

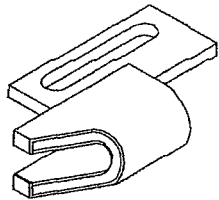
PARTS MANUAL

300W SEWING HEAD

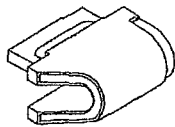


JAMES CASH MACHINE CO INC
100 OUTER LOOP - LOUISVILLE KY 40214 USA
PHONE: (502) 361-1726 FAX: (502) 361-4287

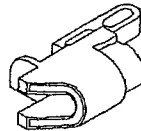
Frequently Ordered Parts



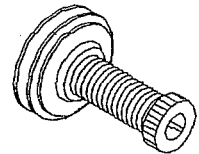
20022 Binder
Available In 1-1/4 Or 1-1/2



259552
Available In 3/4 Or 1 In.



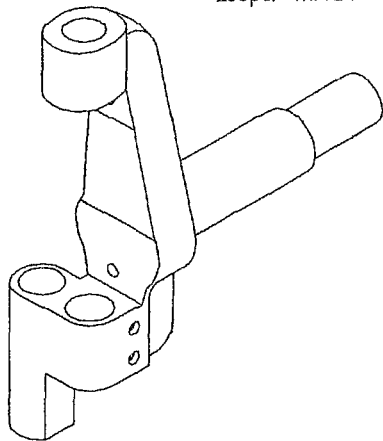
259552
Available In 5/8 Or 7/8 In.



