

SAM® CARRIAGE PARTS BREAKDOWN

Drawing Number GM-02-295

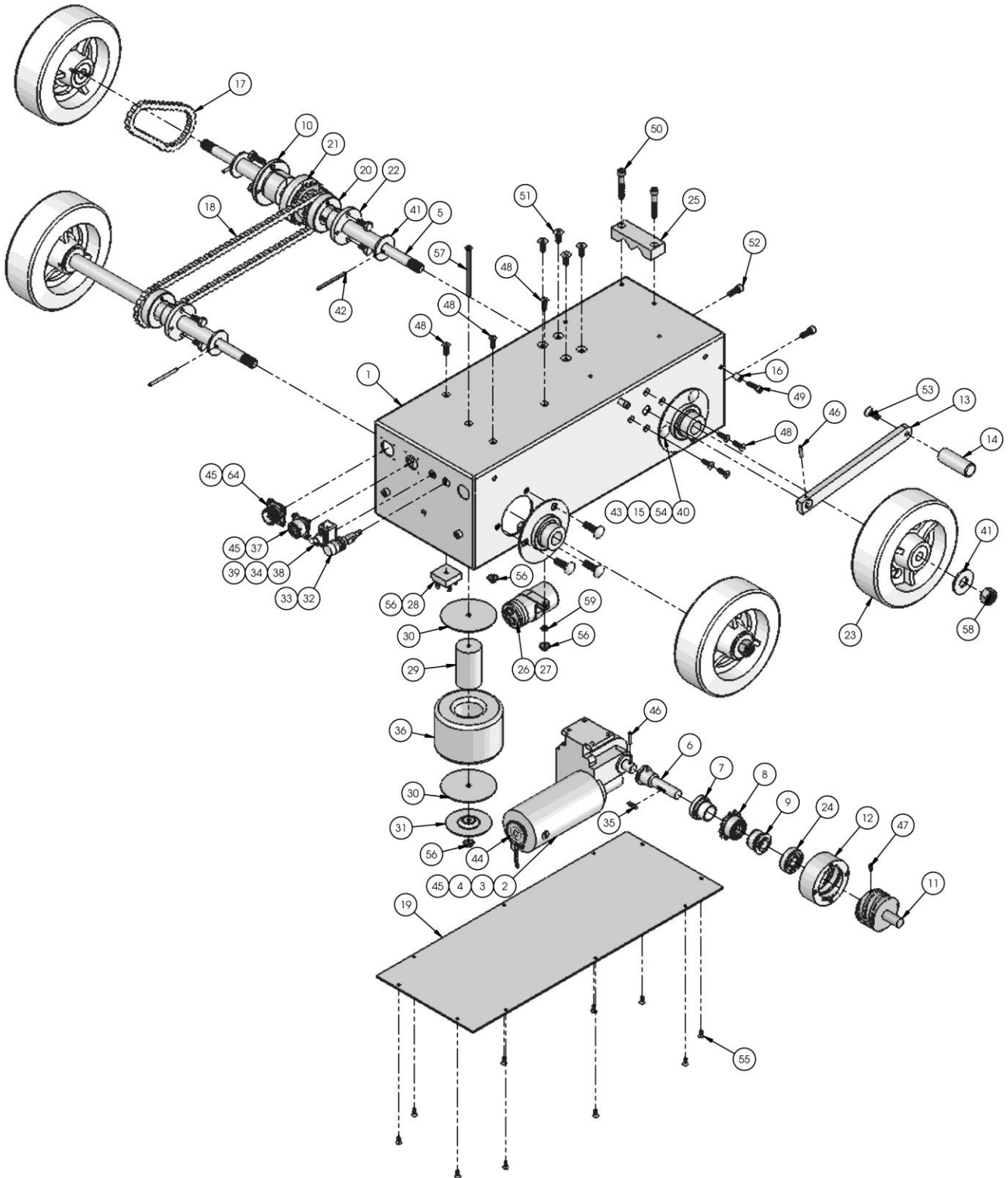
ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-293	LOWER HOUSING (CHASSIS) ASSEMBLY	1
2	GM-02-053	MAIN MAST (ATTACHMENT POST)	1
3	GM-02-315	WIRE FEEDER MOUNTING BRACKET	1
4	GM-02-255	REMOTE CONTROL PENDANT	1
5	GS-489-004	VERT/HOR CRANK SLIDE W/MAST CLAMP ASS'Y	1
6	GS-489-006	MOUNTING CLAMPS FOR MILLER CONTROL	2
7	GM-02-082	GUIDE ARM ASSEMBLY	2
8	GS-489-010	CONTROL SUPPORT ARM ASSEMBLY	1
9	GM-02-322	LIFTING BRACKET	1
10	GM-02-327	PUSH PULL "T" HANDLE BAR ASSEMBLY	1
11	GM-02-316	WIRE REEL MOUNTING ARM ASSEMBLY	1
12	GK-148-012	STRAIN RELIEF 3/4 LIQUID TITE	1
13	GK-153-005	3/8-16 x 1-9/16 ADJUSTABLE HANDLE	2
14	GK-108-148	1/4-20UNC x 2-1/4 HEX BOLT	1
15	GK-108-052	1/4-20UNC x 1 HEX BOLT	7
16	GK-111-058	WASHER 3/8 BOLT x 13/16 OD x 1/16	2
17	GK-111-051	WASHER 1/4 BOLT X 5/8 OD X 0.057	3
18	GK-136-053	LOCK WASHER 1/4 BOLT	7
19	GK-132-003	1/4-20 ACORN NUT	1
20	GM-02-297	MILLER - SAM INTERFACE CABLE ASSEMBLY	1
	GM-02-302 MILLER: 195 308	MILLER CABLE KIT (INCLUDES ITEMS 22 & 23)	
22		MILLER WIRE FEED CABLE (10' LONG)	1
23		MILLER POWER SOURCE CABLE (30' LONG)	1
24	GM-02-300 MILLER: 195 215	HDC 1500DX MILLER CONTROL	1
25	GM-02-303 MILLER: 043 923	OBT 600 GUN ASSEMBLY	1
26	GM-02-305 MILLER: 199 733	WIRE STRAIGHTENER	1
27	GM-02-301 MILLER: 195 265	RAD 400 WIRE FEED DRIVE	1
28	GM-02-119 MILLER: 108 008	WIRE REEL	1
29	GM-02-304 MILLER: 194 775	FLUX HOPPER	1

