

SWING-TYPE SHIRRING ATTACHMENTS
SEWING MACHINES MO-2400N AND -2500N SERIES

S057 · S058 S097 · S098

# INSTRUCTION MANUAL

These shirring attachments, S057, S058, S097 and S098 are designed for use with JUKI overedgers and safety stitchers MO-2400N and -2500N series.

Please read this manual carefully before using these units in order to get the most out of it and to enjoy using it for a long time.

#### 1. MODELS

Swing-type Shirring Attachments for MO-2400N and -2500N series

S057: Swing-type Shirring Attachment (pedal-operated) for safety stitchers

S097: Swing-type Shirring Attachment (manually-operated) for safety stitchers

S058: Swing-type Shirring Attachment (pedal-operated) for overedgers

S098: Swing-type Shirring Attachment (manually-operated) for overedgers

#### 2. APPLICABLE SEWING MACHINES

Attachment Series	S057, S097	S058, S098
MO-2400N	MO-2416N BD4, DD4, DD6, DE4, DF6, DH6, FF6, RH6 MO-2443N DBD6	MO-2404N-0D6, 0F6, 0H6 MO-2412N-DF6 MO-2414N-BD6, BE6
MO-2500N	MO-2516N BD4, DD4, DD6, DE4, DF6, DH6, FF6, RH6 MO-2543N DBD6	MO-2504N-0D6, 0F6, 0H6 MO-2512N-DF6 MO-2514N-BD6, BE6

#### 3. SPECIFICATION

Application	To provide shirring partially or continuously on light-weight articles such as ribbed knit, light-weight knit and broadcloth garments.
Sewing speed	5,000 through 5,500 s.p.m.
Differential feed ratio	Overedger $-1:3$ , Safety stitcher $-1:3$ (Adjustable for each type of materials)
Lift of presser foot	Overedger – 5 mm, Safety stitcher – 6.5 mm

#### 4. REPLACEMENT GAUGE SETS

The gauge set of a sewing machine must be changed when a shirring attachment S057, S058, S097 or S098 is installed to the machine Select the most suitable gauge set out of those listed below.

#### (1) When installing S057 and S097 to safety stitchers (MO-2416N, 2516N, 2443N, 2543N);

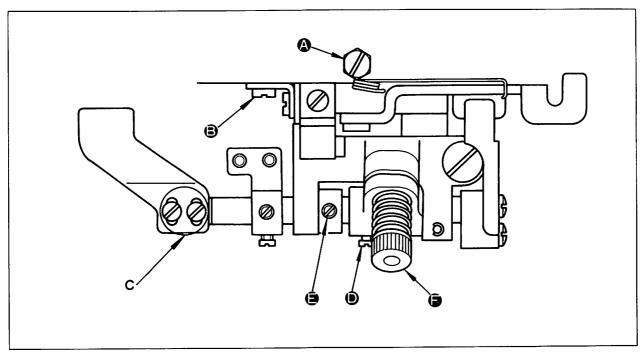
Gauge size Name of part	BD4	DD4	DD6	DE4	DF6	FF6	RH6	DH6	DBD6
Presser foot (asm)	11879558	11879657	11879657	11879657	11983657	11880457	11880853	11973963	11975950
Main feed dog	11883709	11883808	11883907	11883808	11884806	11884103	11884103	11884806	11884806
Differential feed dog	11885704	11885704	11885803	11885704	11885902	11885902	11885902	11885902	11885902
Needle guard	B4120816 D0BA	B4120816 D0BA	B4120816 D0BA	B4120816 D0BA	B4120816 F0CA	B4120816 F0CA	B4120816 R0A	R4120816 F0CA	B4120816 F0CA
Throat plate	Standard	Standard	Standard	R4508H0 ED00	R4608H0 FD00	R4612H0 FB00	R4618H0 HB00	R4608H0 HD00	R4608H0 DE01
* Shirring presser , plate	_	_	_	_	_	_	*MAS 0510800A	_	_
Screw of needle guard				S	S-7060610-S	P	•	•	

<sup>\*</sup> The shirring presser plate is replaced only for RH6.

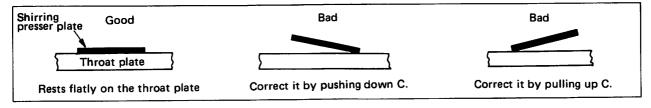
(2) When installing S058 and S098 to overedgers (MO-2404N, 2412N, 2414N, 2504N, 2512N, 2514N);

Gauge size Name of parts	0D6	0F6	0Н6	BD6	BE6	DF6 (2Δ12N)
Presser foot (asm)	11878857	11974268	11974268	11879350	11879350	11974060
Main feed dog	11883402	11883402	11883402	11883402	11883402	11884608
Differential feed dog	B1657814B0L	B1657814B0L	B1657814B0L	B1657814B0L	B1657814B0L	11886603
Throat plate	R4300H0DD0A	R4300H0FE0B	R4300H0HE0A	R4305H0DE0A	R4305H0EE0B	R4308H0FE00

