SERVICE MANUAL

POWER SHOE MACHINERY

Power Schoenmachines®
DSS Holland B.V.
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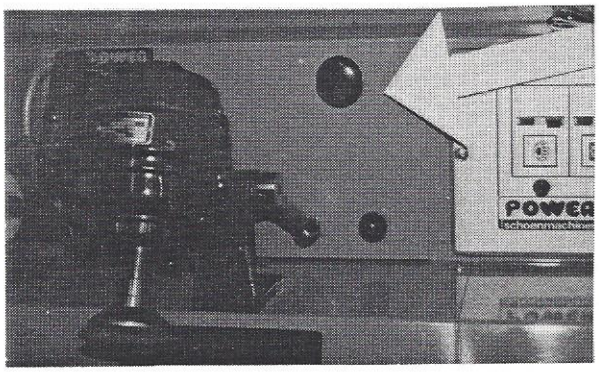
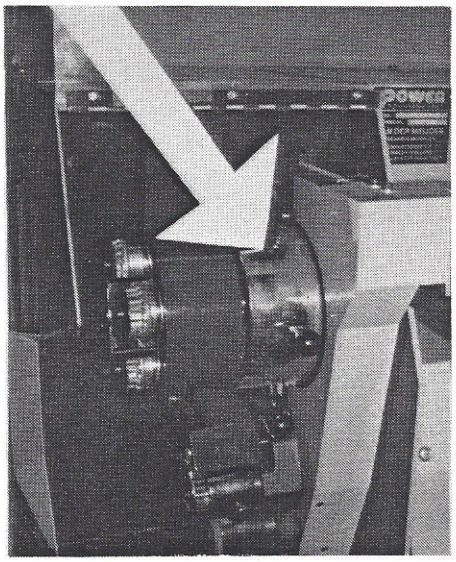
CLEAN THE MACHINE EVERY DAY



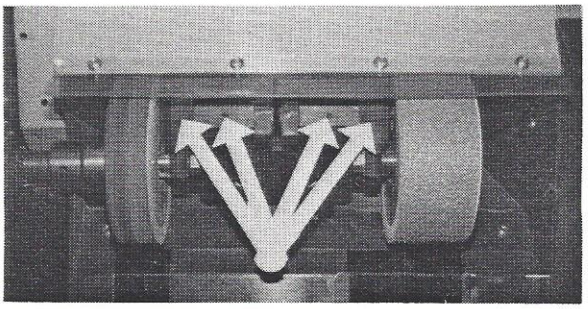
PULL "3" TIMES A DAY ON THE BAG SHAKER KNOB

