 litre	1
18	RM006	Dispenser – Actobac	1
19	RM010	Icex - De-icer (20 litre)	1
20	PD055	Engine Parts Catalogue	1
21	PD054	Engine Workshop Manual	1
22	YM015	Machine Operator Manual	1
23	YM011	Exploded Parts List Issue 4 414S2D CIN 25 to 58	1
24	YM016	Exploded Parts List Issue 5 414RS CIN 58 to 60	1

Item	Part No.	Description	Qty
25	YM018	Exploded Parts List Issue 6 ALL 414 CIN 61 to 72	1
26	YM023	Exploded Parts List Issue 7 ALL 414 CIN 72 to 85	1
27	YM024	Exploded Parts List Issue 8 ALL 414 CIN 86 to 113	1
28	YM029	Exploded Parts List Issue 9 (Covers Models 414 & 424 from CIN113)	1
29	YM007	Video - Operator Training	1
30	YM019	Workshop Manual Issue 1	1
31	ES331	Voice Box (English)	1
32	ES340	Voice Box (French)	1

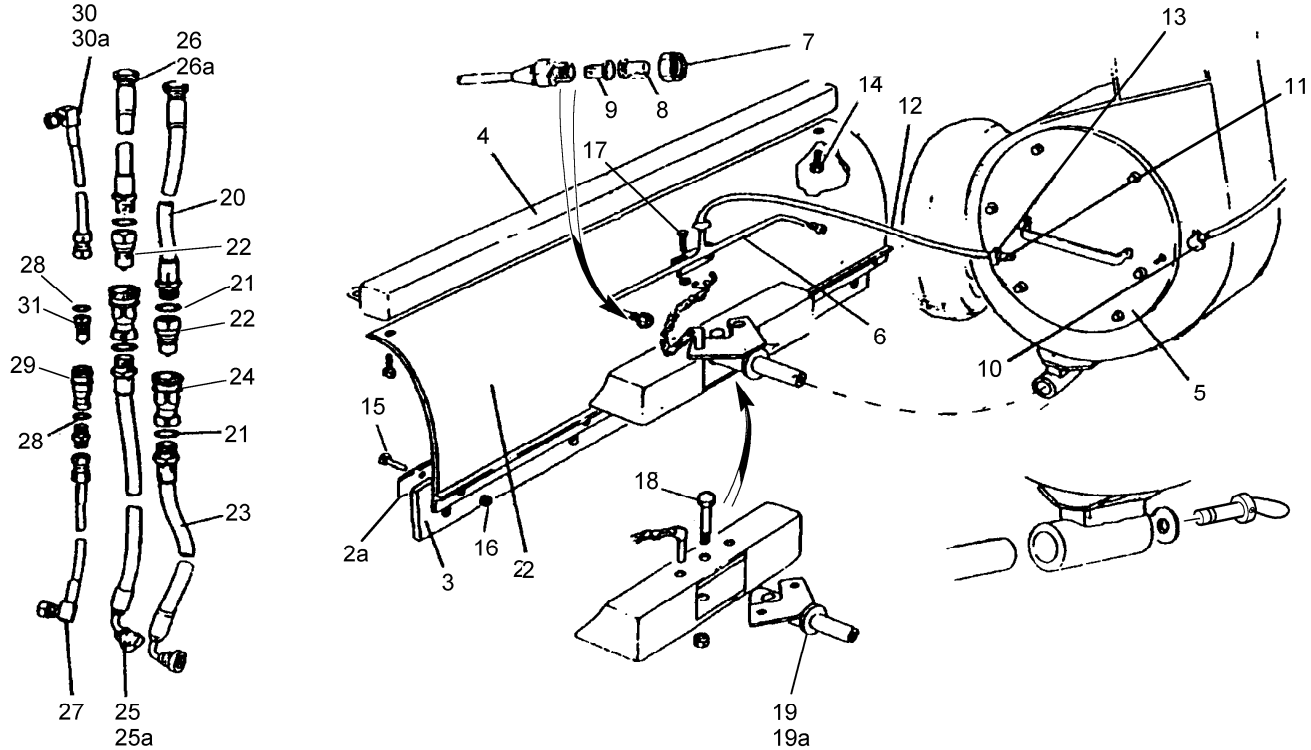


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**SECTION 12**

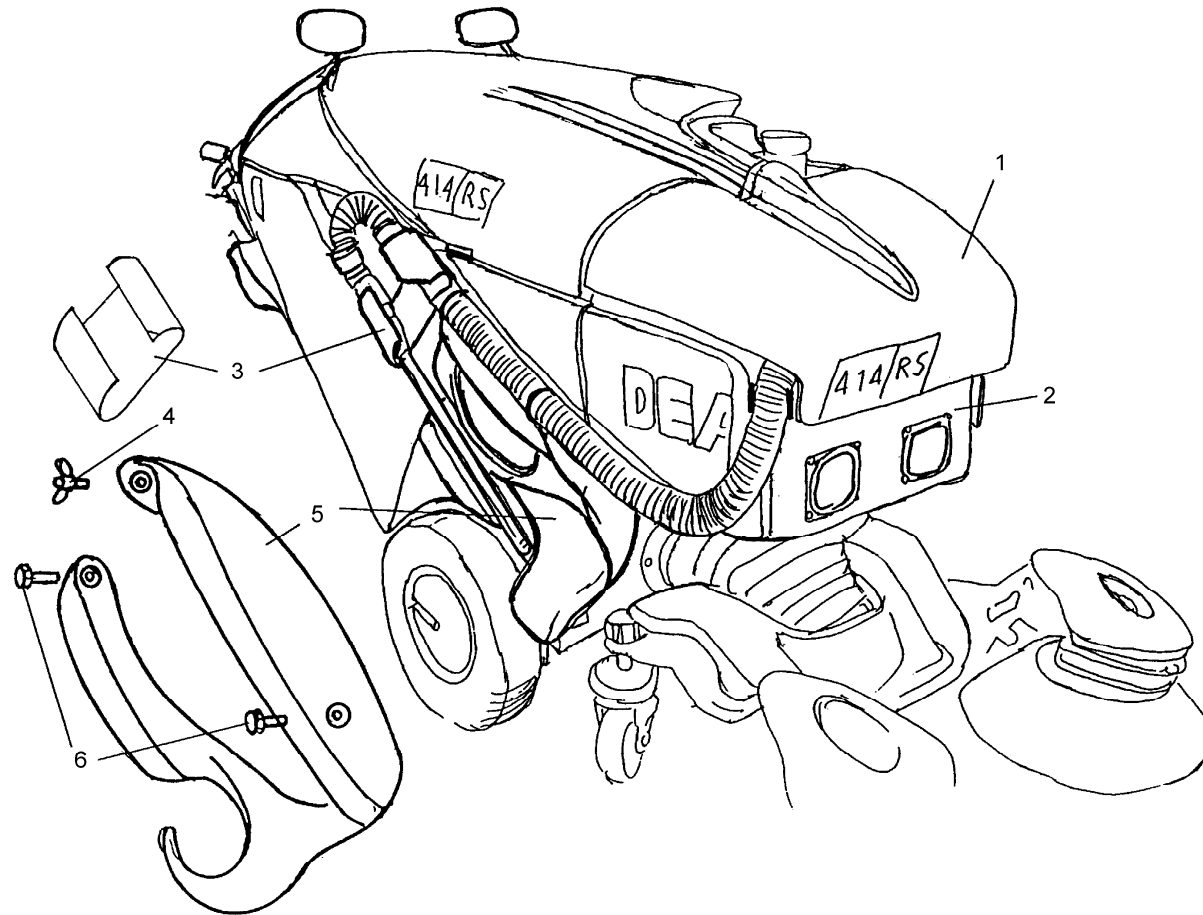
**SNOWPLOWH**

Item	Part No.	Description	Qty.	Item	Series 3 (S3)	S3 Turbo R	Series 2 (S2)	S2 Turbo R	Snowplough Hydraulic Hoses
		Snowplough Kit Comprises it 2 to 11	1	-	HJ137	HJ138	HJ056	HJ122	Hose Kit (Comp. 6 Hoses + Cplgs).
2	AS007	Plough Blade (Includes 2a)	1						<b>FEED TO BRUSH MOTOR</b>
2a		Retaining Bar	1	20	HJ050	HJ050	HJ050	HJ050	Hose - Block BA to Q/Rel Male (RH)
3	AS006s	Rubber - Cut Length	1	21	HF010	HF010	HF010	HF010	Dowty Seal 3/8
4	AS022	Counterbalance Weight	1	22	HF053	HF053	HF053	HF053	Coupling - Male 3/8 Q/Rel