267971
Needle Thread Tension



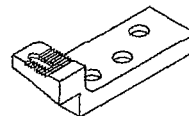
268332
Looper Thread Tension



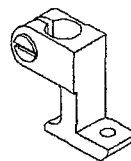
267637
Needle Bar Rock Frame



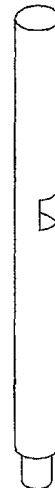
268603
Needle Bar



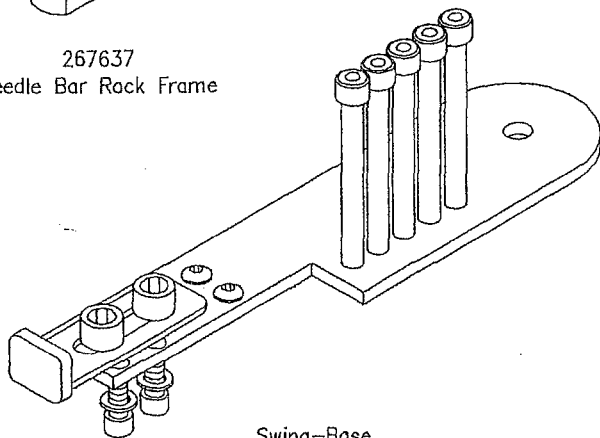
20047
Feed Dog



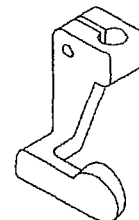
267659
Vib. Presser Foot



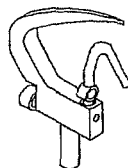
267628
Lifting Presser Bar



Swing-Base
Swing Base Complete



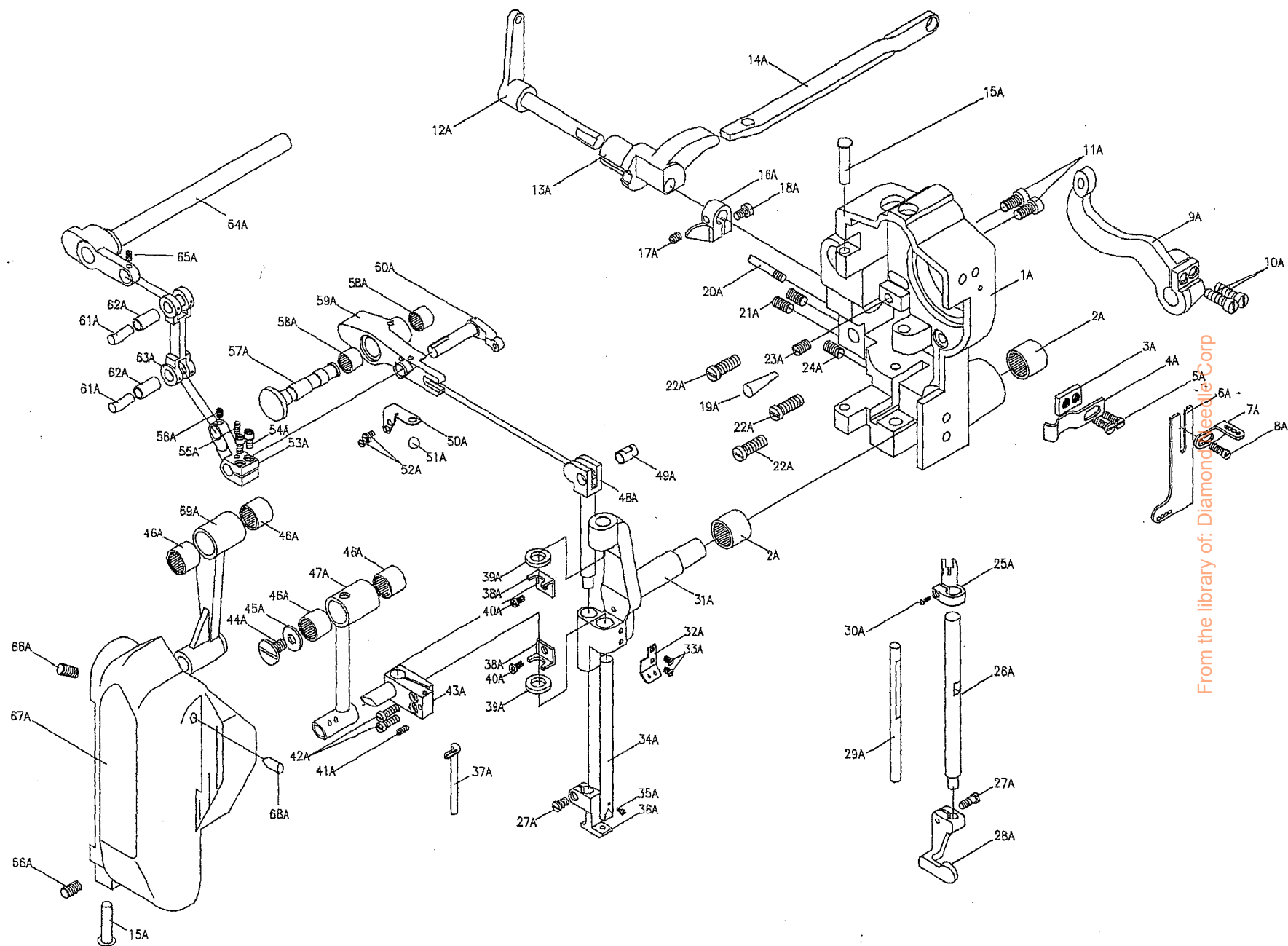
267632
Lifting Presser Foot



268380
Looper



268638
Spreader

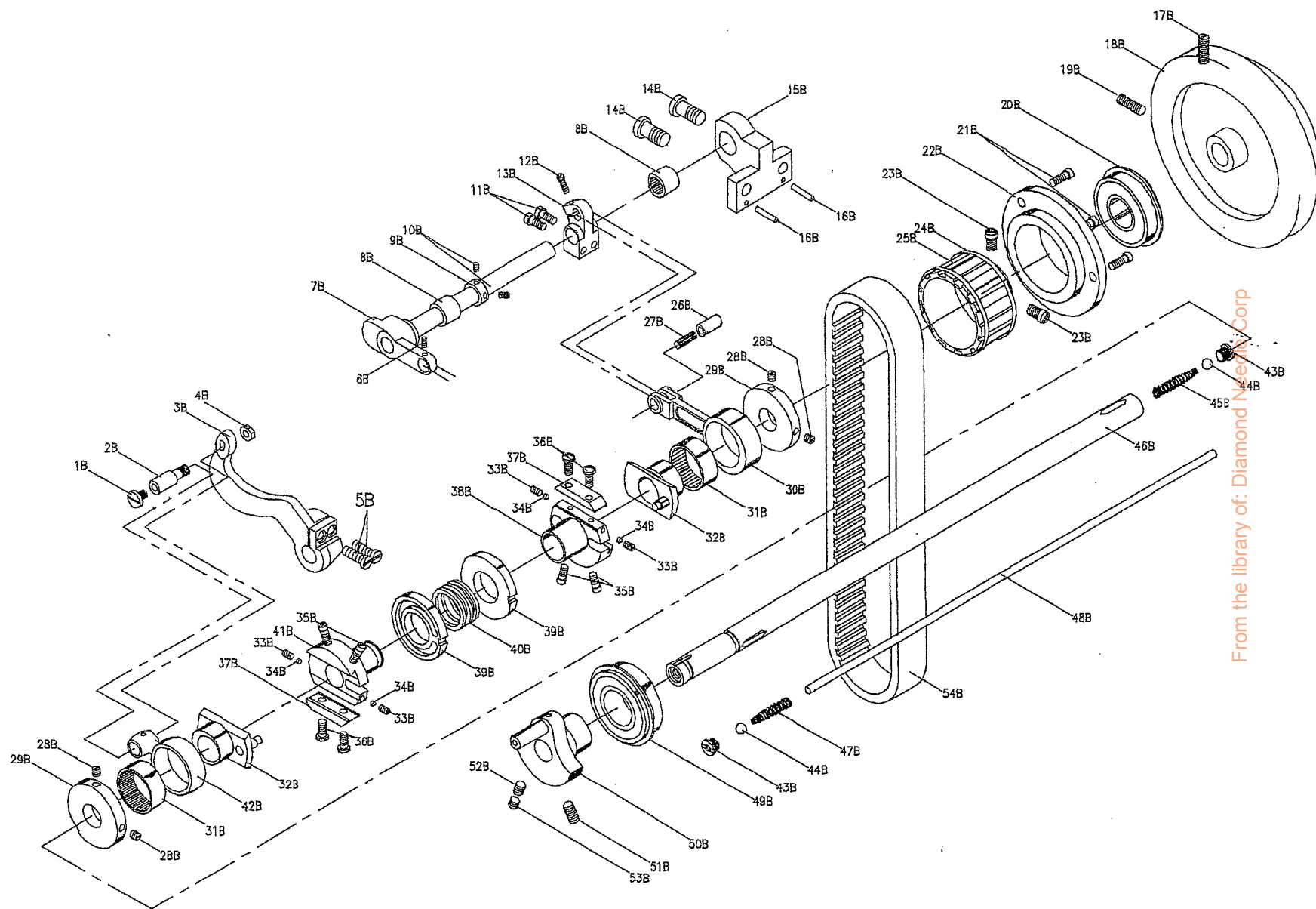


From the library of: Diamond Sewing Corp

REF #	PART #	DESCRIPTION
1A	267905	300W Front Housing Casting
2A	268029	Needle Bearing
3A	268197	Spring Plate
4A	268032	Lock Spring
5A	200571(850)	Screw, Spring Plate
6A	268312	Thread Guide
7A	268513	Thread Guide
8A	200082(804)	Thread Guide Screw
9A	267738	Driving Arm (Includes (2) Ref# 10A)
10A	200043(803)	Driving Arm Screws
11A	201254(803)	Screw SCS 1/4-28 x 1/2
12A	267612	Foot Lift Crank
13A	267719	Fulcrum
14A	267738	Presser Bar Spring Arm
15A	268330	Door Pin
16A	267702	Foot Lift Arm (Includes Ref# 17A, 18A)
17A	200373(803)	Screw
18A	200058(803)	Screw
19A	204235	Pin
20A	200650(819)	Lifter Crank Stop Stud
21A	200362	Lifting Lever Hinge Stud Set Screw
22A	200029(805)	Screws Front Housing Casting
23A	200351(830)	Screw
24A	200417(830)	Screw
25A	267629	Pr. Bar Guide Block (Includes Ref# 30A)
26A	267628	Lifting Pr. Bar
27A	200078	Presser Ft. & Arm Side Cover Screw
28A	267632	Lifting Presser Foot (Includes Ref# 27A)
29A	267907	Guide Rod
30A	200066	Screw
31A	267637	Needle Bar Rock Frame Singer (Includes (2) Ref# 33A (2) 40A)
32A	268219	1/4 Thread Guide
33A	200583(803)	Screw
34A	268603	Needle Bar 300U (Includes Ref# 35A)
35A	200125	Needle Bar Screw
36A	267659	Vib. Pr. Foot (Includes Ref# 37A)
37A	268512	Thread Guide
38A	268278	Oiling Felt Holder
39A	268144	N. Bar Oiling Felt

REF #	PART #	DESCRIPTION
40A	200173(804)	Screw
41A	201188(803)	Screw
42A	200069(803)	Screw
43A	268141	Ndl. Bar Connecting Stud (Includes (1) Ref# 41A (2) 42A)
44A	200095(819)	Screw
45A	268139	Washer
46A	270266	Link Ndl. Bearing
47A	268056	Connecting Link
48A	267657	Vib. Presser Bar
49A	267658	Pr. Bar Hinge Stud
50A	267718	Bearing Retainer
51A	25362	Ball Bearing
52A	201409(806)	Screw
53A	267983	Arm (Includes (2) Ref# 54A (1) 55A (1) 56A)
54A	200061(833)	Screw
55A	200418(803)	Set Screw
56A	200167(805)	Allen Set Screw
57A	267626	Stud
58A	GB66-OH	Ndl. Bearing
59A	267625	Lifting Lever (Includes (2) Ref# 58A)
60A	267631	Pr. Bar Lifting Crank
61A	244071	Wick
62A	267617	Link Hinge Pin
63A	267627	Lifting Link
64A	32789	Lifting Rock Shaft (Assem. only) (Includes Ref# 64A)
65A	200167(805)	Allen Set Screw
66A	201416(803)	300W Face Plate Set Screws
67A	267607	300W Face Plate (Includes (2) Ref# 66A (1) 68A)
68A	268033	Lock Stud

