

User's Manual

GARUDAN®

WJ ; 222 Series



ANITA B s.r.o.

Průmyslová 2453/7

680 01 Boskovice

Czech Republic

tel: +420 516 454 774

+420 516 453 496

fax: +420 516 452 751

e-mail: info@anita.cz

www.garudan.cz

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PREFACE :

UH-9000 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 .

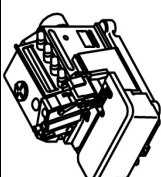
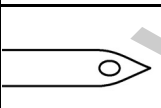
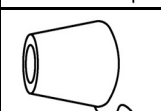
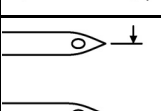
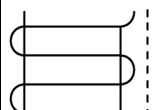

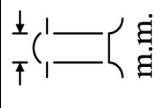
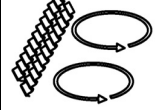


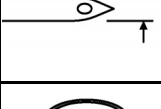
WITH PRECISION PARTS , MACHINES CAN BE PERFORMED QUIET
STABLE , DURABLE CHARACTERS .

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 .

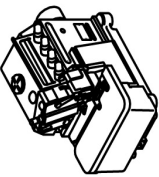
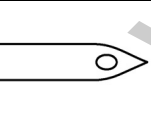

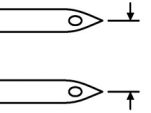
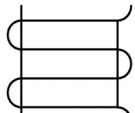

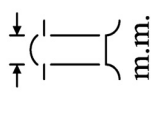
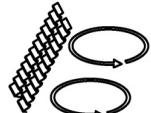

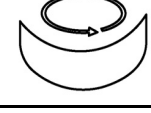
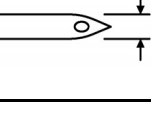
SAFETY PRECAUTIONS :

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 .

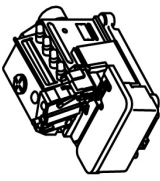
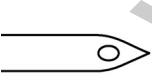

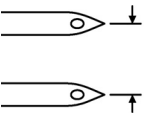
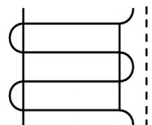
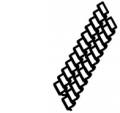
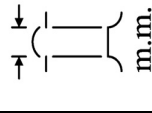
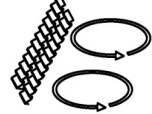

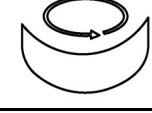
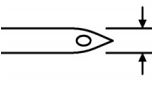
UH9000 SUBCLASS SPECIFICATIONS

												
Application	Subclass	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	Standard Equipment
Fine Edging	UH90B3-021-F02	1	3	—	3	1	3.8	0.7~2	5	8000	DC*27#9	
	UH90B3-021-F04	1	3	—	3	1	3.8	0.7~2	5	8000	DC*27#9	
	UH90B3-022-F02	1	3	—	3	1	3.8	0.7~2	5	8000	DC*27#9	
Plain Seaming	UH9003-032-M04	1	3	—	3	2	3.8	0.7~2	6	8000	DC*27#11	
	UH9003-053-M04	1	3	—	4	3	3.8	0.7~2	6	8000	DC*27#11	
	UH9003-053-H04	1	3	—	5	3	3.8	0.7~2	6	7000	DC*27#14	Thicker Teeth Bigger Needle Plate Hole
Blind Hemming	UH9013-032-L05	1	3	—	3	2	3.8	0.7~2	5	8000	DC*27#9	
Backlatching	UH9023-032-M04	1	3	—	3	2	3.8	0.7~2	6	8000	DC*27#11	
	UH9023B-032-M04	1	3	—	3	2	3.8	0.7~2	6	8000	DC*27#11	
	UH9083-053-H04	1	3	—	5	3	3.8	0.7~2	6	7000	DC*27#14	Thicker Teeth Bigger Needle Plate Hole
Elastic Tape Attaching	UH9084-243-H14	2	4	2.2	4 6	3	3.2	0.8~2.4	6	7000	DC*27#14	Thicker Teeth Bigger Needle Plate Hole
	UH9004-232-M14	2	4	2.2	3 5	2	3.8	0.7~2	5.5	7500	DC*27#11	
Plain Seaming	UH9004-232F-M14	2	4	2.2	3 5	2	3.8	0.7~2	5.5	7500	DC*27#11	
	UH9004-233-M14	2	4	2.2	3 5	3	3.8	0.7~2	5.5	7500	DC*27#11	
	UH9004-242-M14	2	4	2.2	4 6	2	3.8	0.7~2	5.5	7500	DC*27#11	
	UH9004-243-M14	2	4	2.2	4 6	3	3.8	0.7~2	5.5	7500	DC*27#11	
	UH9004-253-M14	2	4	2.2	5 7	3	3.8	0.7~2	5.5	7500	DC*27#11	
	UH9004-253-H14	2	4	2.2	5 7	3	3.8	0.7~2	5.5	7000	DC*27#14	Bigger Needle Plate Hole
	UH9004-263-M14	2	4	2.2	6 8	3	3.8	0.7~2	5.5	6500	DC*27#11	
	UH9004-353-M12	2	4	3	5 8	3	3.8	0.7~2	5.5	7000	DC*27#11	

UH9000 SUBCLASS SPECIFICATIONS

Application												Standard Equipment
Backlatching	UH9024-242-M14	2	4	2.2	4 6	2	3.8	0.7~2	5.5	7000	DC*27#11	
	UH9024B-242-M14	2	4	2.2	4 6	2	3.8	0.7~2	5.5	7000	DC*27#11	
Safety	UH9005-232-L16	2	5	2	3 5	2	3.8	0.7~2	6	7000	DC*27#11	
	UH9005-332C-L16	2	5	3	3 6	2	3.8	0.7~2	6	7000	DC*27#11	
	UH9005-332-M16	2	5	3	3 6	2	3.8	0.7~2	6	7000	DC*27#11	
	UH9005-352-M16	2	5	3	5 8	2	3.8	0.7~2	6	7000	DC*27#11	
	UH9005-353-M16	2	5	3	5 8	3	3.8	0.7~2	6	7000	DC*27#11	
	UH9005-553-M16	2	5	5	5 10	3	3.8	0.7~2	6	7000	DC*27#11	
	UH9005-553-H16	2	5	5	5 10	3	4.5	0.6~1.6	6	6000	DC*27#16	Thicker Teeth Bigger Needle Plate Hole
Gathering	UH9045-353-M16	2	5	3	5 8	3	3	1.0~3.0	5	5500	DC*27#11	
Pocket Bags Seaming	UH9055-353-M16	2	5	3	5 8	3	3	0.6~1.6	5	5500	DC*27#11	
Piping Sewing	UH9065-353-M16	2	5	3	5 8	3	3.8	0.6~1.6	5	5500	DC*27#11	
Gathering & Piping	UH9075-353-M16	2	5	3	5 8	3	3	1.0~3.0	5	5000	DC*27#11	
	UH9075/A-353-M16	2	5	3	5 8	3	3	1.0~3.0	5	5000	DC*27#11	
Extra Heavy Weight Material Seaming	UH9105-553-X16	2	5	5	5 10	3	4.5	0.6~1.6	8	5500	DC*27#19	Thicker Teeth Bigger Needle Plate Hole

UH9000 SUBCLASS SPECIFICATIONS

Application												Standard Equipment
Reinforce Tape Sewing	UH9094-243-H14	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
	UH9004-243E-M14	2	4	2.2	4 6	3	3.8	0.7~2	6	7000	DC*27#11	With Binding Tape Bracket, Tape Guide, Presser Foot With Tape Guide
Double Chain Stitching	UH9034-503-M45	2	4	5	—	3	3.2	0.6~1.6	5	5000	DC*27#14	
Gathering	UH9044-243-M14	2	4	2.2	4 6	3	3	1.0~3.0	5	5500	DC*27#11	
Piping Sewing	UH9064-243-M14	2	4	2.2	4 6	3	3.8	0.6~1.6	5	5500	DC*27#11	
Gathering & Piping	UH9074-243-M14	2	4	2.2	4 6	3	3	1.0~3.0	5	5500	DC*27#11	
6-Thread Multi-Use Overlock Machine	UH9006-3243-M44	3	6	3 × 2.2	4 7	3	3.8	0.7~2	5	6500	DC*27#11	
	UH9006-5243-M44	3	6	5 × 2.2	4 9	3	3.8	0.7~2	5	6500	DC*27#11	

UH9000 SERIES MACHINE NUMBERING SYSTEM

SERIES CODE	APPLICATION CODE
UH90-UH9000 FLAT BED OVERLOCK	0 : BASIC MODEL
UH91-UH9100 FLAT BED HEAVY MATERIAL OVERLOCK	1 : BLIND STITCH
UH92-UH9200 FLAT BED TOP FEED OVERLOCK	2 : BACKLATCHING
UH93-UH9300 CYLINDER BED OVERLOCK	3 : DOUBLE CHAIN STITCHING
UH94-UH9400 CYLINDER BED TOP FEED MACHINE	4 : GATHERING
UHD DIRECT DRIVE MINI MOTOR	5 : POCKET BAGS SEAMING
	6 : PIPING
	7 : GATHERING AND PIPING
	8 : ELASTIC TAPE ATTACHING
	9 : REINFORCE TAPE SEWING
	B : FINE EDGING
	C : STRING FORMING (SPAGHETTI SEWING)

THICKNESS OF FABRICS
F : EXTRA LIGHT MATERIAL
L : LIGHT MATERIAL
M : MEDIUM TO HEAVY MATERIAL
H : HEAVY MATERIAL
X : EXTRA HEAVY MATERIAL

STITCHING CODE
11-101
41-401
03-503
04-504
05-505
12-512
14-514
15-515
16-516
42-542
44-544

TC : ONE TOUCH TYPE TAPE CUTTER
US : FLAT SUCTION TYPE CHAIN CUTTER
SS : SIDE SUCTION TYPE CHAIN CUTTER
BH : BLIND HEMMING DEVICE
AL : PNEUMATIC TYPE AUTO FOOT LIFTER
TF : TENSION FREE TAPE FEEDER
SV : VACUUM CHIP COLLECTION DEVICE
CV : VENTURI DEVICE
BL : BACKLATCHING DEVICE
EF : ELASTIC TAPE FEEDING DEVICE
GC : GATHERING DEVICE

UH[D]90 - M 16 / SS033

AMOUNT OF THREAD
1 ⇒ 1
2 ⇒ 2
3 ⇒ 3
4 ⇒ 4
5 ⇒ 5
6 ⇒ 6

1. EQUIPPED WITH SPECIAL ATTACHMENT OR DEVICE
2. WITH SAME BASIC SPECIFICATIONS BUT WITH MINOR FUNCTION CHANGES, SUCH AS HIGHER LOOPER MOVEMENT.

