

Service Manual and Parts List



From the library of: Diamond Needle Corp

695B001

695B002

695B003

IDENTIFICATION OF MACHINES

Each 695B machine is identified by a Variety number on a metal plate on the machine.

APPLICATION OF CATALOG

This catalog applies specifically to the Varieties of machines as listed below. Reference to directions, such as right, left, front, back, etc., are given from the operator's position while seated at the machine. Operating direction of handwheel is away from operator.

VARIETIES OF MACHINES

High Speed Single Curved Needle, Two Looper, Three Thread, Overseaming Machine, with Differential Feed, Trimming Mechanism with Spring Pressed Lower Knife and Automatic Lubricating System.

695B001 Light to medium duty machine for seaming light to medium weight flat, warp and ribbed knit fabrics of cotton, wool, rayon, silk or similar weight synthetics where long straight seams are a primary requisite. Seam specification 504-SSa-1; standard seam widths 3/32, 1/8 and 5/32 inch (2.38, 3.17 and 3.97 mm); stitch range, 8-20 per inch; operator adjustable main and differential feeds. Maximum recommended speed 7000 R.P.M. - depending on stitch length and type of operation.

695B002 Light to medium duty machine, with single row main and differential feeds that are split at the needle, for better control when sewing curves or irregular shaped seams on women's lingerie, robes and similar seaming and trimming operations on light to medium weight flat, warp and ribbed knit fabrics of cotton, silk and similar weight synthetics. Seam specification 504-SSa-1; standard seam widths 3/32, 1/8 and 5/32 inch (2.38, 3.17 and 3.97 mm); stitch range, 8-20 per inch; operator adjustable main and differential feeds. Maximum recommended speed 7000 R.P.M. - depending on stitch length and type of operation.

695B003 Same as 695B001 except medium to heavy duty machine for seaming light, medium or heavy weight materials. Stitch range, 8-16 per inch. Maximum recommended speed 6500 R.P.M. - depending on stitch length and type of operation.

OILING

CAUTION! Oil was drained from machine when shipped, so reservoir must be filled before beginning to operate. Oil capacity of Class 695B is eight ounces. Use Singer Type C oil or equivalent.

Machine is filled with oil at spring cap in top cover. Oil level is checked at sight gauge on front of machine. Red bulb on oil level indicator should show between gauge lines when machine is stationary.

OILING (Continued)

Machine is automatically lubricated. No oiling is necessary, other than keeping main reservoir filled. Check oil daily before the morning start; add oil as required.

The oil drain plug screw is located at back of machine near bottom edge of base. It is a magnetic screw designed to accumulate possible foreign materials which may have entered the crank case. It should be removed and cleaned periodically.

NEEDLES

Class 695B machines use a curved blade needle. The standard recommended needle for machines covered in this catalog is:

Cat. 1431	-	Light Set Point	(Sizes 7 to 23)
Also available are:			
Cat. 1433	-	Light Ball Point	(Sizes 7 to 21)
Cat. 1434	-	Medium Ball Point	(Sizes 9 to 18)
Cat. 1436	-	Heavy Ball Point	(Sizes 8 to 16)

CHANGING NEEDLES

Release pressure on presser foot by turning presser foot release bushing (AG, Fig. 1) and swing presser arm (U) out of position. Turn handwheel in operating direction until needle is at its lowest point of travel. Using hexagonal socket wrench No. 21388 AU, furnished with machine, loosen needle clamp nut about 1/4 turn. Again turn handwheel until needle is at high position; withdraw needle.

To replace needle, leave needle holder at high position and with the flat to the left, insert needle in holder until it rests against stop pin. Keeping needle in this position, turn handwheel until holder is again at its low point of travel; then tighten nut. Return presser arm (U) to position; relock presser foot release bushing (AG).

THREAD STAND

After thread comes from cones on cone support (A, Fig. 1), it is brought up through back hole of thread eyelet (B), then down through the front hole of thread eyelet. Next it is threaded through the upper holes of tension thread guide (C) from front to back and then through the lower holes from back to front. It should be noted that the lower looper thread is threaded through the tension thread guide (C), first through the upper hole back to front, second through the middle hole front to back and third through the lower hole back to front. All threads then continue between the tension discs (J), through tension post slot (K) in tension post (G) and on through front thread guide (M).

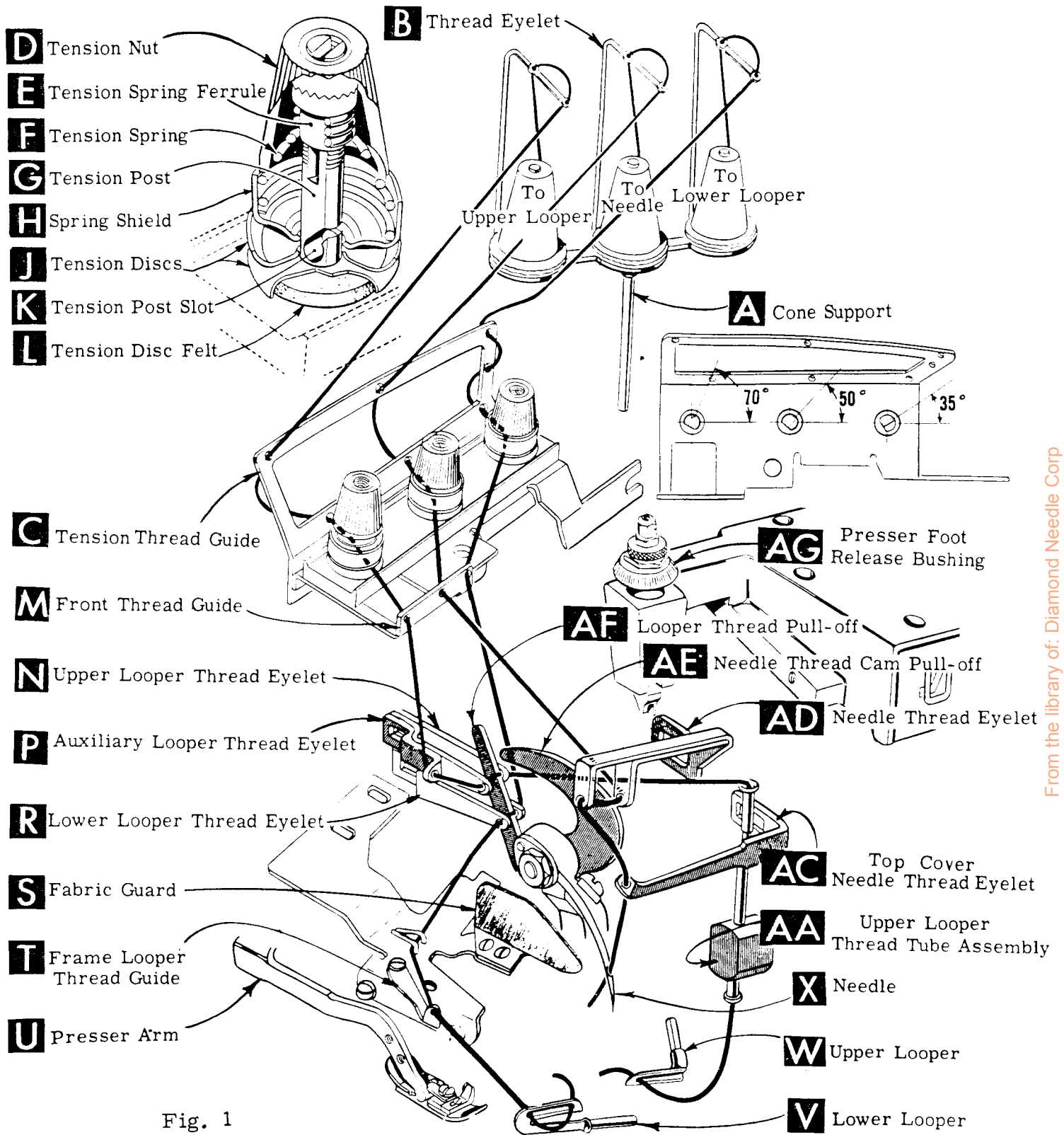


Fig. 1

THREADING

Only parts involved in threading are shown in threading diagram (Fig. 1). Parts are placed in their relative positions for clarity.

It will simplify threading this machine to follow recommended sequence of threading lower looper first, upper looper second and needle third.

Before beginning to thread, swing cloth plate open, turn handwheel in operating direction until needle (X) is at high position, release pressure on presser foot by turning presser foot release bushing (AG) and swing presser arm (U) out of position.

Be sure threads, as they come from the tension thread guide (C) are between tension discs (J) and in diagonal slots (K) in tension posts (G).

TO THREAD LOWER LOOPER

Thread lower looper thread through right eyelet of front thread guide (M). Then double end of thread and lead it through both eyes of lower looper thread eyelet (R, Fig. 1) from right to left. Note: thread must pass in front of looper thread pull-off (AF). Lead thread behind fabric guard (S) and through eyelet hole of frame looper thread guide (T). Turn handwheel in operating direction until heel of lower looper (V) is all the way to the left; then thread through both eyes from left to right. Left eye of lower looper can be threaded easily if tweezers are in left hand.

TO THREAD UPPER LOOPER

Thread upper looper thread through left eyelet of front thread guide (M). Then turn handwheel until point of upper looper (W) is all the way left. Lead thread through auxiliary looper thread eyelet (P) from back to front, then through both eyes of upper looper thread eyelet (N) from left to right. Note: thread must pass in front of looper thread pull-off (AF). After pulling up upper looper thread tube assembly (AA), lead thread under neck of top cover casting and down through thread tube assembly (AA). Pull thread out bottom of tube; push tube down, then insert thread through upper looper eye from front to back.

CAUTION! Be sure upper looper thread is under lower looper thread when passing from tube assembly to upper looper eye.

TO THREAD THE NEEDLE

Thread needle thread through middle eyelet of front thread guide (M). Then turn handwheel in operating direction until needle (X, Fig. 1) is at its highest position. Insert needle thread from right to left, through both eyes of needle thread eyelet (AD), under neck of top cover casting; then down through hole in top cover needle thread eyelet (AC). Thread needle from front.

THREAD TENSION

The amount of tension on needle and looper threads is regulated by the tension nuts (D, Fig. 1). Tension on threads should be only enough to secure proper stitch formation.

PRESSER FOOT PRESSURE

Sufficient presser foot pressure to feed work uniformly should be maintained. Should it be necessary to increase or decrease amount of pressure on presser foot, loosen lock nut (A, Fig. 2) and turn adjusting screw (B). Adjusting screw has a right hand thread so tightening increases pressure, loosening decreases pressure. When pressure adjusting screw (B) has been properly set, tighten lock nut (A). With presser foot resting on throat plate, position locking nut (C) so that its under surface is approximately 1/32 inch to 1/16 inch from the top surface of adjusting screw (B). Set cap (D) against locking nut (C).

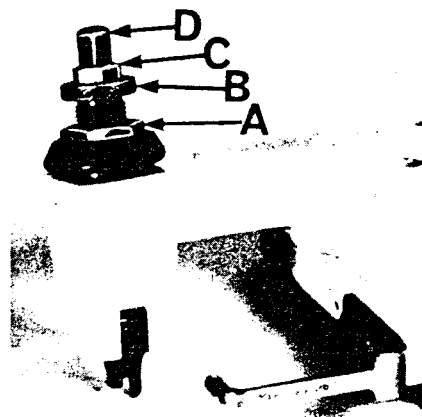


Fig. 2

ASSEMBLING AND ADJUSTING SEWING PARTS

Before assembling and adjusting sewing parts, remove cloth plate, fabric guard, chip guard, upper knife assembly, lower knife holder assembly, then follow this suggested sequence:



Fig. 3

SETTING THE NEEDLE

With throat plate assembled in position, needle should center in the front end of needle slot. When needle is at high position, needle point should be set 1/2 inch above throat plate (A, Fig. 3). To align needle or set the height above the throat plate, move needle driving arm (B, Fig. 3) by loosening clamp screw (C). Remove throat plate.

If needle thread cam pull-off (A, Fig. 4) overlaps looper thread pull-off (B), separate by moving looper thread pull-off back. When re-tightening looper pull-off screw, be sure to take up end play in needle driving arm.

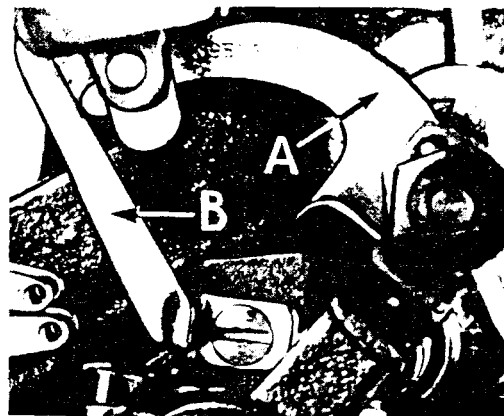


Fig. 4

At this point, insert lower looper (A, Fig. 5) into bar (B). With lower looper at left end of its stroke, set looper point 1/8 inch from center of needle (Fig. 5), using looper gauge No. 21225-1/8. Do not have lower looper deflecting needle. Tighten nut (C).

Now assemble differential (front) feed dog.

