



# 414S2D

## Suction Sweeper Parts Manual



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Rev. 0 (05-2009)

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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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When ordering parts from this catalogue, please also provide your dealer with the model number and chassis number of your machine (located on the chassis plate).

Threaded fasteners - Replacement hexagon head screws must be Grade 8.8 metric minimum and socket head screws must be Grade 12.9 metric minimum, except where stated otherwise. All nuts must be Grade 8 minimum. All fasteners should be zinc plated and passivated unless stated otherwise.

Specifications and parts are subject to change without notice.

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# 414S2D

## Parts Catalogue

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### Bodywork

Body Panels & Water Tank (from CIN 92)	AS030-10
Front Box Assembly (from CIN 92)	AS025-9a
Front Hose & Brush Covers	AS029-9
Top Cover Assembly (from CIN 92)	AS044-10

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Drive Axle & Chassis	AS005-9A

### DEA / CSA Option

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DEA/ CSA Option - Body Panels	AS046-9a
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### Engine & Ancillaries

Engine Cooling System (from CIN 98)	AS037-9
Engine, Exhaust & Impeller	AS010-9a
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### Handles & Controls

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Control Panel (from CIN 117)	AS057-10
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Handle & Controls (from CIN 117)	AS064-10
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### Hydraulics

Hydraulic Control Block (Series 2 to CIN107)	AS015
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Hydraulic System (Series 2 to CIN 107)	AS016
Hydraulic System (Series 3 from CIN 108)	AS042-9a

### Snowplow Option

Snowplow Option	AS023-9
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### Suction System & Brushes

Brush Assembly	AS035-9a
Fan Casing ( from CIN 112)	AS071
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# 414S2D

## Parts Catalogue

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Remote Brush Lift Option	AS045-9
Suction Nozzle Assembly (from CIN 100)	AS012-10
Suction Nozzle Assy - 2 Piece (CIN 81 to CIN 100)	AS047

### **Water System**

Water System	AS020-10
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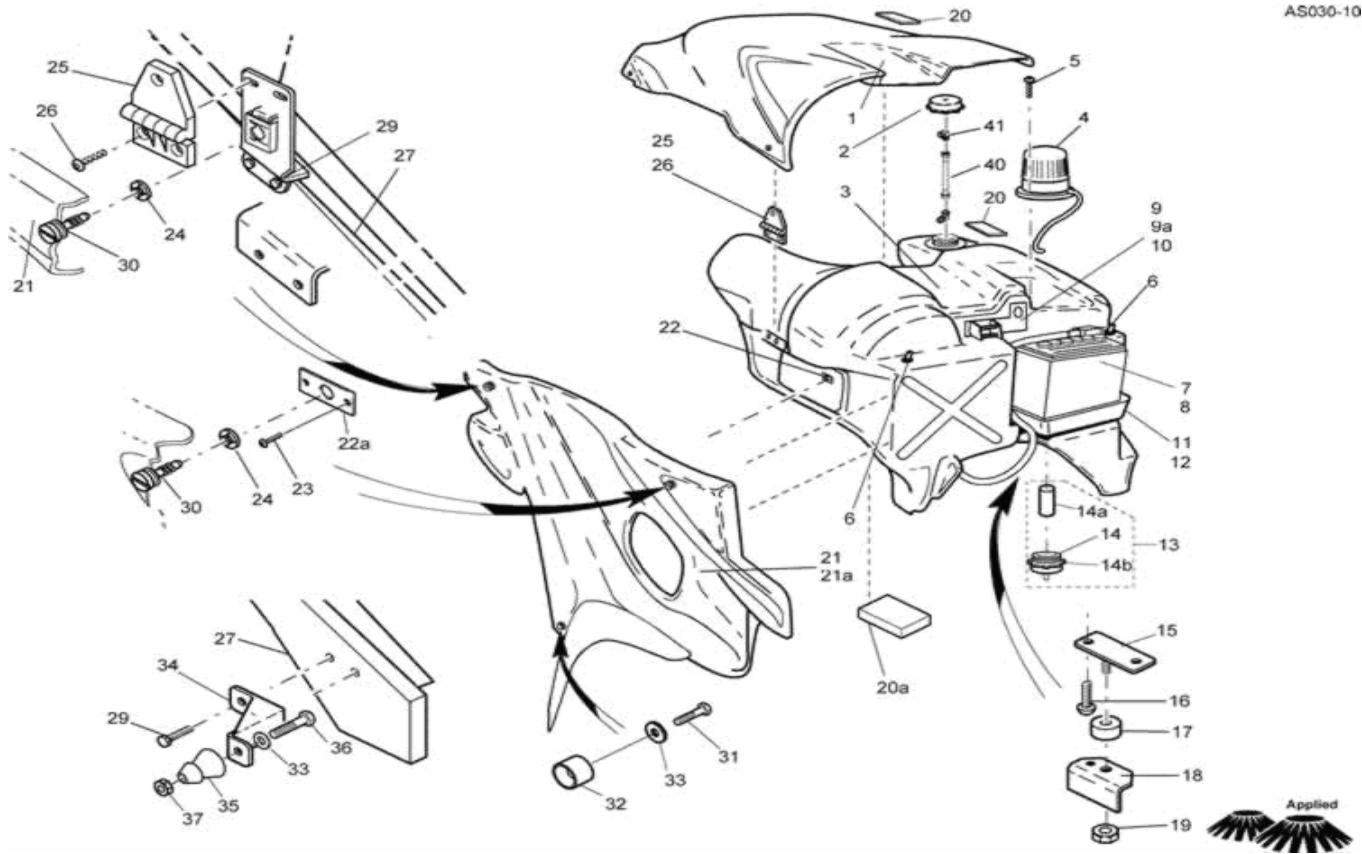
# Body Panels & Water Tank (from CIN 92)

Model: 414S2D

From CIN: 92 To CIN: 999

Drawing: AS030-10 Revision: A

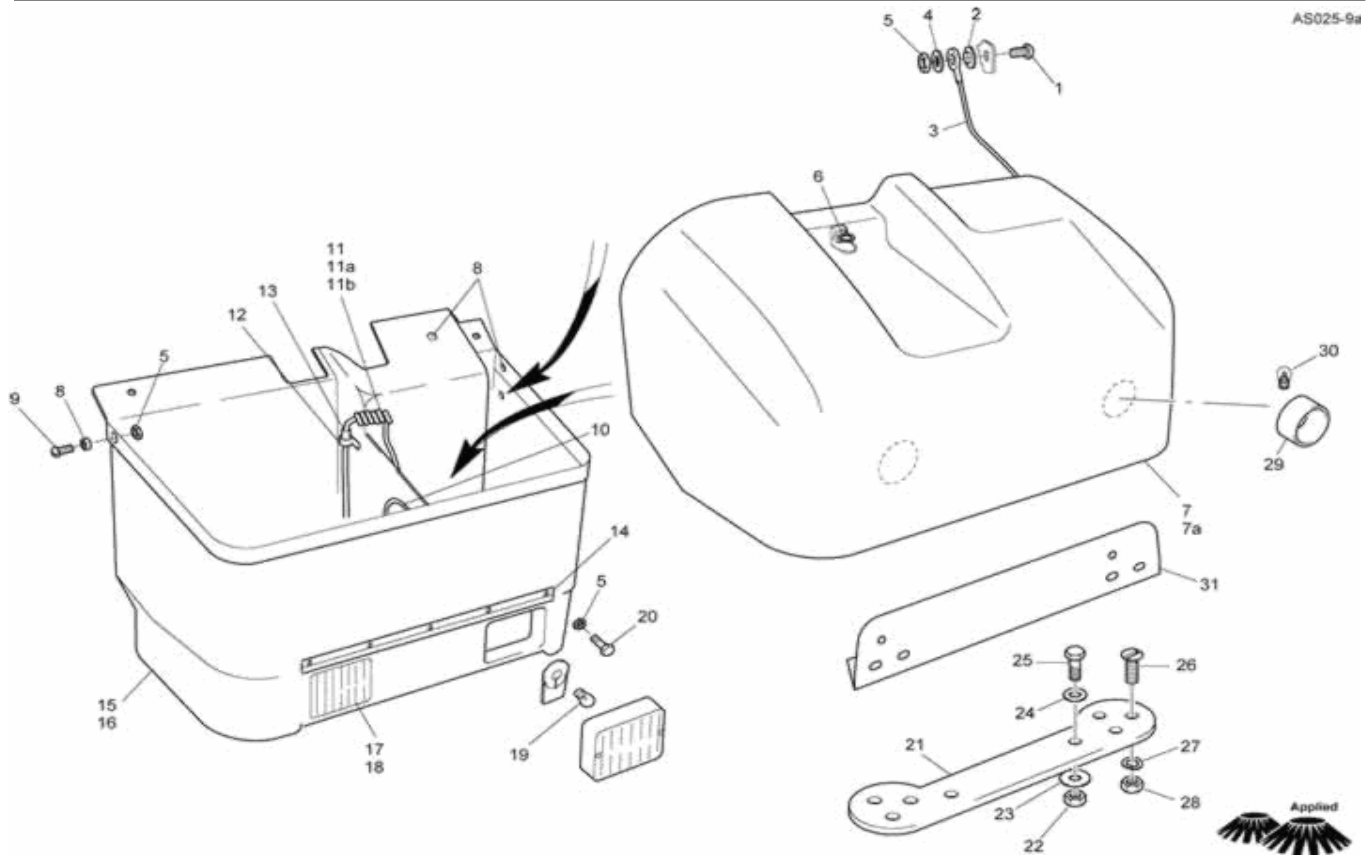
AS030-10



1	CP154 - Top Cover (from CIN 117)	1	20	CP051 - Rubber Pad for top cover adjuster	2
1a	CP122 - Top Cover (CIN 92 to 116)	1	20b	CP197 - Seat Box Moulding	1
2	WA037 - Cap for Water Bottle	1	21	CP126 - Side Panel (CIN 92 to 116)	1
3	CP121 - Water Tank, Rotomould	1	21a	CP150 - Side Panel (from CIN 117)	1
4	ES123 - Beacon Assembly	1	22	CB689 - Recepticle, TR/HS	1
5	GT193 - M5 x 16 button head screw	3	24	GG148 - Retaining washer - plastic	1
6	CP042 - Stud for front box retention	2	25	CP041 - Hinge for top cover	1
7	EM009 - Battery	1	26	GT050 - M8 x 16 Button Head Screw	6
8	EM010 - Battery Acid Pack	1	29	GT203 - M6 x 12 Hex Flanged Sheet Metal Screw	1
9	CB320 - Bracket, Front Box Lock	1	30	GG146 - Knurled panel screw	4
9a	CB564 - Bracket, front box lock	1	31	GT090 - M6 x 12 Hex Screw	1
10	GT222 - M5 x 8 buttonhead screw	2	32	GG044 - Door Stop - female	1
11	CP028 - Tray for battery	1	33	GW038 - M6 Flat Washer	1
13	WA036 - Drain Cap Assembly	1	34	CB371 - Bracket - side panel lower fixing	1
14	WA037 - Cap for Water Bottle	1	35	GG033 - Door Stop - male	1
14a	WA041 - Strainer - Drain Cap	1	36	GT229 - M6 x 30 Button Head screw	1
14b	WA011 - Coupling, quick release	1	37	GN011 - M6 Locknut - Nylon	2
15	CB406 - Bracket	1	39	GG147 - Slip on receptacle	1
16	GT054 - M8 x 20 Button Head Socket Screw	2	40	PC081 - Water Level Tube	1
17	GG054 - Bush rubber bushing	1	41	CP090 - 1/8 Elbow	1
18	CP023 - Bracket - Casing to water tank	1			
19	GN004 - M8 Locknut - Nylon	1			

# Front Box Assembly (from CIN 92)

Model: **414S2D**  
 From CIN: **92** To CIN: **999**  
 Drawing: **AS025-9a** Revision:

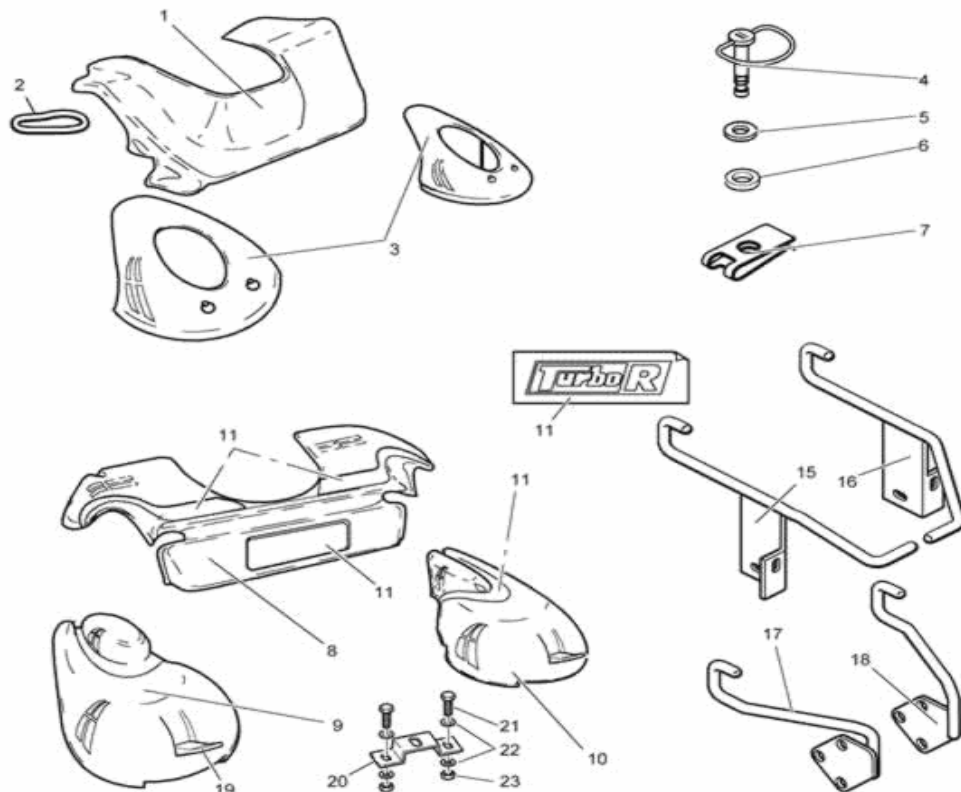


1	GT136 - M5 x 20 Button Head Screw	6	22	GN011 - M6 Locknut - Nylon	2
2	GG078 - Washer - top hat	2	23	GW011 - Washer 1	2
3	GG034 - Restraining Cable	1	24	GW031 - Washer M6 Form C	2
4	GW008 - M5 Flat Washer	5	25	GT027 - M6 x 20 Hex Screw	2
5	GN006 - M5 Locknut - Nylon	5	26	GT199 - M5 x 16 countersunk socket screw	4
6	GG204 - Tailgate Lock	1	27	GW008 - M5 Flat Washer	4
7	CP134 - Front Box Lid	1	28	GN006 - M5 Locknut - Nylon	4
7a	CP156 - Front Box Lid HS/TR Indicators	1	29	ES127 - Front Turn Signal Light (424HS)	2
9	GT193 - M5 x 16 button head screw	3	30	ES133 - Turn Signal Bulb	2
11	EW039 - Wiring Loom for front lights	1	31	CB664 - Mounting Plate DEA HS	1
11a	EW130 - Wiring Loom, 424TR without indicators	1			
11b	EW117 - Wiring Loom, TR/HS with indicators	1			
13	ES025 - Plug only for front lights	1			
14	GG057 - Piano Hinge	1			
14a	GT051 - M5 x 16 Hex Screw	9			
15	CP138 - Front Box Base, RS (from CIN 92)	1			
16	CP137 - Front Box Base, S2D rotomould	1			
17	ES047 - Light - front (414RS, 424TR, 424HS)	2			
18	AE030 - Front Light assembly (414S2D only)	2			
19	ES032 - Bulb 12V 21W	2			
20	GT112 - M5 x 16 Button Head Screw	2			
21	MA620 - Mounting plate, for 424HS or 424TR eq	1			

# Front Hose & Brush Covers

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS029-9** Revision:

AS029-9

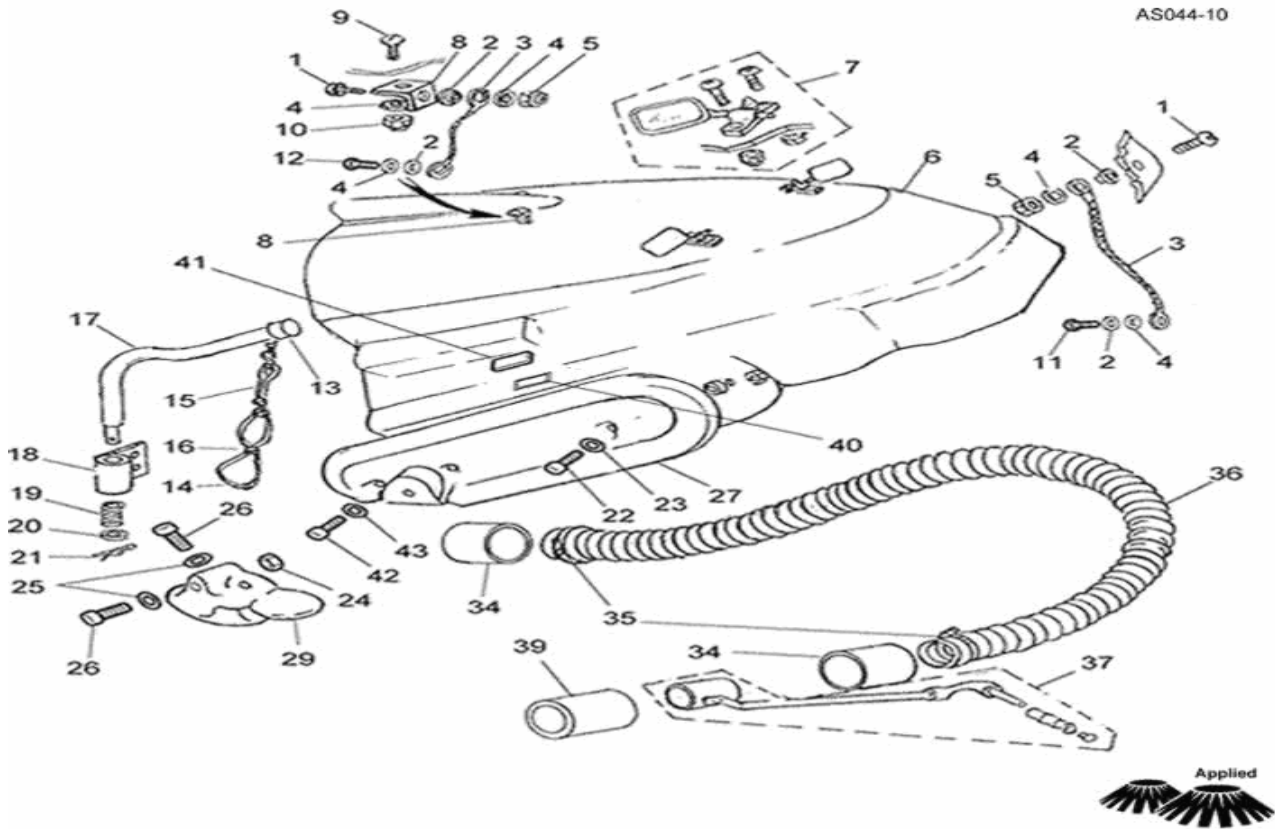


1	CP052 - Front Hose Cover S2D/RS/TR	1
2	CP054 - Fastener Rubber	2
3	CP139 - Brush Cover S2D/RS/TR	2
4	GG110 - Ring Head Stud - 17 mm	4
5	GG055 - Plastic Washer (6mm)	4
6	GG041 - Retainer Washer - steel	4
7	GG042 - Slip on receptacle	4
8	CP125 - Front Hose Cover, HS/Turbo R	1
9	CP164 - Brush Cover Assy. Right Side, 424HS/T	1
10	CP165 - Brush Cover Assy. Left Side, 424HS/Tu	1
12	GG158 - Knurled panel screw - 5.8 dia. x 21.9	4
13	GG129 - Retaining Washer - stainless steel	4
14	GG074 - Clip on receptacle	4
15	CB425 - Bracket, Right hand	1
16	CB424 - Bracket, Left hand	1
17	CB435 - Bracket, Right hand - brush cover mou	1
18	CB434 - Bracket, Left hand - brush cover moun	1
19	GG173 - Swell latch	2
20	CB649 - Bracket, brush mounting	2
21	GT028 - M8 x 20 Setscrew	4
22	GW041 - M8 Washer Form A	8
23	GN004 - M8 Locknut - Nylon	4



# Top Cover Assembly (from CIN 92)

Model: **414S2D**  
 From CIN: **92** To CIN: **999**  
 Drawing: **AS044-10** Revision:

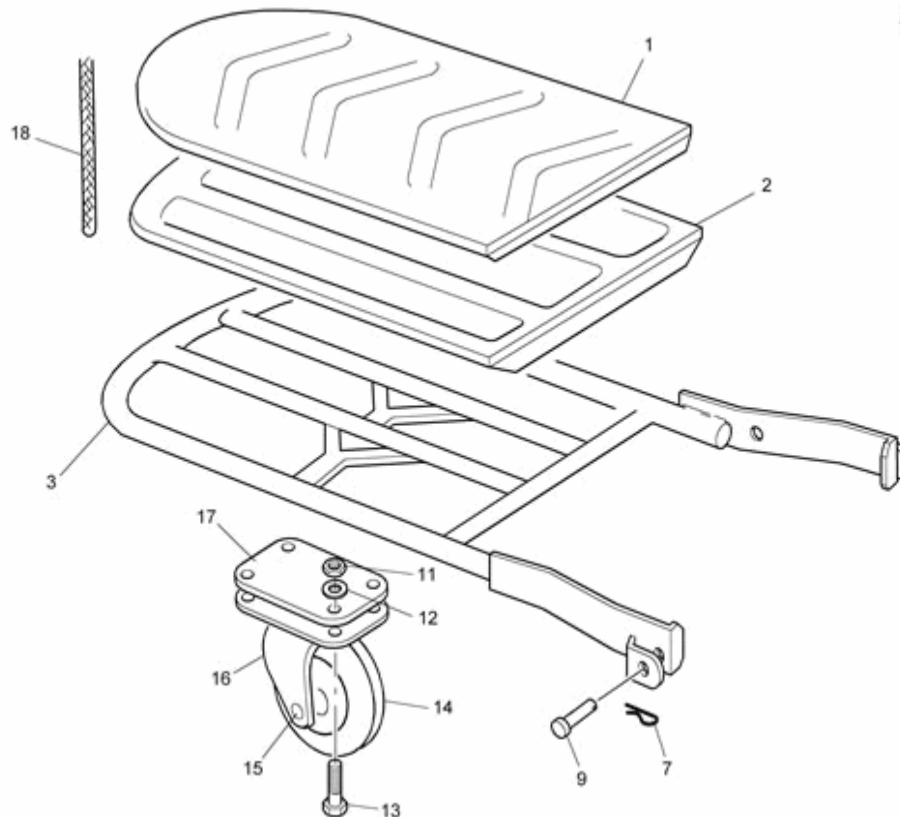


1	GT136 - M5 x 20 Button Head Screw	4	22	GT025 - M6 x 35 Hex Screw	1
2	GG078 - Washer - top hat	4	23	GW031 - Washer M6 Form C	1
3	GG034 - Restraining Cable	2	24	GN004 - M8 Locknut - Nylon	2
4	GW008 - M5 Flat Washer	6	25	GW021 - Washer, M8 x 25	2
5	GN006 - M5 Locknut - Nylon	4	26	GT089 - M8 x 35 Hex Setscrew	2
6	CP122 - Top Cover (CIN 92 to 116)	1	27	AW092 - Whoosh hose carrier	1
6a	CP154 - Top Cover (from CIN 117)	1	29	CP119 - Male Hose Carrier, Whoosh	1
7	MA001 - Wing Mirror	2	31	GT025 - M6 x 35 Hex Screw	1
8	CP043 - Bracket for box retention strap	1	32	GW031 - Washer M6 Form C	6
9	GT054 - M8 x 20 Button Head Socket Screw	1	33	GT135 - M6 x 16 Hex Screw	2
10	GN004 - M8 Locknut - Nylon	1	34	AW040 - Rubber band for whoosh hose	2
11	GT119 - 8 x 3/4 self-tapping screw	1	35	GG086 - Hose Clamp (110mm to 140mm)	2
12	GT193 - M5 x 16 button head screw	1	36	AW053 - Whoosh hose	1
13	AW050 - Plastic cap for whoosh boom end	1	37	AW136 - Woosh Handle Assembly (414 from CIN 1	1
14	AW009 - Rubber fastener for whoosh hose	1	39	AW006 - Rubber End Cuff for Whoosh Hose	1
15	GM154 - Snap Clip	1	40	GG172 - Adjustable Catch	1
16	PG008 - O Clip - 1/2 in.	1	40a	CB858 - Reinforcing plate - Top Cover	1
17	AW013 - Boom arm for whoosh	1	41	CP051 - Rubber Pad for top cover adjuster	1
18	AW012 - Bracket for whoosh boom	1	42	GT135 - M6 x 16 Hex Screw	2
19	AW083 - Spring for whoosh boom return	1	43	GW031 - Washer M6 Form C	2
20	GW051 - M12 Washers Form A	1			
21	BB028 - R Pin	1			

# Bag Trolley (414S2D to CIN 116)

Model: **414S2D**  
From CIN: **54** To CIN: **116**  
Drawing: **AS006-9** Revision:

AS006-9



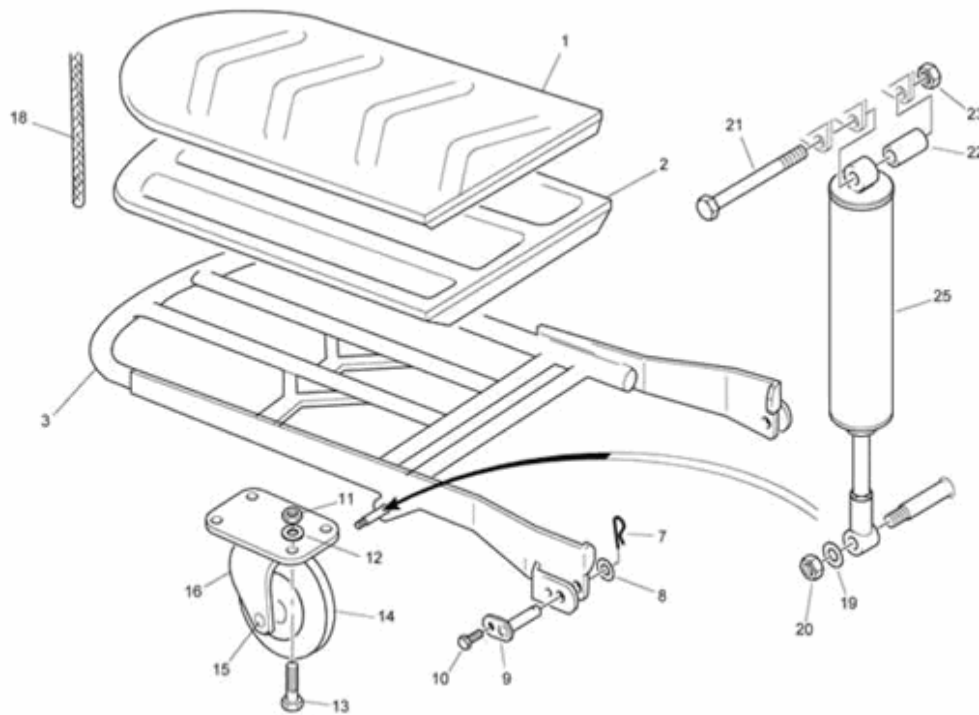
For model 414S2D up to and including CIN 116 (last chassis 108369). For later machines please see drawing AS006-10. Please note the change in part number for item 3 at CIN 99 (chassis 901023) and take care when ordering replacement parts.

