

Curved needle

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DESIGNERS AND MANUFACTURERS OF SPECIALIZED MATTRESS SEWING EQUIPMENT

CATALOG #9700 12/94

PBS 700

Blind Stitch Machine



INSTRUCTIONS, PARTS CATALOG & SERVICE MANUAL

PSM PORTER®
SEWING MACHINES, INC.
97 Rantoul Street, Beverly, MA 01915
(508)922-2611 • (800)343-8138 • FAX (617)599-7081

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2. Bill To and Ship To addresses
3. Fax Number
4. Person placing order
5. Machine Model Number
6. Part Number or complete part description

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Please state how the shipment is to be made when ordering parts (UPS Red/Blue/Ground;

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1. All customers must call Porter to obtain a RMA (Returned Material Authorization) number. Parts returned without a RMA number will be returned to customer. We will not accept parts returned 60 days after receipt.
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If a parcel post shipment reaches you in damaged condition, advise us immediately so that a claim can be filed. All parcel post packages are insured by Porter. If a truck, UPS or express shipment arrives damaged, request the driver to make a notation on the freight bill. If the damage was concealed at the time of delivery, call the carrier for an inspection and obtain a DAMAGE REPORT. This is necessary in order to file a claim. In the case of truck lines, you must file the claim. We will give any needed assistance, but the carrier is responsible for the safe arrival of goods.

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OPERATING INSTRUCTIONS

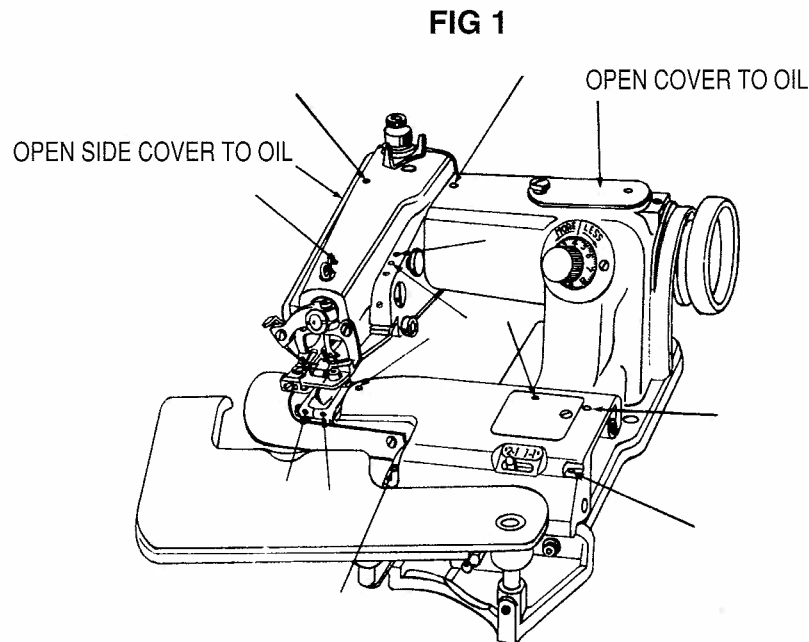
Handwheel Rotation and Speed

Turn handwheel only in direction away from operator for clockwise rotation. Be sure motor drive is wired up to obtain the same clockwise rotation. The recommended operating speed of a brand new machine is 1,800 to 2,000 stitches per minute. After a breaking-in period of several weeks and after the operator has become skilled in the operation of the machine, the speed can be increased up to 2200 stitches per minute.

Oiling and Maintenance (Fig. 1)

It is important not to operate the machine before oil of good quality has been dropped at all points shown in Fig. 1. When breaking in a new machine, oiling should be done sparingly several times a day. Thereafter, one oiling daily will be sufficient. After oiling, wipe machine carefully to avoid soiling of the material.

Do not operate machine without material under the presser foot. This will prevent damage to the needle and the feed dog as well as the feed plattens.



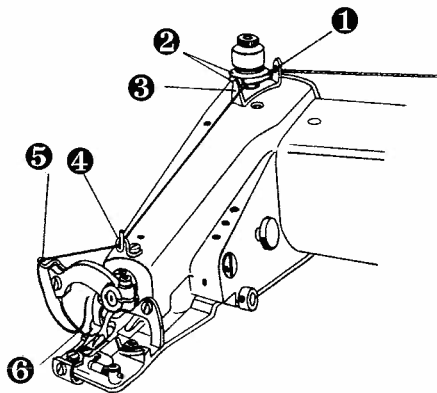
Threading Machine (Fig. 2)

Turn handwheel of machine in clockwise direction away from operator until needle lever reaches its furthest left hand position.

