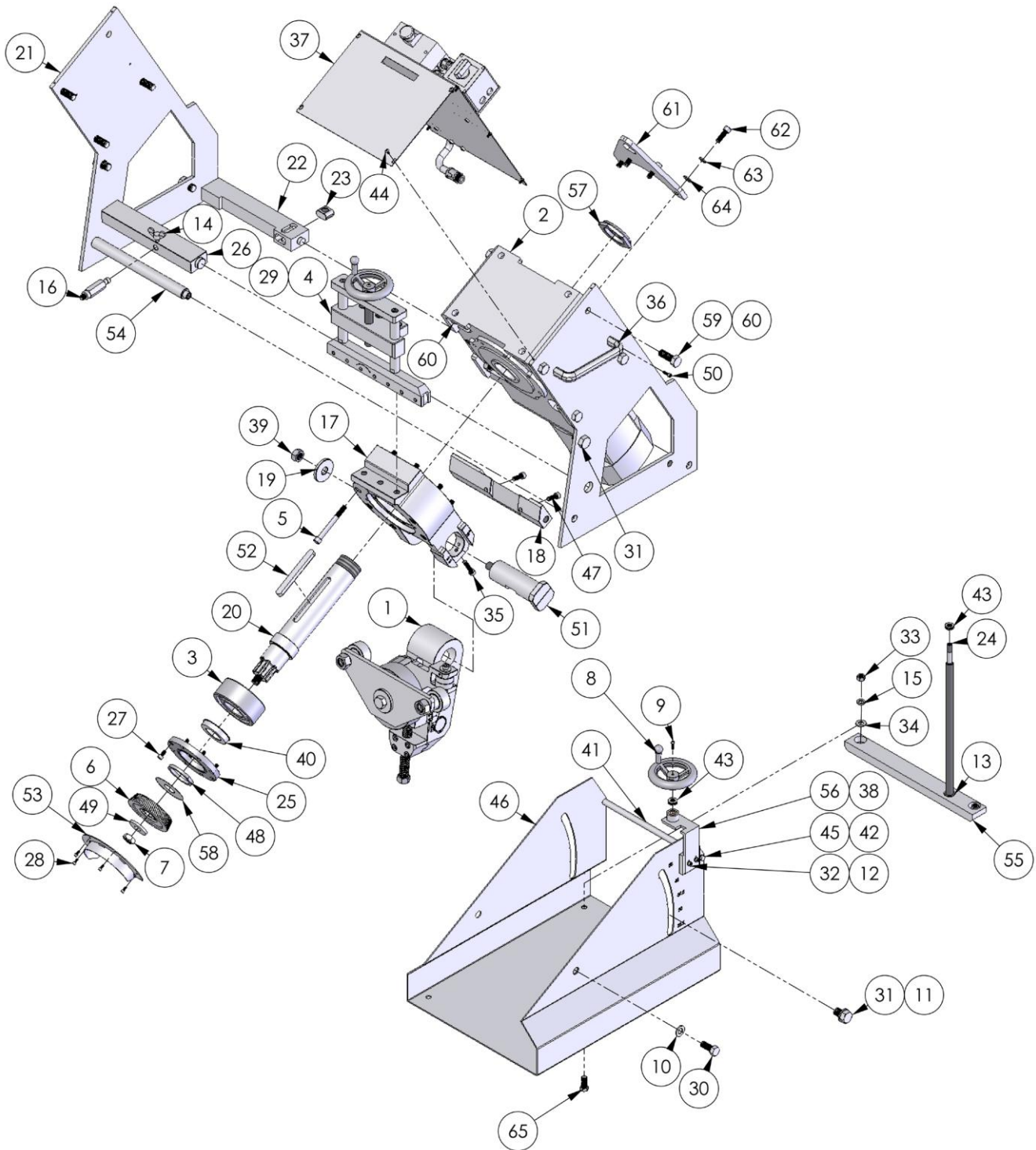


# **KBM®-28-100 GENERAL ASSEMBLY BREAKDOWN**

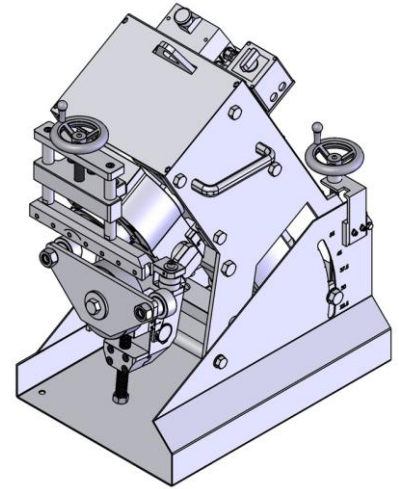
Drawing Number: KBM-28-100



## KBM®-28-100 GENERAL ASSEMBLY BREAKDOWN

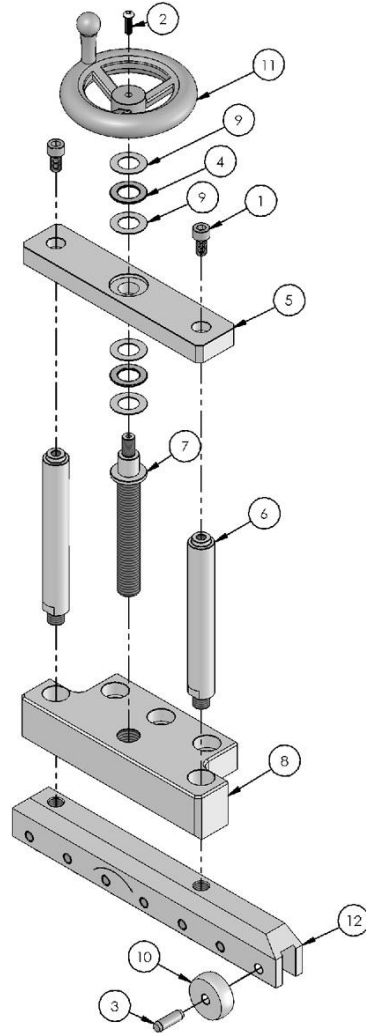
Drawing Number: KBM-28-100

ITEM	PART NUMBER	DESCRIPTION	QTY
1	KBM-28-044	PIVOT ARM ASSEMBLY	1
2	KBM-28-120-A	230/460V GEARMOTOR (KBM-28-100-A, B, C & D)	1
	KBM-28-120-B	575V GEARMOTOR (KBM-28-100-E)	
3	KBM-28-038	CUTTER SHAFT BEARING	1
4	KBM-28-006	CLAMP ROLLER ASSEMBLY	1
5	GK-107-142	M12-1.75 x 110mm SHCS	7
	GBM-28-X1	DEEP TOOTH CUTTER	
	GBM-28-FXS	SHALLOW TOOTH CUTTER	
6	KBM-28-X1C	MEDIUM TOOTH CUTTER	1
	GBM-28-07779	CUTTER NUT	
7	GBM-28-07779	CUTTER NUT	1
8	KBM-28-039	5" HAND WHEEL	1
9	GK-112-131	M6-1.0 x 20mm BHCS	1
10	GK-111-099	WASHER 16mm BOLT x 30 OD x 3.0	2
11	GK-111-100	WASHER 20mm BOLT x 37 OD x 3.0	2
12	GK-111-094	WASHER 6mm BOLT x 12 OD x 1.6	2
13	GK-118-052	BRONZE BUSHING	1
14	GK-161-003	M10x16 WING SCREW	1
15	GK-136-065	LOCK WASHER 1/2 BOLT	2
16	GBM-28-040-225	22.5 DEGREE ANGLE PIN	1
	GBM-28-040-30	30 DEGREE ANGLE PIN	
	GBM-28-040-375	37.5 DEGREE ANGLE PIN	
	GBM-28-040-45	45 DEGREE ANGLE PIN	
	GBM-28-040-55	55 DEGREE ANGLE PIN	
17	KBM-28-015	CUTTER SHAFT HOUSING	1
18	KBM-28-019	MAIN SUPPORT BAR	1
19	KBM-28-049	WASHER	1
20	KBM-28-022	CUTTER SHAFT	1
21	KBM-28-024	BODY SIDE	2
22	KBM-28-030	LIFT BAR	1
23	KBM-28-031	LIFT NUT	1
24	KBM-28-045	LIFTING SCREW	1
25	KBM-28-042	STOP DISC	1
26	KBM-28-021	ANGLE SUPPORT BAR	1