1	CB095 - Drain tray for bag trolley (walk-behi	1
2	CB094 - Bag Tray	1
3	CB125 - Bag Trolley Frame (from chassis 90102	1
3	CB096 - Bag Trolley Frame (up to chassis 9010	1
11	GN011 - M6 Locknut - Nylon	4
12	GW038 - M6 Flat Washer	4
13	GT024 - M6 x 40 Hex Screw	4
14	CB011 - Wheel for rear castor CB002	1
15	CB013 - Axle set for rear castor CB002	1
16	CB002 - Rear Castor wheel assy (414S2D to CIN	1
17	CB044 - Plate for bag trolley	1
18	GM019 - Chain, bag trolley	1

# Bag Trolley (414S2D from CIN 117)

Model: **414S2D**  
 From CIN: **117** To CIN: **999**  
 Drawing: **AS006-10** Revision:

AS006-10



Applies to machines from CIN 117. For older machines please see drawing AS006-9

1	CB095 - Drain tray for bag trolley (walk-behi	1
2	CB094 - Bag Tray	1
3	CB695 - Bag Trolley (CIN 117)	1
7	GG105 - Cotter Pin (1/8 in x 1 in)	2
8	GW019 - M12 Flat Washer	2
9	MA391 - Clevis Pin	2
10	GT203 - M6 x 12 Hex Flanged Sheet Metal Screw	2
11	GN011 - M6 Locknut - Nylon	4
12	GW038 - M6 Flat Washer	4
13	GT024 - M6 x 40 Hex Screw	4
14	CB562 - Wheel Only , Castor	1
15	CB563 - Axle Set, Rear Castor	1
16	CB561 - Castor Wheel	1
17	GT203 - M6 x 12 Hex Flanged Sheet Metal Screw	2
18	GM019 - Chain, bag trolley	1
19	GW021 - Washer, M8 x 25	1
20	GN043 - M8 locknut - nylon - stainless steel	1
21	GT158 - Bolt - hex head, M10 x 110	1
22	CB708 - Spacer, S2D spring strut	1
23	GN019 - M10 Locknut - Nylon	1
24	MA571 - Spring Strut Assy.	1

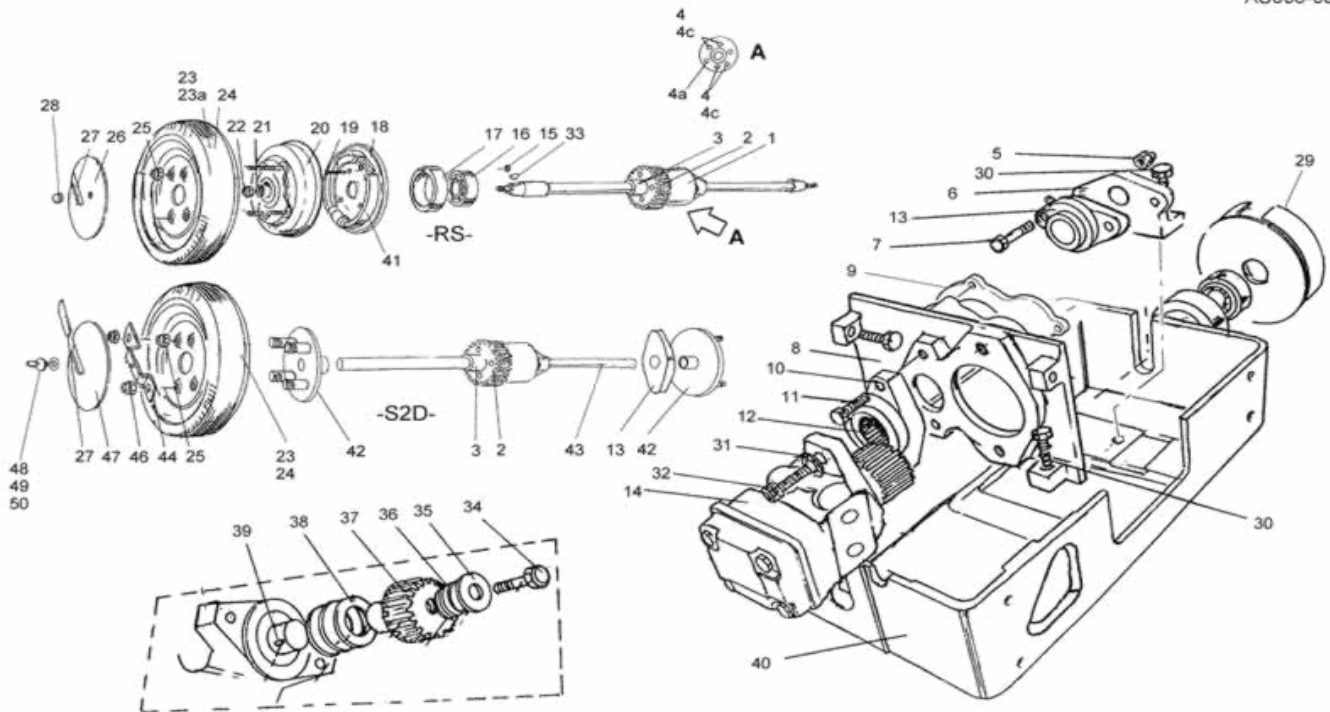
# Drive Axle & Chassis

Model: 414S2D

From CIN: 54 To CIN: 999

Drawing: AS005-9A Revision: A

AS005-9a



- 1 -- TT038 --Differential only
- 1a --TT043- Axle Assembly (414RS and 424TR)
- 1b --TT052- Differential c/w Extended sleeves (HS only)

<del>1</del> TT038 - Differential	1	18	MA309 - Brake Back Plate - right side	1	
<del>1a</del> TT043 - Axle Assembly (414RS, 424TR, 424HS)	1	19	GT251 - M8 x 45 sockethead capscrew	6	
<del>1b</del> TT052 - TT052 - Differential Assembly, HS - E	1	20	MA003 - Brake Drum	2	
2	TT044 - Drive Gear & bolts kit	1	21	MA061 - Washer, form a 36 o/d 12.7 i/d	2
3	TT019 - Inner Ring	1	22	GN047 - M12 Locknut - Prevailing Torque (Phil)	2
4	GT177 - 5.16th UNF x 3.75 in. Hex Bolt - SAE	4	23	TW003 - Main Wheel/Tire(414S2D/RS/424TR)-non-	2
4a	GT191 - 5.16th UNC x 2 in. Hex Bolt - SAE Gra	2	23a	TW035 - Main Wheel/Tire(424HS) - Puncture Res	2
4c	GW006 - Washer, 5/16	4	24	TW034 - Main Wheel/Tyre(414S2D/RS/424TR)-Punc	2
5	GN019 - M10 Locknut - Nylon	2	25	GN017 - Wheel Nut 3/8	8
6	CA016 - Bracket, for Heavy-duty Bearing	1	26	TW020 - Wheel Cover	2
7	GT093 - M10 x 40 Hex Screw	2	28	GN034 - M12 Dome Nut (Acorn)	2
8	CA071 - Cross brace for chassis (from CIN 85)	1	29	MA310 - Brake Back Plate - left side	1
9	CA113 - Cover Plate for gearbox	1	30	GT086 - M10 x 25 Hex Screw	6
10	CA030 - Bearing housing	1	31	GW049 - M12 Schnorr Lockwasher	2
11	GT049 - M8 x 25 Hex Screw	2	32	GT271 - M12 x 40 Socket Cap Screw	2
12	TT018 - Needle Bearing	1	33	MA125 - Woodruff Key	2
13	TT004 - Bearing - self aligning	1	34	GT049 - M8 x 25 Hex Screw	1
14	HM019 - Hydraulic Drive Motor - 414S2D, 414RS	1	37	TT009 - Pinion Gear	1
14a	HM029 - Hydraulic Drive Motor, T Type 60cc	1	40	CA077 - Chassis (Steel)	1
15	GN004 - M8 Locknut - Nylon	6	41	MA322 - Brake Shoes	1
16	MA057 - Bearing, heavy duty	2	42	TT008 - Wheel Hub Assembly	2
17	MA058 - Housing for bearing	1	43	TT041 - Differential	1

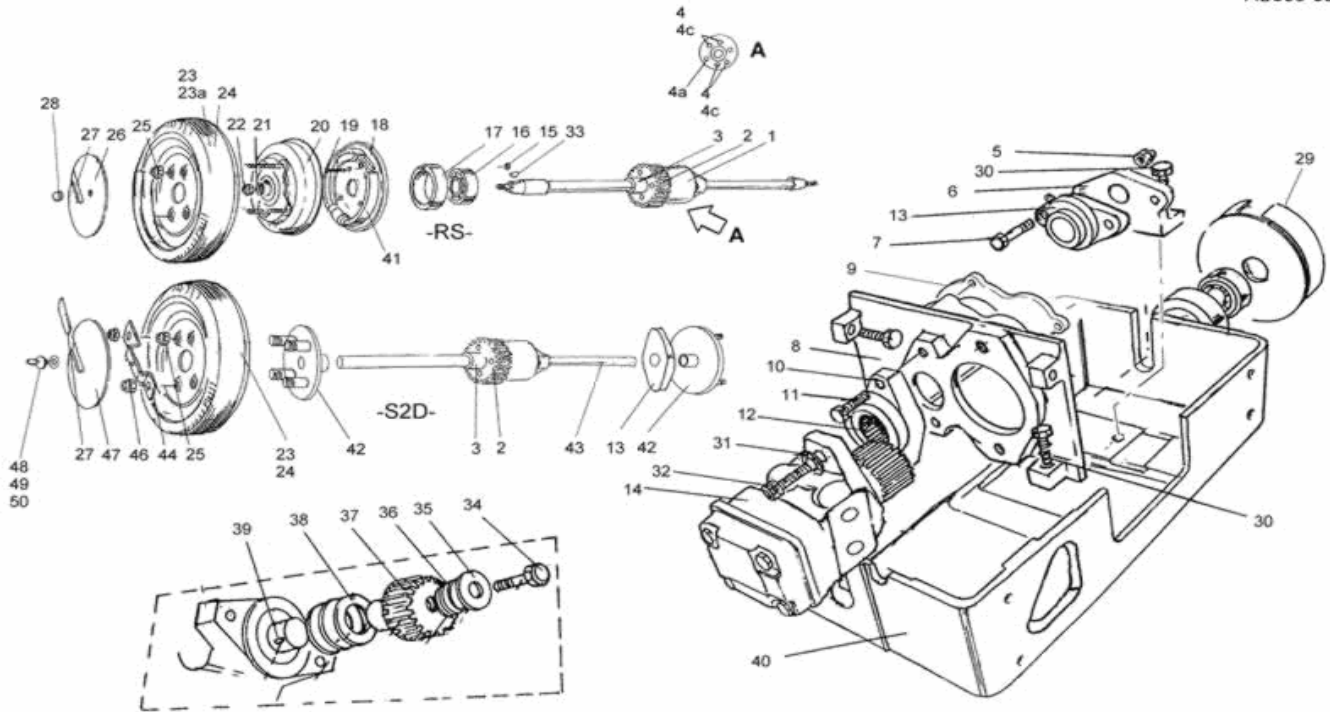
# Drive Axle & Chassis

Model: 414S2D

From CIN: 54 To CIN: 999

Drawing: AS005-9A Revision: A

AS005-9a

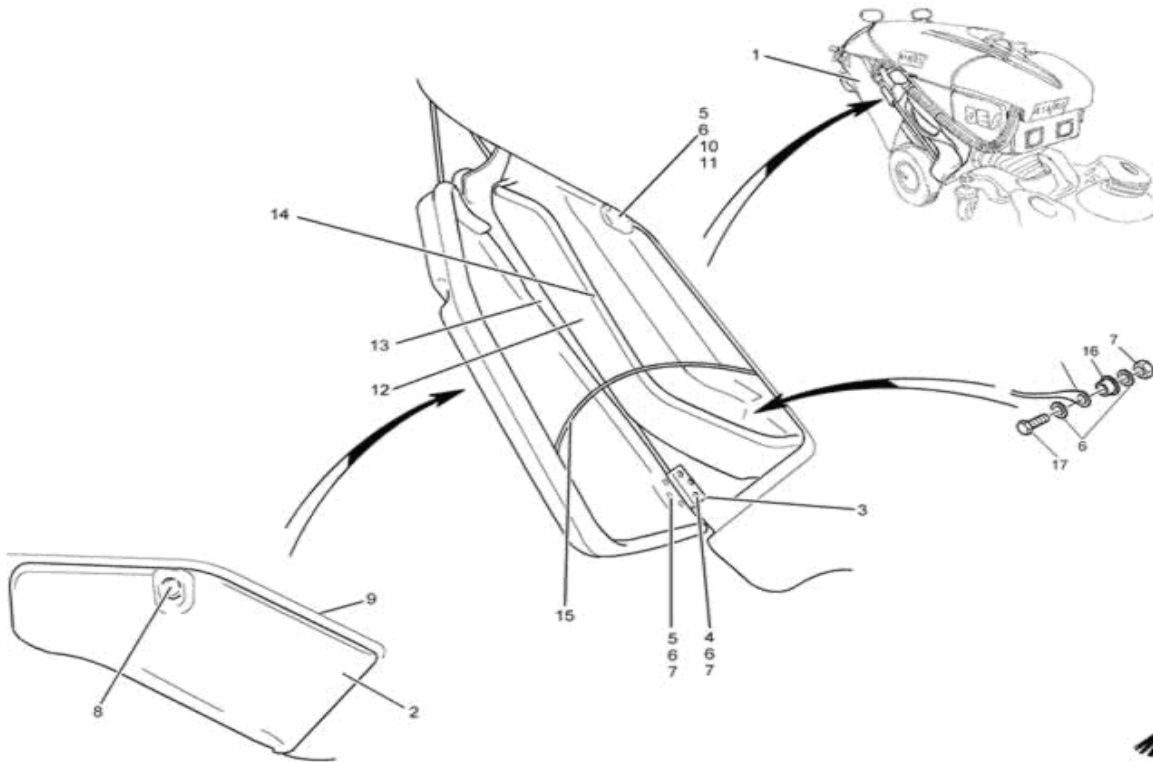


44	TW014 - Bracket for wheel cover	2
45	GG042 - Slip on receptacle	2
46	GN014 - 3/8 UNF Locknut - nylon	4
47	TW015 - Wheel Cover	2
48	GG055 - Plastic Washer (6mm)	4
49	GG048 - Ring Head Stud - 14 mm	2
50	GG041 - Retainer Washer - steel	2

# DEA / CSA Option - Storage Box

Model: **414S2D**  
 From CIN: **117** To CIN: **999**  
 Drawing: **AS040-9** Revision:

AS040

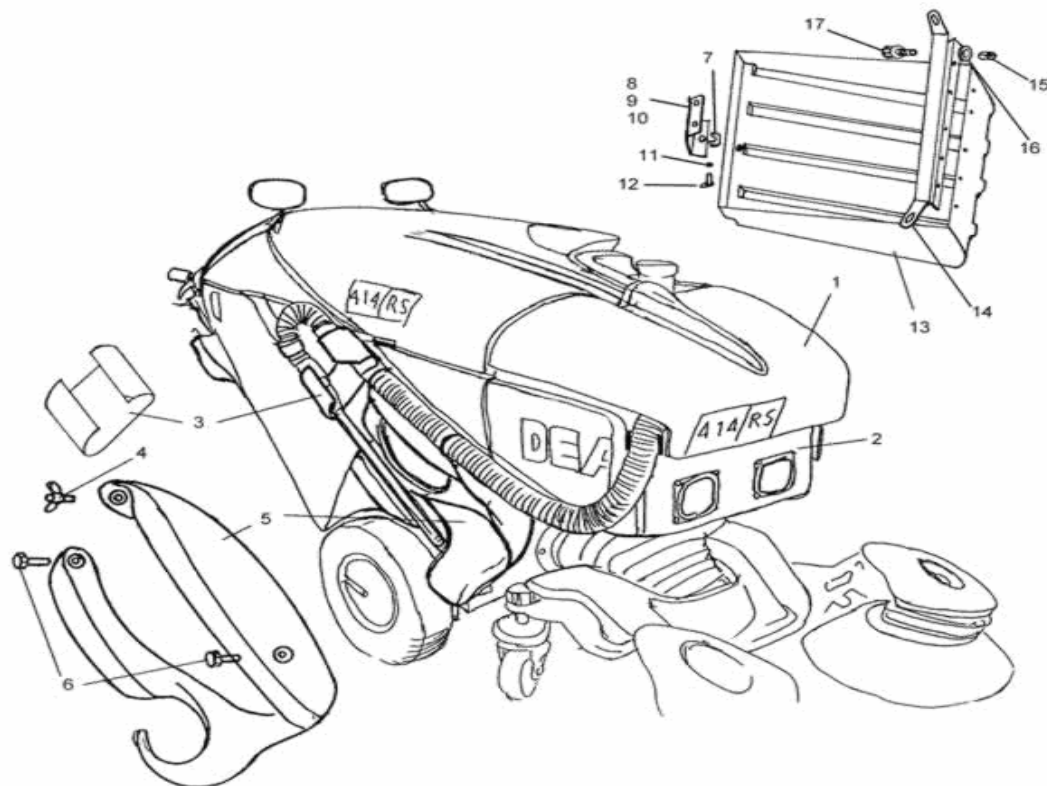


<b>1</b>	CP159 - Side Storage Panel,	1
<b>2</b>	CP141 - Door, Side Storage Panel	1
<b>3</b>	GG112 - Hinge, 63 mm	2
<b>4</b>	GT199 - M5 x 16 countersunk socket screw	6
<b>5</b>	GT193 - M5 x 16 button head screw	6
<b>6</b>	GW008 - M5 Flat Washer	0
<b>7</b>	GN006 - M5 Locknut - Nylon	6
<b>8</b>	GG204 - Tailgate Lock	1
<b>9</b>	GG167 - Body Trim, 1.2 metres	1
<b>10</b>	AD039 - Hinge Catch	1
<b>11</b>	GT075 - M5 x 12 Hex Screw	2
<b>12</b>	CP142 - Panel, Storage Retaining	1
<b>13</b>	GT143 - Poppet Fastener	6
<b>15</b>	GG034 - Restraining Cable	1
<b>16</b>	GG078 - Washer - top hat	2
<b>17</b>	GT136 - M5 x 20 Button Head Screw	2

# DEA/ CSA Option - Body Panels

Model: 414S2D  
From CIN: 54 To CIN: 999  
Drawing: AS046-9a Revision:

AS046

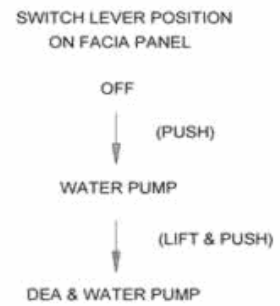
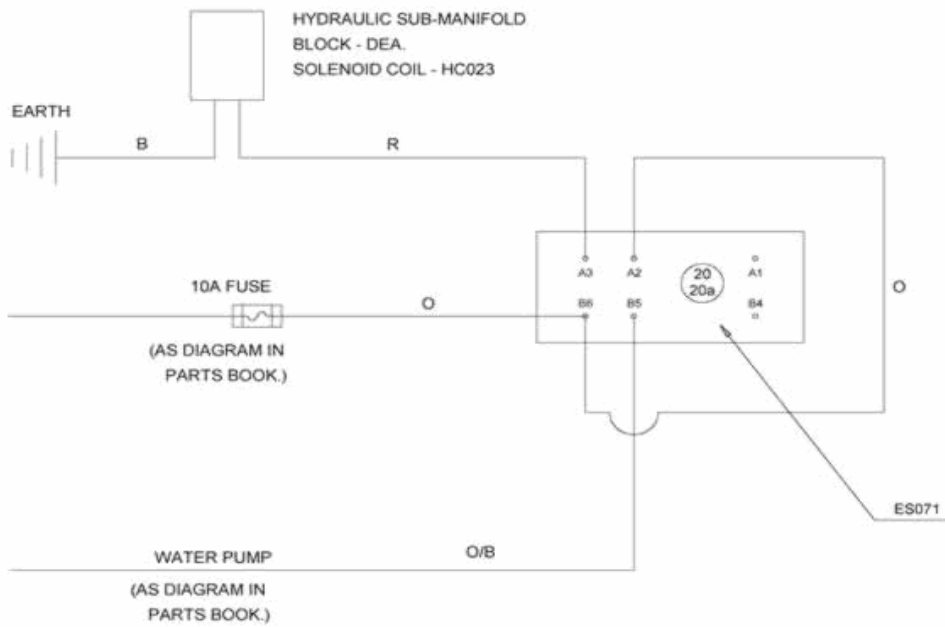


1	CP118 - Front Box Lid, DEA	1
1a	CP161 - Front Box Lid HS/TR DEA (Indicators)	1
2	CP086 - Headlight Panel	1
3	AW110 - Hose bracket (for DEA / CSA)	1
4	GG125 - Screw, wing type	1
5	CP160 - Lance Storage Cover, HS DEA	1
6	GT193 - M5 x 16 button head screw	2

# DEA/ CSA Option - Electrical

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS051-9** Revision:

AS051



**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.



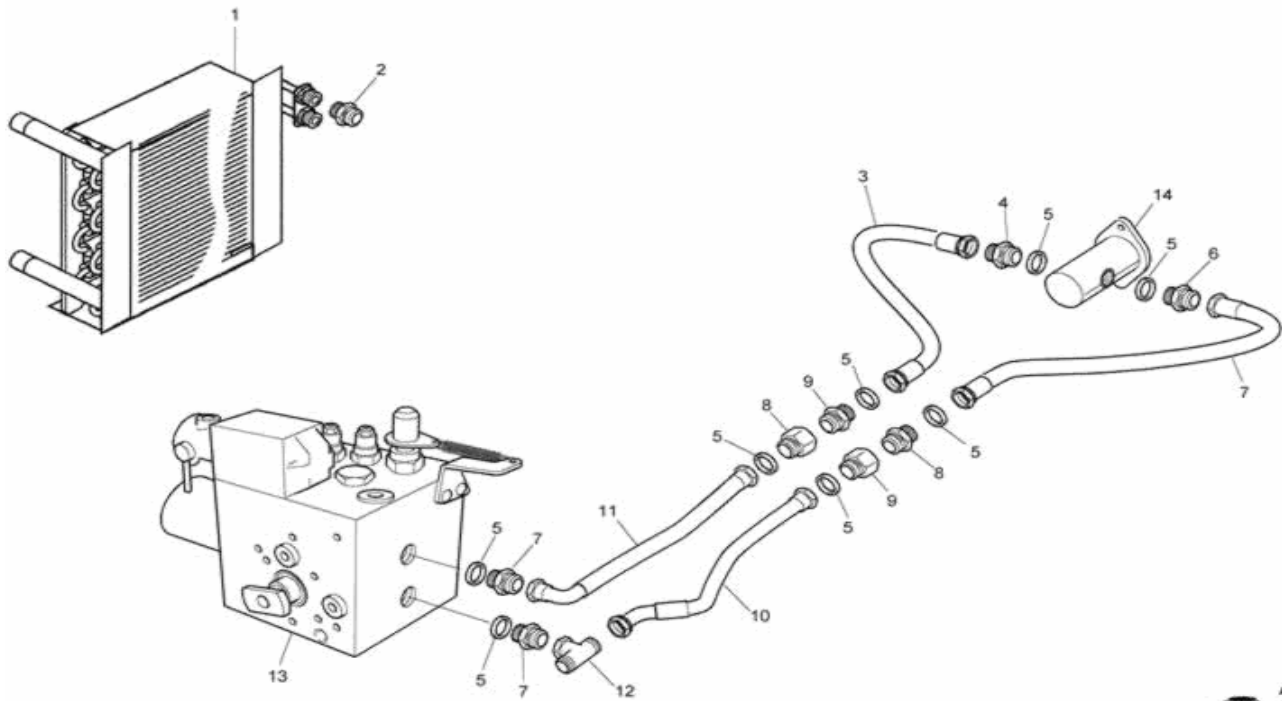
<b>72</b>	ES134 - Bulb for Turn Signal Indicator (Panel	1
<b>73</b>	ES154 - Indicator Switch	1
<b>74</b>	ES153 - Switch - lights	1
<b>75</b>	ES151 - Flasher Unit Indicator Warning	1
<b>75</b>	ES151 - Flasher Unit Indicator Warning	1
<b>76</b>	ES156 - Horn button	1
<b>78</b>	ES127 - Front Turn Signal Light (424HS)	2
<b>78a</b>	ES133 - Turn Signal Bulb	2
<b>79</b>	ES147 - Rear Light / Turn Signal (424HS)	2
<b>79a</b>	ES155 - Rear Light (424TR)	2
<b>79b</b>	ES150 - Light Bulb (Rear light 424TR, 424HS)	2
<b>79c</b>	ES133 - Turn Signal Bulb	2
<b>81</b>	EW116 - Wiring Loom, Ancillary Hydraulic Blo	1
<b>83</b>	EW117 - Wiring Loom, TR/HS with indicators	1
<b>87</b>	ES159 - Switch - high/lo speed or DEA (424 Se	1
<b>88</b>	EH023 - Hourmeter (414 from CIN 117) and all	1



# DEA/ CSA Option - Hydraulic Drive

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS066-9a** Revision:

