SERVICE MANUAL

FOR

LINKING MACHINE

MOD. DL1000

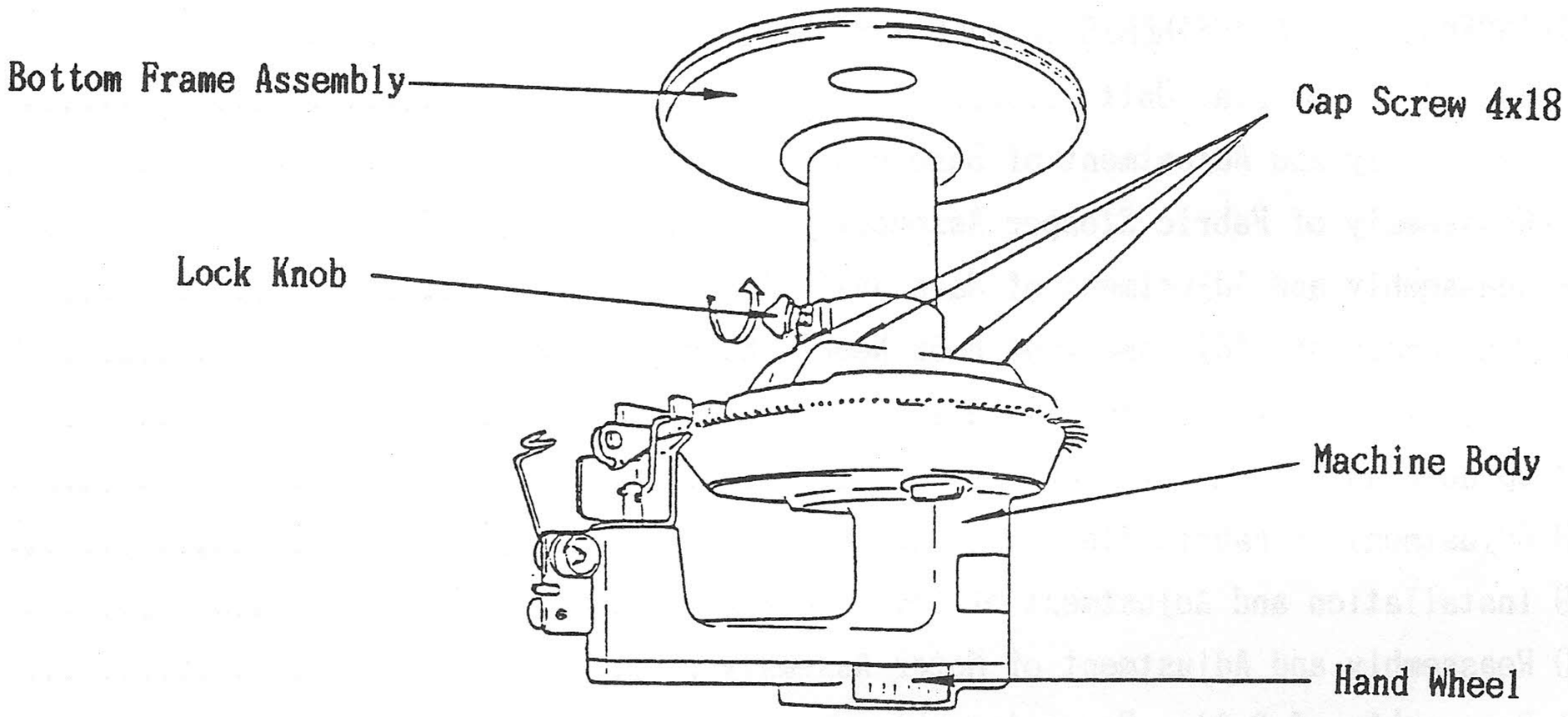
CONTENTS

[1] DISASSEMBLY OF MACHINE BODY

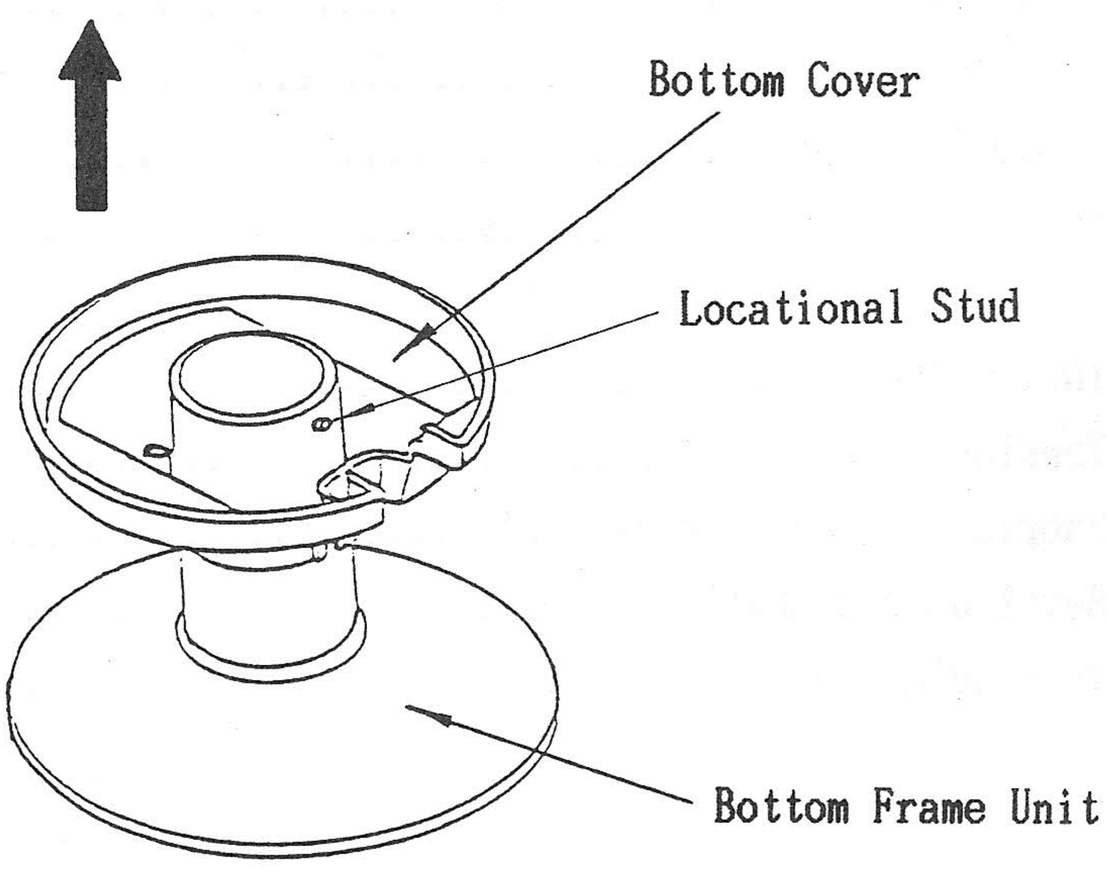
1-1 Disassembly of Bottom Frame Assembly

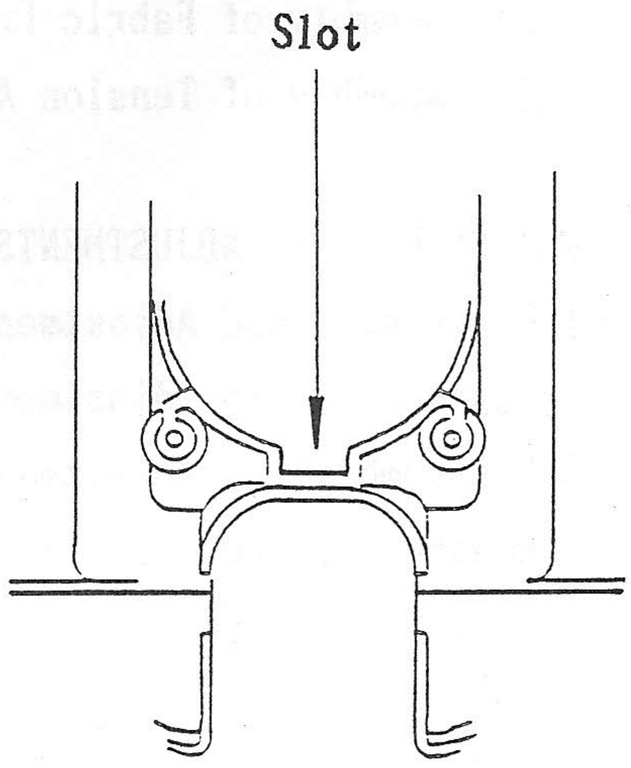
1. Place the Machine upside down.
2. Unscrew Lock Knob.
3. Using Socket-screw Hexagonal Wrench M3, remove four Hexagon Socket Head Cap Screws (hereafter called "Cap Screw") 4x18 securing Bottom Frame Assembly.

   (Note) Do not lose Plain Washers 4x9x0.8 under those Cap Screws 4x18.
4. Lift off Bottom Frame Assembly (the bottom half of the Machine).



5. Push down and rotate Bottom Cover to align its slot with the locational stud on Bottom Frame Unit. Pull out Bottom Cover upward.





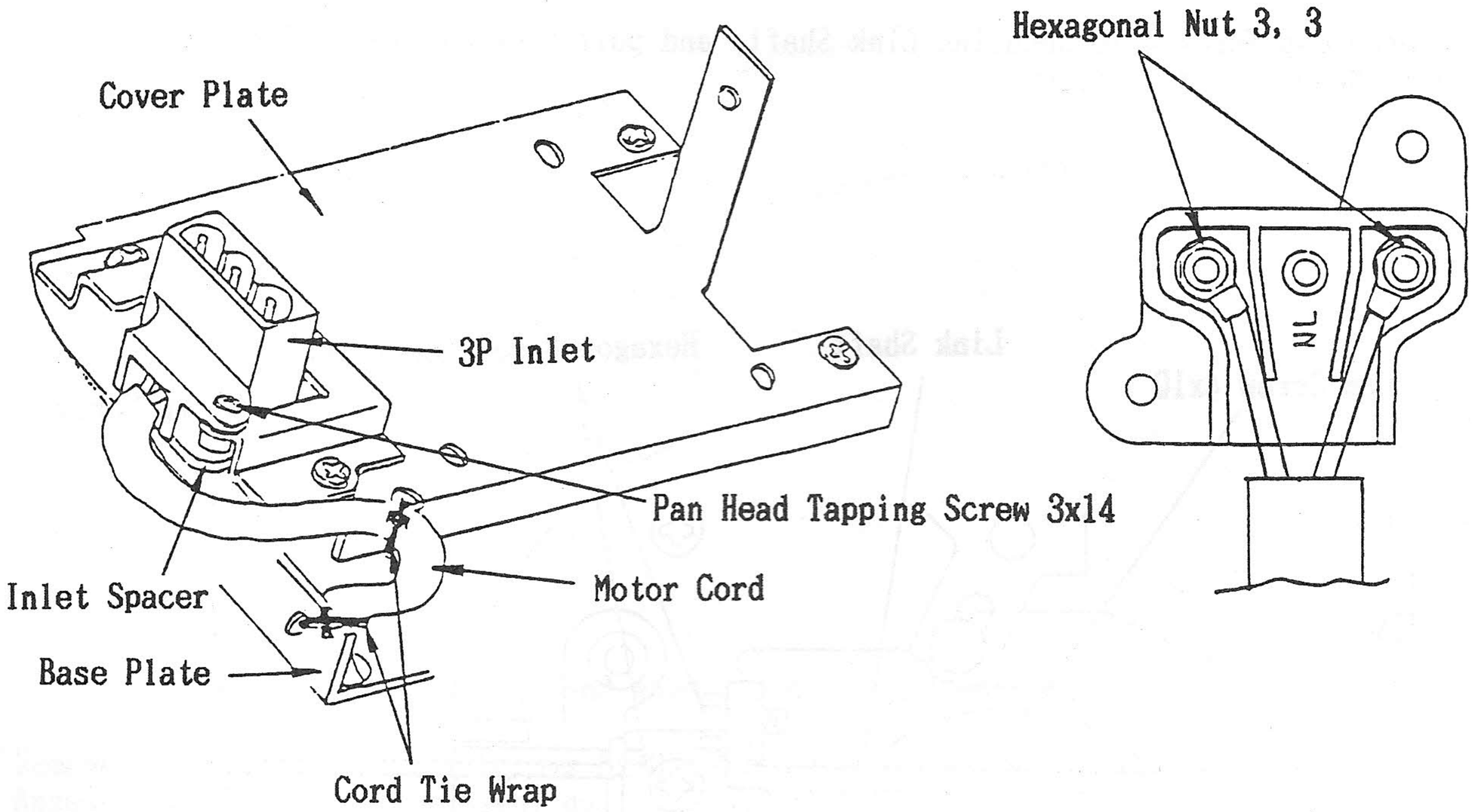
[Bottom Frame Assembly]

1-2 Disassembly of Hook Needle Holder Assembly

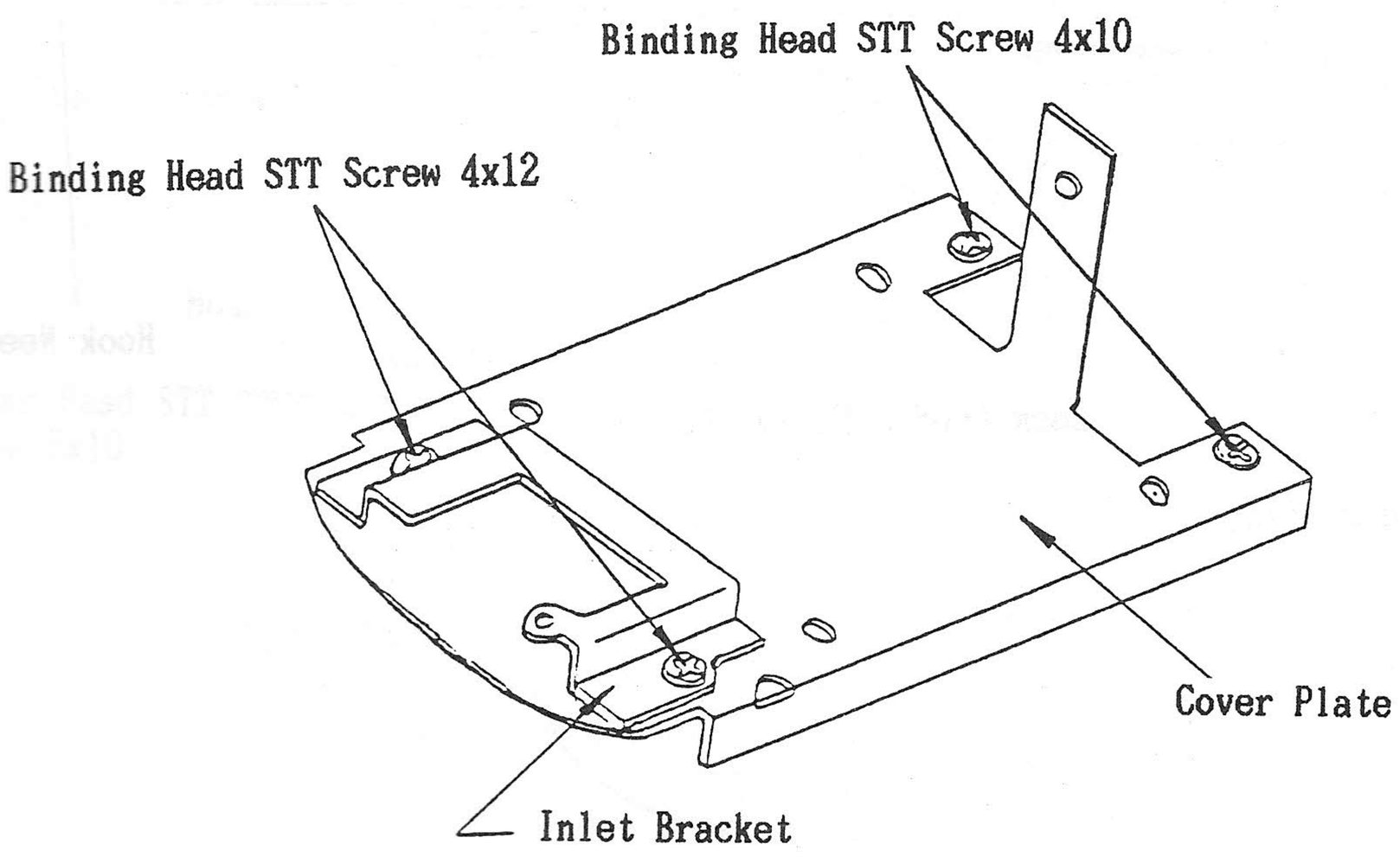
1. Cut off two Cord Tie Wraps fastening Motor Cord to Cover Plate and Base Plate. Never damage Motor Cord when cutting Cord Tie Wraps.

2. Remove two Pan Head Tapping Screws 3x14 securing 3P Inlet.

3. Disconnect Motor Cord from 3P Inlet by removing two Hexagonal Nuts 3, 3.



4. Remove two Binding Head STT Screws 4x10 securing Cover Plate, also two Binding Head STT Screws 4x12 securing Inlet Bracket. Cover Plate will then be free from the Machine.



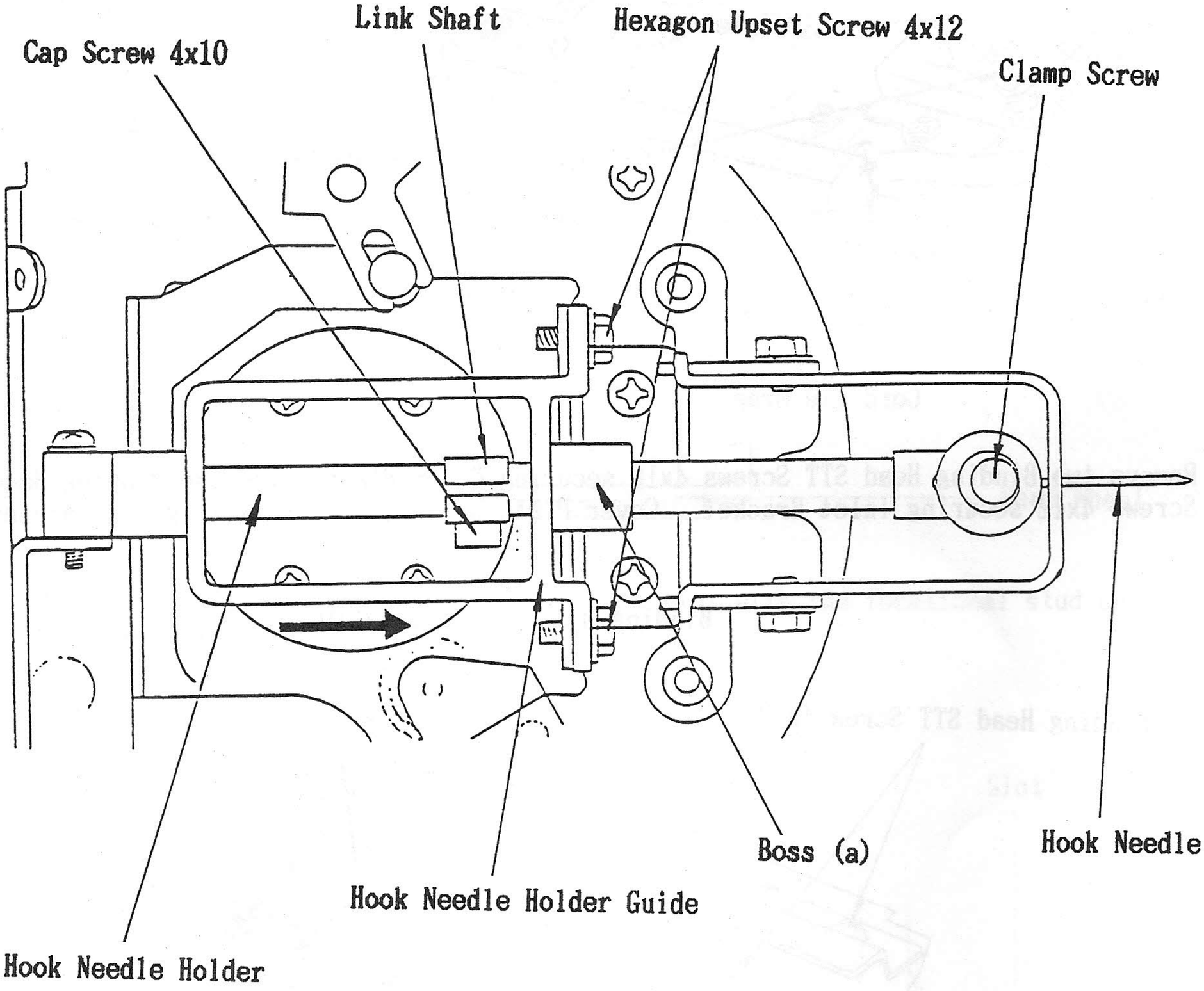
5. Turn Hand Wheel until Hook Needle comes to its furthermost position.

6. Loosen Clamp Screw and pull out Hook Needle.

7. Using spanner M7, loosen two Hexagon Upset Screws 4x12 securing Hook Needle Holder Guide.

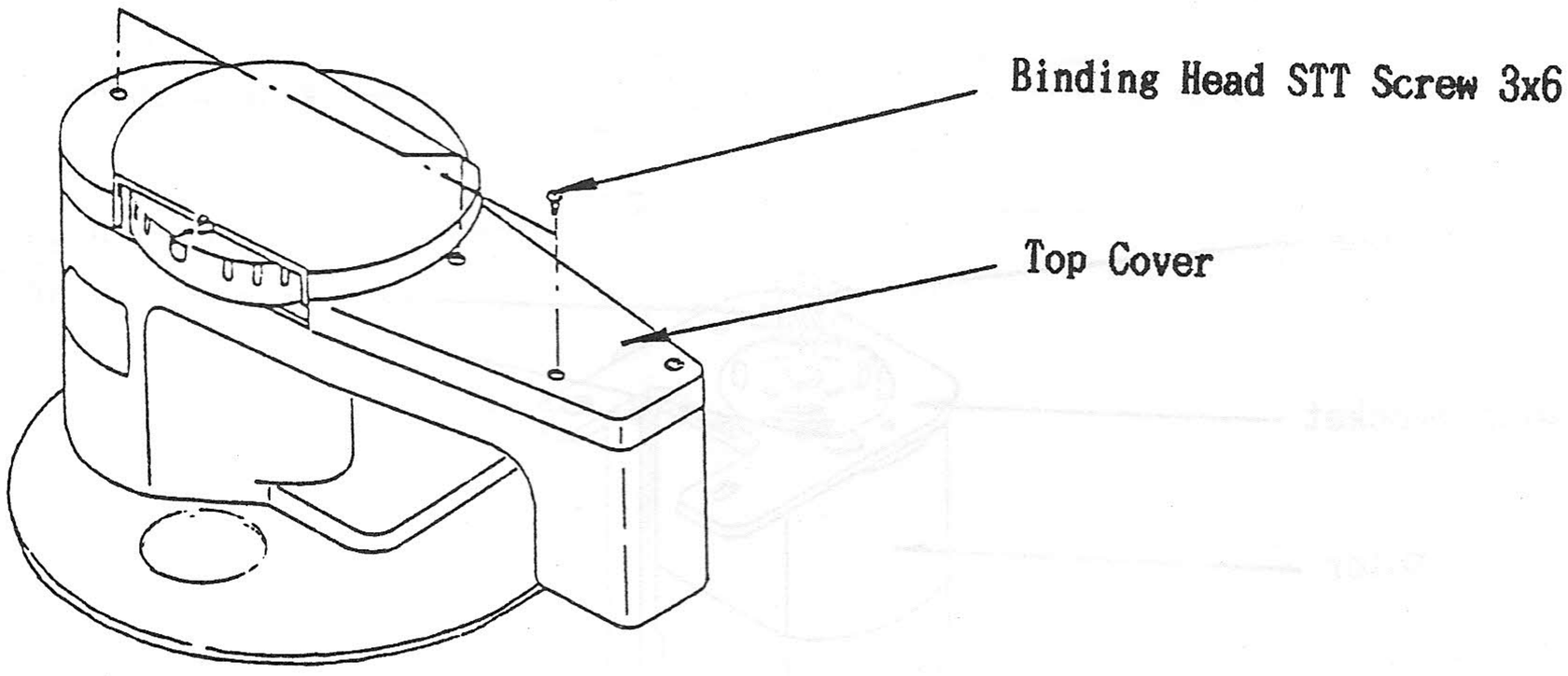
8. Lift up the boss (a) on Hook Needle Holder Guide until Link Shaft is disconnected from Link Ball ϕ6, and slide Hook Needle Holder Assembly in the arrow direction out of the Machine.

9. Loosen Cap Screw 4x10 securing Link Shaft, and pull Hook Needle Holder out of Hook Needle Holder Guide.



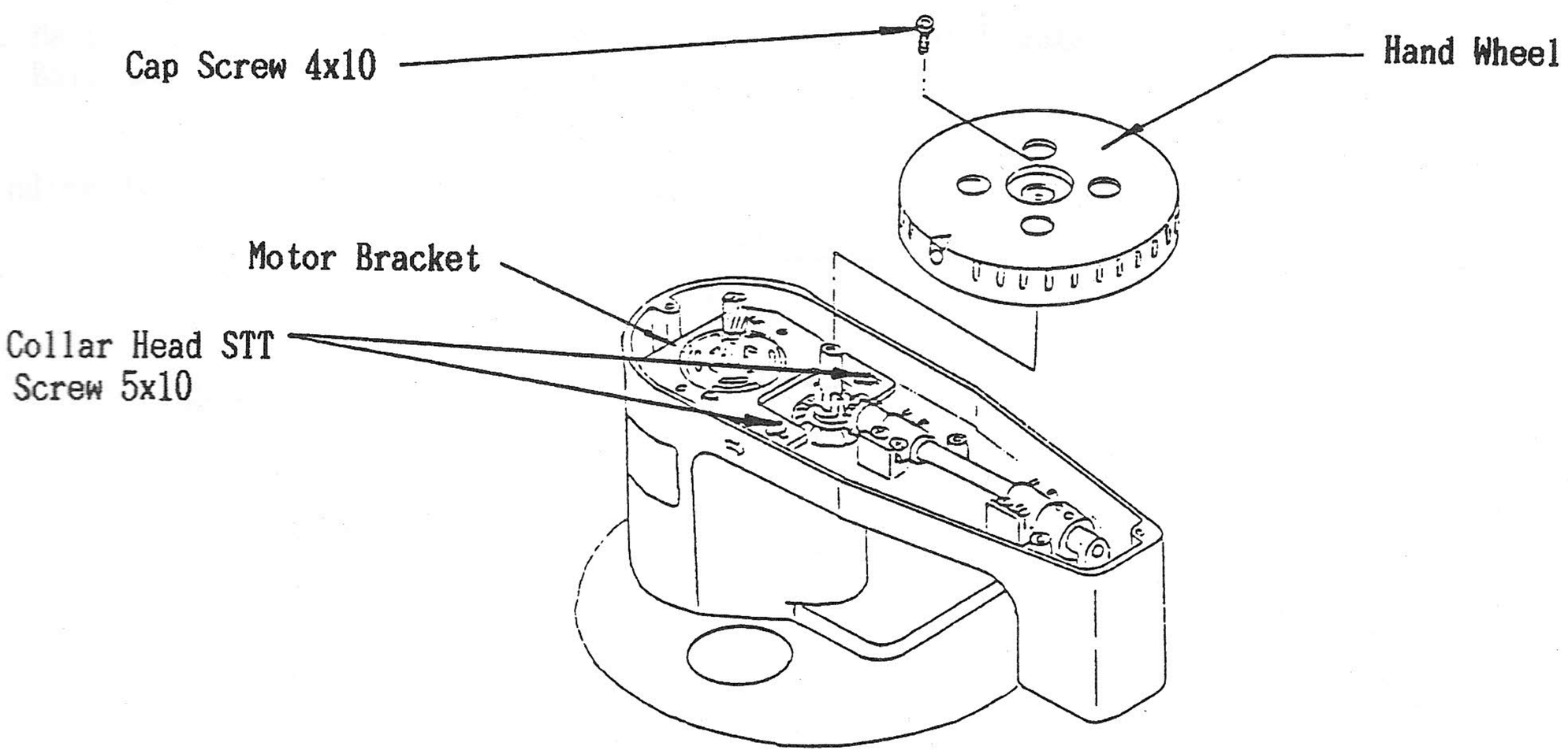
1-3 Disassembly of Motor Assembly

1. Turn over the upper half of the Machine to the top side.
2. Remove Top Cover by unscrewing three Binding Head STT Screws 3x6.