OIL THE MULTIPLE HEAD TRIMMER ONCE
EVERY TWO WEEKS

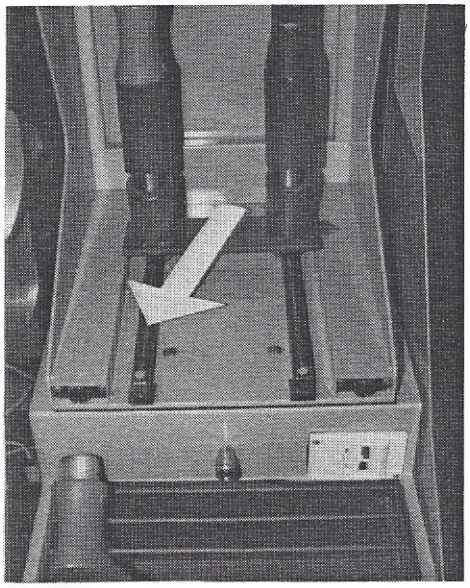


SPEND 10 MINUTES A DAY ON CLEANING AND MAINTAINING YOUR MACHINE
AND IT WILL LAST YOU FOR EVER

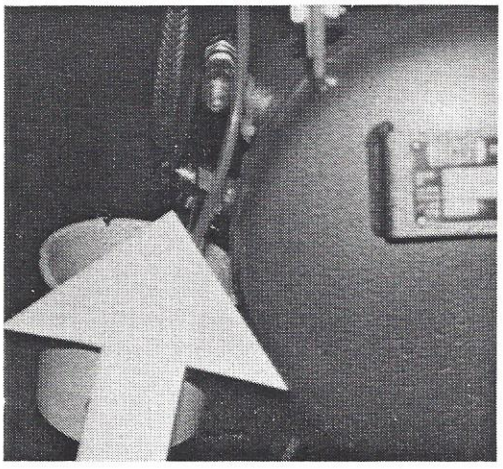
CLEAN THE MACHINE EVERY DAY



OIL THE FOUR POINTS OF THE SCOURING SECTION
ONCE EVERY TWO WEEKS



CLEAN AND OIL THE
HORIZONTAL PRESS SHAFTS
EVERY TWO WEEKS



RELEASE WATER FROM THE COMPRESSOR EVERY DAY

SPEND 10 MINUTES A DAY ON CLEANING AND MAINTAINING.YOUR MACHINE
AND IT WILL LAST YOU FOR EVER

SERVICE AND TROUBLE SHOOTING

You have acquired one of the finest machines in the world, which has been built with the utmost care, using the finest materials, and it should be very rare that faults will occur. However, we give you herewith the action to be taken, should this occur:

SCOURING SECTION

1. If the scouring bands start to make a lot of noise or wander, first check if the felt rolls and the backstand rolls are clean. Very often, rubber or crepe parts are sticking on the rolls and are the cause of excessive noise. This can be avoided by fitting the optional scrapers.

2. If scouring bands are wandering left and right, it is most likely that there is is a fault on the band, so try another scouring band, If a scouring band is not running correctly in the middle of the felt roll, this can be changed by means of the adjustment screw on the tracking mechanism.

3. If everything is alright, but you still have excessive vibration and/or noise, it is possible that some dirt has entered into the cooling fan of the electric motor, and this may have upset the balance of the motor shaft. In this case clean the cooling fan with an air gun.

WITH AN AIRGUN, MOST DUST AND DIRT CAN BE REMOVED FROM ANY PART OF THE MACHINE.

FELT DISCS

The felt discs are all an important part of the machine for every shoe repairman. It scours the sole, as well as finishes it.

It is important to understand that the felt discs are one of the parts that is submitted to the normal wear and tear process.

Normal wear and tear: the discs wear off evenly over the total surface.
Abnormal wear and tear: the normally round discs become oval.

1. do not use the side of the scouring belts to make wedges in ladies heels.
2. do not tension the belts to much and/or leave them for a longtime in a static position. Once a discs is oval, it will inevitably cause problems like vibrating, more noise etc...
3. take the tension off the scouring belts after each day.
4. do not tense the belts too excessively.

If a felt roll is completely worn and has to be exhcanged, it is very easy to take the whole flange and felt roll from the machine by undoing the nut.

DUST EXTRACTION

ALWAYS ENSURE THAT IT IS IMPOSSIBLE TO START
THE MACHINE WHEN YOU ARE WORKING ON THE FAN.
REALIZE THAT THIS IS VERY DANGEROUS

The superior Power dust extraction takes in a lot of dust. Pieces of leather, plastic and rubber.

All this debris enters through the turbine, up the sacs and drops down in the dust drawers.

If the machine is normally operated and you want to maintain the best possible dust extraction, it is important that:

1. you clean out the little grill on top of the turbine.
2. check the turbine for any possible sediments of leather, plastic and/or rubber etc.
3. shake the dust bags 3 times daily
4. empty the dust drawers regularly.
5. do not use the dust extraction section as a spraybooth for dying shoes!!!

As all other parts on your machine, the fan has been balanced very carefully, and it should run without vibration. If you notice excessive vibration, it is most likely that dirt has settled on the fan blades. This can be cleaned by removing the grill on the inlet side of the fan-housing.