NEEDLE DISTANCE
0
2 ⇒ 2.2
3 ⇒ 3.2
5 ⇒ 4.8

SEAM WIDTH
2 : 2.0 mm
3 : 3.0 mm
4 : 4.0 mm
5 : 5.0 mm
6 : 6.0 mm

ROWS OF FEED DOGS
1ROW
2ROWS
3ROWS
4ROWS

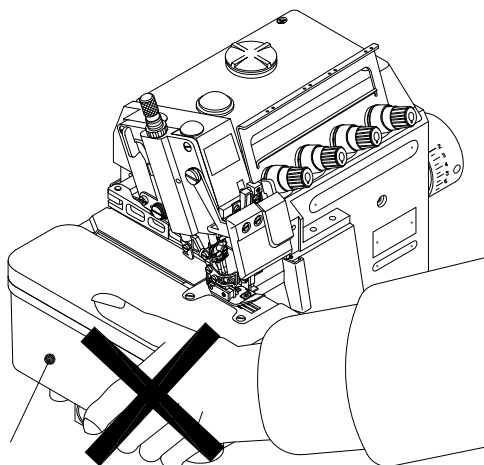
SUB-CLASS CODE :
SAME BASIC MODEL BUT WITH MINOR SPECIAL PARTS FOR SPECIAL APPLICATIONS. A : WIDE KNIFE B : ANGLE KNIFE C : NARROW PRESSER FOOT D : STANDARD / BLIND HEMMING , TWO IN ONE APPLICATION . E : WITH TAPE INSERTING PRESSER FOOT F : SPECIAL FEED DOG R : THICK TEETH FEED DOG

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1. INSTALLATION

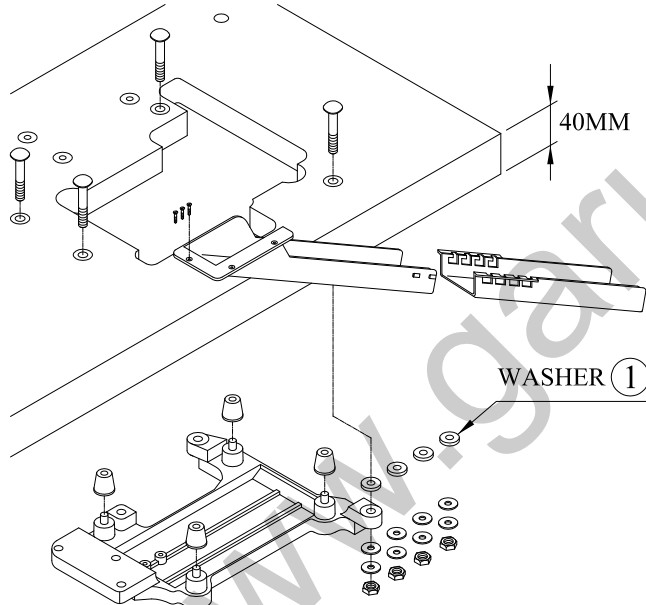
1-1 MOVING :



CLOTH PLATE COVER

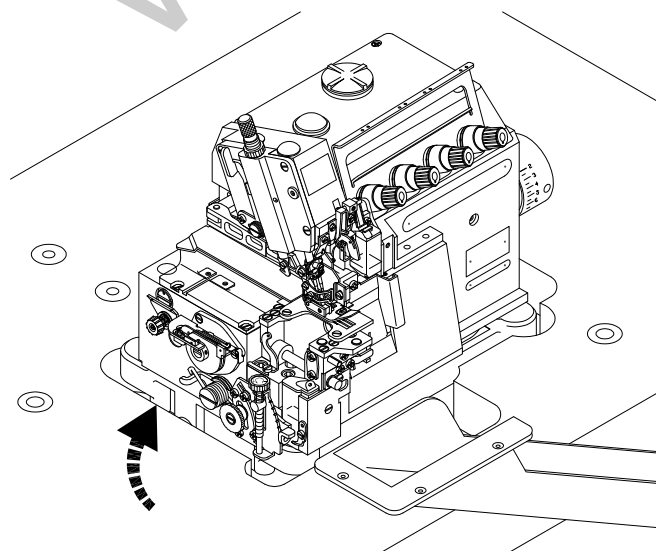
DURING INSTALLATION
PROCESS , DO NOT MOVE
SEWING MACHINE BY
HOLDING CLOTH PLATE .

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



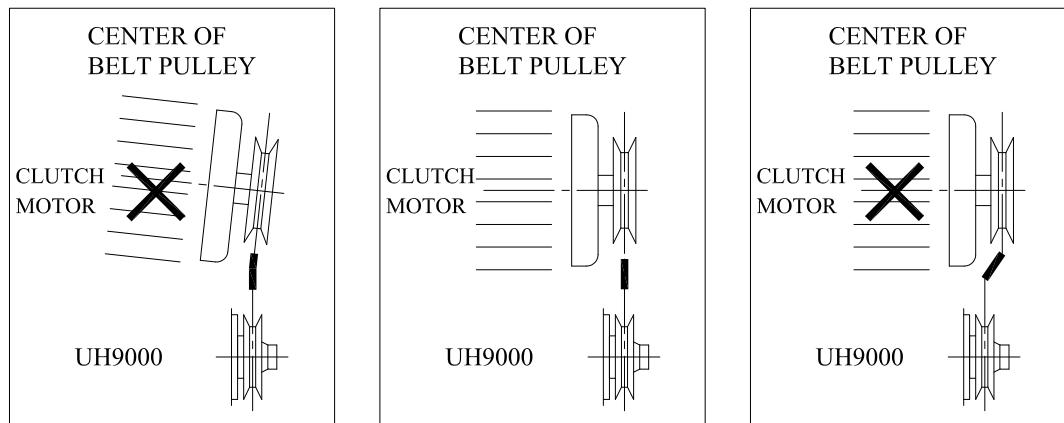
PLEASE USING STANDARD TABLE
OF 40MM IN THICKNESS . IF
USE THE TABLE IN 35MM IN
THICKNESS , THEN , PLEASE
REFER TO INSTALLATION MAP .

1-3 INSTALLATION OF SEWING MACHINE :

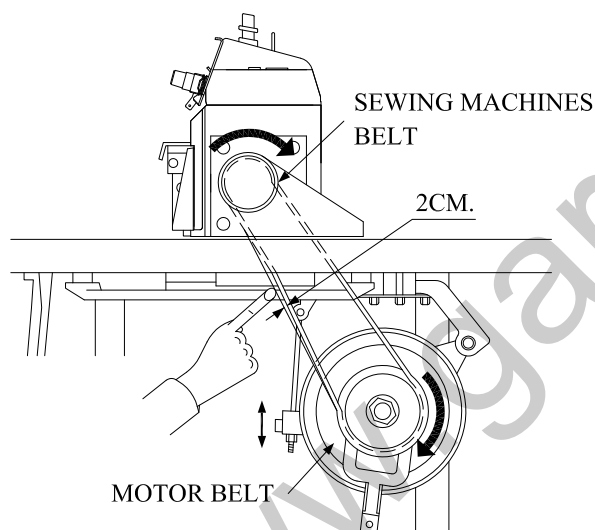


PLEASE MAKE SURE THERE
HAVE ENOUGH ROOM BETWEEN
SEWING MACHINE AND THE
TABLE AROUND IT AFTER
INSTALLATION . TABLE CAN
NOT INTERFERENCE WITH THE
SEWING MACHINE .

1-4 INSTALLATION OF MOTOR BELT :

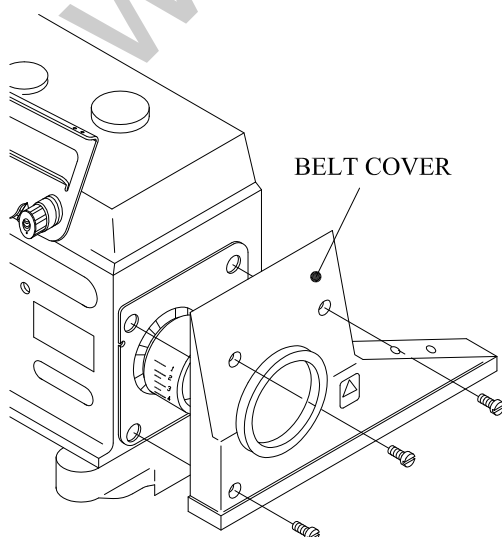


INSTALL MOTOR BELT AND MAKE SURE MOTOR BELT IN PARALLEL WITH BOTH PULLEY OF CLUTCH MOTOR AND SEWING MACHINE BY ADJUSTING CLUTCH MOTOR'S POSITION PROPERLY .



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

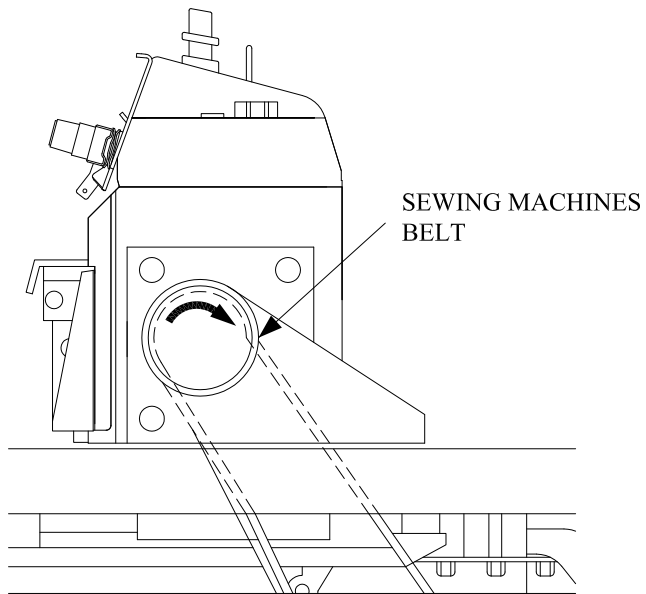
1-5 INSTALLATION OF BELT COVER :



FOR SAFTY REASON , BELT COVER MUST BE INSTALLED .

2. BEFORE OPERATION

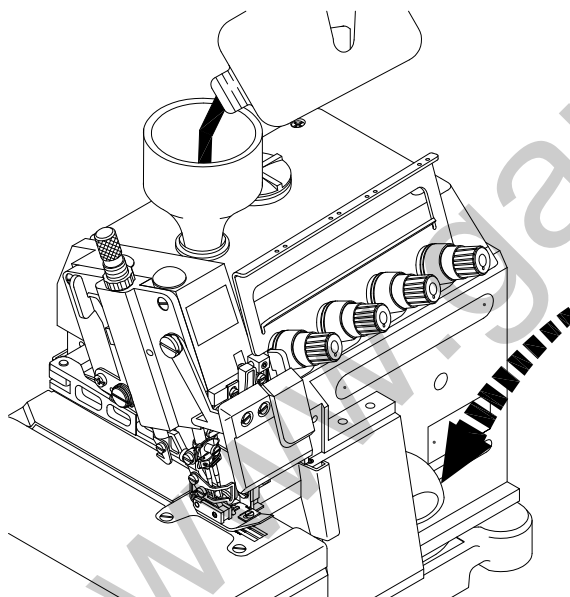
2-1 TURNING DIRECTION OF BELT PULLEY :



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

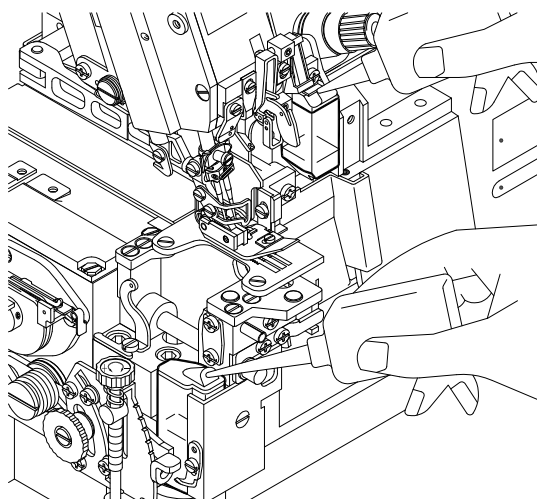


DURING ADDING PROCESS ,
PLEASE MAKE SURE THE
LUBRICATION OIL CAN NOT OVER
THE UPPER LIMIT OF OIL GAUGE .



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

ADDING SILICON OIL



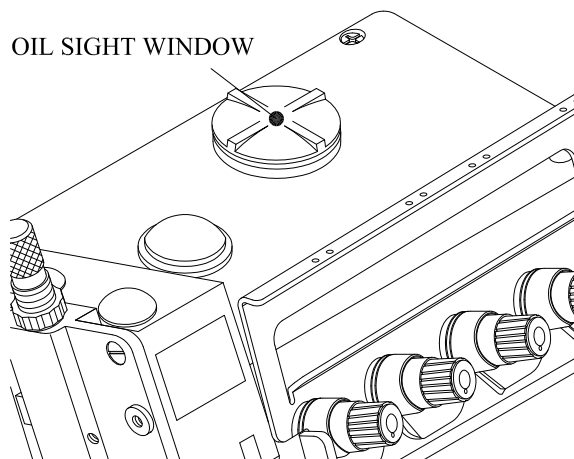
PLEASE ADD PROPER SILICON OIL INTO
SILICON OIL RESERVOIRS IN ORDER TO
PREVENT THREAD BREAKAGE .

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 THOUGHT 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 :

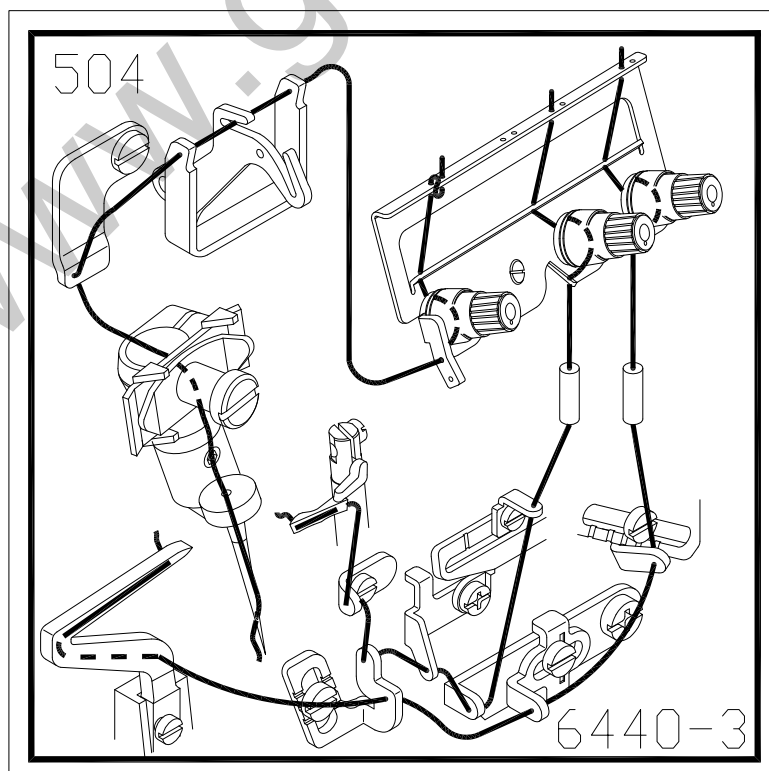


DURING THE FIRST USAGE , PLEASE MAKE SURE LUBRICATION OIL CIRCULATES PROPERLY .

