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STYLES

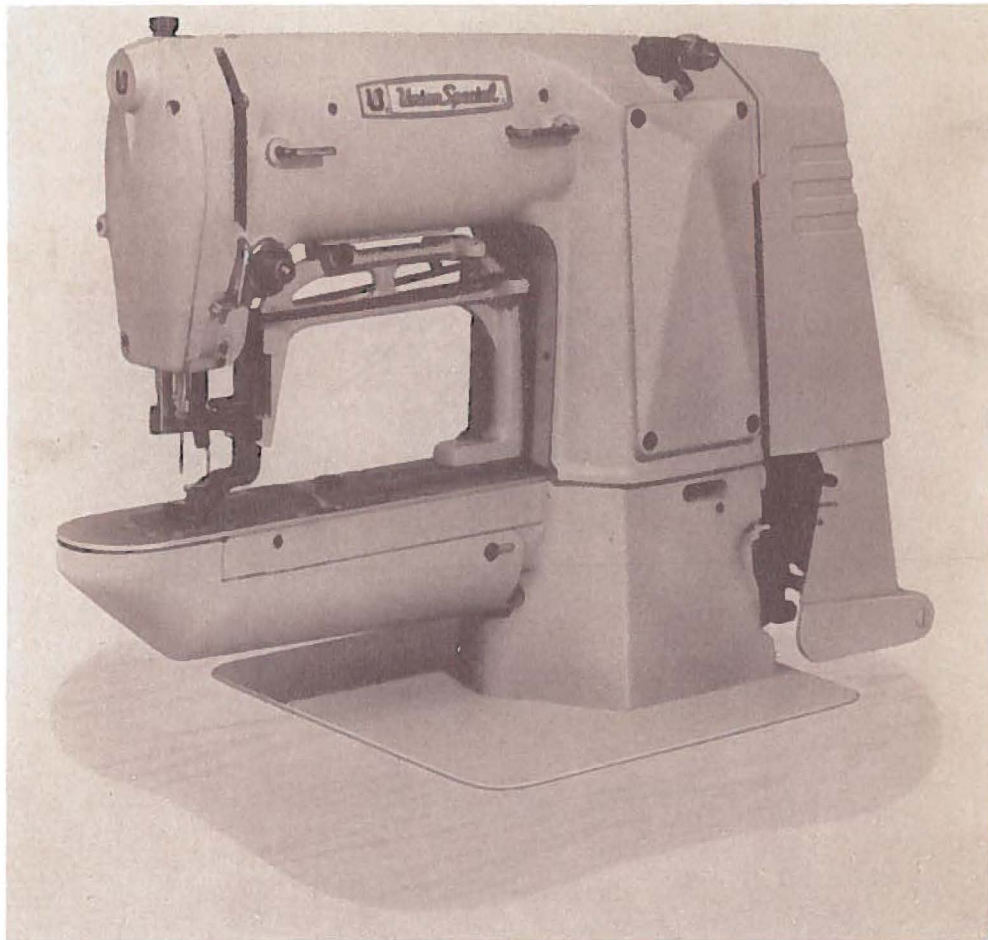
P260-9/108

P260-9/109

P260-9/126

P260-9/139

P260-9/141



CLASS P260

**HIGH SPEED SINGLE NEEDLE LOCKSTITCH
MACHINES FOR GENERAL BARRING
AND TACKING OPERATIONS**

CATALOG

NO.

P3148

UNION SPECIAL CORPORATION

CHICAGO

From the library of: Superior Sewing Machine & Supply LLC

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DESCRIPTION

Machines of Class P260 are single-needle, lockstitch machines designed for barring and tacking operations. The machines will produce the number of stitches indicated in their individual descriptions and will stop automatically with needle in raised position upon completion of stitching cycle.

General Characteristics

Fully enclosed starting and stopping mechanism, machine pulley and driving belt.

Manually operated work clamp and thread trimming device actuated by foot treadle.

Link take-up, short beak, central bobbin, oscillating shuttle on horizontal axis.

Automatic stop and clutching device.

Two-piece machine pulley (tight and loose). Outside diameter of V-belt groove 3-1/4 inches.

Needle bar stroke: 1-9/16 inches.

Clearance under clamp: 5/8 inch.

Cylinder bed. Flat bed type work plate furnished on request.

Special Features

Style P260-9/108 — for barring pockets and general barring and tacking operations on clothing, etc. Forms a bar 1/8 to 5/8 inch long and 1/16 to 5/32 inch wide consisting of 42 stitches (12 staying, 27 covering and 3 tying stitches). Space behind needle, 8 inches.

Style P260-9/109 — for barring buttonholes and fastening bows and other ornaments on shoes and garments. Forms a bar 1/8 to 5/16 inch long and 1/16 to 5/32 inch wide, consisting of 21 stitches (7 staying, 11 covering and 3 tying stitches). Space behind needle, 8 inches.

Style P260-9/126 — for barring pockets and other general barring and tacking operations. Forms a bar 1/8 to 5/8 inch long and 1/16 to 5/32 inch wide consisting of 28 stitches (8 staying, 17 covering and 3 tying stitches at left rear corner of bar). Space behind needle, 8 inches.

Style P260-9/139 — for tacking belt loops on trousers, shorts, etc. Forms a line tack 1/8 to 1/2 inch long consisting of 28 stitches (including 3 tying stitches). Space behind needle, 8 inches. Regularly furnished with flat bed type work plate.

Style P260-9/141 — for barring pockets, etc., on 13 to 14 plies of 15 oz. denim or equivalent. Forms a bar 1/8 to 5/8 inch long and 1/16 to 5/32 inch wide consisting of 28 stitches (8 staying, 17 covering, 1 cross and 2 tying stitches). Space behind needle, 8 inches.

LUBRICATION

For best results, use proper "Type B" or "Type D" Oil. Use "Type D" Oil when an oil is desired to produce a minimum of stain on fabric.

Daily Care

Before starting machine, apply a few drops of oil to each of the holes indicated in Fig. 2.

Weekly Care

Remove face plate, and apply a drop of oil to each of the points indicated in Fig. 3.

NOTE: At least once each year, machine pulley (loose) should be removed and repacked with ball bearing lubricant.

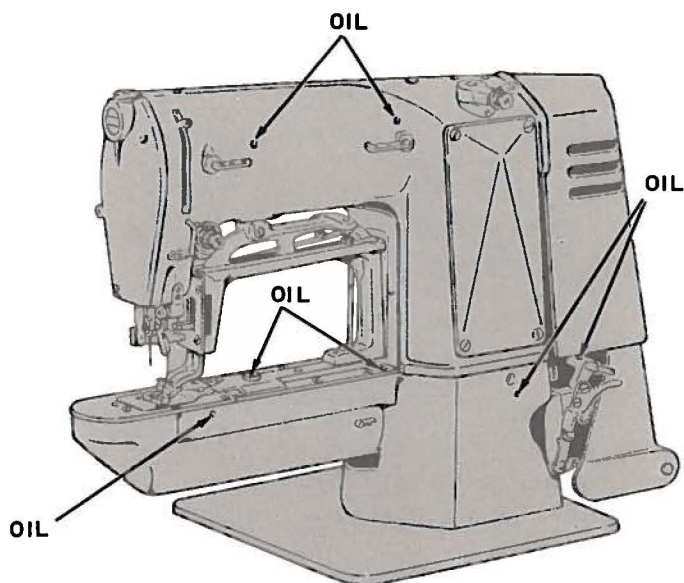
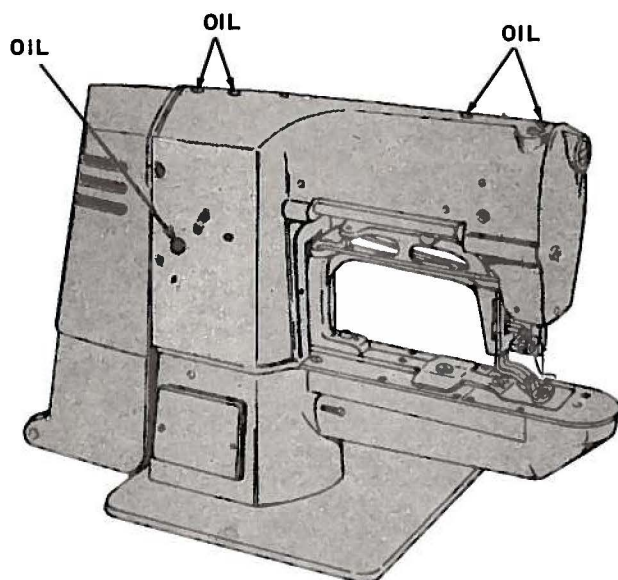


Fig. 2. Lubricating the Machine

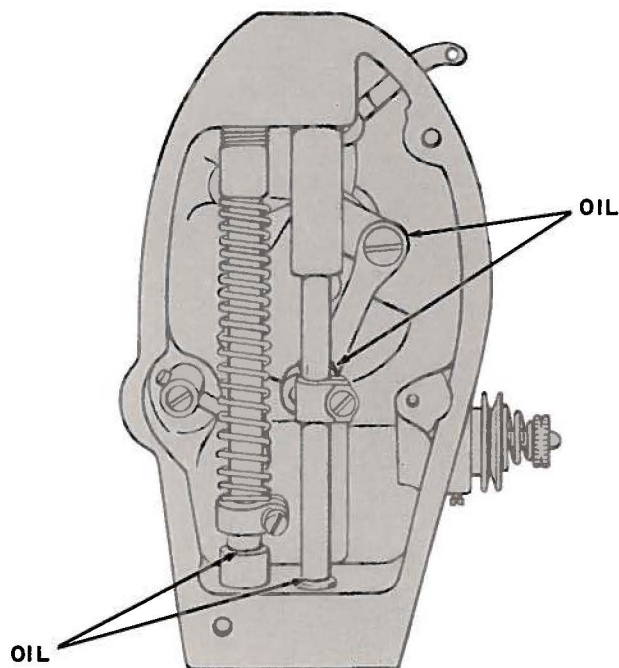


Fig. 3. Oiling Points Behind Face Plate

Cleaning

Using a short bristled brush (not point of scissors or shears), clean out all lint and other waste from around the shuttle and all other parts of the sewing area.

Wipe off all excess oil which may come in contact with material to be sewn.

SPEED

Maximum speed recommended for these machines is 2,000 stitches per minute, except Style P260-9/141 which is 1,200 - 1,600.

Maximum efficient speed is determined upon the nature of the operation, the ability of the operator and type of material being sewn.

NEEDLES

The size needle to be used is determined by the size of the thread which must pass freely through the eye of the needle. Needle type P1628 is recommended for these Class P260 machines.

To Set the Needle

With machine in "stop" position loosen needle clamping screw, shown in Fig. 4.

Insert needle up into needle bar as far as it will go making certain that the long continuous groove of the needle, faces toward the operator as shown in Fig. 4. Then securely tighten clamping screw.

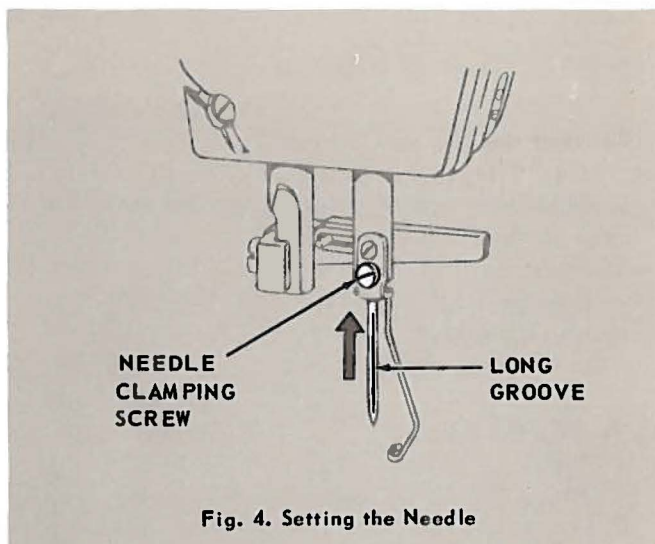


Fig. 4. Setting the Needle

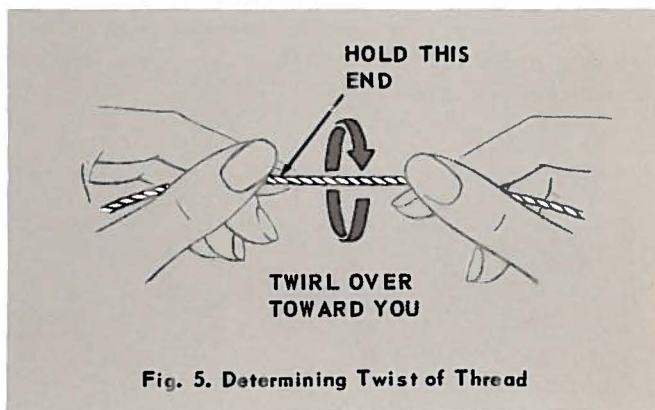


Fig. 5. Determining Twist of Thread

THREAD

Use only left twist thread in the needle and either left or right twist thread in the bobbin.

To determine the twist, hold thread as shown in Fig. 5. Then twirl thread over toward you. Thread is left twist if strands tighten; right twist if strands unwind.

UPPER THREADING

Pass needle thread from the unwinder through all points indicated in Fig. 6. Inset in Fig. 6, shows correct threading of needle.

Draw approximately two inches of thread through the eye of the needle with which to start sewing.

NOTE: Threading of upper thread retainer used only on Style P260-9/109 in place of eyelet, is shown in inset in Fig. 6. Lower thread retainer, Fig. 6, is not used on Style P260-9/109.

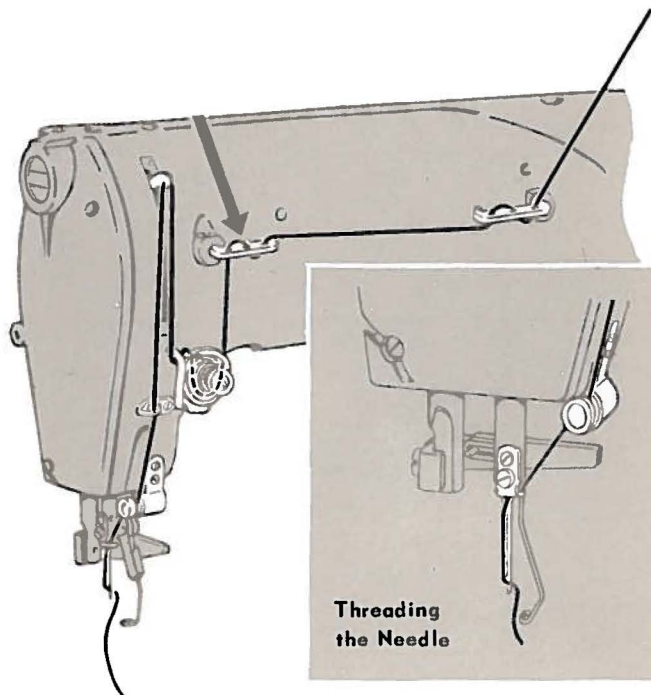


Fig. 6. Threading the Machine

LOWER THREADING

Bobbin Removal

Open front end of cylinder bed and remove bobbin case as shown in Fig. 7.

Release latch and bobbin will drop out of case, as shown in Fig. 8.

To Wind the Bobbin

Place bobbin on bobbin winder spindle, as shown in Fig. 9.

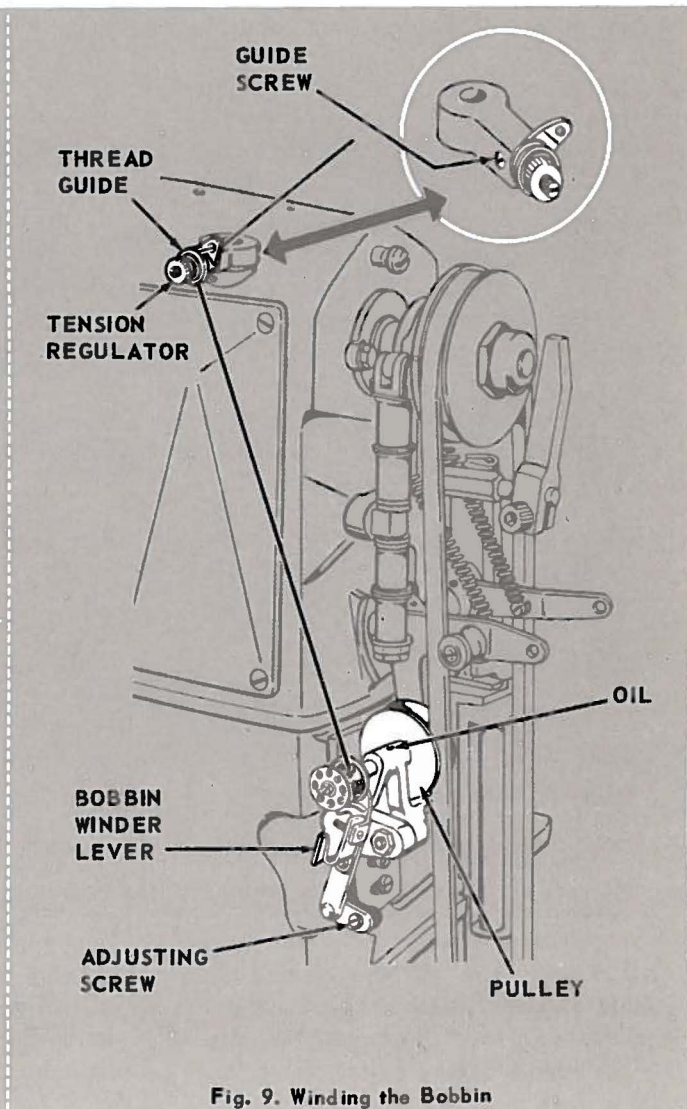
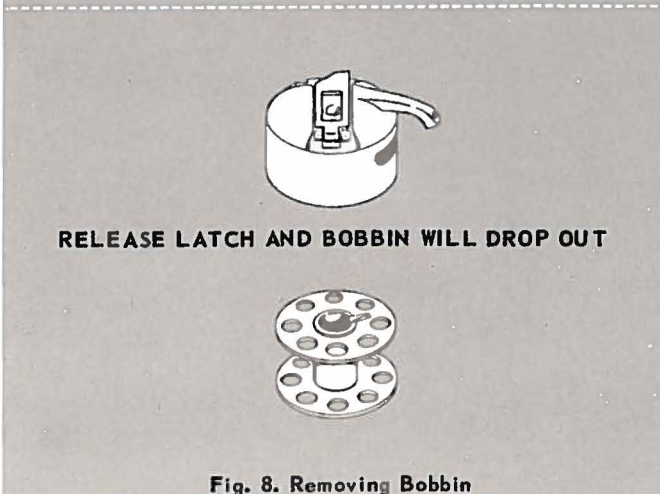
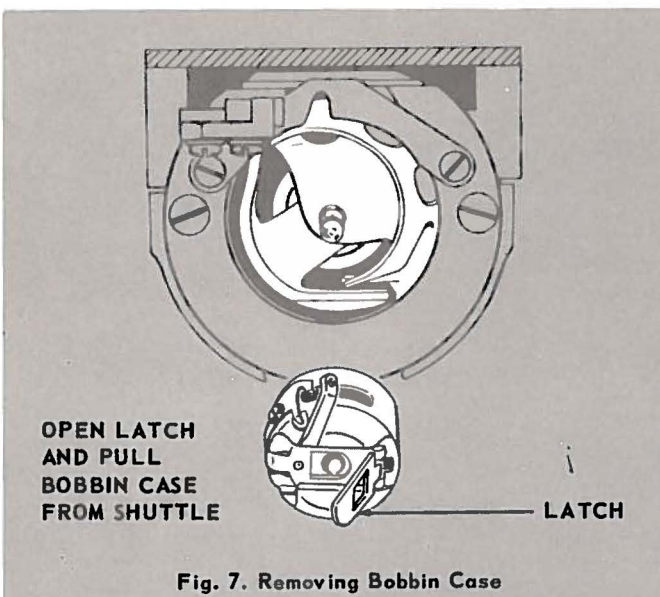
Pass thread from the unwinder through threading points indicated in Fig. 9. Wind thread clockwise around bobbin a few times.