ELECTRICAL INSTALLATION

Your machine will most likely have overload switches for every motor.
These switches will automatically switch off the motor if it is being overloaded.
If this happens, you will have to wait for 10 to 20 minutes and let the motor cool down, before you can switch on again.
If this happens frequently you must check if the motor runs freely. Consult an electrician, who will check if the switch is adjusted properly and is able to check the wiring. If the motor does not turn easily, there is something wrong with the motor itself and it needs to be repaired by a specialist.

MULTIPLE HEAD TRIMMER

This unit is almost service free, due to the use of high quality noise tested bearings, lubricated for life, and the use of Gates Polyflex V Belts, which are completely endless and reinforced with polyester strings.

Always keep the V belt pulley grooves clean and smooth. Under normal cirmcustances the life of the V belt is extremely long, and it will not be necessary to change them.

If it is necessary to adjust the tension of the V belt, this can normally be done by slackening the four bolts of the idler. Move this part in an upward direction until the V belts are sufficiently tight and then tighten up the four bolts.

If the head begins to turn heavily, it probably means that you forgot to oil the nipple which oils the central shaft for a long time.
If this is the case, it is usually possible to free the head after lubrication.

LUBRICATE THE NIPPLE EVERY TWO WEEKS!!!!

The multiple head is adjusted so that it turns with a slight resistance, to prevent it from spinning.

HEEL SCOURINGBAND

If this small scouringband begins to make excessive noise, it is likely that dirt has settled on the roll. This must be cleaned very carefully with a piece of abrasive.

If the roll proves to be very pitted, and not completely round any more, it has to be exchanged. This can be done easily by undoing the flathead screw in a clockwise direction.

SOLID POLISHING SHAFT (POWER UNIT, RIGHTHAND SECTION OR POWER FINISHER)

The tension of the V Belt which drives this shaft can easily be adjusted by pivoting the whole shaft towards you. Slacken the bolts with which both bearings are fitted to the vertical structures of the machine.

The upper holes in the bearings are elongated. Always ensure that the shaft remains parallel to the frontside of the tinwork so that the alignment of both pulleys on motor and shaft will not be disturbed.

EXCHANGE OF MOPS OR BRUSHES

This can be done very quickly and easily be taking out the whole polishing shaft after removing the four nuts. The main bearings are fitted to the shaft. To remove the bearings from the shaft, you have to undo the Allenhead screw in the rings, then the shaft will slide from the bearings.

The fastening screws holds the shaft in a groove, so that the shafts themselves will not be damaged by the screws.

This also applies to the screws on the flanges of the brushes, so that they come off the shaft quickly.

Pads and brushes are used for various machines, and have a bore of 30 M.M. They can be used on shafts of 20 M.M. Also and in this case the brushes are mounted on the flange by means of a special tool so that they are exactly centralised.

Machines built since 1984 have flanges with a centering boss, so that the brushes and mops with a 30 M.M. bore can be mounted exactly in the middle of a flange with a 20 M.M. bore.

When fitting new brushes or mops, pre-drill with a 3 M.M. drill and always use woodscrews of the same size as originally used on the machine.

When refitting brushes on the shaft, leave them loose until you have refitted the tinwork around the brushes, and tighten the screws of the flanges as soon as you have placed them in the middle of the tinwork surroundings.

When tensioning the V belt, adjust it in such a way that the belt can be depressed in the middle section between the pulleys approximately 15 M.M.

After fastening the bolts, tighten the rings of the bearing to avoid axial stress, and check the alingnment of the pulleys.

On the Power Finisher, the motor can be reached through the hinged backplate of the brushes. On the Power Unit, the polishing shaft is driven by the same motor which drives the scouring band and can be reached through the door through which you exchange your scouring belts.