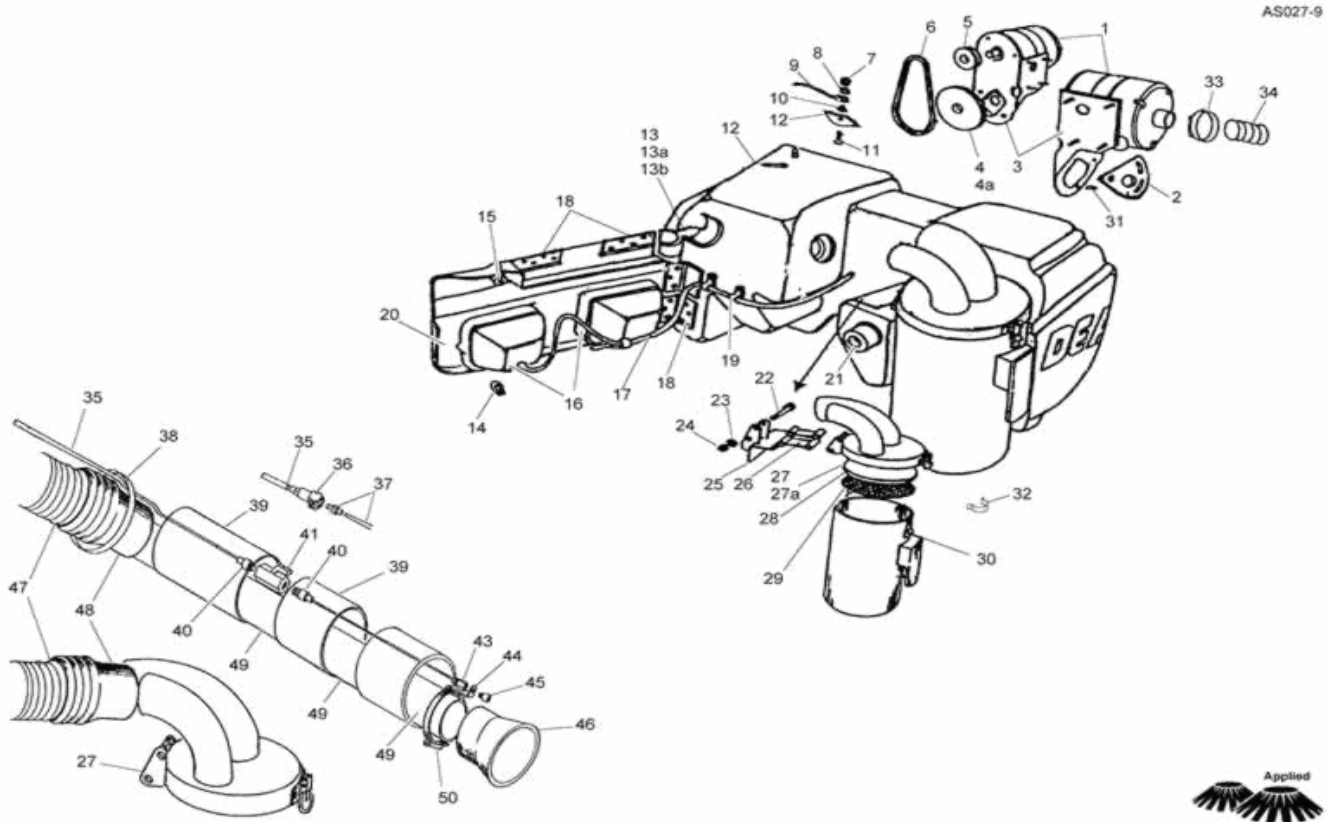
AS066-9



1	PC082 - Radiator / Oil Cooler Assy.	1
2	HF007 - Coupling 3/8	1
3	HJ077 - Hose Assy, 1/4	1
4	HF042 - Hydraulic Adaptor Coupling - 3/8 Male	1
5	HF010 - Hydraulic Bonded Seal - 3/8 BSP (16mm)	8
6	HF006 - Hydraulic Stud Coupling - 3/8 Male to	1
7	HJ074 - Hose Assy. 3/8	1
8	HF054 - Hydraulic Quick-Release Coupling - Fe	2
9	HF053 - Hydraulic Quick Release Coupling - Ma	2
10	HJ135 - Hose Hyd. 3/8 Q/R / block T	1
11	HJ133 - Hose hyd. 1/4 block dea / q/r	1
12	HF072 - Coupling Tee 3/8	1
13	HC098 - Hydraulic Block - main	1
14	HM026 - Hydraulic Motor	1
15	HV027 - Solenoid Valve with coil - DEA	1

# DEA/ CSA Option - Principal Components

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS027-9** Revision:

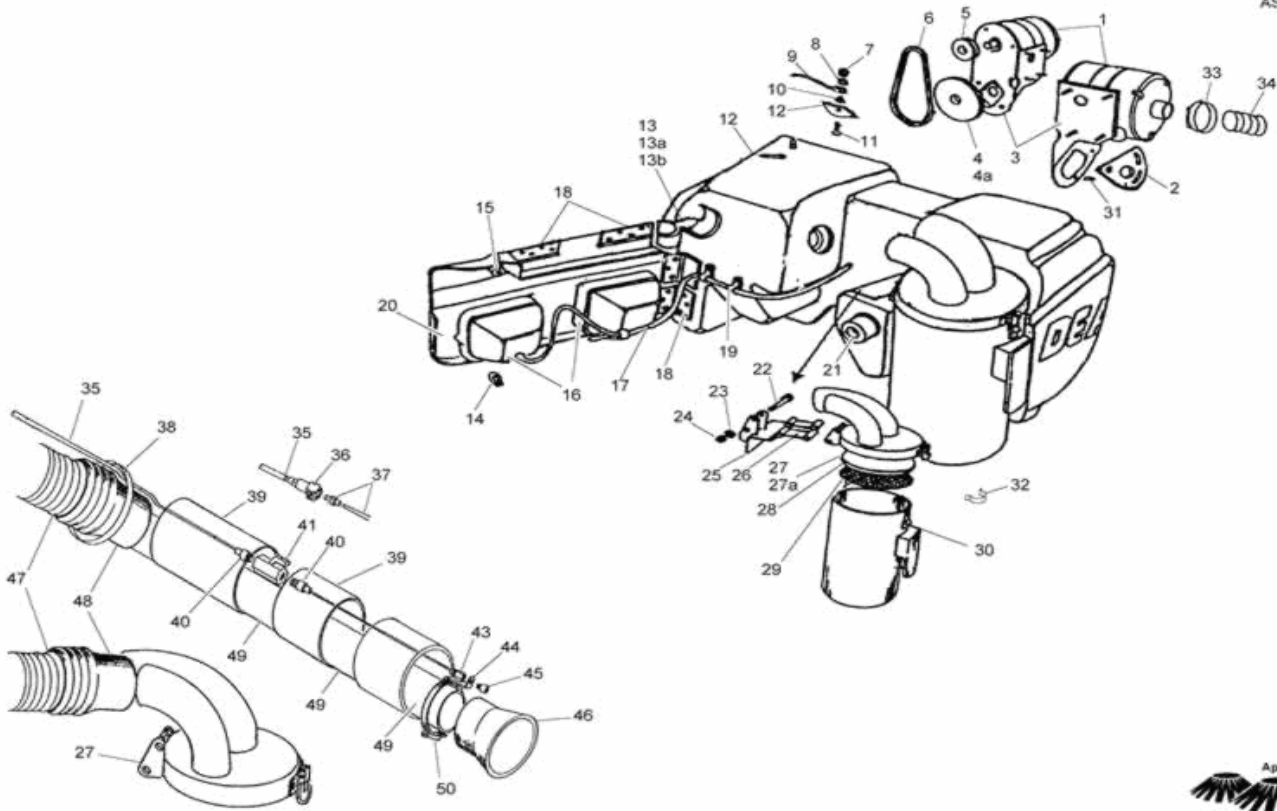


<b>1</b>	VF052 - Vacuum Fan, RSA	1	<b>23</b>	GW041 - M8 Washer Form A	4
<b>2</b>	CB287 - Bracket - hydraulic motor mounting	1	<b>24</b>	GN004 - M8 Locknut - Nylon	4
<b>3</b>	CB285 - Bracket	1	<b>25</b>	AD030 - Bracket	1
<b>4</b>	TC013 - Pulley, large	1	<b>26</b>	CB276 - Link Arm	2
<b>5</b>	TC010 - Pulley, small	1	<b>27a</b>	AD038 - Lid Assembly, DEA/CSA	1
<b>6</b>	TC011 - Drive Belt	1	<b>28</b>	AD025 - Filter	1
<b>7</b>	GN006 - M5 Locknut - Nylon	2	<b>29</b>	AD029 - Seal	1
<b>8</b>	GW008 - M5 Flat Washer	2	<b>30</b>	CB353 - Canister - large (440mm)	1
<b>9</b>	GG034 - Restraining Cable	1	<b>31</b>	GB023 - Nylon Boss	1
<b>10</b>	GG078 - Washer - top hat	2	<b>32</b>	AD037 - Spring Retainer	1
<b>11</b>	GT136 - M5 x 20 Button Head Screw	1	<b>33</b>	GG123 - Hose Clamp (55 to 70 mm)	1
<b>12</b>	CP116 - DEA/CSA Mounting Moulding	1	<b>34</b>	AE062 - Hose - suction pump to canister	1
<b>13a</b>	GN011 - M6 Locknut - Nylon	2	<b>35</b>	WA040 - Tubing - Nylon - 6mm outside diameter	0
<b>13b</b>	GW031 - Washer M6 Form C	2	<b>36</b>	WP134 - Coupling - Quick Release - Female	1
<b>14</b>	ES032 - Bulb 12V 21W	2	<b>37</b>	WP135 - Coupling - Quick Release - Male	1
<b>15</b>	GG033 - Door Stop - male	1	<b>39</b>	GM125 - Heat shrink, 45 mm	2
<b>16</b>	ES047 - Light - front (414RS, 424TR, 424HS)	2	<b>40</b>	WP096 - Male Stud Coupling 1/4	2
<b>17</b>	EW039 - Wiring Loom for front lights	1	<b>41</b>	WP131 - Valve, on/off	1
<b>18</b>	GG112 - Hinge, 63 mm	4	<b>42</b>	GM126 - Heat shrink, 75 mm	1
<b>20</b>	CP086 - Headlight Panel	1	<b>43</b>	WP094 - Female Stud Coupling 1/4	1
<b>21</b>	GG044 - Door Stop - female	1	<b>44</b>	CB258 - Bracket	1
<b>22</b>	GT067 - M8 x 70 Bolt	4	<b>45</b>	WP132 - Water Nozzle	1

# DEA/ CSA Option - Principal Components

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS027-9** Revision:

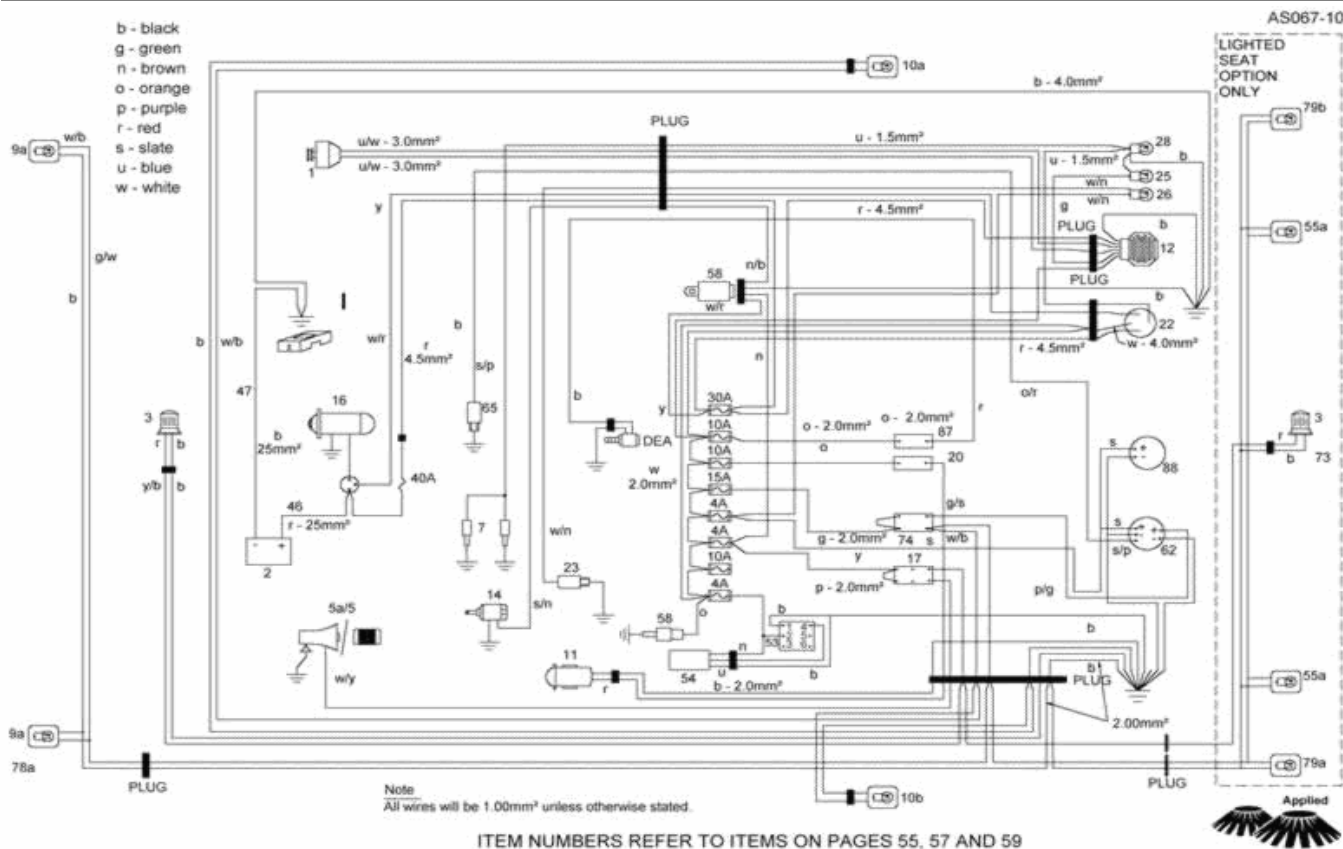
AS027-9



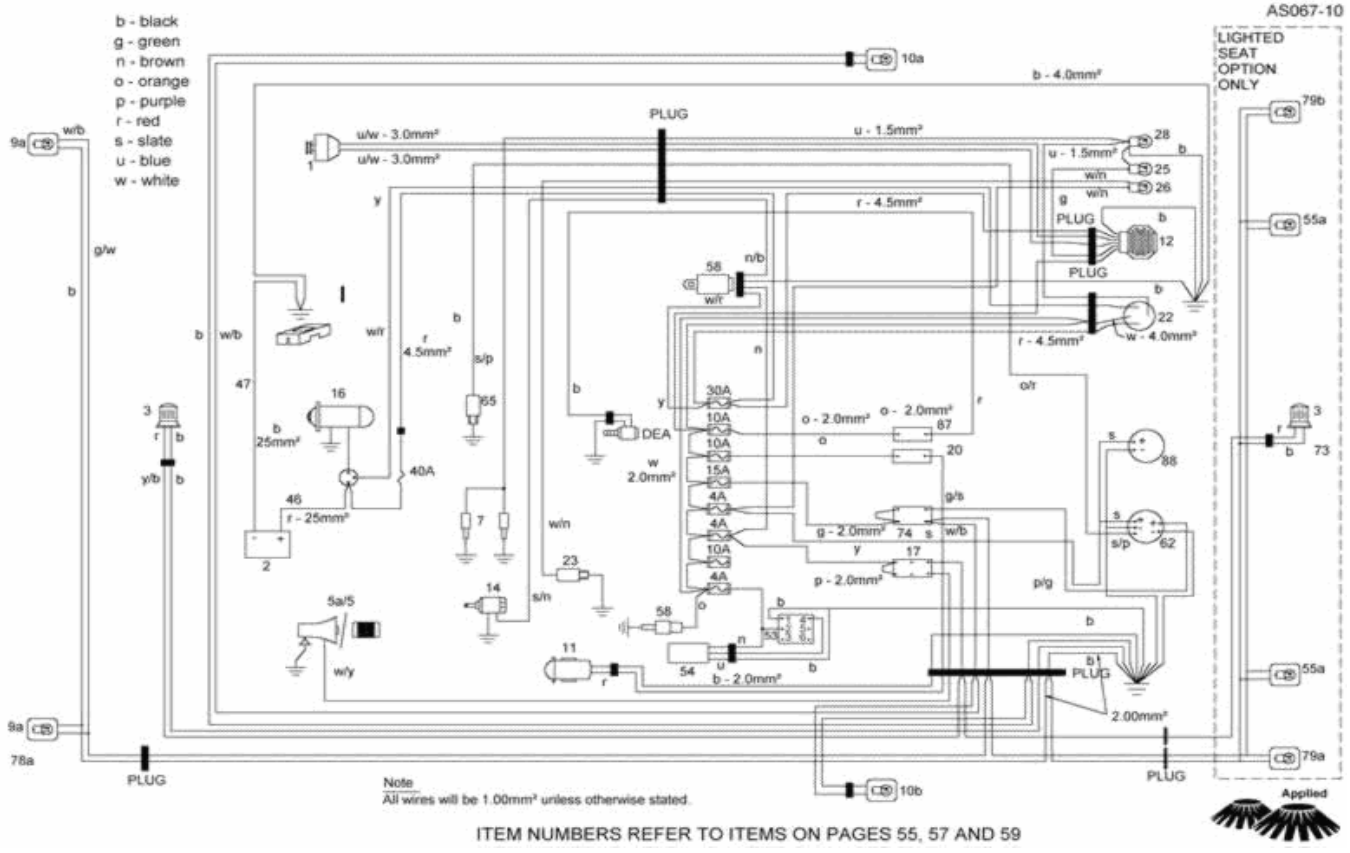
<b>46</b>	<b>AW111 - Suction nozzle(for CSA/DEA)</b>	<b>1</b>
<b>47</b>	<b>AE063 - Suction Hose - DEA / CSA</b>	<b>1</b>
<b>48</b>	<b>AW112 - Threaded Cuff (for DEA/CSA)</b>	<b>2</b>
<b>49</b>	<b>AE064 - Lance Tube</b>	<b>1</b>
<b>50</b>	<b>GG123 - Hose Clamp (55 to 70 mm)</b>	<b>1</b>

# Electrical (414 Models)

Model: 414S2D  
 From CIN: 54 To CIN: 999  
 Drawing: AS067-10 Revision:



1	PD009 - Alternator	1	25	ES018 - Warning Light - Red	1
2	EM009 - Battery	1	26	ES018 - Warning Light - Red	1
3	ES123 - Beacon Assembly	1	28	ES017 - Warning Light - Amber	1
3a	ES137 - Beacon (small) - from May 99	1	31	EW045 - Wiring loom - beeper to chassis	1
5	ES038 - Audible Beeper - Horn	1	32	EW059 - Wiring loom - rectifier to earth	1
5a	ES051 - Voice Box	1	33	ET060 - Fuse - 40 Amp - Blade Type	1
7	PD059 - Glow Plug	2	40	EW095 - Wiring loom, One piece	1
9	AE030 - Front Light assembly (414S2D only)	2	46	ET034 - Battery Cable - positive	1
9a	ES047 - Light - front (414RS, 424TR, 424HS)	2	47	ET035 - Battery Cable - negative	1
10	EW095 - Wiring loom, One piece	1	48	EW039 - Wiring Loom for front lights	1
10a	ES050 - Rear Light	2	48a	ES025 - Plug only for front lights	1
10b	ES050 - Rear Light	2	49a	ES026 - Socket for front lights	1
11	WP044 - - Water Pump	1	53	EH010 - Odometer (calibrated in miles)	1
12	PD245 - Rectifier / Regulator - Heavy Duty	1	53a	EH011 - Odometer (calibrated in kilometres)	1
13	PD027 - Solenoid for starter motor	1	54	EH012 - Sensor for odometer	1
14	PD031 - Fuel Stop Solenoid	1	55a	ES062 - Light - number plate	2
16	PD008 - Starter Motor	1	58	ES124 - Diode - Voltage Suppressor	1
17	ES009 - Switch - Double Pole - Three Position	1	62	EH015 - Temperature Gauge	1
20	ES001 - Switch - Single Pole - Two Position	1	65	EH016 - Temperature Sender	1
22	PD257 - Ignition Switch (Cobo)	1	66	EH021 - Oil Pressure Sender	1
23	PD005 - Switch, low oil pressure	1	73	ES137 - Beacon (small) - from May 99	1
24	PD030 - Timer	1	74	ES153 - Switch - lights	1



<b>78a</b>	ES032 - Bulb 12V 21W	2
<b>79b</b>	ES050 - Rear Light	2
<b>87</b>	ES159 - Switch - high/lo speed or DEA (424 Se)	1
<b>88</b>	EH023 - Hourmeter (414 from CIN 117) and all	1
<b>90</b>	ET036 - Fuse Box	1
<b>90a</b>	ET024 - Fuse - 4 Amp - blade type	3
<b>90b</b>	ET027 - Fuse - 10 Amp - blade type	3
<b>90c</b>	ET023 - Fuse - 15 Amp - Blade Type	1
<b>90d</b>	ET060 - Fuse - 40 Amp - Blade Type	1

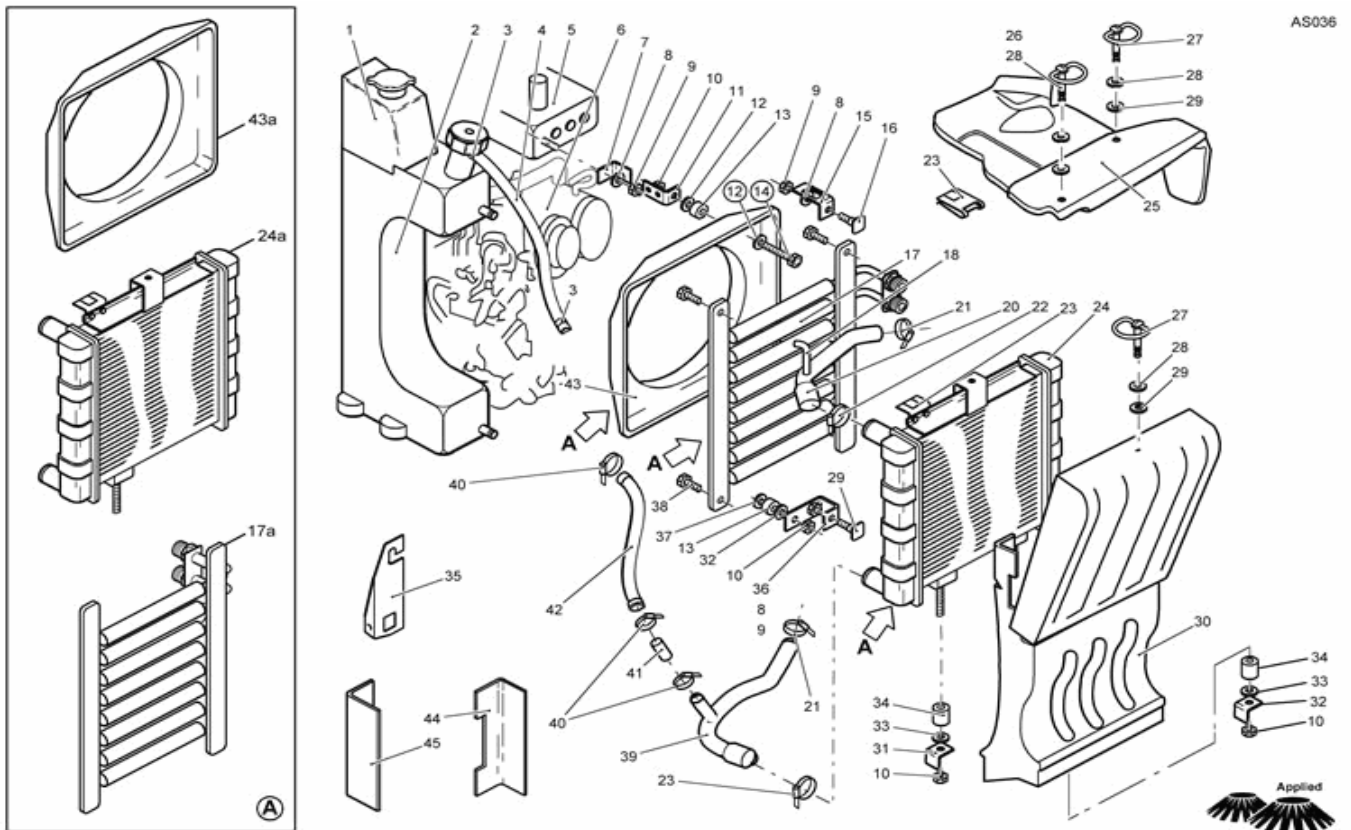


# Radiator & Oil Cooler (to CIN 97)

Model: 414S2D

From CIN: 54 To CIN: 97

Drawing: AS036 Revision:



This diagram covers older Green Machines prior to CIN 98 which were fitted with separate engine radiator and oil cooler. More modern machines use a combined radiator/oil cooler - see drawing AS037. Please note that machines prior to CIN 98 may have one of two variations. Please check diagrams carefully to ensure you order the correct radiator or oil cooler. Oil cooler fitted in between engine and radiator - as shown in the main diagram. Oil cooler fitted on rear face of radiator (i.e. nearest operator) - as shown in inset box at left side of diagram.

