



BERNHARD

Parts Catalogue

ANGLEMASTER 4100



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1. INTRODUCTION

Welcome to the Bernhard Anglemaster 4100. If operated and maintained correctly this machine will give many years of excellent service.

Please read this manual carefully before using the machine.

This manual contains important health and safety information as well as guidance that will enable you to get the best results from the machine.

This manual must be read by, understood and kept available to all who operate, install, maintain, service or manage the machine.

To help us to support you please register your purchase.

If you have any service or operational questions, please contact your distributor or phone our technical support hotline.

USA only

1-888 474 6348

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support@bernhard.co.uk

Answers to frequently asked questions can be found on our website:

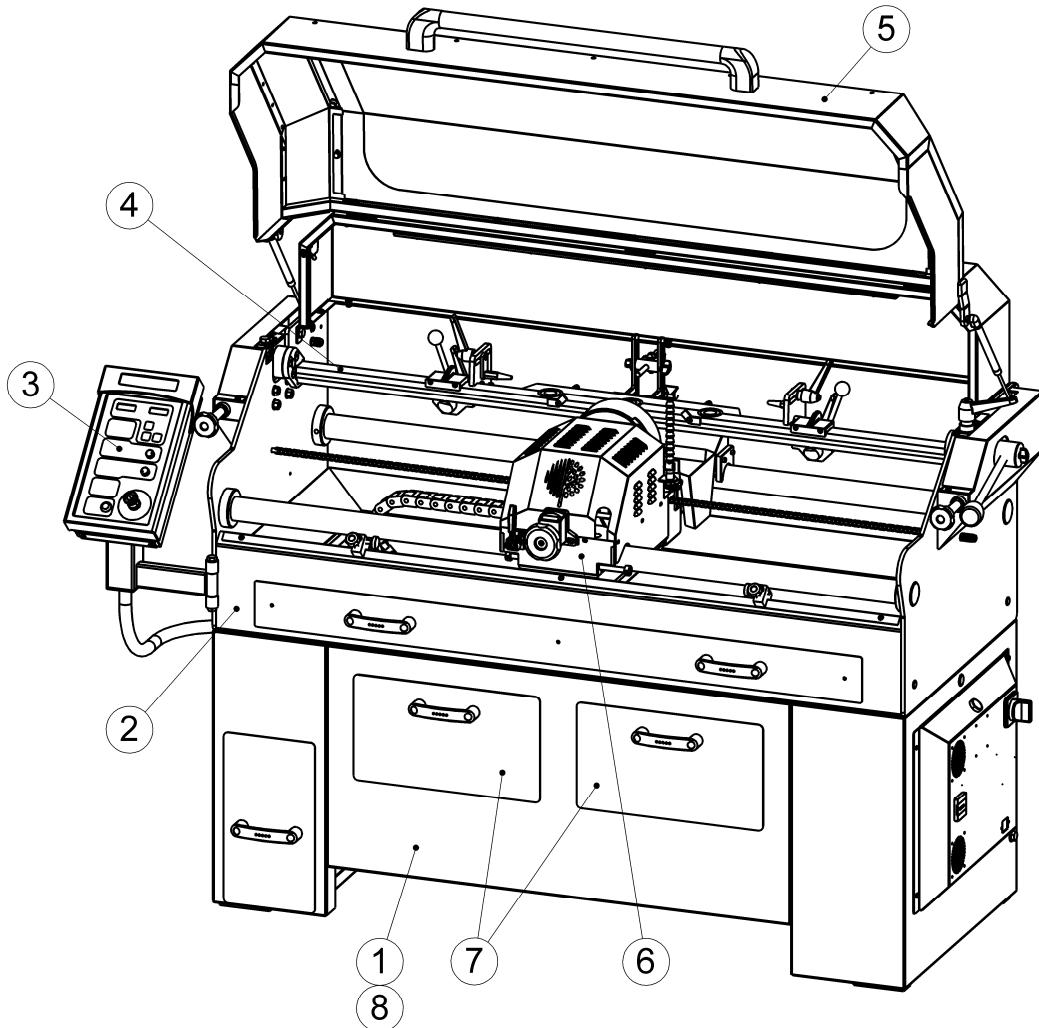
www.bernhard.co.uk

Serial Number	
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Use the space above to record machine serial number which is found on nameplate. Please quote model and serial number when contacting your distributor or Bernhard.

2. PARTS LIST

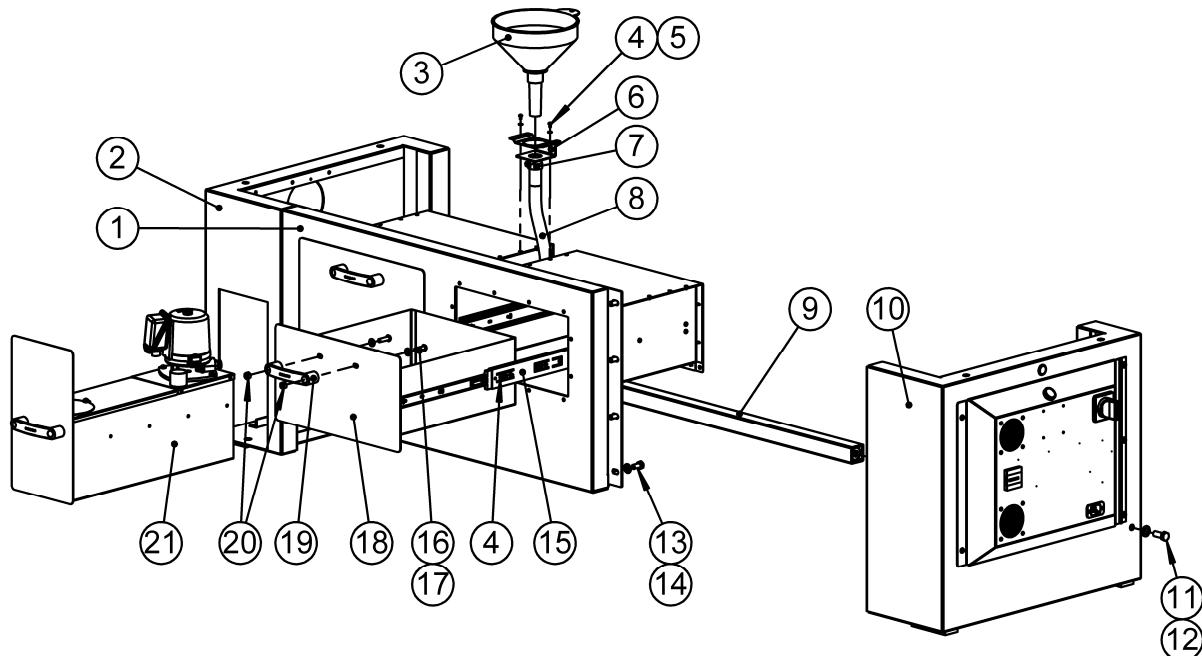
2.1. A11589 ANGLEMASTER 4100



Ref #	Part #	Name of Part	Qty
1	A11626	BASE ASSEMBLY AM4100	1
2	A11646	FRAME ASSEMBLY AM4100	1
3	A11534	CONTROLS ASSY AM4100	1
4	A12069	MOUNTING BAR & ADJUSTER MANUAL ROTATION	1
5	A12048	TOP ENCLOSURE AND COVERS ASSEMBLY	1
6	A12107	CARRIAGE ASSEMBLY COVERS & GUARDS	1
7	A12294	TOOLKIT ASSEMBLY AM4100	1
8	A12289	LIVERY & LABELS ASSEMBLY	1

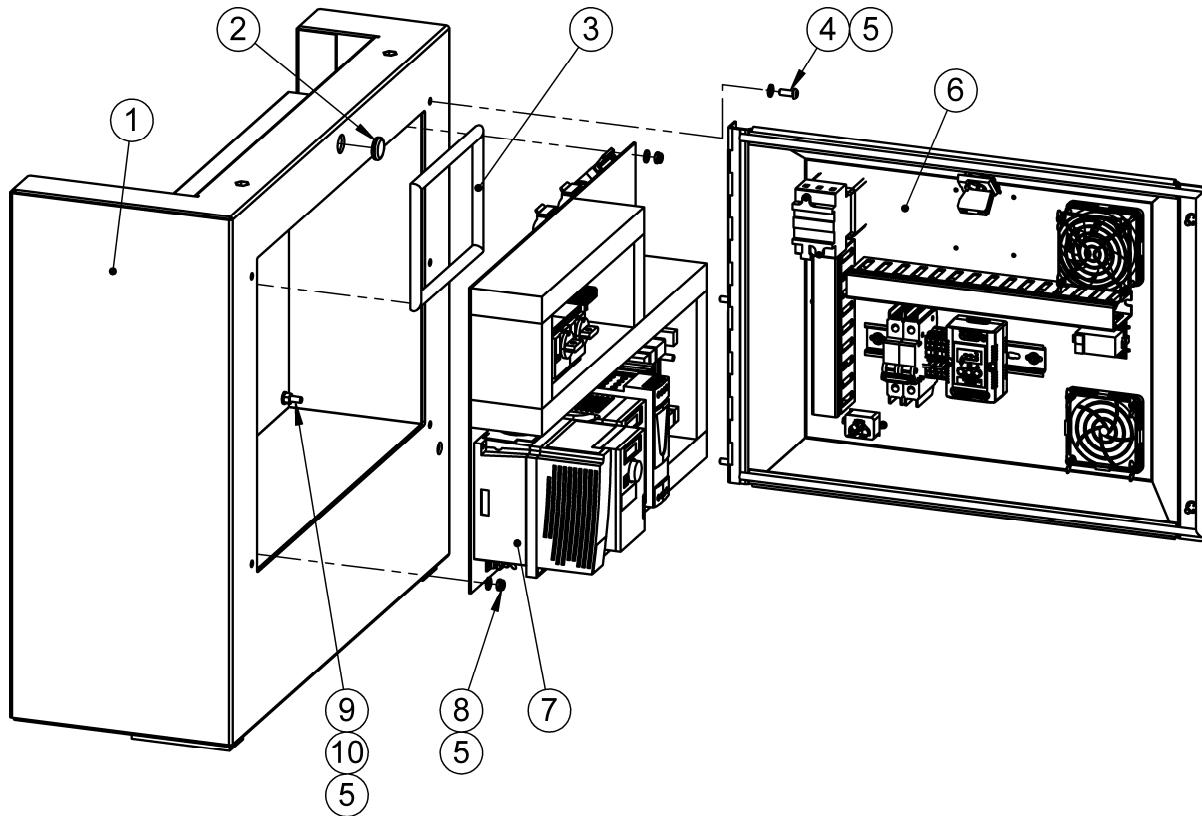


2.2. A11626 BASE FRAME ASSEMBLY AM4100



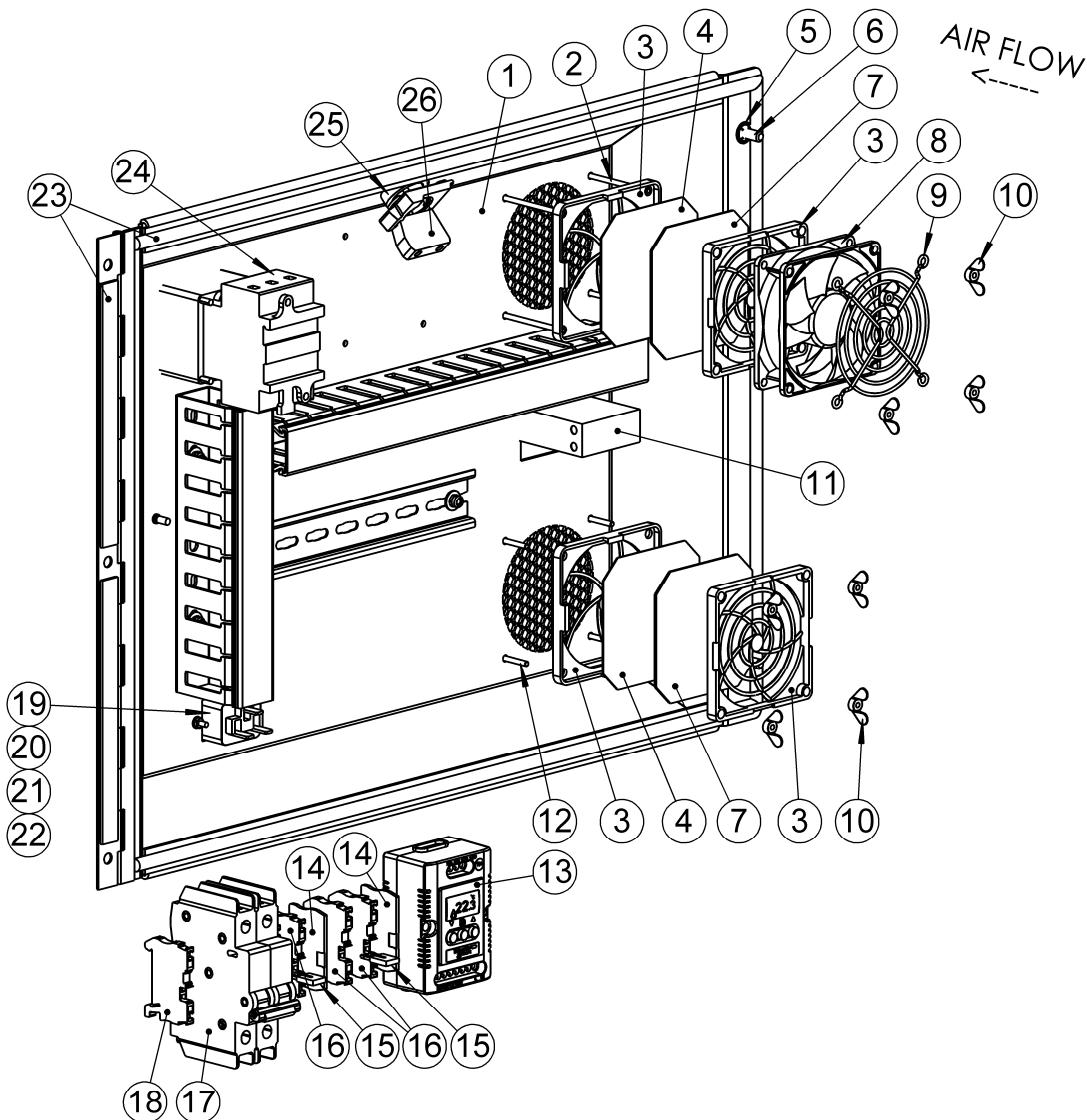
Ref #	Part #	Name of Part	Qty
1	A11497	DRAWER BOX FABRICATION.....	1
2	A03957	LH BASE LEG FABRICATION.....	1
3	A12009	FUNNEL	1
4	A08184	SCREW M4 x 8 BUTTON HEAD BZP	38
5	A05317	M4 WASHER.....	2
6	A11835	FUNNEL BRACKET	1
7	A02746	JUBILEE CLIP 30mm	1
8	A03984	PIPE COOLANT	1 0.85m
9	A04449	BOX FAB	1
10	A11624	CONTROL CABINET ASSEMBLY	1
11	A05713	M12 x 30 HEX SET SCREW	2
12	A05315	M12 FORM B WASHER.....	2
13	A05702	M10 x 20 HEX SET SCREW	8
14	A05310	M10 WASHER FORM B	8
15	A11443	DRAWER RUNNER	2 PAIR
16	A05164	M8 x 30 BUTTON HEAD SCREW	4
17	A05484	M8 FORM 'A' WASHER	4
18	A11494	DRAWER.....	2
19	A11477	HANDLE	2
20	A05519	M8 HEX NUT	4
21	A11556	COOLANT TANK ASSEMBLY	1

2.3. A11624 CONTROL CABINET ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A03956	CONTROL CABINET	1
2	A08020	20mm BLANKING GROMMET	1
3	A12383	GASKET EMC KIT	1
4	A11528	SCREW M6 x 16 BTN HD SEC TX A2-70	3
5	A05320	M6 WASHER	11
6	A11532	DOOR ASSEMBLY	1
7	A11533	CONTROL PANEL ASSEMBLY	1
8	A05517	M6 NYLOCK NUT	4
9	A05152	M6 x 25 CAP HEAD	4
10	A05516	M6 FULL NUT	4

