

Type30

袖章机使用说明书
Operation manual of armband machine

零件样本
Parts sample

Machine set-up & Operations

OUT OF THE BOX

1) Upon removing the machine from its box observe its threading carefully and compare it with the threading diagram supplied with the machine.

Keep this threading diagram for future reference. The matter of threading is very important and if difficulty arises, the threading of the machine should be compared with the individual diagram supplied. Threading is simple, but it must be accurate.

2) Secure the machine mounting assembly to the table with the three screws provided. This assembly should be:

- A. Parallel with the center line of the motor.
- B. When the machine is set on the assembly, the front of the machine will be three or four inches back from the front of the table with its hand wheel to the right of the operator.
- C. The hand wheel belt groove should line up with the motor pulley groove, when the motor pulley is in the running position.

3) Check the Hand Wheel (belt) Guard to be sure it does not hit the belt. Adjust if necessary; by removing screw, repositioning, and replacing screw.

4) Assemble thread stand and screw its base to the table at the rear of the machine.

5) The thread guides at the top of the thread stand should be directly over the center of the cones of thread.

6) The thread or yarn should be wound on cones, which should stand vertically. The thread from these cones should lead up to the Safety Cross Rod (8-52-J) through the thread eyes and diagonally downward to the machine. **Note: The safety Cross Rod should be installed with the thread eyes below the rod. Care should be taken to be sure the threads are far enough apart so that they will not whip together when the machine is running at speed.**

7) Be sure the thread will come off the cones readily, with uniform tension and that it cannot catch under the cone or elsewhere along its path.

8) Since the oil had been drained from the machine before shipping, the main reservoir must be filled before the machine is used. (Note section 15)

SPEED

9) The INDERLE machines are designed to run at maximum speed of 5000 stitches per minute. Some work is efficiently handled at 5000 stitches per minute but it has been found that maximum efficiency for some operations is attained at a speed of about 4500 stitches per minute.

MOTOR

10) To obtain full efficiency the motor must be kept in good operating condition in order to start and stop the machine with minimum delay. Every attempt should be made to avoid driving the hand wheel from an oversize pulley, especially when the centers of both pulleys are relatively close together. Failure to avoid this situation can result in belt slippage and less control of starting and stopping the machine.

11) A V-Belt Hand Wheel with an effective pitch diameter of 2 1/8" is supplied with each machine. A standard 3/8" endless V-Belt is recommended to connect the Hand Wheel to the motor pulley.

12) The top of the hand wheel must turn away from the operator. The machine sews with clockwise rotation only (when viewed from the Hand Wheel).

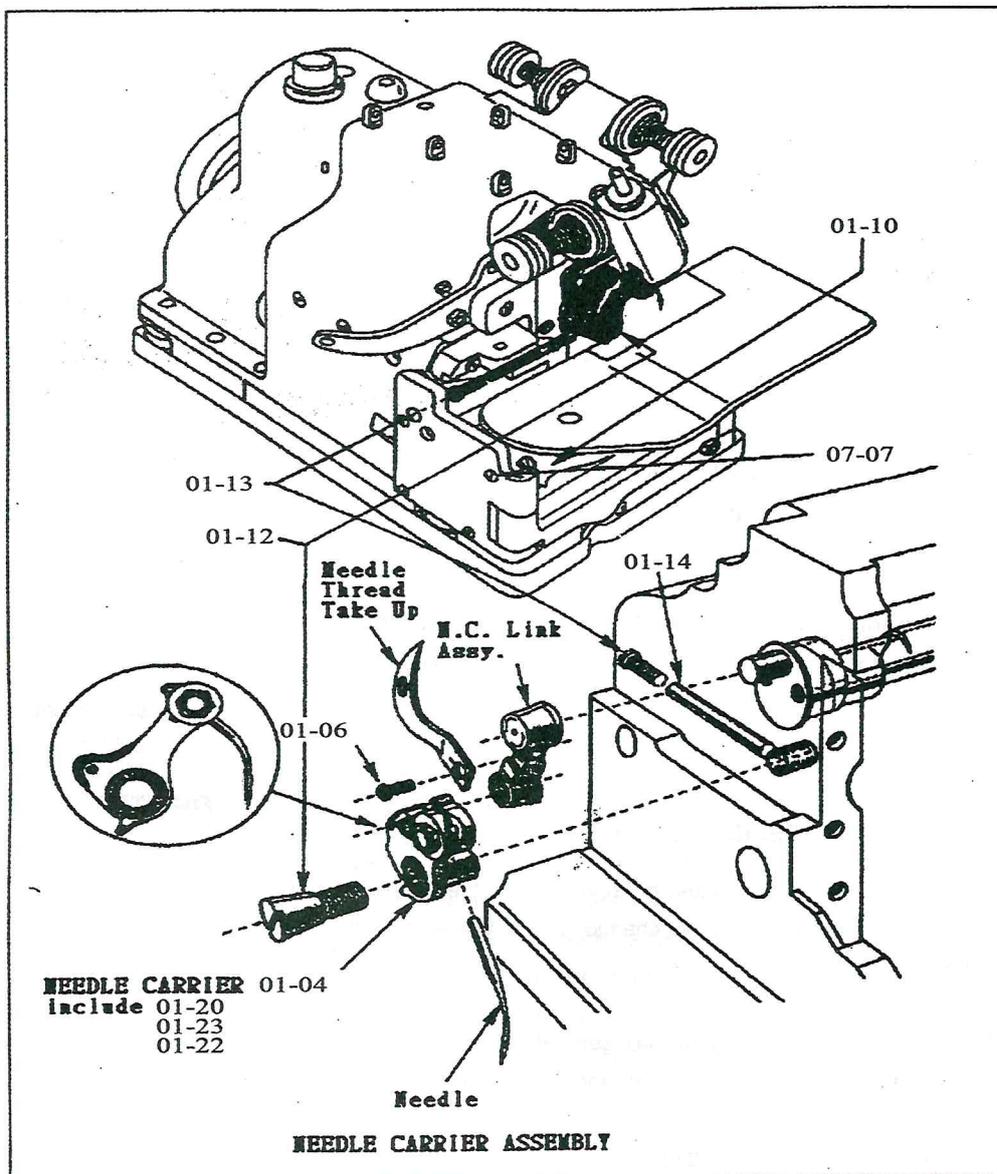
NEEDLE

1) Set the Needle into the Needle Carrier Assembly so that the end of the shank of the Needle is in contact with the Stop Pin 01-20, and tighten the Nut 01-21 with the socket wrench firmly. The beveled portion of this Nut 01-21 should be against the recess provided in the N.C.Collar.

NOTE: The Nut 01-21 should only be loosened to change the Needle; it does not have to be removed.

2) A Needle as large as is practical for the work being accomplished should be used, but care should be taken that the needle slot in the Needle Plate is large enough to fit the Needle.

3) Self-setting needles, marked with the size number and letter "D", used on Type30 and Type30 machines are available in the following sizes: (from smallest to largest) Nos. 000D, 00D, 0D, 1D, 2D, 3D, 4D, 5D, 6D, 7D, AND 8D. Special needles in some of the above sizes are available for special uses.



NEEDLE CARRIER ASSEMBLY

- 1) The Needle Carrier Assembly must be perfectly free to swing upon its stud, but must not have any right to left (lateral) movement. To adjust the Needle Carrier Assembly:
 - A. Remove the Upper Fabric Guard (screw 02-13) and the Work Plate Support (remove screws 02-06 from Feed Cover Support and screws 01-10 from Work Plate Support).
 - B. Loosen Set Screw 01-13. **NOTE: If loosening this screw is neglected, damage to the stud hole in the Frame will occur.**
 - C. Tighten the Needle Carrier Stud 01-12 until it stops then back it out 1/12 of a turn (30 degrees). Tighten Set Screw 01-13 and check Needle Carrier for

lateral movement. Repeat this complete procedure as necessary until Needle Carrier moves freely up and down, but has no lateral movement.

NEEDLE PLATE

- 1) Most edging, seaming and serging operations require a Needle Plate with a chaining finger the width of the stitch desired and sufficiently long to permit two or three stitches to be retained on the finger as goods are fed through the machine.
- 2) A two-thread hemming operation usually requires a Needle Plate with a very short or "stub" finger. When such a Needle Plate is used, the changing finger is part of the presser foot finger.
- 3) The needle slot in the Needle Plate must always be large enough to permit the blade of the needle to pass freely. The edge of this slot should be smooth and slightly rounded. The chaining finger of the Needle Plate should be free of burrs.
- 4) The working surface of the Needle Plate should be corrugated for standard sewing with differential feed, and smooth for use on delicate fabrics requiring little differential.
- 5) The Needle Plate must match the Feeding Parts.

NEEDLE CARRIER ASSEMBLY LOOPERS

- 6) The Upper and Lower Loper must co-operate with the Needle in order for sewing to occur. Before making any Loper adjustments, always change to a new Needle. A new Needle may solve your problem, without further adjustments.
- 7) The Upper Loopers are made in two general forms, one for two thread stitching and the other for three thread stitching. Adjustments of both forms are the same.
- 8) The Loopers are nearly self setting, but they may need slight bending to achieve proper setting. Always bend Loopers slightly farther than the position you desire. The Loopers have a tendency to spring back to their original (pre-bent) position. If you don't bend them far enough, Loopers are designed to be bent only in the shank area. The point areas are hardened to prevent wear, and do not take a bend well.
- 9) To bend the Loopers, we recommend CHUNLIN Loper Bender 10-01. Some people use the shank of a screwdriver, or pliers to do the bending. Please note: If pliers are used, they must be smooth surfaced to prevent damage to the surface of the Loopers. A good light is recommended for visibility when setting the Loopers. A piece of white paper placed behind the Loopers also makes them more visible.

MACHINE LOOPERS

1) The Upper and Lower Looper must cooperate with the Needle in order for sewing to occur. Before making any Looper adjustments, always change to a new Needle. A new Needle may solve your problem, without further adjustments.