27	GK-107-123	M8-1.25 x 16mm SHCS	8
28	GK-107-131	M5-0.8 x 12mm SHCS	4
29	GK-107-143	M16-2.0 x 45mm SHCS	3
30	GK-108-147	M16-2 x 40mm HEX BOLT	2
31	GK-108-145	M20-2.5 x 30mm HEX BOLT	4
32	GK-107-094	M6-1.0 x 12mm SHCS	2
33	GK-109-059	1/2-13UNC HEX NUT	2
34	GK-111-075	WASHER 1/2" BOLT x 1-1/16 OD x 0.117	2
35	GK-107-150	M10-1.5 x 50mm SHCS	2
36	GK-153-019	PULL HANDLE	2
37	KBM-28-420	STARTER ASSEMBLY	1
38	GK-118-062	BRONZE BUSHING	1
39	GK-135-062	M20-2.5 NYLOK HEX NUT	1
40	KBM-28-065	CUTTER SHAFT COLLAR	1
41	KBM-28-004	BASE FRAME BAR	1
42	GK-111-101	WASHER 8mm BOLT x 16 OD x 1.6	2
43	KBM-28-040	THRUST BEARING SET (Thrust Bearing & 2 Thrust Washers)	2
44	GK-112-134	M5-0.8 x 12mm BHCS	10
45	GK-108-112	M8-1.25 x 25mm HEX BOLT	2
46	KBM-28-025	TILTING FRAME	1
47	GK-107-083	M10-1.5 x 30mm SHCS	2
48	GBM-18-094	CUTTER FELT INSERT	1
49	KBM-28-058	CUTTER NUT WASHER	1
50	GK-107-120	M6-1.0 x 20mm SHCS	4
51	KBM-28-054	ANGLE ALIGNMENT BOLT	1
52	KBM-28-023	CUTTER SHAFT KEY	1
53	KBM-28-020	CUTTER GUARD	1
54	KBM-28-051	TILT BAR	1
55	KBM-28-029	LIFTING BAR MOUNT	1
56	KBM-28-033	CRANK BRACKET	1
57	KBM-28-007	65mm SELF-LOCKING NUT	1
58	GBM-28-015-A	0.5mm CUTTER SHIM	AS NEEDED
	GBM-28-015-B	1.0mm CUTTER SHIM	
59	GK-108-155	M18-2.5 x 50mm HEX BOLT	8
60	GK-109-082	M18-2.5 HEX NUT	8
61	KBM-28-071	LIFTING PLATE	1
62	GK-107-137	M12-1.75 x 35mm SHCS	4
63	GK-136-070	LOCK WASHER 12mm BOLT	4
64	GK-111-095	WASHER 12mm BOLT x 24 OD x 2.5	4
65	GK-108-098	1/2-13UNC x 1-1/4 HEX BOLT	2