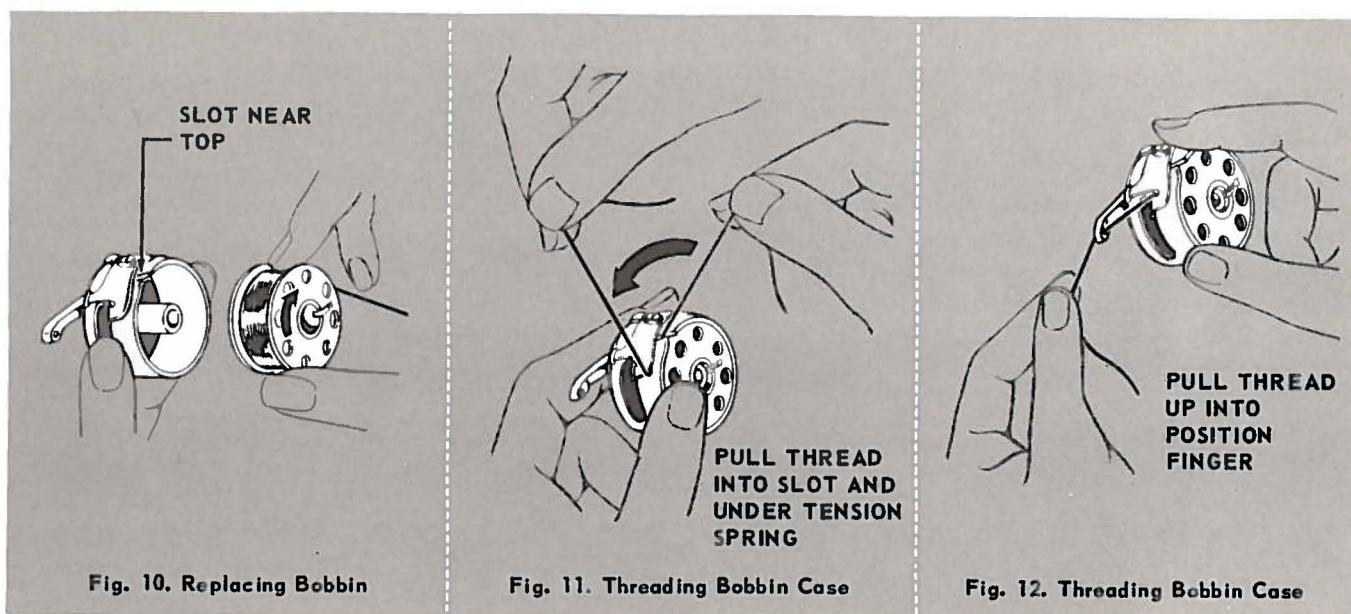
Push bobbin winder lever toward rear, bringing its pulley into contact with machine belt. The bobbin winder will automatically release when bobbin is full.

Adjustment for uneven winding can be made by loosening thread guide screw, Fig. 9, and moving thread guide forward or backward, as required. When correct setting is obtained, tighten guide screw.

Adjusting Bobbin Winder

Bobbin winder pulley, Fig. 9, should press firmly against machine driving belt when winding the bobbin. To adjust, place bobbin winder in winding position, loosen adjusting screw, Fig. 9, and move pulley as required. Then securely tighten adjusting screw.





Threading Bobbin Case

Hold bobbin so that thread will unwind in the direction shown in Fig. 10. Hold bobbin case as shown and place bobbin into case.

Pull thread into slot and under tension spring, Fig. 11. Then up into position finger, as shown in Fig. 12. Draw approximately two inches of thread from bobbin with which to start the sewing.

Bobbin Case Replacement

While holding latch open, place bobbin case on stud of bobbin case holder, (see Fig. 13). Release latch and press bobbin case back until latch engages groove of stud.

THREAD TENSION

Tension of thread should be as light as possible while still sufficient to set the stitch correctly in the material.

Needle Thread Tension

Tension on needle thread is regulated by thumb nut in front of tension discs, as shown in Fig. 14.

Bobbin Thread Tension

Tension on bobbin thread is regulated by screw on bobbin case tension spring, as shown in Fig. 15.

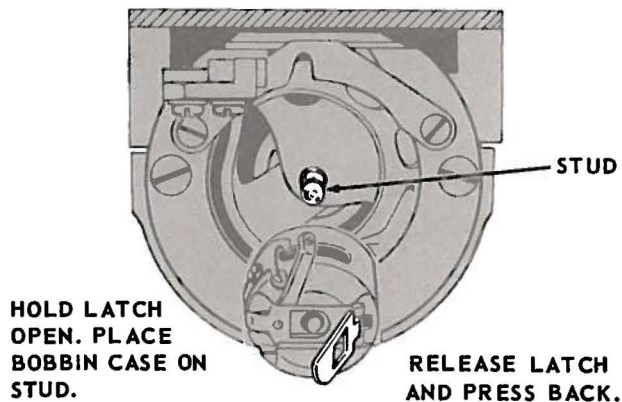


Fig. 13. Replacing Bobbin Case

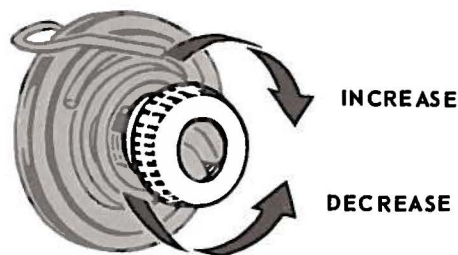


Fig. 14. Adjusting Needle Thread Tension

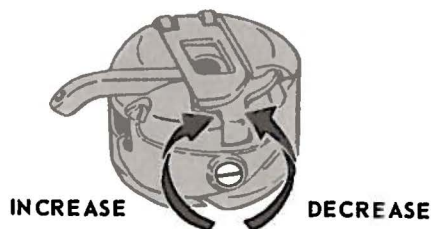
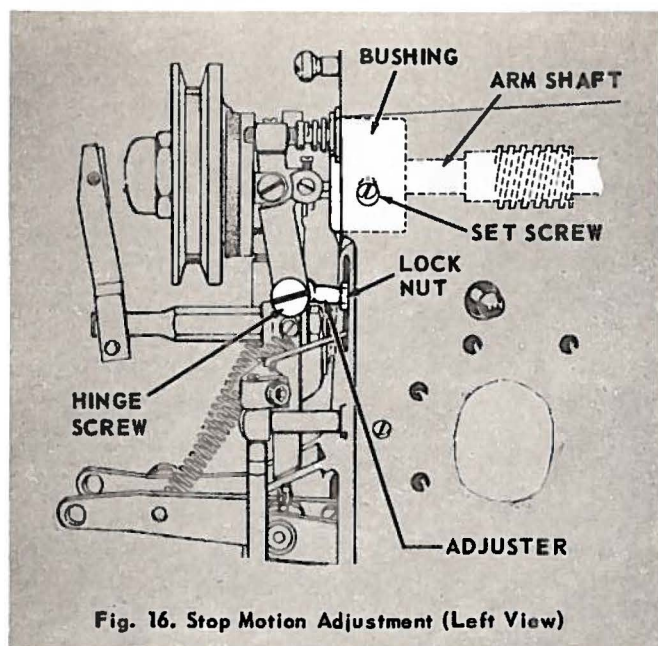


Fig. 15. Adjusting Bobbin Thread Tension



STOP MOTION ADJUSTMENTS

ARM SHAFT

Before any adjustment is made on the stop motion mechanism, check the adjustment of the arm shaft.

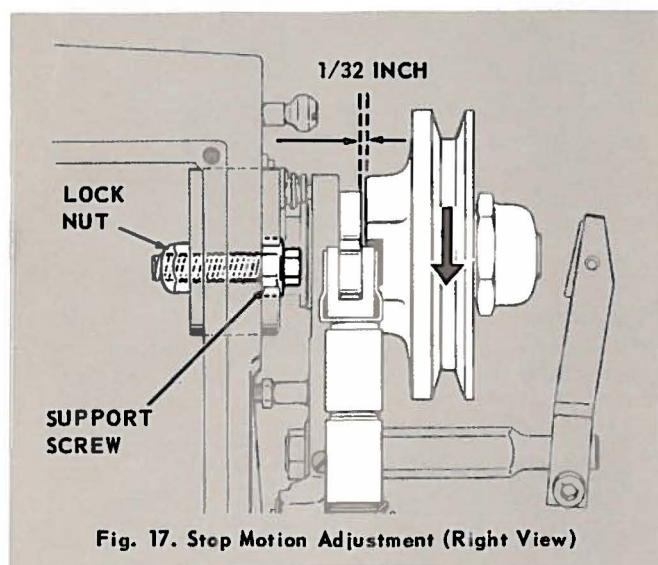
Check:

There should be a minimum of play without binding in the arm shaft, shown in Fig. 16.

Adjustment:

To adjust end play, loosen rear bushing set screw, Fig. 16, and support screw lock nut, Fig. 17. Move rear bushing outward by turning support screw, Fig. 17, in a clockwise direction. Then securely tighten bushing set screw and support screw lock nut.

Check adjustment to be certain that end play is at a minimum and there is no binding.



STARTING LEVER

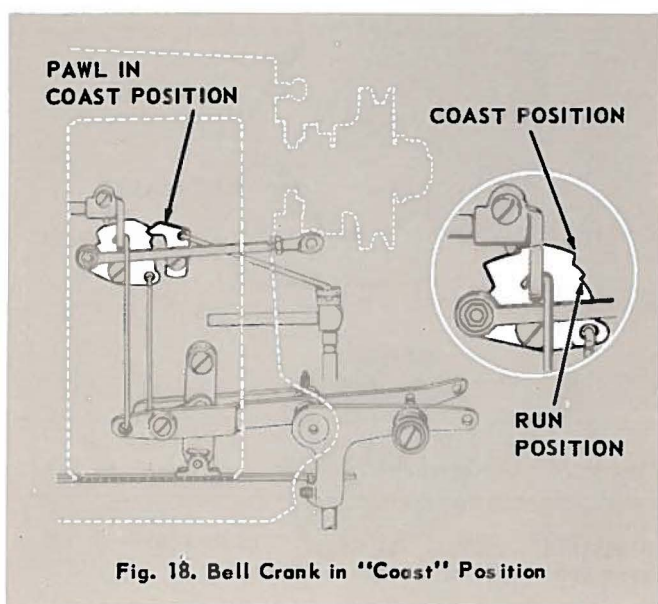
Check:

Depress starting lever to engage machine in "run" position. Turn machine pulley over, as indicated in Fig. 17, until bell crank pawl moves back into the first or "coast" position in bell crank, as shown in Fig. 18.

At this position, there should be approximately 1/32 inch clearance between the interlocking arm and the high point of camming surface on machine pulley, as indicated in Fig. 17.

Adjustment:

Loosen starting rod adjuster lock nut and remove hinge screw shown in Fig. 16. Turn starting rod adjuster in or out one full turn for each 1/32 inch of adjustment required to obtain the correct clearance. Then replace hinge screw and tighten lock nut.



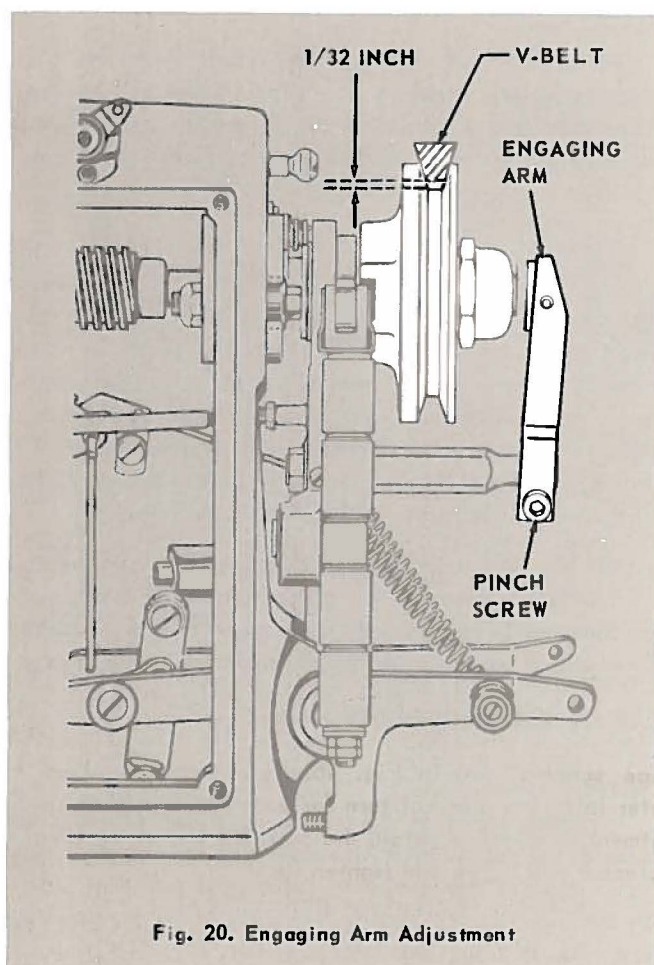
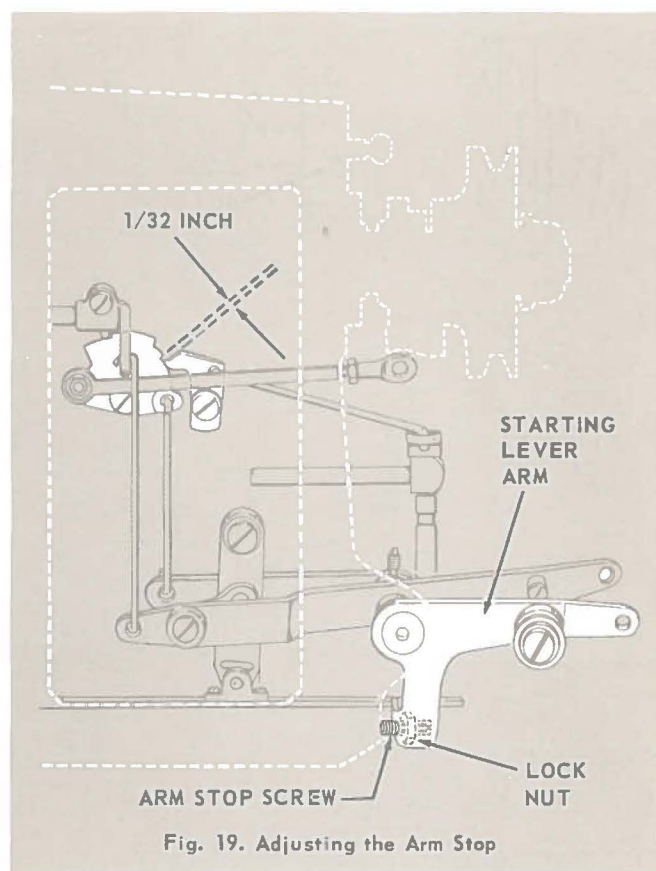
STARTING LEVER ARM STOP

Check:

When correctly set, the starting lever arm stop, Fig. 19, should limit the clearance between the starting bell crank and the bell crank pawl to approximately $\frac{1}{32}$ inch past the "run" notch when the starting lever arm is depressed.

Adjustment:

Loosen arm stop screw lock nut, Fig. 19, and turn arm stop screw until proper clearance is attained. Then tighten lock nut.



