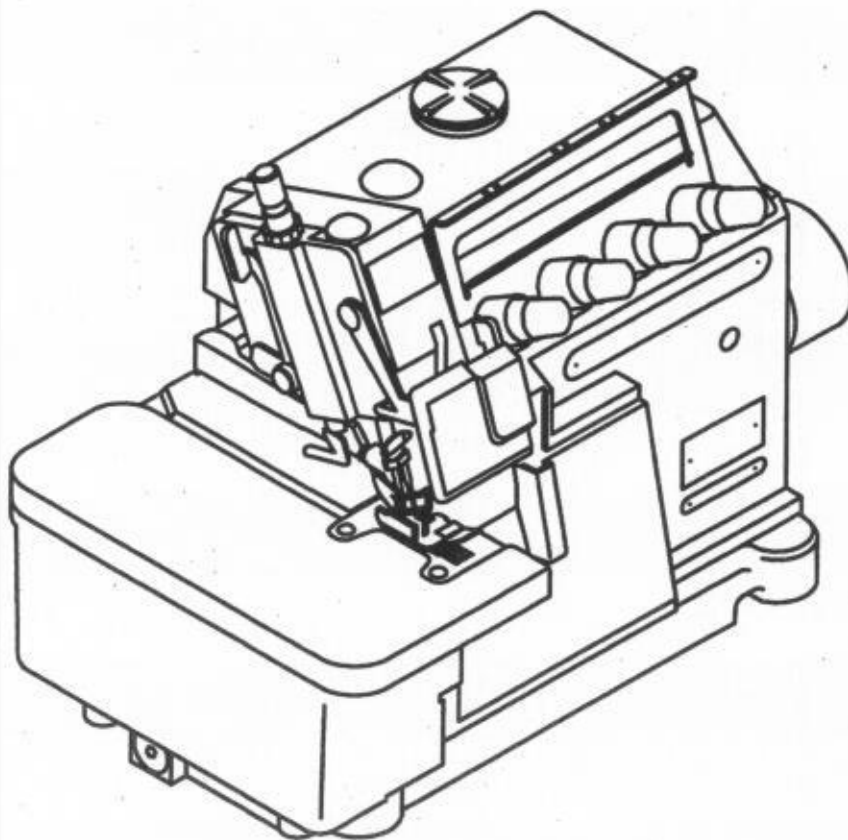


# GLOBAL

Vel. Ver1.0 2014.02

NO. OV 514-1-02-27

## INSTRUCTION MANUAL



### MODELS & DEVICES

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OV 504    OV 514    OV 515  
OV 504 DD    OV 515 DD    OV 516 DD

**GLOBALSEW.COM**

## PREFACE :

OV 500 SERIES IS A ULTRA HIGH SPEED FLAT BED OVERLOCK MACHINE .

ABLE TO PERFORM PERFECT SEWING STITCHES EVEN USING  
DIFFERENT KINDS OF HEAVY OR LIGHT MATERIALS ,  
EASY MAINTENANCE AND REPAIRING , ALSO CAN PERFORMS HIGH EFFICIENCY .


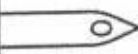

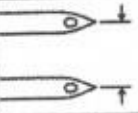
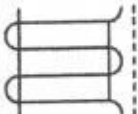

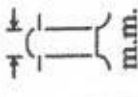
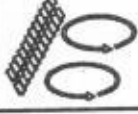


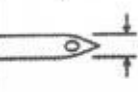
WITH PRECISION PARTS , MACHINES CAN BE PERFORMED QUIET  
STABLE , DURABLE CHARACTERS .

FOR OPERATOR TO MASTER THIS MACHINE , THIS INSTRUCTION  
MANUEL HAVE LISTED FEW BASIC ITEMS WHICH SHOWING HOW  
TO INSTALL , MAINTENANCE , ADJUSTING AND SAFETY PRECAUTIONS  
IN ORDER TO KEEP THE MACHINE IN THE BEST POSSIBLE CONDITIONS .

### SAFETY PRECAUTIONS :

1. BELT COVER MUST BE INSTALLED .
2. MAKE SURE MOTOR POWER BEEN WIRED PROPERLY .
3. BEFORE MAINTENANCE , ADJUSTING , REPAIRING , CLEANING , THREADING OR  
REPLACING NEEDLES , MUST MAKE SURE TO TURN OFF THE ELECTRICITY POWER  
AND THE MOTOR STOPPED COMPLETELY .
4. PLEASE OPERATE THE MACHINES AT THE SPEED UNDER 6000 RPM. FOR THE  
FIRST MONTH USAGE FOR NEW MACHINE .
5. WHEN ADDING LUBRICATION OIL , PLEASE MAKE SURE NOT TO OVER THE UPPER  
LIMIT MARK OF OIL WINDOW .
6. BEFORE OPERATING THE NEW MACHINE , PLEASE ADD ONE DROP OF LUBRICATION  
OIL ON THE UPPER LOOPER DRIVING ROD .
7. BEFORE OPERATING , PLEASE MAKE SURE SEWING NEEDLES DID NOT BENT NEEDLE  
POINT DID NOT BREAK AND NEEDLES FACE THE CORRECT DIRECTION .
8. PLEASE MAKE SURE THE THREADING IS CORRECT .
9. AFTER SEWING OPERATION , MUST CLEAN THE MACHINE AND PUT ON DUST COVER .

# OV 500 SUBCLASS SPECIFICATIONS

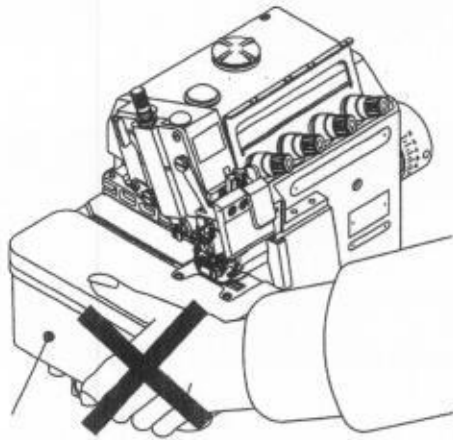
Application	Subclass												Standard Equipment
		Number Of Needles	Number Of Threads	Needle Distance (mm)	Overedge Width(mm)	Feed Dog Rows	Stitch Length Max (mm)	Diff.Feed Ratio	Presserfoot Lift	Max Speed (s.p.m)	Needle Size		
Plain Seaming	OV 504-040	1	3	-	4	3	3.8	0.7~2	6	8000	DC*27#11		
	OV 514-240	2	4	2.2	4   6	3	3.8	0.7~2	5.5	7500	DC*27#11		
Reinforce Tape Sewing	OV 514-245	2	4	2.2	4   6	3	3.2	0.8~2.4	6	7000	DC*27#14	With Wider Knife, Binding Tape Bracket, Thicker Teeth Bigger Needle Plate Hole	
Safety	OV 515-330	2	5	3	3   6	2	3.8	0.7~2	6	7000	DC*27#11		
	OV 515-350	2	5	3	5   8	2	3.8	0.7~2	6	7000	DC*27#11		
	OV 515-550	2	5	5	5   10	3	3.8	0.7~2	6	7000	DC*27#11		
Extra Heavy Weight Material Seaming	OV 515-558	2	5	5	5   10	3	4.5	0.6~1.6	8	5500	DC*27#19	Thicker Teeth Bigger Needle Plate Hole	
Plain Seaming	OV 504-040 DD	1	3	-	4	3	3.8	0.7~2	6	8000	DC*27#11		
Safety	OV 515-330 DD	2	5	3	3   6	2	3.8	0.7~2	6	7000	DC*27#11		
	OV 516-350 DD	2	5	3	5   8	2	3.8	0.7~2	6	7000	DC*27#11		
	OV 515-550 DD	2	5	5	5   10	3	3.8	0.7~2	6	7000	DC*27#11		
Extra Heavy Weight Material Seaming	OV 515-558 DD	2	5	5	5   10	3	4.5	0.6~1.6	8	5500	DC*27#19	Thicker Teeth Bigger Needle Plate Hole	

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# 1. INSTALLATION

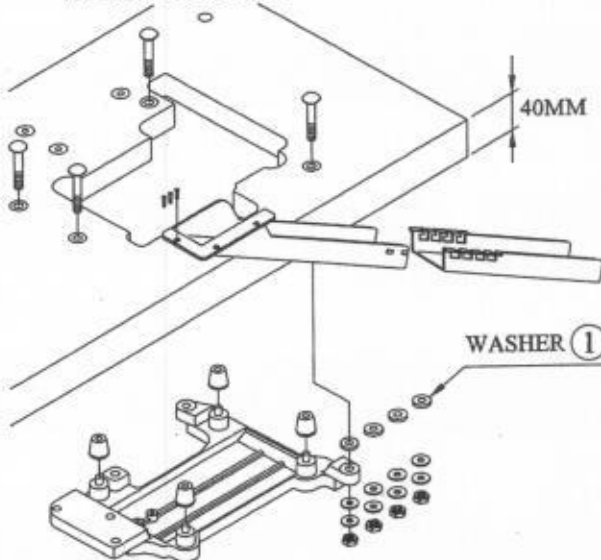
## 1-1 MOVING :



CLOTH PLATE COVER

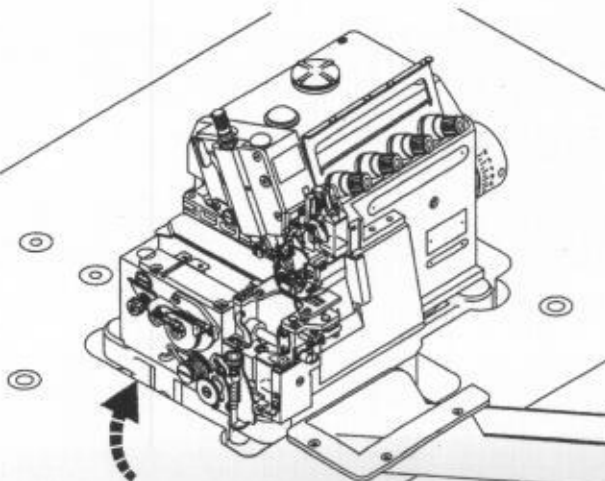
DURING INSTALLATION PROCESS , DO NOT MOVE SEWING MACHINE BY HOLDING CLOTH PLATE .

## 1-2 INSTALLATION OF FRAME SUPPORT PLATE AND WASTE CHUTE :



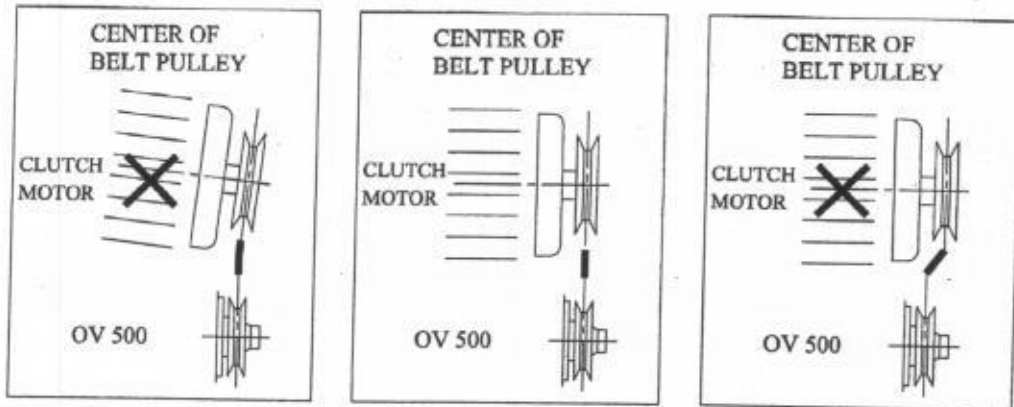
PLEASE USING STANDARD TABLE OF 40MM IN THICKNESS . IF USE THE TABLE IN 35MM IN THICKNESS , THEN , PLEASE REFER TO INSTALLATION MAP .

