



# Troubleshooting Maintenance

# Fault prevention

If the sewing machine does not sew properly, it is usually due to incorrect operation.

## Check whether:

- The upper and lower threads are correctly threaded.
- The needle has been correctly inserted, with the flat side of the shank to the rear.
- The needle size is correct. See needle and thread table.
- The machine is clean. Brush out any remnants of thread.
- The hook race is clean and oiled.
- Any remnants of thread are trapped between the thread tensioning discs and beneath the bobbin case spring.

## Upper thread breaks

- The upper thread tension is too tight.
- Poor quality needles. Ideally, needles should be purchased from a BERNINA dealer.
- The needle has been fitted incorrectly. The flat side of the shank must be to the rear.
- The needle is blunt or bent.
- Poor quality thread, knotted or dried out thread
- Stitch plate or hook tip damaged. Take to a BERNINA dealer.

## Lower thread breaks

- The lower thread tension is too tight.
- The bobbin is jamming in the bobbin case. Replace bobbin.
- The hole in the stitch plate has been damaged by the needle. This must be re-polished by an expert.
- The needle is blunt or bent.

## Skipped stitches

- Wrong needles. Use only 130/705 H needle system.
- The needle is blunt, bent or incorrectly fitted. Push right to the top when inserting.
- Poor quality, badly polished needle.
- The needle point does not suit the fabric being sewn. If necessary, use ball point for knitted fabrics and cutting point for hard leather.

## Needle breaks

- Needle clamping screw not sufficiently tightened.
- Fabric withdrawn forwards instead of backwards under the presser foot.
- When sewing over a thick area, the fabric was pushed while still in the fabric.
- Poor quality thread, unevenly wound or knotted.

## Faulty tension

- Remnants of thread between the thread tensioning discs.
- Remnants of thread under the bobbin case spring.
- Lower thread still threaded in the bobbin case finger.
- Threaded with foot down.
- Incorrectly threaded. Check lower and upper threads.

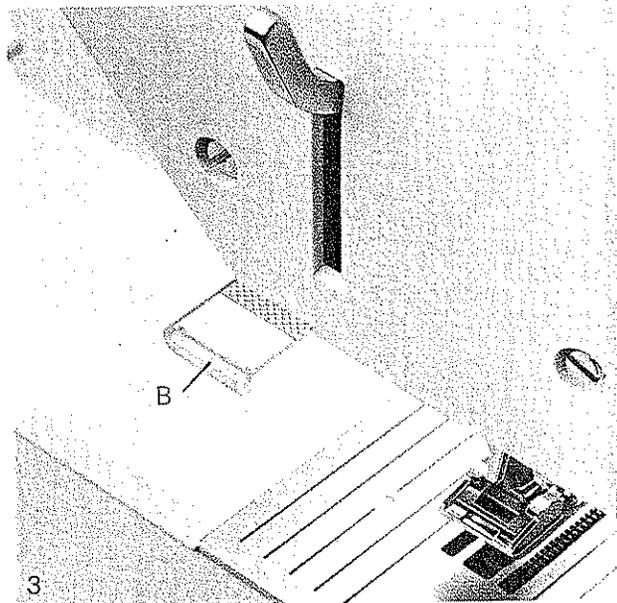
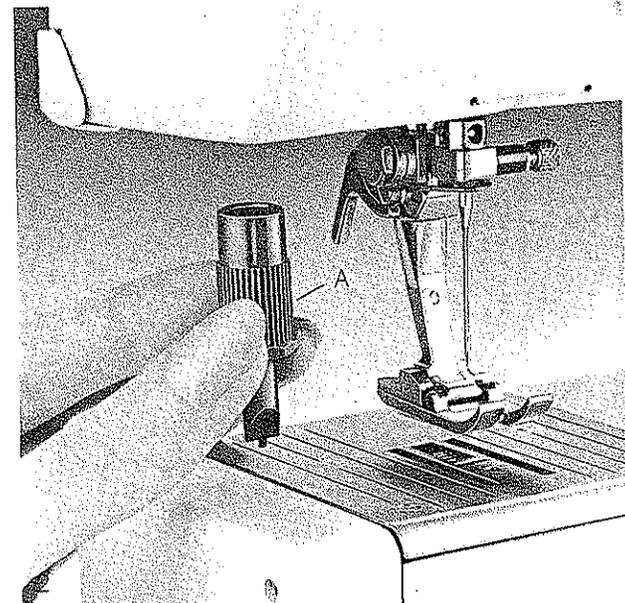
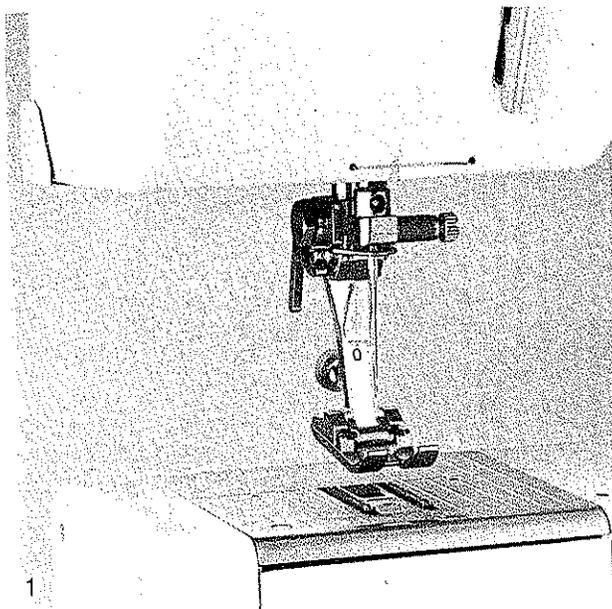
## Machine fails to run, or will run only slowly