From the library of: Diamond Needle Corp

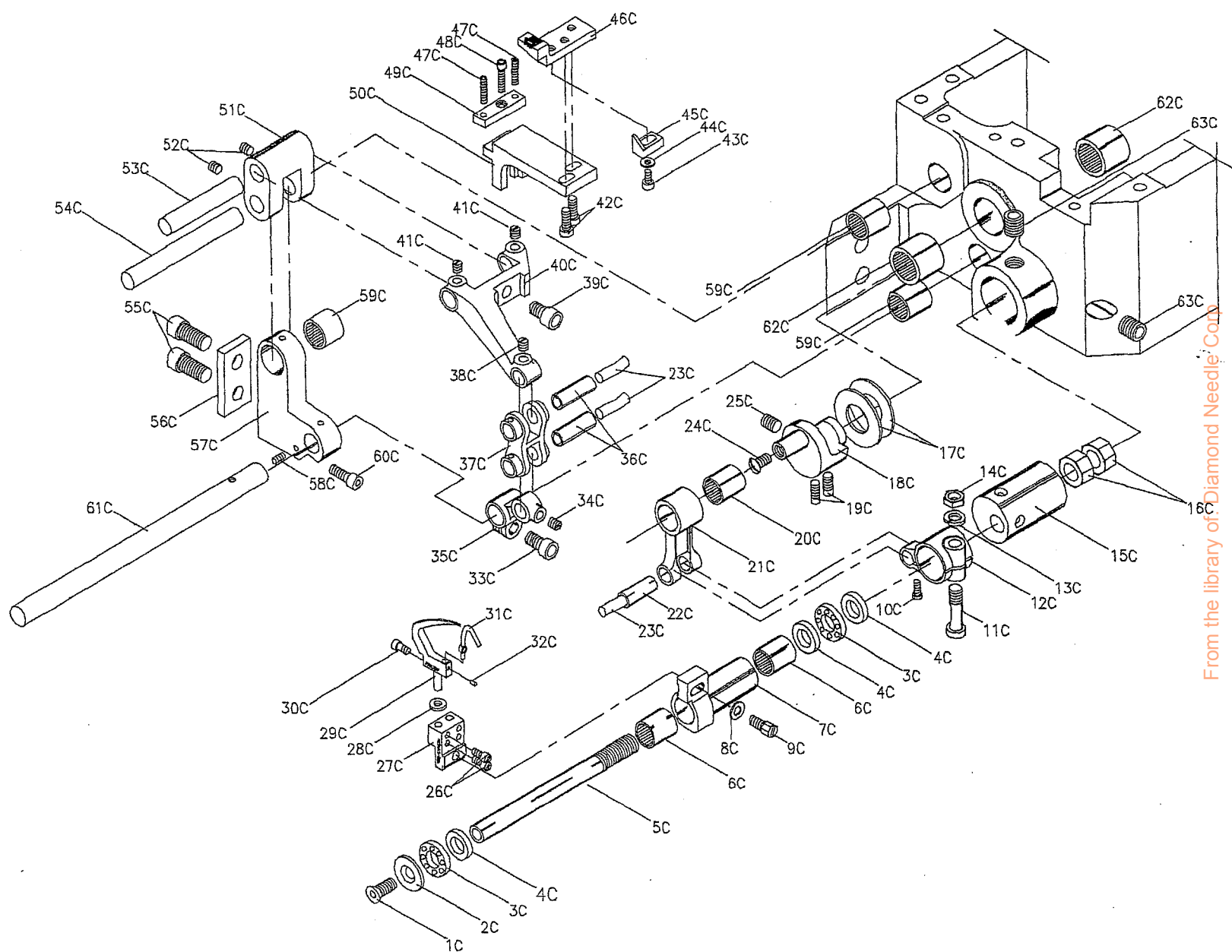


From the library of: Diamond Metals Corp

REF #	PART #	DESCRIPTION
1B	200123(804)	Screw
2B	268062	Hinge Stud
3B	267638	Driving Arm (Includes (2) Ref# 5B)
4B	201522(805)	Nut
5B	200043(803)	Screws
6B	200167(805)	Allen Set Screw
7B	32789	Lifting Rock Shaft (Assem. Only) (Includes Ref# 6B)
8B	267110	Needle Bearing
9B	268072	Rock Shaft Collar (Includes (2) Ref# 10B)
10B	200386(803)	Rock Shaft Collar Set Screw
11B	200058(803)	Screws
12B	201063(805)	Pinch Screw
13B	267621	Crank (Includes (2) Ref# 11B (1) 12B)
14B	200030(819)	Screws
15B	267635	Lifting Rock Shaft Bracket
16B	8554	Lifting Rock Shaft Bracket Position Pins
17B	200328(803)	Balance Wheel Screw
18B	268049	Balance Wheel (Includes Ref# 17B, 19B, 20B)
19B	200327(803)	Balance Wheel Screw
20B	268024	Shaft Ball Bearing
21B	200047(804)	Stud Screw
22B	268004	Bearing Housing
23B	201254(803)	Pulley Screws
24B	202253	Spring Flange
25B	268006	Top Pulley (Includes (2) Ref# 23B, (2) 24B)
26B	267617	Link Hinge Pin
27B	244071	Wick
28B	200380(803)	Set Screw
29B	267624	Collar (Includes (2) Ref# 28B)
30B	268493	Lift Ecc. Connection (Includes Ref# 31B)
31B	267055	Needle Bearing
32B	267610	Feed Drive Eccentric
33B	350477(830)	Screw
34B	241763	Packing Fibre
35B	350467(803)	Screws
36B	350548(803)	Screws
37B	267623	Friction Plate
38B	267622	Ecc. Flange (Includes (2) Ref# 33B (2) 34B (2) 35B (2) 36B (1) 37B)

REF #	PART #	DESCRIPTION
39B	268065	Ecc. Adjusting Disc
40B	267618	Adjusting Disc Spring
41B	267639	Ecc. Flange (Includes (2) Ref# 33B (2) 34B (2) 35B (2) 36B (1) 37B)
42B	268061	Feed Drive Connection
43B	350534(803)	Ball Screw
44B	268214	Oil Stop Ball
45B	268044	Oil Stop Ball Spring
46B	267603	Arm Shaft (Includes (2) Ref# 43B, (2) 44B, (1) 45B, (1) 47B, (1) 48B)
47B	268009	Oil Stopball Spring
48B	268264	Oil Control Rod
49B	268005	Shaft Bearing
50B	267705	Crank High Lift (Includes (1) Ref# 51B, (1) 52B, (1) 53B)
51B	200346(803)	Screw
52B	200354(803)	Screw
53B	200378(803)	Screw
54B	268270	Connection Belt

