New-tecH
Sewing Systems

OVERLOCK AUTOMAT FOR TROUSERS WITH KNEE LINING

MODEL **NEW-TECH 1700/1**

♦ SERVICE MANUAL ♦

YAZICI DIKIS MAKINA SANAYI VE TICARET LTD. STI.   CE

# ATTENTION

1- THE MACHINE SHOULD NOT BE OPERATED BY THE PEOPLE
   WHOM DO NOT HAVE ANY TECHNICAL KNOWLEDGE

2- RELEASE SECURITY FASTENINGS AND WAIT FOR THE
   TECHNICAL PERSON

3- ENSURE THE ELECTRICAL CONNECTING PLUG IS INSERTED
   INTO A CORRECT VOLTAGE OUTLET AND PROPER
   GROUNDING IS MADE. IF THERE IS
   NO GROUNDING, DO NOT TURN ON THE MACHINE

4- PLUG AIR SUPPLY IN AND TURN ON THE AIR DRIER.
   IF THERE IS NO AIR DRIER, MAKE THE NECESSARY WARNINGS
   TO AVOID POSSIBLE HAZARDS. MAKE SURE THAT THE GAUGE
   INDICATES THE REQUIRED PRESSURE OF 0.6 MPA

5- PICK THE CORRECT THREAD AND INSTALL THE THREAD
   UNDER THE SUPERVISION OF TECHNICAL PERSON

6- OPERATE THE MACHINE ACCORDING TO THE INSTRUCTIONS
   IN THE OPERATING MANUAL AND UNDER THE SUPERVISION
   OF TECHNICAL PERSON.
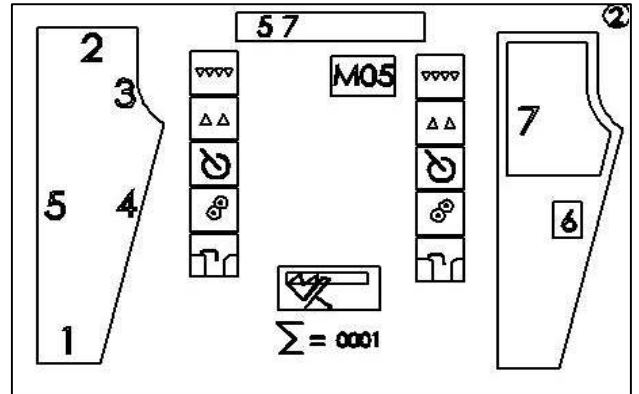
CONTROL PANEL & ICON KEY FUNCTIONS
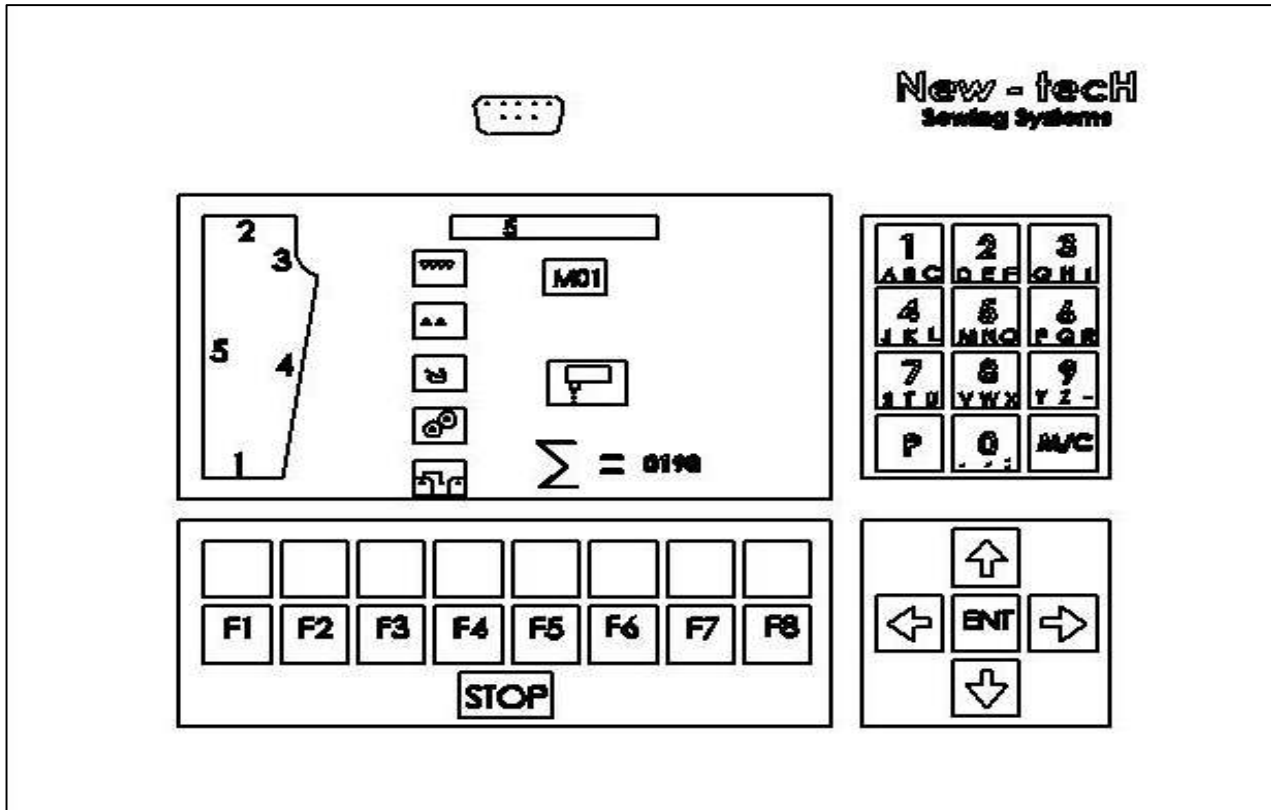
## CONTROL PANEL
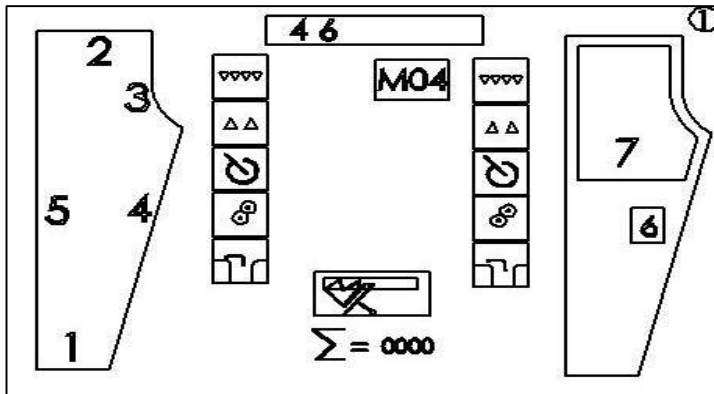
DISPLAY: 1