2.4. A11532 DOOR ASSEMBLY CONTROL CABINET AM4100



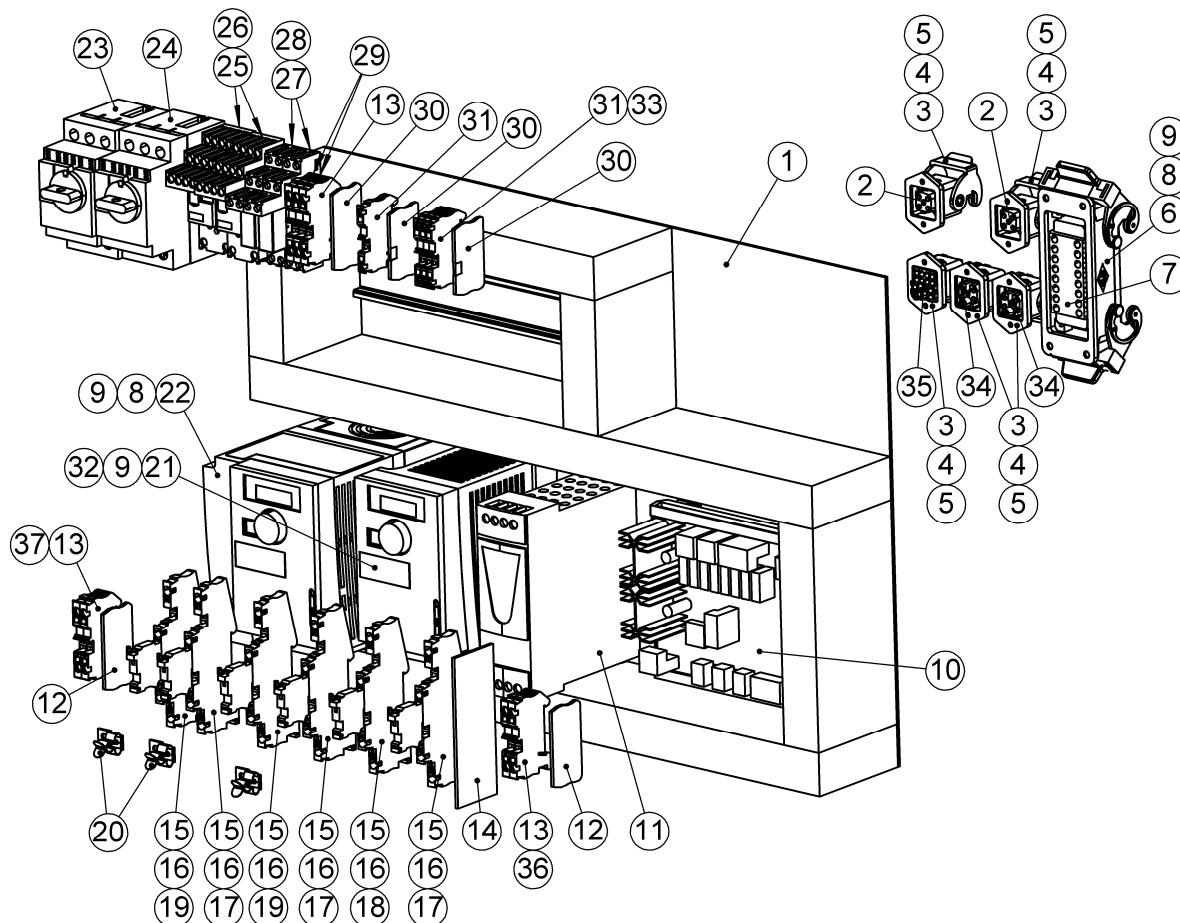
Ref #	Part #	Name of Part	Qty
1	A11388	CONTROL PANEL DOOR	1
2	A12624	SCREW. M3 x 50 BUTTON HEAD HEX SOCKET A2-70 BLACK ...	4
3	A12628	FAN FILTER HOUSING MODIFIED	2
4	A11432	FILTER, SS	2
5	A12040	WASHER, CAPTIVE M6	2
6	A11528	SCREW. M6 x 16, BUTTON HEAD TORX, A2 - ISO 7380	2
7	A11679	FILTER, FELT	2
8	A11430	FAN	1
9	A11429	FINGER GUARD	1
10	A12623	NUT. WING M3 BZP	8
11	A11562	PANEL METER HOURS RUN	1
12	A12625	SCREW. M3 x 20 BUTTON HEAD HEX SOCKET A2-70 BLACK ...	4
13	A11378	THERMOSTAT	1
14	A11421	TERMINAL ENDPLATE PT2.5 (D-ST2.5).....	2
15	A11951	TERMINAL BRIDGE 2 WAY	2
16	A11418	TERMINAL 2.5mm PT2.5.....	4
17	A12314	MCB	1
18	A11935	TERMINAL PT 2.5 PE	1



19	A08901	16 AMP CHASSIS MOUNT SOCKET	1
20	A05463	M3 x 12 PAN HEAD	2
21	A05340	M3 WASHER	2
22	A05510	M3 HEX FULL NUT	2
23	A12041	GASKET	1
24	A11377	SWITCH DISCONNECT	1
25	A11426	PUSH BUTTON HEAD	1
26	A11425	PUSH BUTTON BODY	1



2.5. A11533 CONTROL PANEL ASSEMBLY AM4100

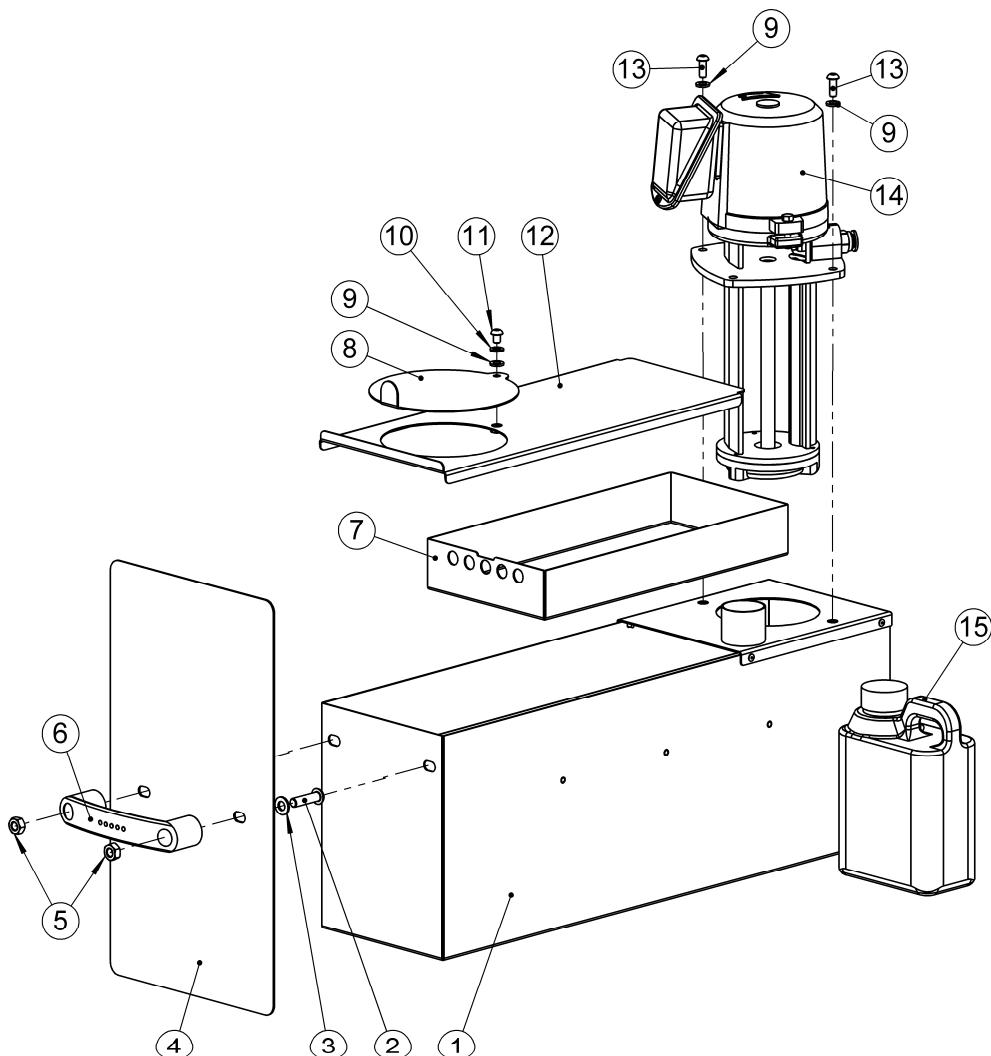


Ref #	Part #	Name of Part	Qty
1	A12036	CONTROL PANEL BACKPLATE FAB AM4100	1
2	A08316	ELECTRICAL SOCKET CKX03I	5
3	A08308	HA-3 FEMALE INSERT	2
4	A05463	M3 x 12 PAN HEAD SLOTTED M/C SCREW	10
5	A05340	M3 ZINC PLATED WASHER	20
6	A12400	PANEL MOUNT 2 LEVER CHI16	1
7	A08900	HBE-16 FEMALE INSERT	1
8	A08109	M4 x 12 PAN HEAD	6
9	A05317	M4 PLAIN WASHER	37
10	A12497	PCB ASSEMBLY INPUT OUTPUT AM4100 ED4	1
11	A10054	REGULATED POWER SUPPLY 24V 3A	1
12	A11422	TERMINAL ENDPLATE PT4 (D-ST4)	4
13	A11514	TERMINAL EARTH 4mm PT4	5
14	A11424	TERMINAL ENDPLATE PTTB4 (D-PTTB 4-TG)	2
15	A12607	TERMINAL PTTB 4-TG DISCONNECT	6
16	A12606	FUSE PLUG	6
17	A08082	FUSE 1.25A x 20mm LONG	3
18	A12616	FUSE 3.15A x 20mm LONG	1
19	A08085	FUSE 2A x 20mm LONG	2
20	A03665	EMC SHIELD CLAMP AM4/ED4	3
21	A12386	VARIABLE SPEED DRIVE TRAVERSE MOTOR AM	1
22	A12385	VARIABLE SPEED DRIVE GRIND MOTOR AM	1
23	A11204	MCB MAGNETIC 18A 3 POLE	1
24	A11331	MOTOR CIRCUIT BREAKER GV2L 16	1
25	A11213	RELAY BASE 4 POLE	2
26	A12052	MINIATURE PLUG IN RELAY 24V DC 12A C/W LED	2



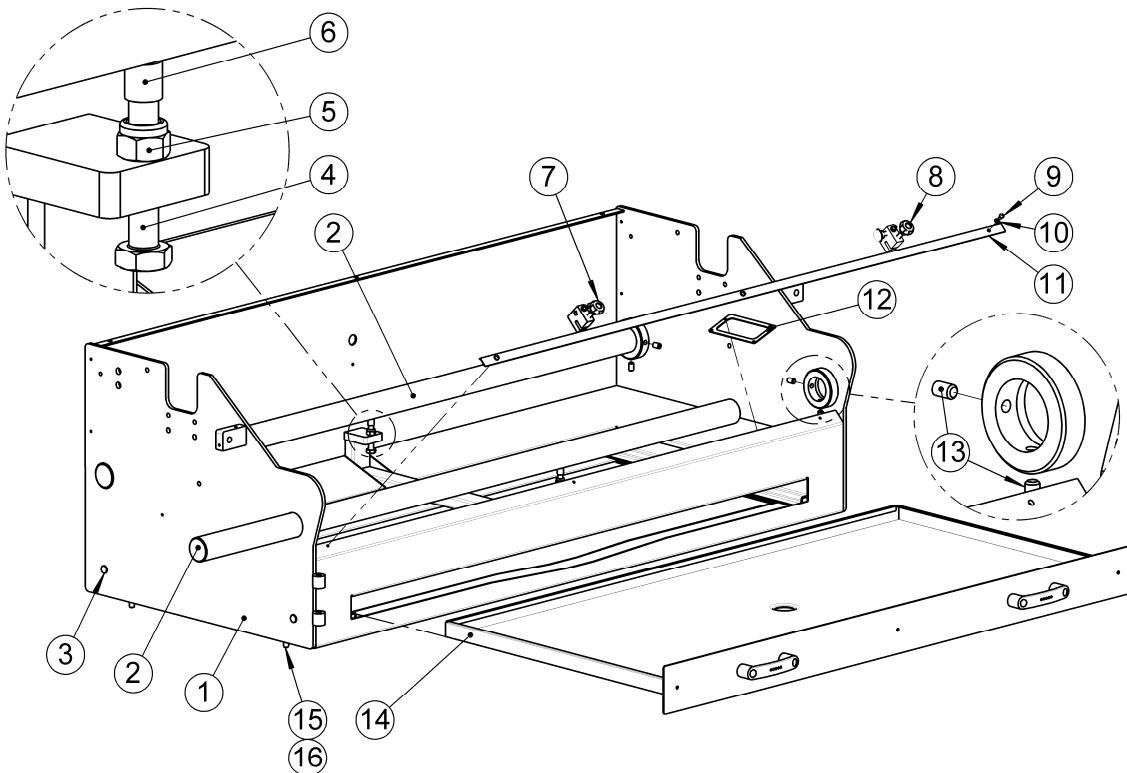
27	A11197	RELAY BASE DPDT	2
28	A11196	RELAY DPDT FORCE GUIDED	2
29	A11419	TERMINAL 4mm PT4.....	2
30	A11421	TERMINAL ENDPLATE PT2.5(D-ST2.5).....	4
31	A11418	TERMINAL 2.5mm PT2.5.....	4
32	A05087	M4 x 8 PAN HEAD SCREW.....	27
33	A11935	TERMINAL PT2.5 PE	1
34	A08317	HA-4 INSERT	2
35	A08604	ILME CONNECTOR CQF12	1
36	A11434	TERMINAL BRIDGE 4-WAY	1
37	A11433	TERMINAL BRIDGE 2-WAY	1

2.6. A11556 COOLANT TANK ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A11546	TANK FAB	1
2	A12017	SCREW. M8 x 30 BTN HD HEX SKT A2-70.....	2
3	A12018	WASHER. M8 FORM A FLT A2.....	2
4	A11547	PLATE	1
5	A12019	NUT. M8 FULL A2	2
6	A11477	HANDLE	1
7	A03963	TRAY	1
8	A03962	COVER	1
9	A12021	WASHER. M6 FORM A FLT A2.....	3
10	A12025	WASHER. M6 SPRNG A2	1
11	A12044	SCREW. M6 x 8 BTN HD HEX SKT A2-70.....	1
12	A03961	LID	1
13	A12020	SCREW. M6 x 16 BTN HD HEX SKT A2-70.....	2
14	A11625	COOLANT PUMP ASSY	1
15	A05883	1 LITRE COOLANT & CONTAINER	1
16	A12062	CABLE	1