5	AS004	Blanking Plate	1	23	HJ051	HJ051	HJ051	HJ051	Hose - Q/Rel Female to RH Motor
6	WP071	Spray Bar	1	21	HF010	HF010	HF010	HF010	Dowty Seal 3/8
7	WP016	Cap Nut	2	24	HF054	HF054	HF054	HF054	Coupling - Female 3/8 Q/Rel
8	WP056	Spray Jets – Pink	2						<b>RETURN FROM BRUSH MOTOR</b>
9	WP020	Filter	2	25	HJ140	HJ140			Hose - Oil Cooler Tee to Q/Rel Female
10	WA019	Tap Quick Release Hose (Female)	1	25a			HJ052	HJ052	Hose - Block BB to Q/Rel Female
11	WA012	Tap Quick Release Hose (Male)	2	21	HF010	HF010	HF010	HF010	Dowty Seal 3/8
12	WA004	Water Hose (Metre)	4	22	HF054	HF054	HF054	HF054	Coupling - Male 3/8 Q/Rel
13	PG008	Hose Clips 1/2"	4	26	HJ049		HF049		Hose - Q/Rel Male to LH Motor
14		Bolt - M10 x 20	6	26a		HJ115		HJ115	Hose - Q/Rel Male to B/Brush Motor
15		Bolt - M8 x 30	6	21	HF010	HF010	HF010	HF010	Dowty Seal 3/8
16		Nut M8	6	24	HF054	HF054	HF054	HF054	Coupling - Female 3/8 Q/Rel
17		Bolt - M6 x 20	1						<b>VENT HOSE</b>
18		Bolt - M12 x 70	1	27	HJ054	HJ054	HJ054	HJ054	Hose - Bleed - Tank to Q/Rel Female
19	AS044	Pivot Pin (One Piece Nozzle)	1	28	HF044	HF044	HF044	HF044	Dowty Seal 1/4
19a	AS041	Pivot Pin	1	29	HF060	HF060	HF060	HF060	Coupling - Female 1/4 Q/Rel
				30	HJ053		HJ053		Hose - Bleed - Q/Rel Male to RH Motor
				30a		HJ117		HJ117	Hose - Bleed - Q/Rel Male to Tee (RH)
				28	HF044	HF044	HF044	HF044	Dowty Seal 1/4
				31	HF059	HF059	HF059	HF059	Coupling - Male 1/4 Q/Rel
									Note: Hose End Fittings may vary from Illustration