SETTING THE REAR NEEDLE GUARD

Set rear needle guard (A, Fig. 6) as high as possible, without interfering with either lower looper or movement of lower knife holder, but still in position to deflect needle forward .002-.004 inch. Screw (B) is used to set rear needle guard. Make sure there is no interference between rear needle guard and lower looper.

SETTING THE LOWER LOOPER

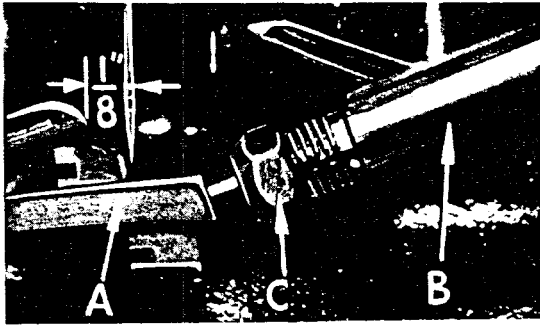


Fig. 5

to adjust and set front needle guard. After this setting make sure there is no interference between needle guards and differential feed dog.

Now finish lower looper adjustment. As lower looper moves to the right, its point should be set into the needle scarf (A, Fig. 7) until the needle springs forward from rear guard surface another .002-.004 inch.

SETTING THE FRONT NEEDLE GUARD

Assemble front needle guard (C, Fig. 6). When lower looper is springing needle off back-guard, set front needle guard as close as possible to needle without touching. Screw (D) is used

SETTING THE UPPER LOOPER

Insert upper looper (A, Fig. 8) in its holder. Screw (B, Fig. 8) holds upper looper in its holder and permits it to be pushed in or out or turned around its shank. Insert upper looper holder into upper looper shaft, if it is not already in place. Screw (C, Fig. 8) on clamp holds the upper looper holder in the shaft. Locate upper looper in its holder so that the shank extends $1/32$ to $1/16$ inch beyond holder (Fig. 8), for 695B001 and 002, $1/16$ to $3/32$ inch for 695B003.

When the upper looper is at the right end of its stroke, upper looper holder should be set to position upper looper shank back of vertical on 695B001 and 002 (Fig. 8).

NOTE: On 695B003, upper looper holder should be set to position the upper looper shank about vertically. Be sure on all styles, there is a clearance between heel of looper and casting. By adjusting looper holder in or out of upper looper shaft and by turning the looper around its shank, set upper looper

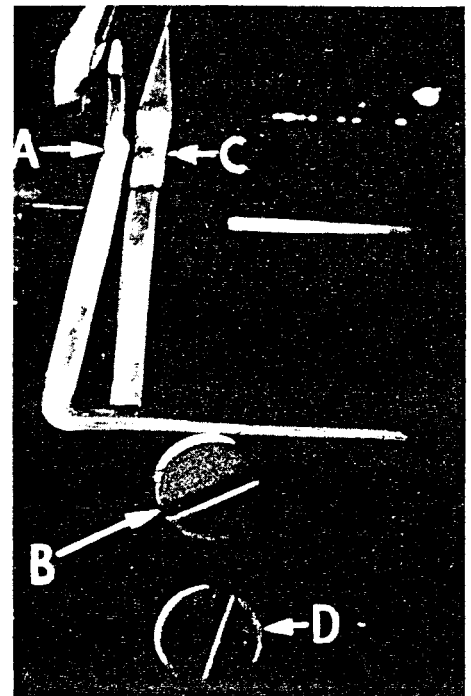


Fig. 6

point to cross lower looper to the left of the lower looper eye with .002 to .004 inch clearance (Fig. 9).

As the upper looper moves toward the top of its stroke, the heel of the upper looper should pass behind the lower looper head with $1/64$ to $1/32$ inch clearance.

Next, turn handwheel until looper is at the left end of its travel; check dimensions of upper looper point with respect to needle and throat plate (Fig. 10). If resetting is necessary, do it by moving the upper looper holder (A, Fig. 10). Figure 10 represents the dimensional setting for 695B001 and 002. For 695B003, the settings are $9/64$ and $35/64$ inch. For example, dimension $31/64$ inch is increased by turning upper looper holder counterclockwise looking from left end of machine; dimension $5/32$ inch is increased

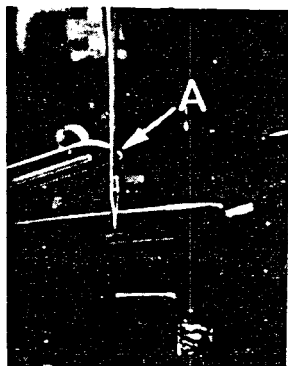


Fig. 7

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SETTING THE UPPER LOOPER (Continued)

by pulling upper looper holder left, out of upper looper shaft. After these changes are made, it may be necessary to turn upper looper around its shank slightly to maintain the condition shown in Fig. 9.

When the correct setting is obtained, it can be checked quickly as follows: As upper looper is moving to the right, when upper looper eye centers on the needle, bottom of the needle eye should be about level with top surface of upper looper (Fig. 11) for 695B001 and 002. For 695B003, the eyes of the upper looper and needle should align exactly.

Check setting to avoid interference between upper looper and needle on needle downstroke. If needle rubs the back of upper looper, pull looper out of its holder slightly and rotate looper a short distance counterclockwise, looking from left end of machine. Reset to maintain dimensions of Figs. 9, 10, 11.

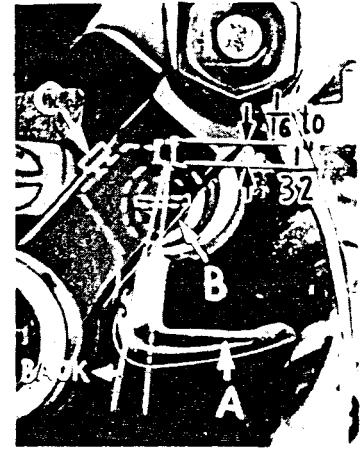


Fig. 8

SETTING THE FEED DOGS

Set all three feed dogs (A, B, C, Fig. 12) so the top surfaces of teeth all lay in the same plane. This can be checked by sighting across teeth with a straight edge. Now assemble throat plate. Feed dogs should now be leveled with throat plate surface by rotating feed tilting adjusting pin (D). This pin raises or lowers the back end of both feed bars at the same time.

The feed dogs should be set level at the time teeth first appear above the throat plate. Screw (E) locks feed tilting adjusting pin in place. Before tightening screw (E), press tilting adjusting pin (D) to the right to thrust against feed bar thrust washer (F). Now set feed dogs so that teeth rise about 3/64 inch above throat plate.

Main feed drive eccentric ferrule (G, Fig. 12) adjusts the position of main and chaining feed dogs from front to rear by turning the eccentric to maintain the proper clearance between the main and differential feed dogs and the rear of the throat plate slot. Lock nut (H) to 19-20 inch lbs. when setting is made.

SETTING THE LOWER KNIFE

Replace lower knife holder assembly. Lower knife (A, Fig. 13) should be set with cutting edge flush with throat plate surface. Adjustments are made with hexagonal head screw which holds lower knife. Lower knife is spring pressed against upper knife, so no lateral adjustment is necessary when width of trim is changed.

Lower knife may be secured in any position by tightening screw (B) and locking nut (C) against support bracket. Because screw (B) also serves as latch pin for the cloth plate latch spring, it should always be locked with nut (C) even when screw is not tightened against lower knife holder.

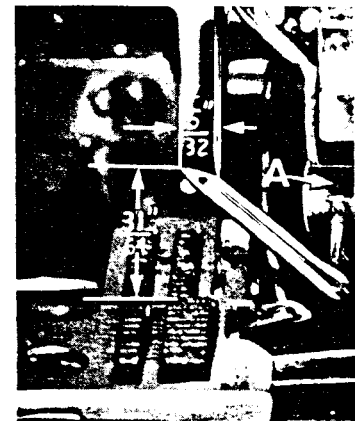


Fig. 10



Fig. 9

SETTING THE UPPER KNIFE

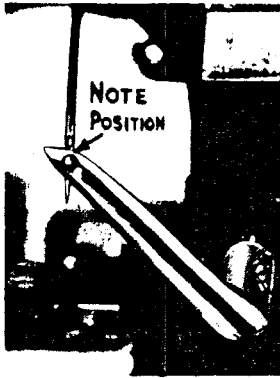


Fig. 11

block (J) in place. This will simplify resetting when upper knife is replaced.

Replace upper knife assembly. Clamp upper knife (D, Fig. 13) in position, setting nut (E) to hold clamp (F) in its most clockwise position against upper knife. At bottom of its stroke, front cutting edge of upper knife should extend not less than 1/64 inch below cutting edge of lower knife. The chain guard (G) should be set down against the upper knife and slightly back from the cutting edge.

After upper knife has been set for proper width of trim, screw (H) should be tightened to lock upper knife holding

SETTING THE STITCH LENGTH

The main and differential feed controls are independent of each other.

The right knurled knob marked "MAIN" is for adjusting the main stitch length.

The left hand knurled knob marked "DIFF" is for adjusting the differential stitch length.

The forward letter marking "L" indicates the longest stitch length, while the most rearward letter marking "S" indicates the shortest stitch length. Therefore, moving the indicator pointers of the main and differential controls rearward shortens the stitch length. To obtain the proper stitch length, set the main and differential feed dogs to have the same feed travel. Adjust accordingly until the desired stitch length is obtained.

NOTE: See Page 19 for "STITCH LENGTH TABLE".

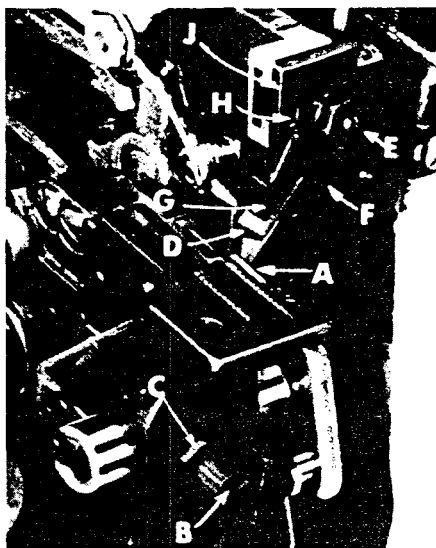


Fig. 13

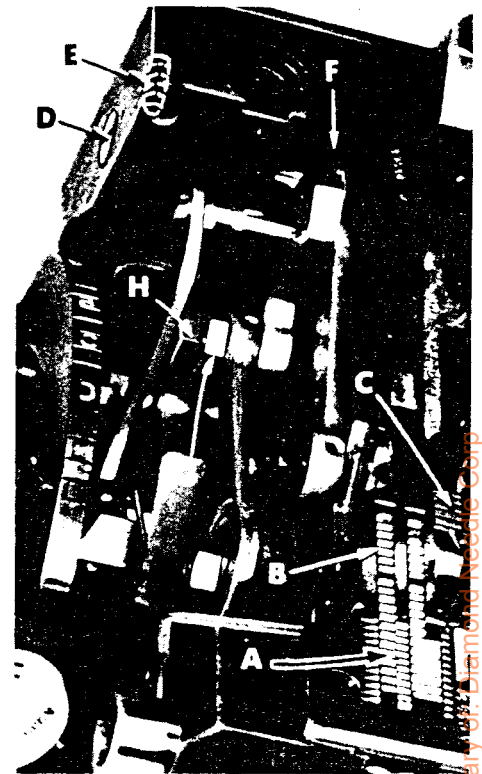


Fig. 12

After stitch length is set and reverse differential feed is desired, turn the differential knob to a shorter stitch length until the desired seam is obtained. If differential feed is desired, turn the differential knob to a longer stitch length until the desired seam is obtained. As a precaution, after setting the stitch length, check the travel of the feed dogs to make sure that there is clearance between the throat plate slots and the main and differential feed dogs.

Locking Main and Differential Feed Travel Controls

1. Differential feed is locked by moving differential feed lever lock to differential indicator lever after proper stitch length is obtained and also by locking indicator lever nut.
2. Main feed stitch length mechanism is locked by turning down nylok screw located behind the throat plate support block in the casting.

SETTING THE PRESSER FOOT

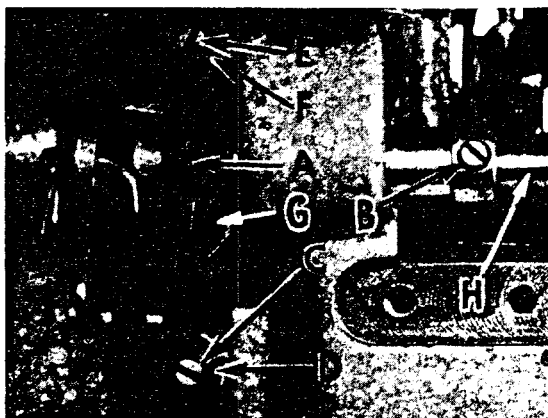


Fig. 14

Assemble the presser foot to presser arm. With needle in high position, swing presser arm into sewing position and set the presser foot to align needle holes (front and back) and flat on throat plate. The front edge of needle hole in presser foot must be aligned with front edge of needle hole in throat plate. It is also important that the bottom of the presser foot be flat on the throat plate. If necessary, presser foot can be realigned with throat plate slots by shifting the foot lifter lever shaft (H, Fig. 14). To move the shaft, loosen collar screws (B, Fig. 14) and clamp screw (G) and then shift the foot lifter lever shaft to the left or right as required. Re-

tighten collar screws and clamp screw.