3. Remove Cap Screw 4x10 securing Hand Wheel, and pull it out upward.
4. Remove two Collar Head STT Screws 5x10 securing Motor Bracket, and remove Motor Assembly by lifting it straight up.

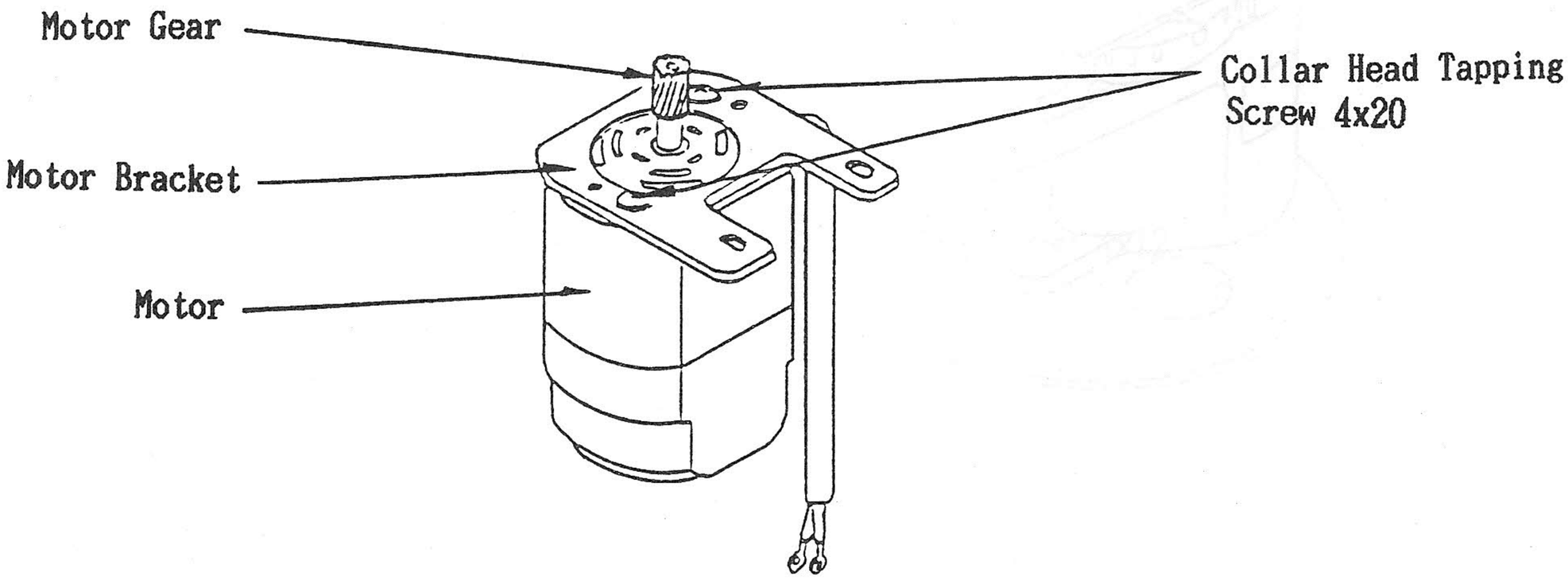
   (Note) To avoid damaging Motor Cord, make sure that the cord is not caught in the Machine during removal of Motor Assembly.



5. Remove Motor Bracket from Motor Assembly by unscrewing two Collar Head Tapping Screws 4x20.

6. Holding Motor Shaft with pliers, remove Motor Gear by turning it clockwise.

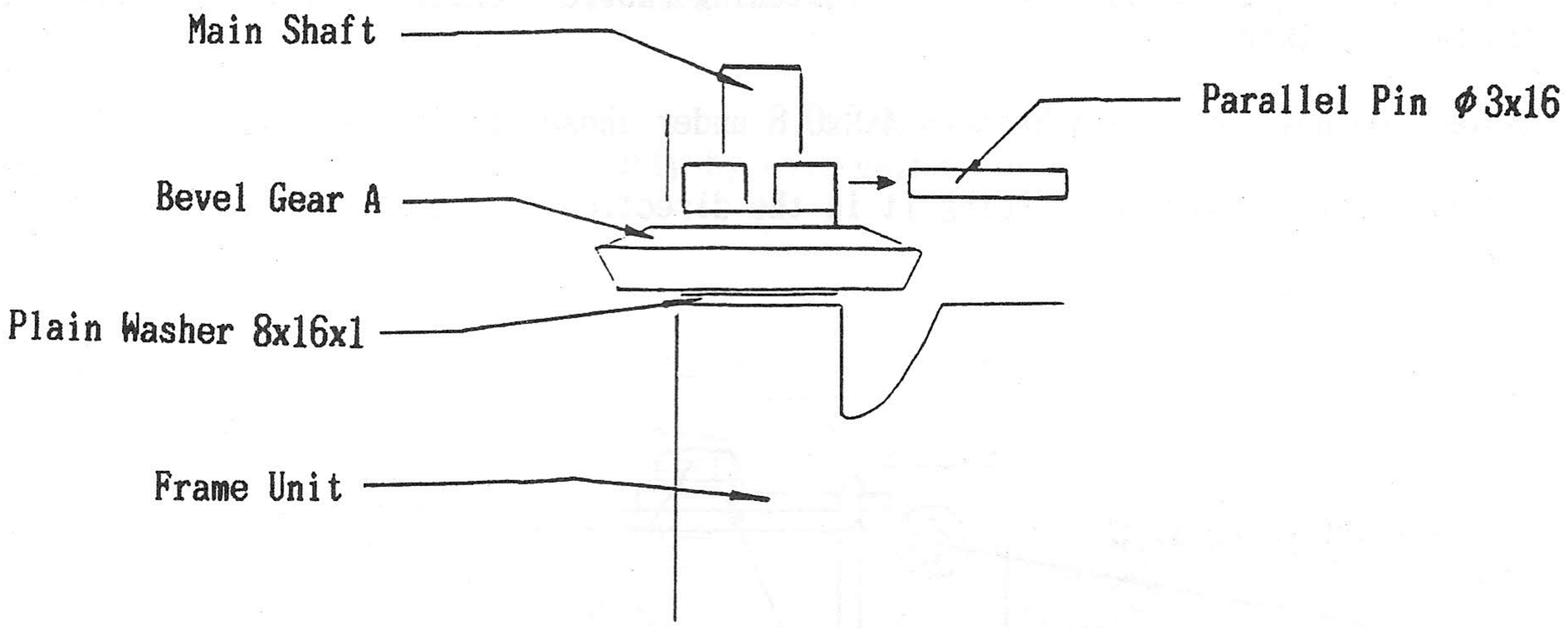
(Note) Motor Gear is of <u>left-hand threads</u> and is sealed with thread lock cement to prevent loosening. When removing Motor Gear, always turn it <u>clockwise</u> with Motor Shaft grasped using pliers.



[Motor Assembly]

1-4 Disassembly of Main Shaft Assembly

1. Pull out Parallel Pin ϕ3x16 retaining Bevel Gear A.



2. Temporarily install Top Cover.

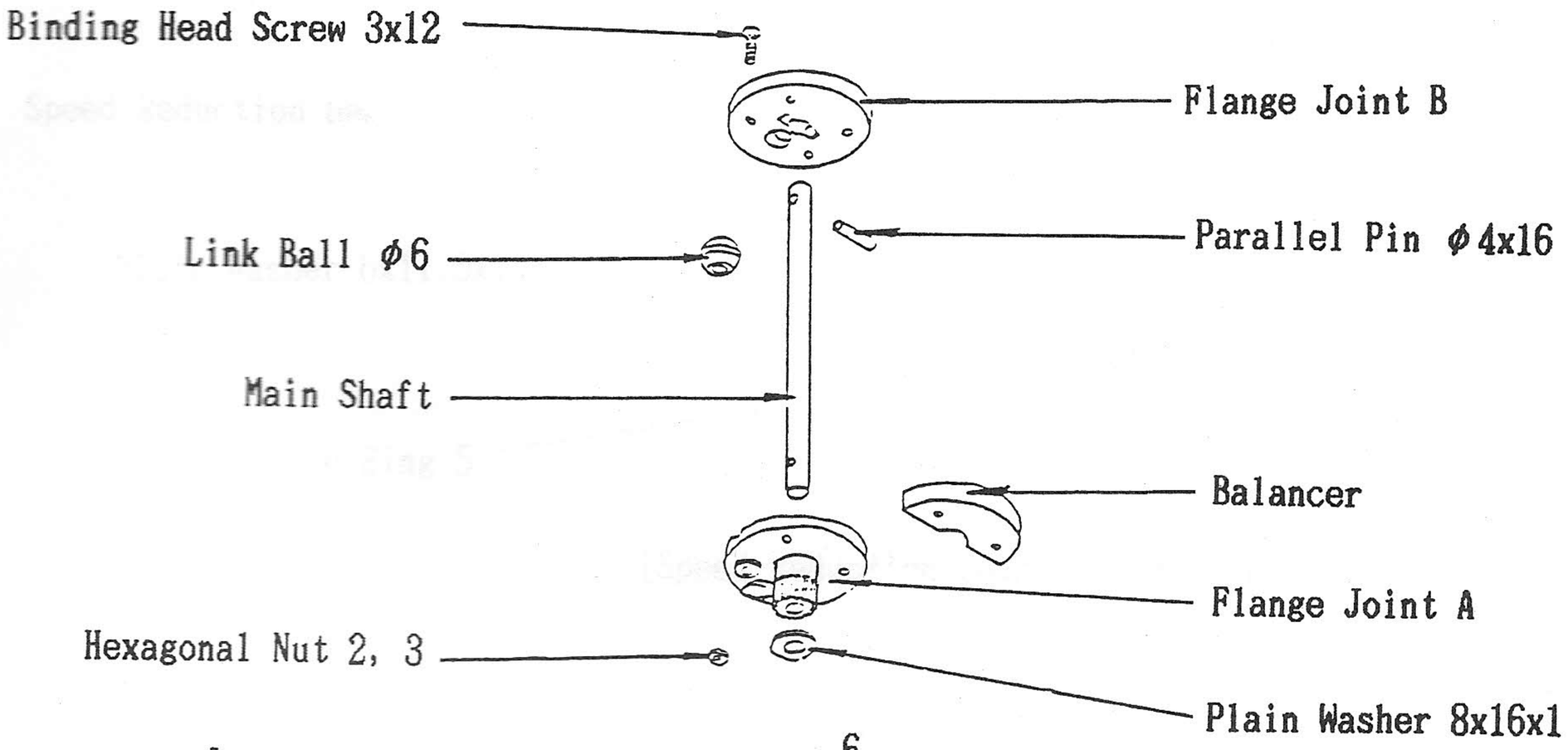
3. Place the upper half of the Machine upside down, and pull out Main Shaft Assembly; Bevel Gear A and Plain Washer 8x16x1 on opposite end will drop and remain inside the Machine.

   (Note) Do not lose two Plain Washers 8x16x1 on Main Shaft (one on each side).

4. Remove four Binding Head Screws 3x12 fastening Flange Joint A, Balancer, and Flange Joint B together.

   (Note) Do not lose two Hexagonal Nuts 2, 3 attached from opposite side behind Balancer.

5. Main Shaft Assembly can be disassembled further into Flange Joints A and B, Link Ball ϕ6, Parallel Pin ϕ4x16, and Main Shaft.



[Main Shaft Assembly]

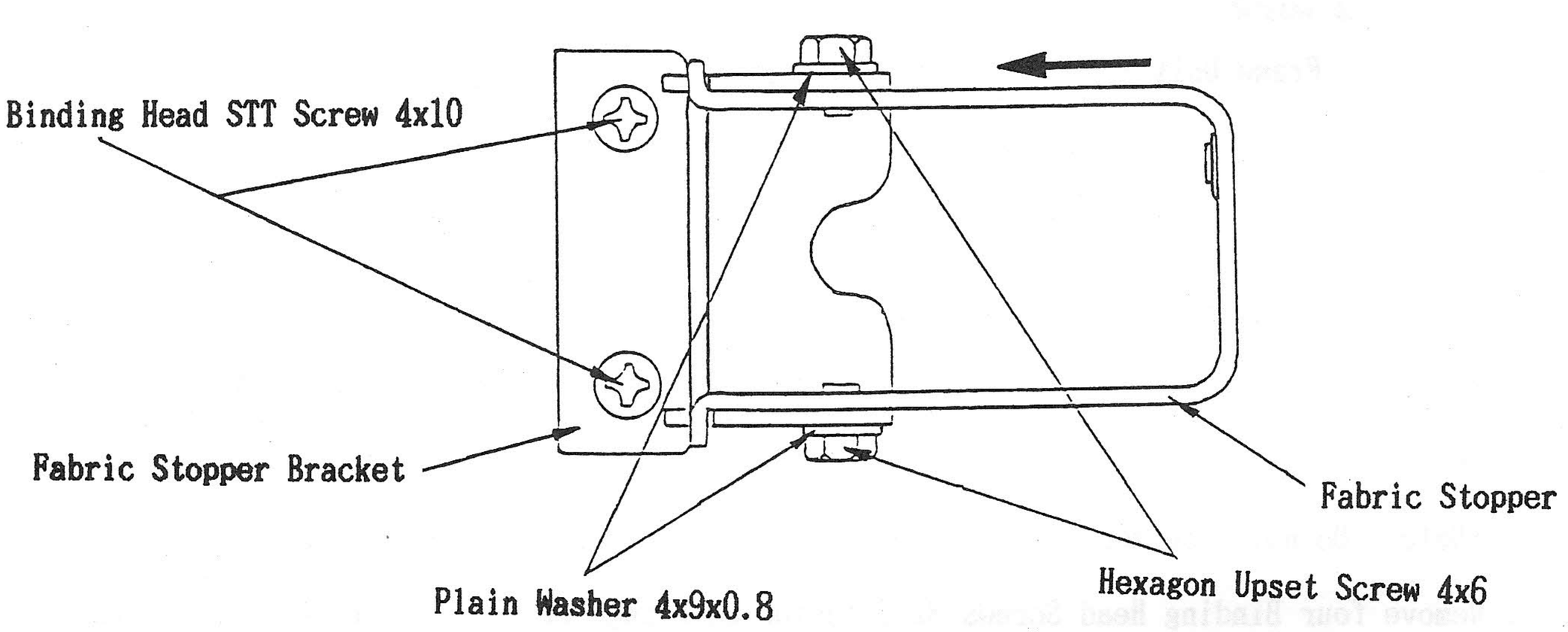
1-5 Disassembly of Fabric Stopper Assembly

1. Remove two Binding Head STT Screws 4x10 securing Fabric Stopper Bracket, and remove Fabric Stopper Assembly.

2. Remove two Hexagon Upset Screws 4x6 fastening Fabric Stopper and Fabric Stopper Bracket together.

   (Note) Do not lose Plain Washers 4x9x0.8 under those upset screws 4x6.

3. Remove Fabric Stopper by sliding it in the direction of the arrow.

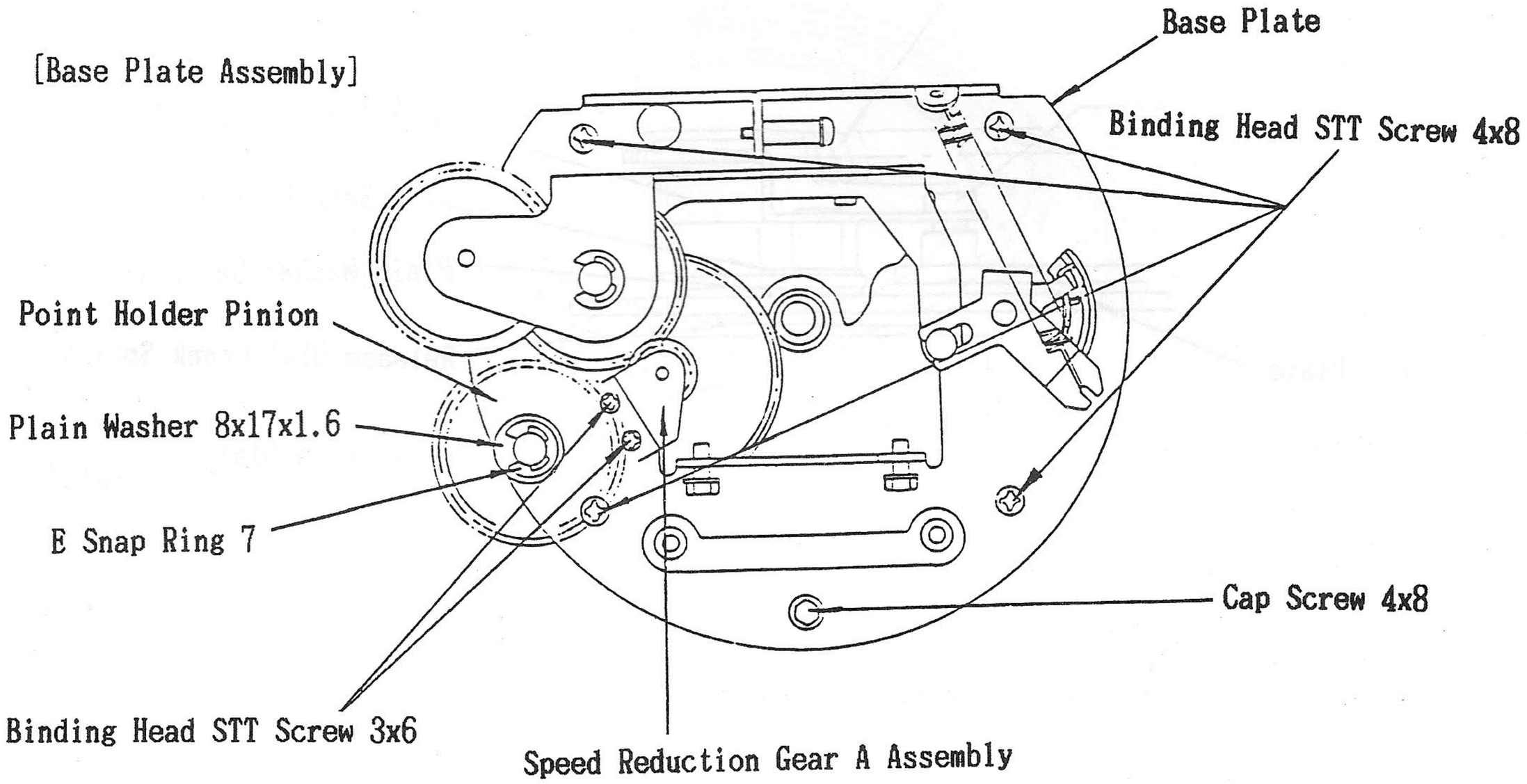


[Fabric Stopper Assembly]

1-6 Disassembly of Base Plate Assembly

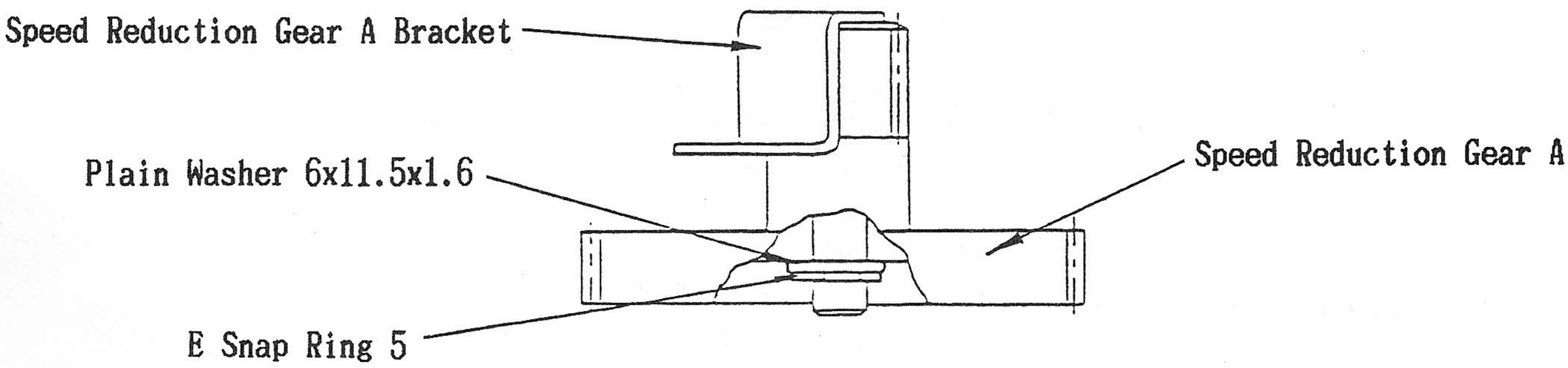
1. Remove E Snap Ring 7 retaining Point Holder Pinion, and pull it out upward together with Plain Washer 8x17x1.6.
2. Remove four Binding Head STT Screws 4x8 and one Cap Screw 4x8 securing Base Plate.
3. Lift off Base Plate Assembly.
4. Remove Speed Reduction Gear A Assembly by unscrewing two Binding Head STT Screws 3x6.

[Base Plate Assembly]



5. Separate Speed Reduction Gear A from Speed Reduction Gear A Bracket by removing E Snap Ring 5.

(Note) Do not lose Plain Washer 6x11.5x1.6 under E Snap Ring 5.



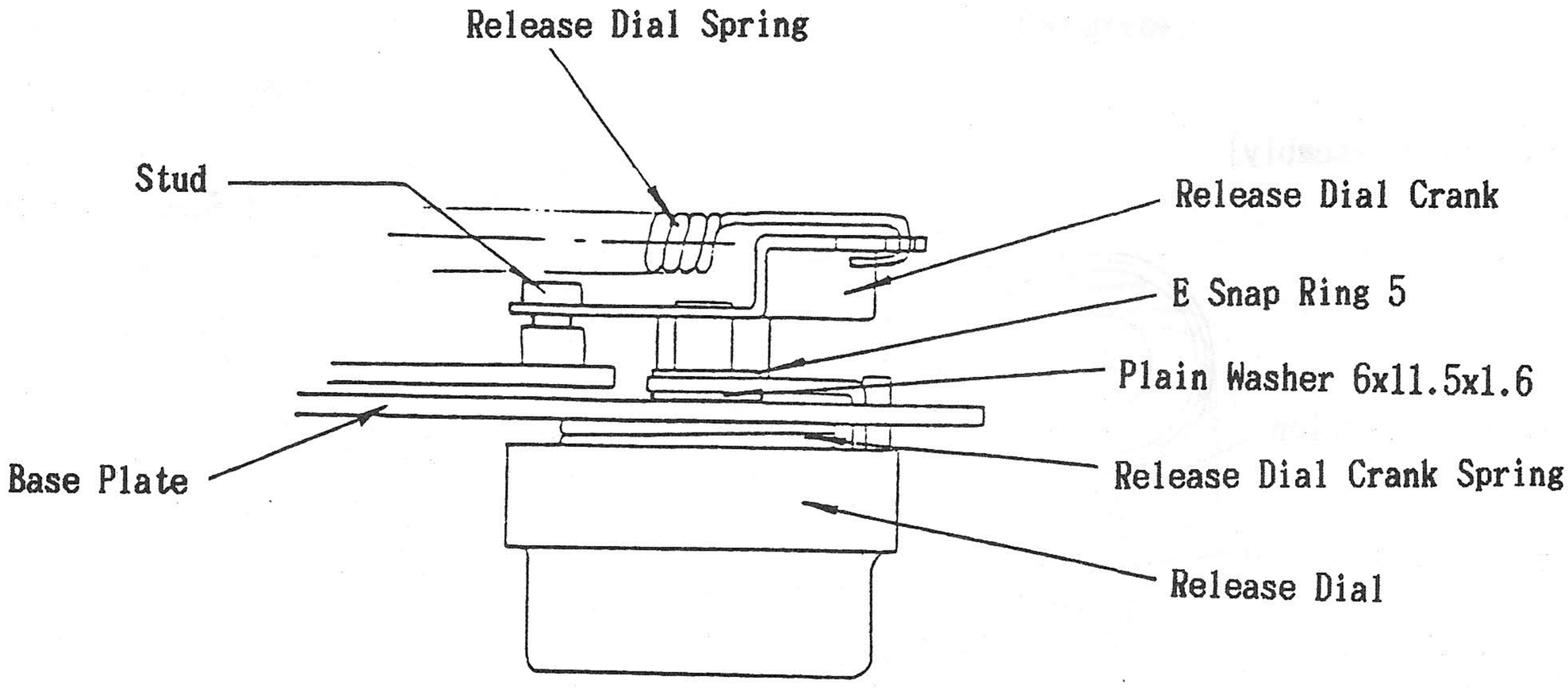
[Speed Reduction Gear A Assembly]

6. Unhook Release Dial Spring.

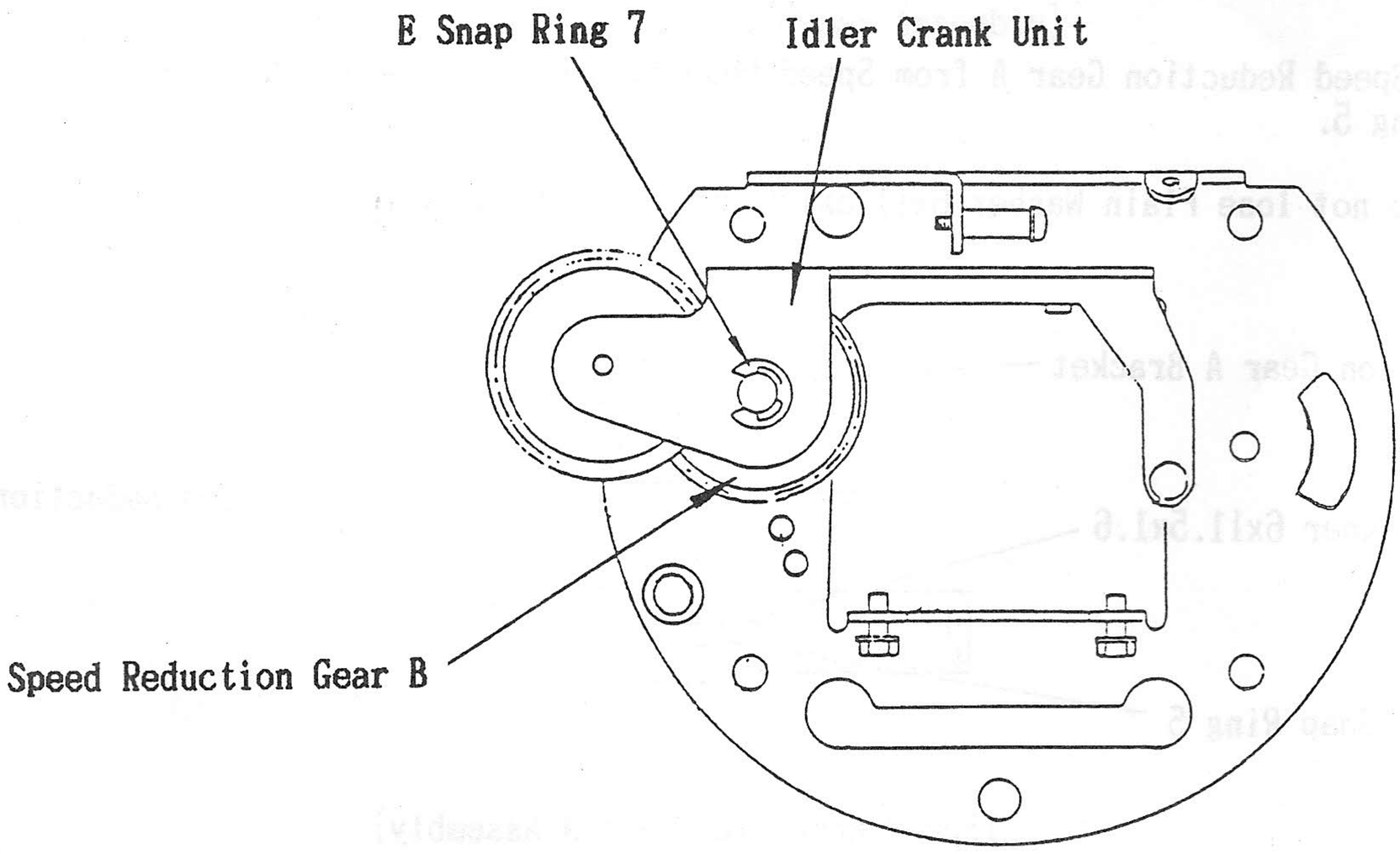
7. Remove E Snap Ring 5 retaining Release Dial, and pull it out downward.
   (Release Dial Crank Spring can be separated from Release Dial.)