EDGES WHERE THE LINING IS PLACED ON BOTTOM
4= RIGHT EDGE TROUSER INSIDE SEAMS LINING DOWN
6= LEFT EDGE TROUSER SIDE SEAMS LINING DOWN

DISPLAY: 2

EDGES WHERE THE LINING IS PLACED ON TOP
5= LEFT EDGE TROUSER INSIDE SEAM LINING TOP
7= RIGHT EDGE TROUSER SIDE SEAM LINING TOP

ALL THE INFORMATION CAN BE READ THROUGH THE DISPLAY. THE NUMBERS LOCATED IN UPPER BOX DEPICTS THE SEAM SEQUENCE

EXAMPLE:

4   6

SEAM SEQUENCE

M   01
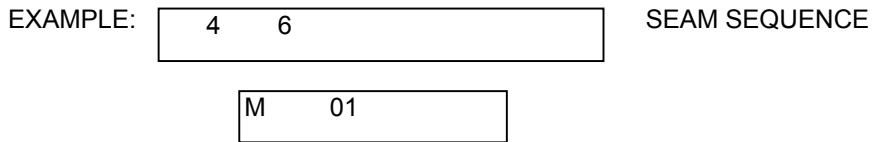
MEMORY PROGRAM NUMBER

IN EXAMPLE 01, THE SEAM SEQUENCE WORK THIS WAY;
SEAM NUMBER 4 IS THE ONE WITH LINING DOWN TROUSER INSIDE SEAM.
TROUSER GRAPHICS IN DISPLAY DEPICTS THE SEAM START SEQUENCE
LINING DOWN TOP START
LINING UP BOTTOM START
THE NUMBERS IN THE GRAPHIC ARE FOR EACH SEAM
THE ONE AFTER THE HIGHLIGHTED NUMBER DETERMINES SEAM SEQUENCE
THE BLOCK LINED UP FROM TOP TO BOTTOM DEPICTS THE ACTIVE FUNCTIONS