## 1-3 INSTALLATION OF SEWING MACHINE :

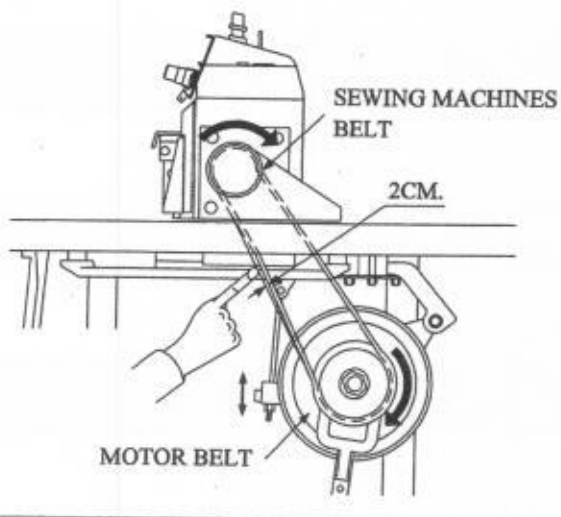


PLEASE MAKE SURE THERE HAVE ENOUGH ROOM BETWEEN SEWING MACHINE AND THE TABLE AROUND IT AFTER INSTALLATION . TABLE CAN NOT INTERFERENCE WITH THE SEWING MACHINE .

#### 1-4 INSTALLATION OF MOTOR BELT :

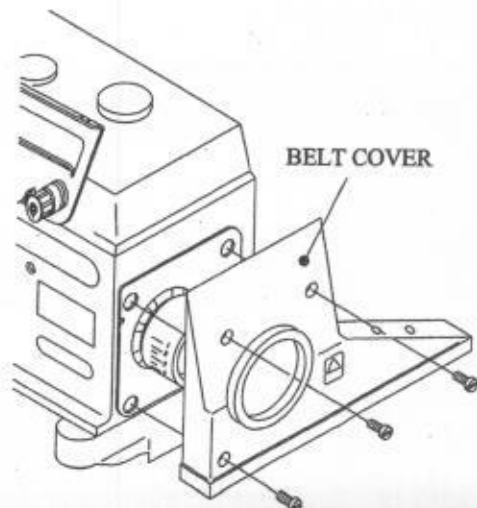


INSTALL MOTOR BELT AND MAKE SURE MOTOR BELT IN PARALLEL WITH BOTH PULLEY OF CLUTCH MOTOR AND SEWING MACHINE BY ADJUSTING CLUTCH MOTOR'S POSITION PROPERLY .



INSTALL MOTOR BELT AND MAKE SURE THERE HAVE 2CM. TOLERANCE BY PRESS THE MOTOR BELT .

#### 1-5 INSTALLATION OF BELT COVER :

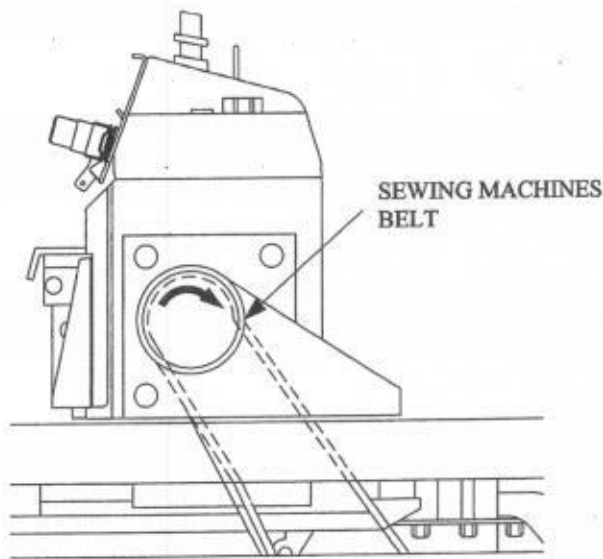


FOR SAFTY REASON , BELT COVER MUST BE INSTALLED .



## 2. BEFORE OPERATION

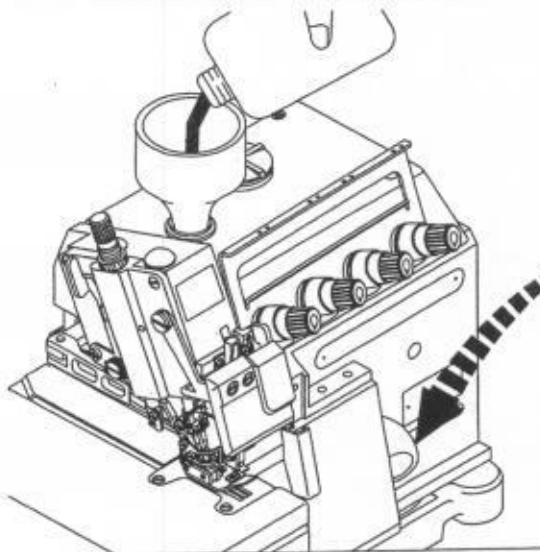
### 2-1 TURNING DIRECTION OF BELT PULLEY :



PLEASE MAKE SURE SEWING MACHINES BELT PULLEY IS TURNING CLOCKWISE . AS FIGURE 2-1 .

### 2-2 ADDING LUBRICATION OIL AND SILICON OIL :

#### ADDING LUBRICATION OIL

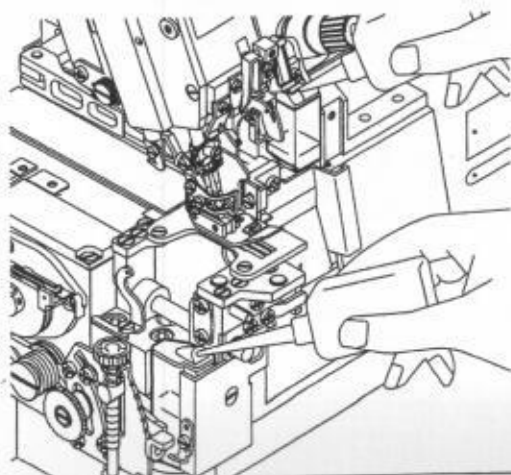


DURING ADDING PROCESS , PLEASE MAKE SURE THE LUBRICATION OIL CAN NOT OVER THE UPPER LIMIT OF OIL GAUGE .



SPECIFICATION OF LUBRICATION OIL : MOBIL VELOCITE OIL NO.10 (ISO/VG22) . OR SAME SPECIFICATION OF OTHER BRAND'S OIL .

#### ADDING SILICON OIL



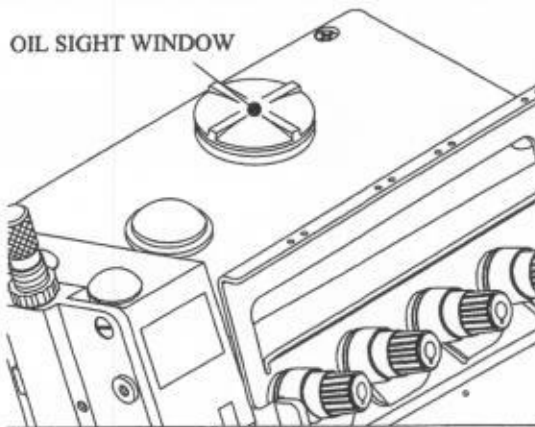
PLEASE ADD PROPER SILICON OIL INTO SILICON OIL RESERVOIRS IN ORDER TO PREVENT THREAD BREAKAGE .

SPECIFICATION OF SILICON OIL : UNION CARBIDE CORP . UCC L-45 (10) OR SAME SPECIFICATION OF OTHER BRAND'S SILICON OIL .

### 3. TEST SEWING AND ADJUSTING

#### 3-1 DESCRIPTION :

EVEN THOUGH THE MACHINE IS UNDER ITS BEST NORMAL SEWING CONDITION WHEN OUT OF THE FACTORY , HOWEVER , DUE TO DIFFERENT SEWING REQUIREMENT , SUCH AS SEWING FABRICS , SEWING THREADS , IT MAY REQUIRED MINOR ADJUSTMENTS ON SEWING MACHINES AS FOLLOWS :

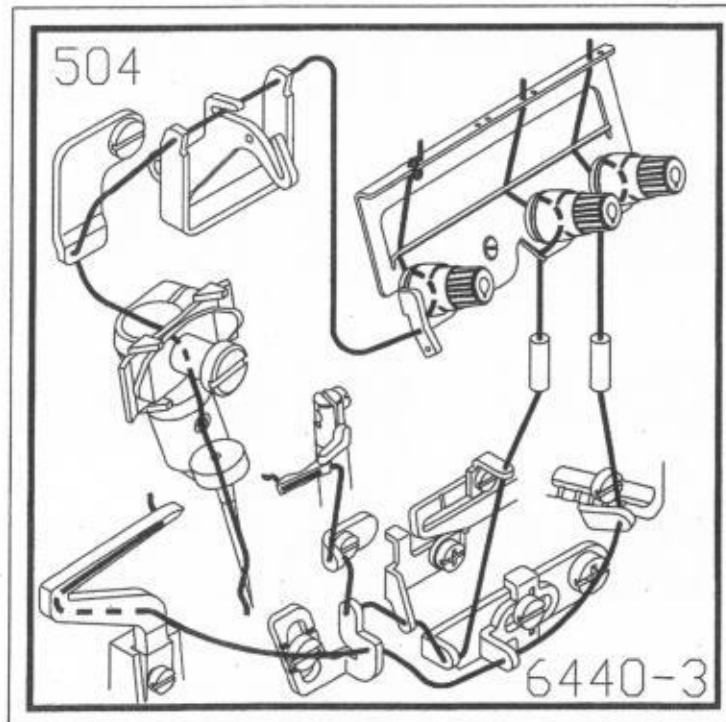


DURING THE FIRST USAGE , PLEASE MAKE SURE LUBRICATION OIL CIRCULATES PROPERLY .

#### 3-2 THREADING MAP :

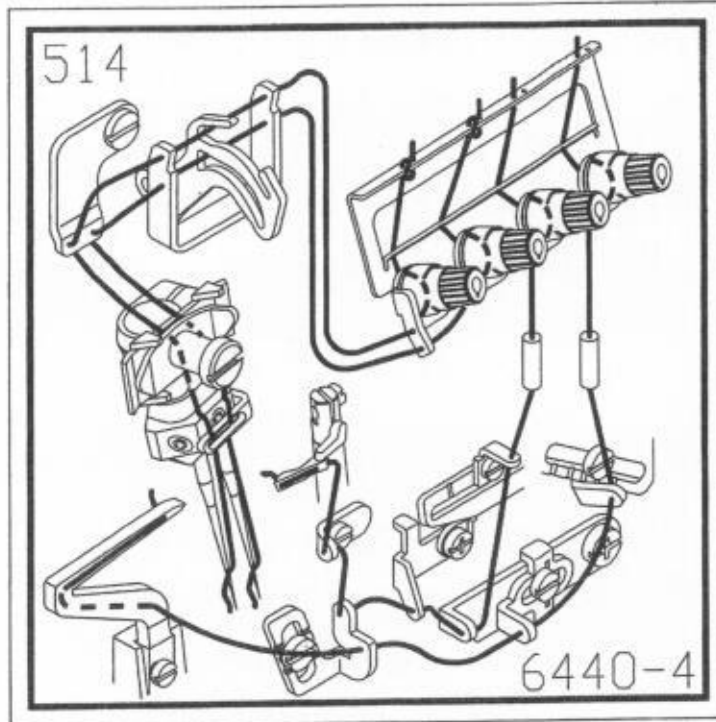
MISTHREADING WILL CAUSE THREAD BREAKAGE , SKIP STITCH OR OTHER SEWING DEFECTS , THUS , PLEASE MAKE SURE FOLLOW THE THREADING MAP AND THREADING PROPERLY .

OV 504 . STITCH TYPE 504 .