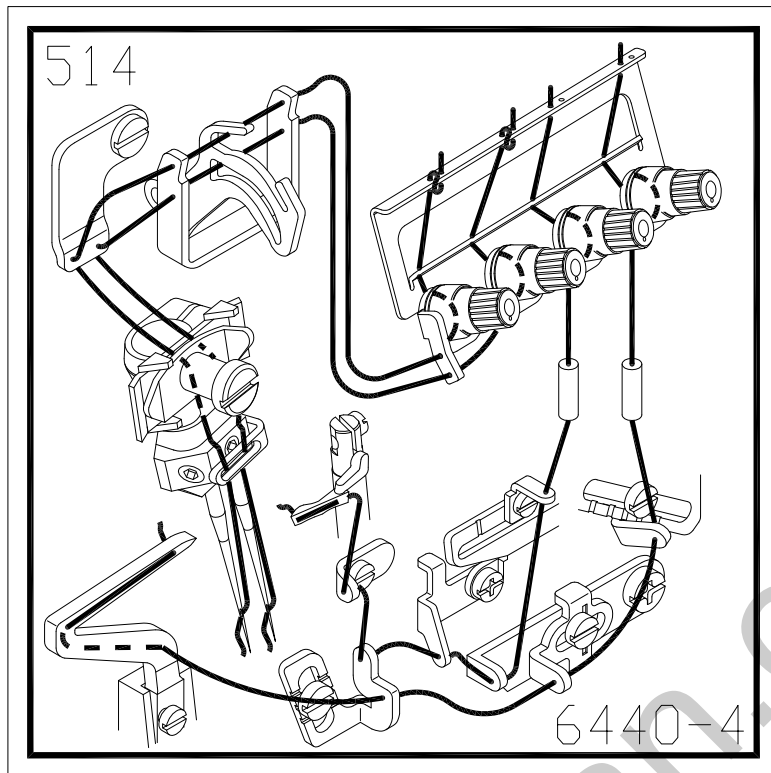
3-2 THREADING MAP :

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

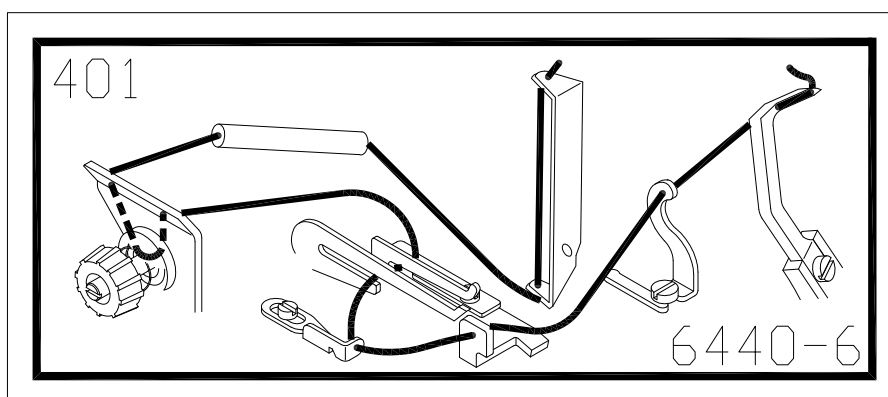
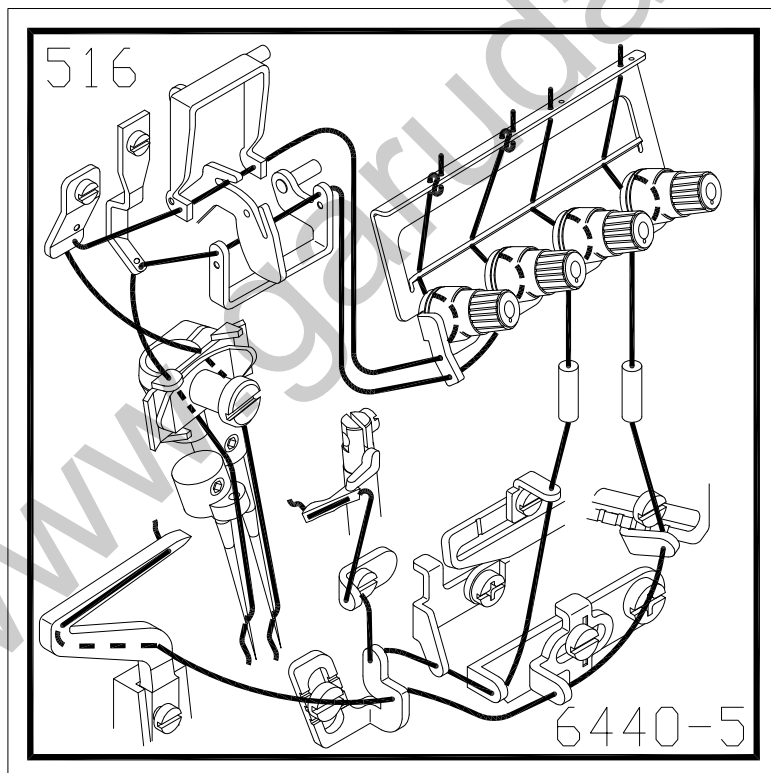
UH9003 . STITCH TYPE 504 .

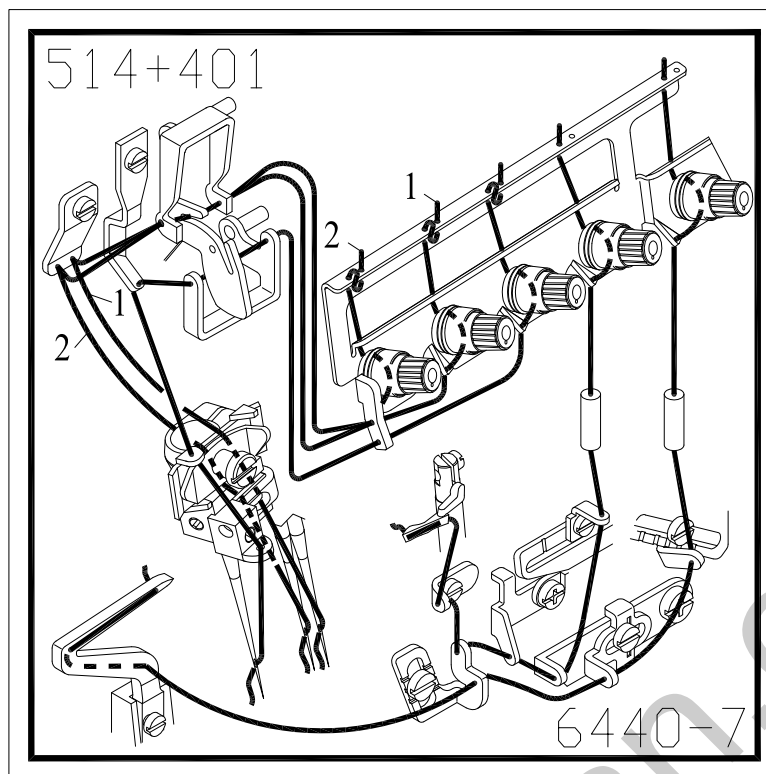


UH9004 . STITCH TYPE 514 .

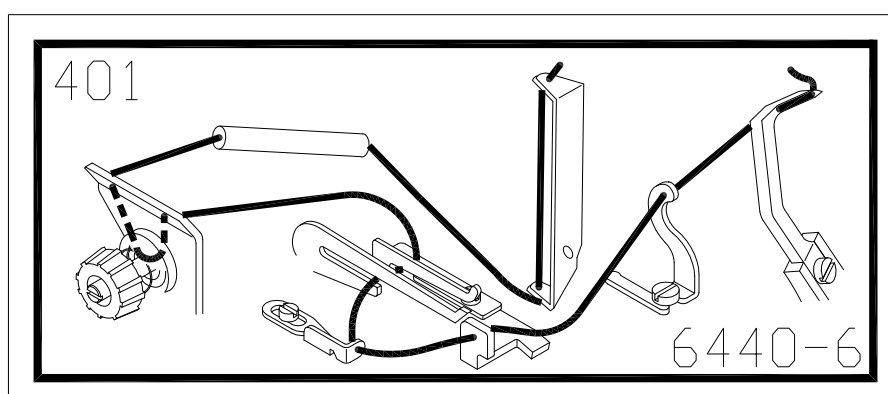
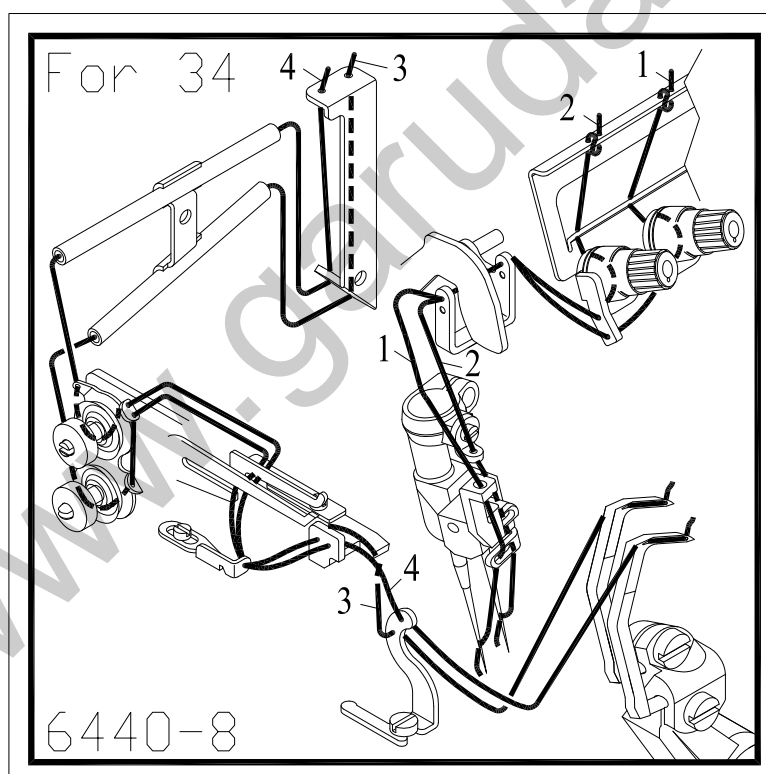


UH9005 . STITCH TYPE 516 .

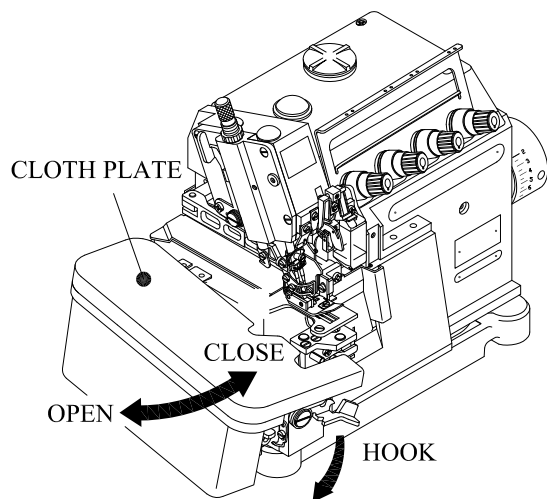




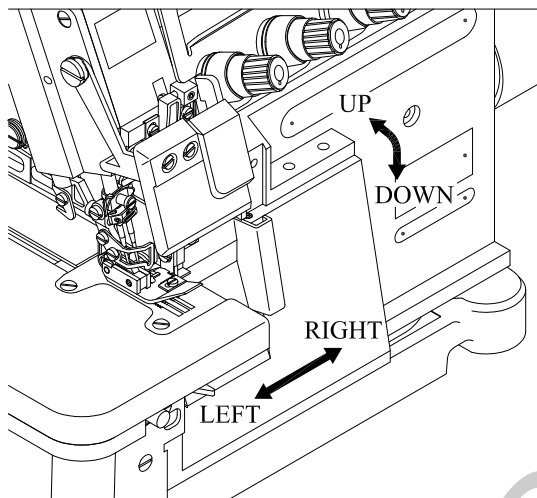
UH9034



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

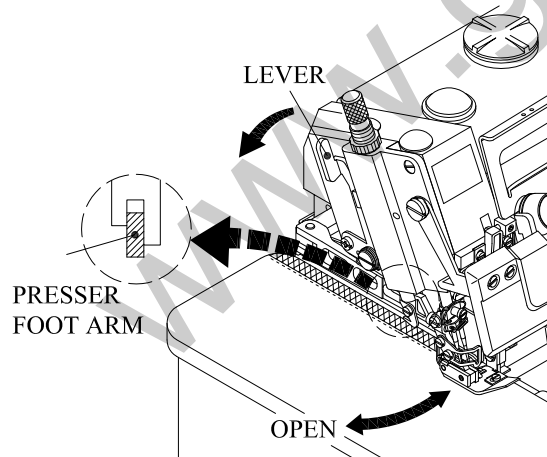


PRESS DOWN HOOK AND PUSH TO LEFT IN ORDER TO OPEN CLOTH PLATE , PUSHING RIGHT TO ITS HOOK SET POSITION , THE CLOTH PLATE WILL BE CLOSED .