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GM-02-275

SAM® LOWER HOUSING (CHASSIS) PARTS BREAKDOWN

Drawing Number GM-02-293



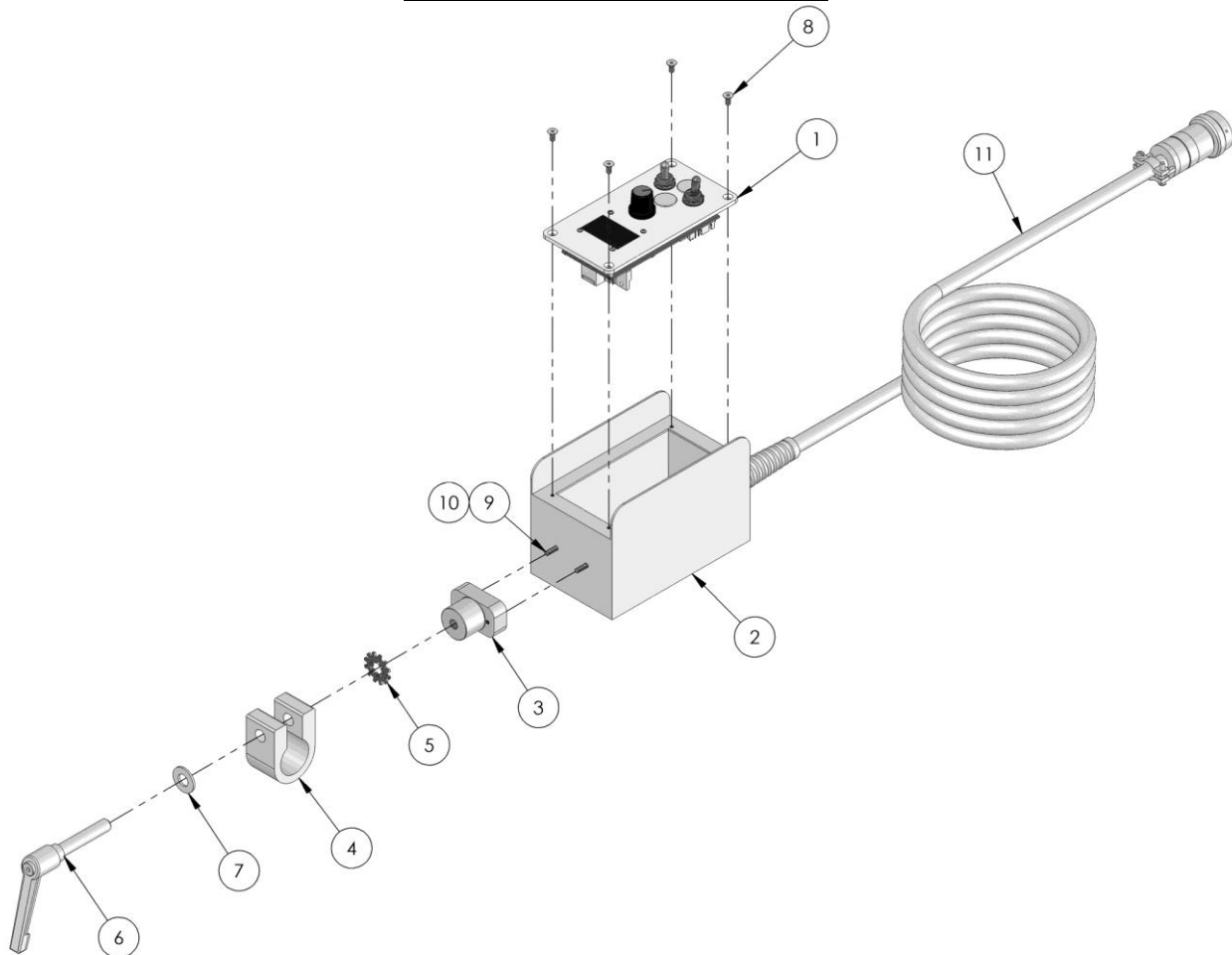
SAM® LOWER HOUSING (CHASSIS) PARTS BREAKDOWN