ENGAGING ARM

Check:

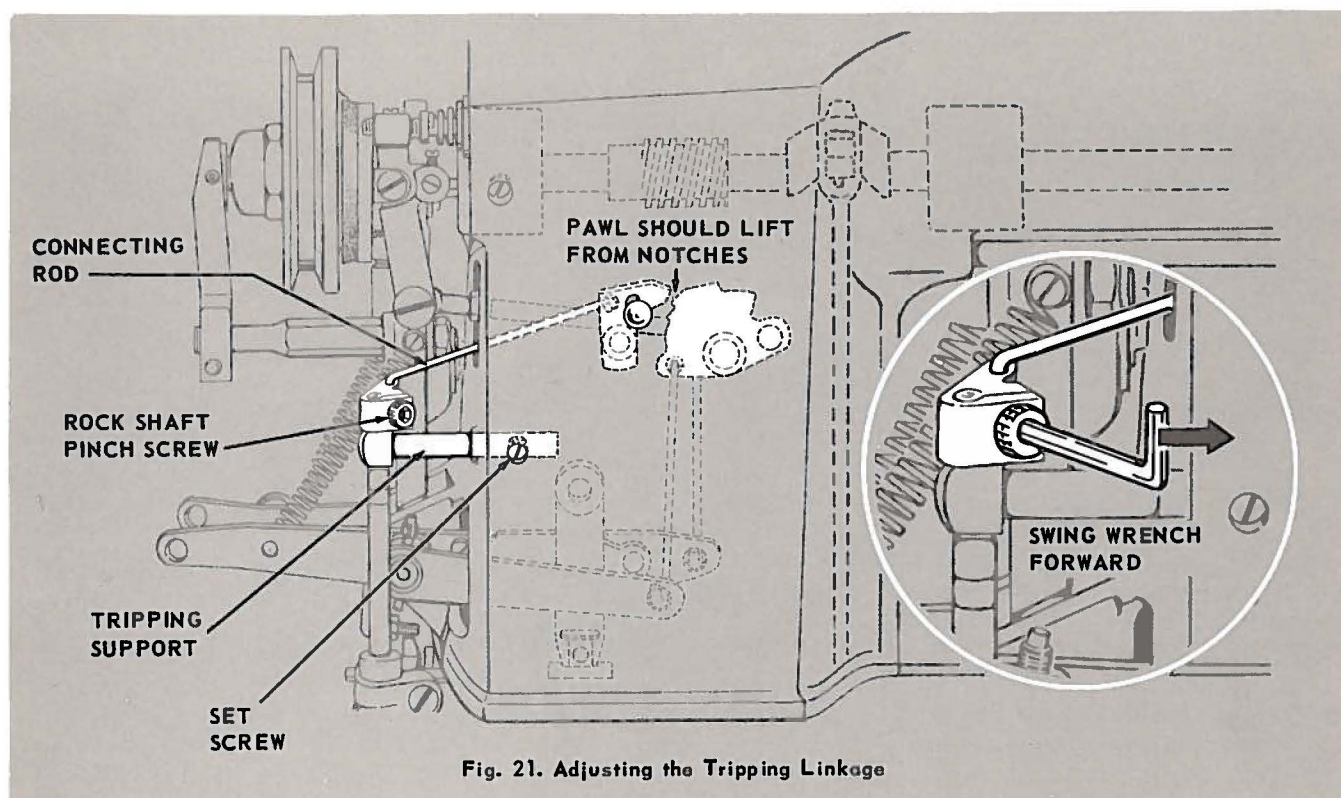
When the engaging arm is properly adjusted, the "V-belt" will rise approximately $\frac{1}{32}$ inch off bottom of idler pulley and up the side of the driving pulley, as shown in Fig. 20, when starting lever arm is depressed to "run" position.

Adjustment:

With engaging arm, Fig. 20, in "running" position, loosen engaging arm pinch screw and move engaging arm closer to or farther from starting cap as required. Then securely tighten pinch screw.

NOTE: Tension on "V-belt" should be just sufficient to operate machine without slippage. Adjustment is made by raising or lowering the motor, and should be made in connection with engaging arm adjustment.

STOP MOTION ADJUSTMENTS (continued)



TRIPPING ROCK SHAFT SUPPORT

Check:

The tripping rock shaft support, Fig. 21, should be positioned to hold tripping rock shaft without binding.

Adjustment:

Loosen set screw, Fig. 21, and position support in or out as required. Then tighten set screw and recheck for binding.

TRIPPING LINKAGE

Check:

When point of tripping rock shaft lever rests on tripping point, as shown in Figs. 22 or 24, the bell crank pawl should be lifted out of notches in bell crank far enough for the interlocking arm to move into "stop" position.

Adjustment:

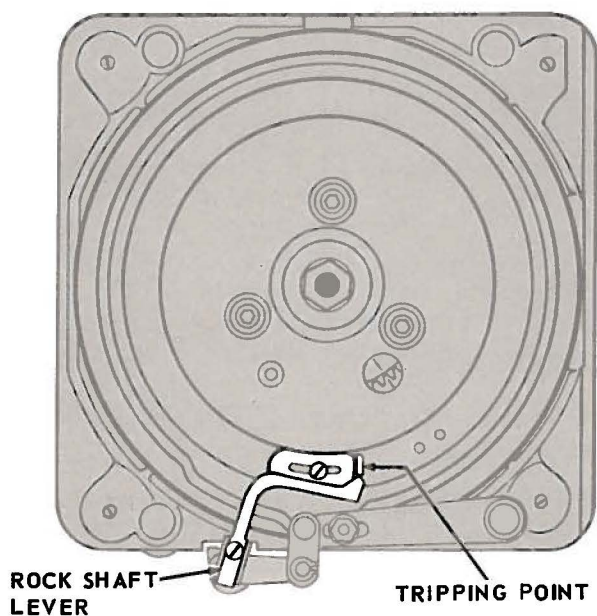
Turn machine pulley over toward operator until point of rock shaft lever rests on tripping point. Loosen rock shaft pinch screw, Fig. 21, using 5/32 inch hex-head wrench. With wrench (inserted in pinch screw) acting as a lever, move rock shaft connection forward (toward face plate) raising bell crank pawl approximately .010 inch above top of "coast" notch in bell crank, as shown in Fig. 21. Then securely tighten pinch screw.

NOTE: The procedure for adjusting the tripping linkage mechanism on machines which have more than one tripping point is the same as the procedure outlined for machines which have one tripping point.

TIMING TRIPPING POINTS

Check:

Tripping point or points on underside of feed cam should be set so that the interlocking arm will drop back against the camming surface of machine pulley as soon as the notch on pulley passes the interlocking arm prior to going into stop position



Adjustment:

On machines equipped with feed cams with tripping point shown in Fig. 23, loosen tripping point screw and move tripping point to the right to trip off sooner, or to the left to set trip off later. On machines having more than one tripping point, each tripping point must be adjusted independently.

On machines equipped with feed cams with tripping point shown in Fig. 24, it is necessary to loosen the three tripping point screws, then, set the same as above.

STOP MOTION BRAKE

CLEARANCE

Check:

The clearance between the stop motion brake shoe, Fig. 25, and the machine pulley (tight) should be approximately 1/32 inch when the machine is in "run" position.

Adjustment:

With machine in "run" position, loosen eccentric stud set screw, Fig. 25, and turn eccentric stud until the proper clearance is attained. Then tighten set screw.

PRESSURE

Check:

The brake pressure, depending upon machine speed and material being sewn, should be adjusted to prevent machine from going into full stop position while running at excessive speed; to avoid damaging machine parts.

Adjustment:

Loosen adjusting screw pinch screw, Fig. 25, and turn adjusting screw inward for more pressure, or outward for less pressure. Then tighten pinch screw.

NOTE: Stop motion brake adjustment should be re-adjusted about once a month, to offset any loss in braking power due to wear or glazing of the braking surface.

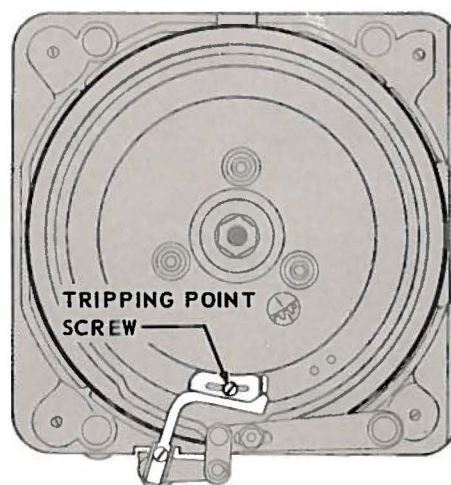


Fig. 23. Tripping Point on Cast Iron Cam

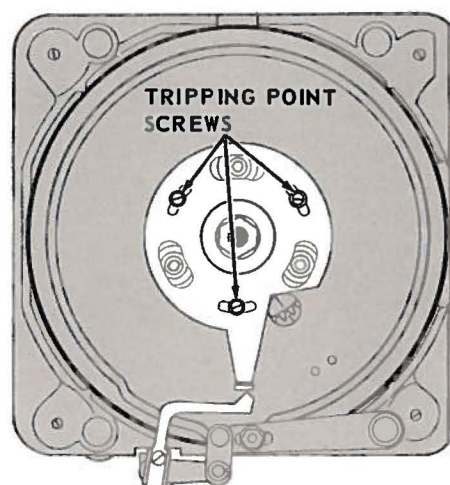


Fig. 24. Tripping Point on Phenolic Cam

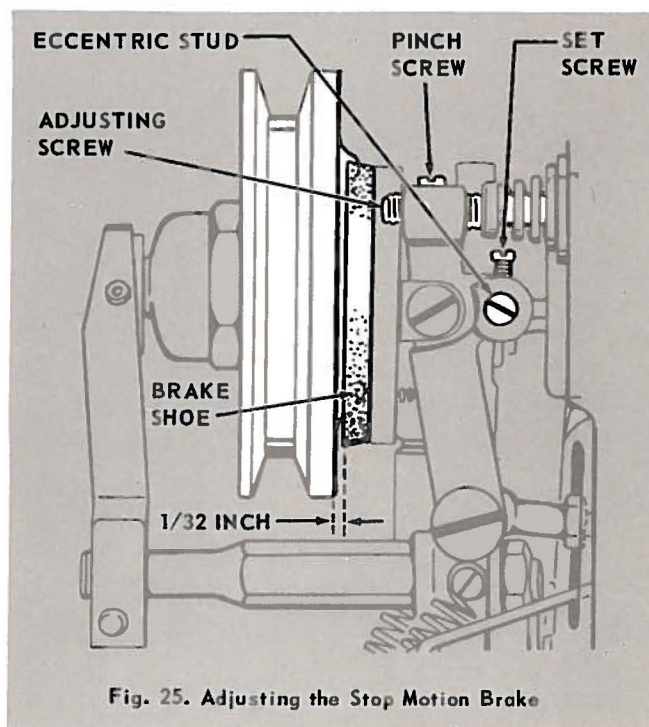


Fig. 25. Adjusting the Stop Motion Brake

KNIFE ACTUATING AND CLAMP LIFTING ADJUSTMENTS

SAFETY INTERLOCK

Check:

The safety interlock, when correctly set, will prevent the clamp from being lifted while the machine is operating and will prevent the machine from running when the clamp is lifted.

Adjustments:

With knife roller at the clear-out slot in the feed arm, depress starting lever to place starting bell crank into running position. Loosen knife bar driving lever pinch screw, Fig. 26, and lift up on clamp lifting lever arm with screwdriver, as shown in Fig. 26, bringing lifting lug against back of bell crank. While maintaining this position of the lifting lug, make certain that the knife roller is in against the cam and then tighten the pinch screw.

TENSION RELEASER

Check:

When work clamp is raised, the first upward movement of the clamp lifting bar, Fig. 27, should separate the needle thread tension discs, releasing tension on needle thread.

Adjustment:

Loosen the tension regulator set screw, Fig. 27, and move the entire regulator all the way in. Tighten set screw. Then loosen the lifting link connection screw, Fig. 27, and set lifting link so that it projects out of the rock shaft approximately $1/32$ inch. Tighten screw.

Next, loosen the lifting arm pinch screw, Fig. 26, and push upward on lifting bar, as shown in Fig. 27, until tension discs just begin to release. Maintain this position while tightening the lifting arm pinch screw. Make certain that the lifting arm is up against the forward shoulder on the rock shaft.

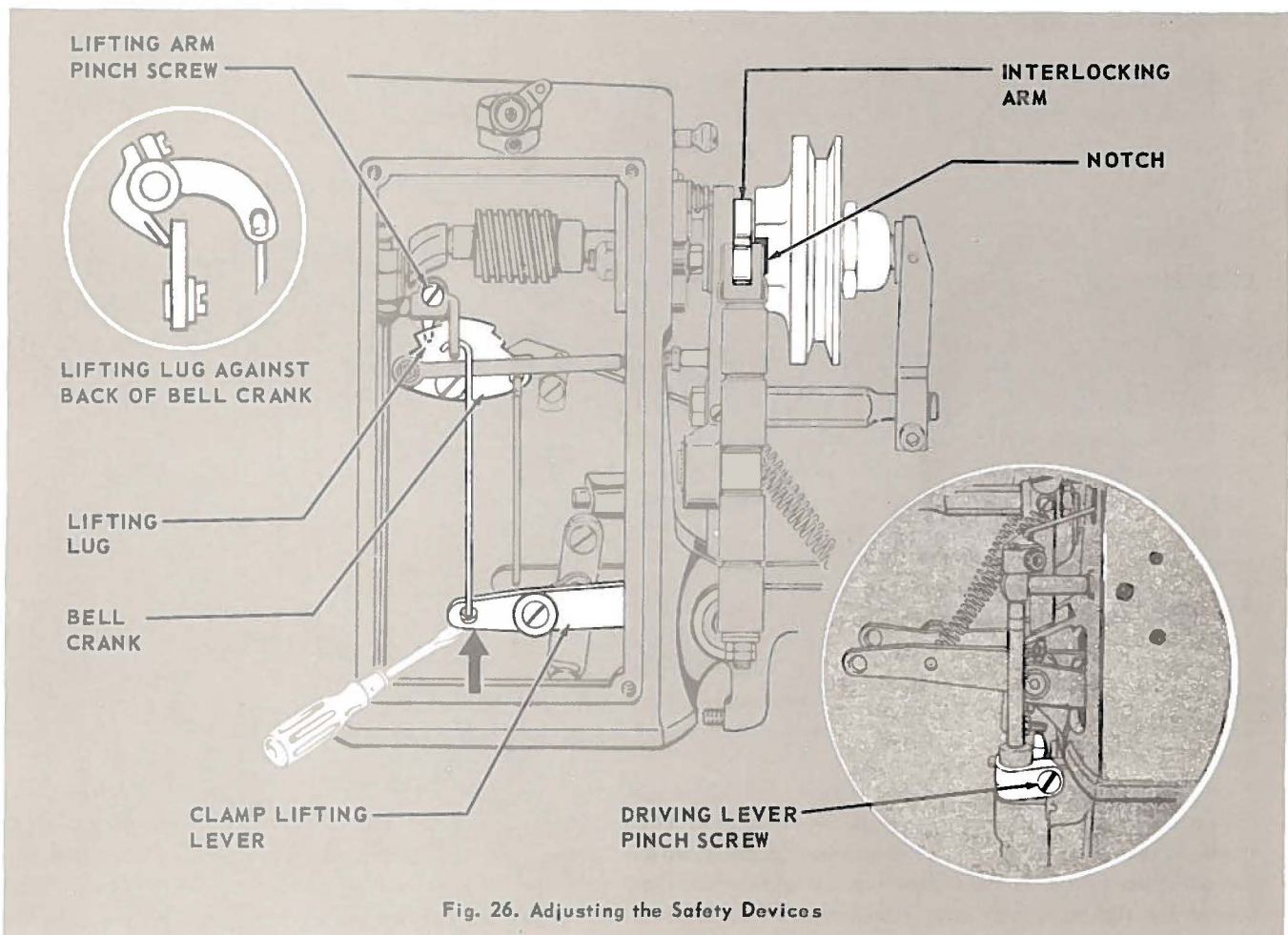


Fig. 26. Adjusting the Safety Devices

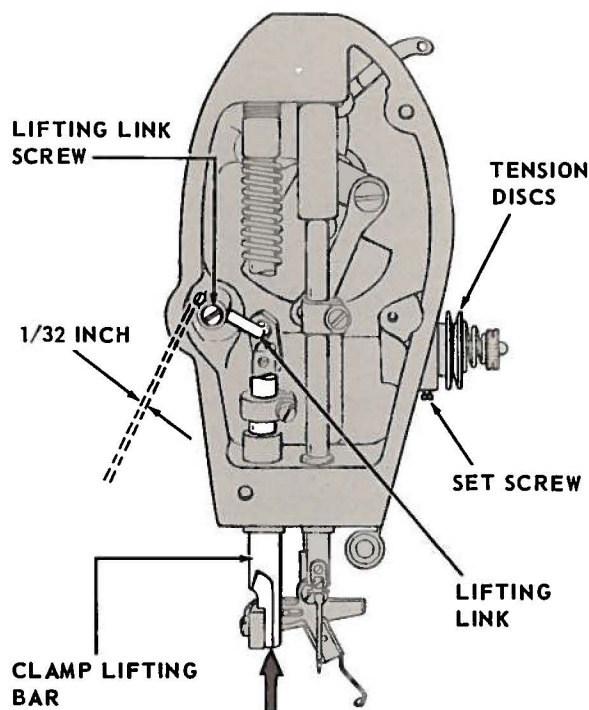


Fig. 27. Adjusting Tension Releaser

WORK CLAMP FOOT LIFTER

Check:

The work clamp foot lifter should be positioned approximately $\frac{1}{16}$ inch below the clamp feet shank pins (or arm hook) and parallel to the front of the machine, as shown in Fig. 28.

Adjustments:

Loosen lifting bar clamp screw, Fig. 29, and raise or lower foot lifter to correct position as shown in Fig. 28. Then tighten clamp screw.

THREAD WIPER

Check:

The body finger slot of the thread wiper should be approximately horizontal when the work clamp is in down position. As the work clamp is raised, the thread wiper wire should swing toward the left clearing the needle by approximately $\frac{1}{16}$ inch. See Fig. 29.

