

Barudan

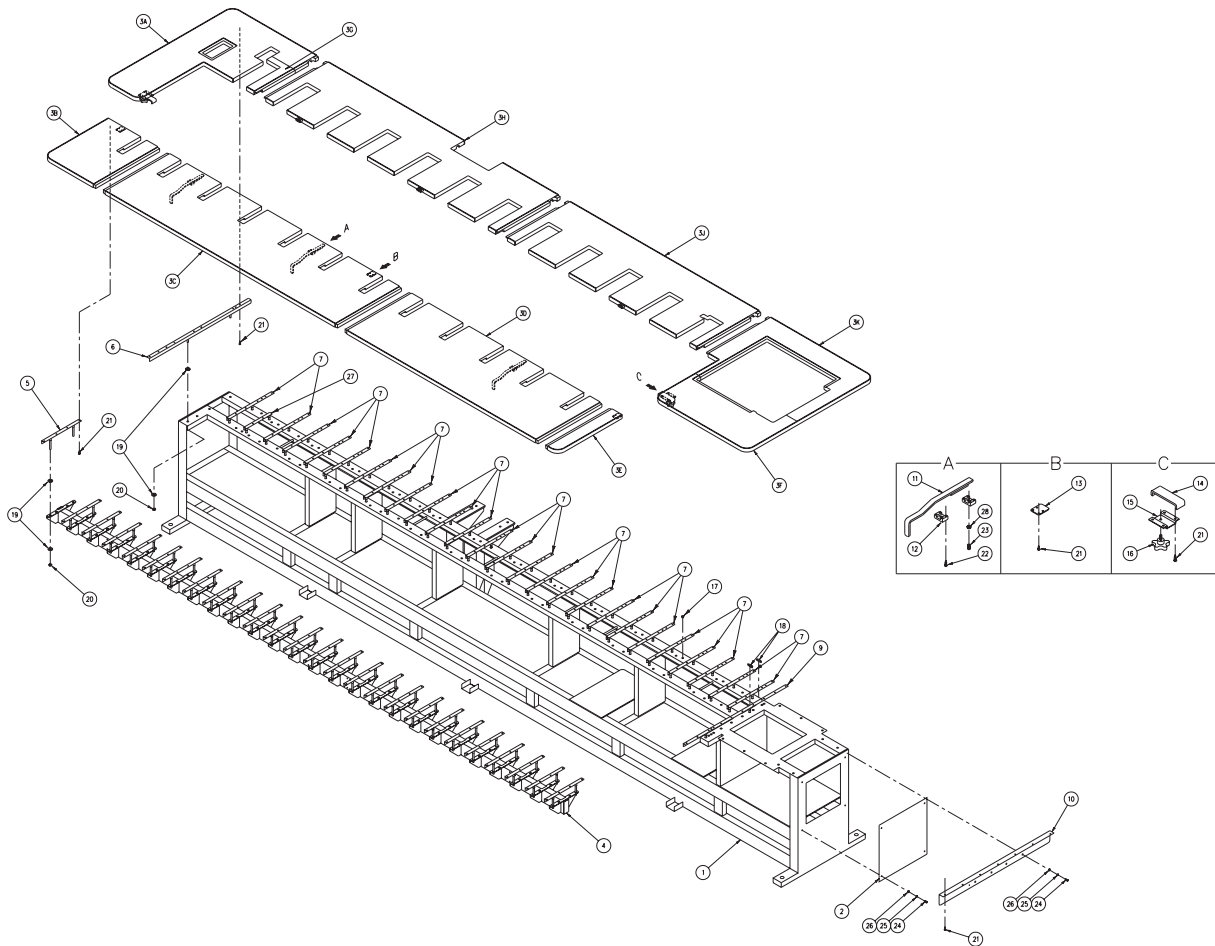
BENSME-ZN

PARTS LIST

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Table and Frame (12 Head)

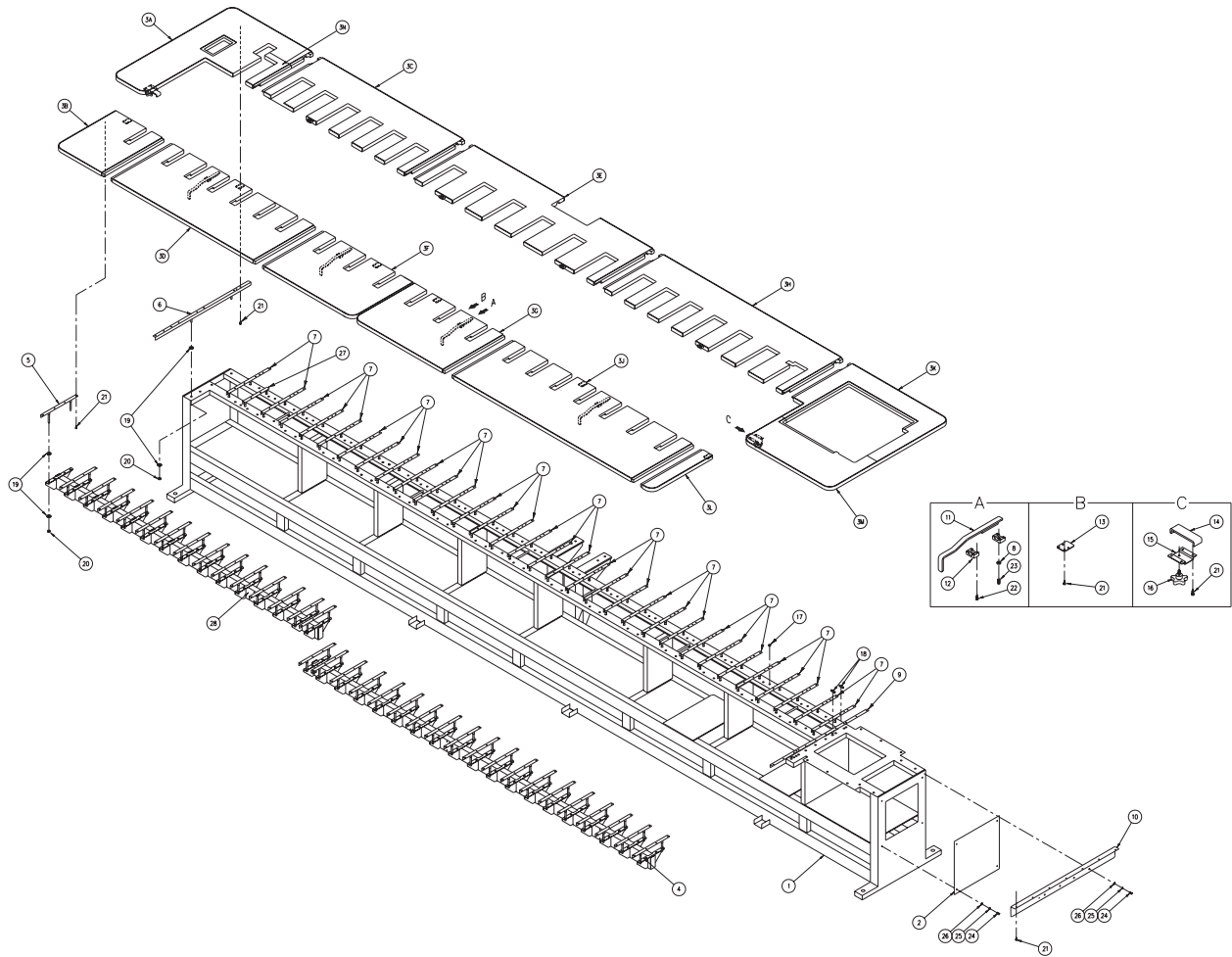


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TABLE AND FRAME				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A200143	FRAME, (BENSME12)	
2	1	KC110910	COVER, ACCESS	
3	1	A200145	TABLE-TOP, (BENSME12)	
4	1	A200018	WELDMENT, TABLE GUIDE	
5	26	A200018	BRACKET, TABLE ADJUSTING	
6	1	KR140010	BRACKET, TABLE MOUNTING (962L)	
7	25	A100029	BRACKET, TABLE MOUNTING (422L)	
8	1	A200151	BRACKET, TABLE MOUNTING	
9	1	A100030	BRACKET, TABLE MOUNTING (962L)	
10	1	A100031	BRACKET, TABLE SUPPORT	
11	3	A200013	SLIDER, ALIGNMENT	
12	6	A200012	BRACKET, ALIGNMENT	
13	3	A200027	STOP, TABLE ALIGNMENT	
14	2	KR140050	PLATE, TABLE SUPPORT	
15	2	MA140320	BRACKET, CENTER TABLE SUPPORT PLATE	
16	2	A110001	KNOB, TABLE BRACKET RETAINING	
17	12	A9014022	PLUG, SEWING HEAD ACCESS	
18	6	A200162	STRIP, FELT	
19	216	P840563	WASHER, [3/8"] FLAT	
20	108	P841026	NUT, [3/8-16UNC-2B] HEAVY HEXAGONAL	
21	305	P840449	SCREW,[#8-18x1" LG.] HEX.HD.#2 TEK(BN1880 4.2X25)	
22	24	P841027	SCREW,[#8-18x1 1/4" LG.] HEX.HD	
23	6	A200051	PLUNGER, [5/16-18] BALL	
24	8	BN3M6X16	SCREW, M6x1.0x16.0mm LG.HEX.SOC.HD.CAP	
25	8	BN760M6	WASHER, M6 HELICAL SPRING LOCK	
26	8	BN715M6	WASHER, M6 FLAT	
27	1	A200141	BRACKET, TABLE MOUNTING (240L)	
28	6	P840707	NUT, [5/16-18UNC-2B] HEXAGONAL	

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Table and Frame (15 head)

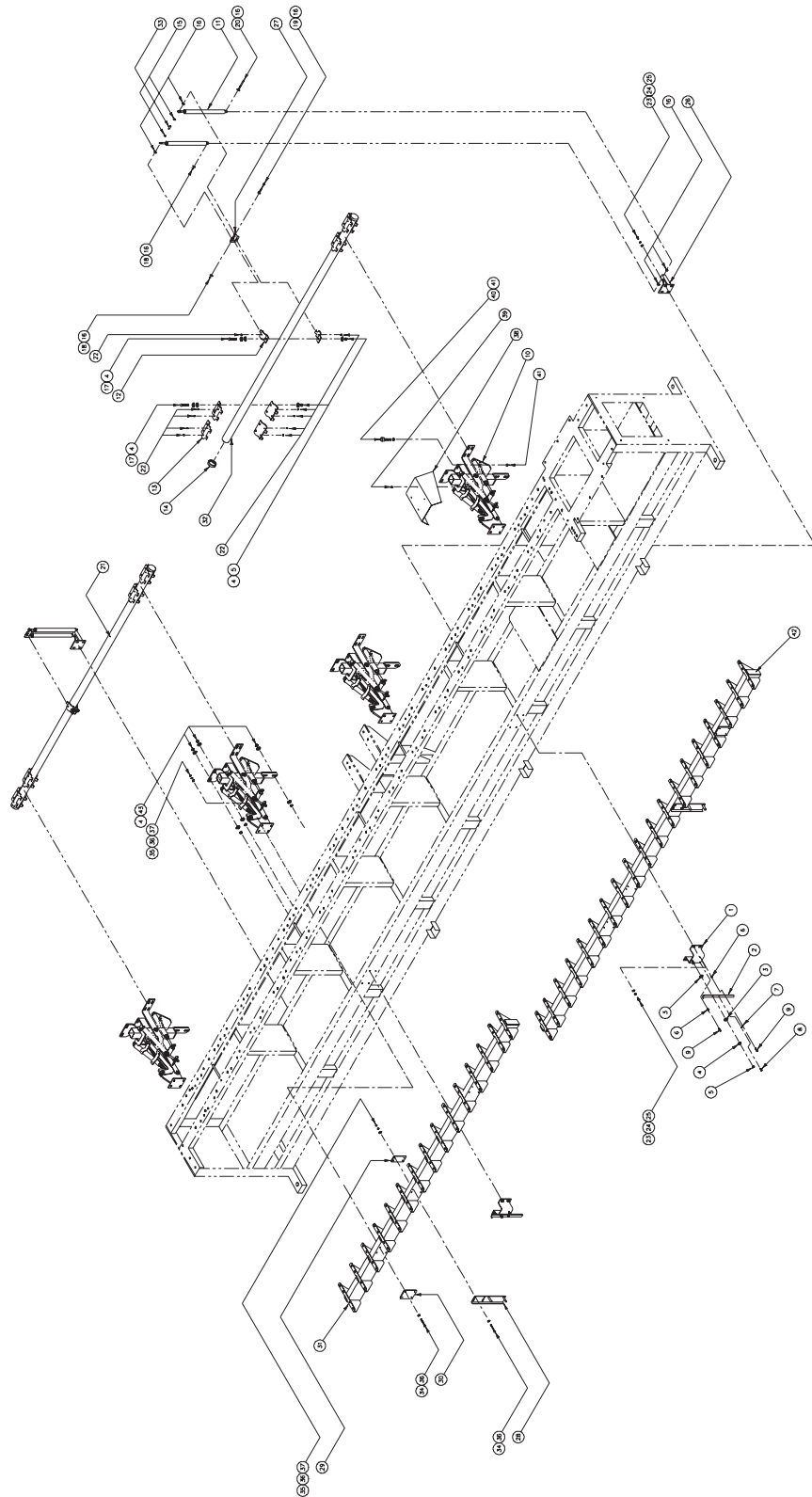


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TABLE AND FRAME (15 HEAD)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A300068	FRAME, (BENSME-15)	
2	1	KC110910	COVER, ACCESS	
3	1	A300066	TABLE-TOP, (BENSME-15)	
4	1	A300004	WELDMENT, TABLE GUIDE (RIGHT HAND)	
5	34	A200018	BRACKET, ADJUSTABLE TABLE	
6	1	KR140010	BRACKET, TABLE MOUNTING (955L)	
7	31	A100029	BRACKET, TABLE MOUNTING (422L)	
8	6	P840707	NUT, [5/16-18UNC-2B] HEXAGONAL	
9	1	A100030	BRACKET, TABLE MOUNTING (962L)	
10	1	A100031	BRACKET, TABLE SUPPORT	
11	3	A200013	SLIDER, ALIGNMENT	
12	6	A200012	BRACKET, ALIGNMENT	
13	3	A200027	STOP, TABLE ALIGNMENT	
14	2	KR140050	PLATE, TABLE SUPPORT	
15	2	MA140320	BRACKET, CENTER TABLE SUPPORT PLATE	
16	2	A110001	KNOB, TABLE BRACKET RETAINING	
17	12	A9014022	PLUG, SEWING HEAD ACCESS	
18	8	A200162	STRIP, FELT	
19	272	P840563	WASHER, [3/8"] FLAT	
20	272	P841026	NUT, [3/8-16UNC-2B] HEAVY HEXAGONAL	
21	308	P840449	SCREW,[#8-18x1" LG.] HEX.HD.#2 TEK(BN1880 4.2X25)	
22	24	P841027	SCREW,[#8-18x1 1/4" LG.] HEX.HD	
23	6	A200051	PLUNGER, [5/16-18] BALL	
24	8	BN3M6X16	SCREW, M6x1.0x16.0mm LG.HEX.SOC.HD.CAP	
25	8	BN760M6	WASHER, M6 HELICAL SPRING LOCK	
26	8	BN715M6	WASHER, M6 FLAT	
27	1	A200141	BRACKET, TABLE MOUNTING (240L)	
28	6	A300005	WELDMENT, TABLE GUIDE (LEFT HAND)	

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Table Lifter



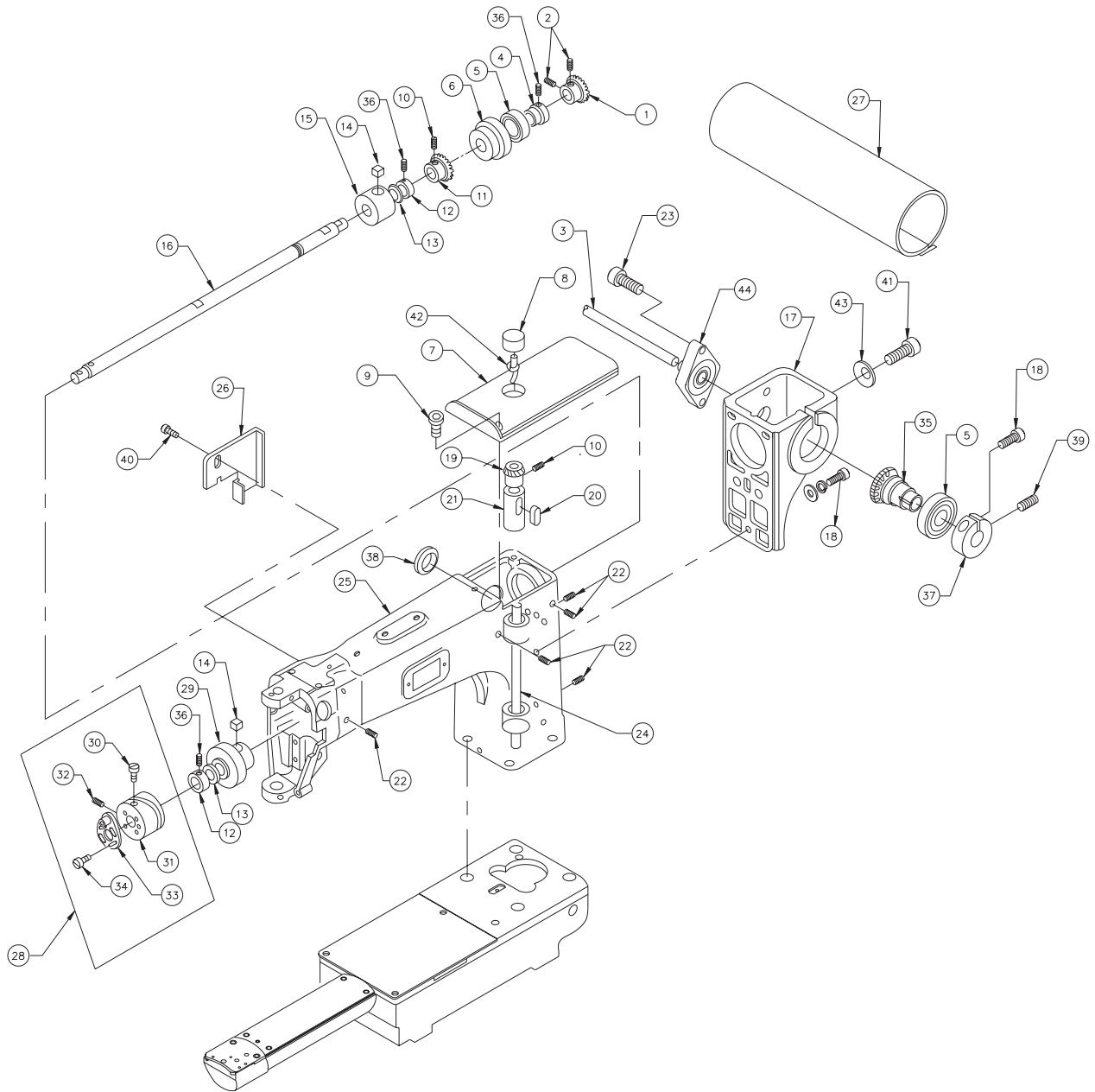
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TABLE LIFTER				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A100174	BASE, LOCK PLATE	
2	1	KC110910	LEVER, LOCK PLATE	
3	2	A100195	WASHER, NYLON 1" O.D. x 13/32 I.D. X 1/16" THK.	
4	58	P840563	WASHER, 3/8" FLAT	
5	14	P841028	NUT, 3/8-16 UNC-2B NYLON INSERT HEX. LOCK	
6	2	KR140010	BRACKET, TABLE MOUNTING (955L)	
7	31	A100079	SPRING, CATCH LEVER	
8	1	P840073	SCREW, #10-32 UNF-2Ax3/8" LG.HEX.SOC.HD.CAP	
9	2	P840621	SCREW, #10-32 UNF-2Ax3/4" LG.HEX.SOC.HD.CAP	
10	3	A200035	ASSEMBLY, STANDARD TABLE LIFT	
11	2	A200034	CYLINDER, HYDRAULIC	
12	2	A200139	BRACKET, CYLINDER & TUBE RETAINING	
13	12	A200109	BRACKET, TUBE RETAINING	
14	2	A110002	CAP, END	
15	2		WASHER, M5 CLEVIS PIN	
16	8		WASHER, M5 FLAT (FENDER)	
17	13	P840656	BOLT, 3/8-16 UNC-2A x 1 3/4" LG. HEX. HD.	
18	2	P841029	NUT, #10-32 UNF-2B HEXAGONAL NYLOCK	
19	1	P841018	SCREW, #10-32 UNF-2Ax2 1/4" LG.HEX.SOC.HD.CAP	
20	1	P841019	SCREW, #10-32 UNF-2Ax2 1/2" LG.HEX.SOC.HD.CAP	
21	6	A300020	LEFT ALIGNMENT TUBING (BENSME15)	
22	26	P841034	SCREW, 1/4-28 UNF-2Ax1/4" LG. KNURLED CUP POINT HEX.SOC.SET	
23	8		SCREW, M6 x 1.0 x 12.0MM LG.HEX.SOC.HD.CAP	
24	8		WASHER, M6 HELICAL SPRING LOCK	
25	8		WASHER, M6 FLAT	
26	1	A200029	BRACKET, LOWER CYLINDER	
27	1	A200140	BRACKET, CYLINDER MOUNTING	
28	1	A100173	CATCH, LOCK PLATE	
29	1	A200049	PLATE, TABLE CATCH BACKING	
30	3	A200026	PLATE, BACKING	
31	1	A300005	LEFT TABLE GUIDE (BENSME 15)	
32	1	A300021	TUBING, RIGHT ALIGNMENT (BENSME15)	
33	1	A100196	SPACER, ZN CYLINDER	
34	16	P841035	BOLT, 1/4-20 UNC-2A x 2 3/4" LG.HEX. HD.	
35	16	P840710	NUT, 1/4-20 UNC-2B HEXAGONAL	

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TABLE LIFTER				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
36	28	P840540	WASHER, 1/4" FLAT	
37	16	P840580	WASHER, 1/4" HELICAL SPRING LOCK	
38	3	A200030	COVER, ZN SPRING	
39	12		SCREW, M4 x 0.7 x 6.0MM LG. TRUSS HEAD	
40	3	A200045	SPINDLE, ADJUSTMENT	
41	12	P841003	NUT, 3/8"-16 UNC-2B GRADE 5 HEXAGONAL	
42	1	A300004	RIGHT TABLE GUIDE (BENSME15)	
43	16	P841003	3/8"-16 HEX NUT	