From the library of: Diamond Needle Corp

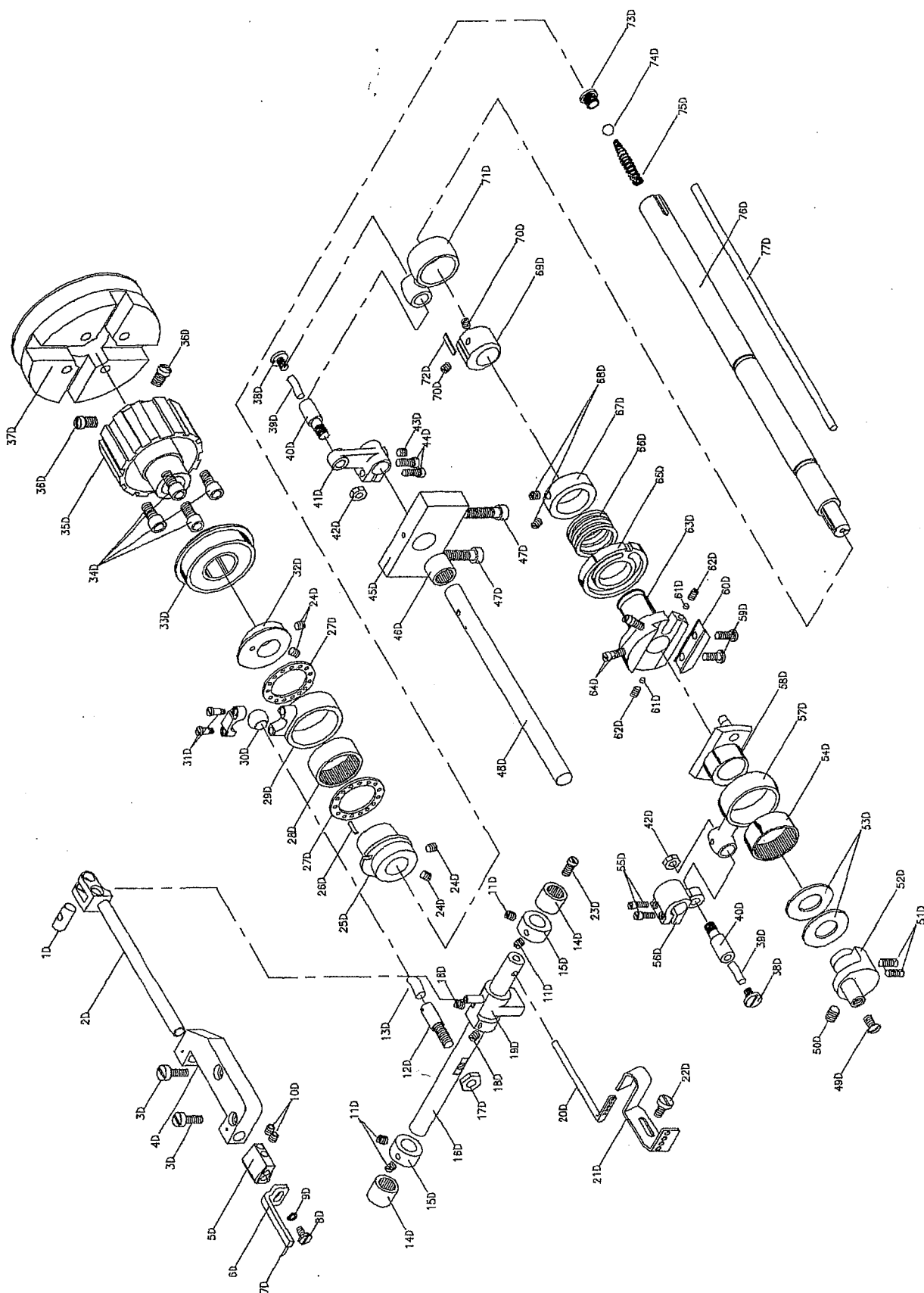


From the library of: Diamond Needle Corp.

REF #	PART #	DESCRIPTION
1C	20062S	Pivot Shaft Screw
2C	20062W	Pivot Shaft Washer
3C	TC141MSC	Thrust Bearing
4C	TC141CSH	Thrust Washer
5C	20062	Pivot Shaft (Includes Ref# 1C, 2C,)
6C	268099	Needle Bearing
7C	268368	Looper Carrier (Includes (2) Ref# 6C)
8C	208636	Washer
9C	350267(805)	Screw
10C	200089(803)	Pinch Screw
11C	268308	Crank Clamp Stud
12C	268307	Looper Carr. Crank (Includes Ref# 10C, 11C, 13C, 14C,)
13C	67425	Washer
14C	201524(805)	Nut
15C	268097	Looper Carrier Shaft Bushing
16C	20063	Looper Pivot Lock Nut
17C	20059	Feed Lifting Conn. Spacer
18C	268277	Driving Crank (Includes (2) Ref# 19C, (1) 24C, (1) 23C,)
19C	200344(830)	Screws
20C	268099	Needle Bearing
21C	268216	Looper Drive Connection (Includes Ref# 20C)
22C	268208	Crank Hinge Pin
23C	268258	Packing Wick
24C	200573(804)	Screw
25C	200362(803)	Screw
26C	350478(803)	Looper Holder Screws
27C	268103	5/16 Looper Holder
28C	268380S	Looper Spacer
29C	268380	Looper (Includes Ref# 29C, 30C, 31C,)
30C	141478	Looper Screw
31C	268310	Needle Guard
32C	141220(869)	Looper Set Screw
33C	140306	Allen Screw
34C	200373(803)	Set Screw
35C	268075	Feed Lifting Crank (Includes Ref# 32C, 33C)
36C	268079	Link Hinge Pin 7/8" Modified
37C	268078	Feed Lifting Link (Modified)

REF #	PART #	DESCRIPTION
38C	200373(803)	Screw
39C	20080	Allen Screw
40C	268291	Feed Bar Mod. (Includes (2) Ref# 40C, (1) 37C, (1) 38C)
41C	200403(830)	Feed Bar & Ecc. Set Screw
42C	20046	Feed Dog Mounting Screws
43C	20048	Needle Deflector Plate Screw
44C	20048W	Needle Deflector Plate Washer
45C	20049	Needle Deflector Plate
46C	20047	Feed Dog
47C	20052SS	Safety Block Set Screw 6-32 x 3/8
48C	20052SCS	Safety Block Soc. Cap 6-32 x 1/2
49C	20052SB	Feed Dog Mounting Bracket Safety Block
50C	20052A	Feed Dog Mounting Bracket
51C	20074	Feed Dog Swivel Bracket (Includes (2) Ref# 51C)
52C	20075	Feed Dog Swivel Bracket Set Screw
53C	268035	Feed Bar Hinge Pin
54C	267933	Feed Driving Rock Shaft
55C	20016	Feed Shaft Bearing Support Attachment Screw
56C	20017	Feed Shaft Bearing Support Spacer
57C	20021A	Feed Dog Bearing Support (Includes Ref# 57C, 58C, 59C)
58C	21004	Feed Dog Bearing Support Set Screw
59C	GB78	Needle Bearing
60C	21005	Feed Dog Bearing Support Pinch Screw Soc. Cap 8-32 x 1/2
61C	268070	Feed Lifting Rock Shaft
62C	268029	Needle Bearing
63C	20084	Looper Carrier Shaft Bushing Set Screw 5/16-18 x 1/2

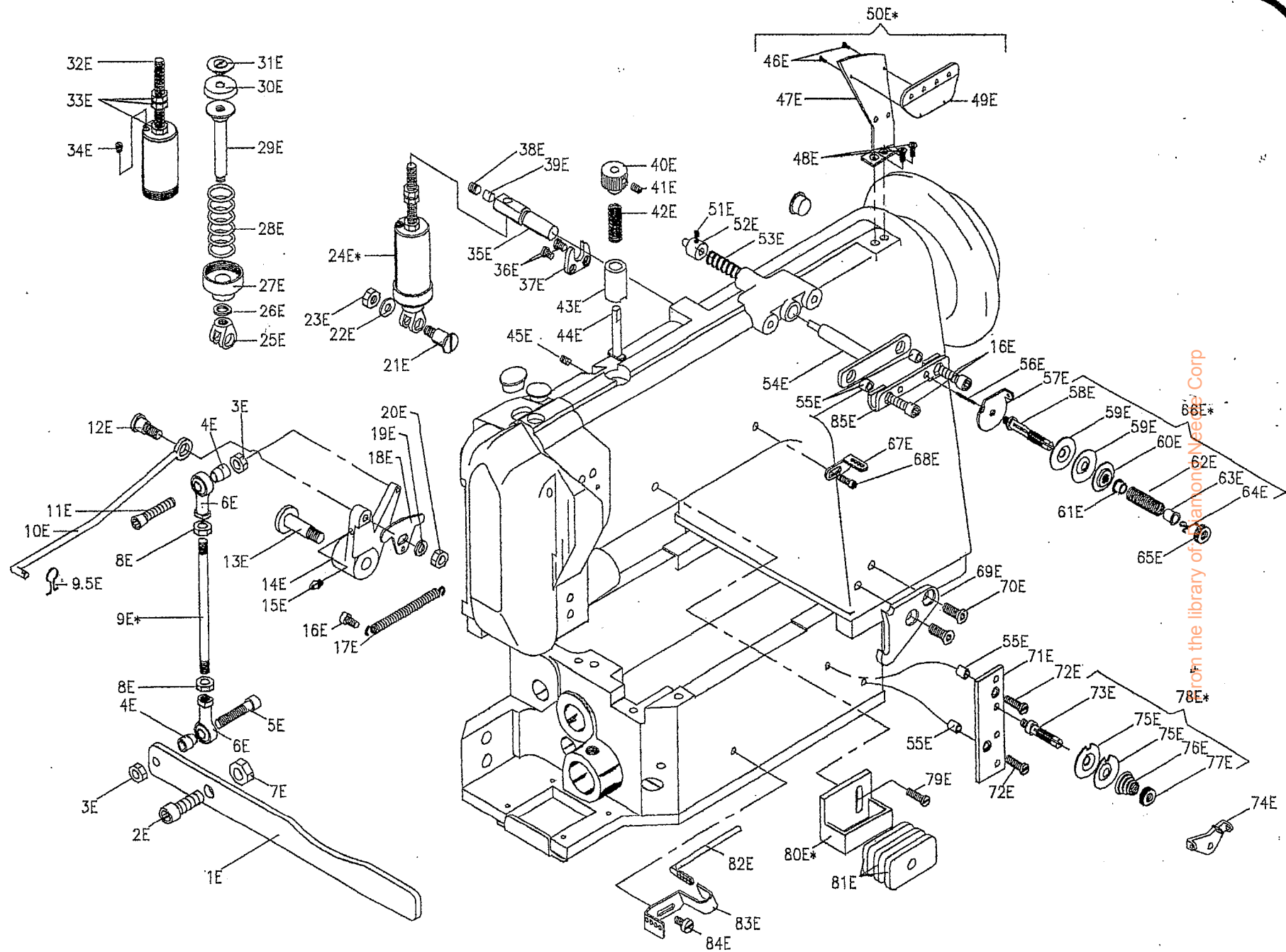
From the library of: Diamond Needle Co.