Adjustment:

To adjust the body finger slot, loosen support set screw, Fig. 28, and raise or lower the support until slot is in correct position. Then tighten set screw. To adjust the thread wiper wire, remove work clamp foot

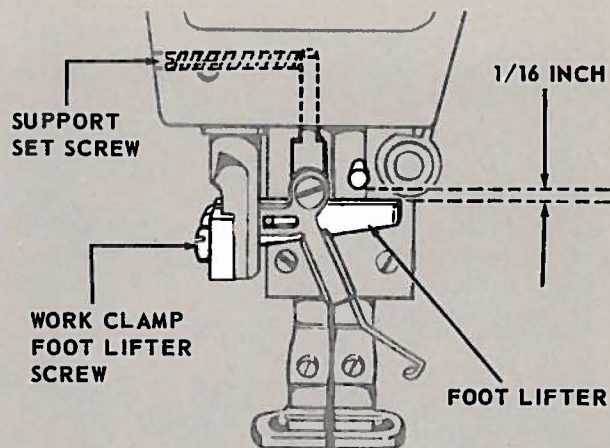


Fig. 28. Adjusting Foot Lifter

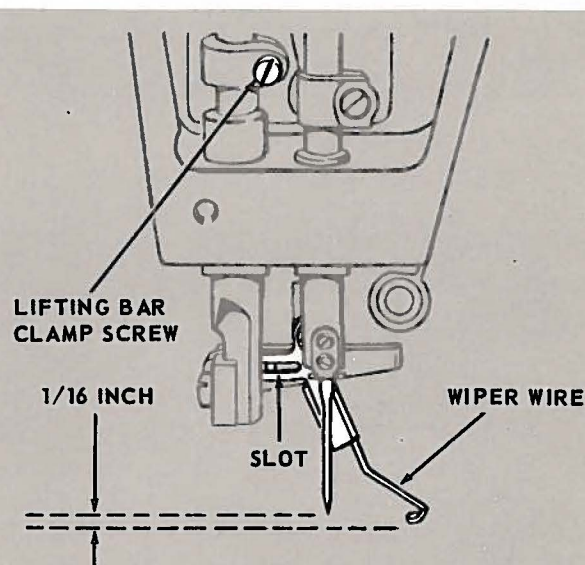


Fig. 29. Adjusting Foot Lifter and Thread Wiper

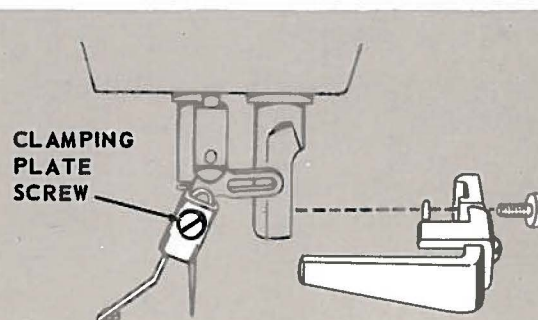


Fig. 30. Adjusting Wiper Wire

lifter screw, Fig. 30, and remove foot lifter. Swing upper wire toward the left, loosen wiper wire clamping plate screw, Fig. 30, in rear of wiper body and raise or lower wiper wire to correct position. Then, tighten clamping plate screw and replace foot lifter.

FEED MECHANISM ADJUSTMENTS

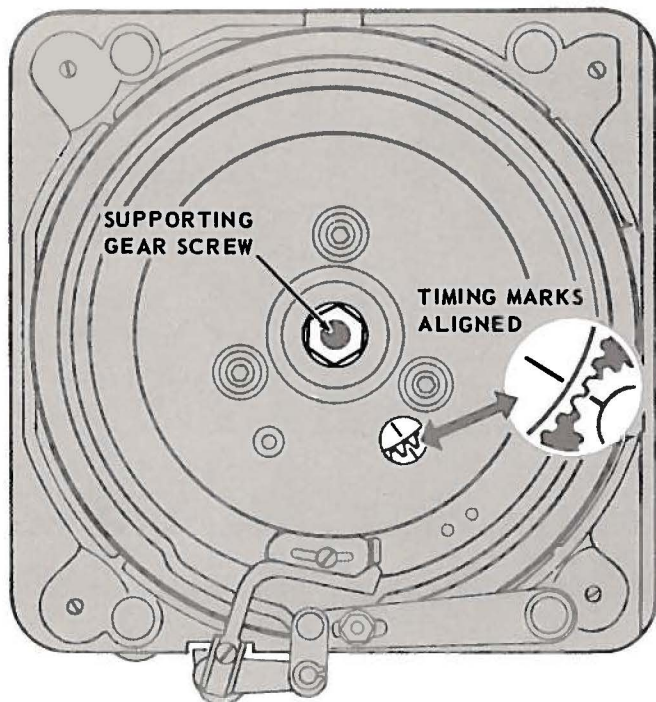


Fig. 31. Alignment of Timing Marks

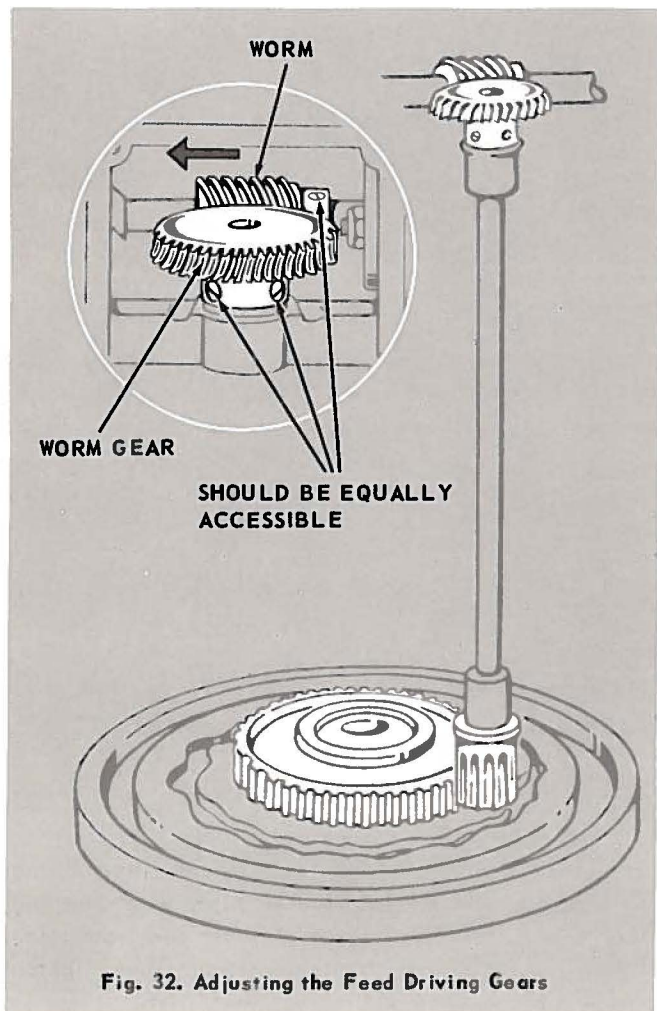


Fig. 32. Adjusting the Feed Driving Gears

FEED DRIVING GEARS

Check:

When the machine is in stop position, the timing marks on the cam supporting gear and the vertical shaft pinion gear should be aligned, as shown in Fig. 31, and there should be a minimum of play between driving gears.

NOTE: If for any reason the feed cam and supporting gear are removed, make certain they are replaced with the timing mark on the supporting gear aligning with timing mark on pinion gear.

Adjustment:

To remove excessive play between worm gear and worm, loosen the two screws in worm (see inset Fig. 32) and move worm forward on shaft.

When the worm gear is properly assembled on vertical shaft, the spot and set screws, shown in Fig. 32, should be equally accessible through the side opening in arm casting when the feed cam supporting gear and vertical shaft pinion gear timing marks are aligned.

To remove excessive play between vertical shaft pinion gear and cam supporting gear, insert wrench through hole in center of supporting gear screw and loosen the supporting gear bracket socket head screw. Then, by means of the "hex" head on the supporting gear screw, turn the bracket (which is eccentric) until only the minimum amount of play exists between the gears. Tighten the socket head screw inside supporting gear screw.

FEED LINKAGES ON BARRING AND TACKING MACHINES:

CENTERING LATERAL FEED

Check:

The lateral feed linkage, when correctly adjusted, will ensure that when the length of bar or tack is changed, it will change in size equally on both sides of the throat plate needle hole.

Adjustment:

First determine the position of the needle in relation to the clamping foot so that the feed carrier bar can be returned to its original position after adjustment has been made, e. g., insert a piece of paper under clamping foot, engage machine into "run" position, turn pulley over toward the right side of machine slowly until needle just punctures the paper, then turn pulley over toward left side of machine to raise the needle. Leave paper under the clamp during adjustment as this will indicate the original position of the needle.

To adjust, loosen lateral pivot driving arm pinch screw and driving arm pinch screw, Fig. 33, and position feed plate carrier bar so it is centered laterally across the cylinder (or center of clamping feet is aligned with the needle).

At this position, the lateral feed rock shaft driven arm and the driving arm should be parallel, as shown in Fig. 33. If necessary, move linkage to obtain this position. Then tighten the lateral pivot driving arm pinch screw.

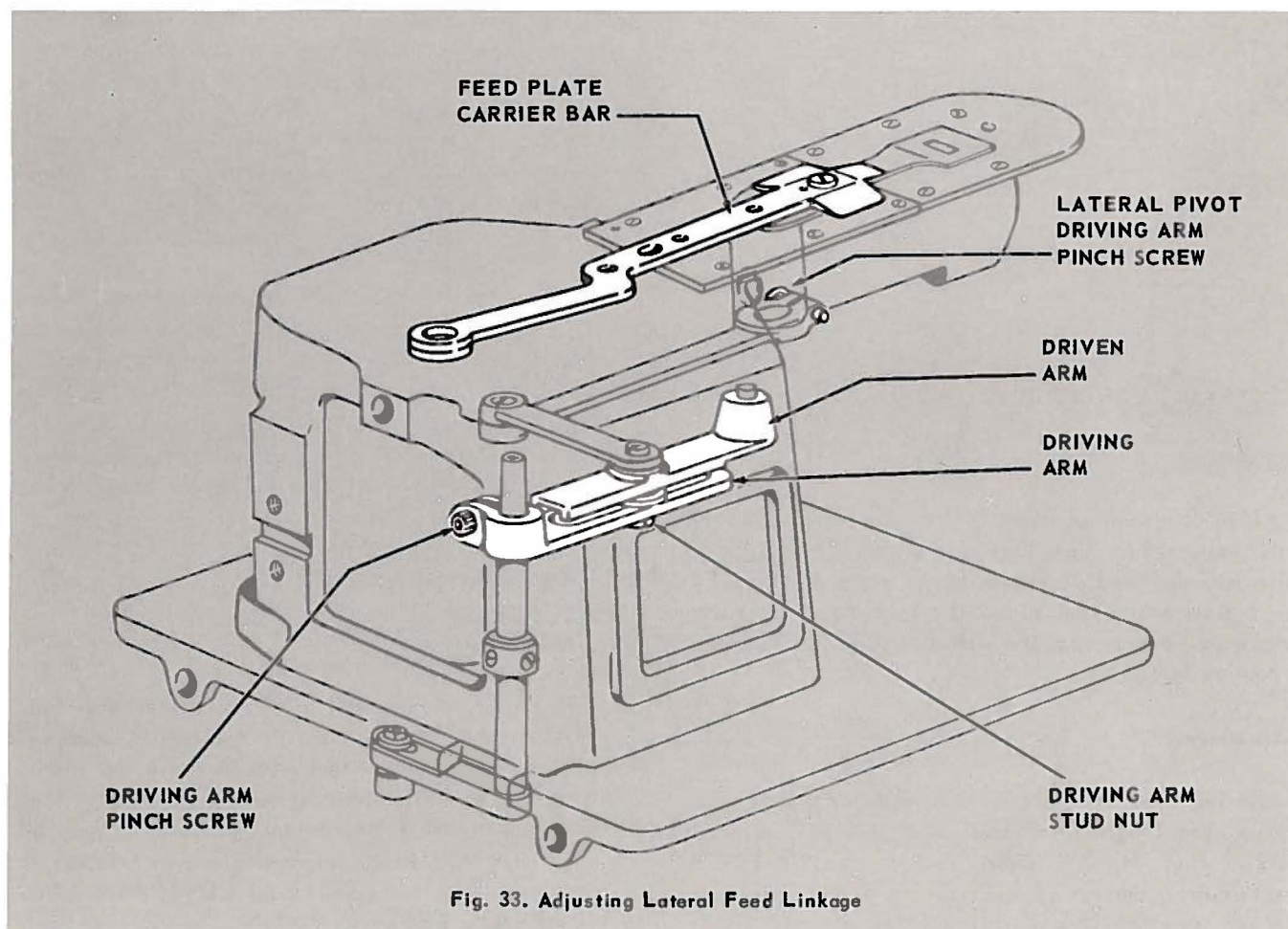
Next, return feed carrier bar to its original position. (A check can be made by lowering the needle into puncture hole previously made in paper.) Then tighten the driving arm pinch screw.

TO ADJUST LENGTH OF TACK

Adjustment:

Loosen the lateral driving arm stud nut, Fig. 33, and slide stud toward front of machine to increase the length of tack (across the bed). To decrease the length of tack, slide stud toward rear of machine. Then tighten stud nut.

NOTE: After this adjustment is made, it may be necessary to adjust the feed carrier bar in relation to the needle as instructed under **CENTERING LATERAL FEED**.



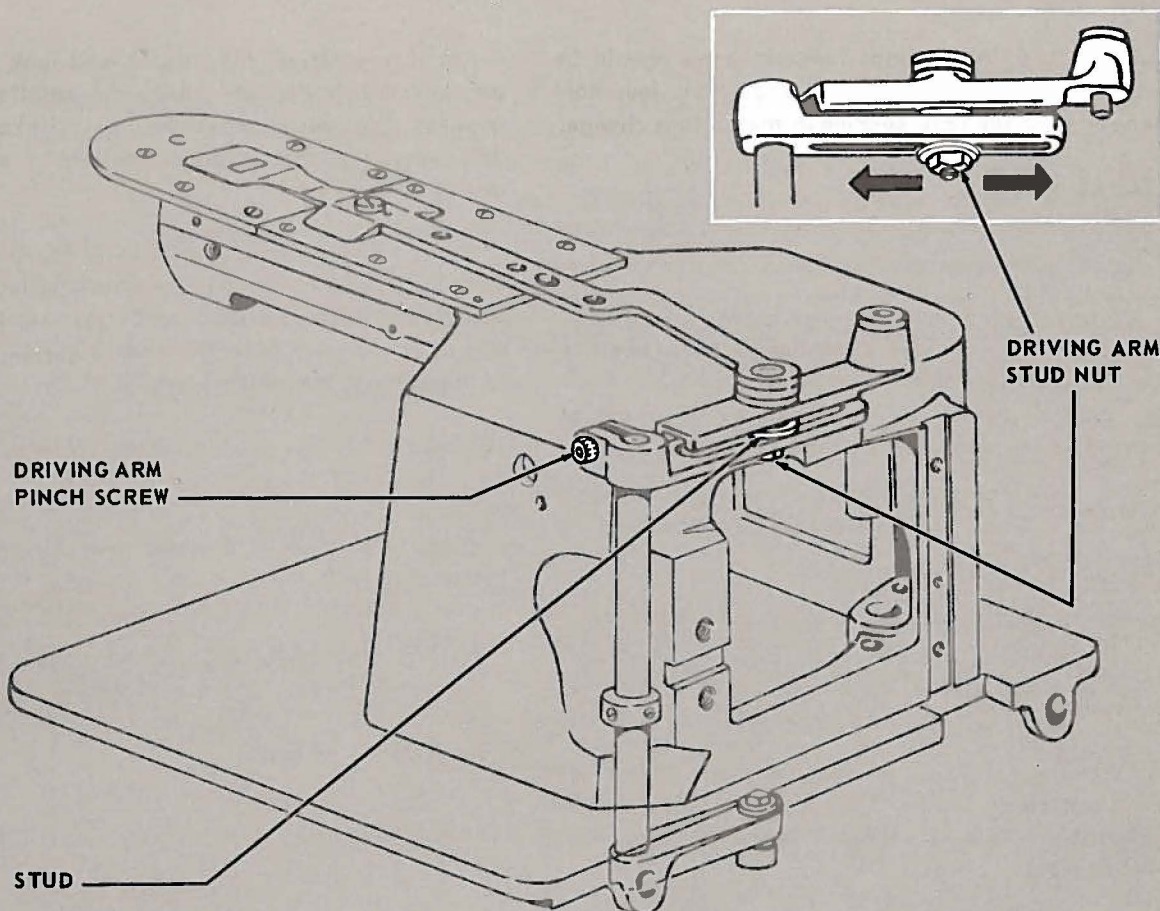


Fig. 34. Adjusting Longitudinal Feed Linkage

CENTERING LONGITUDINAL FEED

Check:

The longitudinal feed, when correctly adjusted, will insure that when the width (bight) of tack is changed, the feed plate moves the same distance forward from the throat plate needle hole as it moves backward preventing the needle from striking the clamping foot.

Adjustment:

Through access hole in right side of upright arm, loosen the longitudinal rock shaft driving arm pinch screw, Fig. 34, and move clamping foot forward or backward in correct relation to the needle. Then retighten the pinch screw.

With machine in "run" position, turn machine pulley slowly while checking to see that the needle does not strike the clamping foot during its longitudinal movement.

TO ADJUST WIDTH OF TACK

Adjustment:

Loosen the longitudinal driving arm stud nut, Fig. 34, and slide stud to the right (facing rear of machine) to increase the width of tack. To decrease the width, slide stud to the left. Then tighten the stud nut.

NOTE: After this adjustment is made, it may be necessary to adjust the feed plate in relation to the needle as instructed under **CENTERING LONGITUDINAL FEED**.

FEED LINKAGES ON BUTTON SEWING MACHINES

Lateral and longitudinal feed linkages should be adjusted when changing from two or from four hole buttons or when the hole spacing in the buttons change.

LATERAL FEED

Check:

The lateral feed linkage, when correctly adjusted, will ensure that the feed plate moves the same distance on one side of the throat plate needle hole as it moves on the other side. This equal distance can be increased or decreased as required.

To Obtain Equal Distance:

Remove cylinder arm cover.

Insert button to be sewn into clamp, engage machine into "run" position and rotate machine pulley until needle is just above button, as shown in Fig. 35.

Loosen lateral pivot driving arm pinch screw and driving arm pinch screw, Fig. 36, and position feed plate so that button is centered laterally (across cylinder) as shown in Fig. 36.

At this position, the lateral feed rock shaft driven arm and the driving arm should be parallel, as shown in inset, Fig. 36. If necessary, move linkage to obtain this position. Then tighten the lateral pivot driving arm pinch screw.

Next, obtain correct position of needle in relation to holes in button by turning machine pulley and moving feed plate to bring needle into right rear hole of four-hole button or rear hole of two-hole button. Then tighten the driving arm pinch screw.