POLISHING SHAFTS ON FINISHERS LIKE THE POWER MASTER WITH ROTATING POLISHING SHAFTS

These machines, which are either fitted with hand operated tumbling section, or an electrically operated tumbling section, have 3 polishing shafts with various mops or ragwheels and brushes. The driving V belt is spring loaded, and does not require attention.

When mops and brushes have to be removed, you have to take out the relative shaft. This can be done very easily by unfastening the four bolts.

After unfastening these bolts, the whole shaft comes off as soon as you have removed the V belt from the pulley. You can slide out the left and righthand brush from the shaft without further dismantling.

The Middle one can be taken off easily, by removing one of the bearings. These bearings are mounted on the shaft by means of an excentric ring.

After undoing the set screws, this ring can be moved upwards while you hold the shaft firmly. After that, the shaft slides off easily.

Here also, all fastening points on the shafts have grooves, so that the shafts are not damaged by the securing screws.
This means that when you are refitting the brushes, you must tighten the securing screws last, in order to set the brushes in the middle of the surrounding tinwork.

For further details, see the instructions under: Solid Shaft.

Should, for some reason, the tumbling section not rotate, first check the overload switch which secures the brake motor - it is the relay mounted on the righthand side in the panel.

After about 15 minutes, you can depress the knob on this relay. After this, the motor should operate again.

If it occurs very often that the overload switch is stopping the current, you should consult an electrician in order to find the failure.

ELECTRICS

In general, there are three electrical systems on our range of Finishing machines:

1. The most simple one, with normal on/off switches.
2. The version which is mainly used in North American countries, with overload switches for every motor.

These overload switches are mounted on a rail in the connection box, behind the front plate of the machine.

ATTENTION

Always isolate the machine electrically before removing the front plate.

Exchange of overload switches can be carried out easily - they are mounted on the rail by a "click on/click off system.

Three phase Power Units and Finishers with optional front-operated main switches have a more comprehensive electrical system with added magnet switches.

Machines with more than two electric motors have two switches, one of which operates with a time delay so that the machine starts to work in two stages, thereby reducing the peak current.

This time delay switch should always be adjusted a few seconds later than the other magnet switch.

ATTENTION

Machines with an optional foot-operated main switch always require an additional single phase electrical connection for operating the magnet switches.
This means that you require a three phase main connection for the overload relay and a single phase connection for the magnet switches which operate the relay or overload switches.

Generally speaking, it is advisable to consult an electrician. If you have difficulty with any of the electrical diagrams that you find, he will no doubt be able to help you.

MANUAL POWER PRESS

This press is now equipped with the newly developed electronic safety system. This electronic system works on a 24 volts, therefore a transformer is mounted. You will find this transformer behind the front cover. This transformer is equipped with a fuse.

If the machine does not operate, first check that there is sufficient pressure and that the electrical current (single phase) is connected. This can be checked through the control lamp in the main switch.

Further check if the lamps on the keyboard are glowing.

If the machine still does not operate, remove both retaining screws of the electronic keyboard and move the keyboard forward.
You will then find the multi-connector at the end of the wire.

Check if this multi-connector is mounted properly, and that both retaining clips on the side have reached the grooves in which they have to clip.

If not, tighten both halves of the multi-connector properly.

Now the machines must be ready for use.

It is very unlikely that the electronic keyboard will fail.
However, should this happen, it can be exchanged very easily and quickly by simply taking apart the multi-connector and fitting another keyboard.

These electronic devices are repairable, but must be sent back to the manufacturer through your local agent.

COMPRESSOR

When you bought a press from us, you are also the owner of a compressor. This compressor will generate air under high pressure and enables your press to work.

Air under high pressure will form water. Water can be a threat for your press:

1- it wull cause rust forming inside the tank.
2- it will find its way through the circuit, deteriorate the filters, and block the free flow of air, because of chaulk forming.
Therefore:
1- drain the compressor tank at the end of every day.

