

SERVICING MANUAL

JF SERIES MODELS

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WHAT TO DO WHEN

CONDITION	CAUSE	HOW TO FIX	REFERENCE
1. SKIPPING STITCHES	1. NEEDLE IS NOT INSERTED PROPERLY.	INSERT THE NEEDLE PROPERLY.	
	2. NEEDLE IS BENT OR WORN.	CHANGE THE NEEDLE.	
	3. INCORRECTLY THREADED.	RETREAD.	
	4. NEEDLE OR THREAD ARE INAPPROPRIATE FOR FABRIC BEING SEWN.	USE THE RECOMMENDED SEWING NEEDLE AND THREAD.	
	5. SEWING ON STRETCH FABRIC.	USE A #11 BLUE TIP NEEDLE.	
	6. INAPPROPRIATE NEEDLE BAR HEIGHT.	SEE MECHANICAL ADJUSTMENT "NEEDLE BAR HEIGHT".	P.15
	7. INAPPROPRIATE NEEDLE TO HOOK TIMING.	SEE MECHANICAL ADJUSTMENT "HOOK TIMING".	P.16
	8. INAPPROPRIATE NEEDLE TO HOOK CLEARANCE.	SEE MECHANICAL ADJUSTMENT "CLEARANCE BETWEEN NEEDLE AND HOOK".	P.13,P.14
2. FABRIC NOT MOVEING	1. INCORECT F.D. HEIGHT.	SEE MECHANICAL ADJUSTMENT "HEIGHT OF FEED DOG".	P.12
	2. THREAD ON BOTTOM SIDE OF FABRIC IS JAMMED UP.	MAKE SURE TO BRING BOTH NEEDLE AND BOBIN THREAD UNDER THE FOOT WHEN STARTING SEWING.	
	3. FEED DOG TEETH ARE WORN.	CHANGE TO FEED DOG.	

WHAT TO DO WHEN

CONDITION	CAUSE	HOW TO FIX	REFERENCE
3. BREAKING UPPER THREAD	1. INITIAL SEWING SPEED IS TOO FAST.	START WITH MEDIUM SPEED.	P.7
	2. THREAD PATH IS INCORRECT.	USE THE PROPER THREAD PATH.	
	3. NEEDLE IS BENT OR DULL.	REPLACE WITH A NEW NEEDLE.	
	4. UPPER THREAD TENSION IS TOO STRONG.	ADJUST UPPER THREAD TENSION CORRECTLY.	
	5. NEEDLE SIZE IS INAPPROPRIATE FOR FABRIC.	USE APPROPRIATE NEEDLE FOR FABRIC AND THREAD IN USE.	
	6. NEEDLE EYE IS WORN.	CHANGE THE NEEDLE.	
	7. NEEDLE HOLE IN NEEDLE PLATE IS WORN OR BURRED.	REPAIR THE HOLE OR REPLACE THE NEEDLE PLATE.	
4. BREAKNG BOBBIN THREAD	1. INCORRECTLY THREADED BOBBIN CASE.	THREAD BOBBIN CASE CORRECTLY.	P.8
	2. TOO MUCH THREAD IS AROUND IN THE BOBBIN.	ADJUST THE POSITION OF STOPPER.	
	3. LINT IS STUCK INSIDE THE BOBBIN HOLDER.	CLEAN THE HOOK RACE.	
	4. THREAD QUALITY IS TOO LOW.	CHANGE TO HIGH QUALITY SEWING THREAD.	
	5. THREAD IS JAMMING AROUND THE BOBBIN.	CLEAR OUT THE JUMMING THREAD.	
	6. BOBBIN THREAD TENSION IS TOO STRONG.	ADJUST BOBBIN THREAD TENSION CORRECTLY.	
5. NEEDLE BREAKS	1. NEEDLE IS HITTING THE NEEDLE PLATE.	SEE MECHANICAL ADJUSTMENT "NEEDLE DROP."	P.11
	2. NEEDLE IS BENT OR WORN.	CHANGE THE NEEDLE.	
	3. NEEDLE IS HITTING THE HOOK RACE.	SEE MECHANICAL ADJUSTMENT "CLEARANCE BETWEEN NEEDLE AND HOOK"	P.13, P.14

WHAT TO DO WHEN

CONDITION	CAUSE	HOW TO FIX	REFERENCE
5. NEEDLE BREAKS	4. THE FABRIC MOVES WHILE THE NEEDLE IS PIERCING IT, OR THE NEEDLE ZIGZAGS WHILE IN FABRIC. 5. FABRIC IN BEING PULLED TOO STRONGLY EHILE SEWING.	SEE MECHANICAL ADJUSTMENT "NEEDLE SEWING". GUIDE THE FABRIC GENTLY WHILE SEWING.	P.10
6. NOISY OPERATION	1. BACKLASH BETWEEN SHUTTLE HOOK GEAR AND LOWER SHAFT GEAR IS TOO GREAT. 2. LOWER SHAFT GEAR IS LOOSE. 3. INAPPROPRIATE BELT TESION. 4. UPPER SHAFT GEAR IS LOOSE. 5. NOT ENOUGH OIL.	SEE MECHANICAL ADJUSTMENT "CLEARANCE BETWEEN NEEDLE AND HOOK (NO.2)". ELIMINATE THE LOOSENESS. SEE MECHANICAL ADJUSTMENT "MOTOR BELT TENSION". ELIMINATE THE LOOSENESS. OIL ALL MOVEING PARTS.	P.14 P.25
7.DEFORMATION PATTERN	1. INAPPROPRIATE ZIGZAG SYNCHRONIZATION. 2. INAPPROPRIATE DISENGAGEMENT OF AM FOLLOWER. 3. UPPER THREAD TENSION IS TOO STRONG. 4. INAPPROPRIATE FEED BALANCE.	SEE MECANICAL ADJUSTMENT "NEEDLE SEWING". SEE MECANICAL ADJUSTMENT "DISENGAGEMENT OF CAM FOLLOWER". ADJUST UPPER THREAD TENSION CORRECTLY. SEE MECHANICAL ADJUSTMENT "FEED BALANCE ON STRECH STITCH".	P.10 P.20 - P.23 P.7 P.17

SERVICE ACCESS

FACE PLATE

TO REMOVE

1. REMOVE THE FACE PLATE BY REMOVING THE CAP AND SET SCREW.

TO ATTACH

2. MOUNT THE FACE PLATE BY THE SET SCREW, AND THEN, MOUNT THE CAP.

BELT COVER

TO REMOVE

1. LOOSEN TEN SET SCREW, AND REMOVE THE BELT COVER BY REMOVING THE BELT COVER RIB FROM THE FRONT COVER.

TO ATTACH

2. MOUNT THE BELT COVER RIB TO THE FRONT COVER, AND THEN, MOUNT THE BELT COVER BY THE SET SCREW.

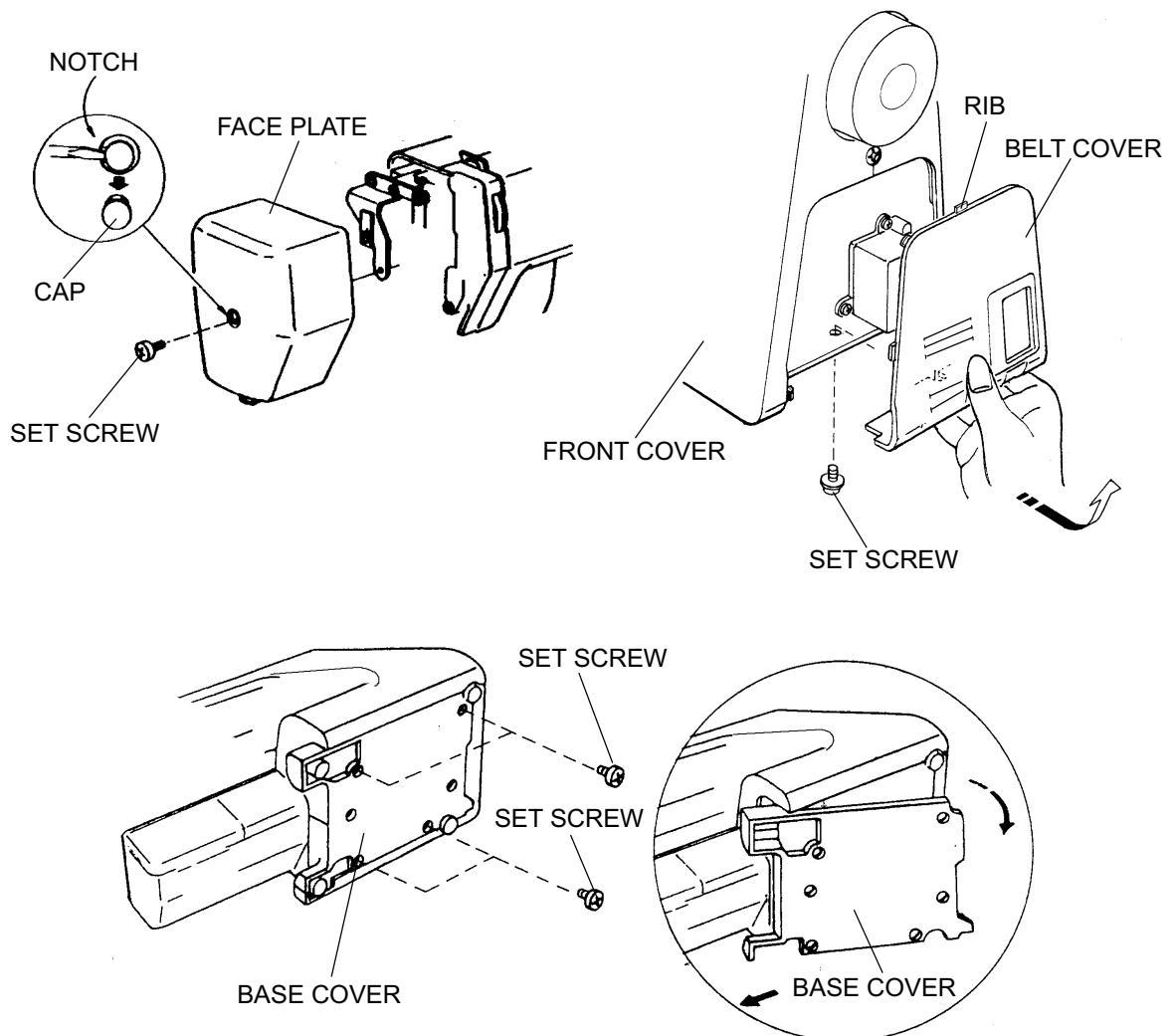
BASE COVER

TO REMOVE

1. REMOVE THE BASE COVER BY FOUR SET SCREWS.

TO ATTACH

2. MOUNT THE BASE COVER BY FOUR SET SCREWS.



SERVICE ACCESS

FRONT COVER

TO REMOVE

1. REMOVE THE FACE PLATE AND BELT COVER. (SEE PAGE 4.)
2. REMOVE SELECTOR DIALS (A) AND (B).

NOTE:

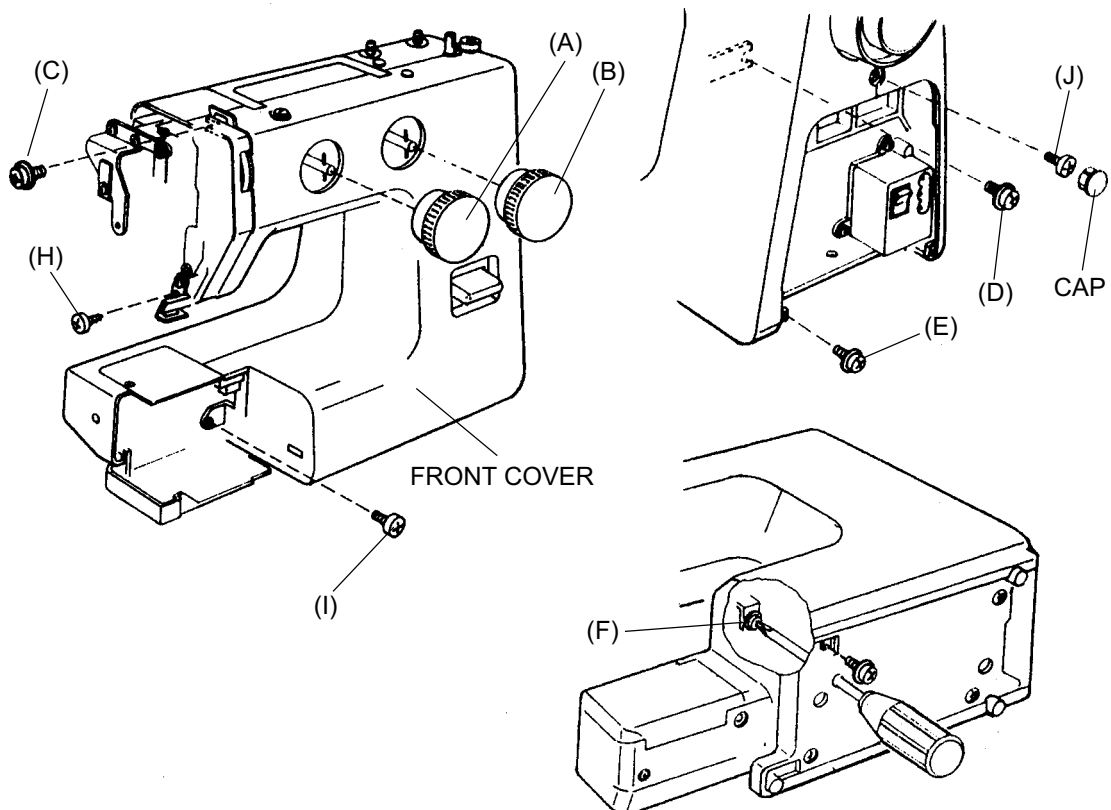
NUMBER OF SELECTOR DIALS IS AS FOLLOWS:

MODEL JF1022	] 3 DIALS	MODEL JF1004	 1 DIAL
JF1018			
MODEL JF1018S	] 2 DIALS		
JF1014			
JF1012			

3. LOOSEN SET SCREWS (C), (D), (E), (F), (G) AND THEN, REMOVE THE FRONT COVER BY REMOVING SET SCREW (H), (I) AND (J).

TO ATTACH

2. MOUNT THE FRONT COVER IN REVERSE PROCEDURE OF THE REMOVING.



SERVICE ACCESS

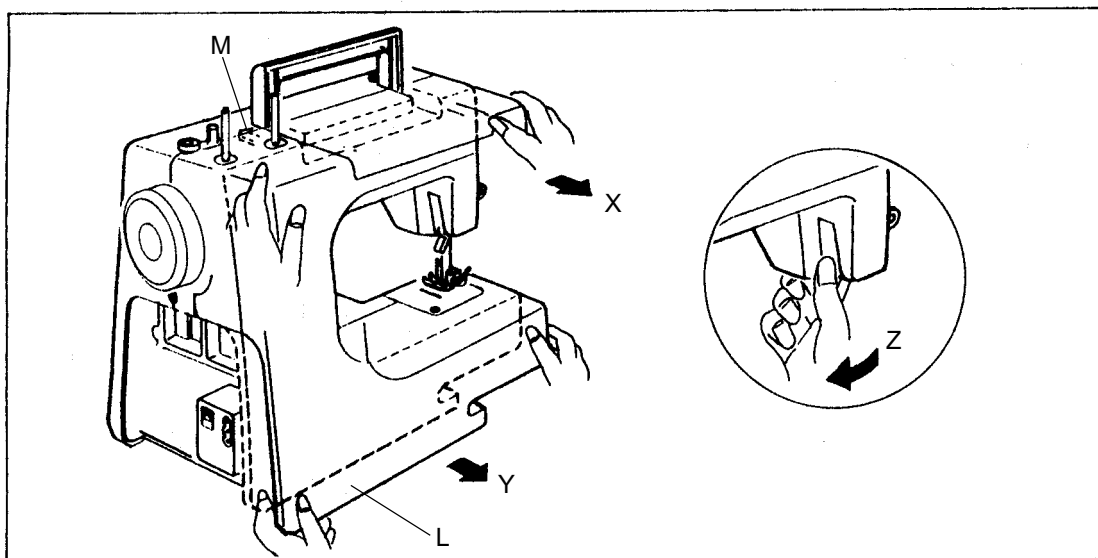
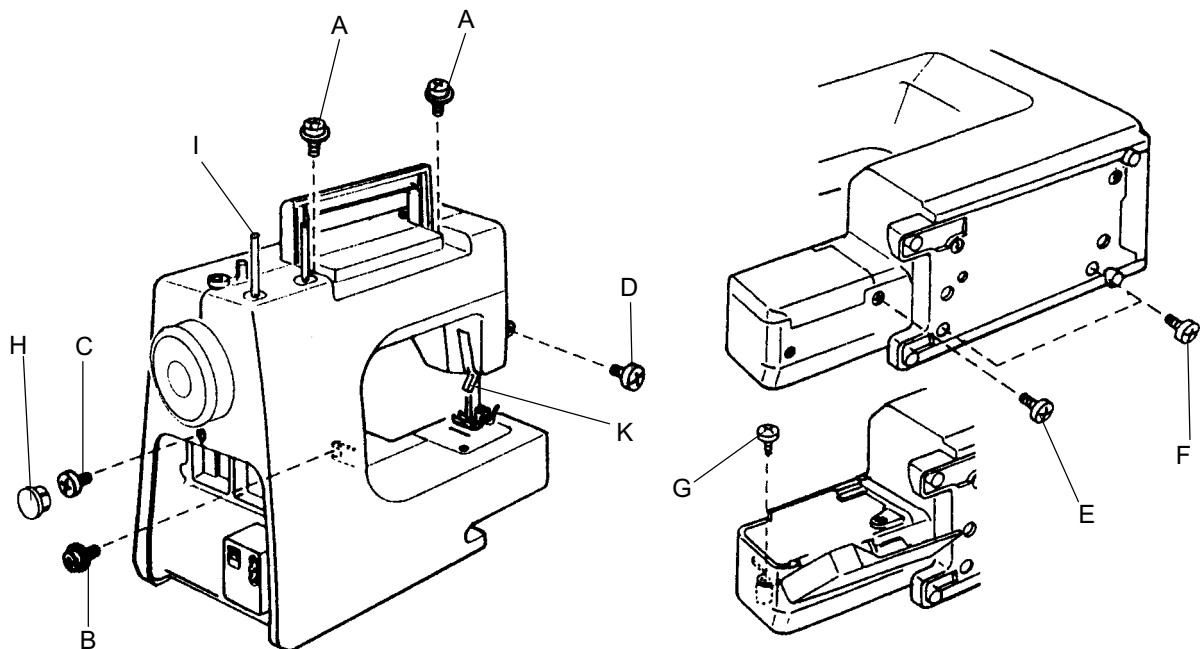
REAR COVER

NOTE:

REAR COVER COULD BE REMOVED WITHOUT REMOVING FIRST FRONT COVER.

TO REMOVE

1. REMOVE THE BELT COVER (SEE PAGE 4).
2. LOOSEN THE SET SCREWS A AND B AND REMOVE THE CAP H.
3. REMOVE THE SET SCREW C, D, E, F AND G.
4. PULL UP THE 2 SPOOL PINS I AND J AND LOWER THE PRESSER FOOT LIFTER K.
5. WHILE PUSHING THE REAR COVER L NEAR THE NOTCHES L AND M, PULL UPPER PART OF THE REAR COVER (SEE X BELLOW).
6. PULL LOWER PART OF THE REAR COVER TOWARD YOU AND SLIDE IT TO THE LEFT (SEE Y AND Z BELLOW).
WHILE SLIDING THE REAR COVER TO THE LEFT, REMOVE THE PRESSER BAR LIFTER K.



MECHANICAL ADJUSTMENT

UPPERTHREAD TENSION DIAL

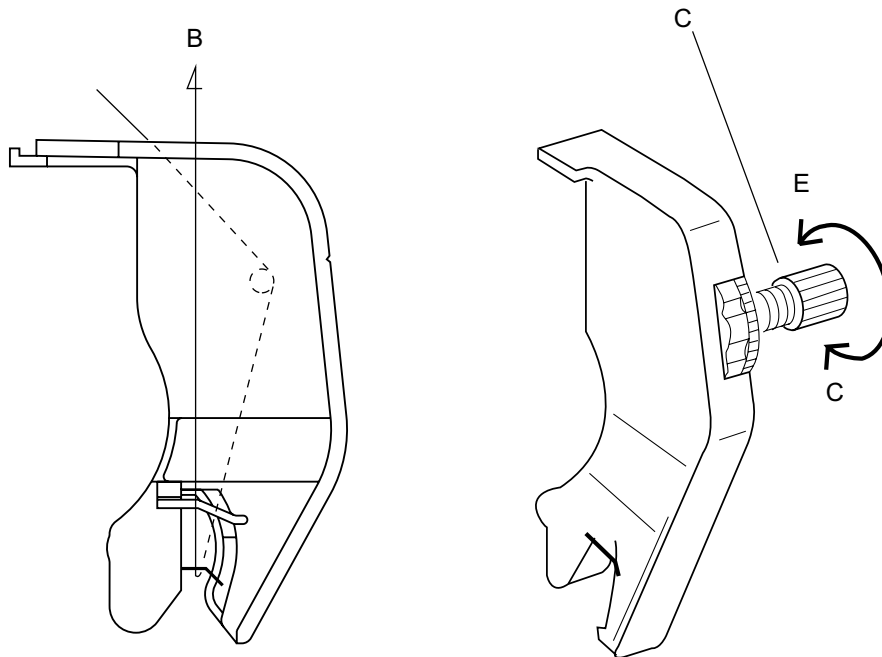
CORRECT SETTING

THE STANDARD UPPER THREAD TENSION SHOULD BE 65g - 95g WHEN THE THREAD (COTTON THREAD #50) IN THE DIRECTION OF B WITH SETTING THE TENSION DIAL AT "3". (MAKE SURE THE FOOT SHOULD BE LOWERED).

IF THE TENSION IS OUT OF THE STANDARD RANGE, ADJUST IT AS FOLLOWS:

TO ADJUST

1. REMOVE THE FRONT COVER UNIT. (SEE PAGE 5.)
2. TURN THE ADJUSTING NUT C IN THE DIRECTION OF D WHEN THE UPPER THREAD TENSION IS TOO TIGHT.
TURN THE ADJUSTING NUT C IN THE DIRECTION OF E WHEN THE UPPER THREAD TENSION IS TOO LOOSE.
3. ATTACH THE FRONT PANEL COVER UNIT.



MECHANICAL ADJUSTMENT

BOBBIN THREAD TENSION

CORRECT SETTING

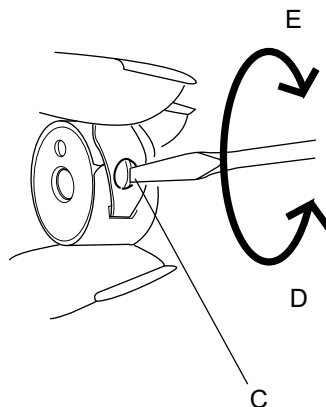
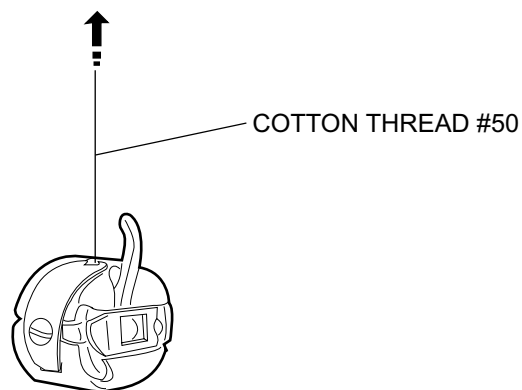
SET THE BOBBIN IN THE BOBBIN CASE AND PASS THE THREAD (COTTON #50) THROUGH THE TENSION SPRING.

THE BOBBIN THREAD TENSION SHOULD BE 45g - 55g WHEN PULLING THE THREAD IN THE DIRECTION OF B.

IF THE TENSION IS OUT THE RANGE, ADJUST IT AS FOLLOWS:

TO ADJUST

1. TURN THE ADJUSTING SCREW C IN THE DIRECTION OF D WHEN THE BOBBIN THREAD TENSION IS TOO TIGHT.
2. TURN THE ADJUSTING SCREW C IN THE DIRECTION OF E WHEN THE BOBBIN THREAD TENSION IS TOO LOOSE.