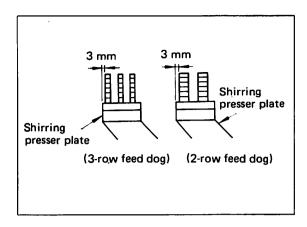
#### 5. ADJUSTING THE SHIRRING PRESSER PLATE

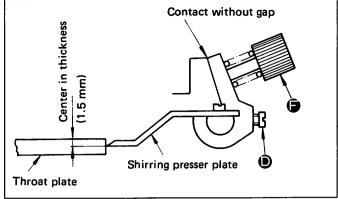


- (1) Perform adjustment so that the shirring presser plate rests flatly on the throat plate.
  - a. Loosely tighten screw (a), and loosen screw (b) to make this adjustment.



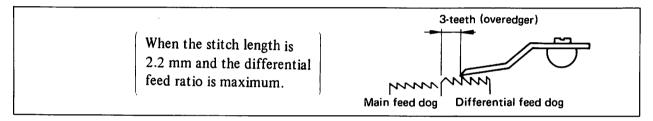
- b. After adjustment, securely tighten screws (3) and (4).
- (2) Height and lateral position fo the shirring presser plate
  - a. Loosen two screws and one screw on the thrust collar, and make adjustment so that the shirring presser plate protrudes 3 mm from the edge of the feed dog.
  - b. Adjust the height of the shirring presser plate so that it meets the center line of the throat plate in thickness when the presser plate is in its resting position.





#### (3) Longitudinal positioning of the shirring presser plate

When the differential feed dog has completed its feeding motion, the top end of the shirring plate must be about three teeth behind (overedger) or 1 or 2 teeth behind (safety stitcher) of the top of the differential feed dog as illustrated below. This is the adjustment for the standard pitch shirring. By changing the longitudinal position of the shirring presser plate, different shirring pitch is obtained. Adjust the longitudinal position by the type of fabrics.

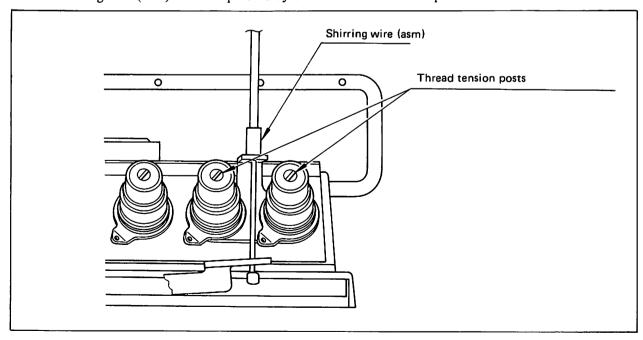


#### (4) Pressure of the shirring presser plate

a. The standard pressure applied by the shirring presser plate to the workpiece at the top end of the presser plate is 1.5 Kg. Adjust the pressure by knob for the type of fabrics.

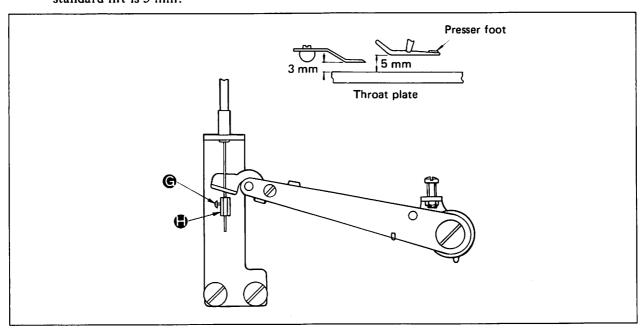
#### 6. INSTALLING THE SHIRRING WIRE (ASM)

Fix the shirring wire (asm) to the top cover by the two thread tension posts.



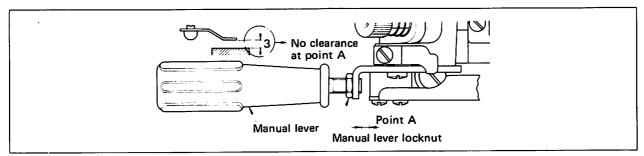
## 7. ADJUSTING THE LIFTING AMOUNT (S057, S058)

a. Loosen screw **(C)** and move **(L)** up or down to adjust the lift of the shirring presser plate. The standard lift is 3 mm.



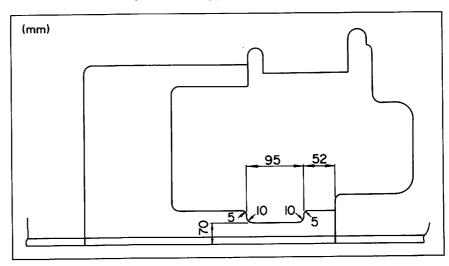
# 8. ADJUSTING THE MANUAL LEVER (S097, S098)

Adjust the protrusion of the manual lever by means of its locknut so that clearance A is eliminated when the manual lever has raised the shirring presser plate 3 mm above the throat plate surface.