- Plug is not properly inserted.
- Power switch in position.
- Machine gummed up by unsuitable oil. Machine will have to be cleaned by a BERNINA dealer.
- Machine has been standing in a cold room.

## Important

If you have to take your machine to a BERNINA dealer, please always take the foot control unit and accessories.

# Changing the bulbs



## Fitting the bulbs

There are 2 low voltage 6 volt/4 watt bulbs provided. One is located in front to the left of the presser foot, the other one behind, to the right.

## WARNING:

Please refer to the Safety Instructions.

## Changing bulbs

To change the front bulb: (Fig. 2). Using special tool A, press the bulb upwards, twist to the left and withdraw.

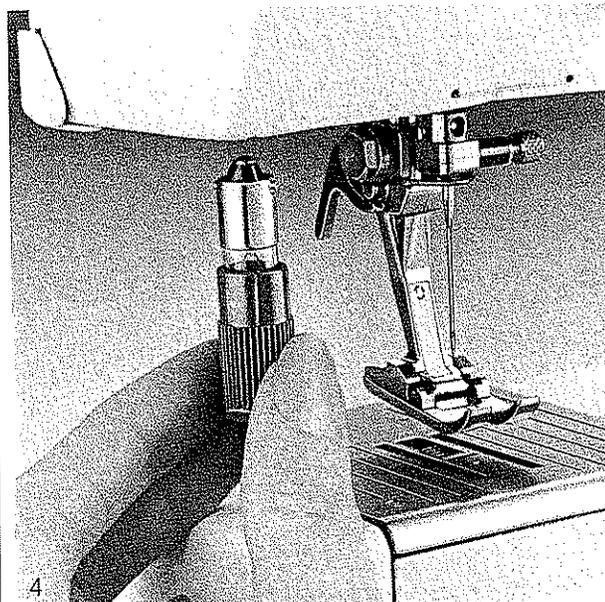
## To change the rear bulb

Pull out diffuser B (Fig. 3). The bulb can then be removed in the same way as the front bulb.