8. Disengage Release Dial Crank from the stud on Idler Crank Unit.

   (Note) Do not lose Plain Washer 6x11.5x1.6 under Release Dial Crank.



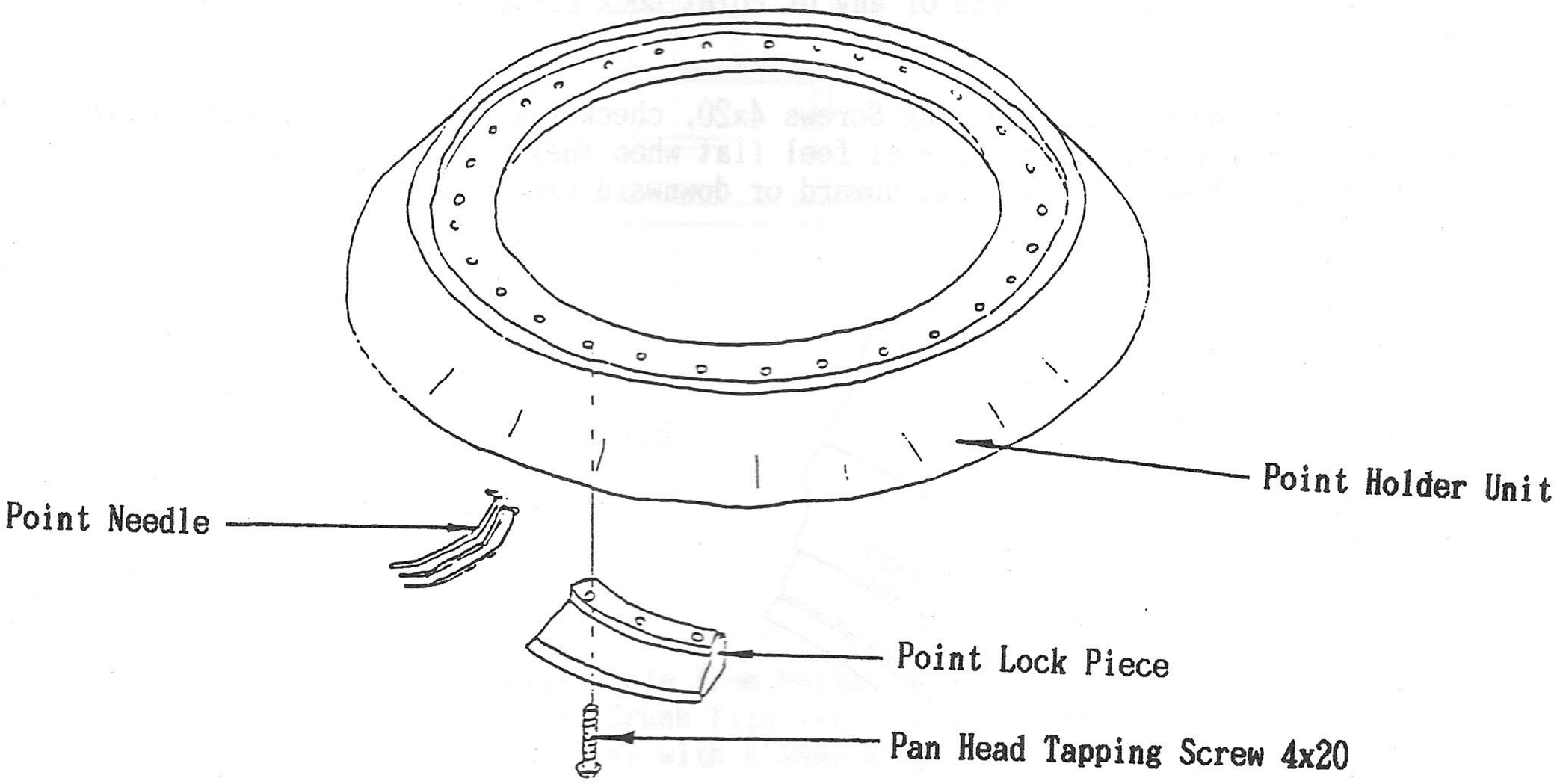
9. Remove E Snap Ring 7 retaining Idler Crank Unit, and pull it out upward;
   Speed Reduction Gear B will be free from Idler Crank Unit.



1-7 Disassembly of Dial Unit

1. Lift off Dial Unit.

2. Remove Point Lock Pieces by unscrewing thirty Pan Head Tapping Screws 4x20 (three on each Point Lock Piece); Point Needles will fall free.



[Dial Unit]

[2] REASSEMBLY AND ADJUSTMENTS OF MACHINE BODY

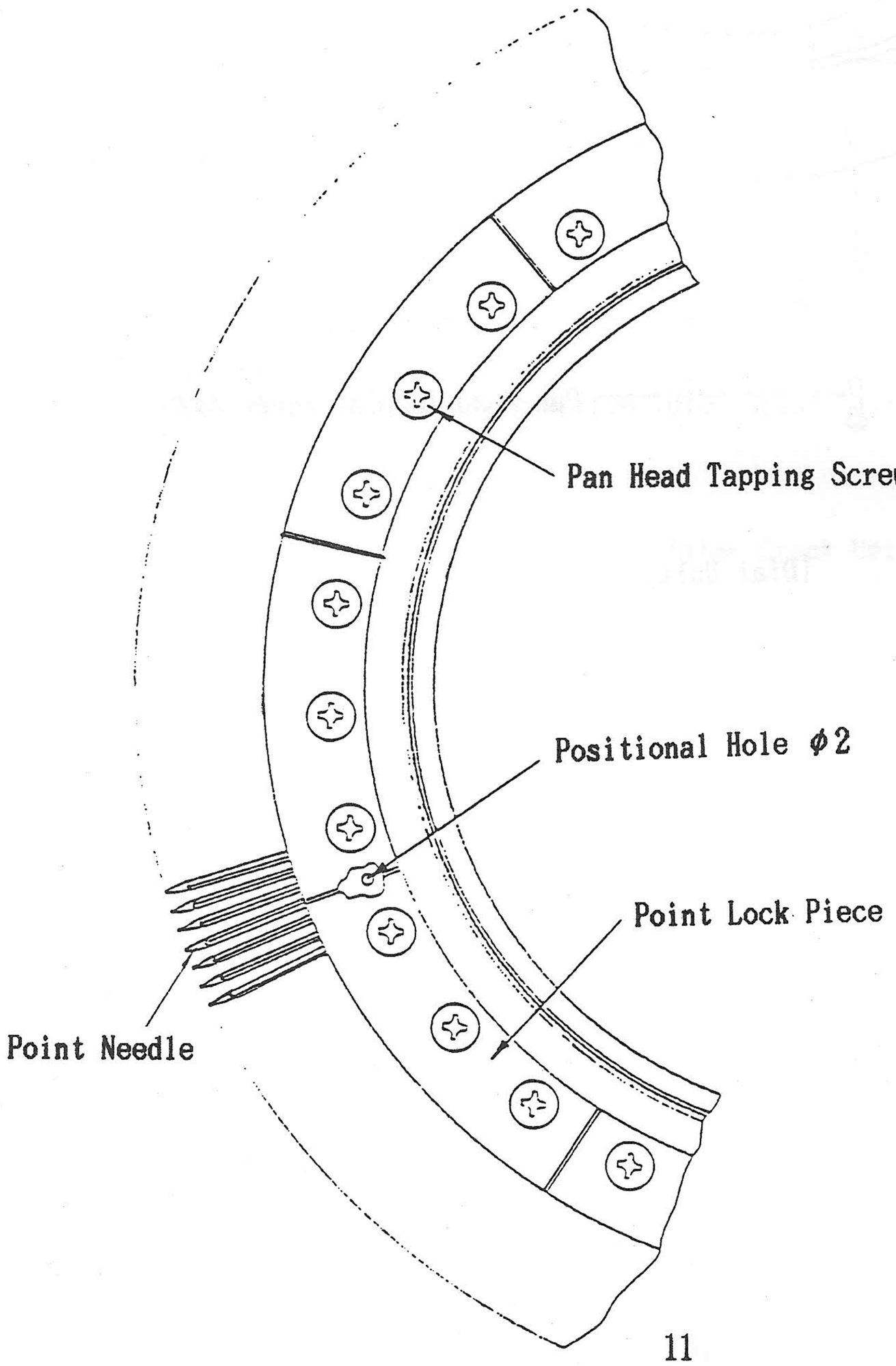
*UNLESS OTHERWISE SPECIFIED, REASSEMBLY IS ACCOMPLISHED BY REVERSING THE PRECEDING PROCEDURE OF DISASSEMBLY.

2-1 Reassembly of Dial Unit

*Take the following notice during reassembly of Dial Unit.

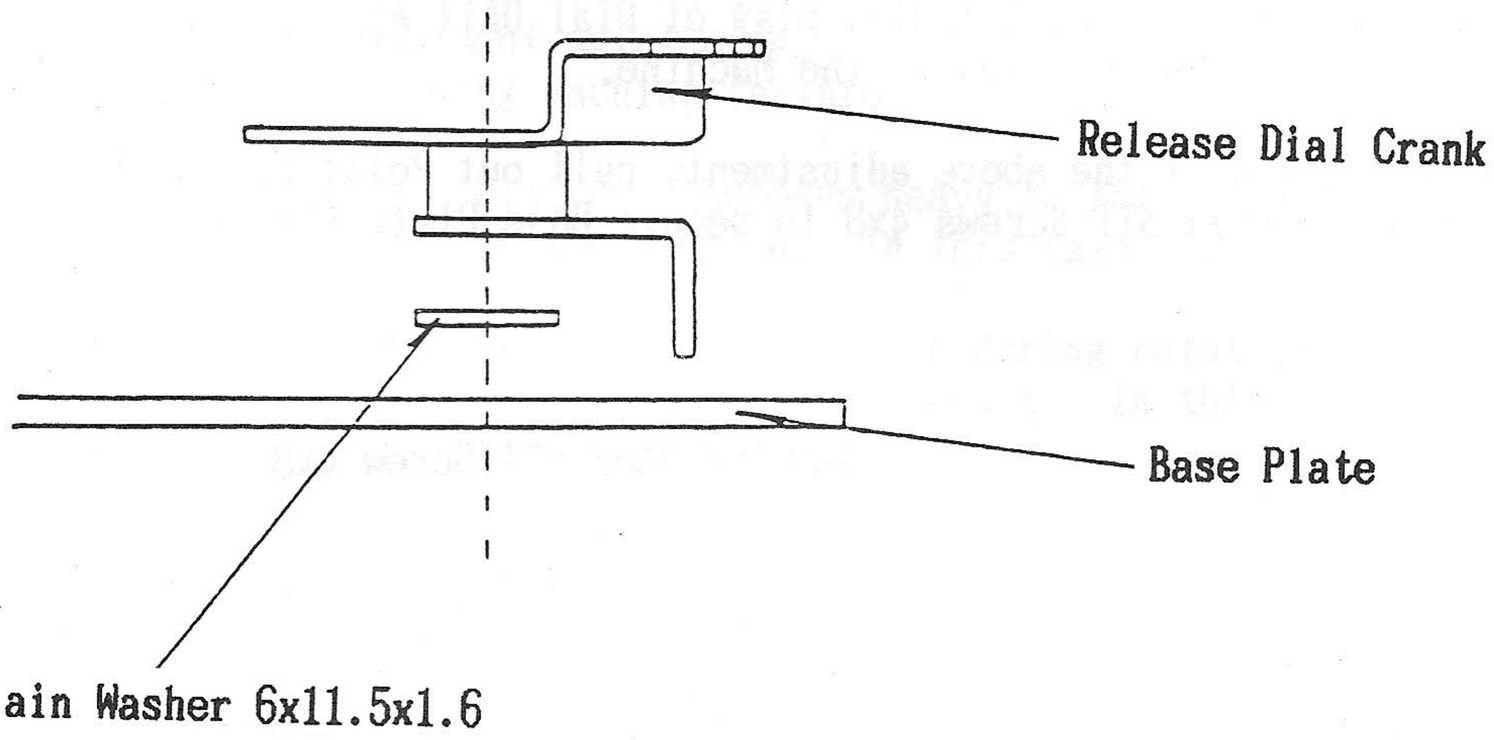
(A) Be sure to align the side face of any of Point Lock Pieces with the positional hole $\phi 2$ inside Dial Unit.

(B) After tightening Pan Head Tapping Screws 4x20, check all Point Needles for horizontal alignment by feeling them; you will feel flat when they are in good condition. Replace Point Needles found bent upward or downward excessively.

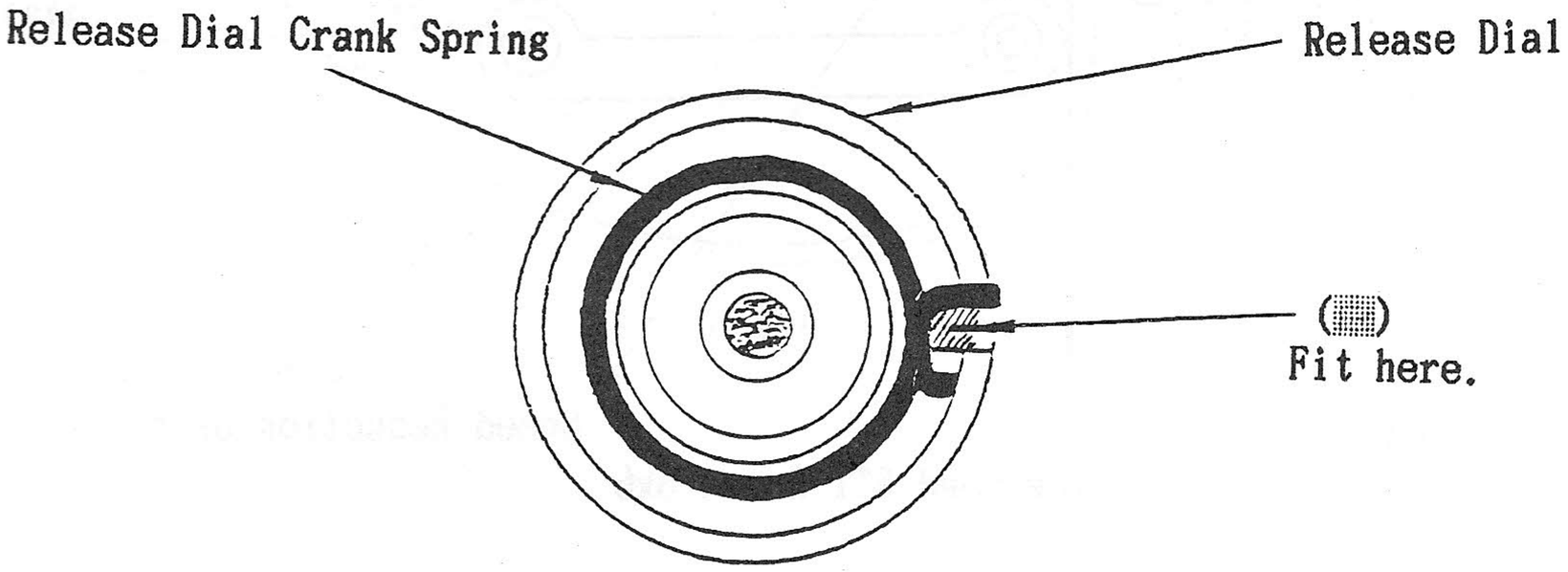


2-2 Reassembly and Adjustment of Base Plate Assembly

1. Reinstall Release Dial Crank on Base Plate with its U-shaped cut fitted onto the mating stud (on Idler Crank Unit). Be sure to place Plain Washer 6x11.5x1.6 between Release Dial Crank and Base Plate.



2. Install Release Dial into Base Plate from bottom, Release Dial Crank Spring attached, so that the tip of Release Dial Crank fits into the shaded area (▒) shown in the Figure below. Retain Release Dial with E Snap Ring 5.



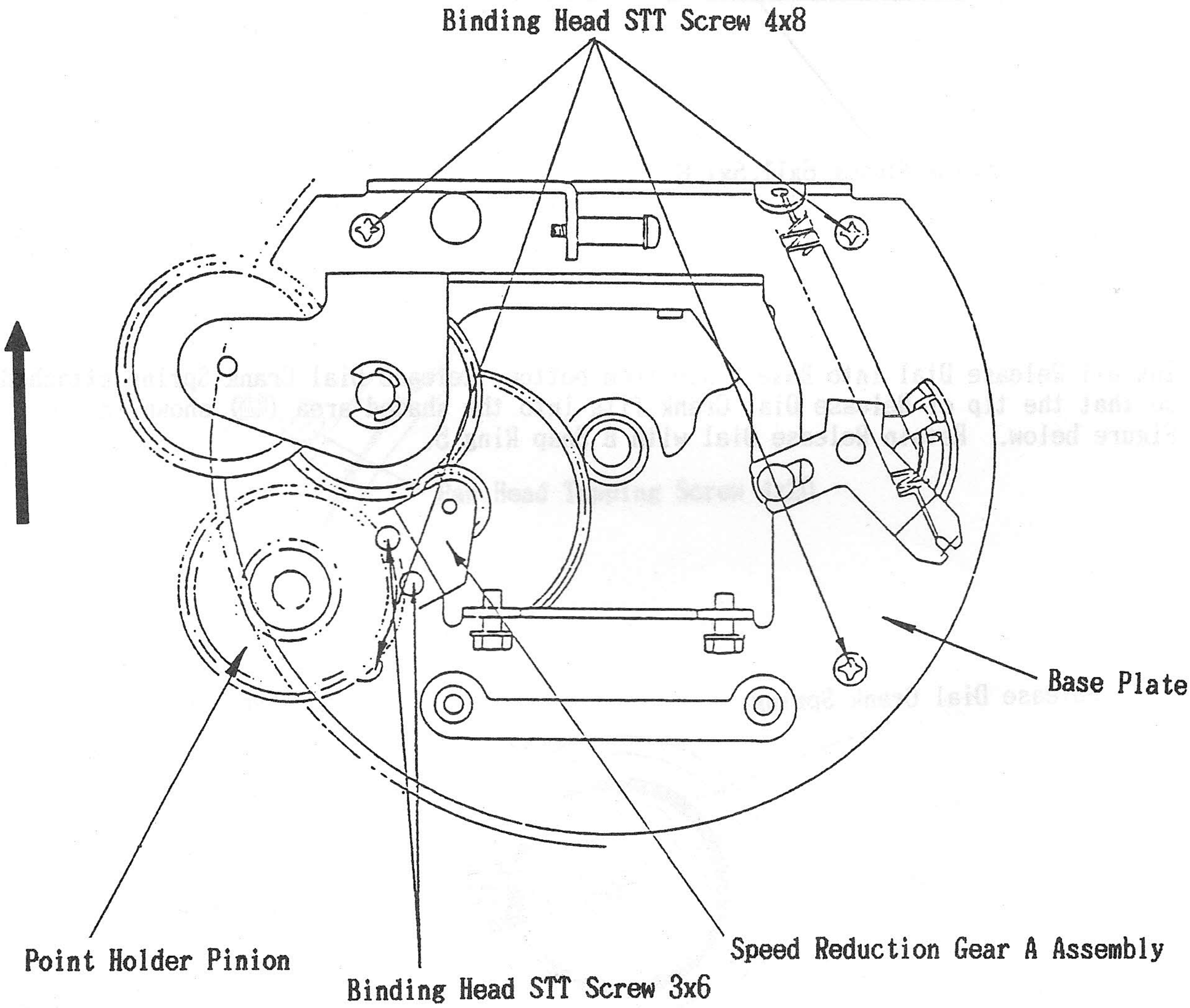
3. Temporarily secure Speed Reduction Gear A Assembly to Base Plate with two Binding Head Screws 3x6.

4. Temporarily install Base Plate Assembly with four Binding Head STT Screws 4x8.

5. Temporarily install Point Holder Pinion. (No need to retain it with E Snap Ring 7.) Check Dial Unit for smooth clockwise rotation under hand pressure against the center. If Dial Unit is heavy to rotate, slide Base Plate in the arrow direction to make a rotation smooth.

   (Note) Don't worry about radial play of Dial Unit as it does not affect the function of the Machine.

6. Upon completion of the above adjustment, pull out Point Holder Pinion and retighten four Binding Head STT Screws 4x8 to secure Base Plate firmly.



[Base Plate Assembly]

7. Eliminate axial play of Dial Unit by turning Cap Screw 4x8.

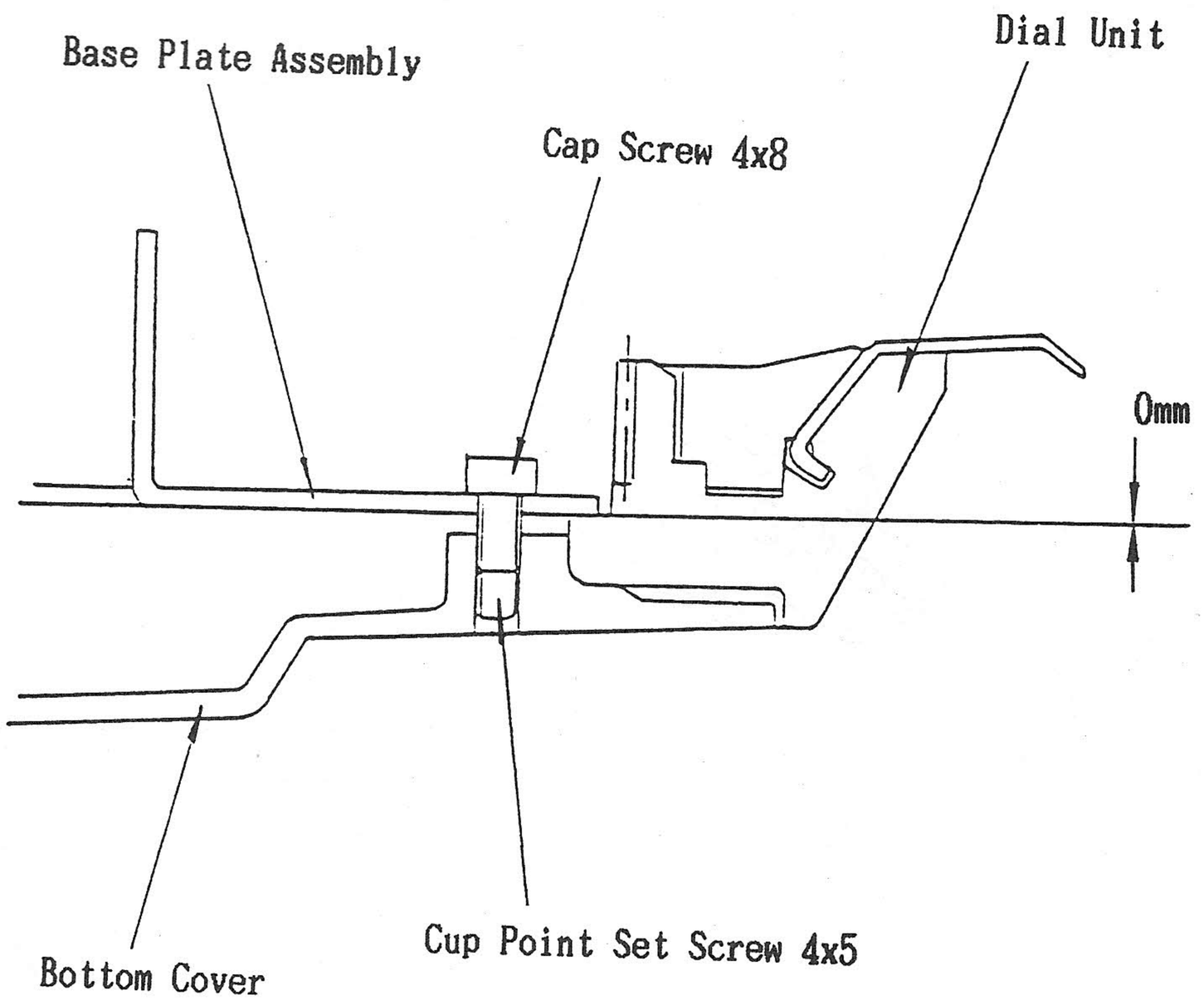
(Note) Before adjusting Cap Screw 4x8, loosen mating Cup Point Set Screw 4x5 threaded from opposite side. Do not fail to retighten this set screw after the adjustment.

[Check Method]

With Release Dial set to OFF, check that Dial Unit can be rotated clockwise smoothly by hand with a little friction, but whithout axial play. Overtightening or undertightening of Cap Screw 4x8 may cause the following machine failures:

*If the Cap Screw is overtightened: Dial Unit becomes heavy to rotate and may get stuck in the Machine. In this case, loosen Cap Screw 4x8.

*If the Cap Screw is undertightened: Dial Unit may flutter during rotation and the damage to the fabrics may result. In this case, tighten Cap Screw 4x8.



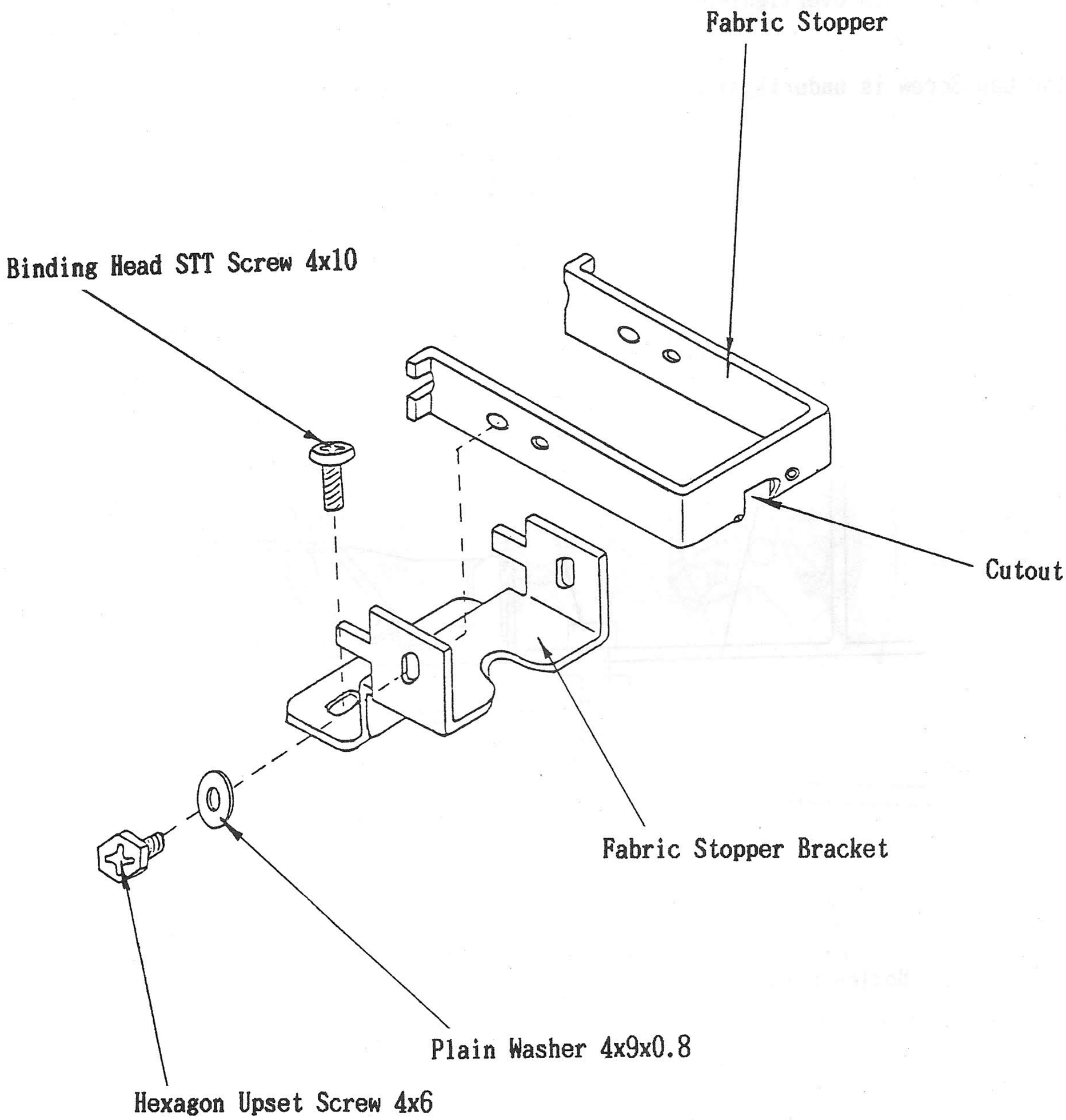
2-3 Reassembly of Fabric Stopper Assembly

*Take the following notice during reassembly of Fabric Stopper Assembly.