REF #	PART #	DESCRIPTION
1D	268190	Spreader Drive Pin
2D	268499	Spreader Bar
3D	200035(805)	Screws
4D	268184	Bearing
5D	268185	Spreader Holder (Includes (2) Ref# 10D)
6D	268638	Spreader
7D	268162	Spreader Point
8D	350149(803)	Spreader Screw
9D	204925	Spreader Spring Stud Washer
10D	200380(803)	Spreader Holder Set Screw
11D	200386(803)	Spreader Shaft Collar Set Screw
12D	350466	Screw Stud
13D	263572	Oil Packing Wick
14D	268071	Needle Bearing GB78-OH
15D	268072	Spreader Shaft Collar (Includes (2) Ref# 11D)
16D	268053	Driving Rock Shaft
17D	201736(805)	Nut
18D	200373(803)	Fd. Bar & Fd. Lifting Ecc. Set Screw
19D	267967	Driving Crank (Includes (2) Ref# 17D)
20D	268052	Looper Take Up Rod
21D	268051	Looper Thread Guide
22D	200035(804)	Looper Thread Guide Screw
23D	200064(806)	Looper Take Up Rod Screw
24D	200354(803)	Counter Balance Set Screw
25D	268045	Counter Balance (Includes (2) Ref# 23D (1) 25D)
26D	543808002	Counter Balance Pin
27D	268220	Thrust Washer
28D	268063	Needle Bearing
29D	268186	Spring Driving Connection (Includes Ref# 27D, 29D, (2) 30D)
30D	351876	Roller
31D	201020(805)	Spring Driving Connection Cap Screw
32D	268046	Counter Balance (Includes (2) Ref# 23D)
33D	268024	Bottom Shaft Ball Bearing
34D	20117	Lower Drive Pulley Screws
35D	268028	Conn. Belt Pulley Bottom (Includes (2) Ref# 36D)
36D	201254(803)	Pulley Locking Screws
37D	20116	Lower Drive Pulley
38D	200123	Hinge Stud Screw
39D	268258	Packing Wick

REF #	PART #	DESCRIPTION
40D	268062	Hinge Stud
41D	268198	Rock Shaft Crank (Includes (2) Ref# 42D (1) 41D)
42D	201522(805)	Hinge Stud Nut
43D	201418(803)	Rock Shaft Crank Set Screw
44D	200061(833)	Rock Shaft Crank Pinch Screw
45D	21000	Bearing Support
46D	GB78-OH	Needle Bearing
47D	21001	Bearing Support Soc Cap screw
48D	268070	Driving Rock Shaft
49D	200573(804)	Driving Crank Screw
50D	200362(803)	Driving Crank Set Screw
51D	200344(830)	Driving Crank Set Screw
52D	268277	Driving Crank (Includes (2) Ref# 49D, (1) 48D)
53D	20059	Driving Crank Spacers
54D	268060	Needle Bearing
55D	200061(833)	Pinch Screw
56D	268073	Rock Shaft Crank (Includes (2) Ref# 55D)
57D	268061	Feed Drive conn. (Includes Ref# 54D)
58D	268064	Feed Drive Eccentric
59D	350548(803)	Screw
60D	267623	Friction Plate
61D	241763	Packing Fibre
62D	350477(830)	Screw
63D	268315	Feed Drive Flange (Includes (2) Ref# 57D, (1) 58D, (2) 59D, (2) 60D, (2) 62D)
64D	350467(803)	Screw
65D	268065	Ecc. Adjusting Disc
66D	268066	Adjusting Disc Spring
67D	268067	Collar (Includes (2) Ref# 66D)
68D	200382(833)	Collar Set Screw
69D	268047	Feed Lift Ecc. (Includes (2) Ref# 68D, (1) 70D)
70D	200394(803)	Feed Lift Ecc. Set Screw
71D	268074	Feed Lift conn.
72D	268077	Lubricating Pad
73D	350534(803)	Ball Screw
74D	268214	Oil Stop Ball
75D	268044	Oil Stop Spring
76D	268054	Bed Shaft (Includes Ref# 71D, 72D, 73D, 75D)
77D	268265	Control Rod

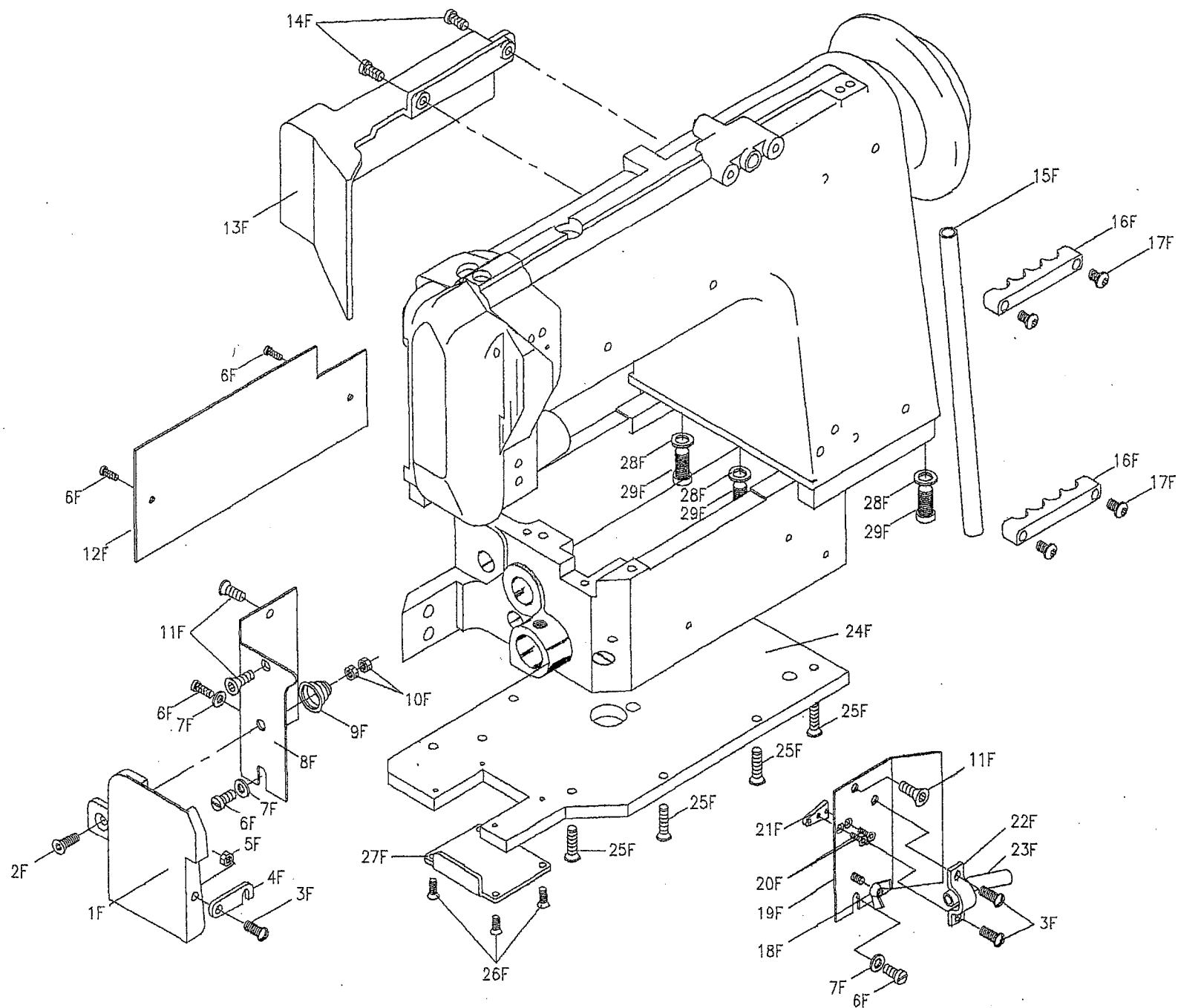
From the library of: Diamond Needle Corp.