MECHANICAL ADJUSTMENT

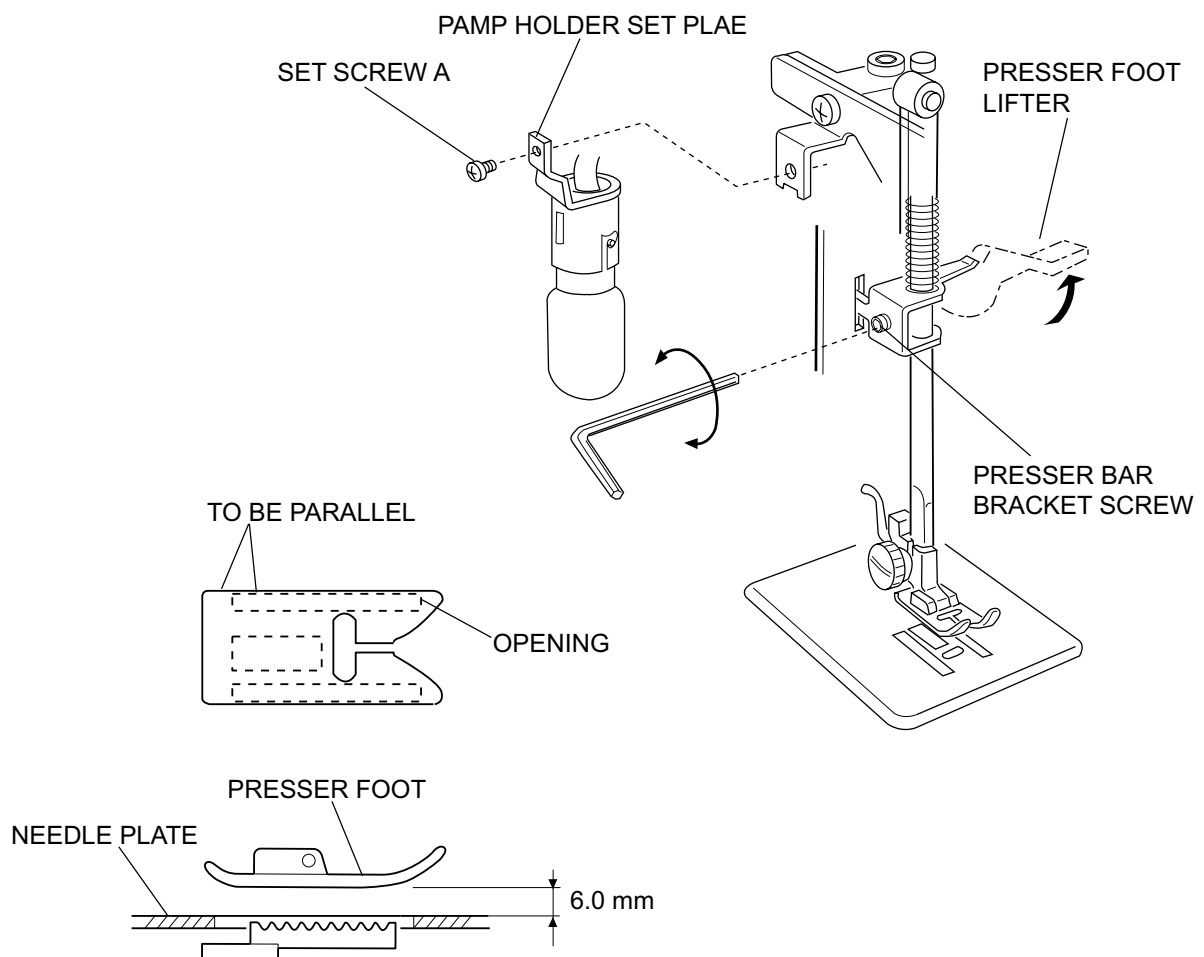
PRESSER BAR HEIGHT AND ALIGNMENT

CORRECT SETTING

THE STANDARD PRESSER BAR HEIGHT IS 6.0 mm BETWEEN THE BOTTOM SURFACE OF THE FOOT AND NEEDLE PLATE WHEN PRESSER FOOT LIFTER IS UP POSITION.

TO ADJUST

1. REMOVE THE FACE PLATE. (SEE PAGE 4.)
2. REMOVE SET SCREW A AND REMOVE LAMP HOLDER SET PLATE.
3. PAISE THE PRESSER FOOT AND LOOSE PRESSER BAR BRACKET SCREW AND ADJUST THE HEIGHT (6.0mm).
4. CHECK IF THE PRESSER FOOT IS PARALLEL TO THE OPEINIGS FOR THE FEED DOG ON THE NEEDLE PLATE. IF NOT, ADJUST IT.
5. TIGHTEN THE PRESSER BAR BRACKET SCREW WHILE HOLDING THE PRESSER BAR TO KEEP THE FOOT PALALLEL TO THE OPENINGS.
6. ATTACH THE LAMP HOLDER SET PLATE.
7. ATTACH THE FACE PLATE.



MECHANICAL ADJUSTMENT

NEEDLE SWING

CORRECT SETTING

IF THE TIMING OF NEEDLE SWING IS NOT CORRECTLY ADJUSTED, THE NEEDLE WILL MOVE SIDEWISE WHILE IT IS IN THE FABRIC.

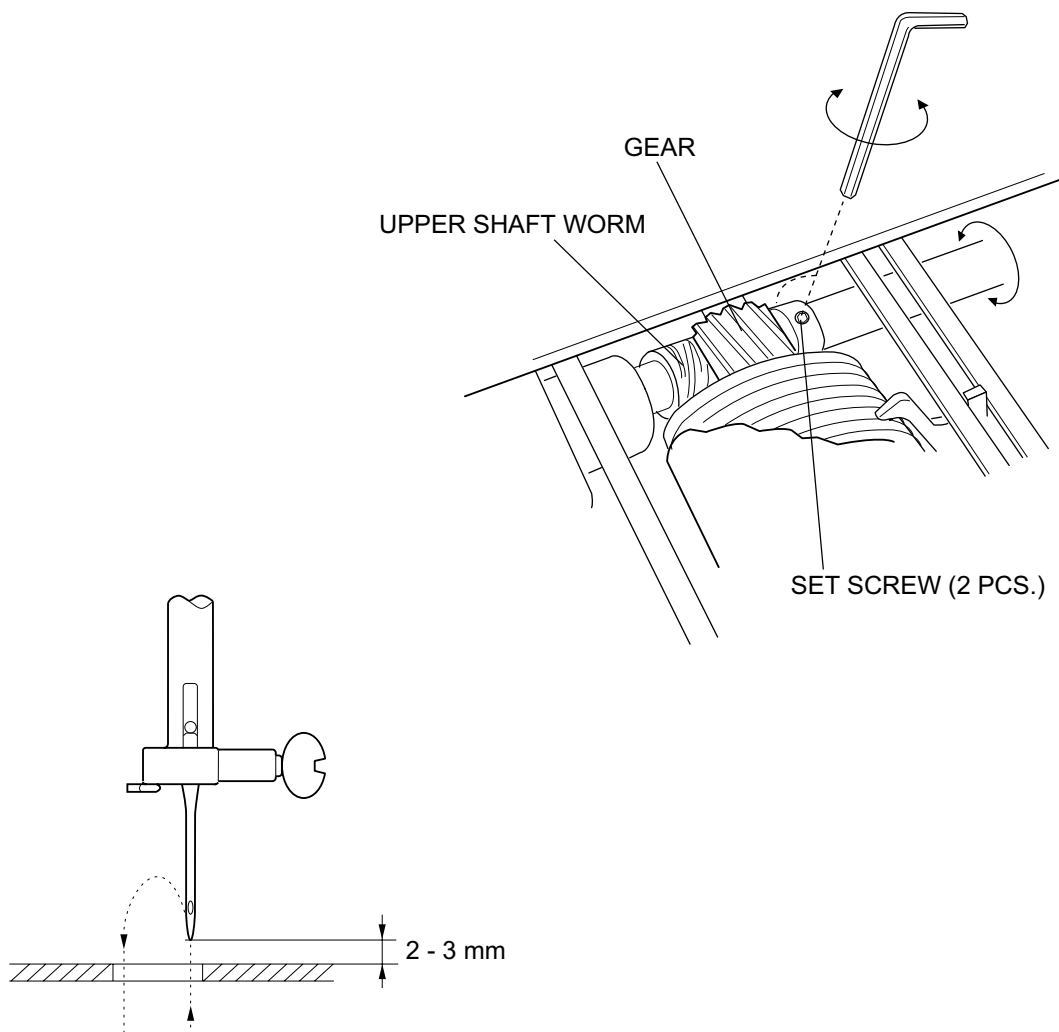
IDEALLY THE NEEDLE SHOULD START SWING FROM A POSITION 2 mm - 3 mm ABOVE THE NEEDLE PLATE IN ITS RIGHT OUTFLOW. (WITH MAXIMUM ZIGZAG WIDTH.)

TO ADJUST

1. SET THE PATTERN SELECTOR DIAL WITH MUXIMUM ZIGZAG WIDTH, AND REMOVE THE FRONT COVER. (SEE PAGE 5.)
2. LOOSEN TWO SET SCREWS.
3. ADJUST THE NEEDLE SWING BY TURNING THE BALANCE WHEEL, WHILE PRESSING THE WORM SO AS NOT TO ROTATE IT, UNTIL THE NEEDLE SWING START AT 2 mm - 3 mm ON THE NEEDLE PLATE AFTER THE NEEDLE HAS COME OUT OF THE RIGHT SIDE OF THE NEEDLE HOLE.
4. TIGHTEN TWO SET SCREWS.
5. MOUNT THE FRONT COVER.

NOTE:

AFTER ADJUSTING THE NEEDLE SWING, CHECK THAT THE UPPER SHAFT WORM AND GEAR ROTATE SMOOTHLY ANY BACKLASH BETWEEN THEM.



MECHANICAL ADJUSTMENT

NEEDLE DROP

CORRECT SETTING

WHEN THE NEEDLE SWINGS IN MAXIMUM ZIGZAG WIDTH, THE DISTANCE BETWEEN THE BOTH ENDS OF NEEDLE HOLE ON THE NEEDLE PLATE AND NEEDLE DROP POSITIONS SHOULD BE EQUAL.

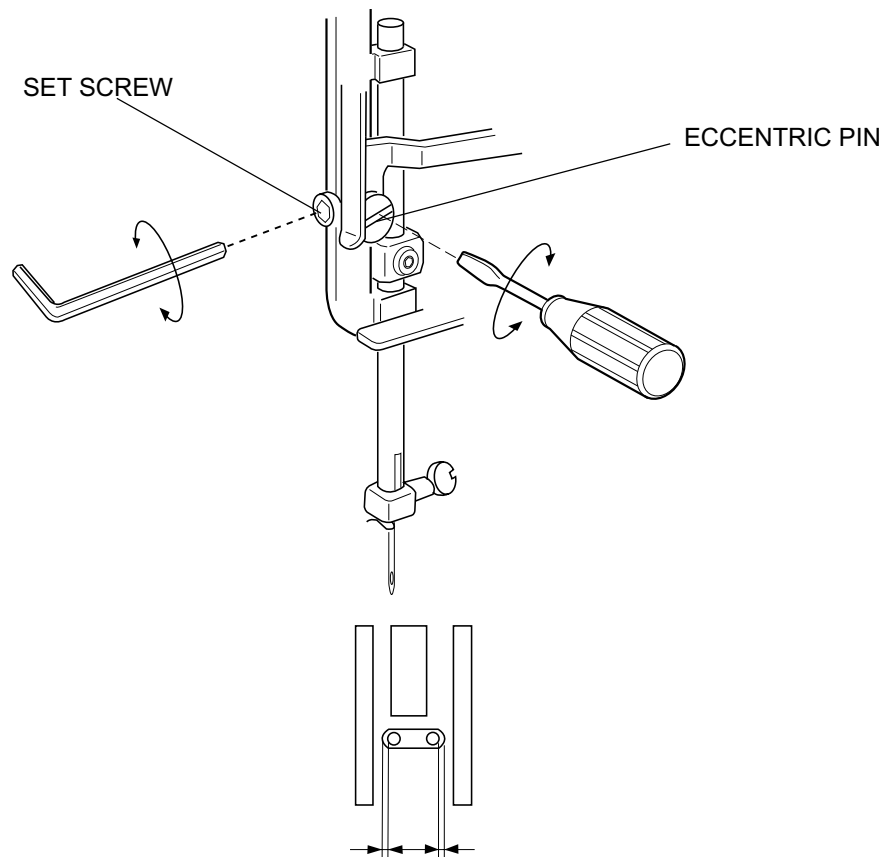
IF NOT, MAKE AN ADJUSTMENT AS FOLLOWS:

TO ADJUST

1. REMOVE THE FACE PLATE. (SEE PAGE 4.)
2. SET THE PATTERN SELECTOR DIAL AT MAXIMUM ZIGZAG WIDTH.
3. LOOSEN THE SET SCREW.
4. TURN THE ECCENTRIC PIN TO ADJUST THE NEEDLE DROP POSITION.
5. TIGHTEN THE SET SCREW.
6. ATTACH THE FACE PLATE.