LOCKSTITCH SOLE SEWING MACHINE MODEL DN 86

NEEDLE SETTING:

When a new needle is fitted, the shank end must locate up to the stop-pin, situated inside the needle bar. The hook of the needle must be directed to the right when viewed from the front of the machine and pointing slightly into the body of the machine. Ensure that the clamp screw DN 1014 is secure. When the needle is in its lowest position the top of the needle barb must be just below the thread hole in the whirl DN 1048, see Fig. 1.

WHIRL AND PINION

Rotate the handwheel until the shuttle tip, when travelling from left to right is in line with the needle, Fig. 3, "start pso.". Rotate the horn so that the horn tip is facing the machine column. Remove the horn cap. The hole in the whirl should be positioned as shown Fig. 1. It is important that if a new whirl or pinion is fitted, the engagement of the teeth is correct, this is shown in Fig. 1.

Frequent cleaning of whirl and pinion will reduce wear.

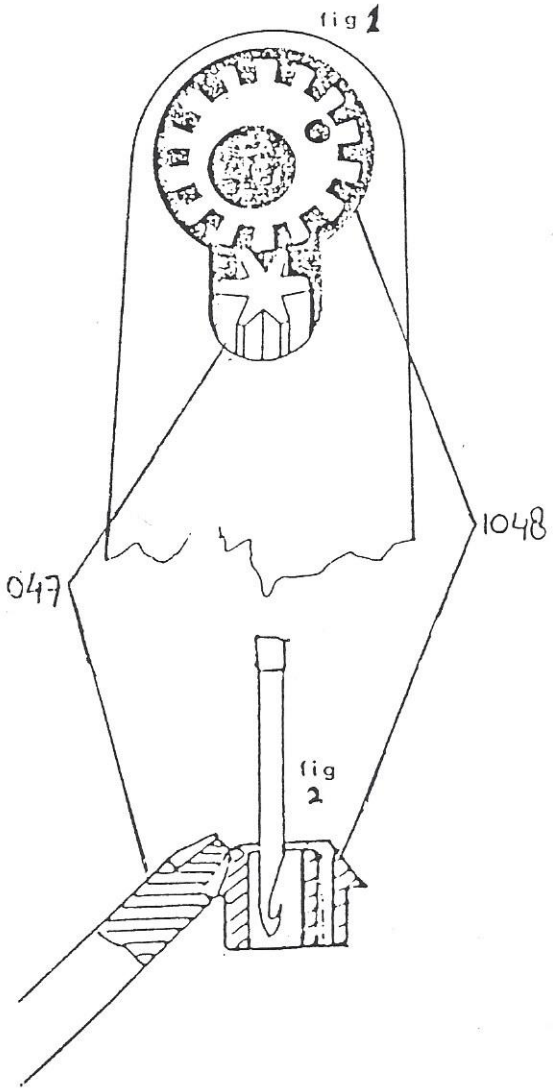


fig 1

fig 2

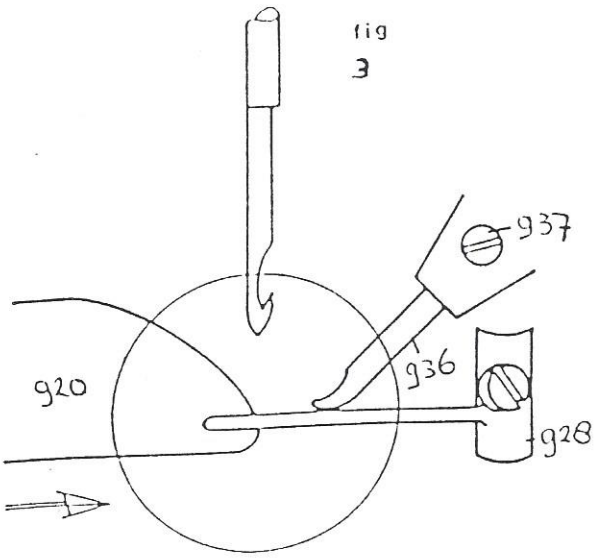


fig 3

1. If the needle does not pick up the thread: -See whirl setting instructions. See needle setting instructions Fig. 1 (the needle could be going down too far or not far enough, Fig. 2).
2. If the thread splitter does not divide the thread: -Check that the point of the thread splitter passes exactly under the point of the needle. The thread splitter can be bent into the correct position.
3. If the thread lifter does not lift the thread from the needle: - Bend slightly up or down or move in or outwards by means of screw DN 937, adjusting the thread lifter so that in its highest position the point of the thread lifter is approximately 1 M.M. to the left of the needle. Check that there is sufficient gap between the needle and the thread lifter for the thread to pass.

THREAD BREAKAGE