## CLAMP ROLLER ASSEMBLY BREAKDOWN

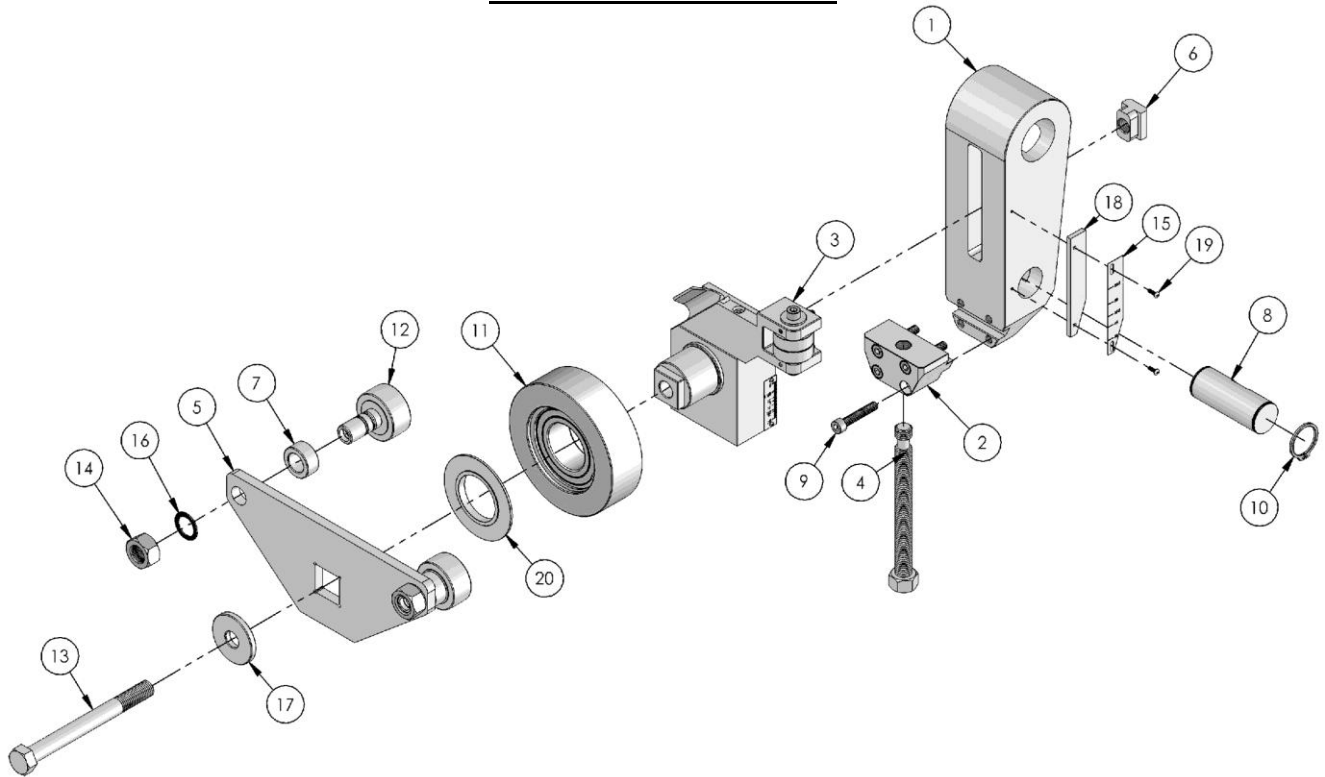
Part Number: KBM-28-006



ITEM	PART NUMBER	DESCRIPTION	QTY
1	GK-107-126	M10-1.5 x 20mm SHCS	2
2	GK-112-131	M6-1.0 x 20mm BHCS	1
3	GK-115-089	10mm x32mm DOWEL PIN	7
4	KBM-28-035	THRUST BEARING	2
5	KBM-28-009	SLIDE SHAFT RETAINING PLATE	1
6	KBM-28-055	SLIDE SHAFT	2
7	KBM-28-053	SCREW SHAFT	1
8	KBM-28-008	SLIDE SHAFT SUPPORT PLATE	1
9	KBM-28-036	THRUST WASHER	4
10	KBM-28-050	CLAMP ROLLER	7
11	KBM-28-039	5" HAND WHEEL	1
12	KBM-28-010	CLAMP ROLLER HOLDER	1