Item	Part No.	Description	Qty.
1	CP118	Front Box Lid DEA - Inclined Push Lock Mounting From CIN No. 84	1
1a	CP161	Front Box Lid (DEA) HS & TR with indicators	1
2	See Page 84	Headlamp Panel DEA	1
3	AW110	C'Clip Plastic DEA	1
	GM140	Adhesive – Terustat M939, See SB 157	
4	GG125	Wing Type Screw Large	1
5	CP160	Cover - Lance Storage - HS DEA and all other machines from CIN117	1
6		Set Screw M5 x 16 B/head	2
	GM122	Decals DEA Box	2

Item	Part No.	Description	Qty
		Note: When ordering Standard Coloured Panels, please quote colour requirements: Lime Green - ADD _G White - ADD _W	

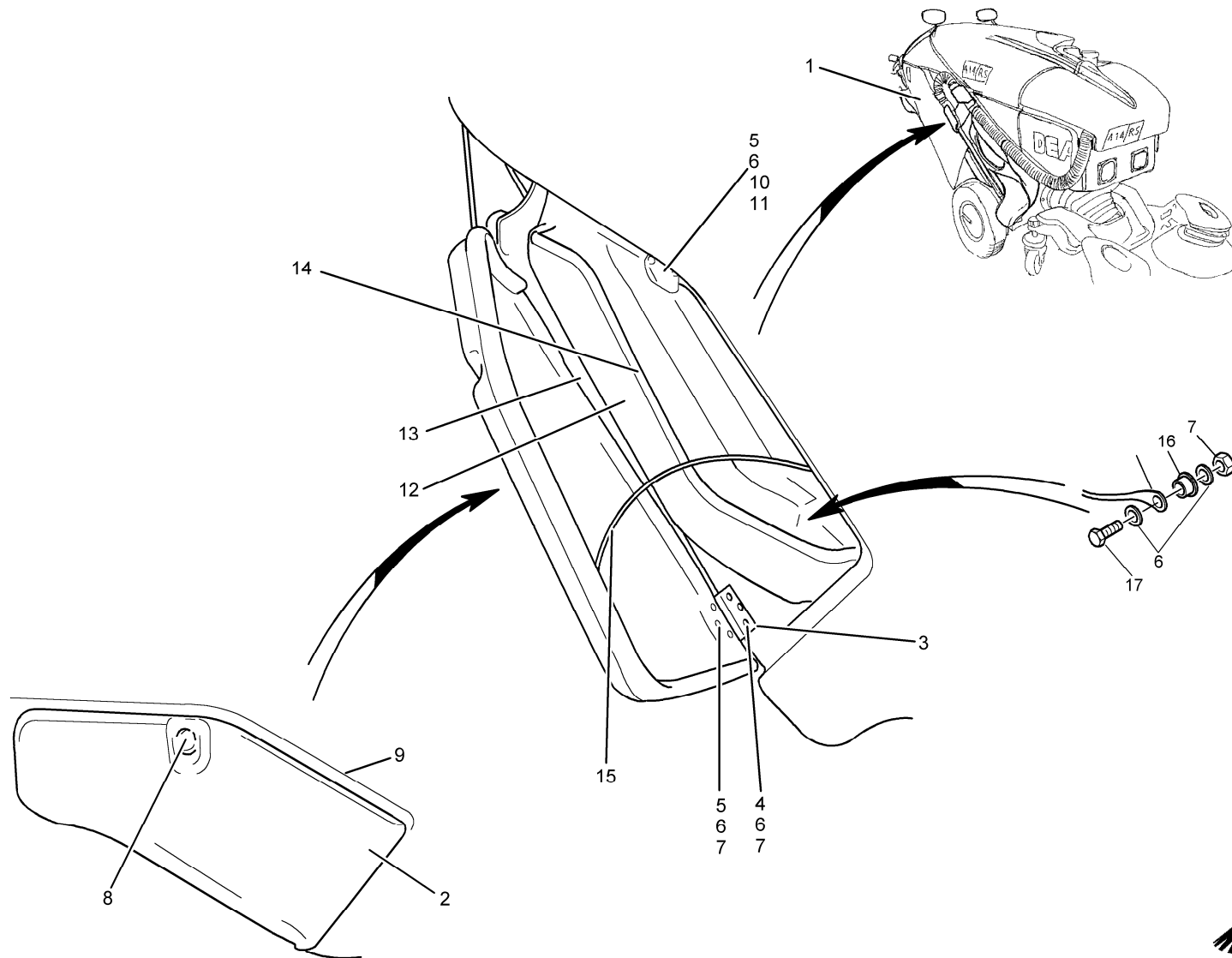


**SECTION 13****DEA STORAGE**

Item	Part No.	Description	Qty.
1	CP159	Side Panel (TR with no seat) (From CIN117 on S2D/RS also)	1
2	CP141	Door, Side panel Storage	1
3	GG112	Hinges	2
4		Screw, Countersunk M5 x 15	6
5		Screw, Button M5 x 16	6
6		Washer, Plain M5	10
7		Nut, Nyloc M5	16
8	GG204	Lock	1
9	GG167	Trim (1.2 Metres)	1
10	AD039	Hinge Catch	1
11		Screw, Hex. M5 x 12	2
12	CP142	Panel, Storage Retaining	1
13	GT143	Poppets	6
14	GG168	Edge Strip (.72 Metres)	1
15	GG034	Retaining Wire	1
16	GG078	Washer, Top Hat	2
17		Screw, Button Hd. M5 x 20	2

Item	Part No.	Description	Qty
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**SECTION 13**

