

Parts Manual

EMC MODEL

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This reference covers the following Fadal products:

Model EMC

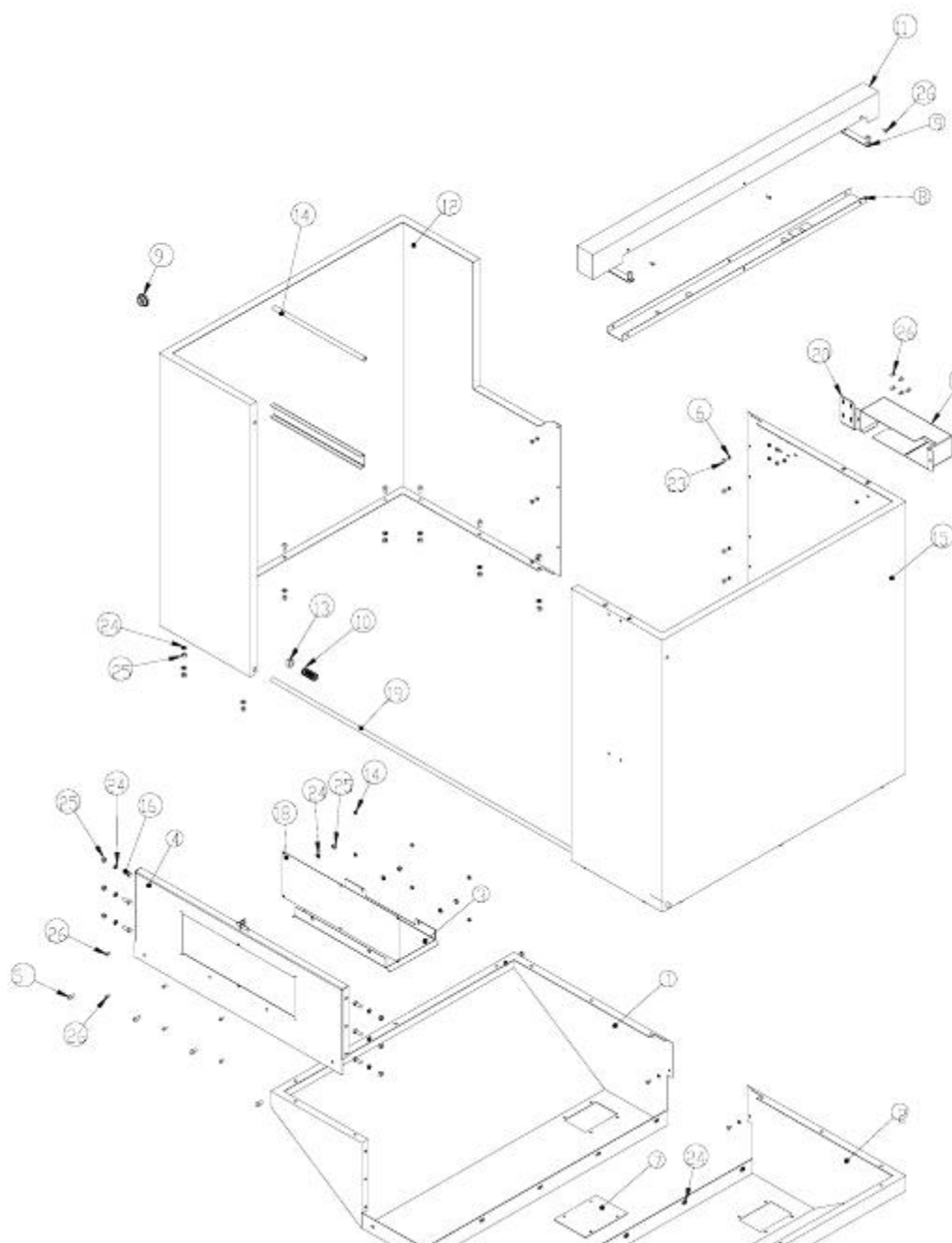
The content of this manual are for Fadal hardware and/or software products as described herein. Differences may exist and cannot be guaranteed that they are completely covered in this document.

Material is subject to change without notice.

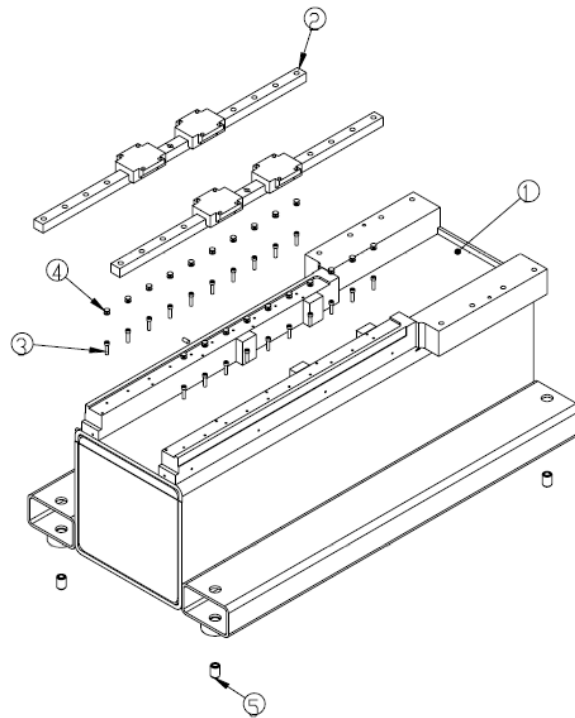
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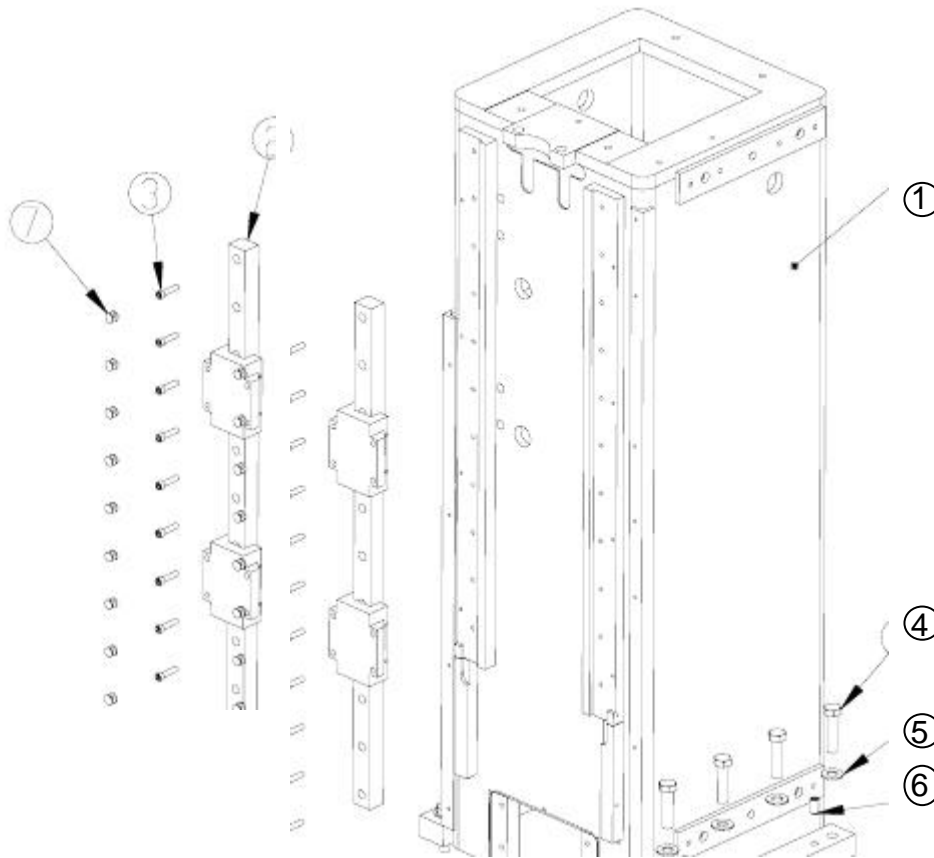
Sheet Metal Assembly



ITEM #	QTY	PART #
1	1	STM 1417 splash guard botton left pan EMC
2	1	STM 1418 splash guard botton riight pan EMC
3	1	STM 1421 cross tray EMC
4	1	STM 1422 front panel EMC
5	24	HDW 0345 screw button socap,375-16 x ,75
6	11	HDW 0279 washer lock split ,25
7	2	STM 1413 splash guard botton drain cover EMC
8	1	STM 1415 pendant wire tray EMC
9	1	HDW 0185 bumper white stick on 3m
10	2	HDW 0264 spring door ,9375x2 compression
11	1	STM 1416 pendant wire tray cover EMC
12	1	STM 1419 splash guard left EMC
13	2	HDW 0215 collar door rod ,625
14	12	HDW 0337 nut hex keps,25 20 z p
15	1	STM 1420 splash guard right EMC
16	6	HDW 0568 screw hexcap 9r8 ,375 16xl
17	1	STM 0088 Gutter rear wire vmc 15 2216 3016
18	1	STM 0082 cover front panel 15 15XT
19	1	DOR 0043 door rod 75 vmc 15 20161 emc
20	1	STM 1429 brace splash guard riight EMC
21	1	STM 1429 gusset splash guard riight EMC
22	6	HDW-0049 Washer,Hardened 3/8
23	11	HDW 0319 screw hexcap qr 8 ,25 20x,5
24	39	HDW 0280 washer lock split ,375
25	26	HDW 0333 nut hex ,375 16 plain steel
26	18	HDW 0346 screw button socap ,25 20x,5