DIFFERENTIAL TOP FEED
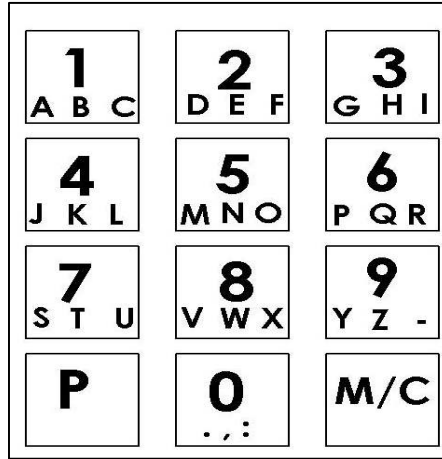
DIFFERENTIAL BOTTOM FEED

ASSISTANT GUIDE

REAR PULLER

STACKER

TEN KEY TOUCHPAD WITH P (PROGRAM) AND M(MEMORY) KEYS

NUMBERS ARE ENTERED WITH THE TOUCHPAD KEYS 1 THROUGH 9

P KEY :
BELOW FUNCTIONS CAN BE DONE WITH P KEY
ALL ENTRIES AND CHANGES ARE CONFIRMED
EXIT PROGRAMMING MODE
ENTRY TO THE SCREEN SUBMENU

M KEY:
REQUIRED PROGRAM IS CALLED WITH M KEY
PRESS M KEY AND REQUIRED PROGRAM NUMBER(FOR EXAMPLE 02)
THE CALLED PROGRAM IS READY TO RUN

THE PROGRAM WITH A MEMORY OF TWENTY CAN BE USED
THESE PROGRAMS ARE FREELY PROGRAMMABLE
HOWEVER;

M01= TROUSER SIDE SEAMS 5--7 RUN AS FUNCTIONAL

M02= TROUSER INSIDE SEAMS 4--6 RUN AS FUNCTIONAL AND LINED UP.

M03= IN THIS PROGRAM FABRICS WITHOUT FULLNESS DISTRIBUTION AND SIDES ARE SEWED

M04= THIS PROGRAM IS FOR ELASTIC INSIDE TROUSER SEAMS

M05= THIS PROGRAM IS FOR ELASTIC SIDE TROUSER SEAMS

M06= SPECIAL PROGRAMS CAN BE MADE UP TO 20 AND LOAD LATER.

ARROW AND ENT KEYS

UP AND DOWN ARROW KEYS WILL LET YOU MOVE UP AND DOWN LINE BY LINE WITHIN
THE HIGHLIGHTED PARAMETER LEVEL.
WITH THE ARROW KEY ON THE RIGHT, IT CAN BE MOVED FORWARD PAGE BY PAGE
WITHIN THE HIGHLIGHTED PARAMETER LEVEL.
WITH THE ARROW KEY ON THE LEFT, IT CAN BE MOVED BACKWARD PAGE BY PAGE
WITHIN THE HIGHLIGHTED PARAMETER LEVEL.
AT THE SAME TIME SEWING CHANGE CAN BE MADE WITHIN THE PROGRAM WITH
LEFT AND RIGHT CURSOR KEYS.
PROGRAMMING IS STARTED BY "ENT" (ENTER) BUTTON. AFTER PICKING UP A PARAMETER,
ANY CHANGE CAN BE MADE BY PRESSING "ENT". IN ORDER TO SAVE THE CHANGES TO THE MEMORY,
P BUTTON MUST BE PRESSED
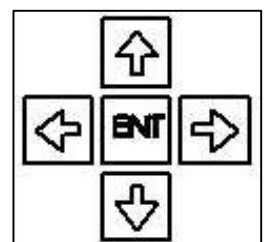
PROGRAM STOP BUTTON

STOP

AFTER MAIN/EMERGENCY STOP ROTARY SWITCH IS TURNED ON, "WAIT FOR RESET" IS SEEN.
AFTER PRESSING **"STOP"** BUTTON TWICE, THE DISPLAY SWITCHES INTO NORMAL WORKING POSITION.
IF THERE HAPPENS AN ERROR WHILE THE MACHINE IS IN OPERATION,
PRESSING **"STOP"** BUTTON WILL STOP PROGRAM COURSE. WHEN PRESSED "STOP" SECOND TIME,
ALL FUNCTIONS WILL RESTART AND THE PROGRAM IS BEING RESTARTED.