2) The Upper Loopers are made in two general forms, one for two-thread stitching and the other for three-thread stitching. Adjustments of both forms are the same.

3) The Loopers are nearly self-setting, but they may need slight bending to achieve proper setting. Always bend Loopers slightly farther than the position you desire. The Loopers have a tendency to spring back to their original (pre-bent) position. If you don't bend them far enough, Loopers are designed to be bent only in the shank area. The point areas are hardened to prevent wear, and do not take a bend well.

4) To bend the Loopers, we recommend CHUNLIN Looper Bender 09-01. Some people use the shank of a screwdriver, or pliers to do the bending. Please note: If pliers are used, they must be smooth surfaced to prevent damage to the surface of the Loopers. A good light is recommended for visibility when setting the Loopers. A piece of white paper placed behind the Loopers also makes them more visible.

LOOPER SETTING

The following instructions are designed to give you a general knowledge of Looper setting. You should be able to make any CHUNLIN Type30 machine sew after following these instructions. Specific styles will require further "fine tuning" to get the ideal Looper setting. Talk to your local CHUNLIN Sales representative for tips on setting your specific style of machine.

A) Swing the Presser Foot Assembly out, and remove the Needle Plate. Remove the Lower Looper Thread Tube, Feed Tooth, Fabric Guard (Upper), and Dust Shield for accessibility. Loosen Set Screws 04-06 04-01 and remove Loopers.

B) Insert Lower Looper into the Lower Looper Carrier. Push it down until it stops. Tighten set Screw 04-06 against the flat spot on the shank of the Looper.

NOTE: Before inserting new Looper, make sure the hole in the Looper Carrier and the area around it are clean. If you push dirt into the hole, the Looper will stick out too far and become hard to adjust properly. If this has happened, remove the Frame Cap (Section 50) and clean out Looper Carriers from the opposite end with a wire or pipe cleaner.

C) Turn the Hand Wheel so that the Needle is at its furthest downward position (see diagram 1). The distance between the point of the Lower Looper and the Needle should be the thickness of the hook end of your CHUNLIN Tweezers ,

or about 1/32 of an inch (.035). Refer to diagram "A" for bending the Lower Looter to this setting.

D) The top corner of the needlepoint (where the point meets the blade) should contact the Needle Guard of the Lower Looter with a little pressure (see diagram

2). To gage this, turn the Hand Wheel to separate the Needle from the Lower Looter. Insert a small scrap piece of note-paper (this is approximately 3thousandths of an inch thick) between the Needle and the Lower Looter. Turn the Hand Wheel back so that just the thickness of the paper is caught between the Needle and the Looter. You should be able to remove the paper, but you should feel a slight drag against it as you pull it out. Refer to diagram "B" for bending Lower Looter to this setting.

E) Turn the Hand Wheel slightly, until the point of the Lower Looter arrives behind the Needle. The point of the Lower Looter should contact the rear surface of the Needle, but it should not deflect the Needle (see diagram 3). The note-paper gage used above, also works here. If you are using "scarfed" Needle, the point of the Lower Looter should still contact, but not deflect the Needle. Generally, a Lower Looter is set tighter to a "scarfed" Needle than a standard Needle. Refer to diagram "E" to adjust the point of the Lower Looter to the Needle.

F) Insert Upper Looter into the Upper Looter Carrier as far as it will go. Tighten Set Screw 04-01 against the flat spot on the shank of the Looter. (See note above in section B)

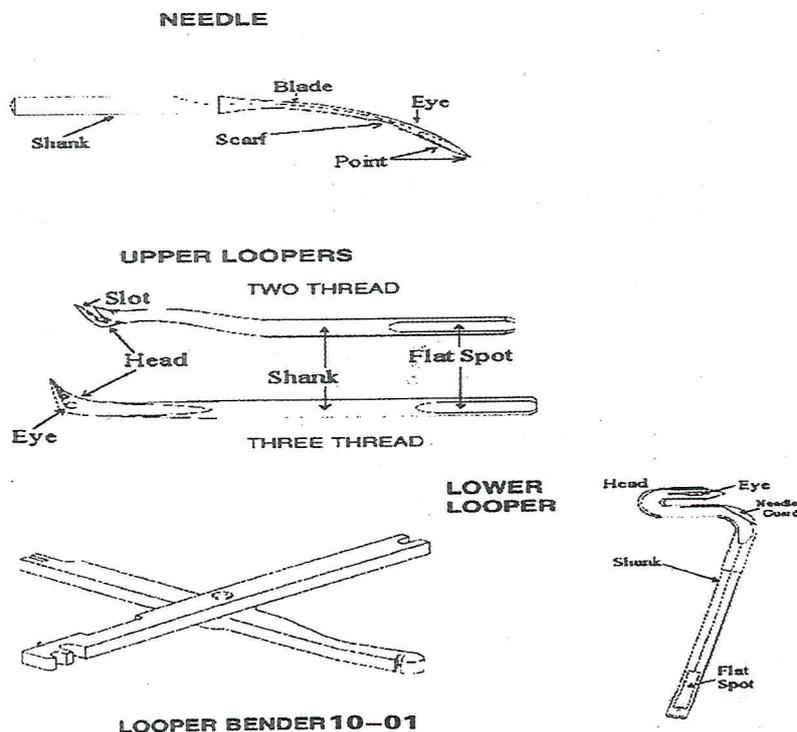
G) Gently turn Hand Wheel over. The Upper Looter should be far enough back that the Needle passes just behind the head. It should also be far enough forward that its point passes through the scarf, just behind the eye of the Lower Looter. Look for interference (contact) between the Upper Looter and Needle, or the Upper Looter and Lower Looter. The Upper Looter should not contact either the Needle or Lower Looter. If there is contact, adjust the Upper Looter to clear the one it is contacting. If it is contacting both, adjust the Upper Looter to clear the one with the most interference first.

H) To adjust the clearance of the Upper Looter, refer to bending diagrams "C" and "D". Moving the Upper Looter from path 1 to path 2 or 1 to 3 (diagram 4) will increase or decrease the clearance between the Upper Looter and the Needle. It will also do the opposite to the clearance between the Upper Looter and the Lower Looter. For example, if moving from path 1 to path 3 increases your clearance between the Upper and Lower Looter, it will also decrease your clearance between the Upper Looter and the Needle.

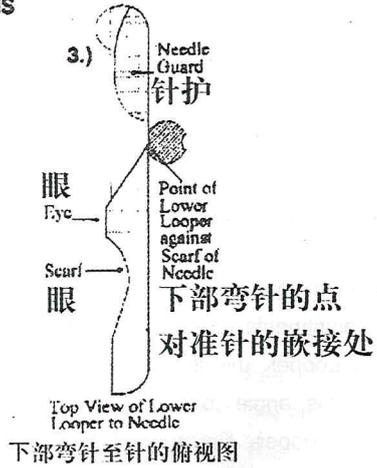
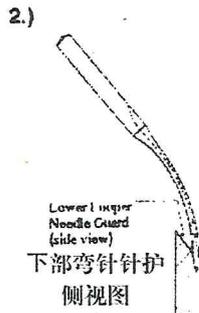
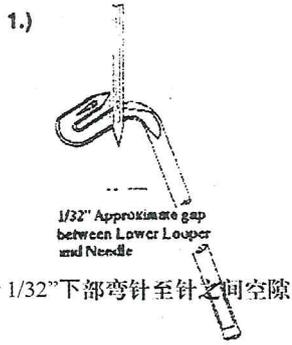
I) Adjusting the Upper Looter (diagram 4) along path 1 through points a, b,

c, d, and e will change the clearance between the Upper Loooper and the Needle (**bending diagram C**). Raising and lowering the Upper Loooper affects the clearance by changing the timing of the meeting of the Upper Loooper and the Needle. Bending the Upper Loooper along this path will also change the meeting place of the point of the Upper Loooper and the rear of the Lower Loooper. The point of the Upper Loooper should fall in the scarf of the Lower Loooper right behind the eye. See **diagram 5 and 6**. The point of the Upper Loooper should not contact the Lower Loooper. To determine if there is contact, place the tip of your left index finger on the exposed shank of the Lower Loooper. Turn the Hand Wheel slowly while holding your finger to the Loooper, if there is contact you will feel it. Adjust and recheck until the contact disappears.

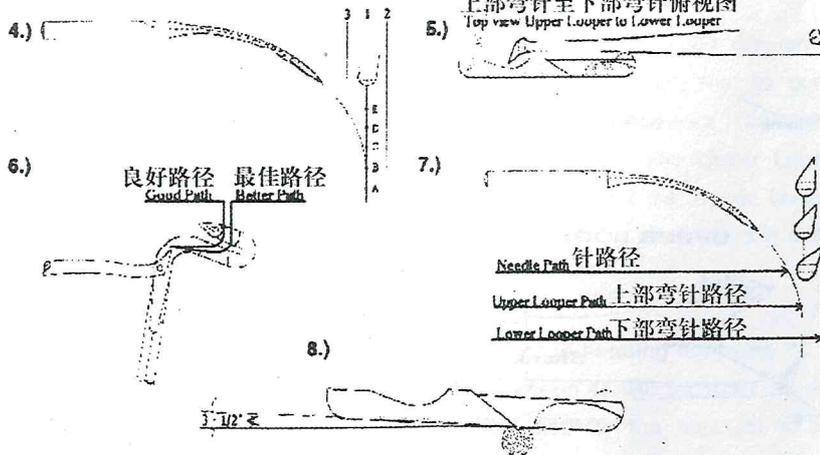
J) At this point your Loopers should be reasonably set and working with each other and the Needle. Two more adjustments can be made, but they are generally not necessary. **Diagram 8** shows the angle of the Lower Loooper, this is pre-set at 3-1/2 degrees. Following bending **diagram F**, you can increase or decrease this angle to affect the clearance between the point of the Upper Loooper and the rear of the Lower Loooper. **Diagram 7** shows rotating the head of the Upper Loooper (**bending diagram G or H**). This maintains the clearance between the Needle and the Upper Loooper, while bringing the point of the Upper Loooper closer to or farther away from the Lower Loooper.