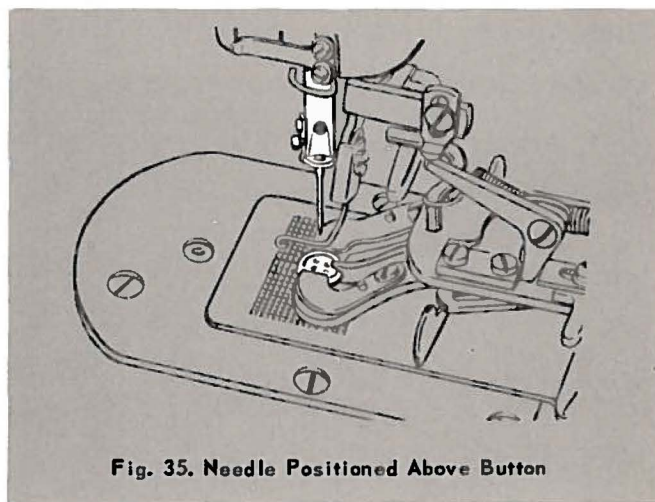


Fig. 35. Needle Positioned Above Button

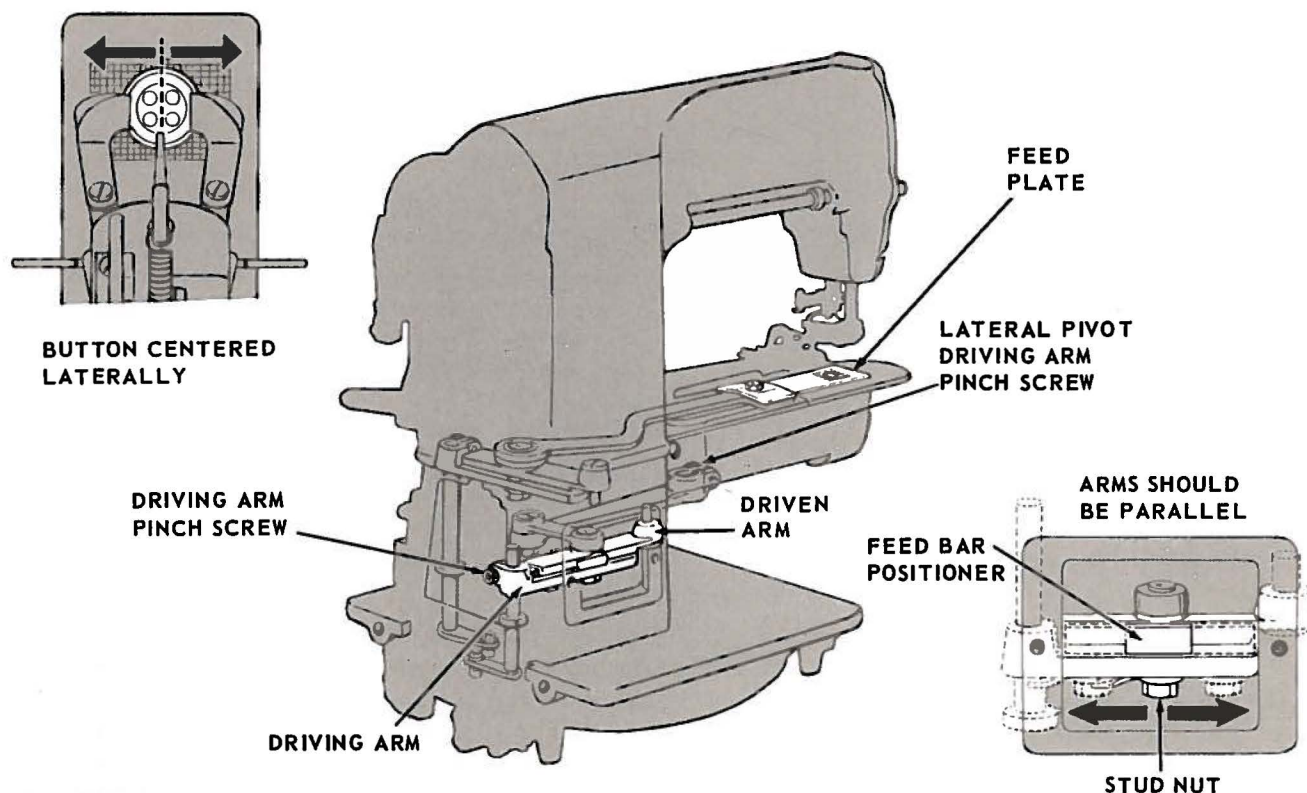


Fig. 36. Adjusting Lateral Feed Linkage

FEED LINKAGES ON BUTTON SEWING MACHINES

LATERAL FEED (continued)

To Increase or Decrease Distance:

When sewing two-hole buttons, move the lateral adjusting lever (lower lever), Fig. 37, in toward the machine as far as it will go.

When sewing four-hole buttons, move the lateral adjusting lever (lower lever), Fig. 37, away from the machine until position is attained where needle will enter the left hand hole in button when machine pulley is turned.

When correct adjustment is attained, the lever can be locked into position by tightening the hex head screw.

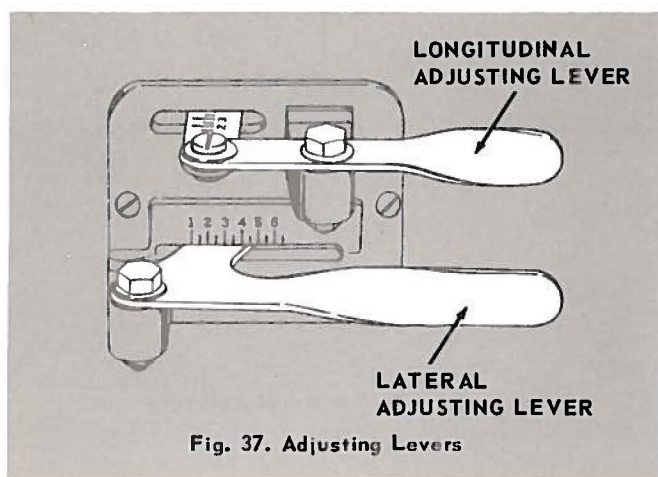


Fig. 37. Adjusting Levers

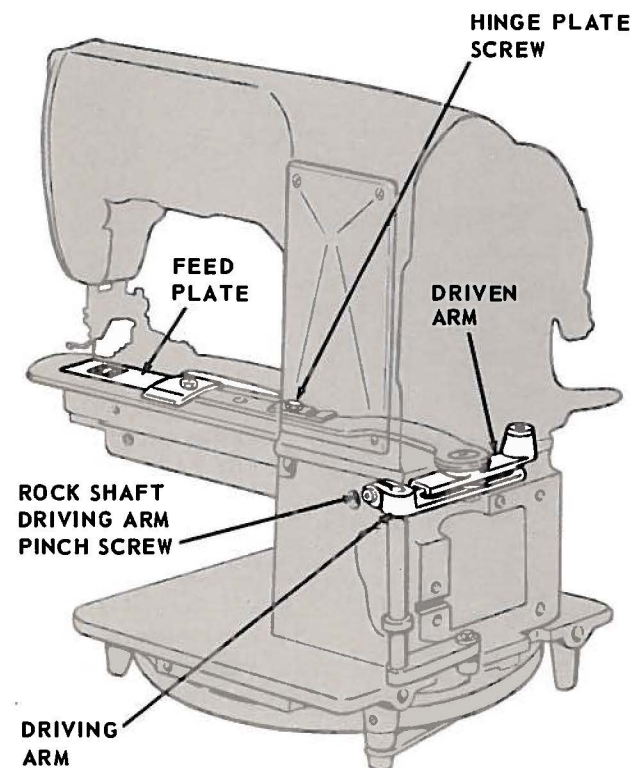


Fig. 38. Adjusting Longitudinal Feed Linkage

LONGITUDINAL FEED

Check:

The longitudinal feed, when correctly adjusted, will ensure that the feed plate moves the same distance forward from the throat plate needle hole as it moves backward. This equal distance can be increased or decreased as required.

To Obtain Equal Distance:

Insert button to be sewn into clamp, engage machine into "run" position and rotate machine pulley until needle is just above button, as shown in Fig. 35.

Loosen arm hinge plate screw, Fig. 38, and longitudinal rock shaft driving arm pinch screw. Move feed plate so that button is centered longitudinally (along the bed) under the needle as shown.

At this position, the longitudinal rock shaft driving arm and the driven arm should be parallel. If necessary, move linkage as required to obtain this position. Then securely tighten the hinge plate screw.

Next, obtain correct position of needle in relation to the holes in the button by turning machine pulley, and moving feed plate to bring needle into right rear hole of four-hole button or rear hole of two-hole button. Then securely tighten the longitudinal rock shaft driving arm pinch screw.

To Increase or Decrease Distance:

With needle positioned over rear hole in button, move the longitudinal adjusting lever (upper lever), Fig. 37, in toward the machine until position is attained where needle will enter the forward needle hole when machine pulley is turned. Movement of the lever in toward the machine, will increase the feed distance; movement from the machine, will decrease the distance.

When correct adjustment is obtained, the lever can be locked into position by tightening the hex head screw.

TIMING THE FEED

NOTE: Longitudinal feed timing should be set before making any lateral timing adjustment.

Check:

The movement of the feed bar, Fig. 40, should be stopped before the needle enters the work. Feed bar should not begin to move until the needle leaves the work.

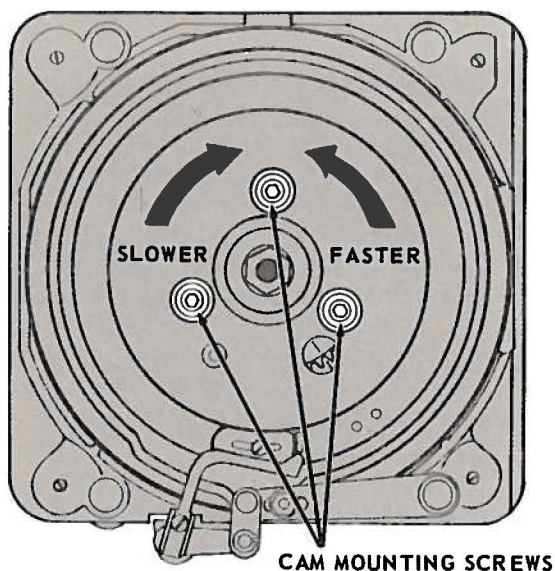


Fig. 39. Timing Longitudinal Feed

Longitudinal Timing:

To time the longitudinal feed movement, loosen the three cam mounting screws, Fig. 39. Then rotate the cam counter-clockwise (as viewed from bottom of machine) to speed up the feed in relation to the needle movement, or clockwise to slow down the movement. When correct adjustment is obtained, securely tighten the cam screws.

Lateral Timing:

To time the lateral feed movement, loosen the lateral rock shaft roller stud nut, Fig. 40. Move roller to the left (as viewed from rear of machine) to slow down the feed in relation to needle movement, or to the right to speed up the feed movement. When correct adjustment is obtained, securely tighten the roller stud nut.

KNIFE TIMING

Check:

To check the knife timing, turn the machine cycle to the stitch before the shuttle thread knife (Fig. 42, page 20) moves across the needle hole (two needle penetrations before the machine goes into stop). Tilt the machine back on its hinges, turn the tight pulley by hand and observe the motion of the shuttle in relation to the shuttle thread knife.

When correctly timed, the shuttle thread knife will start to move toward the right when the "pocket" (the space between the heel of the shuttle and the shuttle driver) comes within 1/8 inch of the end of its stroke, at the top right hand side of the race.

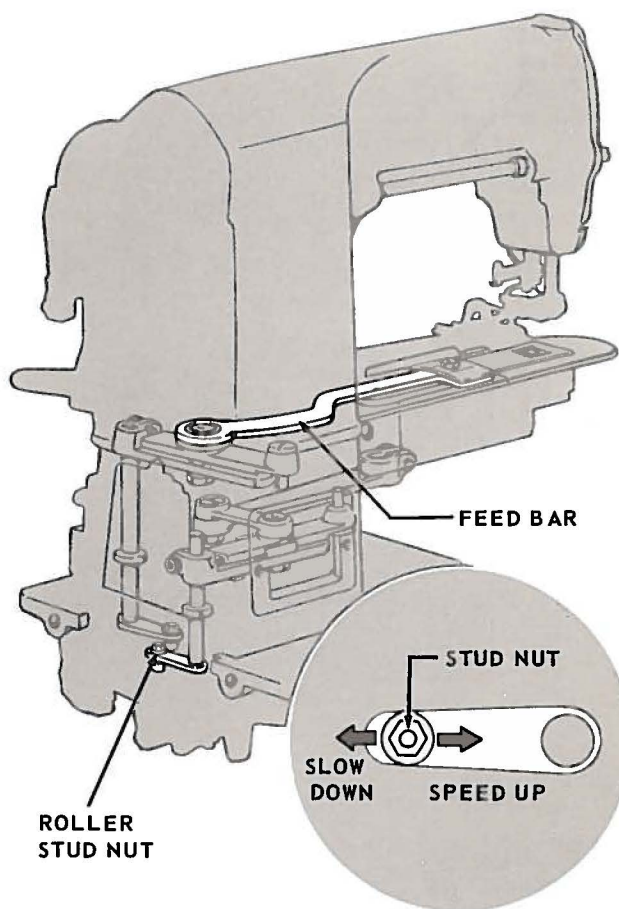


Fig. 40. Timing Lateral Feed

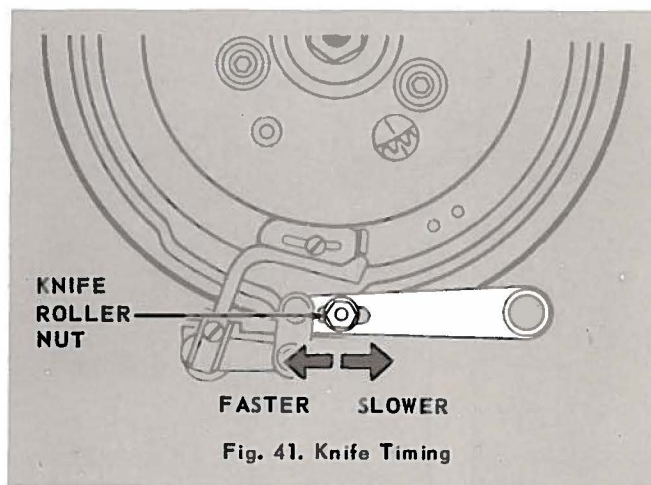


Fig. 41. Knife Timing

Adjustment:

For faster knife action in relation to the movement of the needle and shuttle, loosen the knife roller nut, Fig. 41, and move roller toward the left, as viewed from bottom of feed cam.

For slower knife action, loosen the knife roller nut and move roller toward the right.

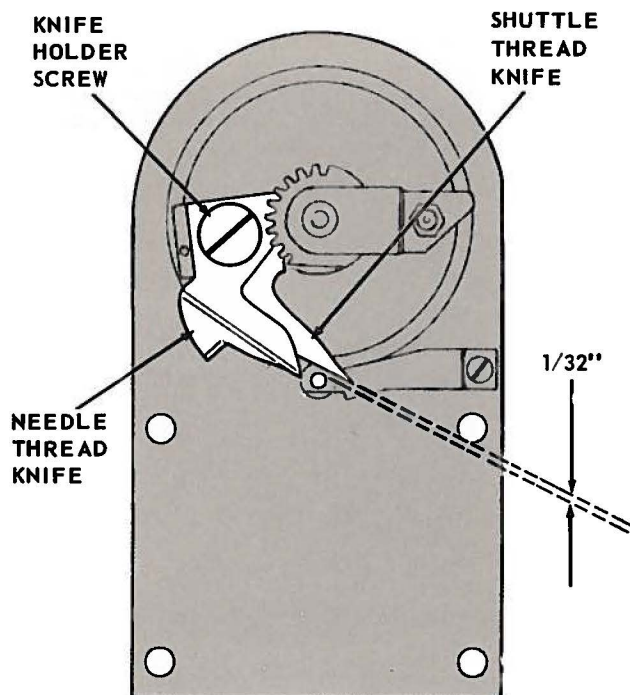


Fig. 42. Knife Positioning

KNIFE POSITIONING

Check:

With machine tilted back, engage starting lever in "run" position and turn machine pulley by hand until a position between the second and third stitch in the machine cycle has been reached. Continue turning pulley, and as the needle moves down in the area between the needle thread knife and shuttle thread knife, the needle should be approximately 1/32 inch from the inside of the shuttle thread knife, as shown in Fig. 42.

NOTE: This setting should also be checked during the last two stitches of machine cycle.

Adjustment:

To position knives, loosen the two knife rack screws, Fig. 43, and slide knife rack along knife bar until correct position is obtained. Then retighten screws making certain that the rack is set firmly against the knife bar.

Should there be excessive play between the knife rack and pinion, loosen the two rack screws and adjusting block screw, Fig. 43. Slide adjusting block forward until excessive play has been removed and tighten the three screws. Then recheck knife position.

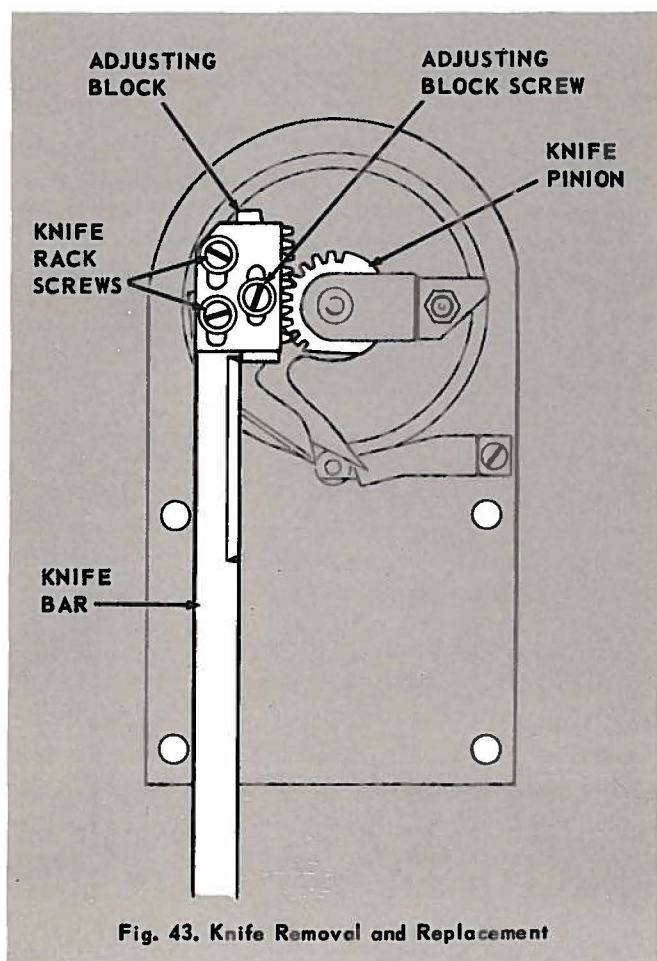


Fig. 43. Knife Removal and Replacement

KNIFE REMOVAL AND REPLACEMENT

Removal:

Tilt machine back on its hinges. Remove the two knife rack screws, Fig. 43, and slide rack up out of engagement with knife pinion. Then remove knife holder screw and remove knives.