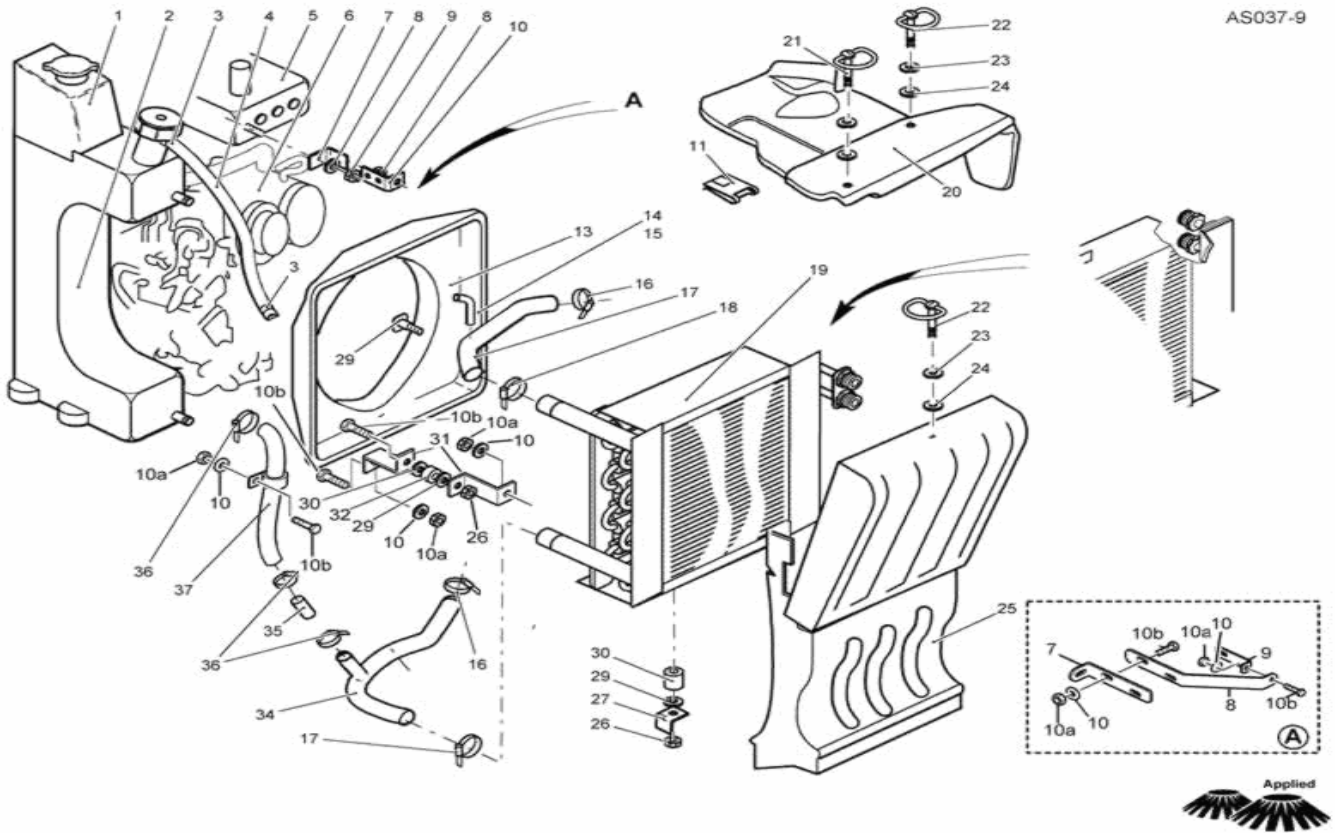
1	PC042 - Header / Radiator Expansion Tank	1	24a	PC045 - Radiator - for use with rear mounted	1
1a	PC003 - Cap, header tank	1	25	CB097 - Cover for engine	1
2	PG039 - Diesel Tank	1	26	GG048 - Ring Head Stud - 14 mm	2
3	GG045 - Hose Clamp (16mm)	2	27	GG110 - Ring Head Stud - 17 mm	1
3	PG038 - Fuel Tank Cap (screw-on style)	1	28	GG055 - Plastic Washer (6mm)	1
4	PG030 - Fuel Pipe	1	29	GG041 - Retainer Washer - steel	1
5	HT020 - Hydraulic Tank RS/S2D/TR	1	30	PC033 - Radiator Duct (to CIN 97)	1
7	CB091 - Bracket - hydraulic tank to fan cowl	1	31	CB336 - Radiator Mounting Bracket - Left Hand	1
11	CB137 - Bracket - fan cowl to hydraulic tank	1	32	CB143 - Bracket - Radiator Mounting - Right	1
13	GG054 - Bush rubber bushing	1	34	GG080 - Bushing - rubber - with spigot	2
15	CB130 - Bracket - radiator to engine cover	1	35	CB101 - Bracket for engine stop cable	1
16	GT122 - 6 x 20 Square Head Screw (for radiato	1	36	CB088 - Bracket - radiator to fuel tank	1
17	HC087 - Oil Cooler (CIN 93 - 97 specials)	1	39	PC046 - Hose - Bottom Radiator (To CIN 97)	1
17a	HC054 - Hydraulic Oil Cooler (Standalone)	1	40	GG090 - Hose Clamp (17mm to 25mm)	2
18	PC024 - Elbow, top hose header tank	1	41	PC047 - Spigot, bottom radiator hose	1
20	PC021 - Hose, Top Radiator (To CIN97)	1	42	PC026 - Hose, header tank/radiator	1
21	GG064 - Hose Clamp (25mm to 35mm)	2			
22	GG066 - Hose Clamp (50mm)	1			
23	GG042 - Slip on receptacle	1			

# Engine Cooling System (from CIN 98)

Model: 414S2D

From CIN: 98 To CIN: 999

Drawing: AS037-9 Revision:



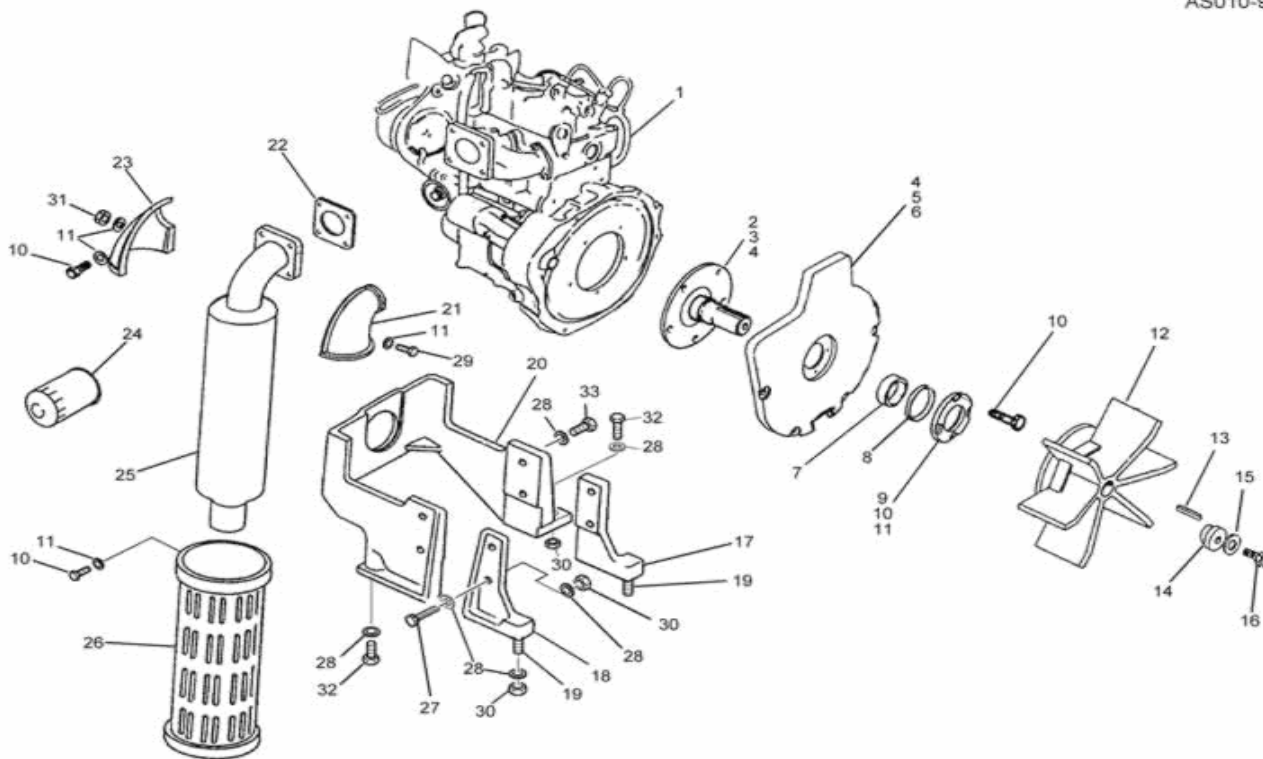
This drawing is for 400 Series machines from CIN 98 onwards that use a combined radiator/oil cooler. For older Green Machines up to the end of CIN 97 that used a radiator with separate oil cooler please see drawing AS036.

1	PC042 - Header / Radiator Expansion Tank	1	20	PC078 - Top Cover, engine	1
2	PG039 - Diesel Tank	1	21	GG048 - Ring Head Stud - 14 mm	1
3	GG045 - Hose Clamp (16mm)	2	22	GG110 - Ring Head Stud - 17 mm	2
4	PG030 - Fuel Pipe	1	23	GG055 - Plastic Washer (6mm)	3
5	HT020 - Hydraulic Tank RS/S2D/TR	1	24	GG041 - Retainer Washer - steel	3
5a	HT030 - Hydraulic Tank HS	1	25	PC057 - Radiator Duct (from CIN 98)	1
6	PD003 - Engine Assembly Kubota Z-482E	1	26	GN019 - M10 Locknut - Nylon	3
7	CB091 - Bracket - hydraulic tank to fan cowl	1	27	CB336 - Radiator Mounting Bracket - Left Hand	1
8	CB339 - Bracket	1	28	CB143 - Bracket - Radiator Mounting - Right	1
9	CB130 - Bracket - radiator to engine cover	1	29	GW027 - Dished Washer	3
10	GW038 - M6 Flat Washer	7	30	GG080 - Bushing - rubber - with spiggot	2
10a	GN011 - M6 Locknut - Nylon	7	31	CB340 - Bracket	2
10b	GT135 - M6 x 16 Hex Screw	4	32	GG054 - Bush rubber bushing	1
11	GG042 - Slip on receptacle	3	34	PC060 - Hose, bottom radiator	1
13	PC058 - Fan Cowling	1	35	PC047 - Spigot, bottom radiator hose	1
14	PC024 - Elbow, top hose header tank	1	36	GG090 - Hose Clamp (17mm to 25mm)	3
15	GG077 - Hose Clamp (14mm to 22mm)	1	37	PC026 - Hose, header tank/radiator	1
16	GG064 - Hose Clamp (25mm to 35mm)	2	38	HF007 - Coupling 3/8	1
17	PC059 - Hose, top radiator/engine	1			
18	GG111 - Hose Clamp (45mm)	2			
19	PC082 - Radiator / Oil Cooler Assy.	1			

# Engine, Exhaust & Impeller

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS010-9a** Revision:

AS010-9a



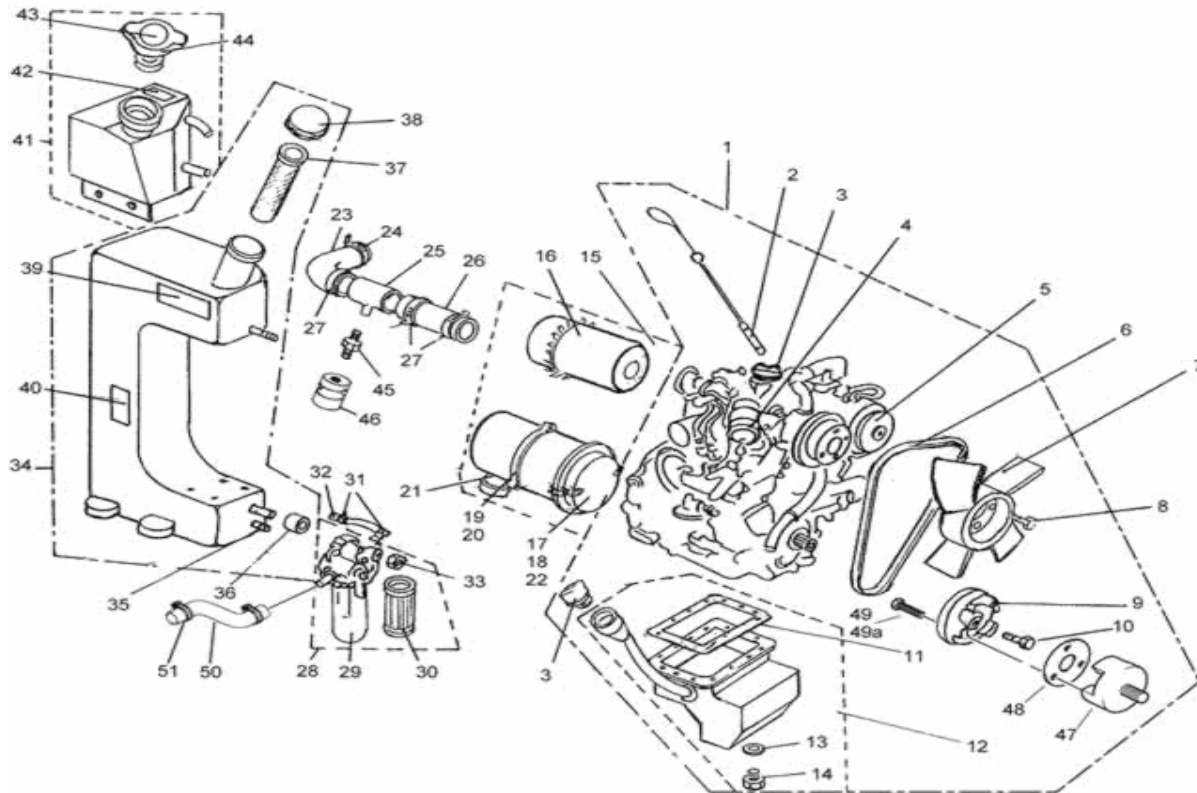
1	PD003 - Engine Assembly Kubota Z-482E	1	23	PD093 - Cover - exhaust flange, rear	1
2	VF022 - PTO Shaft (Impeller)	1	24	PD004 - Oil Filter	1
3	GT100 - M8 x 16 Hex Screw	5	25	PD036 - Exhaust Muffler	1
4	GW015 - M8 Split Lockwasher	1	26	PD051 - Exhaust cover	1
5	CA017 - Adaptor Plate	1	27	GT099 - M10 x 30 x 1.25 Fine Hex Screw	4
6	GT028 - M8 x 20 Setscrew	6	28	GW013 - M10 Flat Washer	8
7	GM065 - Journal for seal	1	29	GT019 - M6 x 30 Hex Screw	2
8	GM064 - Seal - teflon	1	30	GN019 - M10 Locknut - Nylon	8
9	CA045 - Seal Housing	1	31	GN011 - M6 Locknut - Nylon	2
10	GT090 - M6 x 12 Hex Screw	3	32	GT102 - M10 x 20 Hex Screw	2
11	GW031 - Washer M6 Form C	5	33	GT256 - M10 x 1.25 pitch x 20 lg. Hex Screw	4
12	VF025 - Impeller	1			
13	GG070 - Key for impeller	1			
14	GB013 - Boss, Impeller retention	1			
15	GG068 - Washer - disc spring (12.2 x 25mm)	2			
16	GT109 - Bolt for Impeller	1			
17	CA088 - Engine Mounting Left side (from CIN 1	1			
18	CA087 - Engine Mounting Right side (from CIN	1			
19	GT120 - M10 x 50 Stud	4			
20	CA100 - Rear Engine Mounting	1			
21	PD094 - Cover, exhaust flange, front	1			
22	PD049 - Gasket for Exhaust	1			



# Engine, Fuel & Air System

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS008-9a** Revision:

AS008-9a

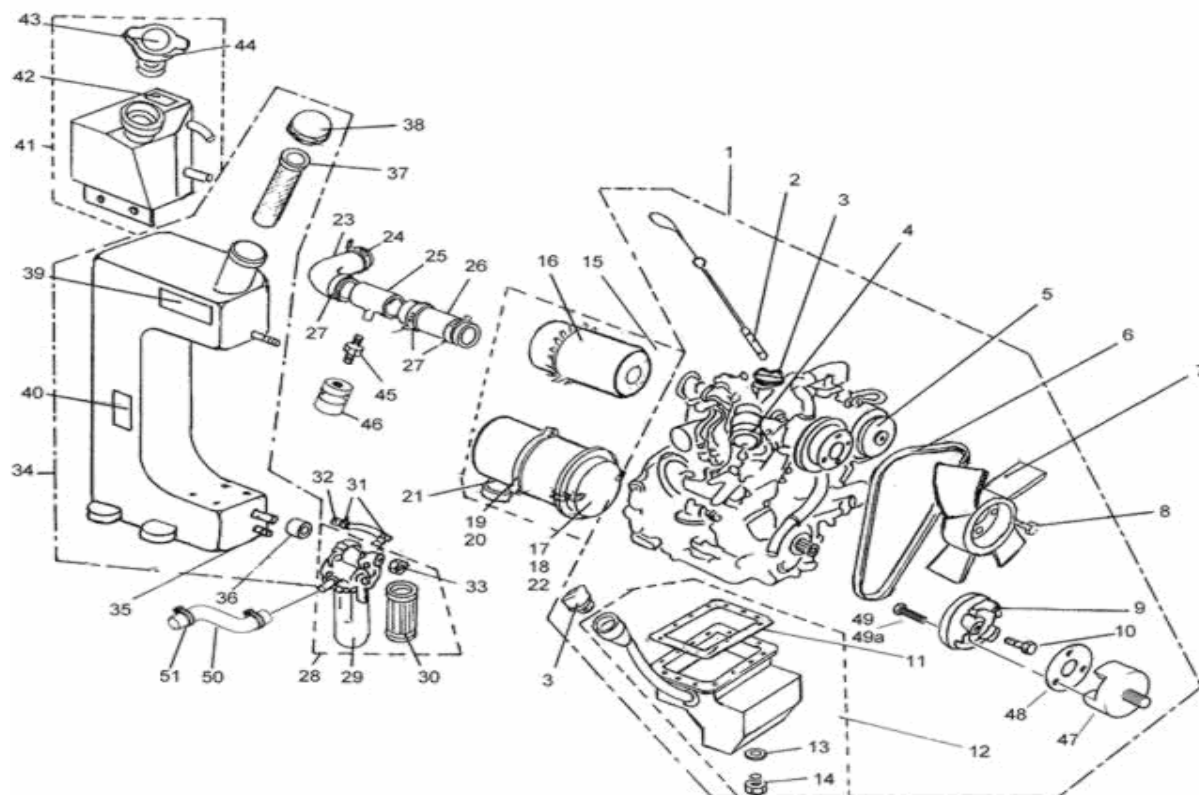


1	PD003 - Engine Assembly Kubota Z-482E	1	23	PD025 - Inlet pipe	1
2	PD018 - Oil Dipstick	1	24	GG076 - Hose Clamp (55mm)	1
3	PD039 - Oil Filler Cap	2	25	PD056 - Pipe - air cleaner	1
4	PD031 - Fuel Stop Solenoid	1	26	PC010 - Pipe Extension	1
5	PD009 - Alternator	1	27	GG066 - Hose Clamp (50mm)	3
6	PD011 - Fan Belt (up to CIN 86 only)	1	28	PD026 - Fuel Filter Assembly	1
6a	PD244 - Fan Belt (CIN 87+ only)	1	29	PD044 - Fuel Filter Bowl	1
7	PD189 - Fan - Engine Cooling (300mm diameter)	3	30	PD045 - Fuel Filter Element	1
9	PD223 - Pulley - Large, 114 dia fan drive	1	32	PD147 - Fuel Pipe, pump to filter	1
10	PD041 - Bolt - for pulley mounting	1	33	GN004 - M8 Locknut - Nylon	1
11	PD052 - Gasket, Oil Sump	1	34	PG039 - Diesel Tank	1
12	PD193 - Sump (oil pan)	1	35	WP036 - Hose Tail - 1/4 BSP -3/8 Hose	1
13	PD053 - Gasket, Sump Plug	1	36	GB019 - Spacer	1
14	PD069 - Sump Plug	1	37	PG027 - Fuel Tank Strainer	1
15	PD170 - Air Filter Assembly	1	38	PG038 - Fuel Tank Cap (screw-on style)	1
16	PD060 - Engine Air Filter	1	41	PC042 - Header / Radiator Expansion Tank	1
17	PD179 - Air Cleaner End Cap	1	44	PC003 - Cap, header tank	1
18	PD184 - Air Cleaner Cap (Inner)	1	45	ES099 - Nipple for filter minder	1
19	PD024 - Air cleaner band	1	46	ES098 - Filter Minder - unswitched	1
20	PD050 - Rubber - air cleaner band	1	47	TC001 - Drive Coupling	1
21	PD228 - Strainer - Air Cleaner Intake	1	48	TC014 - Spacer, Drive coupling	1
22	PD176 - Sealing O- Ring - Air Cleaner	1	49	GT168 - Capscrew, skt hd. M6 x 30	3

# Engine, Fuel & Air System

Model: 414S2D  
From CIN: 54 To CIN: 999  
Drawing: AS008-9a Revision:

AS008-9a



50	PG030 - Fuel Pipe	1
51	GG045 - Hose Clamp (16mm)	2

# Kubota Engine Parts

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **ENGACCE** Revision:



1	PD003 - Engine Assembly Kubota Z-482E	1	32	PD050 - Rubber - air cleaner band	1
2	PD004 - Oil Filter	1	33	PD051 - Exhaust cover	1
3	PD005 - Switch, low oil pressure	1	34	PD052 - Gasket, Oil Sump	1
4	PD245 - Rectifier / Regulator - Heavy Duty	1	35	PD053 - Gasket, Sump Plug	1
5	PD008 - Starter Motor	1	36	PD054 - Engine Workshop Manual	1
6	PD009 - Alternator	1	37	PD055 - Parts Manual- Kubota Z482	1
9	PD011 - Fan Belt (up to CIN 86 only)	1	38	PD056 - Pipe - air cleaner	1
12	PD013 - Fuel Lift Pump (Kubota)	1	39	PD057 - Gasket, Cylinder Head	1
13	PD015 - Water Pump (Kubota)	1	40	PD058 - Thermostat	1
14	PD018 - Oil Dipstick	1	41	PD059 - Glow Plug	1
16	PD024 - Air cleaner band	1	42	PD060 - Engine Air Filter	1
17	PD025 - Inlet pipe	1	43	PD061 - Fuel Injection Pump	1
18	PD026 - Fuel Filter Assembly	1	45	PD063 - Fuel Injector Nozzle Assembly	1
19	PD027 - Solenoid for starter motor	1	49	PD068 - Gasket - Oil Pump	1
22	PD030 - Timer	1	50	PD069 - Sump Plug	1
23	PD031 - Fuel Stop Solenoid	1	57	PD080 - Gasket	1
24	PD036 - Exhaust Muffler	1	61	PD086 - Washer with Rubber- for Air Filter	1
26	PD039 - Oil Filler Cap	1	62	PD087 - Butterfly Screw / Wing Bolt - for ai	1
27	PD041 - Bolt - for pulley mounting	1	65	PD093 - Cover - exhaust flange, rear	1
29	PD044 - Fuel Filter Bowl	1	66	PD094 - Cover, exhaust flange, front	1
30	PD045 - Fuel Filter Element	1	88	PD145 - Knurled Ring - for Fuel Filter	1
31	PD049 - Gasket for Exhaust	1	89	PD146 - O - ring for Fuel Filter - large	1

# Kubota Engine Parts

Model: 414S2D  
 From CIN: 54 To CIN: 999  
 Drawing: ENGACCE Revision:

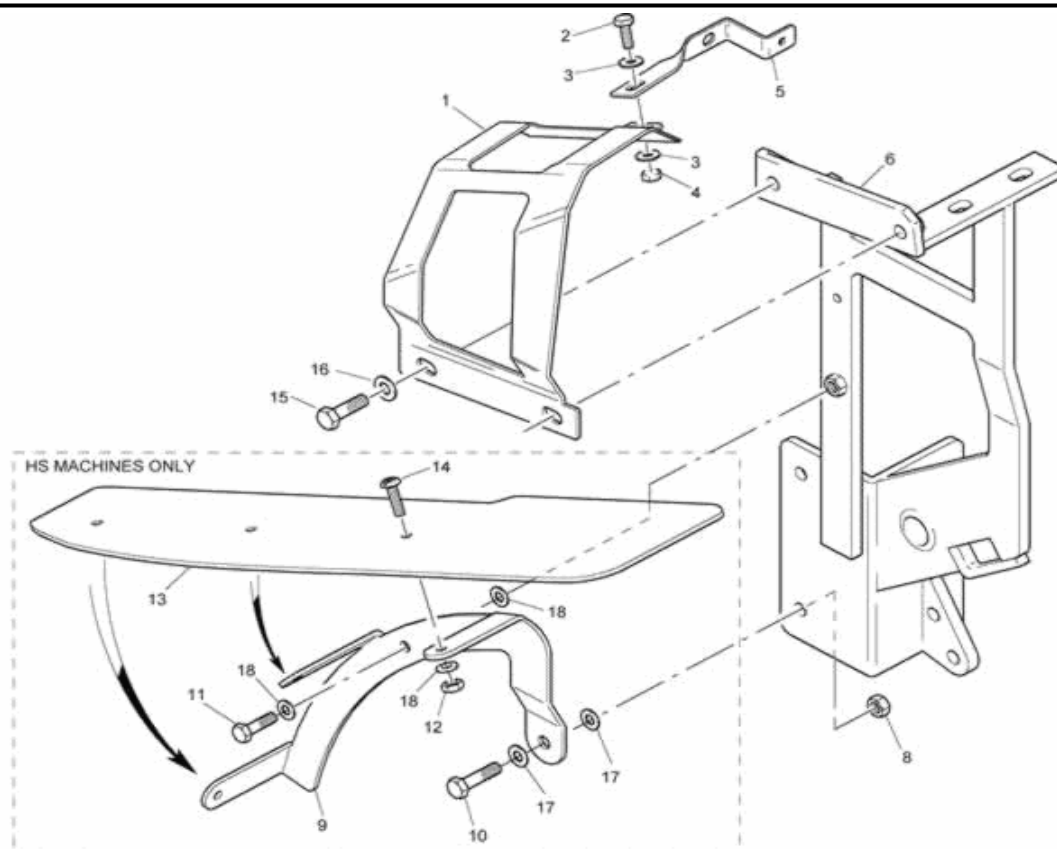


90	PD147 - Fuel Pipe, pump to filter	1
91	PD149 - Gasket, for Fuel Lift Pump	1
94	PD159 - Gasket (for Water Pump PD015)	1
95	PD160 - Gasket with Flange	1
97	PD162 - Ignition Switch (Kubota)	1
98	PD163 - Ignition Key (for Kubota switch)	1
99	PD164 - Connector set for rectifier	1
100	PD169 - Strainer - Air Cleaner Intake	1
101	PD170 - Air Filter Assembly	1
102	PD172 - Overflow pipe	1
103	PD173 - Washer - injector overflow	1
105	PD175 - Kubota Gasket Kit - Bottom	1
106	PD176 - Sealing O- Ring - Air Cleaner	1
108	PD178 - Temperature Sender Unit	1
109	PD179 - Air Cleaner End Cap	1
110	PD184 - Air Cleaner Cap (Inner)	1
112	PD187 - Water pipe	1
113	PD189 - Fan - Engine Cooling (300mm diameter)	1
114	PD193 - Sump (oil pan)	1
116	PD228 - Strainer - Air Cleaner Intake	1
117	PD223 - Pulley - Large, 114 dia fan drive	1
118	PD244 - Fan Belt (CIN 87+ only)	1

# Air Filter Bracket

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS063-10** Revision:

AS063-10

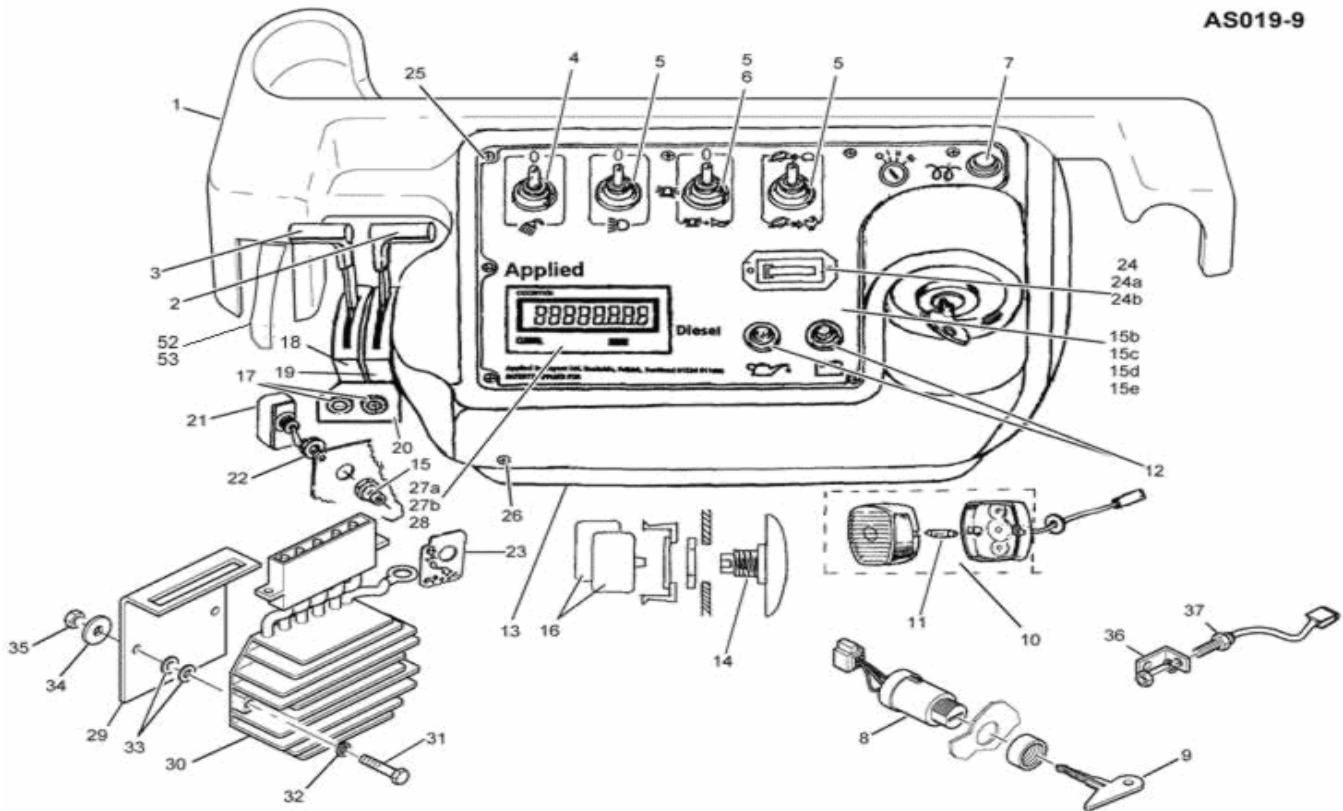


<b>1</b>	CB660 - Support Bracket	1
<b>2</b>	GT135 - M6 x 16 Hex Screw	1
<b>3</b>	GW031 - Washer M6 Form C	2
<b>4</b>	GN011 - M6 Locknut - Nylon	1
<b>5</b>	CB662 - Bracket, diesel tank/cover lock	1
<b>6</b>	CB624 - Bracket for Air Filter	1
<b>8</b>	GN004 - M8 Locknut - Nylon	1
<b>9</b>	CB657 - Bracket for Mudflap Mounting	1
<b>10</b>	GT049 - M8 x 25 Hex Screw	1
<b>11</b>	GT204 - M6 x 10 sockethead screw	1
<b>12</b>	GN011 - M6 Locknut - Nylon	3
<b>13</b>	MA553 - Mudguard	1
<b>14</b>	GT050 - M8 x 16 Button Head Screw	3
<b>14a</b>	GW031 - Washer M6 Form C	3
<b>15</b>	GT028 - M8 x 20 Setscrew	2
<b>18</b>	GW031 - Washer M6 Form C	5

# Control Panel (to CIN 116)

Model: **414S2D**  
 From CIN: **54** To CIN: **116**  
 Drawing: **AS019-9** Revision:

AS019-9



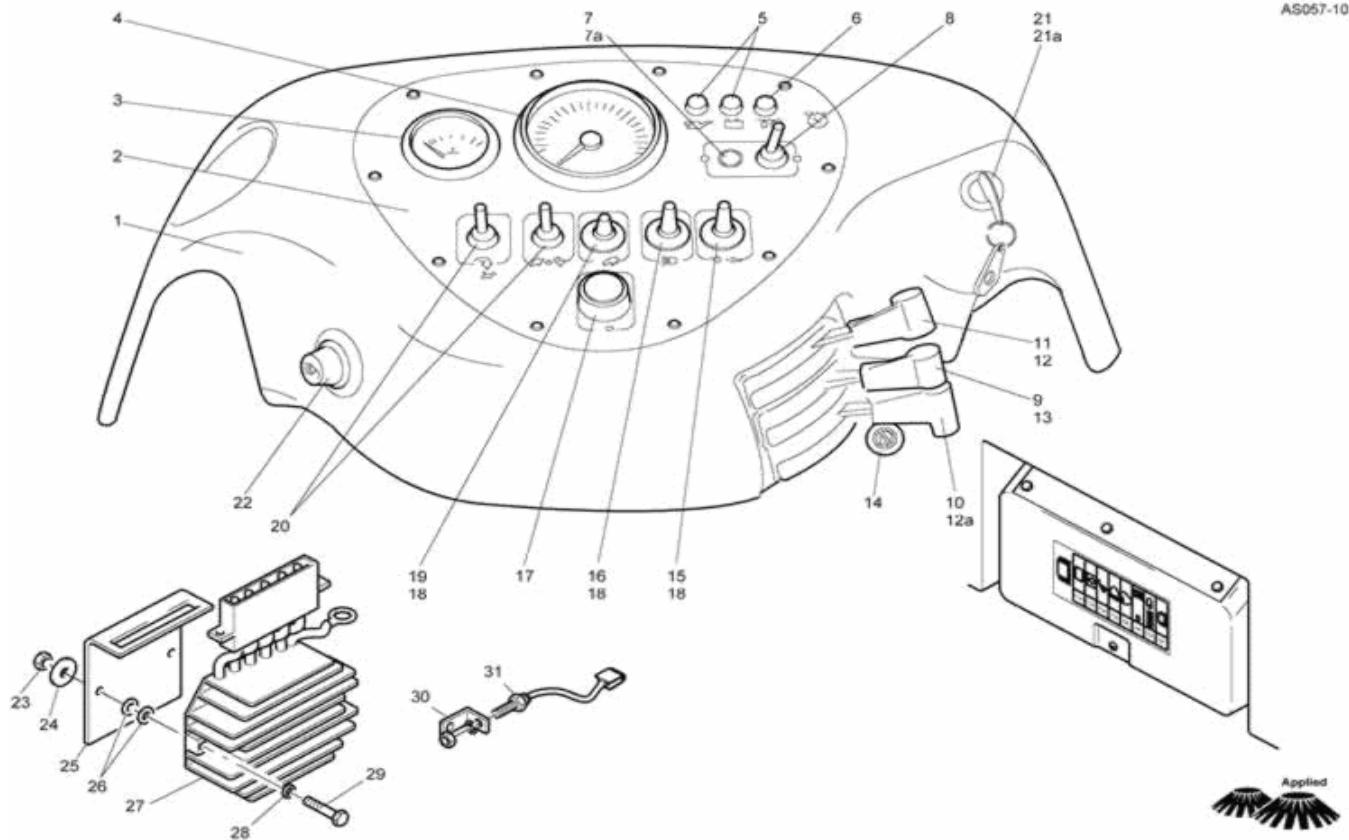
For all 414S2D and 414RS models up to the end of CIN 116. For newer models see Control Panel drawing AS057.

1	ES114 - Control Panel moulding (from CIN 105)	1	21	ES071 - Switch - for DEA/CSA	1
2	BB180 - Spade Knob, Black	1	22	ES096 - Nut (for DEA Switch)	1
3	BB181 - Spade Knob, Red	1	24	EH009 - Hourmeter (414 to CIN 116)	1
4	ES001 - Switch - Single Pole - Two Position	1	24a	EH014 - Perspex Window for hourmeter	1
5	ES001 - Switch - Single Pole - Two Position	1	24b	HF070 - O Ring	2
6	ES009 - Switch - Double Pole - Three Position	1	25	GT106 - #8 x 1/2 in. Phillips Sheet Metal Scr	7
7	ES017 - Warning Light - Amber	1	26	GT119 - 8 x 3/4 self-tapping screw	7
8	PD257 - Ignition Switch (Cobo)	1	27	EH010 - Odometer (calibrated in miles)	1
9	PD258 - Ignition Key for Cobo ignition switch	1	27a	EH011 - Odometer (calibrated in kilometres)	1
9a	PD233 - Ignition Key (for Durite Ignition Swi	1	27b	EH012 - Sensor for odometer	1
9b	PD163 - Ignition Key (for Kubota switch)	1	29	ES109 - Heat Shield	1
10	ES050 - Rear Light	2	30	PD245 - Rectifier / Regulator - Heavy Duty	1
11	ES053 - Bulb - festoon type - 12V 5W	2	36	ES125 - Bracket for diode	1
12	ES018 - Warning Light - Red	3	37	ES124 - Diode - Voltage Suppressor	1
13	ES138 - Control panel lower tray (from CIN 10	1			
14	ES073 - Safety Pushbutton (Reverse Stop)	1			
15b	EW087 - Facia Panel and wiring loom	1			
16	ES074 - Contact block - push button	2			
18	BB057 - Throttle Cable (414 Models to CIN116)	1			
19	BB082 - Brush Control Cable (414 to CIN 116)	1			
20	CB150 - Bracket for water valves	1			

# Control Panel (from CIN 117)

Model: **414S2D**  
 From CIN: **117** To CIN: **999**  
 Drawing: **AS057-10** Revision:

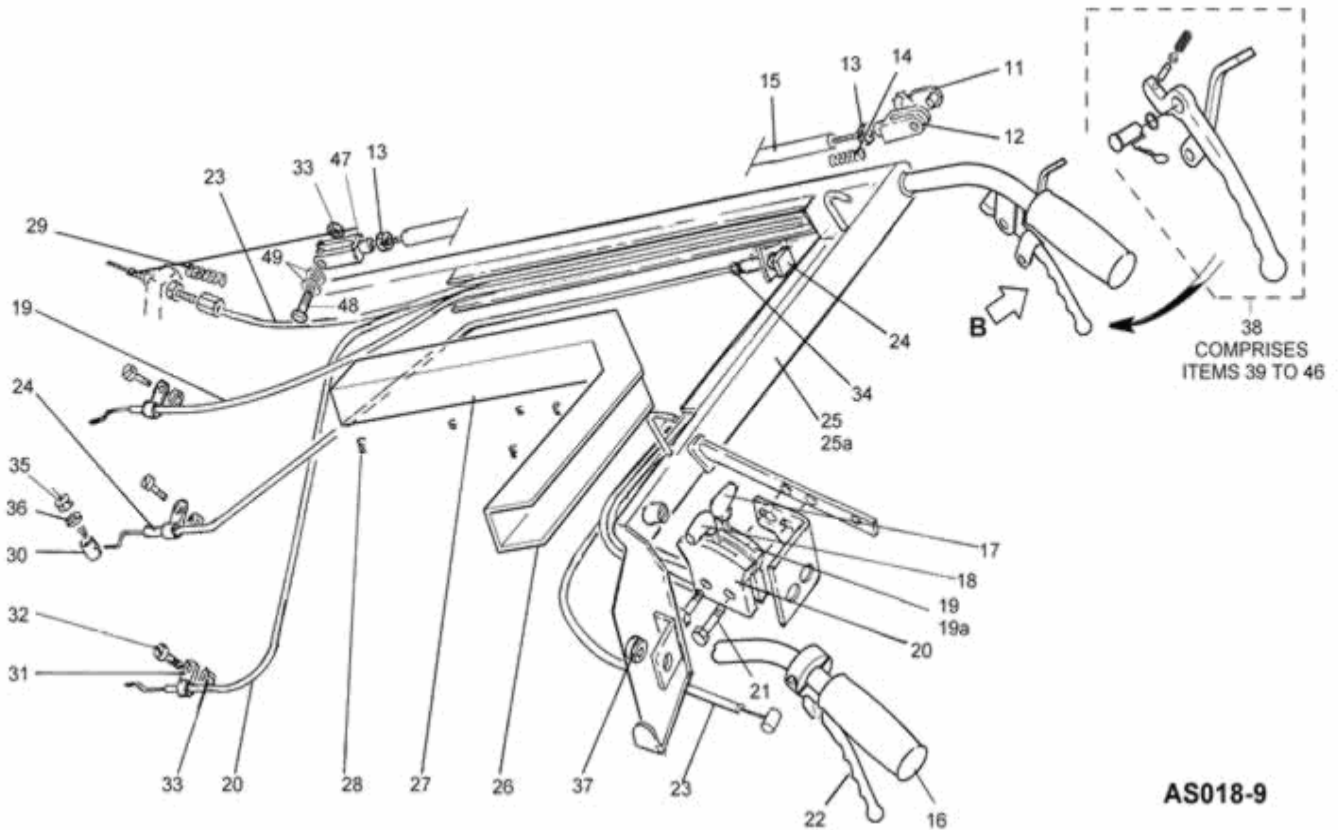
AS057-10



<b>1</b>	CP151 - Control Panel moulding assy.	1	<b>16</b>	ES153 - Switch - lights	1
<b>2</b>	EW135 - Facia Panel - 424HS	1	<b>17</b>	ES156 - Horn button	1
<b>2a</b>	EW136 - Facia Panel - 424TR & 414 machines	1	<b>18</b>	ES002 - Cover for switches	3
<b>2b</b>	EW137 - Facia Panel Assy, HS DEA	1	<b>19</b>	ES152 - Switch - front head lift/lower	1
<b>2c</b>	EW138 - Facia Panel Assy, TR DEA	1	<b>20</b>	ES159 - Switch - high/lo speed or DEA (424 Se	2
<b>2d</b>	EW139 - Facia Panel Assy, TR + Cab	1	<b>21</b>	PD257 - Ignition Switch (Cobo)	1
<b>2e</b>	EW140 - Facia Panel Assy, TR DEA + Cab	1	<b>21a</b>	PD258 - Ignition Key for Cobo ignition switch	1
<b>2f</b>	EW151 - Facia Panel Assy, - Std. 414S2D/RS	1	<b>22</b>	ES158 - Water Controller	1
<b>3</b>	EH015 - Temperature Gauge	1	<b>25</b>	ES109 - Heat Shield	1
<b>4</b>	EH017 - Tachometer with hourmeter (424HS)	1	<b>27</b>	PD245 - Rectifier / Regulator - Heavy Duty	1
<b>5</b>	ES018 - Warning Light - Red	2	<b>28</b>	GW029 - Washer M6 brass	2
<b>6</b>	ES017 - Warning Light - Amber	1	<b>29</b>	GT151 - M6 x 35 Brass Setscrew	2
<b>7</b>	ES192 - Warning Light (Green)	1	<b>30</b>	ES125 - Bracket for diode	1
<b>8</b>	ES154 - Indicator Switch	1	<b>31</b>	ES124 - Diode - Voltage Suppressor	1
<b>9</b>	BB111 - Throttle Cable (414 from CIN117 and a	1			
<b>10</b>	BB110 - Brush Control Cable (414 from CIN 117	1			
<b>11</b>	BB109 - Flap Cable (414 from CIN117 and all 4	1			
<b>12</b>	BB180 - Spade Knob, Black	1			
<b>12a</b>	BB180 - Spade Knob, Black	1			
<b>13</b>	BB181 - Spade Knob, Red	1			
<b>14</b>	BB058 - Cable - Manual Stop	1			
<b>15</b>	ES009 - Switch - Double Pole - Three Position	1			

# Handles & Controls (to CIN 116)

Model: **414S2D**  
 From CIN: **54** To CIN: **116**  
 Drawing: **AS018-9** Revision:



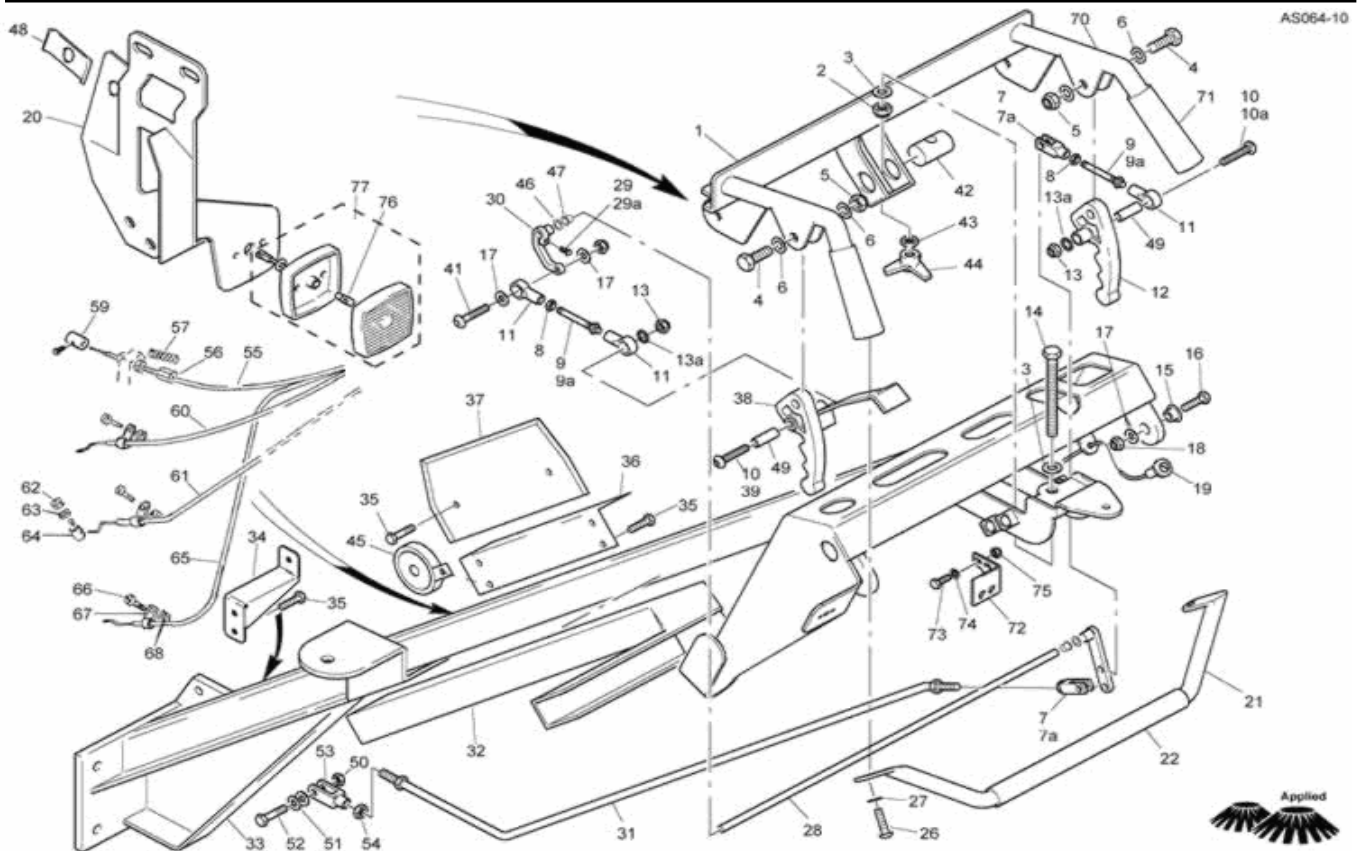
Applies to 414RS and 414S2D models up to the end of CIN116. For later models please refer to drawing AS064.

11	BB022 - Clevis Pin	1	32	GT020 - M6 x 16 Sockethead capscrew	1
12	BB006 - Clevis yoke	1	33	GN011 - M6 Locknut - Nylon	2
13	GN027 - M8 Hex Jam Nut (Half-height)	2	34	BB048 - Nut for stop cable	1
14	GG005 - Spring - Drive Lever Return	1	35	GN006 - M5 Locknut - Nylon	1
15	BB096 - Drive Rod (414 CIN 106 to CIN 116)	1	38	BB106 - Drive Lever Assembly (414 CIN 106 to	1
15a	BB040 - Drive Rod (to CIN 105)	1	40	GB043 - Bush DU	1
16	GM128 - Handle grip	2	41	BB094 - Clevis Pin	1
17	BB180 - Spade Knob, Black	1	47	BB093 - Connector	1
18	BB181 - Spade Knob, Red	1			
19	BB082 - Brush Control Cable (414 to CIN 116)	1			
20	BB057 - Throttle Cable (414 Models to CIN116)	1			
21	GT128 - M6 x 70 Hex Screw	2			
22	BB041 - Flap Lever (414 to CIN 116)	1			
23	BB068 - Flap Cable (414 to CIN 116)	1			
24	BB058 - Cable - Manual Stop	1			
25	CB503 - Handle assembly, RS	1			
26	CB463 - Cable Cover - one piece	1			
28	GT143 - Poppet Fastener	2			
29	BB029 - Spring (Flap Cable)	1			
30	BB049 - Nipple - stop control cable	1			
31	BB045 - Bracket for cable (keyhole shape)	3			



# Handle & Controls (from CIN 117)

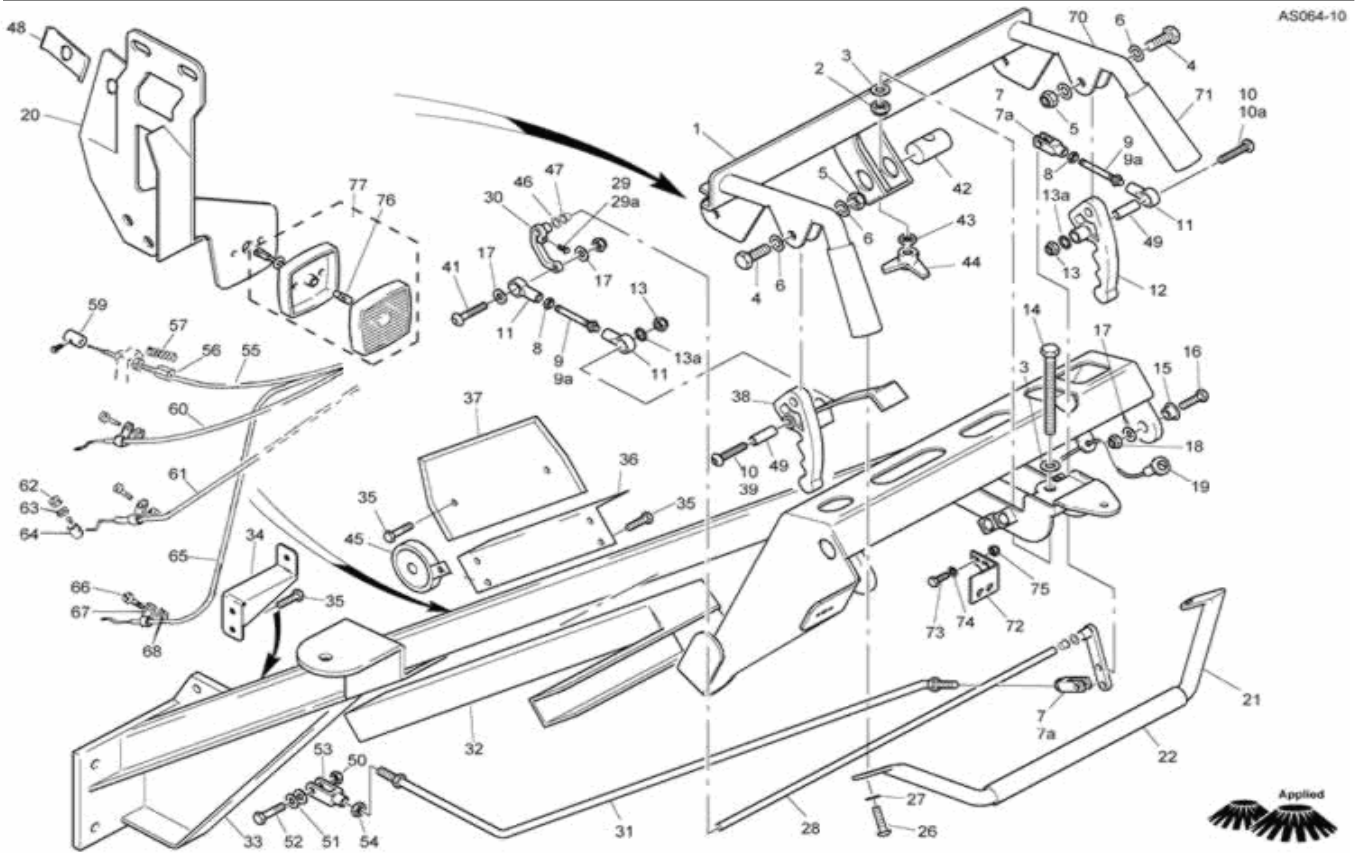
Model: **414S2D**  
 From CIN: **117** To CIN: **999**  
 Drawing: **AS064-10** Revision:



1	CB719 - Adjustable handlebars, HS/TR	1	20	CB626 - Bracket, side panel/rear light	1
2	GN020 - M12 Locknut - Nylon	1	21	CB526 - Crossbar, adjuster handle	1
3	GW066 - Nylon washer 24 o/d x 13 i/d x 2.5	2	22	GM211 - Crossbar Foam	1
4	GT092 - M8 x 40 Hex Screw	2	26	GW023 - M10 Split Lockwasher	2
5	GN043 - M8 locknut - nylon - stainless steel	2	27	GT086 - M10 x 25 Hex Screw	2
6	GW032 - M8 Flat Washer	4	28	CB614 - Connector Rod	1
7	BB006 - Clevis yoke	2	29	GT027 - M6 x 20 Hex Screw	1
7a	BB022 - Clevis Pin	2	30	CB573 - Connector, drive lever	1
8	GN021 - M8 Hex Full Nut	2	31	MA586 - Drive Linkage	1
9	CB652 - Connector Rod	2	32	CB580 - Cover, cable trough	1
9a	CB773 - Connector Rod, S2D/RS	2	33	CB634 - Support, main handlebar	1
10	GT092 - M8 x 40 Hex Screw	2	34	CB681 - Bracket, side panel - lower	1
11	BB108 - Rod End	3	35	GT203 - M6 x 12 Hex Flanged Sheet Metal Screw	0
12	CB668 - Drive Lever - Right Hand	1	36	CB670 - Bracket Mounting	1
13	GN027 - M8 Hex Jam Nut (Half-height)	2	37	CB672 - Guard, ancillary block	1
13a	GW032 - M8 Flat Washer	2	38	CB728 - Drive Lever - Left Hand	1
14	CB609 - Adjuster Screw	1	39	GT262 - M8 x 55 Button Head Screw	1
15	GB056 - DU Bush	2	41	GT097 - M8 x 35 button head screw st.st.	1
16	GT165 - M8 x 60 Hex Screw	1	42	CB648 - Pivot Pin	1
17	GW041 - M8 Washer Form A	1	44	GG174 - Knob - Adjustable Handle	1
18	GN027 - M8 Hex Jam Nut (Half-height)	1	45	ES157 - Horn	1
19	BB058 - Cable - Manual Stop	1	46	HC122 - Scraper Seal	2