Sewing Head Assembly

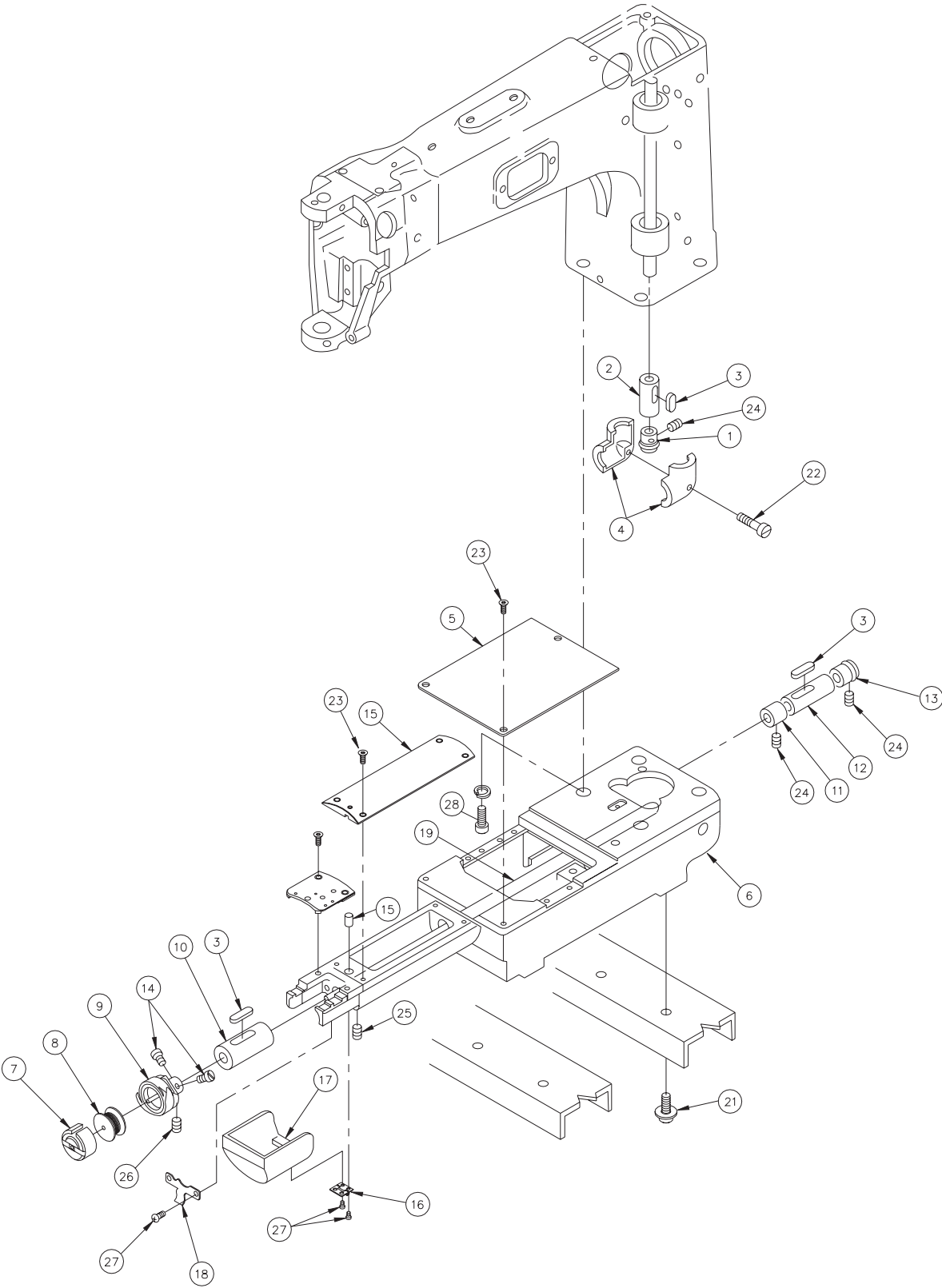


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SEWING HEAD ASSEMBLY				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KL220100	UPPER GEAR	
2	2	KC110910	HEX SOCKET SCREW (M6X6 With adhesion)	
3	1		UPPER CONNECTING SHAFT	
4	1	KL220090	UPPER GEAR REAR BEARING COLLAR	
5	2	A9010017	BEARING	
6	1	KL220040	UPPER GEAR REAR BEARING CASE	
7	1	KL250040	ARM TOP COVER	
8	6	KL220150	OIL FELT	
9			TRUSS SCREW (M4x10)	
10			SCREW (SM1/4 40x4)	
11	1	KF220130	BEVEL GEAR (UPPER)	
12	2	KL220080	UPPER SHAFT COLLAR	
13	2	HP231390	THRUST WASHER (UPPER GEAR)	
14	2	KL220130	OIL FELT	
15	1	KL220030	UPPER SHAFT MIDDLE METAL	
16	1	KL220030	UPPER SHAFT	
17	1	KL210149	ARM GEAR CASE	
18			HEX SOCKET BOLT (M6x25)	
19	1	KF220460	BEVEL GEAR (VERTICAL SHAFT UPPER)	
20	1	KL220140	OIL FELT	
21	1	KL220050	VERTICAL METAL (UPPER)	
22			HEX SOCKET SCREW (M6x25)	
23		A200051	HEX SOCKET SCREW (M6x8)	
24	1	KL220010	VERTICAL	
25	1	KX2100010	ARM	
26	1	KL250051	ARM SIDE CABLE COVER	
27	1	1PKV12380	SHAFT COVER SET (NSME-12)	
		1PKV15380	SHAFT COVER SET (NSME-12)	
28		KB230010	TAKE UP LEVER CAM K6 90° WITH CRANK	
29	1	KL220020	UPPER SHAFT FRONT METAL	
30	1	KF230420	TAKE UP LEVER CAM SCREW	
31	1	KB230030	TAKE UP LEVER CAM K6	
32			SCREW (SM15/64 28x10)(WITH ADHESION)	
33		KB230050	90° CRANK	
34		A9012007	SCREW (SM11/64 40x10) FOR BOBBIN	
35		KL320000	CONNECTING GEAR (SPIRAL BEVEL M1.5-25L)	
36			HEX SOCKET SCREW (M6x6)	

SEWING HEAD ASSEMBLY				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
37	1	KL320020	CONNECTING GEAR CLAMP	
38	1	A9014063	GROMMET C-30-SG-36A	
39			HEX SOCKET SCREW (M6x10)	
40			TRUSS SCREW (M4x8)	
41			HEX SOCKET BOLT (M6x60)	
42	1	KC251330	OIL CORE L=75	
43			FLUSH SPRING (M6)	
44	1	HP321140	UPPER SHAFT CONNECTING UNIT	

Bed Assembly

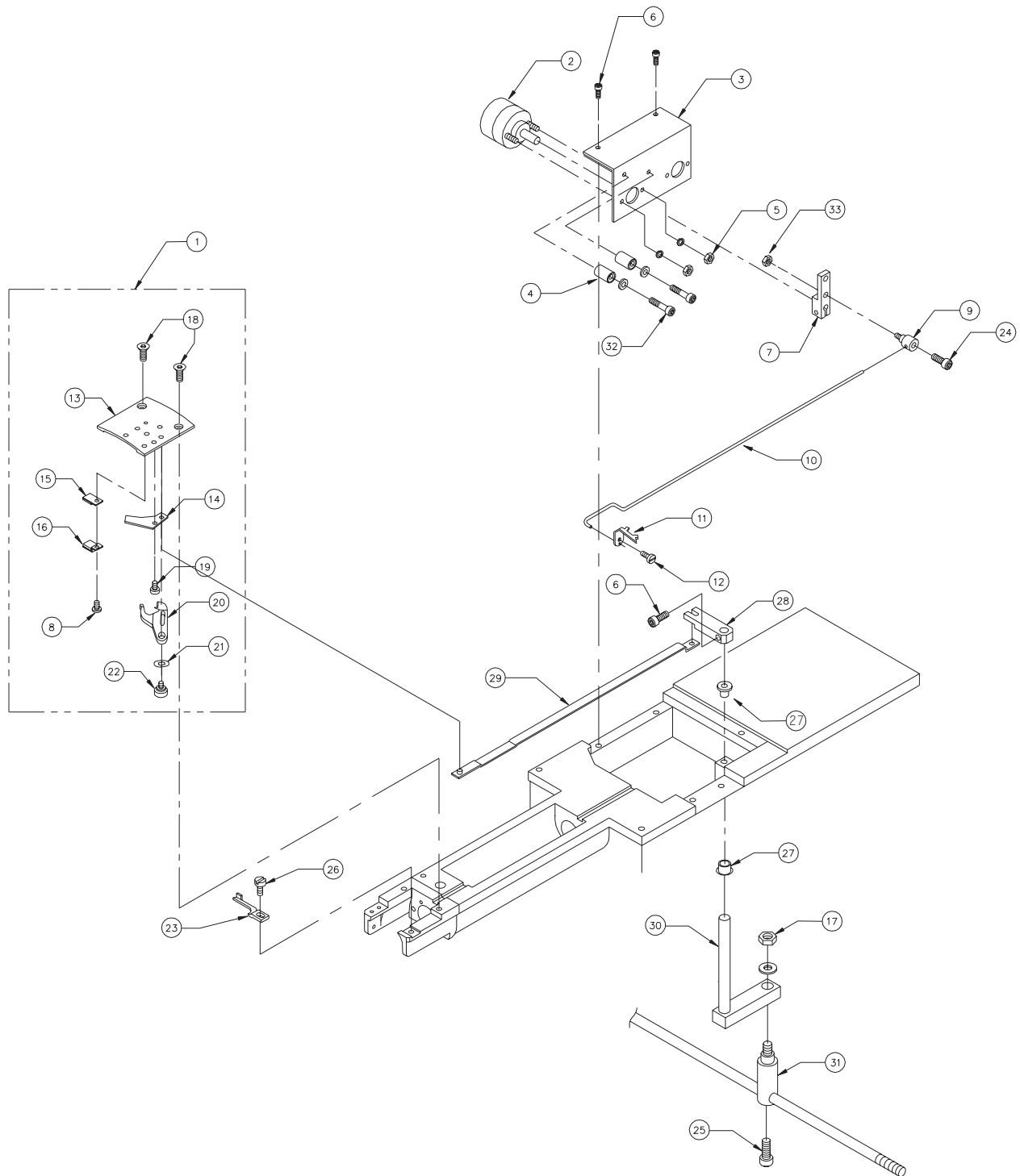


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BED ASSEMBLY				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KF220470	BEVEL GEAR (VERTICAL SHAFT UPPER)	
2	1	KL220060	VERTICAL SHAFT METAL (LOWER)	
3	3	KL220140	OIL FELT C	
4	1	KF220271	GEAR COVER SET	
5	1	KX250000	CYLINDER BED COVER A	
6	1	KX210000	BARREL BED	
7	1	KF220440	BOBBIN CASE	
8	1	KF220410	BOBBIN	
9	1	KF220750	BOBBIN KHS 12-R YNW (TEFLON)	
10	1	KF220230	LOWER SHAFT METAL (FRONT)	
11	1	KF220290	LOWER SHAFT COLLAR	
12	1	KL220070	LOWER SHAFT METAL (REAR)	
13	1	KF220480	BEVEL GEAR (LOWER SHAFT)	
14	1		SCREW (SM11/65 MOUNT40x5)	
15	1	KX250010	CYLINDER BED COVER	
16	1	A9012027	HINGE (TH-TM-72)	
17	1	KC250471	BARREL BED COVER	
18	1	KC250482	BARREL BED COVER SPRING	
19	1	KC220210	LOWER SHAFT	
20	1	KL220120	OIL FELT A	
21			HEX SOCKET BOLT M8x22 (WITH WASHER)	
22			HEX SOCKET BOLT M5x25	
23	9	KX250080	NEEDLE PLATE SET SCREW	
24			SCREW (SM1/4 MOUNT40x4)	
25			HEX SOCKET SET SCREW M6x8	
26		BN715M6	SCREW (SM11/65 MOUNT40x4)	
27			PAN SCREW M3x6	
28			HEX SOCKET BOLT M12x35 (WITH SPRING WASHER)	

Automatic Thread Cutting Mechanism I

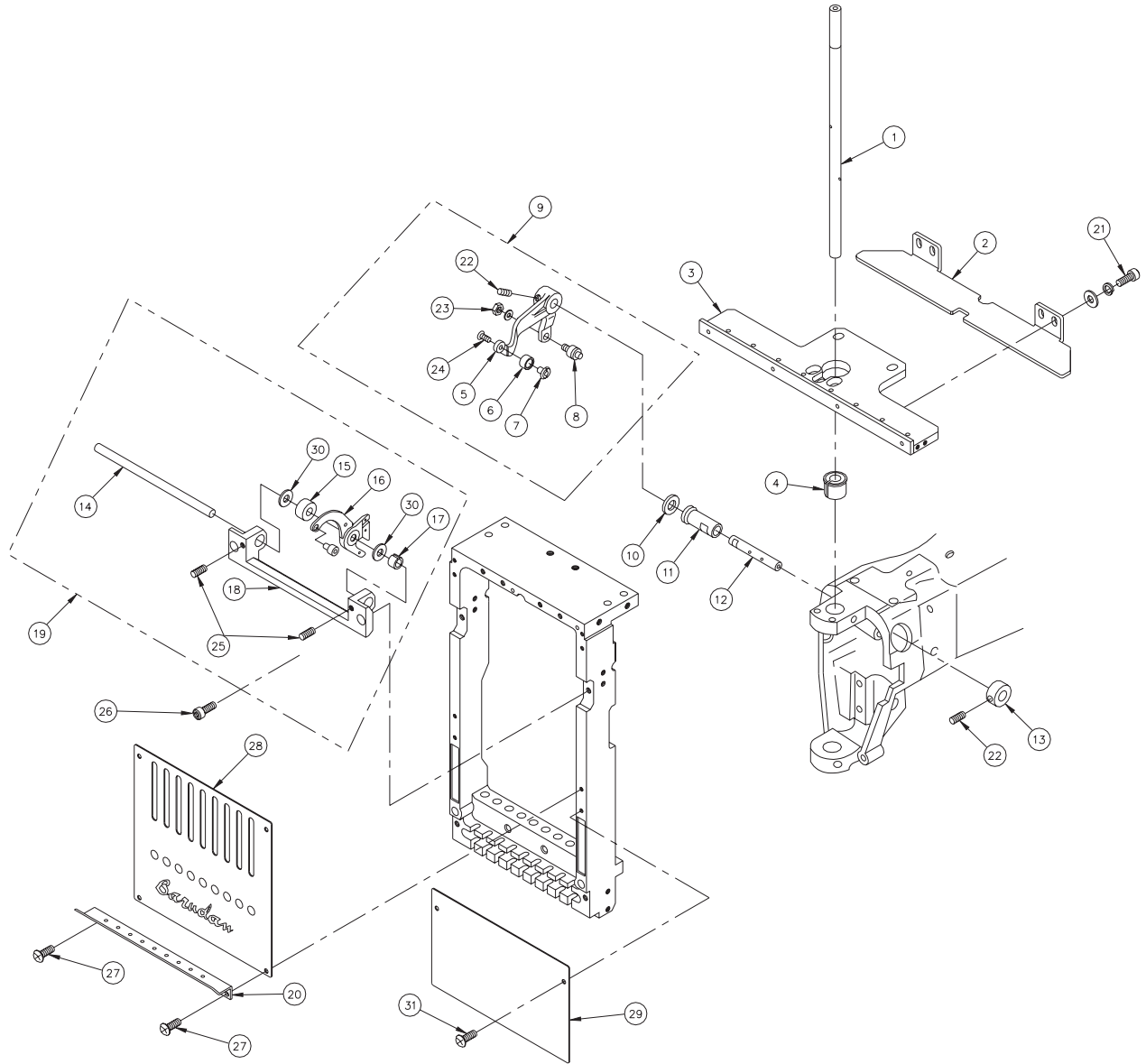
(Thread Cutting Section)



From the library of: Diamond Needle Corp

AUTOMATIC THREAD CUTTING MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KX270280	NEEDLE PLATE MARK5 MULTI CYLINDER ASSEMBLY	
2	1	A9056008	ROTARY SOLENOID (3ER25 33x3x8x0)	
3	1	KC271960	SOLENOID STAY	
4	1	KN272400	STOPPER ECCENTRIC	
5			HEX NUT	
6			HEX SOCKET BOLT	
7	1	KC271940	SOLENOID LEVER	
8			PAN SCREW	
9		KC271041	CONNECTING CLAMP	
10	1	KC271031	HOOK DRIVING ROD	
11	1	KC271021	FORK	
12	1	KC271002	NEEDLE KNIFE TURRET SHAFT	
13	1	KX270020	NEEDLE PLATE (MARK-5) MULTI CYLINDER	
14	1	KN270961	SCREW (SM11/65 MOUNT40x5)	
15	1	HT270160	LOWER THREAD SUPPORT STAY (UPPER)	
16	1	HT270180	LOWER THREAD SUPPORT STAY (LOWER)	
17			HEX NUT	
18	2	KX250080	NEEDLE PLATE SET SCREW	
19	1	KX270010	FIXED KNIFE SET SCREW	
20	1	KN270952	DRIVING KNIFE	
21	1	A9013066	WAVE WASHER	
22		KC270970	LOWER THREAD KNIFE TURRET SHAFT	
23	1	KX270000	ROTATING HOOK BOBBIN CASE HOLDER POSITION BRACKET	
24			HEX SOCKET BOLT M3x5	
25			HEX SOCKET BOLT M4x8	
26	1	A9012007	SCREW (SM11/64 MOUNT 40x10)	
27	2	A9012114	BUSH WITH FLANGE DU (MB0505-10FDU)	
28	1	KC271120	LOWER THREAD KNIFE DRIVING LEVER (UPPER)	
29	1	KX270030	LOWER THREAD KNIFE DRIVING ROD	
30	1	KC271130	LOWER THREAD KNIFE DRIVING LEVER (LOWER)	
31	1	KF230640	LOCK CONNECTING BAR CLAMP	
32			HEX SOCKET BOLT M4x18	
33			HEX NUT M3 (WITH PLAIN WASHER)	

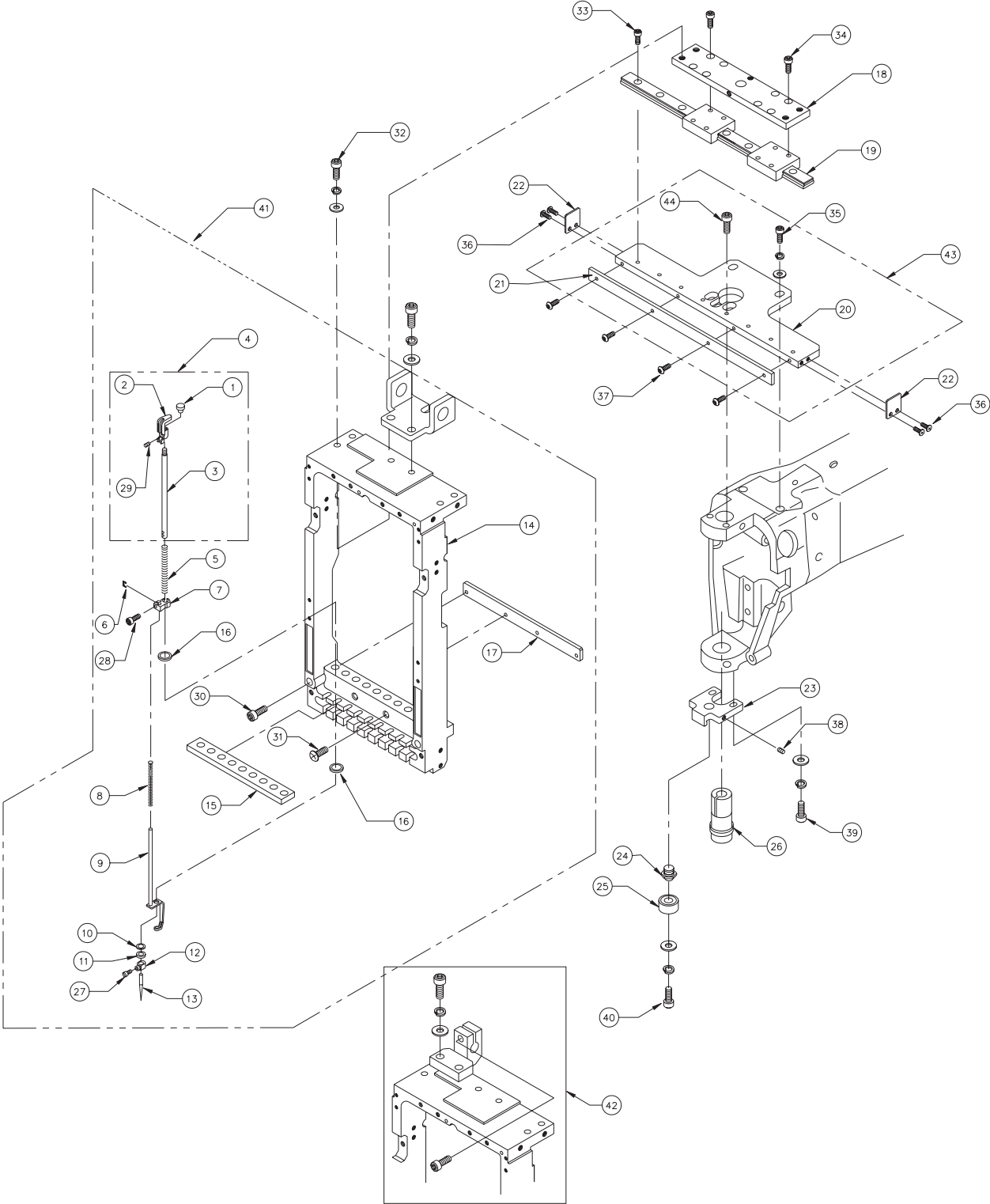
Take-up Lever Mechanism



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TAKE UP LEVER MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KX230090	DRIVING SHAFT	
2	1	KX230161	STOCKER	
3	1	KX230270	BASE PLATE ASSEMBLY	
4	1	KX230070	DRIVING SHAFT BUSH (UPPER)	
5	1	KT230051	TAKE UP LEVER DRIVING LEVER	
6	1	HT230090	TAKE UP LEVER DRIVING ROLLER	
7	1	HT230100	TAKE UP LEVER DRIVING ROLLER SHAFT	
8	1	KF230500	TAKE UP LEVER DRIVING ROLLER ASSEMBLY	
9	1	KT230052	TAKE UP LEVER DRIVING LEVER ASSEMBLY	
10	1	A9012164	WASHER (R-TW0815)	
11	1	KB230100	TAKE UP LEVER DRIVING SHAFT METAL	
12	1	KB230110	TAKE UP LEVER DRIVING SHAFT	
13	1	HB230270	NEEDLE BAR DRIVING LEVER FIXING PIN SET COLLAR	
14	1	KX230130	TAKE UP LEVER SHAFT	
15	1	KX230140	TAKE UP LEVER SPACER	
16	1	KX230150	TAKE UP LEVER	
17	1	KX230120	TAKE UP LEVER COLLAR	
18	1	KX230110	TAKE UP LEVER BRACKET	
19	1	KX230200	TAKE UP LEVER ASSEMBLY	
20	1	KX240020	THREAD HANGER	
21			HEX SOCKET BOLT M4x10 (WITH WASHERS)	
22			HEX SOCKET SCREW M5x6 (WITH ADHESION)	
23			HEX NUT SM7/32 (WITH SPRING WASHER)	
24	1	HB230650	FLUSH SCREW	
25			HEX SOCKET SET SCREW M4x8	
26			HEX SOCKET BOLT M4x8	
27			TRUSS SCREW M3x8	
28	1	KX250100 KX250020	FRONT COVER (UPPER - HEAD #1) FRONT COVER (UPPER)	
29	1	KX250030	FRONT COVER (LOWER)	
30	2	KX230310	TAKE UP LEVER SHIM (t 0.3)	
31			TRUSS SCREW M3x5	