NOTE:

CHECK THE HOOK TIMING AFTER THIS ADJUSTMENT.



BOTH CLEARANCE SHOULD BE EQUAL.

MECHANICAL ADJUSTMENT

HEIGHT OF FEED DOG

CORRECT SETTING

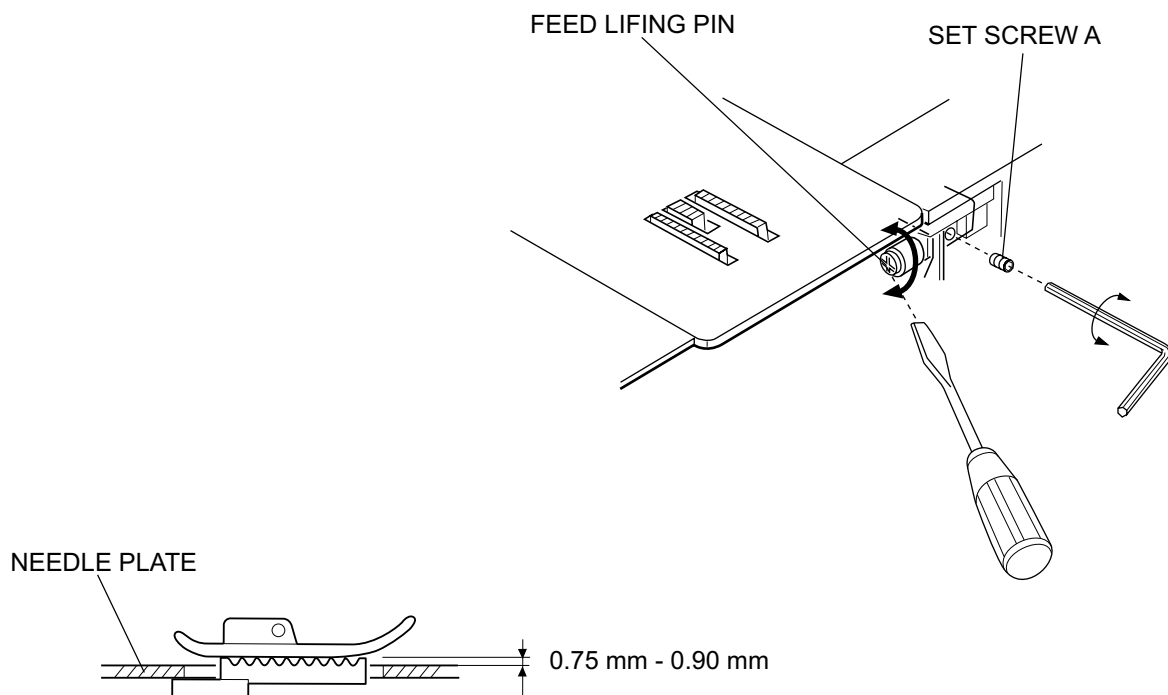
LOWER THE PRESSER FOOT AND TURN THE BALANCE WHEEL TOWARD YOU UNTIL THE NEEDLE BAR COMES TO THE HIGHEST POINT OF ITS TRAVEL.

IN THIS CONDITION, THE HEIGHT OF THE FEED DOG ABOVE THE NEEDLE PLATE SHOULD BE 0.75 mm - 0.90 mm.

IF IT IS NOT IN THE RANGE, MAKE AN ADJUSTMENT AS FOLLOWS:

TO ADJUST

1. SET THE STITCH LENGTH DIAL AT "4". (PATTERN SELECTOR DIAL AT ANY POSITION.)
 2. LOWER THE PRESSER FOOT AND TURN THE BALANCE WHEEL UNTIL THE FEED DOG COMES TO ITS HIGHEST POINT.
 3. LOOSEN THE SET SCREW A.
 4. TURN THE FEED LIFTING PIN TO ADJUST THE HEIGHT OF FEED DOG (0.75 mm - 0.90 mm).
 5. TIGHTEN THE SET SCREW A.
 6. TURN THE BALANCE WHEEL TO RECHECK THE HEIGHT OF FEED DOG.
- * RAISE NEEDLE TO ITS HIGHEST POSITION.
* MODEL JF1804 IS NOT EQUIPPED WITH ANY STITCH LENGTH DIAL.



MECHANICAL ADJUSTMENT

CLEARANCE BETWEEN NEEDLE AND HOOK (NO.1)

CORRECT SETTING

THE CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE SHOULD BE 0 mm - 0.15 mm.
IF NOT, MAKE AN ADJUSTMENT AS FOLLOWS:

TO ADJUST

1. REMOVE THE FACE PLATE. (SEE PAGE 4.)
2. SET THE PATTERN SELECTOR DIAL AT "B". (STITCH LENGTH DIAL AT ANY POSITION.)

NOTE:

FOR MODEL JF1004, SET THE PATTERN DISL AT "↔".

FOR MODELS JF1022 AND JF1018, SET THE PATTERN SELECTOR DIAL AT "A".

SET THE WIDTH SELECTOR SIAL AT "↔".

3. LOOSEN SET SCREW A, AND MOVE THE NEEDLE BAR SUPPORTER TO ARROWS TO GET CLEARANCE BETWEEN 0 mm TO 0.15 mm.

* WHEN CLEARANCE IS TOO WIDE, MOVE THE NEEDLE BAR SUPPORTER TO DIRECTION B.

* WHEN CLEARANCE IS TOO NARROW, MOVE THE NEEDLE BAR SUPPORTER TO DIRECTION C.

NOTE:

AFTER THIS ADJUSTMENT, CHECK IF THE CLEARANCE BETWEEN NEEDLE AND NEEDLE PLATE IS MORE THAN 0.15 mm AS SHOWN IN FIGURE D.

IF NOT, ADJUST THE CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE BY USING METHOD OF ADJUSTMENT NO. 2 IN PAGE 13 AFTER READJUST THE CLEARANCE BETWEEN NEDLE AND NEEDLE PLATE MORE THAN 0.15 mm.

4. ATTACH THE FACE PLATE.

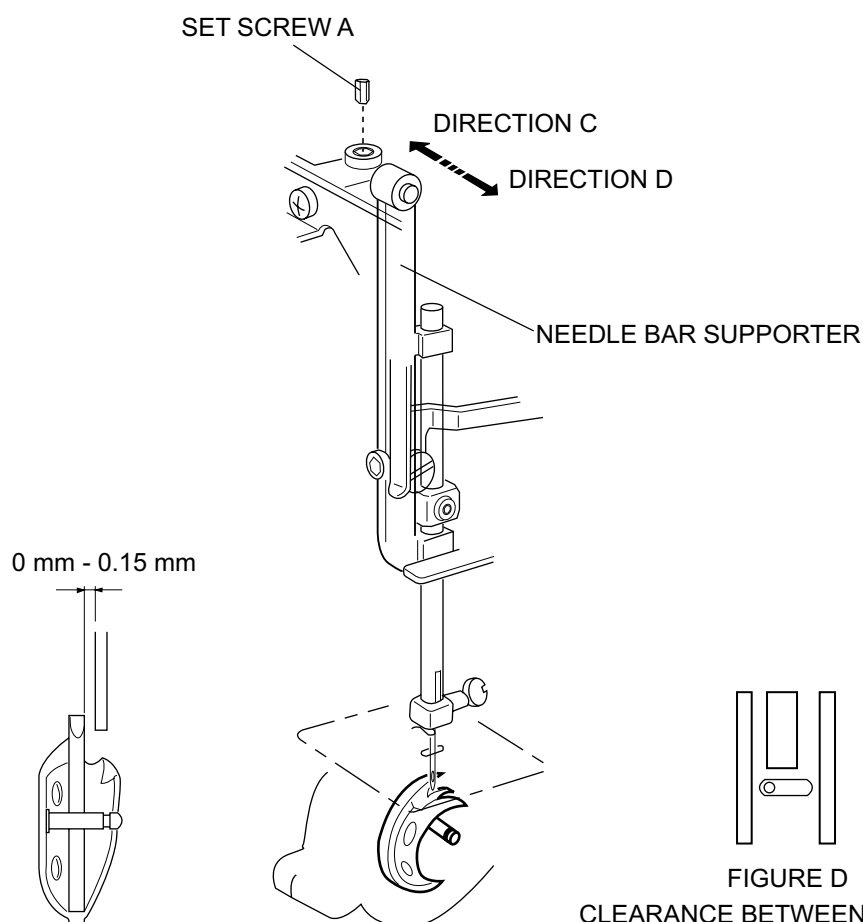


FIGURE D
CLEARANCE BETWEEN NEEDLE AND
NEEDLE PLATE IS MORE 0.15 mm.

MECHANICAL ADJUSTMENT

CLEARANCE BETWEEN NEEDLE AND HOOK (NO.2)

CORRECT SETTING

USE THIS ADJUSTMENT NO.2 WHEN ADJUSTMENT NO. 1 CAN NOT BE USED.

THE CLEARANCE BETWEEN NEEDLE AND SHUTTLE RACE SHOULD BE 0 mm - 0.15 mm.

TO ADJUST

1. SET THE PATTERN SELECTOR DIAL AT "B". (STITCH LENGTH DIAL AT ANY POSITION.)

NOTE:

FOR MODEL JF1004 ... SET THE PATTERN SELECTOR DIAL AT "B".

FOR MODEL JF1022 AND JF1018, SET THE PATTERN SELECTOR DIAL AT "A".

SET THE WIDTH SELECTOR DIAL AT "0".

2. LOOSEN THE SCREW A ON LOWER SHAFT BUSHING AND SLIDE THE GEAR ABOUT 0.5 mm TO THE RIGHT TO MAKE A SLACK BETWEEN GEARS.
3. LOWER THE NEEDLE AND LOOSEN THE TWO SHUTTLE RACE SET SCREWS B. MOVE THE SHUTTLE RACE UNIT AXIALLY EITHER FORWARD OR BACKWARD TO ADJUST THE CLEARANCE BETWEEN THE NEEDLE AND THE SHUTTLE RACE IN THE RANGE OF 0 mm - 0.15 mm.
4. SET THE PATTERN SELECTOR DIAL AT "C", TURN THE BALANCE WHEEL TO CHECK IF THE CLEARANCE BETWEEN THE NEEDLE AND INNER EDGES OF THE SHUTTLE RACE SPRING AT THE LEFT AND RIGHT NEEDLE DROPS ARE EQUAL. IF NOT, MAKE AN ADJUSTMENT BY TURNING THE SHUTTLE RACE UNIT.

NOTE:

FOR MODEL JF1004 ... SET THE PATTERN SELECTOR DIAL AT "C".

FOR MODEL JF1022 AD JF1018 ... SET THE PATTERN SELECTOR DIAL AT "C".

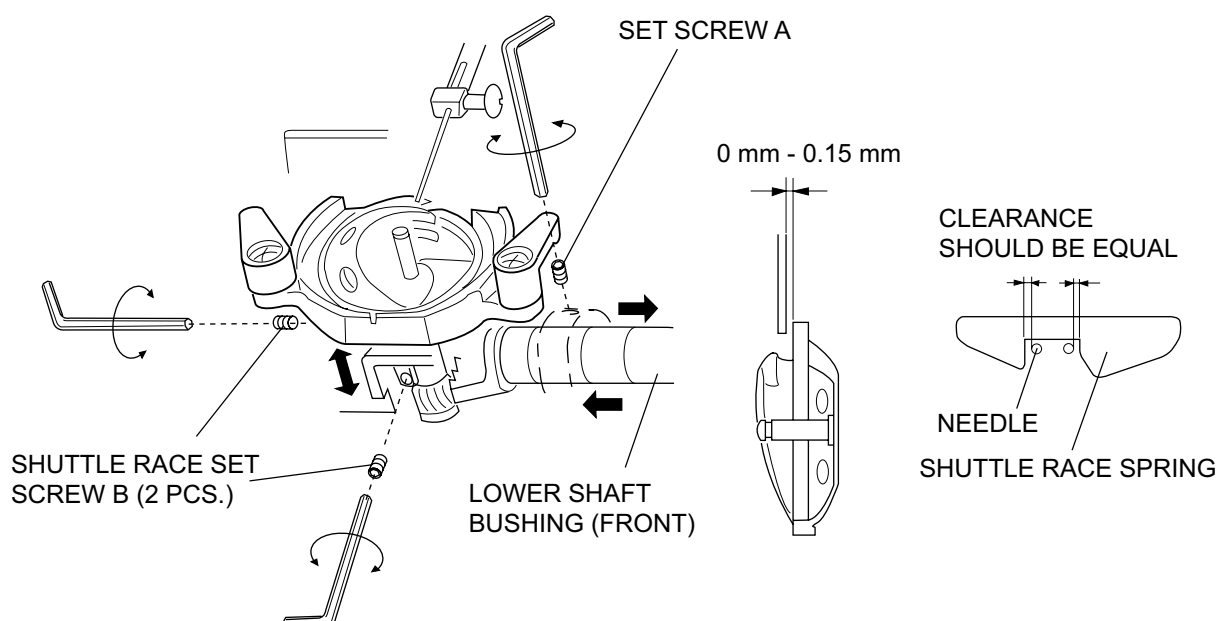
SET THE WIDTH SELECTOR DIAL AT "0".