(A) Be sure to install Fabric Stopper to Fabric Stopper Bracket with its cutout downward as shown below.

(B) Temporarily secure Fabric Stopper Bracket with two Binding Head STT Screws 4x10.

(C) Temporarily secure Fabric Stopper to its uppermost position away from Point Needles.



[Fabric Stopper Assembly]

2-4 Reassembly and Adjustment of Main Shaft Assembly

*If not previously accomplished, loosen two Binding Head STT Screws 3x6 on Speed Reduction Gear A Bracket.

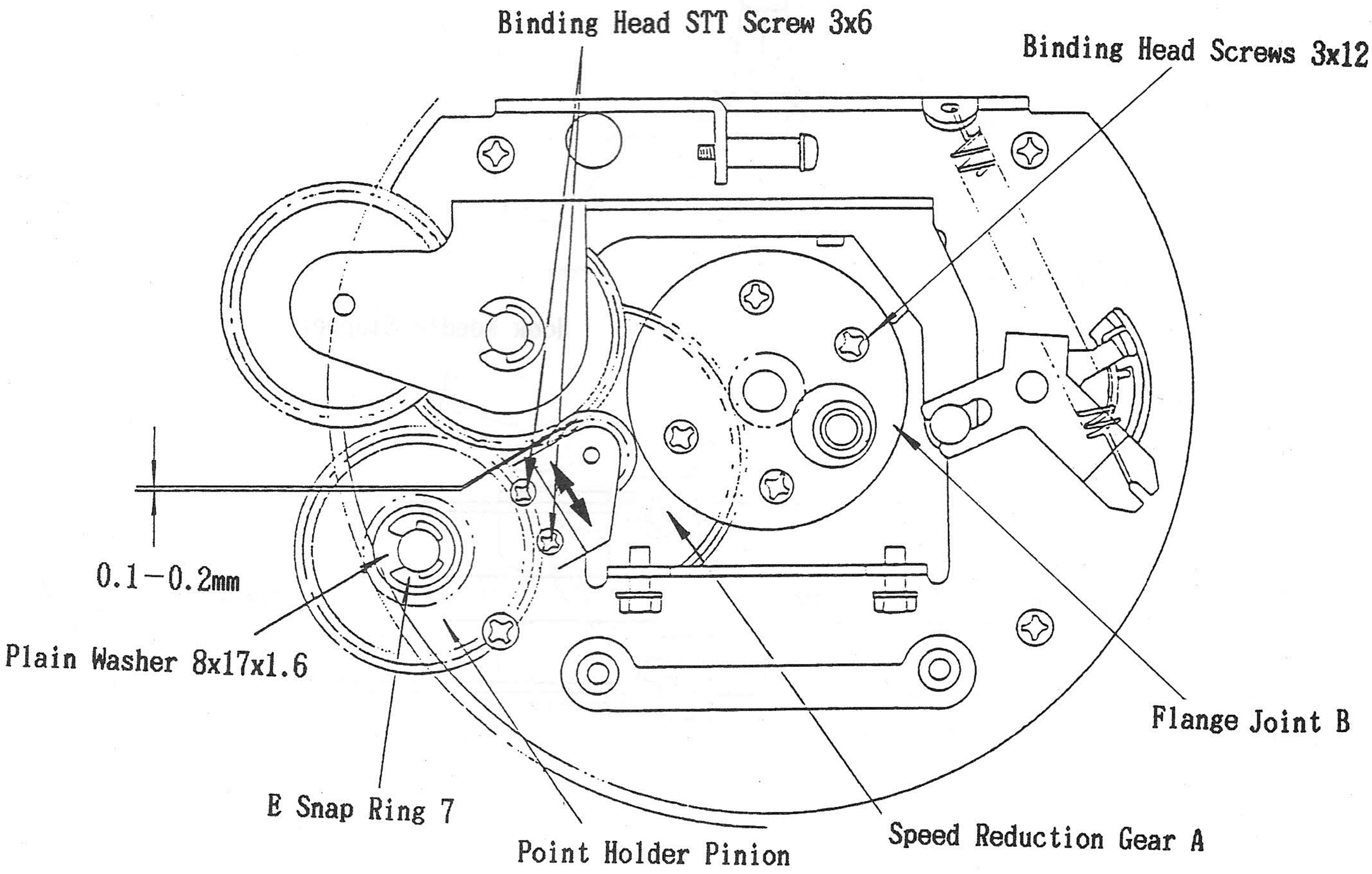
*Take the following notice during reassembly of Main Shaft Assembly.

(A) Check Link Ball φ6 for free movement in the Flange Joints A and B assembled on Main Shaft. If no free movement, loosen four Binding Head Screws 3x12, turn Flange Joint B in either direction to get a better result, and retighten those four screws.

(B) Be sure to restore Plain Washer 8x16x1 when reinstalling Main Shaft Assembly into the Machine.

(C) Obtain 0.1 to 0.2mm backlash between Speed Reduction Gears A and B by sliding Speed Reduction Gear A Bracket back or forward, then retighten two Binding Head STT Screws 3x6 to secure the bracket firmly. Main Shaft Assembly must be rotated smoothly with your hand if proper backlash is obtained.

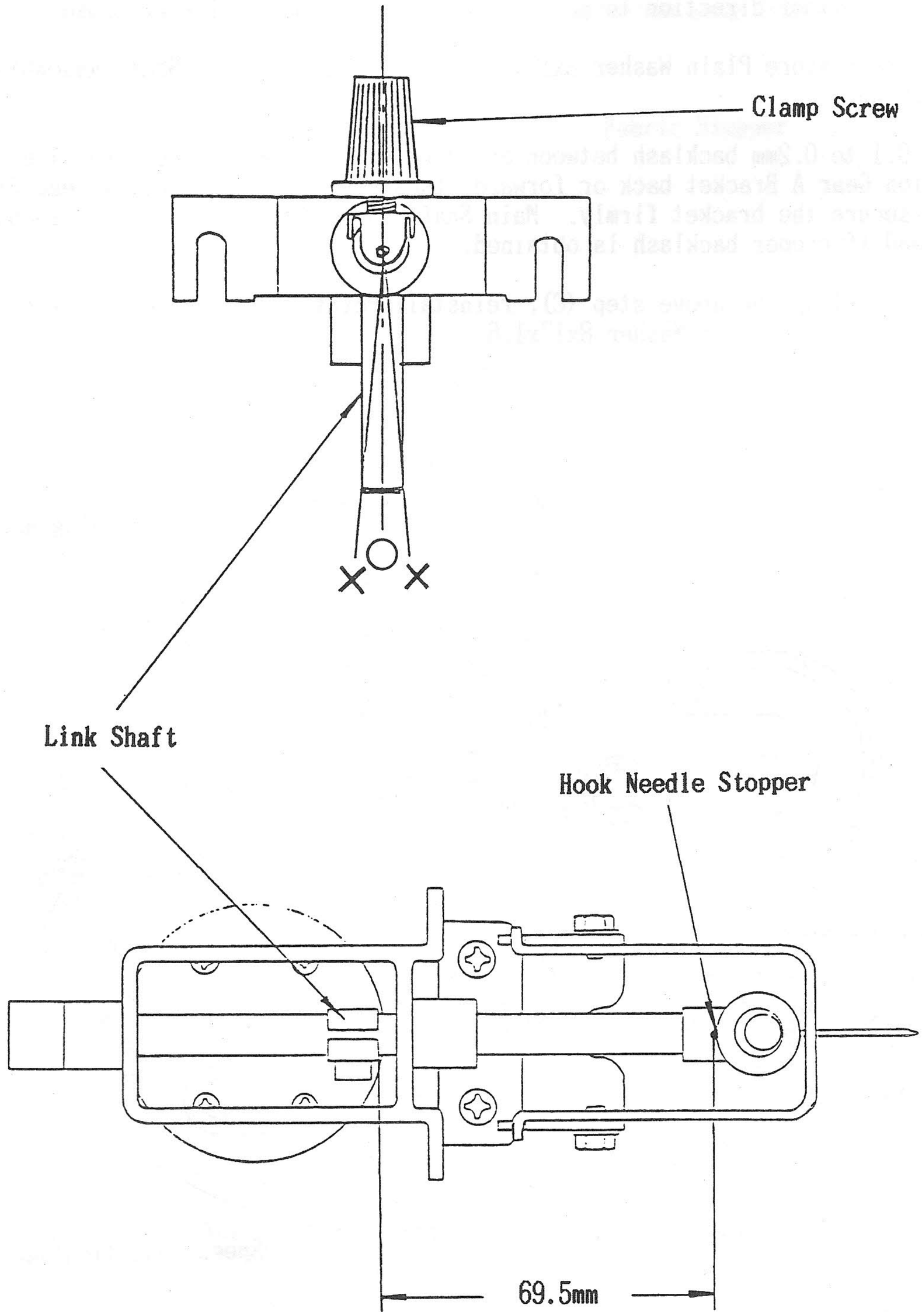
(D) After completing the above step (C), reinstall Point Holder Pinion to Base Plate with E Snap Ring 7 and Plain Washer 8x17x1.6.



2-5 Reassembly and Adjustment of Hook Needle Holder Assembly

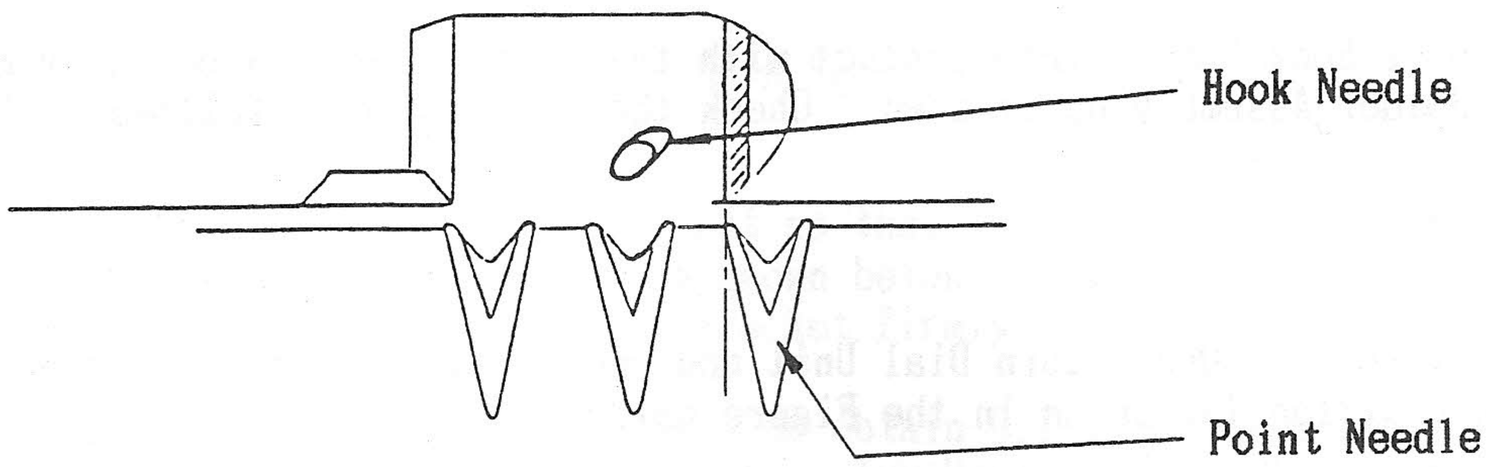
*Take the following notice during reassembly of Hook Needle Holder Assembly.

(A) Align the axis of Link Shaft with that of Clamp Screw, and at the same time leave 69.5mm distance between Link Shaft and Hook Needle Stopper as shown below.



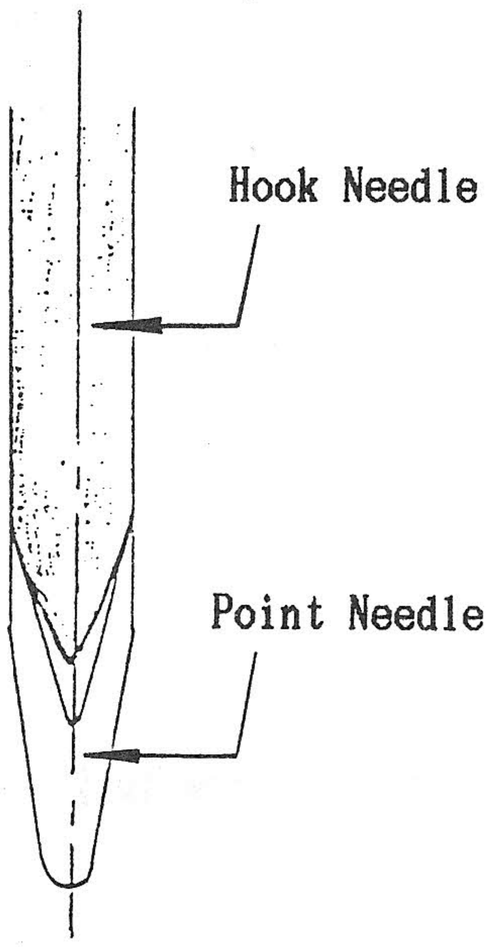
2-6 Timing Adjustment of Hook Needle

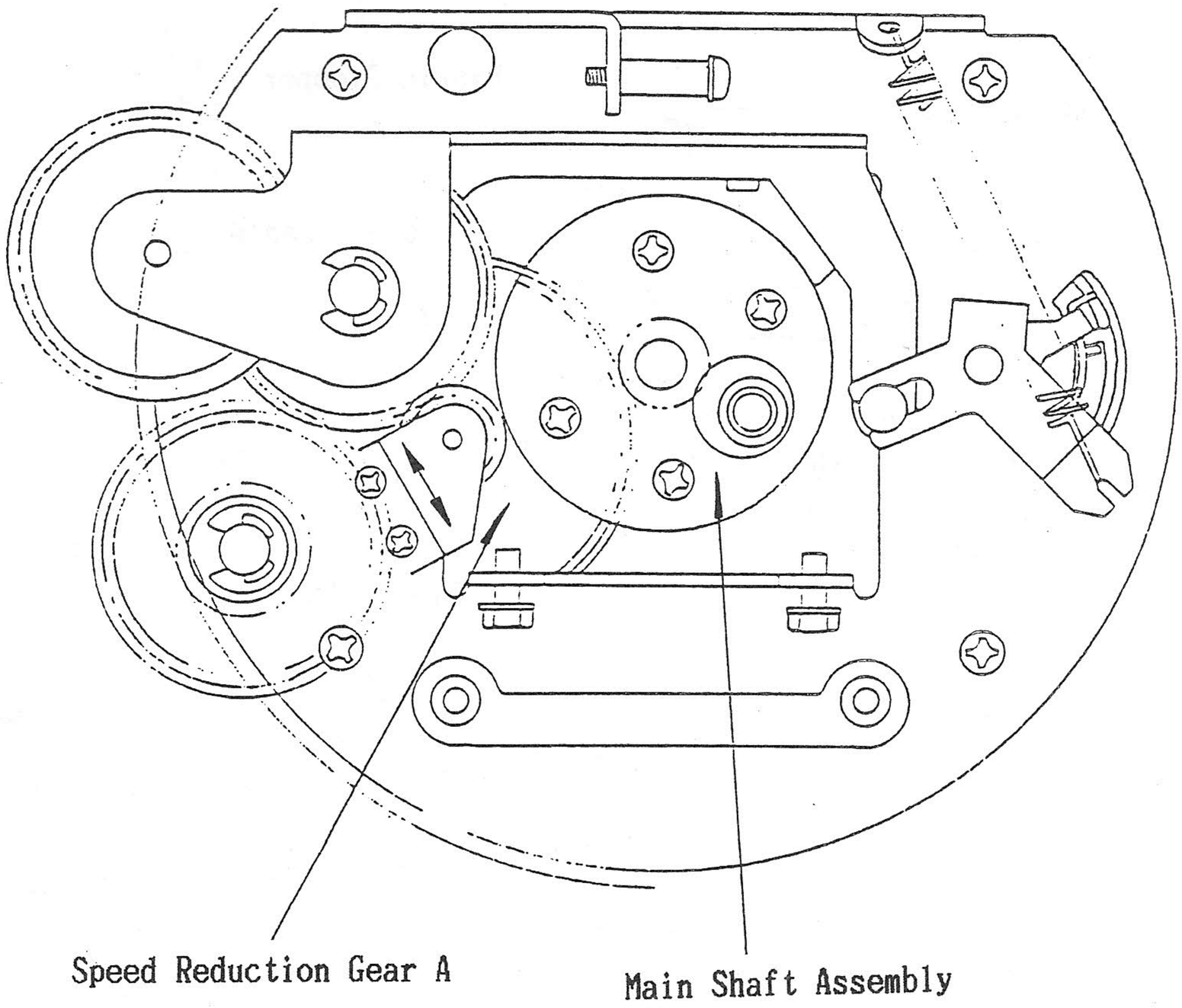
1. Temporarily install Hook Needle Holder Assembly so that Hook Needle does not contact Point Needle.



2. With Release Dial set to "SET", turn Main Shaft Assembly clockwise and check that the axis of Hook Needle is aligned with that of Point Needle as shown below. If they are out of alignment, adjust the engagement between Main Shaft Assembly and Speed Reduction Gear A as follows:

*If Hook Needle is displaced to left-hand side:	Remove Hook Needle Holder Assembly, then lift up and shift Main Shaft Assembly counterclockwise step by step.
*If Hook Needle is displaced to right-hand side:	Remove Hook Needle Holder Assembly, then lift up and shift Main Shaft Assembly clockwise step by step.





2-7 Up-down Adjustment of Hook Needle

*If not previously accomplished, loosen two Hexagon Upset Screws 4x12 on Hook Needle Holder Guide.

1. Bring the tip of Hook Needle into contact with the root of Point Needles by moving Hook Needle Holder Assembly up or down. Check the adjustment as follows:

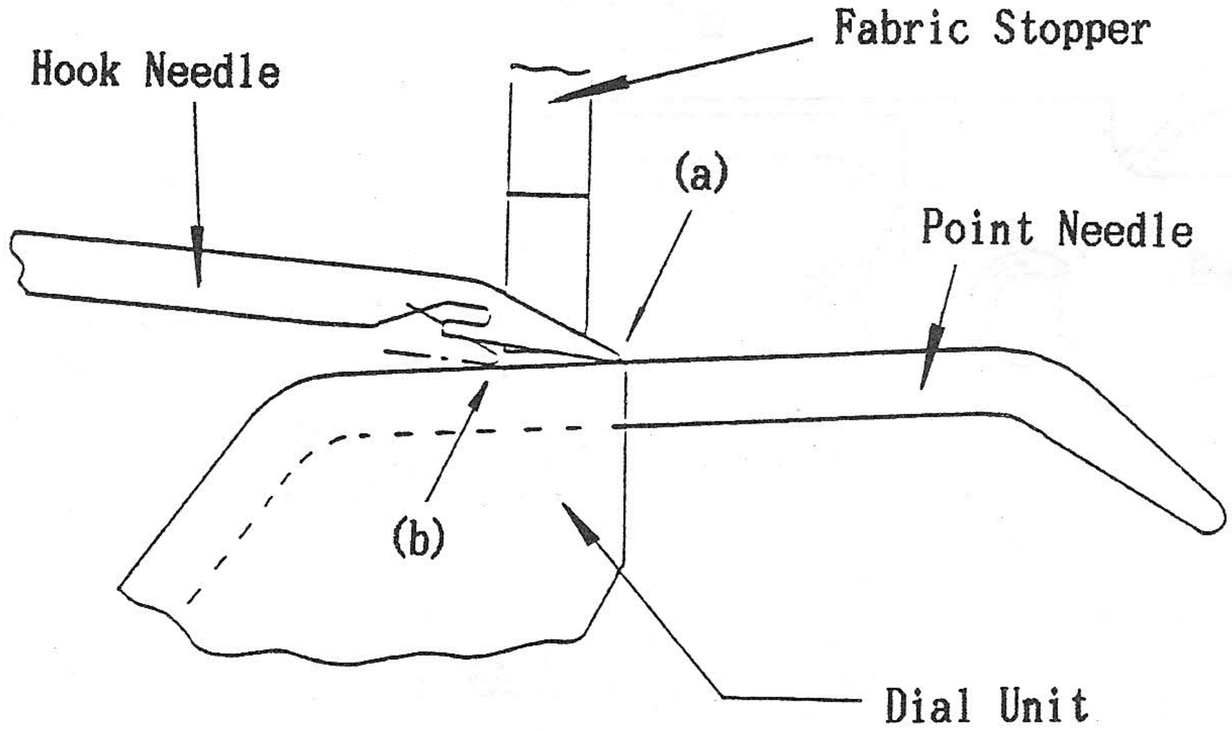
[Check Method]

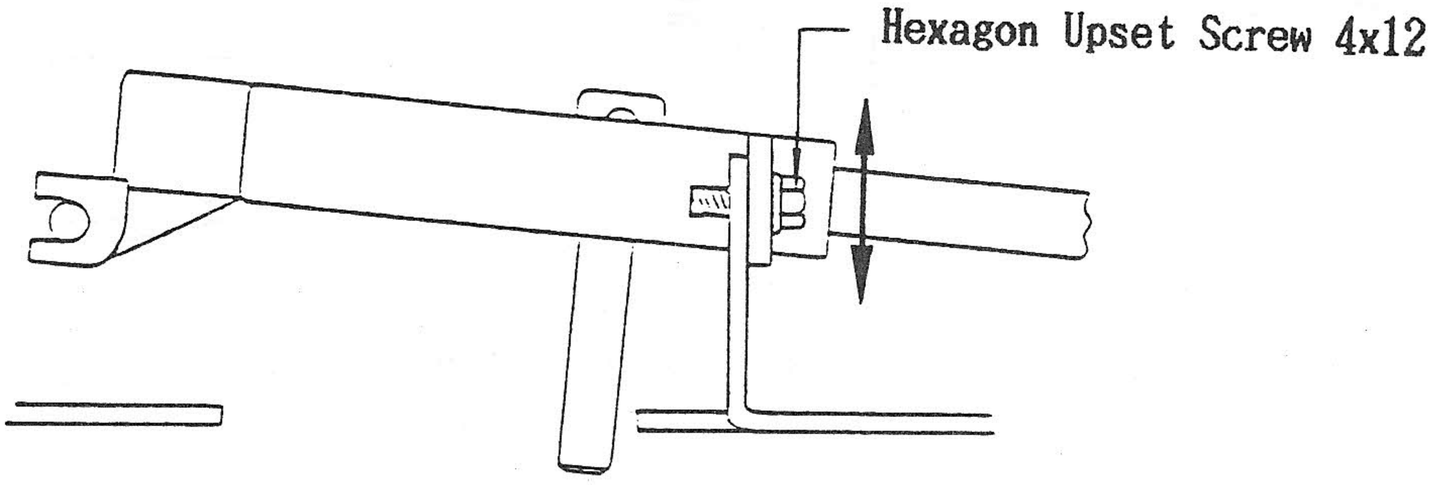
With Release Dial set to "OFF", turn Dial Unit and check that a little friction noise is heard at the position (a) shown in the Figure below.

*If no friction noise is heard: Hook Needle tends to be caught in the fabrics hung on the dial and the damage to the fabrics may result during linking work. In this case, slightly move Hook Needle Holder toward Dial Unit to get proper amount of contact.

*If friction noise is heard at the position (b): The rotation of Hand Wheel tends to become heavy and both Hook Needle and Point Needles may be easy to wear out as they are in excessive contact with each other. In this case, slightly move Hook Needle Holder away from Dial Unit to get less amount of contact.