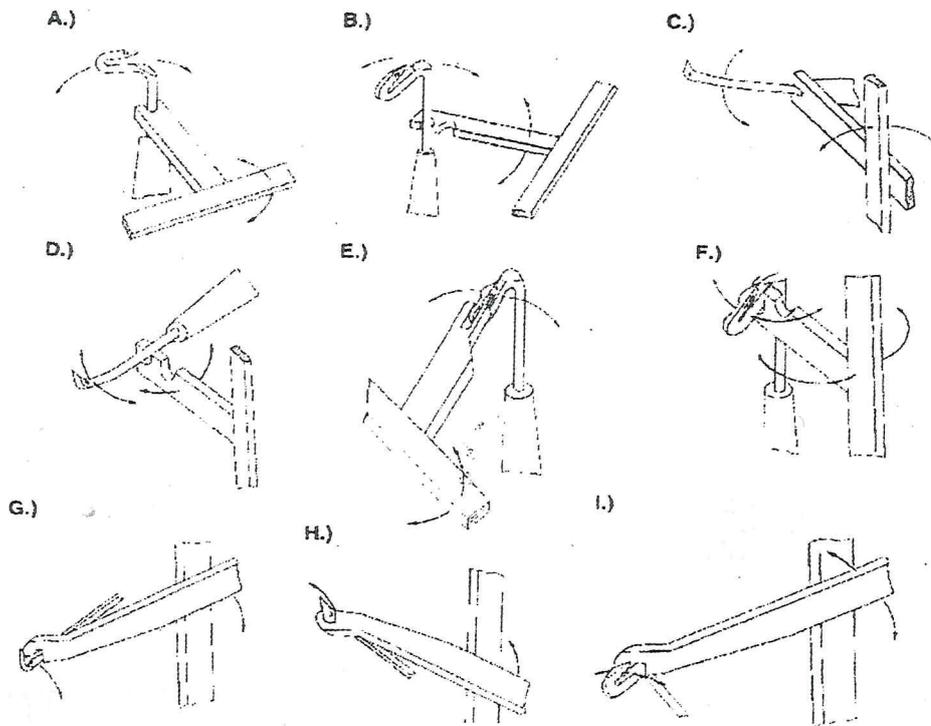


下部弯针的安装
LOWER LOOPER SETTING DIAGRAMS



上部弯针的安装
UPPER LOOPER SETTING DIAGRAMS





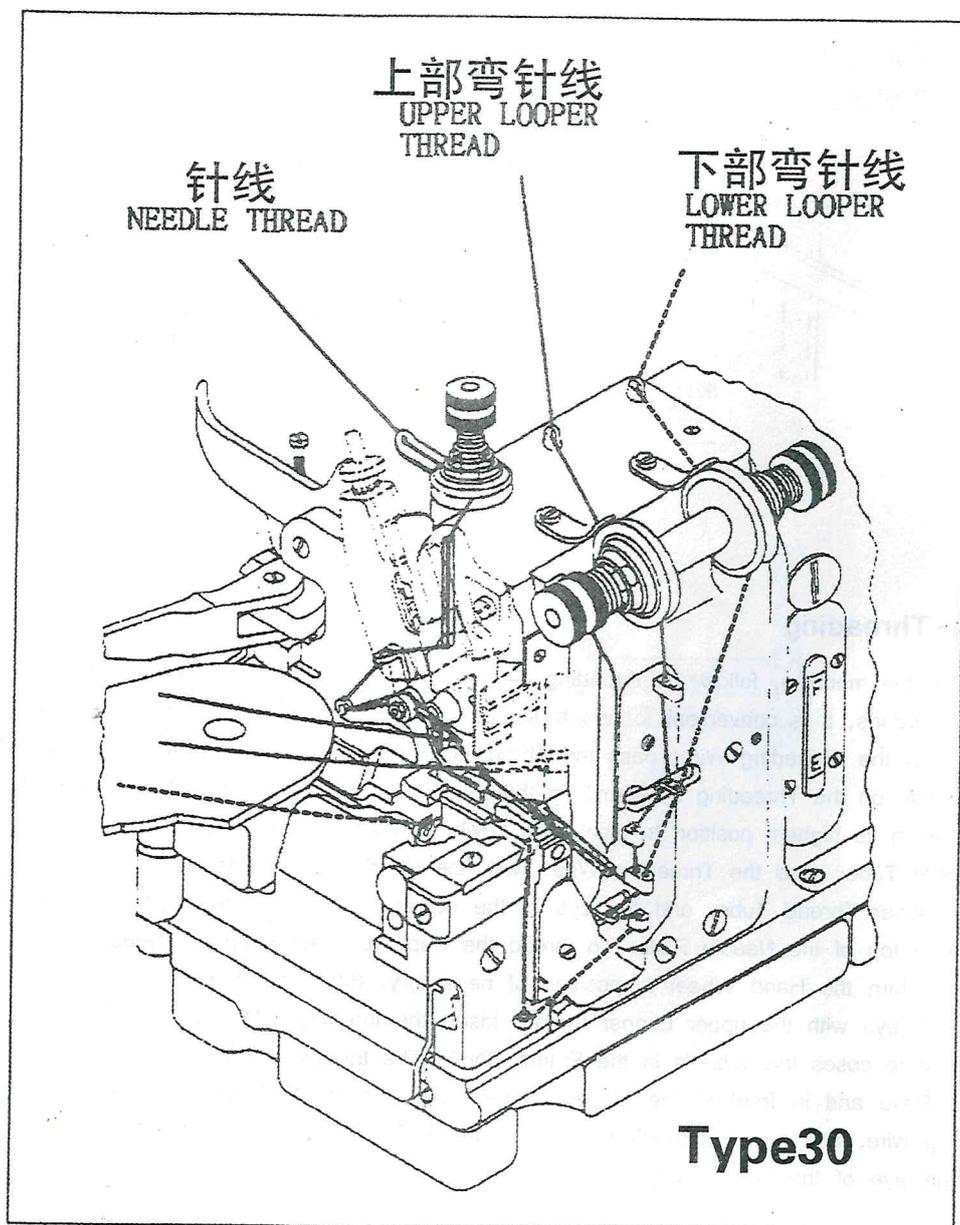
Machine-Threading

1) To thread the machine, follow the threading diagram provided. (Note section 1) When threading the Looper Threads, it is convenient to use a Threading Wire (37-318). Insert the thread or yarn into the eye of the Threading Wire, pass the Threading Wire through the Thread eyes and Tension Discs as shown on the Threading Diagram. To thread the Lower Looper: Turn the Hand Wheel until the Needle is in its highest position to locate the Lower Looper's eye directly in line with the Lower Looper Thread Tube; pass the Threading Wire (with the Lower Looper Thread in its eye) through the Lower Looper Thread Tube, and the eye of the Lower Looper. Pull the Lower Looper Thread through to the top of the Needle Plate. To thread the Upper Looper: Keep the Needle in the same high position; turn the Hand Wheel to position of necessary. Bend the threading wire into a curve and thread its eye with the upper Looper thread. Insert the threading wire into the tube in the Dust Shield (in same cases this tube is in the Frame Cap). The threading wire should come out above the Needle Plate and in front of the Upper Looper. Take the Upper Looper thread out of the threading wire, and thread through the eye of the Upper Looper. Care should be taken when threading the eye of the Upper Looper. Always make sure the

thread is going directly from the tube to the eye of the looper, and NOT around the Looper.

2) It is generally advisable to keep the tension on the threads as light as possible to produce good results. Always make sure the thread with the least tension is still controlled, then adjust the other tensions to balance and form the stitch you desire.

3) To change the stitch formation, consult your nearest CHUNLIN Distributor. It will be necessary to change the Threading Plates on the front of the machine, and in some cases the Needle Thread Take-up.



Cutter Mechanism

Upper and Lower Cutter

1) The Upper and Lower Cutter may be adjusted up and down and right to left. The standard setting would have them adjusted so that the fabric going into the stitch will be trimmed to the width of the Chaining Finger on the Needle Plate.

2) The Lower Cutter Holder slides in the L.C.H Support Assembly allowing right to left (lateral) movement of the Lower Cutter. Some Lower Cutter Holders have an internal spring to maintain pressure between the Upper and Lower Cutter. In some cases you may wish to fix the position of the Lower Cutter; to do this, tighten the screw 03-06 at the desired position. Make sure you are only applying light pressure against the Upper Cutter.

3) The U.C.C Thrust Block supports the force against the Upper Cutter Carrier by the cutters. After extended service it may be necessary to adjust this block by means of adjusting screw 03-06 and the clamp screw 04-15. There should be about 1 thousandth of an inch of clearance between the Thrust Block and the Upper Cutter Carrier.

Knife Adjustment

4) Set the height of the Lower Cutter so that the cutting edge is slightly above the surface of the Needle Plate and tighten the Lower Cutter clamp nut 03-08. Make sure the height of the blade does not interfere with the Presser Foot.

5) Clamp the L.C. Holder to the width of trimming desired by screw 03-06. Turn the Hand Wheel over until the upper cutter is in its lowest position of travel. at this position, the top of the cutting edge of the Upper Cutter should be even with the top of the Lower Cutter's cutting edge. This setting is obtained by adjusting the Upper Cutter Clamp Screw 37 or 03-01 and the Upper Cutter Holder Clamp Screw 03-04.

6) Turn the Hand Wheel over again until the Upper Cutter is in its highest position of travel. The downward projection of the Upper Cutter must never travel above the height of the Lower Cutter. If it goes above the Lower Cutter, you must readjust the settings made in step 40 above to prevent the Upper Cutter from breaking the Lower Cutter.

