ALFA

MODEL

206

INSTRUCTION AND TIMING

MANUAL

INDEX

ABOUT YOUR MACHINE...

Your ALFA Industrial Sewing Machine is a precision-built piece of equipment, it will give years of satisfactory sewing and will respond well to simple care, and maintenance. Lubrication and cleaning are the most important features and these are fully described and illustrated in this Instruction Book.

Periodical expert service is also recommended and can be carried out by our own qualified engineers at a nominal cost. Details of this and any other information that you may require can be obtained from our Technical Service Department at the address in the front of this book. This Department is also at your service for FREE ADVICE and any problems you may encounter in the course of your sewing.

ALFA is a truly international company, our products are exported to more than 60 countries throughout the world, and our current sales figure is in excess of 3 ½ million machines. Our factories, which are among the most modern in Europe, employ more than 3,000 personnel, and we are one of the few sewing machine companies that manufacture all our own components, ensuring precision quality control throughout.

GENERAL INFORMATION ABOUT MODEL 206

The ALFA Industrial Model 206 is a High Speed straight lockstitch sewing machine incorporating a Differential Feed producing perfect stitches at any speed up to 5,000 per minute. It is lubricated fully automatically, the main shaft being enclosed in permanently sealed bearings, the link take-up lever fitted with honed needle bearings. The lower mechanism, including the thread freer also fitted with sealed bearings and honed needle bearings, is lubricated by an oilsoaked foam pad and plastic tube oil-feeds. The superior quality rotary hook is automatically and independently lubricated from a self-oiling reservoir, and can be accurately regulated by a special oil-flow valve.

Reverse feed for backtacking is obtained by finger-tip pressure on a specially contoured control lever. Stitch length is controlled by means of a milled wheel conveniently placed beneath the reverse feed lever. There is a built-in bobbin winder, which automatically cuts the thread when the bobbin is full and holds the cotton in position ready for the next bobbin without need to re-thread. The presser foot is operated by a knee lifter, the mechanism of which is fully enclosed as is the drive belt, preventing any possibility of trapped fingers.

This machine has been designed to meet the needs of the general clothing industry producing high quality goods, eliminating «puckering» on modern synthetic materials such as nylon, terylene, etc., used in the making of raincoats, trousers, shirts, etc. It can also be used to create gather for use on lingerie and blouses, etc.

DIFFERENTIAL FEED

The differential feed in the Model 206 consists of two feed dogs arranged in tandem, which by simple adjustment can be made to create gather or eliminate «pucker».

TECHNICAL DATA

Subclass	Material	Height of presser foot	Needle system	Max. stitches per minute	Motor H. P.	Max. length of stitch
206-100	Fine	3/16" (5 mm.)	133	5,000	1/2	7 s. p. i. (3.5 mm.)
206-300	Medium	11/32" (7 mm.)	134	4,700	1/2	5 1/2 s. p. i. (4.5 mm.)

Motor speed ..... 2,850 r. p. m.
Free space under arm ... 11 1/2" × 4 7/8" (295 × 125 mm.)
Dimensions of bedplate . 18 3/4" + 7" (476 × 178 mm.)
Net weight (head only) .. 68 1/2 lbs. (31 kg.)

SEWING SPEEDS

The speeds indicated can be obtained without difficulty, but due consideration should always be given to all the prevailing circumstances, such as the type of material, thread, maximum stitch length etc.

When working under certain conditions it may be advisable to reduce the speed of operation in order to obtain the best results.

During the first 200 hours of use it is strongly recommended to reduce the maximum speed by approximately 20%.

CLEANING

In general no special attention is needed, but it is recommended to remove the needle plate weekly and clear away any fluff and cotton particles that may have accummulated around the feed mechanism and rotary hook. When working with materials that fray more easily it may be necessary to clean more frequently.