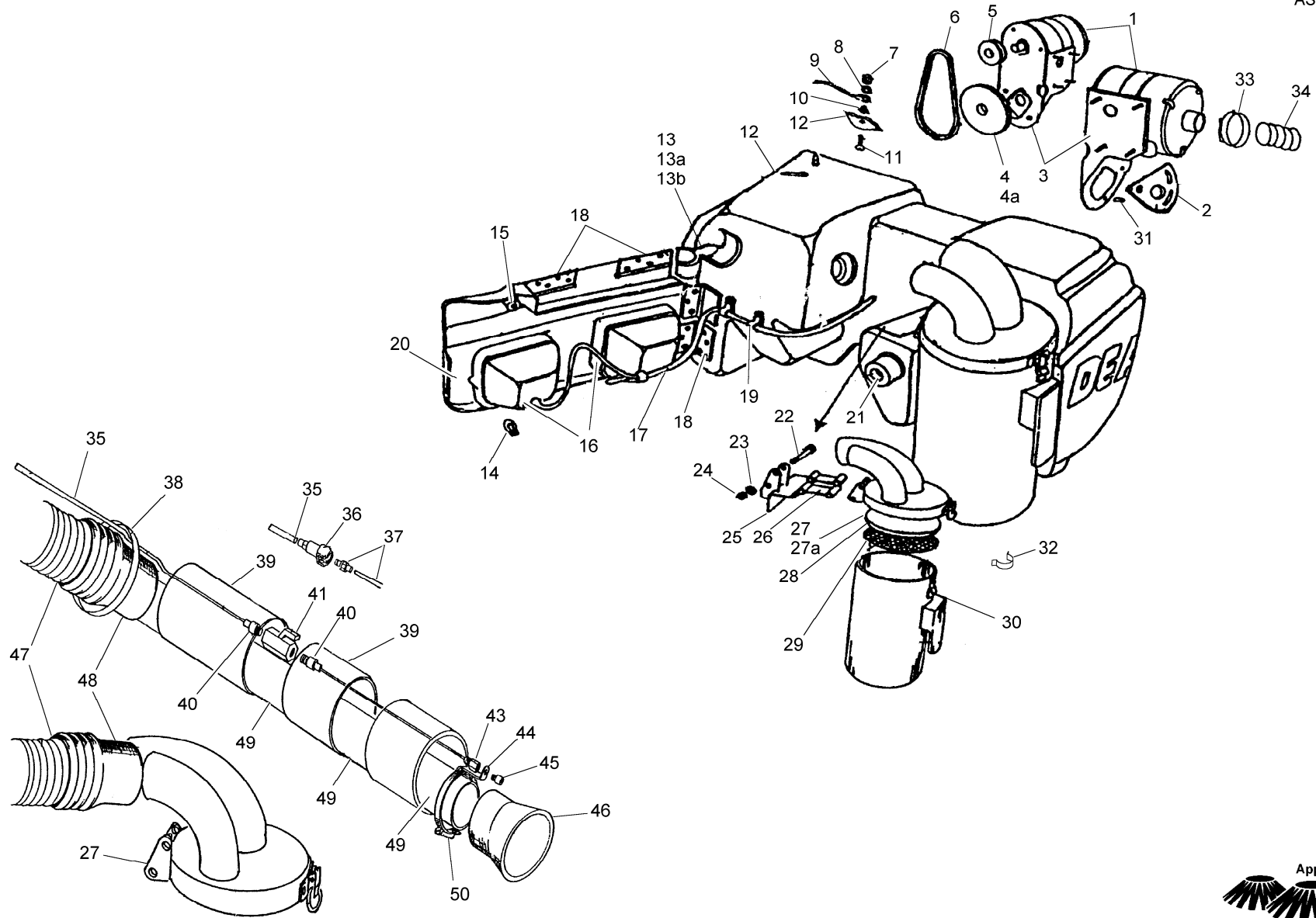
**DEA COVER**

Item	Part No.	Description	Qty.
1	VF052	Vacuum Fan – RSA	1
2	CB287	Bracket, Mounting Hyd. Motor	1
3	CB285	Bracket, Mounting Vacuum Fan	1
4	TC013	Pulley Large (From CIN109)	1
5	TC010	Pulley Small	1
6	TC011	Drive Belt	1
7		Nut, Nyloc - M5	2
8		Washer, Form A - M5	2
9	GG034	Retention Strap	1
10	GG078	Washer, Top Hat	2
11		Set Screw M5 x 20 B/head	2
12	CP116	Mounting Base Moulding	1
13	AD033	Bracket, Support Suction Hose	1
13a		Nut - M6 Nyloc	2
13b		Washer - M6 Plain	2
14	ES032	Bulb 12V, 21W	2
15	GG033	Door Stop, Male	1
16	ES047	Headlight Unit	2
17	EW039	Wiring Loom Front Lights	1
18	GG112	Hinge 63mm	4
19	GM081	‘P’ Clip White	2
20	CP086	Headlight Panel	1
21	GG044	Door Stop, Female	1
22		Bolt M8 x 70 Hex.	4
23		Washer, Form A - M8	4
24		Nut, Nyloc - M8	4
25	AD030	Bracket, Mounting From Chassis 9084 61	1
26	CB276	Link Arm	2
27	AD016	Canister Lid – Rotomould	1