Drawing Number GM-02-293

ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-277	MAIN CHASIS	1
2	GM-02-116	24VDC MOTOR & 1080:1 GEARBOX ASSEMBLY	1
3	GK-191-P-038	ENCODER DISC	1
4	GK-191-P-035	ENCODER SENSOR, INCLUDING WIRING & CONNECTOR	1
5	GM-02-289	WHEEL AXLE	2
6	GM-02-114	MOTOR EXTENSION SHAFT	1
7	GM-02-267	FLANGED BUSHING	1
8	GM-02-281	12 TOOTH CHAIN SPROCKET/ 22 TOOTH CLUTCH JAW	1
9	GM-02-112	22 TOOTH CLUTCH JAW	1
10	GM-02-283-B	TAPERED BUSHING	1
11	GM-02-111	CLUTCH ACTUATOR	1
12	GM-02-110	CLUTCH NUT	1
13	GM-02-075	FOOT PEDAL ARM	1
14	GM-02-081	FOOT PEDAL END	1
15	GM-02-004	FLANGETTE BEARING	4
16	GM-02-096	SPACER	2
17	GM-02-291	DRIVE CHAIN	1
18	GM-02-292	DRIVEN CHAIN	1
19	GM-02-014	BASE PLATE	1
20	GM-02-282-A	16 TOOTH CHAIN SPROCKET	2
21	GM-02-283A	19 TOOTH CHAIN SPROCKET	1
22	GM-02-282-B	TAPERED BUSHING	2
23	GM-02-286	DRIVE WHEEL	4
24	GM-02-115	ANGULAR CONTACT BEARING	1
25	GM-02-020	CABLE CLAMP	1
26	GK-191-P-062	CAPACITOR	1
27	GK-191-P-063	CAPACITOR CLIP	1
28	GK-191-P-020	BRIDGE RECTIFIER	1
29	GM-02-257	TRANSFORMER SPACER	1
30	GK-191-P-218	TRANSFORMER MOUNTING PAD	2
31	GK-191-P-105	TRANSFORMER MOUNTING PLATE	1
32	GK-165-134	FUSE HOLDER ASSEMBLY	1
33	GK-165-097	1.25 AMP SLOW BLOW FUSE	1
34	GK-191-P-050	ON/OFF NAME PLATE	1
35	GM-02-117	1/8" SQUARE KEY	1
36	GK-191-P-019-B	TRANSFORMER 115V	1
37	GM-02-318	REMOTE PENDANT CONNECTOR ASSY (INCLUDES CONNECTOR BELOW)	1
	GK-150-043	12 SOCKET PANEL CONNECTOR	
38	GK-191-P-022	POWER ON/OFF SWITCH	1
39	GK-191-P-056	ON/OFF SWITCH NUT	1
40	GK-160-004	5/16-18UNC x 1 CARRIAGE BOLT	12
41	GK-111-084	WASHER 9/16 ID x 1-3/8 OD x 0.109	8
42	GK-117-021	1/8 x 2 SPRING PIN	4
43	GK-136-055	LOCK WASHER 5/16 BOLT	12
44	GK-106-063	#4-40UNC x 3/16 SET SCREW	3
45	GK-112-060	#4-40UNC x 1/4 RND HEAD SCREW	10
46	GK-117-008	1/8 x 3/4 SPRING PIN	2
47	GK-106-056	#6-32UNC x 3/8 SET SCREW	2
48	GK-105-063	#10-32UNF x 5/8 FHSCS	7
49	GK-107-080	#10-32UNF x 1 SHCS	2
50	GK-107-055	1/4-20UNC x 1-1/2 SHCS	2
51	GK-105-074	1/4-20UNC x 5/8 FHSCS	4
52	GK-107-062	1/4-20UNC x 5/8 SHCS	4
53	GK-105-055	1/4-20UNC x 3/4 FHSCS	1
54	GK-109-052	5/16-18UNC HEX NUT	12
55	GK-105-052	#6-32UNC x 3/8 FHSCS	10
56	GK-135-057	#10-32 LOCK NUT	4
57	GK-141-019	#10-32UNF x 3 COUNTERSUNK MACHINE SCREW	1
58	GK-109-059	1/2-13UNC HEX NUT	4
59	GK-111-068	WASHER #10 BOLT x 3/8 OD x 0.050	1
60	GK-156-010	GROUND LUG (NOT SHOWN ON DRAWING)	3
61	GK-191-P-103	DISCHARGE RESISTOR WIRING HARNESS (NOT SHOWN ON DRAWING)	1
62	GK-191-P-127	HF CAPACITOR WIRING HARNESS (NOT SHOWN ON DRAWING)	1
63	GK-191-P-128	LINE CORD INTERFACE WIRING HARNESS (NOT SHOWN ON DRAWING)	1
64	GM-02-279	MILLER - SAM INTERFACE CONNECTOR ASS'Y (INCLUDES ITEMS BELOW)	1
	GK-150-035	PANEL MOUNT BODY 14 SHELL	
	GK-150-074	INSERT 6 PIN 14 SHELL	