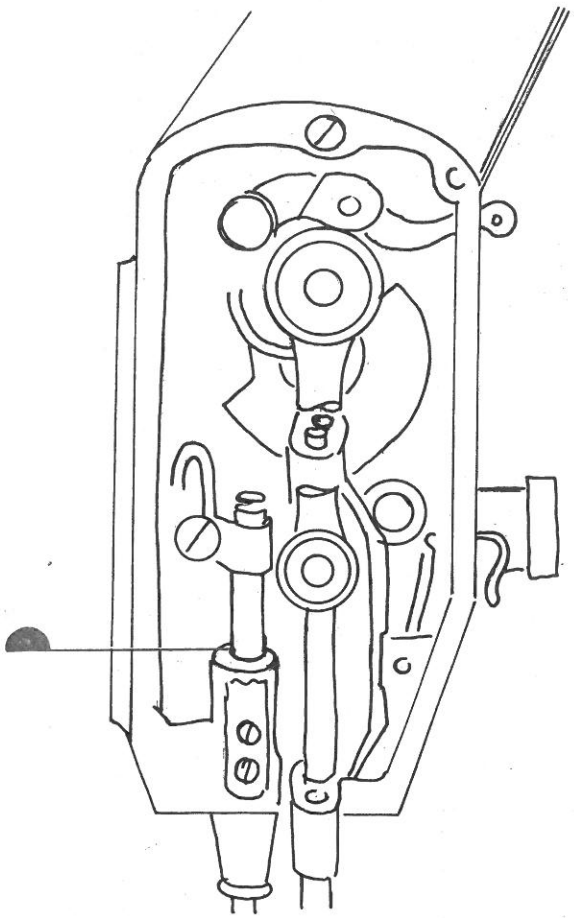
OILING

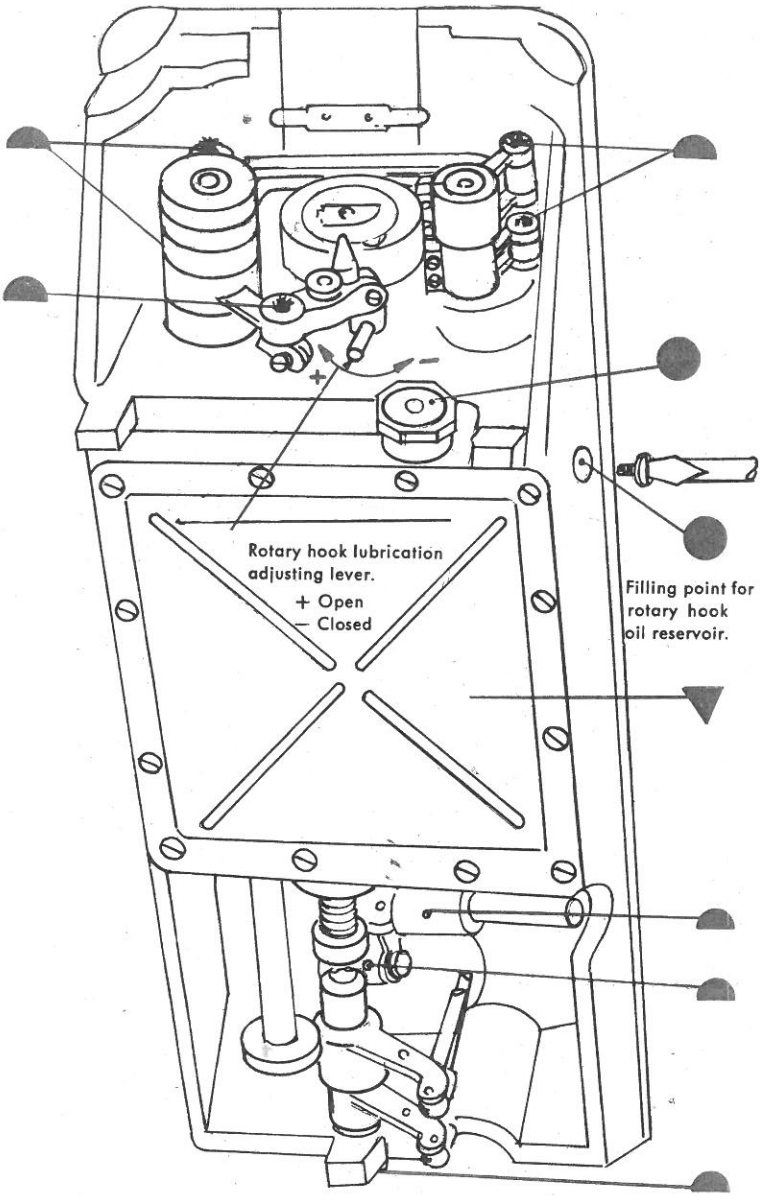
Three monthly.

Six monthly or according to the oil level visible from the inspection windows.

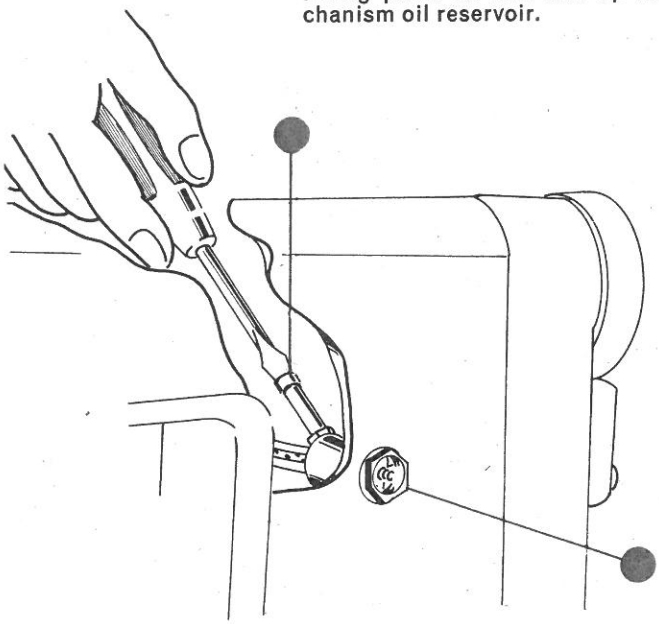
Yearly. Remove the lower sump plate and check that the foam pad is sufficiently oil-soaked. (An oil-pad correctly soaked should contain approximately 6 fluid ozs. of oil).

In the following pages 5-8, you will find illustrated the various points requiring lubrication as indicated above.