2. Retighten the upset screws 4x12 to secure Hook Needle Holder Assembly firmly.





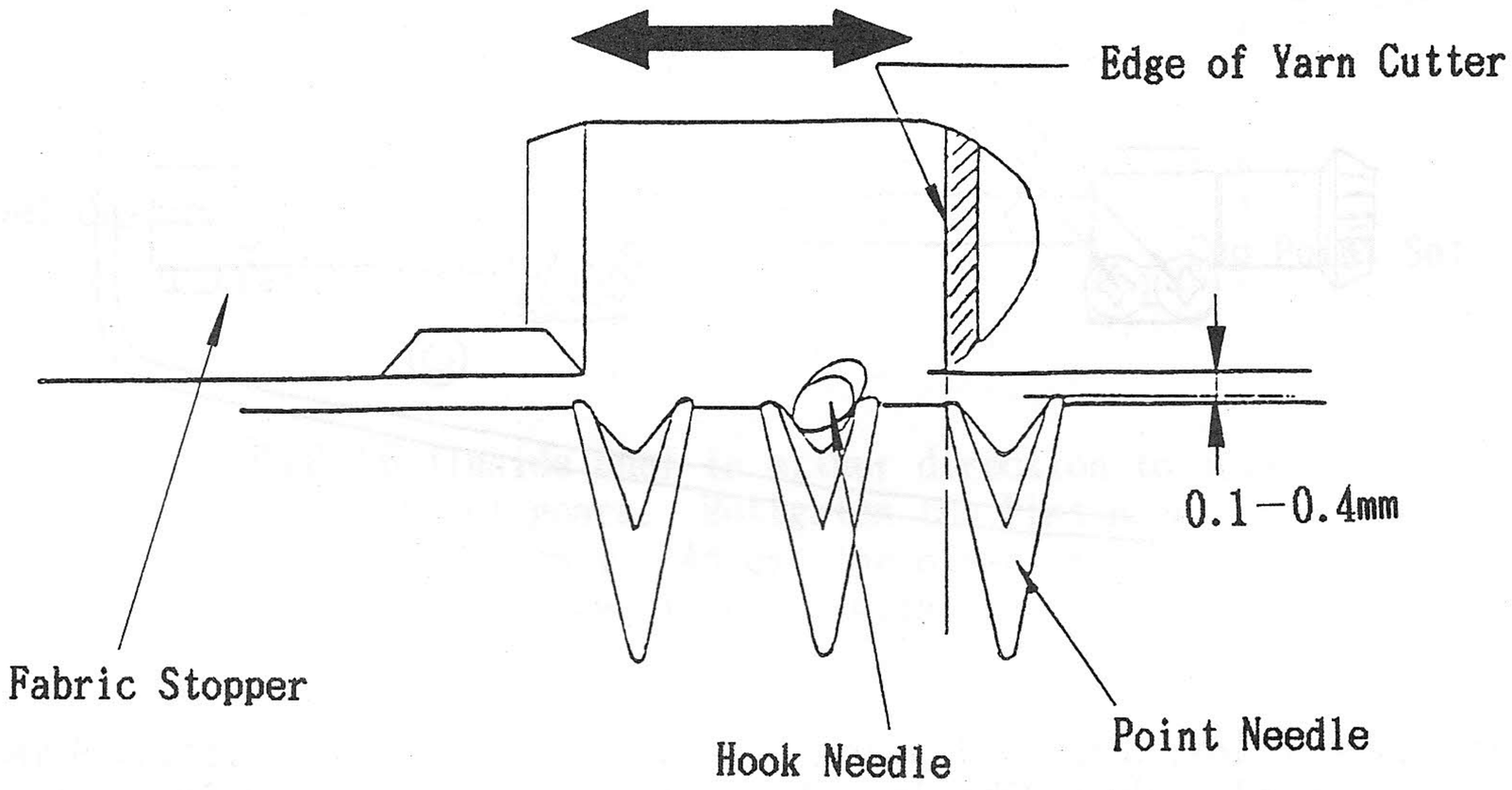
2-8 Adjustment of Fabric Stopper Assembly

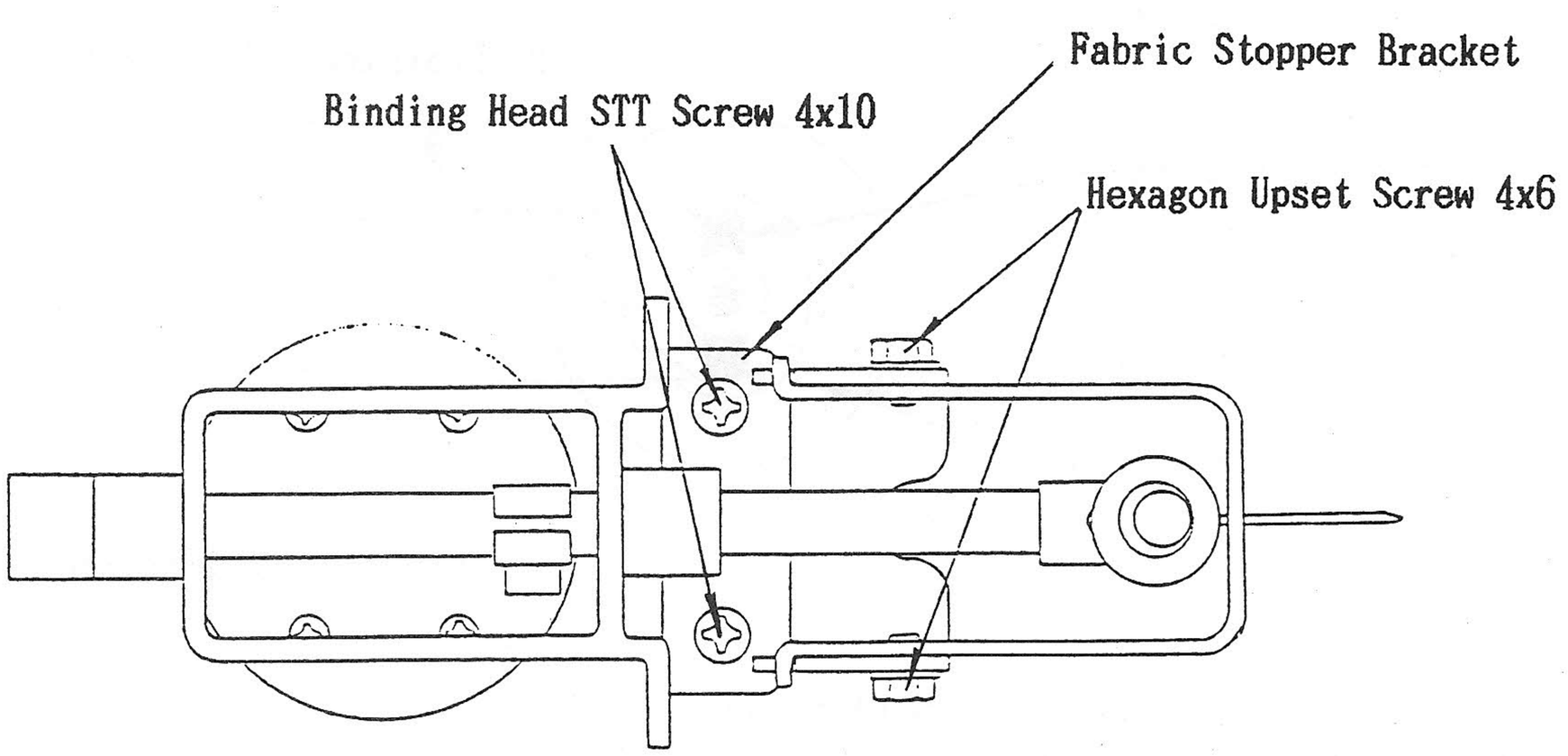
*If not previously accomplished, loosen two Binding Head STT Screws 4x10 and two Hexagon Upset Screws 4x6 on Fabric Stopper Bracket.

1. With Release Dial set to "SET", turn Main Shaft Assembly clockwise until Hook Needle comes to its furthermost position.

2. Move Fabric Stopper to the right or left so that the edge of yarn cutter is aligned with the side face of Point Needle as shown below. Retighten two Binding Head STT Screws 4x10 to secure Fabric Stopper Bracket firmly.

3. Move Fabric Stopper Assembly up or down to obtain 0.1 to 0.4mm clearance between Fabric Stopper and Point Needle. Retighten two Hexagon Upset Screws 4x6 to secure Fabric Stopper firmly.



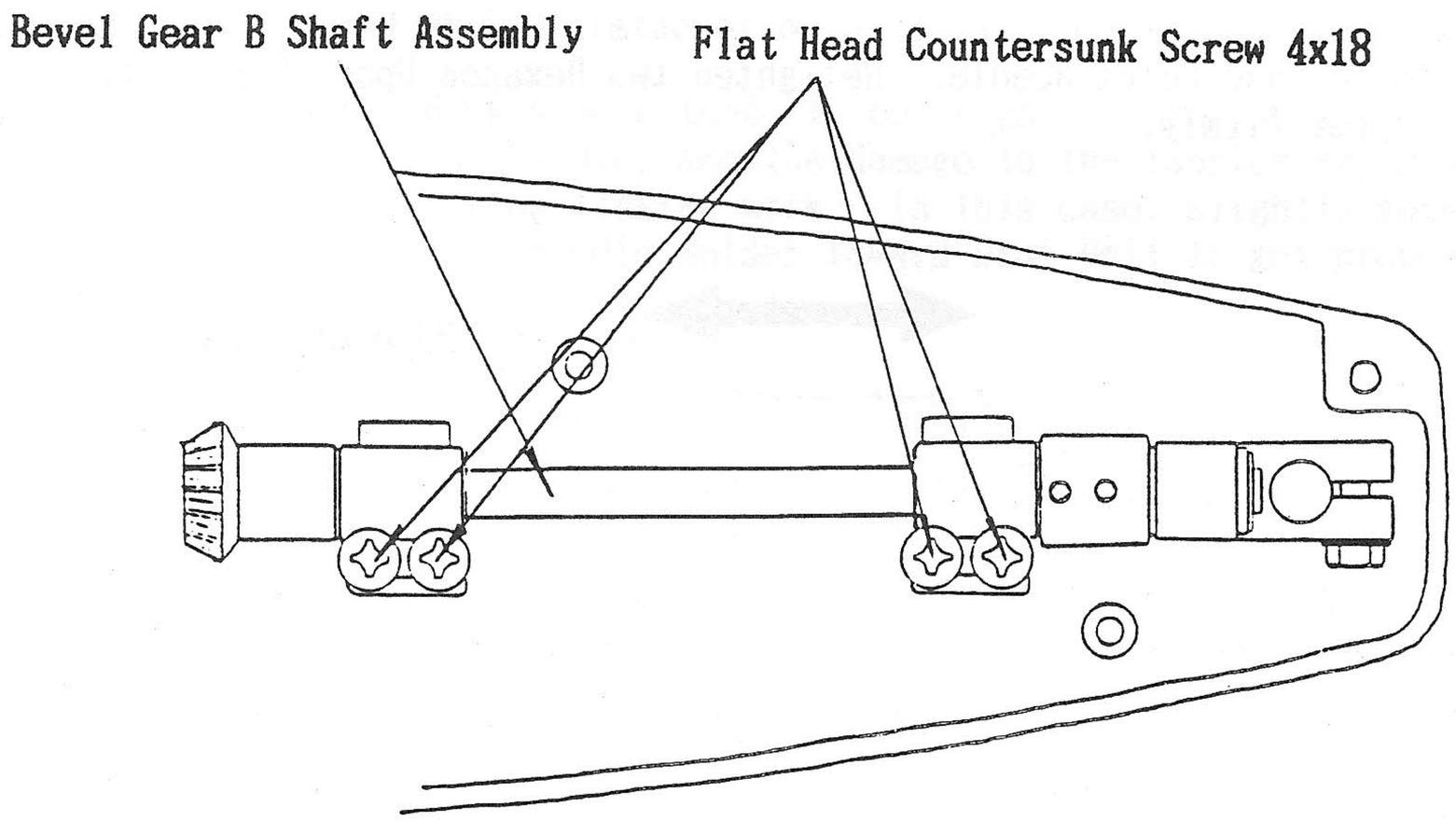


2-9 Reinstallation and Adjustment of Bevel Gear A

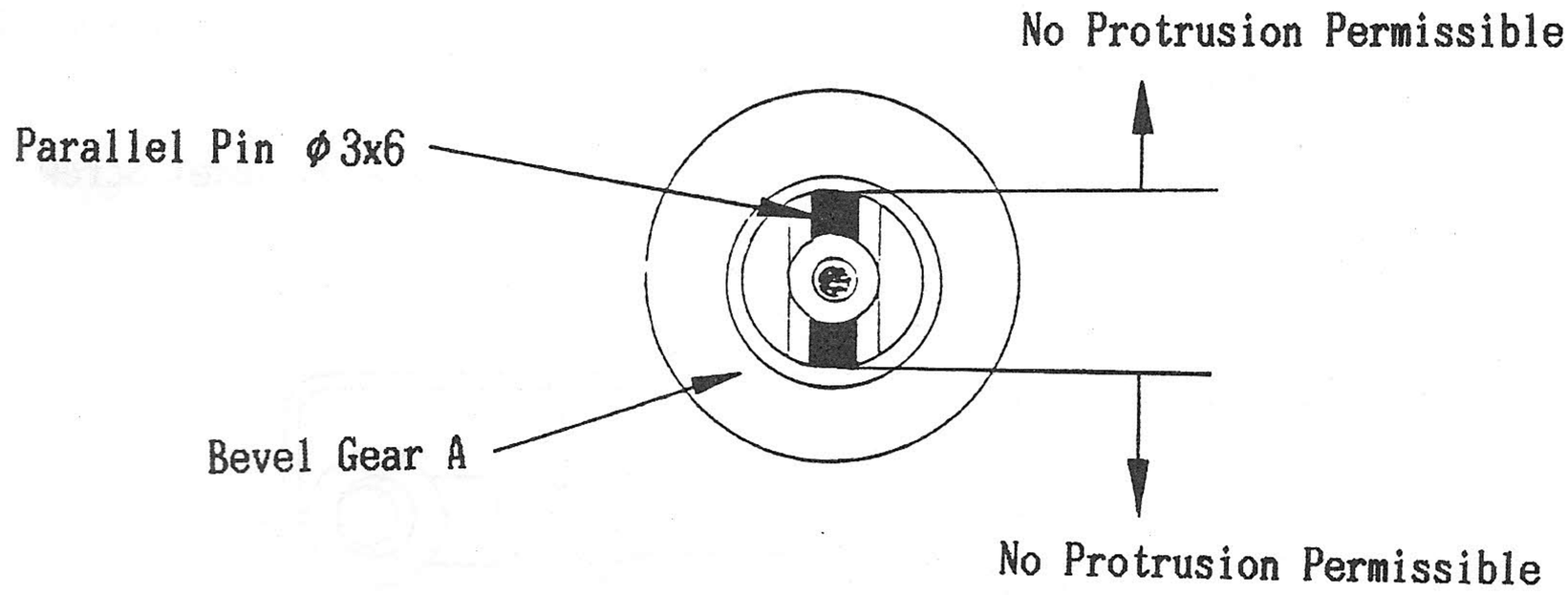
1. Turn over the upper half of the Machine to the top side.

2. Remove Top Cover temporarily installed.

3. Remove four Flat Head Countersunk Screws 4x18 to release Bevel Gear B Shaft Assembly, and put the assembly aside.

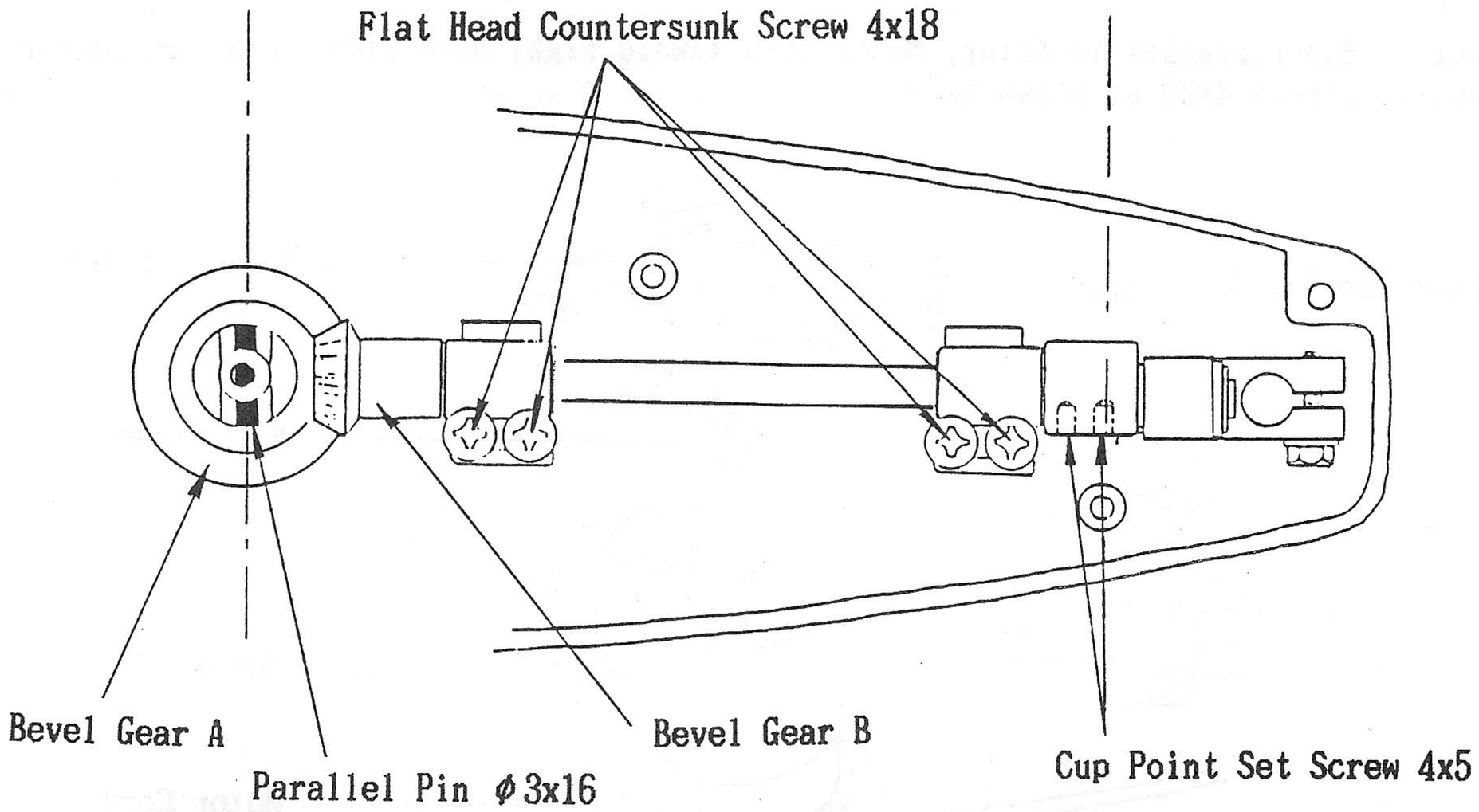


4. Insert Plain Washer 8x16x1 and Bevel Gear A onto Main Shaft. While lifting Main Shaft upward, fit flush Parallel Pin ϕ3x6 into Bevel Gear A through the shaft. Each end of the parallel pin must not protrude beyond Bevel Gear A.



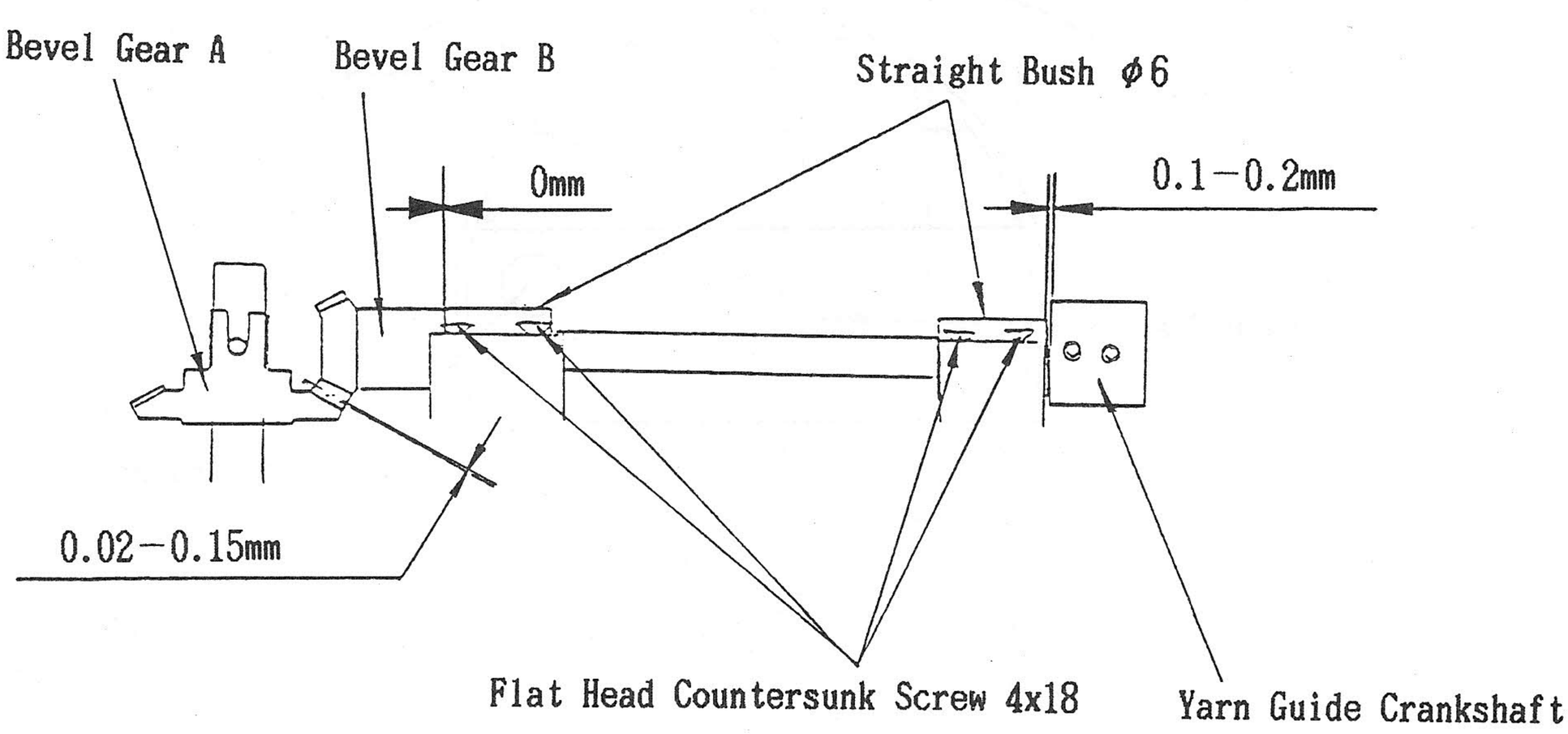
5. Put Bevel Gear B Shaft Assembly back into position.

6. Temporarily install Bevel Gear B Shaft Assembly with four Flat Head Countersunk Screws 4x18 so that Parallel Pin ϕ3x16 and Cup Point Set Screws 4x5 are parallel to each other as shown below.



7. Slide Straight Bush ϕ6 (inside one) in either direction to obtain 0.02 to 0.15mm backlash between both bevel gears. Retighten two Flat Head Countersunk Screws 4x18 to secure the inside bush firmly. Adjust the other Straight Bush ϕ6 (outside one) in the same way for 0.1 to 0.2mm clearance with Yarn Guide Crankshaft. Retighten remaining two Flat Head Countersunk Screws 4x18 to secure the outside bush firmly.

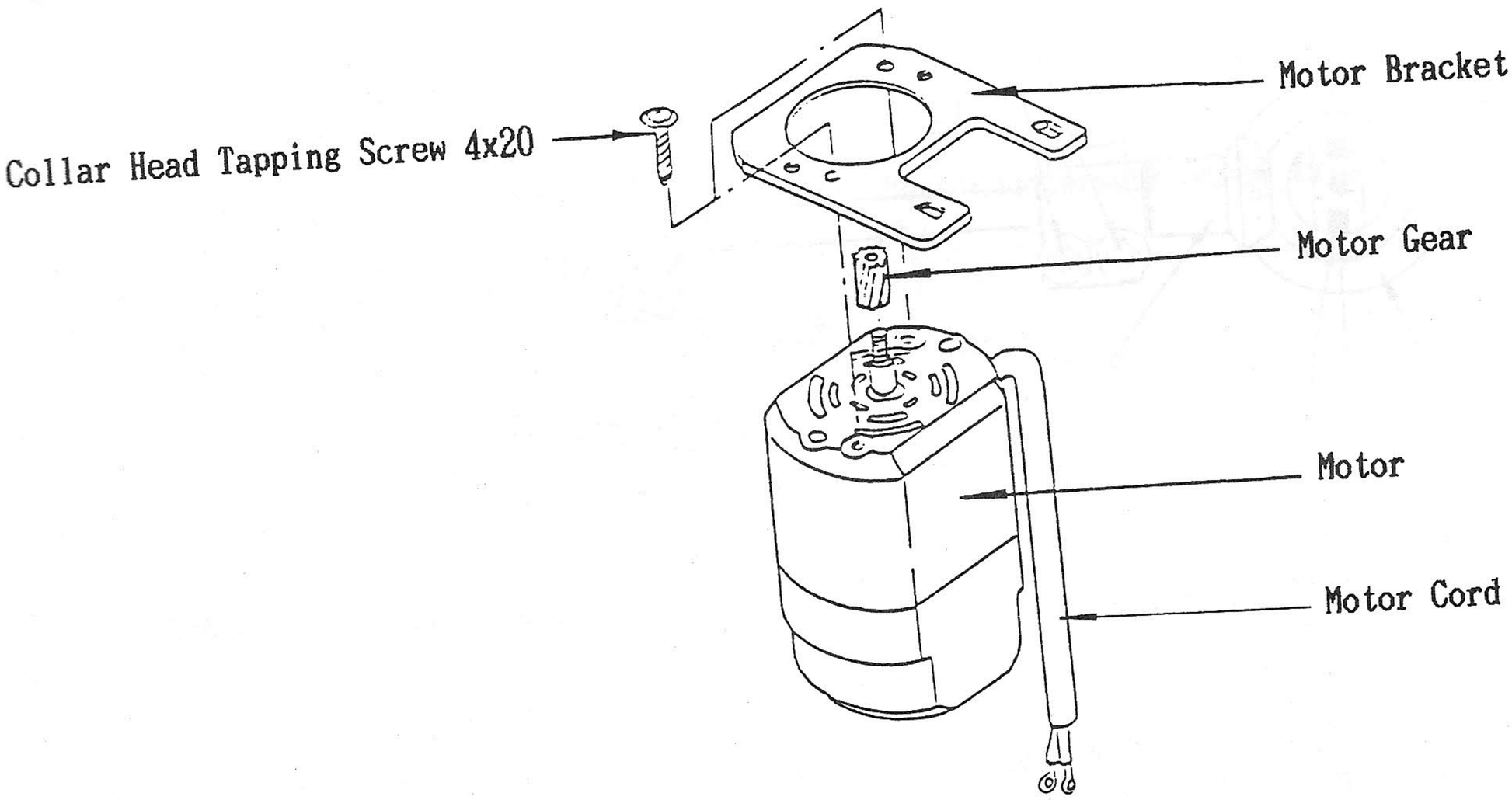
(Note) Evenly tighten those four screws 4x18 securing the bushes; otherwise, improper rotary motion of Bevel Gear B Shaft may result.



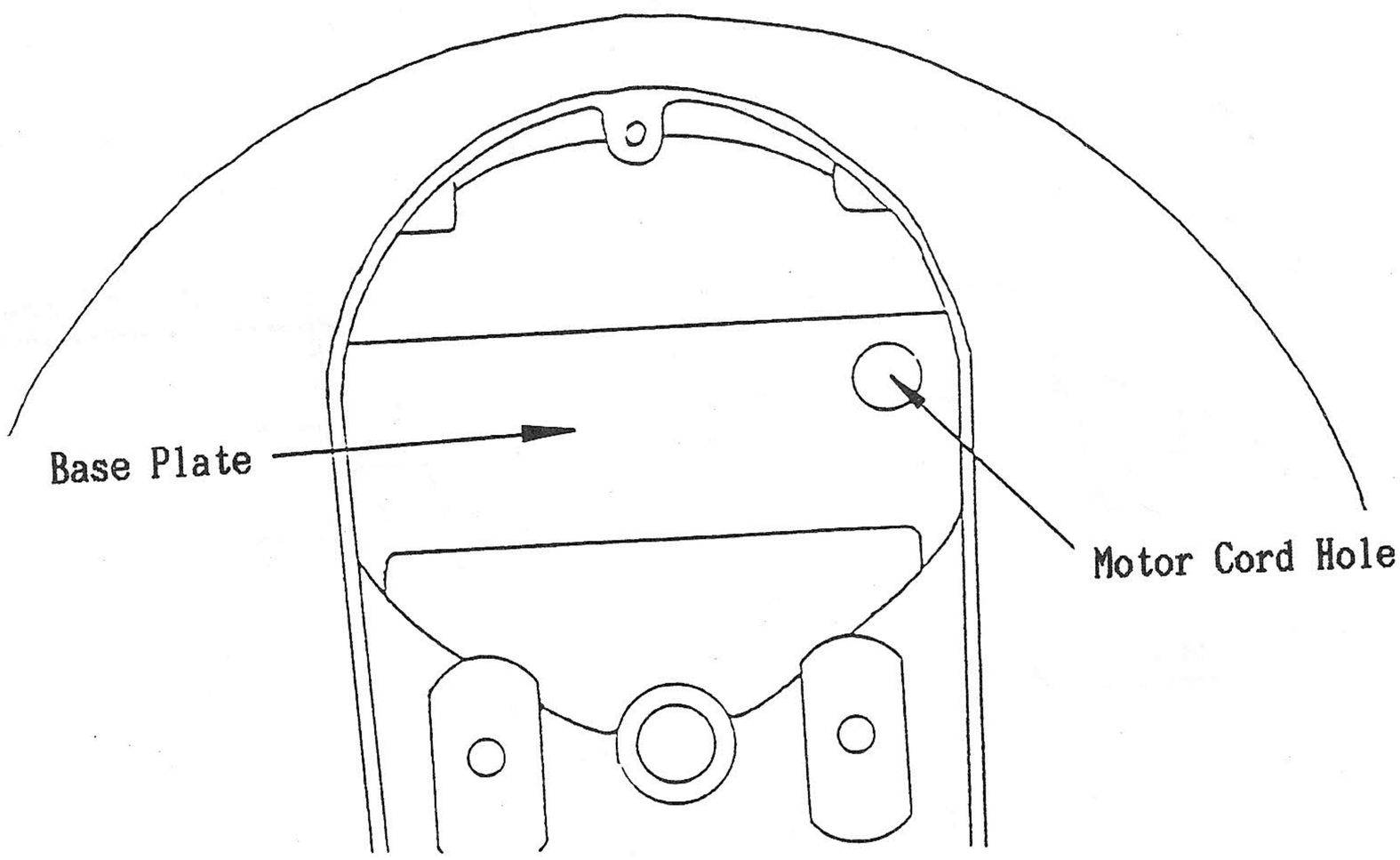
2-10 Reassembly and Adjustment of Motor Assembly

1. Apply thread lock cement to Motor Shaft to prevent loosening, and reinstall Motor Gear by turning it counterclockwise. (Notice that Motor Gear is of left-hand threads.)