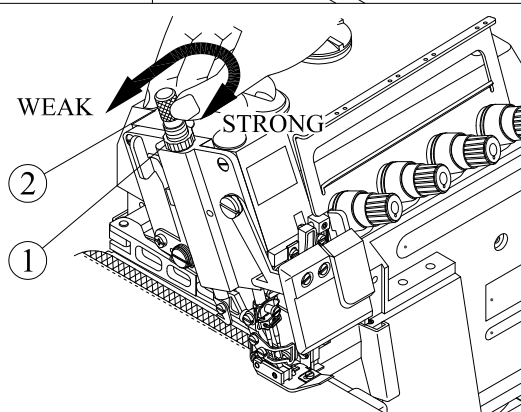


OPEN AND CLOSE FRONT COVER : PUSHING FRONT COVER TO RIGHT SET POSITION AND PULL DOWN TO OPEN IT . AND ON THE OTHER HAND , PULL UP TO ITS SET POSITION AND TO LEFT IN ORDER TO CLOSE FRONT COVER . AFTER CLOSING FRONT COVER , PLEASE MAKE SURE THERE IS NO INTERFERENCE BETWEEN FRONT COVER AND OTHER PARTS .

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



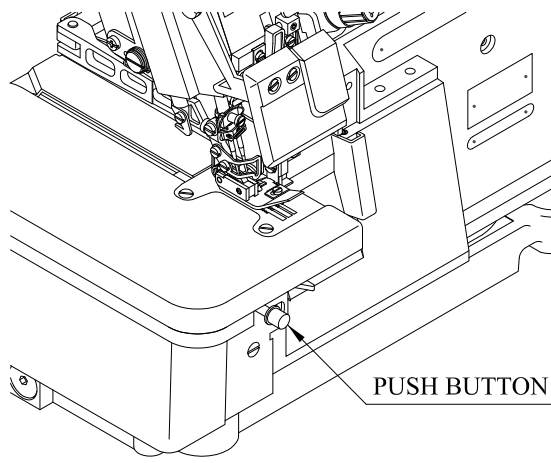
OPEN AND CLOSE THE PRESSER FOOT ARM : PUSH LEVER DOWN TO ITS SET POSITION THEN TAKE OUT PRESSER FOOT ARM . VICE VERSA , PUSH DOWN LEVER TO ITS SET POSITION , CAN PUT PRESSER FOOT ARM BACK . WHEN PUT PRESSER FOOT ARM BACK , PLEASE MAKE SURE IT WILL BE BACK TO ITS SET POSITION .



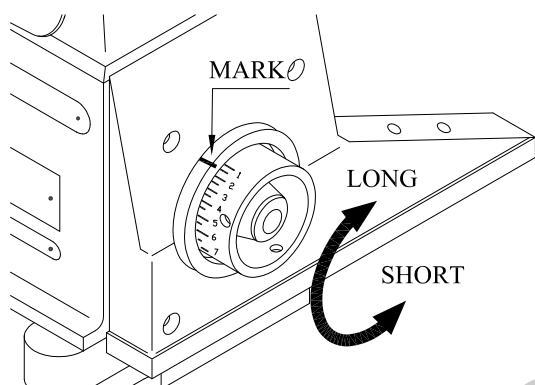
ADJUSTING PRESSURE : TURNING ADJUSTING SCREW CLOCKWISE IN ORDER TO INCREASE PRESSURE . TURNING ADJUSTING SCREW COUNTERCLOCKWISE IN ORDER TO DECREASE PRESSURE .

3-5 ADJUSTING STITCH LENGTH AND DIFFERENTIAL RATIO :

ADJUSTING STITCH LENGTH :

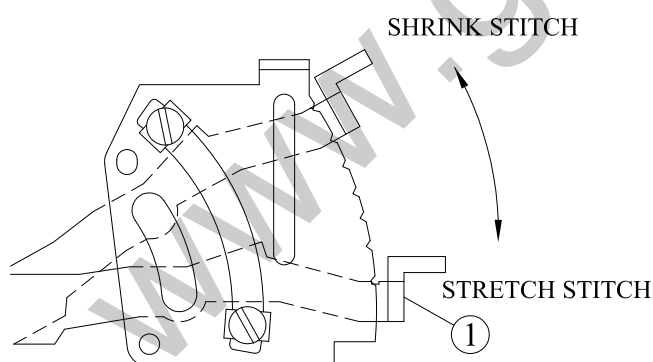


PUSHING THE PUSH BUTTON LIGHTLY FIRST AND TURNING PULLEY TO SET POSITION THEN PUSHING DOWN THE PUSH BUTTON INTO ITS SET POSITION AND ADJUST THE LENGTH OF STITCH .

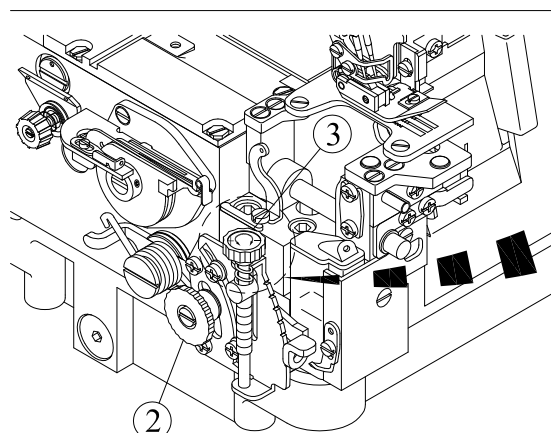


REMARK : THE DISTANCE MARK ON THE PULLEY ONLY REPRESENT APPROX LENGTH OF STITCH AND ACTUAL STITCH LENGTH NEEDED SHOULD GET FROM TEST SEWING .

ADJUSTING DIFFERENTIAL RATIO :

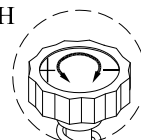


DIFFERENTIAL RATIO WAS SET AT 1 : 1 WHEN MACHINES WERE OUT OF FACTORY . ADJUST DIFFERENTIAL RATIO AS NEEDED . OPEN UP CLOTH PLATE , LOOSEN NUT (2) MOVE LEVEL (1) UPWARD OR DOWNWARD TO THE POSITION NEEDED. THEN TIGHTEN NUT (2) . FOR MICRO-ADJUSTMENT PLEASE TURN ADJUSTING SCREW (3) .



SHRINK STITCH

(+)

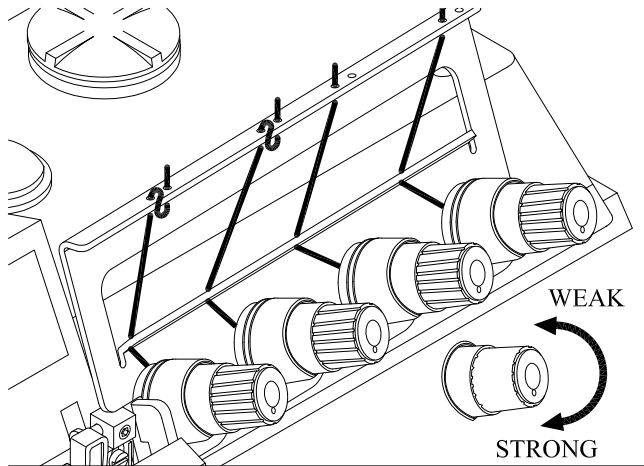


(-)

STRETCH STITCH

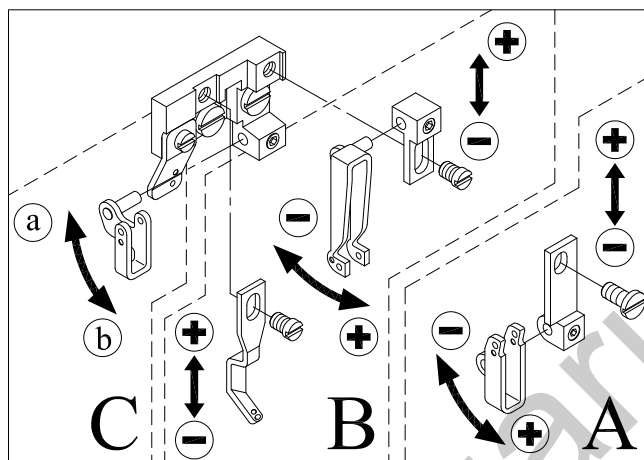
3-6 ADJUSTING THREAD TENSION AND THREAD TENSION AMOUNT :

ADJUSTING THREAD TENSION :



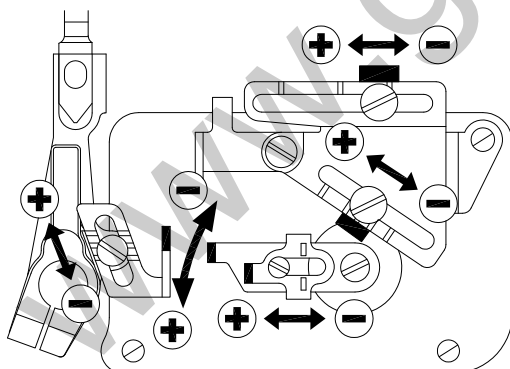
THREAD TENSION CORRELATE WITH THREAD TENSION AMOUNT . PLEASE REFER TO THIS ITEM AND NEXT ITEM TO ADJUST THREAD TENSION AMOUNT IN ORDER TO GET BEST RESULT .
TURNING CLOCKWISE IN ORDER TO GET STRONG THREAD TENSION .
TURNING COUNTERCLOCKWISE IN ORDER TO GET WEAK THREAD TENSION .

NEEDLE THREAD TENSION AMOUNT :



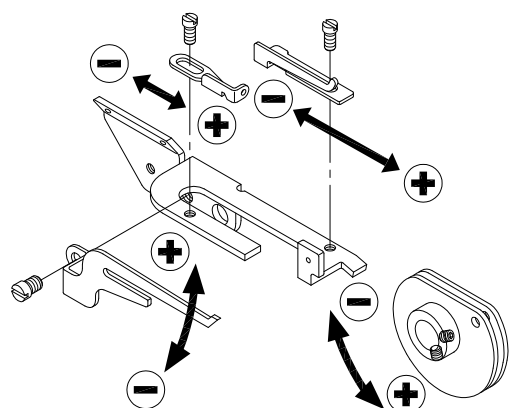
A : FOR UH9003 , UH9004 USAGE .
TOWARD (+) DIRECTION GET BIGGER THREAD TENSION AMOUNT .
TOWARD (-) DIRECTION GET SMALLER THREAD TENSION AMOUNT .
B : FOR UH9005 USAGE .
TOWARD (+) DIRECTION IN ORDER TO GET BIGGER THREAD TENSION AMOUNT .
TOWARD (-) DIRECTION IN ORDER TO GET SMALLER THREAD TENSION AMOUNT .
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 :

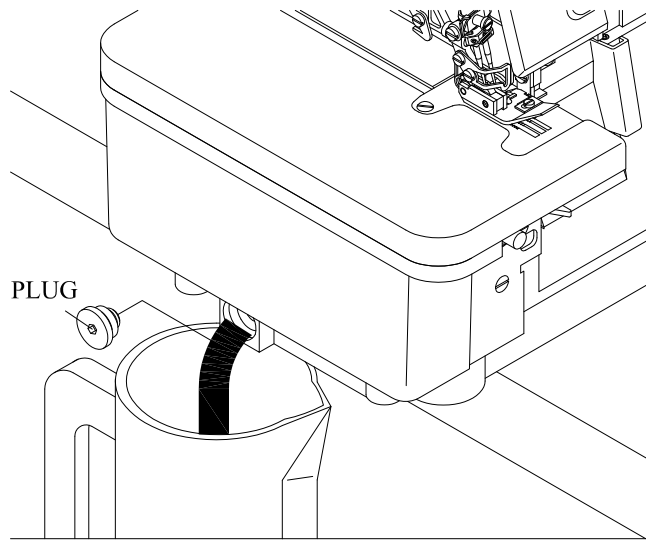


WHEN ADJUSTING CHAINSTITCH LOOPER THREAD , IF THREAD LOOP COLLAPSE , UNSTABLE OR CAN NOT FORM THREAD LOOP , PLEASE ADJUST THREAD TENSION AMOUNT ACCORDING TO ARROW DIRECTION
(+) INCREASE .
(-) DECREASE .