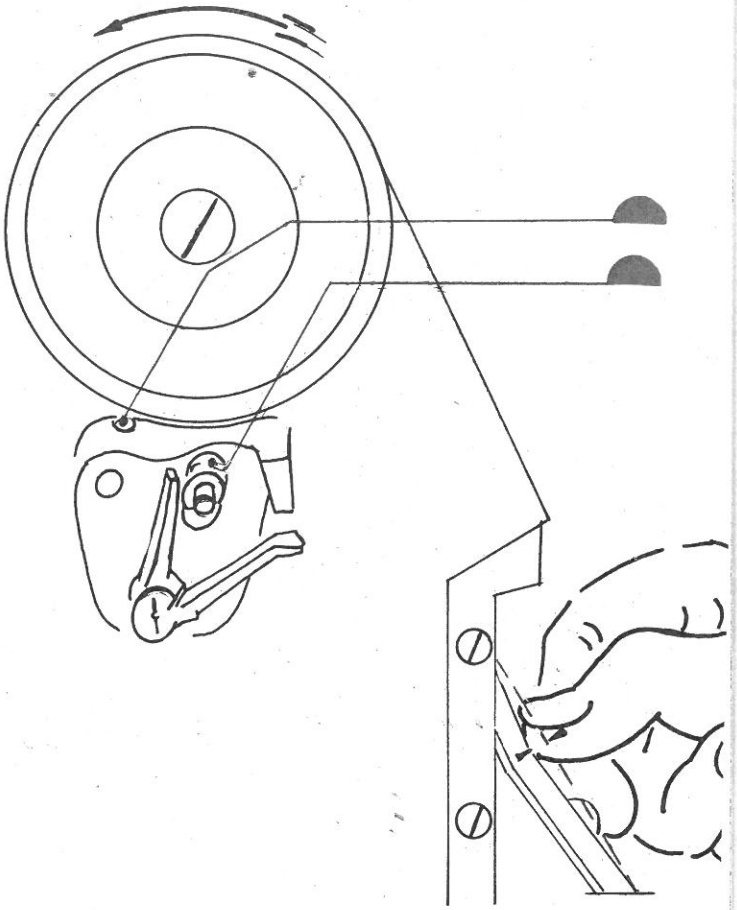




Filling point for link take-up mechanism oil reservoir.