If the thread frays or breaks, check that there are no sharp edges on the horn tip, the thread splitter, the thread lifter, the suttle or needle. Although the thread may break in the horn it can be caused by rough edges on parts above the whirl. 90% of thread breakage is due to rough edges developing on working parts which will fray the thread. This must be carefully checked before the cause of breakage is sought by altering machine settings.

It is essential that the machine is allowed to feed the work and that the operator does not push. If the work is pushed while the needle is in the work, the needle can bend and strike the horn cap damaging the needle and/or the horn cap in such a way that the thread will fray. The thread will also fray if it is dry. Check the lubricant in the container and if the machine has been standing, pull through and remove the dry portion of the thread.

Also check if the bobbin is placed correctly with the flange with 2 holes upwards.

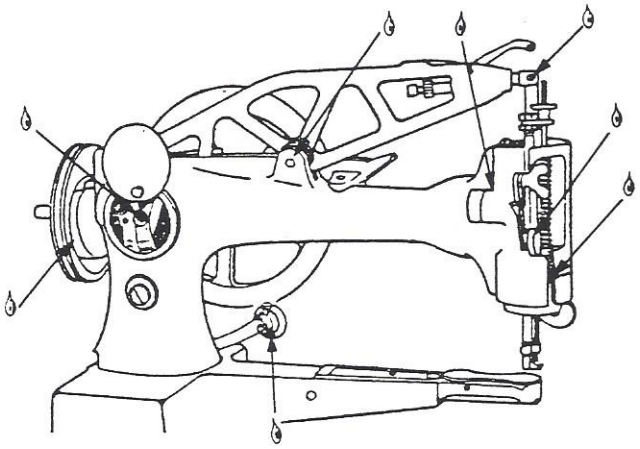
If you forgot to hold the horn-thread when starting work, and also when thread-breakage occured, it is possible that the thread jams between shuttle 920 and shuttle 918 and the machine comes to a standstill.

You should then cut the threads just above the material and try to move the handwheel back and forth while pulling the thread out. If this does not work, loosen screw 919 and remove shuttle 918 and shuttle 920, if necessary carefully tap with a piece of copper ring 918 anticlockwise until the end of its groove and force it down evenly with a screwdriver.

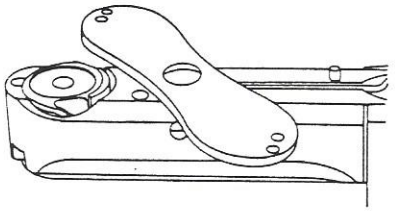
After removal of the shuttle, clean all parts and refit.

If the thread breaks in the machine base: -Check that the machine is threaded up correctly and that the thread is not trapped under the cone.

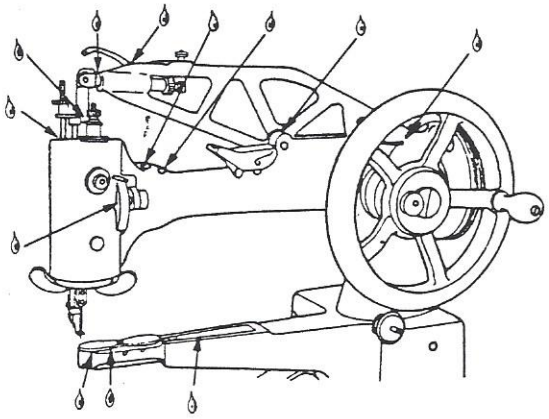
SINGER AND ADLER



APPLY A FEW DROPS OF OIL DAILY.