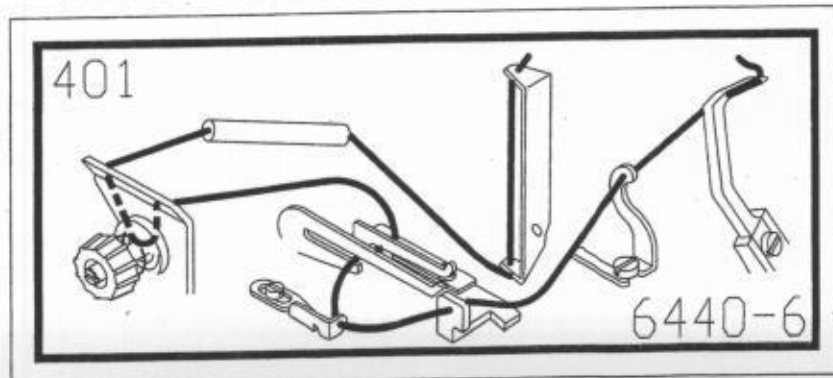
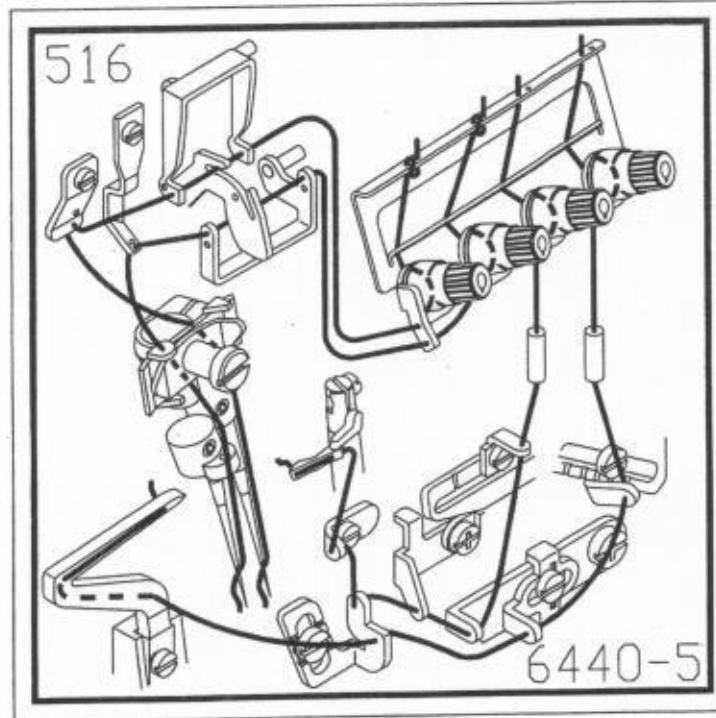




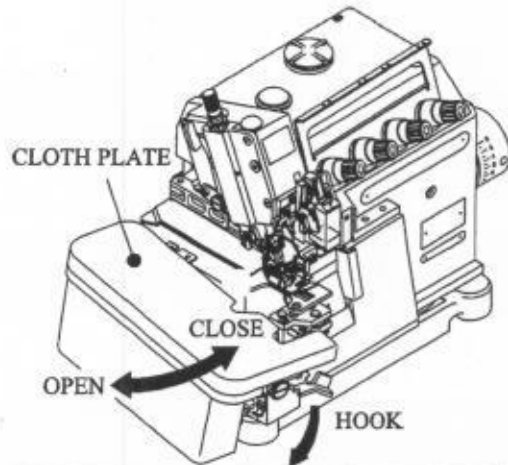
OV 514 . STITCH TYPE 514 .



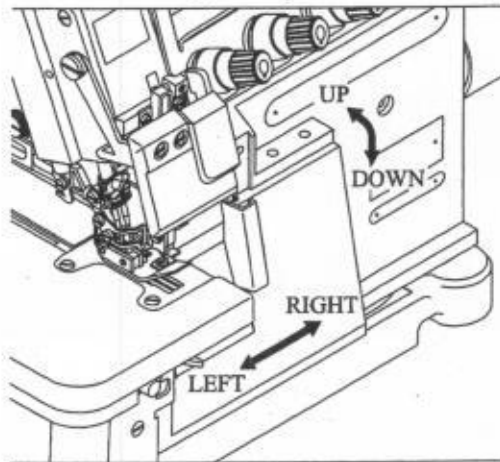
OV 515 . STITCH TYPE 516 .



### 3-3 OPEN AND CLOSE THE CLOTH PLATE AND FRONT COVER :

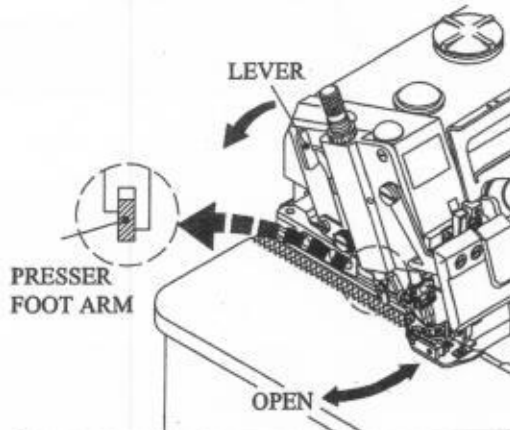


PRESS DOWN HOOK AND PUSH TO LEFT IN ORDER TO OPEN CLOTH PLATE , PUSHING RIGHT TO ITS HOOK SET POSITION , THE CLOTH PLATE WILL BE CLOSED .

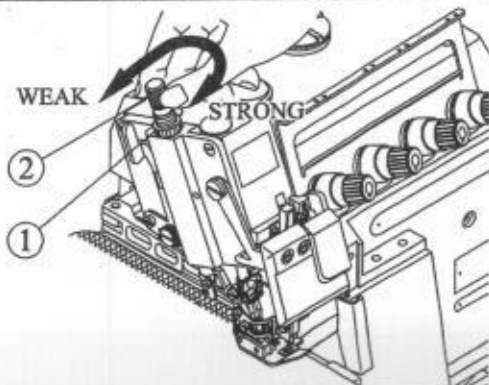


OPEN AND CLOSE FRONT COVER : PUSHING FRONT COVER TO RIGHT SET POSITION AND PULL DOWN TO OPEN IT . AND ON THE OTHER HAND , PULL UP TO ITS SET POSITION AND TO LEFT IN ORDER TO CLOSE FRONT COVER . AFTER CLOSING FRONT COVER , PLEASE MAKE SURE THERE IS NO INTERFERENCE BETWEEN FRONT COVER AND OTHER PARTS .

### 3-4 OPEN AND CLOSE THE PRESSER FOOT ARM AND ADJUSTING PRESSURE :



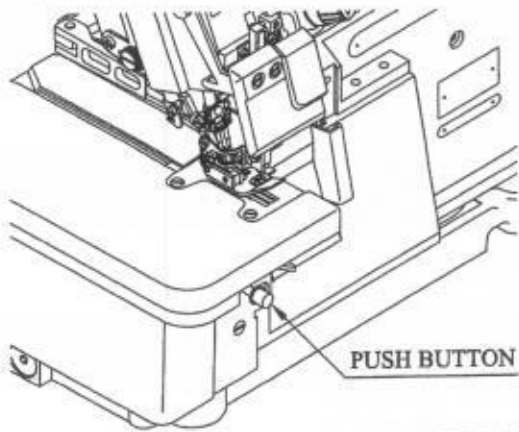
OPEN AND CLOSE THE PRESSER FOOT ARM : PUSH LEVER DOWN TO ITS SET POSITION THEN TAKE OUT PRESSER FOOT ARM . VICE VERSA , PUSH DOWN LEVER TO ITS SET POSITION , CAN PUT PRESSER FOOT ARM BACK . WHEN PUT PRESSER FOOT ARM BACK , PLEASE MAKE SURE IT WILL BE BACK TO ITS SET POSITION .



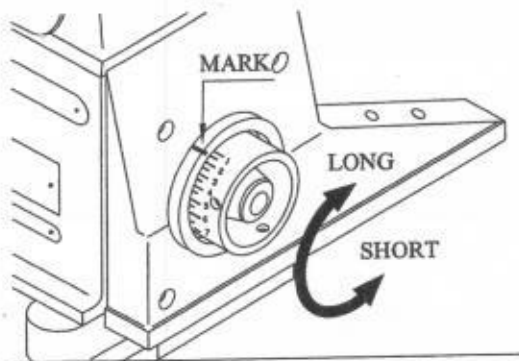
ADJUSTING PRESSURE : TURNING ADJUSTING SCREW CLOCKWISE IN ORDER TO INCREASE PRESSURE . TURNING ADJUSTING SCREW COUNTERCLOCKWISE IN ORDER TO DECREASE PRESSURE .

### 3-5 · ADJUSTING STITCH LENGTH AND DIFFERENTIAL RATIO :

#### ADJUSTING STITCH LENGTH :

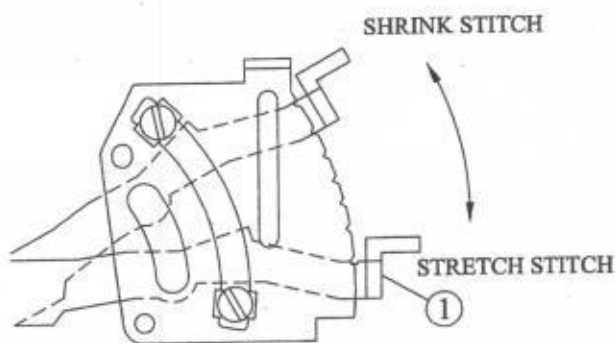


PUSHING THE PUSH BUTTON LIGHTLY FIRST AND TURNING PULLEY TO SET POSITION THEN PUSHING DOWN THE PUSH BUTTON INTO ITS SET POSITION AND ADJUST THE LENGTH OF STITCH .

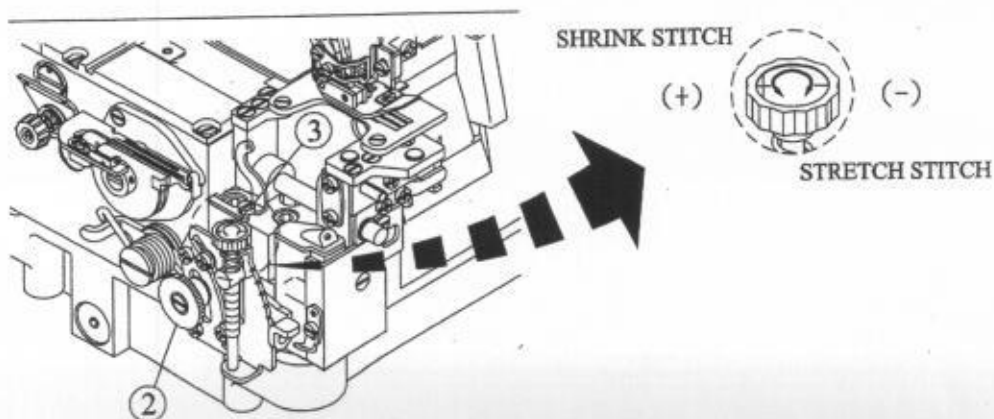


REMARK : THE DISTANCE MARK ON THE PULLEY ONLY REPRESENT APPROX LENGTH OF STITCH AND ACTUAL STITCH LENGTH NEEDED SHOULD GET FROM TEST SEWING .

#### ADJUSTING DIFFERENTIAL RATIO :

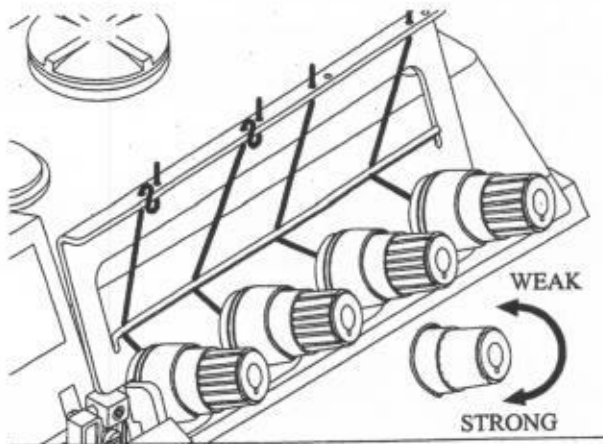


DIFFERENTIAL RATIO WAS SET AT 1 : 1 WHEN MACHINES WERE OUT OF FACTORY . ADJUST DIFFERENTIAL RATIO AS NEEDED . OPEN UP CLOTH PLATE , LOOSEN NUT (2) MOVE LEVEL (1) UPWARD OR DOWNWARD TO THE POSITION NEEDED . THEN TIGHTEN NUT (2) . FOR MICRO-ADJUSTMENT PLEASE TURN ADJUSTING SCREW (3) .