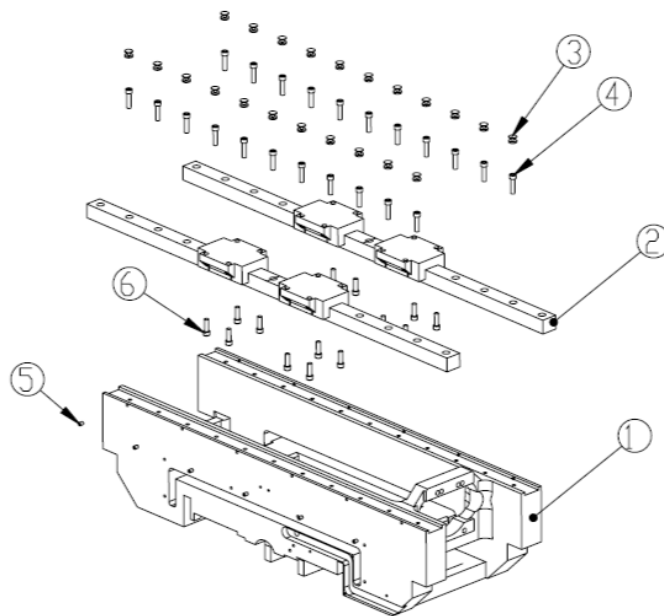


ITEM #	QTY	PART #
1	1	BAS 0042 BAS 0043 base weldment assembly EMC
2	2	BRG 0164 linear guide 1000mm emc
3	20	HDW 0291 screw socap .3125-18x1 .25
4	20	BRG 0032 plug raid socket cap
5	4	HDW 0680 screw set halfdog 1 14 x 1,5

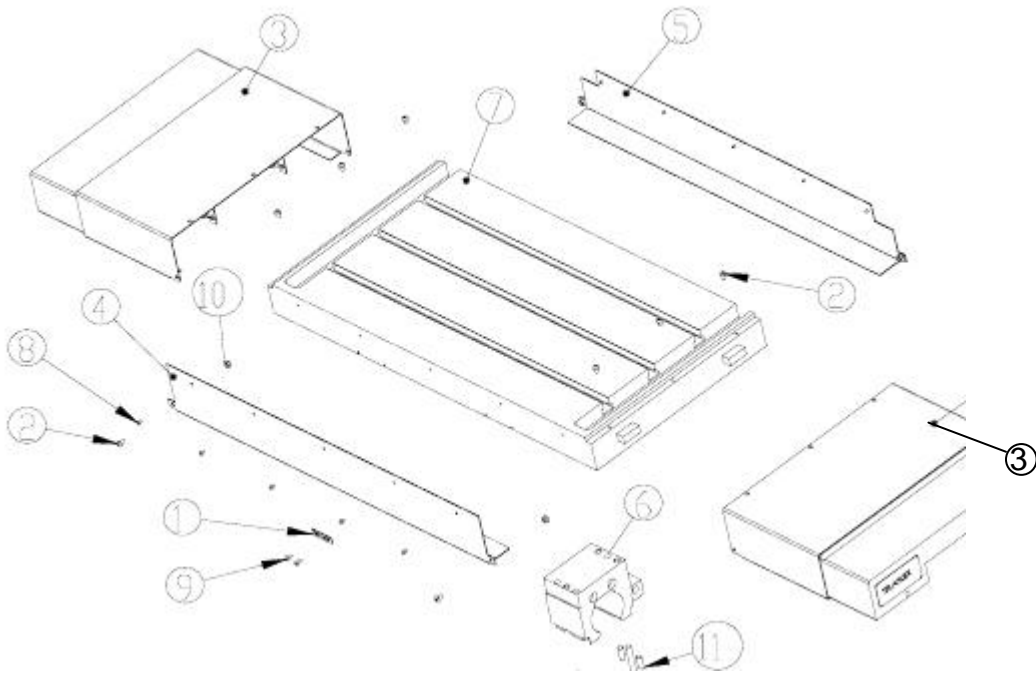


ITEM #	QTY	PART #
1	1	Col 0042 Col 0043 column weldment assembly EMC
2	2	BRG 0165 linear guide 840mm emc
3	22	HDW 0291 screw socap ,3125-18x1 .25
4	8	HDW 0553 screw hexcap g8 ,625 11x2,5
5	8	HDW 0051 washer hardened ,625
6	4	HDW 0769 screw set halfdog ,5 20x1
7	22	BRG 0032 plug raid socket cap

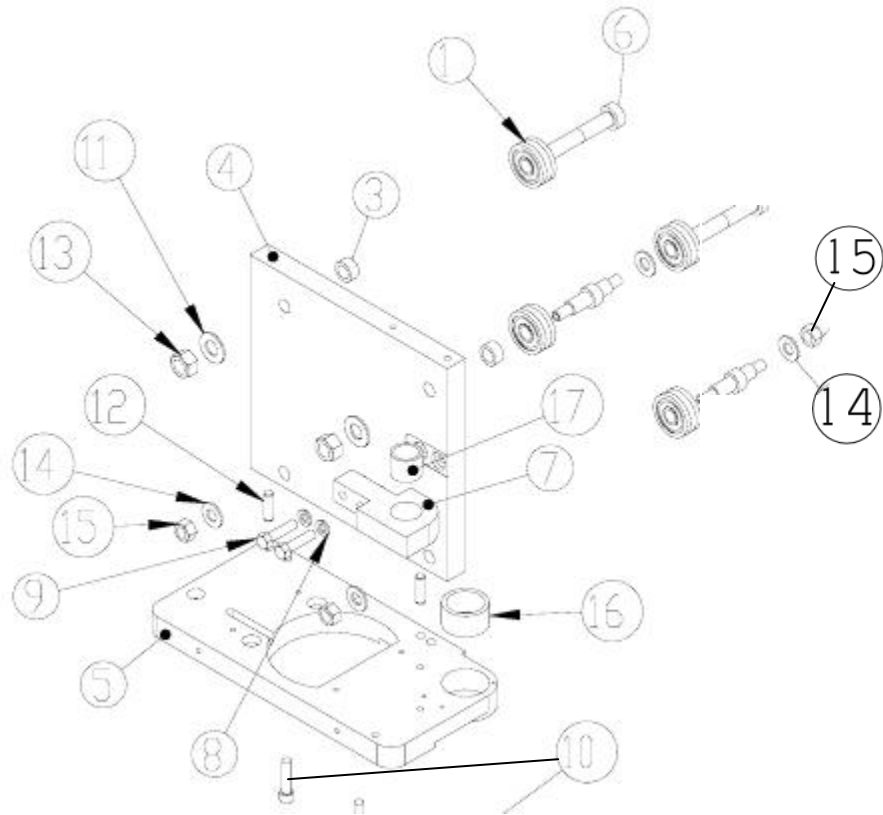
Saddle Assembly



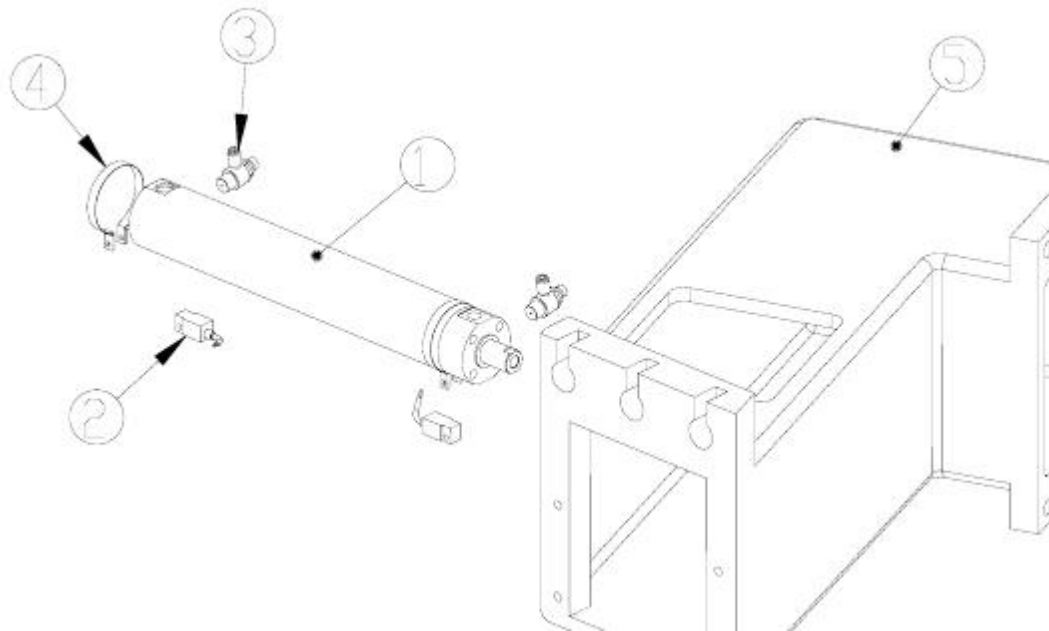
ITEM #	QTY	PART #
1	1	SDL 0077 Sdl 0079 saddle casting machined hi speed EMC 2016E
2	2	BRG 0164 linear guide1000mm emc 2
3	22	BRG 0032 plug raid socket cap
4	22	HDW 0291 screw socap ,3125-18x1 ,25
5	12	HDW 0412 screw set cup pt ,25 20x,375
6	16	HDW 0481 screw socap ,3125 18x1