4. REPAIRING AND MAINTENANCE

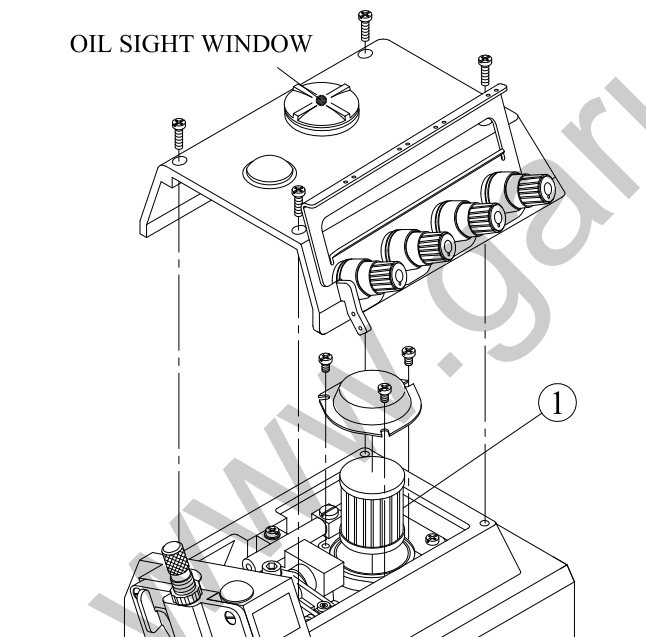
4-1 CHANGING LUBRICATION OIL , OIL FILTER AND NEEDLES :

CHANGE LUBRICATION OIL :



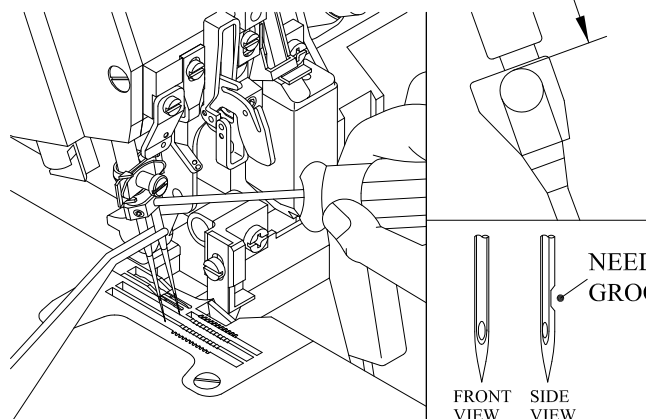
AFTER OPERATING SEWING MACHINE FOR 160-200 HOURS (APPROX ONE MONTH .) PLEASE CHANGE LUBRICATION OIL AND CHANGE LUBRICATION OIL EVERY 6 MONTHS THEREAFTER . IF STOP USING SEWING MACHINE FOR A LONG TIME , PLEASE CHANGE LUBRICATION OIL BEFORE OPERATE AGAIN . CHANGE LUBRICATION OIL BY TAKE OFF PLUG .

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 :

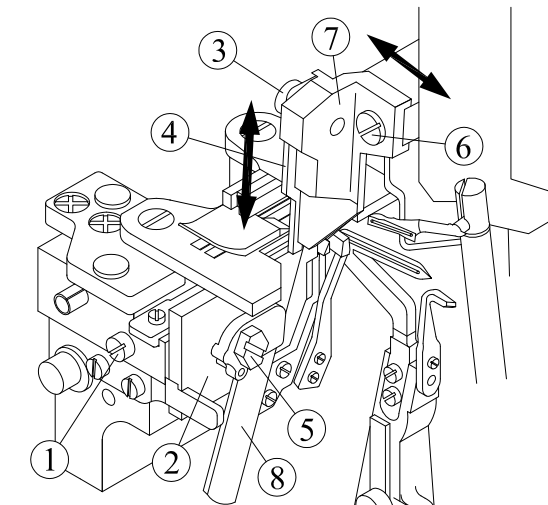


MAKE SURE TO INSERT NEEDLES ALL THE WAY TO THE BOTTOM OF NEEDLE HOLES .

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 .

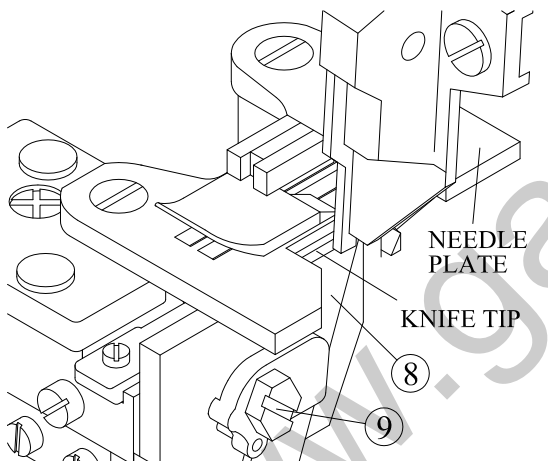
4-2 CHANGING UPPER KNIFE AND LOWER KNIFE :

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) .

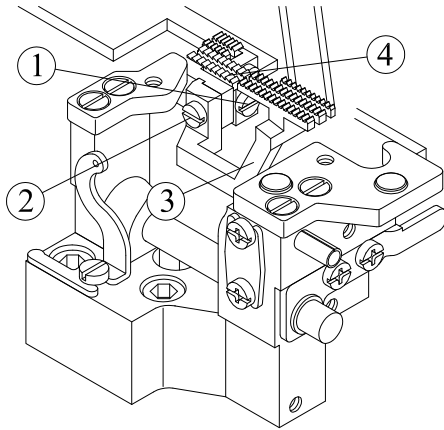
UPPER AND LOWER
KNIFE OVERLAP
AMOUNT 0.5MM

TOP OF NEEDLE PLATE

DIAGRAM 1

4-3 CHANGING AND ADJUSTING FEED DOGS :

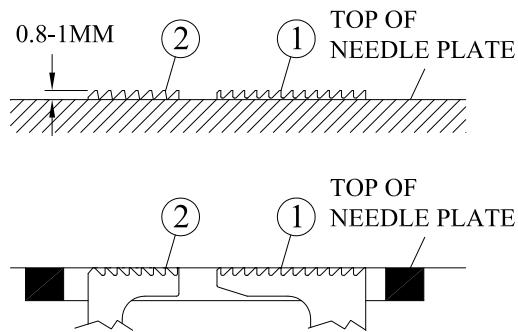
CHANGING FEED DOGS :



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 :



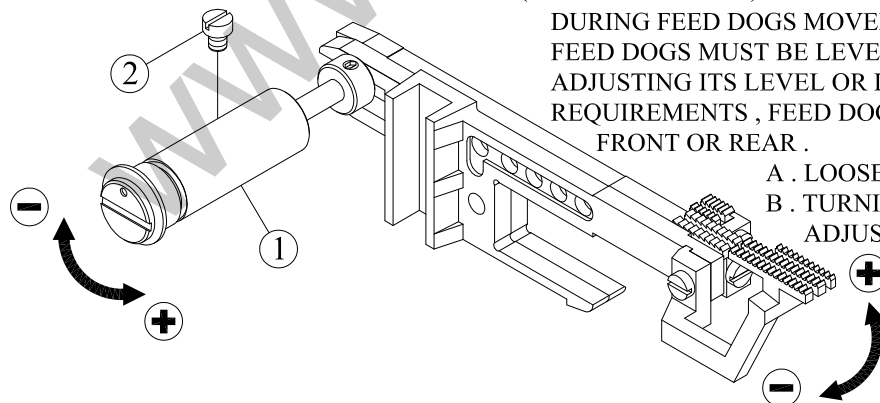
AFTER CHANGE FEED DOGS , MUST ADJUST FEED DOGS
TO ITS CORRECT POSITION . TURNING BELT PULLEY ,
MAKE SURE MAIN FEED DOG (2) TO ITS HIGHEST
POSITION , MAKE SURE THE TIP OF FEED DOG
TEETH HIGHER THAN TOP OF NEEDLE PLATE BY
0.8-1MM . (STANDARD SETTING VALUE)
THEN , TURNING BELT PULLEY , LOWERING
MAIN FEED 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) :

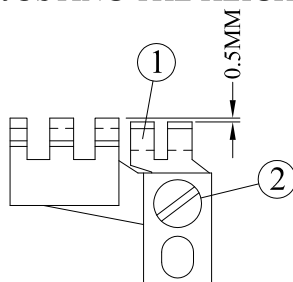


DURING FEED DOGS MOVEMENT , THE TEETH OF
FEED DOGS MUST BE LEVEL OFF ALWAYS .
ADJUSTING ITS LEVEL OR DURING SOME SPECIAL
REQUIREMENTS , FEED DOG TEETH MUST TILT TO
FRONT OR REAR .

A . LOOSEN SCREW (2) .

B . TURNING SHAFT (1) IN ORDER TO
ADJUST LEVEL OF FEED DOGS .

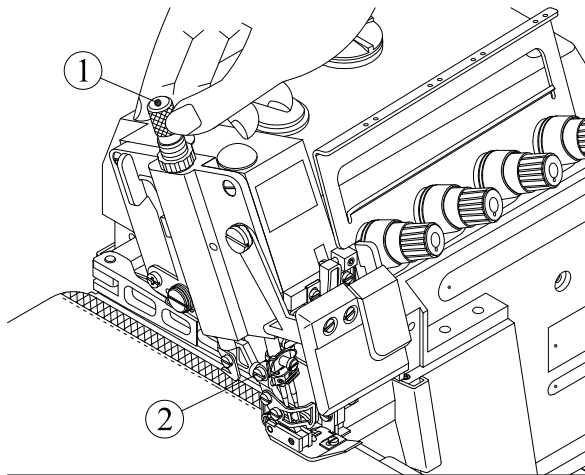
ADJUSTING THE HEIGHT OF AUXILIARY FEED DOG :



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 :

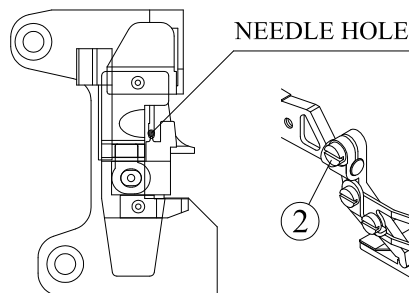


TURNING ADJUSTING SCREW (1) COUNTERCLOCKWISE IN ORDER TO LOOSE PRESSURE SPRING .
LOOSEN SCREW (2) CAN TAKE OFF PRESSER FOOT SET .