MEMORY CARD SLOT

THE MEMORY CARD SLOT PLACED IN THE MIDDLE OVER THE DISPLAY.
THIS MEMORY CARD SLOT ENABLES TO SAVE THE PROGRAM DATA'S OF THE AUTOMAT
IN ITS MEMORY. THE PROGRAMS LOADED INTO THE MACHINE CAN BE COPIED TO THE MEMORY CARD.
LATER ON, SETTINGS WHICH HAVE BEEN DESTROYED BY ELECTRICAL AND PERSONAL FAULTS
CAN BE LOADED INTO THE MACHINE FROM THE MEMORY CARD. EVEN PROGRAMS THAT HAVE BEEN
CHANGED BY MISTAKE CAN BE RELOADED BY MEMORY CARD IN A FAST AND EASY WAY.
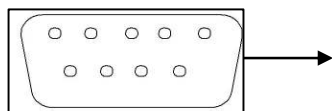
MEMORY EPROM ENTRY

KEY FUNCTIONS F1 THROUGH F8

| F1 | F2 | F3 | F4 | F5 | F6 | F | F8 |

BOŞ

B
O
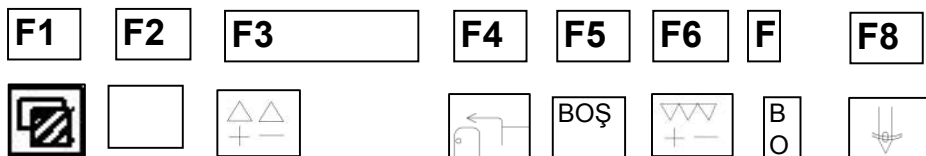
FUNCTION KEYS FROM F1 THROUGH F8 HAVE SPECIAL FUNCTION IN EVERY LEVEL THAT IS RECALLED.
FUNCTION KEYS DO OPERATE WITHIN THE FUNCTIONS OF THE PICTURES ABOVE THE KEYS
ON THE UPPER LINE. WHEN ENTERED THE SECOND LEVEL BY PRESSING F1,
THE FUNCTION OF THE CORRESPONDING ICON ON THE SCREEN WILL APPEAR.

EXPLANATIONS AND THEIR FUNCTIONS

F1   SWITCHES FROM THE KEY FUNCTIONS TO THE ICON KEY FUNCTIONS

   THE ICONS ARE SHOWN ON DISPLAY WHEN THE ICON KEY FUNCTIONS ARE ACTIVATED.

F3   DIFFERENTIAL BOTTOM FEED

AFTER PRESSING F3 KEY, THE NUMBER SECTION NEXT TO THE DIFFERENTIAL BOTTOM FEED CHANGES COLOR
THIS MEANS THAT IT IS READY FOR CHANGE WITH RIGHT AND LEFT ARROW KEYS,
NUMBER IS INCREASED AND DECREASED AND SAVE IN MEMORY WITH ENT BUTTON

F4   WHEN PRESSED THIS KEY EACH TIME, THE STACKER WORKS AS MANUAL.
   USE TO PUT IN ORDER THE UNCOMPLETED SEAMS AND WORK PIECES IN WRONG ORDER.

F6   THE KEY TO ASSIGN RAPID AND GENERAL FULLNESS DISTRIBUTION TO DIFFERENTIAL TOP FEED.
   AFTER PRESSING THE KEY, THE POSITION OF DIFFERENTIAL TOP FEED IS CHANGED
   NUMERATICALLY WITH LEFT & RIGHT ARROW KEYS
   THE CHANGES ARE SAVED IN MEMORY WITH ENT KEY

F8   THREAD INSTALLING KEY. WHEN PRESSED THIS KEY, FOOT LIFTING SYSTEM COMES DOWN AND THE
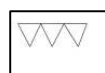   HEAD'S AUTOMATIC START IS AVOIDED