# Handle & Controls (from CIN 117)

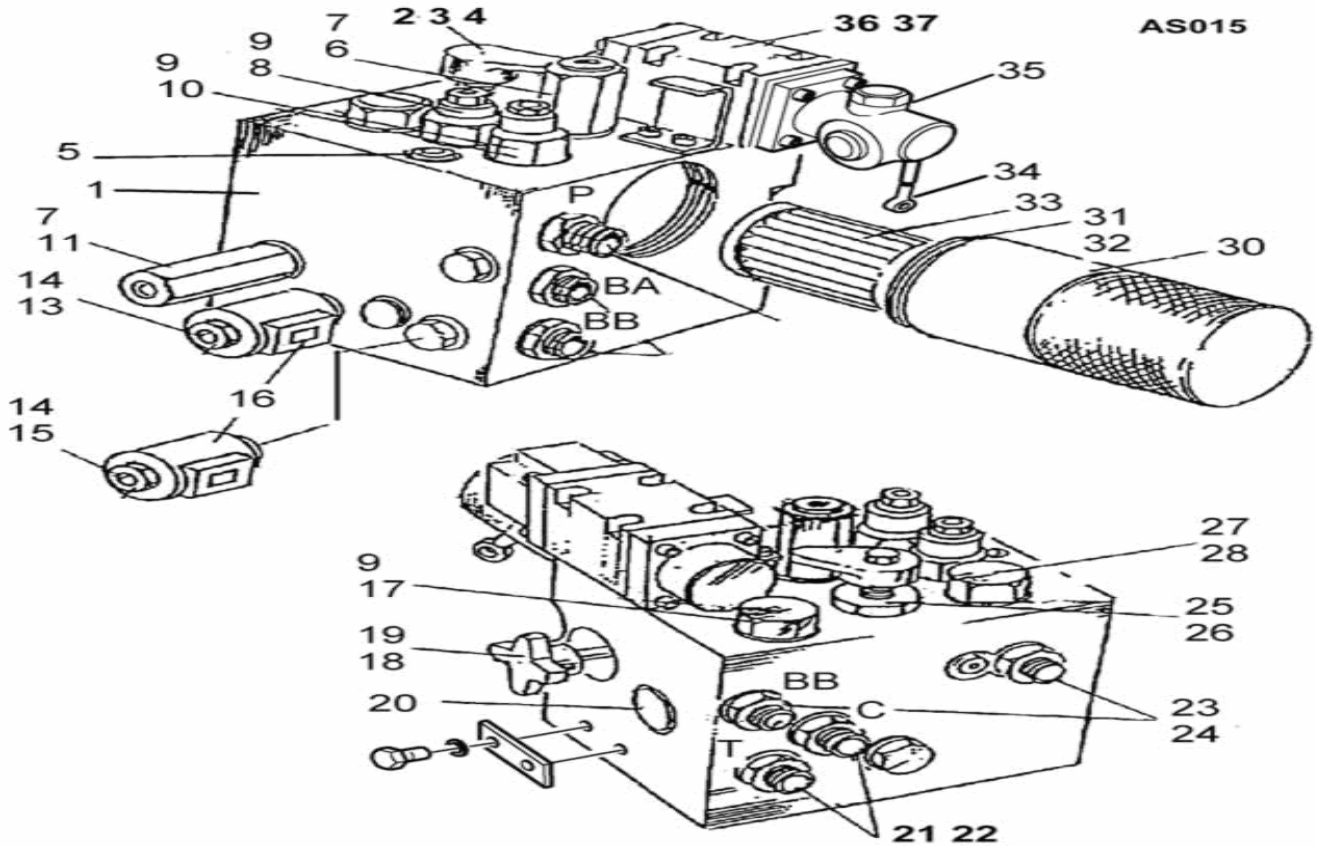
Model: **414S2D**  
 From CIN: **117** To CIN: **999**  
 Drawing: **AS064-10** Revision:



48	GG147 - Slip on receptacle	1	77	ES050 - Rear Light	2
49	CB710 - Bushing, handles	2			
53	BB093 - Connector	1			
55	BB109 - Flap Cable (414 from CIN117 and all 4	1			
56	GG179 - Adjuster	1			
57	BB029 - Spring (Flap Cable)	1			
59	NN107 - Cable clamp assembly	1			
60	BB110 - Brush Control Cable (414 from CIN 117	1			
61	BB058 - Cable - Manual Stop	1			
62	GN006 - M5 Locknut - Nylon	1			
63	GW008 - M5 Flat Washer	1			
64	BB049 - Nipple - stop control cable	1			
65	BB111 - Throttle Cable (414 from CIN117 and a	1			
66	GT050 - M8 x 16 Button Head Screw	3			
67	BB045 - Bracket for cable (keyhole shape)	3			
68	GN011 - M6 Locknut - Nylon	3			
70	CB767 - Handlebar, fixed S2D/RS	1			
71	GM128 - Handle grip	2			
72	CB150 - Bracket for water valves	1			
73	GT159 - Screw, M6 x 16	1			
74	GW031 - Washer M6 Form C	1			
75	GN011 - M6 Locknut - Nylon	1			
76	ES053 - Bulb - festoon type - 12V 5W	2			

# Hydraulic Control Block (Series 2 to CIN107)

Model: 414S2D  
 From CIN: 54 To CIN: 107  
 Drawing: AS015 Revision:

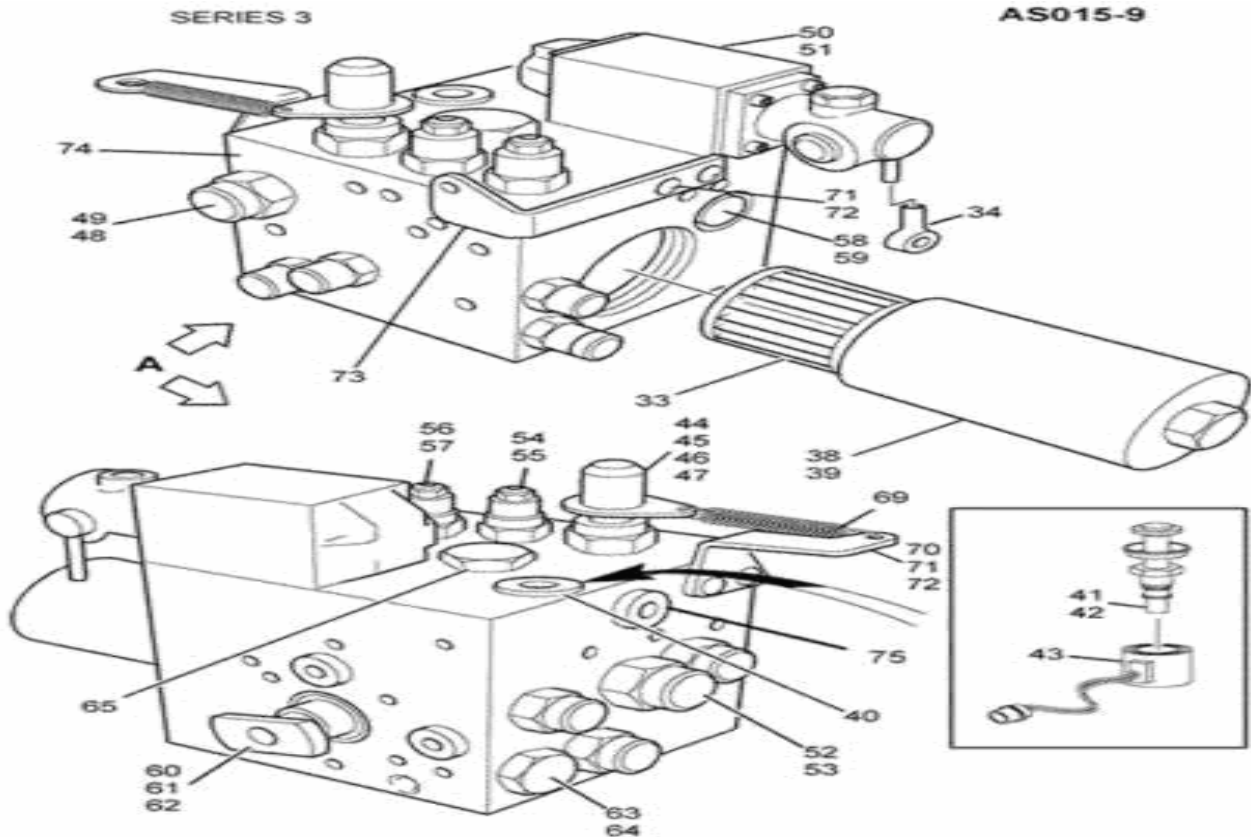


Series 2 hydraulics were fitted to 414 Green Machines up to CIN 107. For later machines please Series 3 hydraulics.

1	HC061 - Hydraulic Block Assy. (Series 2)	1	34	BB007 - Rose Bearing	1
2	CB142 - Lever - Brush Speed (Series 2 Hydraul	1	35	HV020 - Spool Valve - Closed center (Series 2	1
3	HF045 - Cone for brush control (Series 2 hydr	1	36	HV020 - Spool Valve - Closed center (Series 2	1
4	GG091 - Torsion Spring - brush control	1			
5	HC022 - Shuttle Valve (Series 2)	1			
6	HC013 - Main Pressure Relief Valve (Series 2)	1			
7	HC041 - Seal Kit- Pressure relief valve (Seri	1			
8	HC016 - Forward Brake Valve (Series 2)	1			
10	HC035 - Reverse Brake Valve (Series 2)	1			
11	HC019 - Reverse Pressure Relief Valve (Series	1			
14	ES043 - Solenoid Valve (Series 2)	2			
16	HC023 - Solenoid Coil (Series 2)	2			
18	HC017 - Needle Valve (Series 2)	1			
20	HC020 - Check Valve (Series 2)	1			
21	HF006 - Hydraulic Stud Coupling - 3/8 Male to	2			
23	HF046 - Hydraulic Stud Coupling - 1/4 Male to	2			
25	HC064 - Rotary Valve - Brush Speed (Series 2)	1			
27	HC014 - Flow Control Valve (Series 2)	1			
30	HC062 - Filter Bowl	1			
31	HC097 - Seal Kit	1			
33	HC058 - Filter Element	1			

# Hydraulic Control Block (Series 3 from CIN 108)

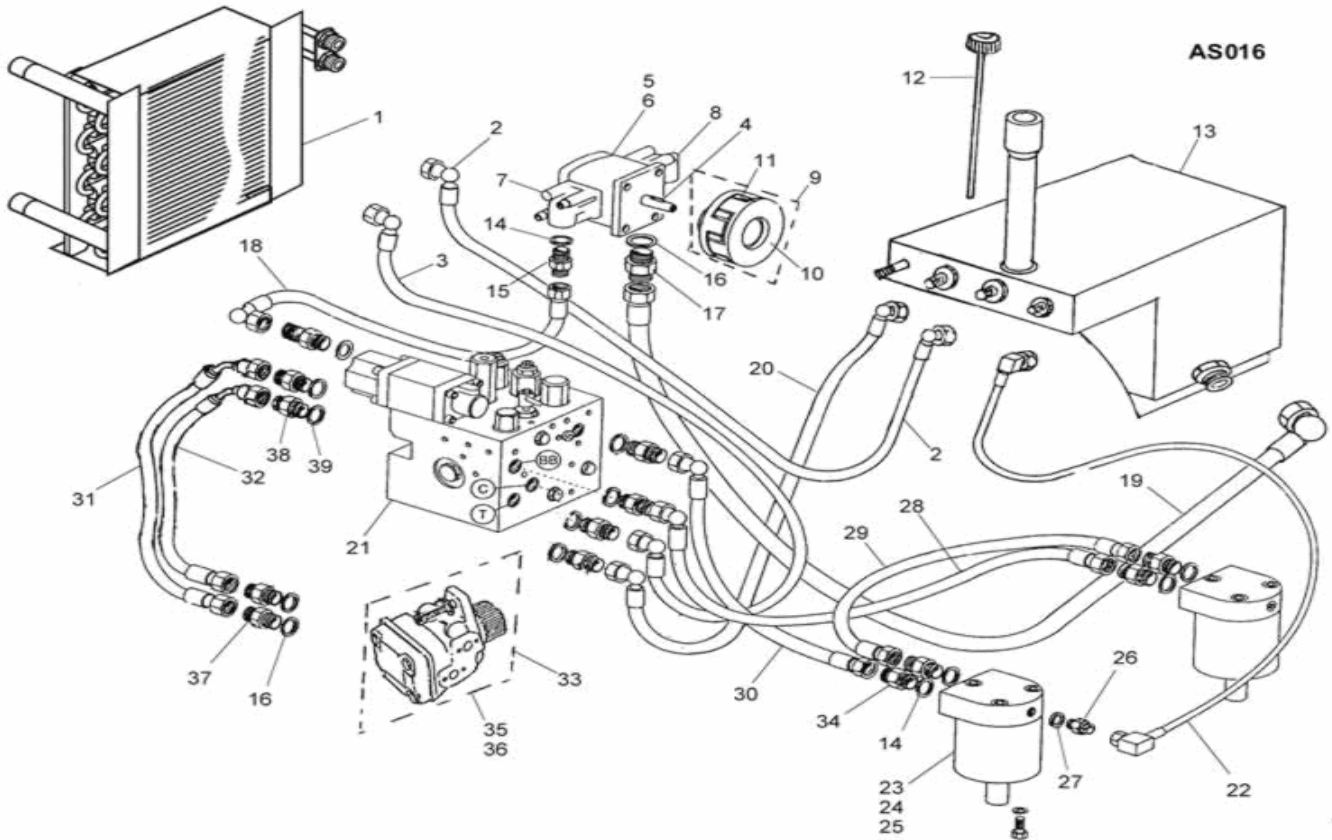
Model: 414S2D  
 From CIN: 108 To CIN: 999  
 Drawing: AS015-9 Revision:



33	HC058 - Filter Element	1	58	HV062 - Valve, Check	1
34	BB007 - Rose Bearing	1	59	HV045 - Seal Kit	1
38	HC062 - Filter Bowl	1	60	HV049 - Valve, Free-wheel Shutoff	1
39	HC097 - Seal Kit	1	61	HV051 - Seal Kit	1
40	HF071 - Plug - DEA Cavity	1	62	HV050 - Knob for HV049	1
41	HV027 - Solenoid Valve with coil - DEA	1	63	HV044 - Valve, Oil Cooler Bypass Check	1
42	HV030 - Seal Kit	1	64	HV045 - Seal Kit	1
43	HV029 - Coil for HV027	1	65	HF074 - Plug - Reverse Override	1
44	HV035 - Valve Rotary, brush speed	1	66	HV046 - Solenoid Valve - Reverse Override	1
45	HV037 - Orifice Disc	1	67	HV045 - Seal Kit	1
46	HV036 - Seal Kit	1	68	HV048 - Coil for solenoid valve	1
47	HV038 - Lever Arm Kit for HV035	1	69	GG160 - Spring	1
48	HV039 - Valve, priority flow	1	70	CB454 - Spring Anchor Bracket	1
49	HV040 - Seal Kit for HV039	1	71	GT075 - M5 x 12 Hex Screw	1
50	HV056 - Spool Valve - Open Center (Series 3)	1	72	GW008 - M5 Flat Washer	1
51	HC069 - Seal Kit	1	73	CB450 - Bracket, brush cable	1
52	HV060 - Valve, Priority Flow Control	1	74	HC095 - Hyd. Manifold assy, w/o rexroth	1
53	HV061 - Seal Kit for HV060	1			
54	HV042 - Valve, Reverse Counterbalance	1			
55	HV043 - Seal Kit	1			
56	HV041 - Valve, Forward Counterbalance	1			
57	HV043 - Seal Kit	1			

# Hydraulic System (Series 2 to CIN 107)

Model: **414S2D**  
 From CIN: **54** To CIN: **107**  
 Drawing: **AS016** Revision:



Series 2 hydraulics were fitted to 414 Green Machines up to CIN 107. For later machines please Series 3 hydraulics.

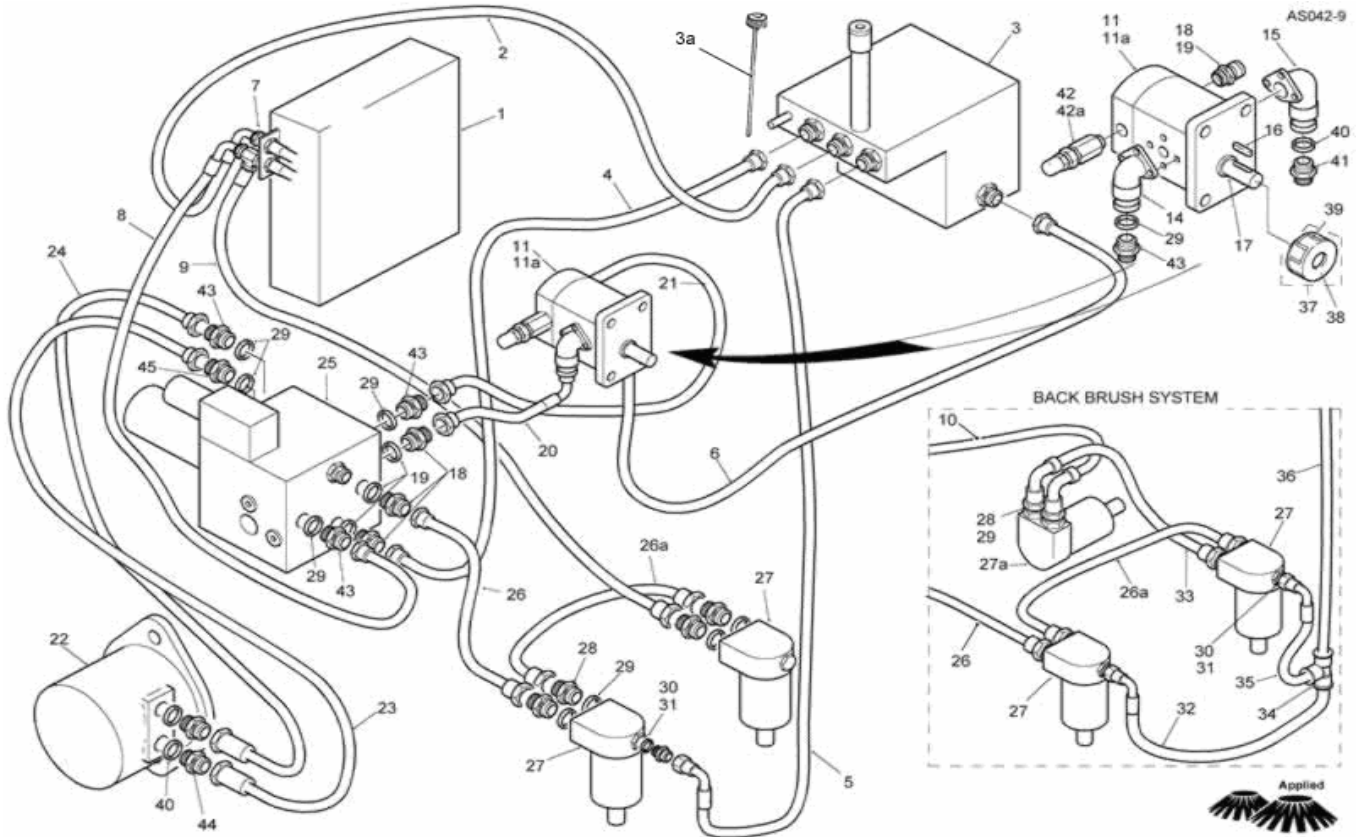
1	HC054 - Hydraulic Oil Cooler (Standalone)	1	26	HF030 - Hydraulic Stud Coupling - 1/8 Male to	1
2	HJ045 - Hydraulic Hose - oil cooler to tank	1	27	HF016 - Hydraulic Bonded Seal - 1/8 BSP (9mm)	1
3	HJ055 - Hydraulic Hose - port C to cooler	1	28	HJ048 - Hydraulic Hose - brush motor left to	1
4	HM017 - Key for Hydraulic Pump	1	29	HJ046 - Hydraulic Hose - brush motor right to	1
5	HP001 - Hydraulic Pump (Series 2)	1	30	HJ047 - Hydraulic Hose - port BA to right bru	1
7	HP006 - Elbow for Pump - 3/8 BSP (Series 2)	1	31	HJ071 - Hydraulic Hose - port MA to drive mot	1
8	HP007 - Elbow for Pump - 1/2 BSP (Series 2)	1	32	HJ072 - Hydraulic Hose - port MB to drive mot	1
9	TC001 - Drive Coupling	1	33	HM019 - Hydraulic Drive Motor - 414S2D, 414RS	1
11	TC008 - Plastic Gear for Drive Coupling	1	37	HF017 - Hydraulic Adaptor Coupling - 1/2 Male	2
12	HT011 - Hydraulic Filler Cap and Dipstick	1	38	HF006 - Hydraulic Stud Coupling - 3/8 Male to	2
13	HT020 - Hydraulic Tank RS/S2D/TR	1	39	HF010 - Hydraulic Bonded Seal - 3/8 BSP (16mm)	2
14	HF006 - Hydraulic Stud Coupling - 3/8 Male to	8			
15	HF006 - Hydraulic Stud Coupling - 3/8 Male to	2			
16	HF011 - Hydraulic Bonded Seal - 1/2 BSP (20mm)	1			
17	HF036 - Hydraulic Adaptor Coupling - 3/4 Male	1			
18	HJ031 - Hydraulic Hose - pump to manifold blo	1			
19	HJ043 - Hydraulic Hose - hydraulic tank to pu	1			
20	HJ044 - Hydraulic Hose - port T to tank	1			
21	HC061 - Hydraulic Block Assy. (Series 2)	1			
22	HJ042 - Hydraulic Hose - bleed	1			
23	HM005 - Hydraulic Motor - Brush Drive	2			

# Hydraulic System (Series 3 from CIN 108)

Model: 414S2D

From CIN: 108 To CIN: 999

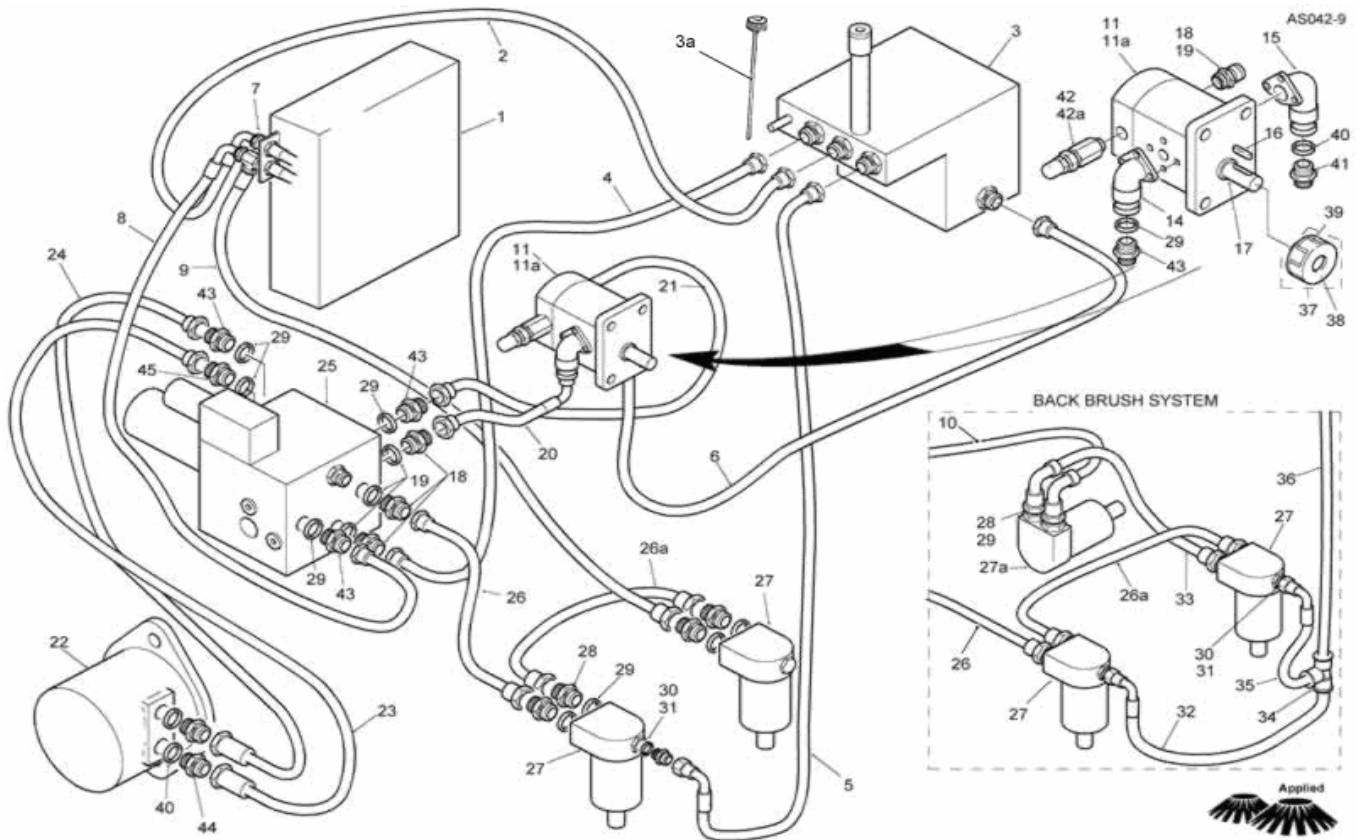
Drawing: AS042-9a Revision:



2	HJ105 - Hydraulic Hose	1	25	HC095 - Hyd. Manifold assy, w/o rexroth	1
3	HT020 - Hydraulic Tank RS/S2D/TR	1	26	HJ047 - Hydraulic Hose - port BA to right bru	2
3a	HT011 - Hydraulic Filler Cap and Dipstick	1	26a	HJ046 - Hydraulic Hose - brush motor right to	1
4	HJ044 - Hydraulic Hose - port T to tank	1	27	HM005 - Hydraulic Motor - Brush Drive	2
5	HJ042 - Hydraulic Hose - bleed	1	27a	HM005 - Hydraulic Motor - Brush Drive	1
6	HJ043 - Hydraulic Hose - hydraulic tank to pu	1	28	HF042 - Hydraulic Adaptor Coupling - 3/8 Male	4
7	HF049 - Coupling 3/8	1	29	HF010 - Hydraulic Bonded Seal - 3/8 BSP (16mm)	0
8	HJ105 - Hydraulic Hose	1	30	HF030 - Hydraulic Stud Coupling - 1/8 Male to	1
9	HJ130 - Hose Hyd. oil cooler /lh brush motor	1	31	HF016 - Hydraulic Bonded Seal - 1/8 BSP (9mm)	1
10	HJ131 - Hose Hyd, oilcooler/ b/brush motor	1	32	HJ110 - RH Brush Motor to Tee	2
11	HP012 - Hydraulic Pump (Series 3)	1	33	HJ100 - Hose Assy, LH Brush to Back Brush Mot	1
11a	HP013 - Seal Kit for HP012	1	34	HF063 - Coupling Tee, 1/4 BSP M/M/M	1
14	HP011 - Elbow for Pump - 3/8 BSP (Series 3)	1	35	HJ111 - Hose Hyd, Bleed T to RH	1
15	HP010 - Elbow for Pump - 1/2 BSP (Series 3)	1	36	HJ109 - Hose Assy Bleed Tee to Hyd Tank	1
16	HM017 - Key for Hydraulic Pump	1	37	TC001 - Drive Coupling	1
18	HF046 - Hydraulic Stud Coupling - 1/4 Male to	3	39	TC008 - Plastic Gear for Drive Coupling	1
19	HF044 - Hydraulic Bonded Seal - 1/4 BSP (12mm)	3	40	HF011 - Hydraulic Bonded Seal - 1/2 BSP (20mm)	1
20	HJ123 - Hydraulic Hose	1	41	HF036 - Hydraulic Adaptor Coupling - 3/4 Male	1
21	HJ126 - Hydraulic Hose	1	42	HV065 - Pressure Relief Valve	1
22	HM019 - Hydraulic Drive Motor - 414S2D, 414RS	1	42a	HV066 - Seal Kit	1
23	HJ124 - Hydraulic Hose	1	43	HF006 - Hydraulic Stud Coupling - 3/8 Male to	1
24	HJ125 - Hydraulic Hose	1	44	HF017 - Hydraulic Adaptor Coupling - 1/2 Male	1

# Hydraulic System (Series 3 from CIN 108)

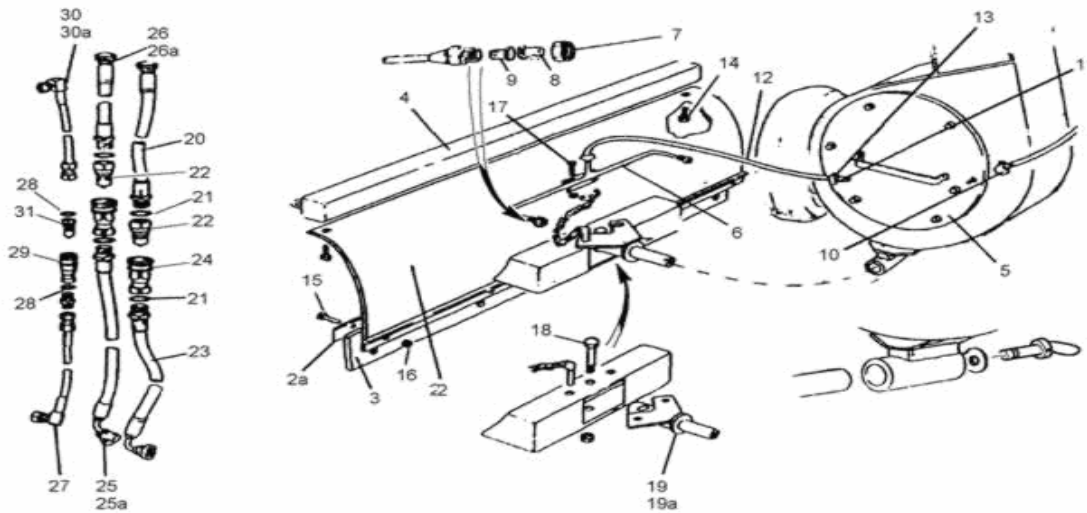
Model: 414S2D  
From CIN: 108 To CIN: 999  
Drawing: AS042-9a Revision:



# Snowplow Option

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS023-9** Revision:

AS023



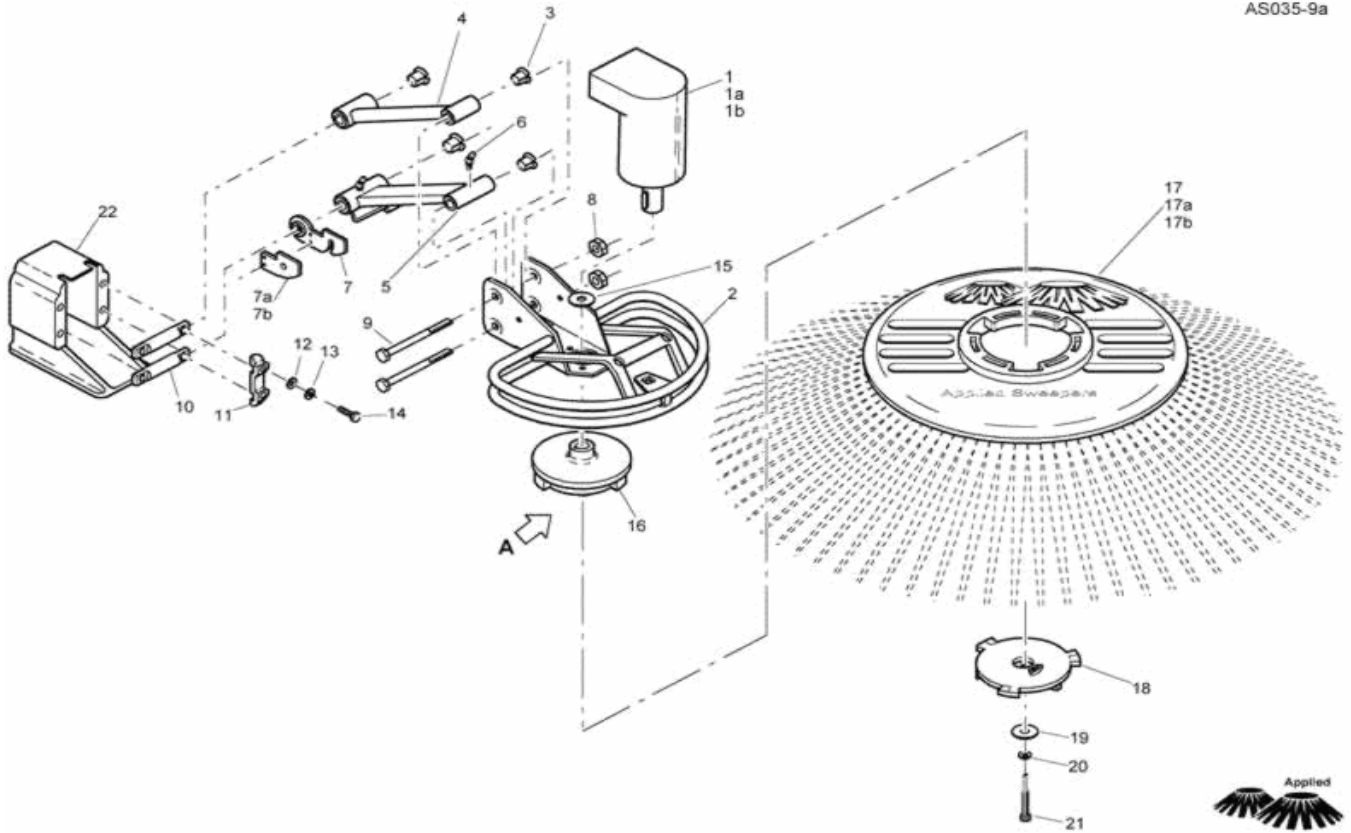
<b>3</b>	AS006 - Rubber blade - snowplough	1	<b>26</b>	HJ049 - Hydraulic Hose - DM1 to snap D	1
<b>4</b>	AS022 - Counterbalance Weight	1	<b>27</b>	HJ054 - Hydraulic Hose - bleed tank to snap	1
<b>5</b>	AS004 - Blanking Plate	1	<b>28</b>	HF044 - Hydraulic Bonded Seal - 1/4 BSP (12mm	1
<b>6</b>	WP071 - Spray Bar - Snowplough	1	<b>29</b>	HF060 - Hydraulic Quick Release Coupling - Fe	1
<b>7</b>	WP016 - Cap Nut	2	<b>30</b>	HJ053 - Hydraulic Hose - bleed to DM1 snap	1
<b>8</b>	WP056 - - Spray Jet - Orange	2	<b>31</b>	HF059 - Hydraulic Quick Release Coupling - Ma	1
<b>9</b>	WP020 - Filter with anti-drip valve	2			
<b>10</b>	WA019 - Hose Fitting	1			
<b>11</b>	WA012 - Water Tap - Quick Release Hose	2			
<b>12</b>	WA004 - Black Water Hose	4			
<b>13</b>	PG008 - O Clip - 1/2 in.	4			
<b>14</b>	GT086 - M10 x 25 Hex Screw	6			
<b>15</b>	GT042 - M8 x 30 Hex Screw	6			
<b>16</b>	GN004 - M8 Locknut - Nylon	6			
<b>17</b>	GT027 - M6 x 20 Hex Screw	1			
<b>19</b>	AS044 - Pivot Pin, one piece nozzle	1			
<b>20</b>	HJ050 - Hydraulic Hose - brush motor A to QR	1			
<b>21</b>	HF010 - Hydraulic Bonded Seal - 3/8 BSP (16mm	1			
<b>22</b>	HF053 - Hydraulic Quick Release Coupling - Ma	1			
<b>23</b>	HJ051 - Hydraulic Hose - Hose DM2 to snap	1			
<b>24</b>	HF054 - Hydraulic Quick-Release Coupling - Fe	1			
<b>25</b>	HJ140 - Hydraulic Hose - cooler T to QR femal	1			



# Brush Assembly

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS035-9a** Revision:

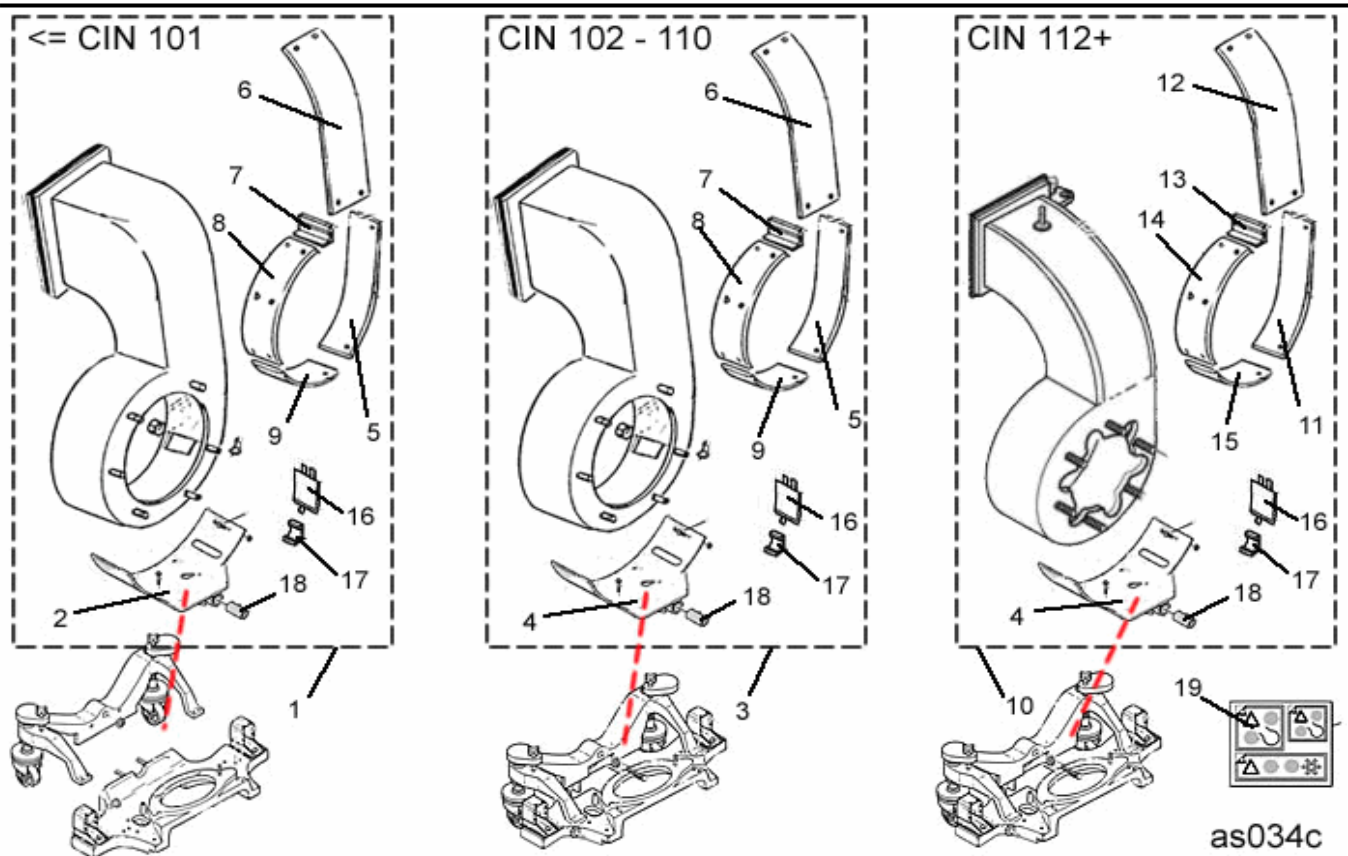
AS035-9a



<b>1</b>	HM005 - Hydraulic Motor - Brush Drive	2
<b>1a</b>	HF058 - Seal Kit for Eaton Brush motor	1
<b>1a</b>	HF056 - Key for Eaton Brush Motor	1
<b>2</b>	NF032 - Bumper for brush arm	2
<b>3</b>	GB033 - Bush Kit	1
<b>4</b>	NF090 - Link Arm - Upper (for side brush)	1
<b>5</b>	NF091 - Link Arm - Lower (for side brush)	1
<b>7</b>	NF062 - Hook for brushes up	2
<b>7a</b>	NF087 - Lock-up hook - left hand	1
<b>7b</b>	NF088 - Lock-up hook - right hand	1
<b>10</b>	NF056 - Pin for brush arm	4
<b>11</b>	NN051 - Cap, Brush Arm Pins	4
<b>15</b>	GW053 - Washer, plastic 34mm (brush motor gua	2
<b>16</b>	NB035 - Drive Hub for quick release brush	2
<b>17</b>	NB046 - Brush - Poly - 400 Series (Quick Rele	2
<b>17a</b>	NB048 - Brush - P.E.T. - 400 Series (Quick Re	2
<b>17b</b>	NB062 - Brush - Poly/wire mix - 400 Series	2
<b>18</b>	NB036 - Lock Cam for quick release brush	2
<b>19</b>	GW062 - Washer 25 o/d x 6.5 i/d x 3mm	2
<b>21</b>	GT240 - M6 x 35 Hex Screw with Adhesive	2
<b>22</b>	NN050 - Front Head Support Casting	2

# Fan Casing ( to CIN 111)

Model: **414S2D**  
 From CIN: **86** To CIN: **112**  
 Drawing: **AS034c-8** Revision:



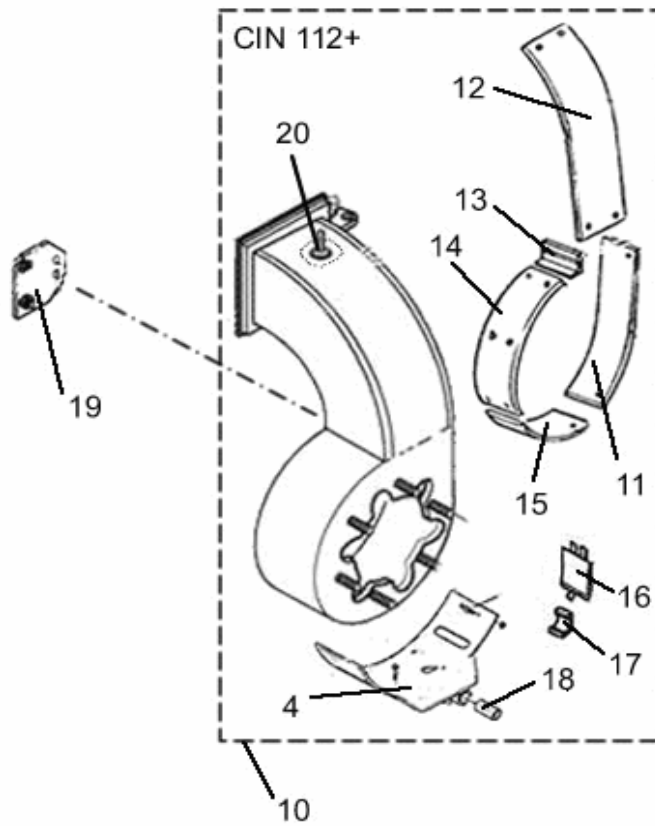
Several major revisions to the Green Machine front nozzle assembly and fan casing have been introduced which together impact replacement parts ordering. The introduction of a one-piece casting for the front suction nozzle (from CIN 102) together with the introduction of a robotically-welded fan casing (from CIN 110 for United Kingdom destination machines through CIN112 for export models) means care should be taken when ordering replacement parts.

Please also take care when ordering wearplates if your machine has had a replacement fan casing fitted. Later style replacement fan casings with welded rather than lock-formed seams can accommodate wider wearplates and so items 11 through 15 should be used.

1	CC211 - Fan Casing (for use with two piece no	1	17	GG097 - Catch Plate	1
2	CC141 - Fishplate (for use with two piece noz	1	18	GB026 - Bush, fishplate	2
3	CC209 - Fan Casing (for use with one piece no	1			
4	CC137 - Fishplate (for use with one piece noz	1			
5	CC048 - Wearplate - Left Side (to CIN 111)	1			
6	CC024 - Wearplate - Trunking Exit (to CIN 111)	1			
7	CC011 - Wearplate - L shaped	1			
8	CC049 - Wearplate - Right Side (to CIN 111)	1			
9	CC019 - Wearplate - Bottom (to CIN 111)	1			
10	CC209 - Fan Casing (for use with one piece no	1			
11	CC125 - Wearplate - Left side	1			
12	CC134 - Wearplate - casing trunking exit	1			
13	CC011 - Wearplate - L shaped	1			
14	CC127 - Wearplate - Right side	1			
15	CC123 - Wearplate - bottom	1			
16	CC061 - Sludge door (one clip)	1			

# Fan Casing ( from CIN 112)

Model: **414S2D**  
From CIN: **110** To CIN: **999**  
Drawing: **AS071** Revision:



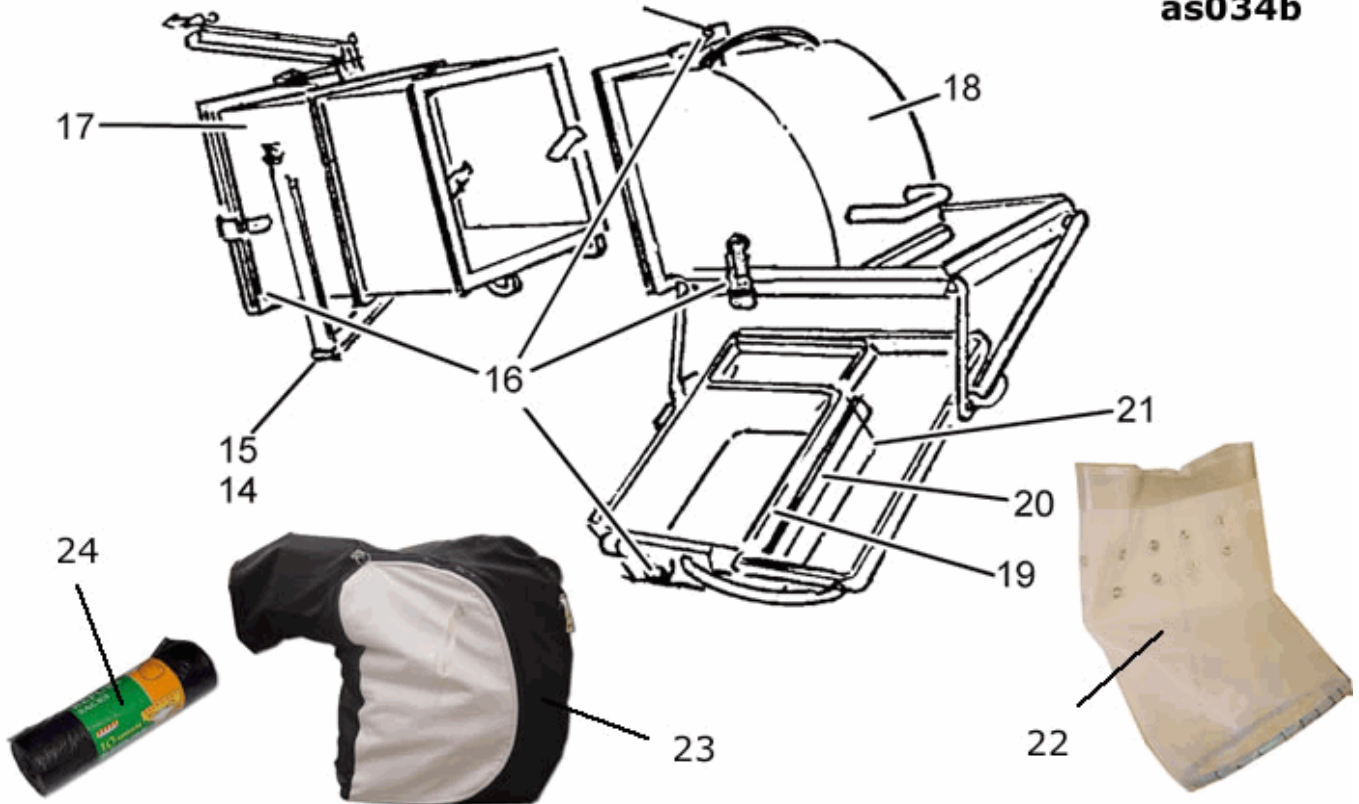
Applies to machines from CIN112 or machines from CIN102 that have had a replacement fan casing. For previous machines please refer to drawing AS034c.

10	CC209 - Fan Casing (for use with one piece no	1
11	CC125 - Wearplate - Left side	1
12	CC134 - Wearplate - casing trunking exit	1
13	CC011 - Wearplate - L shaped	1
14	CC127 - Wearplate - Right side	1
15	CC123 - Wearplate - bottom	1
16	CC061 - Sludge door (one clip)	1
17	GG097 - Catch Plate	1
18	GB026 - Bush, fishplate	2
19	AW088 - Boom mounting bracket	1

# Filter Bag & Trunking (non swing-out bag system)

Model: 414S2D  
From CIN: 54 To CIN: 85  
Drawing: AS034b-8 Revision:

as034b



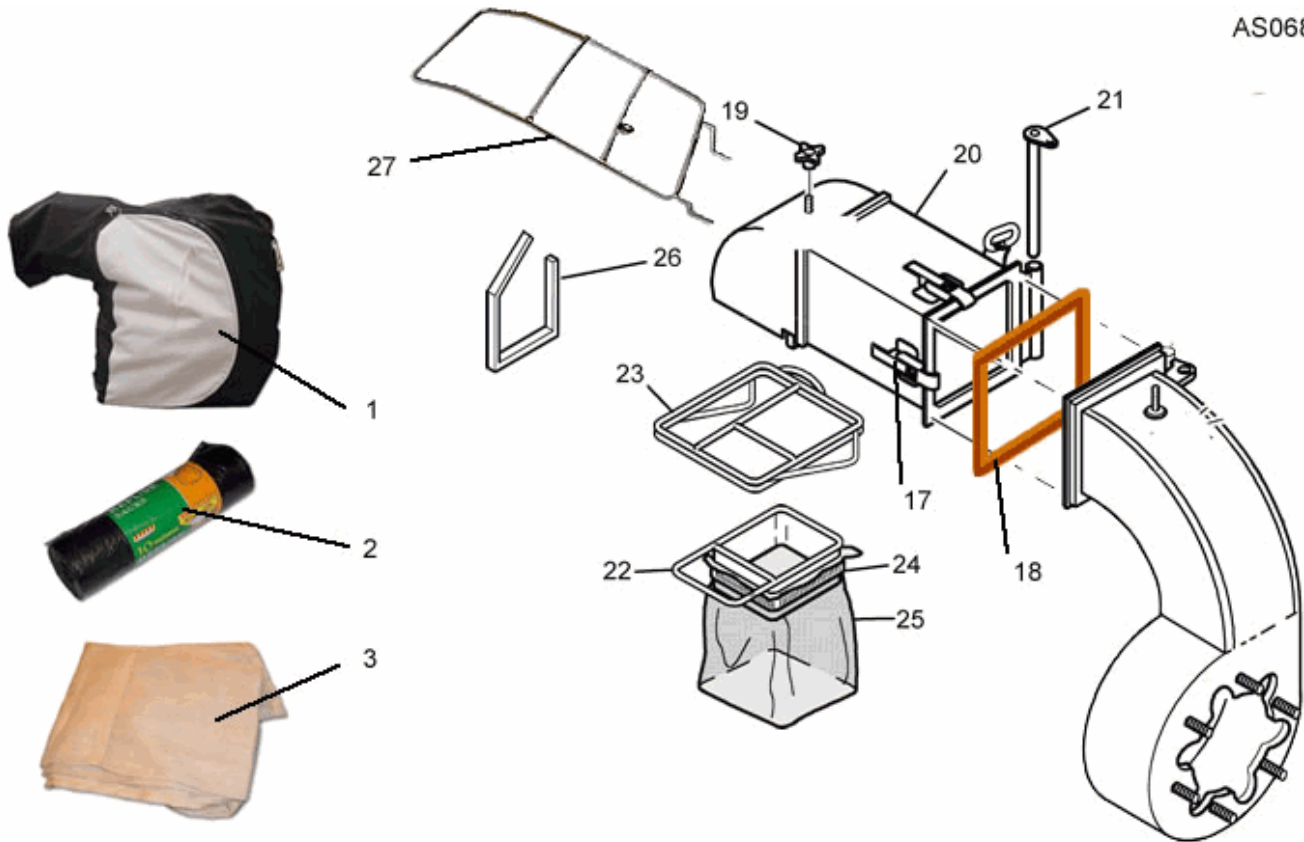
This drawing applies to older model 414 Green Machines from 1996 that were not fitted with a swing-out filter bag system. For more modern 400 series machines that were fitted with the swing-out filter bag system, please refer to drawing AS068. Prior to 1996, machines were fitted with a "top entry" bag system, where the bag zipper ran along the top of the filter bag, rather than later "side-entry" bags. Replacement filter bags for these older machines are still available as VB016 by calling your local Applied Sweepers dealer.