7) The two Cutters must remain in contact with each other in order to cut cleanly. Turn the Hand Wheel so the Upper Cutter in its highest travel position, and loosen the L.C.H. Clamp Screw 03-06. Press the Lower Cutter holder lightly to the right until contact is made with the Upper Cutter and tighten the L.C.H.C screw. Some machines have spring type supports like the one shown; on this

support you only have to loosen the L.C.H.C screw, and the spring applies the pressure needed to cut. Do not allow the Lower Cutter to push too tightly against the Upper Cutter. If more than light pressure is required to make a clean cut, the blades are probably dull and should be sharpened on a CHUNLIN Cutter Grinder.

Feeding Mechanism

Feed Dogs

1) Feed Dogs are normally provided with either coarse or fine cut teeth, single row or double row, depending on the material you are sewing. Generally, the Feed Dogs should be set as low as practical to allow the work to feed. The length of feed can be changed by removing the Feed Eccentric and substituting an eccentric of shorter or longer stroke. Feed Eccentrics 01-27#) are marked to indicate approximately the number of stitches per inch produced at the edge of the fabric.

2) The Feed Dog and Needle Plate must match each other and it may be necessary to change Feed Dogs to prevent interference with the Needle Plate when very few stitches per inch are used.

3) Machines designated by the letter "D" in the style marking contain a differential or gathering feed. The differential feed contains two separate Feed Dogs, with separate Feed Carriers and separate Feed Eccentrics. This separation allows the front Feed Dog to be set up to travel farther than the rear Feed Dog. This gathers the fabric and prevents it from being stretched or lengthened while it is being sewn. The difference in the throw of the two Feed Eccentrics creates the "differential" feed. The difference between the two can be very little or quite large depending on the number of stitches per inch you desire and on the elasticity (stretch) of the fabric.

4) On certain fabrics it may be desirable to tilt the Feed Mechanism. To make this adjustment loosen the Set Screw 01-11, then slowly turn the Feed carrier Block Pin to the desired location and tighten the set screw. When the screw slot in the F.C. Block Pin is level with the base of the machine, the feed dogs will be in their standard position. It is never necessary to remove the Set Screw 01-11.

Presser Foot and Presser Foot Finger

5) The center hinged type Presser Foot is generally used since it is convenient for seaming or edging where seams or thick and thin places must be crossed. Rigid and rear hinged type Presser Feet are available for special purposes. After lifting the Presser Foot Latch, the Presser Foot Arm with its Presser Foot may be swung out to provide access to the Needle and Loopers.

6) A "stub" or short Presser Foot Finger is used if the machine is equipped with a Needle Plate with a chaining finger. A long P.F. Finger is used with a Needle Plate with a stub or short chaining finger. The finger guards the right side of the Needle. This should be adjusted sideways so that the left hand edge of the finger (next to the Needle) just clears the Needle when the Needle is in the full down position.

7) Ordinarily, use as little pressure on the Presser Foot as possible. This pressure is adjustable by the Screw 02-10 set Screw 02-05 holds Screw 02-11 in position so your adjustment does not change while the machine is running.

Machine Maintenance

LUBRICATION

1) General: The lubrication system is entirely automatic, feeding oil to all bearing surfaces without the use of wicks. The path of the oil as it circulates through the machine is described as follows: Two Oil Pump Plungers are operated from eccentric grooves in the main shafts. The upper shaft pump draws oil from the main reservoir and forces it through the Oil Bubbler Pipe to the Oil Bubbler Pipe Cap. The oil then drains down through holes to the Upper Shaft Oil Collector and the correct amount of oil is fed into the Upper Shaft Assembly. Inside the Upper Shaft the oil is distributed through several successive oil holes and grooves to the bearing surfaces of the main shafts on the left end of the machine, the Needle Carrier Assembly, the Upper Cutter Carrier Assembly, and the Feed Mechanism. Some of the oil not fed into the Upper Shaft is forced along the outside of the Upper Shaft, down the face of the Cam Boss, and through holes in the Main Cams to lubricate the Cam Rolls and the Frame Cap bearings. The Needle Bearing for the Lower Shaft is oiled from the overflow oil from the lower shaft pump. All the oil in the machine drains down through the Oil Filter into the Oil Filter Support and is pumped from this support by the lower shaft pump back into the oil reservoir.

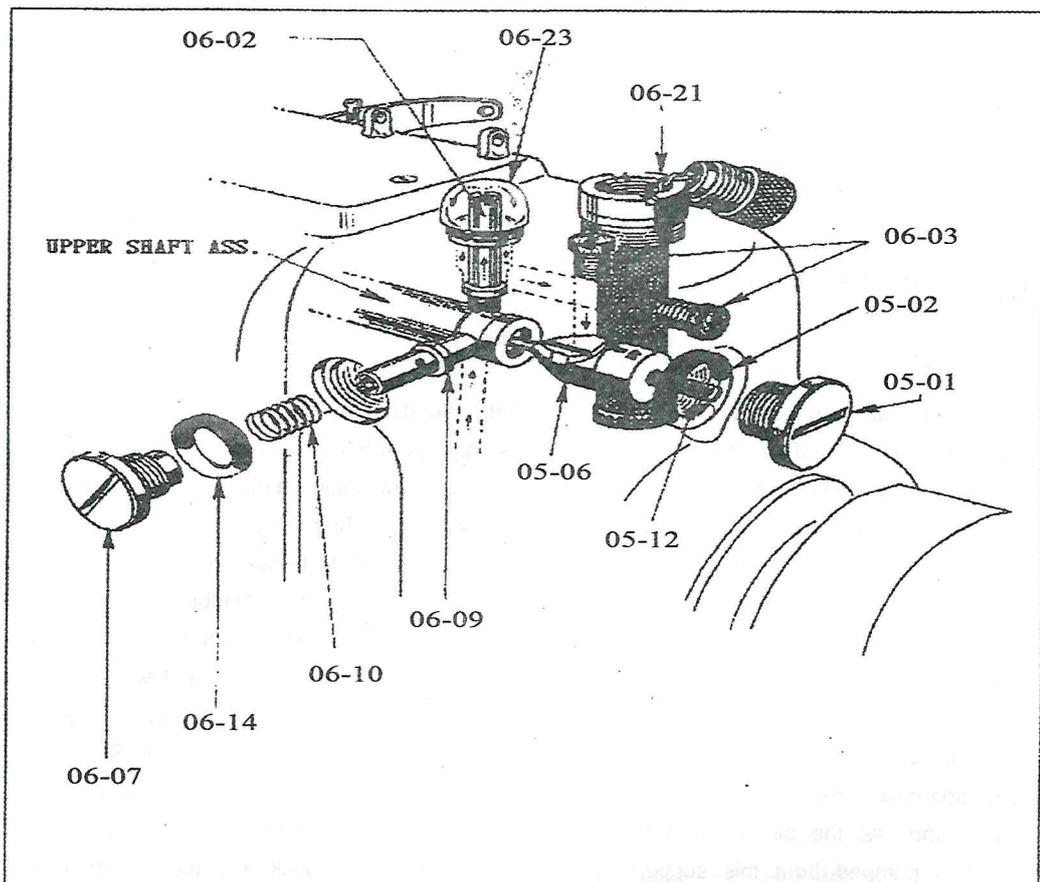
2) Oil is filled through a hole under the Cap Screw of the Oil Filler Assembly into the main reservoir. About 8 ounces of a high grade turbine oil is recommended. To drain the oil, remove the machine from the Machine Mounting Assembly and extend the hand wheel end of the machine over the end of the table. After providing a means of catching the oil, unscrew the Oil Drain Screw 06-01) several turns.

3) The following precautions are recommended:

- A. Never allow the oil level to go below the "E" line on the Oil Gage.
- B. Occasionally clean the lint around the Feed Dogs and from behind the Dust Shield and Upper Fabric Guard. (Do Not Use Compressed Air)
- C. Daily clean the lint from the drain slots around the L.C. Holder Support Assembly.

D. Clean the Oil Filter about once a year (See Below). Replace filter after four cleanings.

E. Clean screen on the Oil Filter Assembly if filling the machine becomes difficult (See Below)



CLEANING OIL FILTER 清理油箱过滤器

4) To clean the Oil Filter, remove the three screws (06-06) in the Oil Filter Support and lift the machine from this support; remove the Oil Filter and clean with compressed air or solvent. When using compressed air to clean the filter, blow the air in the reverse direction of the oil flow—from bottom to the top of the Oil Filter. For best result, remove and replace the three gaskets on the Oil Filter Support. (O.F. Gasket 06-13, O.F.S. Gasket 06-11, and O.F.S. Line Gasket 06-15) Carefully locate the new gaskets in their proper positions, and install the cleaned filter (flat side down). Lower the machine straight down onto the Oil Filter Support Assembly, being careful not to disturb the alignment of the gaskets. Install and tighten the three screws (06-06).

5) To clean the screen on the Oil Filter Assembly: unscrew the entire assembly from the machine, remove the cap screw, and clean the filler screen with compressed air or solvent.

RECOMMENDED OILS

REPRESENTATIVE LIST OF OILS FOR INDERLE MACHINES

Type 30 MACHINE

CHUNLIN Recommendation—Spindle Oil of 46 cst at 40 degrees Celsius

Troubleshooting

Breaking Needles

- 1) **Incorrect Needle**—Try a larger Needle. Needles are available in sizes from #000 to #8. The larger the number the bigger the Needle.
- 2) **Needle Carrier Stud is Loose**—The Needle Carrier Assembly must be free to swing upon the Stud, but must not have any right to left lateral movement. To adjust the Stud loosen the set screw, 01-12. Tighten the Needle Carrier Stud until it stops, then back it out 1/12 of a turn (30 degrees).
- 3) **Check the Loper Setting**—Check that the Needle is not impacting or bending when it passes the Loopers.
- 4) **Needle Carrier Stud Hold is Worn**—If a customer finds that he or she is continually readjusting the Needle Carrier Stud, it is a good indication that the Needle Carrier Stud hold is worn out. The machine should be shipped to the CHUNLIN factory for service.