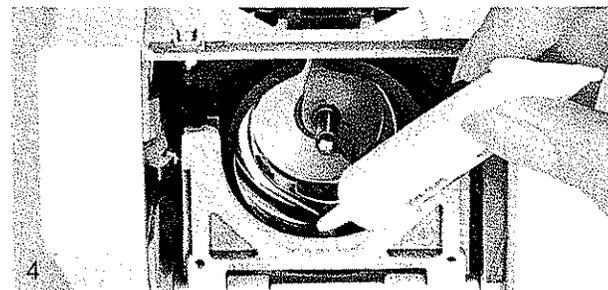
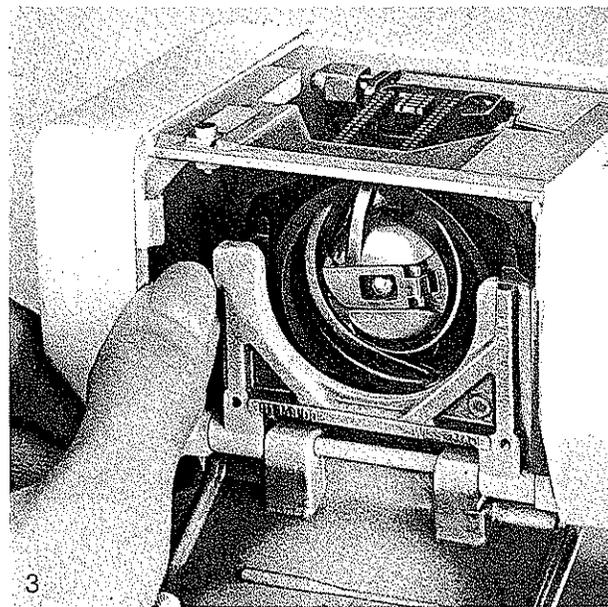
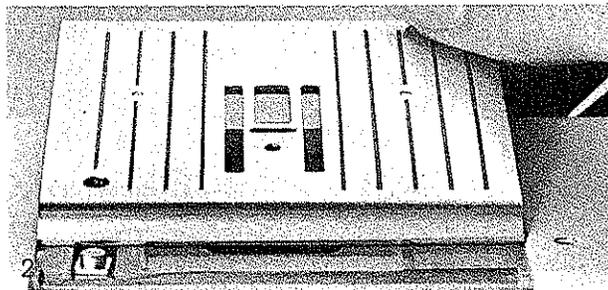
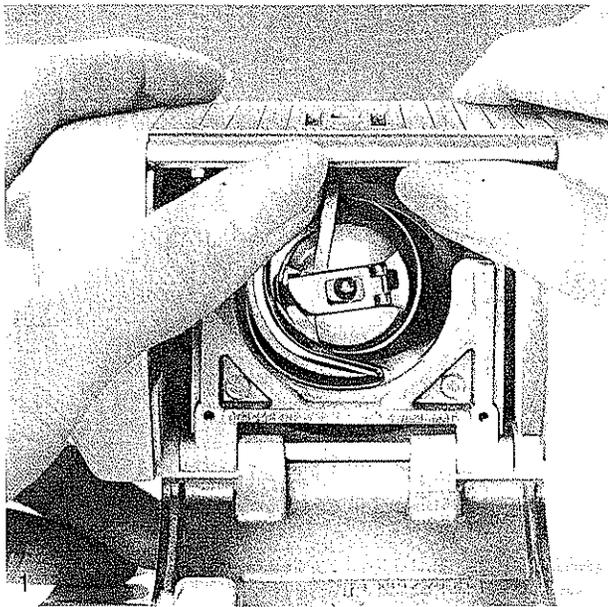
## To insert new bulbs:

Place the new bulb on the special tool (Fig. 4).

Insert the lamp in the socket, press upwards and twist to the right as far as it will go. For the rear bulb, refit diffuser B.



# Maintenance: Cleaning and oiling



If the machine is stored in a cold room, it should be brought to a warm room approximately one hour before use, to restore the oil in the bearings to a fluid state.

## Cleaning

During sewing, fluff from the thread will collect under the stitch plate and around the hook. These remnants must be removed from time to time.

- Disconnect the machine from the mains by pulling the mains plug from the socket.
- Remove the presser foot and needle.
- Open the hinged front cover on the free arm.
- Lower the feed-dog. Set knob to position . Using both thumbs, press the stitch plate up and back (Fig. 1).
- Clean the feed-dog and underside of the stitch plate.
- To refit the stitch plate on the free arm, insert the stitch plate from the rear, push forward until it engages (Fig. 2).

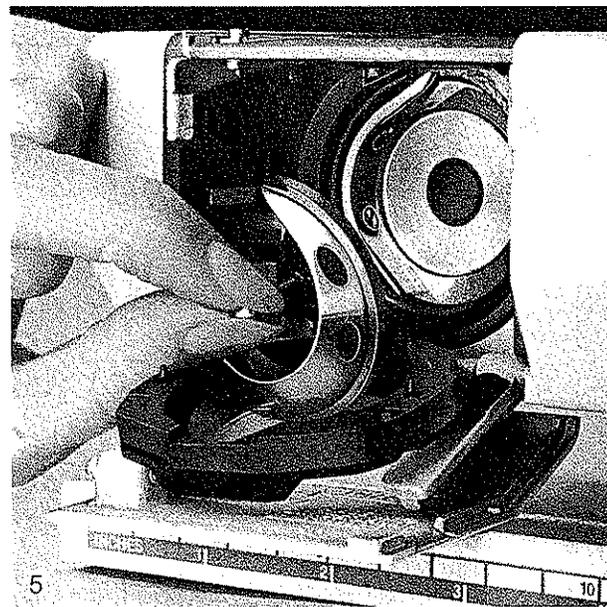
## WARNING:

Please refer to the Safety Instructions.

To oil the hook: Apply 1–2 drops of oil after 3–4 hours' sewing.