The foot lifter lever arm (A, Fig. 14) and the collar (B) secure the shaft. Be sure the presser arm does not bind and rise when presser foot release bushing is unlocked.

Adjust lifter lever stop screw (C) so that presser foot can be raised no higher than upper looper will permit; then lock the nut (D). There should be from 1/16 to 1/8 inch free motion of foot lifter lever before the presser foot begins to rise. This adjustment should be made with screw (E) and locked with nut (F). Re-assemble the chip guard, fabric guard and cloth plate. To assemble chip guard, turn handwheel until upper knife assembly reaches its highest position.

STARTING TO OPERATE

Be sure machine is threaded according to threading diagram (Fig. 1). With thread tensions light, set looper thread eyelets (N and R) about horizontal and in the middle of their front to back locations. Operate machine slowly, without presser foot in place, to make sure that chain forms and moves off the tongue freely. Swing presser foot into position, insert material and sew slowly.

NEEDLE THREAD CONTROL

While sewing on material, check needle thread control as follows: Usually all needle thread is drawn on needle downstroke. At top of needle stroke, thread should be just tight enough to feed chain off stitch tongue. Stitch tends to pull down slightly if excessive thread is pulled on the upstroke. With needle at bottom of stroke, position needle thread eyelet (AD, Fig. 1) so that needle thread cam pull-off (AE) just contacts needle thread.

It is desirable to adjust the needle thread pull-off eyelet well-forward (toward the operator) to delay, slightly, the tightening of the needle thread.

LOWER LOOPER THREAD CONTROL

With material under presser foot, set lower looper thread eyelet (R, Fig. 1) back far enough so thread is a little slack when looper thread pull-off (AF) reaches its most rearward position. Looper thread pull-off (AF) is set about 1/8 inch distance behind needle thread cam pull-off (AE). Frame looper thread guide (T) should be set with its eyelet approximately 1/8 inch to the right of lower looper (V) heel eyelet at the time lower looper is at extreme left end of its travel.

While sewing on material, check drawing off of looper thread as follows: A portion of lower looper thread should be drawn through the tension before lower looper thread comes off upper looper. To increase amount of thread drawn through the tension while lower looper thread is on upper looper, move lower looper thread eyelet (R) down, keeping the same amount of pull-off action.

UPPER LOOPER THREAD CONTROL

Before proceeding to adjust upper looper thread eyelet (N, Fig. 1) balance all three tensions to give a normal appearing stitch. Moderate change in these tensions will not markedly affect the purl.

During needle downstroke, forward stroke of looper thread pull-off (AF) will draw upper looper thread through the tension. When normal amount of looper thread is drawn, upper looper thread will have almost all slack taken up as looper thread pull-off reaches its most rearward position.

POSITIONING THE PURL

To move the purl more under the edge, both looper thread eyelets (N and R, Fig. 1) should be raised keeping the same amount of pull-off. Usually it is better to have slightly more pull-off on upper thread than on lower thread.

If it becomes necessary to move looper thread pull-off (AF), be sure to take up all end play in needle drive shaft before tightening. If upper looper is located so that it is higher over throat plate than recommended in Fig. 10, the purl will tend to form near top edge. If upper looper is too low, the purl will form nearer bottom edge.

THREAD TENSIONS

The needle thread tension required is a function of needle thread and material being sewn. In general, lower looper thread tension should be set as high as possible without causing needle thread to be pulled down. Upper looper thread tension should be increased as long as the elasticity of the chain increases or until the purl is pulled too far over the top.

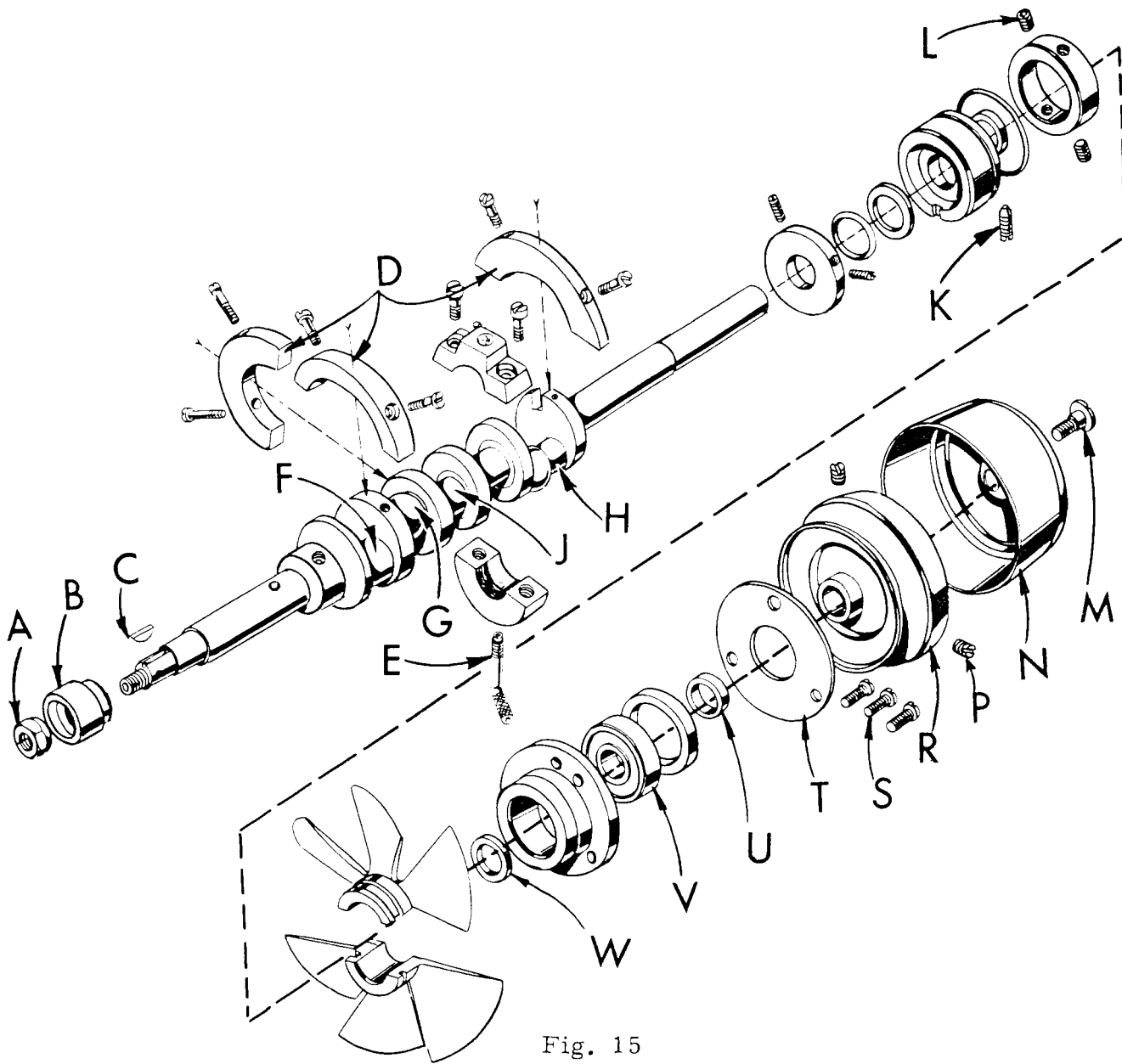


Fig. 15

TO REMOVE CRANKSHAFT

Crankshaft can be withdrawn easier if these steps are followed:

1. Drain oil by removing plug screw located on back of machine near bottom edge of base.
2. Remove top and bottom covers of machine.
3. Remove feed eccentric nut (A, Fig. 15) and remove the eccentric (B).
4. Remove key (C).
5. Remove three counterweights (D). Identify these counterweights so that they will be re-assembled in the proper places.
6. Unscrew oil tube (E) which holds crankshaft split bearing and oil pump. This tube is reached through bottom of bed casting.

TO REMOVE CRANKSHAFT (Continued)

7. Remove caps of bearings on crankshaft at points F, G and H. When re-assembling bearing caps make sure they are in their original position. Marks are stamped on both halves of the caps and both marks should be on the same side of the bearings. Also, screws should be reassembled in the same holes from which they were removed.

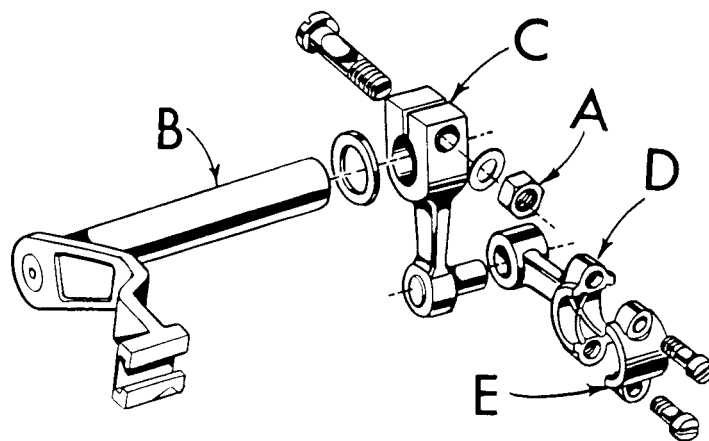


Fig. 16

8. Loosen clamp nut (A, Fig. 16) which holds upper knife driving arm (B). Access to clamp nut is through top cover. Draw driving arm to the left until upper knife driving lever (C) and connecting rod (D) drop, allowing removal of bearing cap (E). This is at bearing point (J, Fig. 15) on crankshaft. Observe same precautions when re-assembling cap as described in 7 above.
9. Remove screw (K, Fig. 15) which holds inner right crankshaft bearing. This screw is reached through bottom of bed casting.
10. Loosen two screws (L) in fan collar; remove both halves of cooling fan.
11. Remove screw (M); take off pulley cap (N).
12. Loosen two screws (P); remove pulley (R).
13. Remove three screws (S); take off bearing retaining plate (T); also, spacer collar (U) may be removed at this time.
14. Crankshaft may now be removed.
15. If necessary to replace ball bearing (V), it should be pressed off shaft on an arbor press. In replacing bearing it must be pressed on carefully until it seats against ground thrust washer (W).
16. Carefully observing reverse of the foregoing operations should simplify re-assembly of crankshaft. Checking exploded view drawings for location of various parts and constant testing for binds during re-assembly will also prove helpful.
17. Before re-assembling, thoroughly clean and dry top and bottom covers and gaskets. Before re-assembling bottom cover make sure that spring pressed oil wick which lubricates left crankshaft bearing is inserted in hole in casting and that it contacts shaft. The wick stands vertically on its spring against bottom cover. Coat oil drain plug with a sealing compound before re-assembling to prevent oil leakage. No. 1 Crane Lead Seal is recommended.