Feeding Problems

- 1) **Check Cutter Sharpness** — Place a single strand of thread between the two blades. Turn the Handwheel by hand, and see if the thread is cut cleanly. If the thread is not cut cleanly, adjust, sharpen, or replace the Cutters.
- 2) **Feed Dogs Set too Low** — The Feed Dogs should be set so that the bottom point of the Feed dog tooth is even with the top of the Needle Plate when the Feed Dogs are at their highest point of travel.
- 3) **Too Little Presser Foot Pressure** — Loosen the lock screw, and turn the adjustment screw clockwise a few turns. Retighten the Lock Screw.
- 4) **Feed Dogs Worn** — The points on the Feed Dog teeth are no longer sharp. They appear shiny and polished over. Replace the worn part.
- 5) **Presser Foot Worn** —The Presser Foot has channels or railroad like tracks worn into its bottom surface. Replace the worn part.
- 6) **Feed Dog Tilt** —On certain fabrics it may be desirable to tilt the Feed Mechanism.

Stitch Quality

Holes In Fabric / Needle Tears

1) **Replace Needle** – Loosen the nut two turns. Remove the old Needle and replace it with a new Needle. Set the new Needle all the way back against the Stop Pin, and retighten the nut.–

2) Incorrect Needle–

A. Try a smaller Needle. Needles are available in sizes from #000 to #8. The larger the number the bigger the Needle.

B. Try a Ball Point Needle. CHUNLIN's designation for Ball Point is "F".

Ragged Edge (Fabric looks chopped, not cut)

1) **Check Cutter Sharpness** – Place a single strand of thread between the two blades. Turn the Handwheel by hand, and see if the thread is cut cleanly. If the thread is not cut cleanly, adjust, sharpen, or replace the cutters.

Poor Coverage on Edge

1) **Increase the Stitch Count** – Increase the number of stitches per inch by replacing the Feed Eccentrics (stitch cams). Use Eccentrics with a higher number. The number on the Stitch Cam represents the approximate number of stitches per inch.

2) Use Additional Thread–

A. Use a heavier thread as the coverage thread.

B. On certain styles it is common to use more than one Cover Thread. Type30 is examples of this approach.

Loose Stitch

1) **Check the Threading** – Refer to the Threading Diagram provided with the machine, and ensure that the threading is proper.

2) **Increase Tension of Thread** – Turning the Tension Adjustment Nut clockwise to increase the tension. The standard setting is considered to be lock nuts on all tensions approximately even with the ends of the Tension Studs.

Edge Curling With Stitch -Too much fabric in stitch

1) **Decrease Tension of Thread** – Determine which thread is breaking, and decrease the tension on that thread. Turning the Tension Adjustment Nut counterclockwise decreases the tensions. The standard setting is considered to be lock nuts on all tensions approximately even with the ends of the Tension Studs.

2) **Adjust Cutters** – Move the Cutters to the left to reduce the amount of fabric in the stitch.

Scratch On Fabric - Feed Dog Tracking On Fabric

1) Check For Burrs / Sharp Edges -

- A. Check the Feed Dogs, and remove any burrs encountered.
- B. Check for sharp edges on the Feed Dog slot(s) of the Needle Plate.
Buff the sharp edges until smooth.

2) Too Much Presser Foot Pressure – Loosen the lock Screw, and turn the Adjustment Screw counterclockwise a few turns. Retighten the Lock Screw.

3) Feed Dogs Set too High – The Feed Dogs should be set so that the bottom point of the Feed Dog tooth is even with the top of the Needle Plate when the Feed Dogs are at their highest point of travel.

4) Wrong Feed Dogs -

- A. Fine Tooth Feeds should be used with light fabric.
- B. Urethane Feeds should be used with delicate fabric.

Oil Problems

Oil on Fabric

- 1) Use the Proper Oil** – Check to ensure that the proper grade or weight of oil is being used.
- 2) Clean the Machine** – Check for and remove any lint or debris from around the Needle Carrier and Fabric Guard Lint accumulating around the sewing area may become saturated with oil.

Oil on Table

- 1) Use the Proper Oil** – Check to ensure that the proper grade or weight of oil is being used.
- 2) Clean the Machine** – Remove any lint that has accumulated behind the Dust shield and around the Feeds.
- 3) Replace the Oil Filter and Gaskets** – If the oil filter is clogged with lint, it should be replaced. The Gaskets should be replaced at the same time.
- 4) Replace the Lower Pump** – If the Lower Pump is not working the oil being delivered to the machine will not be returned to the reservoir. Replace the Oil Pump Plunger 06-09, and the Oil Pump Plunger Spring 06-10. The Lower Pump is located in the rear of the machine behind a 3/4 inch diameter screw.

No Bubbler Flow

- 1) Replace the Upper Pump** – If the Upper Pump is not working the oil is not being delivered to the machine. If one continues to run the machine in this condition, parts will burn and seize. Replace the Oil Pump Plunger 06-09, and the Oil Pump Plunger Spring 06-10. The Upper Pump is located in the front of the machine behind a 3/4 inch diameter screw.