## To clean and oil the hook

- Disconnect the machine from the mains by pulling the mains plug from the socket.
- Take out the bobbin case, see page 5.
- With the thumb of the left hand, press the lower release lever to the left (Fig. 3).
- Fold down the semi-spherical locking strap with the black hook race cover.
- Take out the hook.
- Clean the top and bottom of the hook race with the cleaning brush and cotton cloth. Never use a screwdriver, scissors etc. to remove remnants of thread.
- Lightly oil the hook race with 1–2 drops of oil (Fig. 4). Insert the hook. If necessary, turn the handwheel until the hook driver is on the left (Fig. 5).
- Close the black hook race cover and locking strap. The pawl must engage.
- Check by turning the handwheel.
- Insert the bobbin case.



# Bernina publications

It is not possible to cover more than the basics of sewing in an instruction manual. However, the creative potential of your Bernina sewing machine and Bernina overlocker is enormous. To help you use your machines to the full, Bernina regularly publishes sewing literature which covers everything from simple techniques to advanced fashion projects. Your Bernina Dealer will be delighted to give you more information.

## Sewing Service Leaflets

Each issue of our Sewing Service Leaflets deals with a particular sewing technique presented in easy to follow steps. Success is guaranteed!

## Bernina Creative Sewing

The Bernina Creative Sewing magazine appears twice yearly. Fashion, Bernina Studio, home decoration, sewing for teens and twens and craft projects are all regular features of the magazine. Special sewing techniques which are featured in the sewing projects are described in detail in words and pictures. Unusual and imaginative ideas are also included from enthusiastic sewers around the world. Read about new sewing developments and trends in the comfort of your own home. The Creative Sewing magazine is a source of inspiration for all sewers. Ask your Bernina Dealer and learn how to get the most out of your machines.

## Bernina Collection

These booklets deal with one particular theme in all its variations. Basic information, pattern suggestions, detailed sewing instructions with coloured illustrations and many tips and tricks of the trade will turn you into a sewing pro in no time at all. They are issued two to three times a year, so be sure to ask your Bernina Dealer when the next one is expected.



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### **WARNING:**

Before using your sewing machine, please read the Safety Instructions.

**The right to make constructional changes differing from text and illustrations reserved.**

Sollte diese Maschine in ein anderes Sprachgebiet verkauft werden, fordern Sie beim nationalen Importeur oder Bernina-Händler eine Bedienungsanleitung in der entsprechenden Sprache an.

If this machine has been purchased in a foreign country, please request an instruction manual in your own language from the national Importer or a Bernina dealer.

Si cette machine est vendue dans une autre région linguistique, demandez à l'importateur national ou à l'agent Bernina, un manuel d'instructions dans la langue correspondante.

In caso questa macchina fosse venduta in un territorio di lingua diversa si prega di richiedere il libretto d'istruzione nella lingua adeguata presso l'importatore nazionale oppure presso un rivenditore Bernina.

Si esta máquina se vende en otra región lingüística entonces pida Vd. de su importador nacional o del representante Bernina un manual de instrucciones en el idioma correspondiente.

Indien deze machine in een ander taalgebied werd gekocht, kunt u bij de nationale importeur of Bernina vakhandelaar een handleiding in de overeenkomstige taal aanvragen.

Skulle denne maskine blive solgt i et andet sprogområde, bedes du henvende dig hos den nationale Bernina-importør eller en Bernina-forhandler, hvor du kan købe en brugsanvisning på det ønskede sprog.

Om den här maskinen har köpts i ett annat land, var vänlig beställ en instruktionsbok på Ditt eget språk från importören eller en Bernina-återförsäljare.

Er denne maskinen kjøpt i utlandet, kan instruksjonsbok bestilles på ditt eget språk fra Bernina importøren eller nærmeste Bernina forhandler.

Tarvittaessa voit tiedustella omakielistäsi käyttöohjekirjaa Bernina-maahantuojalta tai jälleenmyyjältä.

SE ESTA MÁQUINA FOI COMPRADA NUM PAÍS ESTRANGEIRO, DEVER-SE-À PEDIR O MANUAL DE INSTRUÇÕES NAQUELA LÍNGUA AO IMPORTADOR NACIONAL OU AO FORNECEDOR DA BERNINA.

ΑΝ Η ΜΗΧΑΝΗ ΕΧΕΙ ΑΓΟΡΑΣΤΕΙ ΣΕ ΜΙΑ ΞΕΝΗ ΧΩΡΑ, ΠΑΡΑΚΑΛΩ ΖΗΤΗΣΤΕ ΕΝΑΝ ΟΔΗΓΟ ΛΕΙΤΟΥΡΓΙΑΣ ΣΤΗΝ ΔΙΚΗ ΣΑΣ ΓΛΩΣΣΑ ΑΠΟ ΤΟΝ ΓΕΝΙΚΟ ΑΝΤΙΠΡΟΣΩΠΟ ΤΗΣ BERNINA Η ΑΠΟ ΤΟΥΣ ΠΩΛΗΤΕΣ ΤΗΣ BERNINA.

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