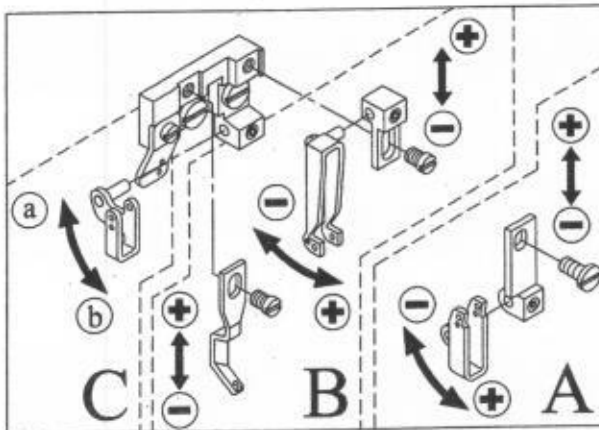
### 3-6 ADJUSTING THREAD TENSION AND THREAD TENSION AMOUNT :

#### ADJUSTING THREAD TENSION :



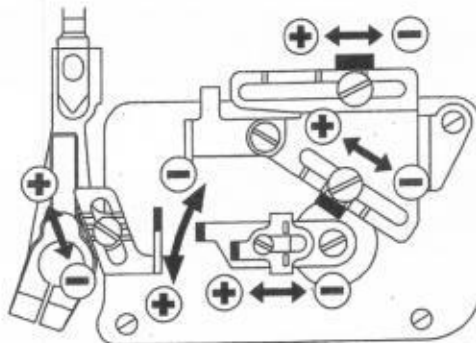
THREAD TENSION CORRELATE WITH THREAD TENSION AMOUNT . PLEASE REFER TO THIS ITEM AND NEXT ITEM TO ADJUST THREAD TENSION AMOUNT IN ORDER TO GET BEST RESULT .  
TURNING CLOCKWISE IN ORDER TO GET STRONG THREAD TENSION .  
TURNING COUNTERCLOCKWISE IN ORDER TO GET WEAK THREAD TENSION .

#### NEEDLE THREAD TENSION AMOUNT :



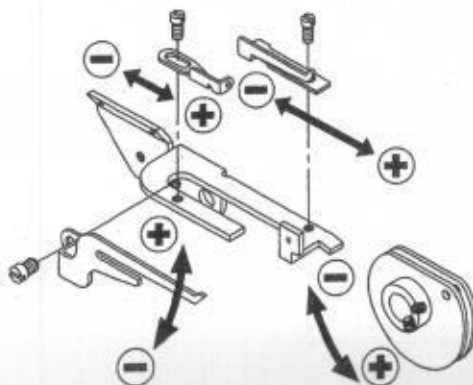
A : FOR OV 504 , OV 514 USAGE .  
TOWARD (+) DIRECTION GET BIGGER THREAD TENSION AMOUNT .  
TOWARD (-) DIRECTION GET SMALLER THREAD TENSION AMOUNT .  
B : FOR OV 515 USAGE .  
TOWARD (+) DIRECTION IN ORDER TO GET BIGGER THREAD TENSION AMOUNT .  
TOWARD (-) DIRECTION IN ORDER TO GET SMALLER THREAD TENSION AMOUNT .  
C : IF CHAIN STITCH NEEDLE THREAD LOOP FORMED TOO EARLY , PLEASE ADJUST THREAD GUIDE TO (a) DIRECTION .

#### UPPER / LOWER LOOPER THREAD TENSION AMOUNT :



PLEASE ADJUST TENSION AMOUNT ACCORDING TO ARROW DIRECTION  
(+) INCREASE LOOPER THREAD TENSION AMOUNT .  
(-) DECREASE LOOPER THREAD TENSION AMOUNT .

#### CHAINSTITCH LOOPER THREAD TENSION AMOUNT :

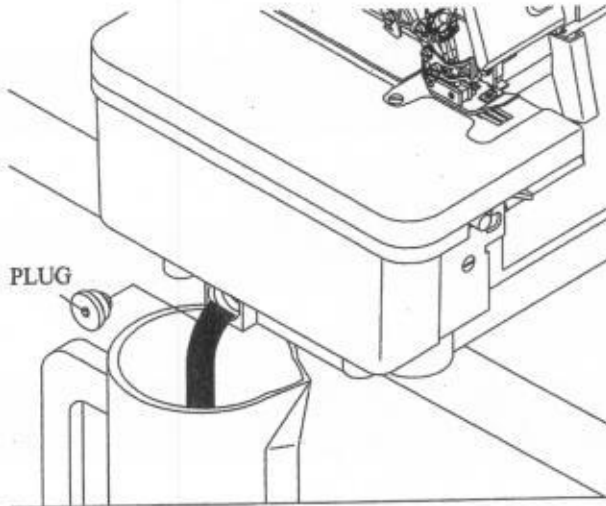


WHEN ADJUSTING CHAINSTITCH LOOPER THREAD , IF THREAD LOOP COLLAPSE , UNSTABLE OR CAN NOT FORM THREAD LOOP , PLEASE ADJUST THREAD TENSION AMOUNT ACCORDING TO ARROW DIRECTION  
(+) INCREASE .  
(-) DECREASE .

## 4. REPAIRING AND MAINTENANCE

### 4-1 CHANGING LUBRICATION OIL , OIL FILTER AND NEEDLES :

#### CHANGE LUBRICATION OIL :



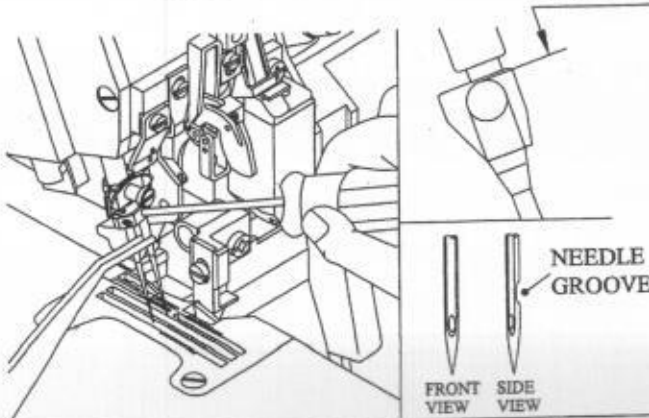
AFTER OPERATING SEWING MACHINE FOR 160-200 HOURS ( APPROX ONE MONTH . ) PLEASE CHANGE LUBRICATION OIL AND CHANGE LUBRICATION OIL EVERY 6 MONTHS THEREAFTER . IF STOP USING SEWING MACHINE FOR A LONG TIME , PLEASE CHANGE LUBRICATION OIL BEFORE OPERATE AGAIN . CHANGE LUBRICATION OIL BY TAKE OFF PLUG .

#### CHANGE OIL FILTER :



PLEASE CHANGE OIL FILTER AFTER APPROX 6 MONTHS USAGE OR FOUND OUT OIL CIRCULATION WAS NOT NORMAL FROM OIL SIGHT WINDOW .

#### CHANGE NEEDLES :



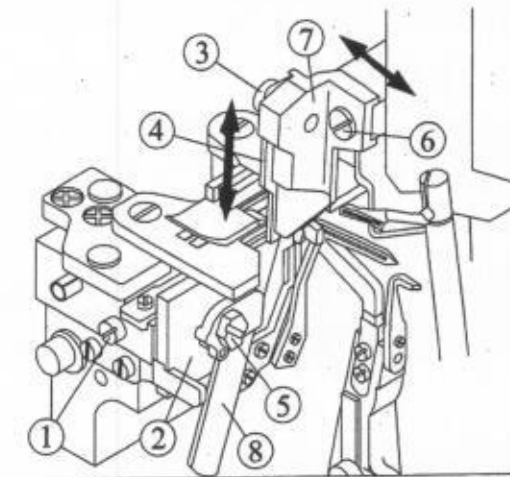
MAKE SURE TO INSERT NEEDLES ALL THE WAY TO THE BOTTOM OF NEEDLE HOLES .

WHEN CHANGING NEEDLES , PLEASE MAKE SURE NEEDLE GROOVE IS IN ITS CORRENT POSITION AND ALSO MAKE SURE NEEDLES BE INSERTED ALL THE WAY TO THE BOTTOM OF NEEDLE HOLES .



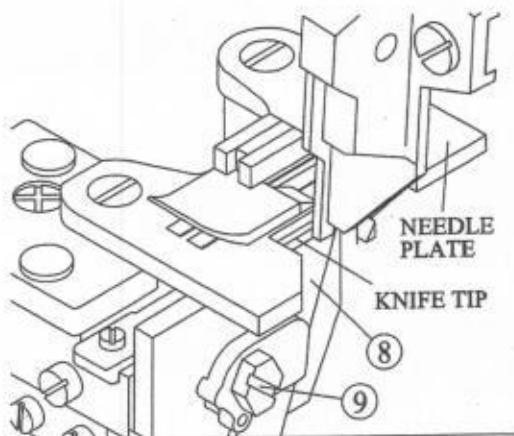
## 4-2 CHANGING UPPER KNIFE AND LOWER KNIFE :

### CHANGING UPPER KNIFE :

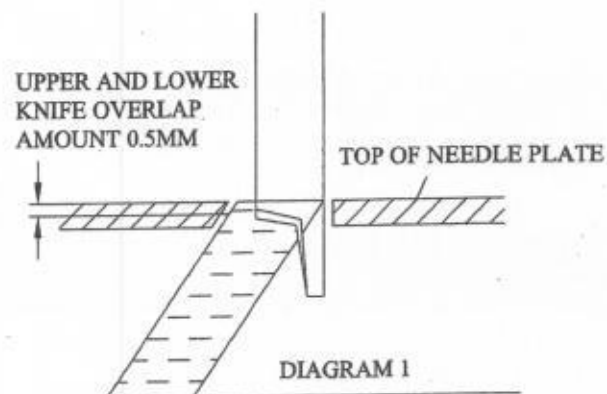


- A. LOOSEN SCREW (1) PUSH LOWER KNIFE HOLDER (2) TO LEFT , THEN , TIGHTEN SCREW (1) LIGHTY .
- B. TAKE OFF SCREW (3) CHANGE NEW UPPER KNIFE (4) . THEN , TIGHTEN SCREW (3) LIGHTLY .
- C. LOOSEN SCREW (1) MAKE SURE LOWER KNIFE (8) TOUCH UPPER KNIFE CLOSELY .
- D. TURNING HAND WHEEL TILL UPPER KNIFE CLAMP REACH ITS LOWEST POSITION . THEN , ADJUSTING THE POSITION OF UPPER KNIFE IN ORDER TO MAKE SURE UPPER KNIFE AND LOWER KNIFE OVERLAP BY 0.5MM .
- E. TIGHTEN SCREW (3) , (1) .

### CHANGING LOWER KNIFE :



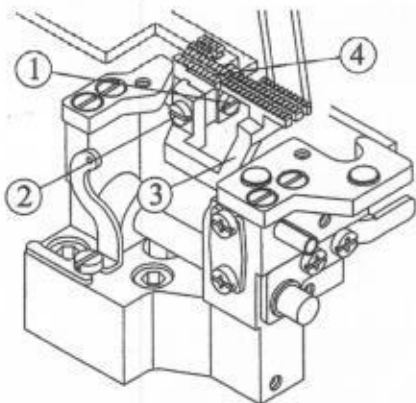
- A. LOOSEN SCREW (1) PUSH LOWER KNIFE HOLDER (2) TO LEFT , THEN , TIGHTEN SCREW (1) LIGHTY .
- B. LOOSEN SCREW (9) TAKE OFF OLD LOWER KNIFE (8) AND CHANGE NEW LOWER KNIFE .
- C. MAKE SURE THE TIP OF LOWER KNIFE LINE EVEN WITH THE TOP OF NEEDLE PLATE . THEN , TIGHTEN SCREW (9) .
- D. LOOSEN SCREW (1) MAKE SURE LOWER KNIFE TOUCH UPPER KNIFE (4) CLOSELY . THEN , TIGHTEN SCREW (1) .