SECOND LEVEL

F1 WHEN PRESSED, SWITCHED THE SECOND LEVEL

GP	**1→2**						
F1	**F2**	**F3**	**F4**	**F5**	**F6**	**F7**	**F8**

GP GP =BASIC PARAMETERS

F1 WHEN PRESSED F1 KEY IN THIS LEVEL

PARAMETERS WHICH ARE VALID FOR THE PROGRAM ARE SHOWN. IF CERTAIN PARAMETERS WOULD LIKE TO BE CHANGED, THEN THESE ARE SELECTED BY OK KEYS. AFTER PRESSING "ENT", PARAMETERS CAN BE CHANGED 0-9 KEYS.
PRESSING THE "P" KEY COUPLE TIMES WILL ALLOW YOU TO SAVE THE CHANGES AND THE MACHINE WILL READY FOR OPERATION.

1→2 PROGRAM SEQUENCE SELECTION KEY

F2 WHEN PRESSED F2 KEY IN SECOND LEVEL, SEAM SEQUENCE APPEARS ON DISPLAY.
THIS SEQUENCE IS CHANGED BY 1-9 KEYS. DELETED BY "0" KEY. PRESSING THE "P" KEY COUPLE TIMES CAN BRING THE MACHINE TO STITCH POSITION

ENTRY TO THE MACHINE'S HEAD SPEED SETTINGS

F3 WHEN PRESSED F3 KEY, THE MACHINE'S START AND SPEED SETTINGS APPEAR.
IN ORDER TO MAKE ANY CHANGES, WE CHOOSE THE PARAMETER WITH UP AND DOWN CURSOR KEYS. THE ENTRY IS MADE WITH "ENT" KEY. VALUES ARE ENTERED WITH "0-9" KEYS
TO EXIT PRESS "P" KEY COUPLE TIMES. THE MACHINE WILL BE READY FOR OPERATION

 FRONT WHEEL SETTINGS ACCORDING TO EDGE CURVES

F4 WHEN PRESSED F4 KEY, ALL THE DATA ARE ENTERED IN ORDER TO RUN THE FRONT WHEEL SENSIBLE

 CARRIAGE WHEEL (ROLLER)

F5 WHEN PRESSED THIS KEY, THE SETTINGS OF FABRIC SENSITIVE CARRIAGE, THREAD CUTTING TIME AND DISTANCES CAN BE ADJUSTED EASILY. EVEN VERY SENSITIVE FABRICS CAN BE ADJUSTED WITH DATA CHANGES IN THIS SECTION INSIDE AND SIDE SEAMS ARE SAVED IN MEMORY SEPARATELY.

 DIFFERENTIAL TOP FEED

F6 AFTER PRESSING THE KEY, DIFFERENTIAL'S TOP FEED MOTION AND TIME ARE ADJUSTED IN DIFFERENT LEVELS. THE POSITION OF MOTOR FOR FULLNESS DISTRIBUTION IS ADJUSTED WITH FOUR DIFFERENT FULLNESS TYPE AND STEP FIGURE IN FOUR LEVELS SENSITIVE ADJUSTMENT IS MADE SEPARATELY TO THE INSIDE AND SIDE EDGES FOR ALL TYPES OF FABRIC

 DIFFERENTIAL BOTTOM FEED

F7 AFTER PRESSING THIS KEY, DATA YOU WISH TO ENTER IS COMPLETED WITH ENT KEY AND SAVE IN MEMORY WITH P KEY. THE POSITION OF DIFFERENTIAL BOTTOM FEED AND DATA FOR FULLNESS DISTRIBUTION ARE ENTERED IN FOUR LEVELS. IN EACH LEVEL SEPARATE SENSITIVE ADJUSTMENT IS SHOWN AS SEPARATE NUMERAL VALUE. IN ORDER TO SAVE IN MEMORY AND START STITCHING, PRESS P KEY COUPLE TIMES