REMOTE CONTROL PENDANT PARTS BREAKDOWN

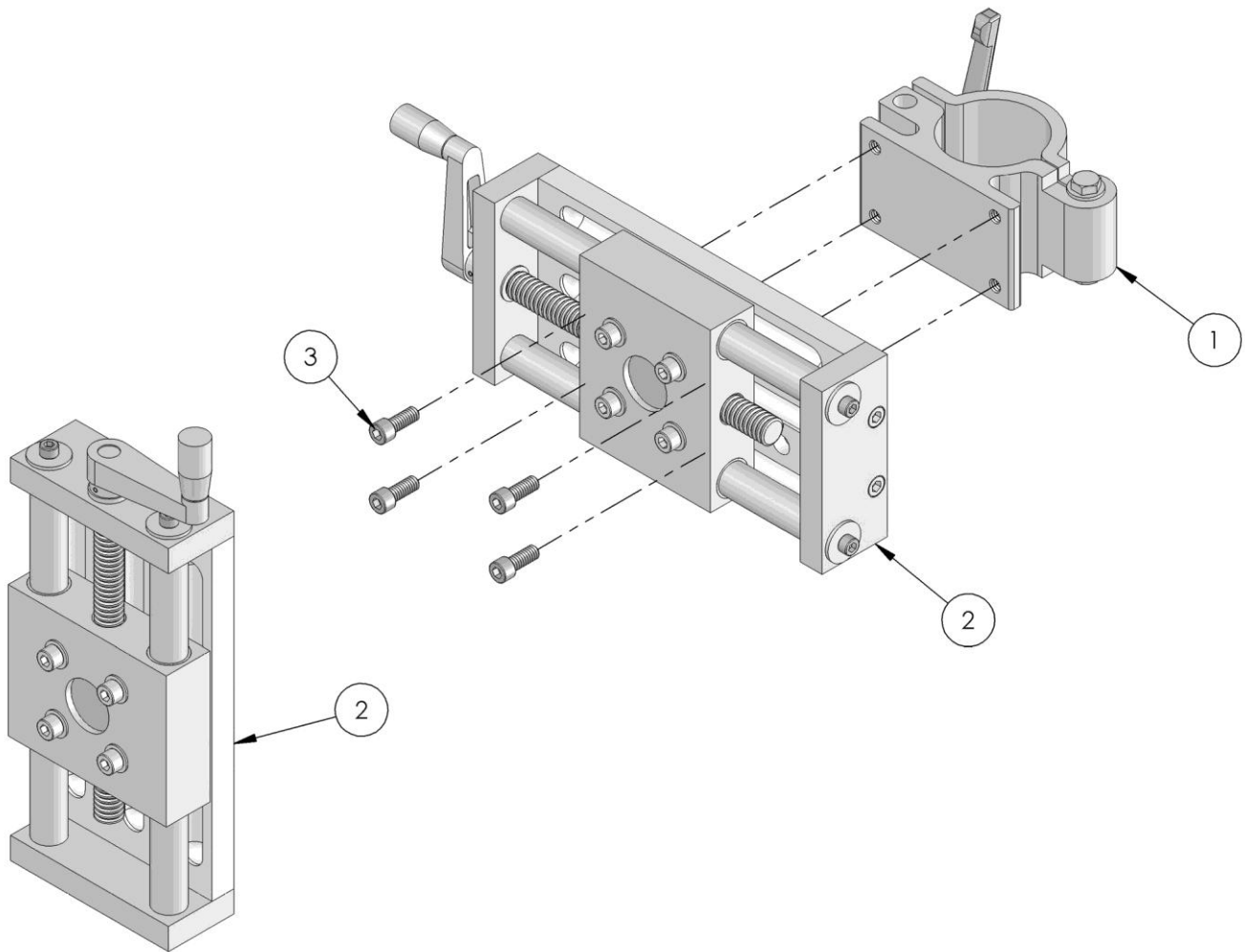
Drawing Number GM-02-255



ITEM	PART NO.	DESCRIPTION	QTY.
1	GSP-2001-11	GSP MOTOR CONTROL	1
2	GP-200-013	GSP REMOTE PENDANT ENCLOSURE	1
3	GK-190-161	SWIVEL MOUNTING BRACKET	1
4	GK-166-183	1-1/8" SWIVEL CLAMP	1
5	GK-129-007	3/8 COMBINATION STAR WASHER	1
6	GK-153-014	3/8-16UNC x 2.48" ADJUSTABLE HAND LEVER	1
7	GK-111-058	WASHER 3/8 BOLT x 13/16 OD x 1/16	1
8	GK-141-014	#6-32UNC x 5/16 FLAT HEAD MACHINE SCREW	4
9	GK-112-051	#6-32UNC x 1/2 RND HEAD SCREW	2
10	GK-111-059	WASHER #6 BOLT x 5/16 OD x 0.033	2
11	GM-02-308	REMOTE PENDANT CABLE ASS'Y (COMPLETE WITH FOLLOWING HARDWARE)	1
	GK-150-062	12 PIN CABLE CONNECTOR	
	GK-148-015	PIGTALE CABLE STRAIN RELIEF	
	GK-148-017	STRAIN RELIEF LOCKNUT	

COMPOUND SLIDES AND MAST CLAMP ASS'Y PARTS BREAKDOWN

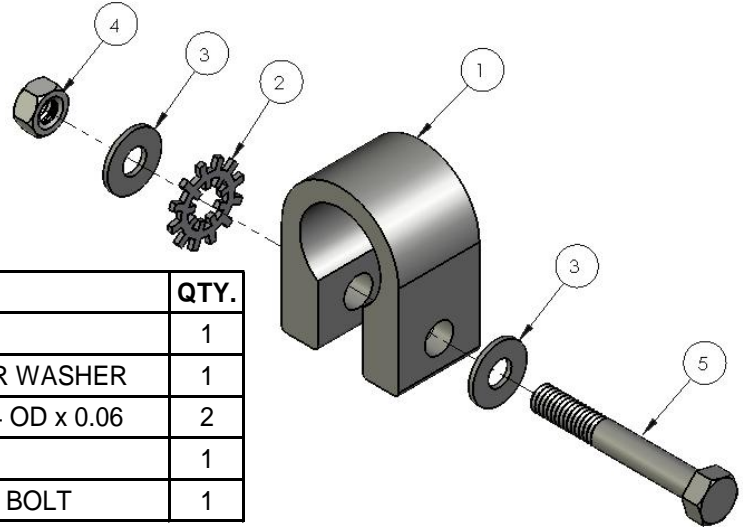
Drawing Number GS-489-004



ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-042	MAST CLAMP ASSEMBLY	1
2	GM-02-031	4" STROKE SLIDE	2
3	GK-107-062	1/4-20UNC x 5/8 SHCS	4

CONTROL MOUNTING CLAMP PARTS BREAKDOWN

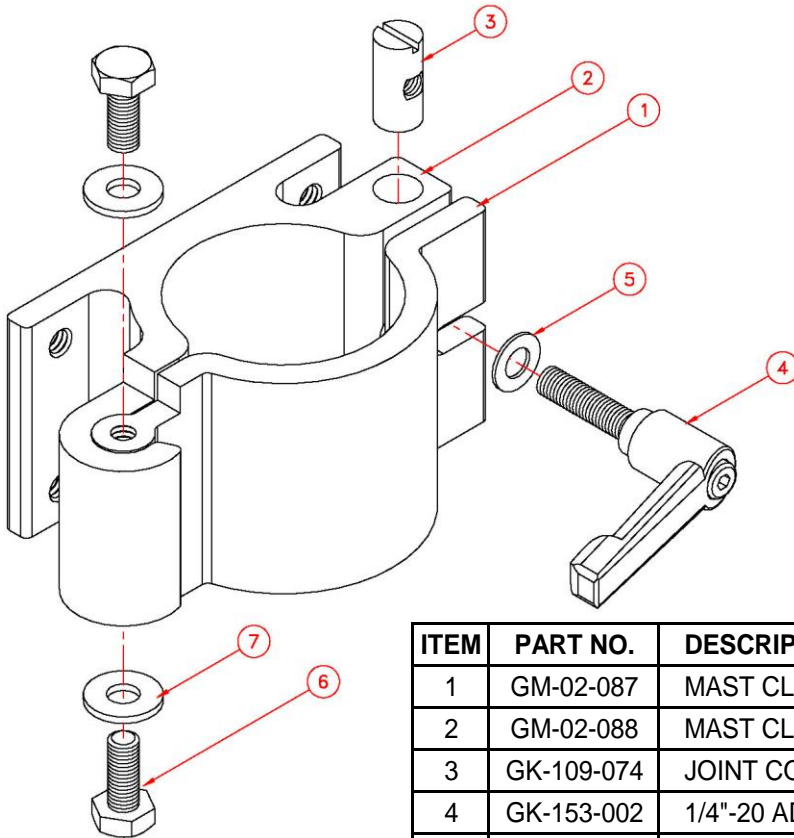
Drawing Number GS-489-006



ITEM	PART NO.	DESCRIPTION	QTY.
1	GK-166-183	1-1/8" SWIVEL CLAMP	1
2	GK-129-011	5/16" COMBINATION STAR WASHER	1
3	GK-111-054	WASHER 5/16" BOLT x 3/4 OD x 0.06	2
4	GK-109-052	5/16"-18 UNC HEX NUT	1
5	GK-108-107	5/16"-18 UNC x 2-1/4" HEX BOLT	1