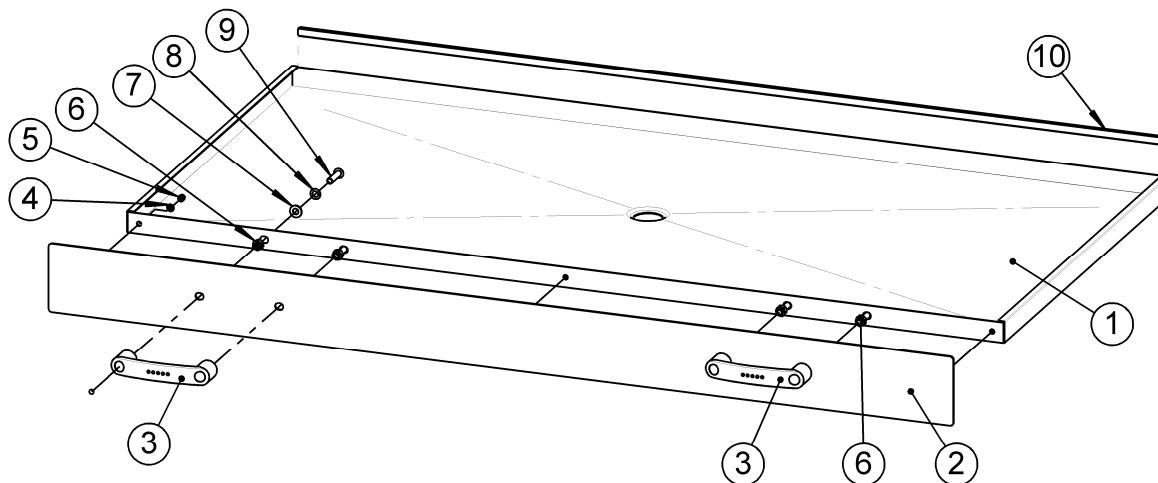
2.7. A11646 FRAME ASSEMBLY AM4100



Ref #	Part #	Name of Part	Qty
1	A11647	FRAME FABRICATION AM4100	1
2	A06717	50mm HARDENED PRECISION GROUND RAIL	2
3	A12147	BLANKING PLUG.....	4
4	A05755	RAIL ADJUSTER BOLT	2
5	A05505	M10 NYLOC NUT	2
6	A09222	BRASS CAP	2
7	A04687	LH REVERSING STOP ASSEMBLY	1
8	A04686	RH REVERSING STOP ASSEMBLY	1
9	A05759	M5 x 8 CAP HEAD SOCKET SCREW	3
10	A04688	5mm FIBRE WASHER	3
11	A06351	STAINLESS STEEL STRIP	1
12	A03663	COOLANT DEFLECTOR GASKET	1
13	A05114	M10 X 16 SKT GRUB SCREW	8
14	A11658	DUST TRAY ASSEMBLY. AM	1
15	A05703	M10 x 25 HEX SET SCREW	4
16	A05192	M10 PENNY WASHER	4



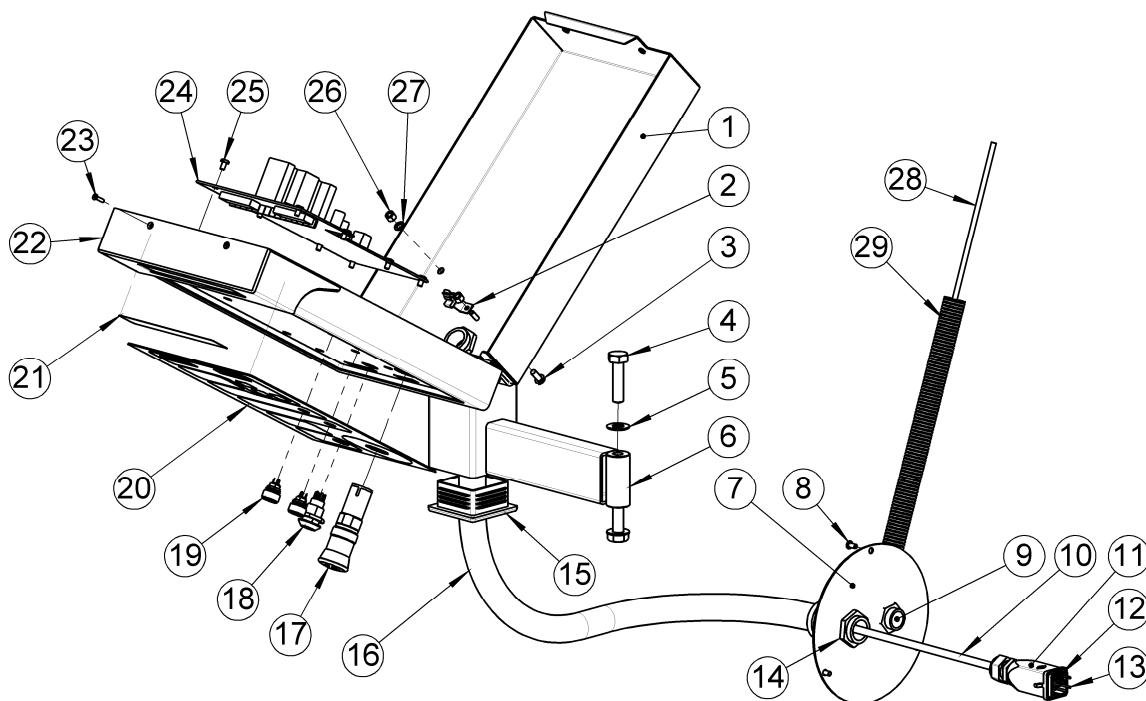
2.8. A11658 DUST TRAY ASSEMBLY



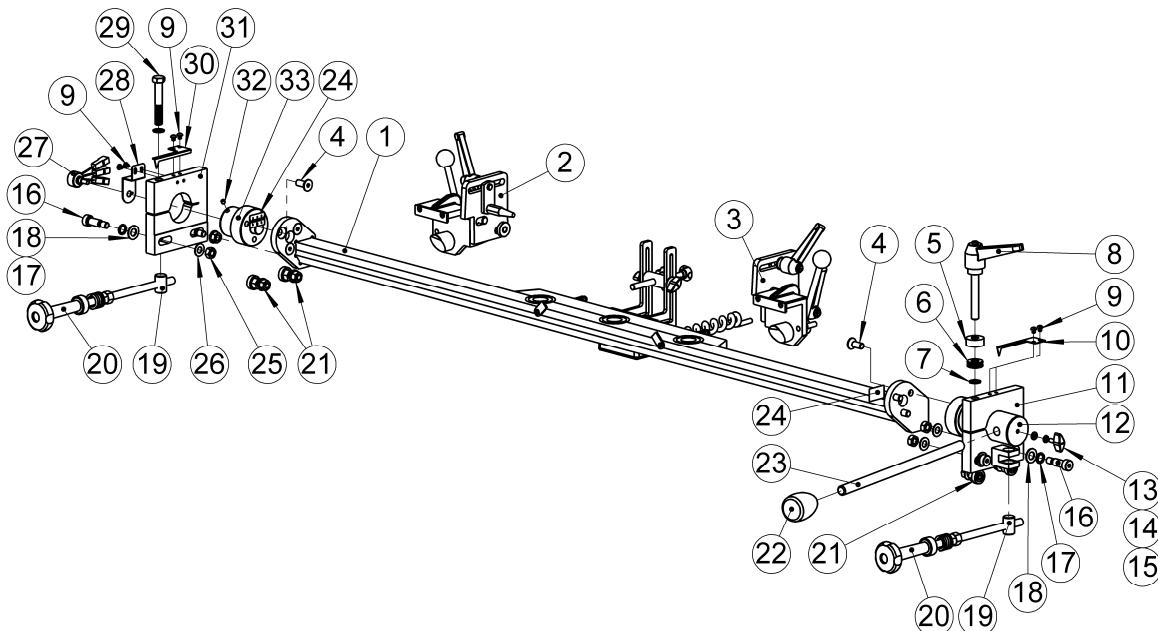
Ref #	Part #	Name of Part	Qty.
1	A11393	COOLANT TRAY FOR EPDM SEAL	1
2	A11495	PANEL DUST DRAWER FRONT	1
3	A11477	HANDLE	2
4	A05318	M5 FORM B WASHER.....	3
5	A05513	M5 NYLOC NUT BZP.....	3
6	A05519	NUT M8 FULL	4
7	A05484	M8 FORM 'A' WASHER	4
8	A11949	WASHER, SPRING M8.....	4
9	A05213	M8 x 35 BUTTON HEAD SOCKET SCREW	4
10	A11786	SEAL 1.3m	1



2.9. A11534 CONTROLS ASSEMBLY AM4100

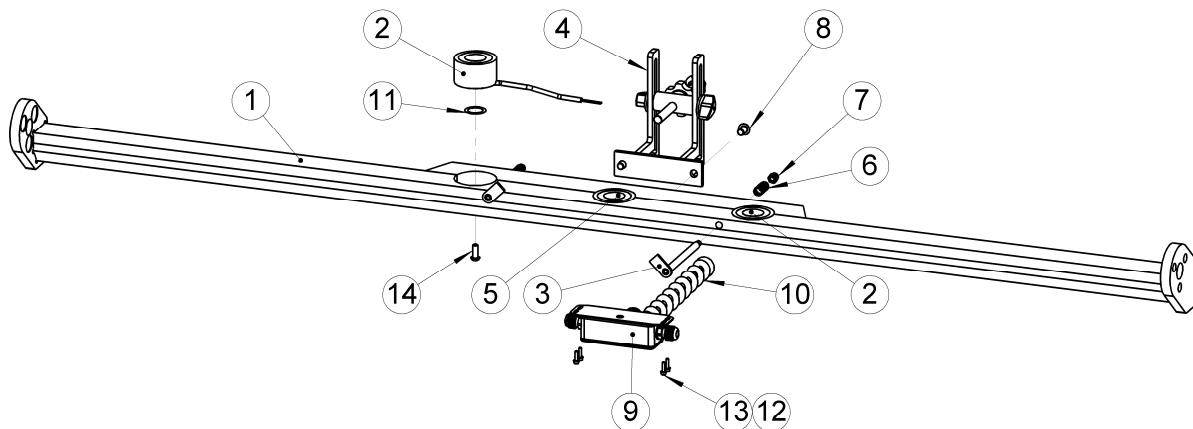


Ref #	Part #	Name of Part	Qty
1	A11687	CONTROLS BOX AM4100	1
2	A03665	3 - 6 EMC SHIELD CLAMP	1
3	A05474	M5 x 12 PAN HEAD	4
4	A05738	M10 x 40 HEX HEAD HT SCREW	2
5	A05310	M10 WASHER FORM B	2
6	A04029	CONTROL BOX ARM	1
7	A06961	COVER DISC	1
8	A05125	M4 x 8 BUTTON HEAD	3
9	A08099	KOPEX PMA 90 DEGREES FITTING	1
10	A11529	CABLE	1
11	A08833	TOP ENTRY COVER	1
12	A08603	ILME CONNECTOR CMQ12	1
13	A04672	ILME CDMA 0.3 PIN	12
14	A08830	CANADIAN STRAIGHT ADAPTOR	2
15	A05631	60 x 60 BLACK PLASTIC CAP DRILLED	1
16	A08931	25mm FLEXIBLE CONDUIT 1m	1
17	A11032	EMERGENCY STOP	1
18	A03060	GUARD SERVICE KEY SWITCH	1
19	A08014	1K POTENTIOMETER	2
20	A11526	AM4100 MEMBRANE KEY PANEL	1
21	A11734	LABEL ANGLEMASTER	1
22	A12075	CONTROL BOX BEZEL BLACK	1
23	A04896	M3 x 12 POZI HEAD SCREW	2
24	A12496	PCB ASSY, DISPLAY INTERFACE	1
25	A04888	M4 x 8mm POZI POLYCARBONATE SCREW	8
26	A05512	M5 FULL NUT	5
27	A05319	M5 STAR WASHER	4
28	A11531	CABLE	1
29	A08264	CONDUIT FOR MOTORS 1m	1

**2.10. A12069 MOUNTING BAR & ADJUSTER MANUAL ROTATION**

Ref #	Part #	Name of Part	Qty
1	A11484	MOUNTING BAR ASSEMBLY (BOLTED CONSTRUCTION).....	1
2	A12007	SOLEPLATE BRACKET ASSEMBLY LH	1
3	A12008	SOLEPLATE BRACKET ASSEMBLY RH.....	1
4	A05115	SCREW. COUNTERSUNK. M10 x 25 SOCKET HEAD	6
5	A06195	THRUST BEARING CAP	1
6	A07738	12mm THRUST BEARING.....	1
7	A05487	WASHER M12 (SPECIAL).....	2
8	A06196	KIP LEVER M12 x 85	1
9	A05138	M5 x 6 BUTTON HEAD BZP	6
10	A06339	MOUNTING BAR L.H. POINTER.....	1
11	A10060	R/H TRUNION BLOCK FABRICATION	1
12	A11571	SHAFT RH MOUNTING BAR	1
13	A06129	WING KNOB M6 x 15.....	1
14	A05604	M6 SINGLE COIL SPRING WASHER	1
15	A05320	M6 WASHER	1
16	A05120	SHOULDER SCREW 12 x 25 M10 x 1,5 TO ISO 7379	4
17	A05312	M12 SQ. SECTION SPRING WASHER.....	4
18	A05315	M12 FORM B WASHER.....	4
19	A04552	SLIDE BLOCK TRUNNION	2
20	A04696	MOUNTING BAR ADJUSTMENT HANDLE ASSEMBLY	2
21	A05383	ECCENTRIC BEARING ASSEMBLY	4
22	A03886	KNOB SHORT HANDLE	1
23	A03885	MOUNTING BAR HANDLE	1
24	A06609	MOUNTING BAR SCALE	2
25	A05503	NUT M10 TO ISO - 4032-D-N	4
26	A05310	M10 WASHER FORM B	4
27	A08501	2K POTENTIOMETER FOR MEMBRAIN K/PAD	1
28	A03508	POT BRACKET	1
29	A05715	M12 x 75 HEX BOLT	1
30	A06340	MOUNTING BAR POINTER R.H.	1
31	A10061	TRUNION BLOCK FABRICATION L/H	1
32	A05156	M6 x 6 GRUB SCREW	1
33	A11570	SHAFT LH MOUNTING BAR	1

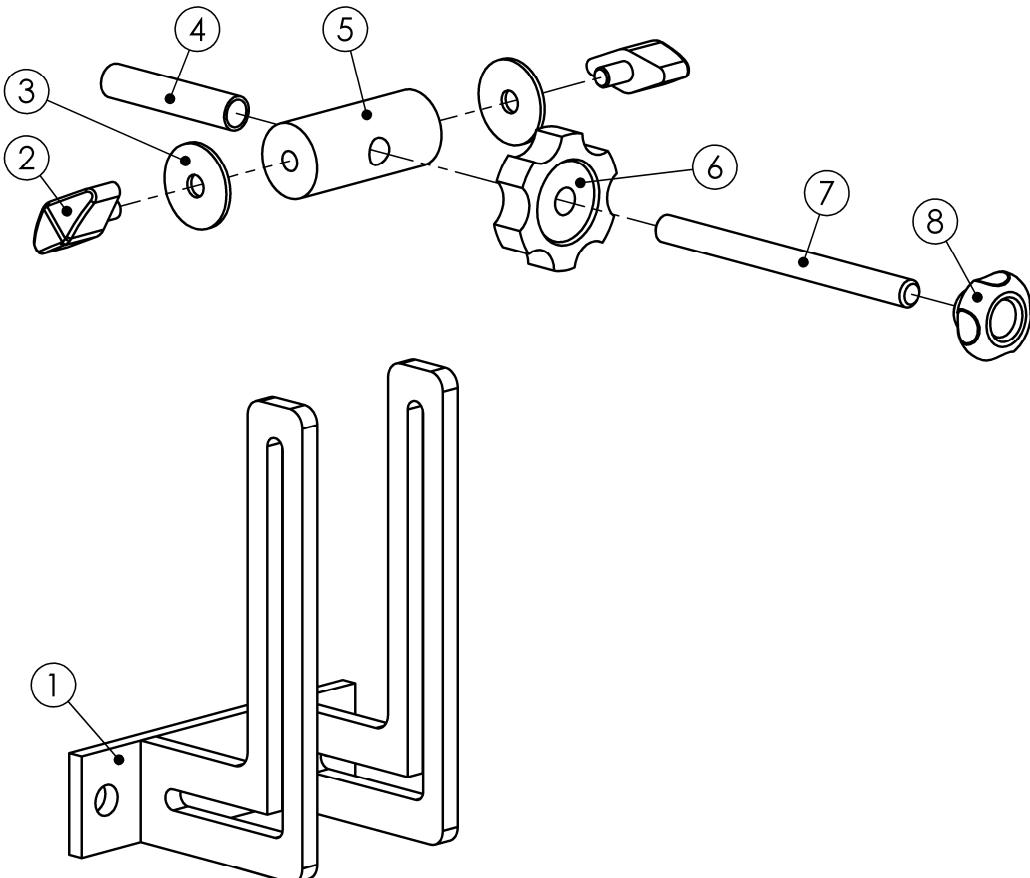
2.11. A11484 MOUNTING BAR ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A11256	MOUNTING BAR 30° WELDED ASSEMBLY	1
2	A12978	MAGNET 24V C/W TWIN CORE SHEATHED CABLE LONG	2
3	A11293	STOP DEPTH BLADE MOUNTING BAR.....	2
4	A09553	JACKING SCREW ASSEMBLY	1
5	A12979	MAGNET 24V C/W TWIN CORE SHEATHED CABLE SHORT	1
6	A11691	SPRING 10.67 O/D x 38.1 LG.....	2
7	A11825	NUT DOME M6 ST/ST	2
8	A05194	M8 x 12 BUTTON HEAD	2
9	A11876	ENCLOSURE MOUNTING BAR ASSEMBLY	1
10	A08019	2 CORE FLEXIBLE CABLE	1
11	A05227	SHIM WASHER 18 x 25 x 0.2mm	3
12	A05340	M3 WASHER.....	4
13	A05181	SCREW. M3 x 12 CAP HEAD	4
14	A05148	M6 x 16 BUTTON HEAD SOCKET SCREW	3