5. TIGHTEN THE TWO SHUTTLE RACE SET SCREW B.
6. LOOSEN THE SET SCREW ON LOWER SHAFT BUSHING AND SLIDE THE GEAR BACK TO THE ORIGINAL POSITION WHILE ADJUSTING THE BACKLASH.
7. TIGHTEN THE SCREWS A FIRMLY.
8. ATTACH THE RACE COVER.

NOTE:

THE BACKLASH PLAY SHOULD BE LESS THAN 0.3 mm AND LOWER SHAFT TURNS SMOOTHLY.

AFTER THE ADJUSTMENT, CHECK THE HOOK TIMING.



MECHANICAL ADJUSTMENT

NEEDLE BAR HEIGHT

CORRECT SETTING

THE STANDARD DISTANCE BETWEEN THE UPPER EDGE OF NEEDLE EYE AND THE TIP OF SHUTTLE HOOK SHOULD BE IN THE RANGE OF 2.9 mm - 3.5 mm WHEN THE TIP OF SHUTTLE HOOK MEETS THE LEFT SIDE OF THE NEEDLE IN ASCENDING TRAVEL OF NEEDLE FROM ITS LEFT AND LOWEST POSITION.

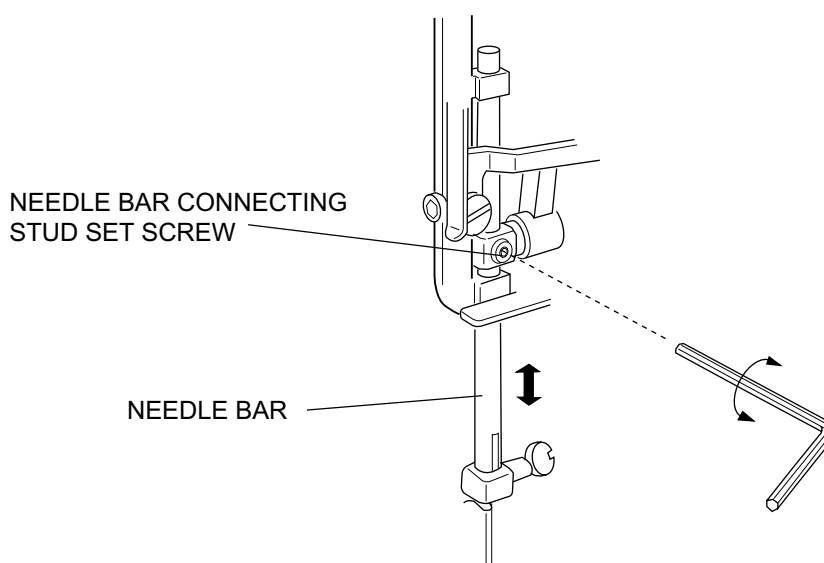
TO ADJUST

1. REMOVE THE FACE PLATE. (SEE PAGE 4.)
2. SET THE PATTERN SELECTOR DIAL AT "B". (STITCH LENGTH DIAL AT ANY POSITION.)

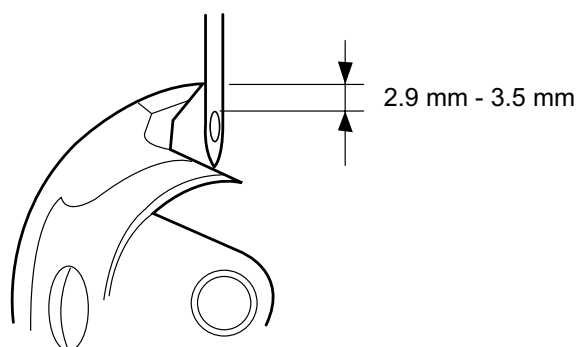
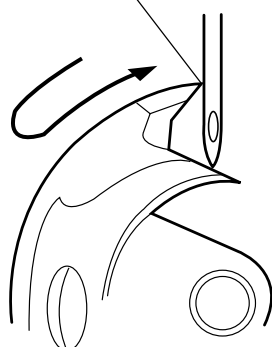
NOTE:

FOR MODEL JF1004 , SET THE PATTERN SELECTOR DIAL AT "E".
FOR MODEL JF1022 AD JF1018, SET THE PATTERN SELECTOR DIAL AT "A".
SET THE WIDTH SELECTOR DIAL AT "0".

3. REMOVE THE SHUTTLE RACE RING.
4. TURN THE BALANCE WHEEL TOWARD YOU UNTIL TIP OF SHUTTLE HOOK MEETS THE LEFT SIDE OF THE NEEDLE.
5. LOOSEN THE NEEDLE BAR CONNECTING STUD SET SCREW.
6. ADJUST THE HEIGHT OF THE NEEDLE BAR BY REMOVEING THE NEEDLE BAR UPWARD OR DOWNWARD WITHOUT TURNING IT.
7. TIGHTEN THE SET SCREW.
8. ATTACH THE SHUTTLE RACE RING.
9. ATTACH THE FACE PLATE.



TIP OF SHUTTLE HOOK MEETS LEFT SIDE OF NEEDLE.



MECHANICAL ADJUSTMENT

HOOK TIMING

CORRECT SETTING

THE STANDARD HEIGHT OF NEEDLE POINT FROM ITS LOWEST POINT OF TRAVEL SHOULD BE IN THE RANGE OF 1.45 mm - 1.95 mm WHEN THE TIP OF SHUTTLE HOOK MEETS EXACTLY THE LEFT SIDE OF NEEDLE AT LEFT NEEDLE POSITION.

TO ADJUST

1. SET THE SELECTOR DIAL AT "B".

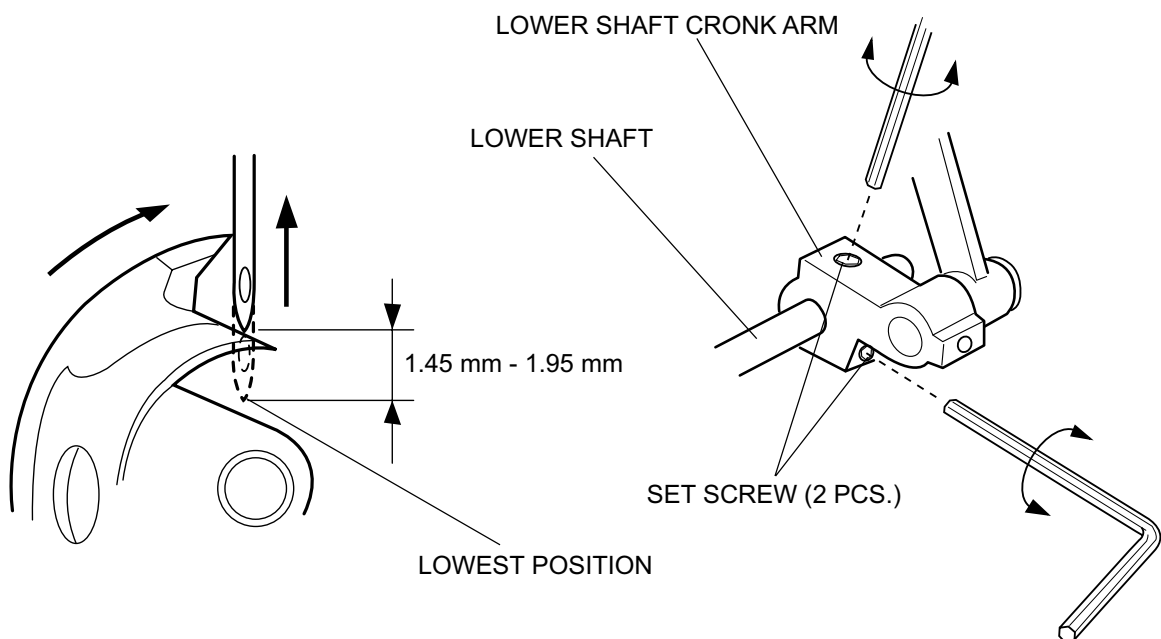
NOTE:

FOR MODEL JF1004 , SET THE PATTERN SELECTOR DIAL AT "E".

FOR MODEL JF1022 AD JF1018, SET THE PATTERN SELECTOR DIAL AT "A".

SET THE WIDTH SELECTOR DIAL AT "0".

2. REMOVE THE FRONT PANEL COVER UNIT.
3. REMOVE THE MOTOR.
4. REMOVE THE SHUTTLE RACE RING.
5. TURN THE BALANCE WHEEL TOWARD YOU UNTIL THE TIP OF SHUTTLE HOOK MEETS THE LEFT SIDE OF NEEDLE.
6. LOOSEN THE LOWER SHAFT CRANK ARM SET SCREW (2 PCS.).
7. WHILE HOLDING THE SHUTTLE HOOK NUT TO TURN, TURN THE BALANCE WHEEL TOWARD YOU UNTIL NEEDLE COMES TO ITS LOWEST POSITION. THEN, FURTHER TURN THE BALANCE WHEEL TO RAISE THE NEEDLE ABOUT 1.7 mm FROM ITS LOWEST POSITION.
8. TIGHTEN THE SET SCREW.
9. TURN THE BALANCE WHEEL TOWARD YOU TO CHECK IF THE HEIGHT IS THE RANGE OF 1.45 mm - 1.95 mm. IF IT IS NOT IN THE RANGE, REPEAT THE ABOVE PROCEDURE.
10. ATTACH THE SHUTTLE RACE RING.
11. ATTACH THE MOTOR AND ADJUST THE BELT TENSION.
12. ATTACH THE FRONT PANEL COVER UNIT.



MECHANICAL ADJUSTMENT

(FOR MODELS JF1022, JF1018S, JF1018, JF1014 AND JF1012)

FEED BALANCE ON STRETCH STITCH

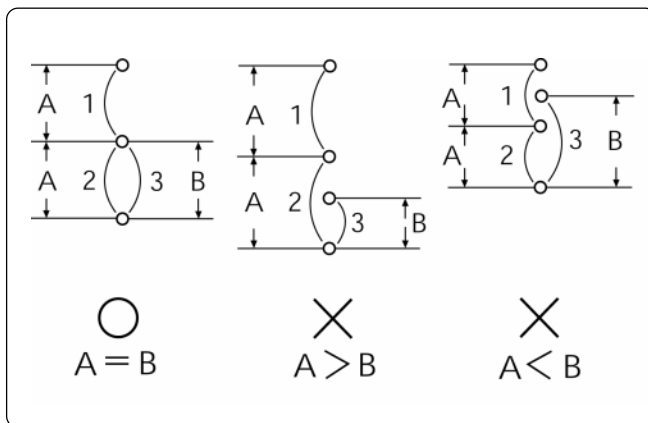
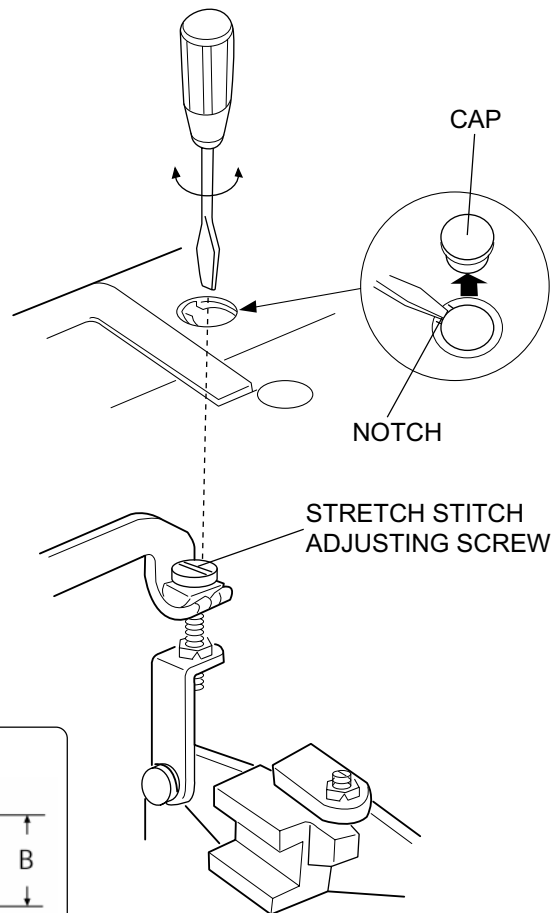
CORRECT SETTING

IF THE STRETCH STITCH PATTERNS ARE DISTORTED WITH SETTING THE STITCH LENGTH DIAL AT "SS".