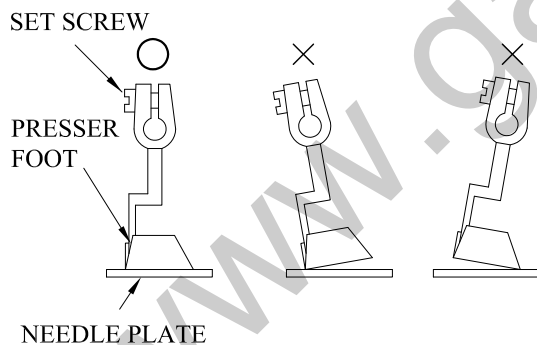
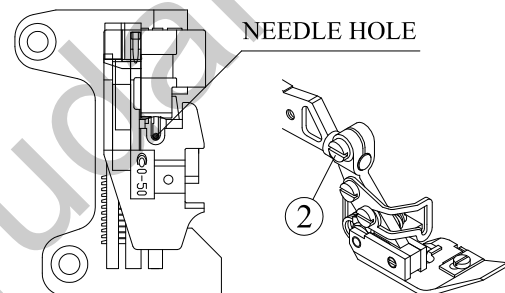
ADJUSTING :

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

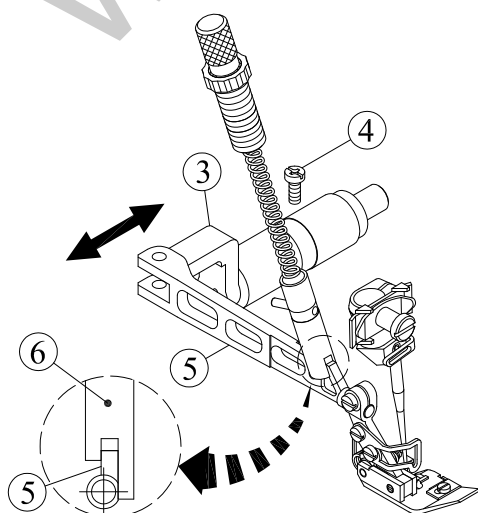
UH9003 UH9004



UH9005



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 :

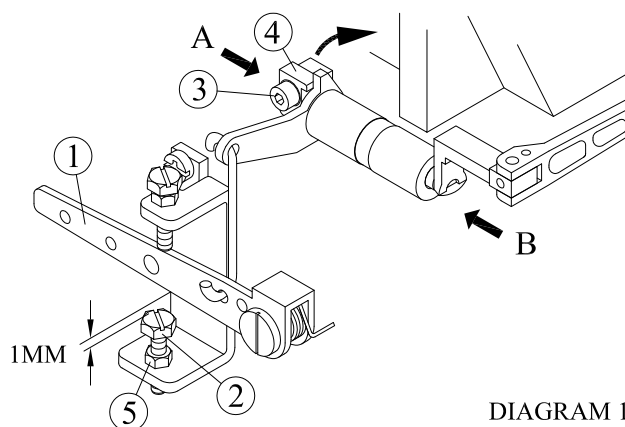


DIAGRAM 1

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 (UH9003 , UH9004) AND DIAGRAM 3 (UH9005)

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) .

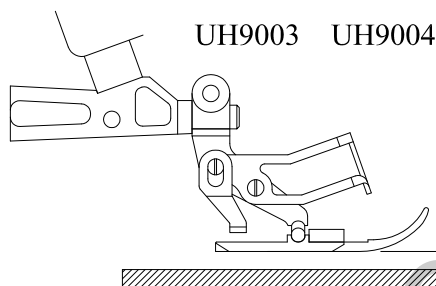


DIAGRAM 2

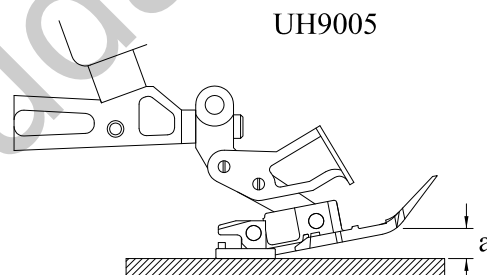
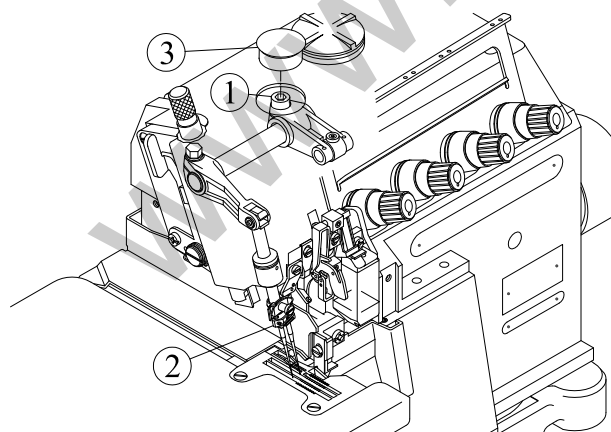


DIAGRAM 3

4-6 ADJUSTING THE HEIGHT OF NEEDLE :

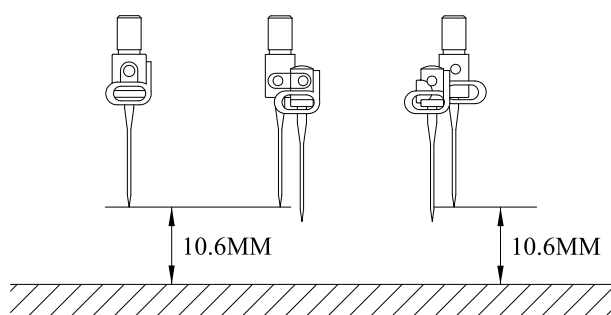


THE DISTANCE BETWEEN NEEDLE TIP TO TOP OF NEEDLE PLATE SHOULD BE 10.6MM (STANDARD SETTING) .

PLEASE REFER TO LEFT DIAGRAM :

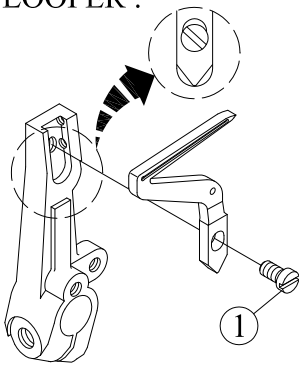
1. TURNING BELT PULLEY IN ORDER TO RAISE NEEDLE BAR TO ITS HIGHEST POSITION .
2. OPEN UP PLUG (3) AND LOOSEN SCREW (1) .
3. ADJUST THE HEIGHT OF NEEDLE BAR .
4. AFTER ADJUSTMENT PLEASE MAKE SURE TIGHTEN SCREW (1) .

UH9003 UH9004 UH9005



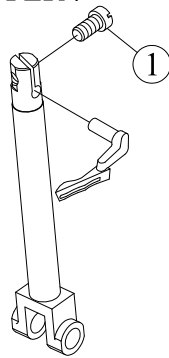
4-7 CHANGING LOOPERS :

4-7-1 CHANGING LOWER LOOPER :



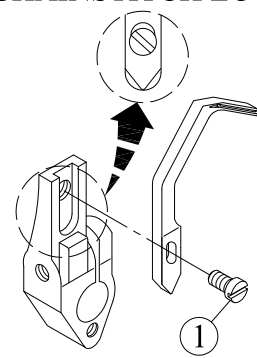
CHANGING LOWER LOOPER BY
TAKE OFF SCREW (1) .
WHEN INSTALLING , PLEASE
MAKE SURE THE CRANK OF
LOWER LOOPER MUST
ATTACH TO THE BOTTOM OF
GROOVE OF LOWER LOOPER
ARM CLOSELY .

4-7-2 CHANGING UPPER LOOPER :



CHANGING UPPER LOOPER BY
TAKE OFF SCREW (1) .

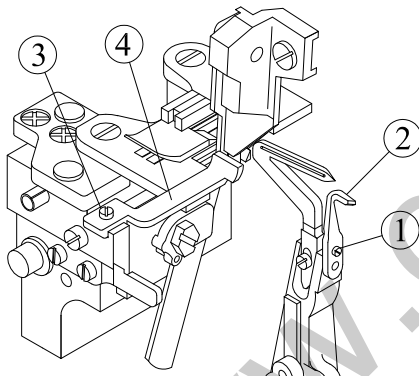
4-7-3 CHANGING CHAINSTITCH LOOPER :



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 .

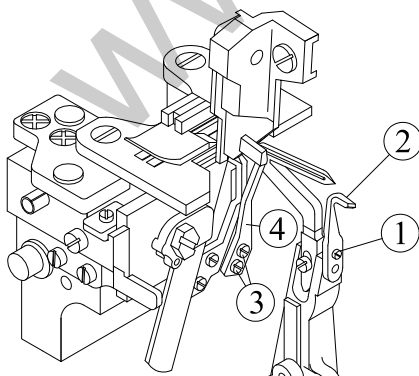
4-8 CHANGING NEEDLE GUARD :

4-8-1 CHANGING NEEDLE GUARD OF UH9003 , UH9004

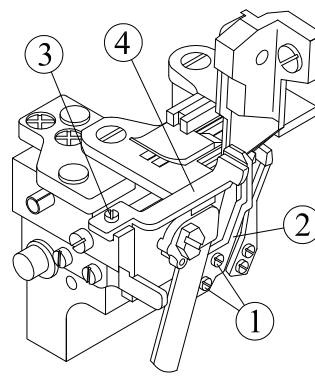


CAN TAKE OFF REAR NEEDLE GUARD (2)
BY LOOSEN SCREW (1) . LOOSEN SCREW
(3) CAN TAKE OFF FRONT NEEDLE GUARD
(4) .

4-8-2 CHANGING NEEDLE GUARD OF UH9005



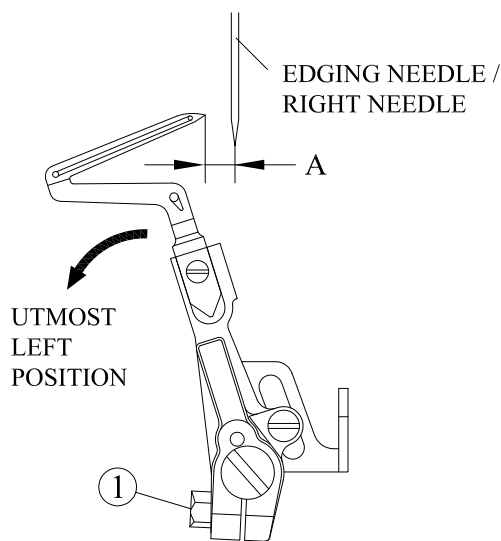
PLEASE TAKE OFF REAR NEEDLE
GUARD (2) BY LOOSEN SET SCREW
(1) . LOOSEN SET SCREW (3) CAN
TAKE OFF FRONT NEEDLE GUARD
(4) .



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 :

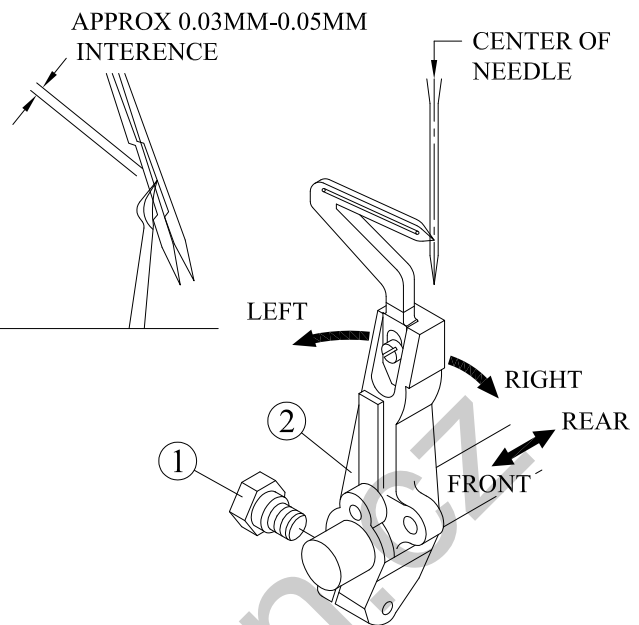


LOOSEN SCREW (1)

UNIT MM

MODEL	THE DISTANCE A BETWEEN TIP OF LOOPER AND THE CENTER OF NEEDLE(S)
9003	3.8 ~ 4
9004	3.6 ~ 3.8
9005	3.8 ~ 4

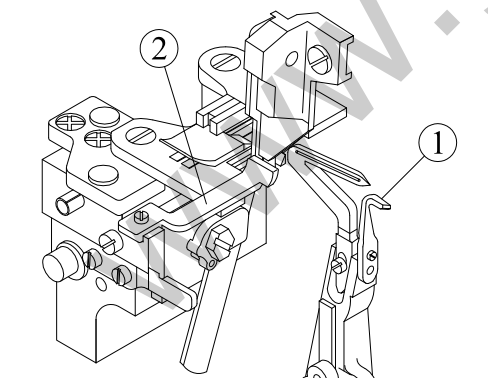
WHEN LOWER LOOPER MOVES TO ITS UTMOST LEFT POSITION , PLEASE REFER TO THE CHART ABOVE FOR THE DISTANCE A BETWEEN THE TIP OF LOWER LOOPER AND THE CENTER OF EDGING NEEDLE .