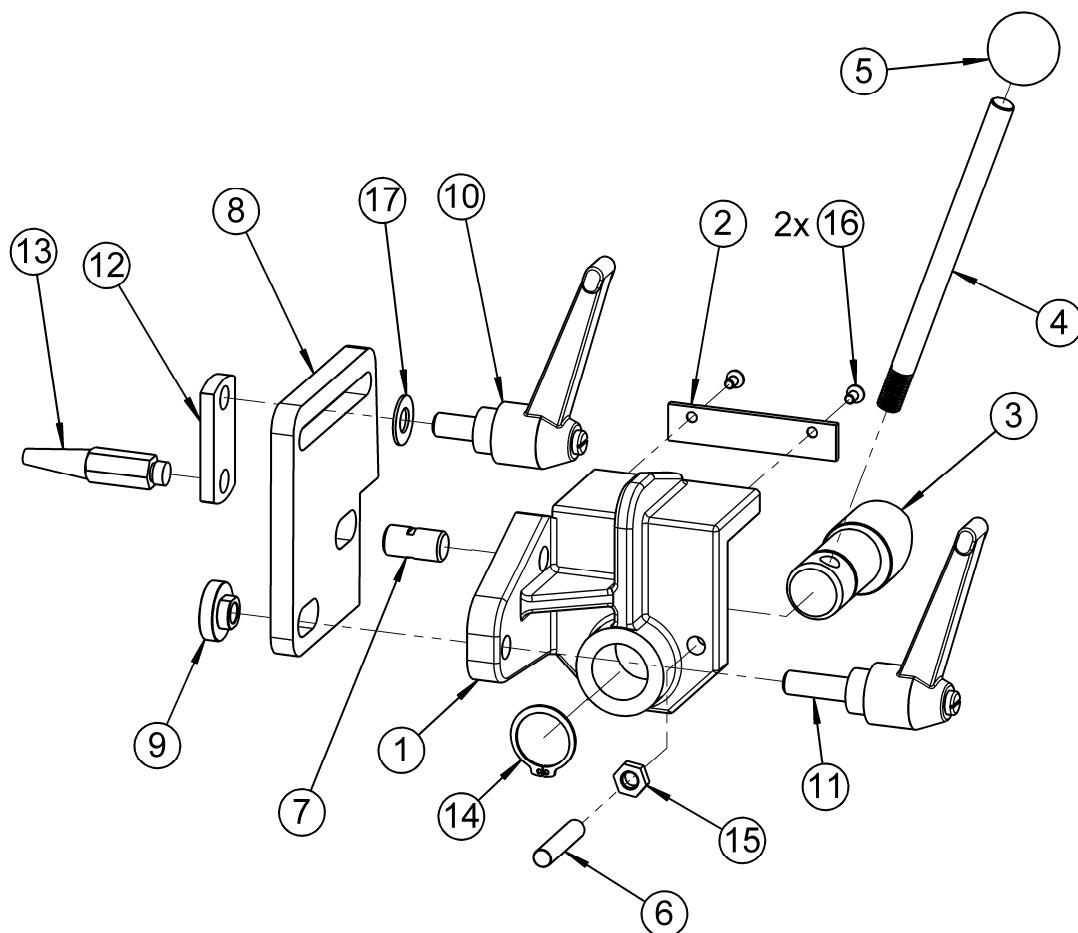


2.12. A09553 JACKING SCREW ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A04374	CENTRE JACKING SCREW BRACKET.....	1
2	A06129	WING KNOB M6 x 15.....	2
3	A05320	M6 WASHER	2
4	A09197	THREAD EXTENSION	1
5	A09198	MOUNTING BAR BRACKET BOSS	1
6	A06179	M8 LOCKING NUT	1
7	A05498	JACKING SCREW M8 x 110.....	1
8	A03299	PLASTIC KNOB	1

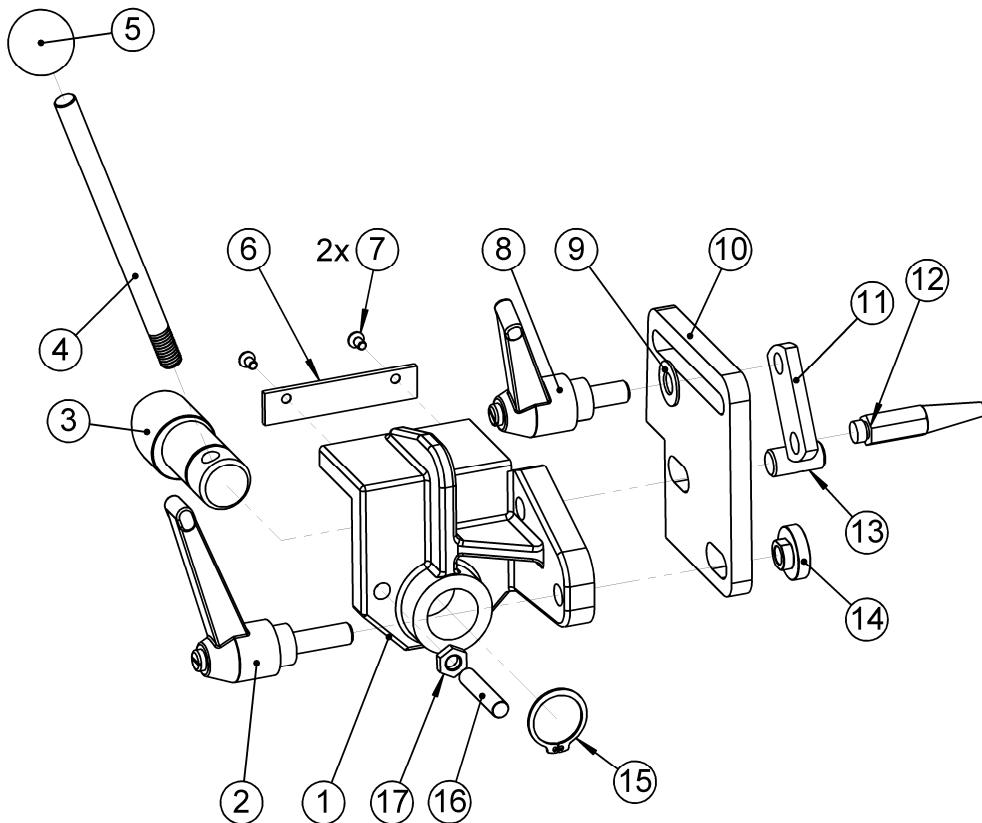
2.13. A12007 SOLE PLATE BRACKET ASSEMBLY LH



Ref #	Part #	Name of Part	Qty.
1	A04130	SOLEPLATE CASTING LH.....	1
2	A04132	SOLEPLATE CASTING RETAINING STRIP.....	1
3	A11867	PIN ECCENTRIC SOLEPLATE BRACKET.....	1
4	A09035	ECCENTRIC LEVER.....	1
5	A06115	BALL KNOB.....	1
6	A09062	LEVER STOP.....	1
7	A09105	QUADRANT PIVOT PIN	1
8	A04302	QUADRANT PLATE	1
9	A09023	NUT CAPTIVE M10.....	1
10	A06118	LEVER. CLAMPING INDEXED M10 x 20 STUD	1
11	A06119	ADJUSTABLE HANDLE M10 x 30.....	1
12	A04089	TAPER PIN PLATE	1
13	A09119	TAPER PIN.....	1
14	A05603	25mm CIRCLIP	1
15	A05229	M8 HEX HALF NUT.....	1
16	A05127	SCREW. COUNTERSUNK. M4 x 8 SOCKET HEAD	2
17	A05310	M10 WASHER FORM B.....	1

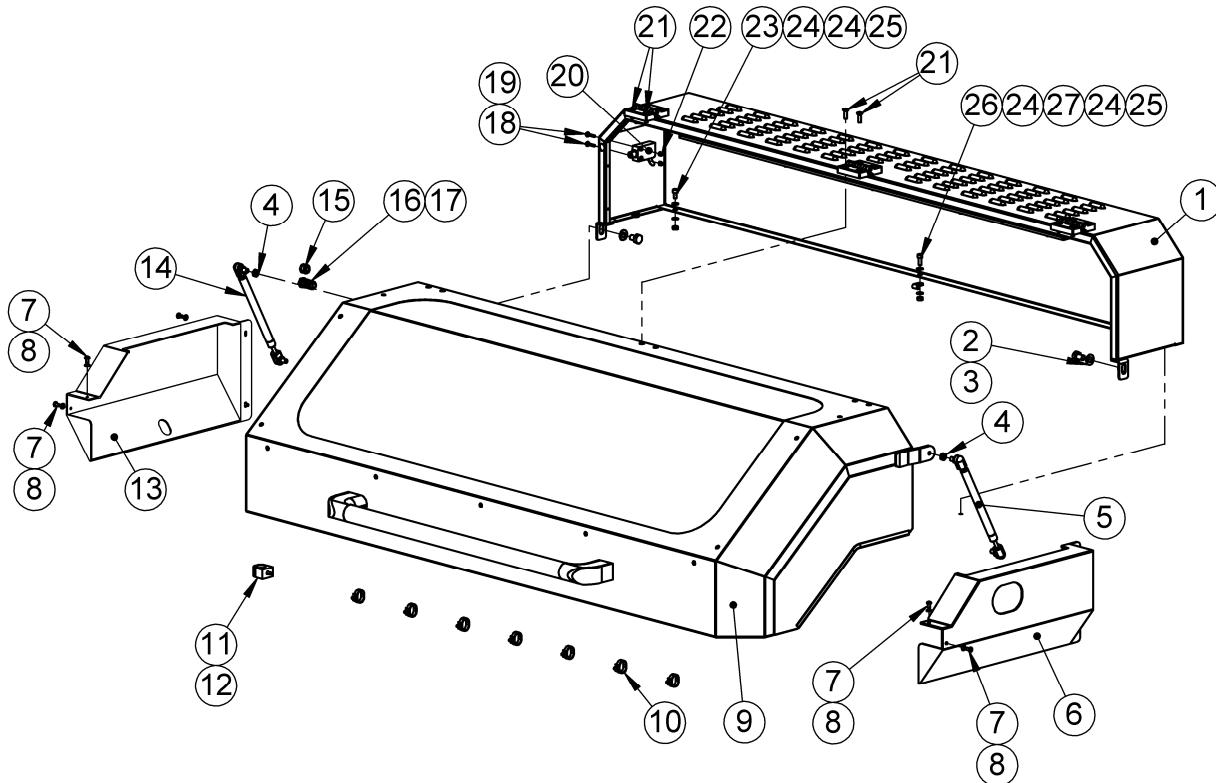


2.14. A12008 SOLE PLATE BRACKET ASSEMBLY RH



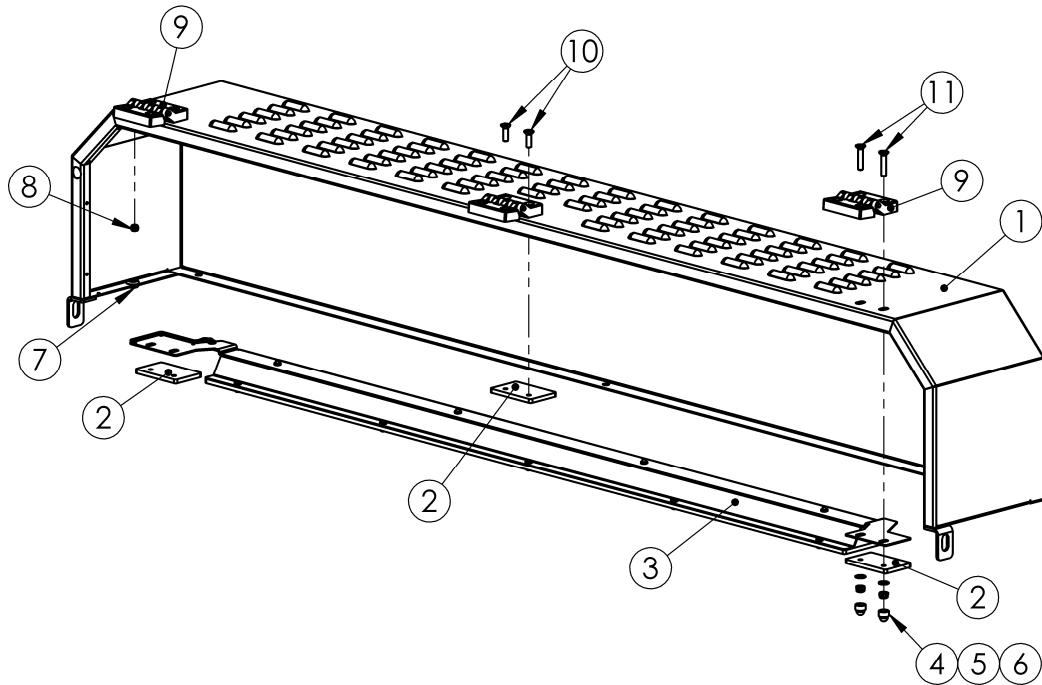
Ref #	Part #	Name of Part	Qty.
1	A04131	SOLEPLATE CASTING RH.....	1
2	A06119	ADJUSTABLE HANDLE M10 x 30	1
3	A12013	PIN ECCENTRIC SOLEPLATE BRACKET RH	1
4	A09035	ECCENTRIC LEVER	1
5	A06115	BALL KNOB	1
6	A04132	SOLEPLATE CASTING RETAINING STRIP	1
7	A05127	SCREW. COUNTERSUNK. M4 x 8 SOCKET HEAD	2
8	A06118	LEVER. CLAMPING INDEXED M10 X 20 STUD.....	1
9	A05310	M10 WASHER FORM B	1
10	A04302	QUADRANT PLATE	1
11	A04089	TAPER PIN PLATE.....	1
12	A09119	TAPER PIN	1
13	A09105	QUADRANT PIVOT PIN	1
14	A09023	NUT CAPTIVE M10	1
15	A05603	25mm CIRCLIP	1
16	A09062	LEVER STOP.....	1
17	A05229	M8 HEX HALF NUT	1