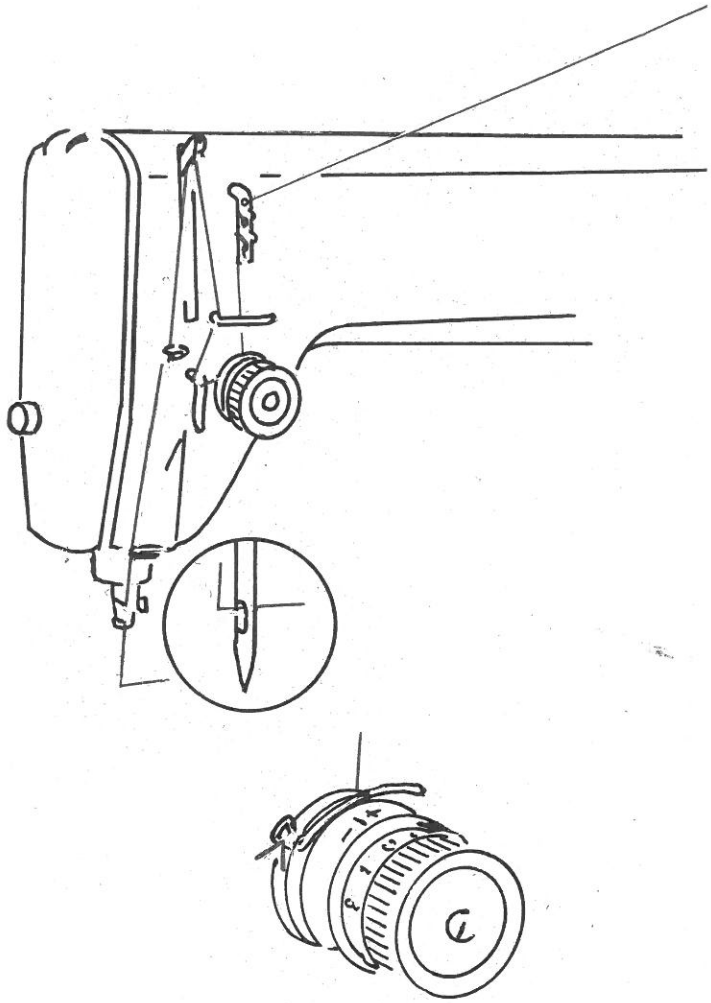


BALANCE WHEEL DIRECTION AND DRIVE BELT TENSION

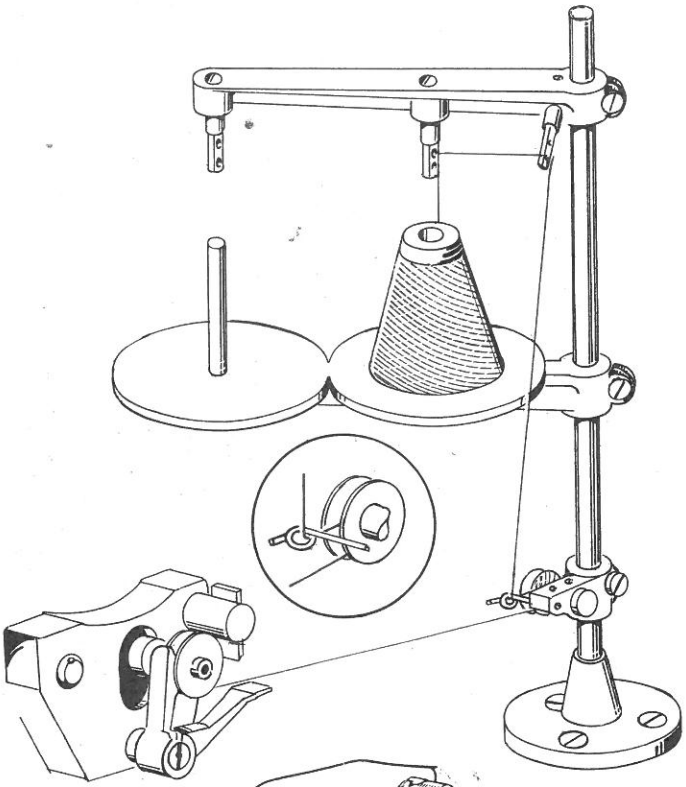


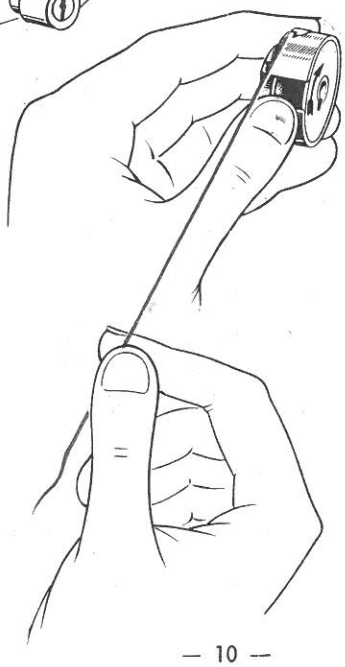
The drive belt will be at its correct tension when you can depress it by approx. 30 mm. as shown above. Excessive tightness of the belt must be avoided or unnecessary wear and strain will be imposed upon the bearings.

UPPER THREADING

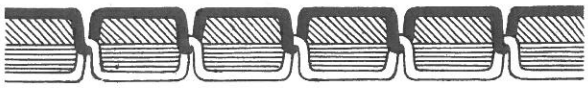


WINDING THE BOBBIN AND FITTING INTO THE BOBBIN CASE

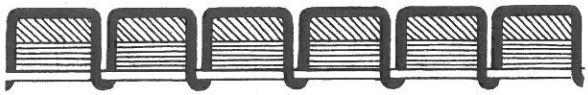




TENSIONS



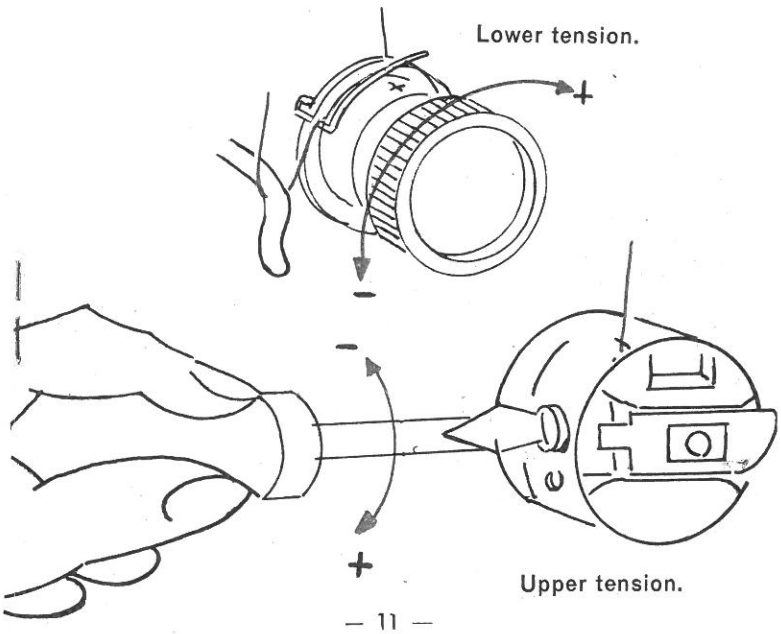
Correct tensions.



Bottom tensions too tight or upper tension too loose.