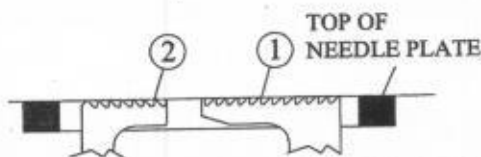
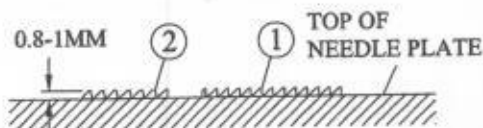
## 4-3 CHANGING AND ADJUSTING FEED DOGS :

### CHANGING FEED DOGS :



LOOSEN SCREW (1) CAN CHANGE MAIN FEED DOG (4),  
LOOSEN SCREW (2) CAN CHANGE DIFFERENTIAL  
FEED DOG (3).  
AFTER CHANGED FEED DOGS, TIGHTEN SCREWS  
LIGHTLY. PLEASE REFER TO FOLLOWING ITEMS IN  
ORDER TO SET UP CORRECT POSITION OF FEED DOGS.  
THEN, TIGHTEN SET SCREWS.

### ADJUSTING FEED DOGS AFTER CHANGED :

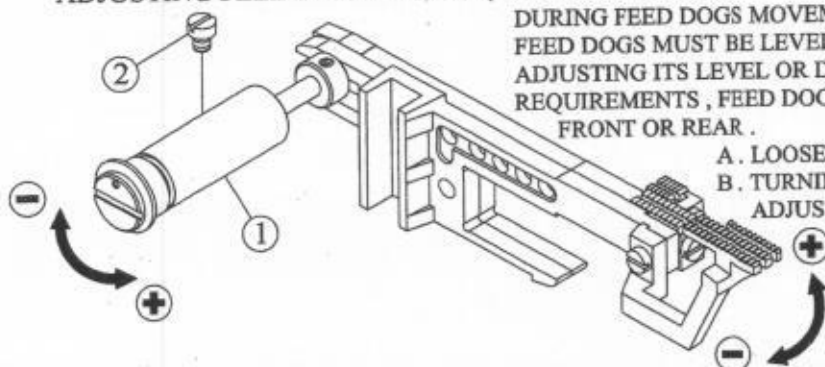


AFTER CHANGE FEED DOGS, MUST ADJUST FEED DOGS  
TO ITS CORRECT POSITION. TURNING BELT PULLEY,  
MAKE SURE MAIN FEED DOG (2) TO ITS HIGHEST  
POSITION, MAKE SURE THE TIP OF FEED DOG  
TEETH HIGHER THAN TOP OF NEEDLE PLATE BY  
0.8-1MM. (STANDARD SETTING VALUE)  
THEN, TURNING BELT PULLEY, LOWERING  
MAIN FEED DOG, MAKE SURE THE TIP OF  
TEETH LINE EVEN WITH TOP OF NEEDLE PLATE,  
THEN, ADJUSTING THE TIP OF TEETH OF  
DIFFERENTIAL FEED DOGS LINE EVEN WITH TOP OF  
NEEDLE PLATE.  
AFTER SET UP, TIGHTEN SCREW (1), (2) AND  
MAKE SURE FEED DOGS ARE AT ITS CORRECT  
POSITION AGAIN.

AFTER ADJUSTING, PLEASE TIGHTEN SCREW (1), (2)  
AND IN THE SAME TIME, PLEASE MAKE SURE  
a. IF FEED DOGS WILL RAISE 0.8-1MM. ABOVE  
THE TOP OF NEEDLE PLATE BY TURNING BELT PULLEY  
AND MOVING FEED DOG UP.

b. IF FEED DOGS WILL HIDE UNDERNEATH THE NEEDLE  
PLATE BY KEEP TURNING BELT PULLEY.

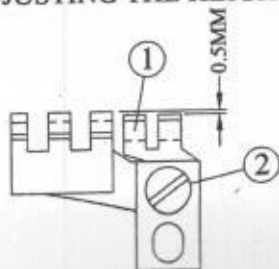
### ADJUSTING FEED DOGS LEVEL ( TILT AMOUNT ) :



DURING FEED DOGS MOVEMENT, THE TEETH OF  
FEED DOGS MUST BE LEVEL OFF ALWAYS.  
ADJUSTING ITS LEVEL OR DURING SOME SPECIAL  
REQUIREMENTS, FEED DOG TEETH MUST TILT TO  
FRONT OR REAR.

A. LOOSEN SCREW (2).  
B. TURNING SHAFT (1) IN ORDER TO  
ADJUST LEVEL OF FEED DOGS.

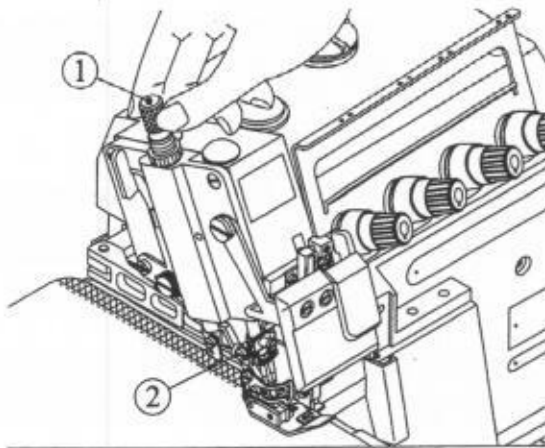
### ADJUSTING THE HEIGHT OF AUXILIARY FEED DOG :



THE HEIGHT OF AUXILIARY FEED DOG SHOULD BE  
0.5MM LOWER THAN MAIN FEED DOG (STANDARD  
SETTING VALUE) AND ADJUSTMENT CAN BE MADE  
BY LOOSEN SCREW (2).

#### 4-4 CHANGING AND ADJUSTING PRESSER FOOT SET :

##### CHANGE PRESSER FOOT SET :

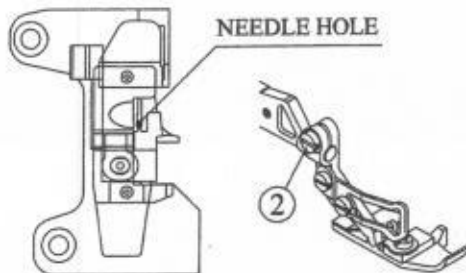


TURNING ADJUSTING SCREW (1) COUNTERCLOCKWISE IN ORDER TO LOOSE PRESSURE SPRING . LOOSEN SCREW (2) CAN TAKE OFF PRESSER FOOT SET .

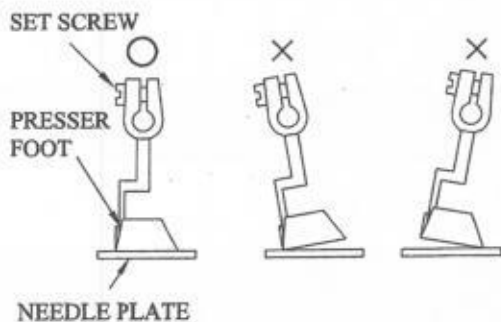
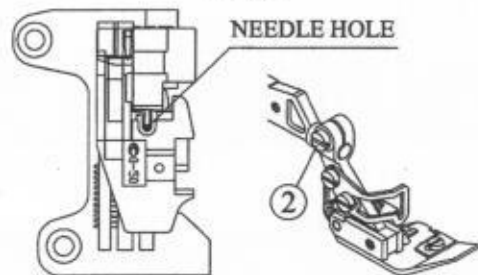
##### ADJUSTING :

PRESSER FOOT MUST BE INSTALLED CORRECTLY IN ORDER TO OBTAIN BEST SEWING EFFECTS .

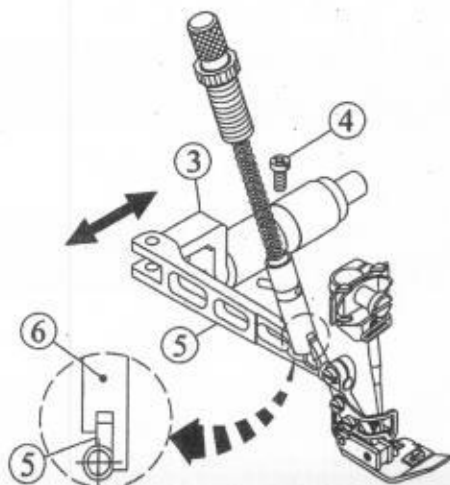
OV 504 OV 514



OV 515



1. TURNING HAND WHEEL IN ORDER TO LOWER THE NEEDLE BAR TO ITS LOWEST SET POSITION AND NEEDLE CAN BE MOVED INTO NEEDLE HOLE .
2. MAKE SURE THE NEEDLE HOLE OF PRESSER FOOT IN LINE WITH THE NEEDLE HOLE OF NEEDLE PLATE AND SEWING NEEDLE IS IN THE CENTER OF NEEDLE HOLE . IN THE MEANTIME , THE BOTTOM OF PRESSER FOOT SHOULD LAY FLAT ON THE TOP OF NEEDLE PLATE ( LEFT DIAGRAM )
3. TIGHTEN SCREW (2)
4. THE BOTTOM OF PRESSER BAR SHOULD HOLD PRESSER ARM PROPERLY . SO , PRESSER ARM CAN BE HELD AND RELEASED EASILY , WHILE ADJUSTING , LOOSEN SCREW (4) MOVE SHAFT (3) TO RIGHT OR LEFT IN ORDER TO SET UP CORRECT POSITION .



#### 4-5 ADJUSTING THE LIFTING HEIGHT OF PRESSER FOOT :

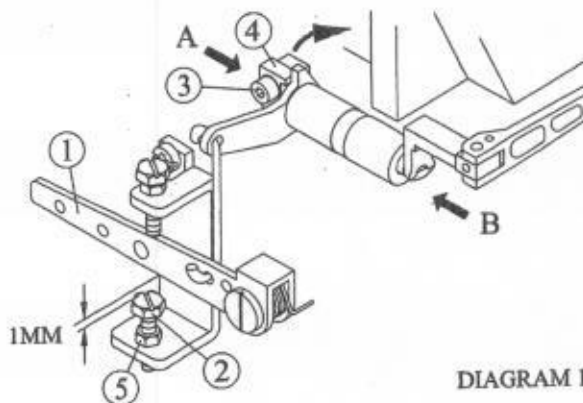


DIAGRAM 1

#### SETTING TOLERANCE UP :

THE TOLERANCE BETWEEN LEVEL (1) AND SCREW (2) SHOULD BE 1MM .

1. LOWER FEED DOGS UNDER NEEDLE PLATE BY TURNING HAND WHEEL .
2. LOOSEN SCREW (3) LIGHTLY ( CAN NOT LOOSEN SCREW COMPLETELY . )
3. HOLDING BUSHING FROM A AND B SIDES TURNING COLLAR (4) IN ORDER TO SET UP 1MM TOLERANCE BETWEEN LEVEL (1) AND SCREW (2)
4. TIGHTEN SCREW (3) .

#### SETTING UP PRESSER FOOT LIFTING AMOUNT :

AS SHOWN ON DIAGRAM 2 ( OV 504 , OV 514 ) AND DIAGRAM 3 (OV 515)  
 MAX . PRESSER FOOT LIFTING AMOUNT "a" IS 7MM .  
 WHEN ADJUSTING , LOOSEN NUT (5) AND ADJUST THE TOLERANCE TO DESIRED POSITION BETWEEN SCREW (2) AND LEVEL (1) .