Needle Bar Mechanism I

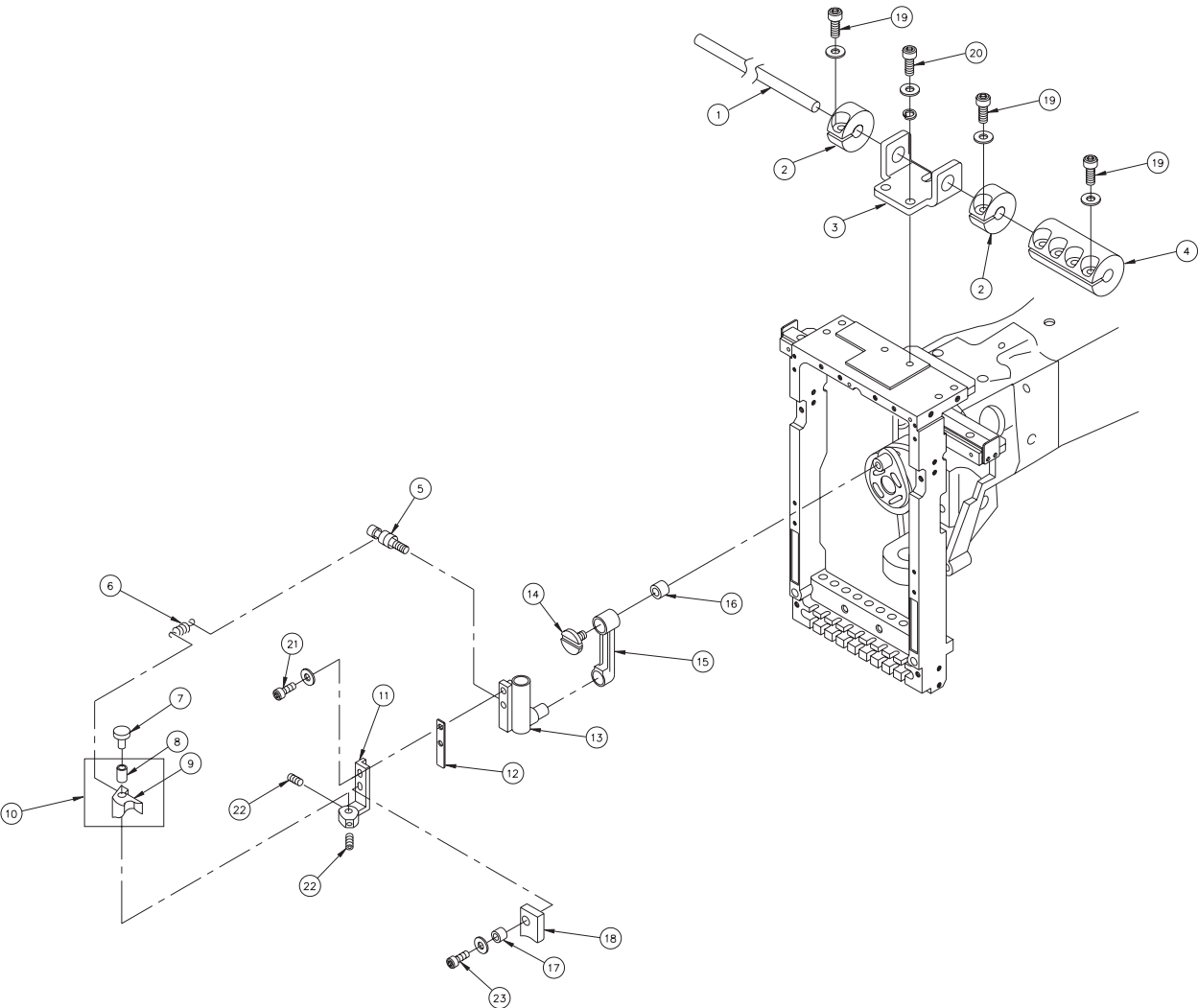


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NEEDLE BAR MECHANISM 1				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	9	HT230130	NEEDLE BAR CAP	
2	9	HT230151	NEEDLE BAR GUIDE	
3	9	HT230043	NEEDLE BAR	
4	9	HT230810	NEEDLE BAR ASSEMBLY	
5	9	HT230251	NEEDLE BAR SPRING	
6	9	HT230263	WASHER FOR SET CLAMP	
7	9	HT230051	CLOTH WINDER STOP LATCH SET SCREW	
8	9	KX230250	NEEDLE BAR SPRING (LOWER)	
9	9	HT230143	PRESSER FOOT	
10	9	KF230910	O-RING (SMALL)	
11	9	HT230120	WASHER 2.4	
12	9	HT230670	NEEDLE CLAMP (WITH HOOK)	
13	9	KF230250	NEEDLE (DBK5-11)	
14	1	KX230000	SLIDE BLOCK	
15	1	KX230180	NEEDLE BAR FELT	
16	18	KX230920	O-RING (LARGE)	
17	1	KX230040	BEARING PLATE	
18	1	KX230010	LM BASE	
19	1	KX230060	LM GUIDE	
20	1	KX230020	BASE PLATE	
21	1	KX230220	LM RAIL PLATE	
22	2	KX230190	LM STOPPER	
23	1	KX230030	BEARING PLATE	
24	1	KX230050	BEARING PIN	
25	1	A9010065	BALL BEARING 686ZZ	
26	1	KX230080	DRIVING SHAFT BUSH (LOWER)	
27	9	KF230240	NEEDLE CLAMP SCREW (SM9/64 MOUNT 40)	
28			HEX SOCKET BOLT M3x8	
29			HEX SOCKET SET SCREW M4x4	
30			HEX SOCKET BOLT M3x25	
31			HEX SOCKET FLUSH SCREW M3x25	
32			HEX SOCKET BOLT M5x16 (WITH WASHERS)	
33			HEX SOCKET BOLT M3x8	
34			HEX SOCKET BOLT M3x6	
35			HEX SOCKET BOLT M5x20	
36			HEX SOCKET BUTTON BOLT M3x6	
37			HEX SOCKET BUTTON BOLT M3x8	

NEEDLE BAR MECHANISM 1				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
38			HEX SOCKET SET SCREW M4x12	
39			HEX SOCKET BOLT M4x15 (WITH WASHERS)	
40			HEX SOCKET BOLT M4x6 (WITH WASHERS)	
41		KX230260	SLIDE BLOCK ASSEMBLY	
42		KX230300	SLIDE BLOCK ASSEMBLY	
43		KX230270	BASE PLATE ASSEMBLY	
44			HEX SOCKET BOLT	

Needle Bar Mechanism II

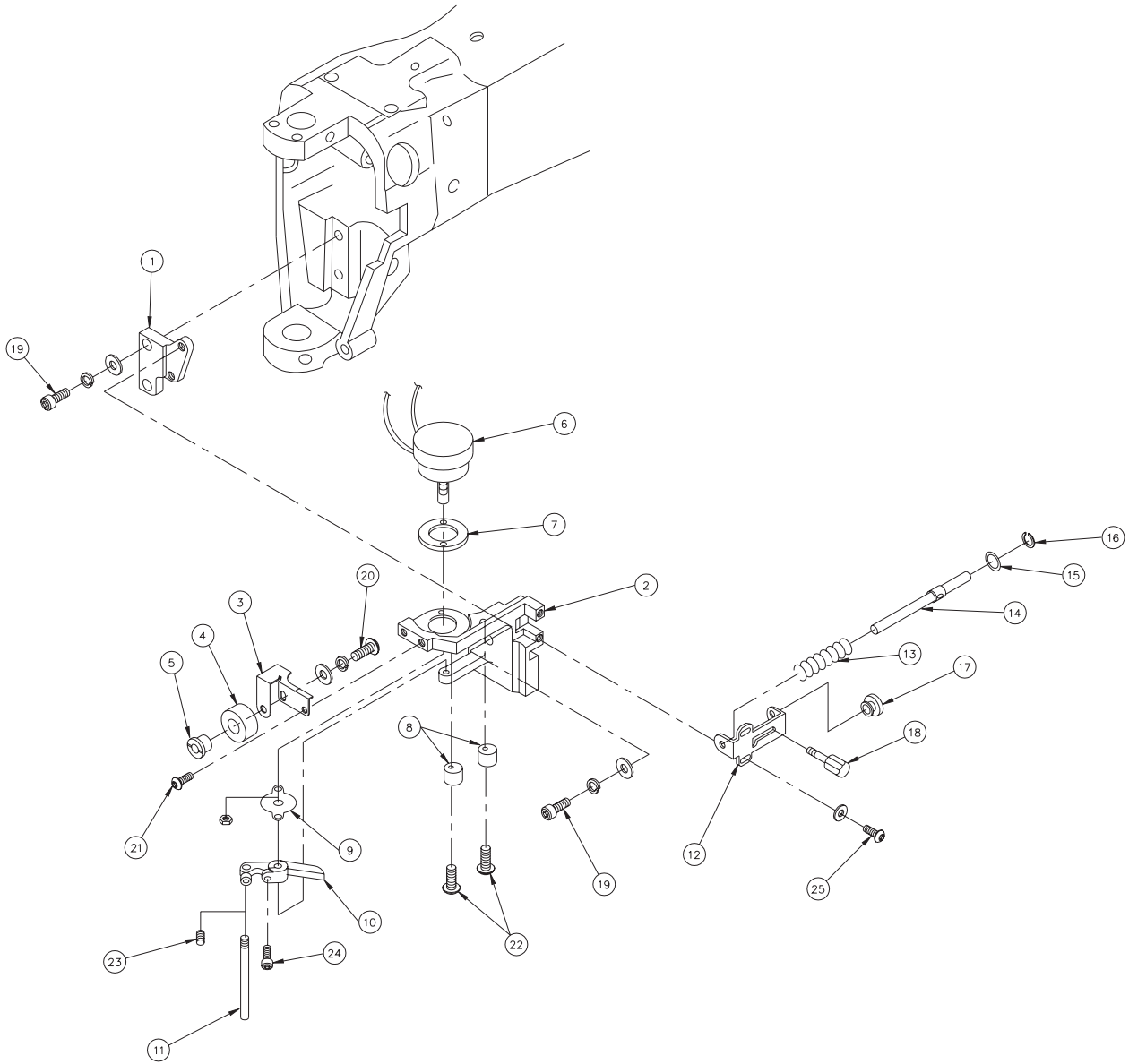


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NEEDLE BAR MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KX330020	CONNECTING ROD	
2	2	KX230240	COLLAR FOR DECIDED POSITION	
3	1	KX230230	JOINT BRACKET	
4	2	KX330010	ROD JOINT	
5	1	HB230590	SET SCREW FOR RETURN SPRING	
6	1	HB230401	NEEDLE BAR DRIVER RETURN SPRING	
7	1	HB230390	NEEDLE BAR DRIVER FIXING PIN	
8	1	A0012190	DU BUSH (MB0606DU)	
9	1	HB230383	NEEDLE BAR DRIVER	
10	1	HT230201	NEEDLE BAR DRIVER ASSEMBLY	
11	1	KB230372	NEEDLE BAR DRIVER FIXING BASE	
12	1	KX230210	DRIVER FIXING BASE SPACER	
13	1	KB230080	NEEDLE BAR DRIVER GUIDE BLOCK	
14	1	KB230070	90° CRANK LEFT SCREW	
15	1	KB230060	CRANK ROD	
16	1	A9011115	NEEDLE BEARING (K9x12x10T2)	
17	1	HB230420	NEEDLE BAR DRIVER STOPPER SET COLLAR	
18	1	HB230414	NEEDLE BAR DRIVER STOPPER	
19			HEX SOCKET BOLT M4x16 (WITH PLAIN WASHER)	
20			HEX SOCKET BOLT M5x14 (WITH WASHERS)	
21			HEX SOCKET BOLT M4x12 (WITH WASHERS)	
22			HEX SOCKET SET SCREW M4x15 (WITH ADHESION)	
23			HEX SOCKET BOLT M4x15 (WITH PLAIN WASHER)	

From the library of: Diamond Needle Corp

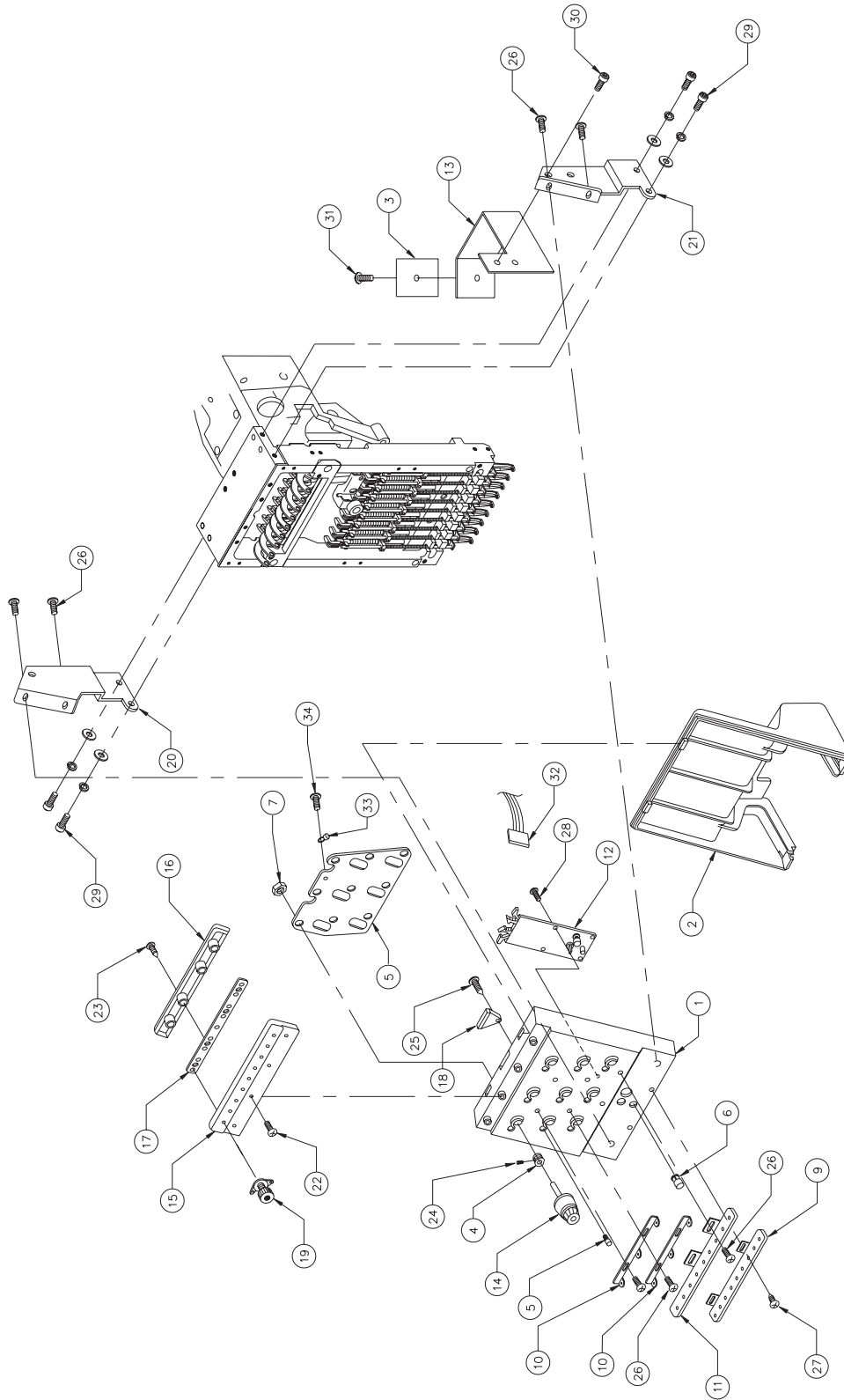
Jump Assembly



From the library of: Diamond Needle Corp

JUMP ASSEMBLY				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KB210170	SOLENOID BRACKET FIXING BASE	
2	1	KX240040	JUMP SOLENOID FIXING BRACKET	
3	1	KX230100	NEEDLE BAR STOPPER FIXING BRACKET	
4	1	HT230220	NEEDLE BAR STOPPER	
5	1	HT230620	NEEDLE BAR STOPPER FIXING PIN	
6	1	A9056020	ROTARY SOLENOID	
7	1	HB230560	SHEET FOR ROTARY SOLENOID	
8	2	HB230560	JUMP ECCENTRIC	
9	1	HB230580	SOLENOID NOISE PREVENTION COVER	
10	1	HB240020	JUMP SOLENOID LEVER	
11	1	HB240030	JUMP SOLENOID LEVER PIN	
12	1	KB240040	CANCEL BRACKET	
13	1	HB240110	CANCEL RETURN SPRING	
14	1	KX240050	CANCEL ROD	
15	1	A9014051	O-RING	
16	1	A9012051	E-RING	
17	1	HB240090	CANCEL ROD GUIDE	
18	1	HB240080	MANUAL CANCEL PIN	
19			HEX SOCKET BOLT M4x12	
20			HEX SOCKET BOLT M4x8 (WITH WASHERS)	
21			HEX SOCKET BUTTON BOLT M4x5	
22			HEX SOCKET BUTTON BOLT M4x12 (WITH ADHESION)	
23			HEX SOCKET SET SCREW M4x4 (WITH ADHESION)	
24			HEX SOCKET BOLT M4x8	
25			HEX SOCKET BUTTON BOLT M4x10	

Thread Guide Mechanism

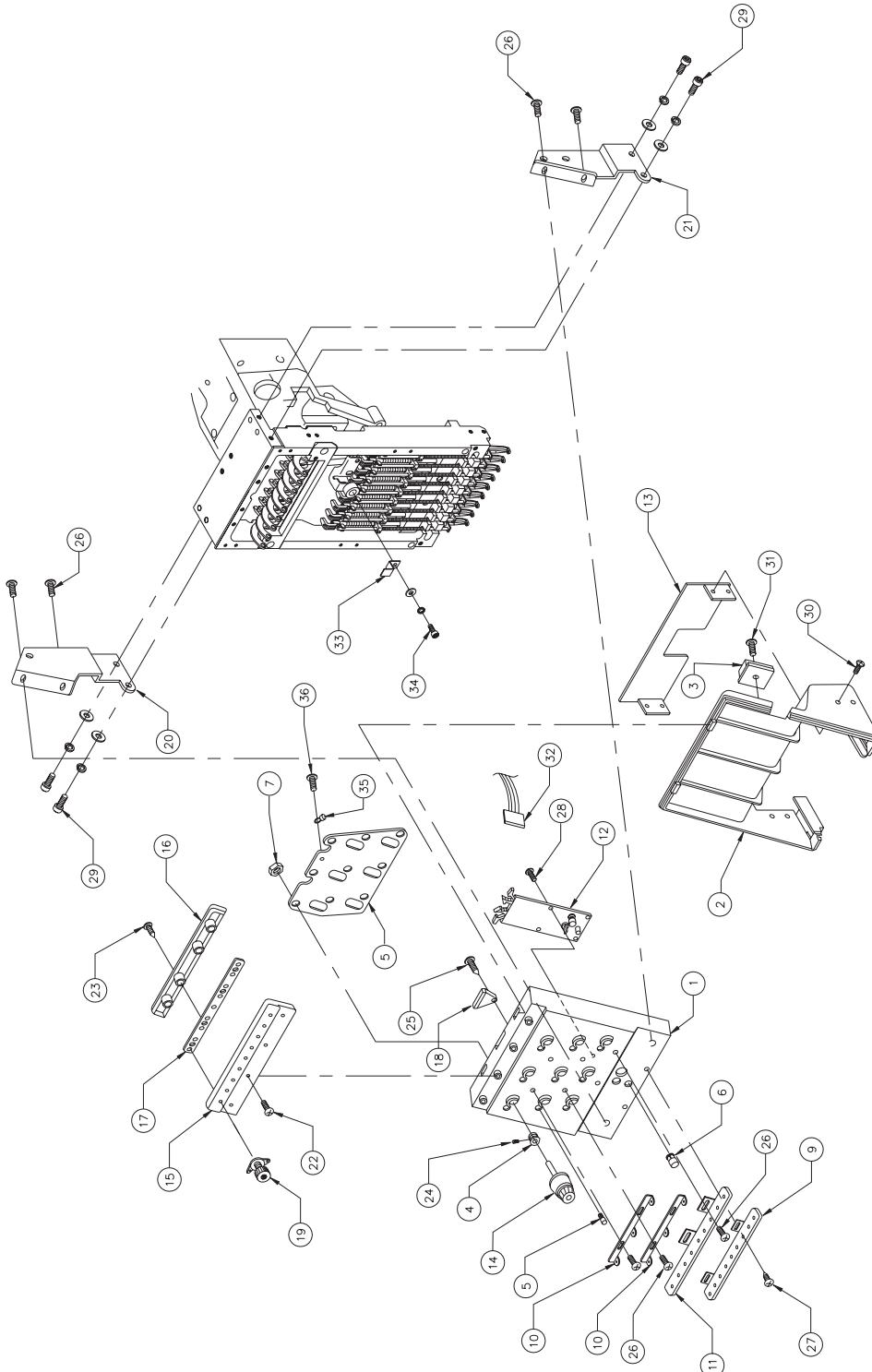


From the library of: Diamond Needle Corp

THREAD GUIDE MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	HT240120	TENSION BASE CASE	
2	1	kx330320	TENSION BASE COVER	
3	1	A9068032	FCW CLAMP	
4	1	HT240151	BASE	
5	1	HT240160	TENSION EARTH PLATE	
6	1	HT240170	UPPER THREAD DETECTION PIN	
7	1	HT240180	SM-NUT	
8			NO. LABEL	
9	1	KX240030	SECOND THREAD GUIDE PLATE	
10	1	HT240062	FIRST THREAD GUIDE (YN)	
11	1	HT240391	THREAD GUIDE PLATE	
12	1	EBY01621	4640 HEAD SW BOARD (ZN)	
13	1	KX240060	CORD HOLDER	
14	9	HT240523	TENSION UNIT COMPLETE	
15	1	HT240211	UPPER THREAD GUIDE FIXING PLATE	
16	1	HT240220	UPPER THREAD GUIDE FIXING COVER	
17	1	HT240230	UPPER THREAD GUIDE FIXING BASE	
18	1	KX240240	BLIND CAP	
19	9	HT240331	THREAD GUIDE FOR UPPER TENSION	
20	1	KX240010	TENSION BASE BRACKET (L)	
21	1	KX240000	TENSION BASE BRACKET (R)	
22			PAN SCREW M3x6	
23			TAPPING SCREW M3x12	
24			HEX SOCKET SET SCREW M4x12	
25			TAPPING SCREW M3x12	
26			TRUSS SCREW M4x10	
27			TAPPING TRUSS SCREW M4x10	
28			PAN HEAD TAPPING SCREW M3x8	
29			HEX SOCKET BUTTON BOLT	
30			TRUSS SCREW M4x6	
31			PAN SCREW M3x5	
32		EBY01625	H1842 16 LEAD FLAT CABLE	
33		KX240150	TENSION EARTH CABLE (ZN)	
34			PAN SCREW M3x6	