Draw thread from spool on thread stand and pass it through eyelet of rear thread guide ①, then slide it between two tension discs ②, and pass it over rear thread guide ③, through eyelet of front thread guide ④, then down through needle clamp hole ⑤ and pass it from the underside of needle hole ⑥. Leave thread about 5 cm (2 inches) past needle hole.

To thread needle at point ⑥, swing front plate out of way and depress cylinder out of way with knee lifter, then hold thread between index finger and thumb. End of thread must be stub not feather edge.

FIG 2



Right
up like this



Wrong
Not like this



Adjusting Cam to Needle (Figs. 3, 4, 5, & 6.)

POWER OFF

Heel foot treadle to depress feed frame and turn handwheel away from operator (clockwise) until point of needle is at the left edge of cam slot (Fig.3). Release treadle.

If the cam is pressing up against needle (Fig. 4), turn dial "less" until a 1/32" clearance gap is between needle and cam (Fig. 5).

FIG 3

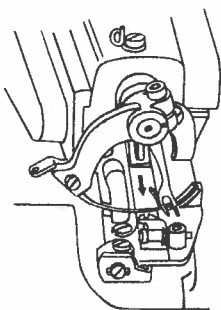


FIG 4

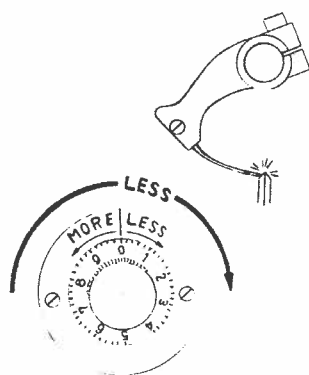
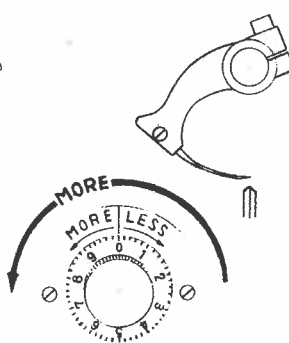


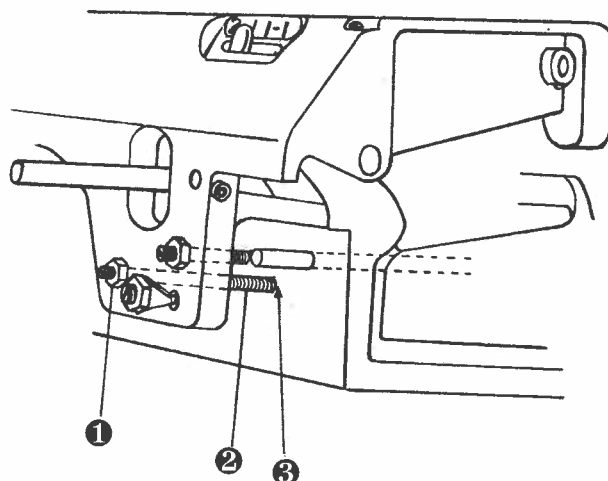
FIG 5



To prevent the operator from mistakenly adjusting cam too high with "more/less" dial, loosen nut at ❶ and turn threaded shaft ❷ clockwise until it just touches main casting ❸.

Secure nut to maintain position (Fig. 6).

FIG 6



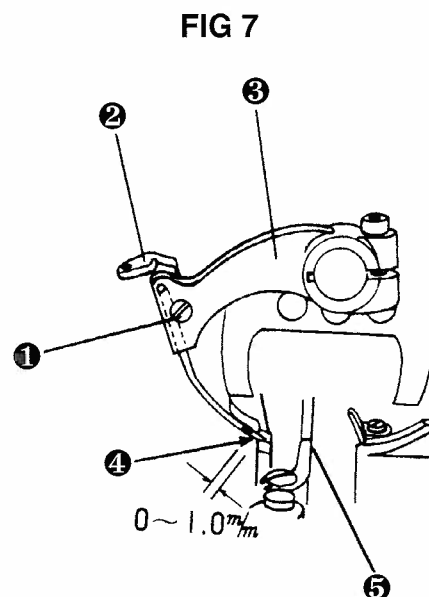
Replacing Needle (Fig.7)

Turn handwheel away from operator (clockwise) until needle reaches the end of its return stroke (extreme left hand position).