 TO RESET THE DAILY PRODUCTION COUNTER

F8 IF YOU PRESS F8 KEY IN SECOND LEVEL SHORTLY, THERE WILL NOT BE ANY CHANGES IF YOU HOLD YOU FINGERS ON F8 KEY MORE THAN 5 SECONDS, DAILY COUNTER WILL COME TO "0000" POSITION. YOU SHOULD EXIT WITH P KEY
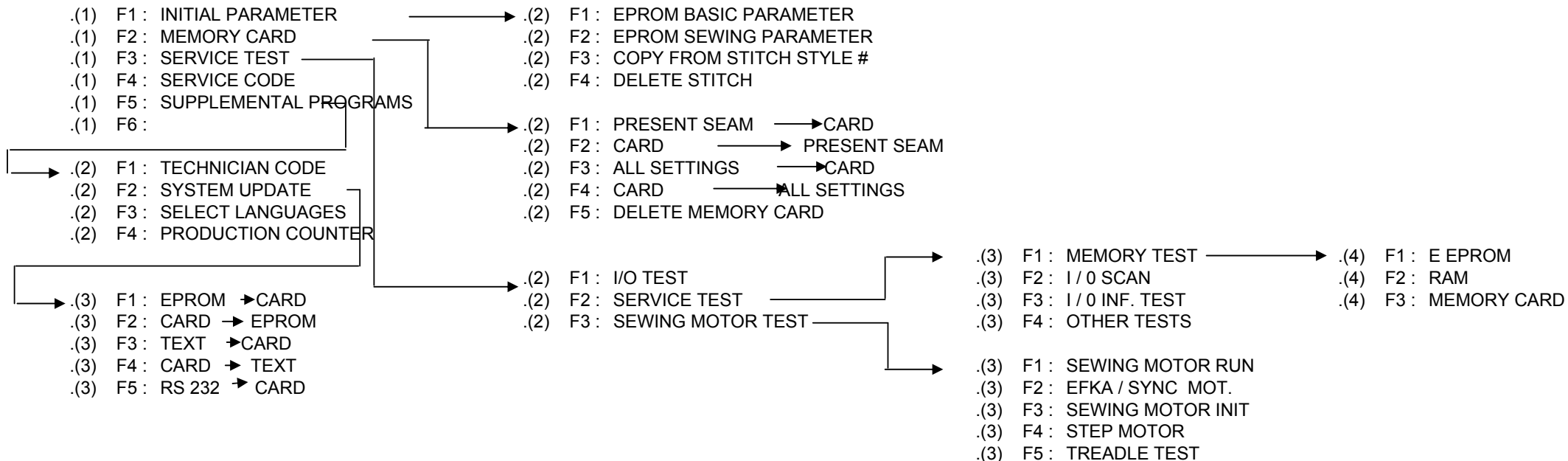
BASIC PARAMETERS

01 = PHOTOCELL ACTIVATION TIME	=	0,5 SEC
02 = FOOT DOWN TIME AFTER PHOTOCELL	=	0,10 SEC
03 = START STITCH TIME AFTER FOOT DOWN	=	0,10 SEC
04 = BEGINNING THREAD CUTTING VACUUM LENGTH	=	05 CM
05 = STITCH LENGTH AFTER 1, 2 AND 3 PROGRAM	=	12 CM
06 = STITCH LENGTH AFTER PHOTOCELL IN 4 & 5 PROGRAM	=	0,5 SEC
07 = FOOT UP TIME AFTER STITCHING	=	0,2 SEC
08 = WAITING TIME FOR SECOND PIECE	=	0,30 SEC
09 =	=	0,1 SEC
10 = STACKER START TIME	=	0,1 SEC
11 = STACKER TURN ON LENGTH	=	0,8 SEC
12 = FABRIC HOLD TAKE OFF TIME	=	0,15 SEC
13 = THREAD PHOTOCELL STOP LENGTH	=	0,00 SEC
14 = STITCH LENGTH	=	3,0 MM
15 = NEEDLE POSITION	=	45
16 = MACHINE MODEL (00/01)	=	.00