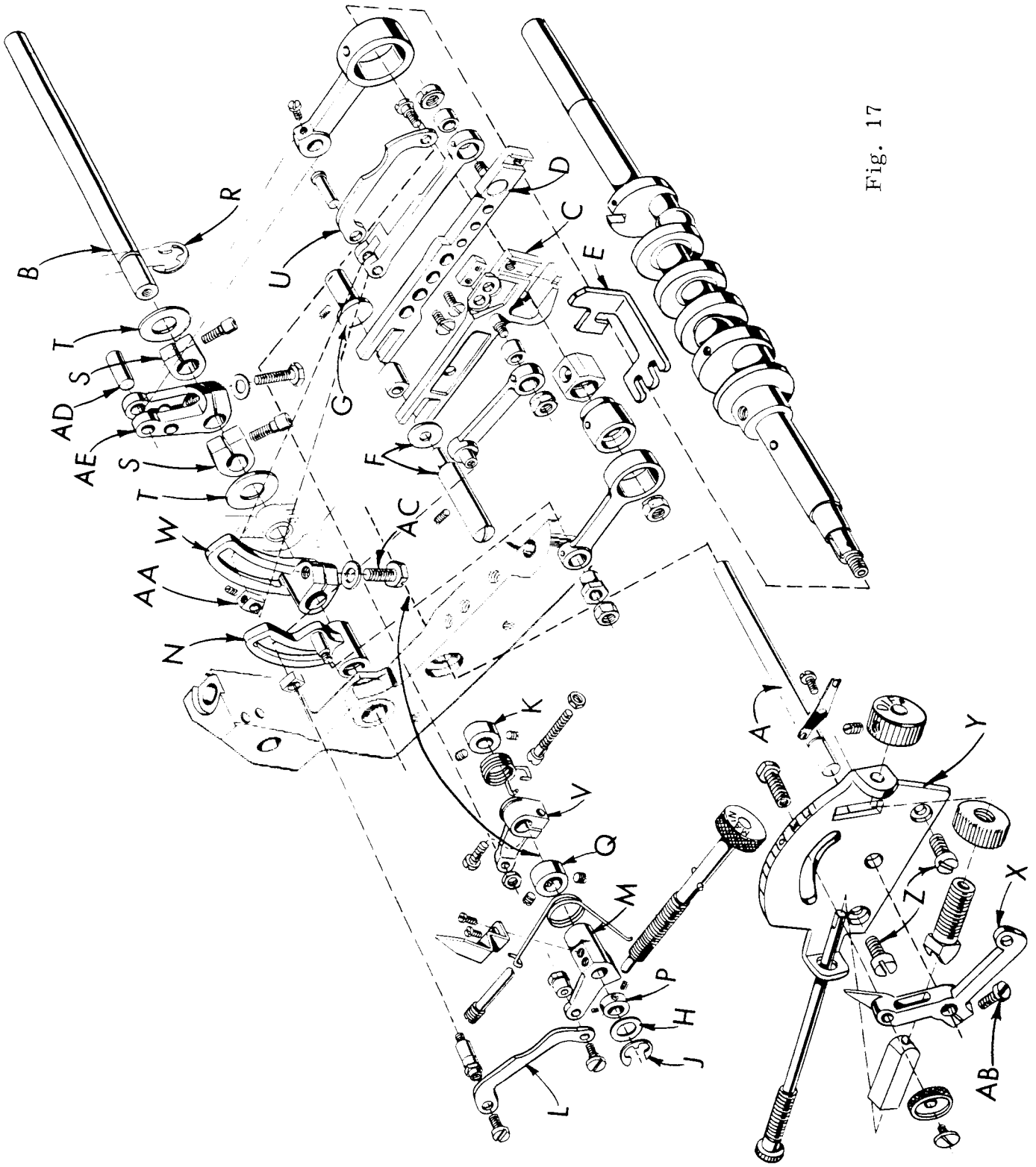


Fig. 17

ADJUSTING INSTRUCTIONS FOR FEED DRIVE MECHANISM

1. Assemble parts as illustrated to feed control shaft (A, Fig. 17) and feed rock shaft (B); including feed bars.
2. Thrust feed bars (C and D) against differential thrust guide on bed. Thrust left side of main feed bar (C) with left feed bar thrust guide (E). Align and thrust rear of feed bars with tilt adjusting pin and washer (F) and guide pin (G).
3. Thrust the feed control shaft (A) assuring that washer (H) is against retaining ring (J) and flush against the recess in the bed casting. Collar (K) should be thrust against the bed casting and tightened securely.
4. Main feed control link (L) and main feed drive lever (M) must be in alignment with main feed rocker lever (N) to avoid binding and secured in position by collars (P and Q).
5. Feed rock shaft (B) should be positioned with the opening of the retaining ring (R) upwards and thrust against the main feed rocker lever (N). Secure shaft (B) in this position by thrusting collars (S) against thrust washers (T) against the bed casting.
6. Differential feed control link (U) and differential feed control lever (V) must be in alignment with differential feed rocker lever (W) to avoid binding. Also the differential feed rocker lever (W) must thrust against the main feed rocker lever (N). Lever (V) and rocker lever (W) can be positioned as required and secured in place by their clamp screws.
7. A bind could occur in the main feed drive lever (M), differential feed control lever (V) and differential feed indicator lever (X) if the indicator plate (Y) is not properly aligned. Oversize holes are provided in plate (Y) for its mounting screws (Z) to allow repositioning to eliminate bind.

DIFFERENTIAL FEED CONTROL ADJUSTMENT

- a. Move differential rocker lever block (AA) to lowest position in differential feed rocker lever (W).
- b. Rotate differential feed indicator lever (X) counterclockwise until the pointer is at the rear end of the scale.
- c. Clamp the indicator lever (X) with screw (AB).

DIFFERENTIAL FEED DRIVE SEGMENT ADJUSTMENT

- a. Move differential rocker lever block (AA) to top position by rotating lever (X) clockwise.
- b. Turn the handwheel until the feed bar is in its most rear position.
- c. Loosen feed rocker lever clamp screw (AC).
- d. Operate differential feed indicator lever (X) and tighten rocker lever clamp screw (AC) when the differential feed bar (D) shows no movement. Make sure differential feed rocker lever (W) thrusts against the main feed rocker lever (N).

DIFFERENTIAL FEED DRIVE LEVER

- a. Standard location of the drive pin (AD) is to be in the upper hole of differential feed drive lever (AE). For longer differential feed travel, such as for gathering, move pin (AD) to lower hole of lever (AE).

ORDERING REPAIR PARTS

ILLUSTRATIONS

This catalog is arranged to simplify ordering replacement parts. Exploded views of various sections of the mechanism are shown on the left hand pages so that parts may be seen in their actual positions in the machine. On the right hand pages opposite the illustrations, the parts are listed with descriptions and the quantity of parts required in the particular view being shown.

Numbers in the first column are reference numbers only, indicating position of a part in the illustration. Do not use the reference numbers in ordering.

In the second column in the examples below are the part numbers as listed in this catalog. In the third column is the coded number to be ordered. The prefix "910" must be used. Additionally, letter suffixes generally are transposed as a prefix to the part number.

Components of sub-assemblies which can be furnished as replacements are indented under the description of the main sub-assembly.

The examples below show how to order using parts on Page 29 of this catalog to illustrate the instructions above:

Ref. No.	Part No.	Order As	<u>Description</u>	<u>Qty.</u>
19	29126 DF	910-DF 29126	Lower Looper Bar Driving Lever and Connecting Rod Assembly ---	1
20	39544 N	910-N 39544	Lower Looper Connecting Rod --	1
21	22729 E	910-E 22729	Screw, for connecting rod-	2
22	22729 D	910-D 22729	Screw, for connecting rod-	2
23	39544 S	910-S 39544	Ball Joint Guide Fork -----	1
24	97	910-97	Screw, for ball joint guide fork -----	2
25	39544 U	910-U 39544	Lower Looper Bar Driving Lever -----	1

In the example above, the connecting rod bearing is not listed. Replacement of this individual part is not recommended. The complete sub-assembly should be ordered.

Where the parts for all machine varieties covered in this catalog are not the same, the difference will be shown in the illustrations or mentioned in the descriptions. When a part is used in all machines in this catalog, the variety number is not mentioned.

A numerical list of all parts shown in this catalog appears on Pages 38 and 39 to facilitate locating the illustration and description when the part number is known.

IDENTIFYING PARTS

Where the construction permits, each part is stamped with its part number. On some of the smaller parts, and on those where construction does not permit, an identification letter is stamped in to distinguish the part from similar ones.

PART NUMBERS REPRESENT THE SAME PART, REGARDLESS OF CATALOG IN WHICH THEY APPEAR.

TORQUE REQUIREMENTS

Torque (measured in inch-pounds) is a rotating force (in pounds) applied through a distance by a lever (in inches or feet). This is accomplished by a wrench, screw driver, etc. Many of these devices are available, which when set at the proper amount of torque will tighten the part to the correct amount and no tighter.

All straps and eccentrics should be tightened to 19-21 inch-pounds (22-24 cm/kg) unless otherwise noted. All other nuts, bolts, screws, etc., should be tightened by hand as tightly as possible, unless otherwise noted.

The screws requiring a specific torque, will be indicated on the picture plates.

STITCH LENGTH TABLES - 695B001, 002 ,003

VARIETY	695B001 and 002		695B003	
Indicator Plate Markings	Diff. Feed Stitch Length (Left Pointer)	Main Feed Stitch Length (Right Pointer)	Diff. Feed Stitch Length (Left Pointer)	Main Feed Stitch Length (Right Pointer)
S Short	20	21	17	18
A	16	17	14	14
B	13	14	11	12
C	10	12	9	11
D	9	10	7	10
E	8	9	6	9
L Long	7	8	5.5	8

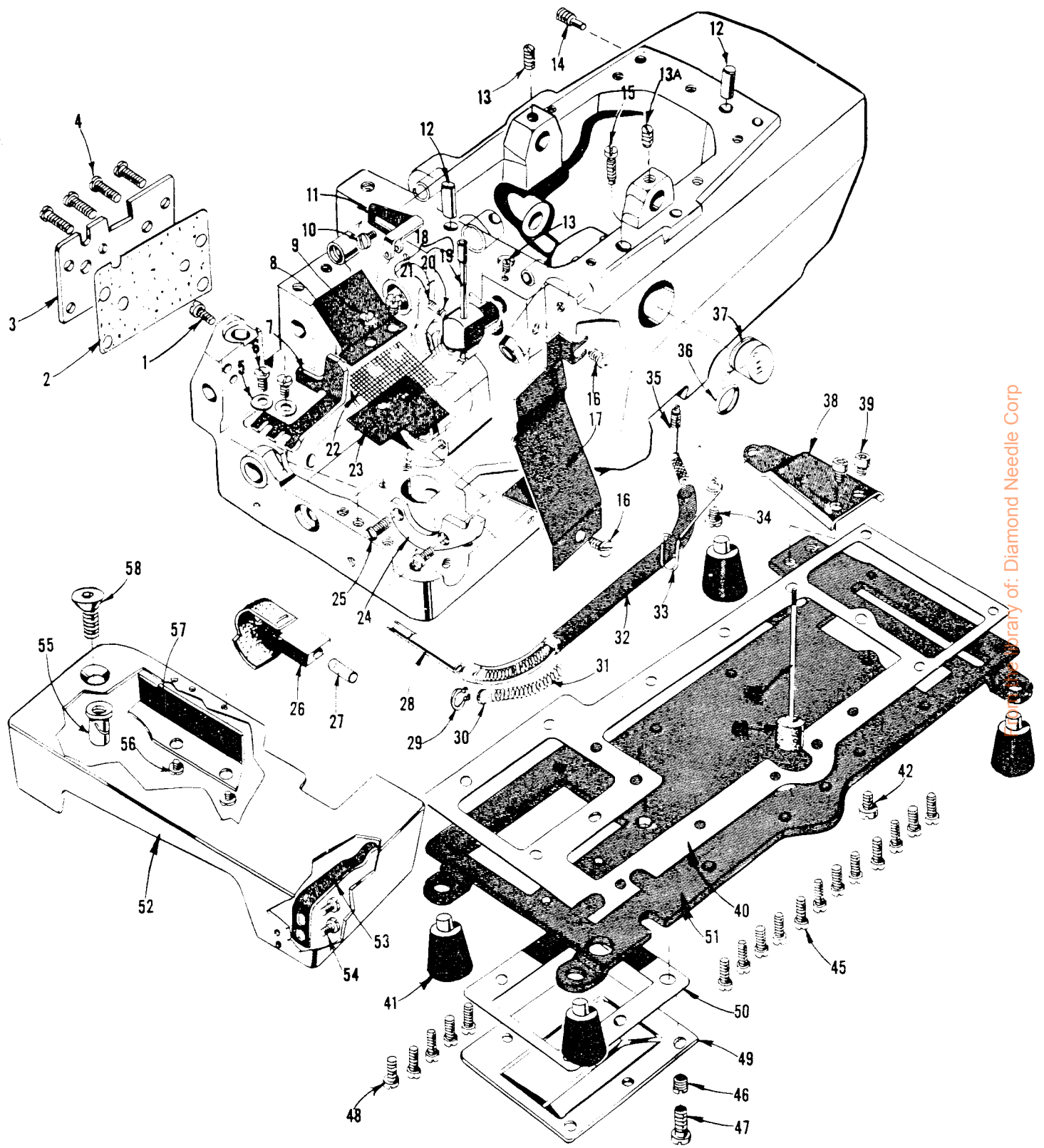
NOTE: The above chart indicates approximately the number of stitches obtained on the main and differential feed dogs, when set at the different markings on the indicator plates.

For Example:

To get both MAIN and DIFFERENTIAL feed travels at 10 S.P.I., set the LEFT pointer (DIFFERENTIAL) at "C" and RIGHT pointer (MAIN) at "D" respectively. This will give the equivalent of a #10 cam on MAIN and #10 cam on DIFFERENTIAL.

To get DIFFERENTIAL (GATHERING) action equivalent to say a #9 cam on DIFFERENTIAL and a #10 on MAIN, move the LEFT pointer (DIFFERENTIAL) to "D".

To get REVERSE DIFFERENTIAL (STRETCH) action equivalent to say a #12 cam on DIFFERENTIAL and a #10 on MAIN, move the LEFT pointer (DIFFERENTIAL) to "B".