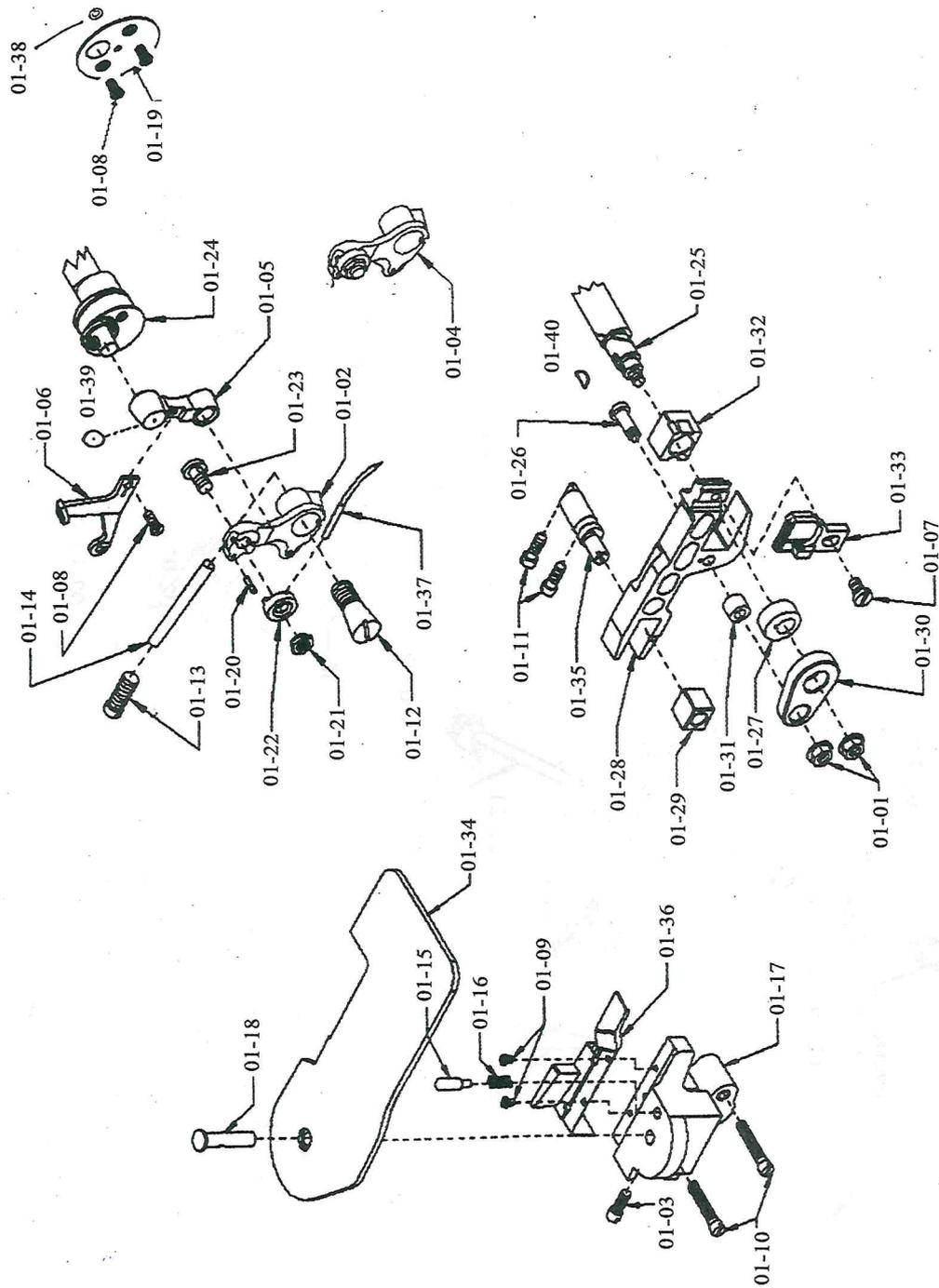
Skipped Stitches

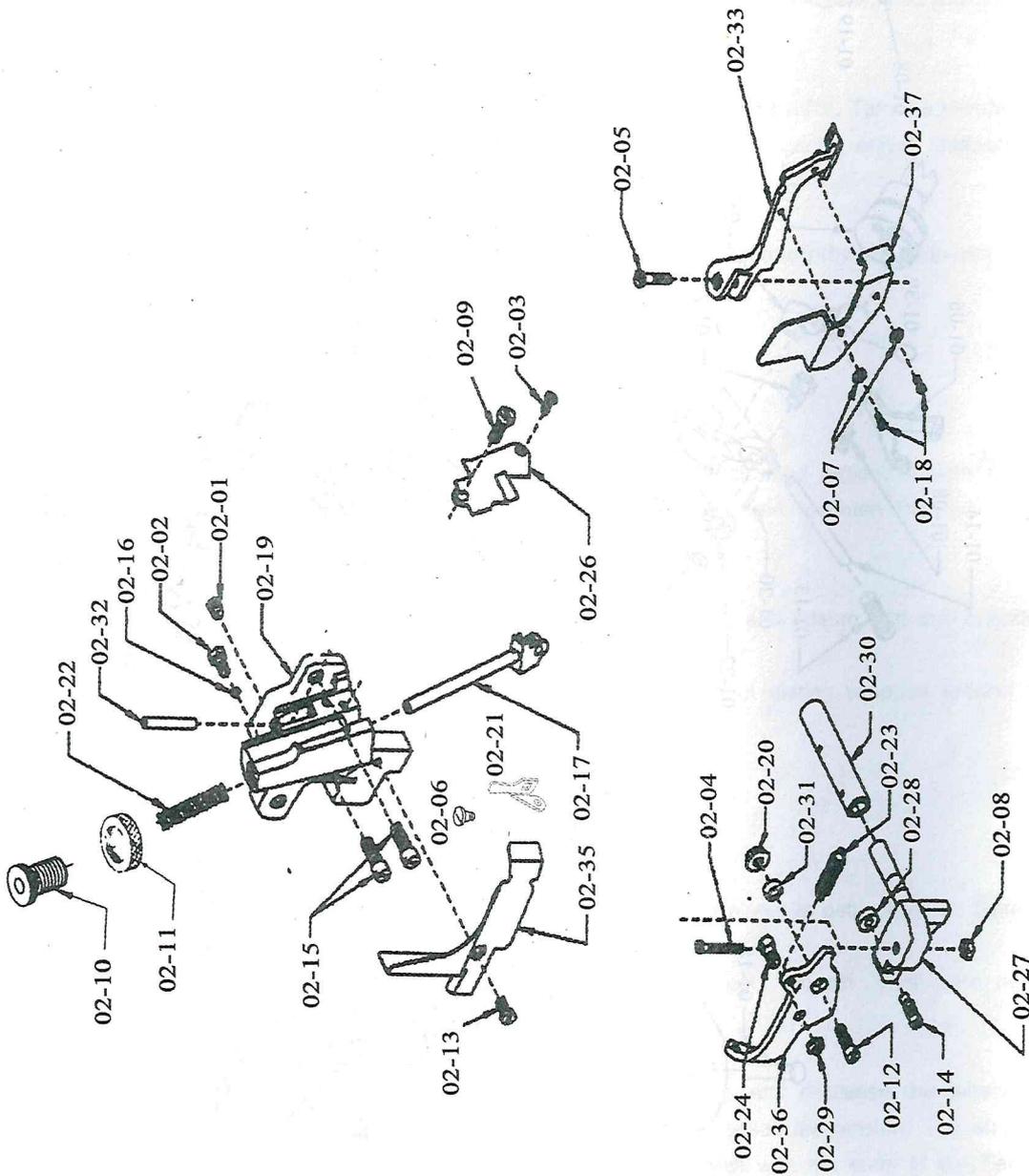
- 1) **Replace Needle** – Loosen the nut two turns. Remove the old Needle and replace it with a new Needle. Set the new needle all the way back against the Stop Pin, and retighten the nut.
- 2) **Check the Threading** – Refer to the Threading Diagram provided with the machine, and ensure that the threading is proper.
- 3) **Check Cutter Sharpness** – Place a single strand of thread between the two blades. Turn the Handwheel by hand, and see if the thread is cut cleanly. If the thread is not cut cleanly, adjust sharpen, or replace the Cutter.
- 4) **Check the Loper Settings** – Referring to the illustrations and descriptions provided help pin point the problem with the Loper Setting.

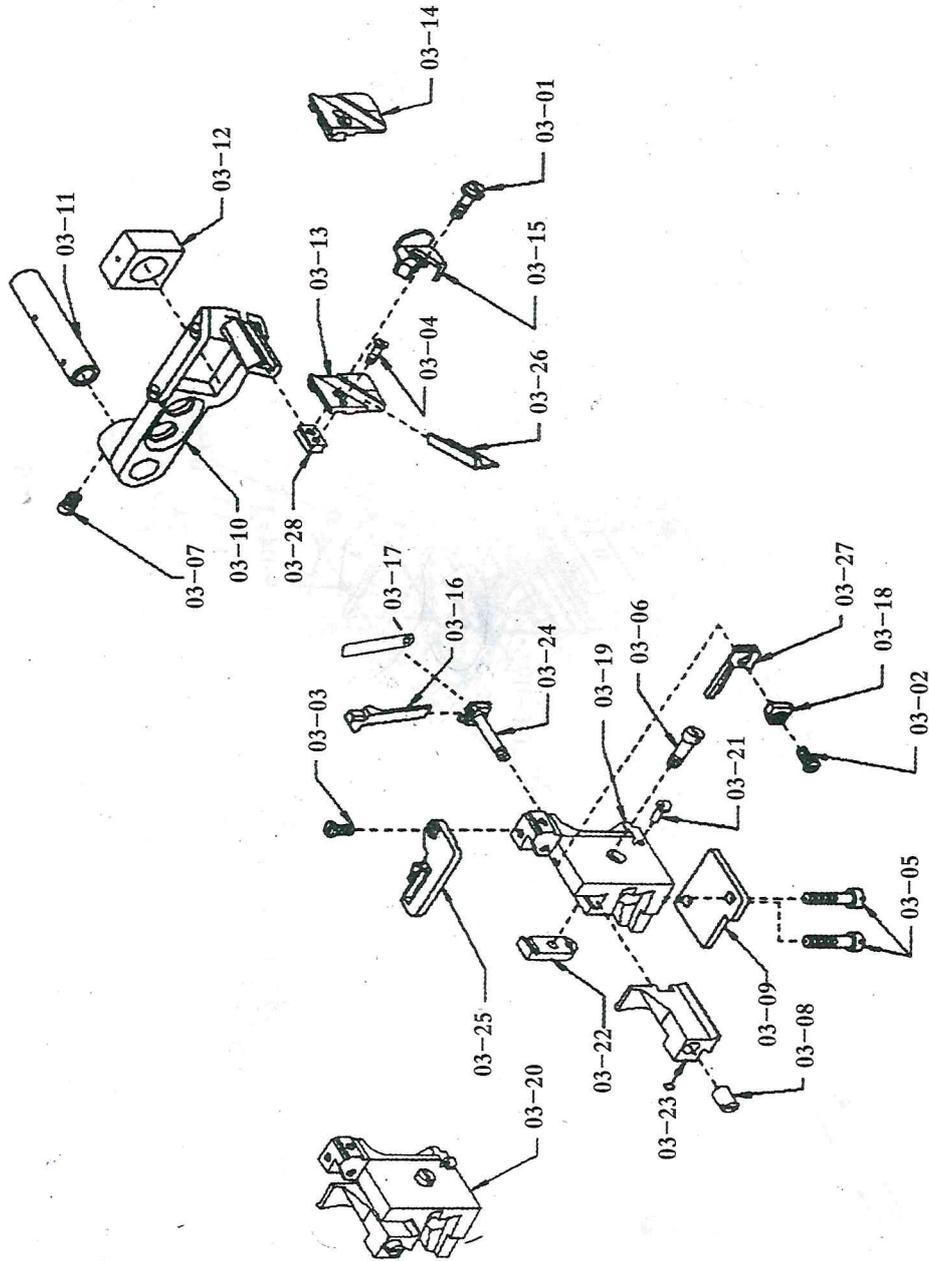
Thread Breaking

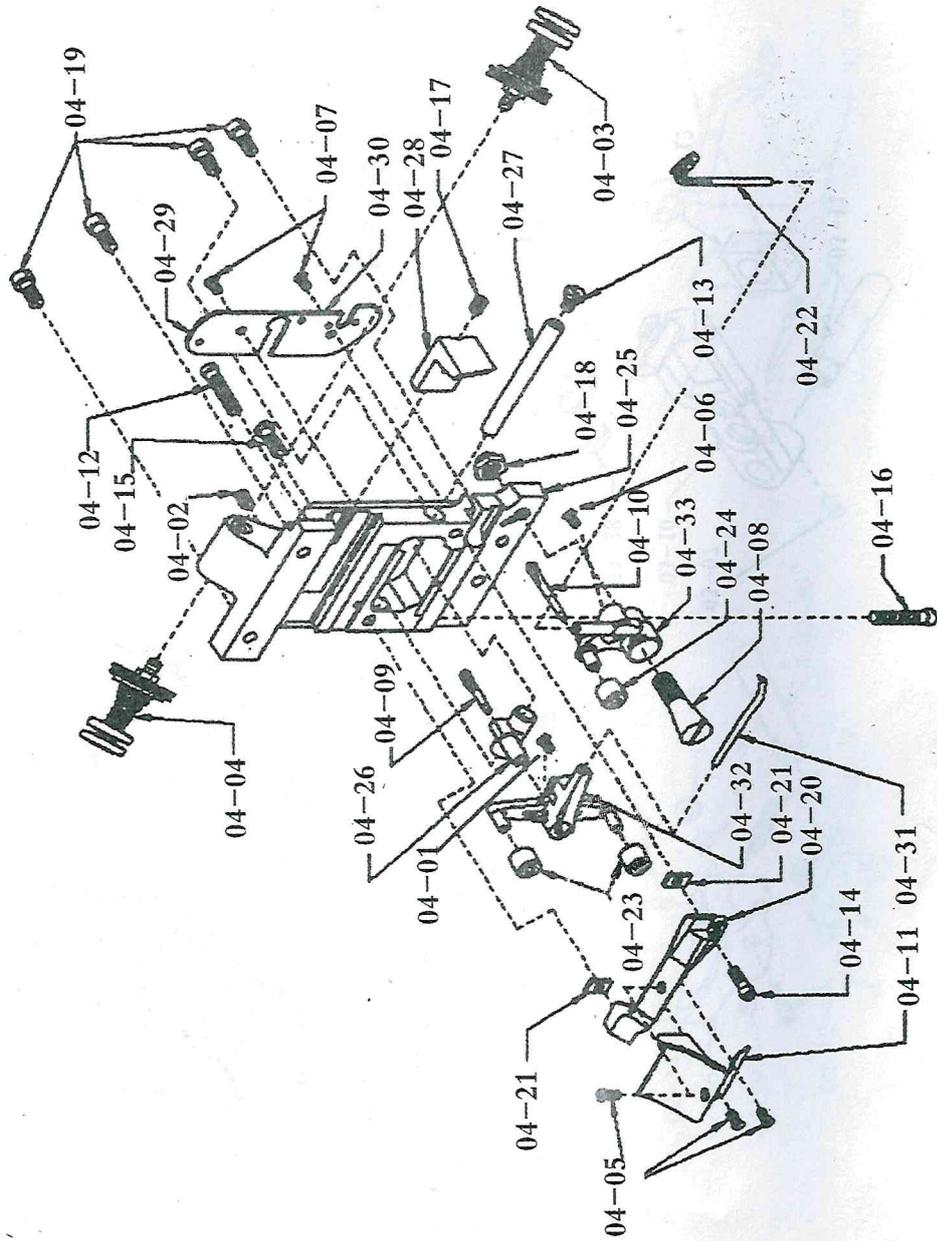
- 1) **Replace Needle** – Loosen the nut two turns. Remove the old Needle and replace it with a new Needle. Set the new needle all the way back against the Stop Pin, and retighten the nut.
- 2) **Check the Threading** -
 - A). Refer to the Threading Diagram provided with the machine, and ensure that the threading is proper.
 - B). Make sure the thread is coming off the spools freely without getting wrapped around the Tread stand.
- 3) **Check for Burrs / Sharp Edges** -
 - A. Determine which thread is breaking, and check for any sharp edges along its path of travel. Remove any burrs encountered, and buff the part smooth.
 - B. Check the Loopers for burrs. Remove any burrs and buff the Loper smooth. Take care not to dull the point in the process.
- 4) **Decrease Tension of Thread** – Determine which thread is breaking, and decrease the tension on that thread. Turning the Tension Adjustment Nut counterclockwise decreases the tension. The standard setting is considered to be lock nuts on all tensions approximately even with the ends of the Tension Studs.
- 5) **Problem with the Thread** -
 - A. The thread might be brittle from a dying process or from age. Try another cone of thread from another lot if possible.
 - B. The thread might be too light a size / strength for the application.