Thread Guide Mechanism

(Head with color change mechanism)

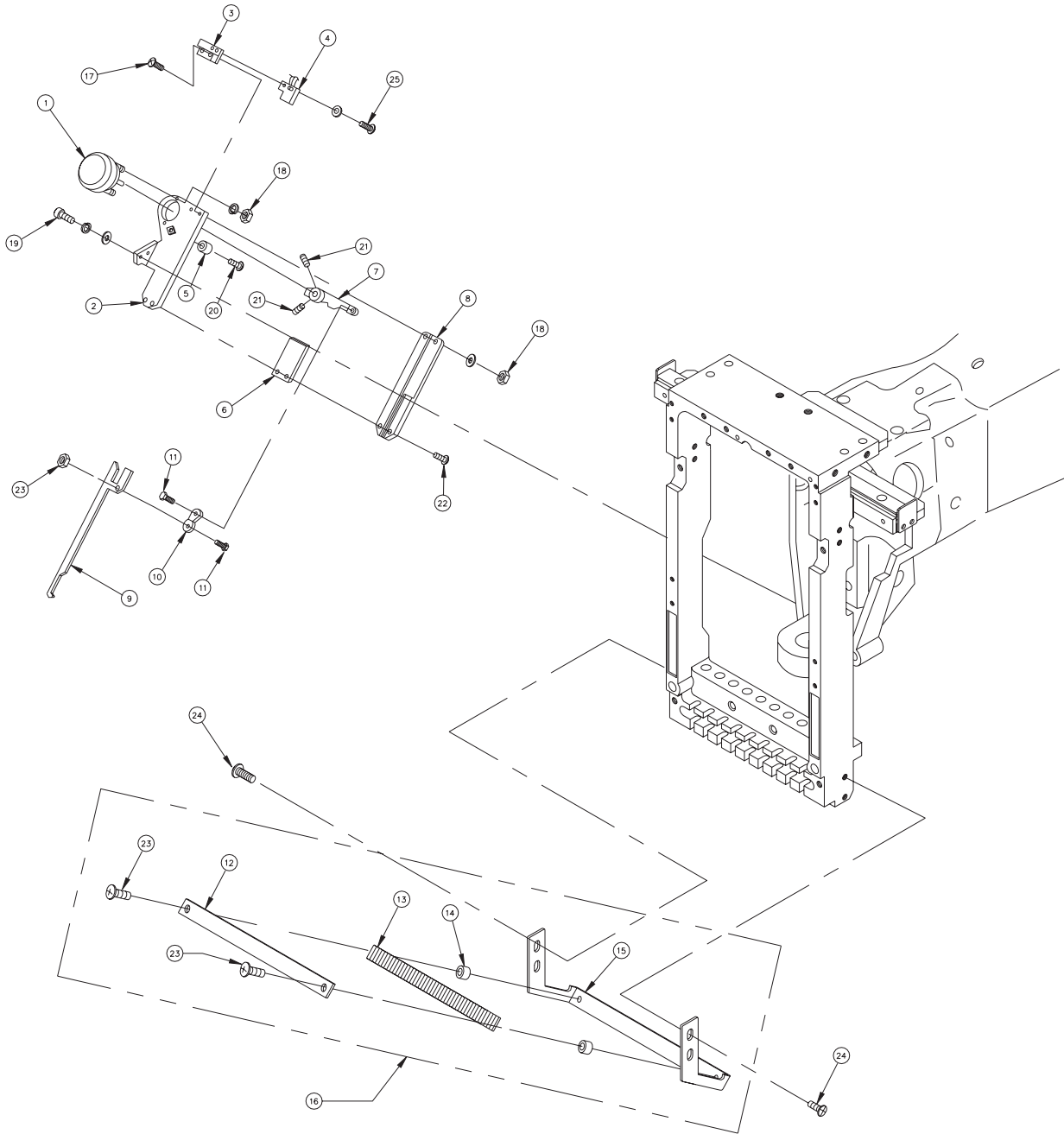


From the library of: Diamond Needle Corp

THREAD GUIDE MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	HT240120	TENSION BASE CASE	
2	1	KX330320	TENSION BASE COVER	
3	1	A9068032	FCW CLAMP FCW-26	
4	1	HT240150	BASE	
5	1	HT240160	TENSION EARTH PLATE	
6	1	HT240170	UPPER THREAD DETECTION PIN	
7	1	HT240180	SM-NUT	
8			NO. LABEL	
9	1	KX240030	SECOND THREAD GUIDE PLATE	
10	1	HT240062	FIRST THREAD GUIDE (YN)	
11	1	HT240391	THREAD GUIDE PLATE (YN)	
12	1	EBY01621	4640 HEAD SW BOARD (ZN)	
13	1	KX330330	TENSION BASE COVER A	
14	9	HT240523	TENSION UNIT COMPLETE	
15	1	HT240211	UPPER THREAD GUIDE FIXING CASE	
16	1	HT240220	UPPER THREAD GUIDE FIXING COVER	
17	1	HT240230	UPPER THREAD GUIDE FIXING BASE	
18	1	HT240240	BLIND CAP	
19	9	HT240331	THREAD GUIDE FOR UPPER TENSION	
20	1	KX240010	TENSION BASE BRACKET (L)	
21	1	KX240000	TENSION BASE BRACKET (R)	
22			PAN SCREW M3x6	
23			TAPPING SCREW M3x12	
24			HEX SOCKET SET SCREW M4x12	
25			TAPPING SCREW M3x12	
26			TRUSS SCREW M4x10	
27			TAPPING TRUSS SCREW M4x10	
28			PAN HEAD TAPPING SCREW M3x8	
29			HEX SOCKET BUTTON BOLT M5x12 (WITH WASHERS)	
30			TRUSS SCREW M3x8	
31			PAN HEAD TAPPING SCREW M3x5	
32	1	EBY01625	H1842 1 HEAD EXCLUSIVE USE FLAT CABLE 16 LEAD FLAT CABLE	
33	1	KX250110	NEEDLE BAR INDICATION	
34			HEX SOCKET BOLT M4x6 (WITH WASHERS)	
35	1	KX240150	TENSION EARTH CABLE (ZN)	
36			PAN SCREW M3x6	

Automatic Thread Cutting Mechanism II

(Thread Away Section)

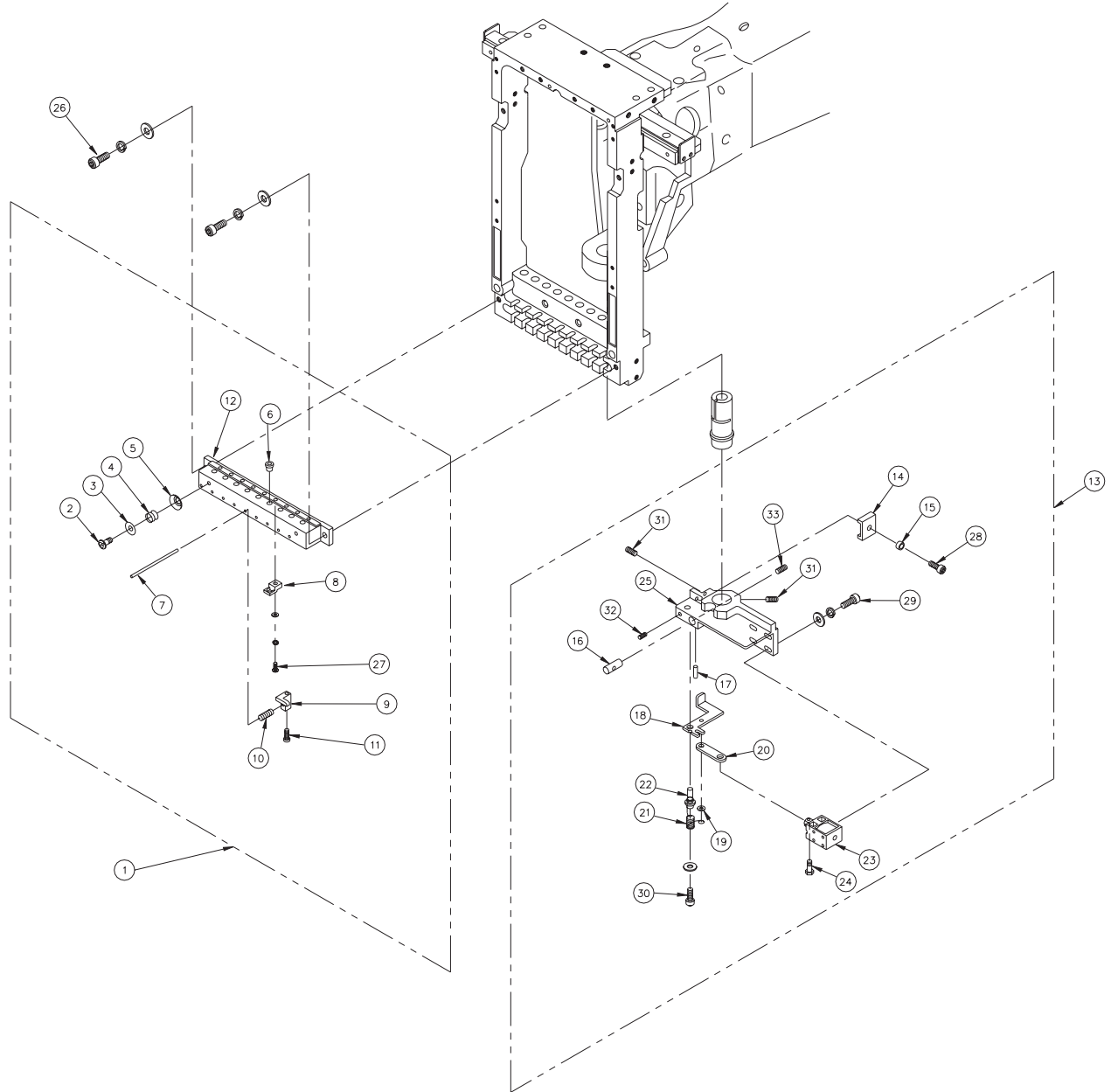


From the library of: Diamond Needle Corp

THREAD CUT MECHANISM II				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A9056018	ROTARY SOLENOID (4ER67.5-34x8x9) ORANGE	
2	1	KL270081	TENSION BASE COVER	
3	1	KL270260	SWITCH STAY	
4	1	A9052028	PROXIMITY SWITCH	
5	1	KN272400	STOPPER ECCENTRIC	
6	1	KL270450	HOOK GUIDE PLATE	
7	1	KL270110	THREAD AWAY SOLENOID LEVER	
8	1	KL270091	THREAD AWAY HOOK GUIDE	
9	1	KL270101	THREAD AWAY HOOK	
10	1	KL270120	CONNECTING PLATE	
11	2	KL270130	LEVER CONNECTING PIN	
12	1	KX270050	THREAD HOOK DISK (UPPER)	
13	2	KX270370	NAPPED PLATE	
14	2	KX270070	THREAD HOOK DISK SPACER	
15	1	KX270060	THREAD HOOK DISK BRACKET	
16	1	KX270220	THREAD HOOK DISK ASSEMBLY	
17			TRUSS SCREW M3x10	
18			HEX NUT M4 (WITH SPRING WASHER)	
19			HEX SOCKET BOLT M4x12 (WITH SPRING WASHER)	
20			TRUSS SCREW M4x16	
21			HEX SOCKET SET SCREW M4x8	
22			TRUSS SCREW M3x6	
23			TAPPING SCREW M4x8	
24			TRUSS SCREW M4x8	
25			TRUSS SCREW M3x6 (WITH PLAIN WASHER)	

Automatic Thread Cutting Mechanism III

(Thread Support Section)

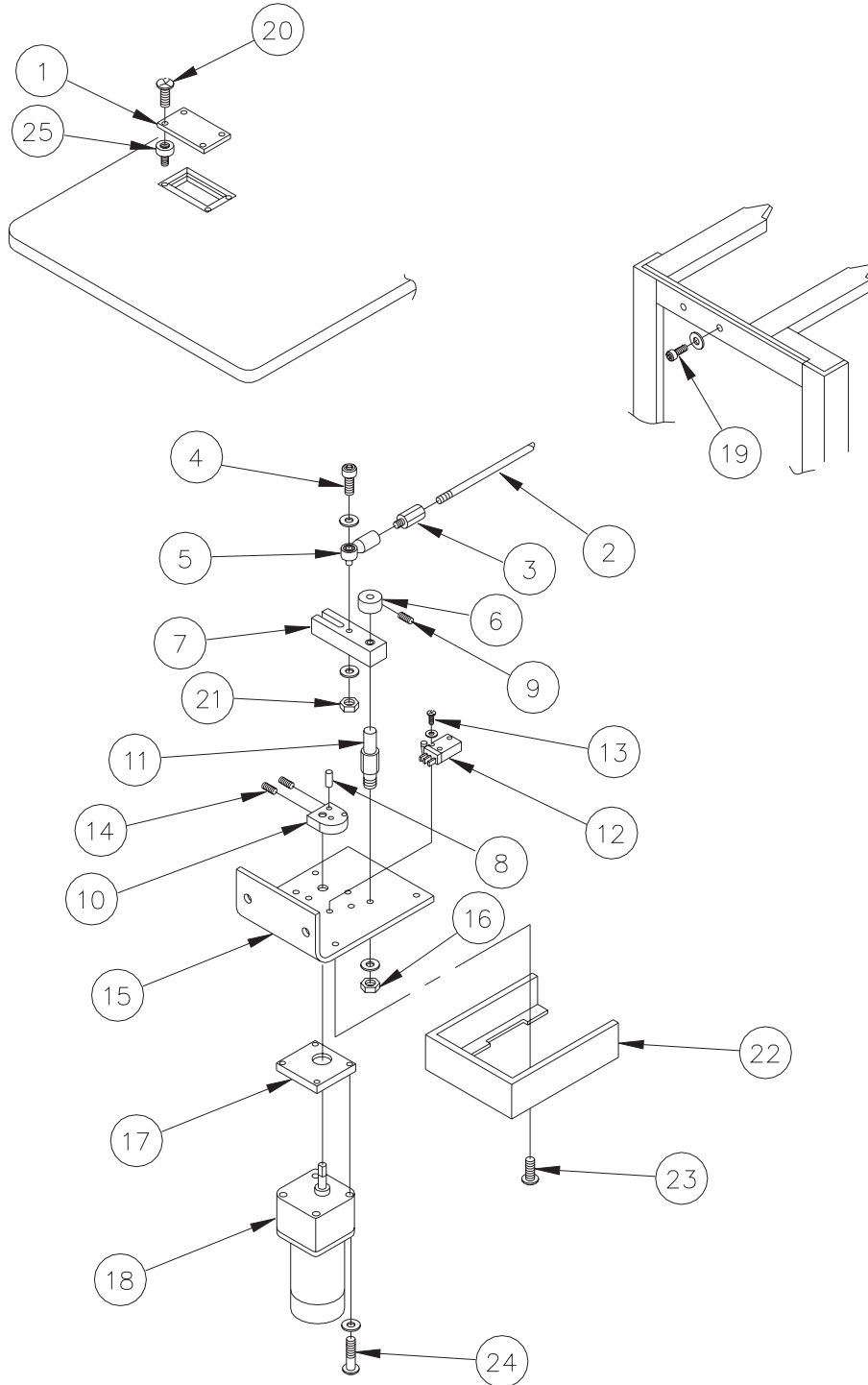


From the library of: Diamond Needle Corp

THREAD CUT MECHANISM III				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KX270230	THREAD SUPPORT APRON ASSEMBLY	
2	2	KF250250	THREAD HOOK SHAFT SCREW	
3	2	KF250231	THREAD HOOK SPRING HOLDER	
4	2	KF250241	THREAD HOOK SPRING	
5	2	KF250220	THREAD HOOK DISK	
6	9	KF230580	TAKE UP LEVER INSULATOR	
7	9	KL270110	THREAD SUPPORT PIN	
8	9	KX270100	THREAD SUPPORT BLOCK	
9	9	KX270090	THREAD SUPPORT CLAMP	
10	9	KL270120	THREAD SUPPORT SPRING	
11	2	HT270062	SET SCREW FOR THREAD SUPPORT CLAMP	
12	1	HT270080	THREAD SUPPORT APRON	
13	2	KX270340	THREAD SUPPORT ASSEMBLY	
14	2	HT230520	NEEDLE BAR DRIVER STOPPER	
15	1	A9012368	SPACER	
16	1	KX270360	THREAD SUPPORT PUSH ROD	
17	1	KX270320	THREAD SUPPORT PUSH PIN	
18	1	KX270290	THREAD SUPPORT LEVER	
19	1	A9012127	E-RING	
20	1	KX270310	THREAD SUPPORT LINK	
21	1	KX270350	THREAD SUPPORT RETURN SPRING	
22	1	KX270300	THREAD SUPPORT LEVER PIN	
23	1	A9056013	KEEP SOLENOID (TDS-K10SL)	
24	1	KC270101	SOLENOID PIN	
25	1	KX270330	THREAD SUPPORT BASE	
26			HEX SOCKET BOLT M4x12 (WITH WASHERS)	
27			HEX SOCKET BUTTON BOLT M3x10 (WITH WASHERS)	
28			HEX SOCKET BOLT M3x6	
29			HEX SOCKET BOLT M3x8 (WITH WASHERS)	
30			HEX SOCKET BOLT M3x6 (WITH PLAIN WASHERS)	
31			HEX SOCKET SET SCREW M5x8	
32			HEX SOCKETS SET SCREW M4x4	
33			HEX SOCKET SET SCREW M3x6	

Automatic Thread Cutting Mechanism IV

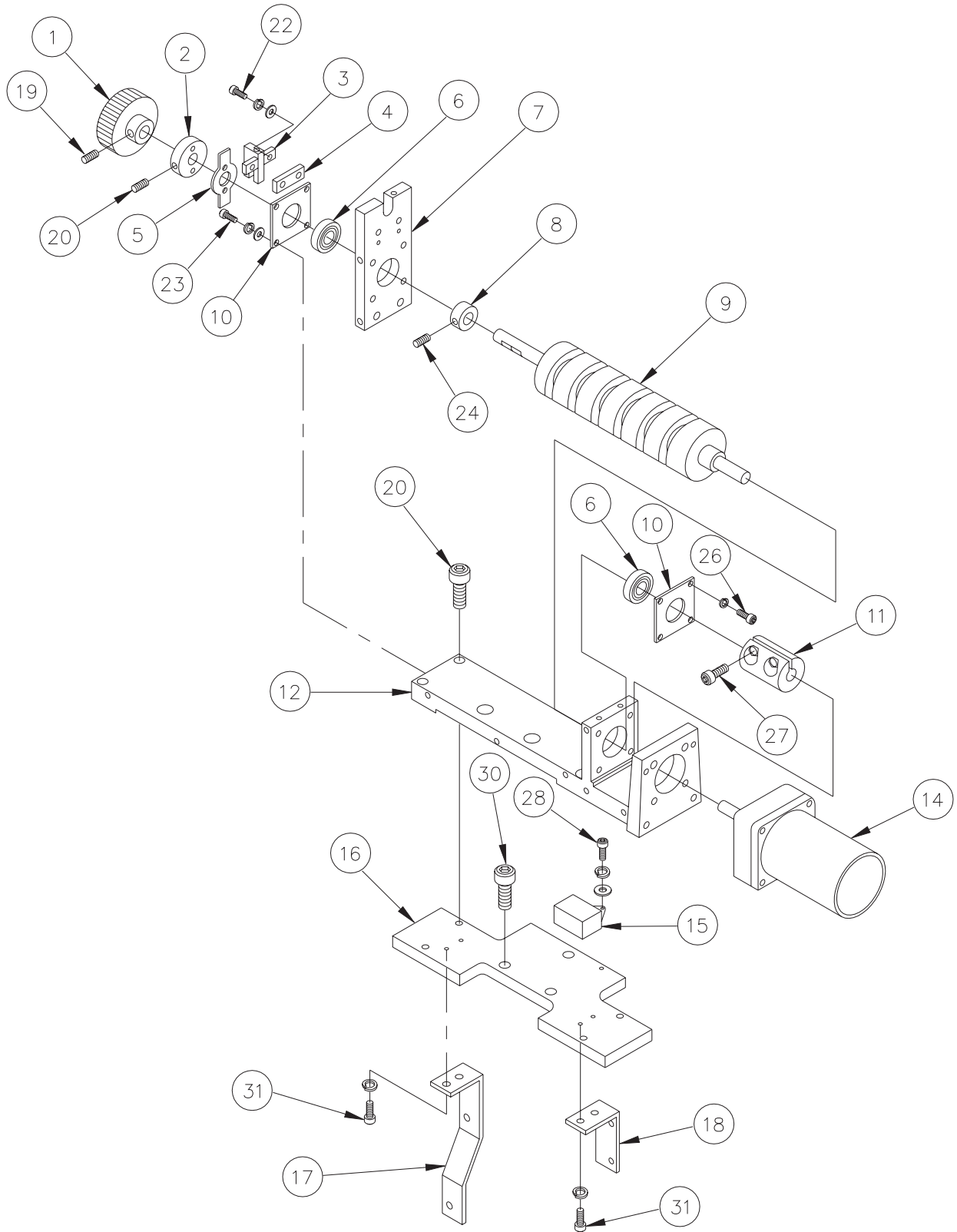
(Drive Section)



From the library of: Diamond Needle Corp

THREAD CUT MECHANISM IV				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KC271440	DRIVE SERVICE COVER	
2	2	KC330410	ROCK CONNECTING ROD	
3	1	KC330510	HEX CONNECTING BAR (L)	
4			HEX SOCKET BOLT	
5	1	A9012002	UNIBALL JOINT	
6	1	KC330180	COLLAR	
7	1	KC271140	MOTOR LEVER	
8	1	KN272350	DRIVE PIN	
9			HEX SOCKET SCREW M5x6	
10	1	KS270030	DRIVE CAM	
11	1	KC271151	MOTOR LEVER TURRET SHAFT	
12	1	A9052005	MICRO SWITCH	
13			TRUSS SCREW	
14			HEX SOCKET SET SCREW	
15	1	KC271162	MOTOR BRACKET	
16	1		HEX NUT	
17	1	KC271430	MOTOR SPACER	
18	1	A9065026	REVERSIBLE MOTOR RM H6A 8PEAA(6RH D36)	
19			HEX SOCKET BOLT	
20			TRUSS SCREW	
21			HEX NUT	
22	1	KN271712	MOTOR BRACKET COVER	
23			TRUSS SCREW	
24			PAN SCREW	
25			RAG NUT	