14	VT027 - Bag Strap Assembly	1
15	VT016 - Foam	1
16	GG008 - Toggle Clip, Large	3
17	VT030 - Back Trunking	1
18	VT031 - Sliding Frame	1
19	VT032 - Flange for Nylon Sock	1
20	VT035 - Hose Clamp (12.5 inches)	1
22	VB015 - Inner mesh	1
23	VB062 - Filter Bag	1
24	VB017 - Plastic Sacks, roll (20)	1

# Filter Bag & Trunking (swing-out bag system)

Model: **414S2D**  
 From CIN: **86** To CIN: **999**  
 Drawing: **AS068** Revision:

AS068



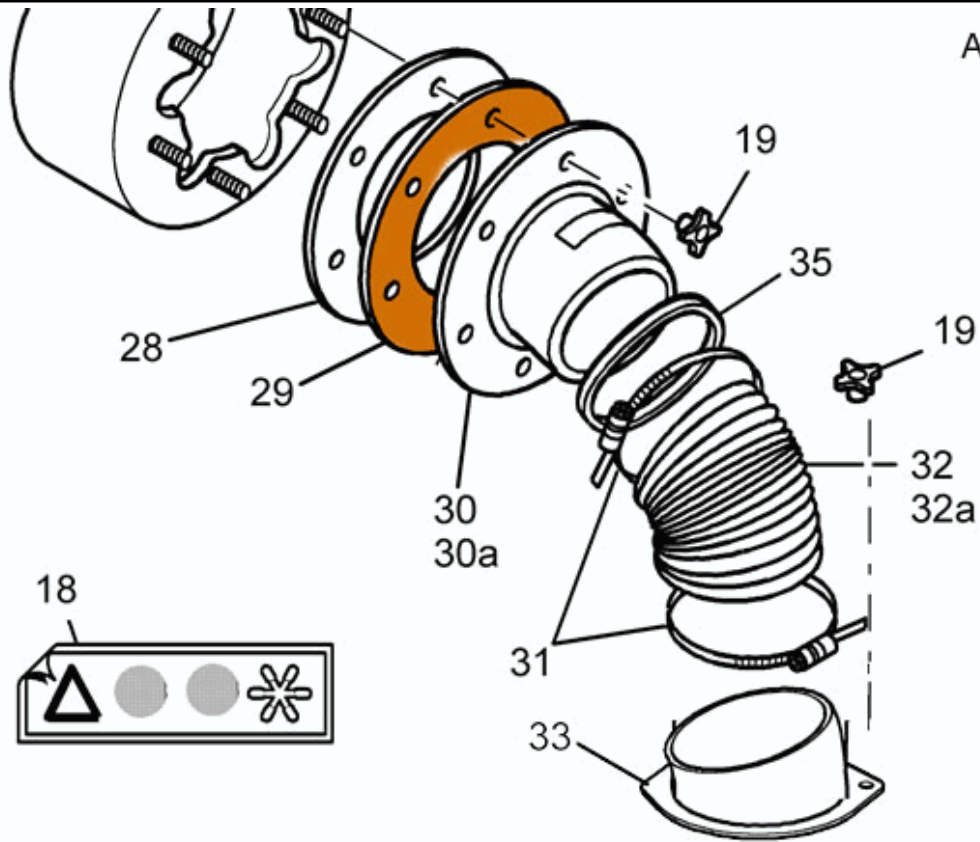
Applies to more modern 400 series Green Machines that use a swing-out system for the filter bag. For older machines, please refer to drawing AS034b.

1	VB062 - Filter Bag	1
2	VB017 - Plastic Sacks, roll (20)	1
3	VB007 - Leaf Bag	0
17	GG156 - Adjustable Latch	3
18	VT014 - Back Trunking Gasket	1
19	GG021 - Panel Knob - black M8	1
20	VT046 - Back Trunking	1
21	CB420 - Hinge Pin - Swing out bag	1
22	VT032 - Flange for Nylon Sock	1
23	VT047 - Sliding Frame (Roto-Tank)	1
24	VT035 - Hose Clamp (12.5 inches)	1
25	VB015 - Inner mesh	1
26	VT027 - Bag Strap Assembly	1
27	VB028 - Spring assy, filter bag	1

# Front Hose Assembly

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS069** Revision:

AS069

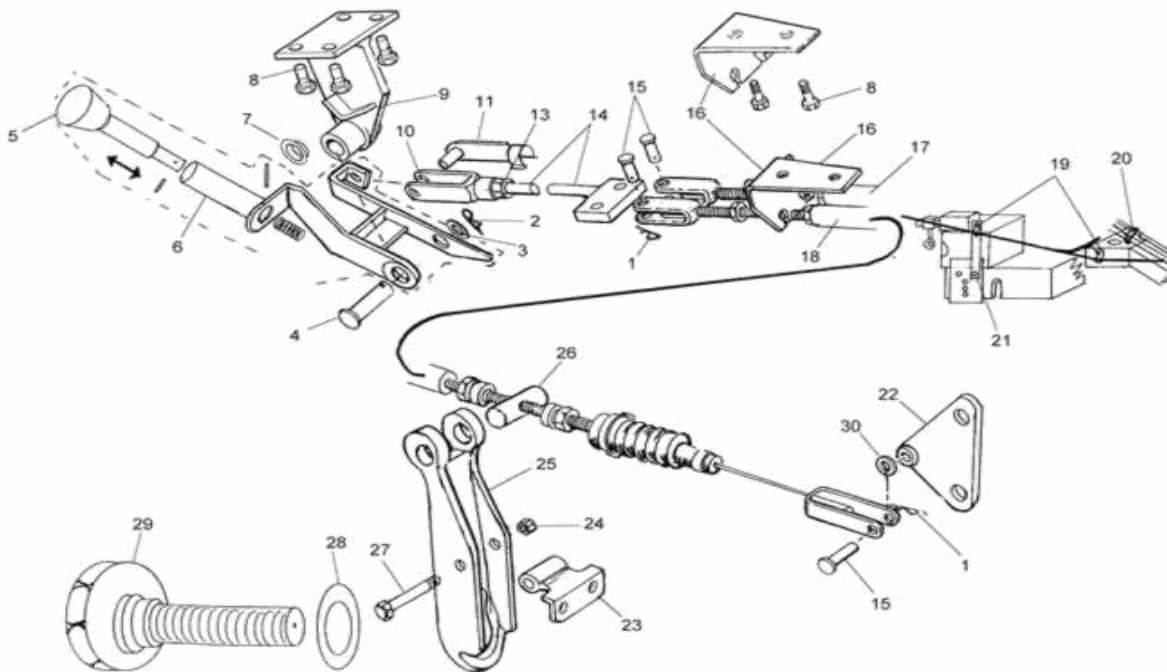


19	GG021 - Panel Knob - black M8	7
28	VT023 - Casing Ring	1
29	VT024 - Circle Gasket	1
30	AW122 - Access cover	1
30a	VT107 - Access Cover (non- whoosh)	1
31	GG015 - Hose Clamp (8.5 inch)	2
32	AW085_B - Front Hose	1
32a	VT013 - Front Hose (non whoosh)	1
32b	VT165 - Front Hose - model 424HS	1
33	VT042 - Oval Casting (one stud fixing)	1
35	GM013 - Rubber band - 8 in. diameter	2

# Remote Brush Lift Option

Model: **414S2D**  
 From CIN: **54** To CIN: **999**  
 Drawing: **AS045-9** Revision:

AS045-9

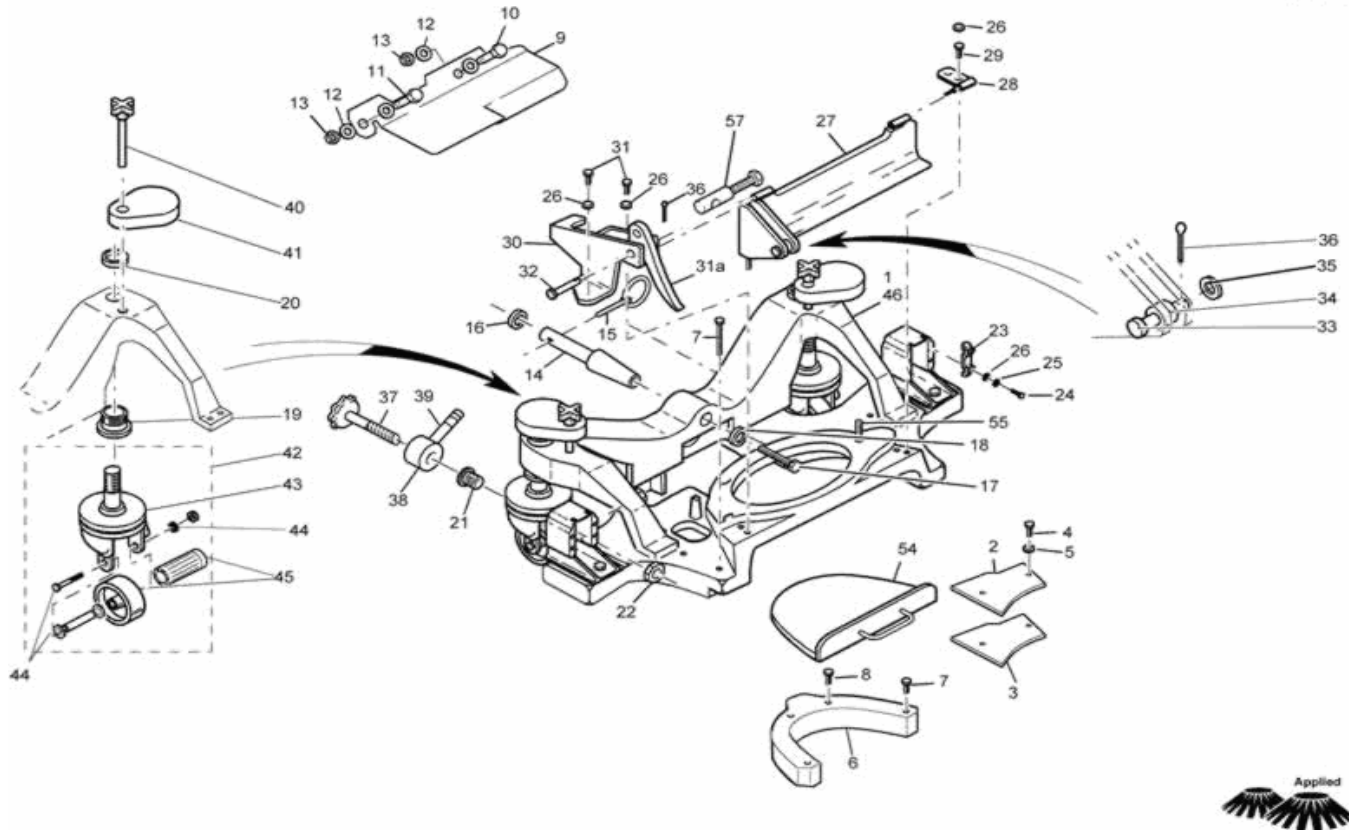


1	BB044 - R Pin	4	24	GN004 - M8 Locknut - Nylon	2
2	GG105 - Cotter Pin (1/8 in x 1 in)	1	25	NF075 - Lifting Lever	2
3	GW013 - M10 Flat Washer	1	26	NF077 - Anchor Pivot Pin	2
4	CB250 - Pivot Pin	1	27	GT244 - M8 x 60 Hex Bolt	2
5	GM136 - Knob, with transparent cap	1	28	GW043 - Washer - plastic (for brush lift)	2
6	CB231 - Handle Assembly for brush lift	1	29	NF045 - Adjuster screw for brush height	2
7	GB028 - Bush flanged 12 o/d 10 i/d 12 lg.	2	30	GB027 - Bush, door hinge bar	4
8	GT203 - M6 x 12 Hex Flanged Sheet Metal Screw	6			
9	CB482 - Bracket, mounting	1			
10	BB006 - Clevis yoke	1			
11	BB022 - Clevis Pin	1			
13	GN027 - M8 Hex Jam Nut (Half-height)	1			
14	CB307 - Link Arm	1			
15	BB085 - Clevis Pin (6mm x 20mm)	4			
16	CB310 - Anchor Plate - top - for brush lift	1			
17	BB081 - Cable - left side (long) for remote l	1			
18	BB080 - Cable - right side (short) for remote	1			
19	BB063 - P Clip - black - 16 mm diameter.	4			
20	BB084 - Clamp - rubber lined - 30 mm diameter	2			
21	CB251 - Plate, cable support - hydraulic bloc	1			
22	CB324 - Bracket, bottom anchor - brush lift	2			
23	CB314 - Bracket - Pivot - brush lift	2			

# Suction Nozzle Assembly (from CIN 100)

Model: **414S2D**  
 From CIN: **100** To CIN: **999**  
 Drawing: **AS012-10** Revision:

AS012-10



This drawing is for machines from CIN 100 that were fitted with a one piece front head assembly. For older machines that used a two piece casting, then please refer to drawing AS047.

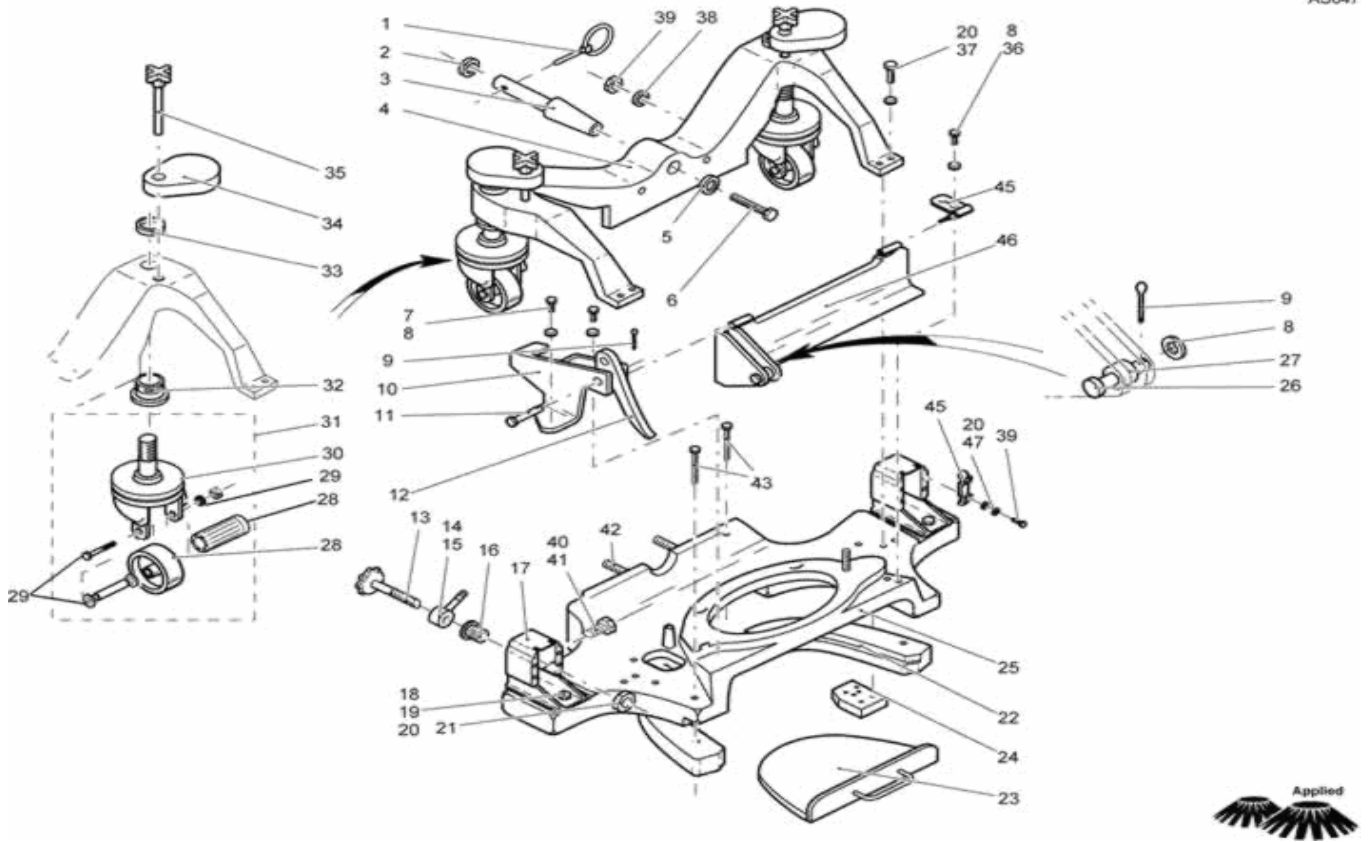
1	NN090 - Suction Nozzle Assembly (One Piece)	1	31a	NN104 - Lever for Flap (All 424 plus 414 from	1
2	NN095 - Counterbalance Weight, Top	2	32	GG130 - Clevis Pin (6 x 23 mm)	1
3	NN099 - Counterbalance Weight, Bottom	2	33	GG135 - Clevis Pin (6 x 30 mm)	1
6	NN057 - Horseshoe wear-plate (from CIN 81)	1	34	GB029 - Bush, oilite	1
8	GT115 - M8 x 30 sockethead screws	1	37	NF045 - Adjuster screw for brush height	2
9	NF093 - Blanking plate	1	38	NF041 - Locking device for brush height adjus	2
10	GT092 - M8 x 40 Hex Screw	1	39	GG043 - Plastic Cap	2
11	GT042 - M8 x 30 Hex Screw	1	40	NC003 - Locking Pin for front castor	2
13	GN004 - M8 Locknut - Nylon	2	41	NN041 - Top Cap	2
14	NC034 - Pivot Pin for suction nozzle	1	42	NC002 - Castor Assembly	2
15	BB060 - Lynch Pin	1	43	NC022 - Seal for front castor wheel	2
17	GT163 - M12 x 30 Hex Screw st.st.	1	44	NC020 - Axle Set for front castor	2
18	MA061 - Washer, form a 36 o/d 12.7 i/d	1	45	NC014 - Wheel for front castor	2
19	NC030 - Bushing for castor wheel	2	54	AW134 - Horseshoe Blanking Plate (from CIN 10	2
20	GN028 - Nut - for Castor Bushing	2	56	GG179 - Adjuster	1
21	NN028 - Stud for brush height adjuster	2	57	NN107 - Cable clamp assembly	1
22	NN029 - Nut for brush height adjuster stud	2			
23	NN051 - Cap, Brush Arm Pins	4			
27	NN058 - Flap -Front (From CIN 81)	1			
28	NN064 - Hinge - Left Side - for front flap (	1			
30	NN059 - Hinge - Right Side - for front flap (	1			



# Suction Nozzle Assy - 2 Piece (CIN 81 to CIN 100)

Model: **414S2D**  
 From CIN: **81** To CIN: **100**  
 Drawing: **AS047** Revision:

AS047



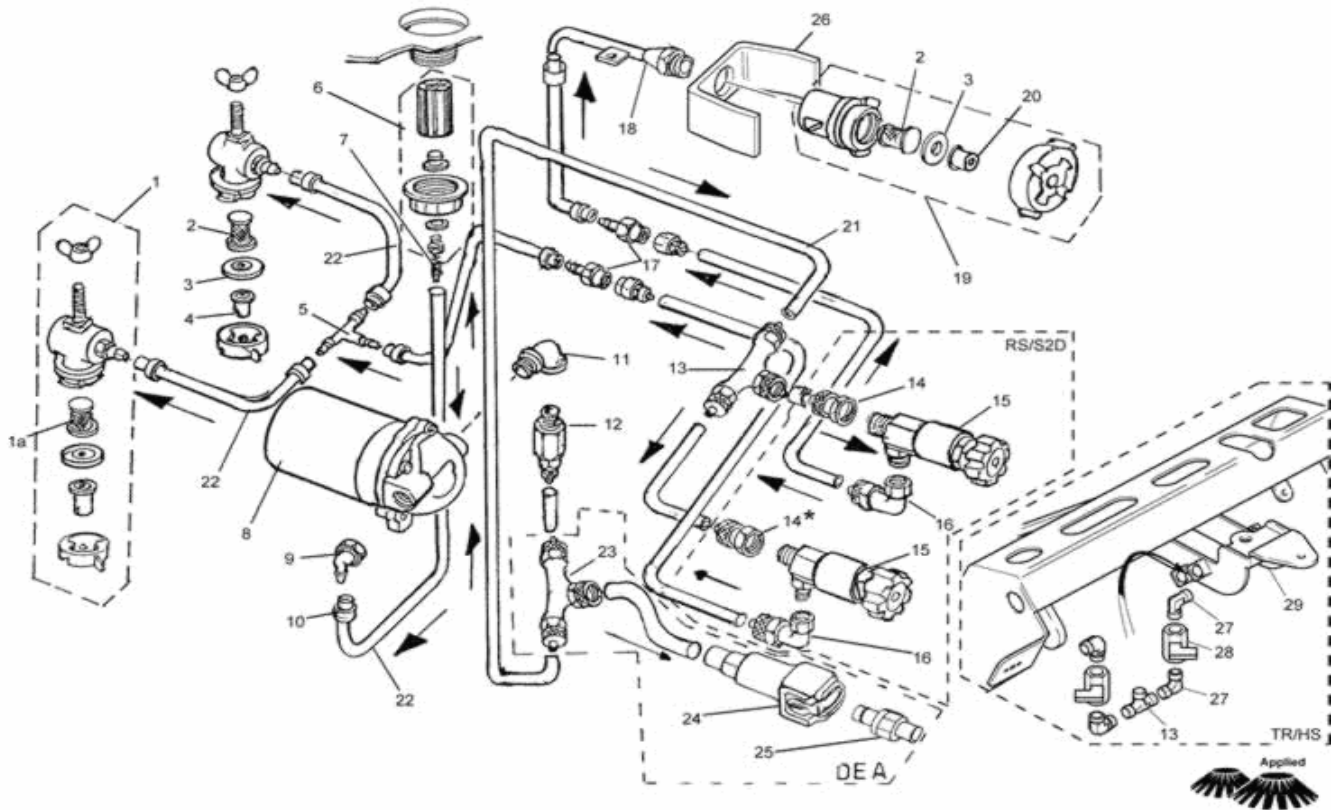
Later models from CIN101 used a one piece casting - see drawing AS012.

1	BB060 - Lynch Pin	1	28	NC014 - Wheel for front castor	2
3	NC034 - Pivot Pin for suction nozzle	1	30	NC022 - Seal for front castor wheel	2
4	NN043 - Spider Assembly	1	31	NC002 - Castor Assembly	2
5	MA061 - Washer, form a 36 o/d 12.7 i/d	1	32	NC030 - Bushing for castor wheel	2
6	GT163 - M12 x 30 Hex Screw st.st.	1	33	GN028 - Nut - for Castor Bushing	2
7	GT208 - M5 x 20 sockethead screw	4	35	NC003 - Locking Pin for front castor	2
9	GG131 - Cotter Pin (1/16th in.)	1	36	GT049 - M8 x 25 Hex Screw	8
10	NN059 - Hinge - Right Side - for front flap (	1	45	NN041 - Top Cap	4
11	GG130 - Clevis Pin (6 x 23 mm)	1	45a	NN064 - Hinge - Left Side - for front flap (	1
12	NN069 - Lever, for flap	1	46	NN058 - Flap -Front (From CIN 81)	1
13	NF045 - Adjuster screw for brush height	2			
14	NF041 - Locking device for brush height adjus	2			
16	NN028 - Stud for brush height adjuster	2			
17	NN050 - Front Head Support Casting	2			
21	NN029 - Nut for brush height adjuster stud	2			
22	NN057 - Horseshoe wear-plate (from CIN 81)	1			
23	AW078 - Horseshoe Blanking Plate (To CIN 100)	1			
24	CB160 - Counterbalance Weight (CIN 81 to CIN	2			
25	NN055 - Suction Nozzle assembly (CIN 81to CIN	1			
26	GG135 - Clevis Pin (6 x 30 mm)	1			
27	GB029 - Bush, oilite	1			

# Water System

Model: **414S2D**  
 From CIN: **58** To CIN: **999**  
 Drawing: **AS020-10** Revision:

AS020-10



<b>1</b>	WP108 - Spray Jet Assembly for brush sprays	<b>2</b>	<b>21</b>	WA040 - Tubing - Nylon - 6mm outside diameter	<b>0</b>
<b>1a</b>	WP020 - Filter with anti-drip valve	<b>1</b>	<b>22</b>	WA004 - Black Water Hose	<b>1</b>
<b>2</b>	WP115 - Filter Spray Nozzle	<b>3</b>	<b>23</b>	WP095 - Tee - 6/4mm Tube	<b>1</b>
<b>3</b>	WP118 - - Sealing Disc	<b>3</b>	<b>24</b>	WP134 - Coupling - Quick Release - Female	<b>1</b>
<b>4</b>	WP060 - Spray Jet - Green	<b>2</b>	<b>25</b>	WP135 - Coupling - Quick Release - Male	<b>1</b>
<b>5</b>	WP005 - Tee Piece 3.16, 3.16, 3.16	<b>1</b>	<b>26</b>	CB399 - Guard for spray nozzle	<b>1</b>
<b>6</b>	WA036 - Drain Cap Assembly	<b>1</b>	<b>27</b>	WP101 - Elbows	<b>4</b>
<b>7</b>	WA012 - Water Tap - Quick Release Hose	<b>1</b>	<b>28</b>	WP131 - Valve, on/off	<b>2</b>
<b>8</b>	WP044 - - Water Pump	<b>1</b>			
<b>9</b>	WP110 - Elbow -Hose Tail - 3/8	<b>1</b>			
<b>10</b>	PG008 - O Clip - 1/2 in.	<b>0</b>			
<b>11</b>	WP112 - Elbow - 3/8 male - 3/8 female	<b>1</b>			
<b>12</b>	WP128 - Coupling 3/8	<b>1</b>			
<b>13</b>	WP095 - Tee - 6/4mm Tube	<b>1</b>			
<b>14</b>	WP094 - Female Stud Coupling 1/4	<b>5</b>			
<b>15</b>	WP106 - Needle Valve for water system	<b>2</b>			
<b>16</b>	WP100 - Elbow 1/8	<b>1</b>			
<b>17</b>	WP025 - Hose Tail - 1/4 male to 7mm	<b>2</b>			
<b>17a</b>	WP094 - Female Stud Coupling 1/4	<b>1</b>			
<b>18</b>	WP137 - Spray Tube Assembly (from CIN 92)	<b>1</b>			
<b>19</b>	WP109 - - Spray Jet Assembly for bag spray	<b>1</b>			
<b>20</b>	WP121 - - Spray Jet - Bag -Blue Cone	<b>1</b>			