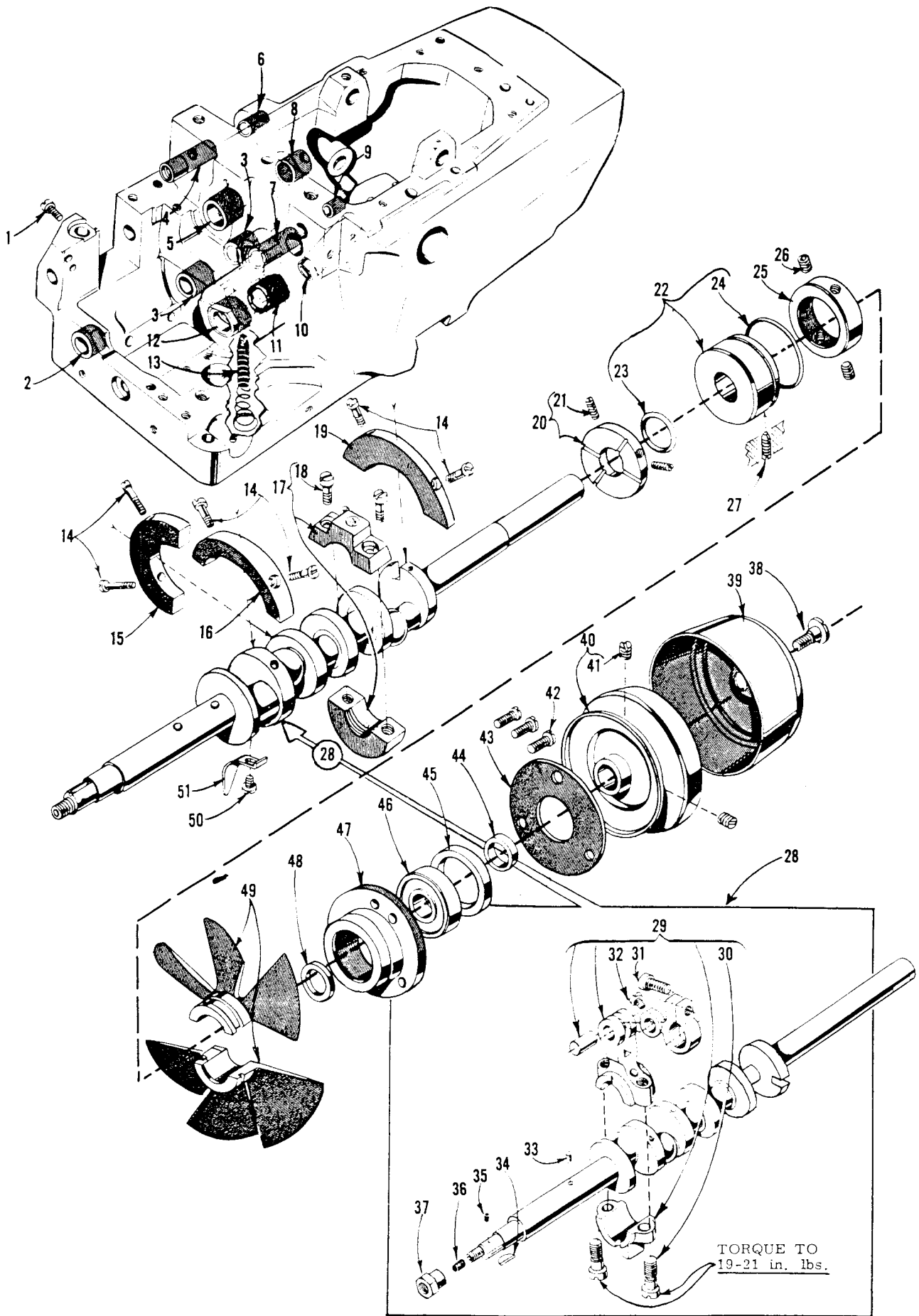
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MAIN FRAME, MISCELLANEOUS COVERS, PLATES AND OILING PARTS

Ref. No.	Part No.	Description	Amt. Req.
1	22569	Screw, for cloth plate stud-----	1
2	39582 BD	Gasket, for rear cover-----	1
3	39582 BU	Rear Cover-----	1
4	22569 J	Screw, for rear cover-----	4
5	53634 C	Washer, for main feed bar thrust guide-----	2
6	22569 C	Screw, for main feed bar thrust guide-----	2
7	39535 P	Main Feed Bar Thrust Guide-----	1
8	39582 BF	Oil Shield, lower-----	1
9	22824	Screw, for lower oil shield-----	2
10	22569 D	Screw, for needle thread pull-off eyelet-----	1
11	39563 H	Needle Thread Pull-off Eyelet-----	1
12	667 D-8	Dowel Pin-----	2
13	22565	Set Screw, for upper looper thread tube assembly and upper looper drive lever shaft-----	2
13A	22565 S	Spot Screw, for upper looper drive lever shaft-----	1
14	22571 E	Oil Drain Plug-----	1
15	22569 K	Screw, for oil sight gauge-----	1
16	22569 D	Screw, for chip guard-----	2
17	39578 T	Chip Guard-----	1
18	29477 GW	Upper Looper Thread Tube Assembly-----	1
19	39568 G	Thread Tube-----	1
20	39568 J	Thread Tube Tension Spring-----	1
21	22743	Screw, for thread tube tension spring-----	1
22	39594 S	Oil Filter Screen-----	1
23	39594 T	Oil Filter Pad-----	1
24	39535 M	Guide, for differential feed bar-----	2
25	22569 B	Screw, for differential feed bar guide-----	2
26	666-268	Felt Pad-----	1
27	39593 K	Oil Tube, tygothane-----	1
28	666-271	Oil Tube, brass-----	1
29	660-506	Retaining Ring, for oil tube-----	1
30	56393 G	Porex Filter, for oil tube-----	1
31	56393 V	Spring, for oil tube-----	1
32	666-280	Oil Tube, tygothane-----	1
33	39593 L	Spring, for oil tube-----	1
34	22569 D	Screw, for oil tube spring-----	1
35	39593 J	Oil Pump Tube-----	1
36	660-243	Oil Seal Ring, for oil sight gauge-----	1
37	39593 H	Oil Sight Gauge-----	1
38	39582 F	Base Plate Extension-----	1
39	22653 D-4	Screw, for base plate extension-----	2
40	39582 AY	Gasket, for bottom cover-----	1
41	39595	Isolator-----	4
42	22586 R	Screw, for bottom cover-----	1
43	39593 D	Oil Gauge Indicator-----	1
44	39593 C	Oil Gauge Float-----	1
45	22569	Screw, for bottom cover-----	11
46	74 E	Plug Screw, for machine bed-----	1
47	22806 A	Screw, for bottom cover plate-----	1
48	22572 A	Screw, for bottom cover plate-----	5
49	39582 AZ	Bottom Cover Plate-----	1
50	39582 BA	Gasket, for bottom cover plate-----	1
51	39582 XE	Bottom Cover-----	1
52	39501 DL	Cloth Plate-----	1
53	39532 A	Latch Plate Latch Spring-----	1
54	90	Screw, for latch plate latch spring-----	2
55	39501 K	Cloth Plate Stud-----	1
56	138	Screw, for cloth plate fabric guard-----	2
57	39578 F	Cloth Plate Fabric Guard-----	1
58	22657 D-12	Screw, for cloth plate-----	1

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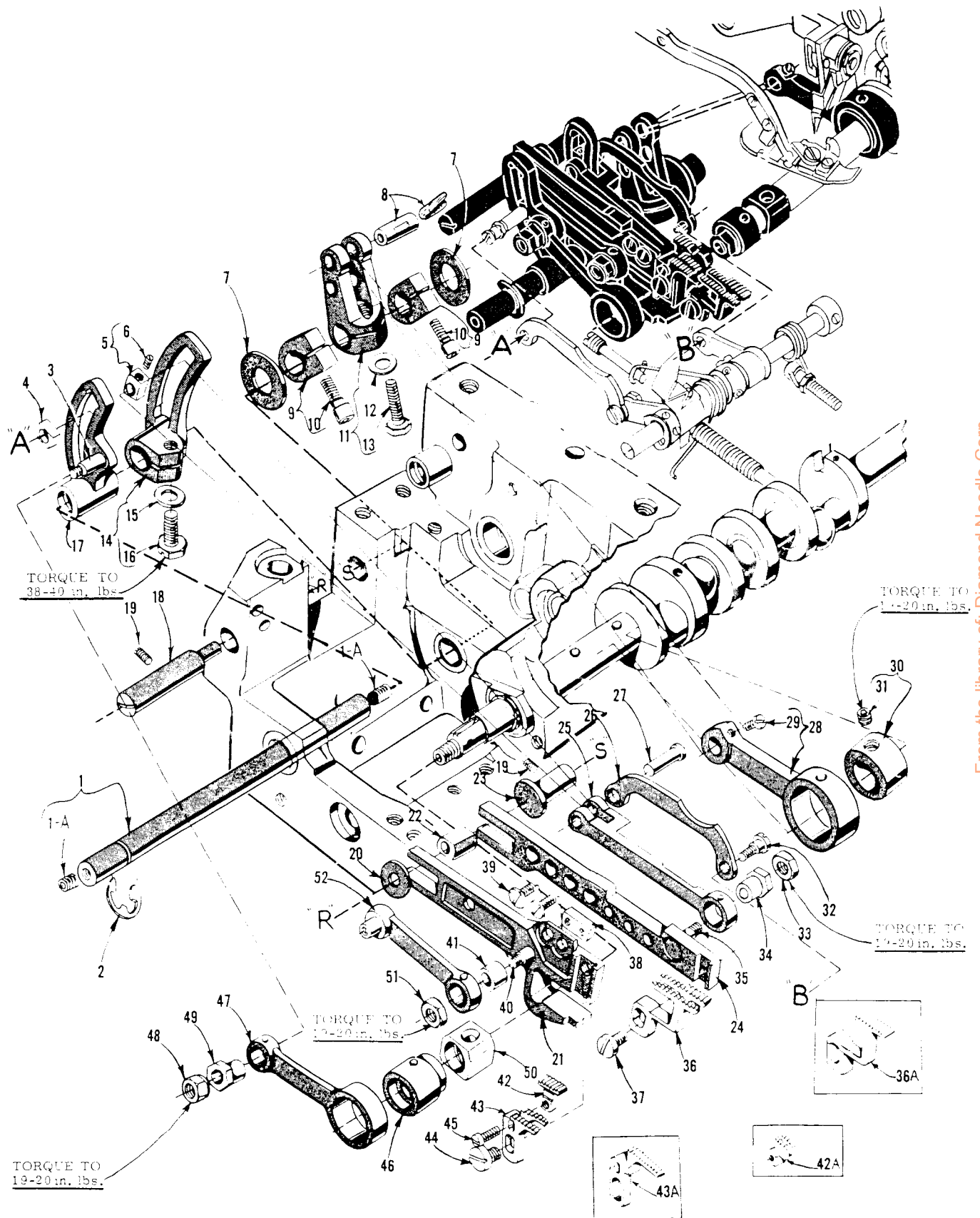


IMPORTANT: BEFORE ORDERING ANY PARTS BELOW, REFER TO THE DETAILED INSTRUCTIONS ON PAGE 17

CRANKSHAFT MECHANISM AND BUSHINGS

Ref. No.	Part No.	Description	Amt. Req.
1	22569	Screw, for cloth plate stud -----	1
2	39536 CD	Differential Feed Rocker Shaft Bushing, left -----	1
3	39536 BY	Differential Feed Rocker Shaft Bushing, middle and right -----	2
4	39555 P	Foot Lifter Shaft Bushing, left -----	1
5	39573 K	Upper Knife Driving Arm Bushing, left -----	1
6	39555 R	Foot Lifter Shaft Bushing, right -----	1
7	39552 U	Needle Driving Arm Crank Bushing, left -----	1
8	39573 AA	Upper Knife Driving Arm Bushing, right -----	1
9	39552 P	Needle Driving Arm Crank Bushing, right -----	1
10	39544 L	Lower Looper Bar Bushing -----	1
11	39590 T	Crankshaft Bushing, inner left -----	1
12	39590 U	Crankshaft Bushing, left -----	1
13	666-94	Oil Wick and Spring, for crankshaft bushing -----	1
14	22747 B	Screw, for counterweights -----	6
15	39591 A	Crankshaft Counterweight, middle -----	1
16	39591 K	Crankshaft Counterweight, left -----	1
17	39590 V	Split Bearing and Oil Pump -----	1
18	97 A	Screw, for split bearing and oil pump -----	2
19	39591 B	Crankshaft Counterweight, right -----	1
20	39590 P	Oil Slinger Collar -----	1
21	77 Q	Set Screws, for oil slinger collar -----	2
22	39590 X	Crankshaft Bearing, inner right -----	1
23	660-204	Oil Seal Ring -----	1
24	660-443	Oil Seal Ring -----	1
25	39591 H	Fan Collar -----	1
26	22894 D	Spot Screw, for fan collar -----	2
27	22565 F	Spot Screw, for crankshaft bearing inner, right -----	1
28	29477 LS	Crankshaft Assembly, for 695B001 and 002 -----	1
-	29477 LT	Crankshaft Assembly, for 695B003 -----	1
29	29477 MC	Needle Driving Arm Crank and Connecting Rod Assembly -----	1
30	22587 M	Screw, for needle driving arm connecting rod -----	2
31	22596 H	Screw, for needle driving arm crank -----	1
32	22768 C	Screw, for needle driving arm connecting rod pin -----	1
33	51-228 Blk.	Vent Plug -----	1
34	39541 A	Feed Driving Eccentric Key -----	1
35	30-106 Blk.	Wood Plug -----	1
36	CO67 E	Cork Plug -----	1
37	39536 BL	Nut, for crankshaft -----	1
38	22769 B	Screw, for pulley cap -----	1
39	39521 D	Pulley Cap -----	1
40	39521 G	Pulley -----	1
41	95	Set Screw, for pulley -----	2
42	22569 B	Screw, for ball bearing housing -----	3
43	39590 H	Ball Bearing Retaining Plate -----	1
44	39590 S	Spacing Collar -----	1
45	39590 R	Ball Bearing Stop Collar -----	1
46	660-268	Crankshaft Ball Bearing -----	1
47	39590 G	Ball Bearing Housing -----	1
48	39590 J	Thrust Washer -----	1
49	39591 L	Fan, for chamber cooling -----	1
50	87 U	Screw, for oil splasher -----	1
51	39594 N	Oil Splasher -----	1