## PIVOT ARM ASSEMBLY BREAKDOWN

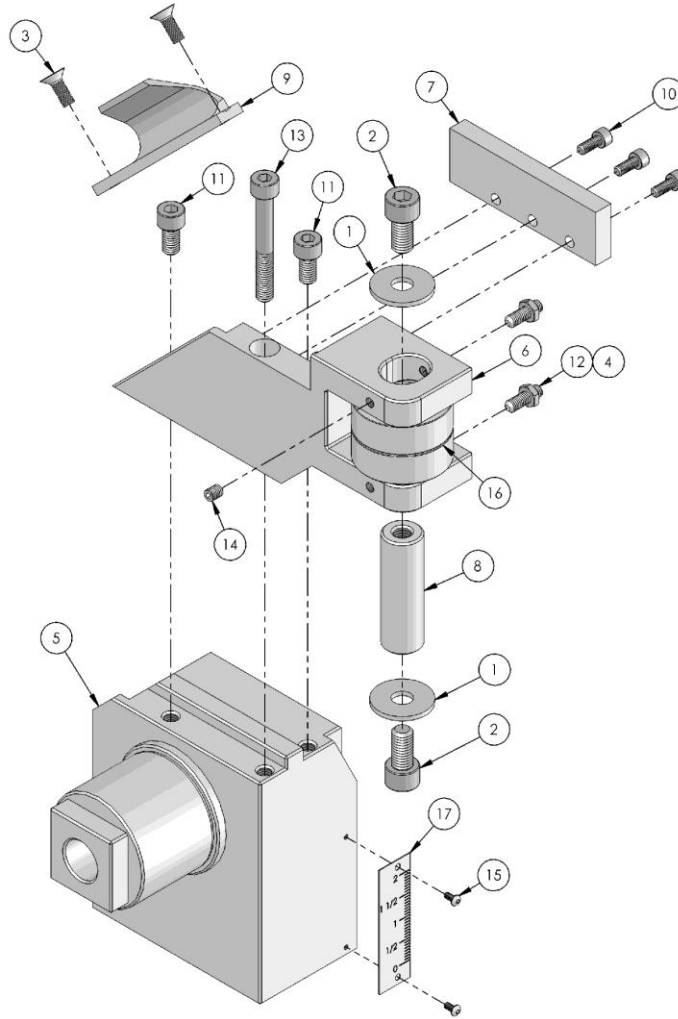
Part Number: KBM-28-044



ITEM	PART NUMBER	DESCRIPTION	QTY
1	KBM-28-017	PIVOT ARM BLOCK	1
2	KBM-28-069	ADJUSTING BOLT SUPPORT	1
3	KBM-28-043	SLIDE BASE ASSEMBLY	1
4	KBM-28-070	SLIDE BASE ADJUSTING BOLT	1
5	KBM-28-014	SUPPORT ROLLER PLATE	1
6	KBM-28-016	"T" NUT	1
7	KBM-28-046	SUPPORT ROLLER SPACER	2
8	KBM-28-052	ANGLE PIVOT PIN	1
9	GK-107-102	M10-1.5 x 55mm SHCS	4
10	GK-119-068	EXTERNAL RETAINING RING	2
11	KBM-28-041	MAIN ROLLER ASSEMBLY	1
12	KBM-28-037	SUPPORT ROLLER	2
13	GK-108-135	M20-2.5 x 200mm HEX BOLT	1
14	GK-109-080	M24-1.5 HEX NUT	2
15	KBM-28-027	ANGLE REFERENCE SCALE	1
16	GK-111-102	M24 SCHNORR LOCKWASHER	2
17	KBM-28-049	WASHER	1
18	KBM-28-067	ANGLE REFERENCE SCALE SPACER	1
19	GK-107-105	M4-0.7 x 14mm SHCS	2
20	KBM-28-048	COVER PLATE	1