MAST CLAMP ASSEMBLY PARTS BREAKDOWN

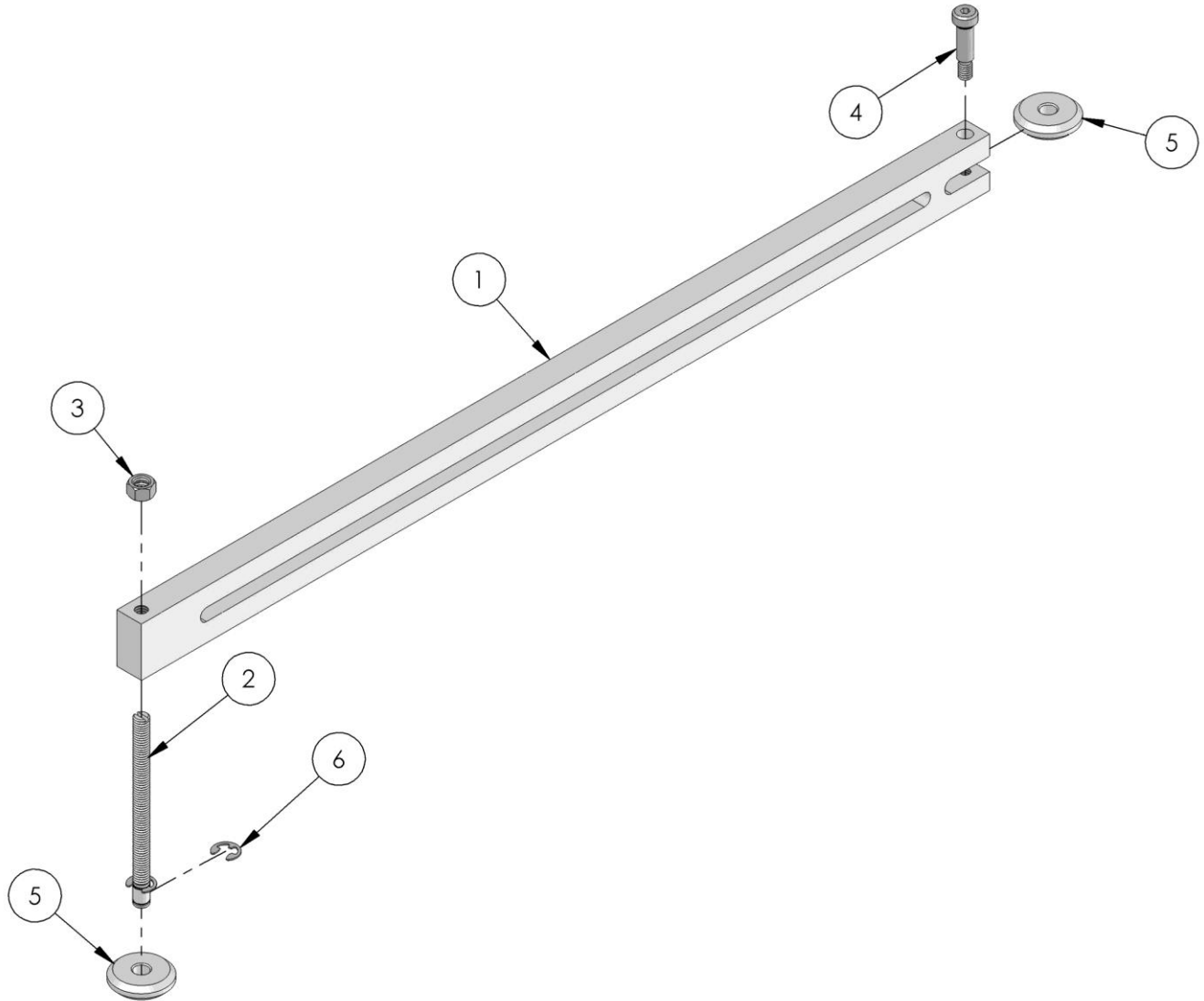
Drawing Number GM-02-042



ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-087	MAST CLAMP HALF, CLAMPING SIDE	1
2	GM-02-088	MAST CLAMP HALF, MOUNTING SIDE	1
3	GK-109-074	JOINT CONNECTOR NUT	1
4	GK-153-002	1/4"-20 ADJUSTABLE HAND LEVER	1
5	GK-111-066	1/4" BOLT SIZE x 1/2" O.D. WASHER	1
6	GK-108-050	1/4"-20 x 5/8" HEX BOLT	2
7	GK-111-051	1/4" BOLT SIZE x 5/8" O.D. WASHER	2