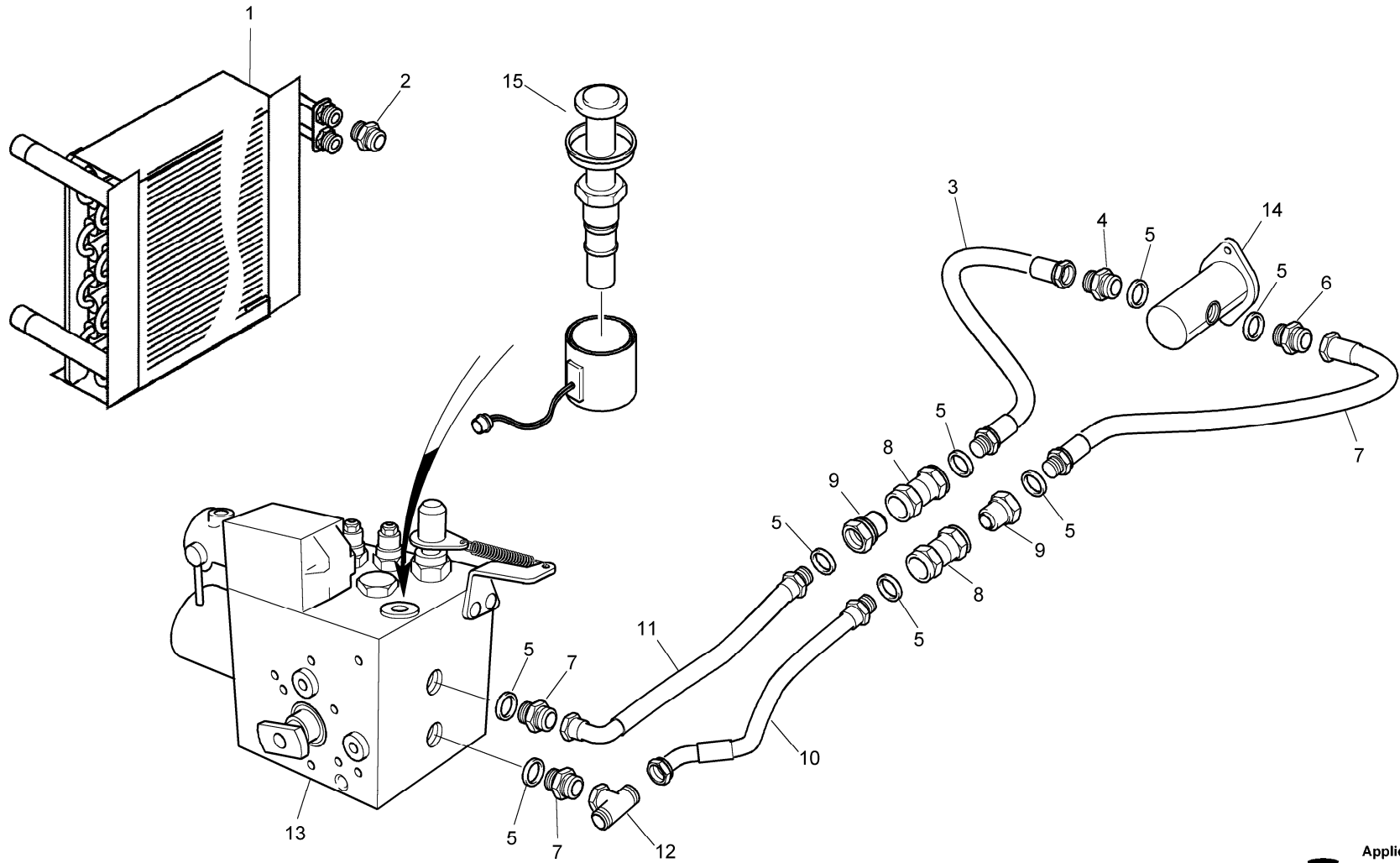
Item	Part No.	Description	Qty
27a	AD038	Lid Assy – Replaces AD010 C/w link pate mount brkt, filter & seal	1
28	AD025	Filter – From Chassis 908461	1
29	AD029	Seal Assembly – From Chassis 908461	1
30	CB353	Canister - Large 440mm	1
31	GB023	Spacer, Nylon	1
32	AD037	Spring Retainer	1
33	GG123	Jubilee Clip - 55 to 70	1
34	AE062	Hose Suction Pump to Canister	1
35	WA040	Water Hose Nylon Black	10 mtr
36	See Page 64	Coupling, Quick Release Female	1
37	See Page 64	Coupling, Quick Release Male	1
38	AW030	Cable Tie - Flat Entry	6
39	GM125	Heat Shrink 45mm	2
40	WP096	Coupling, Stud ¼" BSP	2
41	WP131	Valve - On/Off	1
42	GM126	Heat Shrink 75mm	1
43	WP094	Coupling, Female ¼" BSP	1
44	CB258	Bracket, Water Nozzle	1
45	WP132	Water Nozzle	1
46	AW111	Nozzle, Suction	1
47	AE063	Hose - Suction Canister/Lance	1
48	AW112	Threaded Cuff	2
49	AE064	Tube Lance	1
50	GG123	Jubilee Clip - 55 to 70	1