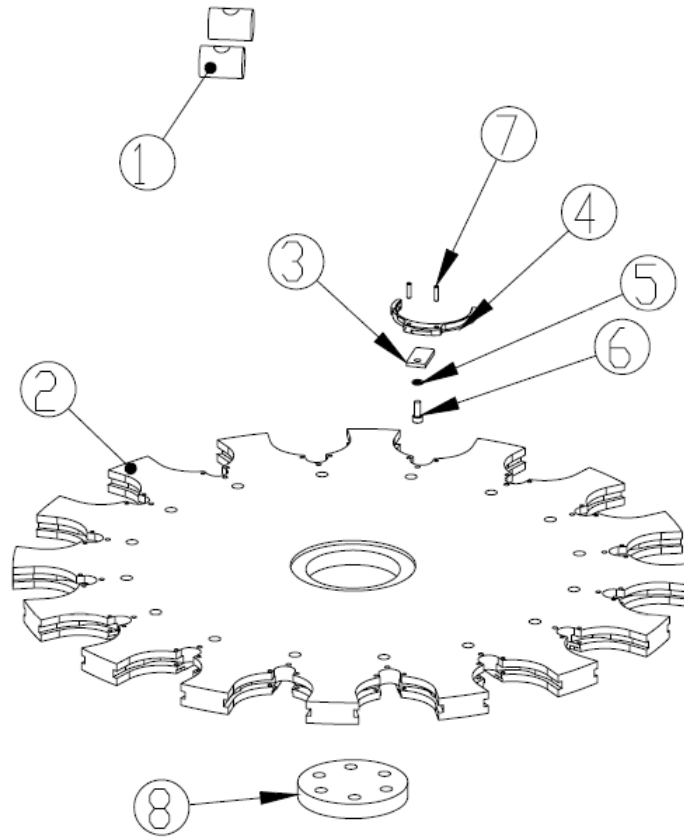
ITEM #	QTY	PART #
1	1	STM 0593 cold start brkt x axis l model
2	10	HDW 0347 screw button socap ,25 20x,375
3	2	CVR 0016 assy way coyer x axis 15 2216 2016L complete
4	1	STM 0468 table face cover c s
5	1	STM 0227 table face cover rear
6	1	BLS 0315 ball nut adapter 3016L 2016L 700ipn EMC
7	1	TBL 0043 table machined emc
8	10	HDW 0352 screw button socap 8 32x,25
9	2	HDW 0349 screw button socap 10 32x,375
10	4	HDW 0337 nut hex keps,25 20 z p
11	3	HDW 0329 dowel pin 7375x1 steel
12	3	HDW 0479 screw ,375 16x4,5 hk shcs



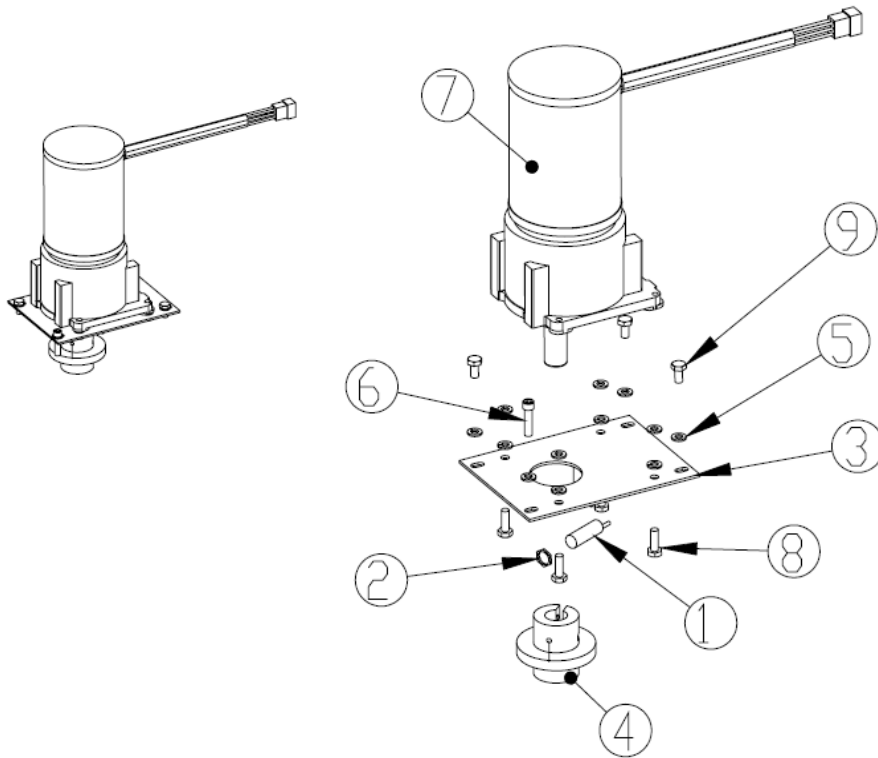
ITEM N#	QTY	PART #
1	4	ATC-0153
2	2	ATC-0152
3	2	ATC 0093 V bearing shaft bushing
4	1	ATC 0083 plate back carriage 21tool atc
5	1	ATC 0082 atc carriage base
6	2	ATC 0033 shaft v bearing 21 tool
7	1	ATC 0018 upper bearing support
8	2	HDW 0280 washer lock split ,375
9	2	HDW 0313 screw hexcap qr8 ,375 16x1,5
10	3	HDW 0472 screw socap ,375 16x1,5
11	2	HDW 0448 washer hard ,625
12	2	HDW 0616 dowel pin .375x1,25 steel
13	2	HDW 0634 nut hex .625 11 plain steel
14	4	HDW 0050 Washer,Hardened 1/2
15	4	HDW 0543 nut hex .5 13 plain steel
16	1	BRG 0012 needle bearing
17	1	BRG 0011 needle bearing



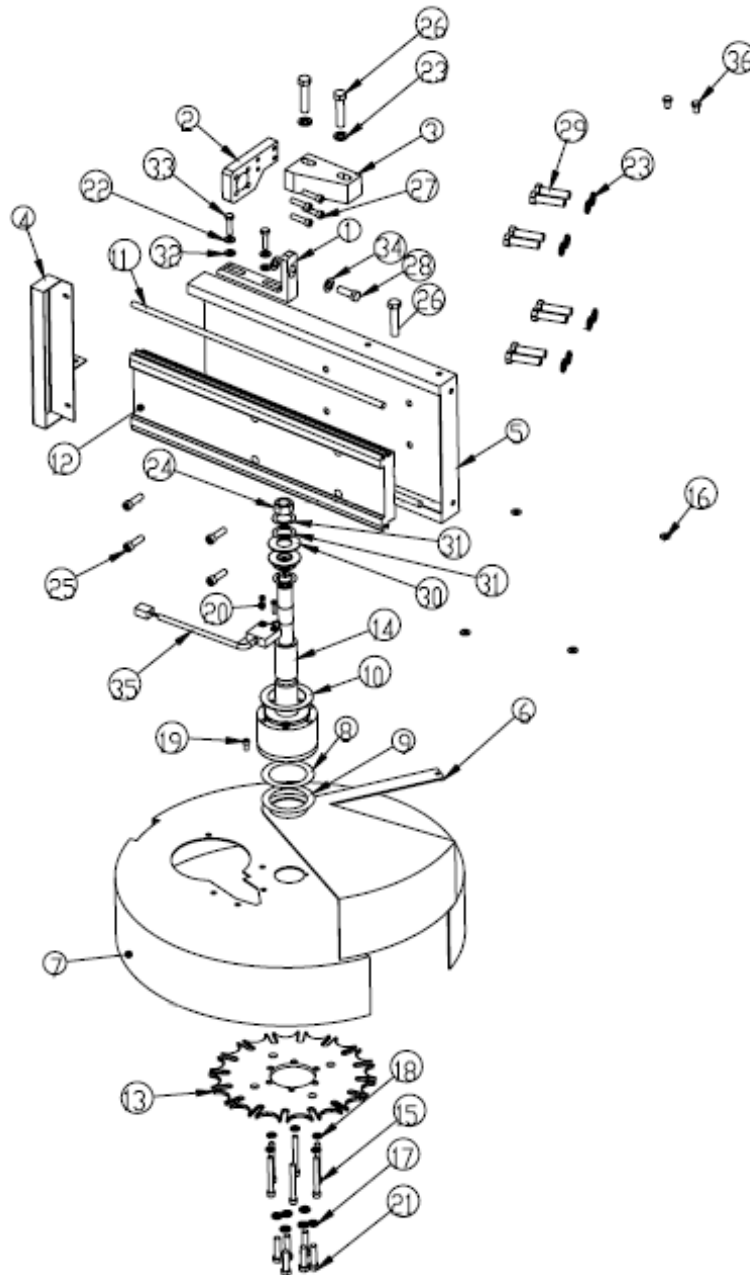
ITEM #	QTY	PART #
1	1	CYL 0027 cylinder air atc EMC
2	2	CYL 0029 auto switch atc EMC
3	2	CYL 0030 flow control cylinder atc EMC
4	2	CYL 0028 band switch atc EMC
5	1	Arm 0002K arm machined 15 5020a 904058 3