GUIDE ARM ASSEMBLY PARTS BREAKDOWN

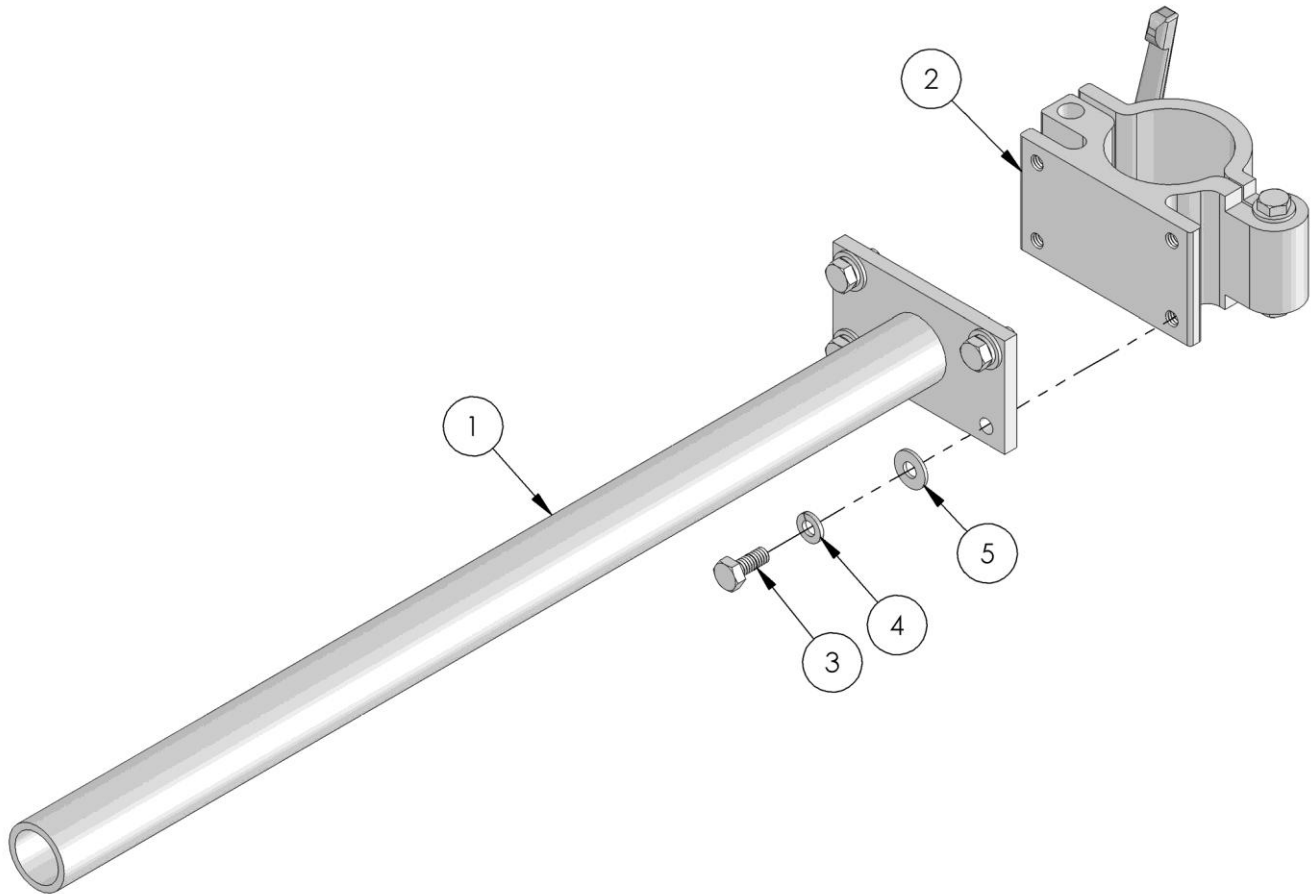
Drawing Number GM-02-082



ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-012	GUIDE ROLLER ARM	1
2	GM-01-066	ADJUSTABLE GUIDE ROLLER BOLT	1
3	GK-110-061	3/8-16UNC HEX HEAD JAM NUT	1
4	GK-104-073	3/8 x 1 SHOULDER BOLT	1
5	GM-01-029-C	COPPER GUIDE WHEEL	2
6	GK-119-059	3/8 SHAFT EXTERNAL RETAINING RING	2

CONTROL SUPPORT ARM ASSEMBLY PARTS BREAKDOWN

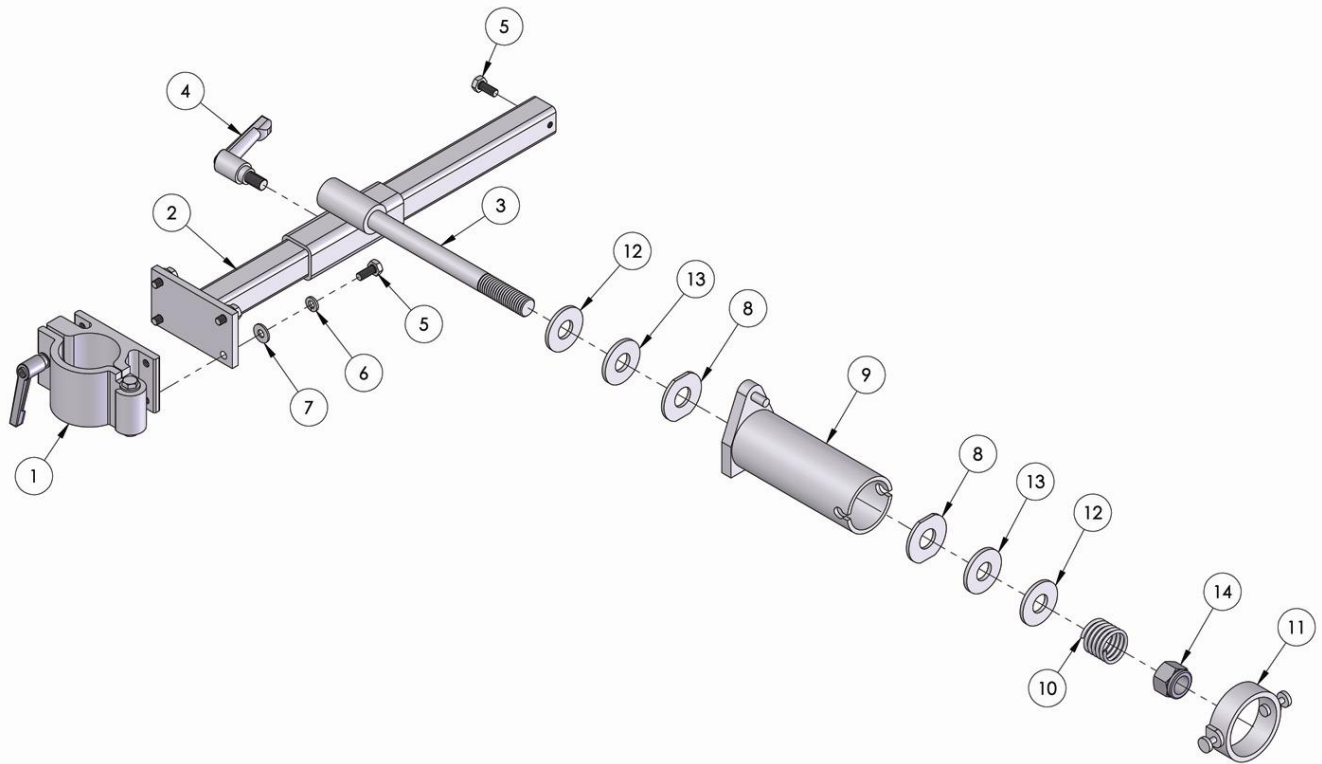
Drawing Number GS-489-010



ITEM	PART NO.	DESCRIPTION	QTY.
1	GS-489-012	CONTROL BOX SUPPORT ARM	1
2	GM-02-042	MAST CLAMP ASSEMBLY	1
3	GK-108-050	1/4-20UNC x 5/8 PLATED HEX BOLT	4
4	GK-136-053	LOCK WASHER 1/4 BOLT	4
5	GK-111-051	WASHER 1/4 BOLT X 5/8 OD X 0.057	4