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FEED DRIVE MECHANISM

Ref. No.	Part No.	Description	Amt. Req.
1	39536 AN	Feed Drive Rock Shaft -----	1
1A	22651 AB-3	Set Screw, for feed drive rock shaft -----	2
2	660-467	Truarc Ring, for feed drive rock shaft -----	1
3	39536 BE	Stud, for main feed drive segment -----	1
4	39536 AM-247	Main Feed Segment Sliding Block, marked "G", .247 inch -----	1
	39536 AM-248	Main Feed Segment Sliding Block, marked "H", .248 inch -----	1
	39536 AM-249	Main Feed Segment Sliding Block, marked "J", .249 inch -----	1
5	39536 AY-247	Differential Feed Segment Sliding Block, marked "K", .247 inch -----	1
	39536 AY-248	Differential Feed Segment Sliding Block, marked "L", .248 inch -----	1
	39536 AY-249	Differential Feed Segment Sliding Block, marked "M", .249 inch -----	1
6	22733	Set Screw, for differential feed segment sliding block -----	1
7	62244 A	Thrust Washer, for feed drive rock shaft -----	2
8	51236 A	Link Pin, for differential feed drive lever -----	1
9	35751 G	Collar, for feed drive rock shaft -----	2
10	22572 B	Screw, for collar -----	1
11	39536 AL	Differential Feed Drive Lever -----	1
12	40-139	Washer, for differential feed drive lever -----	1
13	22852 A	Screw, for differential feed drive lever -----	1
14	39536 AR	Differential Feed Drive Segment -----	1
15	80557	Washer, for differential feed drive segment -----	1
16	22852 A	Screw, for differential feed drive segment -----	1
17	39536 CM	Main Feed Drive Segment -----	1
18	39535 L	Feed Adjusting Pin -----	1
19	22597 A	Screw, for feed adjusting pin -----	2
20	39536 BX	Feed Bar Thrust Washer -----	1
21	39534 S	Main Feed Bar -----	1
22	39535 J	Feed Bar Guide Block -----	1
23	39535 N	Guide Pin, for differential feed bar -----	1
24	39534 T	Differential Feed Bar -----	1
25	39536 AX	Differential Feed Drive Link -----	1
26	39536 BA	Differential Feed Control Link -----	1
27	39536 BB	Differential Feed Drive Link Pin -----	1
28	39536 AU	Differential Feed Connecting Rod -----	1
29	77	Screw, for differential feed drive connecting rod -----	1
30	39540 E	Differential Feed Eccentric, for 695B001 and 002 -----	1
	39540 F	Differential Feed Eccentric, for 695B003 -----	1
31	22894 AA	Spot Screw, for differential feed eccentric -----	1
32	22760 E	Screw, for differential feed control link -----	1
33	39536 E	Nut, for differential feed bar stud -----	1
34	39536 BU	Differential Feed Drive Eccentric Ferrule -----	1
35	39536 BE	Differential Feed Bar Drive Stud -----	1
36	39526 AP	Differential Feed Dog, 16 teeth per inch, for 695B001 -----	1
	39526 AE	Differential Feed Dog, 12 teeth per inch, for 695B003 -----	1
36A	39526 BP	Differential Feed Dog, 16 teeth per inch, for 695B002 -----	1
37	22528	Screw, for differential feed dog -----	1
38	39535 K	Guide Block, for main feed bar -----	1
39	98 A	Screw, for guide block -----	2
40	39536 J	Stud, for main feed bar -----	1
41	39536 BC	Main Feed Drive Stud Ferrule -----	1
42	39505 L	Chaining Feed Dog, marked "V", 16 teeth per inch, for 695B001 and 003 -----	1
42A	39505 BB	Chaining Feed Dog, marked "PD", 16 teeth per inch, for 695B002 -----	1
43	39505 BP	Main Feed Dog, marked "FW", 16 teeth per inch, for 695B001 -----	1
	39505 AY	Main Feed Dog, marked "PH", 12 teeth per inch, for 695B003 -----	1
43A	39505 BA	Main Feed Dog, marked "PC", 16 teeth per inch, for 695B002 -----	1
44	94	Screw, for main feed dog -----	1
45	22747	Screw, for chaining feed dog -----	1
46	39540 G-13	Main Feed Eccentric, marked "EH" -----	1
47	39536 BW	Main Feed Drive Connecting Rod -----	1
48	39536 E	Nut, for main feed drive connecting rod stud -----	1
49	39536 BU	Main Feed Drive Eccentric Ferrule -----	1
50	39538	Feed Lift Block -----	1
51	9937	Nut, for main feed bar stud -----	1
52	39536 AW	Main Feed Drive Link -----	1

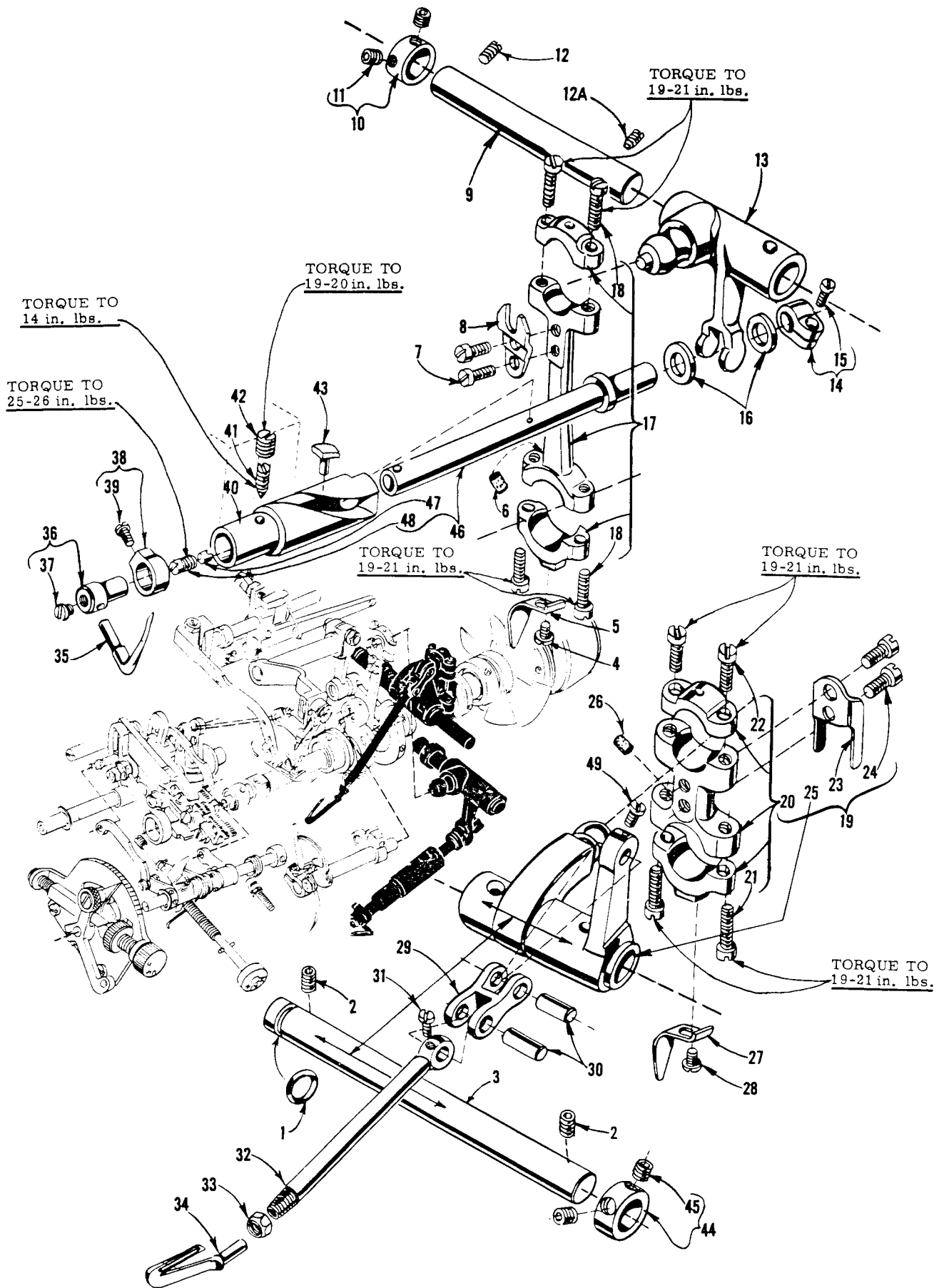
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FEED DRIVE MECHANISM

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	22760 E	Screw, for main feed control link -----	1
2	39536 BA	Main Feed Control Link -----	1
3	28	Screw, for main feed linkage rod -----	1
4	39536 CG	Main Feed Linkage Rod -----	1
5	39536 AV	Main Feed Control Lever -----	1
6	39536 CK	Nut, for main feed control link screw -----	1
7	39536 CJ	Screw, for main feed return spring -----	1
8	39536 CH	Main Feed Return Spring -----	1
9	39536 BV	Main Feed Stitch Indicator -----	1
10	77	Screw, for main feed stitch indicator -----	2
11	61248 G	Collar, for feed control shaft -----	2
12	89	Screw, for collar -----	2
13	39536 AT	Differential Feed Control Lever -----	1
14	22652 A-6	Screw, for differential feed control lever -----	1
15	41071 G	Nut, for differential feed control link screw -----	1
16	1025 L	Plug Screw, for bed -----	1
17	39536 CF	Differential Link Return Spring -----	1
18	294	Screw, for differential link return spring -----	1
19	7947	Nut, differential link return spring screw -----	1
20	39536 BM	Main Feed Stitch Regulating Screw -----	1
21	51-392 Blk.	Pin -----	1
22	39536 AP	Feed Control Shaft -----	1
23	39536 CA	Pressure Plug, for main feed stitch regulating screw -----	1
24	22580 A	Pressure Plug Screw, with nylok insert -----	1
25	39536 CL	Collar, for feed control shaft -----	1
26	1096	Screw, for collar -----	2
27	40-144	Washer, for feed control shaft -----	1
28	660-466	Truarc Ring, for feed control shaft -----	1
29	39536 BP	Stitch Indicator Plate -----	1
30	39536 BF	Differential Feed Stitch Regulating Screw -----	1
31	22517	Screw, for stitch indicator plate -----	2
32	39536 BH	Differential Feed Control Regulating Nut -----	1
33	39536 BS	Differential Lever Thumb Nut -----	1
34	22784 F	Screw, for differential lever lock screw -----	1
35	39536 CB	Differential Stitch Control Lever -----	1
36	93	Screw, for differential stitch control lever -----	1
37	39536 BG	Differential Feed Control Regulating Screw -----	1
38	39536 BJ	Differential Feed Control Regulating Stop Nut -----	1
39	39536 BK	Differential Feed Stitch Regulating Knob -----	1
40	531	Screw, differential feed stitch regulating knob ---	1
41	39536 CC	Ratchet Spring -----	1
42	28	Screw, for ratchet spring -----	1
43	39536 BR	Differential Lever Lock Screw -----	1