REF #	PART #	DESCRIPTION
1E	20038	Foot Lifter Arm
2E	20026	Foot Lifter Arm Mounting Screw
3E	20036	Hex Nut
4E	20035	Conn. Link Spacer
5E	20029	Socket Cap Screw
6E	20032R	Mod. Rod End
7E	20028	Foot Lifter Lever Nut
8E	20032N	Hex Nut
9E	20032	Foot Lifter Conn. Complete (Includes (2) Ref# 6E, (2) 8E)
9.5E	248423	Cotter Pin
10E	267704	Lifter Lever Rod
11E	20034	Conn. Link Screw
12E	350524(829)	Tension Release Cam Screw
13E	201363	Screw
14E	268085	Foot Lifter Lever 300W
15E	201160(805)	Screw Eye
16E	350467(803)	Stud Screw
17E	204348	Switch Spring
18E	267707	Releasing Plate
19E	206133	Washer
20E	201526(805)	Nut
21E	414567	Screw
22E	548154	Washer
23E	545405	Nut
24E	267660	Housing Complete (Includes Ref# 24E, 25E, 26E, 27E, 28E, 29E, 30E, 31E, (2) 32E, (1) 33E)
25E	415113	Presser Bar Spring Arm Fork
26E	267645	Fork Lock Washer
27E	267653	Presser Bar Bushing
28E	267641	Presser Bar Spring
29E	415387	Presser Bar Spring Plunger
30E	267655	Presser Bar Washer
31E	415115	Presser Bar Spring Plunger Cap
32E	350561	Screw
33E	201524	Nut
34E	414523	Screw
35E	267714	Cylinder Support
36E	200098	Cylinder Support Screws
37E	267650	Cylinder Support Retainer
38E	544358	Screw
39E	244084	Packing Fibre
40E	264709	Stud Cap
41E	200364(803)	Set Screw
42E	214529	Spring
43E	268149	Sleeve

REF #	PART #	DESCRIPTION
44E	268148	Stud
45E	200337(803)	Screw
46E	50169	Screws
47E	268111	Looper Thread Bracket
48E	200578(850)	Screws
49E	268505	Looper Thread Guide
50E	268506	Thread Guide Bracket Assem. (Includes (2) Ref# 45E, (1) 46E, (1) 48E)
51E	201052(833)	Screw
52E	268169	Tension Release Cap (Includes Ref# 50E)
53E	204365	Spring
54E	268168	Tension Releaser
55E	268121	Spacing Collar
56E	226206	Latch Spring Pin
57E	54279	Thread Guide
58E	50326	Stud Tension
59E	2102	Tension Disc
60E	32572	Tension Disc
61E	59538	Spring Bushing
62E	131741	Tension Spring
63E	59537	Spring Bushing
64E	143658	Clip
65E	51570	Nut
66E	267971	Thread Tension Assembly (Includes Ref# (2) 58E, 59E, 60E, 61E, 62E, 63E, 64E)
67E	268513	Thread Guide
68E	200082	Screw
69E	29999C	Foot Lifter Holder Plate
70E	29998C	Flat Head Socket Cap
71E	268331	Looper Regulator Bracket
72E	200562	Looper Regulator Bracket Screw
73E	141432	Looper Thread Tension Stud
74E	268333	Thread Guide
75E	244048	Tension Disc
76E	10148	Tension Spring
77E	201572	Tension Nut
78E	268332	Looper Thread Tension Assembly (Includes Ref# 73E, (2) 75E, 76E, 77E)
79E	200064	Thread Lubricator Screw
80E	267656	Thread Lubricator (Includes (3) Ref# 80E)
81E	236957	Oil Felt Pad
82E	268052	Looper Take Up Rod
83E	268051	Looper Thread Guide
84E	200035	Looper Thread Guide Screw
85E	268167	Tension Bracket