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Item	Part No.	Description	Qty.
		Variances to Hydraulic System when DEA fitted	
1	See Page 26	Radiator	
2	HF007	Coupling - 3/8" BSP M/F	1
3	HJ077	Hose Assy 1/4" Q/R to Motor P	1
4	HF042	Adaptor 3/8" x 1/4" M/M	1
5	HF010	Seal – Dowty 3/8" BSP	8
6	HF006	CPLG – Stud 3/8"/3/8" M/M	1
7	HJ074	Hose Assy 3/8" Motor T to Q/R	1
8	HF054	CPLG Q/Rel 3/8" Female	2
9	HF053	CPLG Q/Rel 3/8" Male	2
10	HJ135	Hose – 3/8" Q/R to Block (T)	1
11	HJ133	Hose – 1/4" Block DEA to Q/R	1
12	HF072	Connector – Tee 3/8" M/M/F	1
13	See Page 42	Hydraulic Block	
14	HM026	Hyd. Motor (DEA)	1
15	See Page 42	Solenoid Valve (DEA Only)	1



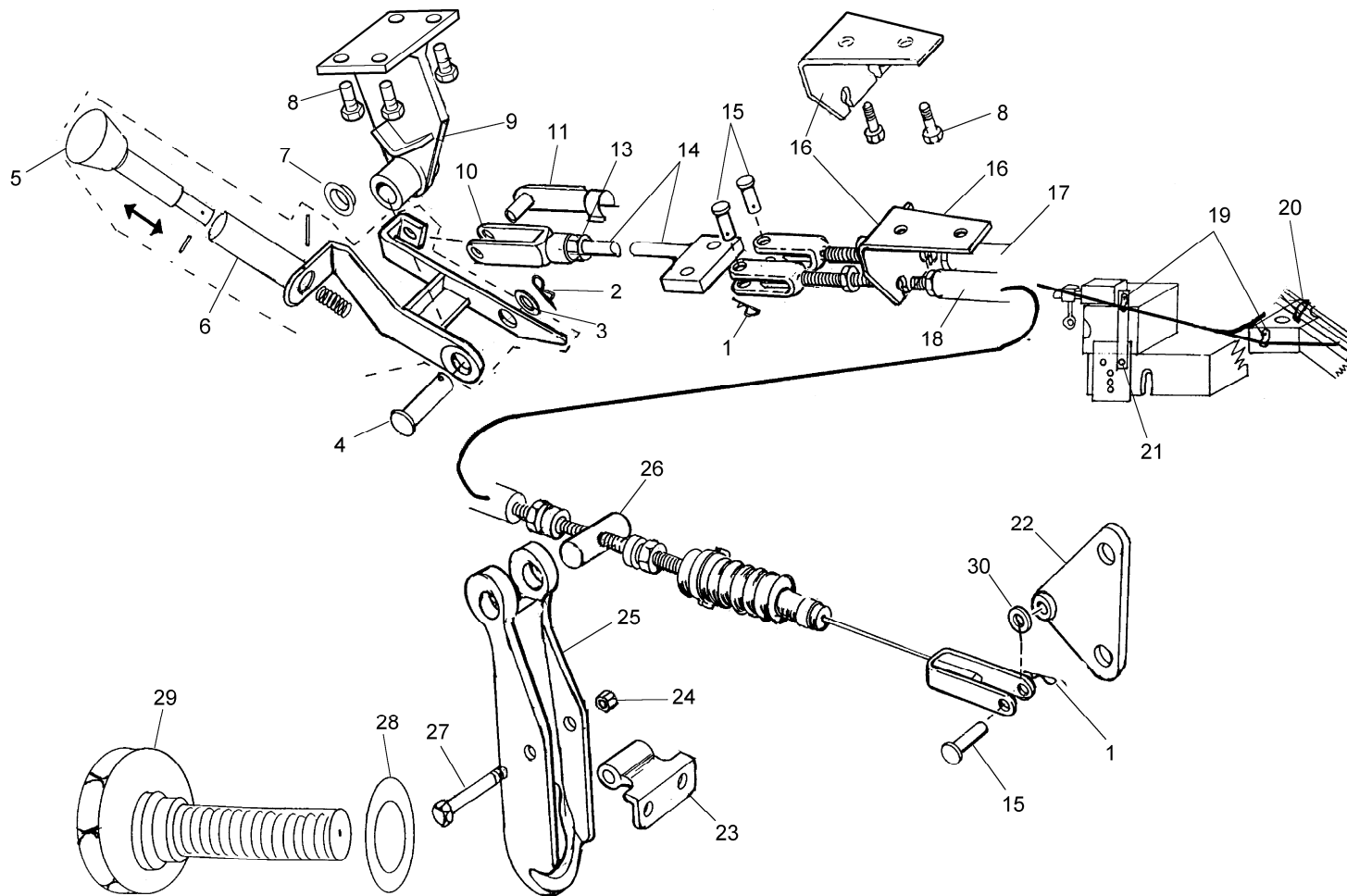
**SECTION 14**

**BRUSH LIFT**

Item	Part No.	Description	Qty.
1	BB086	`R' Pin	4
2	GG105	Split Pin 1/8" x 1"	1
3		Washer, Plain - M10	1
4	CB250	Pivot Pin	1
5	GM136	Knob Brush Lift Handle	1
6	CB231	Handle Assembly c/w Item 5	1
7	GB028	Bush Flanged 10 dia x 12 o/d x 12 lg	2
8		Self Tapping Flanged, M6 x 12 Hex.	6
9	CB482	Bracket, Mounting From >CIN 101	1
10	BB006	Clevis Yoke	1
11	BB022	Clevis Pin Long	1
12	See Page 50	Handle Assembly	1
13		Nut M8 Half Height	1
14	CB307	Link Arm	1
15	BB085	Pivot Pin	4
16	CB310	Anchor Plate - Top	1
17	BB081	Cable Lifting L.H.	1
18	BB080	Cable Lifting R.H.	1
19	BB063	`P' Clip Black 16 dia.	4
20	BB084	Clamp Rubber Linned 30 dia.	2
21	CB251	Plate Cable Support Hyd./Block	1
22	CB324	Bracket, Bottom Anchor	2
23	CB314	Bracket, Pivot	2
24		Nut, Nyloc - M8	2
25	NF075	Lifting Lever	2
26	NF077	Anchor Pivot Pin	2
27		Bolt M8 x 60 Hex.	2
28	GW043	Washer Plastic	2
29	NF045	Side Brush Adjuster	2