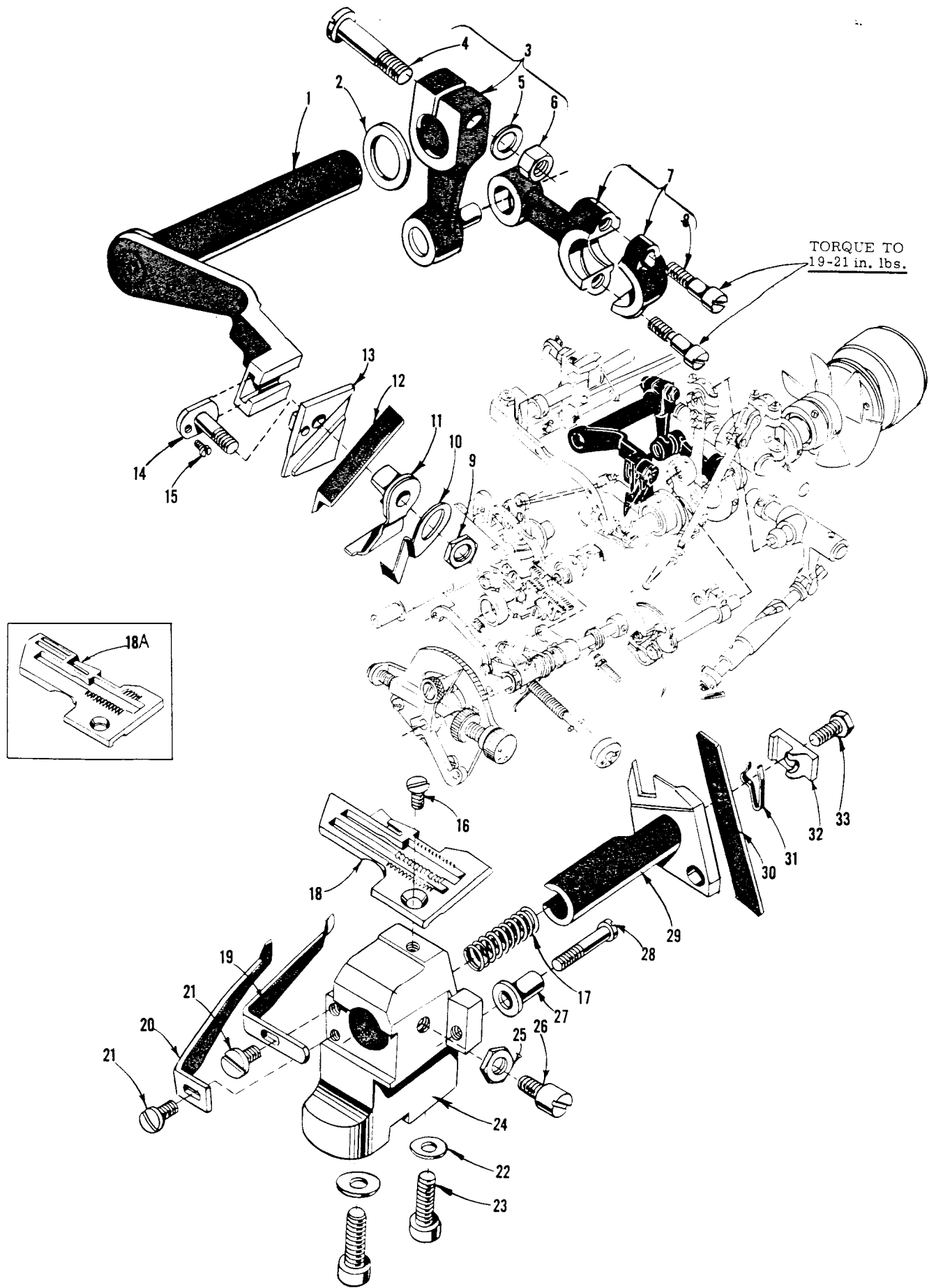
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<u>UPPER AND LOWER LOOPER DRIVING PARTS</u>			
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	660-206	Oil Seal Ring, for lower looper driving shaft-----	1
2	22894 AE	Screw, for lower looper driving shaft-----	2
3	39544 V	Lower Looper Driving Shaft-----	1
4	87 U	Screw, for oil splasher-----	1
5	39594 N	Oil Splasher-----	1
6	666-255	Felt Plug-----	1
7	97	Screw, for ball joint guide fork-----	2
8	39544 J	Ball Joint Guide Fork, for upper looper drive assembly-----	1
9	39543 X	Upper Looper Drive Lever Shaft-----	1
10	482 C	Upper Looper Drive Lever Shaft Collar-----	1
11	22894 C	Screw, for collar-----	2
12	22565	Set Screw, for upper looper drive lever shaft-----	1
12A	22565 S	Spot Screw, for upper looper drive lever shaft-----	1
13	39543 W	Upper Looper Drive Lever-----	1
14	39543 M	Clamp Collar, for upper looper drive lever shaft--	1
15	22562 A	Screw, for clamp collar-----	1
16	39543 P	Upper Looper Shaft Thrust Washer-----	2
17	39543 U	Upper Looper Connecting Rod-----	1
18	22729 D	Screw, for connecting rod-----	4
19	29126 DF	Lower Looper Bar Driving Lever and Connecting Rod Assembly-----	1
20	39544 N	Lower Looper Connecting Rod-----	1
21	22729 E	Screw, for connecting rod-----	2
22	22729 D	Screw, for connecting rod-----	2
23	39544 S	Ball Joint Guide Fork-----	1
24	97	Screw, for ball joint guide fork-----	2
25	39544 U	Lower Looper Bar Driving Lever-----	1
26	666-255	Felt Plug, for connecting rod-----	1
27	39594 N	Oil Splasher-----	1
28	87 U	Screw, for oil splasher-----	1
29	39544 B	Lower Looper Bar Connecting Link-----	1
30	39544 D	Lower Looper Bar Connecting Link Pin-----	2
31	77	Screw, for lower looper bar connecting link pin---	1
32	39544	Lower Looper Bar-----	1
33	39151	Nut, for lower looper bar-----	1
34	39508 B	Lower Looper-----	1
35	39508 A	Upper Looper, marked "C C"-----	1
36	39543	Upper Looper Holder-----	1
37	22564 G	Screw, for upper looper-----	1
38	39543 A	Upper Looper Holder Collar-----	1
39	22 KH	Screw, for upper looper holder collar-----	1
*40	39543 S	Bushing and Cam Guide-----	1
41	22565 H	Spot Screw, for bushing and cam guide-----	1
42	1025 L	Lock Screw, for bushing and cam guide screw----	1
*43	39543 T	Cam Follower-----	1
44	482 C	Lower Looper Driving Shaft Collar-----	1
45	22894 C	Screw, for collar-----	2
*46	39543 K	Upper Looper Drive Lever Shaft-----	1
47	39543 E	Cam Follower Locking Clamp-----	1
48	22503 F	Screw, for cam follower locking clamp-----	1
49	77	Screw, for lower looper bar connecting link pin---	1

* The use of assembly No. 29126 EC is recommended instead of the individual parts.

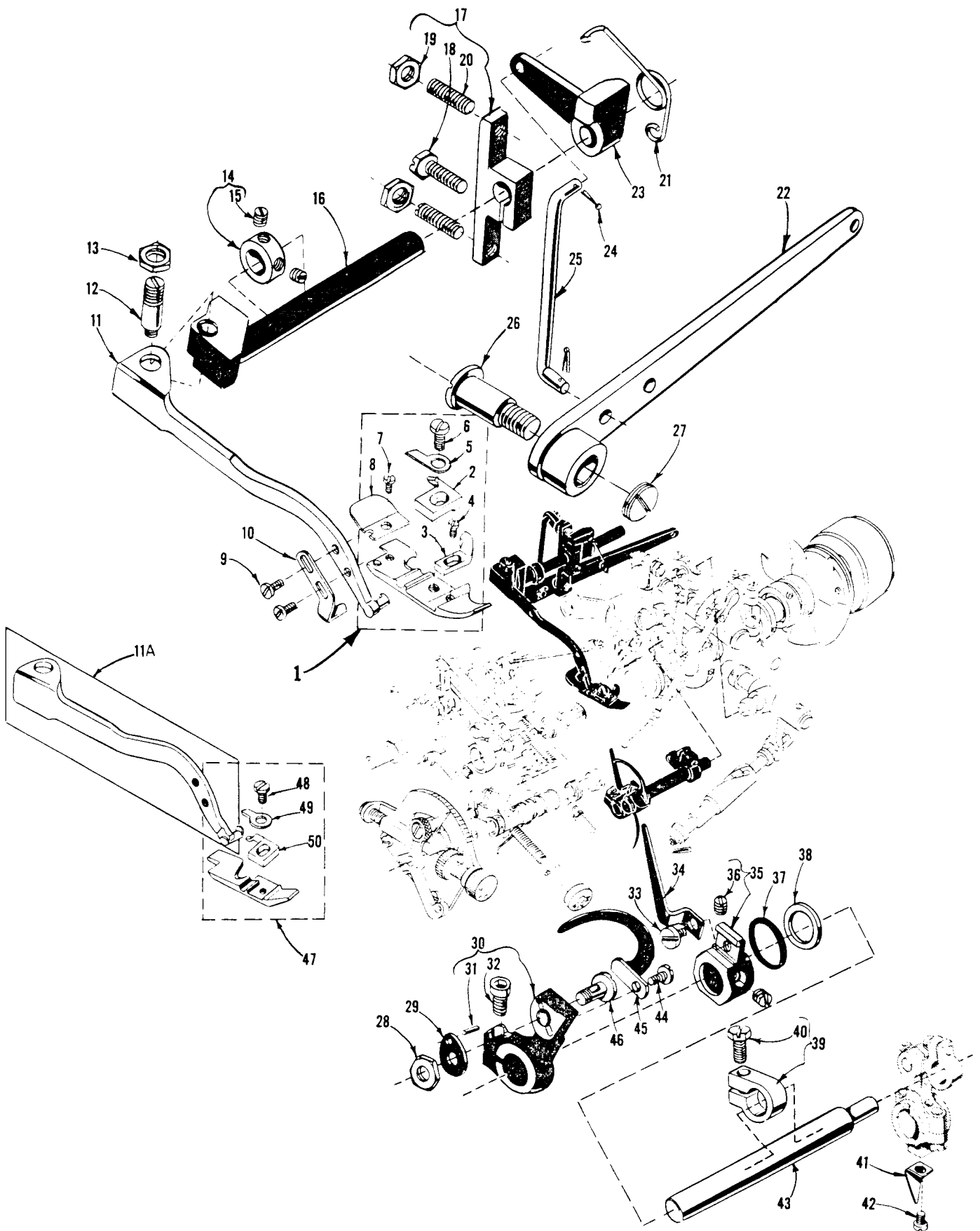


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NEEDLE GUARDS, THROAT PLATE, UPPER AND LOWER KNIFE MECHANISM

Ref. No.	Part No.	Description	Amt. Req.
1	39573 H	Upper Knife Driving Arm -----	1
2	39573 A	Upper Knife Driving Arm Washer -----	1
3	39573 E	Upper Knife Driving Lever -----	1
4	55235 D	Locking Stud, for upper knife driving lever ----	1
5	6042 A	Washer, for upper knife driving lever -----	1
6	55235 E	Nut, for upper knife driving lever -----	1
7	39573 J	Upper Knife Driving Connecting Rod -----	1
8	22587 J	Screw, for upper knife driving connecting rod --	2
9	14077	Nut, for upper knife clamp stud -----	1
10	39571 B	Upper Knife Chain Guard -----	1
11	39571 F	Upper Knife Clamp-----	1
12	39570	Upper Knife -----	1
13	39572	Upper Knife Holder Block-----	1
14	39571 D	Upper Knife Clamp Stud -----	1
15	22738	Screw, for upper knife clamp stud -----	1
16	22524	Screw, for throat plate -----	1
17	39550 E	Lower Knife Holder Spring-----	1
18	39524 C-3/32	Throat Plate, marked "AC-3/32", for 3/32 inch (2.38 mm) wide seam, for 695B001 and 003 -----	1
	39524 C-1/8	Throat Plate, marked "AC-1/8", for 1/8 inch (3.17 mm) wide seam, for 695B001 and 003 -----	1
	39524 C-5/32	Throat Plate, marked "CU", for 5/32 inch (3.97 mm) wide seam, for 695B001 and 003 -----	1
18A	39524 BP-3/32	Throat Plate, marked "CS", for 3/32 inch (2.38 mm) wide seam, for 695B002 -----	1
	39524 BP-1/8	Throat Plate, marked "CT", for 1/8 inch (3.17 mm) wide seam, for 695B002 -----	1
	39524 BP-5/32	Throat Plate, marked "CV", for 5/32 inch (3.97 mm) wide seam, for 695B002 -----	1
19	39525 A	Needle Guard, rear -----	1
20	39525	Needle Guard, front-----	1
21	22585 A	Screw, for needle guard -----	2
22	39580 F	Washer, for throat plate and lower knife support bracket-----	2
23	22653 B-12	Screw, for throat plate and lower knife support bracket-----	2
24	39580 AH	Throat Plate and Lower Knife Support Bracket ----	1
25	14077	Nut, for lower knife holder locking screw -----	1
26	22892 B	Locking Screw, for lower knife holder -----	1
27	39550 C	Lower Knife Holder Locking Stud -----	1
28	22729 B	Screw, for lower knife holder locking stud-----	1
29	39550 S	Lower Knife Holder -----	1
30	39549	Lower Knife-----	1
31	39550 M	Lower Knife Clamp Spring -----	1
32	39550 Z	Lower Knife Clamp -----	1
33	22588 J	Screw, for lower knife clamp -----	1

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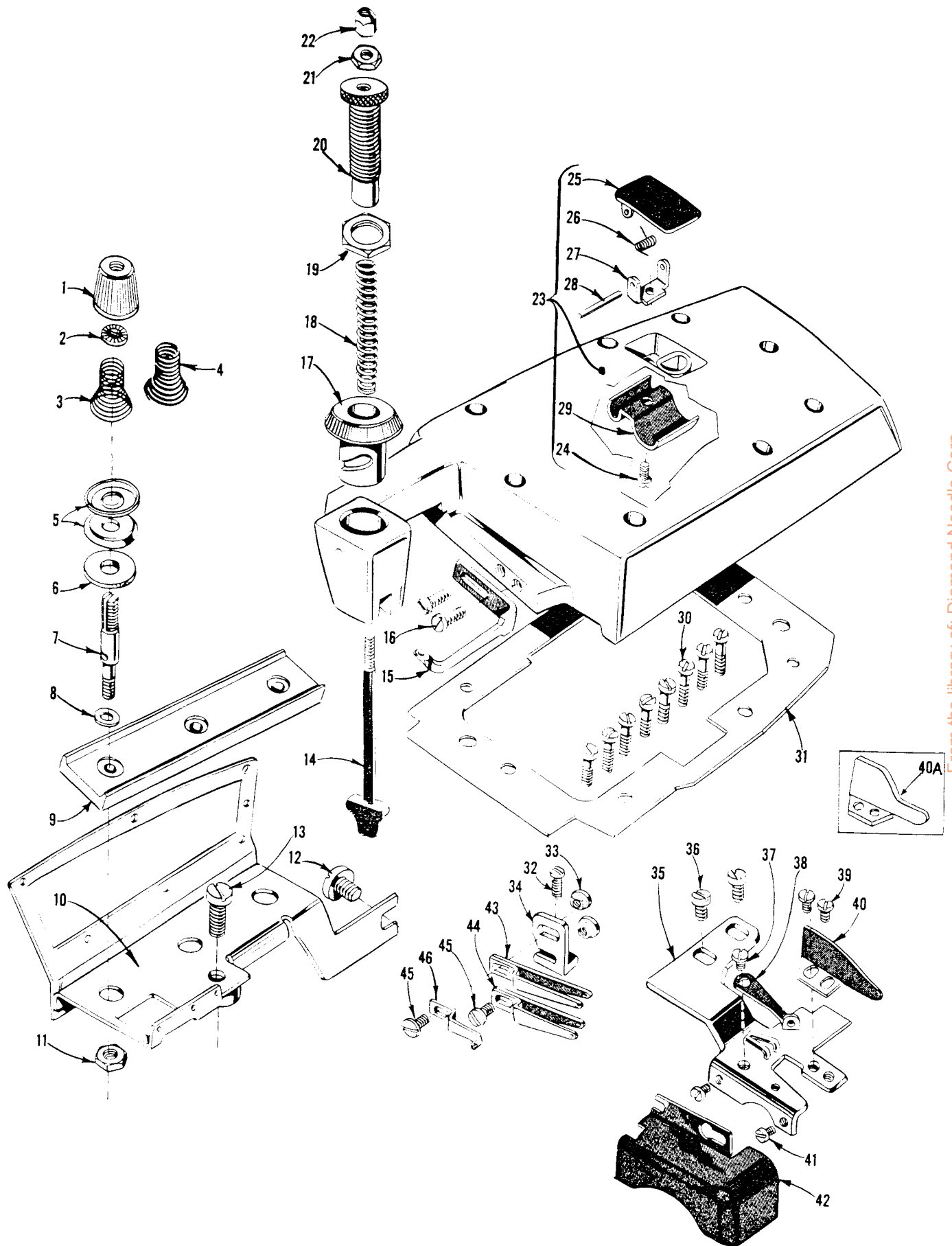