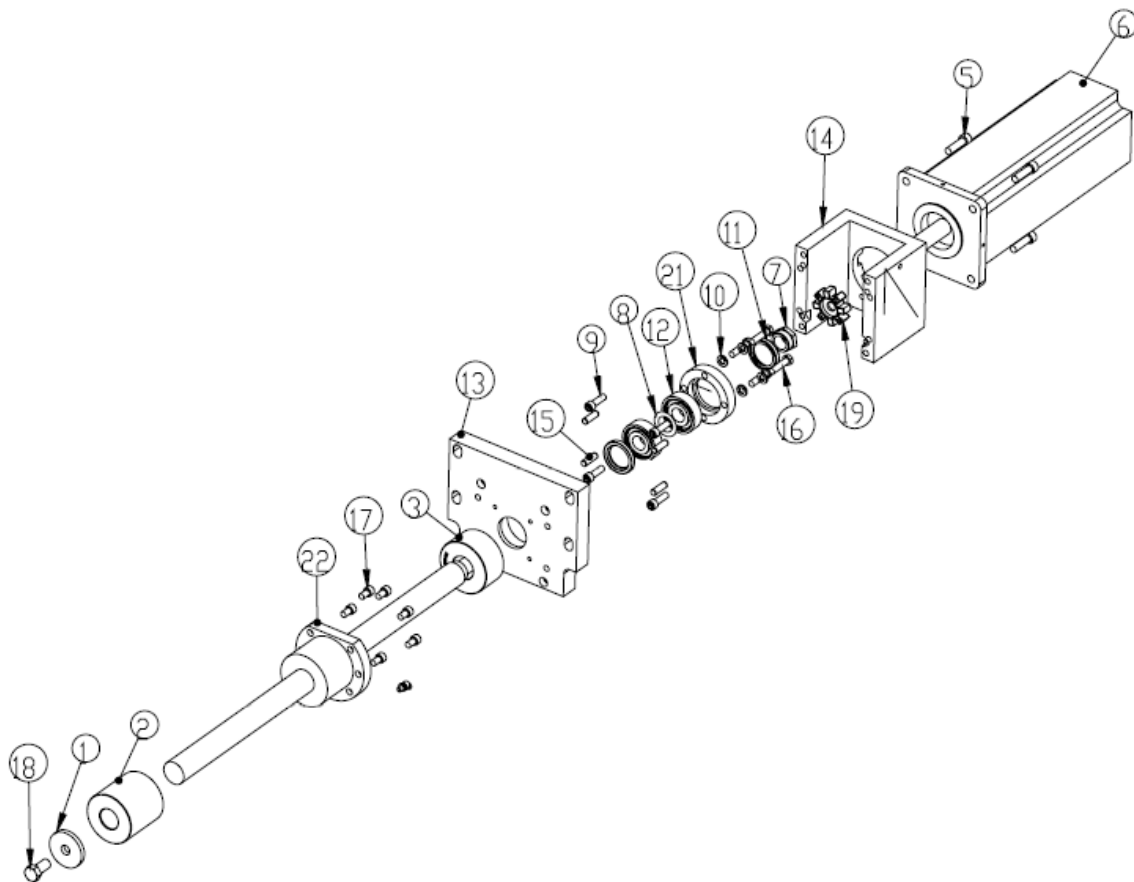
ITEM #	QTY	PART #
1	2	ATC 0035 retainer nut slide plate
2	1	ATC 0181 tool carrier atc 16 tool EMC
3	1	ATC 0032 key tool orientation atc
4	1	ATC 0028 retention ring cat tool
5	1	HDW 0278 washer lock split #10 z p
6	1	HDW 0302 screw socap 10 32x.5
7	2	HDW 0328 roll pin ,125x,5 plain steel
8	1	ATC 0031 plate tool carrier clamp



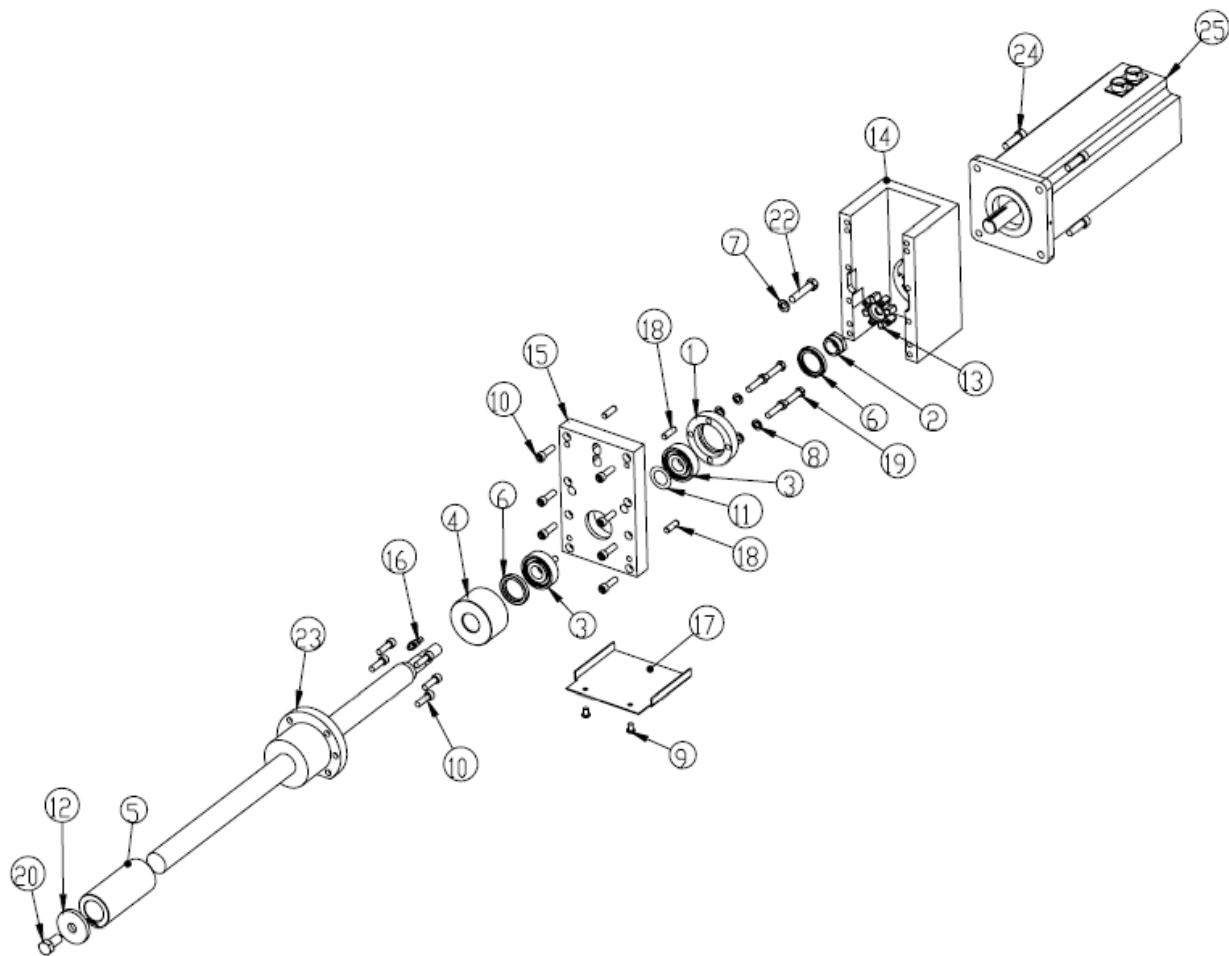
ITEM #	QTY	PART #
1	1	ELE 0145 Switch, 103SR5A-2 hall effect switch
2	2	ELE 0145 Nut hal effect switch
3	1	ATC 0074 plate mount motor geneva
4	1	ATC 0022 driver 16 tool geneva
5	12	HDW 0279 washer lock split ,25 plain
6	1	HDW 0294 screw socap ,25-20x1
7	1	MTR 0134 motor gear 60 rpm piston
8	4	HDW 0583 screw hexcap gr8 ,25 28x,75
9	3	HDW 0319 screw hexcap gr8 ,25 20x,5