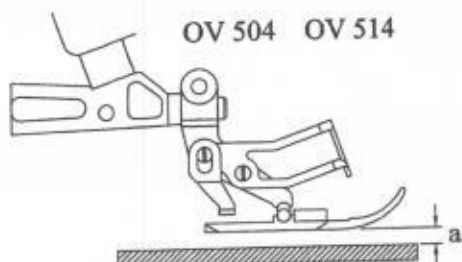


DIAGRAM 2

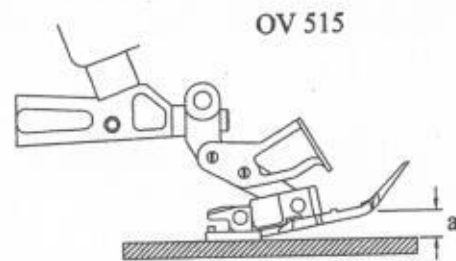
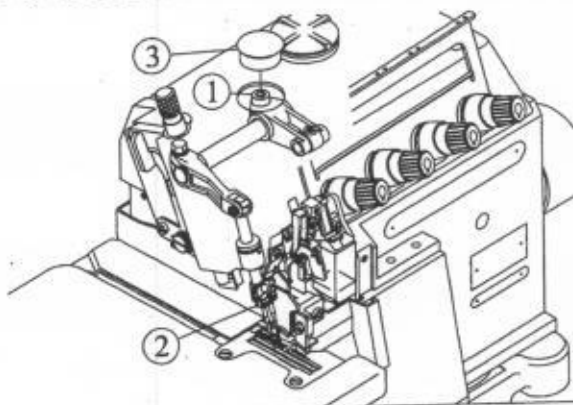


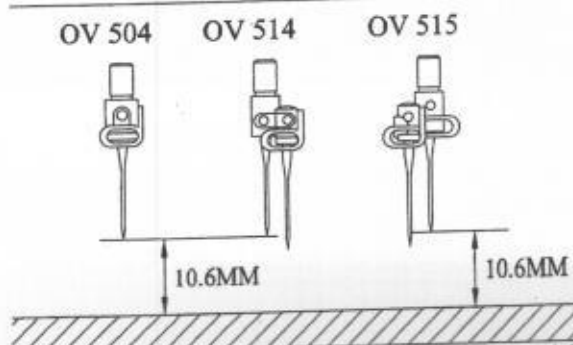
DIAGRAM 3

#### 4-6 ADJUSTING THE HEIGHT OF NEEDLE :



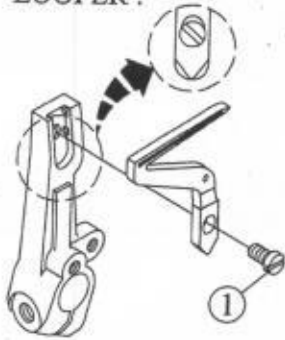
THE DISTANCE BETWEEN NEEDLE TIP TO TOP OF NEEDLE PLATE SHOULD BE 10.6MM ( STANDARD SETTING ) .

- PLEASE REFER TO LEFT DIAGRAM :
1. TURNING BELT PULLEY IN ORDER TO RAISE NEEDLE BAR TO ITS HIGHEST POSITION .
  2. OPEN UP PLUG (3) AND LOOSEN SCREW (1) .
  3. ADJUST THE HEIGHT OF NEEDLE BAR .
  4. AFTER ADJUSTMENT PLEASE MAKE SURE TIGHTEN SCREW (1) .



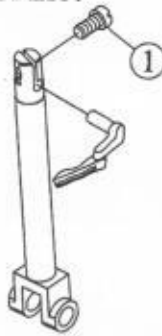
#### 4-7 CHANGING LOOPERS :

##### 4-7-1 CHANGING LOWER LOOPER :



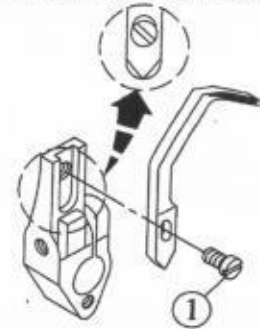
CHANGING LOWER LOOPER BY TAKE OFF SCREW (1). WHEN INSTALLING, PLEASE MAKE SURE THE CRANK OF LOWER LOOPER MUST ATTACH TO THE BOTTOM OF GROOVE OF LOWER LOOPER ARM CLOSELY.

##### 4-7-2 CHANGING UPPER LOOPER :



CHANGING UPPER LOOPER BY TAKE OFF SCREW (1).

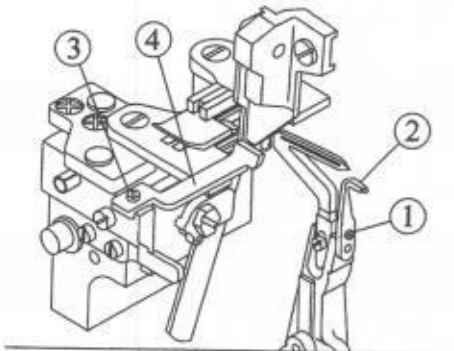
##### 4-7-3 CHANGING CHAINSTITCH LOOPER :



CHANGING THE CHAIN LOOPER BY LOOSEN SCREW (1). WHEN INSTALLING, PLEASE MAKE SURE THE CRANK OF CHAIN LOOPER MUST ATTACH TO THE BOTTOM OF GROOVE OF CHAIN LOOPER ARM CLOSELY.

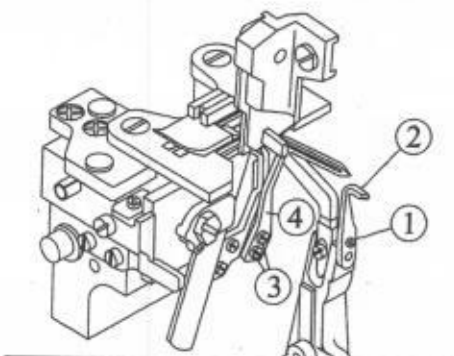
#### 4-8 CHANGING NEEDLE GUARD :

##### 4-8-1 CHANGING NEEDLE GUARD OF OV 504 , OV 514

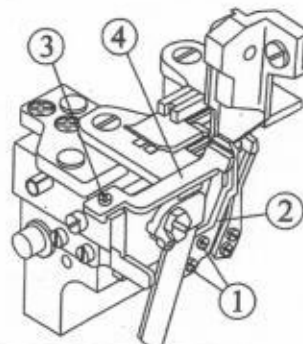


CAN TAKE OFF REAR NEEDLE GUARD (2) BY LOOSEN SCREW (1). LOOSEN SCREW (3) CAN TAKE OFF FRONT NEEDLE GUARD (4).

##### 4-8-2 CHANGING NEEDLE GUARD OF OV 515



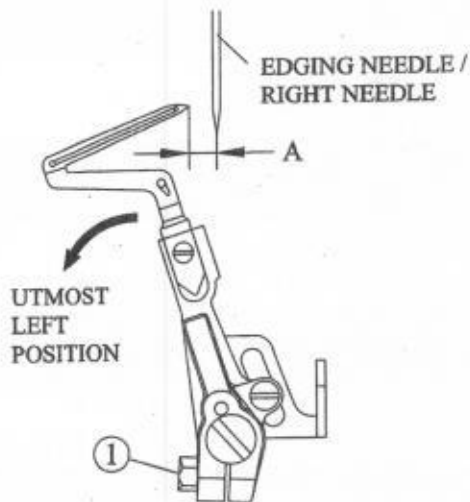
PLEASE TAKE OFF REAR NEEDLE GUARD (2) BY LOOSEN SET SCREW (1). LOOSEN SET SCREW (3) CAN TAKE OFF FRONT NEEDLE GUARD (4).



LOOSEN SET SCREW (1) CAN TAKE OFF REAR CHAINSTITCH NEEDLE GUARD (2). LOOSEN SET SCREW (3) CAN TAKE OFF FRONT CHAINSTITCH NEEDLE GUARD (4).

## 4-9 SETTING UP LOOPER AND NEEDLE GUARD :

### 4-9-1 SETTING UP LOWER LOOPER :

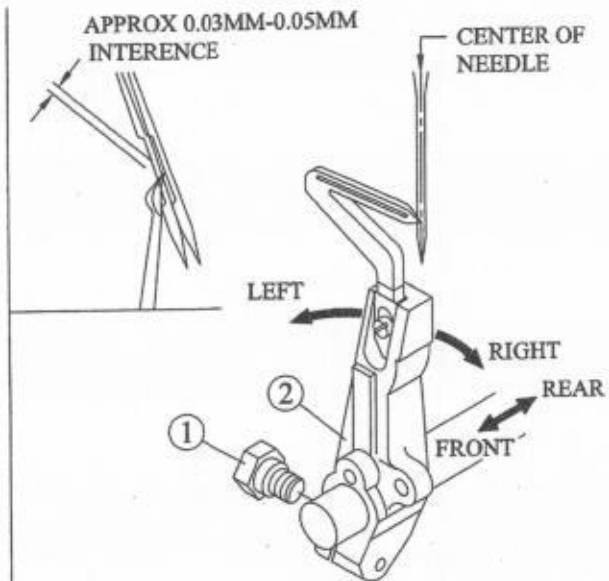


LOOSEN SCREW (1)

UNIT MM

MODEL	THE DISTANCE A BETWEEN TIP OF LOOPER AND THE CENTER OF NEEDLE(S)
OV 504	3.8 ~ 4
OV 514	3.6 ~ 3.8
OV 515	3.8 ~ 4

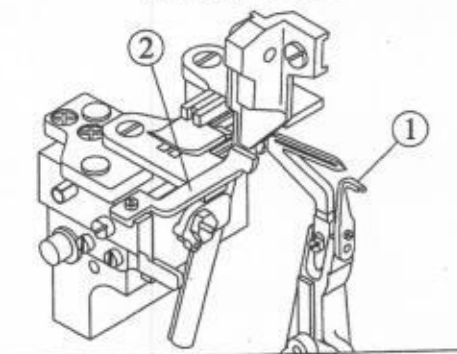
WHEN LOWER LOOPER MOVES TO ITS UTMOST LEFT POSITION, PLEASE REFER TO THE CHART ABOVE FOR THE DISTANCE A BETWEEN THE TIP OF LOWER LOOPER AND THE CENTER OF EDGING NEEDLE.



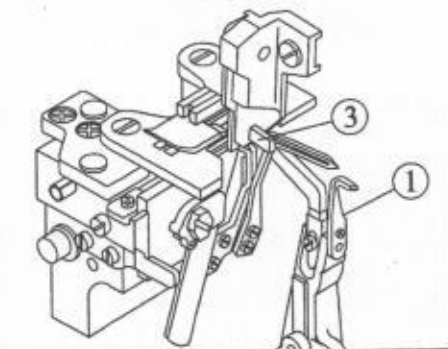
WHEN LOWER LOOPER MOVES FROM RIGHT TO LEFT AND THE TIP OF LOOPER MOVES TO EDGING NEEDLE / RIGHT NEEDLE, THERE WILL HAVE A INTERFERENCE APPROX 0.03MM TO 0.05MM. LOOSEN SCREW (1) AND ADJUSTMENT CAN BE MADE BY MOVING LOOPER ARM (2) FORWARD OR BACKWARD.

### 4-9-2 SETTING UP NEEDLE GUARD OF EDGING NEEDLE :

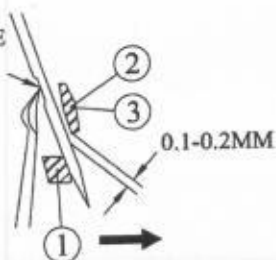
OV 504 OV 514



OV 515



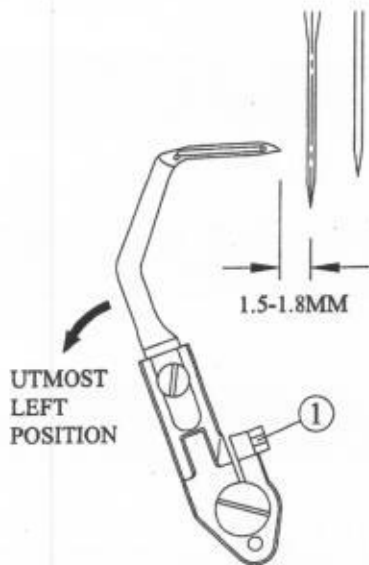
TOLERANCE  
0-0.05MM



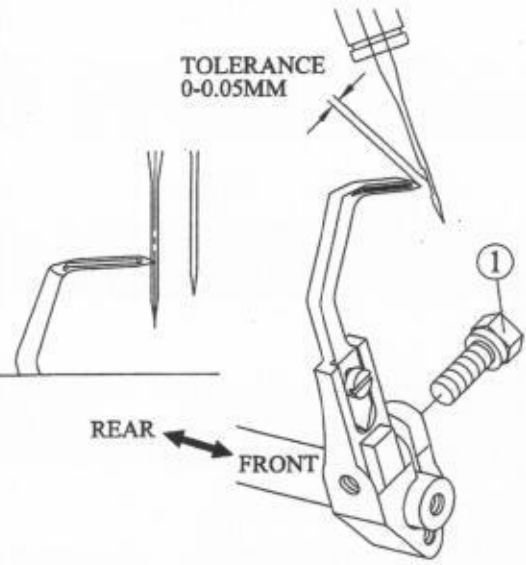
1. AS MENTIONED ABOVE, WHEN LOWER LOOPER MOVES TO THE CENTER OF EDGING NEEDLE, THERE WILL HAVE APPROX 0.03MM-0.05MM INTERFERENCE.
2. IN THE SAME TIME, ADJUSTING REAR NEEDLE GUARD (1) IN ORDER TO PUSH NEEDLE FORWARD AND CREATE A TOLERANCE OF 0-0.05MM BETWEEN NEEDLE AND THE TIP OF LOWER LOOPER.
3. IN THE SAME TIME, ALSO ADJUSTING FRONT NEEDLE GUARD (2) (OV 504, OV 514) (3) (OV 515) TO CREATE A TOLERANCE OF 0.1-0.2MM BETWEEN FRONT NEEDLE GUARD AND NEEDLE.