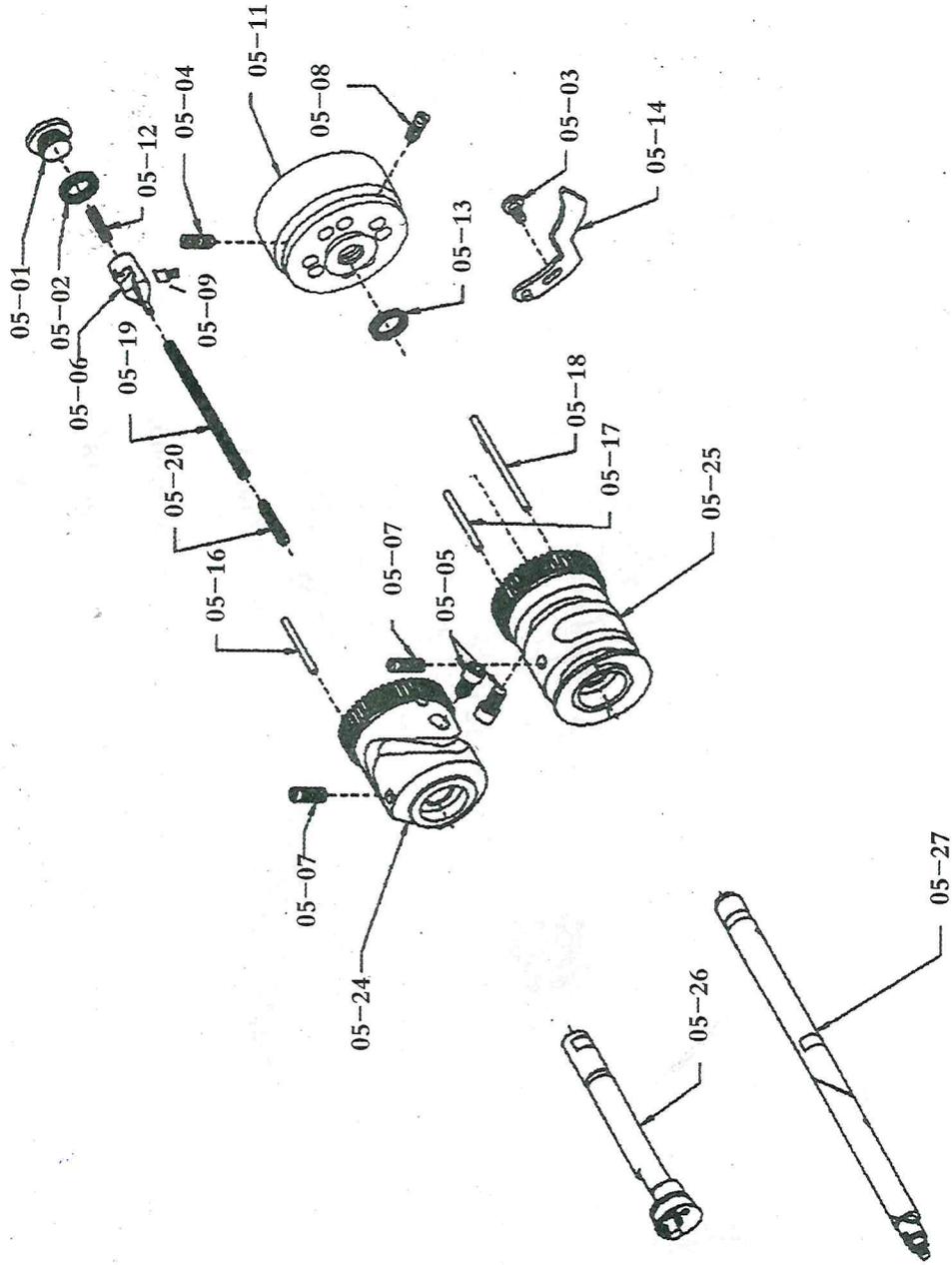
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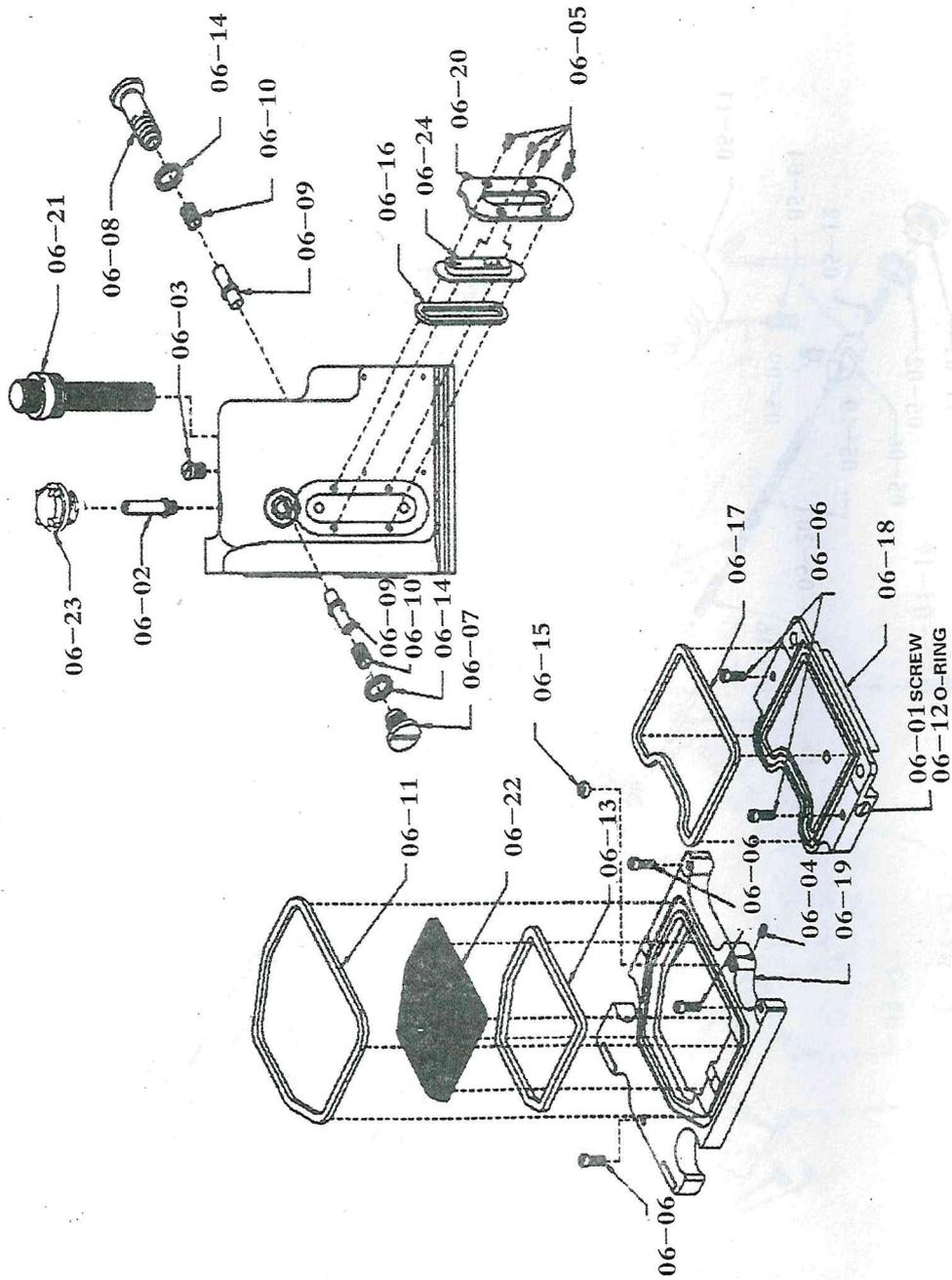