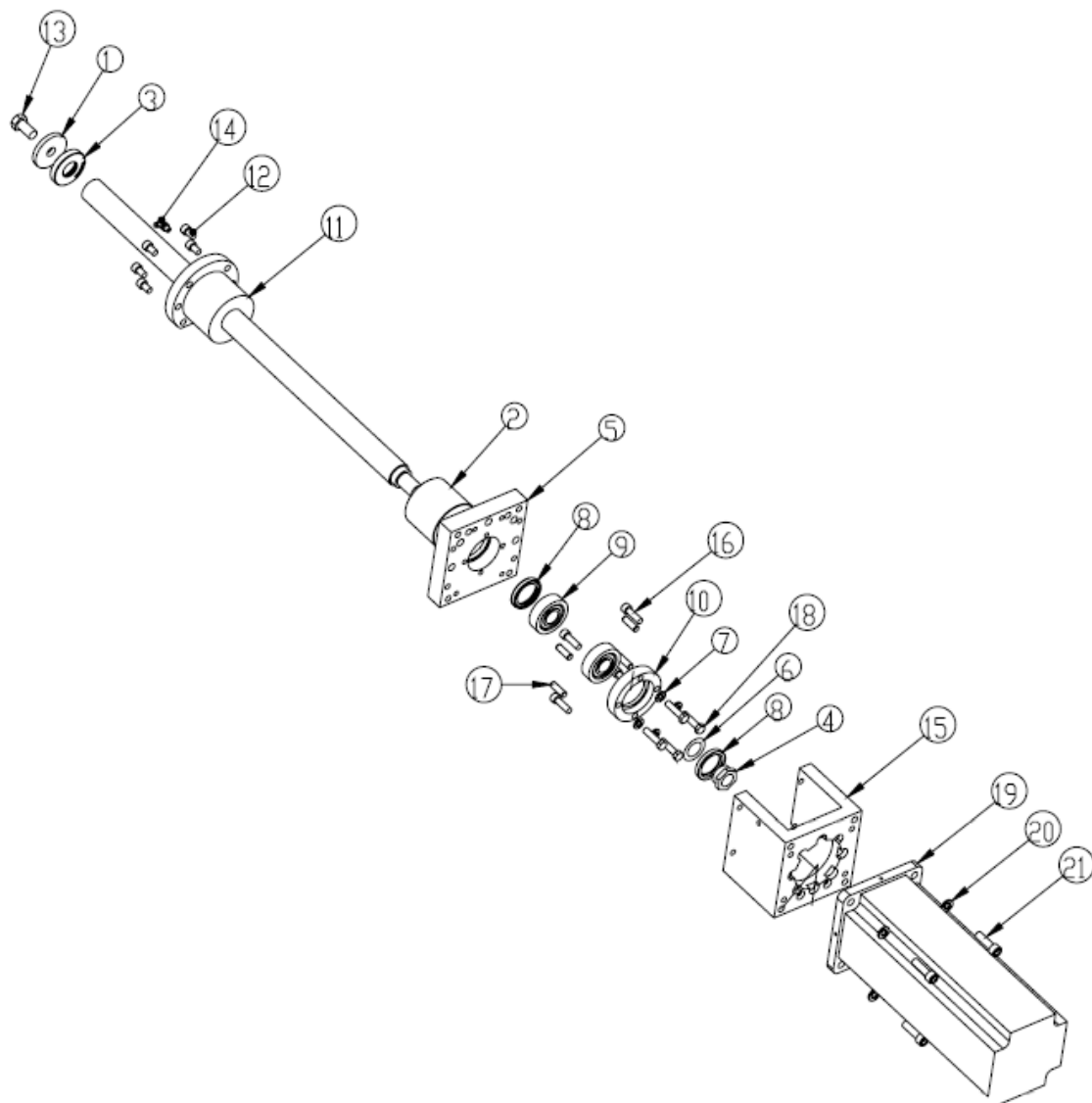
ITEM #	QTY	PART #
1	1	ATC 0187 bracket carriage cylinder atc EMC
2	1	ATC 0186 mount cylinder atc EMC
3	1	ATC 0185 bracket cylinder atc EMC
4	1	STM 0063 cover rail slide end
5	1	STM 1428 cover rail slide outer atc EMC
6	1	STM 1426 door 16 21 tool atc EMC
7	1	STM 1425 cover 16 21 tool atc EMC
8	1	HDW 0359 shim telfon .010in atc door
9	1	HDW 0358 shim telfon .005in atc door
10	1	HDW 0357 shim nylon 062in atc door
11	2	ATC 0154 sht 3of3 rod track
12	1	ATC 0154 sht 2of3 track
13	1	ATC 0184 atc 0024 wheel geneva black machined 16 tool EMC
14	1	ATC 0027 turret spindle
15	1	HDW 0485 screw socap .3125 18x2.75
16	4	HDW 0047 washer hardened .250
17	6	HDW 0280 washer lock split .375
18	6	HDW 0281 washer lock .3125
19	1	HDW 0295 Screw socap ¼ - 20 X ½
20	1	HDW 0303 Screw socap 10 32 X .75
21	6	HDW 0313 Screw hex gr8 .375 16x1.5
22	2	HDW 0387 washer serrated .3125
23	10	HDW 0451 washer lock split .5
24	1	HDW 0637 nut hex jam .75 16 z p
25	4	HDW 0779 screw socap .375 16x1.25
26	3	HDW 0789 screw hex cap gr8 .5 13x2.25
27	4	HDW 1201 screw socap .3125-24 x 1.25
28	1	HDW 1203 screw hexcap .4375 – 20 x 1.25
29	8	HDW 0310 screw hexcap gr8 .5 13x2
30	2	BRG 0009 thrust bearing nta 1625
31	4	BRG 0010 thrust washer tra 1625
32	2	HDW 0048 washer hardened .3125
33	2	HDW 0575 screw hexcap gr8 .3125 18x.75
34	2	HDW 1202 washer hardened .4375
35	1	ELE 0385 switch roller proximity atc
36	2	HDW 0573 screw hexcap gr8 .3125 18x.5



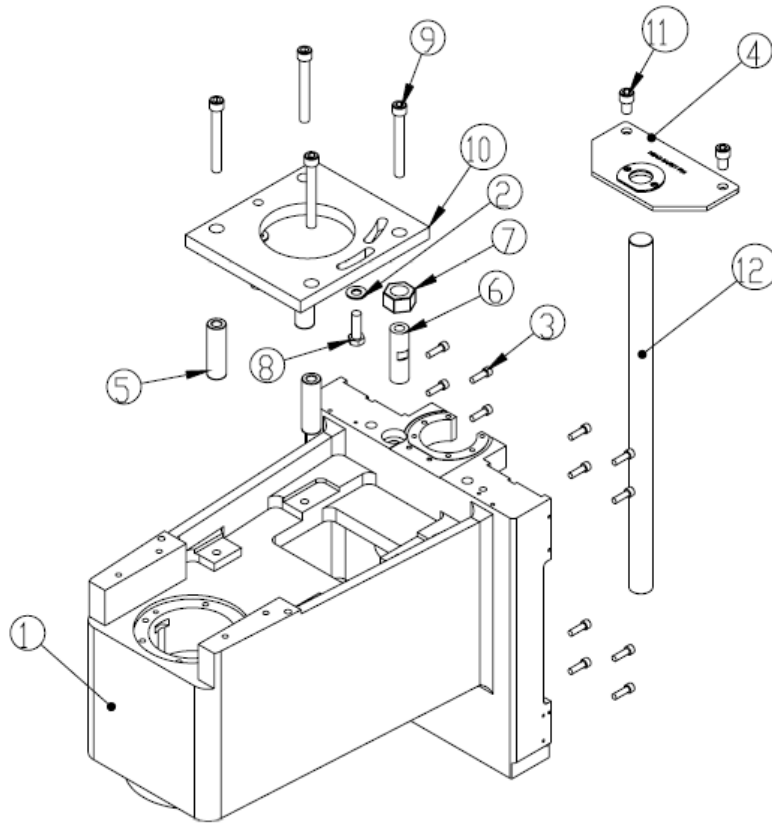
ITEM #	QTY	PART #
1	1	HDW 0859 washer x axis ls adapter 6030
2	1	BLS 0342 stop limit rear y-axis EMC 2016L 3016L
3	1	BLS 0341 stop limit front y-axis EMC 2016E 3016E
4	4	HDW 0280 washer lock split .375
5	4	HDW 0779 screw socap ,375 16x1,25
6	1	MTR 0141 motor servo Baldor 3136 3016L AC
7	1	BLS 0047 Retainer blx nut 2216 5020a 400nn hmc
8	1	HDW 0730 Spacer, arbor, .875 x 1,375 x ,001
9	4	HDW 0481 screw socap ,3125 18x1
10	4	HDW 0281 washer lock .3125
11	2	HDW 0210 seal 11138CR
12	2	BRG 0024 Bearing, thrust 7304BYG
13	1	BLS 0308 mount y axis drive 2016E 3016E 700ipm EMC
14	1	BLS 0207 X Y Motor adapter channel
15	4	HDW 0619 dowel pin .3125x1 steel
16	4	HDW 0792 screw hexcap q8 ,3125 18x1,25
17	6	HDW 0482 screw socap ,3125 18x,5
18	1	HDW 1196 screw hexcap q8 ,5 13 unc x 1
19	1	MTR 0198 Coupler, spider. Balder axis motor. Can EKM30
20	1	PLM 0245 fitting hydraulic gears m6x1 mle 45 degree
21	1	BLS 0039 thrust bearing retainer
22	1	BLS 0306 ballscrew assy Y axis emc