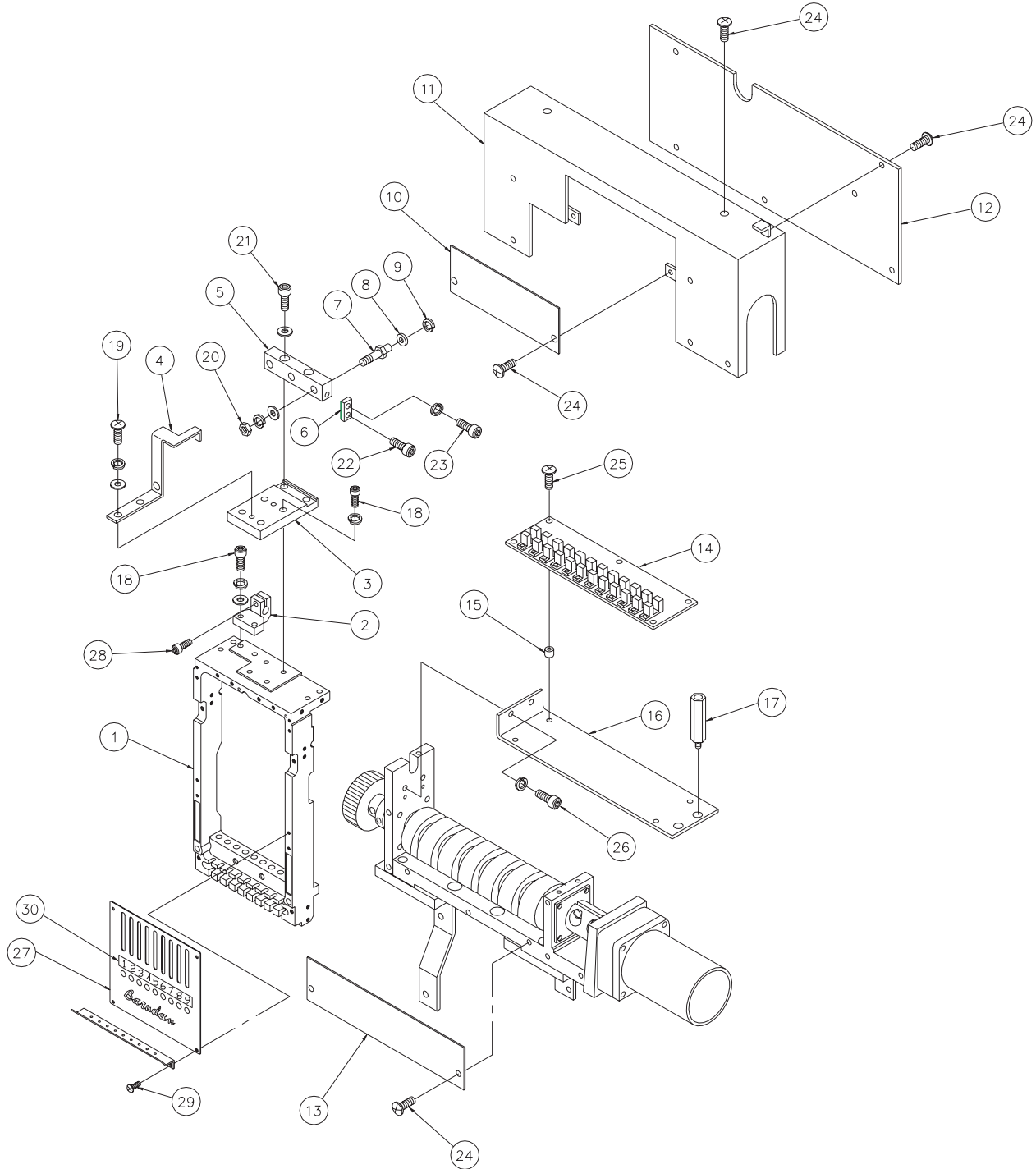
Color Change Mechanism I



From the library of: Diamond Needle Corp

COLOR CHANGE MECHANISM I				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KX330130	MANUAL KNOB	
2	1	KC330170	DETECTION PLATE COLLAR	
3	1	A9060063	PHOTO MICRO SENSOR EE-SX672A	
4	1	KX330250	SENSOR SPACER	
5	1	KX330271	ROTATION SENSOR DOCK	
6	2	A9010062	BEARING B6000ZZ	
7	1	KX330090	COLOR CHANGE SLIDE PLATE	
8	1	KX330120	BEARING HOLD COLLAR	
9	1	KX330060	COLOR CHANGE CAM	
10	2	KX330110	BEARING HOLD	
11	1	KX330140	MOTOR COUPLING	
12	1	KX330070	COLOR CHANGE BASE	
13	1	A9065073	GEAR HEAD 2GN30K	
14	1	A9065072	REVERSIBLE MOTOR 2RK6GN-AUL(AC 100V)	
15	1	A9054042	CONDENSOR CH35UL	
16	1	KX330080	COLOR CHANGE BASE PLATE	
17	1	KX330180	SEWING HEAD COVER FIXING BRACKET (A)	
18	1	KX330190	SEWING HEAD COVER FIXING BRACKET (B)	
19			HEX SOCKET SET SCREW M6x6	
20			HEX SOCKET SET SCREW M5x10	
21			TRUSS SCREW M4x8	
22			HEX SOCKET BOLT M3x16 (WITH WASHERS)	
23			HEX SOCKET BOLT M5x25 (WITH WASHERS)	
24			HEX SOCKET SET SCREW M6x5	
25			HEX SOCKET BOLT M5x25	
26			HEX SOCKET BOLT	
27			HEX SOCKET BOLT M5x16	
28			HEX SOCKET BOLT M4x10 (WITH WASHERS)	
29			PAN SCREW M4x60 (WITH WASHERS)	
30			HEX SOCKET BOLT M5x18	
31			HEX SOCKET BOLT M4x12 (WITH SPRING WASHER)	

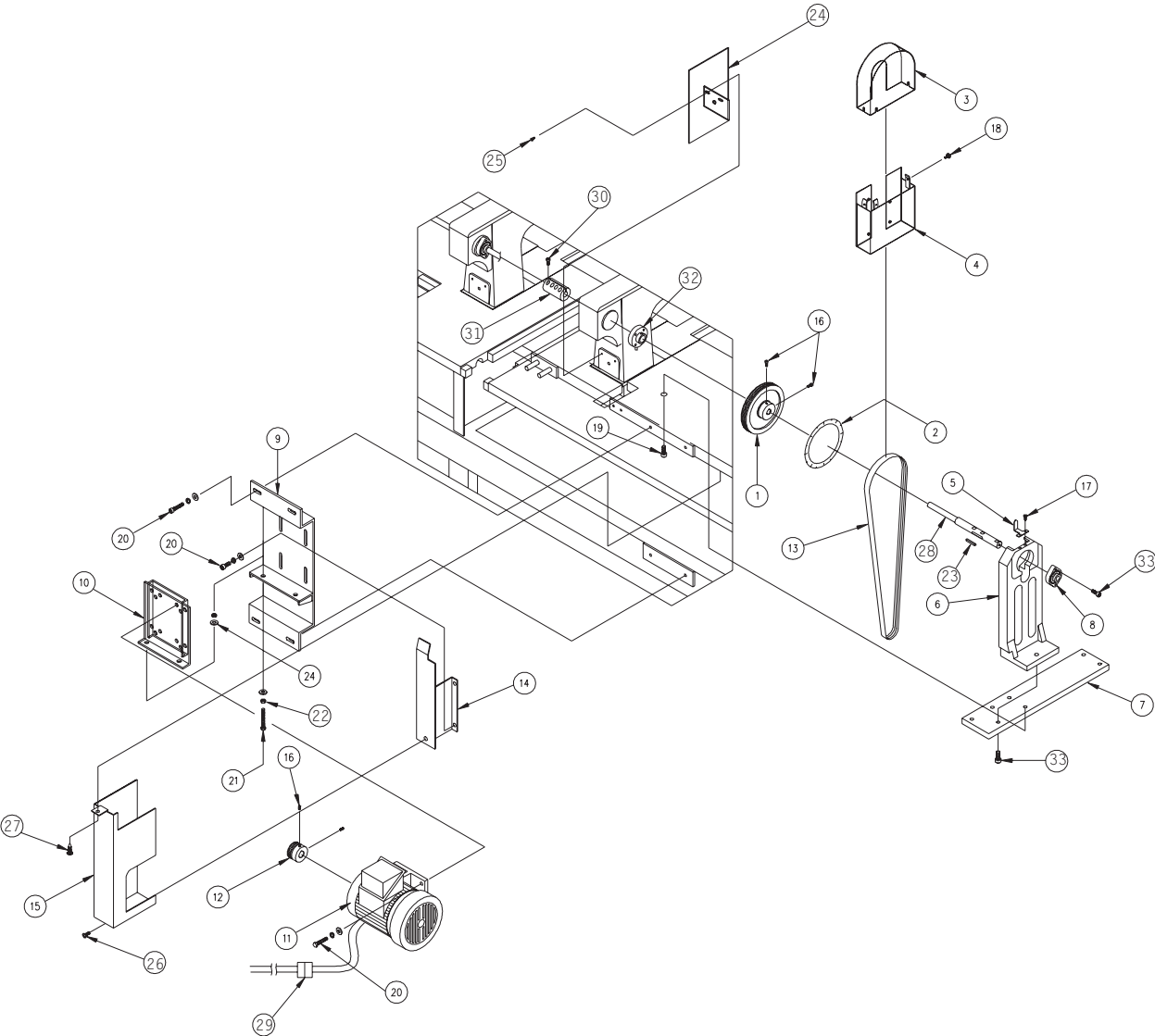
Color Change Mechanism II



From the library of: Diamond Needle Corp

COLOR CHANGE MECHANISM II				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KX230280	SLIDE BLOCK	
2	1	KX230170	JOINT BLOCK (HEAD WITH COLOR CHANGE MECHANISM)	
3	1	KX330280	CONNECTING BASE PLATE	
4	1	KX330290	SENSOR DOCK	
5	1	KX330170	CONNECTING BLOCK	
6	2	KX330240	TENSION BRACKET	
7	2	KX330160	CONNECTING COLLAR SHAFT	
8	2	A9010063	BEARING MR105ZZ (NSK)	
9	1	A9012127	E-RING	
10	1	KX330230	COLOR CHANGE UNIT COVER D	
11	1	KX330220	COLOR CHANGE UNIT COVER A	
12	1	KX330200	COLOR CHANGE UNIT COVER B	
13	1	KX330210	COLOR CHANGE UNIT COVER C	
14	1	EBY01623	3770 NEEDLE POSITIONER BOARD (ZN) FOR NSME	
15	1	A9012208	SPACER 05x4L	
16	1	KX330300	COLOR CHANGE BOARD BASE PLATE	
17	1	KX330260	SHAFT FOR CATCHING COVER	
18	1		HEX SOCKET BOLT M5x18 (WITH WASHERS)	
19			HEX SOCKET BUTTON BOLT M4x8 (WITH WASHERS)	
20			HEX NUT M6 (WITH WASHERS)	
21			HEX SOCKET BOLT M6x25 (WITH PLAIN WASHER)	
22			HEX SOCKET BOLT M4x25	
23			HEX SOCKET BOLT M3x8 (WITH SPRING WASHER)	
24			TRUSS SCREW M4x6	
25			TRUSS SCREW M3x10	
26			HEX SOCKET BOLT M4x10 (WITH SPRING WASHER)	
27	1	KX250100	FRONT COVER (UPPER NEEDLE)	
28			HEX SOCKET BOLT	
29			TRUSS SCREW M3x8	
30		KX790000	NEEDLE INDICATION SEAL	

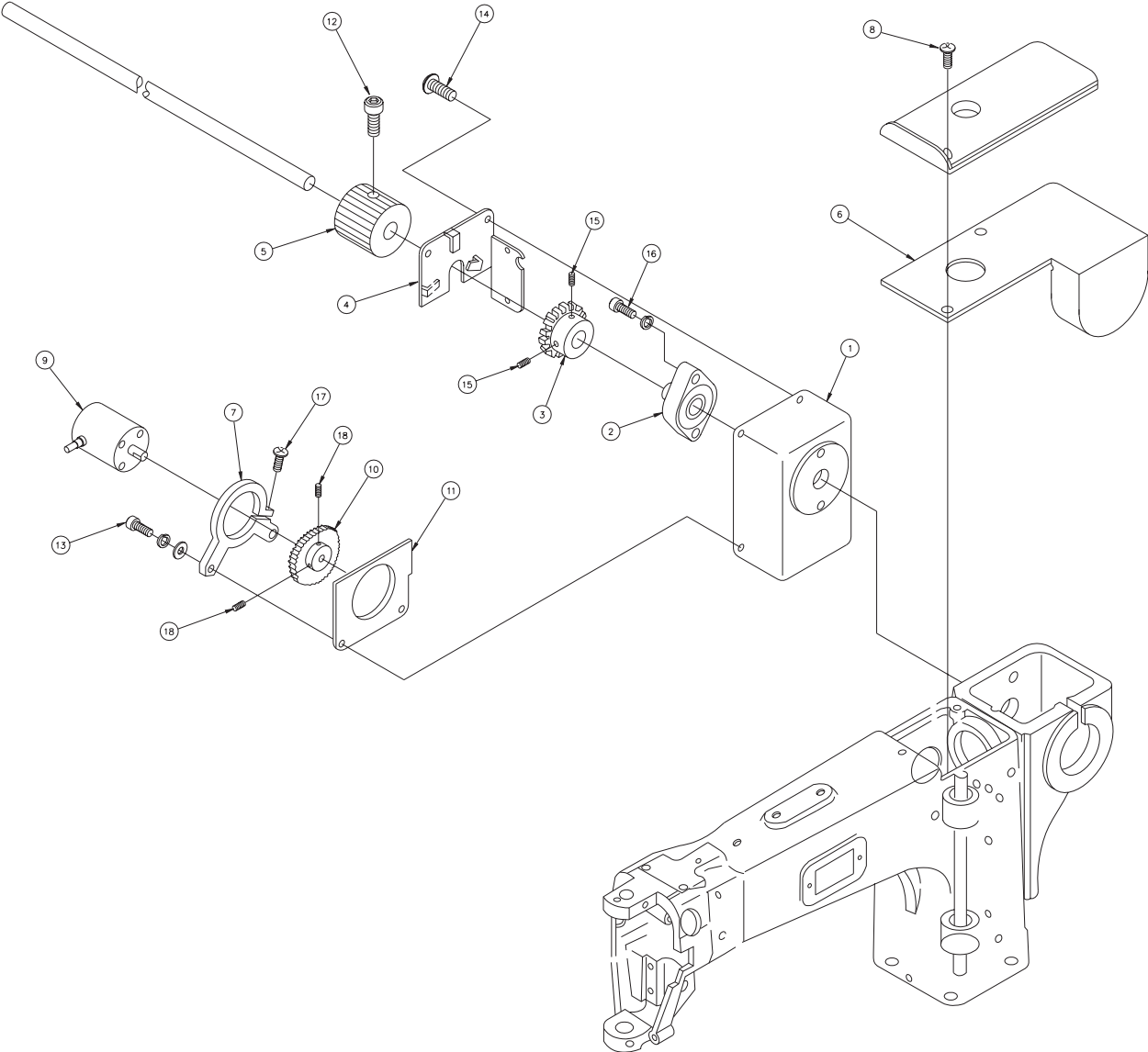
Drive Mechanism



From the library of: Diamond Needle Corp

DRIVE MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KN310000	DRIVING PULLEY	
2	1	HP313690	ANGLE LABEL	
3	1	KV310041	BELT COVER (UPPER)	
4	1	KV310050	BELT COVER	
5	1	KV310090	ANGLE GAUGE	
6	1	KV310021	SHAFT HOLDER BRACKET	
7	1	KS310011	SHAFT HOLDER	
8	1	A9011017	BEARING (BLF 204)	
9	1	KV310070	MOTOR BASE (BENSME)	
10	1	KV310080	MOTOR FIXING BASE (BENSME)	
11	1	HB310280	MOTOR FBK8-4P-0.75KW VF3 (WITH CABLE)	
12	1	KN310010	MOTOR PULLEY	
13	1	A9020200	RIBSTAR BELT (4PK-1240)	
14	1	KS310020	BELT COVER BRACKET	
15	1	KS310031	BELT COVER (BENSME)	
16			HEX SOCKET BOLT M6x12	
17			PAN SCREW M4x8	
18	1	A9012320	SCREW	
19			HEX SOCKET BOLT	
20			HEX BOLT M8x20	
21			HEX BOLT M8x55	
22			HEX NUT M8	
23	1	WW310210	BOTH ROUND PARALLEL KEY	
24		KR310041	BELT COVER BRACKET	
25			HEX SOCKET BOLT	
26			PAN SCREW	
27			HEX #2 TEK SCREW	
28		KC320820	TOP SHAFT CONNECTING SHAFT	
29	1	A9053070	NS-MOTOR CABLE (7.5W)	
30			HEX SOCKET BOLT	
31	1	HP320110	TOP SHAFT CONNECTING COUPLING	
32	1	A9011119	BALL BEARING JAF(SH204)	
33			HEX SOCKET BOLT M8x25	
34			HEX SOCKET BOLT M5x25	

Connecting Shaft Mechanism

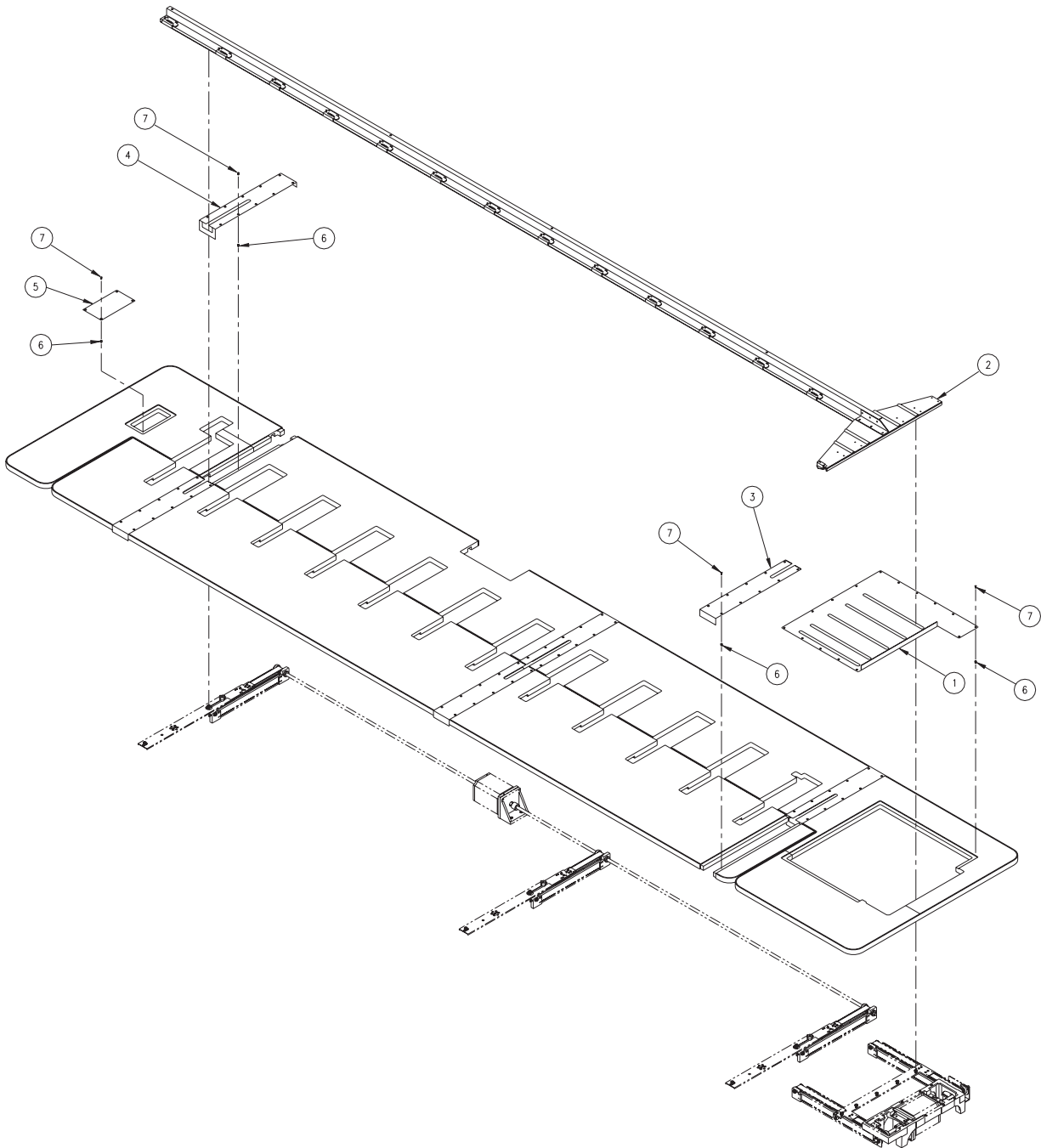


From the library of: Diamond Needle Corp

CONNECTING SHAFT MECHANISM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KR310090	ENCODER BOX	
2	1	KP321140	UPPER CONNECTING SHAFT BEARING UNIT (SBFLN02)	
3	1	KR310130	ENCODER DRIVE GEAR NO.1	
4	1	KR310120	ENCODER BOX COVER A	
5	1	KC320590	HAND PULLEY	
6	1	KR330110	SHAFT SIDE COVER	
7	1	KC312890	ENCODER RETAINER	
8			TRUSS SCREW M4x10	
9		KN511020	POSITION CODER	
10	1	KR310100	ENCODER DRIVE GEAR NO. 2	
11	1	KR310110	ENCODER BOX COVER B	
12	1		HEX SOCKET BOLT M6x12	
13			HEX SOCKET BOLT M6x20	
14			TRUSS SCREW M4x6	
15	1		HEX SOCKET SET SCREW M5x10	
16	1		HEX SOCKET BOLT M6x40	
17	1		TRUSS SCREW M4x15	
18	1		HEX SOCKET SET SCREW M4x10	

Pantograph Drive Mechanism I

(Pantograph Drive Cover for 12 head)