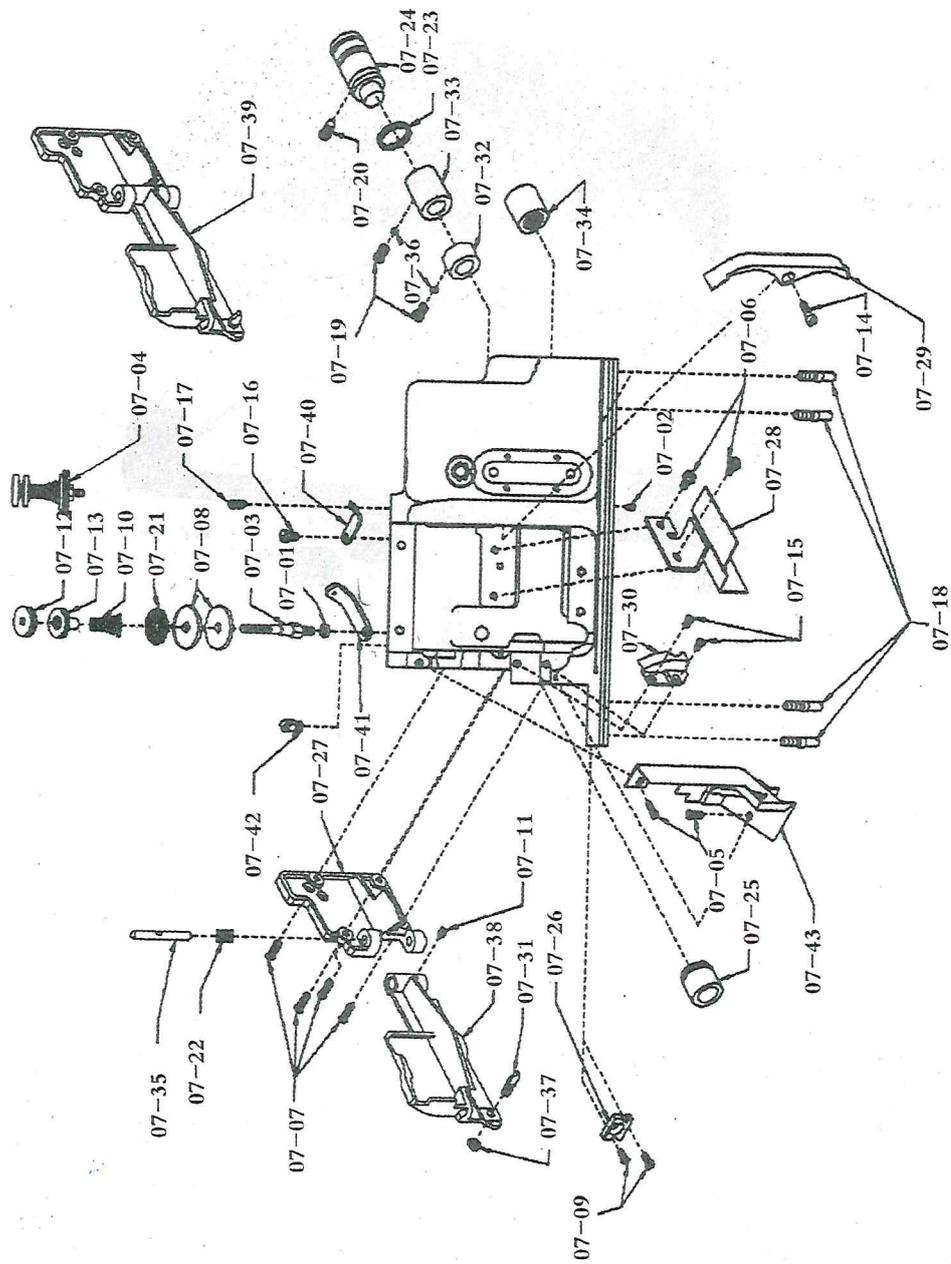


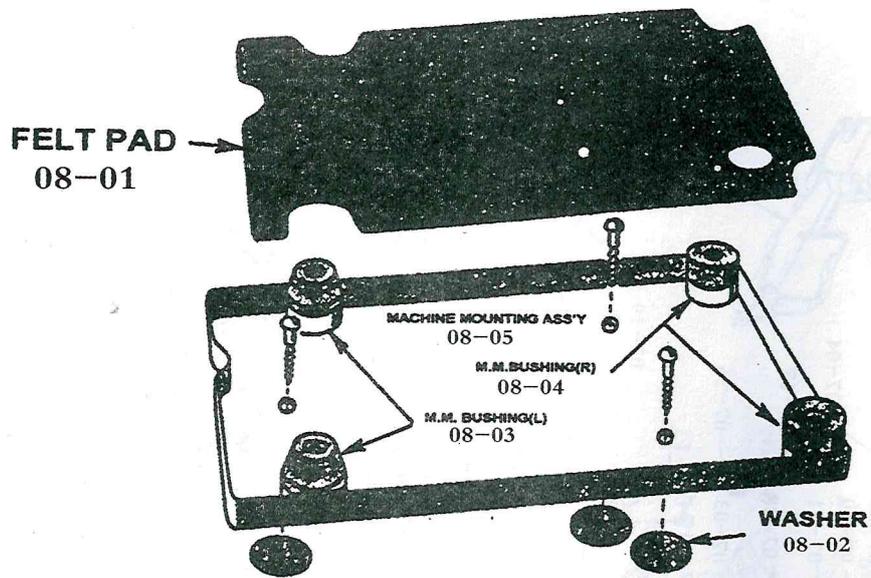








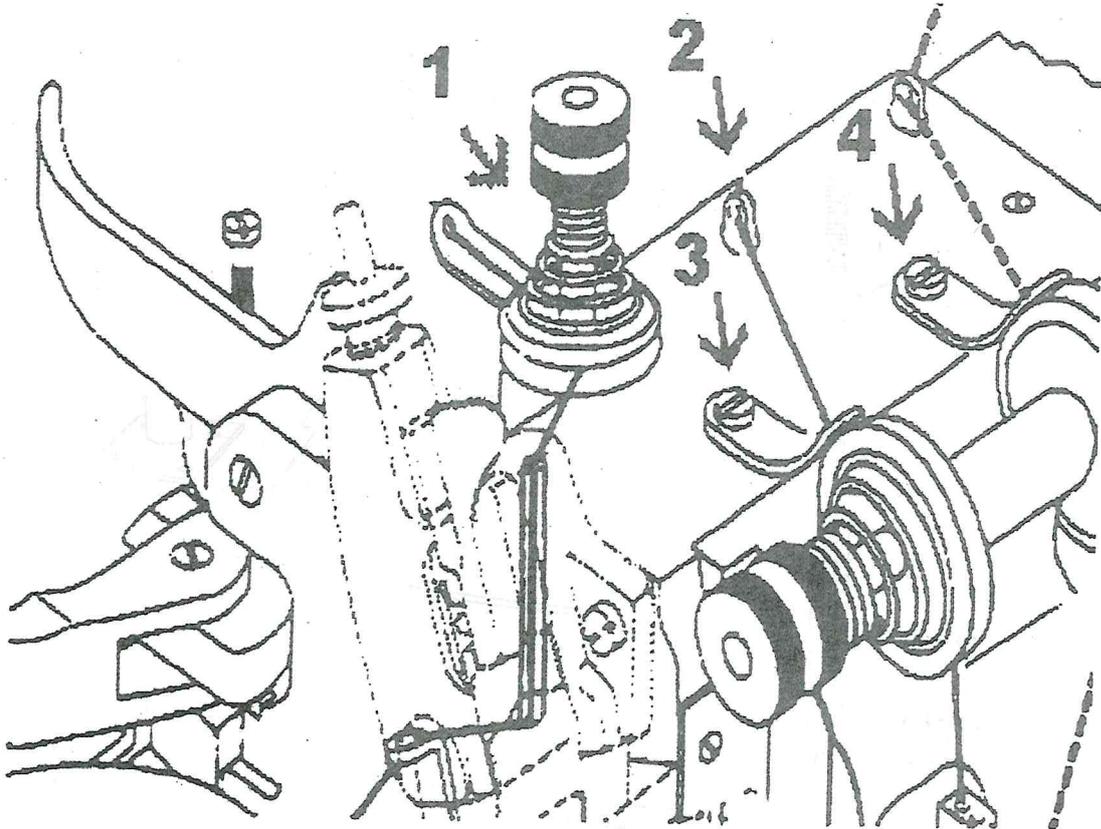




Type30C COMPASS ATTACHMENT

INSTALL INSTRUCTIONS

1. PLEASE LOOSE PART 07-04 SET (1) AND 07-42 (2)
2. TO UNSCREW SCREW 07-16 2PCS AND TAKE OUT THREAD GUIDE 07-40.(3 AND 4)
3. INSTALL CL-30C ROD HOLDER PLATE 09-02 ON 4 HOLE (SEE DIAGRAM BELOW)



BEFORE INSTALL HOLDER PLATE (09-02) ON MACHINE, PLEASE TIGHTEN SCREW (M6X 10) THROUGH HOLDER PLATE (09-02) TO CONNECTION ROD HOLDER (09-01). ORIGINAL 07-42 THREAD EYELET, PLEASE USE LONG TYPE 09-11 WITH WASHER 07-01 TO REPLACE ORIGINAL SHORT.

THE ORIGINAL 07-16 SCREW 2 PCS PLEASE USE LONG SCREW 05-03 TO REPLACE SHORT AND TO SCREW WITH ORIGINAL THREAD GUIDE 07-40.

TO LOOSE ORIGINAL WORK PLATE 01-34, CHANGE NEW WORK PLATE 09-09.

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Type30C SPARE PARTS LIST