Position knives on holder and replace screw. Mesh first tooth of knife rack with first tooth of pinion. Slide rack down along knife bar and fasten in place with the two screws. Then check knife position.

SEWING MECHANISM ADJUSTMENTS

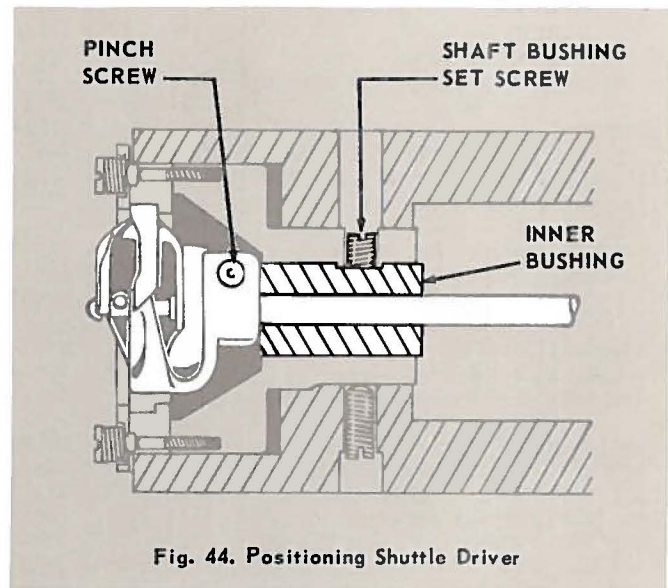
POSITIONING SHUTTLE DRIVER

Check:

The shuttle driver should be positioned in relation to the needle with sufficient clearance (approximately .002 to .010 inch) to prevent the shuttle point striking the needle.

Adjustment:

With machine in drive position, rotate machine pulley until needle bar is at bottom of stroke. Then using an Allen wrench, loosen the shuttle driver pinch screw, Fig. 44. Loosen the shuttle shaft bushing (front inner) set screw and move the shuttle driver and bushing to correct position. Tighten the shuttle shaft bushing set screw.



SHUTTLE TIMING

Check:

Loop taking occurs when needle bar has risen .100 inch from bottom of stroke. At this position, the shuttle point should be at centerline of needle, as shown in Fig. 45.

NOTE: A gauge for positioning needle bar .100 inch from bottom position is available upon request at additional charge.

Adjustment:

With needle bar positioned .100 inch above bottom of stroke, rotate the shuttle driver, by means of the Allen wrench, until the shuttle point is correctly positioned. Then securely tighten the shuttle driver pinch screw.

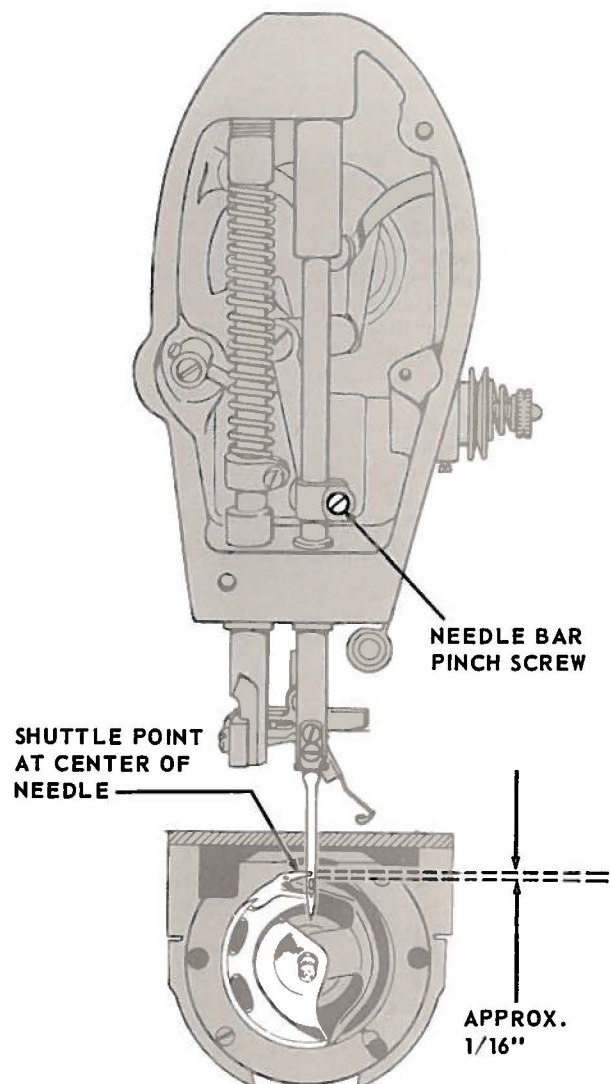
NEEDLE BAR HEIGHT

Check:

Needle bar height should be set so that the shuttle point is just above the needle eye (approximately 1/16 inch) at loop taking, see Fig. 45.

Adjustment:

Rotate shuttle, by machine pulley, until point of shuttle is at centerline of needle. Remove face plate and loosen needle bar pinch screw. Raise or lower needle bar until correct position is obtained. Then securely tighten pinch screw and replace face plate.



**NUMERICAL LIST OF PARTS
MACHINE P260-9/108**

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
171(830)	Adjusting Screw Pinch Screw	32377	Oscillating Shaft Crank Slide Block complete, Nos. 19448, 32376 and 141412	141407(869)	Worm Position Screw
175(830)	Pinch Screw			141407(869)	Worm Gear Position Screw
176(819)	Arch Clamp Foot Lifter Screw	32572	Tension Releasing Disc	141408(869)	Worm Gear Set Screw
193(804)	Knife Bar Connection Screw (2)	37310	Roller Screw Stud Washer (2)	141408(869)	Worm Set Screw
201(804)	Bracket Stud Screw	39453	Thread Wiper Body Finger	141412(803)	Slide Block Screw Stud
202(819)	Arch Clamp Foot Screw (2)			141448(803)	Knife Actuating Lever Screw
209(833)	Needle Set Screw	39653	Oscillating Rock Shaft Shuttle Body	141449(803)	Pawl Hinge Screw
330(809)	Thread Wiper Body Finger Screw	40028-003	Shuttle Bobbin Case complete, Nos. 591(805), 592(805), 2975, 15141 and 224842	141450(803)	Bell Crank Hinge Screw
418(804)	Thread Tension Stud	43725		141462(803)	Slide Block Screw
423(830)	Stop Screw			141560(805)	Feed Plate Screw Stud
460(830)	Collar Set Screw (2)	50018(806)	Bracket Screw	141574(803)	Clamping Plate Screw
462(830)	Adjusting Stud Set Screw	50169(819)	Thread Guide Screw	141575(803)	Spring Adjusting Screw (2)
591(806)	Regulating Screw	50356(804)	Spindle Housing Screw	141576(803)	Tension Stud
592(805)	Latch Lever Stop Screw	50446(803)	Hinge Screw	167001	Arch Clamp Frame (universal) with two 239208
691(819)	Cover Plate Screw (6)	50628(809)	Plate Screw	167004	Lifting Rock Shaft with 141059(830)
691(806)	Throat Plate Screw (4)	50650(803)	Cap Screw	167006	Lifting Arm with 350604(869)
808(830)	Retaining Plate Screw (4)	51119(805)	Lever Arm Screw	167007	Lifting Link
808(830)	Rubbing Block Screw	51381(805)	Spring Screw (2)	167009	Arm Cover (front) with 1053(806) and 167262
858(830)	Crank Set Screw	51403(869)	Screw (2)	167012	Arm Shaft Bushing (back)
896(830)	Cap Screw (2)	51657(805)	Lock Nut	167013	Arm Shaft Bushing (back) 167012 with 53618(805), 141128(833) 202299, 239374 and two 239383
908(803)	Hinge Screw	51948	Follower Arm Roller with 1521(805) and 225837	167041	Cylinder Cover Plate (top)
1053(806)	Knife Screw	51951	Cam Follower Roller and Screw Stud with 1655(803), 5968 and 37310 (2)	167048	Screw Stud (2)
1065(830)	Crank Position Screw			167049	Arm Shaft Bushing (center)
1208(809)	Bushing Screw (2)	52082	Thread Take-up Spring	167050	Supporting Gear Bracket
1513(819)	Stud Lock Nut	52454	Thread Retainer (front)	167051	Feed Plate
1518(805)	Arm Stop Rod Nut (2)	53612(805)	Screw Stud Nut (2)	167052	Feed Plate Carrier Bar with two 239448
1519(805)	Driving Link Screw Nut	53617(805)	Swivel Stud Nut	167055	Driving Block complete
1521(805)	Screw Stud Nut	53618(805)	Support Screw Lock Nut	167062	Driving Lever with 350604(869)
1560(803)	Tension Thumb Nut	55325	Throat Plate Needle Hole Bushing (46 drill needle hole)	167064	Adjusting Block
1562(819)	Tension Thumb Nut	55459	Knife (shuttle thread)	167072	Connecting Arm
1620(819)	Housing Screw Nut	63837	Arch Clamp Foot Lifter	167075	Driving Arm with 350600(869)
1636(805)	Screw Stud Nut	68721	Arch Clamp Foot (left)	167076	Driving Arm 167075 with 1519(805), 141075(803) and 239266
1650(805)	Stop Screw Lock Nut	68723	Arch Clamp Foot (right)	167084	Machine Pulley (loose)
1655(803)	Screw Stud Nut (2)	125044	Oil Pad (felt)	167086	Engaging Arm Stud
1662(805)	Bell Crank Hinge Screw Nut	131022	Stop Rod Bumper (rubber) (3)	167087	Needle Bar
1662(805)	Knife Actuating Lever Screw Nut	140321(830)	Collar Set Screw (4)		Needle Bar 167086 with 209(833), 50169(819) and 239376
1747(805)	Screw Lock Nut	140352(830)	Tripping Point Screw (2)	167088	Needle Bar Connecting Link 271597 with 50650(803), 167089-001 and 239385
2049	Crank Pin	141059(830)	Lifting Link Connection Screw	167089-001	Connecting Stud with 175(830) and 239277
2102	Tension Disc (2)	141066(803)	Locating Screw (4)	167143	Starting Bell Crank
2103	Tension Spring	141067(805)	Locking Screw	167144	Starting Bell Crank 167143 with 51657(803), 53617(805), 167154 and 167155
2455	Tension Disc (2)	141069(869)	Arm Screw (3)	167145	Starting Lever with 141077(830)
2807	Bumper Separating Washer (4)	141069(869)	Cylinder Screw (2)	167146	Starting Lever 167145 with 239159, 239307 and two each 141099(805) and 214053
2973	Latch Lever	141069(869)	Supporting Gear Bracket Screw	167154	Starting Lever Starting Rod
2974	Fulcrum Pin	141070(803)	Supporting Gear Screw	167155	Starting Rod Adjuster
2975	Lever Spring	141071(819)	Driving Block Screw	167157	Stop Rod Swivel
5968	Roller Washer (2)	141075(803)	Driving Link Screw	167159	Brake Shoe Support with 171(830) and 201(804)
10141	Tension Spring	141077(830)	Bushing Set Screw		
13275	Oil Pad (felt)	141099(805)	Screw Stud (upper) (2)		
13288	Retaining Ring	141100(850)	Hinge Screw		
15140	Bobbin Case Latch	141101(803)	Pressure Spring		
15141	Bobbin Case Hinge Nos. 2973, 2974 and 15140		Adjusting Screw		
17825	Knife Holder	141128(833)	Bushing (back)		
17828	Pinion Stud Bracket	141145(803)	Support Screw		
19448	Slide Block	141242(819)	Knife Screw		
20197	Crank Connecting Rod with 125044 and two 896(830)	141242(819)	Adjusting Block Screw		
23421	Oil Hole Plug (leather)	141245(869)	Rock Adjusting Screw (2)		
23477	Needle Bar Crank with 858(830), 1065(830) and two 141275(869)	141275(869)	Tension Stud Set Screw (2)		
23500	Bobbin		Crank Position Screw (2)		
32376	Retaining Ring				

**NUMERICAL LIST OF PARTS
MACHINE P260-9/108**

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
167160	Swivel Retaining Ring	200161(819)	Position Plate Screw (2)	223847	Bushing (front) Oil Packing (wick)
167161	Brake Shoe Support Bracket 167159 with 50446(803), 141101(803), 223812, 239513 and 239557	200294(819)	Cylinder Cover (bottom) Screw (2)	224842	Shuttle Tension Spring
167162	Tension Release Rod	200299(819)	Trip Lever Hinge Screw	225444	Bobbin Winder Stop Latch
167163	Tension complete, Nos. 1560(803), 2103, 32572, 52082, 141576(803), 167173, 270278 and two 2102	200308(803)	Hinge Screw	225458	Stop Latch Thumb Lever
167173	Spring Regulator with two 141245(869)	200333(830)	Bushing (front-outer) Set Screw	225459	Thumb Lever Joining Stud (2)
167181	Tripping Rock Shaft	200335(830)	Hinge Stud Set Screw (2)	225837	Roller Screw Stud Washer
167182	Tripping Rock Shaft Collar with two 460(830)	200338(803)	Bushing (back) Set Screw	228485	Number Plate Drive Screw (2)
167183	Vertical Drive Shaft Worm with 141407(869) and 141408(869)	200338(803)	Bushing (center) Set Screw	228792	Bobbin Winder Brake (leather)
167184	Vertical Drive Shaft Worm Gear with 141407(869) and 141408(869)	200363(830)	Hinge Pin Set Screw	228793	Bobbin Winder Pulley with 200436(803)
167229	Support Bracket Pressure Spring	200364(830)	Hinge Stud Set Screw	228794	Bobbin Winder Spindle
167234	Tripping Point Washer (2)	200366(830)	Thread Guard Set Screw	228795	Spindle Housing
167235	Thread Cutter Knife	200378(830)	Support Set Screw	228796	Thumb Lever Plate
167262	Adjusting Stud Bracket with 462(830)	200394(803)	Hinge Pin Set Screw	228798	Tension Adjusting Stud
167292	Knife Actuating Lever Screw and Nut complete, Nos. 1662(805) and 141448(803)	200397(833)	Stud Set Screw	228800	Adjusting Stud Bracket 167292 with 418(804), 1562(819), 10141, 228798, 268122 and two 2455
167413	Bell Crank Hinge Screw and Nut complete, Nos. 1662(805) and 141449(803)	200436(803)	Pulley Set Screw	228810	Return Spring Screw Stud
167414	Pawl Hinge Screw and Nut complete, Nos. 1662(805) and 141450(803)	200442(803)	Regulator Set Screw	228812	Tension Pulley
167415	Collar with two 140321(830)	200582(819)	Arm Cover (center) Screw (2)	232837	Retaining Screw Washer
167416	Arch Clamp complete, Nos. 68721, 68723, 141071(819), 167001, 167041, 167051, 167052, 167055, 239202, 239204, 239209, 350605(869), two each 202(819), 141575(803), 201711(803), 239206, 239613 and five 808(830)	201135(803)	Thread Retainer (lower) Screw (2)	239078	Oscillating Shaft 239550 with 1636(805), 2049, 32377 and 239551
167423	Arm Stop Rod	201188(803)	Pulley Retaining Screw	239079	Oscillating Shaft 239550 with 2049 and 239551
167445	Arm Stop Rod complete, Nos. 167445, 202342, 239518 and 239519	201256(803)	Collar Set Screw	239081	Thread Guide
167446	Interlocking Arm Stop Rod 167446 with 167157, two 1518(805), three 131022 and four 2807	201356(805)	Bracket Screw (4)	239133	Starting Lever Arm and Rock Shaft (adjustable) with 423(830), 1650(805), 201135(803), 201442, 201525(805), 228810, 228812 and 232837
200056(805)	Stop Latch Screw	201422(803)	Screw Stud (lower)	239143	Thread Take-up Lever Link
200064(819)	Arm Cover (side) Screw (4)	201442	Position Screw (pin)	239144	Hinge Pin Wick
200072(803)	Pinch Screw	201472(803)	Bushing (front-inner) Set Screw	239157	Longitudinal Rock Shaft 239384 with 51951
200084(819)	Arm Cover (front) Screw (2)	201525(805)	Screw Stud Nut	239158	Bobbin Winder Bracket
200084(819)	Cylinder Cover (side) Screw (2)	201711(803)	Adjusting Screw Lock Nut (2)		Bobbin Winder complete, Nos. 1620(819), 50356(804), 50628(809), 200056(805), 200299(819), 202478, 225444, 225458, 228793, 228794, 228795, 228796, 239157, 249716 and two 225459
200084(850)	Bracket Set Screw	201711(803)	Bracket Screw Nut	239159	Stop Cam Interlock Arm
200132(819)	Thread Guide Screw	201749(805)	Hinge Screw Nut	239160	Lateral Rock Shaft 239264 with 51951
200138(805)	Knife (stationary) Screw	202005	Gear Bracket Screw Washer	239161	Knife Bar
		202299	Oil Packing (wick)	239165	Lifting Rod
		202342	Arm Hinge Tension Spring	239170	Wire (adjustable)
		202423	Hinge Stud Oil Packing (wick) (2)	239193	Slide Block
		202478	Stop Latch Trip Lever	239194	Connection with Stud and Block
		202603	Adjusting Block Screw Washer	239195	Position Plate
		202603	Adjusting Screw Washer (2)	239196	Shuttle Race complete, Nos. 239195, 239289, 239290, two each 51381(806), 200161(819) and 239291
		203172	Friction Washer	239202	Shank (left)
		204235	Arm Position Pin (2)	239204	Shank (right)
		204235	Cylinder Position Pin (2)	239206	Spring (medium) (2)
		210805	Screw Washer (3)	239208	Dowel Pin (2)
		210805	Screw Stud Washer (2)	239209	Rubbing Block
		210957	Thread Retainer (lower) Stud	239211	Lifting Bar with 176(819)
		210958	Stud Collar	239212	Lifting Bar Bushing (lower)
		210993	Sleeve	239213	Position Guide with 167007, 200072(803) and 239515
		214053	Return Spring (2)	239214	Spring
		222583	Oil Packing (wick)	239218	Lifting Link Connection
		223710	Thread Retainer (lower) with 200397(833)		
		223711	Thread Retainer (lower) complete, Nos. 210957, 210958, 210993, 223710 and 223844		
		223812	Brake Shoe Support Spring		
		223844	Thread Retainer (lower) Spring		