2. Install Motor Bracket to Motor, Motor Cord toward right-hand side, with two Collar Head Tapping Screws 4x20 as shown below.



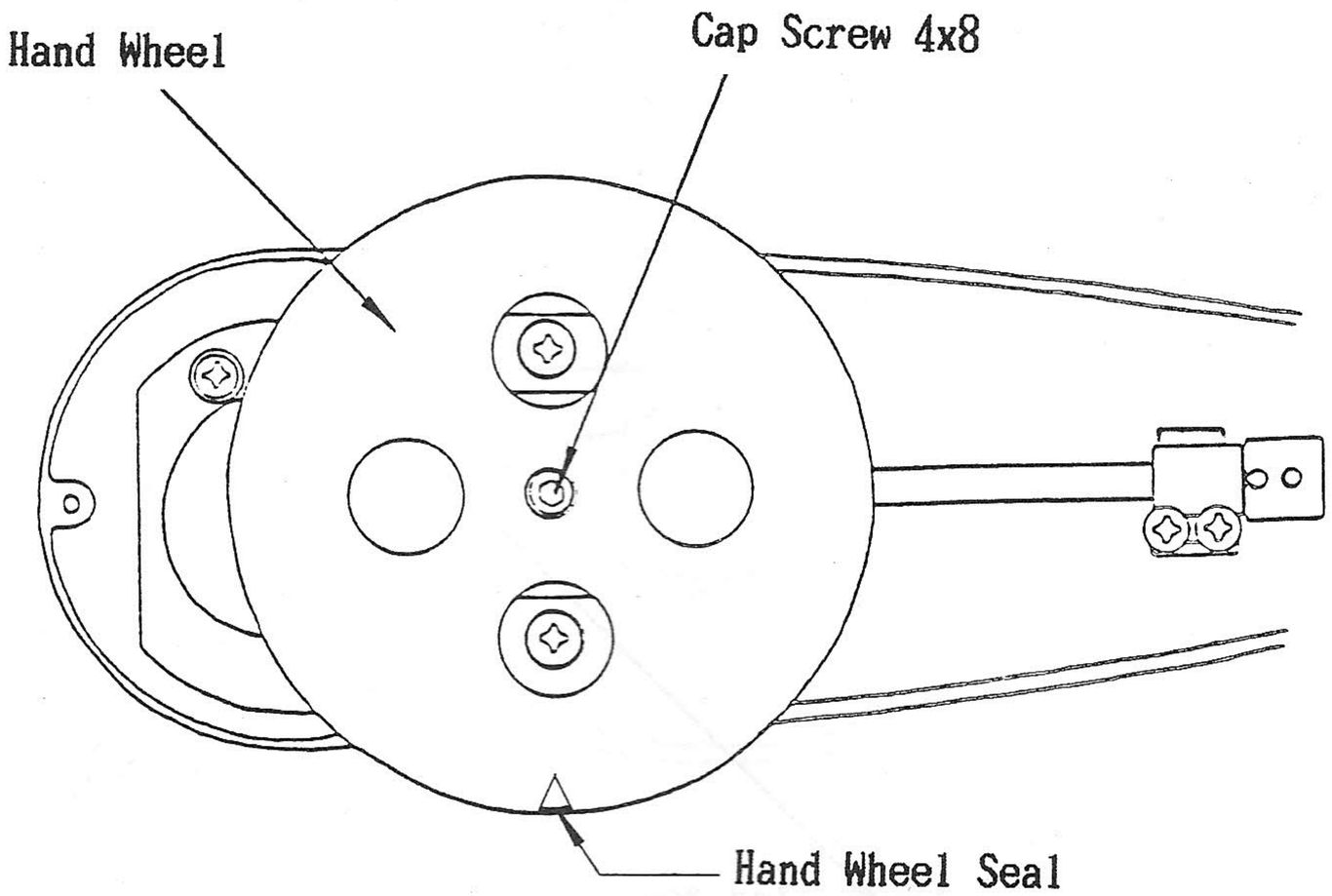
3. Temporarily install Motor Assembly into the Machine with two Collar Head STT Screws 5x10, leading Motor Cord outside through corresponding hole in Base Plate.

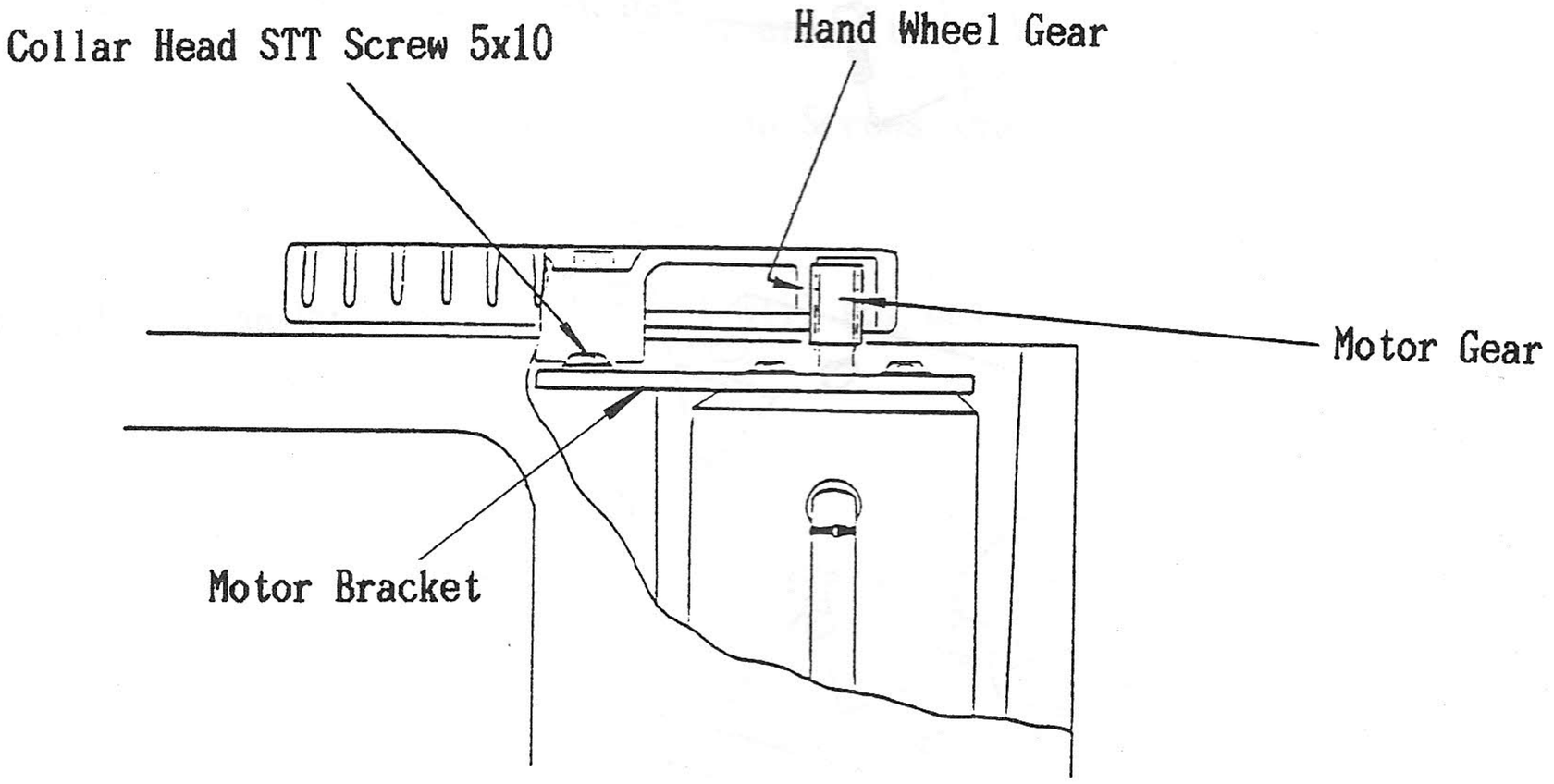


4. Turn Bevel Gear A until Hook Needle is fully retracted inside the Machine.

5. Fit Hand Wheel, with its positional mark (Hand Wheel Seal) forward, onto Main Shaft and secure it with Cap Screw 4x8.

6. Adjust Motor Bracket to eliminate backlash between Motor Gear and Hand Wheel Gear so that Hand Wheel can be rotated smoothly without play. Retighten two Collar Head STT Screws 5x10 to secure Motor Bracket firmly.





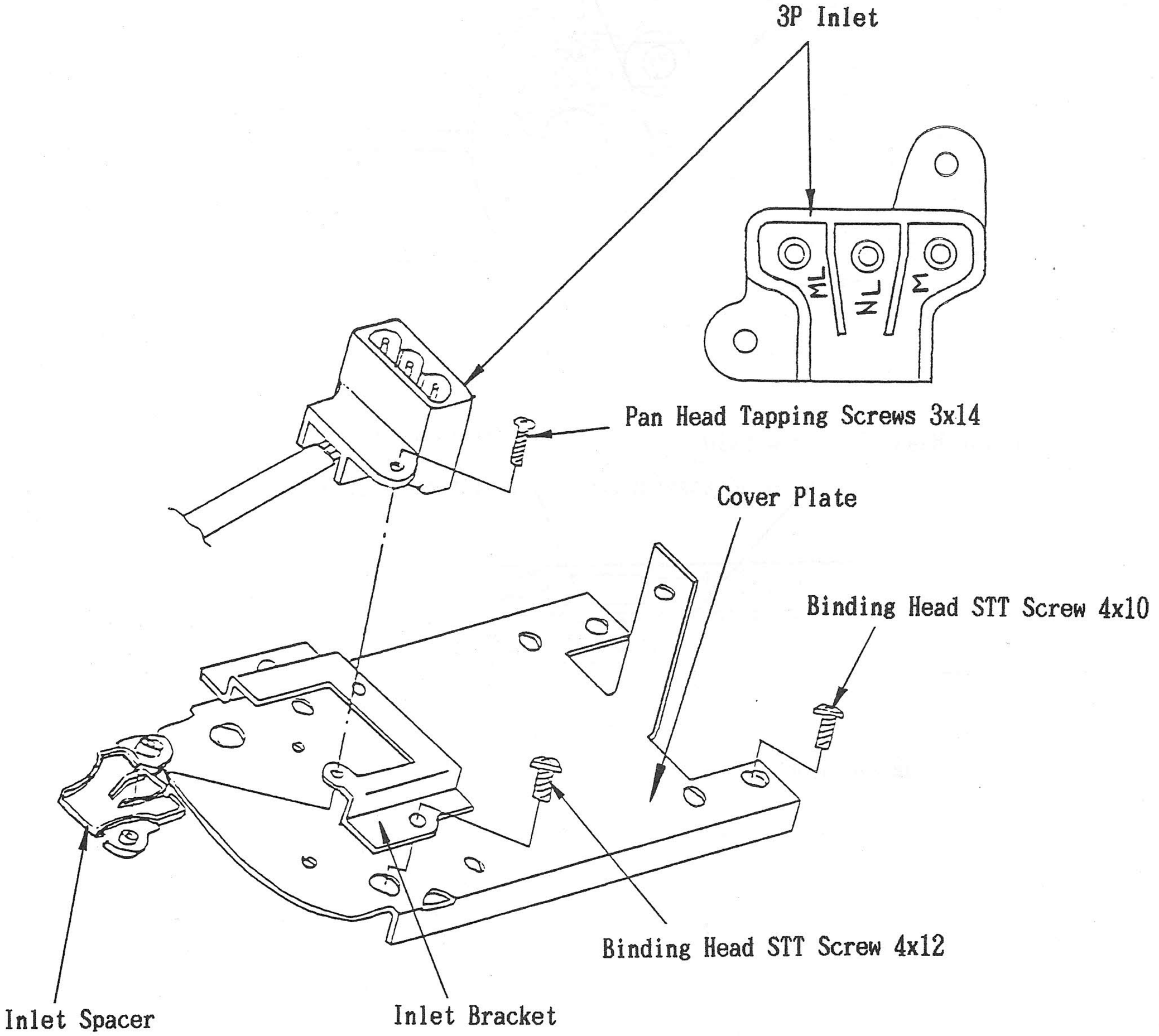
7. Reinstall Top Cover with three Binding Head STT Screws 3x6.

8. Place the upper half of the Machine upside down. Put Cover Plate in place and secure its cutout end with two Binding Head STT Screws 4x10, then secure the other end (round end) with two Binding Head STT Screws 4x12 together with Inlet Bracket.

9. Connect Motor Cord to 3P Inlet, one end to Terminal "M" and the other end to "ML", with two Hexagonal Nuts 3, 3.

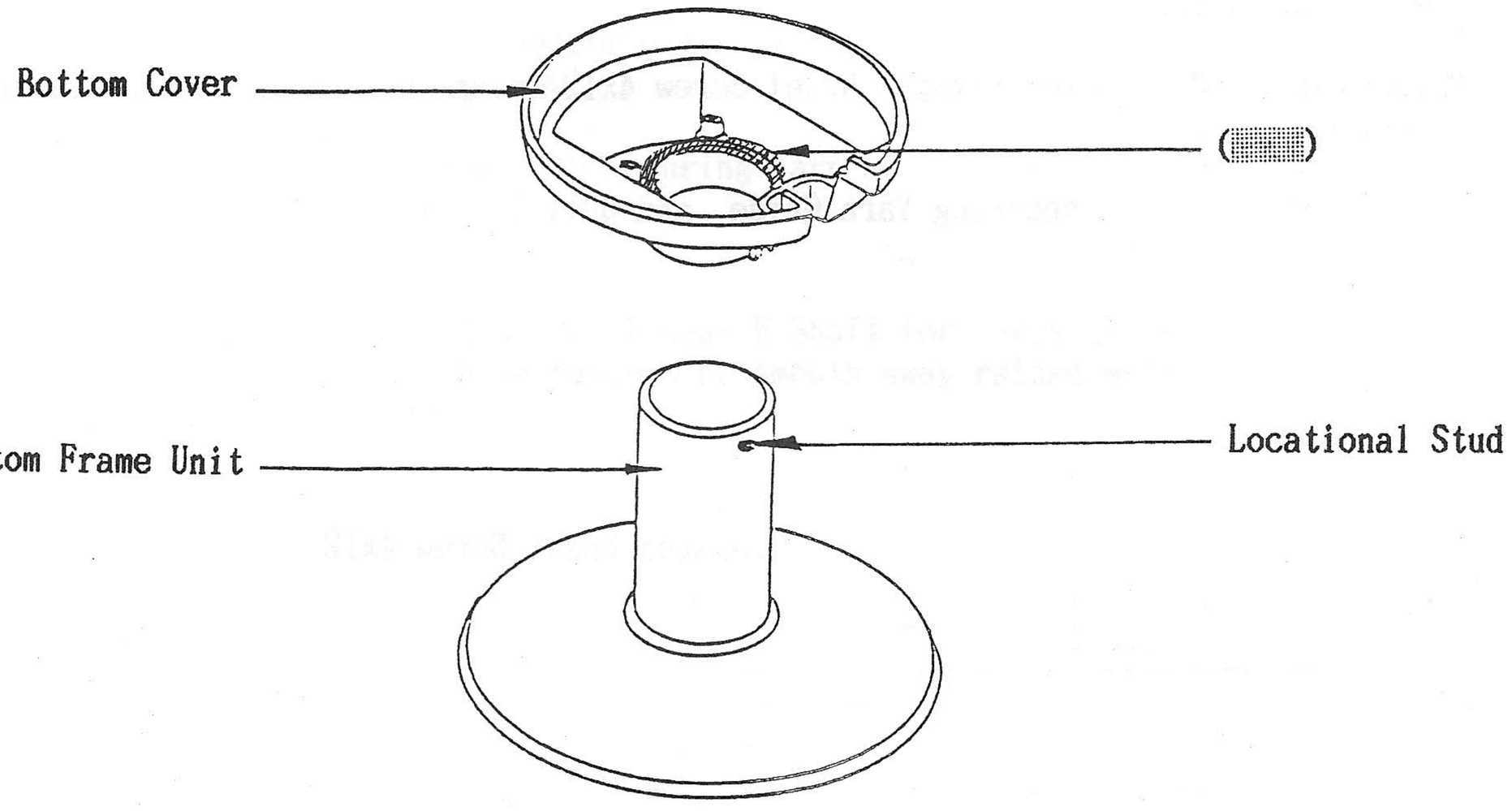
10. Insert Inlet Spacer between Inlet Bracket and Cover Plate. Fit 3P Inlet onto Inlet Spacer and secure it with two Pan Head Tapping Screws 3x14.

11. Fasten Motor Cord to Base Plate and Cover Plate with Cord Tie Wraps or similar strings.



2-11 Reassembly of Bottom Frame Assembly

1. Install Bottom Cover onto Bottom Frame Unit so that the locational stud (on Bottom Frame Unit) fits in the shaded area (▒) of Bottom Cover shown in Figure below.

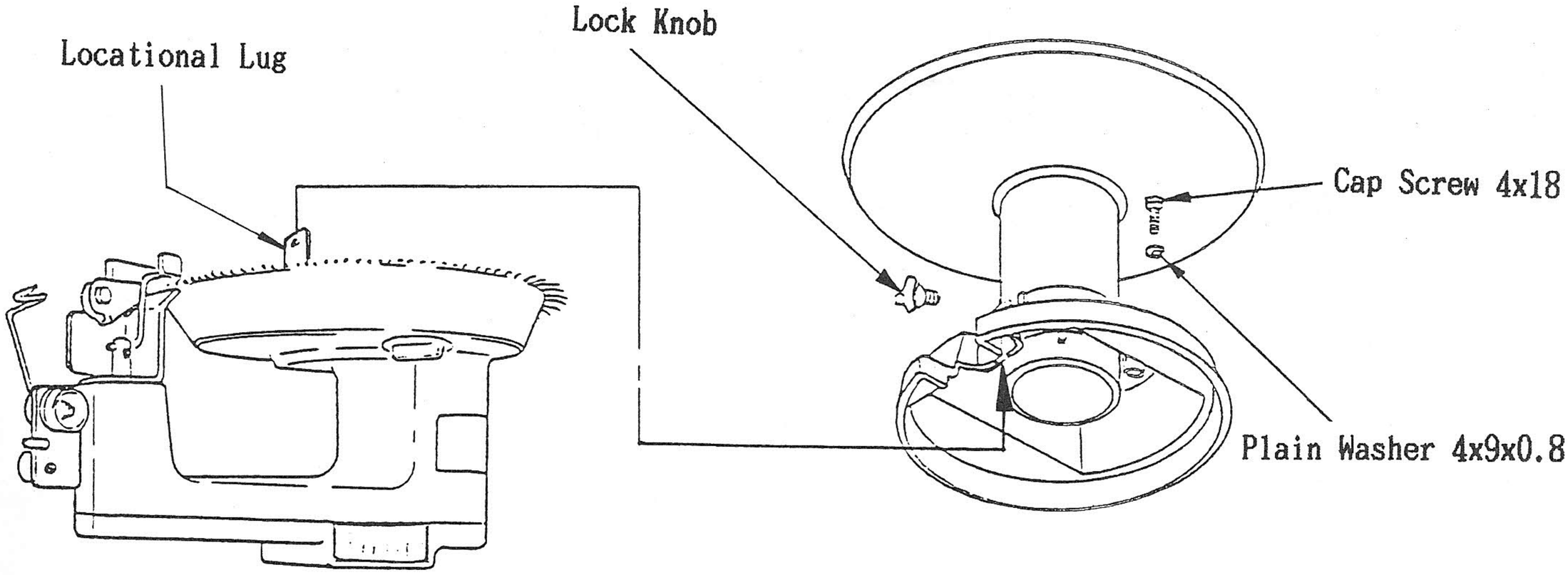


2. Install Bottom Frame Assembly on the upper half of the Machine so that the locational lug on Cover Plate is inserted between the slot in Bottom Cover and Bottom Frame. At the same time, make sure 3P Inlet properly fits in the opening of Bottom Cover.

3. Secure Bottom Frame Assembly with four Cap Screws 4x18 and four Plain Washers 4x9x0.8.

4. Turn over the Machine to the top side.

5. Turn Linking Arm clockwise as far as it will go, and lock it with Lock Knob.



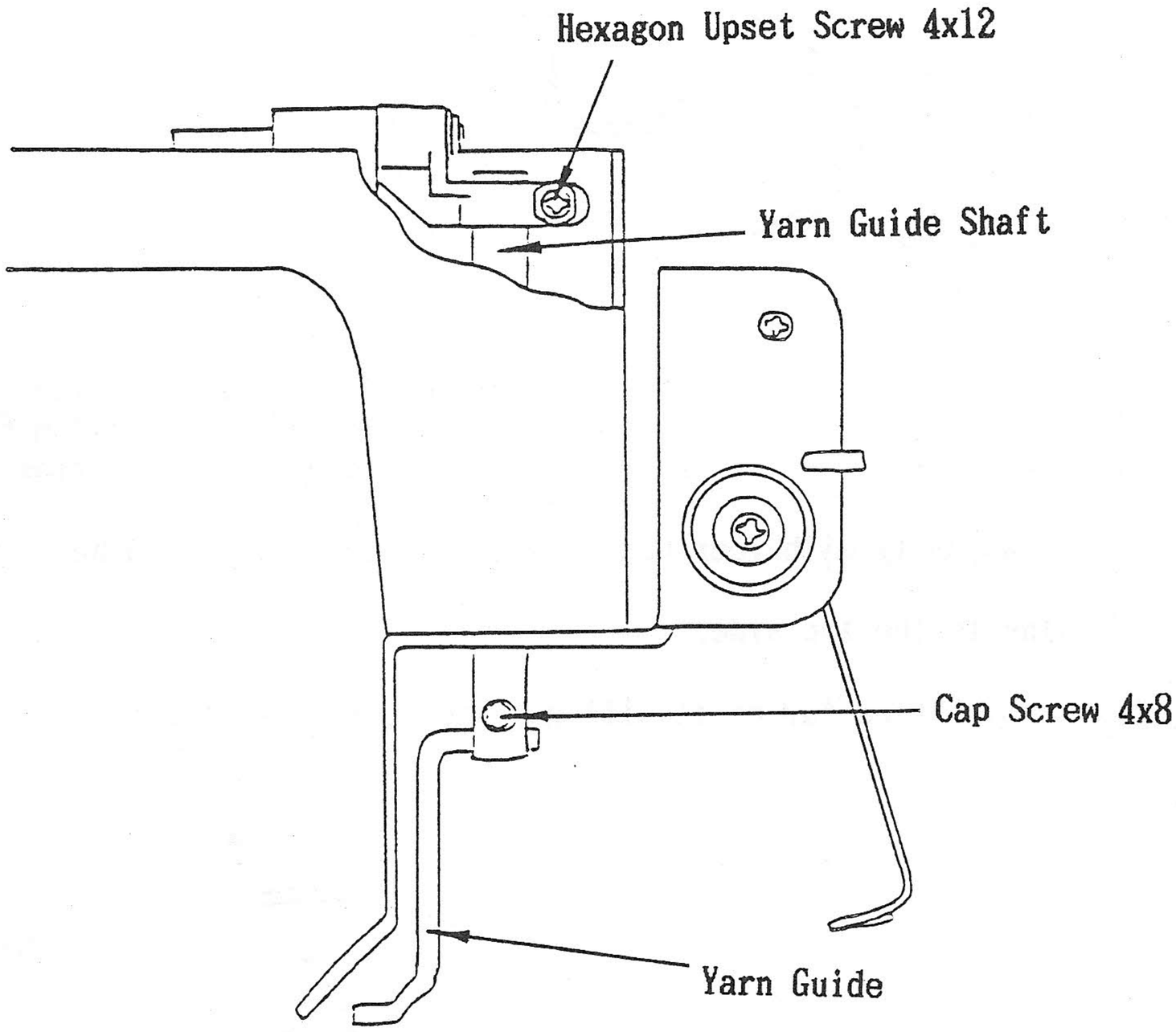
[3] DISASSEMBLY OF LINKING ARM

3-1 Disassembly of Yarn Guide Shaft Assembly

1. Remove Top Cover.

2. Using spanner M7, loosen Hexagon Upset Screw 4x12 securing Yarn Guide Shaft, and pull it out downward.

3. Loosen Cap Screw 4x8 securing Yarn Guide, and pull it out.



3-2 Disassembly of Bevel Gear B Shaft Assembly

1. Remove Cap Screw 4x8 securing Hand Wheel, and pull it out upward.

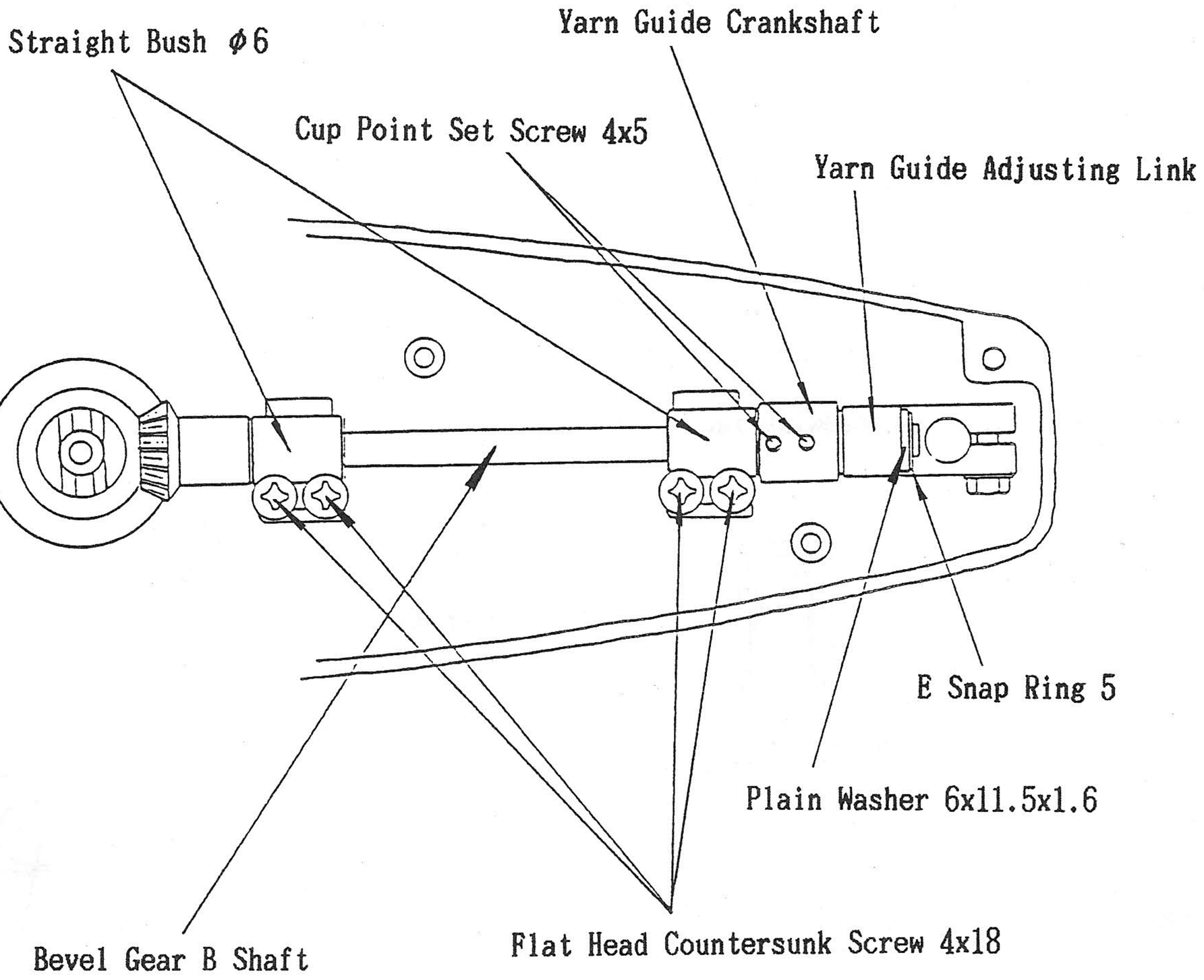
2. Remove four Flat Head Countersunk Screws 4x18 securing Straight Bushes ϕ6, and remove Bevel Gear B Shaft Assembly.