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PRESSER FOOT, PRESSER FOOT LIFTER AND NEEDLE DRIVE PARTS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	39520 B	Presser Foot Assembly, for 695B001 and 003 -----	1
2	39597 A	Stitch Tongue, marked "DS" -----	1
3	39530 P	Chip Guard -----	1
4	22738 B	Screw, for chip guard -----	1
5	39530	Hinge Spring -----	1
6	22768 B	Screw, for stitch tongue and hinge spring -----	1
7	22738 B	Screw, for chain shield -----	1
8	39530 C	Chain Shield -----	1
9	605 A	Screw, for presser foot hold down plate -----	2
10	39556 H	Presser Foot Hold Down Plate -----	1
11	39556 F	Presser Arm, for 695B001 and 003 -----	1
11A	39556 J	Presser Arm, for 695B002 -----	1
12	22791 H	Screw, for presser arm -----	1
13	258 A	Nut, for presser arm screw -----	1
14	12865	Foot Lifter Lever Shaft Thrust Collar -----	1
15	88	Screw, for collar -----	2
16	39555 S	Foot Lifter Lever Shaft -----	1
17	39555 C	Foot Lifter Lever Arm -----	1
18	627	Screw, for foot lifter lever arm -----	1
19	12538	Lock Nut, for foot lifter lever arm -----	2
20	22597 E	Screw, for foot lifter lever arm -----	2
21	39555 B	Foot Lifter Lever Spring -----	1
22	39855	Foot Lifter Lever -----	1
23	39555 D	Foot Lifter Intermediate Lever -----	1
24	660-142	Cotter Pin, for foot lifter lever connecting link ---	2
25	39555 F	Foot Lifter Lever Connecting Link -----	1
26	22566 B	Screw, for foot lifter lever -----	1
27	22571 D	Plug Screw, for foot lifter hole -----	1
28	14077	Nut, for needle clamp stud -----	1
29	39551 A	Needle Clamp Washer -----	1
30	39552	Needle Driving Arm, marked "B" -----	1
31	50-774 Blk.	Stop Pin, for needle -----	1
32	22596 E	Screw, for needle driving arm -----	1
33	22513	Screw, for looper thread pull-off -----	1
34	39568 A	Looper Thread Pull-off -----	1
35	39568 Y	Looper Thread Pull-off Lever -----	1
36	88 B	Screw -----	2
37	660-207	Oil Seal Ring, for needle driving shaft -----	1
38	39552 C	Needle Driving Arm Crank Thrust Washer -----	1
39	39543 Y	Needle Drive Shaft Thrust Collar -----	1
40	22782 A	Screw, for needle drive shaft thrust collar ---	1
41	39594 N	Oil Splasher -----	1
42	87 U	Screw, for oil splasher -----	1
43	39552 R	Needle Driving Shaft -----	1
44	87 U	Screw, for needle thread cam pull-off -----	1
45	39563 G	Needle Thread Cam Pull-off -----	1
46	39551 F	Needle Clamp Stud -----	1
47	39520 BP	Presser Foot Assembly, for 695B002 -----	1
48	22768 B	Screw, for stitch tongue and hinge spring -----	1
49	39530 G	Hinge Spring -----	1
50	39597 BP	Stitch Tongue, marked "FA" -----	1

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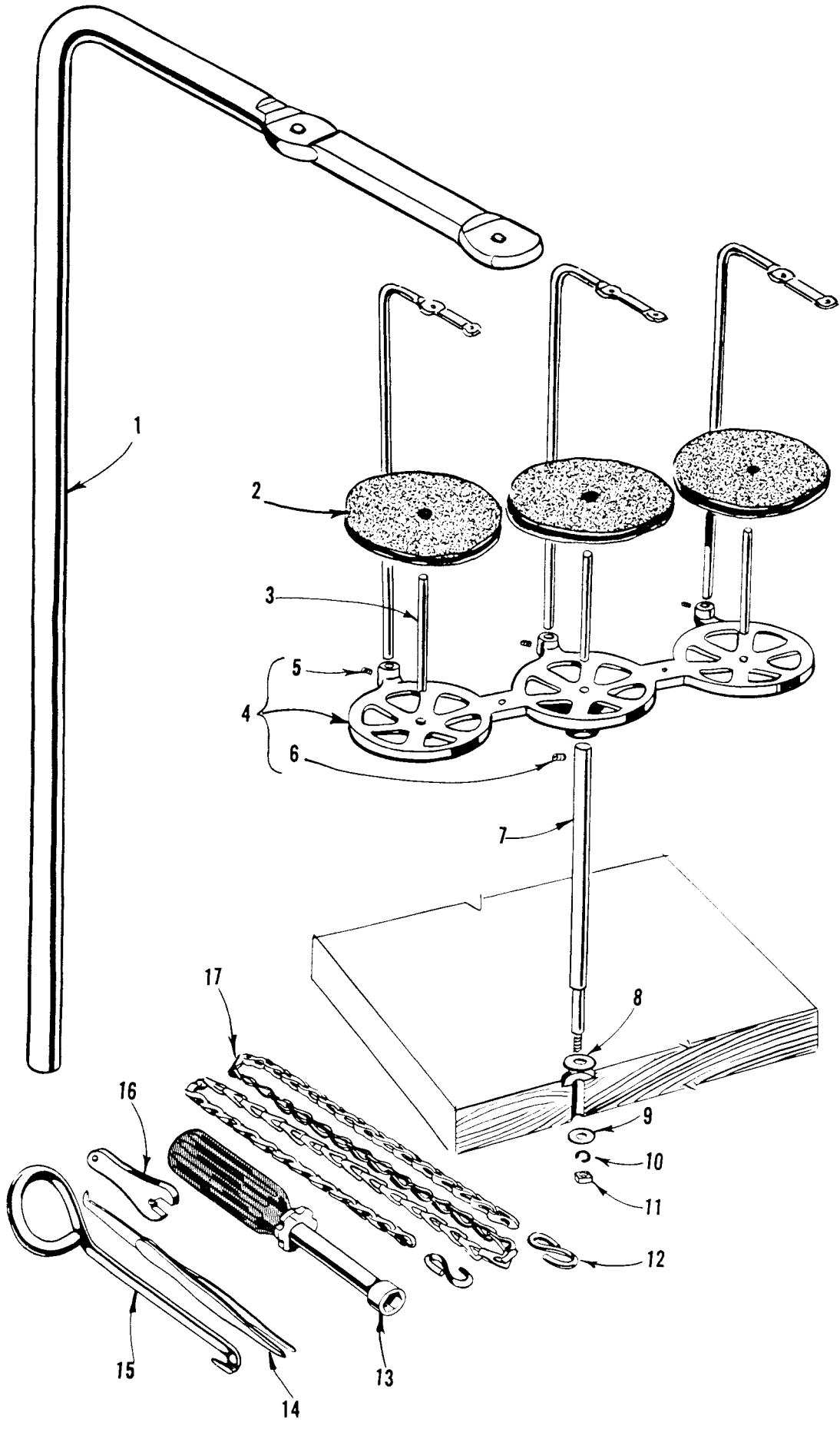


IMPORTANT: BEFORE ORDERING ANY PARTS BELOW, REFER TO THE DETAILED INSTRUCTIONS ON PAGE 17

THREAD TENSION PARTS, PRESSER SPRING, TOP COVER
AND MISCELLANEOUS EYELETS

Ref. No.	Part No.	Description	Amt. Req.
1	39592 AB	Upper Looper Tension Nut, blue -----	1
	39592 AA	Needle Tension Nut, green -----	1
	39592 AC	Lower Looper Tension Nut, red-----	1
2	39592 AK	Tension Spring Ferrule -----	3
3	39592 AR-5	Looper Thread Tension Spring-----	2
	39592 AR-5	Needle Tension Thread Spring, for 695B001 and 002 -----	1
4	39592 AR-8	Needle Tension Thread Spring, for 695B003 -----	1
5	39592 AD	Thread Tension Disc-----	6
6	39592 AF	Tension Disc Felt -----	3
7	39592 AL	Tension Post-----	3
8	8372 A	Washer, for tension post -----	3
9	39592 AM	Tension Post Bar-----	1
10	39592 AG-3	Tension Post Mounting Bracket -----	1
11	39592 AH	Tension Post Nut-----	3
12	22847 B	Screw, for tension post mounting bracket -----	1
13	22806 A	Screw, for tension post mounting bracket -----	1
14	39557 A	Presser Spring Plunger-----	1
15	39563 F	Top Cover Needle Thread Eyelet-----	1
16	22569 B	Screw, for top cover needle thread eyelet-----	2
17	39556 A	Presser Foot Release Bushing-----	1
18	39557	Presser Spring-----	1
19	39557 F	Lock Nut, for plunger adjusting screw-----	1
20	39557 C	Presser Spring Plunger Adjusting Screw-----	1
21	39557 E	Presser Spring Plunger Lock Nut -----	1
22	39557 B	Presser Spring Plunger Cap Nut -----	1
23	39582 AD	Top Cover -----	1
24	22562 A	Screw, for hinge bracket -----	1
25	39582 AF	Oil Filler Cover-----	1
26	39582 V	Spring-----	1
27	39582 AG	Hinge Bracket-----	1
28	51-103 Blk.	Hinge Pin-----	1
29	39582 W	Oil Guard-----	1
30	22541	Screw, for top cover-----	8
31	39582 AE	Gasket, for top cover -----	1
32	22569 B	Screw, for looper thread eyelet mounting bracket	1
33	43139 A	Nut, for looper thread eyelet screw -----	2
34	39568 D	Looper Thread Eyelet Mounting Bracket -----	1
35	39582 BN	Oil Shield, upper-----	1
36	22569 C	Screw, for upper oil shield-----	2
37	22513	Screw, for lower looper thread eyelet -----	1
38	39568 AA	Lower Looper Thread Eyelet -----	1
39	87 B	Screw, for fabric guard-----	2
40	39578 M	Fabric Guard, for 695B001 and 003 -----	1
40A	39578 AF	Fabric Guard, for 695B002 -----	1
41	22513	Screw, for oil shield end-----	2
42	39582 BP	Oil Shield, end-----	1
43	39568 L	Upper Looper Thread Eyelet-----	1
44	39568 B	Lower Looper Thread Eyelet -----	1
45	376 A	Screw, for upper and lower thread eyelet -----	2
46	39568 E	Auxiliary Looper Thread Eyelet-----	1

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IMPORTANT: BEFORE ORDERING ANY PARTS BELOW, REFER TO THE DETAILED INSTRUCTIONS ON PAGE 17

THREAD STAND AND MISCELLANEOUS TOOLS

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Amt. Req.</u>
1	21113 F	Thread Stand Eyelet -----	3
2	21104 V	Pad, for thread cone-----	3
3	69 S	Spool Pin -----	3
4	21130 W-3	Cone Support-----	1
5	22650 CB-4	Screw, for spool pin-----	3
6	22650 CE-6	Screw, for cone support-----	1
7	21104 AA	Thread Stand Rod -----	1
8	652 J-24	Washer, for thread stand rod -----	1
9	652 J-16	Washer, for thread stand rod -----	1
10	WA9 A	Lock Washer, for thread stand rod -----	1
11	651 A-16	Nut, for thread stand rod-----	1
12	660-264	"S" Hook, for treadle chain-----	2
13	21388 AU	Socket Wrench, for 3/8 inch nuts holding feed eccentrics -----	1
14	660-240	Thread Tweezers-----	1
15	21227 BF	Feed Eccentric Extractor Hook -----	1
16	116	Wrench, for 9/32 inch nut -----	1
17	421 D-34	Treadle Chain, 34 inches long -----	1
-		Can of Oil, 16 fluid ounces -----	1

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