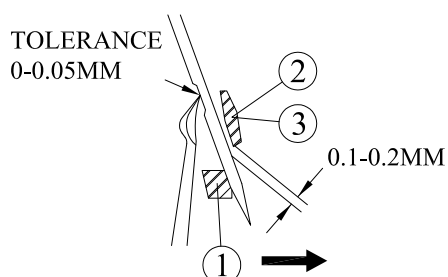
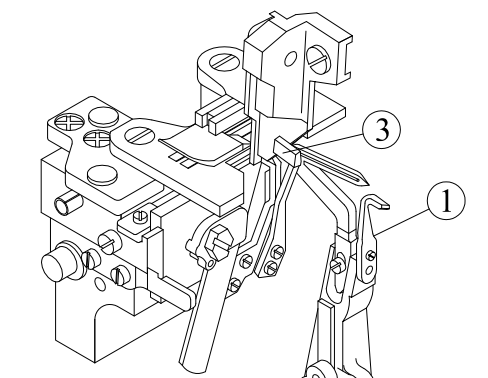
WHEN LOWER LOOPER MOVES FROM RIGHT TO LEFT AND THE TIP OF LOOPER MOVES TO EDGING NEEDLE / RIGHT NEEDLE , THERE WILL HAVE A INTERFERENCE APPROX 0.03MM TO 0.05MM . LOOSEN SCREW (1) AND ADJUSTMENT CAN BE MADE BY MOVING LOOPER ARM (2) FORWARD OR BACKWARD .

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

UH9003 UH9004

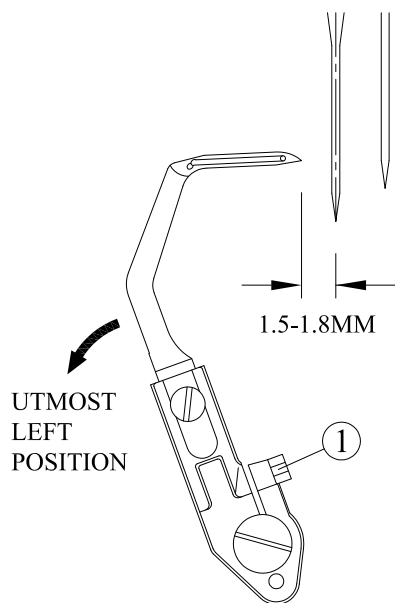


UH9005

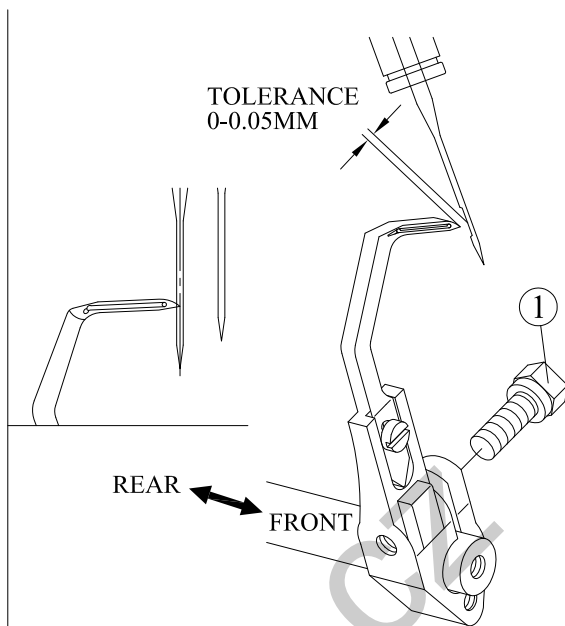


1. AS MENTIONED ABOVE , WHEN LOWER LOOPER MOVES TO THE CENTER OF EDGING NEEDLE , THERE WILL HAVE APPROX 0.03MM-0.05MM INTERFERENCE .
2. IN THE SAME TIME , ADJUSTING REAR NEEDLE GUARD (1) IN ORDER TO PUSH NEEDLE FORWARD AND CREATE A TOLERANCE OF 0-0.05MM BETWEEN NEEDLE AND THE TIP OF LOWER LOOPER .
3. IN THE SAME TIME , ALSO ADJUSTING FRONT NEEDLE GUARD (2) (UH9003 , UH9004) (3) (UH9005) TO CREATE A TOLERANCE OF 0.1-0.2MM BETWEEN FRONT NEEDLE GUARD AND NEEDLE .

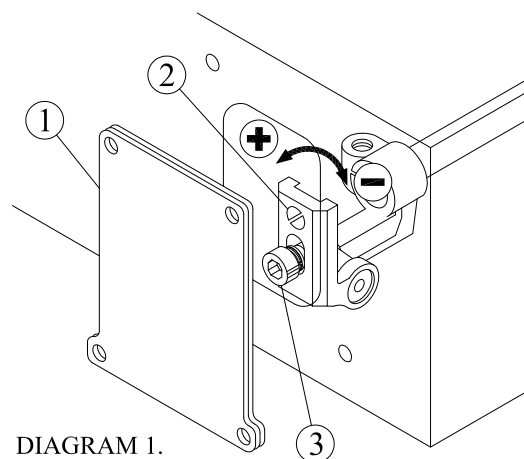
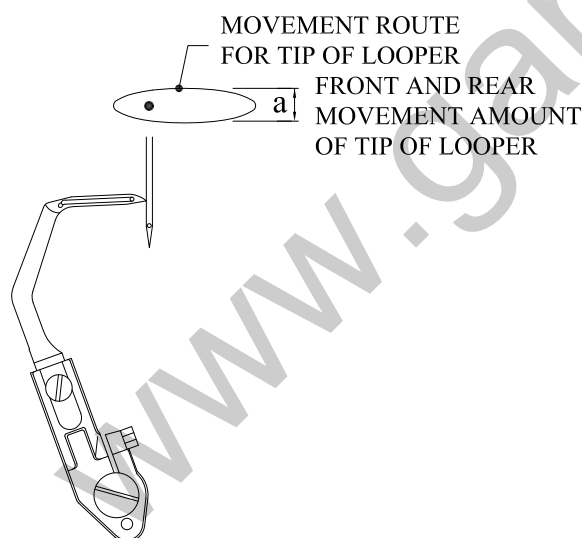
4-9-3 SETTING UP CHAINSTITCH LOOPER (FOR UH9005) :



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) .



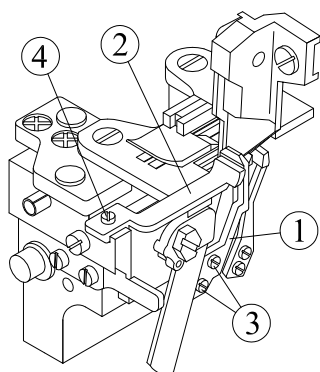
WHEN TIP OF LOOPER MOVES TO THE CENTER OF CHAINSTITCH NEEDLE , THE TOLERANCE BETWEEN LOOPER TIP AND NEEDLE GROOVE SHOULD BE 0-0.05MM .
ADJUSTMENT CAN BE MADE BY LOOSEN SCREW (1) .



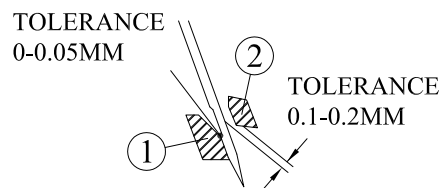
WHEN CHANGING THE SIZE OF NEEDLE OR WHEN ADJUSTING THE FRONT AND REAR MOVEMENT AMOUNT OF TIP OF LOOPER .
PLEASE REFER TO DIAGRAM 1.

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 :



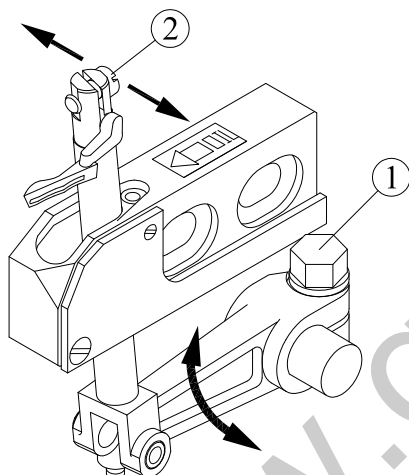
ADJUSTMENT CAN BE MADE BY LOOSEN SCREW (3) , (4) AND AFTER ADJUSTMENT , MUST MAKE SURE TIGHTEN SCREWS .



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.

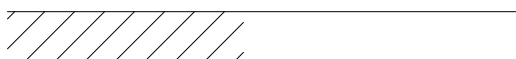
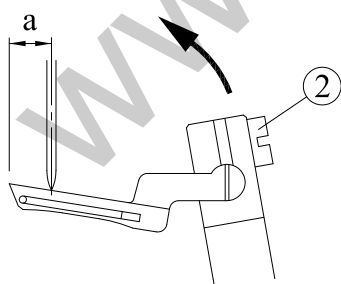
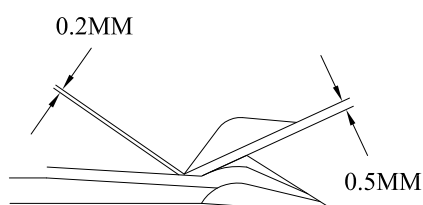
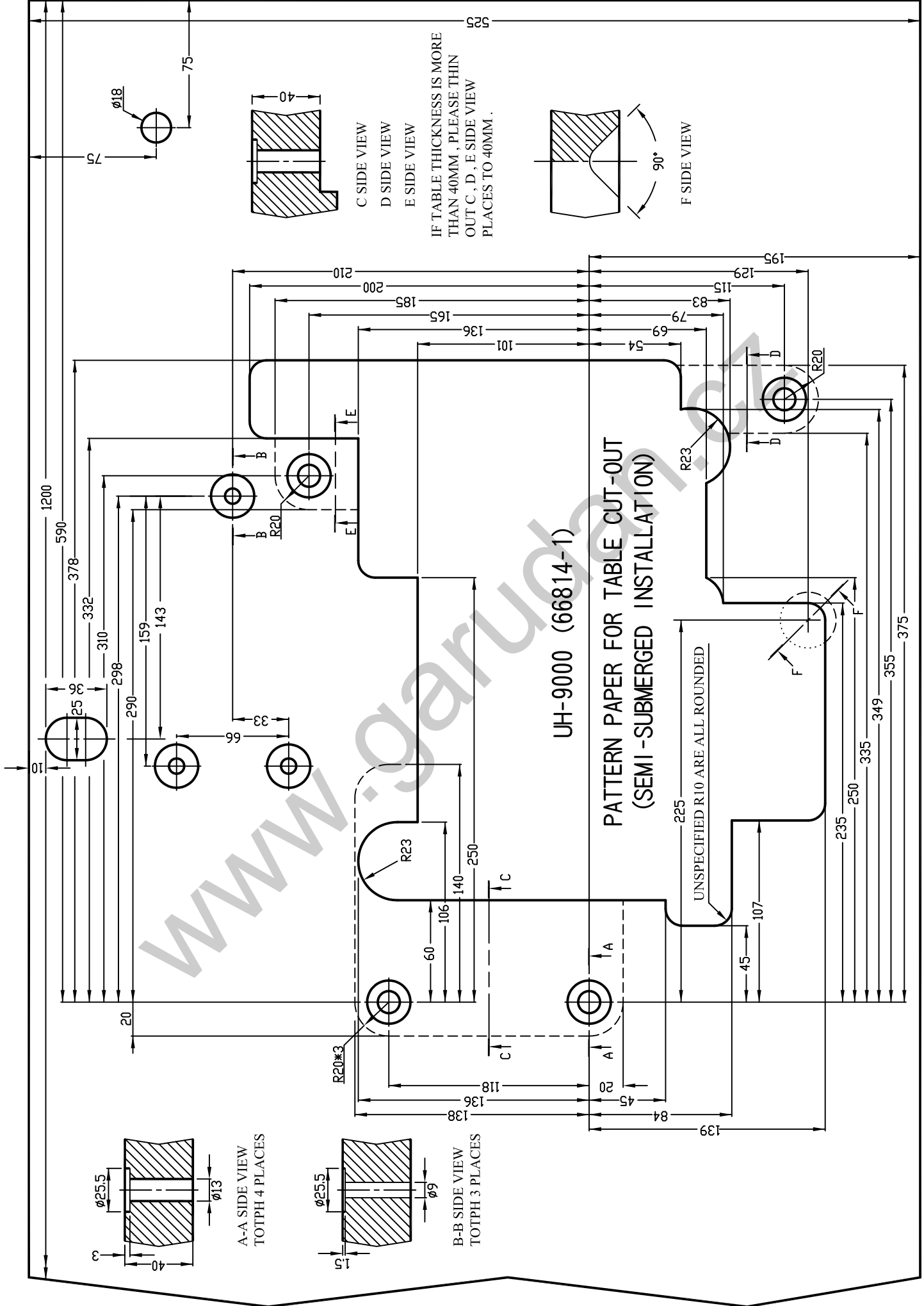


DIAGRAM 3.



SPECIFICATION CHART

MODEL	a
UH9003(L)	4.5~5.0
UH9003	4.3~4.8
UH9004	4.5~5.0
UH9005	4.3~4.8
UH9005(H)	4.5~5.0



Technical drawing of a pattern paper for a table cut-out, showing top, side, and detail views with dimensions and labels.