## SLIDE BASE ASSEMBLY BREAKDOWN

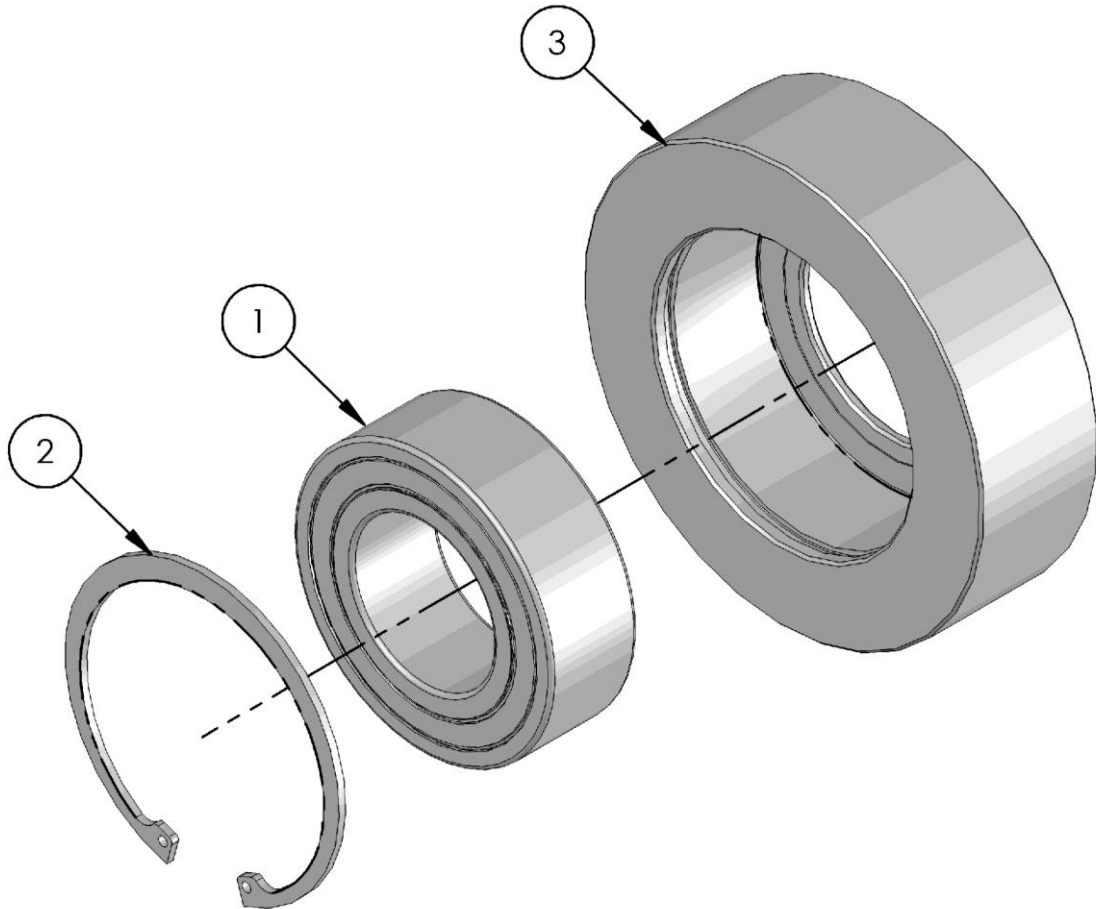
Part Number: KBM-28-043



ITEM	PART NUMBER	DESCRIPTION	QTY
1	GK-111-098	FENDER WASHER 10mm BOLT x 30 OD x 2.5	2
2	GK-107-126	M10-1.5 x 20mm SHCS	2
3	GK-105-092	M6 x 16mm FHSCS	2
4	GK-110-071	M6 x 1.0 HEX HEAD JAM NUT	2
5	KBM-28-011	SLIDE BASE	1
6	KBM-28-012	GUIDE ROLLER BRACKET	1
7	KBM-28-013	CHIP DEFLECTOR SUPPORT	1
8	KBM-28-047	TRACK SPACER	1
9	KBM-28-04052	CHIP DEFLECTOR	1
10	GK-107-131	M5-0.8 x 12mm SHCS	3
11	GK-107-123	M8-1.25 x 16mm SHCS	2
12	GK-106-086	M6-1.0 x 20mm SET SCREW	2
13	GK-107-141	M8-1.25 x 60mm SHCS	1
14	GK-106-085	M6-1.0 x 8mm SET SCREW	1
15	GK-112-132	M3 x 6mm BHCS	2
16	KBM-28-059	GUIDE ROLLER BEARING	2
17	KBM-28-026	ROOT FACE SCALE	1