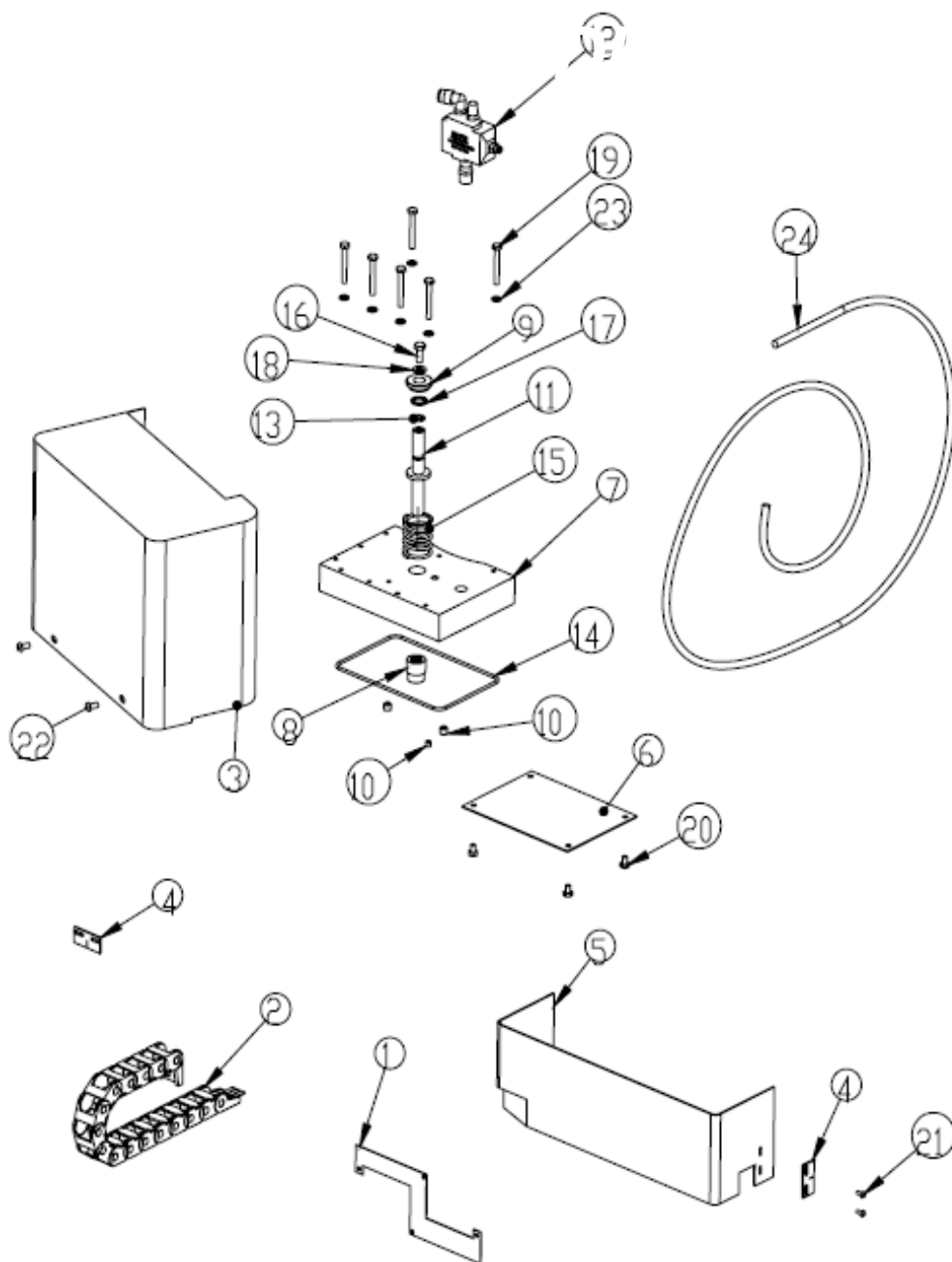
ITEM #	QTY	PART #
1	1	BLS 0039 thrust bearing retainer
2	1	BLS 0047 Retainer bls nut 2216 5020a 400nn hmc
3	2	BRG 0024 Bearing, thrust 7304BYG
4	1	BLS 0326 stop limit upper z axis EMC
5	1	BLS 0323 stop limit lower z axis EMC
6	2	HDW 0210 seal 11138CR
7	5	HDW 0280 washer lock split .375
8	4	HDW 0281 washer lock .3125
9	2	HDW 0347 screw button socap .25 20x,375
10	14	HDW 0481 screw socap .3125 18x1
11	1	HDW 0730 Spacer, arbor, .875 x 1.375 x .001
12	1	HDW 0859 washer x axis ls adapter 6030
13	1	MTR 0198 Coupler, spider, Baldor axis motor, Gam EKM30
14	1	BLS 0208 z motor adapter channel
15	1	BLS 0218 drive mount z axis
16	1	PLM 0245 fitting hydraulic grs m6x1 mle 45deg
17	1	STM 0043 cover z axis all vmc
18	4	HDW 0619 dowel pin .3125 x 1 steel
19	4	HDW 0792 screw hexcap g8 .3125 18x1.25
20	1	HDW 1196 screw hexcap g8 .5 13 unc x 1
21	1	HDW 0310 screw hexcap gr8 .5 13x2
22	1	Hdw 0569 screw hexcap qr8 ,375 16x1,75
23	1	BLS 0309 screw y axis w3205wf51 nsk emc
24	4	HDW 0779 screw socap .375 16x1.25
25	1	MTR 0141 motor servo baldor 3136 3016L ac



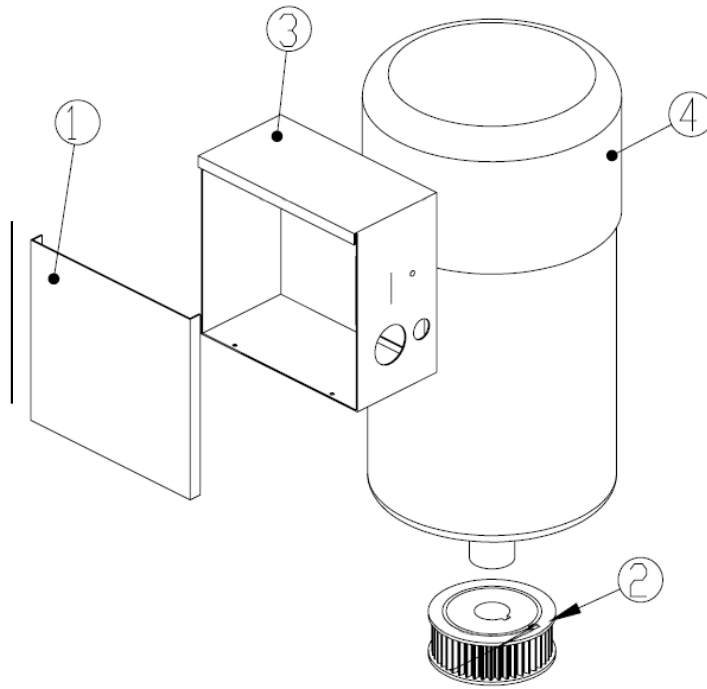
ITEM #	QTY	PART #
1	1	HDW 0859 washer x axis ls adapter 6030
2	1	BLS 0340 stop Unit right x axis EMC 2016L
3	1	BLS 0339 stop limit left x axis EMC 2016L
4	1	BLS 0047 Retainer bls nut 2216 5020a 400mm hmc
5	1	BLS 0217 drive mount x axis smaller mch
6	1	HDW 0730 Spacer, arbor, .875 x 1.375 x .001
7	4	HDW 0281 washer lock .3125
8	2	HDW 0210 seal 11138CR
9	2	BRG 0024 Bearing, thrust 7304 BYG
10	1	BLS 0039 thrust bearing retainer
11	1	BLS 0325 screw x axis 3250 nsk emc
12	6	HDW 0482 screw socap .3125 18x.5
13	1	HDW 1196 screw hexcap q8 .5 13 unc x 1
14	1	PLM 0245 fitting hydraulic grs m6x1 mle 45deg
15	1	BLS 0207 X Y motor adapter channel
16	4	HDW 0481 screw socap .3125 18x1
17	4	HDW 0619 dowel pin .3125x1 steel
18	4	HDW 0792 screw hexcap q8 .3125 18x1.25
19	1	MTR 0141 motor servo baldor 3136 3016L ac
20	4	HDW 0280 washer iock split .375
21	4	HDW 0779 screw socap .375 16x1.25



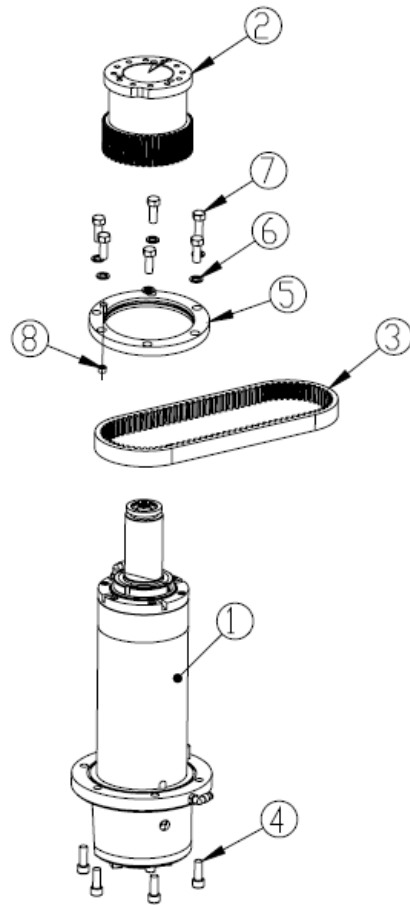
ITEM #	QTY	PART #
1	1	HED 0039, 0041, 0043 head casting machined 2016L 3016L 700ipm EMC
2	2	HDW 0050 Washer, Hardened ½
3	16	HDW 0431 screw socap .3125 18x1
4	1	HDW 1199 bracket pin head safety EMC
5	3	MTR 0076 stand off spindle mtr 7.5k
6	1	MTR 0090 stand off adj spindle mtr 7.5k
7	1	PLC 0042 nut hex 1 20 x7.8 plt chgr
8	2	HDW 0558 screw hexcap g8 .5 13x1.5
9	4	HDW 0469 screw socap ,50 13x4
10	1	MTR 0075 plate spindle motor mount vmc 15
11	2	HDW 0464 Screw,Socap ½ -13 X 1
12	1	CWT 0012 counter weight rod