**NUMERICAL LIST OF PARTS
MACHINE P260-9/108**

NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
239221	Arm Cover (center)	239337	Throat Plate	249716	Housing Spring
239223	Arm Cover (side)	239339	Throat Plate 239377	249915	Hinge Pin with
239224	Arm Shaft		with 17825, 17828,	239143	
239228	Arm Shaft Bushing		50018(806), 55325,	259470	Collar with 201188(803)
	(front)		55459, 141145(803),	262061	Shuttle Driver (C.B.)
239233	Cylinder Cover		200138(805), 201711(803),		with 350606(869)
	(bottom)		239367, 239372 and two	268122	Tension Guide
239234	Cylinder Cover		1208(809)	270278	Tension Releasing Pin
	(side)	239341	Connection with	271018	Thread Retainer (back)
239236	Oil Stop Pad (felt)		350606(869)	271597	Connecting Link
239238	Follower Arm with	239342	Connection Rod	350238(804)	Brake Screw (2)
	239239 and 239240	239343	Lever Arm	350489(830)	Support Set Screw
239239	Follower Arm Link	239344	Tripping Rock Shaft	350559(819)	Thread Retainer Screw
239240	Link Hinge Stud		Support		(2)
239245	Locating Pin	239345	Vertical Drive Shaft	350577(819)	Pressure Regulating
239250	Oscillating Slide Stud	239346	Vertical Drive Shaft		Screw
239251	Knife Actuating Lever		Bushing (2)	350600(869)	Mounting Screw (3)
239252-001	Lever Link	239361	Hinge Stud	350600(869)	Pinch Screw (2)
239255	Rock Shaft	239363	Locating Pin	350604(869)	Lever Clamping Screw
239256	Rock Shaft Bracket	239365	Oiling Felt	350604(869)	Lifting Arm Pinch Screw
239260	Knife Bar Rack	239367	Knife (stationary)	350604(869)	Pinch Screw (2)
239264	Lateral Rock Shaft	239368	Knife Holder complete,	350605(869)	Frame Screw
239265	Rock Shaft Driven		Nos. 17825, 55459,	350606(869)	Pinch Screw(2)
	Arm (2)		141145(803) and 239372	Type P1628	Needle (size 18)
239266	Driving Link	239372	Knife (needle thread)		(Chromium finish)
239267	Hinge Stud with	239374	Needle Thrust Bearing		
	202423 (2)	239376	Thread Guide		
239268	Driving Arm with	239379	Engaging Arm with		
	250604(869) (2)		239320, 239321 and		
239273	Needle Bar Bushing		350600(869)		
	(lower)	239382	Thrust Plate		
239274	Needle Bar Bushing	239383	Needle Thrust Bearing		
	(upper)		Washer (2)		
239277	Oil Packing (wick)	239384	Longitudinal Rock		
239279	Hinge Pin		Shaft		
239280	Hinge Pin 239279 with	239385	Take-up Crank		
	23421 and 222583	239387	Thread Wiper Body		
239282	Oscillating Shaft	239388	Support		
	Bushing (back)	239390	Thread Wiper (quick		
239283	Oscillating Shaft		acting) complete, Nos.		
	Bushing (front-inner)		330(809), 39453, 63837,		
239284	Oscillating Shaft		141574(803), 200308(803),		
	Bushing (front-outer)		239170, 239336, 239387,		
	with 201472(803)		and 239388		
239287	Shuttle 1-11/16 in.	239486-001	Machine Pulley (tight)		
	diam., Nos. 23500,	239501	Driving Block Pin		
	40028-003 and 43725	239512	Pressure Spring Sleeve		
239289	Shuttle Race Body with	239513	Bracket Stud (eccentric)		
	239365	239515	Hinge Pin		
239290	Shuttle Race Ring	239518	Arm Hinge Pin		
239291	Shuttle Race Ring	239519	Arm Hinge Pin Retainer		
	Spring (2)	239522	Supporting Gear with		
239294	Starting Bell Crank		239245		
	Pawl	239524	Starting Cap		
239295	Pawl Return Spring	239525	Thrust Button		
239299	Lifting Rod	239526	Needle Bearing		
239301	Starting Lever Bushing	239549	Stop Motion Brake		
239303	Operating Lever Arm		complete, Nos.		
239307	Retaining Ring		141100(850), 167161,		
239314	Pulley (tight) Key		167229 and 239512		
239315	Retaining Ring (2)	239550	Oscillating Shaft		
239317	Machine Pulley (loose)	239551	Oscillating Shaft Crank		
239318	Machine Pulley (loose)	239554	Brake Shoe (leather)		
	239317 with 239322	239555	Rivet (2)		
239320	Engaging Arm Wear	239556	Support		
	Block	239557	Support complete, Nos.		
239321	Wear Block Pin		239554, 239556 and two		
239322	Pulley (loose) Needle		239555		
	Bearing	239574	Screw Stud Guide Block		
			(2)		
239328	Tension Thread Guard		Feed and Knife Driving		
239330	Take-up Lever	239591	Cam with 167234 and two		
239331	Lever Link		each 140352(830) and		
239332	Take-up Lever complete,		167235		
	Nos. 239330 and 239331		Retaining Plate (2)		
239336	Clamping Plate	239613			

ACCESSORIES FOR CLASS P260-9 MACHINES

NUMBER	DESCRIPTION
167189	Belt Guard with 141093(830), 167188, 239356, 239357 and two 141103(850)
167187	Belt Guard with 141093(830)
239355	Belt Guard Base
239444-001	Belt Guard Base 239355 with two wood screws 1-1/4" No. 12 R.H.B.
239356	Belt Guard Hinge Pin
141093(830)	Belt Guard Hinge Pin Set Screw
239357	Belt Guard Lock Spring
167188	Belt Guard Lock Spring Plate
141103(830)	Belt Guard Lock Spring Plate Screw (2)
141577(803)	Belt Guard Lock Spring Screw Stud
23500	Bobbin (2)
228785	Drip Pan (except for P260-9 Machine)
201308(805)	Drip Pan Screw (4)
203637	Drip Pan Screw Washer (4)
52843	Drip Pan Washer (leather) (4)
259832	Eye Guard Complete, Nos. 200273(819), 226467, 259830, 259831 and two 200184(819)
259846	Eye Guard and Extension complete, Nos. 200095(819), 201528(819), 259832 and 259845, for P260-9/139 Machine
259831	Eye Guard Bracket
200273(819)	Eye Guard Bracket Hinge Screw
200184(819)	Eye Guard Bracket Screw (2)
226467	Eye Guard Bracket Spring Washer
259830	Eye Guard Deflector
259845	Eye Guard Deflector Bracket Extension, for 259846
200095(819)	Eye Guard Deflector Bracket Extension Screw, for 259846
201528(819)	Eye Guard Deflector Bracket Extension Screw Nut, for 259846
167448	Machine Base Oil Drain Jar (plastic)
228444	Machine Cushion (4)
12361-001	Machine Hinge Connection (2)
228786	Machine Support (left)
228865	Machine Support (left) 228786 with two wood screws 1-1/4" No. 12 F.H.
228809	Machine Support (right) with two wood screws 1-1/4" No. 12 F.H.
228787	Machine Tilting Latch Lever
228788	Machine Tilting Latch Lever 228787 with 225459 and 228790
225459	Machine Tilting Latch Lever Joint Stud
200246(803)	Machine Tilting Latch Lever Screw
228789	Machine Tilting Latch Lever Spring
228790	Machine Tilting Latch Lever Stop
OPERATING EQUIPMENT	
228807	Operating Equipment complete, Nos. two each 2770, 32134, 167416, 228802, 228811, 228861, and four each 228805 and 228806
167226-001	Operating Equipment Cable (2)
228861	Operating Equipment Cable (adjustable) complete, Nos. 1521(819), 151633, 167226-001 and 228858 (2)
1521(819)	Operating Equipment Cable Lock Nut (2)
228858	Operating Equipment Cable Yoke End (2)
151633	Operating Equipment Cable Yoke End Pin (2)
228910	Operating Equipment Chain (24" long) (2)
228802	Operating Equipment Chain 228910 with two 202784 (2)
202784	Operating Equipment Chain Hook (4)
228811	Operating Equipment Rock Shaft (2)
167416	Operating Equipment Rock Shaft Collar with two 140321(830) (2)
140321(830)	Operating Equipment Rock Shaft Collar Set Screw (4)
228805	Operating Equipment Rock Shaft Lever Arm (4)
228806	Operating Equipment Rock Shaft Lever Arm Bracket with two 356(803) (4)
356(803)	Operating Equipment Rock Shaft Lever Arm Bracket Set Screw (8)
32134	Operating Equipment Rock Shaft Spring (2)
2770	Operating Equipment Rock Shaft Stop Dog with 140219(803) (2)
140219(803)	Operating Equipment Rock Shaft Stop Dog Screw (2)
DRIVING ACCESSORIES FOR HEAD-ON INSTALLATION	
21261M-50	Machine Driving Belt, 50" long, (V-belt)
151223	Motor Mount and Belt Tightener complete, Nos. 51655(813), 150783, 151066, 151219 to 151222, two each 9281, 151068, four each 50807(813) and eight each 1778(816), 9842 and 126150
228822	Treadle complete, Nos. 2718(813), 14372, 14373, 14375, 17881, 50581(813) and two 46709 (2)

LIST OF PARTS FOR P260-9/126 MACHINE
Same as P260-9/108, except for the following:

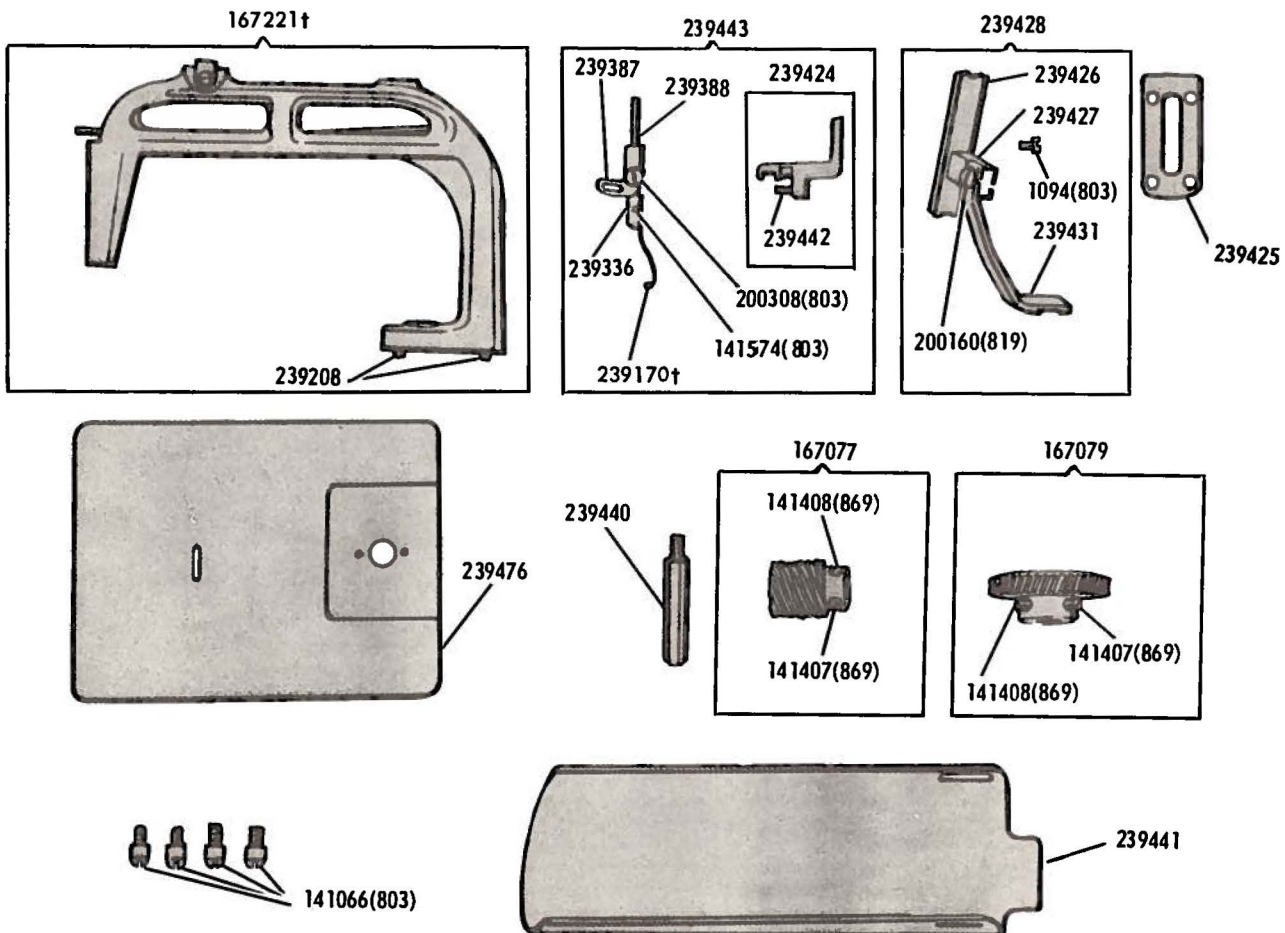
239189	Feed and Knife Driving Cam with 167234 and two each 140352(830) and 167235	239591
167077	Vertical Drive Shaft Worm with 141407(869) and 141408(869)	167183
167079	Vertical Drive Shaft Worm Gear with 141407(869) and 141408(869)	167184

**ACCESSORIES FOR MACHINE P260-9/139
FOR SUBMERGED PARALLEL MOUNTING**

NUMBER	DESCRIPTION
239355	Belt Guard Base
239445	Belt Guard Base 239355 with two each 67425, 201752(819) and 350640(819)
239446	Belt Guard Base Spacer
239447	Drip Pan with four 228804
228804	Drip Pan Rock Shaft Bushing (4)
201308(805)	Drip Pan Screw (3)
203637(805)	Drip Pan Screw Washer (3)
52843	Drip Pan Washer (leather)
263417	Drip Pan Jack Screw
1517(805)	Drip Pan Jack Screw Lock Nut
167448	Machine Base and Oil Drain Jar (plastic)
228444	Machine Cushion (2)
228881	Machine Support Complete, Nos. 228866, 228868, 228870 to 228872, 239445, 239446, two 228444, four each 228873 to 228875 and 350639(819)
228786	Machine Support (rear)
228870	Machine Support (rear) 228786 with two each 51074(813) and 67425
67425	Lock Washer (11)
51074(813)	Machine Support Bolt (3)
228872	Machine Support Bracket (rear)
228873	Machine Support Bracket Jack (4)
350639(819)	Machine Support Bracket Jack Bolt (4)
228874	Machine Support Bracket Jack Bolt Washer (4)
228875	Machine Support Bracket Jack Flange with three wood screw 7/8" No. 12 R.H.B. (4)
228871	Machine Support Bracket (front) with two each 67425, 350640(819) and four 201752(819)
350640(819)	Screw (4)
201752(819)	Nut (10)
228867	Machine Support (front)
228868	Machine Support (front) 228867 with 51074(813), 67425, 200076(819) and 228869
200076(819)	Machine Support (front) Cushion Screw
228869	Machine Support (front) Cushion (nylon)
350641(819)	Screw (4)
228866	Machine Hinge Connection and Belt Guard Mounting Plate with four each 67425, 201752(819) and 350641(819)
OPERATING EQUIPMENT	
228879	Operating Equipment Complete, Nos. 228811, 228878, two each 32134, 228802, 228861, 268072, four each 2770, 228805 and 228806
228811	Operating Equipment Rock Shaft
2770	Operating Equipment Rock Shaft Stop Dog with 140219(803) (4)
140219(803)	Operating Equipment Rock Shaft Stop Dog Set Screw
32134	Operating Equipment Rock Shaft Spring (2)
268072	Operating Equipment Rock Shaft Collar with two 200386(803) (2)
200386(803)	Operating Equipment Rock Shaft Collar Set Screw (4)
288806	Operating Equipment Rock Shaft Lever Arm Bracket with two 356(803) (4)
356(803)	Operating Equipment Rock Shaft Lever Arm Bracket Set Screw (8)
228805	Operating Equipment Rock Shaft Lever Arm (4)
228861	Operating Equipment Cable (adjustable) Complete, Nos. 1521(819), 151633, 167226-001 and 228858 (2)
151633	Operating Equipment Cable (adjustable) Yoke End Pin (2)
228858	Operating Equipment Cable (adjustable) Yoke End (2)
1521(819)	Operating Equipment Cable Lock Nut (2)
167226-001	Operating Equipment Cable (2)
228910	Operating Equipment Chain (lower), 24" long (2)
228802	Operating Equipment Chain (lower) 228910 with two 202784 (2)
228878	Starting Rock Shaft
DRIVING ACCESSORIES	
228829	Driving Accessories Complete, Nos. 150748, 228880 and two 228877
228876	Foot Lifter Treadle (2)
228877	Foot Lifter Treadle 228876 with 2718(813), 14373 and 50581(813) (2)
14373	Foot Lifter Treadle Extension (2)
50581(813)	Foot Lifter Treadle Extension Screw (2)
2718(813)	Foot Lifter Treadle Extension Screw Washer (2)
151219	Belt Tightener Hinge Plate
150783	Belt Tightener Hinge Plate Adjusting Screw 150701 with 51655(813)
150701	Belt Tightener Hinge Plate Adjusting Screw
51655(813)	Belt Tightener Hinge Plate Adjusting Screw Nut
9281	Belt Tightener Hinge Plate Adjusting Screw Nut Washer
151066	Belt Tightener Hinge Plate Adjusting Screw Hinge Pin
151068	Belt Tightener Hinge Plate Adjusting Screw Hinge Pin Retaining Ring (2)
1062(819)	Belt Tightener Hinge Plate Mounting Screw (4)
1606(819)	Belt Tightener Hinge Plate Mounting Screw Nut (4)
126150	Belt Tightener Hinge Plate Mounting Screw Nut Washer (4)
151220	Belt Tightener Hinge Plate Adjusting Screw Hinge Bracket
151221	Belt Tightener Hinge Plate Hinge Bracket
151222	Belt Tightener Hinge Plate Hinge Bracket Pin
50807(813)	Belt Tightener Hinge Plate Motor Mounting Bolt (4)
1778(813)	Belt Tightener Hinge Plate Motor Mounting Bolt Nut (4)
9842	Belt Tightener Hinge Plate Motor Mounting Bolt Nut Washer (4)
21261M-480	Machine Driving Belt, 46" long (V-belt)
228880	Motor Mount and Belt Tightener Complete, Nos. 51655(813), 150783, 151066, 151219 to 151222, two each 9281, 151068, four each 1062(819), 1606(819), 1778(813), 9842, 50807(813) and eight 126150