Remove old or defective needle by loosening needle clamp screw ①. Insert new needle into seat in needle clamp ② and needle lever ③ as far as it will go. Make sure hole of needle is 0-1.0 mm (0.04") on the left end of presser foot ④ and tighten needle clamp screw ①.

Turn handwheel slowly away from operator and observe movement of needle. The curved portion of the needle should bear slightly on the needle guide groove ⑤ in the left hand part of presser foot.

Always replace bent or blunt needles. They affect the satisfactory operation of machine.



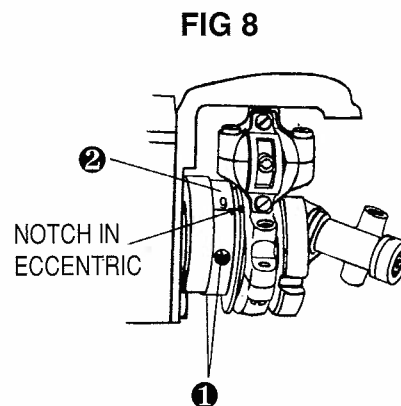
Needle Recommendation

Size #5-1/2

Regulating Stitch Length (Fig. 8)

Loosen screws ① in stitch regulating collar ② and turn collar ② until desired number is reached by indicator notch of eccentric. The larger the number by the notch, the longer the stitch. The smaller the number by the notch, the shorter the stitch. Tighten screws ① securely.

Number on Collar	5	6	7	9
Stitch Length (SPI)	5	4.2	3.6	3



NOTE: Due to the changing thicknesses of material passing between the cam and shoe area, an end result of 6-8 SPI will be satisfactory.

ADJUSTMENTS

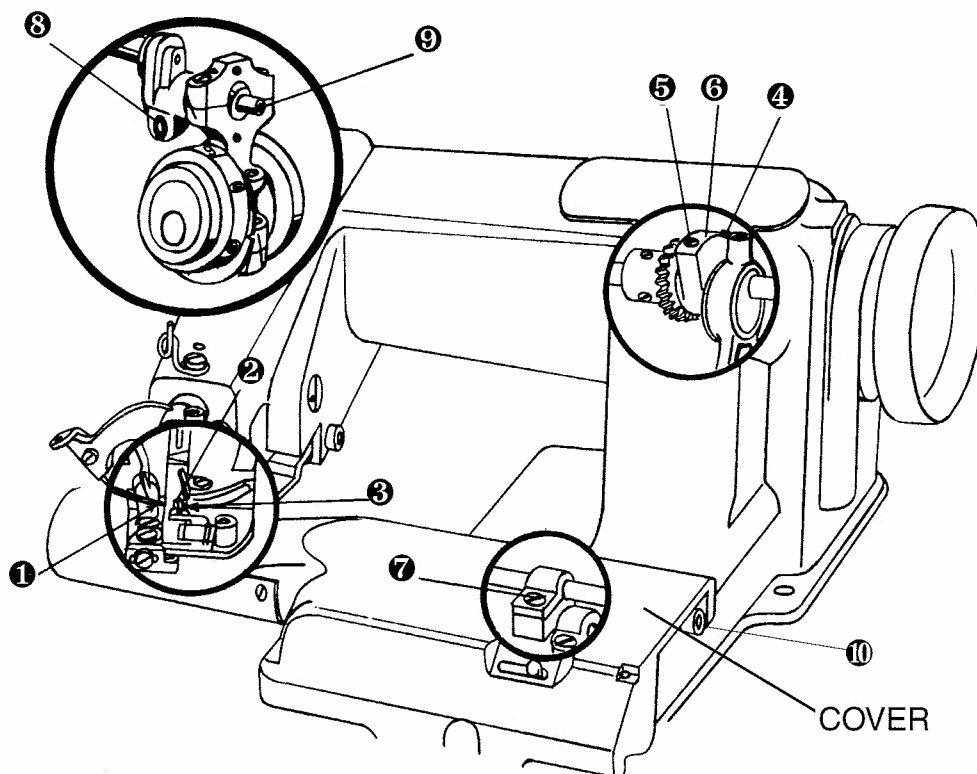
Proper Setting for Cam Connection (Fig. 9)

Turn handwheel away from operator (clockwise) until needle is on the down stroke. When needle reaches the right hand edge of needle guide **1**, Cam **2** should stop and should not move until the point of needle passes over cam to other side of presser foot opening **3**.

If cam moves, make the following adjustments: first open top cover plate and loosen screw **4** on eccentric **6**. Bring the point of needle back to the right hand edge of needle guide **1**. Then loosen screw **5**, keeping screwdriver in place. Move eccentric **6** forward to backward until cam is at the stop position, holding needle in position with handwheel while performing this operation. Tighten screw **5**.