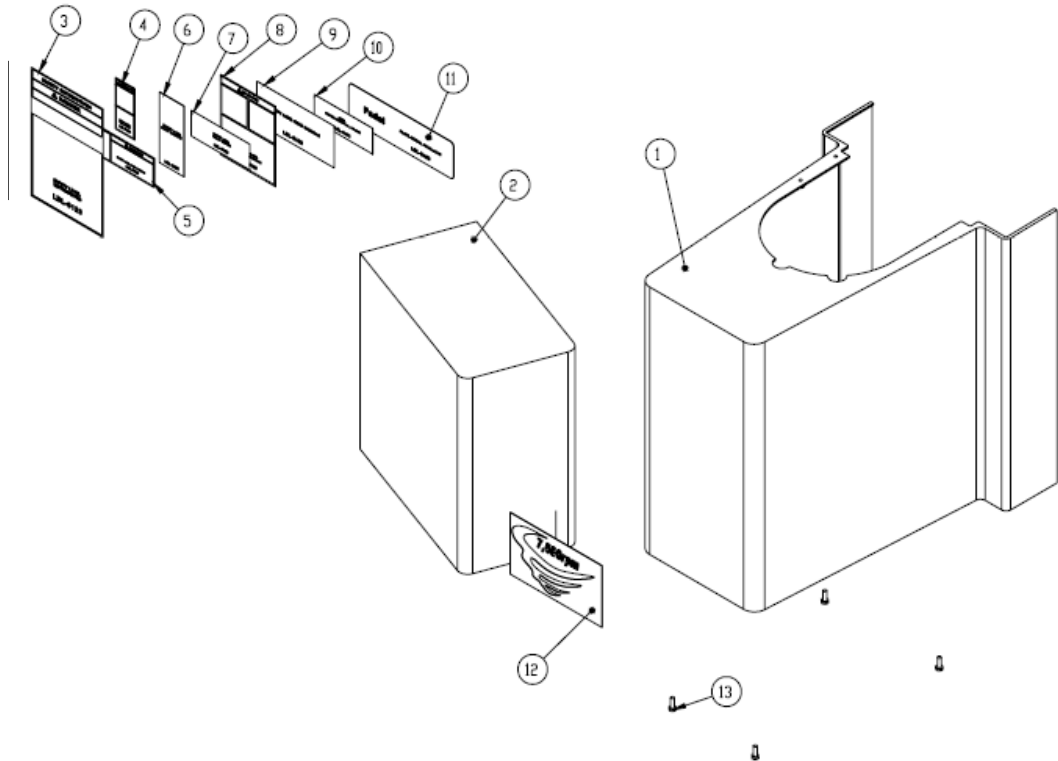
ITEM #	QTY	PART #
1	1	CVR 0224 cover wires motor x axis EMC 2016L 3016L pa13158
2	1	CVR 0225 chain carrier assembly E14-2-048 igus EMC
3	1	STM 0059 cover atc turret 21 tool regular
4	2	STM 0044 X Y axis c s
5	1	STM 0570 z head bottom cover
6	1	STM 0064 cover head core all vmc
7	1	ORB 0027 drawbar cylinder
8	1	ORB 0023 Bushing drawbar cylinder
9	1	ORB 0017 db cylinder spring pad
10	1	ORB 0009 Drawbar piston assembly
11	1	ORB 0007 piston rod tool out auto hi lo
12	1	VLV 0069 valve assy drawbar
13	1	HDW 0177 o ring 2 111 .437x.093 cs
14	1	HDW 0178 o-ring 2 264 .500x.125 cs
15	1	HDW 0262 spring 1.406 1.75
16	1	HDW 0575 screw hexcap gr8 .3125 18x.75
17	1	HDW 0917 o-ring q4114 buna double seal
18	1	HDW 0048 washer hardened .3125
19	6	HDW 0320 screw hexcap gr8 .25 20x2
20	4	HDW 0795 screw hexcap gr8 .25 20x.375
21	2	HDW 0383 screw button socap 8 32x.375
22	4	HDW 0346 screw button socap .25 20x.5
23	6	HDW 0279 Washer lock split .25
24	1	PLM 0024 tubing .375 nylon per foot



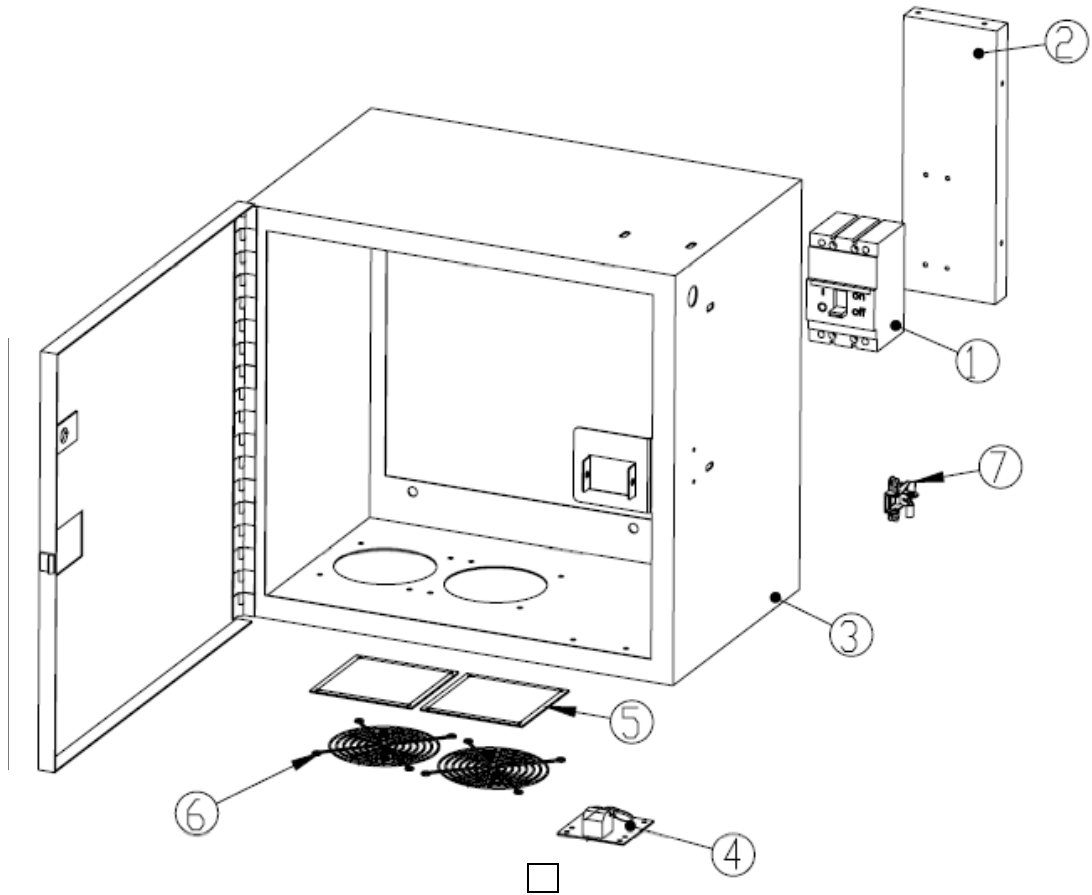
ITEM #	QTY	PART #
1	1	STM 1411 cover box conduit motor spindle EMC
2	1	PUL 0024 sprocket motor polychain
3	1	STM 1412 conduit box spindle motor EMC
4	1	MTR 0194 motor assembly 5hp emc



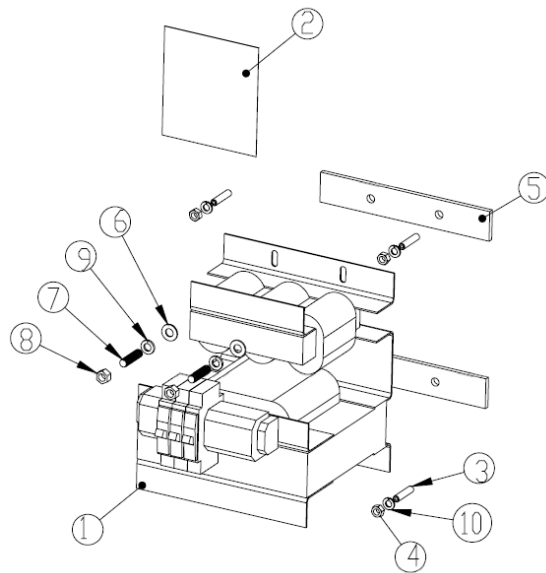
ITEM #	QTY	PART #
1	1	SPN 0081 spindle assy non-lock 7.5K grease
2	1	PUL 0025 sprocket spn polychain std
3	1	BEL 0006 belt 8mgt 800 21 polychain
4	6	HDW 0470 screw socap .375 16x1
5	1	SPN 0042c Retainer spirdle upper
6	6	HDW 0275 390x625x060 fw ylw zc washer
7	6	HDW 0568 screw hexcap gr8 .375 16x1
8	1	HDW 0422 plug pressure .125 x 18



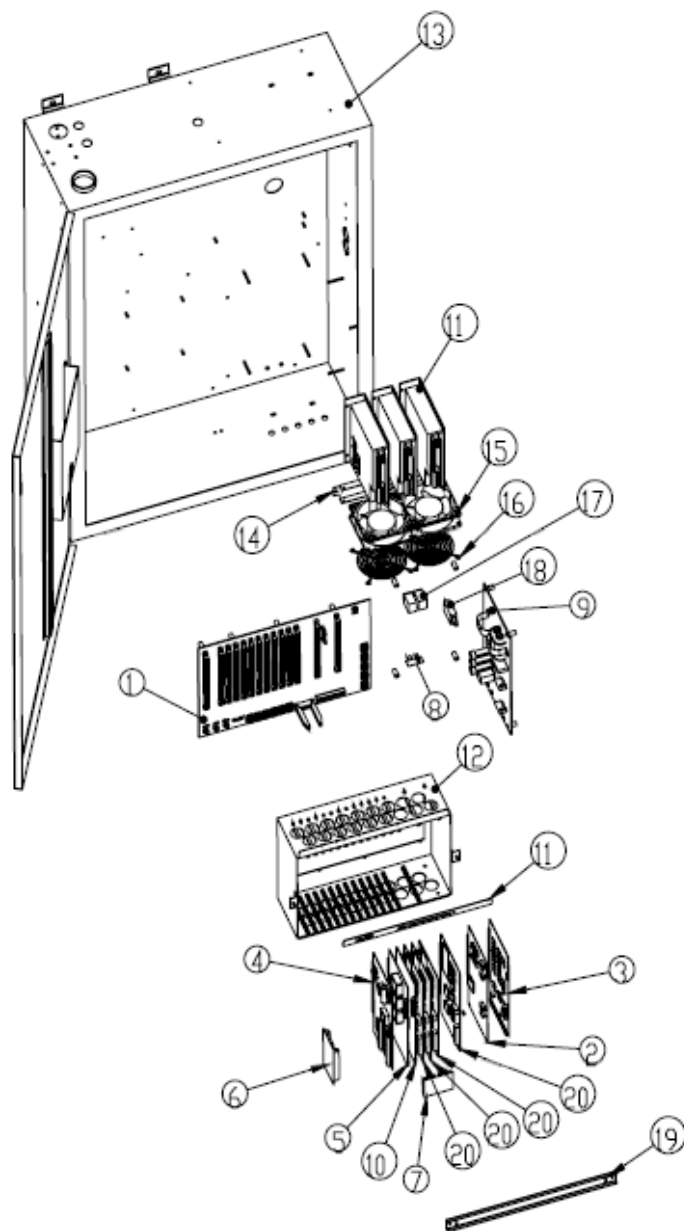
ITEM ND,	QTY,	PART ND,
1	1	CVR 0217 cover head fiberglass EMC
2	1	STM 1427 cover front slide rail ate EMC
3	1	LBL 0123 safety label instructions
4	1	LBL 0124 safety label tool danger
5	1	LBL 0127 safety label tool warning
6	1	LBL 0128 safety label elect warning
7	1	LBL 0129 safety label pulley danger
8	1	LBL 0130 safety label eye ear warning
9	1	LBL 0163 safety label read manuals
1	1	LBL 0471 lbl darger z axis fall spn enc
1	1	LBL 0485 plate serial fadal enc
1	1	LBL 0215 label 7500 rpm
1	4	HDW 0322 screw hexcap gr8 .25 20x.75