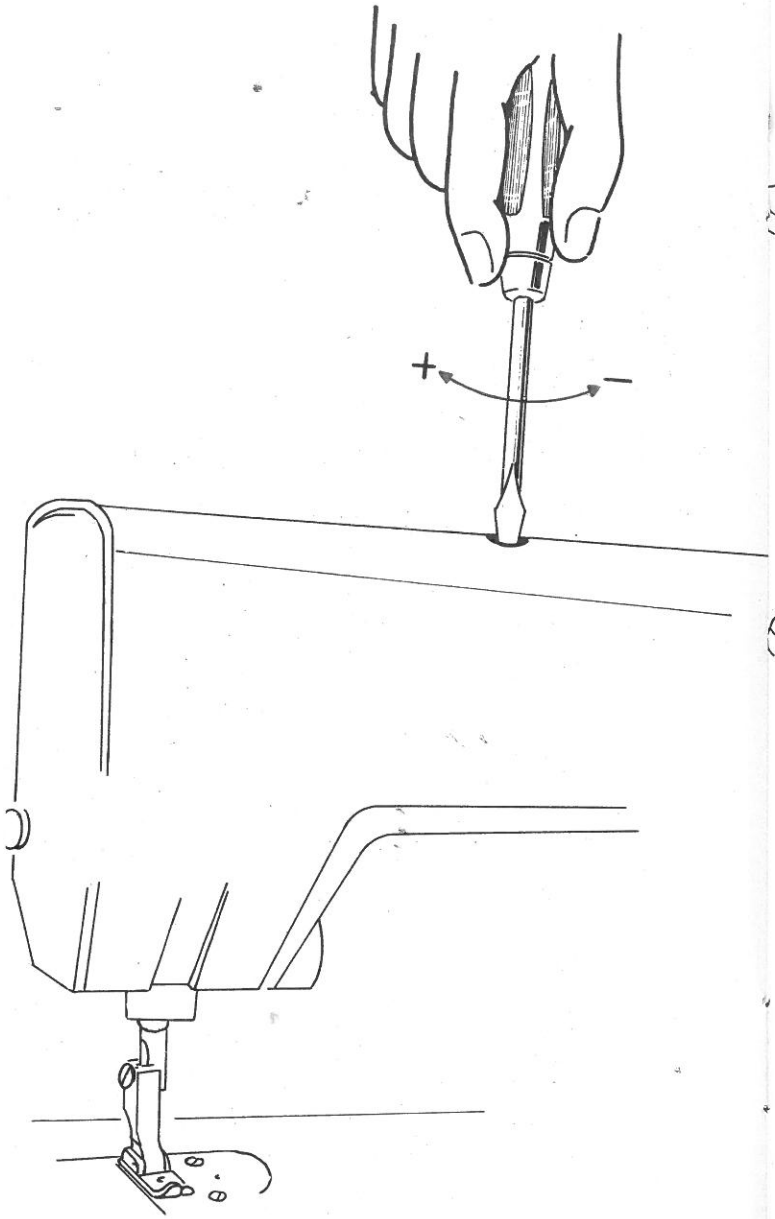
Upper tensions too tight or lower tension too loose.

Both tensions too tight.

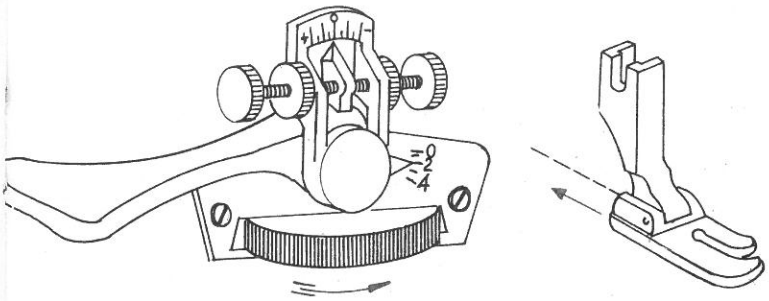


Upper tension.

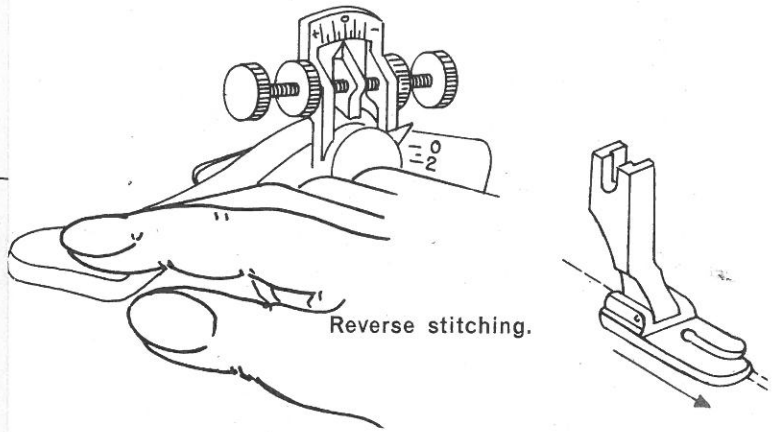
HOW TO REGULATE PRESSER FOOT PRESSURE



STITCH LENGTH REGULATION

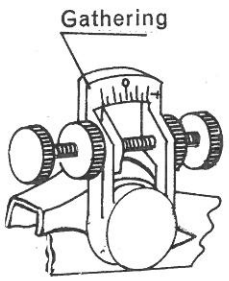


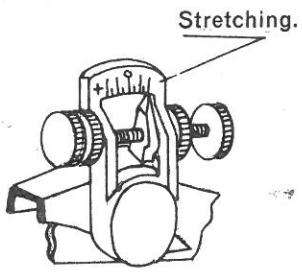
Forward stitching.