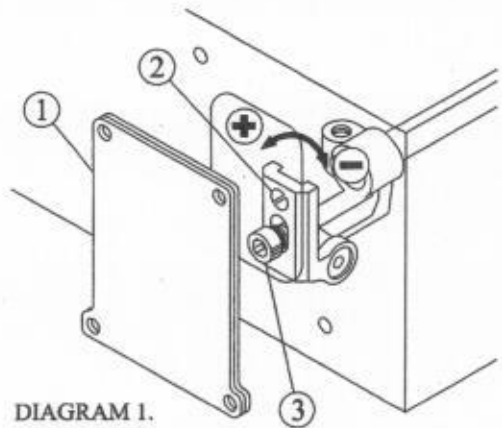
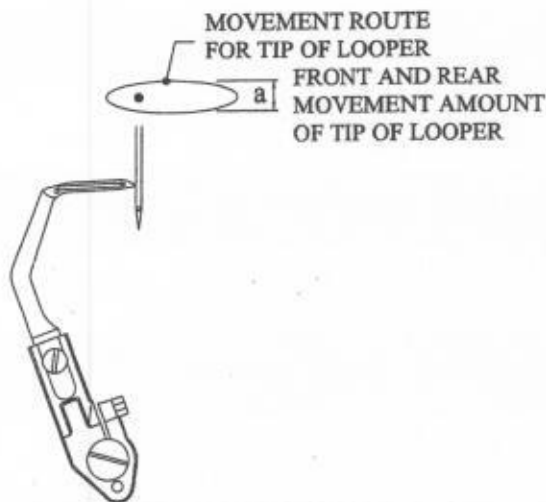
4-9-3 SETTING UP CHAINSTITCH LOOPER ( FOR OV 515 ):



WHEN CHAINSTITCH LOOPER MOVES TO ITS  
UTMOST LEFT POSITION , THE DISTANCE  
BETWEEN TIP OF CHAINSTITCH LOOPER AND  
THE CENTER OF CHAINSTITCH NEEDLE  
SHOULD BE 1.5MM .  
ADJUSTMENT CAN BE MADE BY LOOSEN  
SCREW (1) .



WHEN TIP OF LOOPER MOVES TO THE  
CENTER OF CHAINSTITCH NEEDLE , THE  
TOLERANCE BETWEEN LOOPER TIP AND  
NEEDLE GROOVE SHOULD BE 0-0.05MM .  
ADJUSTMENT CAN BE MADE BY LOOSEN  
SCREW (1) .



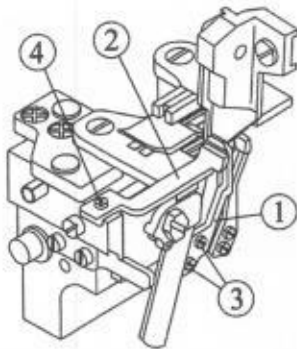
WHEN CHANGING THE SIZE OF NEEDLE OR WHEN ADJUSTING THE FRONT AND  
REAR MOVEMENT AMOUNT OF TIP OF LOOPER .

PLEASE REFER TO DIAGRAM 1 .

1. PLEASE OPEN UP BACK COVER (1) OF SEWING MACHINE .
2. LOOSEN SCREW (3) A LITTLE BIT ( PLEASE DO NOT LOOSEN SCREW (3) COMPLETELY . )
3. TURNING ADJUSTING SCREW (2) .
4. TURNING TOWARD (+) DIRECTION IN ORDER TO OBTAIN BIGGER MOVEMENT .  
TURNING TOWARD (-) DIRECTION IN ORDER TO OBTAIN SMALLER MOVEMENT .
5. AFTER ADJUSTMENT , PLEASE MAKE SURE TIGHTEN SCREW (3) AND BACK COVER (1) .



#### 4-9-4 SETTING UP NEEDLE GUARD OF CHAINSTITCH LOOPER :



ADJUSTMENT CAN BE MADE BY LOOSEN SCREW (3), (4) AND AFTER ADJUSTMENT, MUST MAKE SURE TIGHTEN SCREWS.

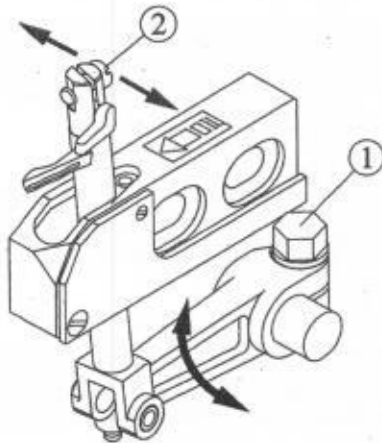
TOLERANCE  
0-0.05MM



WHEN CHAINSTITCH NEEDLE REACHED LOWEST POINT OF ITS STROKE, THE TOLERANCE BETWEEN REAR NEEDLE GUARD AND NEEDLE IS 0-0.05MM AND THE TOLERANCE BETWEEN FRONT NEEDLE GUARD AND NEEDLE IS 0.1-0.2MM.

#### 4-9-5 SETTING UP UPPER LOOPER :

DIAGRAM 1.



1. WHEN UPPER LOOPER MOVES TO ITS HIGHEST POSITION, THE DISTANCE BETWEEN TIP OF LOOPER AND CENTER OF NEEDLE SHOULD BE AS SPECIFICATION CHART LISTED BELOW AND ALSO PLEASE REFER TO DIAGRAM 2.

2. WHEN UPPER LOOPER PASSING THROUGH THE BACK OF LOWER LOOPER. PLEASE REFER TO DIAGRAM 3. FOR CORRECT TOLERANCE BETWEEN UPPER LOOPER AND LOWER LOOPER.

3. WHEN SETTING, PLEASE LOOSEN SCREW (1), (2) AS PER DIAGRAM 1. AND SET UP THE TOLERANCES BETWEEN UPPER LOOPER AND NEEDLE, UPPER LOOPER AND LOWER LOOPER AS PER SPECIFICATION CHART. THEN, TIGHTEN SCREW (1), (2).

DIAGRAM 2.

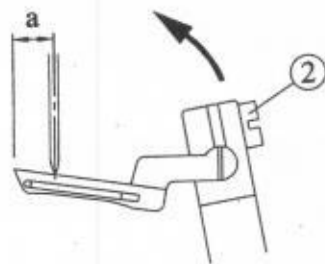
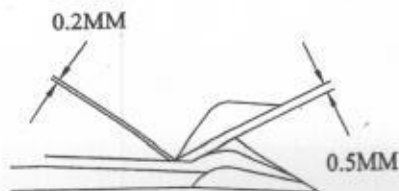
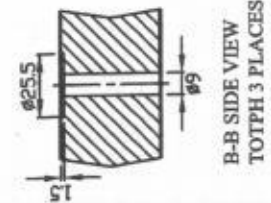
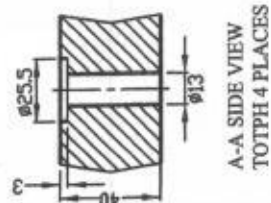
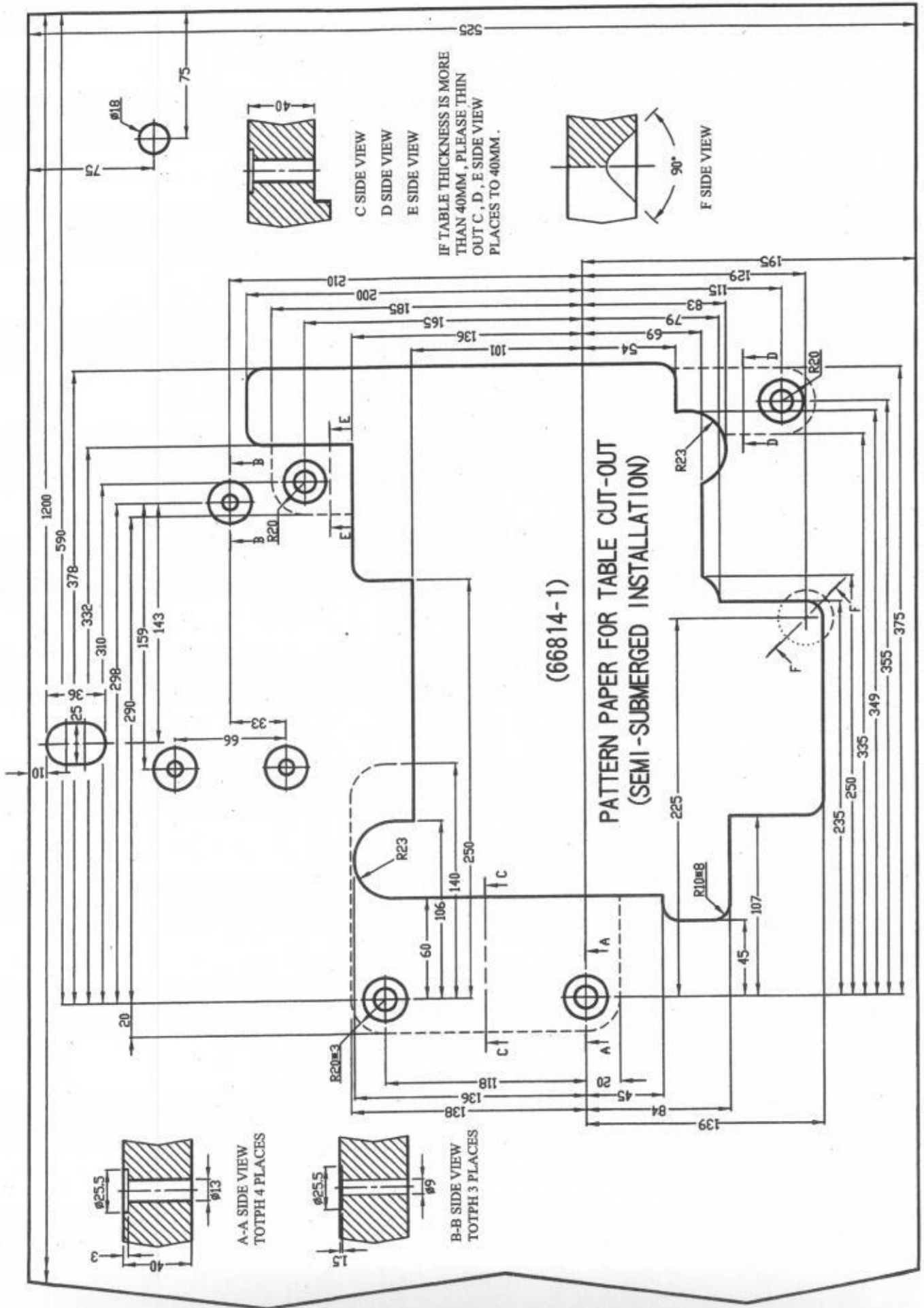


DIAGRAM 3.