Item	Part No.	Description	Qty
30	GB027	Oilite Bush 1/4" x 3/8" x 2"	4

AS045-9

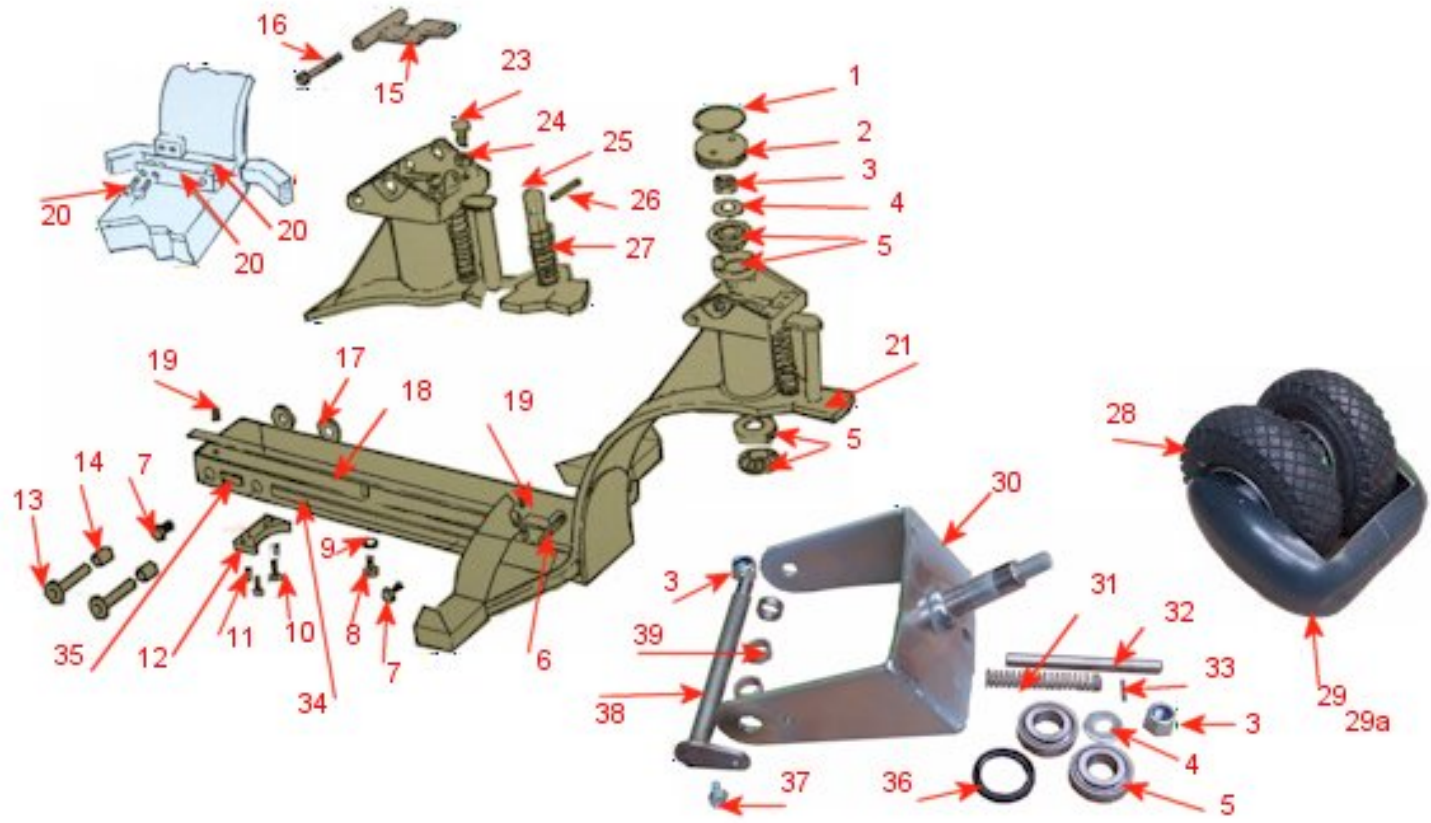


**SECTION 15**

**RS ADVANCED SEAT**

Item	Part No.	Description	Qty.
1	MA046	'O' Ring	1
2	MA045	Bearing Sealing Cap	1
3	GN036	Nut – M16 Nyloc	1
4	GW061	Thrust Washer	1
5	MA042	Bearing – Swivel Fork	2
6	GG043	Plastic Cap	1
7	GT149	Screw – M4 x 16 C/Sunk	2
8	GT153	Screw – M4 x 16 B/Head Set	1
9	GW022	Washer – 3/16 Form A	1
10	GT170	Screw – M5 x 12 C/Sunk Set	2
11	MA194	Dowel Pin, 6 x 12	2
12	MA133	End Stop	1
13		Axle Roller not available, see section 1	
14	GB030	Bush	2
15	MA049	Cam – Locking Plunger	1
16	GT150	Screw – M6 x 90	1
16a	GN045	Nut – M6 Thin Nyloc	1
17		Rollers not available, see section 1	
18	MA034	Release Lever	1
19	MA091	Latch Peg	2
20	MA257	Latch Spring Assembly	1
21		Trailer Bar cpt with swivel box, bushes etc.	1
22	Not used		
23	GT097	Screw – M8 x 35 B/Head Set	1
24	GN021	Nut – M8 Half Height	1
25	MA050	Locking Plunger	1

26	GG127	Roll Pin – 3 mm x 24 lg	1
27	MA051	Spring	1
28	TW039	Wheel/Tyre, Thornguard	2
29	MB047	Mudguard Moulding	1
29a	GT111	Screw – M6 x 20 B/Head	2
29b	GB017	Spacer	2
30	MB014	Castor Fork	1
31	MA051	Plunger Spring	1
32	MA050	Locking Plunger	1
33	GG127	Tension Pin	1
34	MA980	Nylon Guide – Large (From CIN 116)	2
35	MA981	Nylon Guide – Short (from CIN 116 )	2