If still not correct, readjust by loosening screw **5** again, change angle of eccentric **6** slightly forward or backward as needed and retighten screw **5**. When adjusted satisfactorily, be sure to tighten both screws **4** & **5** before putting machine into operation.

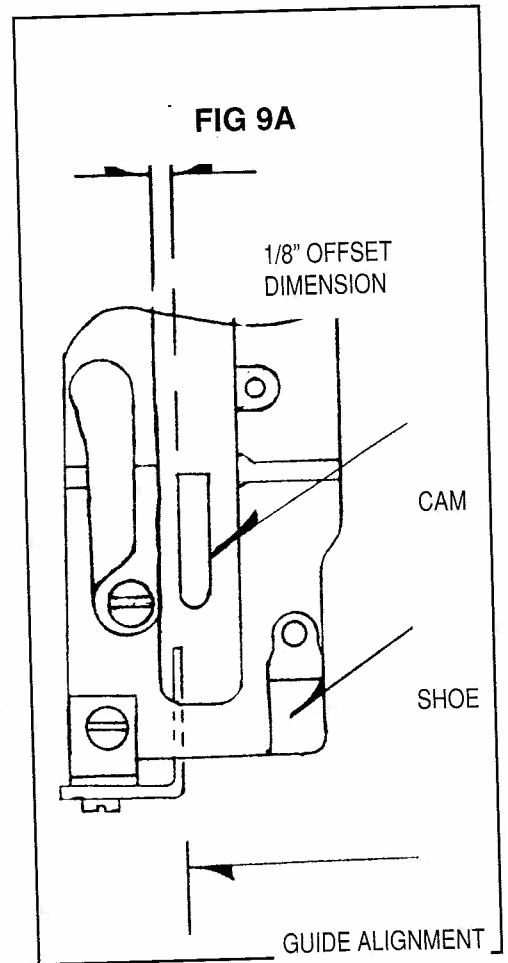
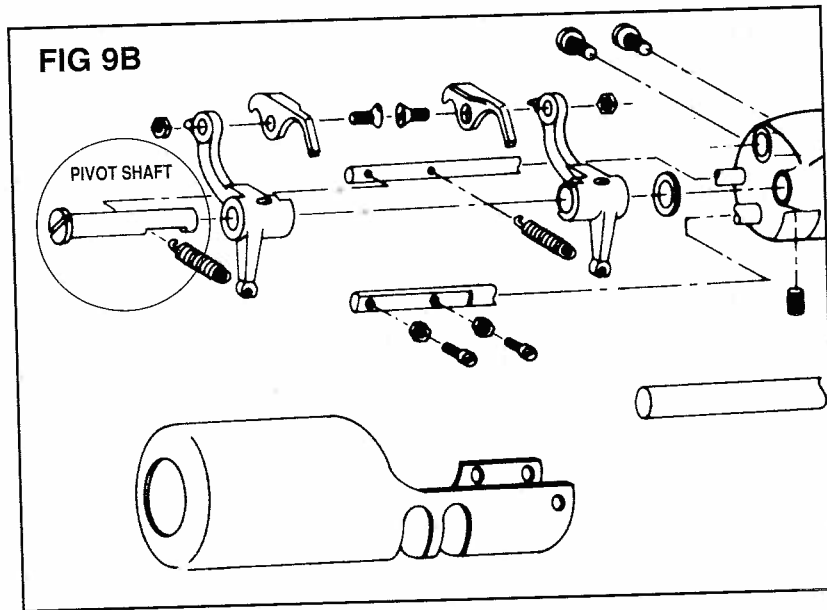
FIG 9



Setting Cam Shaft Offset (Figs. 9, 9A, & 9B)

Remove cover (Fig. 9) and loosen screw ⑦ on cam shaft drive collar and L.H. positioning collar (not shown). Loosen R.H. position collar ⑩ and slide cam shaft to dimension shown in (Fig. 9A). Then secure both L.H. and R.H. collars.

Fig. 9B shows the pivot shaft for the feed plattens. The shaft has a clearance slot for the travel stroke of the cam. Be sure there is no interference contact after performing the off-set adjustment.



Setting Cam Shaft Stroke (Fig. 9 & 9C)

When the point of needle is at the cam, open window plate, loosen screw ⑦ and adjust cam to be 5 m/m (13/64") between the center of needle and the end position of rib's forward movement as shown in Fig. 9C.

FIG 9C