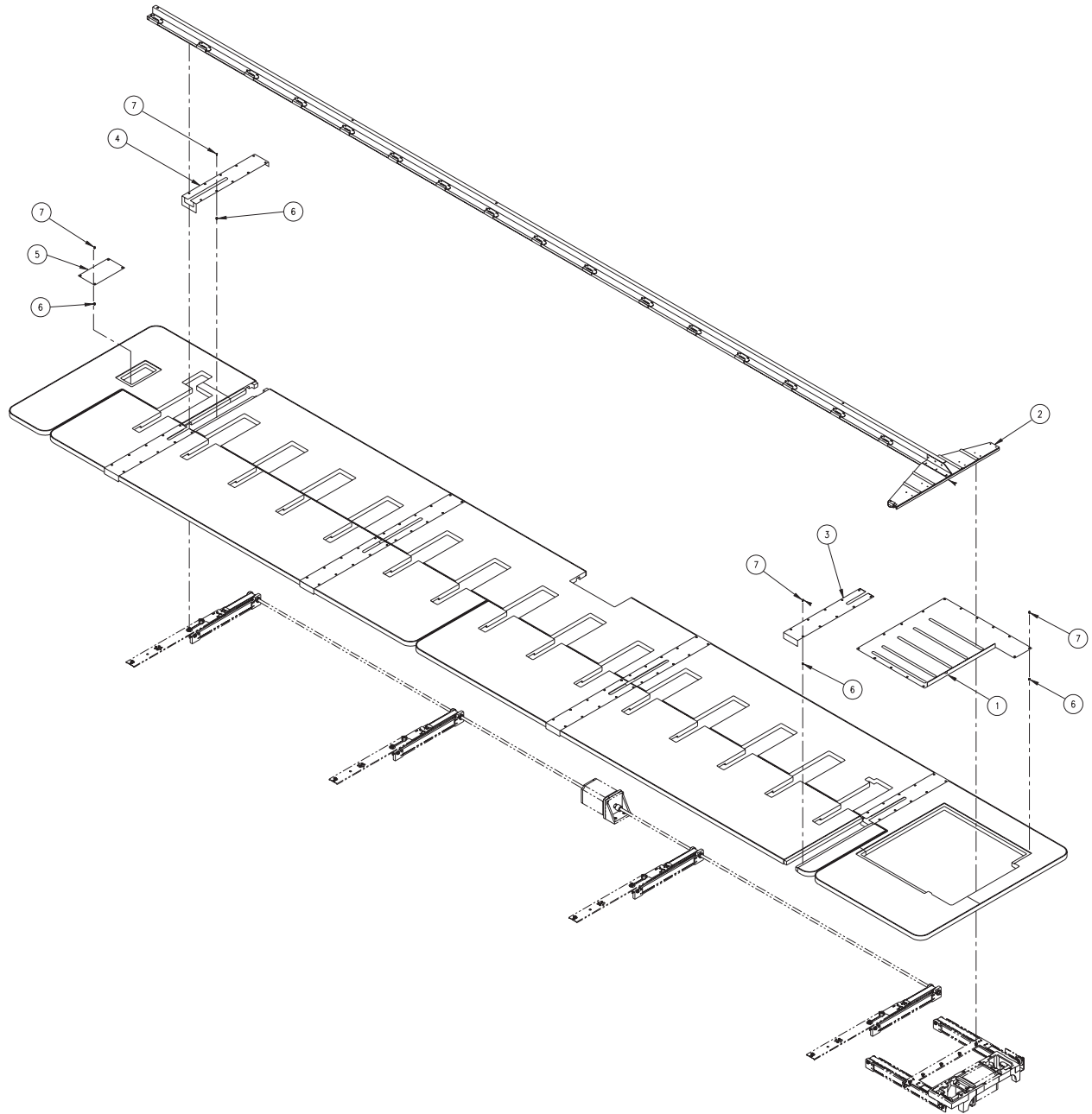


From the library of: Diamond Needle Corp

PANTOGRAPH DRIVE MECHANISM (Pantograph, Cover 12 head)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A300073	COVER, V-DRIVE	
2	1	A200142	ASSEMBLY, (BENSME-12) PANTOGRAPH	
3	3	KK480100	COVER, H-GUIDE (FRONT)	
4	3	KR480250	COVER, H GUIDE (REAR)	
5	1	KC271440	PLATE, TRIMMER COVER	
6	79	A100140	INSERT, #8-32 WOOD	
7	79	P840492	SCR.,#8-32 UNC-2Ax3/8"LG.CROSS RECESSED FLAT HD. UNDERCUT	

Pantograph Drive Mechanism

(Pantograph, Drive Cover for 15 head)

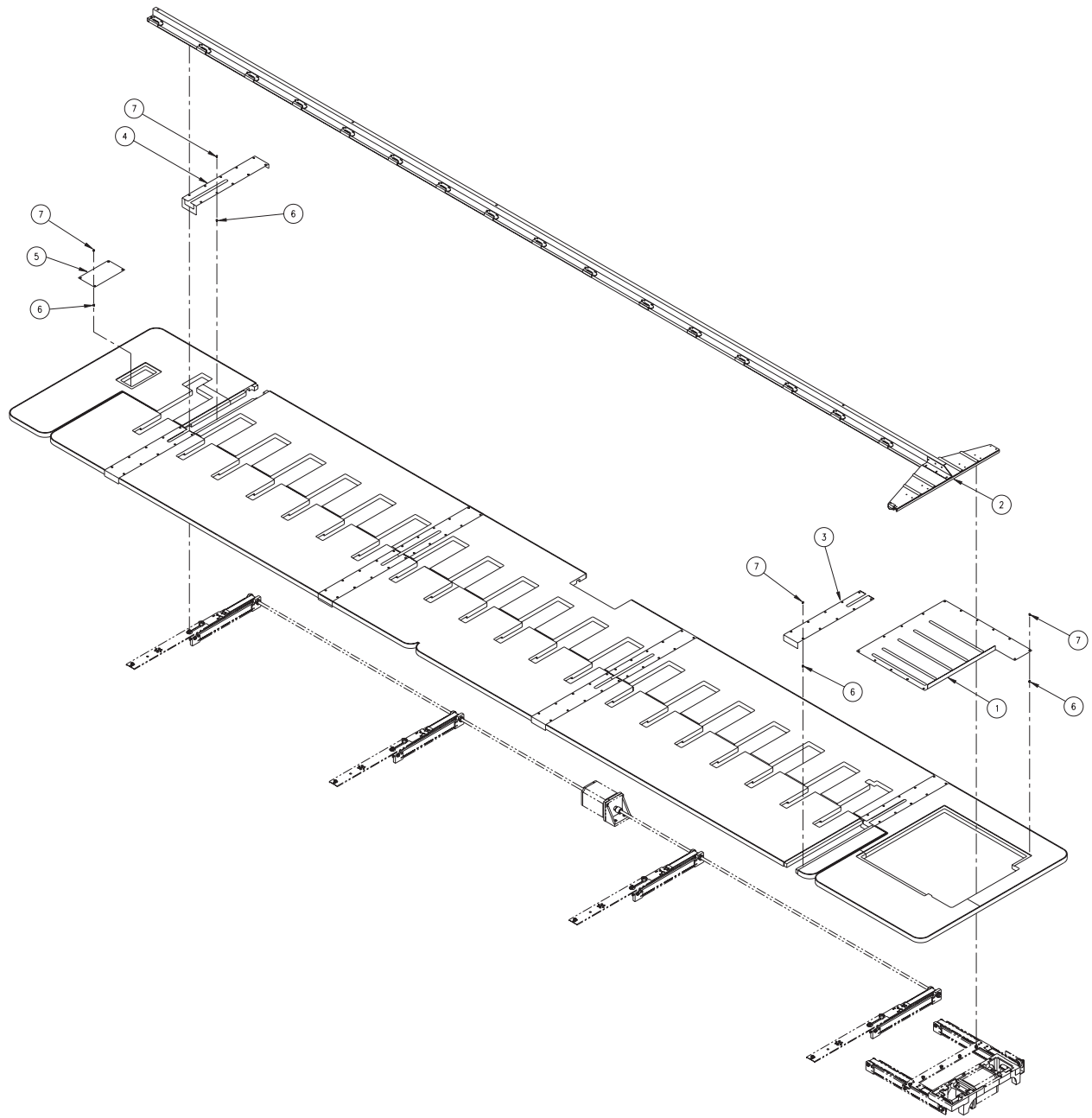


From the library of: Diamond Needle Corp

PANTOGRAPH DRIVE MECHANISM (Pantograph, Cover 15 head)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A300073	COVER, V-DRIVE	
2	1	A300085	ASSEMBLY, (BENSME-15) PANTOGRAPH	
3	4	KK480100	COVER, H-GUIDE (FRONT)	
4	4	KR480250	COVER, H GUIDE (REAR)	
5	1	KC271440	PLATE, TRIMMER COVER	
6	99	A100140	INSERT, #8-32 WOOD	
7	99	P840492	SCR.,#8-32 UNC-2Ax3/8"LG.CROSS RECESSED FLAT HD. UNDERCUT	

Pantograph Drive Mechanism

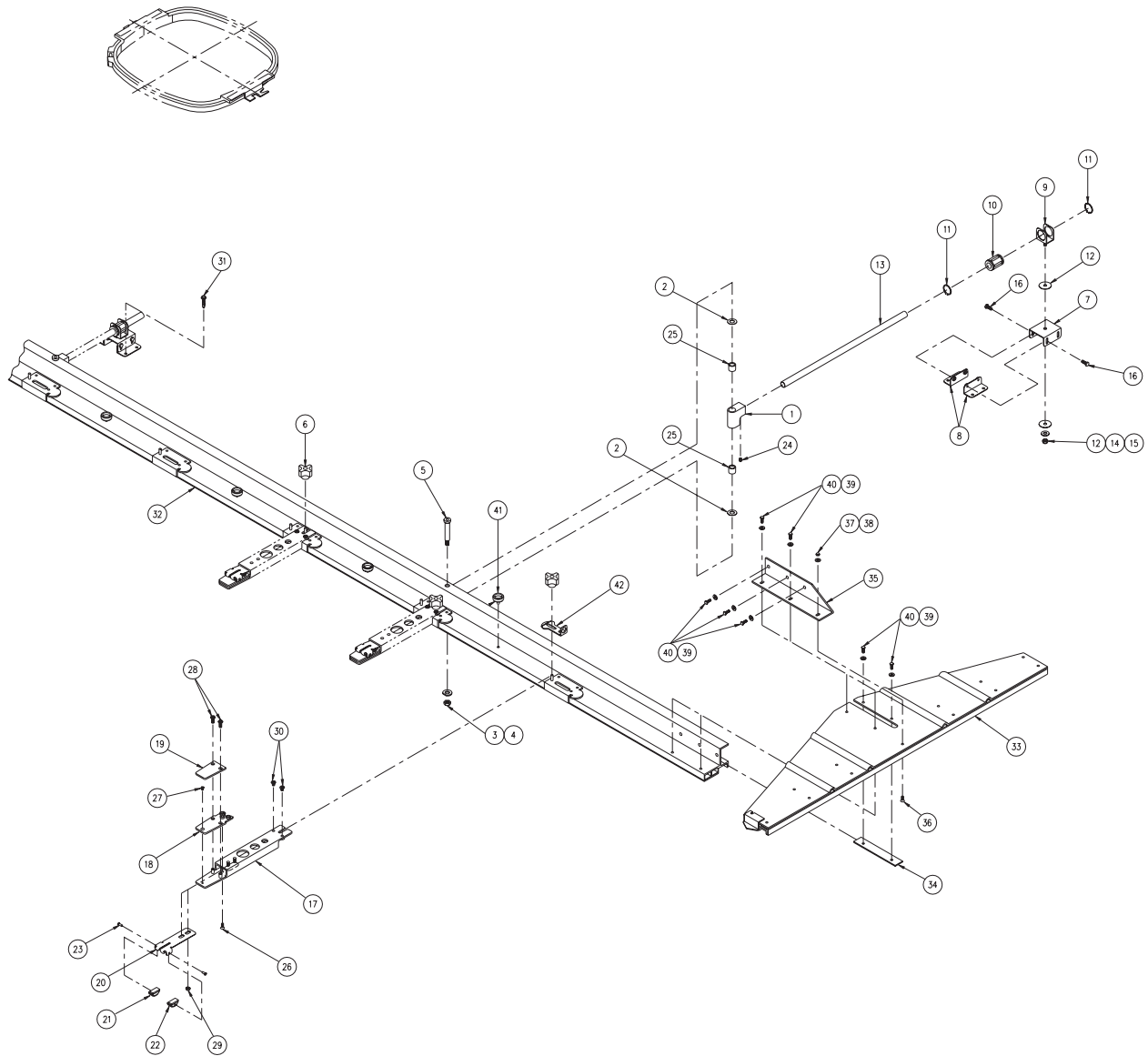
(Pantograph, Drive Cover for 20 head)



From the library of: Diamond Needle Corp

PANTOGRAPH DRIVE MECHANISM (Pantograph, Cover 20 head)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A300073	COVER, V-DRIVE	
2	1	A600024	ASSEMBLY, (BENSME-20) PANTOGRAPH	
3	4	KK480100	COVER, H-GUIDE (FRONT)	
4	4	KR480250	COVER, H GUIDE (REAR)	
5	1	KC271440	PLATE, TRIMMER COVER	
6	99	A100140	INSERT, #8-32 WOOD	
7	99	P840492	SCR.,#8-32 UNC-2Ax3/8"LG.CROSS RECESSED FLAT HD. UNDERCUT	

T Pantograph Relation



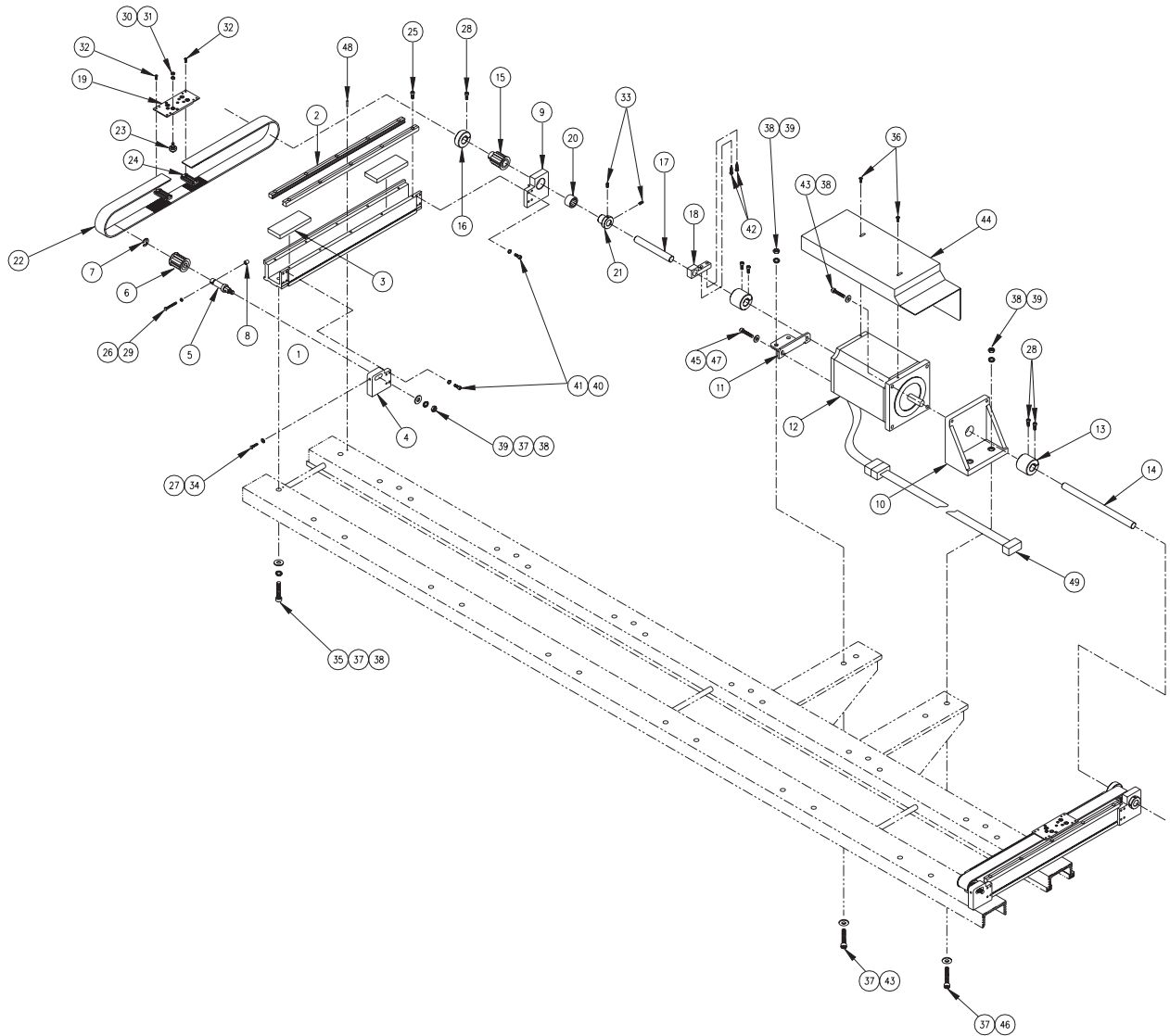
From the library of: Diamond Needle Corp

T PANTOGRAPH RELATION					
ITEM	12 HD	15 HD	20 HD	PART NUMBER	DESCRIPTION
1	5	7	7	A200088	BRACKET, SWIVEL
2	10	14	14	A200105	WASHER, NYLON
3	5	7	7	A200104	WASHER, HALF CUT STEEL
4	5	7	7	A100129	NUT, 5/16-18UNC-2B NYLOCK
5	5	7	7	A200103	SCREW, 5/16-18UNC-2A x 1 3/4" LG. SHOULDER
6	13	16	21	P820710	KNOB, [1/4-20] PHENOLIC
7	5	7	7	A200078	BRACKET, UPPER TURRET
8	10	14	14	A200079	BRACKET, LOWER TURRET
9	5	7	7	A200080	BRACKET, BALL BUSHING RETAINING
10	5	7	7	A100102	BEARING, TURRET
11	10	14	14	A100103	WASHER, TURRET MOUNTING
12	10	14	14	A100101	WASHER, TURRET MOUNTING
13	5	7	7	A200075	TUBE, PANTOGRAPH GUIDE (18)
14	5	7	7	P840540	WASHER, 1/4" FLAT
15	5	7	7	P840711	NUT, 1/4-20 UNC-2B NYLON INSERT HEX. LOCK
16	20	28	28	P841008	SCREW,#10-32UNF-2A x 1 1/4" LG. HEX HD. MACHINE
17	13	16	21	A200132	ARM, HOOP SUPPORT
18	13	16	21	A100107	TONGUE, STEEL
19	13	16	21	A200093	TONGUE, NYLON
20	13	16	21	A100108	CLAMP, HOOP SUPPORT
21	13	16	21	A200158	BUTTON, RIGHT HOOP SUPPORT
22	13	16	21	A200159	BUTTON, LEFT HOOP SUPPORT
23	26	32	42	A200167	RIVET, HOOP SUPPORT BUTTON
24	5	7	7	P840442	SCR.,#10-32UNF-2Ax1/4"LG. KNURLED CUP POINT HEX. SOC. SET
25	10	14	14	A200106	BEARING, NEEDLE
26	39	48	63	P841007	SCR.,#8-32UNC-2Ax1/4" LG. CROSS RECESSED FLAT HD. MACHINE
27	13	16	21	P841006	SCR.,#6-UNC-2Ax3/16" LG. CROSS RECESSED FLAT HD UNDER CUT MACHINE
28	26	32	42	P840420	SCR.,#10-32UNF-2A x 3/8" LG. SLOTTED PAN HD.
29	26	32	42	P841005	NUT, #10-32UNF-2B HEX. KEPS
30	26	32	42	P841004	SCR.,#10-32UNF-2A x 3/16" LG. SLOTTED PAN HD
31	20	28	28	P840446	SCR., #8-18 x 3/4" LG. HEX. HD. No.2 TEK
32	1			A200134	ASSEMBLY, (BENSME12) HOOP ARM MOUNT
32		1		A300084	ASSEMBLY, (BENSME15) HOOP ARM MOUNT
32			1	A600023	ASSEMBLY, (BENSME 20) HOOP ARM MOUNT
33	1	1	1	A100106	ASSEMBLY, PANTOGRAPH STIFFENING GUIDE

T PANTOGRAPH RELATION					
ITEM	12 HD	15 HD	20 HD	PART NUMBER	DESCRIPTION
34	1	1	1	A200085	SHIM, PANTOGRAPH BRACKET
35	1	1	1	A200084	BRACKET, PANTOGRAPH
36	1	1	1	P841009	SCR.,#8-32UNC-2Ax3/4"LG. CROSS RECESSED FLAT HD.
37	1	1	1	P840520	WASHER, #8 FLAT
38	1	1	1	P841011	NUT, #8-32UNC-2B LOW CROWN BLIND ACORN
39	7	7	7	P841012	SCR., #8-32UNC-2A x 1/2" LG. HEX. HD. MACHINE
40	7	7	7	P840530	WASHER, #10 FLAT
41	12	15	20	A200091	KNOB, STEEL (#10-32)
42	12	15	20	A200081	BRACKET, HOOP RETAINING

Pantograph Drive Mechanism

(H Direction Rear I)