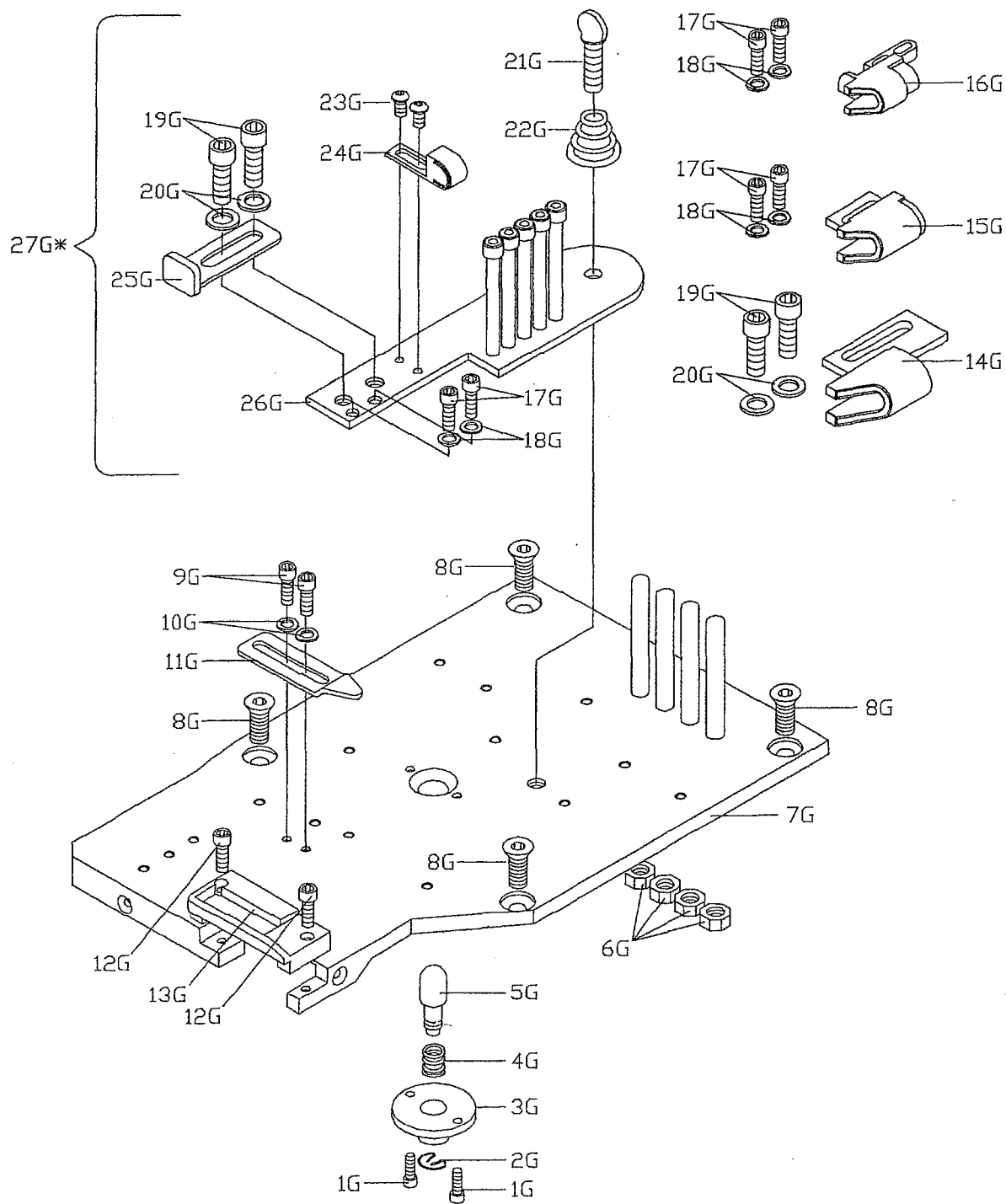
From the library of Diamond Needle Corp



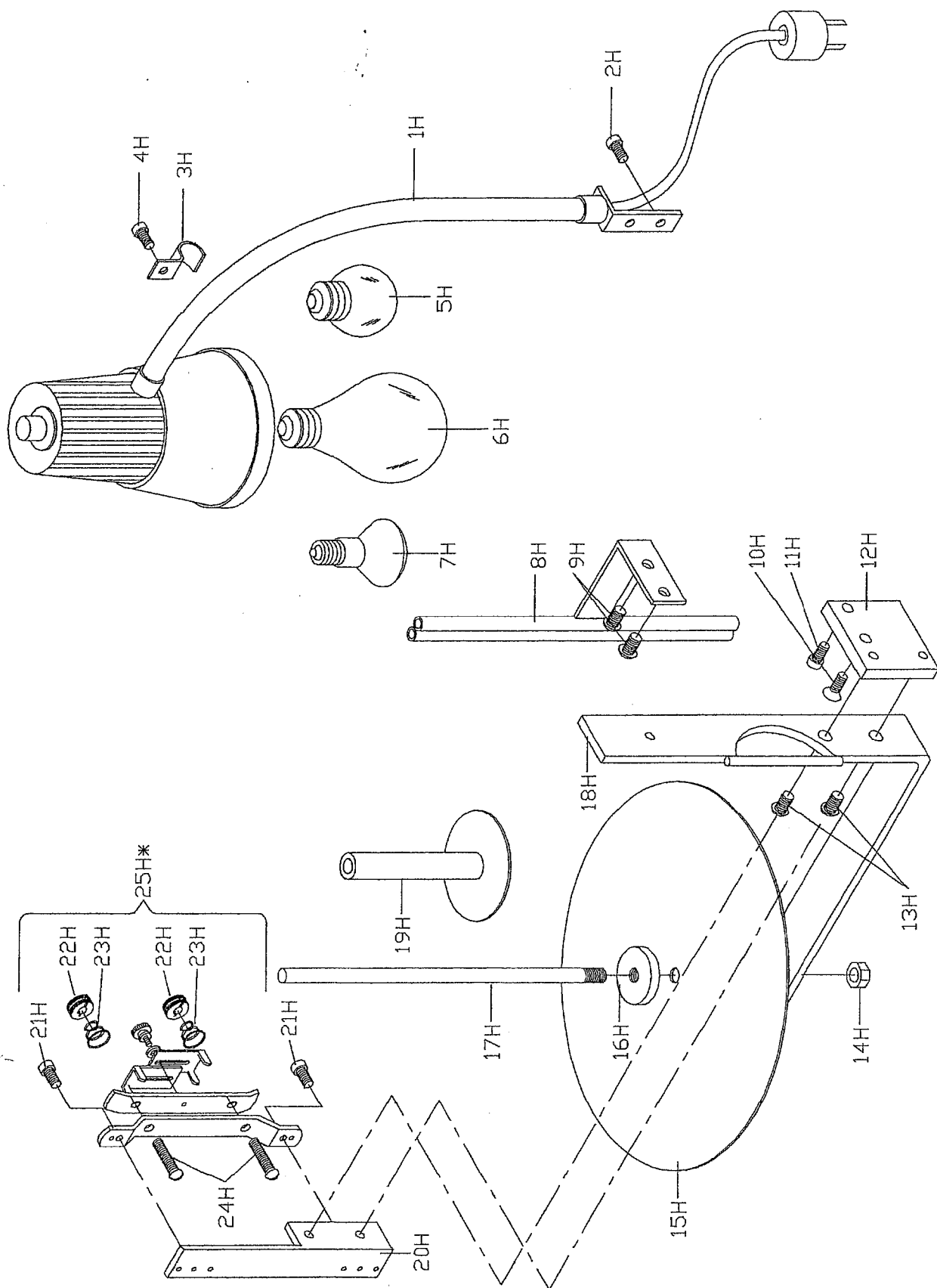
REF # PART

DESCRIPTION

1F	20111	Bottom Door (Includes Ref# 3F, 4F, 5F)
2F	20111FH	Bottom Door Flat Head Screw
3F	20111S	Bottom Door Latch Screw
4F	20111L	Bottom Door Latch
5F	20111N	Bottom Door Latch Nut
6F	20115	Cover Screws
7F	20108	Flat Washer
8F	20112	Front Housing
9F	GP200246SP	Spring Front Housing
10F	20108N	Front Housing Lock Nut
11F	20064	Flat Head Screw Cover
12F	20114	Left Side Housing
13F	267604	Arm Side Cover 300W
14F	200078	Cover Screws
15F	268123	Thread Tube
16F	268124	Thread Tube Clamp
17F	200054	Thread Tube Clamp Screws
18F	20121W	Wing Nut
19F	20121	Right Side Housing Assem. (Includes Ref# 19F, (2) 21F, (1) 22F (1) 23F, (1) 24F, (2) 3F)
20F	20124	Flat Head Screw
21F	20122	Thread Guide
22F	20121C	Right Side Housing Tube Clamp
23F	20121T	Right Side Housing Thread Tube
24F	20105	Bottom Base Plate
25F	20107	Flat Head Socket Cap
26F	21005ACS	Bottom Access Plate Srew
27F	20105AC	Bottom Access Plate
28F	202005	Washer (Qty. Of 4)
29F	200004	Arm Screw (Qty. Of 4)