(IN CASE OF BEING A DIFFERENCE BETWEEN FORWARD FEEDING AND BACKWARD FEEDING DURING STRETCH STITCH PATTERNS), MAKE AN ADJUSTMENT AS FOLLOWS:

TO ADJUST

1. REMOVE THE CAP.
2. SET THE PATTERN SELECTOR DIAL AT "A", AND THE STITCH LENGTH DIAL AT "SS".
FOR MODELS JF1022 AND JF1018, SET THE PATTERN SELECTOR DIAL AT "A".
SET THE STITCH WIDTH SELECTOR DIAL AT "0".
SET THE STITCH LENGTH SELECTOR DIAL AT "SS".
3. TURN THE STRECH STITCH ADJUSTING SCREW IN THE DIRECTION OF C WHEN $A > B$, OR IN THE DIRECTION OF D WHEN $A < B$.
4. MOUNT THE CAP.



MECHANICAL ADJUSTMENT

(FOR MODELS JF1022, JF1018S, JF1018 AND JF1014 - JF1004)

BUTTON HOLE FEED BARANCE

CORRECT SETTING

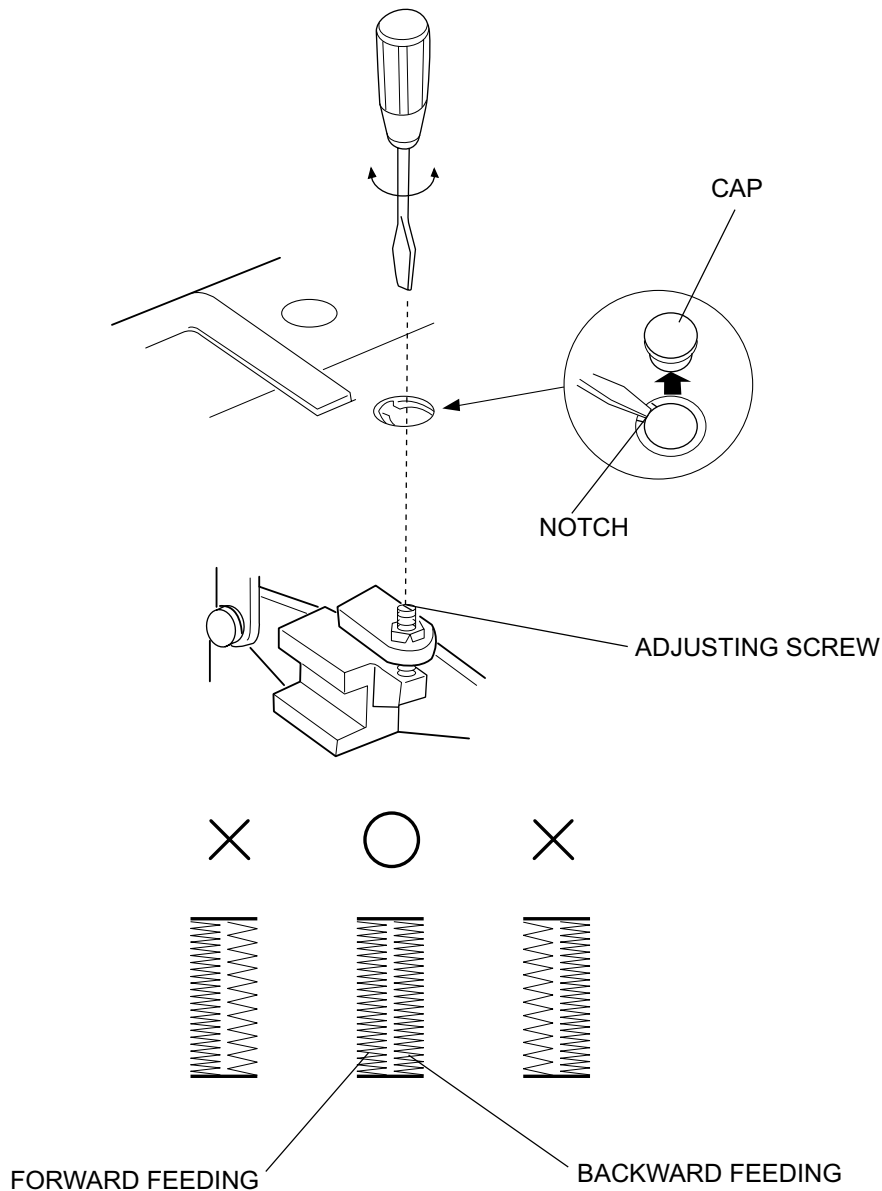
WHEN SEWING BUTTONHOLE, THE STITCHES ON EACH SIDE OF BUTTONHOLE SHOULD BE THE SAME STITCH DENSITY.

THE RANGE OF 9 - 11 STITCHES IN THE RIGHT SIDE ROW "BACKWARD FEEDING" AGAINST 10 STITCHES IN THE LEFT SIDE ROW "FORWARD FEEDING" IS CONSIDERED ACCEPTABLE.

TO ADJUST

1. CONFIRM THE STITCHES BY SEWING BUTTONHOLES, AND REMOVE THE CAP.
2. TURN THE ADJUSTING SCREW IN THE DIRECTION OF C IN CASE OF A (RIGHT STITCHES ARE ROUGH), OR IN THE DIRECTION OF D IN CASE OF B (LEFT STITCHES ARE ROUGH).
3. MOUNT THE CAP.

* IN CASE OF MODEL JD1818 HAVING ONE STEP BUTTONHOLE FUNCTION, THE "FORWARD FEEDING" AND "BACKWARD FEEDING" ARE REVERSED.



MECHANICAL ADJUSTMENT

(FOR MODELS JF1022, JF1018S, JF1018 AND JF1014 - JF1004)

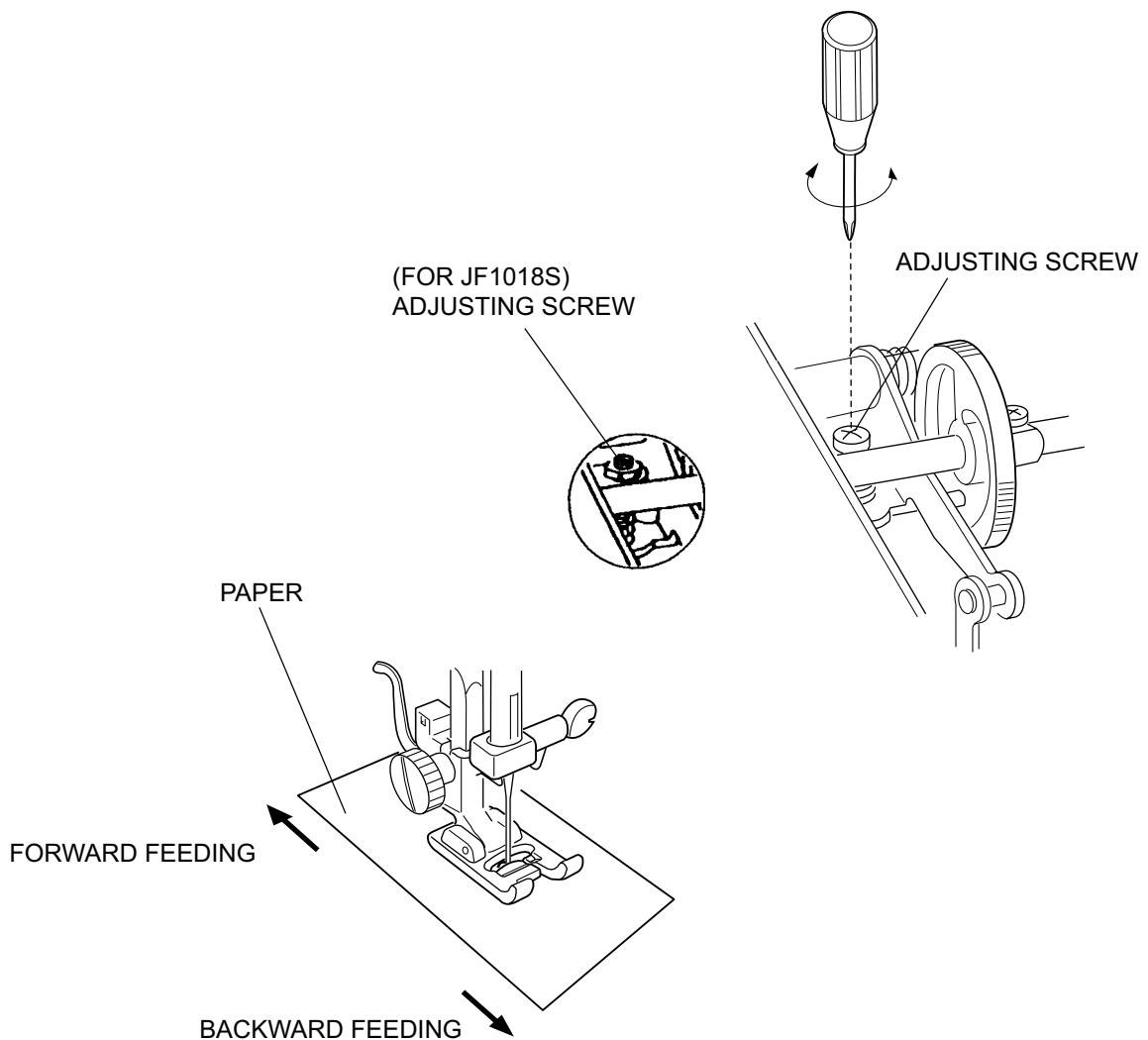
BARTACK FEED OF BUTTONHOLE

CORRECT SETTING

IF THE MATERIAL IS FED FORWARD OR BACKWARD WHEN SEWING BARTACK ON BUTTONHOLE, MAKE AN ADJUSTMENT AS FOLLOWS:

TO ADJUST

1. SET THE PATTERN SELECTOR DIAL AT "  " AND THE STITCH LENGTH DIAL AT "4".
(SET THE PATTERN SELECTOR DIAL AT "  " ON CASE OF JF1018S.)
2. REMOVE THE FRONT COVER. (SEE PAGE 5.)
3. PLACE A PIECE OF PAPER UNDER THE FOOT AND TURN THE BALANCE WHEEL.
IF THE PAPER IS FED FORWARD, TURN THE ADJUSTING SCREW IN THE DIRECTION OF C.
IF THE PAPER IS FED BACKWARD, TURN THE ADJUSTING SCREW IN THE DIRECTION OF D.
4. MOUNT THE FRONT COVER.
* IN CASE OF MODEL JF1018S HAVING ONE STEP BUTTONHOLE FUNCTION, THE ADJUSTING SCREW AND PRESSER FOOT ARE DIFFERENT FROM THOSE DESCRIBED ABOVE.