WIRE REEL MOUNTING ARM ASSEMBLY PARTS BREAKDOWN

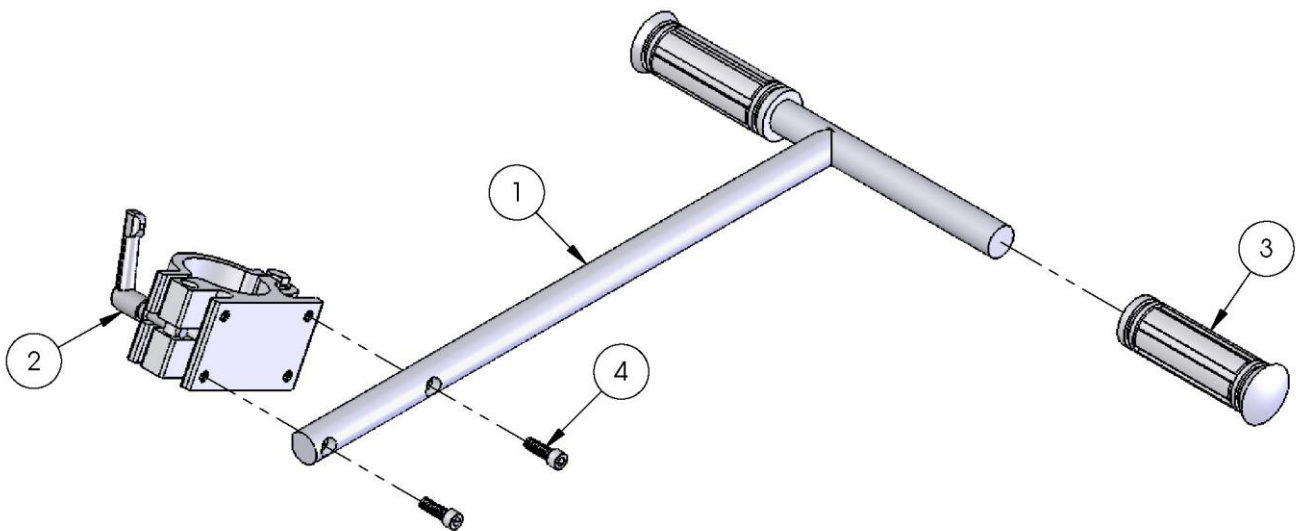
Drawing Number GM-02-316



ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-042	MAST CLAMP ASSEMBLY	1
2	GM-02-094	REEL SUPPORT ARM	1
3	GM-02-097	ADJUSTABLE SPINDLE MOUNT	1
4	GK-153-015	3/8"-16 ADJUSTABLE HANDLE	1
5	GK-108-050	1/4"-20UNC x 5/8" HEX BOLT	5
6	GK-136-053	LOCK WASHER 1/4" BOLT	4
7	GK-111-051	WASHER 1/4" BOLT x 5/8" OD x 0.057"	4
8	GK-111-088	BRAKE WASHER	2
9	GM-02-159	SPOOL HUB	1
10	GK-116-018	WIRE REEL COMPRESSION SPRING	1
11	GM-02-158	RETAINING SPOOL RING	1
12	GK-111-060	5/8" WASHER	2
13	GK-111-087	0.656" I.D. FIBER WASHER	2
14	GK-135-059	5/8"-11 UNC LOCK NUT	1

PUSH/PULL 'T' HANDLE BAR ASSEMBLY PARTS BREAKDOWN

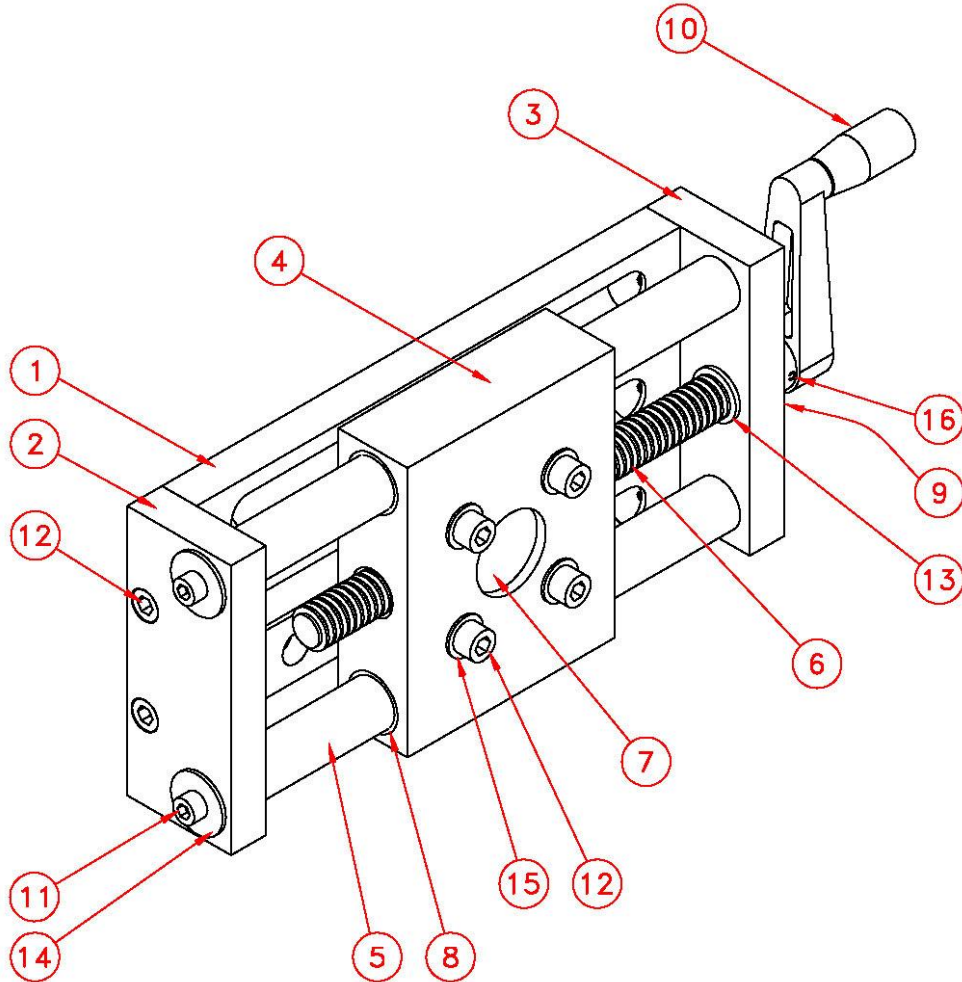
Drawing Number GM-02-327



ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-328	HANDLE BAR	1
2	GM-02-042	MAST CLAMP ASSEMBLY	1
3	GM-02-083	3/4" I.D. HANDLE GRIP	2
4	GK-107-054	1/4"-20 UNC x 3/4" SOCKET HEAD CAP SCREW	2