## MAIN ROLLER ASSEMBLY BREAKDOWN

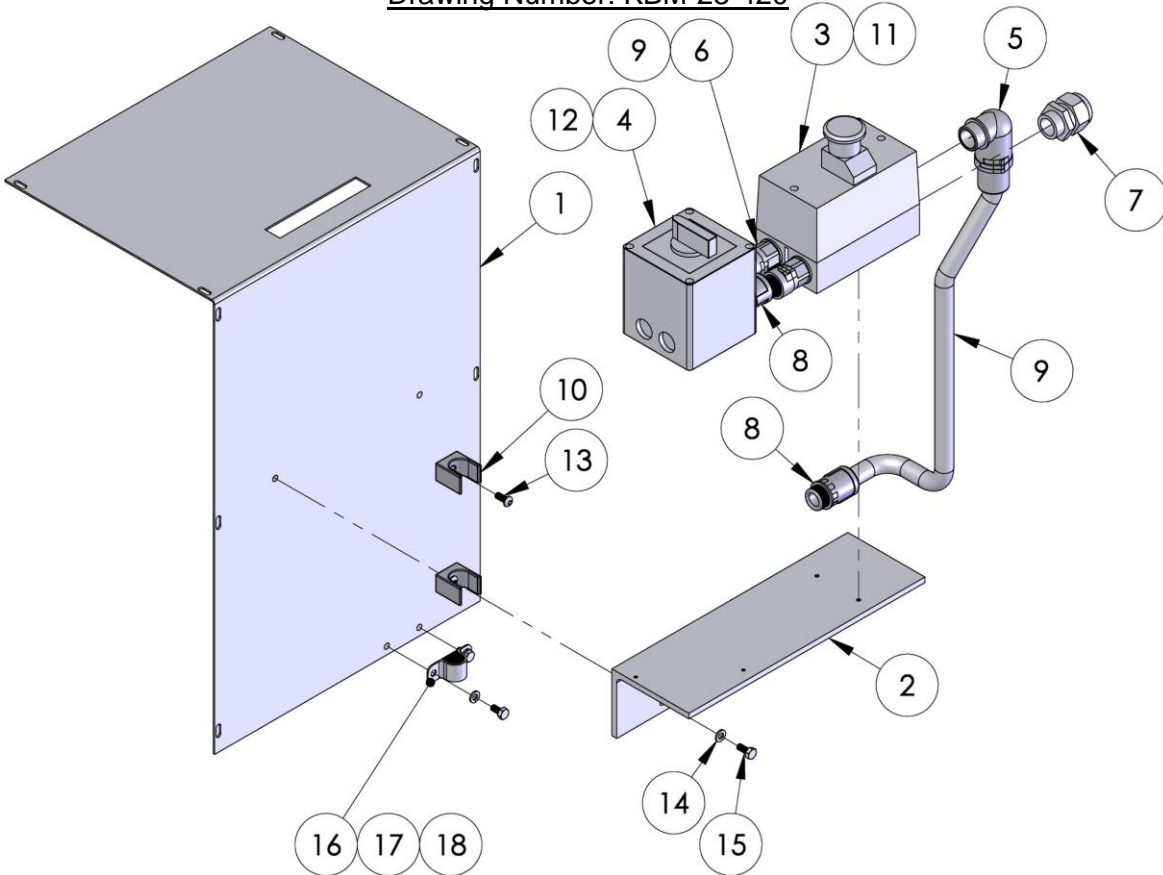
Part Number: KBM-28-041



ITEM	PART NUMBER	DESCRIPTION	QTY
1	KBM-28-060	MAIN ROLLER BEARING	1
2	KBM-28-061	INTERNAL RETAINING CLIP	1
3	KBM-28-057	MAIN ROLLER	1

## STARTER ASSEMBLY BREAKDOWN

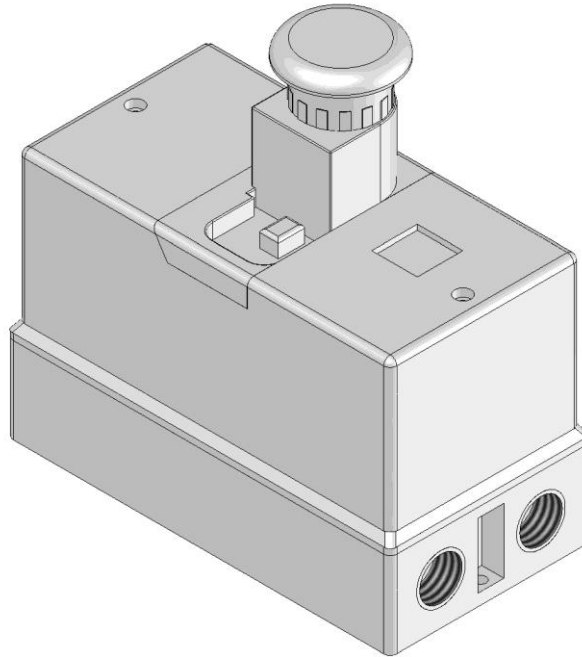
Drawing Number: KBM-28-420



ITEM	PART NUMBER	DESCRIPTION	QTY
1	KBM-28-028	GEAR BOX COVER	1
2	KBM-28-064	MOTOR STARTER MOUNTING BRACKET	1
3	GBM-28-022	MANUAL STARTER ASSEMBLY	1
4	KBM-28-072	ROTARY DIRECTION SWITCH	1
5	GK-148-031	M25-1.5MM 90 DEG. CONNECTOR	1
6	GK-148-030	M25 STRAIGHT CONNECTOR	2
7	GK-148-032	M25 CABLE GLAND	1
8	GK-148-025	PG16 STRAIGHT CONNECTOR	3
9	RM-114-111	FLEX CONDUIT (2pcs @ 2-1/2" LONG) (1pc @ 22" LONG)	3
10	GK-156-082	CO-FIX SYSTEM SUPPORT	2
11	GK-107-059	#10-32UNF x 3/8 SHCS	2
12	GK-107-065	#8-32UNC x 3/8 SHCS	2
13	GK-112-130	M6-1.0 x 14mm BHCS	2
14	GK-111-094	WASHER 6mm BOLT x 12 OD x 1.6	2
15	GK-108-115	M6-1.0 x 14mm HEX BOLT	2
16	GK-156-093	CABLE CLAMP	1
17	GK-136-072	LOCK WASHER 6mm BOLT	2
18	GK-108-159	M6-1.0 x 12mm HEX BOLT	2