MECHANICAL ADJUSTMENT

(FOR MODELS JF1022 AND JF1018)

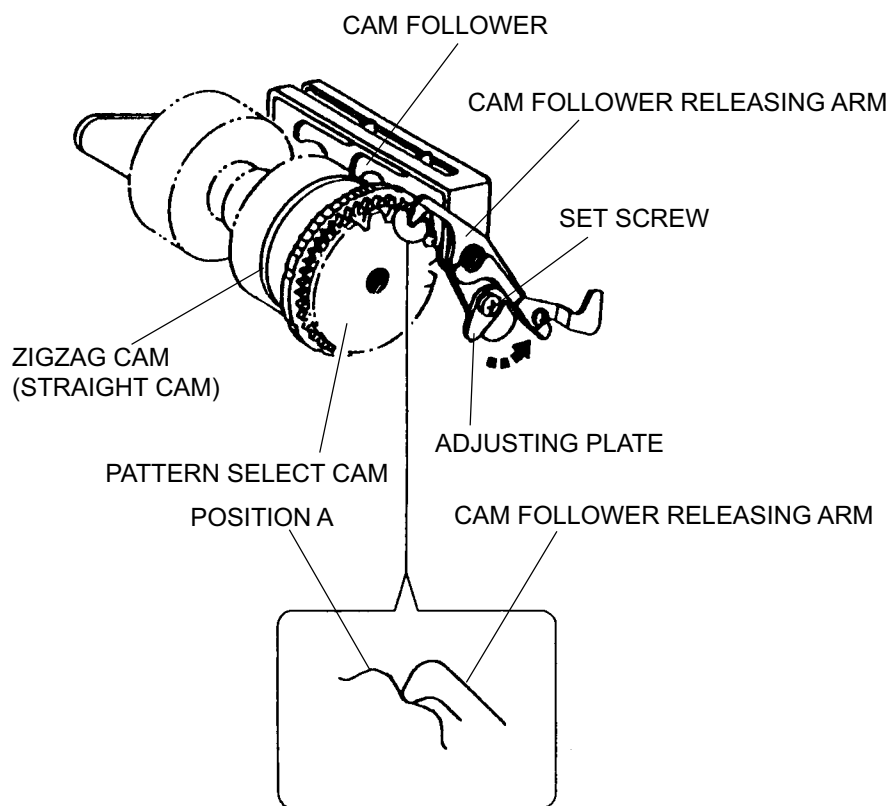
DISENGAGEMENT OF CAM FOLLOWER (NO.1)

CORRECT SETTING

TOO NARROW CLEARANCE BETWEEN THE CAM FOLLOWER AND THE TOP CONVEX OF ZIGZAG CAM MAY OFTEN CAUSE DIFFICULTY IN TURNING THE PATTERN SELECTOR DIAL OR CAN NOT SELECT CORRECT PATTERN.

TO ADJUST

1. SET THE PATTERN SELECTOR DIAL AT "A" AND THE STITCH WIDTH DIAL AT " 5 ".
(STITCH LENGTH DIAL AT ANY POSITION.)
2. REMOVE THE FRONT COVER. (SEE PAGE 5.)
3. PUT THE CAM FOLLOWER TH THE ZIGZAG CAM (STRAIGHT CAM), AND ALSO PUT THE CAM FOLLOWER REPEASING ARM TO THE PATTERN SELECTOR CAM.
4. LOOSEN THE SET SCREW.
5. MOVE ADJUSTING PLATE INT THE DIRECTON OF ARROW UNTIL TOUCH THE THE RELEASING ARM AND TIGHTEN SET SCREW.
* AFTER ADJUSTMENT, CHECK THAT THE CLEARANCE BETWEEN THE ZIGZAG CAM AND THE CAM FOLLOWER IS ABOUT 0.3 mm WHEN PUTTING THE CAM FOLLOWER RELEASING ARM ONTO POSITION (A) OF PATTERN SELECT CAM.
6. MOUNT THE FRONT COVER.
* CHECK THE ADJUSTMENT OF THE NEEDLE MOVEMENT FOR STRAIGHT STITCH.



MECHANICAL ADJUSTMENT

(FOR MODELS JF1018 AND JF1022)

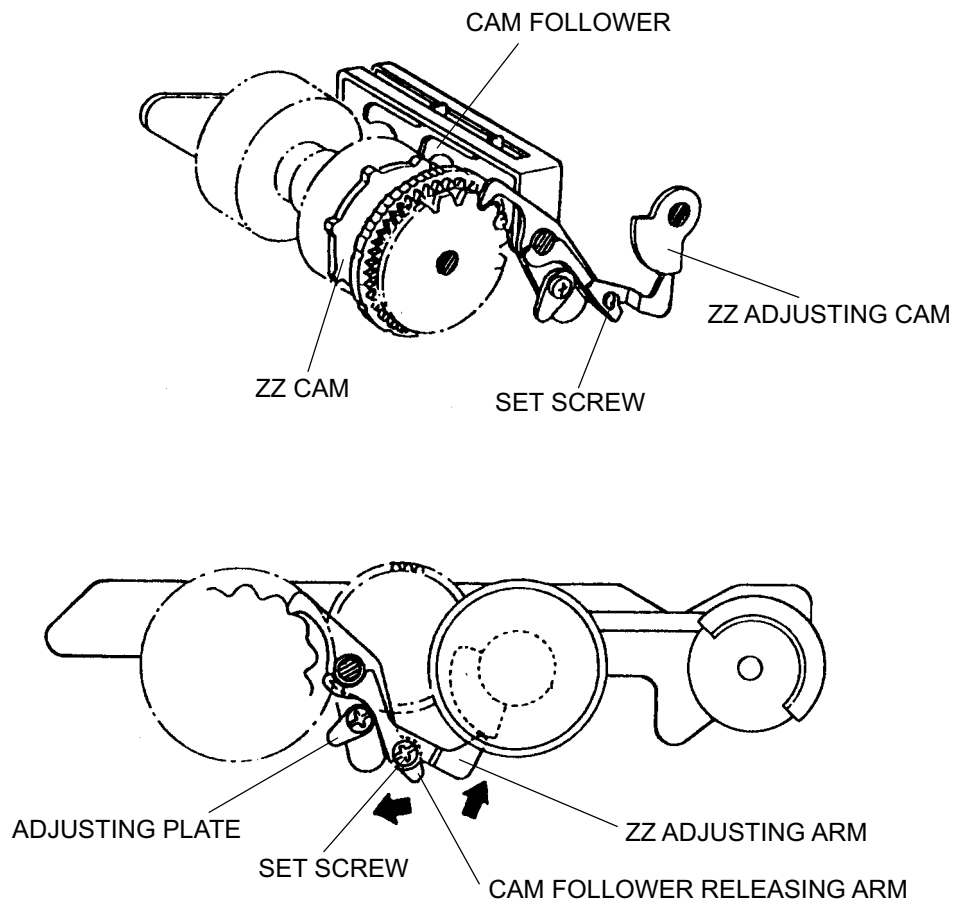
NEEDLE MOVEMENT FOR STRAIGHT STITCH

CORRECT SETTING

NEEDLE IS ZIGZAG SLIGHTLY WHEN SELECT THE PATTERN SELECTOR DIAL AT "C" AND THE STITCH WIDTH DIAL AT "0", ADJUSTMENT IS AS FOLLOWS:

TO ADJUST

1. SET THE PATTERN SELECTOR DIAL AT "C" AND THE STITCH WIDTH DIAL AT "0".
2. REMOVE THE FRONT COVER. (SEE PAGE 5.)
3. LOOSEN THE SET SCREW.
4. TURN THE BALANCE WHEEL TO PUT THE CAM FOLLOWER ONTO THE TOP CONVEX OF THE ZIGZAG CAM (ZZ CAM) AND SET THE ZZ ADJUSTING ARM TO TOUCH THE ZZ ADJUSTING CAM. THEN, SET THE CAM FOLLOWER RELEASING ARM TO LIGHTLY TOUCH THE ADJUSTING PLATE, AND TIGHTEN THE SET SCREW.
* AFTER THIS ADJUSTMENT, CHECK IF NEEDLE IS NOT ZIGZAGING OR CLEARANCE BETWEEN NEEDLE AND NEEDLE HOLE IS MORE THAN 0.2 mm AND NEEDLE POSITION IS CORRECT.
5. MOUNT THE FRONT COVER.



MECHANICAL ADJUSTMENT

(FOR MODELS JF1018S, JF1014 AND JF1012)

DISENGAGEMENT OF CAM FOLLOWER (2)

CORRECT SETTING

TOO NARROW CLEARANCE BETWEEN THE CAM FOLLOWER AND THE TOP CONVEX OF ZIGZAG CAM MAY OFTEN CAUSE DIFFICULTY IN TURNING THE PATTERN SELECTOR DIAL. CAN NOT SELECT CORRECT PATTERN OR ZIGZAGGING IN STRAIGHT STITCH SETTING.

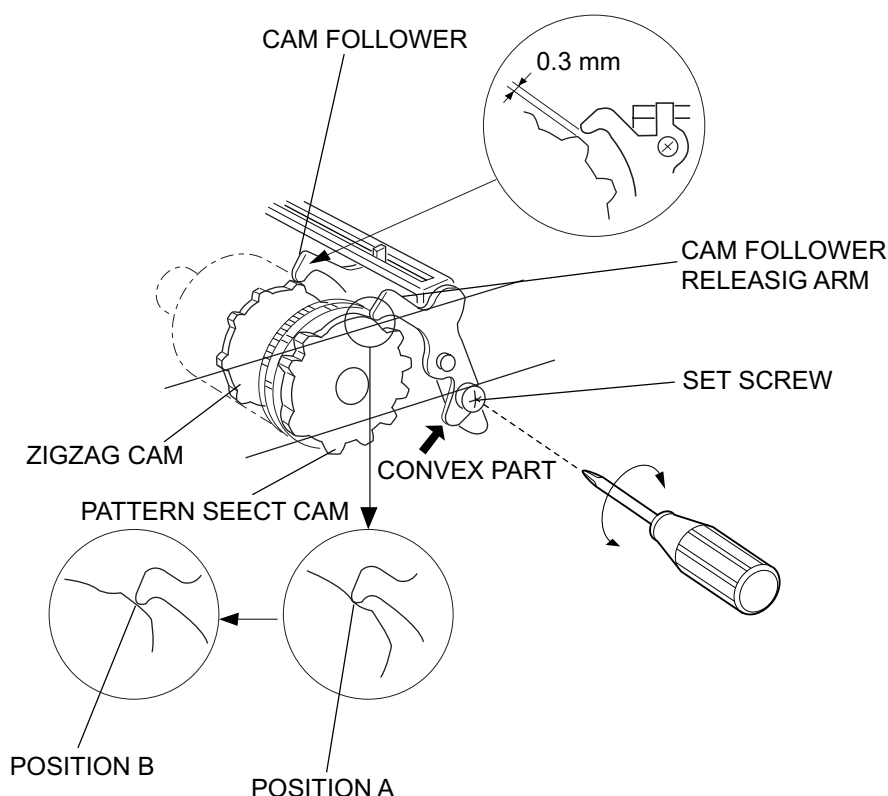
TO ADJUST

1. REMOVE THE FRONT COVER. (SEE PAGE 5.)
2. MOUNT THE PATTERN SELECTOR DIAL, AND SET IT AT PATTERN "B". (5TH CAM AS VIEWED FROM C.)
3. TURN THE BALANCE WHEEL TO PUT THE CAM FOLLOWER ONTO THE TOP CONVEX OF THE ZIGZAG CAM.
4. LOOSEN THE SET SCREW.
5. PUSH THE CONVEX PART OF THE CAM FOLLOWER RELEASING ARM IN THE DIRECTION OF ARROW UNTIL THE CAM FOLLOWER RELEASING ARM TOUCHES TO POSITION (A) OF THE PATTERN SELECT CAM, AND THEN, TIGHTEN THE SET SCREW.

NOTE:

AFTER THIS ADJUSTMENT, CHECK THAT THE CLEARANCE BETWEEN THE ZIGZAG CAM AND THE CAM FOLLOWER IS 0.3 mm WHEN THE CAM FOLLOWER RELEASING ARM HAS MOVED TO POSITION (B) BY TURNING THE PATTERN SELECTOR DIAL COUNTERCLOCKWISE, AND ALSO THE CLEARANCE BETWEEN THE CAM FOLLOWER AND THE ZIGZAG CAM SHOULD BE 0.3 mm.

6. REMOVE THE PATTERN SELECTOR DIAL, AND MOUNT THE FRONT COVER.



MECHANICAL ADJUSTMENT

(FOR MODEL JF1004)

DISENGAGEMENT OF CAM FOLLOWER (2)

CORRECT SETTING

TOO NARROW CLEARANCE BETWEEN THE CAM FOLLOWER AND THE TOP CONVEX OF ZIGZAG CAM MAY OFTEN CAUSE DIFFICULTY IN TURNING THE PATTERN SELECTOR DIAL. CAN NOT SELECT CORRECT PATTERN OR ZIGZAGING IN STRAIGHT STITCH SETTING.