2.15. A12048 TOP ENCLOSURE & COVERS ASSEMBLY

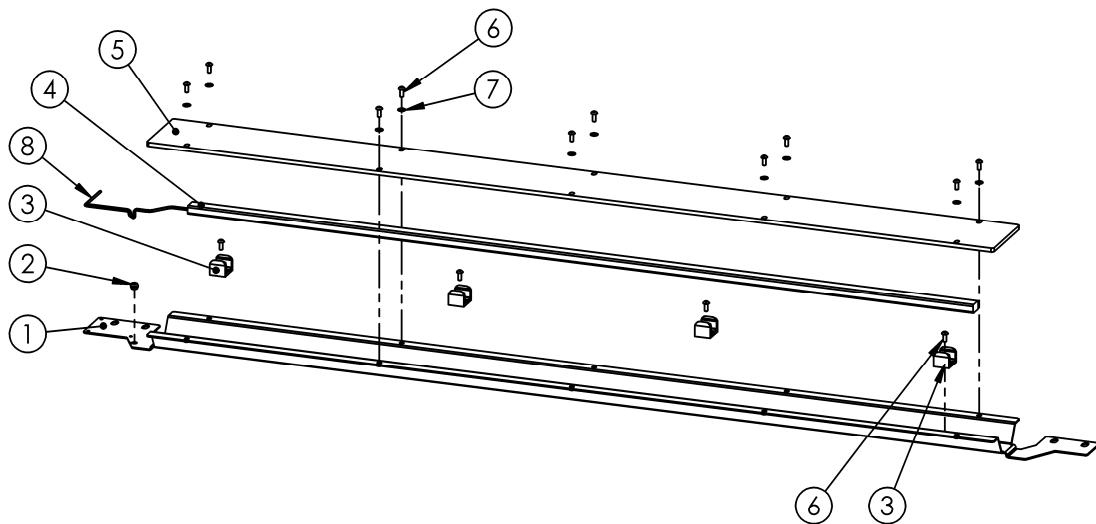


Ref #	Part #	Name of Part	Qty
1	A12167	REAR COVER ASSEMBLY	1
2	A05310	M10 WASHER FORM B.....	2
3	A05149	M10 x 16 HEX HEAD	2
4	A05555	M8 HALF NUT BZP	2
5	A06731	GAS STRUT	1
6	A06338	RH FEEDSCREW COVER	1
7	A05129	M5 x 10 BUTTON HEAD	8
8	A05318	M5 FORM B WASHER.....	8
9	A12545	HOOD ASSEMBLY	1
10	A08422	CLIP	7
11	A11793	CLIP	1
12	A05129	M5 x 10 BUTTON HEAD	1
13	A06337	LH FEEDSCREW COVER	1
14	A06731	GAS STRUT	1
15	A12453	GROMMET	1
16	A12080	GLAND, M12	1
17	A12081	NUT	1
18	A12546	M4 x 20 TORX BUTTON HD SCREW	2
19	A05317	M4 WASHER.....	2
20	A12442	SWITCH	1
21	A09066	M6 x 20 CSK SET SCREW BZP	6
22	A05414	NUT M4 NYLON LOCKING Z	2
23	A05171	M6 x 12 CAP HEAD	2
24	A05320	M6 FORM B WASHER.....	6
25	A05516	NUT M6 FULL BZP	3
26	A05754	M6 x 16 CAP HEAD	1
27	A08007	4.8/6.4mm P-CLIP	1
28	A08049	CABLE TIE	7

2.16. A12167 REAR COVER ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A11485	REAR COVER.....	1
2	A12071	PLATE	3
3	A12164	LIGHT BAR ASSEMBLY	1
4	A11707	NUT, COVER	4
5	A05517	M6 NYLOCK NUT	4
6	A05320	M6 FORM B WASHER.....	4
7	A12128	GROMMET.....	1
8	A12127	GROMMET.....	1
9	A06109	HINGE	3
10	A09066	SCREW. COUNTERSUNK. M6 X 20 SOCKET HEAD.....	2
11	A11788	SCREW. COUNTERSUNK. M6 X 30 SOCKET HEAD.....	4

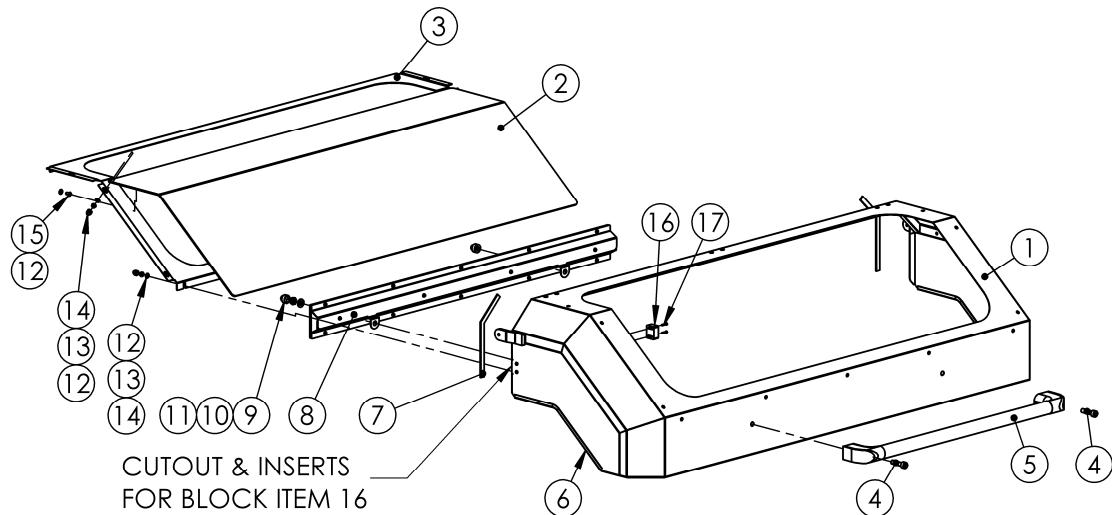
**2.17. A12164 LIGHT BAR ASSEMBLY**

Ref #	Part #	Name of Part	Qty
1	A11459	LIGHT BRACKET	1
2	A12127	GROMMET	1
3	A11441	CLIP	4
4	A11507	LED LIGHT BAR, MODIFIED	1
5	A12001	DIFFUSER	1
6	A12158	SCREW. M4 x 10, BUTTON HD	14
7	A05317	M4 WASHER	10
8	A08049	CABLE TIE	3



2.18. A12545 HOOD ASSEMBLY

FOR MACHINE SERIAL NUMBERS 25191 TO 25445



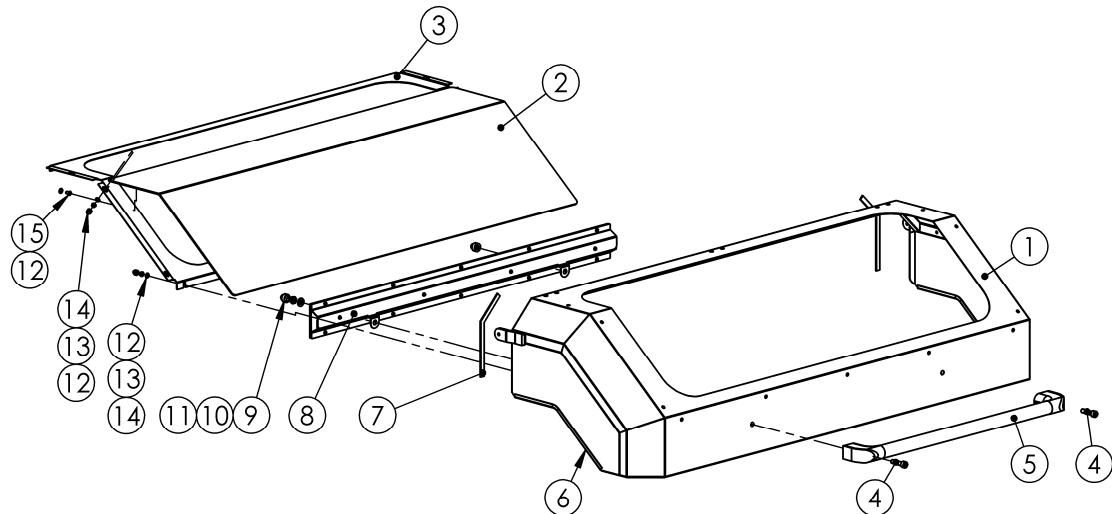
Ref #	Part #	Name of Part	Qty.
1	A12542	HOOD	1
2	A11452	PANEL	1
3	A11479	RETAINER	1
4	A12177	SCREW ISO 4762 M10 x 40 - 40N	2
5	A11440	HANDLE	1
6	A08219-365	GROMMET STRIP	0.75m
7	A06921-250	SEALING STRIP	0.5m
8	A12163	LIGHT BAR ASSEMBLY	1
9	A11444	NUT, COVER	2
10	A05505	M10 NYLOCK NUT	2
11	A05997	M10 FORM A WASHER	2
12	A05320	M6 FORM B WASHER	16
13	A05517	M6 NYLOCK NUT	11
14	A11707	NUT, COVER	11
15	A05145	M6 x 12 BUTTON HEAD SOCKET SCREW	5
16	A12439	BLOCK ROLLER SWITCH	1
17	A12444	SCREW M3 x 16 BUTTON HEAD SECURITY TORX	2

* AM4100 MACHINES WITH THE SERIAL NUMBERS 25191 TO 25445 WERE SUPPLIED WITH A NOW OBSOLETE VERSION OF THE HOOD PART NUMBER A12542. IF A NEW HOOD IS REQUIRED ON THESE MACHINES THEN THE NEW REPLACEMENT HOOD WILL ALSO REQUIRE THE MATCHING NEW REAR COVER.

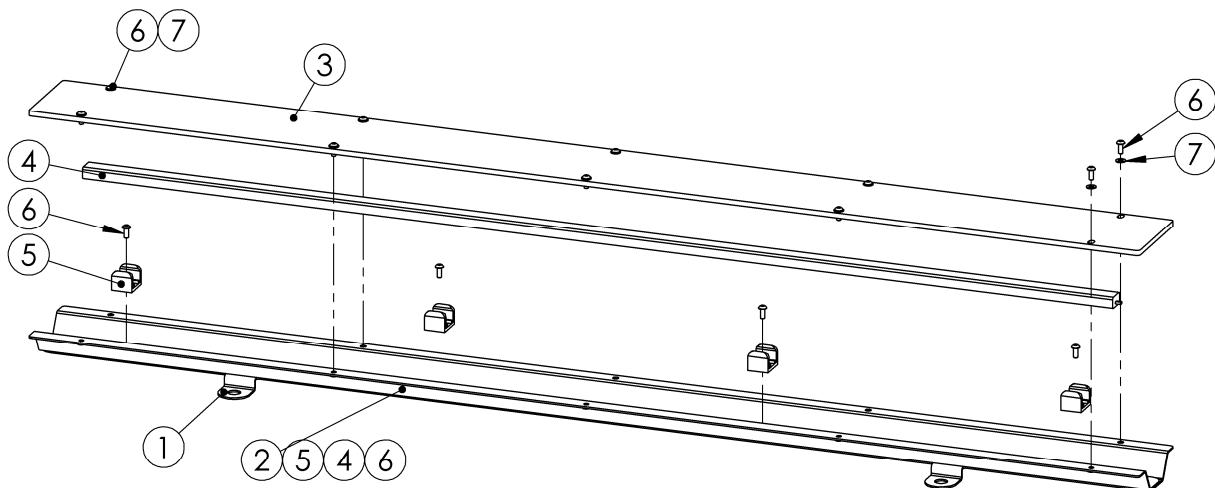
THE NEW STYLE HOOD WILL NOT REQUIRE ITEMS 16 OR 17 TO BE FITTED.

A NEW STYLE REAR COVER A11485 IS COMPATABLE WITH AN ORIGINAL HOOD.

2.19. A12545 HOOD ASSEMBLY



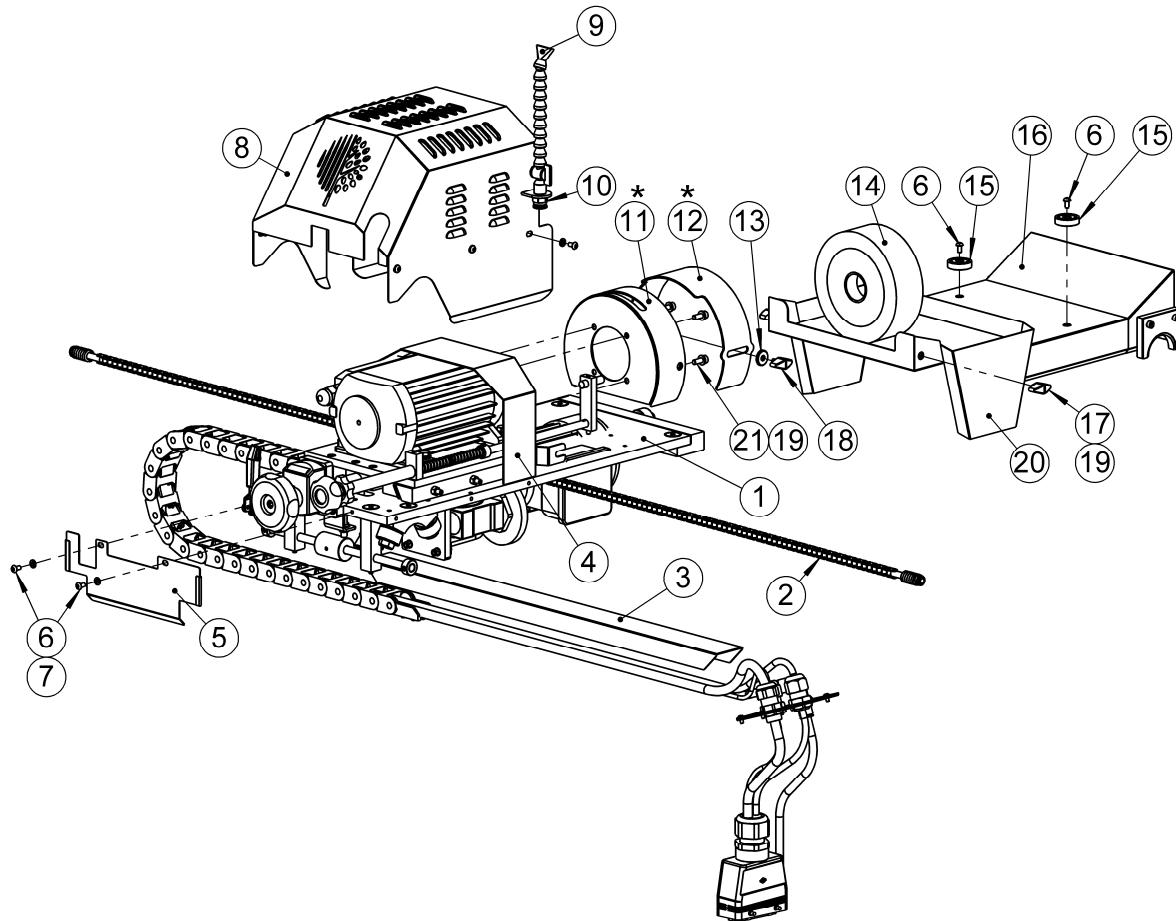
Ref #	Part #	Name of Part	Qty.
1	A12542	HOOD	1
2	A11452	PANEL	1
3	A11479	RETAINER	1
4	A12177	SCREW ISO 4762 M10 x 40 - 40N	2
5	A11440	HANDLE	1
6	A08219-365	GROMMET STRIP	0.75m
7	A06921-250	SEALING STRIP	0.5m
8	A12163	LIGHT BAR ASSEMBLY	1
9	A11444	NUT, COVER	2
10	A05505	M10 NYLOCK NUT	2
11	A05997	M10 FORM A WASHER	2
12	A05320	M6 FORM B WASHER	16
13	A05517	M6 NYLOCK NUT	11
14	A11707	NUT, COVER	11
15	A05145	M6 X 12 BUTTON HEAD SOCKET SCREW	5