## MANUAL STARTER ASSEMBLY BREAKDOWN

Drawing Number: GBM-28-022

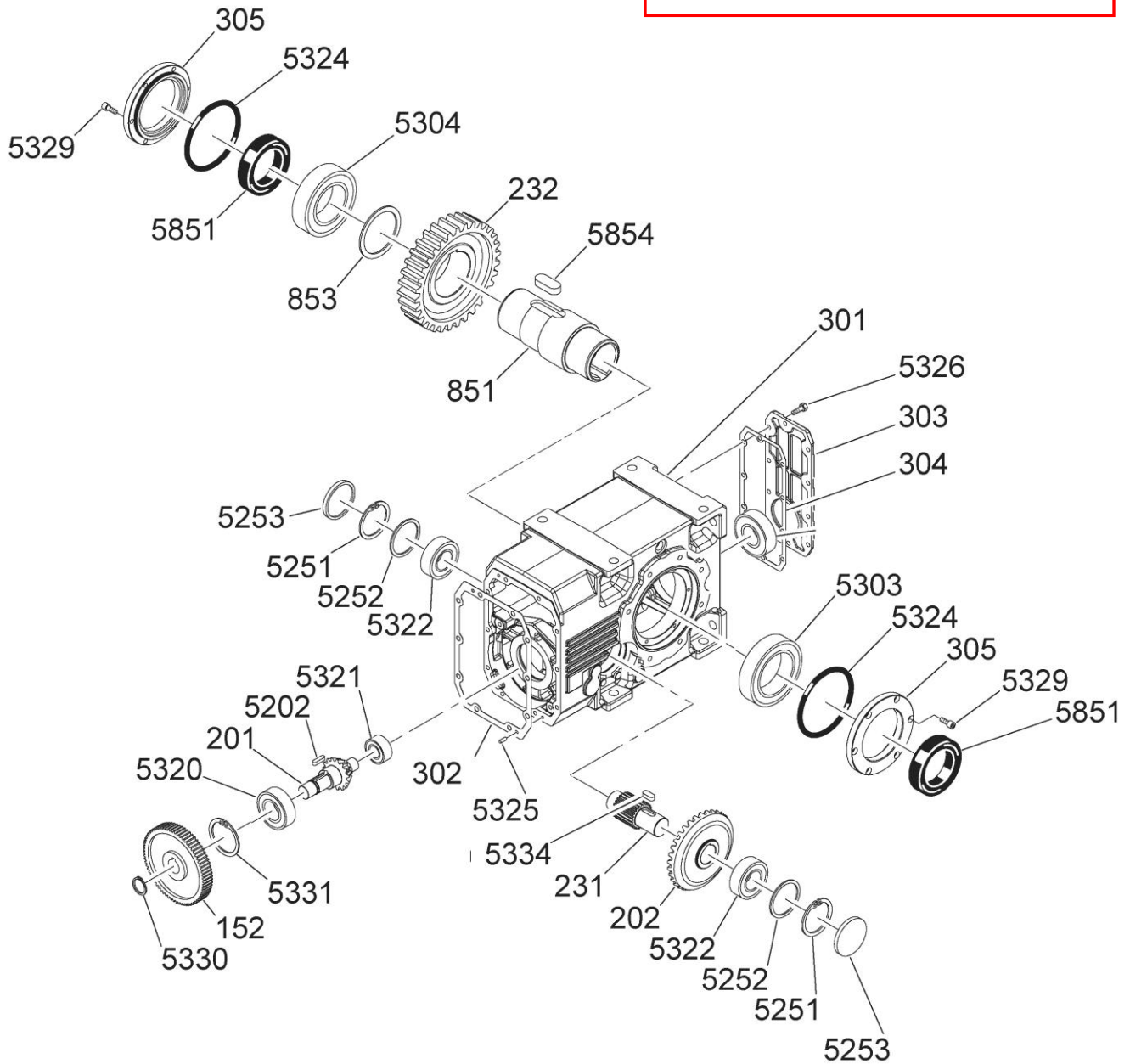


PART NUMBER	DESCRIPTION	QTY
<b>GBM-28-022-A</b>	<b>MANUAL STARTER ASSEMBLY FOR 230V MACHINES</b>	
GBM-18-019-01	ENCLOSURE	1
GBM-18-019-07	RED MUSHROOM E-STOP	1
GBM-18-019-05	MANUAL STARTER 6.3 - 10 AMP	1
GBM-18-019-08	UNDER-VOLTAGE TRIP 230V 60Hz	1
<b>GBM-28-022-B</b>	<b>MANUAL STARTER ASSEMBLY FOR 380V &amp; 400/415V MACHINES</b>	
GBM-18-019-01	ENCLOSURE	1
GBM-18-019-07	RED MUSHROOM E-STOP	1
GBM-18-019-04	MANUAL STARTER 4 - 6.3 AMP	1
GBM-18-019-09	UNDER-VOLTAGE TRIP 380V 50Hz & 415V 50HZ	1
<b>GBM-28-022-C</b>	<b>MANUAL STARTER ASSEMBLY FOR 460V MACHINES</b>	
GBM-18-019-01	ENCLOSURE	1
GBM-18-019-07	RED MUSHROOM E-STOP	1
GBM-18-019-04	MANUAL STARTER 4 - 6.3 AMP	1
GBM-18-019-10	UNDER-VOLTAGE TRIP 460V 60Hz	1
<b>GBM-28-022-D</b>	<b>MANUAL STARTER ASSEMBLY FOR 575V MACHINES</b>	
GBM-18-019-01	ENCLOSURE	1
GBM-18-019-07	RED MUSHROOM E-STOP	1
GBM-18-019-03	MANUAL STARTER 2.5 - 4 AMP	1
GBM-18-019-11	UNDER-VOLTAGE TRIP 575V 60Hz	1



## KBM®-28 MAIN GEARBOX BREAKDOWN

Note:  
Provide all nameplate details from gear  
box label when ordering spare parts.