3. Remove E Snap Ring 5 and Plain Washer 6x11.5x1.6 at the end of Bevel Gear B Shaft, and pull out Yarn Guide Adjusting Link.

4. Loosen two Cup Point Set Screws 4x5 securing Yarn Guide Crankshaft, and pull it out.

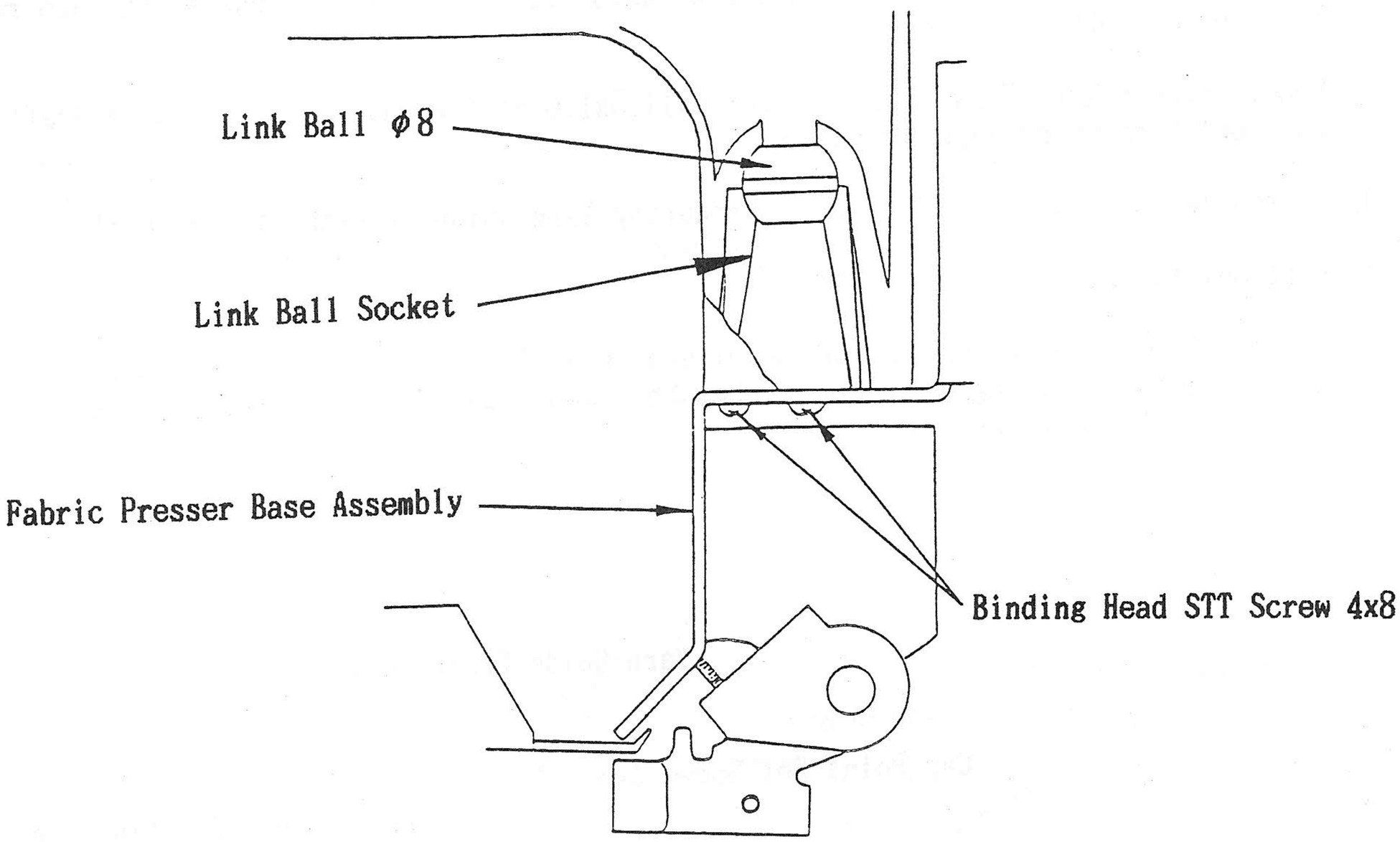
5. Pull out two Straight Bushes ϕ6.

   (Note) Check clamped surface of Bevel Gear B Shaft for burrs (raised metal). Before pulling out those bushes ϕ6, smooth away raised metal if exists with superfine file.

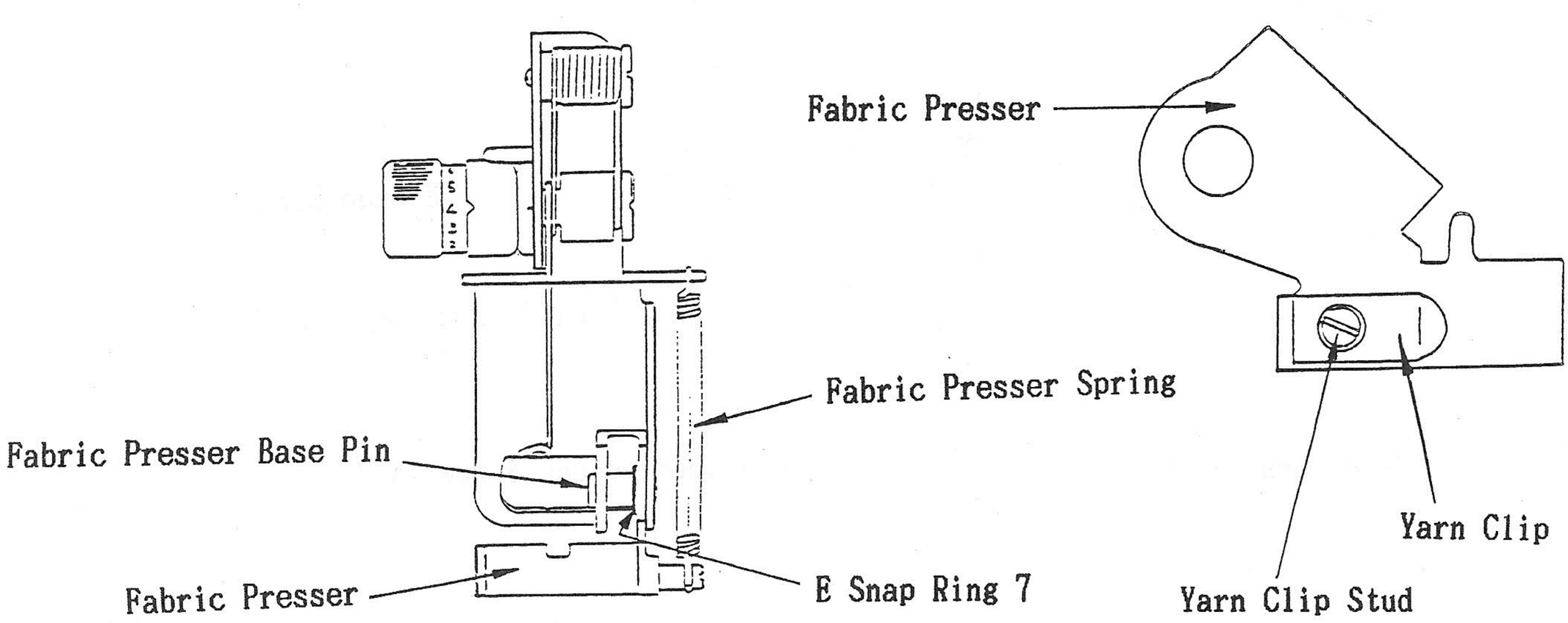


3-3 Disassembly of Fabric Presser Base Assembly

1. Remove two Binding Head STT Screws 4x8 securing Fabric Presser Base Assembly; Fabric Presser Base Assembly, Link Ball Socket, and Link Ball ϕ8 can be removed in sequence.



2. Unhook Fabric Presser Spring.
3. Remove E Snap Ring 7 from Fabric Presser Base Pin, and pull out Fabric Presser.
4. Remove Yarn Clip by unscrewing Yarn Clip Stud.

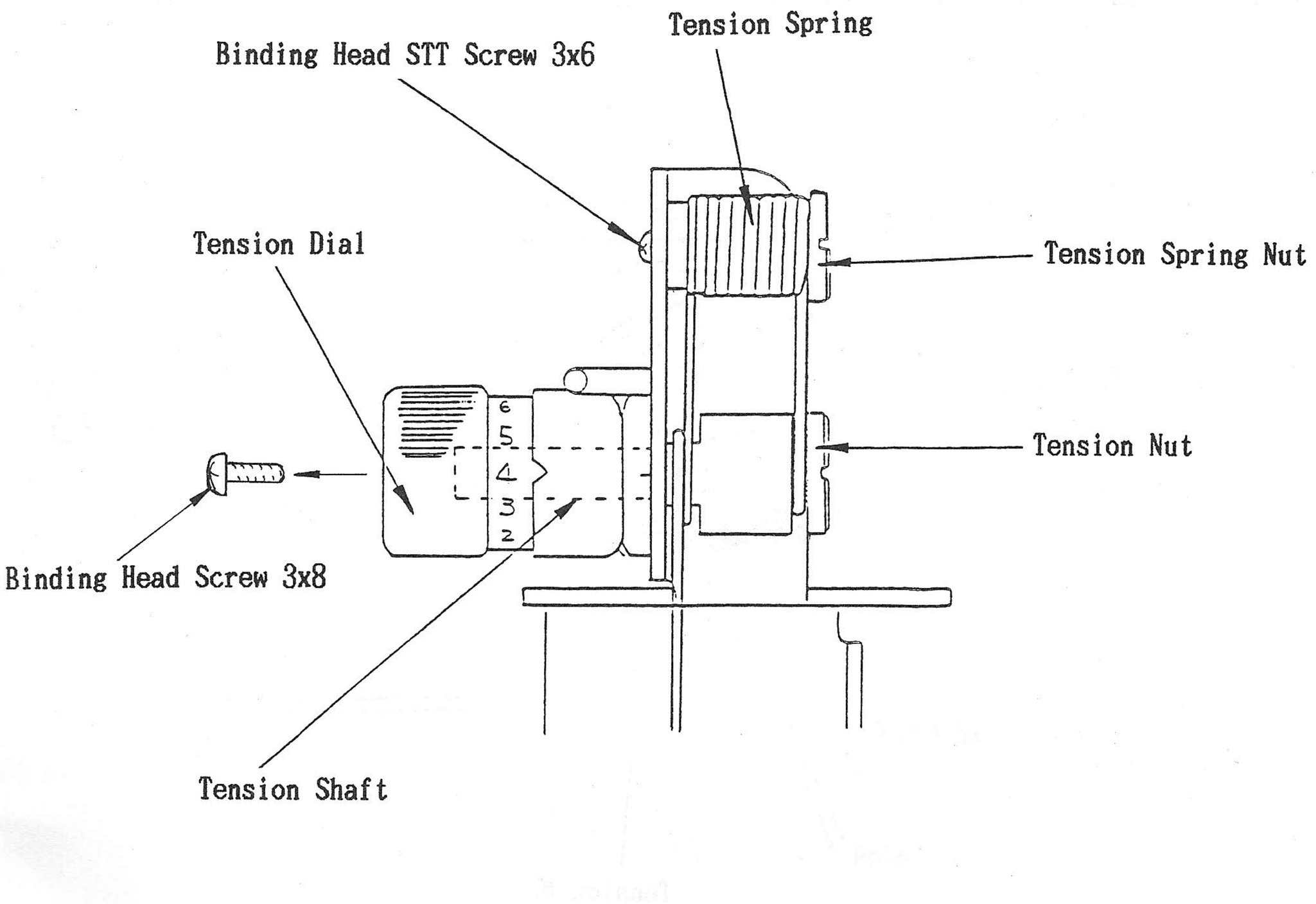


3-4 Disassembly of Tension Assembly

1. Remove Tension Dial together with Spring Washer 2, 3, and Dial Stopper by unscrewing Binding Head Screw 3x8.

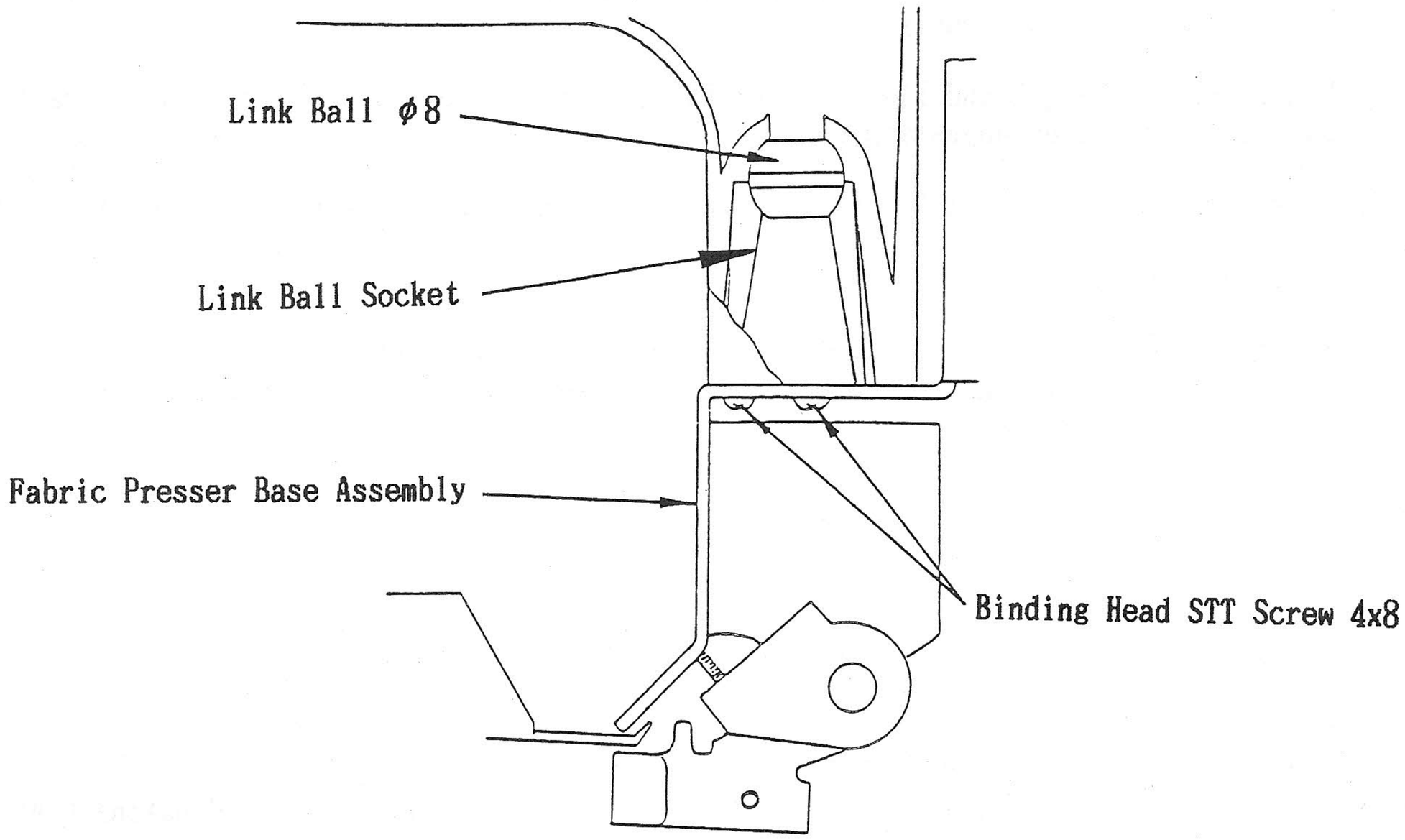
2. Holding Tension Shaft, unscrew Tension Nut.

3. Remove Tension Spring Nut by unscrewing Binding Head STT Screw 3x6, and pull out Tension Spring.



3-3 Disassembly of Fabric Presser Base Assembly

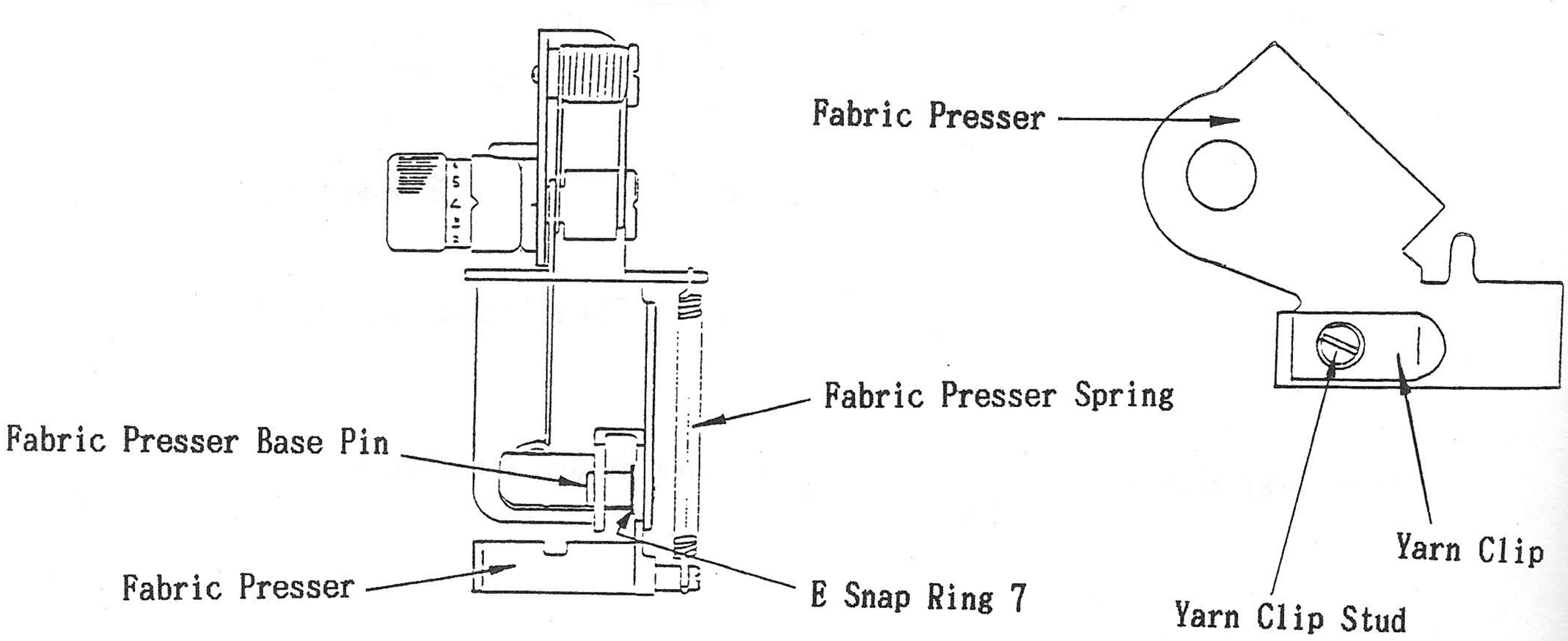
1. Remove two Binding Head STT Screws 4x8 securing Fabric Presser Base Assembly; Fabric Presser Base Assembly, Link Ball Socket, and Link Ball ϕ8 can be removed in sequence.



2. Unhook Fabric Presser Spring.

3. Remove E Snap Ring 7 from Fabric Presser Base Pin, and pull out Fabric Presser.

4. Remove Yarn Clip by unscrewing Yarn Clip Stud.

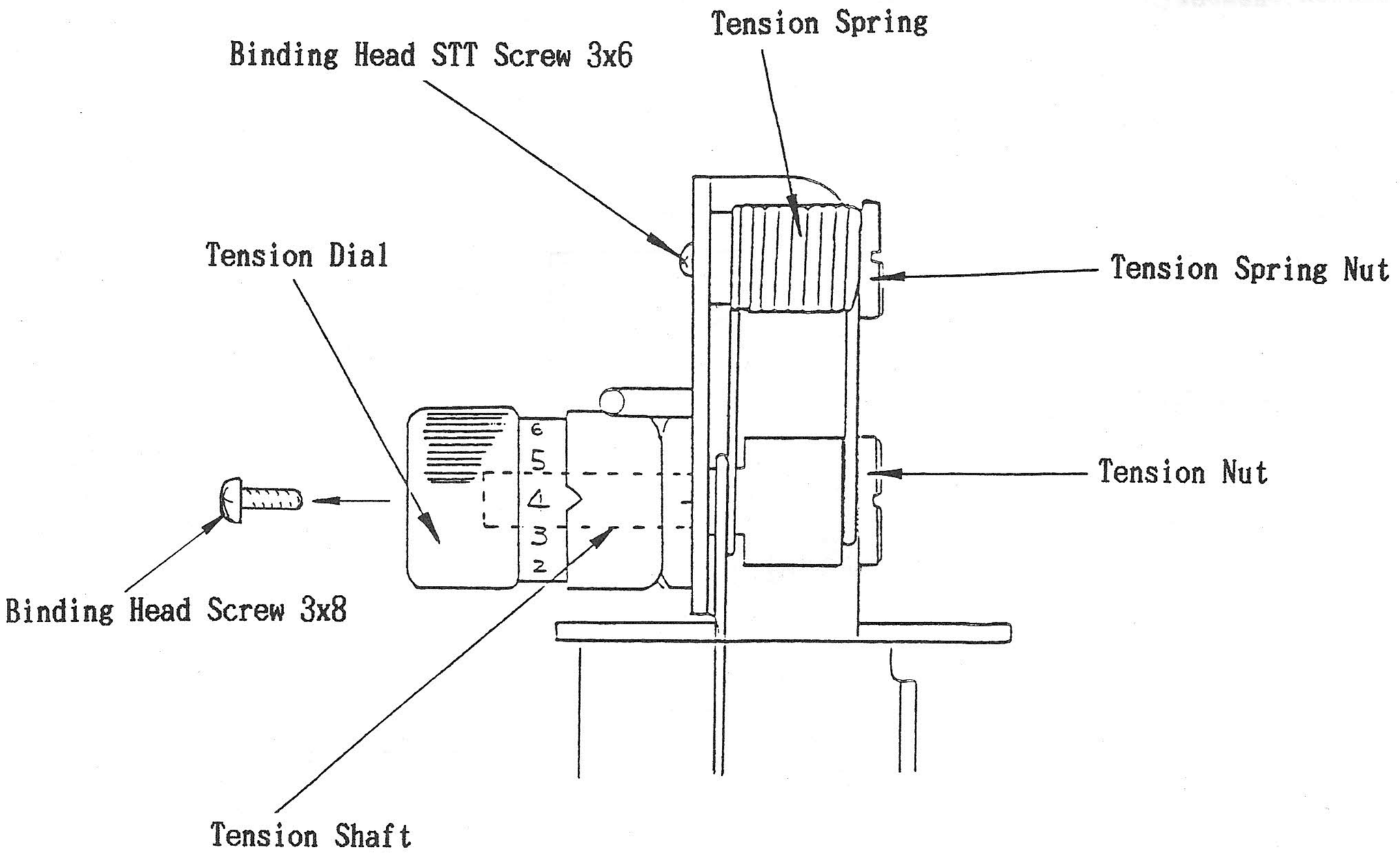


3-4 Disassembly of Tension Assembly

1. Remove Tension Dial together with Spring Washer 2, 3, and Dial Stopper by unscrewing Binding Head Screw 3x8.

2. Holding Tension Shaft, unscrew Tension Nut.

3. Remove Tension Spring Nut by unscrewing Binding Head STT Screw 3x6, and pull out Tension Spring.



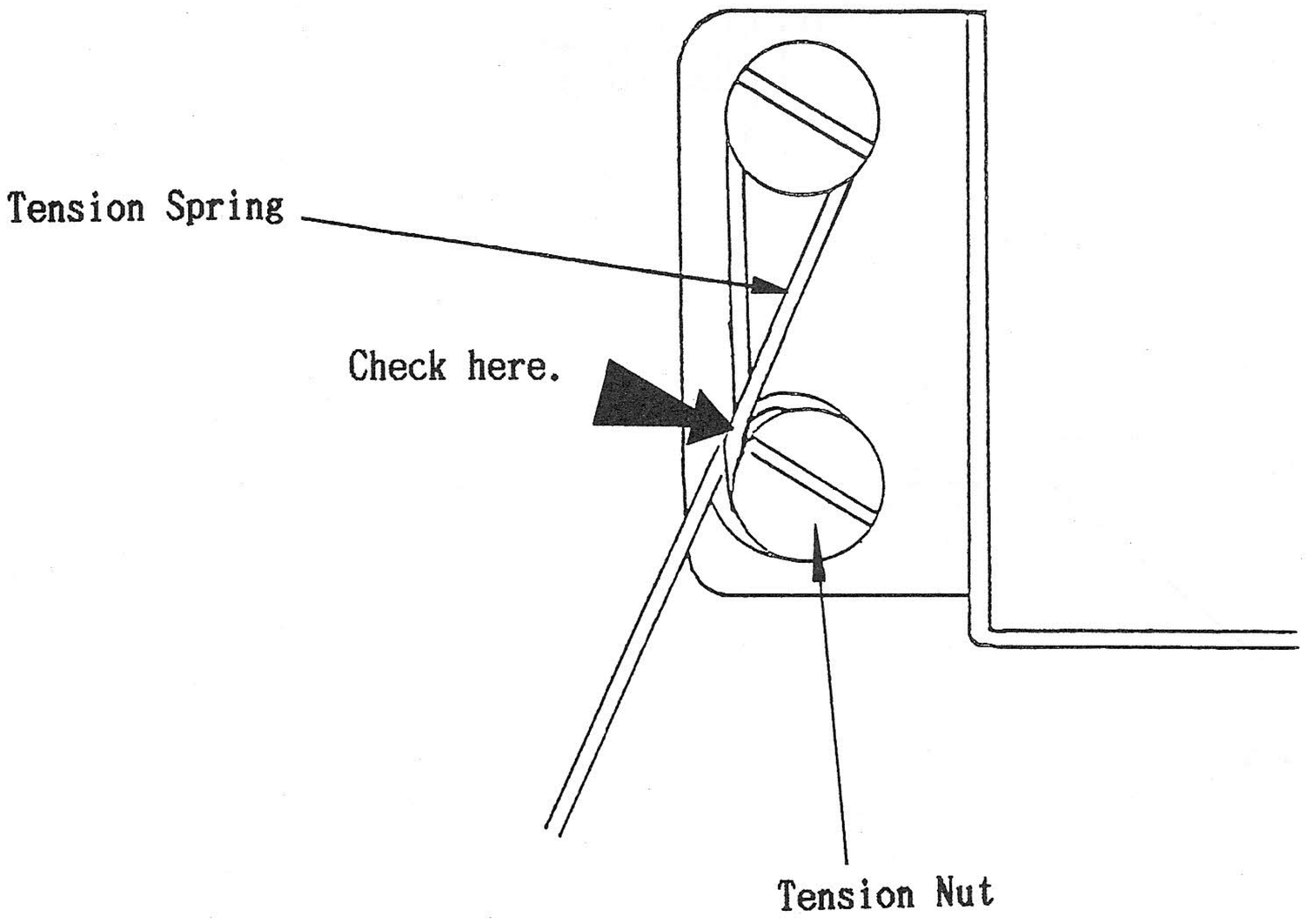
[4] REASSEMBLY AND ADJUSTMENTS OF LINKING ARM

*UNLESS OTHERWISE SPECIFIED, REASSEMBLY IS ACCOMPLISHED BY REVERSING THE PRECEDING PROCEDURE OF DISASSEMBLY.