**2.20. A12163 LIGHT BAR ASSEMBLY**

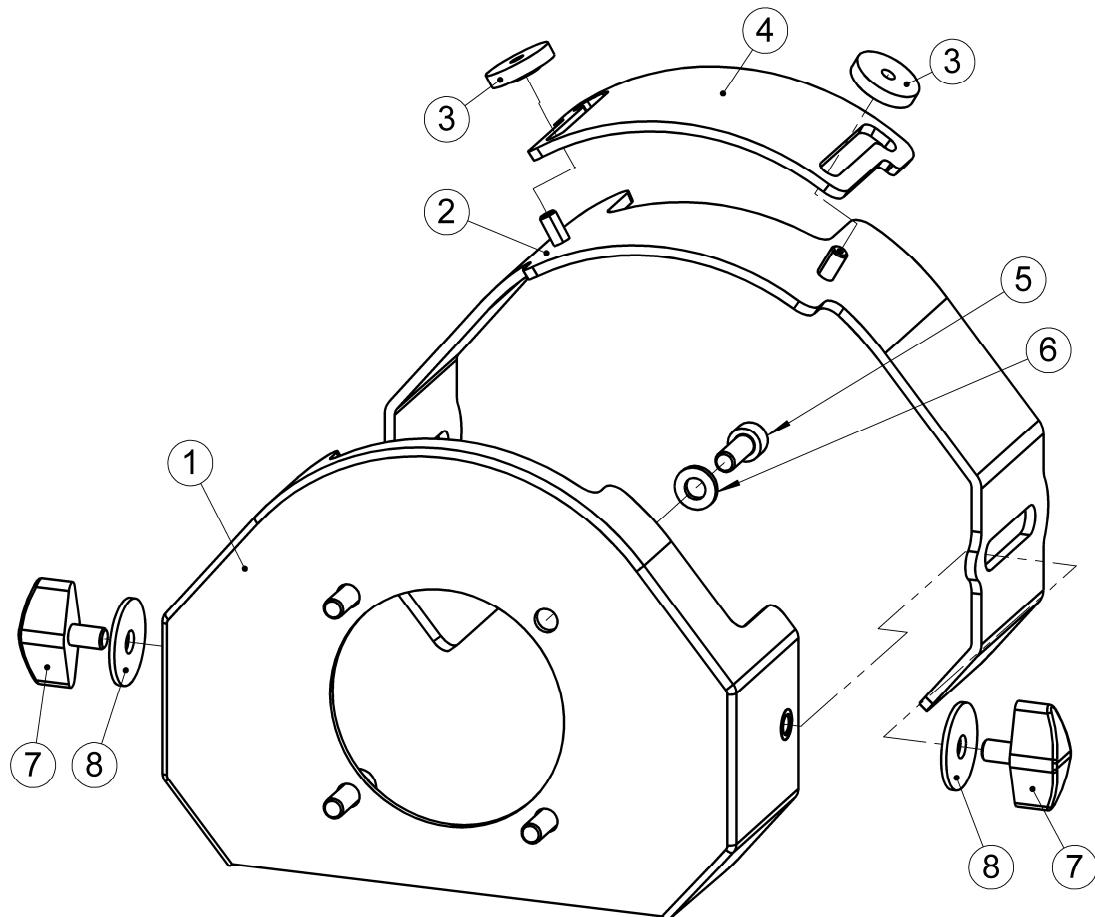
Ref #	Part #	Name of Part	Qty
1	A11999	LIGHT BRACKET BASE	1
2	A12000	LIGHT BRACKET TOP	1
3	A12001	DIFFUSER.....	1
4	A11507	LED LIGHT BAR.....	1
5	A11441	CLIP.....	4
6	A12158	SCREW. M4 x 10, BUTTON HD	14
7	A05317	M4 WASHER.....	10

2.21. A12107 CARRIAGE ASSEMBLY COVERS & GUARDS

*An optional grind wheel guard to replace items 11 & 12 is available with a retractable top section for larger bedknives see page 26.

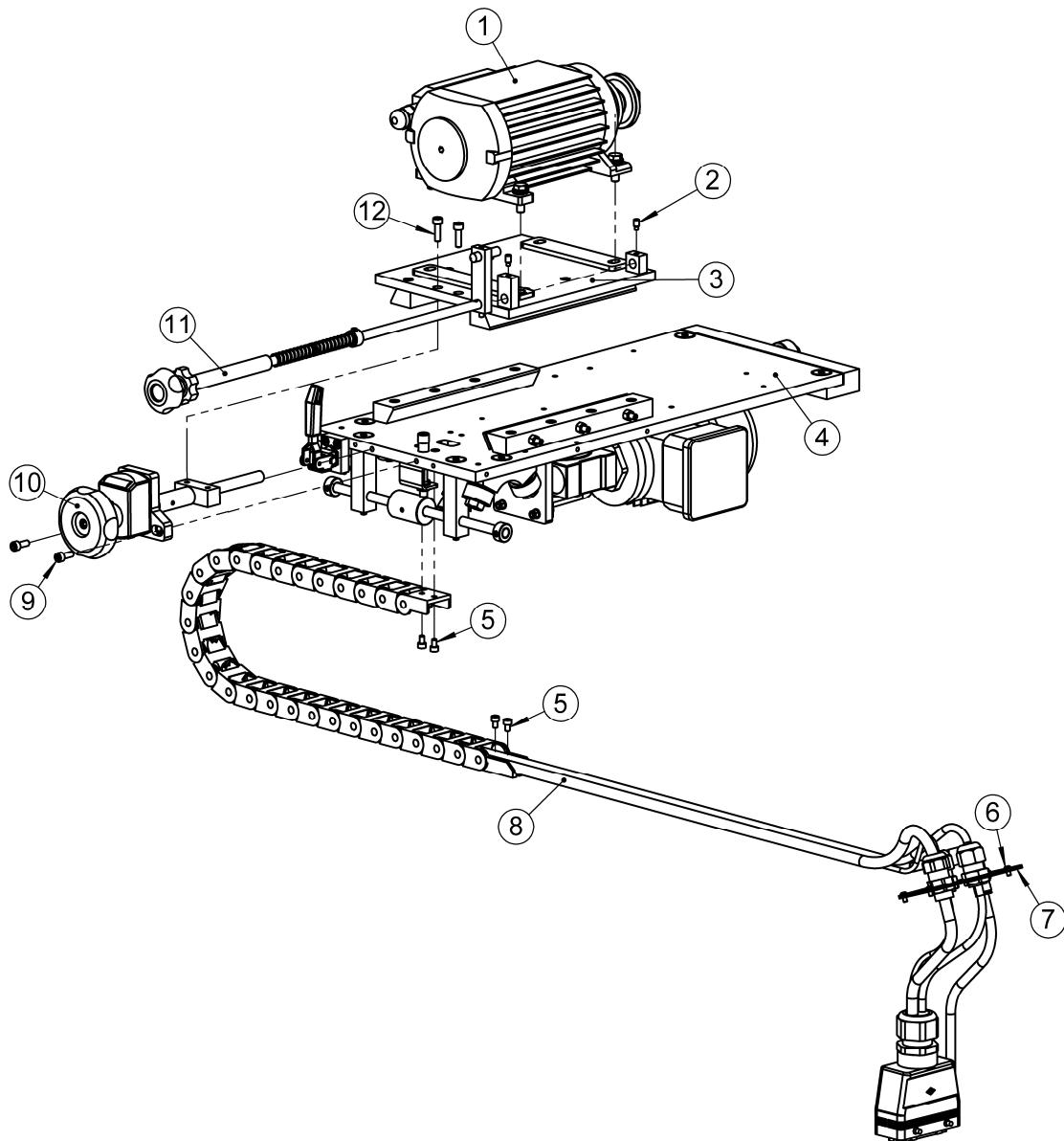


Ref #	Part #	Name of Part	Qty
1	A12109	CARRIAGE ASSEMBLY AM4100.....	1
2	A05045	TRAVERSE CHAIN ASSEMBLY	1
3	A06954	CABLE TRACK COVER.....	1
4	A11342	COVER GUARD MOTOR FRONT	1
5	A05609	REVERSING SWITCH COVER ASSEMBLY.....	1
6	A05129	M5 x 10 BUTTON HEAD	10
7	A05318	M5 FORM B WASHER.....	8
8	A11553	COVER ASSY MOTOR AM	1
9	A06773	STAY PUT HOSE INCL TAP	1
10	A11695	COUPLING.....	1
11	A11344	GUARD STONE FIXED	1
12	A11346	GUARD STONE ADJUSTABLE.....	1
13	A11347	SPACER GUARD	2
14	A11858	GRIND WHEEL ANGLEMASTER SUPERBLUE MKII	1
15	A06704	MAGNET	2
16	A05047	REAR RAIL GUARD ASSEMBLY	1
17	A06144	WING KNOB M6 x 8.....	2
18	A06126	WING KNOB M6 x 10.....	2
19	A05320	M6 WASHER	6
20	A06350	SMALL REMOVABLE DUST COLLECTOR	1
21	A05754	M6 x 16 CAP HEAD	4

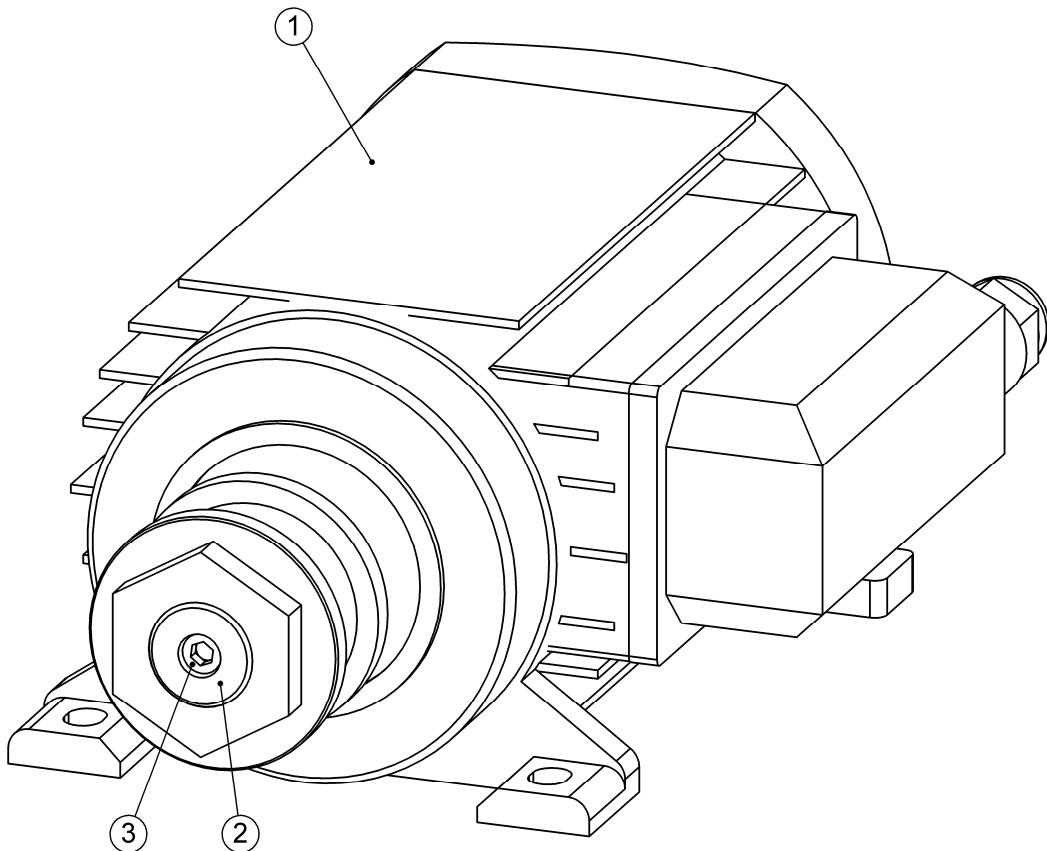
2.22. A12723 GUARD ASSEMBLY LARGE BEDKNIFE CARRIERS


Ref #	Part #	Name of Part	Qty
1	A12724	INNER GUARD FABRICATION	1
2	A12725	OUTER GUARD	1
3	A12839	NUT THUMB. THIN. M5 STAINLESS STEEL A1 TO DIN 467	2
4	A12838	GUARD TOP	1
5	A05754	M6 x 16 CAP HEAD	4
6	A05320	M6 WASHER	4
7	A06126	WING KNOB M6 x 10	2
8	A05337	M6 PENNY WASHER	2

2.23. A12109 CARRIAGE ASSEMBLY AM4100

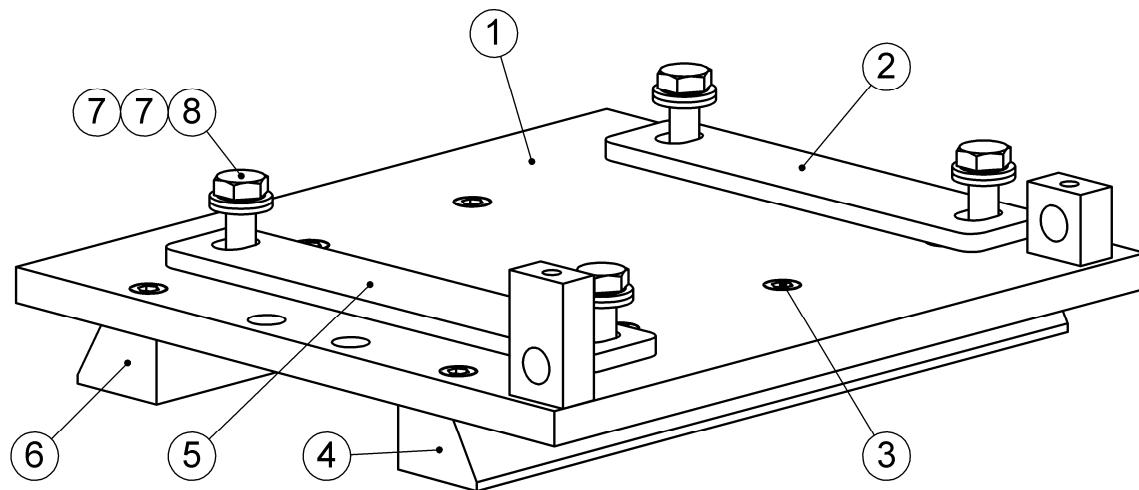


Ref #	Part #	Name of Part	Qty
1	A12243	MOTOR + ARBOR ASSEMBLY	1
2	A12248	SCREW GRUB M6 x 10 ACETAL TIP	2
3	A11663	CARRIAGE TOP ASSEMBLY	1
4	A12108	CARRIAGE BOTTOM ASSEMBLY	1
5	A05759	M5 x 8 CAP HEAD SOCKET SCREW	4
6	A05125	M4 x 8 BUTTON HEAD	4
7	A03663	COOLANT DEFLECTOR GASKET	1
8	A11819	CABLE LOOM ASSEMBLY AM4100 E-CHAIN	1
9	A05754	M6 x 16 CAP HEAD	2
10	A05283	MOTOR FEEDSCREW & COUNTER ASSEMBLY	1
11	A05076	DIAMOND DRESSER ARM ASSEMBLY	1
12	A05150	M6 x 20 CAP HEAD	2

2.24. A12243 MOTOR + ARBOR Assembly

Ref #	Part #	Name of Part	Qty
1	A11314	MOTOR 3PH 1.1KW	1
2	A05043	ARBOR ASSEMBLY	1
3	A05152	SOCKET CAP SCREW M6 x 25	1