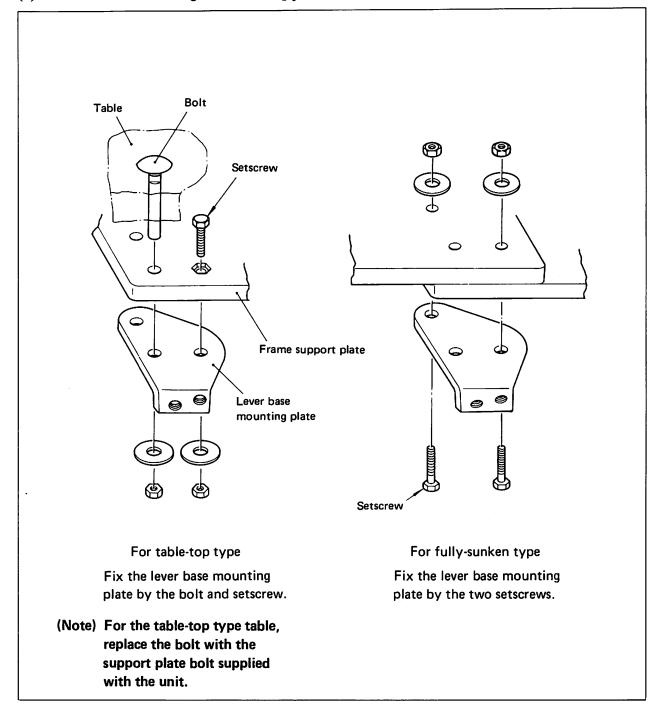
# 9. CUTTING THE MACHINE TABLE (Fully-sunken type table)

When S057 or S058 is installed to a machine head set up on a fully-sunken type table, modify the mounting opening in the table as shown in the figure right.

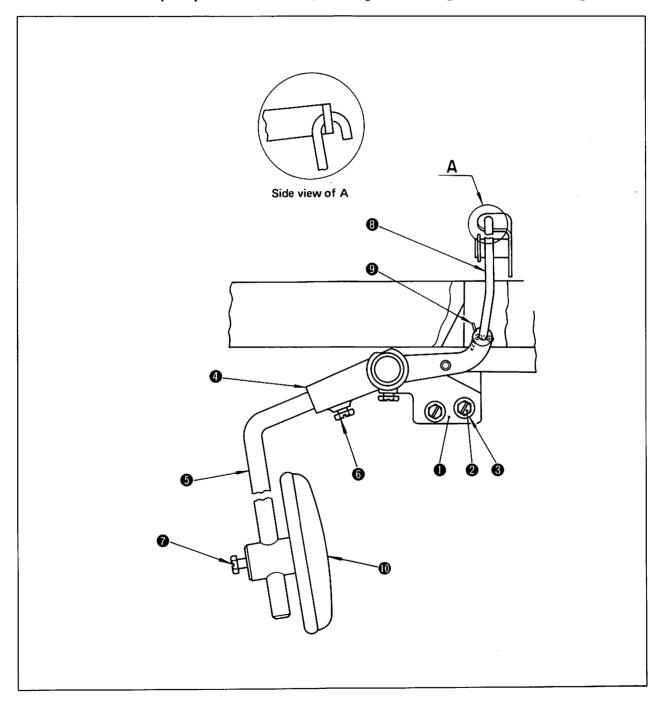


## 10. INSTALLING THE KNEE LIFTER

(1) Install the lever installing base mounting plate as illustrated below.



- (2) Attach the knee lifter to the lever base mounting plate according to the following procedures.
  - a. Attach lever base 1 to the frame support plate using screws 2 and washers 3.
  - b. Insert shaft 6 into lever 4, and fasten it by screw 6.
  - c. Insert one end of connecting rod 3 into the hole of the differential feed contorl lever from inside, and insert the other end into the hole of lever 4. Then lock the connecting rod to the lever with split pin 3.
  - d. Attach the knee press plate 10 to rod 15 and tighten screw 17 at a convenient height.





# **JUKI CORPORATION**

HEAD OFFICE 8-2-1 KOKURYO-CHO, CHOFU-CITY, TOKYO 182, JAPAN **BUSINESS OFFICE** 1-23-3 KABUKI-CHO

SHINJUKU-KU, TOKYO 160, JAPAN PHONE: 03(3205)1188, 1189, 1190

Tم	order	Or	for	further	information.	nlease	contact :

Please do not hesitate to contact our distributors or agents in your area for further information when necessary. \*The description covered in this instruction manual is subject to change for improvement of the

commodity without notice.