APPLY A FEW DROPS OF OIL. APPLY A DROP OF OIL TO THE FACE OF THE OF THE SHUTTLE.



CLEANING

Using short bristled brush (not point of scissors or shears) remove lint or other waste from around the shuttle. Wipe the exterior of the machine with a soft cloth.
Use Singer Oil, Type "B" only.

The top of hand wheel must always turn over toward the operator (conterclockwise). If located at side of machine, the hand wheel must turn over from left toward right (clockwise).

Never run the machine without material between the feeding foot and needle plate.

Do not run the machine when both shuttle and needle are threaded unless there is material under the feeding foot.

THE BELT

See that the belt is not too tight, it should be just tight enough not to slip. If too loose, remove the hook at one end, shorten the belt and rejoin.

MACHINE WORKING HEAVILY

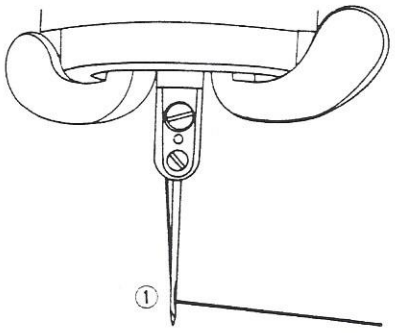
If the machine runs hard after standing idle for some time, use a little kerosene or benzine in the oiling places, run the machine rapidly, then wipe clean and oil.

TO AVOID BREAKING NEEDLES

The feeding foot should be securely fastened by the thumb screw. Do not sew heavy seams or very thick material with too fine a needle. A large needle and thread to correspond should be used on heavy work.
Avoid pulling the material when stitching. This may cause the needle to strike on the needle plate and break.

BREAKING OF UPPER THREAD

Improper threading of machine.
Tension being too tight.
The thread being too coarse for the size of the needle.
The needle being bent, having a blunt point,
or being set incorrectly.



① Thread left to right.

BREAKING OF UNDER THREAD

Improper threading of shuttle.
Bobbin Thread tension being too tight.