LIST OF PARTS FOR P260-9/139 MACHINE
Same as 269W108, except for the following:

Parts Added	DESCRIPTION	Parts Removed
239431	Aroh Clamp Foot	--
239424	Aroh Clamp Foot Lifter with 239442	63837
239425	Aroh Clamp Foot Retaining Plate	--
200160(819)	Aroh Clamp Foot Screw	--
239426	Aroh Clamp Foot Shank	--
239427	Aroh Clamp Foot Shank Arm	--
1094(803)	Aroh Clamp Foot Shank Arm Screw	--
239428	Aroh Clamp Foot Shank complete, Nos. 1094(803), 200160(819), 239426, 239427 and 239431	--
167221	Aroh Clamp Frame with two 239208	167001
239430	Aroh Clamp complete, Nos. 141071(819), 141575(803), 167041, 167052, 167221, 201711(803), 239206, 239209, 239425, 239428, 239476 and five 808(830)	167423
239440	Cylinder Base Leg	--
239441	Cylinder Cover (bottom)	239233
239596	Feed and Knife Driving Cam with 167234 and two each 140352(830) and 167235	239591
239476	Feed Plate	167051
239387	Thread Wiper Body	--
200308(803)	Thread Wiper Body Hinge Screw	--
239388	Thread Wiper Body Support	--
239170	Thread Wiper Body Wire	--
239336	Thread Wiper Body Wire Clamping Plate	--
141574(803)	Thread Wiper Body Wire Clamping Plate Screw	--
239442	Thread Wiper Fulcrum Pin	--
239443	Thread Wiper (quick acting) complete, Nos. 141574(803), 200308(803), 239170, 239336, 239387, 239388 and 239424	239390
167077	Vertical Drive Shaft Worm with 141407(869) and 141408(869)	167183
167079	Vertical Drive Shaft Worm Gear with 141407(869) and 141408(869)	167184
239394	Work Plate complete	--



LIST OF PARTS FOR P260-9/109 MACHINE
Same as P260-9/108, except for the following:

Parts Added	DESCRIPTION	Parts Removed
239401	Arch Clamp Foot (left)	68721
239402	Arch Clamp Foot (right)	68723
239593	Feed and Knife Driving Cam with two 167234 and four each 140352(830) and 167235	239591
167083	Feed Plate	167051
239532	Knife Holder complete, Nos. 17825, 55458, 55459 and 141145(803)	239368
210993	Thread Retainer Sleeve	--
223844	Thread Retainer Spring	--
210957	Thread Retainer Stud	--
210958	Thread Retainer Stud Collar	--
239337	Throat Plate	--
239127	Throat Plate 239337 with 17825, 17828, 50018(806), 55326, 55458, 141145(803), 200138(805), 201711(803), 239367 and two 208(830)	239339
55326	Throat Plate Needle Hole Bushing	55325
167085	Arch Clamp complete, Nos. 141070(819), 167001, 167041, 167052, 167055, 167083, 239202, 239204, 239209, 239401, 239402, 350605(869), two each 202(819), 141575(803), 201711(803), 239206, 239613 and four 808(830)	167423

LIST OF PARTS FOR P260-9/141 MACHINE
Same as P260-9/108, except for the following:

Parts Added	DESCRIPTION	Parts Removed
239166	Feed and Knife Driving Cam with 167324 and two each 140352(830) and 167235	239591
55458	Knife (needle thread)	239372
239532	Knife Holder complete, Nos. 17825, 55458, 55459 and 141145(803)	239368
239627	Needle Bar	167086
239629	Needle Bar 239627 with 200125(833), 201143(819) and 239628	167087
239628	Needle Bar Thread Guide	239376
201143(819)	Needle Bar Thread Guide Screw	50169(819)
200125(833)	Needle Set Screw	209(833)
239172	Throat Plate 239337 with 17825, 17828, 50018(806), 55458, 55459, 141145(803), 200138(805), 201711(803), 239173, 239367 and two 1208(809).	239339
239173	Throat Plate Needle Hole Bushing (square hole .099)	55325
167077	Vertical Drive Shaft Worm with 141407(869) and 141408(869)	167183
167079	Vertical Drive Shaft Worm Gear with 141407(869) and 141408(869)	167184
Type P3355	Needle - Size 22	Cat. 1628 (Size 18)

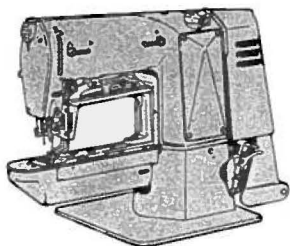
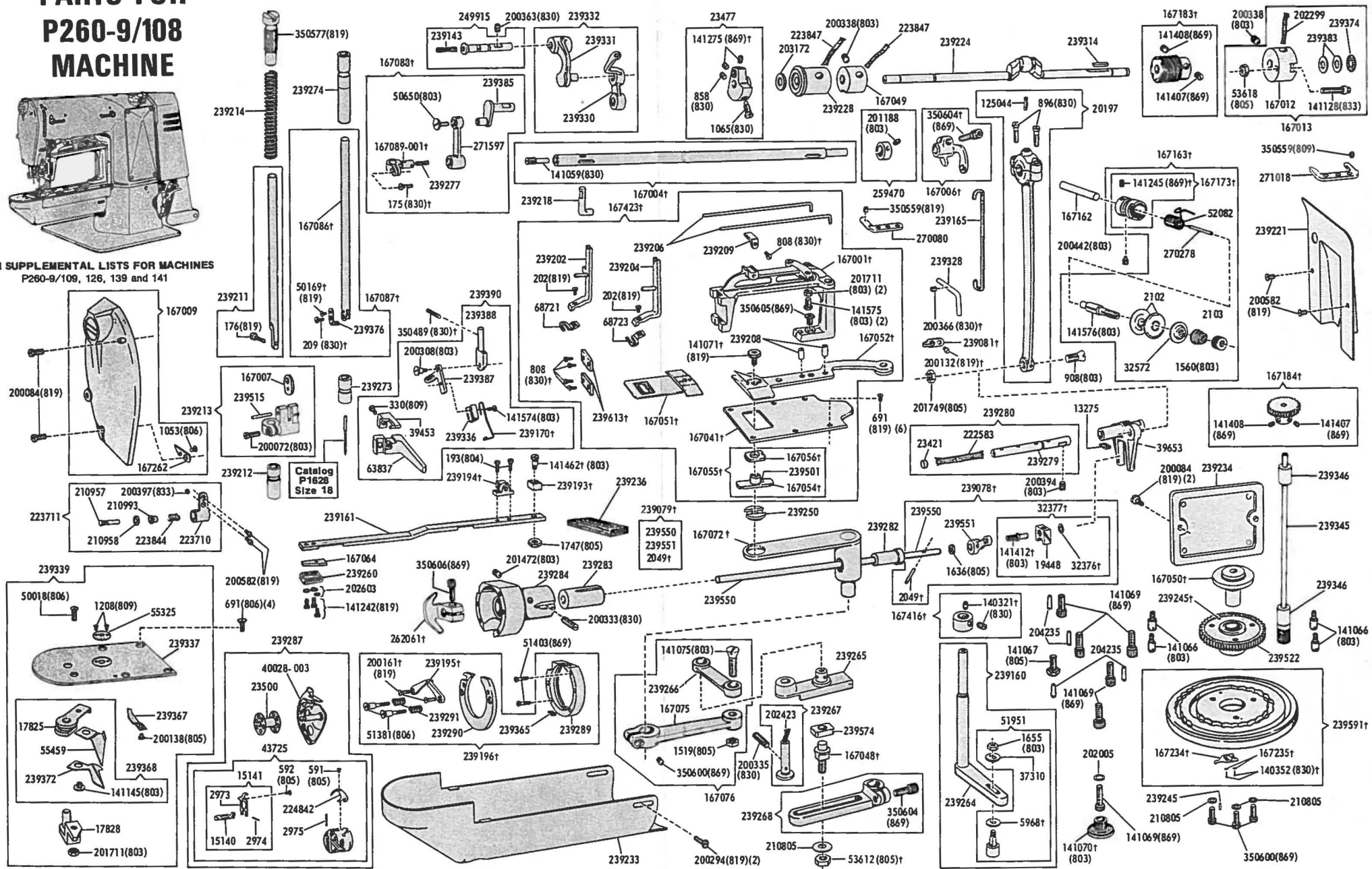
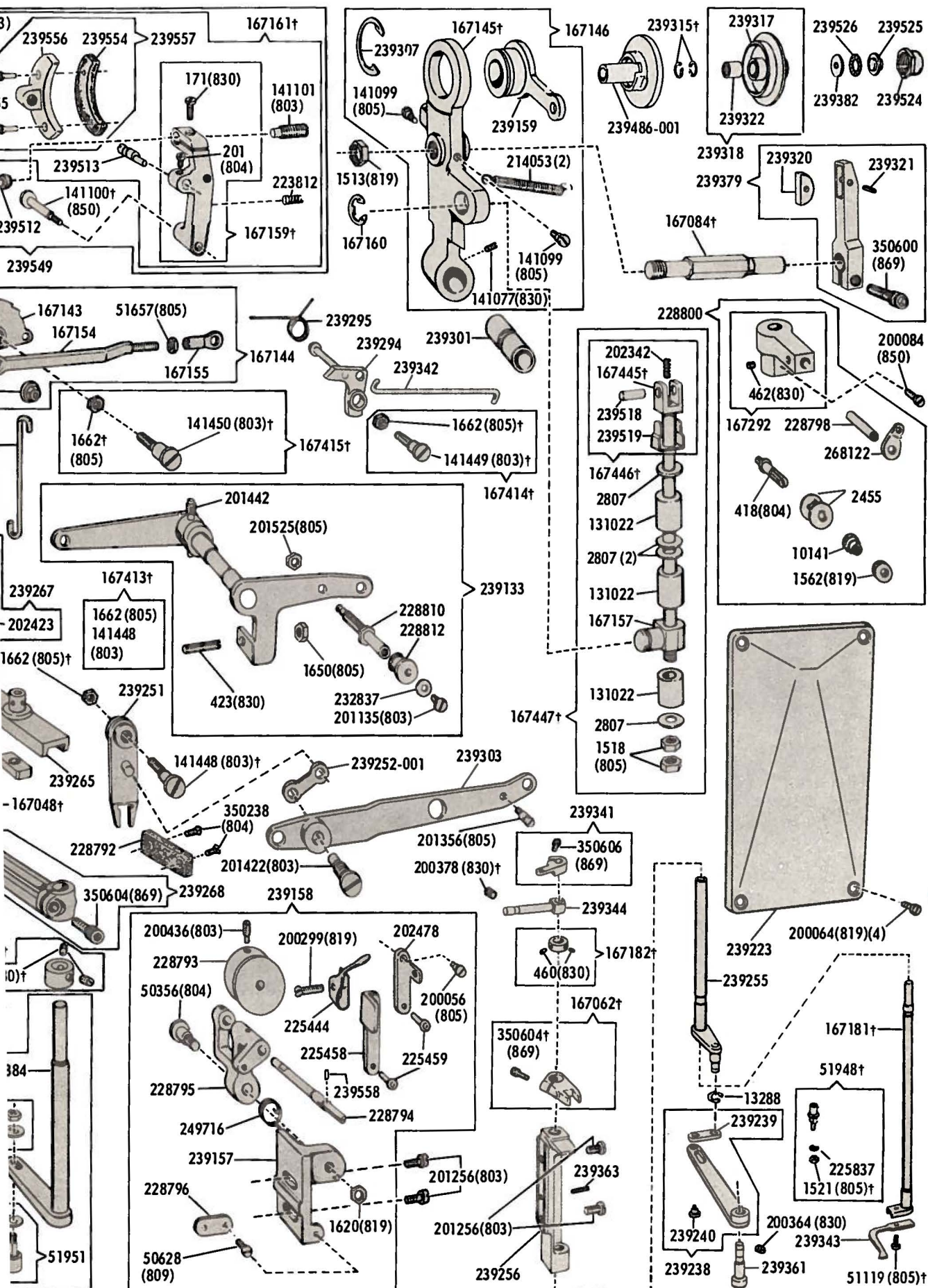


Diagram illustrating the front view of a boat hull assembly with the following components and part numbers:

- 167009 (Top transom plate)
- 200084(819) (Two transverse structural ribs)
- 239213 (Right transverse structural rib)
- 1053(806) (Small fastener or pin)
- 167262 (Bottom transverse structural rib)
- 210957 (Bottom longitudinal structural rib)
- 200397(833) (Bottom longitudinal structural rib)



†Latest number for this part. See coded alphabetical list for earlier numbers.



Union Special Wants to Help You Cut Sewing Machine Maintenance Costs

Union Special is offering two practical systems to help pinpoint and reduce your sewing machine maintenance costs: a record keeping system to help spot machines requiring abnormally high maintenance, and a parts inventory system to speed routine repairs.

Machine Maintenance Records

Repair-prone machines or inexperienced competent operators can eat up your maintenance dollars in short order. To help spot these problems, Union Special suggests two variations of a simple maintenance record keeping system using cards provided by Union Special.

The first system utilizes a "Machine Maintenance Record" card (Form 237) for each sewing machine in a plant. When a repair is required, the card is pulled from the file and the repair date, parts used, and their cost are entered in the spaces provided and the card is refiled.

MACHINE MAINTENANCE RECORD					
MACHINE NAME	STYLE	TYPE NEEDLE	SERIAL NO.	DATE PURCH.	
DATE	SERVICE PART USED	COST	DATE	SERVICE PART USED	COST
FORM 237— Machine Maintenance Record card					

The second system is normally used when more detailed information on repair costs is desired. Two record cards are used: a "Repair Request Card" (Form 234), and a "Machine Repair Record" (Form 233). When a machine requires service, the forelady or foreman fills out the top of a "Repair Request Card" and gives it to a mechanic. He fills in the time the repair work is started, the parts used and their cost,

and the completion time. This data is then transferred to the permanent "Machine Repair Record" kept in the office.

Whichever system is used, management now has an invaluable tool to reduce needless maintenance costs.

Repair Part Inventories

While record keeping tells management which machines require abnormally high maintenance, it does little to help reduce the downtime caused by routine repairs. To alleviate this situation, Union Special recommends that manufacturers establish a formal parts inventory system for each type of sewing machine they operate.

Excessive machine downtime and wasted hours by mechanics can be eliminated with an orderly in-plant inventory of the most commonly needed parts. There is no longer a need to cannibalize other machines for spare parts. Long waits for deliveries are avoided and machine downtime is kept to a minimum. The cost of a parts inventory is small when the overall savings are considered.

MACHINE REPAIR RECORD CARD						REPAIR REQUEST CARD	
MACHINE NAME		MACHINE STYLE		DATE		REPAIR REQUESTED BY	
DATE	MACHINE NO.	2250*	2251*	2252*	2253*	MACHINE SERIAL NO.	
						OPERATOR'S NO.	
FORM 233— Machine Repair Record card						FORM 234— Repair Request Card	

For free sample copies of the machine record cards and spare part inventory lists for a variety of the most popular machines, contact your local Union Special Representative or write direct to Union Special.

Union Special

Style 52800 BN-16

*Suggested Minimum Spare Parts List**

Part Number	Description	Minimum Quantity Per 5 Machines	Part Number	Description	Minimum Quantity Per 5 Machines
G 52827-16	Presser foot	1	88 B	Needle clamp screw	4
91	Presser foot clamp screw	2	28 C	Needle clamp screw	2
52805 D-16	Main feed dog	1	41076 D	Spreader thread eyelet	2
22593	Main feed dog screw	4	73 A	Spreader thread eyelet screw	4
3026 A	Differential feed dog	1	22743	Spreader thread eyelet holder screw	4
90	Differential feed dog screw	2	52945 M	Spreader	2
52824 D-16	Throat plate (12 to 15 S.P.I.)	1	77 A	Spreader set screws	4
or			88	Spreader holder screws	4
52828 D-16	Throat plate (16 to 18 S.P.I.)	1	52844 A	Spreader thread guide	1
87	Throat plate screw	4	90	Spreader thread guide screws	4
121 GBS	Needles (specify size)	300	52904 G	Cast-off wire	2
52708 B	Looper	2	73 A	Cast-off wire screws	2
73	Looper set screw	2	22564	Needle bar clamp screw	2
22563	Looper needle guard screw	4	21225	Looper gauge	1
33174 B	Looper needle guard holder screw	4	21227 C-14	Spreader gauge	1
52842 G	Needle thread guide wire	2	29484	Screw assortment	1
28 B	Needle thread guide wire screw	4			

*The parts and quantities listed above are intended to assist you in setting up the initial inventory of spare parts. An efficient inventory can only be established according to actual usage. The nature of the sewing operation will determine actual usage.

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