Top View:

- Overall dimensions: 735 (width) x 1200 (length).
- Dimensions from left edge: 530, 485, 340, 260, 15.
- Dimensions from right edge: 150, 15, 530, 555, 580, 660, 810.
- Dimensions from bottom edge: 35, 197, 480.
- Internal dimensions: 320, 185, 140, 121, 76, 55, 36, 115, 90, 195.
- Curved sections: R20, R40.
- Labels: A, B, C, D.
- Text: UH-9000 (66814-2), PATTERN PAPER FOR TABLE CUT-OUT (FULLY-SUBMERGED INSTALLATION).

Side View (A SIDE VIEW):

- Dimensions: 13, 266, 3.
- Label: TOTP 1 PLACE.

Side View (D SIDE VIEW):

- Dimensions: 11, 266, 3.
- Label: TOTP 4 PLACES.

Side View (C-C SIDE VIEW):

- Dimensions: 15, 15.

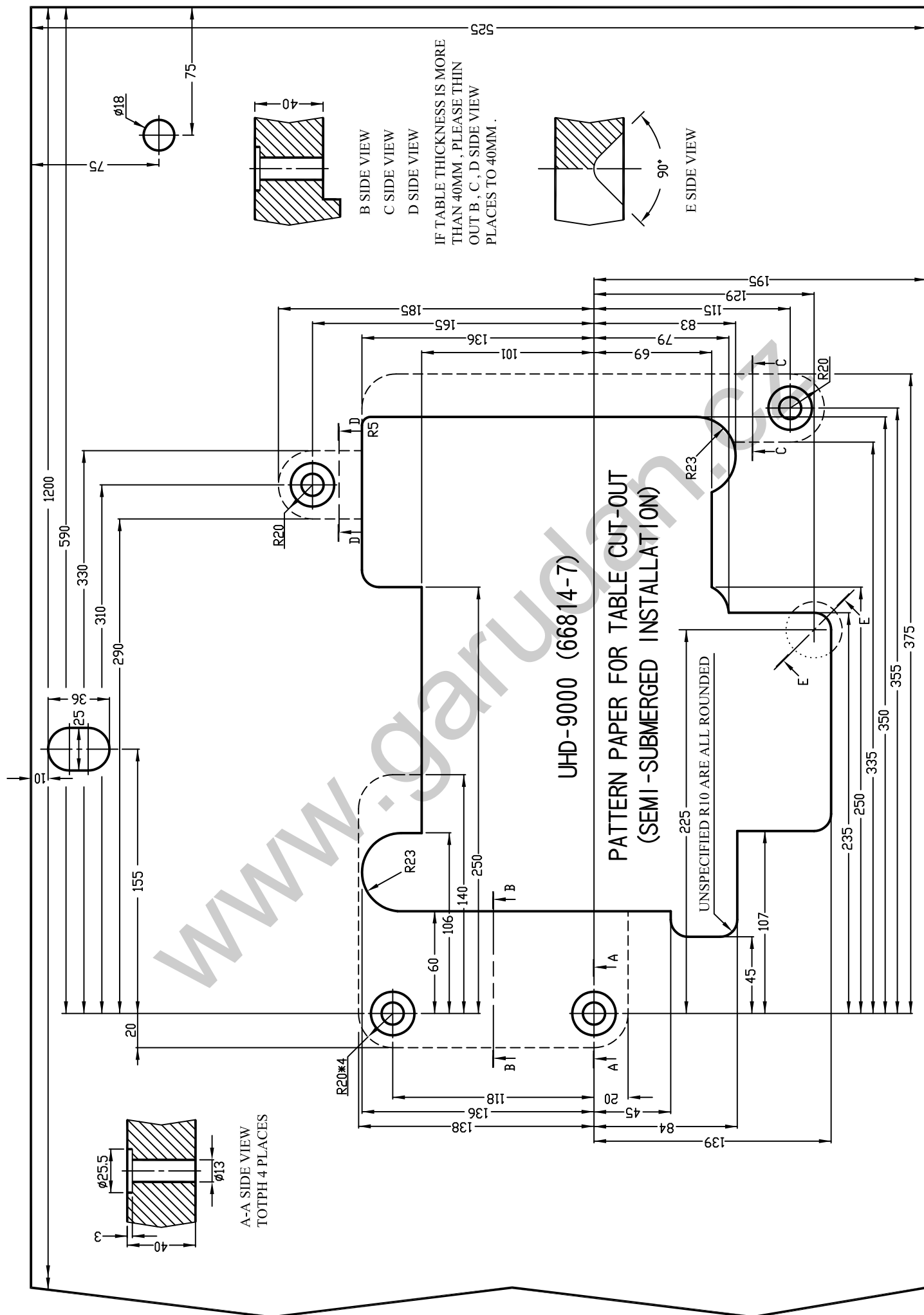
Side View (B-B SIDE VIEW):

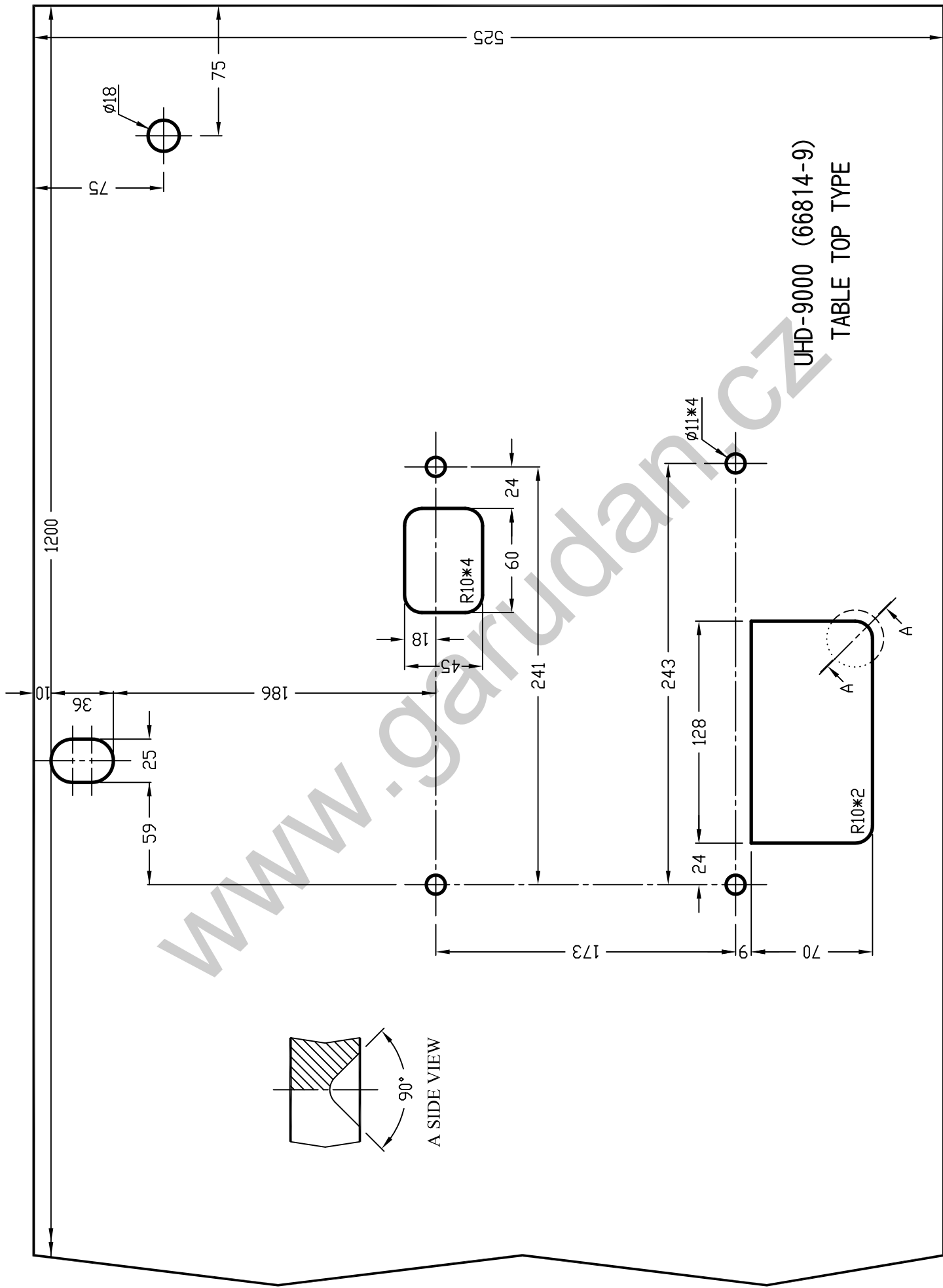
- Dimensions: 45°, 10, 10.

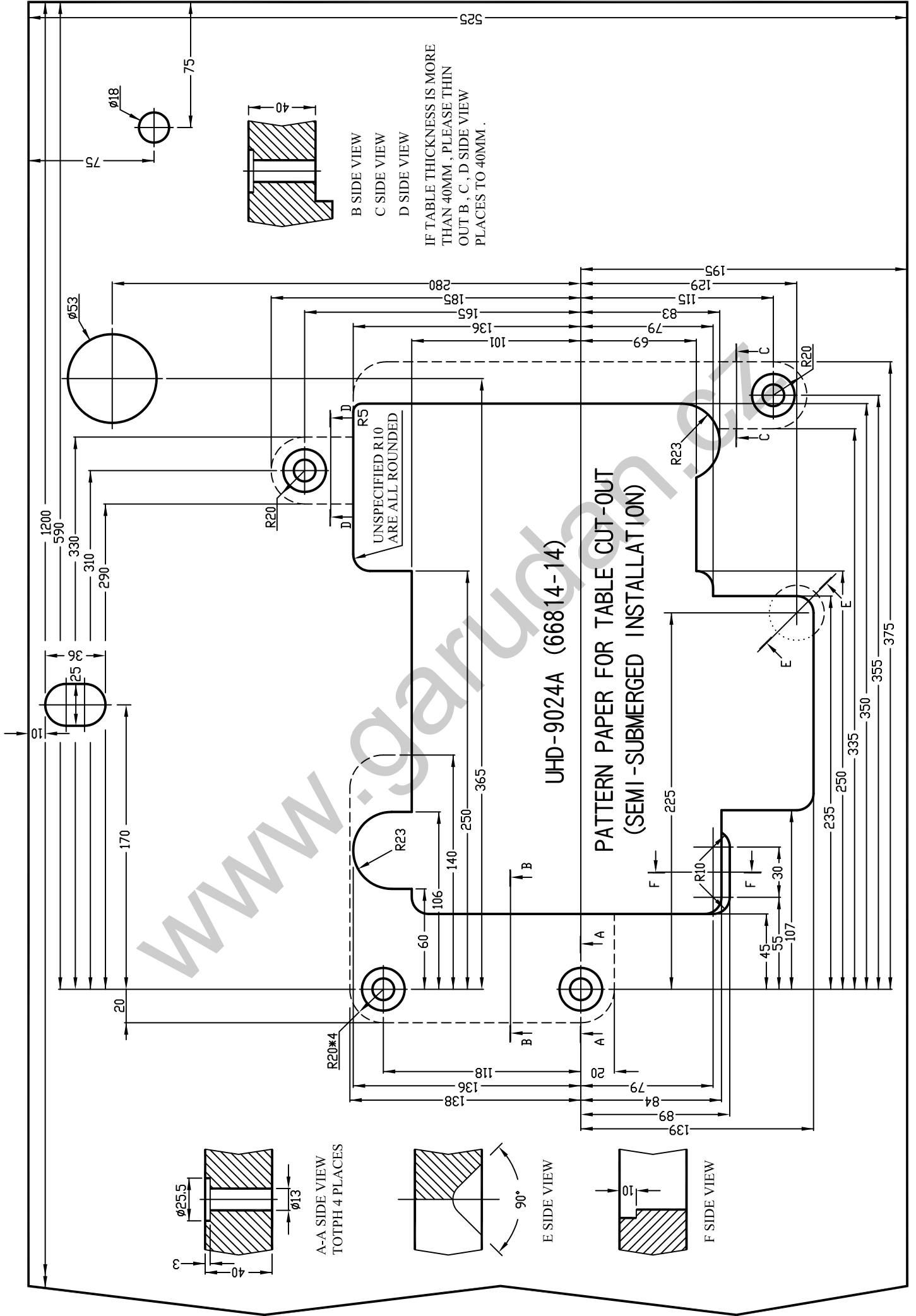
PATTERN PAPER FOR TABLE CUT-OUT
(FULLY-SUBMERGED INSTALLATION)

C-C SIDE VIEW

B-B SIDE VIEW







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