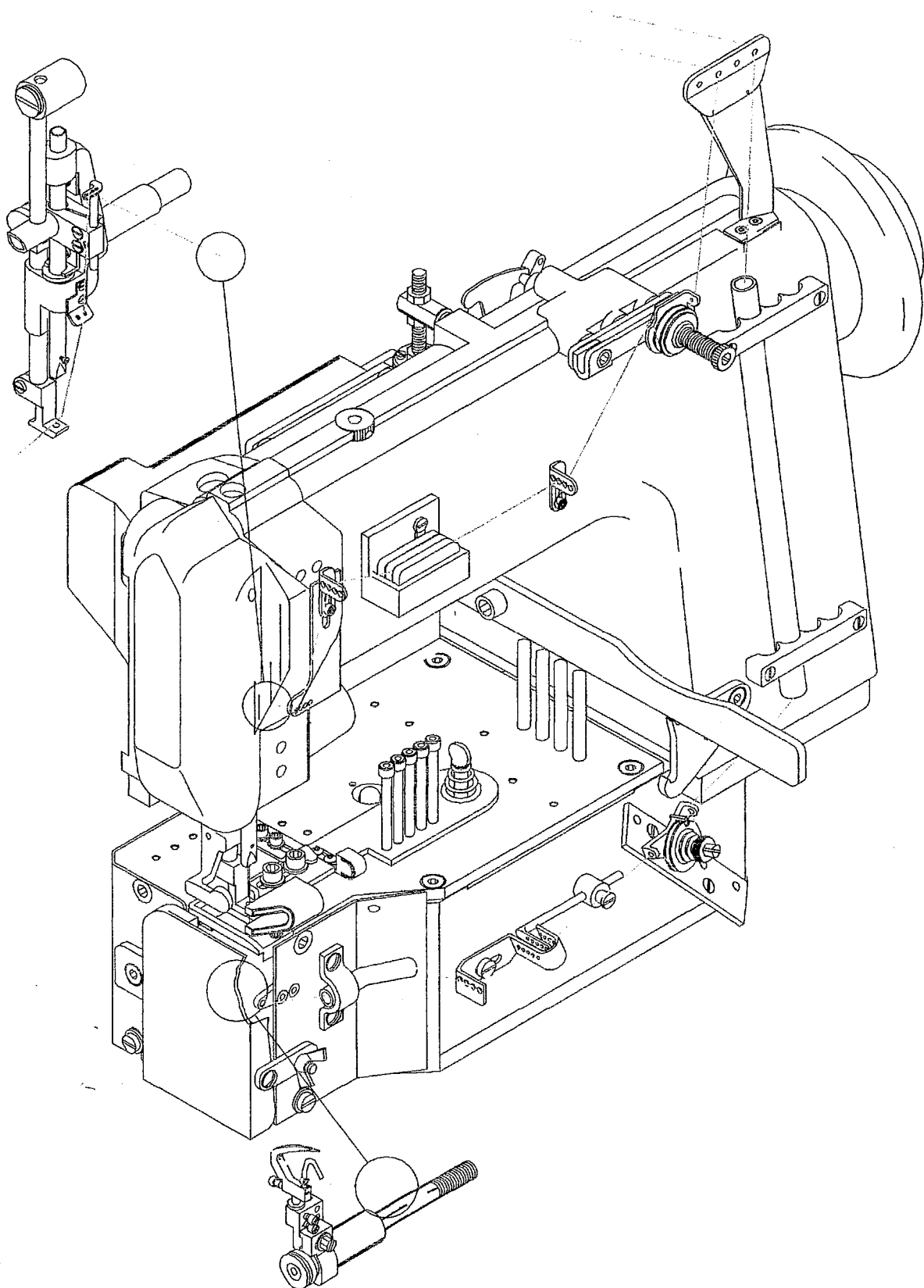


REF #	PART #	DESCRIPTION
1G	20113	Socket Cap Screw
2G	240245	Retaining Spring
3G	268082	Socket
4G	270026	Feed Reg. Stud Spring
5G	268081	Feed Reg. Stud
6G	20104N	Top Base Plate Nut
7G	20104	Top Base Plate
8G	20106	Base Plate Screw
9G	20041	Binder Plate Stop Mounting Screws
10G	20042	Binder Plate Stop Mounting Screw Washer
11G	20027	Binder Stop Plate
12G	20120	Throat Plate Screws
13G	20119	Throat Plate
14G	20022	Binder Available In Two Sizes 1-1/4 Or 1-7/16 1-1/2
15G	259552	Binders Two Available In This Style 3/4 Or 1 In.
16G	259552	Binders Two Available In This Style 5/8 or 7/8 In.
17G	259552S	Binder Screw
18G	259552W	Binder Screw Washer
19G	20014	Binder Screw
20G	20013	Binder Washer
21G	20007	Swing Base Thumb Screw
22G	225708	Binder Plate Tension Spring
23G	240659BH	Tape Guide Button Head Screws
24G	240659	Tape Guide Available In Sizes 5/8" 3/4" 7/8"
25G	20023	Binder Stop Guide For 1-1/4 - 1-7/16 - 1-1/2 Binders
26G	20012	Swing Base (No Welt Attachment)
27G	SWING-BASE	MSC Swing Base (Includes Ref# 26G, (2) 17G, (2) 18G, (2) 19G, (2) 20G, (1) 25G, (2) 23G)



REF #	PART #	DESCRIPTION
1H	29R901	Light Assembly
2H	29R902S	Light Mount Screw
3H	29R901C	Light Mount Clamp
4H	29R902S	Light Mount Screw
5H	NT-219	Old Style Bulb
6H	29R901B	50 Watt Rough Service Bulb
7H	25R14N	Old Style Bulb
8H	NT-153	Thread Tube
9H	NT-211	Thread Tube Screws
10H	NT-207	Flat Head Socket Cap Screw
11H	NT-206	Socket Cap Screw
12H	NT-152	Mounting Plate
13H	NT-205	Tape Stand Mounting Screws Button Heads
14H	NT-202	Nut For Tape Spool Rod
15H	NT-209	Tape Reel Plate
16H	NT-201W	Tape Spool Rod Washer
17H	NT-201	Tape Spool Rod
18H	NT-200	Thread Spool Bracket
19H	NT-210	Thread Spool Holder
20H	NT-151	Tape Tens. Mount. Bracket
21H	NT-220	Socket Cap Screw
22H	NT-154	Tape Tension Thumb Nut
23H	NT-156	Tape Tension Spring
24H	NT-159	Tape Tension Screws
25H	NT-154160	Tape Tension Assembly

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SEWING ADJUSTMENTS

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1. Set both top and bottom shafts on "D" setting on balance wheel.
2. Turn the balance wheel so that the looper is at its' extreme rearward movement. There should be a $5/32$ " space between the point of the looper and the edge of the needle.
3. Turn the balance wheel and see that the looper crosses the scarf of the needle in exactly the same place on both the forward and return movements . If it does not release the large set screw in the looper driving crank (Ref.#18C) then adjust the stroke using the two offset screws to attain the proper position. Then tighten the large set screw.
4. Raise or lower the needle bar as may be necessary in order for the looper to pass directly through the center of the needle scarf.
5. Set the needle loop deflector plate (Ref.#45C) so there is a $1/32$ " between the face of the plate and the back of the needle.
6. Set the looper needle guard (Ref.#31C) as close to the needle as possible without actually touching it. Care must be exercised so that the eye of the needle remains above the incline of the guard on the upward stroke of the needle. It may be necessary to compromise step #4 and raise the needle bar if the needle eye is so obstructed.
7. The spreader (Ref.#7D) should be set so that on its' rearward movement there should be $1/16$ " between the point of the spreader and the edge of the needle. As the looper moves forward, the spreader point should be as close to the face of the looper as possible without actually touching. As the spreader moves rearward across the top of the looper, it should be as close to the top of the looper as possible without actually touching.
8. Assemble cover (Ref.#19F) to the side of the head. Close cover (Ref.#1F) and check for the conflicts of looper and looper guard and spreader with the cover.
9. Set the looper thread guide (Ref.#83E) and the looper take-up rod (Ref.#82E) so that on the downward movement of the take-up rod the center of the thread holes in the take-up rod will be even with the bottom of the loop of the looper thread guide.
10. Set the needle guide (Ref.#37A) so that there is $5/16$ " of its' shank protruding on the bottom.
11. Set the needle thread guide (Ref.#6A) so that the top of the piece is one inch above the center of the mounting screw (Ref.#8A). Set the needle thread guide (Ref.#7A) so that it is as high as it can be moved.

SEWING ADJUSTMENTS

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12. Adjust the pressure cylinder on the back of the head so that there is $5/16$ " of the stud protruding above the top lock nut.
13. Set the looper thread tension so the outside face of the thumb nut is about flush with the end of the tension stud. Set the needle thread so that there is about $1/4$ " of the tension stud protruding from the thumb nut.
14. The lifting presser foot (Ref.#28A) should lift about $1/8$ ". the vibrating presser foot (Ref.# 36A) should lify about $5/16$ ". The point of the needle should center the material when the vibrating presser foot (Ref.#36A) is $3/16$ " above the material on its' downward movement.
15. The lower feed-dog (Ref.#46C) should rise no more than $1/16$ " above the top surface of the throat plate (Ref.#13G). The feed dog in its' forward movement should come to within $1/16$ " of the end of the slot in the throat plate. The needle should enter the slot in the lower feed-dog about $1/3$ of the distance from the end closet to the operator.

Note: These are close approximate settings. On different sewing heads it may be necessary to vary these settings slightly in order to compensate for such things as thread variance, weight of material being sewn, parts wear and length of stitch. If it is not possible to make the machine sew with these settings, there is probably a problem in some of the inner drives and eccentric assemblies.