36	MA043	Seal – Swivel Bearing	1
37	GT243	Screw – M8 x 16 self tapper	1
38	MA996	Shaft	1
39	MA999	Wheel Spacer	4



**SECTION 15**

**RS ADVANCED SEAT**

Item	Part No.	Description	Qty.
1	GN045	Nut – M10 Thin	2
2	GT209	Bolt – M10 x 100 Hex Hd.	2
3	MB041	Location Pin	1
4	GG127	Tension pin	1
5	GG155	Spring	1
6	MB001	Seat Mounting Plate	1
6a	GT049	Screw – M8 x 25 Hex Hd.	3
6b	GN004	Nut – M8 Nyloc	3
7	MB004	Seat Upright	
8	Mc225	Seat Belt Assembly	1
9	ES320	Rear Light	2
9a	GT193	Screw – M5 x16 Button Hd. Hex	4
9b	GN042	Nut – M5 Nyloc Thin	4
9b	ES019	Bulb – 12V 5W	2
10	EW188	Wiring Loom	1
11	MB021	Number Plate Bracket	1
12	MA242	Backing Plate (for number plate)	1
13	Not used		
14	MB050	Beacon Bracket	1
15	GT193	Screw – M5 x16 Button Hd. Hex	2
15a	GN042	Nut – M5 Nyloc Thin	2
16	GT194	Screw – M5 x 12 Button Hd. Hex	4
16a	GN042	Nut – M5 Nyloc Thin	4
16b	GW008	Washer – M5 Form A	4
17		Beacon	1

18	GT115	M8 x 30 C/Sunk Skt.	1
18a	GN004	Nut – M8 Nyloc	1
19	MB017	Seatbelt Bracket	
20	Not used		
21	GT115	M8 x 30 C/Sunk Skt.	4
22	GN004	Nut – M8 Nyloc	4
23	MB048	Clamp	2
24	MB023	Seat Support ( for stowing )	1
24a	GM024	Clip – PVC Adhesive	1
25	MB040	Seat Moulding	1
26	MA995	Seat	1
27	ES062	Light – Number Plate	1
28	ES053	Bulb	1
29			2
30	MB036	Support Plate – Front Box Handle	1 1