SLIDE ASSEMBLY PARTS BREAKDOWN

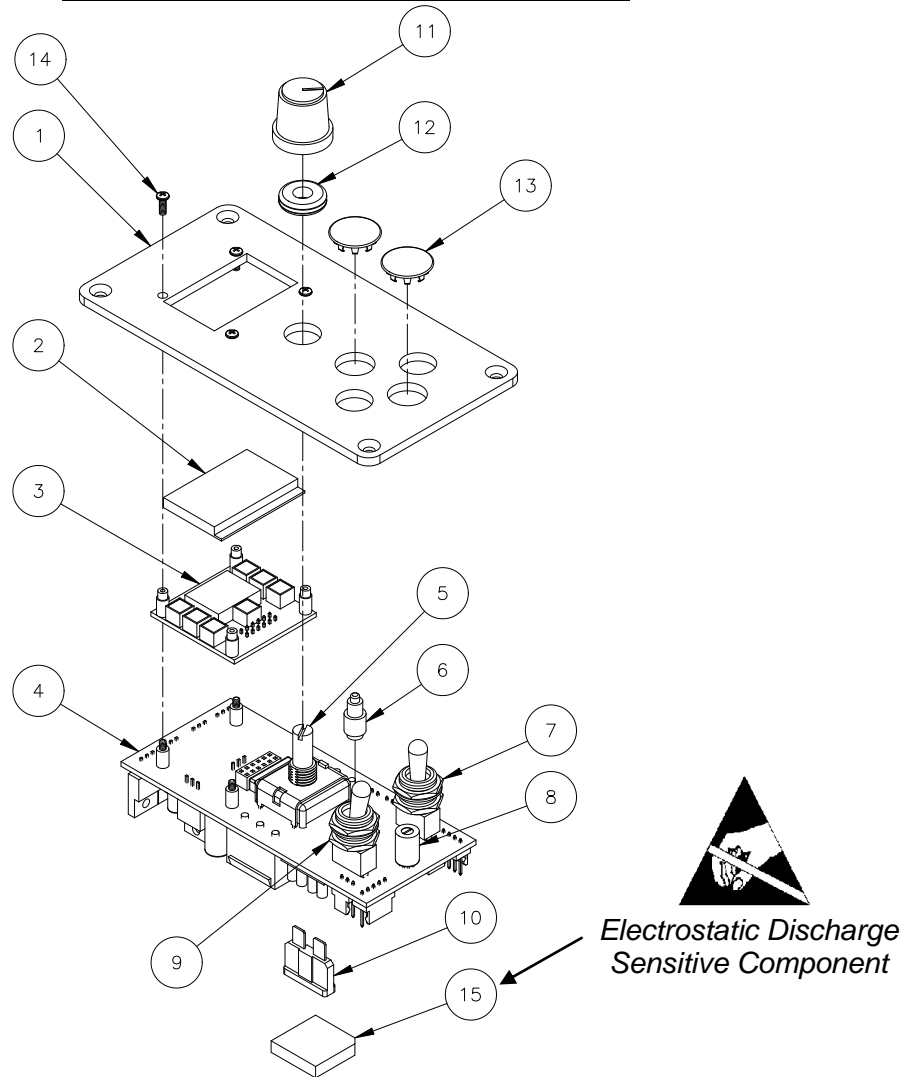
Drawing Number GM-02-031



ITEM	PART NO.	DESCRIPTION	QTY.
1	GM-02-032	BASE PLATE	1
2	GM-02-033	TOP END PLATE	1
3	GM-02-034	BOTTOM END PLATE	1
4	GM-02-035	SLIDE BLOCK	1
5	GM-02-036	SLIDE SHAFT	2
6	GM-02-037	SLIDE LEAD SCREW	1
7	GM-02-038	SCREW NUT	1
8	GK-118-075	SLIDE BEARING	4
9	GK-118-073	FLANGE BEARING	1
10	GM-02-040	SLIDE CRANK HANDLE	1
11	GK-107-063	#10-32 x 1/2" SHCS	4
12	GK-107-054	1/4"-20 x 3/4" SHCS	8
13	GK-111-108	STEEL SHIM 3/8" ID 5/8" OD X .062"	1
14	GK-111-085	#10 BOLT SIZE x 3/4" O.D. FLAT WASHER	4
15	GK-111-066	1/4" BOLT SIZE x 1/2" O.D. FLAT WASHER	4
16	GK-117-011	3/32" DIA. x 5/8" SPRING PIN	1

GSP-2001-11 CONTROL ASSEMBLY PARTS BREAKDOWN

Based on Drawing Number GSP-2001



ITEM	PART NUMBER	DESCRIPTION	QTY
1	GSP-2020	SAM GSP CONTROL FACEPLATE	1
2	GK-191-P-223	DISPLAY BEZEL	1
3	GSP-2003	GSP DISPLAY BOARD	1
4	GSP-2017	GSP MAIN BOARD (INCLUDES ITEMS 5-9)	1
5	GK-191-P-235	ROTARY SPEED ENCODER	1
6	GSP-2009	CYCLE PUSH BUTTON (RECESSED)	1
7	GSP-2007	FORWARD/NEUTRAL/REVERSE SWITCH	1
8	GSP-2011	PROGRAM VARIABLE SELECTOR SWITCH (RECESSED)	1
9	GSP-2008	RUN/STOP SWITCH (AUTO-ENABLE/MANUAL MODE)	1
10	GSP-2006	15 AMP FUSE	1
11	GK-191-P-097	SPEED SELECTOR KNOB	1
12	GK-151-004	GROMMET	1
13	GK-155-006	1/2" HOLE PLUG	2
14	GK-112-091	#2-56 x 1/4" PAN HEAD SCREW	4
15	GSP-2004-11	SAM/MILLER MICRO-PROCESSOR CHIP	1