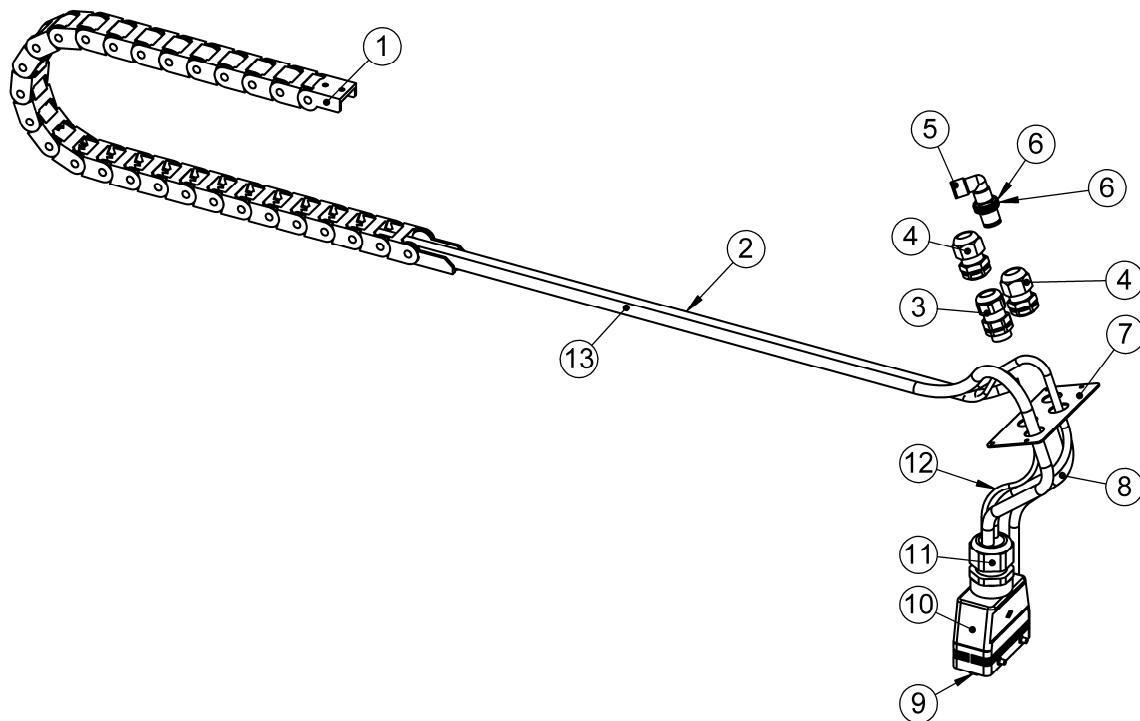
2.25. A11663 CARRIAGE TOP ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A09555	MOTOR PLATE FABRICATION	1
2	A54113	MOTOR SPACER PLATE (SHORT).....	1
3	A05150	SCREW. M6 x 20 CAP HEAD.....	8
4	A04077	MOTOR PLATE SLIDE L.H.....	1
5	A54114	MOTOR SPACER PLATE (LONG)	1
6	A04305	MOTOR PLATE SLIDE R.H.....	1
7	A05484	M8 FORM 'A' WASHER	8
8	A05723	M8 x 25 HEX SET SCREW.....	4

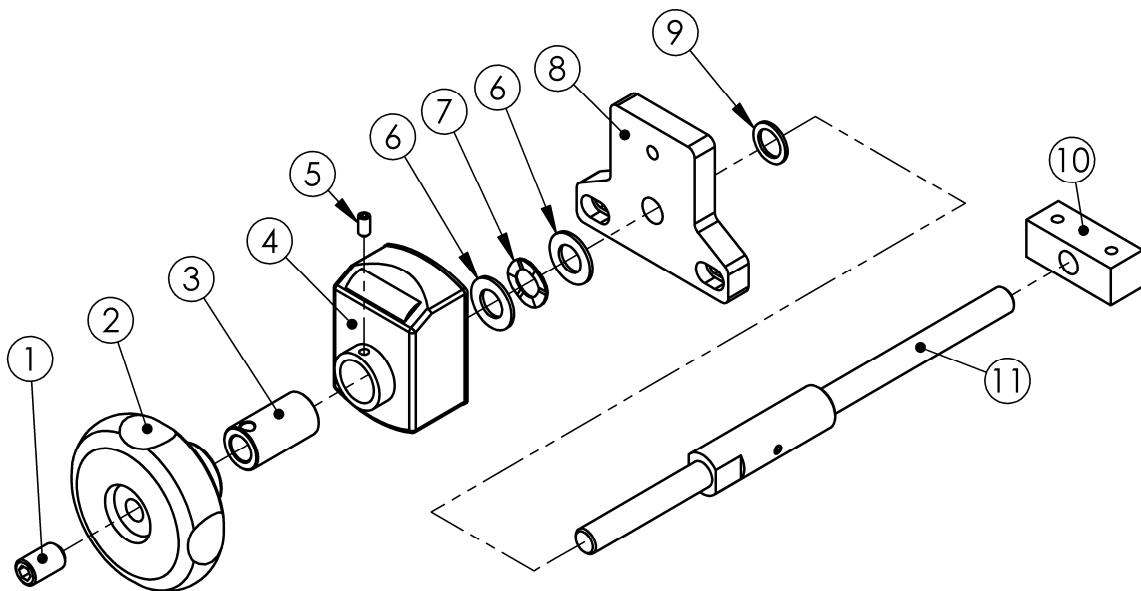


2.26. A11819 CABLE LOOM ASSEMBLY AM4100 E-CHAIN

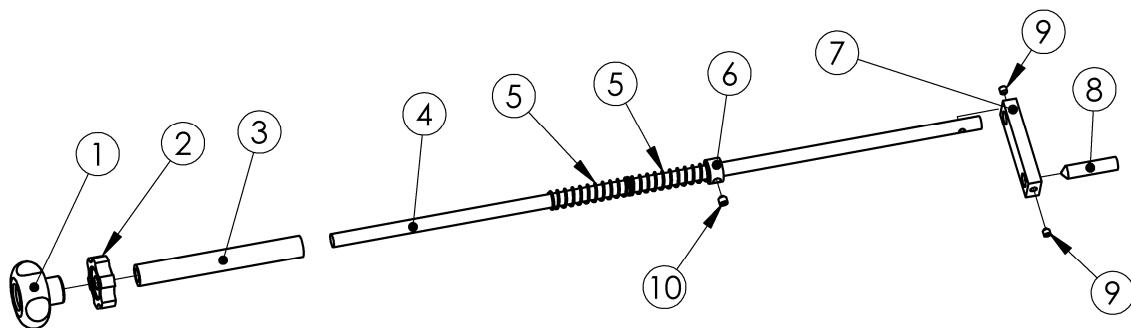


Ref #	Part #	Name of Part	Qty
1	A12458	ENERGY CHAIN MODIFIED	1
2	A11535	CABLE 4C (3+1) 18AWG SCREENED	1
3	A12086	GLAND M20 x 1.5 BLACK 10-14mm CABLE	1
4	A08114	20mm GLAND	2
5	A11307	ELBOW 90° BULKHEAD PNEUMATIC 10mm OD TUBE	1
6	A11699	WASHER NYLON SEALING 20mm I/D	2
7	A12085	PLATE GLAND TROLLEY LOOM	1
8	A12087	TUBE 10MM OD 6.5mm ID BLUE	1
9	A08893	HBE-16 MALE INSERT	1
10	A12088	CONNECTOR HOOD MAV16.32	1
11	A12089	GLAND M32 x 1.5 BLACK	1
12	A08978	SENSOR LEAD M12 PLUG 10M	1
13	A11536	CABLE 6C (3+1)(1P) 1.5mm SCREENED	1

2.27. A05283 MOTOR FEEDSCREW & COUNTER ASSEMBLY



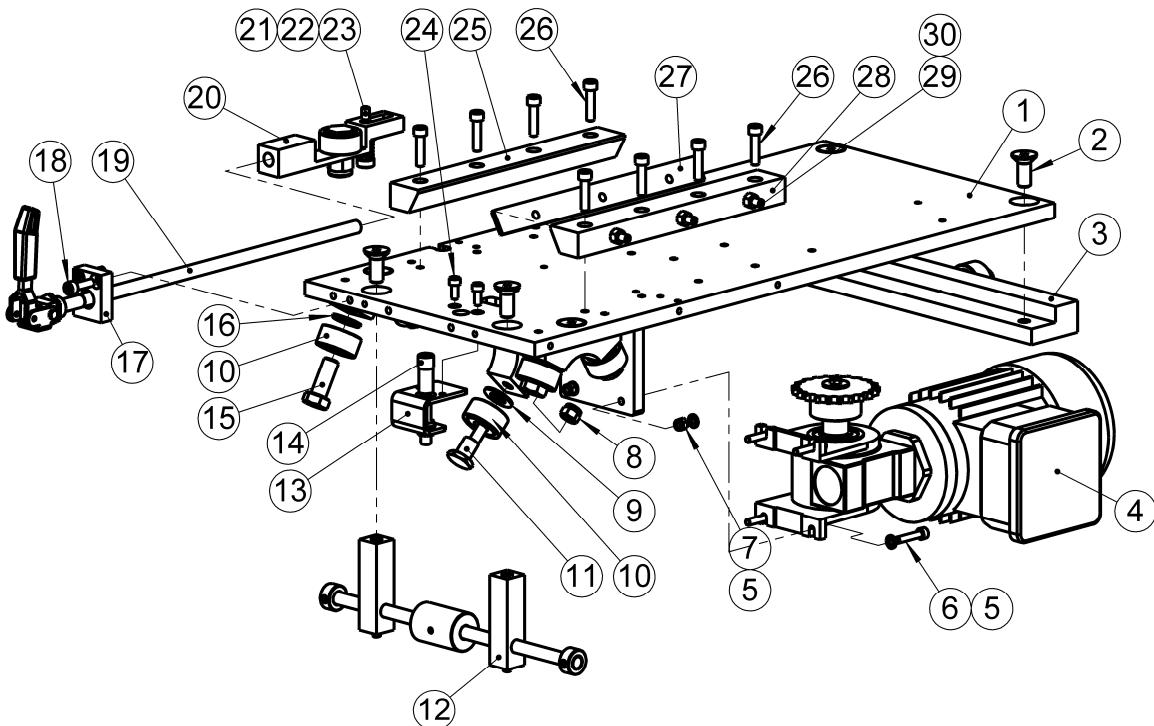
Ref #	Part #	Name of Part	Qty
1	A05486	M12 x 20 GRUB SCREW	1
2	A06106	HANDWHEEL.....	1
3	A04181	SIKO COUNTER INSERT	1
4	A06771	SIKO COUNTER	1
5	A05131	M5 x 10 GRUB SCREW.....	1
6	A05315	M12 FORM B WASHER.....	2
7	A05325	M12 CRINKLE WASHER	1
8	A04956	SIKO COUNTER SUPPORT BLOCK WIDE	1
9	A05487	WASHER M12 (SPECIAL)	1
10	A04040	MOTOR SLIDE NUT	1
11	A09213	CARRIAGE FEEDSCREW.....	1

2.28. A05076 DIAMOND DRESSER ARM ASSEMBLY


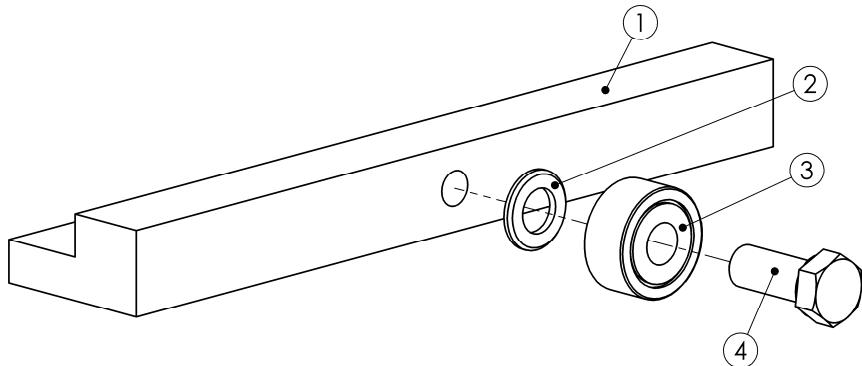
Ref #	Part #	Name of Part.....	Qty
1	A06103	50mm LOBE KNOB	1
2	A06105	LOCKING KNOB.....	1
3	A09030	SPACER.....	1
4	A09029	DIAMOND DRESSER SHAFT.....	1
5	A06711	SPRING 12mm O/D X 60	2
6	A05105	DIAMOND DRESSER COLLAR.....	1
7	A06738	DIAMOND DRESSER HOLDER	1
8	A06737	DIAMOND DRESSER.....	1
9	A05137	M5 x 5 SOCKET SET SCREW.....	2
10	A05156	M6 x 6 GRUB SCREW	1



2.29. A12108 CARRIAGE BOTTOM ASSEMBLY

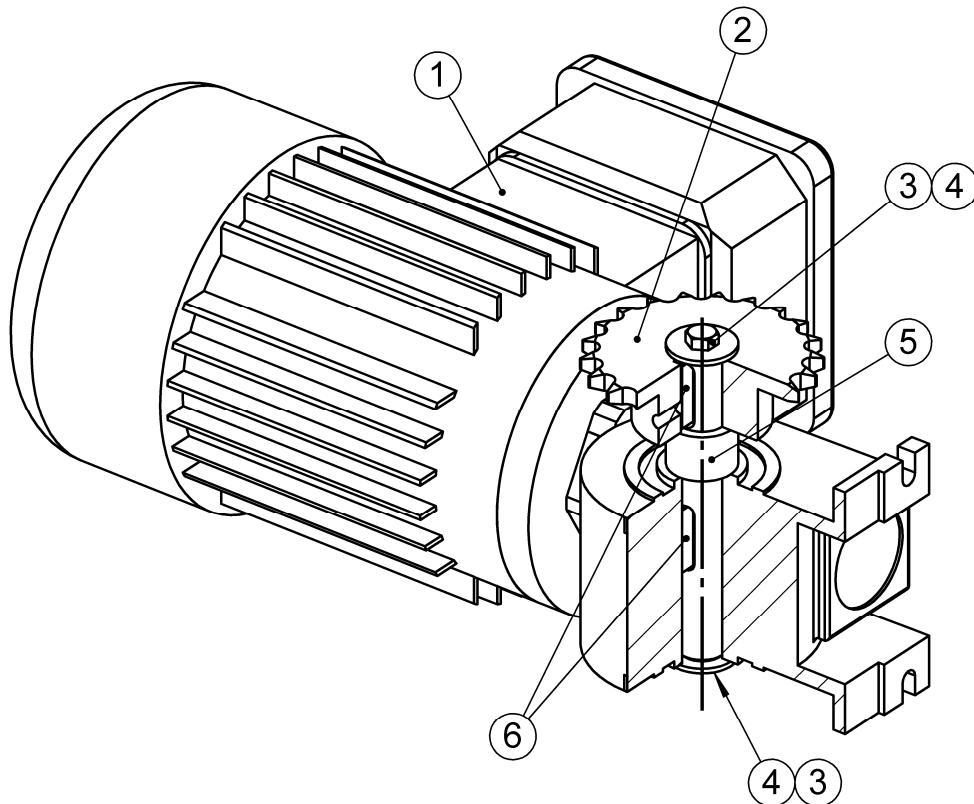


Ref #	Part #	Name of Part	Qty
1	A09554	BASE CARRIAGE FABRICATION.....	1
2	A05115	SCREW. COUNTERSUNK. M10 x 25 SOCKET HEAD	4
3	A05078	REAR BEARING BLOCK ASSY.....	1
4	A12265	MOTOR 3PH TRAVERSE ASSEMBLY	1
5	A05318	M5 FORM B WASHER.....	8
6	A05134	M5 x 25 CAP HEAD SOCKET SCREW.....	4
7	A05513	M5 NYLOC NUT BZP.....	4
8	A05520	NUT M8 NYLOCK	1
9	A05315	M12 FORM B WASHER.....	1
10	A07713	BEARING	5
11	A09032	ECCENTRIC BOLT	1
12	A12270	REVERSING BAR ASSEMBLY	1
13	A12259	BRACKET PROXIMITY SENSOR	1
14	A08981	SENSOR PROXIMITY PNP N/C M8	1
15	A05713	M12 x 30 HEX SET SCREW	4
16	A05211	M12 TURNED & CHAMFERED WASHER.....	4
17	A04291	CHAIN ENGAGEMENT HANDLE BLOCK.....	1
18	A05150	M6 x 20 CAP HEAD	2
19	A05075	TOGGLE CLAMP ASSEMBLY	1
20	A05077	CLUTCH ENGAGEMENT ASSEMBLY	1
21	A05484	M8 FORM 'A' WASHER	1
22	A04936	CLUTCH ENGAGEMENT BRACKET SPRING.....	1
23	A04937	M6 x 8 x 30 SOCKET SHOULDER BOLT.....	1
24	A09809	M5 x 12 CAP HEAD	2
25	A04024	CARRIAGE PLATE SLIDE L.H.....	1
26	A05152	M6 x 25 CAP HEAD	8
27	A04061	JIB STRIP	1
28	A04304	CARRIAGE PLATE SLIDE R.H.....	1
29	A05111	M6 x 40 SOCKET SCREW	3
30	A05516	M6 FULL NUT	3