4-1 Reassembly and Adjustment of Tension Assembly

*Take the following notice during reassembly of Tension Assembly.

(A) Check that Tension Spring (contact surface of the eyelet indicated with the arrow) is properly spring-loaded to Tension Nut without play or overload by feeling it. If any play or overload exists at the contact surface, adjust the bend angle of Tension Spring.



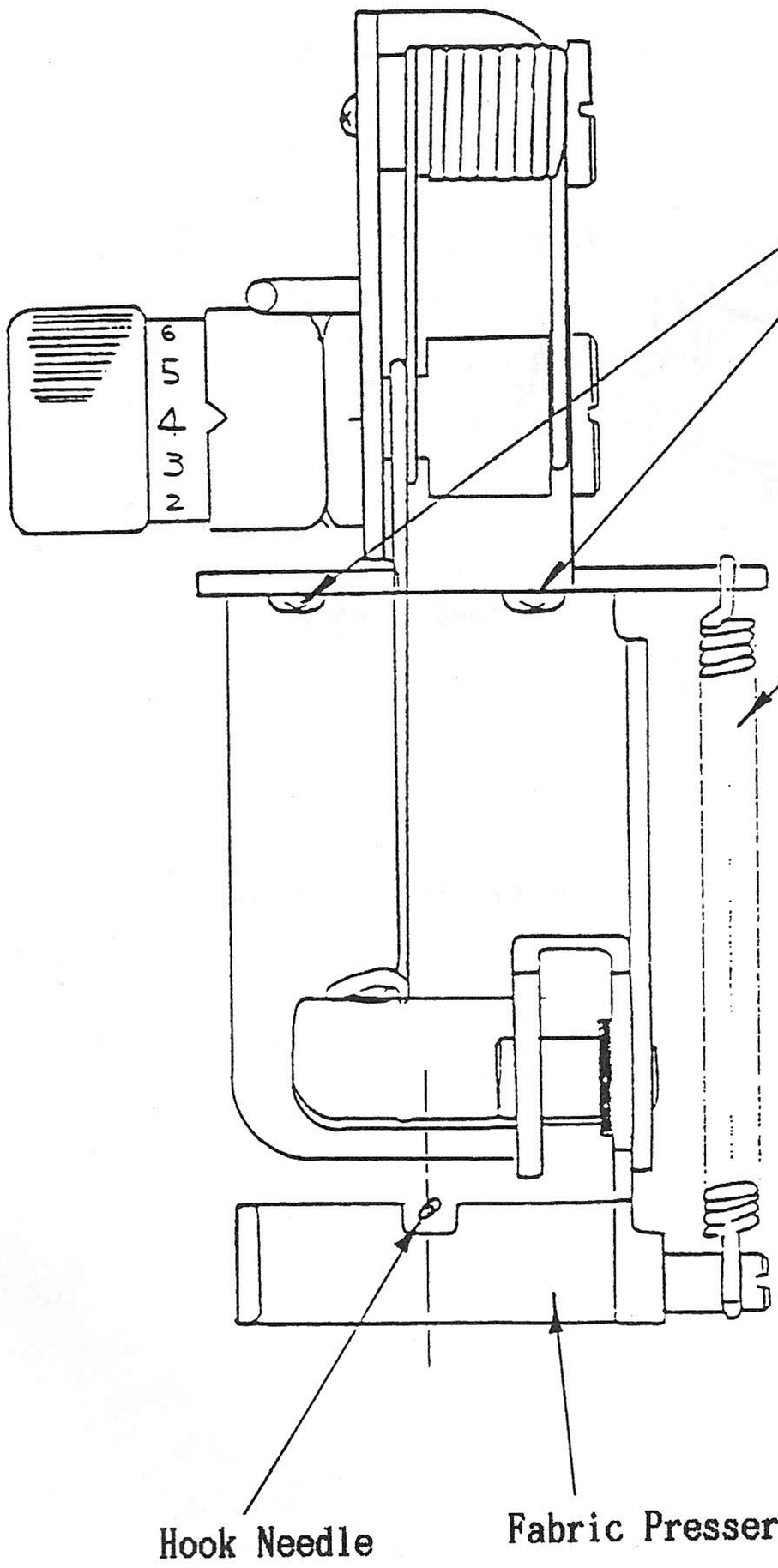
4-2 Reassembly and Adjustment of Fabric Presser Base Assembly

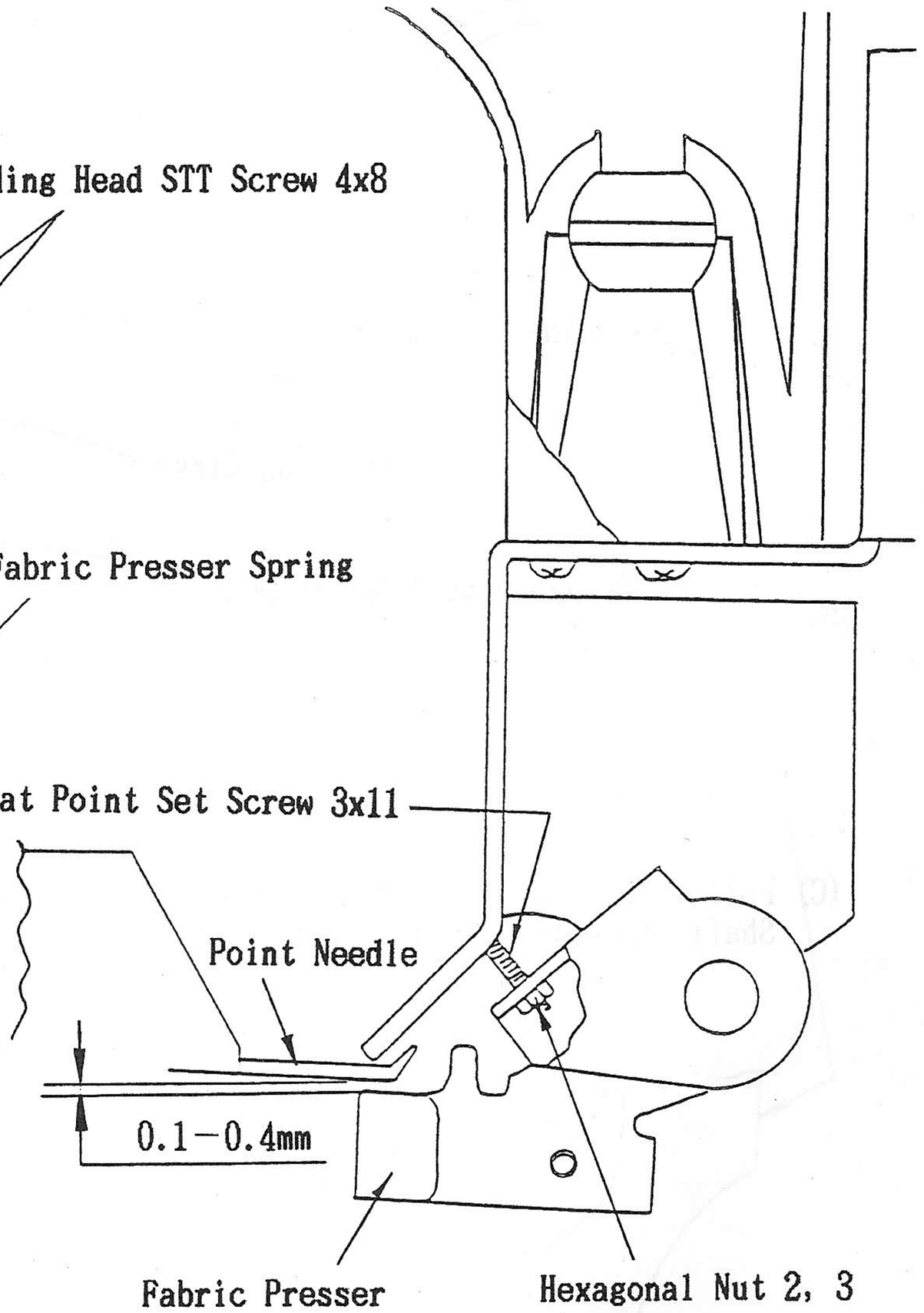
*Take the following notice during reassembly of Fabric Presser Base Assembly.

(A) Install Fabric Presser Spring with both hooks toward the Machine. If adversely installed, Fabric Presser Spring may slip off when moving Fabric Presser away from the Machine.

(B) After setting Link Ball ϕ8 and Link Ball Socket in the Machine, install Fabric Presser Base Assembly with two Binding Head STT Screws 4x8 so that Hook Needle is positioned at the center of the cutout in Fabric Presser as shown below.

(C) Adjust Fabric Presser for 0.1 to 0.4mm clearance with Point Needle by turning Flat Point Set Screw 3x11 with Hexagonal Nut 2, 3 loosened. Never fail to lock this set screw with the mating nut upon completion of the adjustment.



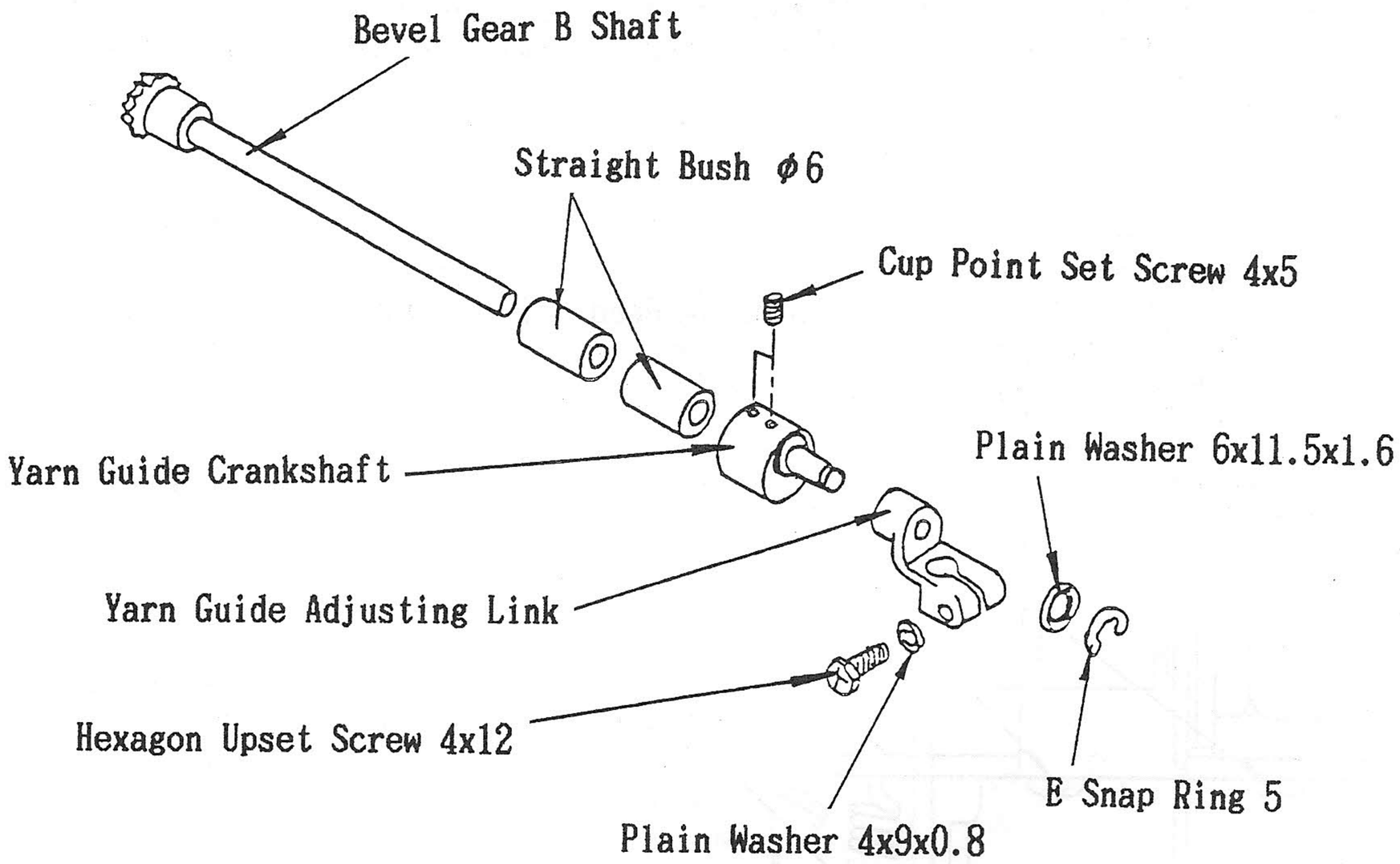


4-3 Reassembly and Adjustment of Bevel Gear B Shaft Assembly

*Take the following notice during reassembly of Bevel Gear B Shaft Assembly.

(A) Insert Bevel Gear B Shaft into Yarn Guide Crankshaft until it bottoms out.

(B) Firmly tighten two Cup Point Set Screws 4x5 in Yarn Guide Crankshaft; otherwise, the rotary motion of Bevel Gear B Shaft may not be transmitted properly or the timing adjustment of Hook Needle may go wrong.



(C) Follow the steps (6) to (7) in Item 2-9 on page 22, when reinstalling Bevel Gear B Shaft Assembly into the Machine.

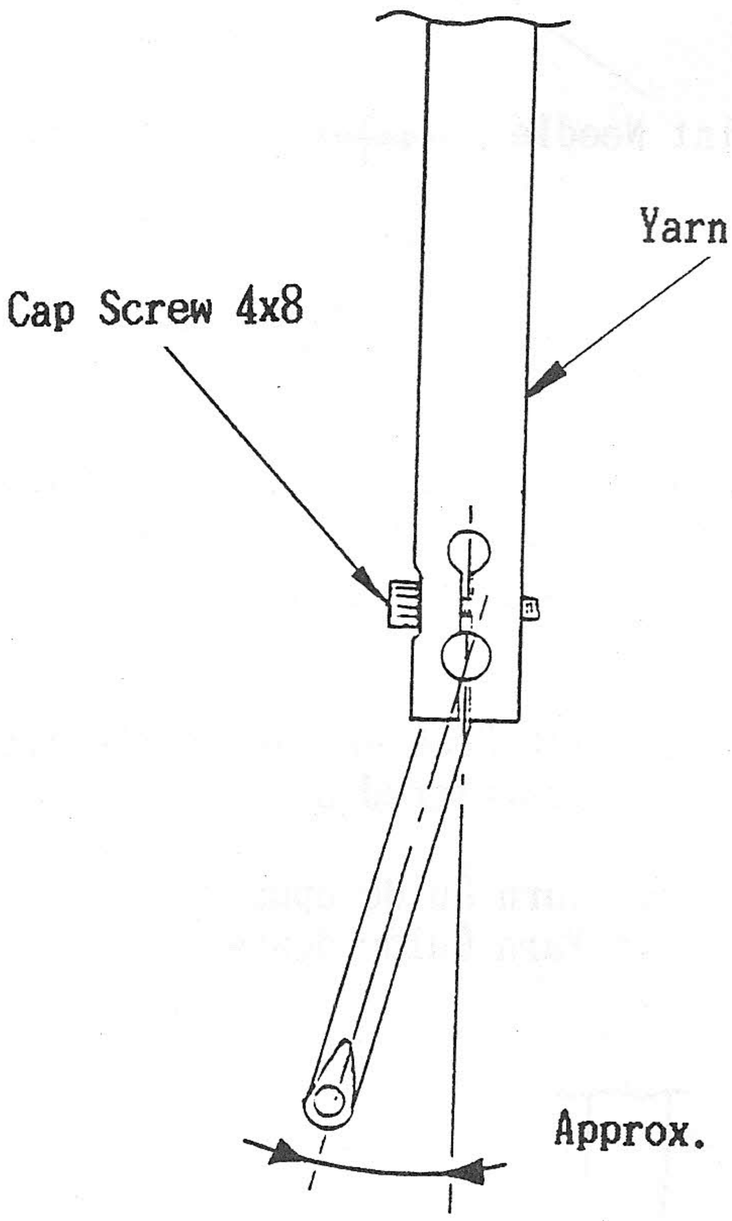
4-4 Reassembly and Adjustment of Yarn Guide Shaft Assembly

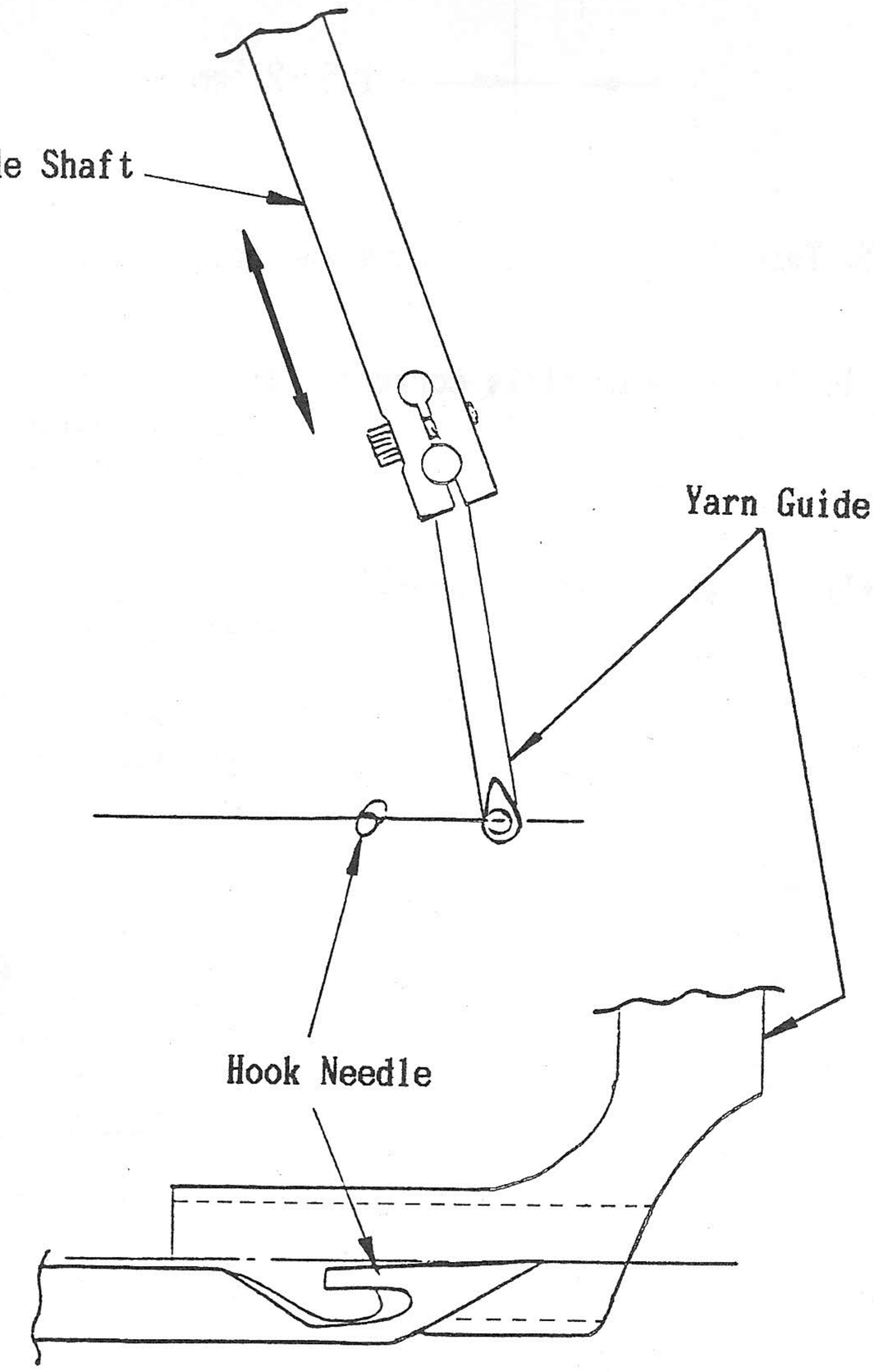
1. Insert Yarn Guide into Yarn Guide Shaft from behind. Loosely secure Yarn Guide with Cap Screw 4x8 at approx. 10 degrees leftward to the axis of Yarn Guide Shaft as shown below.

2. Insert Yarn Guide Shaft into Yarn Guide Adjusting Link from bottom through Fabric Presser Base Assembly. Loosely secure Yarn Guide Shaft with Hexagon Upset Screw 4x12 and Plain Washer 4x9x0.8.

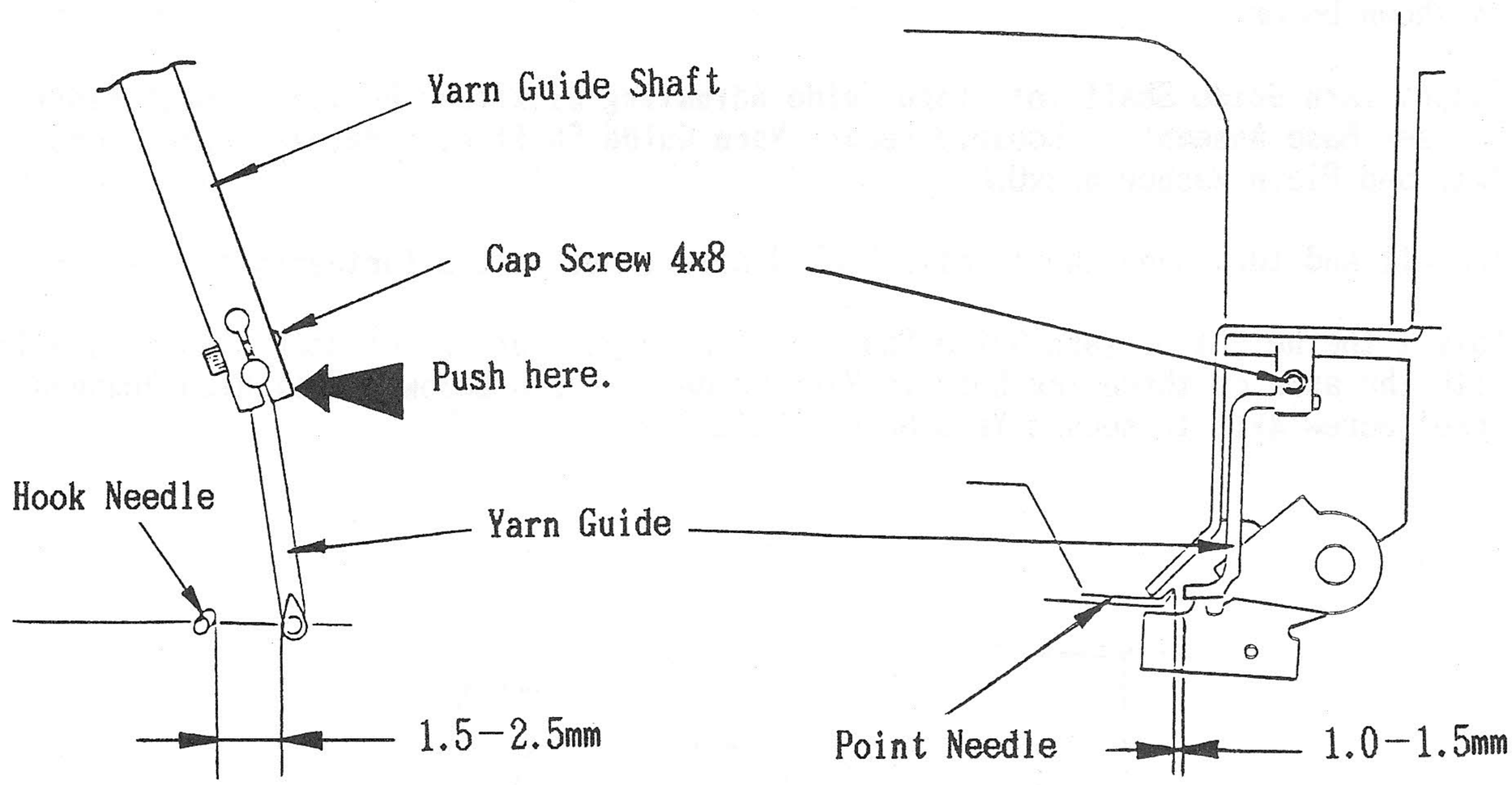
3. Install and turn Hand Wheel until Hook Needle comes to its furthermost position.

4. Adjust the height of Yarn Guide Shaft so that upper surface of Hook Needle is aligned with the axis of threading hole in Yarn Guide as shown below. Retighten Hexagon Upset Screw 4x12 to secure Yarn Guide Shaft firmly.





5. While pushing Yarn Guide Shaft toward Hook Needle, adjust Yarn Guide for 1.5 to 2.5mm clearance with Hook Needle and 1.0 to 1.5mm clearance with Point Needle simultaneously as shown below. Retighten Cap Screw 4x8 to secure Yarn Guide firmly.

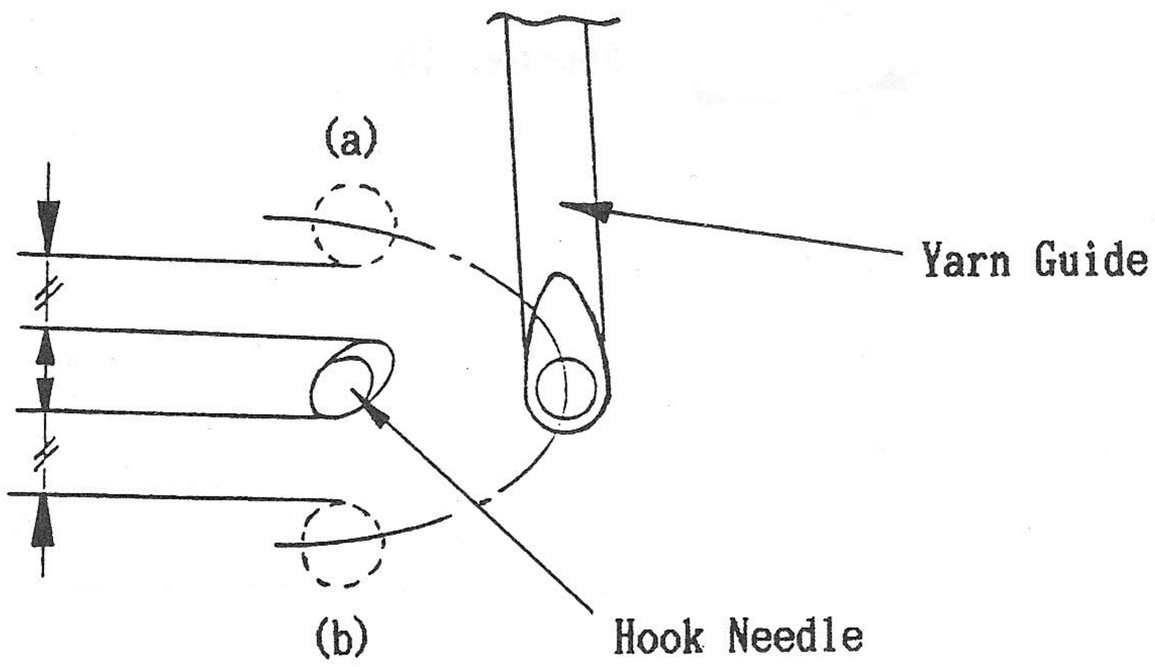


6. Turn Hand Wheel and check the adjustment of Yarn Guide.

*If the adjustment is correct: The track of Yarn Guide during operation will be just as shown below, i.e. Yarn Guide will move orbitally around Hook Needle without any interference.

*If the adjustment is wrong: Yarn Guide may interfere with Hook Needle on the track. When the interference is encountered at:

☆the position (a): Move Yarn Guide upward.
☆the position (b): Move Yarn Guide downward.



7. Install Top Cover.

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