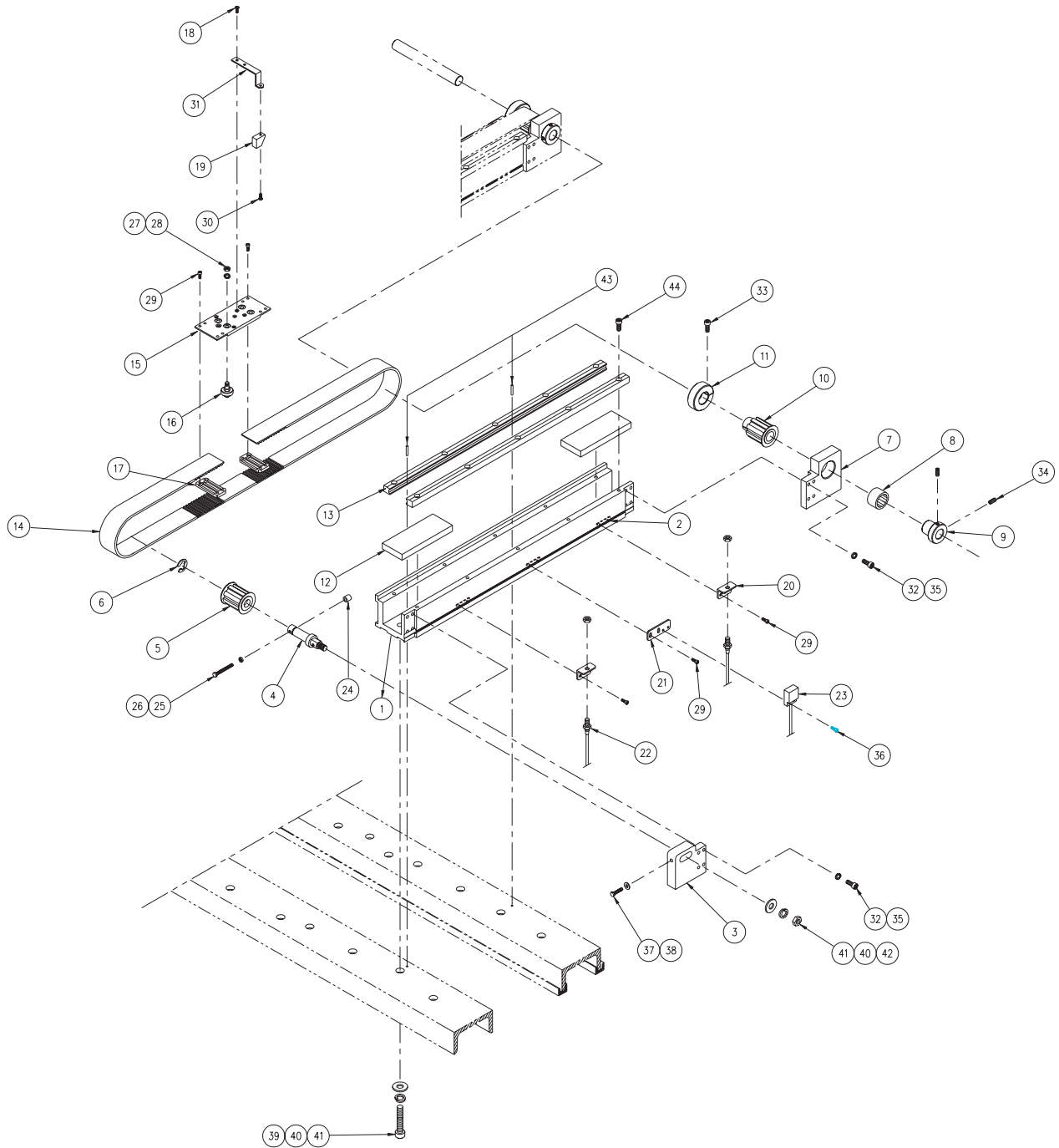
From the library of: Diamond Needle Corp

PANTOGRAPH DRIVE MECHANISM (H Direction - Rear 1)					
ITEM	QTY 12	QTY 15	QTY 20	PART NUMBER	DESCRIPTION
1	1	3	3	KK480010	BASE, "H" DRIVE (453L)
2	4	6	6	A200161	RAIL, "H" DRIVE (430L) GUIDE
3	4	6	6	KN480061	PAD, OIL RETAINING FELT
4	2	3	3	HP482950	BRACKET, H-V GUIDE FRONT PULLEY
5	2	3	3	A110048	SHAFT, TIMING PULLEY
6	2	3	3	HV480050	ASSEMBLY, FRONT TIMING PULLEY
7	2	3	3	A110056	E-RING, EXTERNAL PULLEY RETAINING
8	2	3	3	HH482110	CAP, PULLEY SHAFT BOLT
9	2	3	3	A110033	BRACKET, REAR PULLEY
10	1	1	1	HV480010	BRACKET, "H" & "V" PULSE MOTOR
11	1	1	1	HV480020	BRACKET, "H" & "V" PULSE MOTOR
12	1	1	1	HV480060	MOTOR, PULSE (5M)
13	2	2	2	HH481931	COUPLING, PULSE MOTOR
14	1	1	1	KC320113	SHAFT, "H" DRIVE (2580.00L)
15	2	3	3	HV480040	PULLEY, (REAR) "H" & "V" DRIVE
16	2	3	3	HH481980	COLLAR, 19MM DIA. CLAMPING
17	1			KC320113	SHAFT, "H" DRIVE (1480.00L)
17		1		KC320113	SHAFT, "H" DRIVE (2620.00L)
17			1	KC320113	SHAFT, "H" DRIVE (2670.00L)
18	2	2	2	HV480070	SUPPORT, PULSE MOTOR CONNECTING SHAFT
19	2	3	3	KK140130	BASE, "H" ROLLER
20	2	3	3	A9011110	BEARING, NEEDLE
21	2	3	3	HH481970	COLLAR, P.M. CONNECTING SHAFT
22	2	3	3	HV4801101035	BELT, TIMING
23	8	12	12	HP482950	ASSEMBLY, ROLLER PIN "A"
24	4	6	6	HP482940	RACK, TIMING BELT SET
25	20	30	30	BN272M4x16	SCREW, M4 x 0.7 x 16.0MM LG. SOC. HD. CAP
26	2	3	3	BN41056M4x40	BOLT, M4 x 0.7 x 40.0MM LG. HEXAGONAL HEAD
27	2	3	3	BN41056M4x30	BOLT, M4 x 0.7 x 40.0MM LG. HEXAGONAL HEAD
28	6	7	7	BN3M5X16	SCREW, M5 x 0.8 x 16.0MM LG. SOC. HD. CAP
29	2	3	3	BN109M4	NUT, M4 x 0.7 HEXAGONAL
30	8	12	12	BN760M5	WASHER, M5 HELICAL SPRING LOCK
31	8	12	12	BN124M5	NUT, M5 x 0.8 HEXAGONAL JAM
32	8	12	12	BN3M3X6	SCREW, M3 x 0.5 x 6.0MM LG. SOC. HD. CAP
33	4	6	6	BN30M5X8	SCREW, M5x0.8x8.0MM LG. KNURLED CUP POINT SOC. SET
34	2	3	3	BN715M4	WASHER, M4 FLAT
35	4	6	6	BN3M8X25	SCREW, M8 x 1.25 x 25.0MM LG. SOC. HD. CAP

PANTOGRAPH DRIVE MECHANISM (H Direction - Rear 1)					
ITEM	QTY 12	QTY 15	QTY 20	PART NUMBER	DESCRIPTION
36	2	2	2	BN354M4X10	SCREW, M4x0.7x10MM LG. CROSS RECESSED TRUSS HD.
37	9	11	11	BN715M8	WASHER, M8 FLAT
38	13	15	15	BN760M8	WASHER, M8 HELICAL SPRING LOCK
39	6	7	7	BN109M8	NUT, M8 x 1.25 HEXAGONAL
40	16	24	24	BN760M4	WASHER, M4 HELICAL SPRING LOCK
41	16	24	24	BN3M4X18	SCREW, M4 x 0.7 x 18.0MM LG. SOC. HD. CAP
42	2	4	4	BN1880 4.2X32	SCREW, M8 x 1.25 x 30MM LG. HEX. SOC. HD. CAP
43	4	4	4	BN272M8X30	SCREW, M8 x 1.25 x 30MM LG. HEX. SOC. HD. CAP
44	1	1	1	A200152	COVER, "H" DRIVE MOTOR
45	2	2	2	BN760M6	WASHER, M6 HELICAL SPRING LOCK
46	2	2	2	BN272M8X40	SCREW, M8 x 1.25 x 40MM LG. HEX. SOC. HD. CAP
47	2	2	2	BN272M6X22	SCREW, M6 x 1.0 x 22.0MM LG. SOC. HD. CAP
48	4	6	6	BN876M4X24	PIN, M4 x 24.00MM LG. ROLL
49	1	1	1	A200149	CABLE, "H" PULSE MOTOR

Pantograph Drive Mechanism

(H Direction - Rear II)



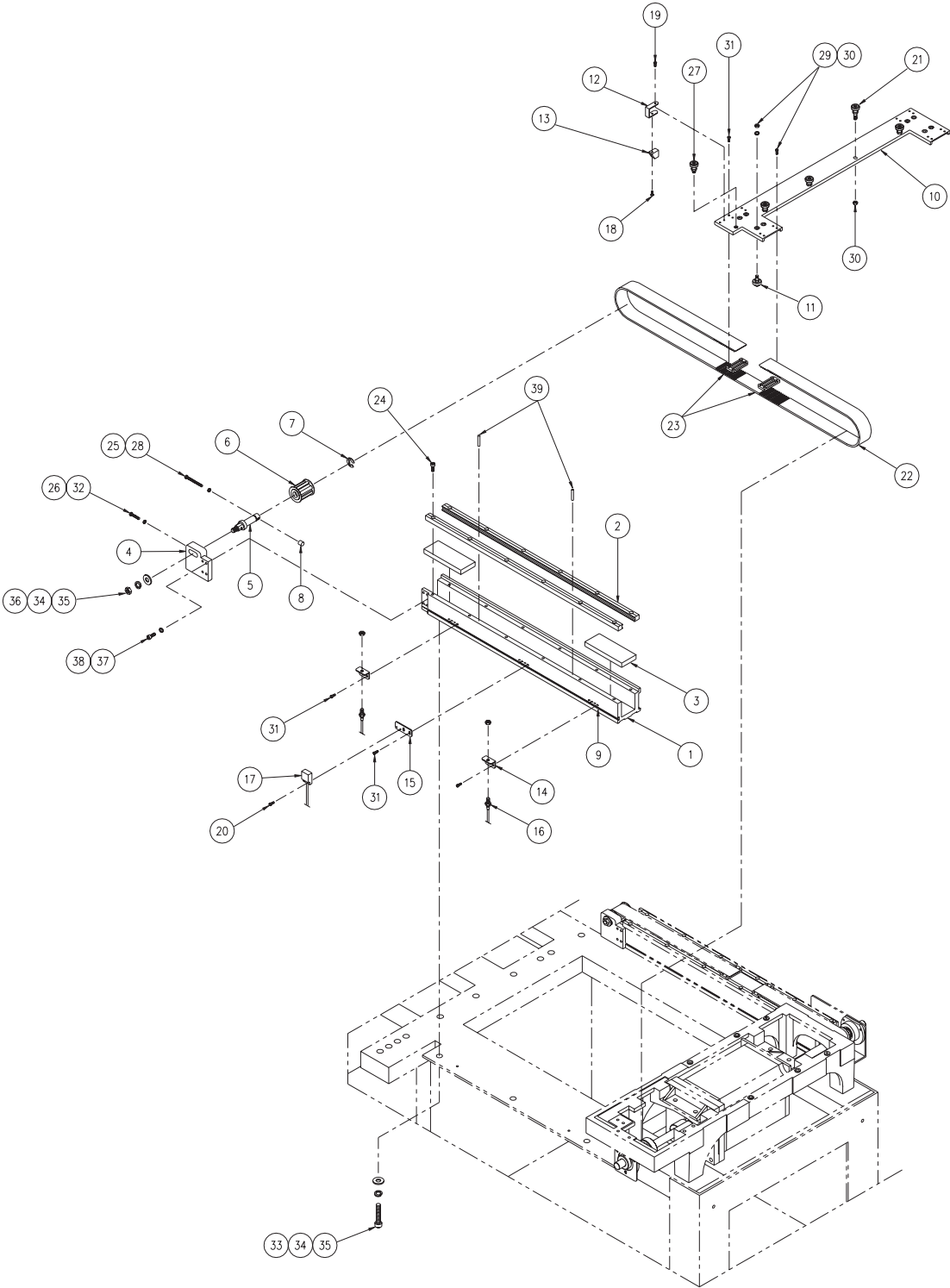
From the library of: Diamond Needle Corp

PANTOGRAPH DRIVE MECHANISM (H Direction - Rear II)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KK480010	BASE, "H" DRIVE (453 L)	
2	3	KU460270	PLATE, NUT	
3	1	A110034	BRACKET, H-V GUIDE FRONT PULLEY	
4	1	A110048	SHAFT, TIMING PULLEY	
5	1	HV480050	ASSEMBLY, FRONT TIMING PULLEY	
6	1	A110056	E-RING, EXTERNAL PULLEY BRACKET	
7	1	A110033	BRACKET, REAR PULLEY	
8	1	A9011110	BEARING, NEEDLE	
9	1	HH481970	COLLAR, P.M. CONNECTING SHAFT	
10	1	HV480040	PULLEY, (REAR) H-V DRIVE	
11	1	HH481980	COLLAR, 19MM DIA. CLAMPING	
12	2	KN480061	PAD, OIL RETAINING FELT	
13	2	KK480140	RAIL, "H" DRIVE (430L) GUIDE	
14	1	HV4801101035	BELT, TIMING	
15	1	KK140130	BASE, "H" ROLLER	
16	4	HP482950	ASSEMBLY, ROLLER PIN "A"	
17	2	HP482940	TIMING BELT RACK (5M)	
18	2		SCR., M4x0.7x6.0MM LG CROSSED RECESSED FLAT HD.	
19	1	A9052030	MAGNET, (M-102 A-02)	
20	2	MT460240	BRACKET, (RS-001 "V")	
21	1	KN450300	BRACKET, (MH-601A) PROXIMITY SWITCH FIXING	
22	2	A9052024	SWITCH, (RS-001)	
23	1	A9052031	SWITCH, MAGNET PROXIMITY (MH-601A)	
24	1	HH482110	CAP, PULLEY SHAFT BOLT	
25	1		NUT, M4 x 0.7 HEXAGONAL	
26	1		BOLT, M4 x 0.7 x 40.0MM LONG HEXAGONAL HEAD	
27	4		NUT, M5 x 0.8 HEXAGONAL JAM	
28	4		WASHER, M5 HELICAL SPRING LOCK	
29	10		SCREW, M3 x 0.5 x 6.0MM LONG SOCKET HEAD CAP	
30	1		SCREW, M3 x 0.5 x 6.00MM LONG TRUSS HEAD	
31	2	KU460342	H-PANTOGRAPH MAGNET BRACKET	
32	8		SCREW, M4 x 0.7 x 18.0MM LONG SOCKET HEAD CAP	
33	1		SCREW, M5 x 0.8 x 16.0MM LONG SOCKET HEAD CAP	

PANTOGRAPH DRIVE MECHANISM (H Direction - Rear II)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
34	2		SCREW, M5 x .8 x 8.0MM LG. KNURLED CUP POINT SOC. SET	
35	8		WASHER, M4 HELICAL SPRING LOCK	
36	2		SCREW, M3 x 0.5 x 10.0MM LONG SOCKET HEAD CAP	
37	1		BOLT, M4 x 0.7 x 30.0MM LONG HEXAGONAL HEAD	
38	1		WASHER, M4 FLAT	
39	2		SCREW, M8 X 1.25 X 25.0MM LONG SOCKET HEAD CAP	
40	3		WASHER, M8 FLAT	
41	3		WASHER, M8 HELICAL SPRING LOCK	
42	1		NUT, M8 x1.25 HEXAGONAL	
43	2		PIN, M4 x 24.00MM LG. ROLL	
44	10		SCREW, M4 x 0.7 x 16MM LG. HEX. SOC. HD. CAP	

Pantograph Drive Mechanism

(V Direction - Front)



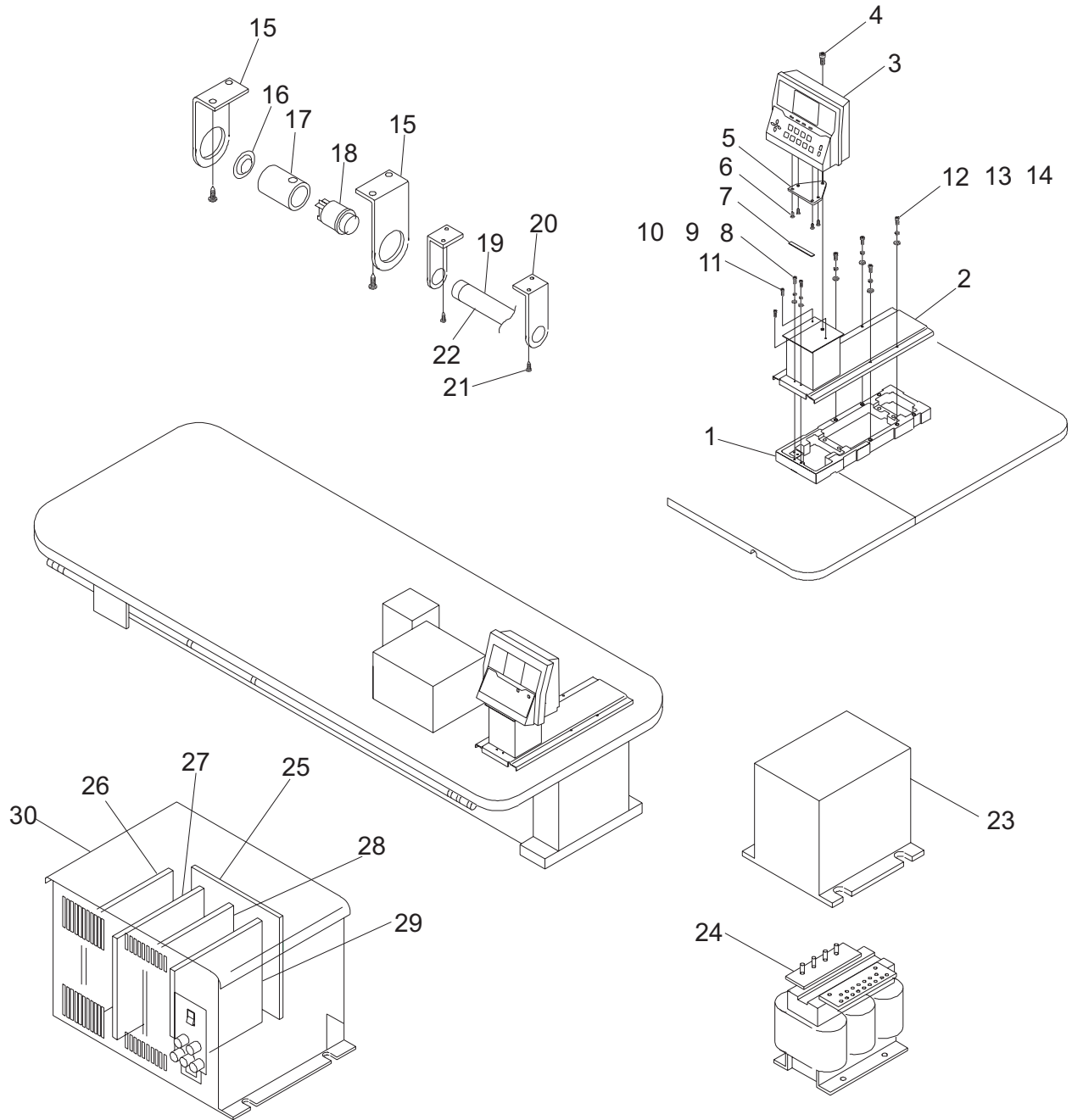
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PANTOGRAPH DRIVE MECHANISM (V Direction - Front)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	A300077	BASE, "V" DRIVE NEAR SIDE (531L)	
2	2	A300075	RAIL, "V" DRIVE (516L) GUIDE (NSME)	
3	2	KN480061	PAD, OIL RETAINING FELT	
4	1	A110034	BRACKET, H-V GUIDE FRONT PULLEY	
5	1	A110048	SHAFT, TIMING PULLEY	
6	1	HV480050	ASSEMBLY, FRONT TIMING PULLEY	
7	1	A110056	E-RING, EXTERNAL PULLEY RETAINING	
8	1	HH482110	CAP, PULLEY SHAFT BOLT	
9	3	KU460270	PLATE, NUT	
10	1	A300072	BASE, V-ROLLER	
11	4	HP482950	ASSEMBLY, ROLLER PIN "A"	
12	1	KN450311	V-PANTOGRAPH MAGNET BRACKET	
13	1	A9052030	MAGNET (M-102A-02)	
14	2	MT460240	BRACKET (RS-001,V)	
15	1	KN450300	PROXIMITY SWITCH BRACKET	
16	2	A9052079	FRAME LIMIT SWITCH (RS-001)	
17	1	A9052031	MAGNET PROXIMITY SWITCH (MH-601A)	
18	1		M4 x 6MM LG CROSSED RECESSED FLAT HD SCREW	
19	1		M3 X 8MM LG. TRUSS HD. SCREW	
20	2		M3 X 10MM LG. SOCKET HD. CAP SCREW	
21	4	HP483111	ROLLER PIN "B" ASSY.	
22	1	A9020170	TIMING BELT	
23	2	HP482940	TIMING BELT RACK (5M)	
24	12		M4 X 16MM LG. SOCKET HD. CAP SCREW	
25	1		M4 X 40MM LG HEX HD. BOLT	
26	1		M4 X 30MM LG HEX HD. BOLT	
27	1	HP483370	ROLLER PIN BEARING ASSY.	
28	1		M4 HEX NUT	
29	4		M5 LOCK WASHER	
30	8		M5 HEX NUT	
31	10		M3 X 6 LG. SOCKET HD. CAP SCREW	
32	1		M4 FLAT WASHER	
33	3		M8 X 25 LG. SOCKET HD. CAP SCREW	
34	4		M8 FLAT WASHER	
35	4		M8 LOCK WASHER	
36	1		M8 HEX NUT	
37	4		M4 LOCK WASHER	

PANTOGRAPH DRIVE MECHANISM (V Direction - Front)				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
38	4		M4 X 18MM LG. SOCKET HD. CAP SCREW	
39	2		M4 X 24MM LG. ROLL PIN	