2.30. A05078 REAR BEARING BLOCK ASSEMBLY

Ref #	Part #	Name of Part	Qty
1	A04107	REAR ADJ BEARING BLOCK	1
2	A05211	M12 TURNED & CHAMFRED WASHER.....	1
3	A07713	BEARING	1
4	A05713	M12 x 30 HEX SET	1

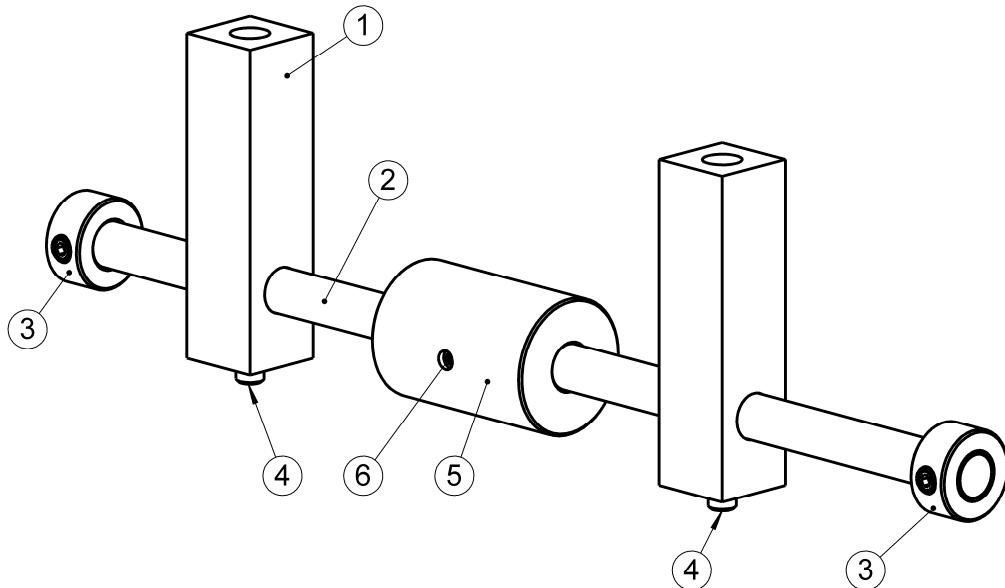
2.31. A12265 MOTOR 3PH TRAVERSE ASSEMBLY



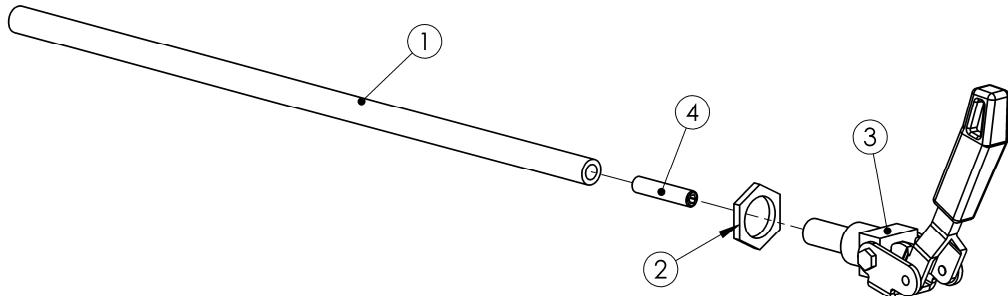
Ref #	Part #	Name of Part	Qty
1	A11802	TRAVERSE MOTOR 3PH.....	1
2	A07606	TRAV MOTOR SPROCKET 14mm.....	1
3	A11742	M5 x 12 HEX SET SCREW	2
4	A09942	M5 x 20 O.D. WASHER	2
5	A09226	DRIVE SHAFT.....	1
6	A03311	CYLINDER DRIVE KEY	2



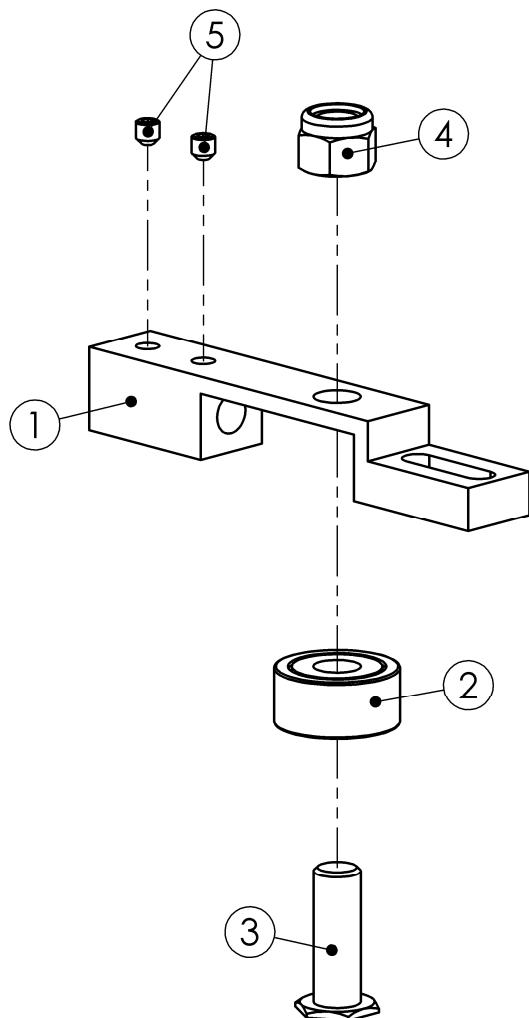
2.32. A12270 REVERSING BAR ASSEMBLY



Ref #	Part #	Name of Part	Qty
1	A04114	REVERSING BAR SUPPORT BLOCK	2
2	A12273	ROD REVERSING BAR	1
3	A09006	10mm SHAFT COLLAR	2
4	A04509	M6 BALL SPRING PLUNGER	2
5	A12271	BOSS PROXIMITY SWITCH	1
6	A05131	M5 x 10 GRUB SCREW	1

2.33. A05075 TOGGLE CLAMP ASSEMBLY

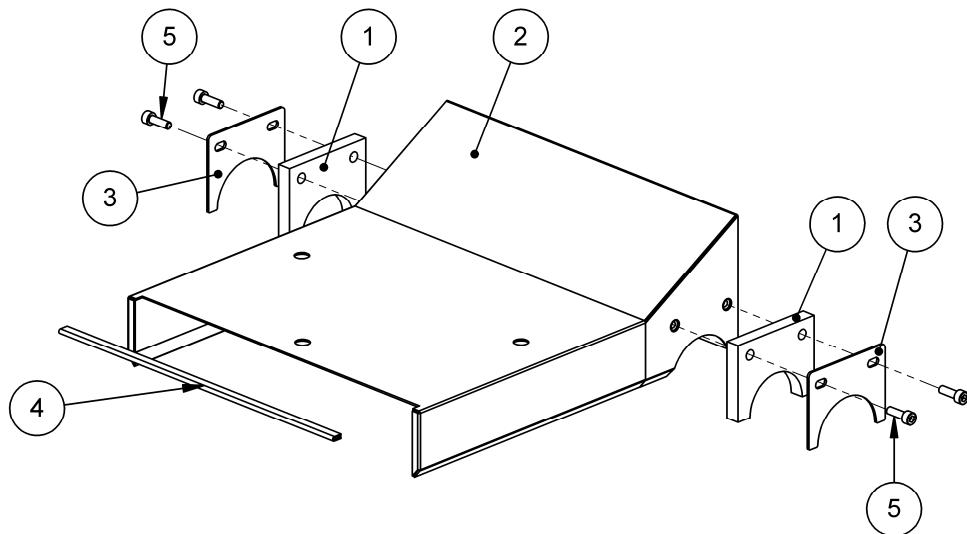
Ref #	Part #	Name of Part	Qty
1	A09214	REVERSING BAR ACTUATOR ROD	1
2	A05527	M16 HALF NUT	1
3	A06884	PUSH PULL TOGGLE CLAMP	1
4	A05215	M6 x 30 SOCKET SET SCREW	1

2.34. A05077 CLUTCH ENGAGEMENT ASSEMBLY


Ref #	Part #	Name of Part	Qty
1	A04292	CLUTCH ENGAGEMENT BRACKET	1
2	A07713	BEARING	1
3	A09065	MODIFIED BOLT M12 x 40.....	1
4	A05507	M12 NYLOCK NUT	1
5	A05156	M6 x 6 GRUB SCREW	2

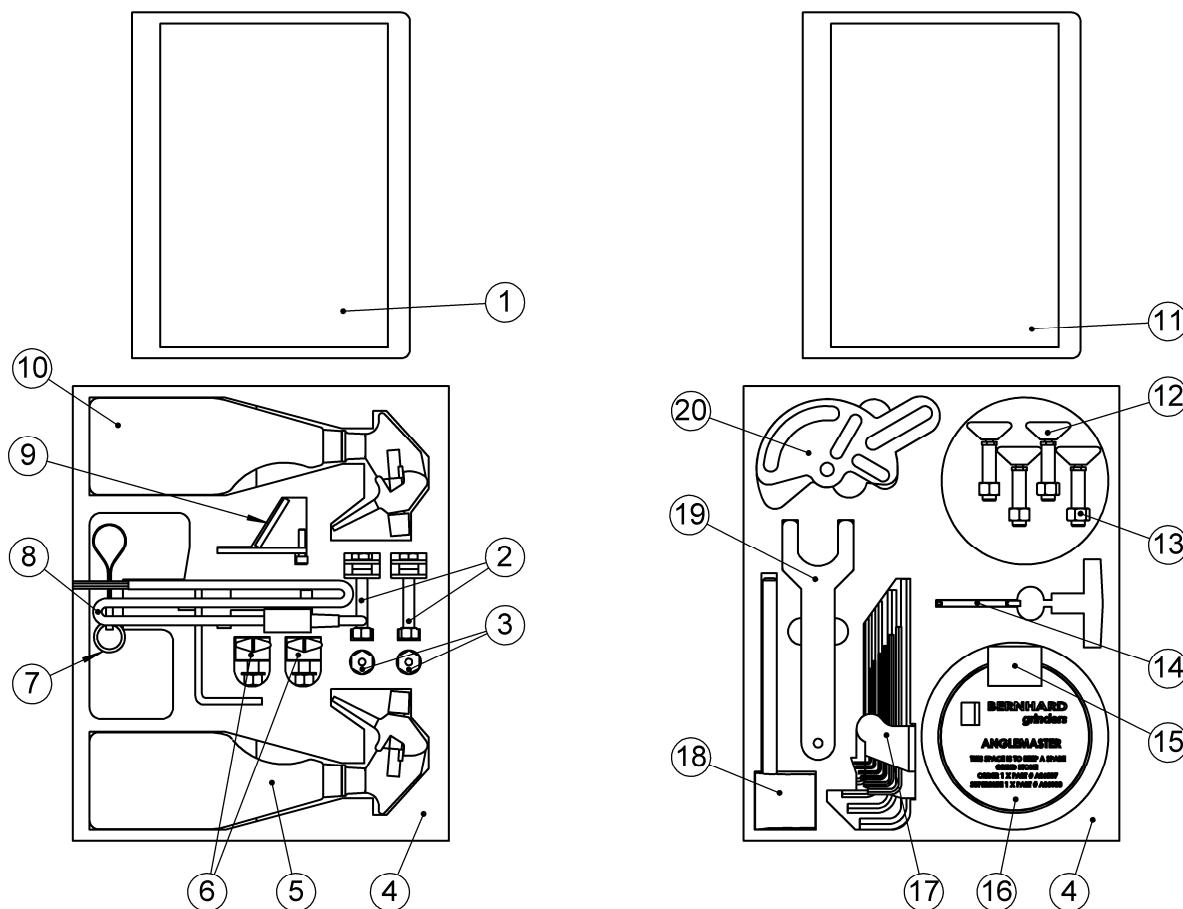


2.35. A05047 REAR RAIL GUARD ASSEMBLY



Ref #	Part #	Name of Part	Qty.
1	A06766	WIPER FELT	2
2	A06347	REAR RAIL GUARD FABRICATION	1
3	A04104	WIPER PLATE	2
4	A08273	GROMMET STRIP-THIN 25cm LONG	1
5	A05132	SCREW M5 x 16 CAP HEAD	4

2.36. A12294 TOOLKIT ASSEMBLY AM4100



Ref #	Part #	Name of Part	Qty
1	A12299	OPERATOR MANUAL. AM4100 ENGLISH	1
2	A09607	F10 BRACKETS COMPETE	2
3	A09266	19mm TAPER CONES	2
4	A02718	FOAM INSERTS	1
5	A03493	SPRAY BOTTLE WITH FINE CLEAN 1/2 LTR	1
6	A05668	BEDKNIFE MOUNTING BRACKETS 3/4 (SINGLE)	2
7	A11102	LOOP FOB	1
8	A08902	3m MAINS LEAD 10AMP PLUG TO TAILS	1
9	A03952	TORO DPA BRACKET ASSEMBLY	1
10	A03492	SPRAY BOTTLE WITH ANTI RUST 1/2 LTR	1
11	A12304	PARTS CATALOGUE	1
12	A06107	ADJUSTABLE FOOT	4
13	A05506	M12 FULL NUT	4
14	A12329	HEX KEY. T30 TORX SECURITY	1
15	A07090	FUSES	1
16	A05017	LABEL FOR SPARE AM STONE	1
17	A07042	HEX KEY METRIC EXPERT 10 PIECE SET	1
18	A02716	BOX SPANNER	1
19	A04483	GRINDING SHAFT SPANNER	1
20	A04090	SLOTTED QUADRANT	2

**2.37. A12289 LIVERY & LABELS ASSEMBLY AM4100**

Ref #	Part #	Name of Part	Qty
1	A11602	LABEL PRODUCT NAME AM4100.....	1
2	A12369	LABEL NAMEPLATE	1
3	A12349	LABEL SAFETY WARNINGS AND QUICK GUIDE.....	1
4	A12358	LABEL SAFETY UNPLUG	1
5	A12359	LABEL SAFETY ELECTRICITY	1
6	A12360	LABEL SAFETY MAGNET.....	2
7	A12220	LABEL DECAL SET ANGLEMASTER.....	1
8	A06639	LABEL FORKLIF THERE.....	2



3. CONTACT INFORMATION

If you have any service or operational issues please contact your distributor or phone our technical support hotline

Technical Helpline (USA only) – 1-888 474 6348

Rest of World: UK Head Office – (+44) 1788 811600

Email: support@bernhard.co.uk

Technical FAQs can be found on our website:

www.bernhard.co.uk

When ordering spare parts please quote the machine type and serial number.

THE MANUFACTURERS ACCEPT NO RESPONSIBILITY FOR ANY SITUATION ARISING FROM THE FITTING AND/OR USE OF NON-ORIGINAL SPARE PARTS.

4. UPDATES AND REVISIONS

This section contains Bernhard update policy and revision history of this document.

4.1. UPDATES AND REVISION CONTROL

The machine specification and parts may be updated without prior notice in line with Bernhard policy of continuous improvement. Images shown are for illustration purposes only and may not exactly match the machine.

This document may be updated as required. The latest version can be found on our website: www.bernhard.co.uk

4.2. This document revision history

Issue	Revision Description / Reference	Date	By
01	First Release	18/10/23	SK
02	CN02356	20/8/2024	SK



5. Notes



BERNHARD