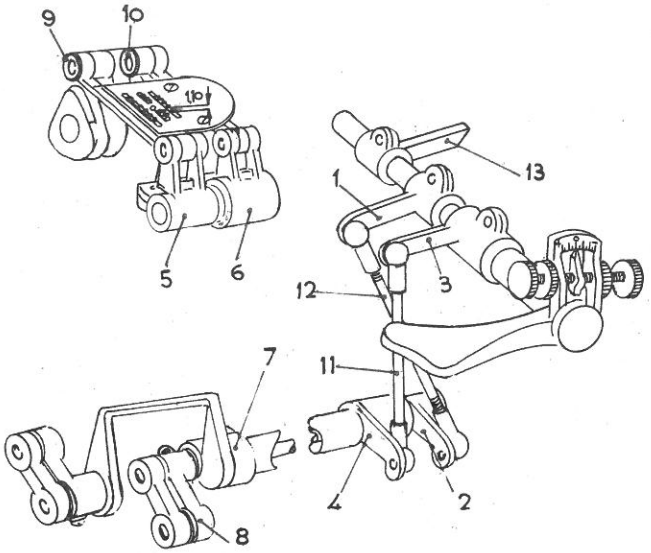
Reverse stitching.

SETTINGS FOR GATHERING OR STRETCHING





TIMING OF THE FEED DOGS MECHANISM



1. With the Stitch Length Regulator at ZERO and the Crank Arms (1, 2, 3, and 4) parallel to the Bed Plate, adjust Cranks (5 and 6) to centre the Feed Dogs with the Needle Plate.

2. With the Stitch Length Regulator at ZERO, adjust the Links (7 and 8) so that there is no movement in the Feed Dogs.

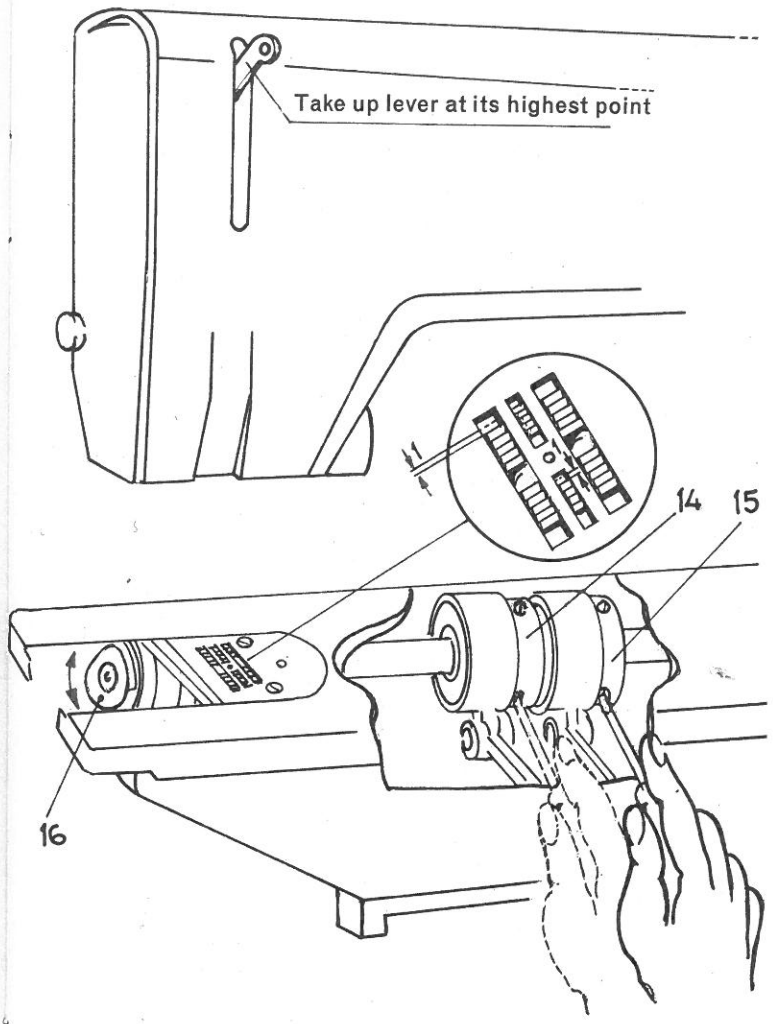
3. Set the height of the Feed Dogs teeth by rotating the two eccentrics (9 and 10) so that the maximum height above the Needle Plate is 1,10 mm.

4. With the Feed Dogs at their maximum forward travel, ensure that both Feed Dogs have equal forward and reverse travel. To achieve this adjust torque rods (11 and 12).

5. Re-check No. 2 timing above, and if necessary repeat the operation.

6. With the Feed Dogs at their maximum forward travel adjust stop bar (13) against the casting.

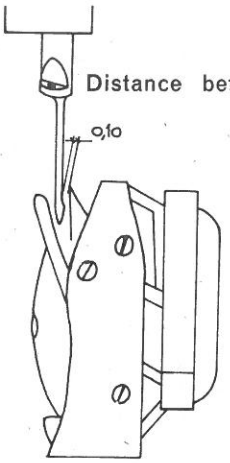
TIMING OF THE FEED DOG IN RELATION TO THE LINK TAKE-UP



Whith the Link Take-Up Lever at its highest point, adjust the two eccentrics (14 and 15) so that the Feed Dogs are 1 mm. short of their maximum forward travel.