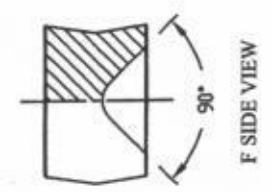


#### SPECIFICATION CHART

MODEL	a
OV 504	4.3~4.8
OV 514	4.5~5.0
OV 515	4.3~4.8

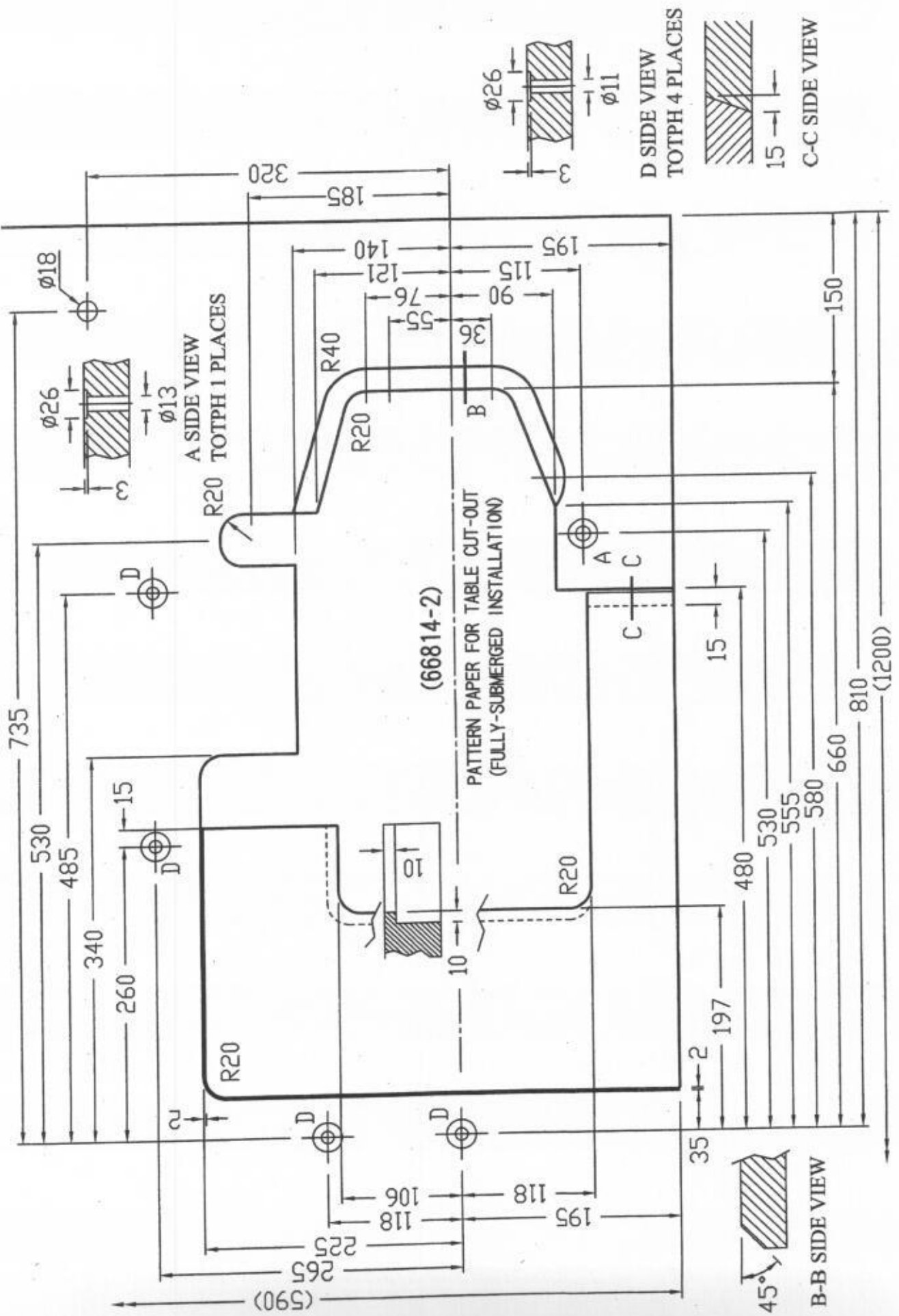


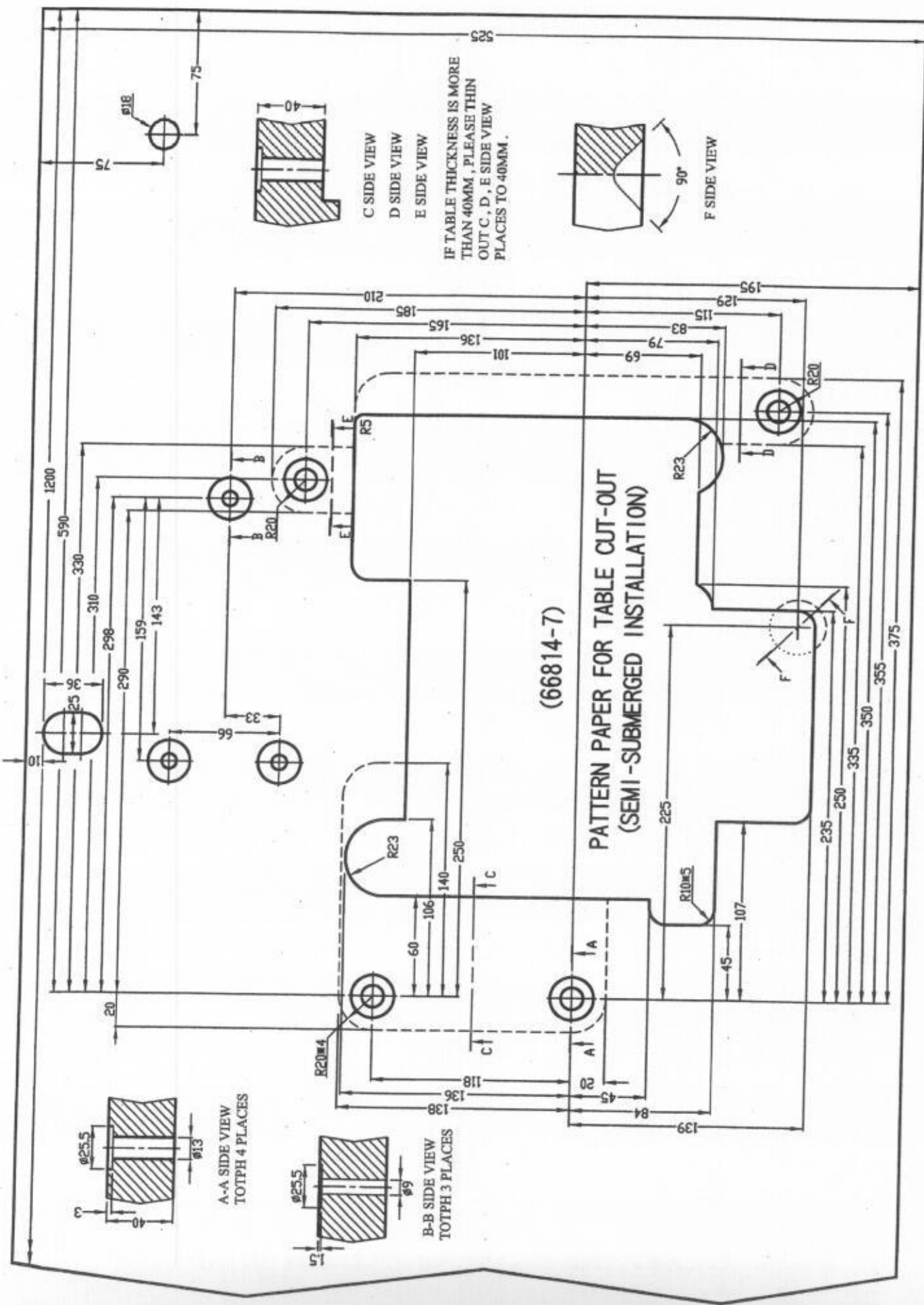
IF TABLE THICKNESS IS MORE THAN 40MM, PLEASE THIN OUT C, D, E SIDE VIEW PLACES TO 40MM.



(66814-1)  
PATTERN PAPER FOR TABLE CUT-OUT  
(SEMI-SUBMERGED INSTALLATION)

# DIMENSIONS FOR FULLY SUBMERGED MOUNTING





(66814-7)

PATTERN PAPER FOR TABLE CUT-OUT  
(SEMI-SUBMERGED INSTALLATION)

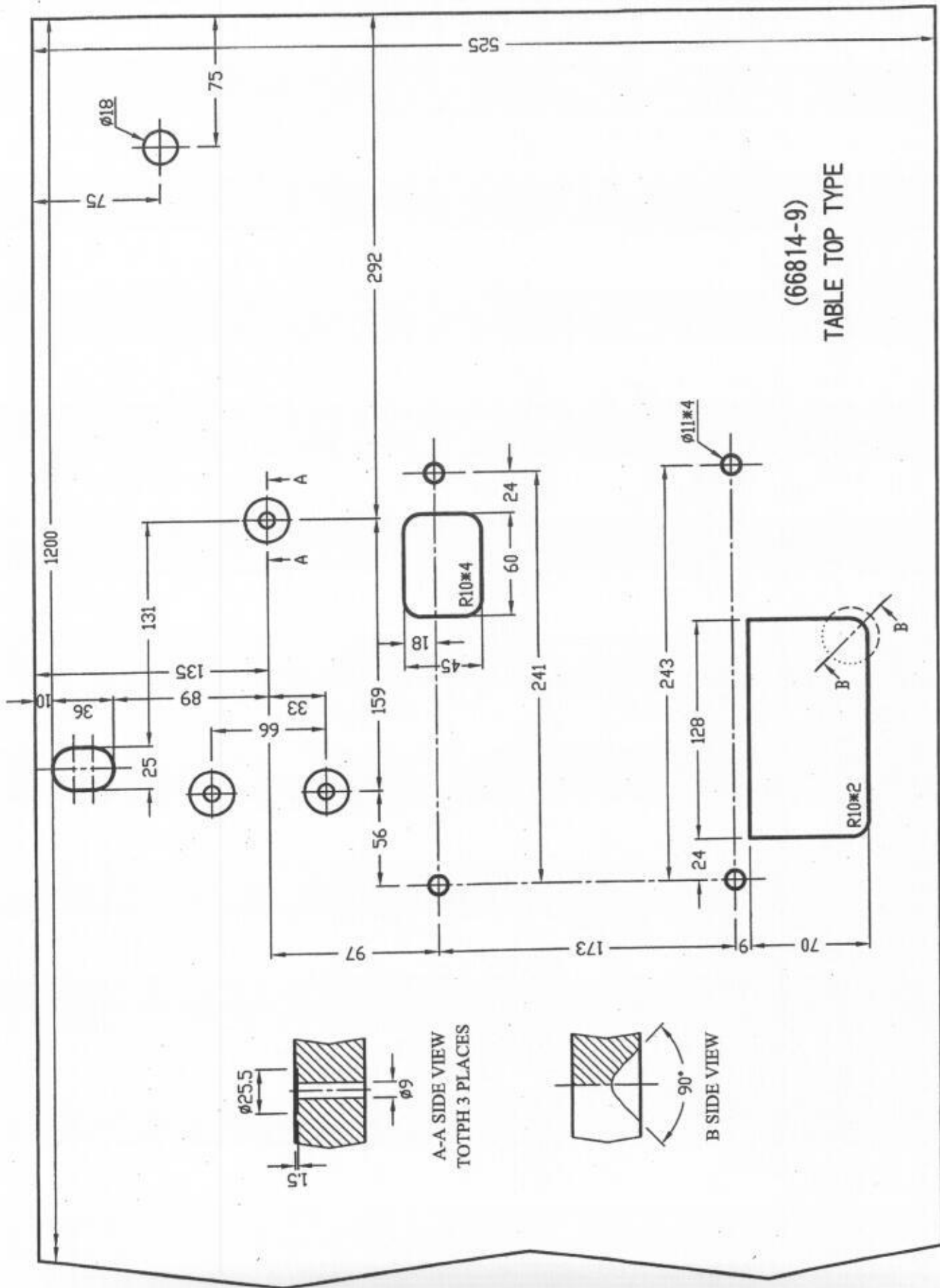
IF TABLE THICKNESS IS MORE  
THAN 40MM, PLEASE THIN  
OUT C, D, E SIDE VIEW  
PLACES TO 40MM.

A-A SIDE VIEW  
TOTPH 4 PLACES

B-B SIDE VIEW  
TOTPH 3 PLACES

C SIDE VIEW  
D SIDE VIEW  
E SIDE VIEW

F SIDE VIEW



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