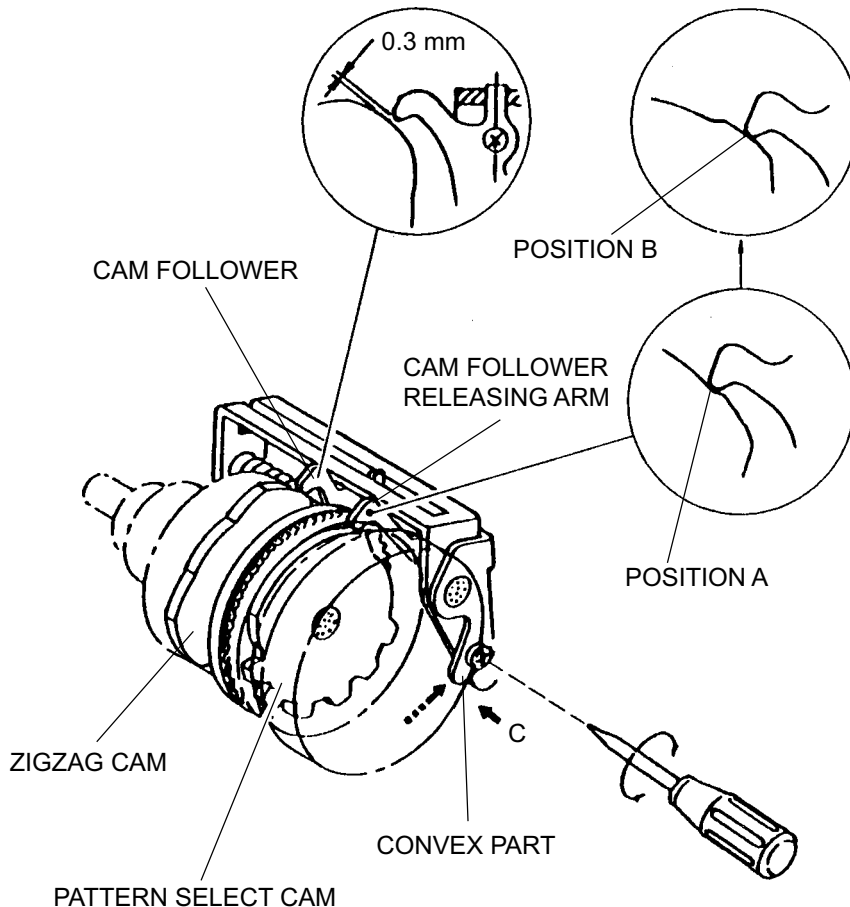
TO ADJUST

1. REMOVE THE FRONT COVER. (SEE PAGE 5.)
2. MOUNT THE PATTERN SELECTOR DIAL, AND SET IT AT PATTERN "E". (5TH CAM AS VIEWED FROM C.)
3. TURN THE BALANCE WHEEL TO PUT THE CAM FOLLOWER ONTO THE TOP CONVEX OF THE ZIGZAG CAM.
4. LOOSEN THE SET SCREW.
5. PUSH THE CONVEX PART OF THE CAM FOLLOWER RELEASING ARM IN THE DIRECTION OF ARROW UNTIL THE CAM FOLLOWER RELEASING ARM TOUCHES TO POSITION (A) OF THE PATTERN SELECT CAM, AND THEN, TIGHTEN THE SET SCREW.

NOTE:

AFTER THIS ADJUSTMENT, CHECK THAT THE CLEARANCE BETWEEN THE ZIGZAG CAM AND THE CAM FOLLOWER IS 0.3 mm WHEN THE CAM FOLLOWER RELEASING ARM HAS MOVED TO POSITION (B) BY TURNING THE PATTERN SELECTOR DIAL COUNTERCLOCKWISE, AND ALSO THE CLEARANCE BETWEEN THE CAM FOLLOWER AND THE ZIGZAG CAM SHOULD BE 0.3 mm.

6. REMOVE THE PATTERN SELECTOR DIAL, AND MOUNT THE FRONT COVER.



MECHANICAL ADJUSTMENT

(FOR MODEL JF1018S ONLY)

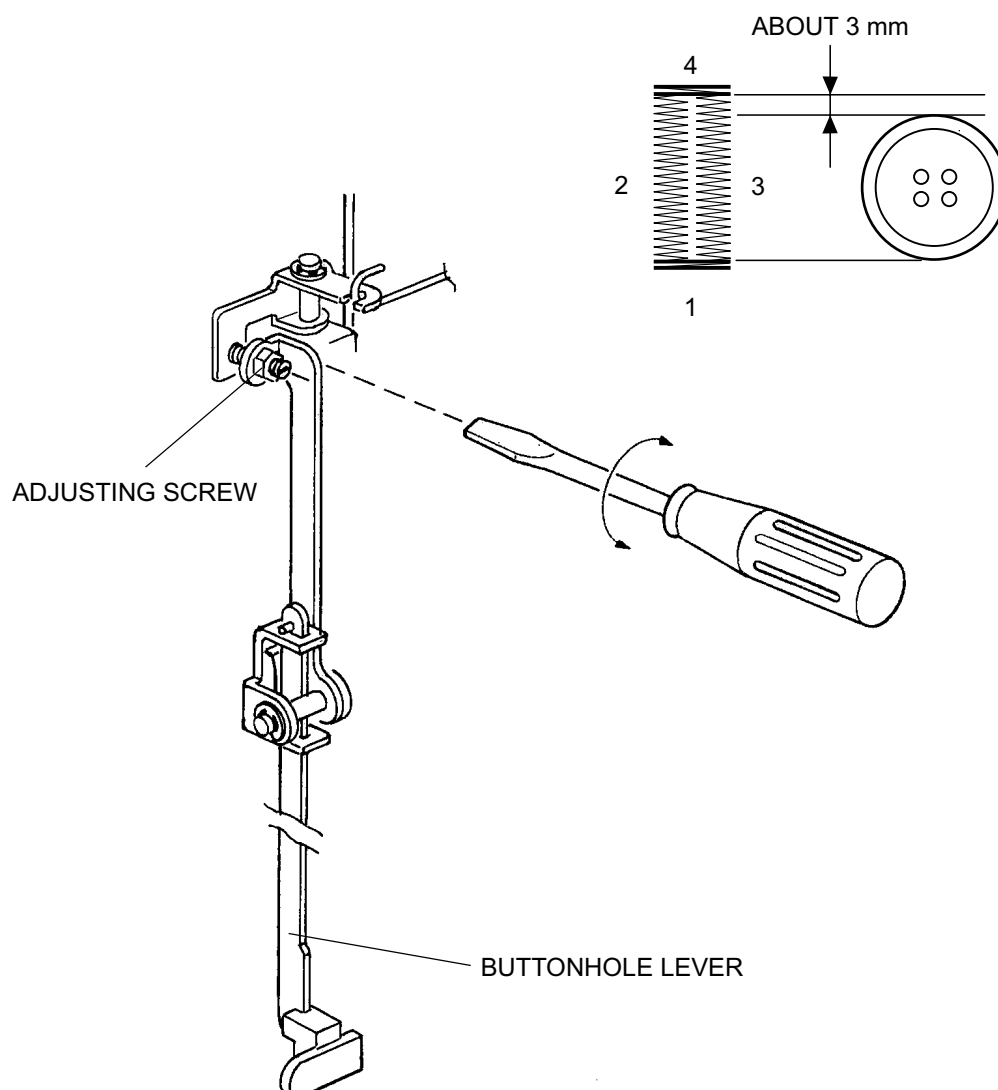
BUTTONHOLE FUNCTION

CORRECT SETTING

IN BH STITCHING, THE SEWED BUTTONHOLE SHOULD BE ABOUT 3 mm LONGER THAN THE LENGTH SET BY THE R FOOT. IF THIS LENGTH CANNOT BE OBTAINED, THEN CHECK AND ADJUST IN THE FOLLOWING PROCEDURE:

TO ADJUST

1. REMOVE THE FACE PLATE. (SEE PAGE 4.)
2. TURN THE ADJUSTING SCREW IN THE DIRECTION OF (A) IF THE BUTTONHOLE STITCH LENGTH IS LONGER THAN THE STANDARD, OR IN THE DIRECTION OF (B) IF THE BUTTONHOLE STITCH LENGTH IS SHORTER THAN THE STANDARD.
3. MOUNT THE FACE PLATE.



MECHANICAL ADJUSTMENT

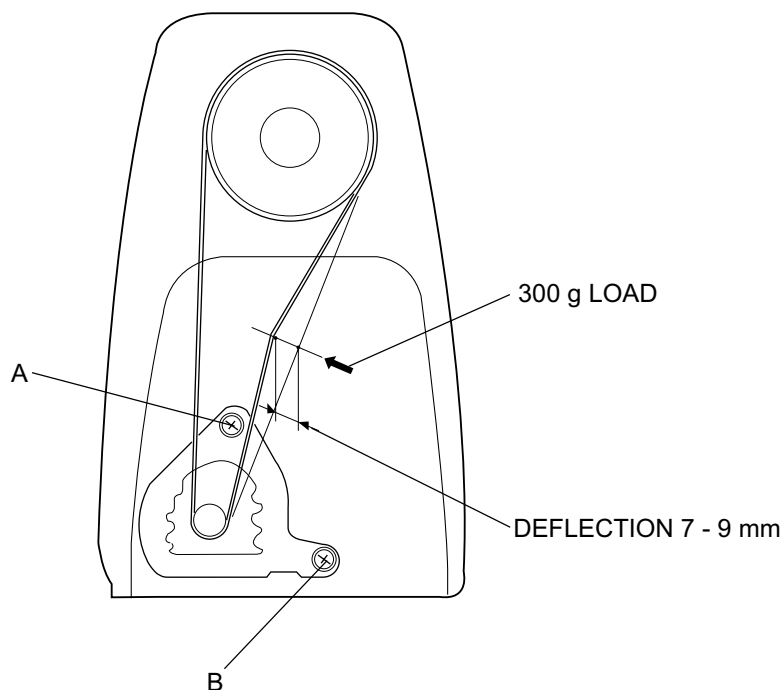
MOTOR BELT TENSION

CHECK:

1. TOO TIGHT OR TOO LOOSE MOTOR BELT TENSION MAY CREATE BELT NOISE AND ALSO TOO TIGHT MOTOR BELT TENSION CAN CAUSE THE MACHINE TO RUN SLOW AND WILL OVERLOAD THE MOTOR.
TOO LOOSE MOTOR BELT TENSION MAY CAUSE JUMPING OF THE BELT TEETH ON THE MOTOR PULLEY.
2. THE CORRECT MOTOR BELT TENSION IS THAT THE DEFLECTION OF MOTOR BELT IS ABOUT 7 mm (0.28") - 9 mm (0.36") WHEN PUSHING THE MOTOR BELT BY FINGER AT ABOUT 300 g LOAD.

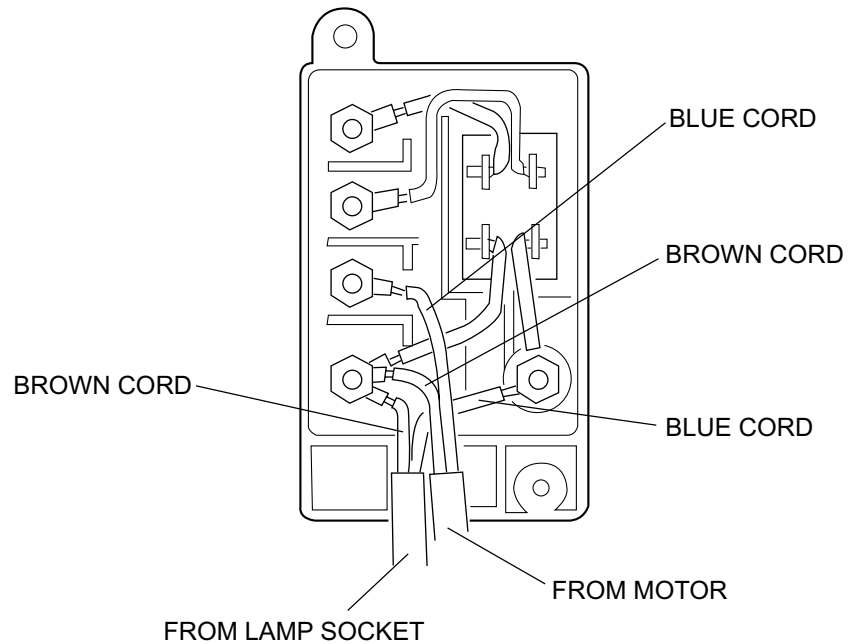
TO ADJUST

1. REMOVE THE BELT COVER.
2. LOOSEN THE SCREWS (A) AND (B).
3. MOVE THE MOTOR UP OR DOWN TO ADJUST THE DEFLECTION ABOUT 7 mm (0.28") - 9 mm (0.36").
4. TIGHTEN THE SCREWS (A) AND (B).



WIRING

(FOR 220 - 240V)



(FOR 110 - 120V)

