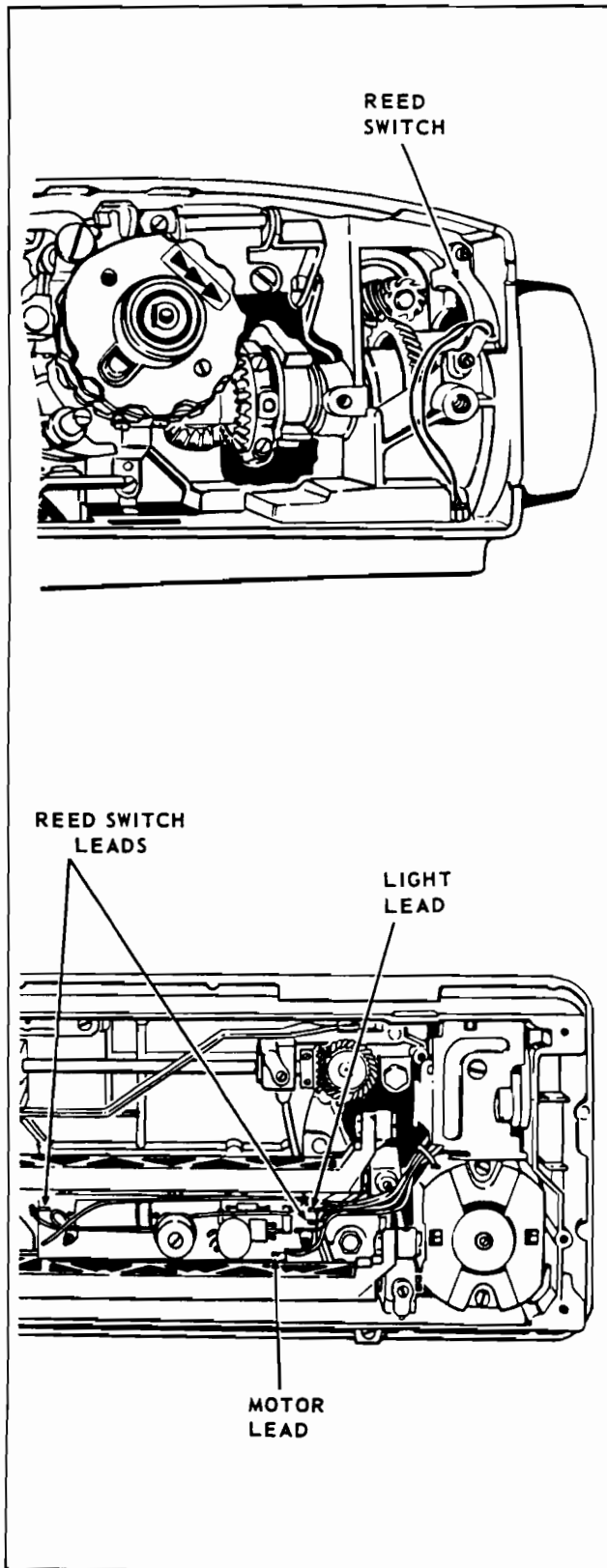


NEEDLE POSITIONER (630 M/c)



The needle positioner is comprised of the S.C.R. controller, circuit board in bed of machine, reed switch, and magnet in hand wheel of machine. Before removing any of the above, make the following test. NOTE: Machine and foot controller are a mated pair adjusted at the factory and should not be separated. If any other controller is used, machine speed should be adjusted for that controller.

Needle Will Not Position

Check for defective controller by replacing with one known to be in operating condition. Adjust machine for that controller.

Disconnect controller from power supply.

Check for bind in machine.

Remove top and bottom covers. Check for loose electrical connections in machine.

Check machine speed adjustment as described on page 25 (55-65 S.P.M.).

Substitute a new reed switch for a suspected defective reed switch. Remove two nuts holding circuit board cover and remove cover. Disconnect reed switch leads from printed circuit board. Remove two screws holding reed switch and remove switch. Replace with one known to be in good operating condition.

Before removing hand wheel as instructed on page 27 of the 600 Service Manual, move reed switch away from hand wheel.

Check to see that magnet is free of foreign particles and that it is cemented firmly in place.

Check for defective circuit board. Replace with one known to be in operating condition and adjust machine speed.

Removal

Remove arm top cover and bottom cover.

Remove two nuts holding circuit board cover and remove cover.

Disconnect reed switch leads, motor leads, light lead, and leads from machine receptacle. Then, remove circuit board.

Remove two screws holding reed switch and lift switch out of machine.

Replacement

Replace the same way as for removal except in reverse order.

Adjustment

Remove bottom cover.

Insert screwdriver through access hole in circuit board and turn trim pot clockwise. (Don't force).

Connect controller to power supply.

Step on and off controller until needle stops in down position. Turn screw counterclockwise slowly until needle rises to up position. This must be accomplished within a four second time period and may require more than one attempt to master.

When correctly adjusted, needle should be above raised presser foot and take-up should be no lower than middle of slot.

NOTE: Machine should stop from low speed within one stitch with needle up. It may not stop within one stitch from high speed operation. Turning trim pot in a clockwise direction decreases stitches per minute and turning trim pot in a counterclockwise direction increases stitches per minute.

If machine does not stop within one stitch, proceed as follows:

1. Check machine speed adjustment.
2. Check reed switch.
3. Make certain magnet is cemented firmly into place and free from all foreign particles.
4. If machine still does not operate, repeat procedure as described on page 24.