## KBM®-28 MAIN GEARBOX BREAKDOWN

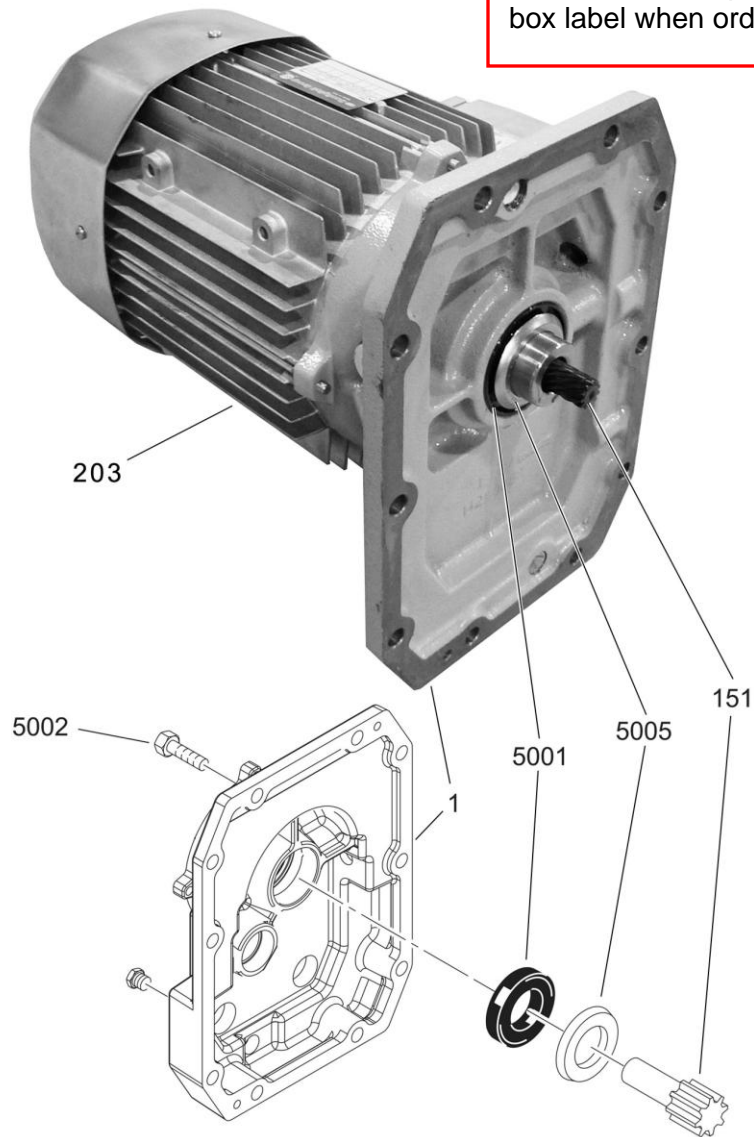
If component damage occurs, Gullco strongly recommends replacing the KBM-28-300 Gearbox Sub Assembly, as it is more readily available and has been precision assembled & adjusted. Special tooling and procedures are required to rebuild these gearboxes and therefore not recommended.

Item	Part Number	Description	Qty
152	KBM-28-152	1st. Red.Gear	1
302	KBM-28-120-GL	Gasket	1
5325	KBM-28-5225	Dowel 6x16	2

	KBM-28-300	Gearbox Sub Assembly (All Items Below)	
201	Not Sold Individually	Bevel Pinion	1
202	Not Sold Individually	Bevel Gear	1
231	Not Sold Individually	Output Pinion	1
232	Not Sold Individually	Output Gear	1
301	Not Sold Individually	Gear Housing	1
303	KBM-28-302	Cover	1
304	KBM-28-304	Gasket	1
305	KBM-28-305	Flange	2
851	Not Sold Individually	Output Shaft	1
853	KBM-28-853	Spacer Ring 90x110x3.5 R	1
5202	Not Sold Individually	Key 8x7x30 B	1
5251	KBM-28-5251	Circlip 80	2
5252	KBM-28-5252	Washer 68x80x3 R	2
5253	KBM-28-5253	Rubber Cap 80x8	2
5303	KBM-28-5303	Bearing 32018X	1
5304	KBM-28-5304	Bearing 32216	1
5320	KBM-28-5320	Bearing 32208	1
5321	KBM-28-5321	Bearing 33205	1
5322	KBM-28-5322	Bearing 32208	2
5324	KBM-28-5324	O-Ring Seal133.02x2.62	2
5326	KBM-28-5326	Screw T.E. Mx25	8
5329	KBM-28-5329	Screw T.C.E. M8x22	12
5330	KBM-28-5330	Circlip De30	1
5331	KBM-28-5331	Circlip 80	1
5334	Not Sold Individually	Key 12x8x28 C	1
5851	KBM-28-5851	Oil Seal	2
5854	Not Sold Individually	Key 25x14x60 B	1

## **KBM®-28 MOTOR ASSEMBLY BREAKDOWN**

Note:  
Provide all nameplate details from gear  
box label when ordering spare parts.



Item	Part Number	Description	Qty
203	KBM-28-203-A	230/460V Motor Assembly (KBM-28-100-A, -B, -C & -D) Includes Items 1, 151, 5001 & 5005	1
	KBM-28-203-B	575V Motor Assembly (KBM-28-100-E) Includes Items 1, 151, 5001 & 5005	
1	KBM-28-207	Cover	1
151	Not Sold Individually	Pinion Gear	1
5001	KBM-28-5001	Seal	1
5002	KBM-28-5002	Bolt	10
5005	KBM-28-5005	Gamma Seal 32x52x4.5	1