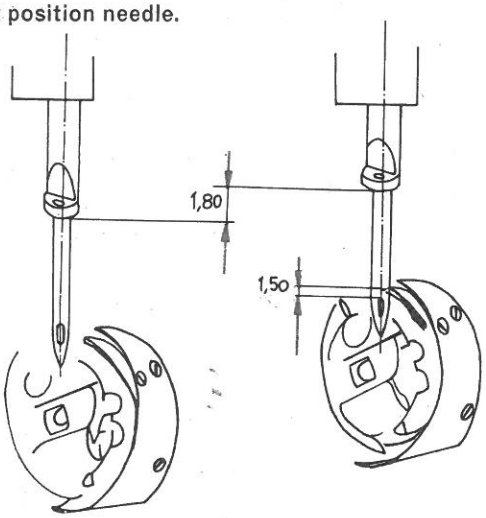
By adjusting eccentric (16) you can achieve the synchronisation of the elevation and forward travel of the Feed Dogs.

TIMING OF THE ROTARY HOOK



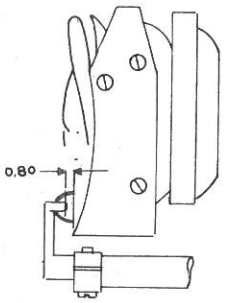
Distance between hook and needle should be 0.10 mm.

Lowest position needle.

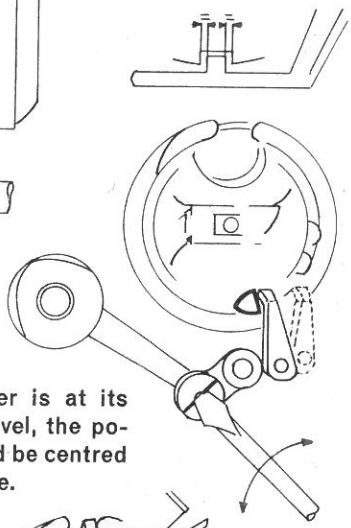


With the needle at its **lowest** point turn the balance wheel, raising the needle 1.80 mm. (use timing key), the point of the hook must now be in the centre of the needle 1.50 mm. above the top of the needle eye.

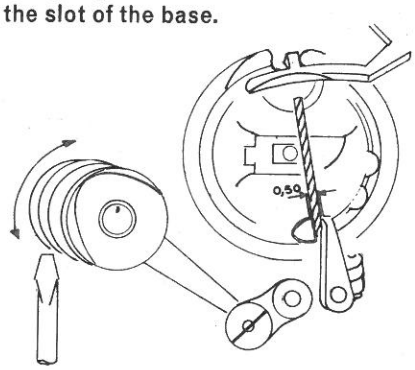
TIMING OF THE THREAD FREER



The distance between the point of the thread freer finger and the base must be 0.80 mm.

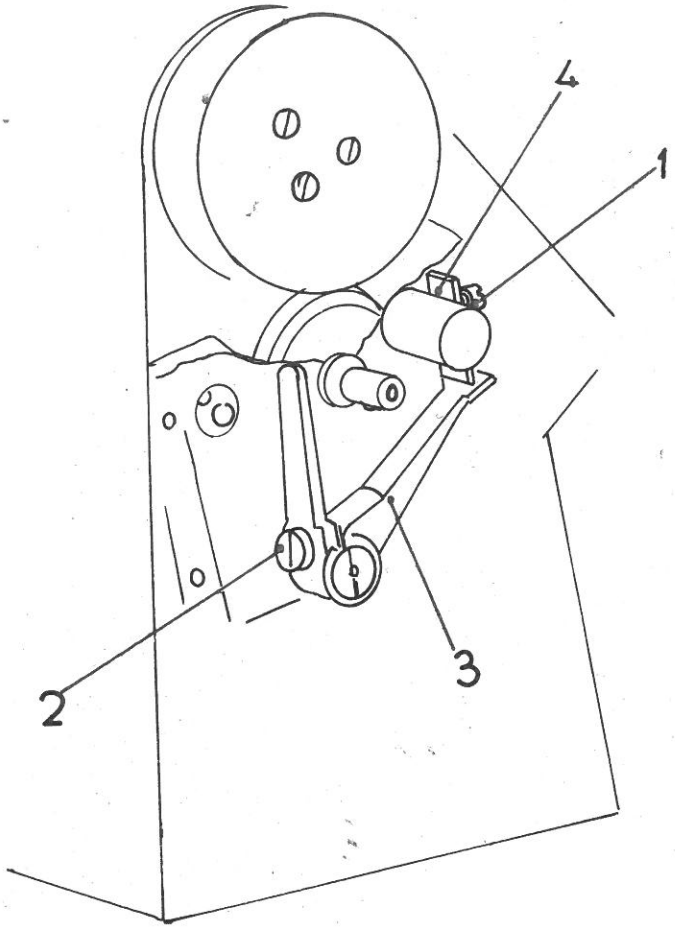


When the thread freer is at its maximum forward travel, the positioning finger should be centred on the slot of the base.



The eccentric should be adjusted so that the distance between the thread freer finger and stop on the base should be 0.50 mm. when the thread passes through, as illustrated.