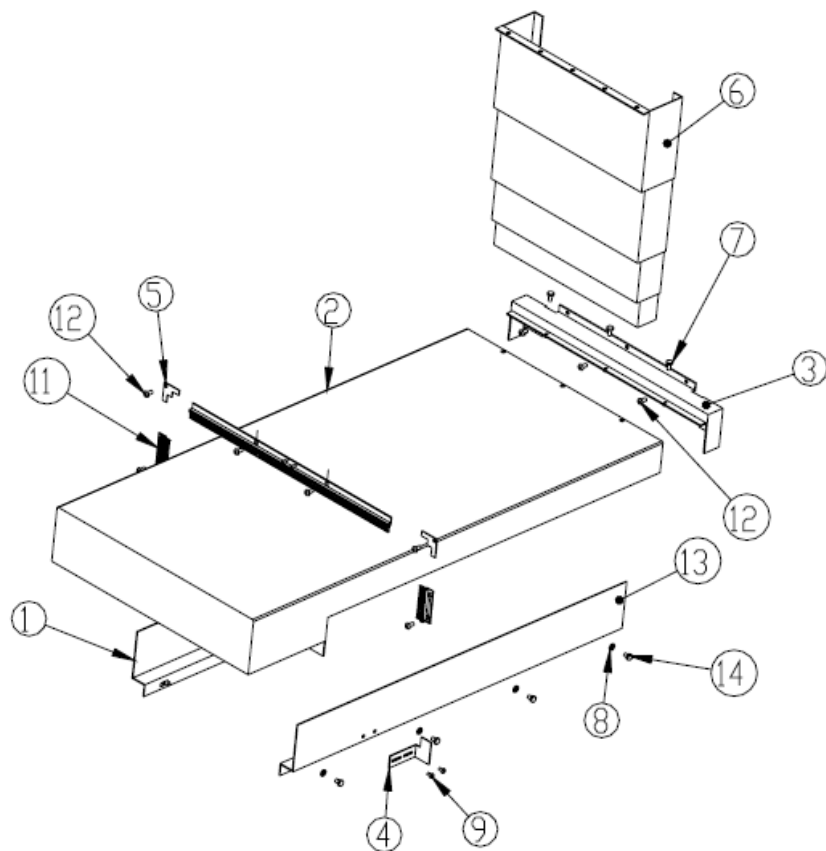
Item#	Qty	Part#
1	1	ELE 1511 circuit breaker 30amp EMC
2	1	STM 1408 bracket mounting disconnect EMC
3	1	STM 1406 cabinet transformer assembly EMC
4	1	ELE 0776 pcb bare 1170 2
5	2	HDW 0849 screen slim line
6	2	HDW 0850 finger guard 4x4 fan
7	1	HDW 0925 cab latch spring short blade



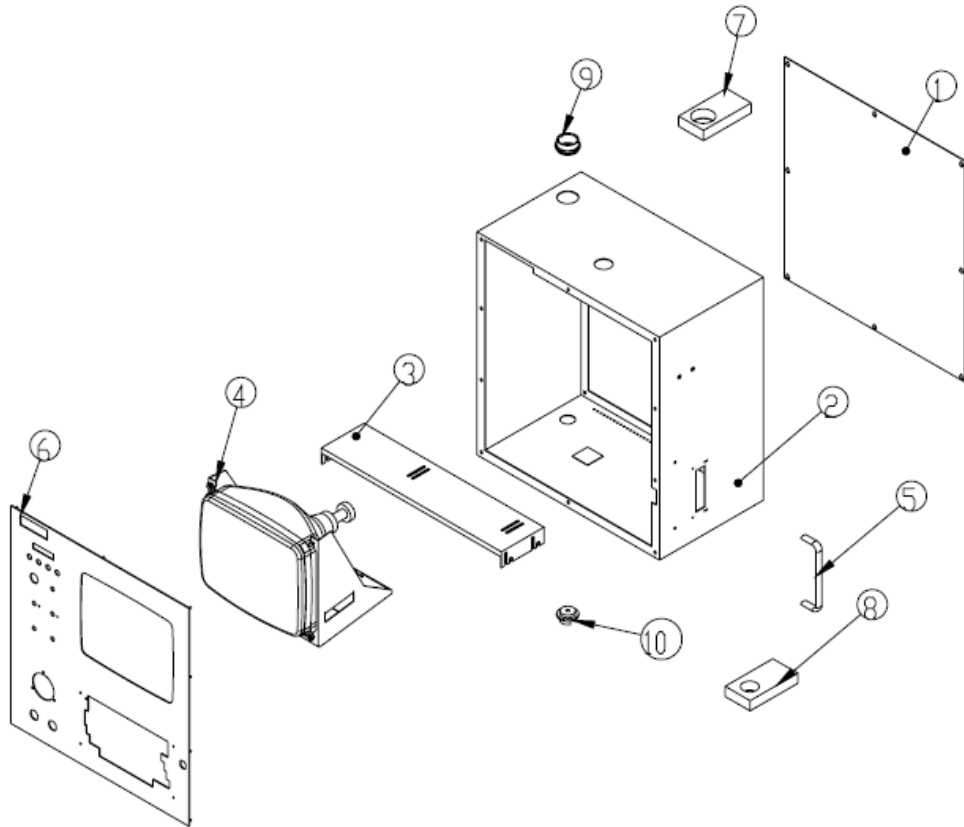
ITEM #	QTY	PART #	1
1	1	ELE 0982 transformer T812 assembly	
2	1	LBL 0486 label maintenance english emc	
3	4	HDW 0407 screw set cup .3125 18x1.5	
4	4	HDW 0640 nut hex .3125 18 plain steel	
5	3	HDW 0513 pad 50 neoprene 9x1.5x.25	
6	4	HDW-0049 Washer,Hardened 3/8	
7	4	HDW 1057 stud .375 16x1.75 double end thread	
8	4	HDW 0333 nut hex .375 16 plain steel	
9	4	HDW 0280 washer lock split .375	
10	4	HDW 0281 washer lock .3125	



ITEM #	QTY	PART #
1	1	PCB 0009 pcb motherboard 1060 0c
2	1	PCB 0000 pcb clock card 1020 lb
3	1	PCB 0005 pcb mill int pallet chg 1040
4	1	PCB 0030 pcb cpu 1400 5 svstTen 38k
5	1	PCB 0127 vga enhanced graphics 1420 6a
6	1	PCB 0159 pcb module sys 97 english
7	1	PCB 0189 pcb board 1730 5a aff
8	3	ELE 0937 relay ss special green 1 amp
9	1	PCB 0195 pcb asv populated 1100 2q
10	1	PCB 0206 pcb cmprtr intrfc 1030 1c
11	1	LBL 0200 label card cage shows card num
18	1	STN 0398 card rack
13	1	STN 1409 ac cnc control box emc
14	1	STN 1410 bracket fan EMC
15	1	AMP 0066 housing fan
16	2	HDW 0850 finger guard 4x4 fan
17	8	ELE 0072 relay 5a 120vac mechanical
18	1	ELE 0098 circuit breaker 8,5 amp
19	1	STN 0040 card retainer
20	4	PCB 0217 pcb axis controller configurable



ITEM #	QTY	PART #
1	1	CVR 0216 y axis way cover side panel assembly weldment base emc
2	1	CVR 0058 y axis cover 914007
3	1	CVR 0084 cover y axis way
4	1	STN 0224 adapter cover y axis way right 914007 5
5	2	STN 0628 clamp y wiper front rear 15xt
6	1	CVR 0057 cover way z axis
7	3	HDW 0319 screw hexcap gr8 .25 20x.5
8	8	HDW 279 washer lock split .25
9	2	HDW 0349 screw button socap 10 32x.375
10	1	HDW 0905 brush holder long wiper vmc 15
11	2	HDW 0906 brush holder short wiper vmc 15
12	9	HDW 0346 screw button socap .25 20x.5
13	1	CVR 0216 y axis way cover side panel weldment base EMC
14	8	HDW 0795 screw hexcap gr8 .25 20x.375



ITEM #	QTY	PART #
1	1	STM 1405 back panel pendant Multi processor EMC
2	1	STM 1404 box pendant multi processor assembly EMC
3	1	STM 0951B support monitor cnc multi processor
4	1	ELE 1072 monitor 14 vga flat b&w
5	1	HDW 0182 handle alum A1035 PL
6	1	CTR 0134 Control panel cnc multi processor
7	1	CTR 0006 monitor mount 2.00 id upper
8	1	CTR 0005 monitor mount 1.5 id lower
9	1	HDW 0957B cabinet bushing 904166 5
10	1	CTR 0007 bushing cabinet 904166 2