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Control System

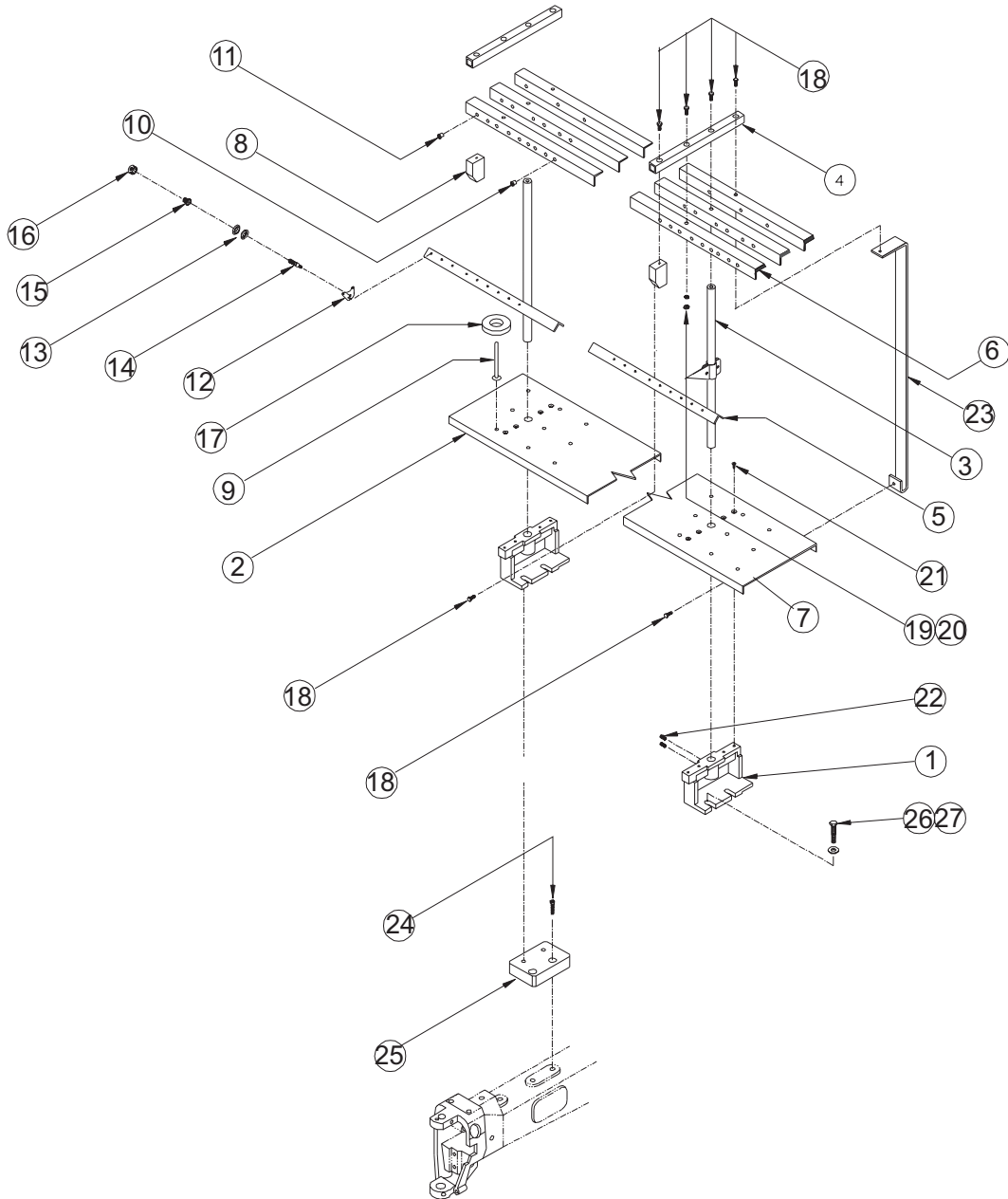


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CONTROL SYSTEM				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	1	KV330030	V-MOTOR SUPPORT	
2	1	A100197	WELDMENT, NS AUTOMAT	
3	1	EAY03341	AUTOMAT CONTROLLER	
4	1		SCREW, M10x1.5x20.00MM LG. HEX. CAP	
5	1	HV330020	BRACKET, NS AUTOMAT	
6	4		SCREW, M4x0.7x10.0MM LG. CROSS RECESSED FLAT HD.	
7	1	HV330022	BRACKET, AUTOMAT SPACER	
8	2		SCREW, M5x0.8x18.00MM LG. SOC. HD. CAP	
9	2		WASHER, M5 HELICAL SPRING LOCK	
10	2		WASHER, M5 FLAT	
11	2		SCREW, M5x0.8x10.00MM LG. SOC. HD. CAP.	
12	4		SCREW, M6x1.0x16.00MM LG. SOC. HD. CAP	
13	4		WASHER, M6 HELICAL SPRING LOCK	
14	4		WASHER, M6 FLAT	
15	4	KC530230	BAR SWITCH BRACKET (LG)	
16	2	A400010	SWITCH HOUSING COVER	
17	2	A400009	BAR SWITCH HOUSING	
18	1	A400008	START SWITCH (GR)	
	1	A400007	STOP SWITCH (RD)	
19	1	KF530160	BAR SWITCH	
20	2	KC530240	BAR SWITCH BRACKET (SM)	
21	12		HEX #2 TEK SCREW	
22	1	A400011	BAR SWITCH END CAP	
23	1	KC520020	TRANSORMER COVER SET	
24	1	EAY033A3	3P TRANSFORMER - NS	
	1	EAY034A3	1P TRANSFORMER - NS	
25	1	EBY01330	5740 BACK BOARD	
26	1	EBY01310	5720 PULSE MOTOR DRIVE UNIT	
27	1	EBY01340	5750 INVERTER UNIT	
28	1	EBY01300	5710 DRIVER CPU BOARD	
29	1	EBY01320	5730 CONTROL UNIT	
30	1	EAY033A2	AUTOMAT DRIVER UNIT	

Thread Stand

- ②⑧ BENSME12 THREAD STAND ASSEMBLY
- ②⑨ BENSME15 THREAD STAND ASSEMBLY
- ③⑩ BENSME20 THREAD STAND ASSEMBLY

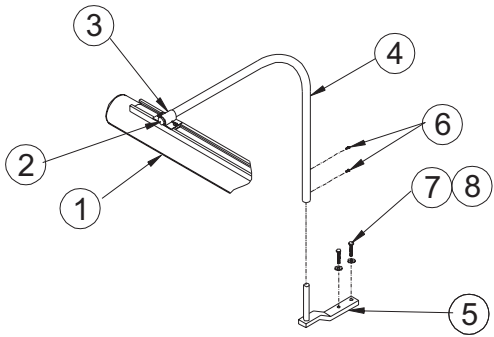


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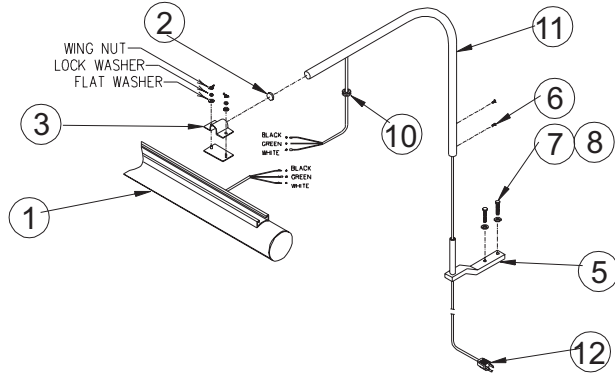
THREAD STAND					
ITEM	QTY 12	QTY 15	QTY 20	PART NUMBER	DESCRIPTION
1	8	8	8	A110053	THREAD STAND SUPPORT
2	1			A200124R	THREAD STAND BASE (12-380)
2	1			A200124L	THREAD STAND BASE (12-380)
2		1		A300056R	THREAD STAND BASE (15-380)
2		1		A300056L	THREAD STAND BASE (15-380)
2			1	A600013R	THREAD STAND BASE (20-280)
2			1	A600013L	THREAD STAND BASE (20-280)
3	8	8	8	A400055	THREAD GUIDE SUPPORT SHAFT
4	8	8	8	A400054	THREAD GUIDE ATTACHING BASE
5	1			A200125R	THREAD GUIDE SUPPORT ANGLE
5	1			A200125L	THREAD GUIDE SUPPORT ANGLE
5		1		A300057R	THREAD GUIDE SUPPORT ANGLE
5		1		A300057L	THREAD GUIDE SUPPORT ANGLE
5			1	A600014R	THREAD GUIDE SUPPORT ANGLE
5			1	A600014L	THREAD GUIDE SUPPORT ANGLE
6					BLACK VINYL END CAP (3/4 X 3/4)
7					BLACK VINYL END CAP (8-1/4 X 1)
8	8	8	8	A400053	THREAD GUIDE SUPPORT SPACER
9	108	135	180	A200097	ARM SPOOL PIN
10	12	15	20	A110005	BLACK THREAD GUIDE EYELET
11	204	255	340	A110006	TAN THREAD GUIDE EYELET
12	108	135	180	A100097	THREAD TENSION BASE
13	216	270	360	A100096	FORMED THREAD TENSION WASHER
14	108	135	180	A100095	THREAD TENSION STUD
15	108	135	180	A100094	THREAD TENSION SPRING
16	108	135	180	A100098	MOLDED THREAD TENSION KNOB
17	108	135	180	KF710390	THREAD STAND FELT PAD
18	24	24	24		M5x0.8x12.0MM LG. SOC. HEAD CAP SCREW
19	8	8	8		M5 HELICAL SPRING LOCK WASHER
20	8	8	8		M5x0.8 HEXAGONAL JAM NUT
21	32	32	32		M5x0.8x12.0MM LG. CROSS RECESSED FLAT HD. SCREW
22	16	16	16		M5x0.8x8.0MM LG. KNURLED CUP POINT SOC. SET SCREW
23	8	8	8	A100198	REAR THREAD STAND SUPPORT BRACKET
24	16	16	16		M8x1.25x30.0MM LG. HEX. SOC. HD. CAP SCREW
25	8	8	8	KR330160	SPOOL HOLDER BASE

THREAD STAND					
ITEM	QTY 12	QTY 15	QTY 20	PART NUMBER	DESCRIPTION
26	16	16	16		M8 FLAT WASHER
27	16	16	16		M8 X 25MM LG. HEX HD BOLT
28	1			A200131A	BENSME12 THREAD STAND ASSY.
	1			A200131B	
29			1	A300136A	BENSME15 THREAD STAND ASSY.
			1	A300136B	
30			1	A600012A	BENSME20 THREAD STAND ASSY. (280)
			1	A600012B	
			1	A200131A	BENSME20 THREAD STAND ASSY. (380)
			1	A200131B	
			1	A300136A	

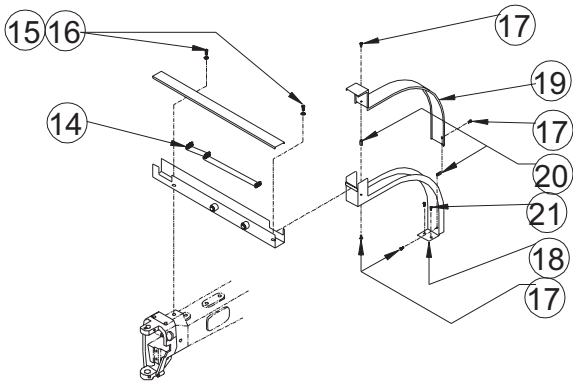
Lamp Assembly



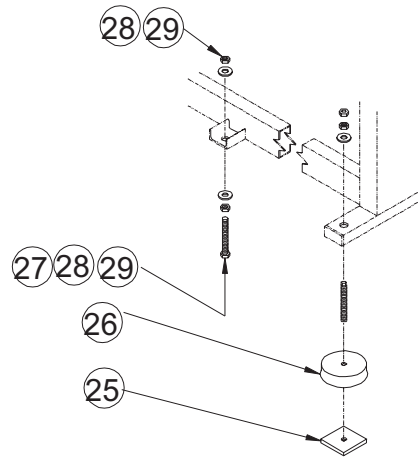
9 BLACK LAMP SUPPORT ASSEMBLY



13 CORDED BLACK LAMP SUPPORT ASSEMBLY

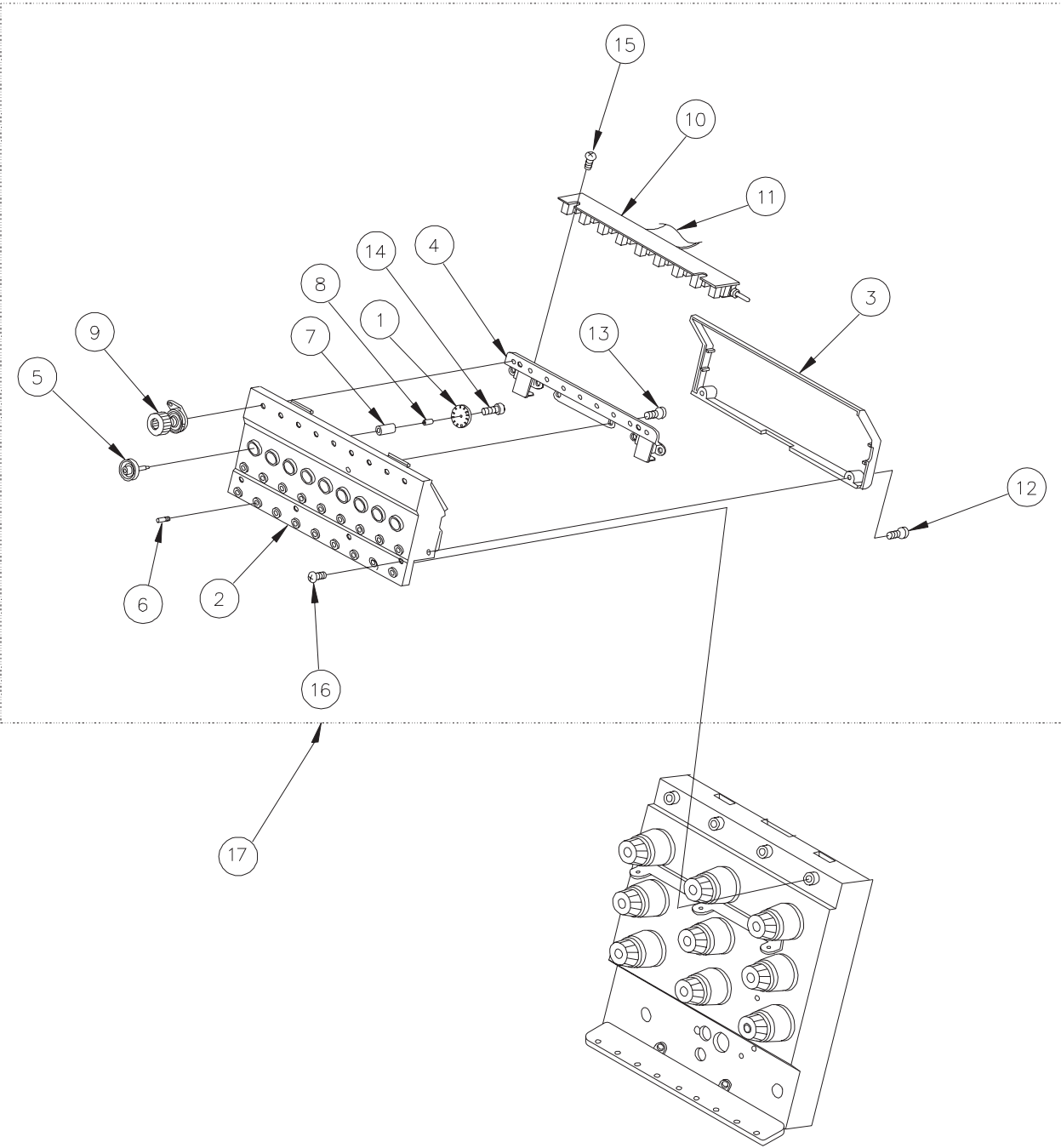


24 BENSME20, HEAD DUCT WIRING ASSEMBLY
 23 BENSME15, HEAD DUCT WIRING ASSEMBLY
 22 BENSME12, HEAD DUCT WIRING ASSEMBLY



LAMP ASSEMBLY					
ITEM	QTY 12	QTY 15	QTY 20	PART NUMBER	DESCRIPTION
1				A400040	LAMP FIXTURE 16' 120V
2	4	4	4	A400000	LAMP MOUNTING PIPE PLUG
3	4	4	4	A400002C	LAMP BRACKET ASSEMBLY
4	3	3	3	A400022A	LAMP MOUNTING PIPE
5	4	4	4	A400002B	LAMP BASE WELDMENT
6	8	8	8		#8-32 X 1/4" LG CROSS RECESSED HD SCREW
7	8	8	8		M8 X 40MM LG HEX HEAD BOLT
8	8	8	8		M8 FLAT WASHER
9	3	3	3	A400032A	BLACK LAMP SUPPORT ASSEMBLY
10	1	1	1	A400021	LAMP SUPPORT GROMMET
11	1	1	1	A400019	CORDED LAMP MOUNTING PIPE
12	1	1	1	A400023	LIGHT FIXTURE POWER CORD
13	1	1	1	A400022D	CORDED BLACK LAMP SUPPORT ASSEMBLY
14	1			2DKS12380	HEAD DUCT HARNESS (BENSME12-380)
15	6	8	10		M5 X 10MM LG HEX SOCKET HD CAP SCREW
16	6	8	10		M5 FLAT WASHER
17	4	4			M4 X 6MM LG TRUSS HD SCREW
18	1	1	1	KR510120	CABLE DUCT #4
19	1	1	1	KR510130	CABLE DUCT #4 COVER
20	2	2	2	MT510791	CABLE DUCT STANDOFF
21	2	2	2	P840446	#8-18 X 3/4" LG HEX HD #2 TEK SCREW
22	1			1UKS12380	WIRING DUCT (BENSME12-380)
23		1		1UKS15380	WIRING DUCT (BENSME15-380)
24			1	1UKS20280	WIRING DUCT (BENSME20-380)
25	4	4	4	A100487	LEVELING PLATE
26	4	4	4	HH120900	(140 X 70) MOUNT SET
27	6	8	8		5/8 X 11 X 5-1/2 HEXHEAD ZINC BOLT
28	12	16	16		5/8 X 11 ZINC HEX NUT
29	12	16	16		5/8 ZINC FLAT WASHER

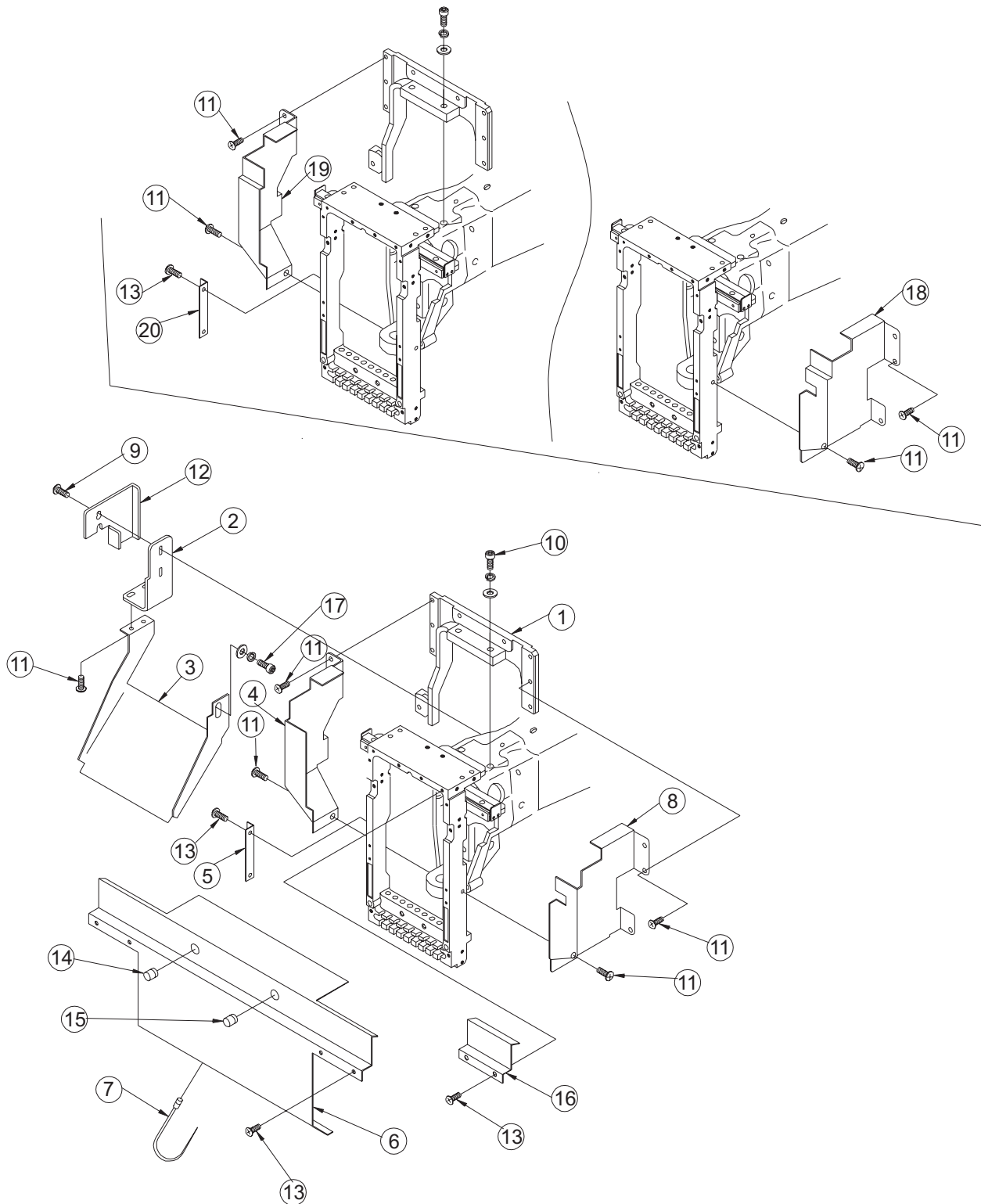
UTSM Option



From the library of: Diamond Needle Corp

UTSM OPTION				
ITEM	QTY.	PART NUMBER	DESCRIPTION	REMARKS
1	9	HT240100	LOWER THREAD SENSOR DISK (YN)	
2	1	HT240250	LOWER THREAD SENSOR BOX CASE (YN)	
3	1	HT240270	LOWER THREAD SENSOR BOX COVER	
4	1	HT240280	LOWER THREAD SENSOR BOX BASE	
5	9	HT240290	TENSION WHEEL	
6	18	HT240300	THREAD GUIDE PIN	
7	9	HT240310	TENSION WHEEL BEARING	
8	9	HT540510	TENSION WHEEL NUT	
9	9	HT240340	SECOND TENSION UNIT COMPLETE	
10		EBY01110	4690 UTSM BOARD	
11			SENSOR CABLE	
12			M3 X 6 PAN SCREW	
13			M3 X 8 TAPPING PAN SCREW	
14			M2 X 3 HEX SOCKET BOLT	
15			M3 X 12 TAPPING PAN SCREW	
16			M4 X 10 TRUSS SCREW	
17	1	HT240410	UTSM COMPLETE ASSY (YN/ZN/ZNA)	

Cover



From the library of: Diamond Needle Corp

COVER				
ITEM	QTY	PART NUMBER	DESCRIPTION	REMARKS
1	1	KB250050	SEWING HEAD COVER FIXING BRACKET	
2	1	KX270260	CAP COVER BRACKET	
3	1	KX270250	CAP COVER	
4	1	KX250050	SIDE COVER	
5	1	KC250070	FRONT COVER (L)	
6		KX330001	CC COVER W SWITCHES	
		KC330311	CC COVER	
7		A9068034	BAND WITH SNAP (SG-130)	
8	1	KX250040	SIDE COVER	
9			M4 X 12 TRUSS SCREW	
10			M5 X 20 HEX SOCKET BOLT (WITH WASHERS)	
11			M4 X 6 TRUSS SCREW	
12		KL250051	ARM SIDE CABLE COVER	
13			M3 X 6 TRUSS SCREW	
14		A9052032	PUSH BUTTON SWITCH (GREEN)	
		A110004	SWITCH BEZEL (SILVER)	
		B250011	BUTTON (GREEN)	
15		A9052036	PUSH BUTTON SWITCH (RED)	
		B250010	BUTTON (RED)	
16	1	KX250060	HEAD COVER	
17	1		M8 X 12 HEX SOCKET BOLT (WITH WASHERS)	
18	1	KX250140	SIDE COVER (R. HEAD FOR COLOR CHANGE)	FIRST HEAD
19	1	KX250150	SIDE COVER (L. LAST HEAD)	LAST HEAD
20	1	KX250160	FRONT COVER (L. LAST HEAD)	LAST HEAD