SKIPPING OF STITCHES

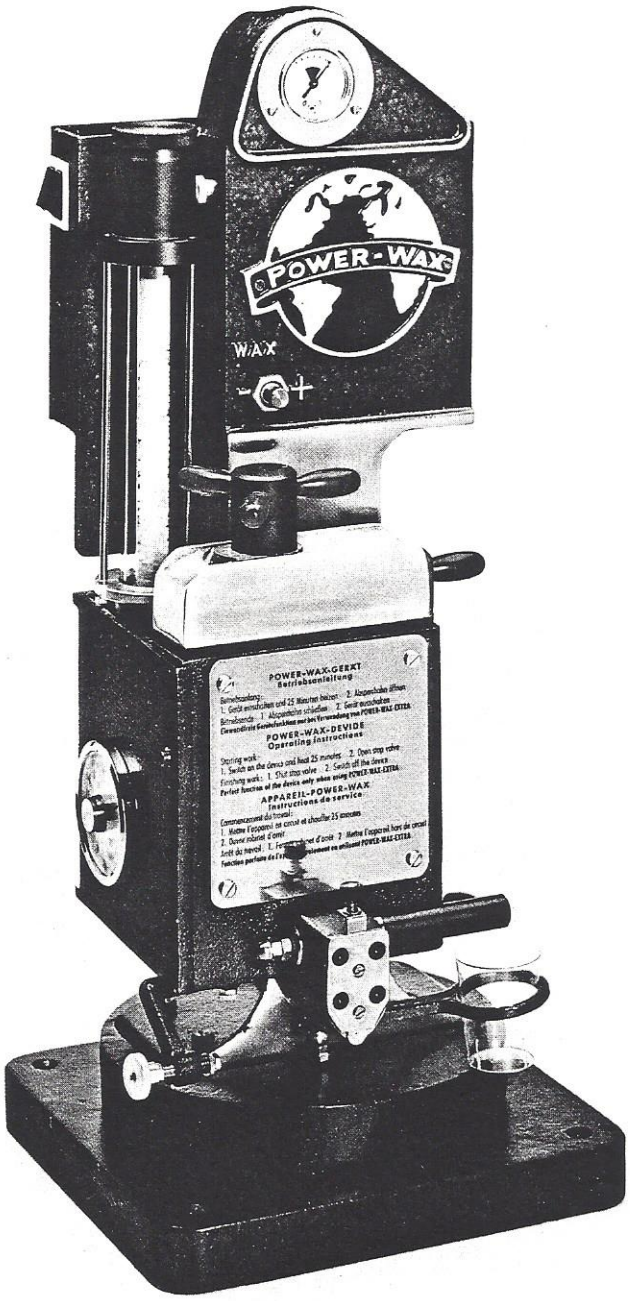
The needle may not be accurately set into the needle bar or the needle may be blunt or bent. Remove the accumulation of dirt or lint which might gather behind thread retaining spring near bottom of needle bar by working a piece of tape or thread back and forth between spring and needle bar.

CAUTION: Do not bend spring away from needle bar or spring may become permanently damaged. Examine feeding foot and remove any dirt or lint from the teeth to insure regular feeding of material.

WORKING ON OLD, HARD LEATHER

When working on old, hard leather, it is advisable to soften the leather with oil, use a coarse needle and make a long stitch to prevent needle from splitting the leather.

POWER WAX



1. Make sure that there is no dust on the wax when you put it into the machine.
2. Never use Yankee Polish in the Power Wax.
3. Exchange the filter when it has turned brown.
4. Do not fill the container more than half full.
5. Do not try to open the valve when the machine is still cold.

TO EXCHANGE THE POWER WAX FILTER: Turn the top of the filter holder while pulling it out. Unscrew the filter from the filter holder and put in a new one.

TO EXCHANGE A CLOGGED-UP HEAD:

1. The machine must be warm.
2. Close the valve.
3. Unscrew the four allen screws on the front with an allen key.
4. Pull the head out
5. Drain the Power Waxer fully by opening up the valve.
6. Take a soft brush and some paint thinner and clear out the machine.
7. Put a new head into the machine. (with the 4 allen screws.)
8. Put a CLEAN bar of Power Wax into the machine.
9. Put the old head into a jar with paint thinner to clean it.

THE EXACT SETTING OF THE VACUUM PUMP IS AS FOLLOWS:

1. Turn the knob - (O) + towards (+) until drops fall from the head.
2. Turn the knob a little bit to (-) until no more drops fall from the head.

LUBRICATION

Frequent but not excessive lubrication is required for best performance. Oil added through the air line connection will lubricate the internal parts. Use Mobil Velocite #10 oil or an equivalent. Do not use detergent oil or oil additives because the seals and bumpers in the tool may be attacked by the oil.

If an air line lubricator is used it should be as close to the tool as practical, with a hose to the tool no longer than 50ft. (15meters).

If no lubricator is used, add oil during use by squirting oil into the air fitting on the tool once or twice a day. Only a few drops at a time are required. Too much oil will collect inside the tool and will be noticeable in the exhaust. For cold weather operation, near and below freezing, the oil and water present in the air line may freeze and prevent operation. We recommend the use of permanent antifreeze (ethylene glycol) as a cold weather lubricant, in place of Velocite #10 oil. Note that some commercial air line drying liquids attact o-rings and seals--do not use these low temperature air dryers without checking compatibility.