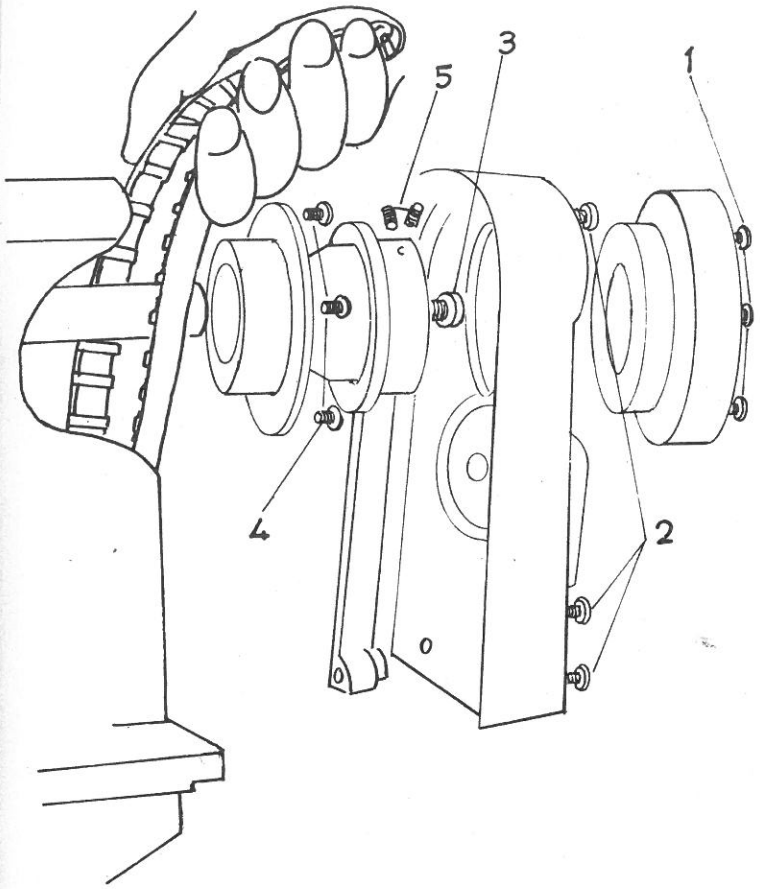
SETTING OF THE BOBBIN WINDER



1. Loosen screws (1) and (2). Set the Bobbin Arm (3) so that it will disengage when the maximum amount of wound thread is approximately 1 mm. from the edge of the Bobbin. Tighten screw (2).

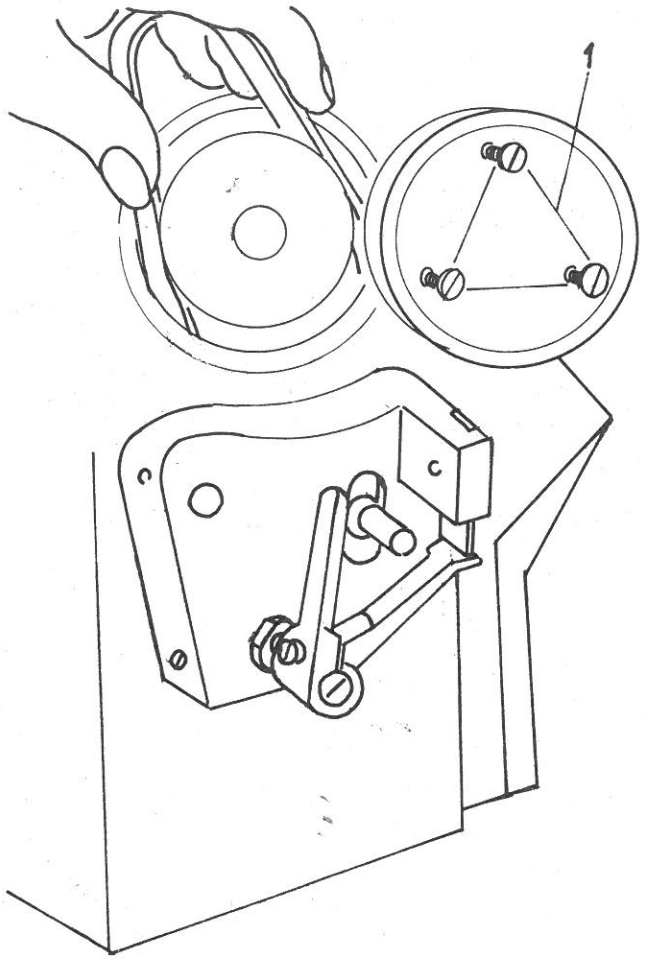
2. With the Bobbin Arm (3) in the open position set the Thread Cutter Blade (4) so that it will cut the thread when the Bobbin is full.

CHANGING THE TIMING BELT



Remove the three screws marked 1, and take off the balance wheel. Remove the three screws marked 2, and take off the 'V' belt cover. Then remove the large centre screw 3, and the three screws marked 4, and loosen the two grub screws marked 5. You can then remove the remaining bearing housing from the main shaft. You can now replace the timing belt as illustrated above. Reassemble by reversing the procedure above, taking EXTREME care not to over-tighten screw No. 3. (When fully screwed home it is advisable to release pressure on this screw by $^1/_4$ turn).

CHANGING THE MOTOR BELT



Take out the three screws marked 1 and remove the Balance Wheel. Replace the Motor Belt as shown in the illustration.