.00	=	OVER LOCK
.01	=	SIDE SEAM

SEWING PARAMETERS

01 = SLOW STITCH SPEED	=	3000 RPM
02 = MACHINE STITCH SPEED	=	6000 RPM
03 = MACHINE SLOW STITCH LENGTH	=	01-CM
04 = BEGINNING WORK FORM	=	.00
05 = DISCHARGE TILL IT IS ACTIVE	=	.000 CM
06 = FABRIC PUFF START TIME	=	.002 CM
07 = FABRIC PUFF LENGTH	=	.050 CM
08 = BASSIN BLADE START LENGTH	=	.050 CM
09 = FRONT WHEEL DOWN LENGTH	=	.010 CM
10 = FRONT WHEEL WORK LENGTH	=	.020 CM
11 = FRONT WHEEL UP LENGTH	=	.050 CM
12 = PRESSURE FOOT NORMAL	=	.000 CM
13 = FABRIC THROW PUFF TIME	=	.0.0 SEC
14 = DIFFERENTIAL TOP FEED SPEED	=	50%
15 = DIFFERENTIAL TOP FEED COME DOWN LENGTH	=	20 CM
16 = DIFFERENTIAL TOP FEED WORK LENGTH	=	20 CM
17 = DIFFERENTIAL TOP FEED CUT STOP LENGTH	=	.08 CM
18 = DIFFERENTIAL TOP FEED CUTTING TIME LENGTH	=	10 CM
19 = DIFFERENTIAL FEED CARRIAGE LENGTH AFTER CUTTING	=	10 CM
20 = STACKER WORK POSITION	=	01 ON 00 OFF
21 = TOP FULLNESS ON/OFF	=	.01
22 = TOP FULLNESS START POSITION	=	.00
23 = TOP FEED STEP FIGURE 1	=	.018 CM
24 = TOP FEED QUANTITY 1	=	.00
25 = TOP FEED STEP FIGURE 2	=	.045 CM
26 = TOP FEED QUANTITY 2	=	.00
27 = TOP FEED STEP FIGURE 3	=	.085 CM
28 = TOP FEED QUANTITY 3	=	.00
29 = TOP FEED STEP FIGURE 4	=	222 CM
30 = TOP FEED QUANTITY 4	=	.00
31 = BOTTOM FULLNESS ON/OFF	=	.01
32 = BOTTOM FULLNESS START POSITION	=	.00
33 = BOTTOM FEED STEP FIGURE 1	=	.018 CM
34 = BOTTOM FEED QUANTITY 1	=	.00
35 = BOTTOM FEED STEP FIGURE 2	=	.045 CM
36 = BOTTOM FEED QUANTITY 2	=	.00
37 = BOTTOM FEED STEP FIGURE 3	=	.085 CM
38 = BOTTOM FEED QUANTITY 3	=	.00
39 = BOTTOM FEED STEP FIGURE 4	=	222 CM
40 = BOTTOM FEED QUANTITY 4	=	.00

ENTRIES WITH "P" KEY

.(1) F1 : INITIAL PARAMETER   →   .(2) F1 : EPROM BASIC PARAMETER
.(1) F2 : MEMORY CARD   .(2) F2 : EPROM SEWING PARAMETER
.(1) F3 : SERVICE TEST   .(2) F3 : COPY FROM STITCH STYLE #
.(1) F4 : SERVICE CODE   .(2) F4 : DELETE STITCH
.(1) F5 : SUPPLEMENTAL PROGRAMS
.(1) F6 :   .(2) F1 : PRESENT SEAM → CARD
                                                .(2) F2 : CARD → PRESENT SEAM
.(2) F1 : TECHNICIAN CODE   .(2) F3 : ALL SETTINGS → CARD
.(2) F2 : SYSTEM UPDATE   .(2) F4 : CARD → ALL SETTINGS
.(2) F3 : SELECT LANGUAGES   .(2) F5 : DELETE MEMORY CARD
.(2) F4 : PRODUCTION COUNTER

.(3) F1 : EPROM → CARD   .(2) F1 : I/O TEST   → .(3) F1 : MEMORY TEST → .(4) F1 : E EPROM
.(3) F2 : CARD → EPROM   .(2) F2 : SERVICE TEST   .(3) F2 : I / 0 SCAN   .(4) F2 : RAM
.(3) F3 : TEXT → CARD   .(2) F3 : SEWING MOTOR TEST   .(3) F3 : I / 0 INF. TEST   .(4) F3 : MEMORY CARD
.(3) F4 : CARD → TEXT   .(3) F4 : OTHER TESTS
.(3) F5 : RS 232 → CARD

                                                                                .(3) F1 : SEWING MOTOR RUN
                                                                                .(3) F2 : EFKA / SYNC MOT.
                                                                                .(3) F3 : SEWING MOTOR INIT
                                                                                .(3) F4 : STEP MOTOR
                                                                                .(3) F5 : TREADLE TEST

INPUT AND OUTPUT POSITIONS

INPUT

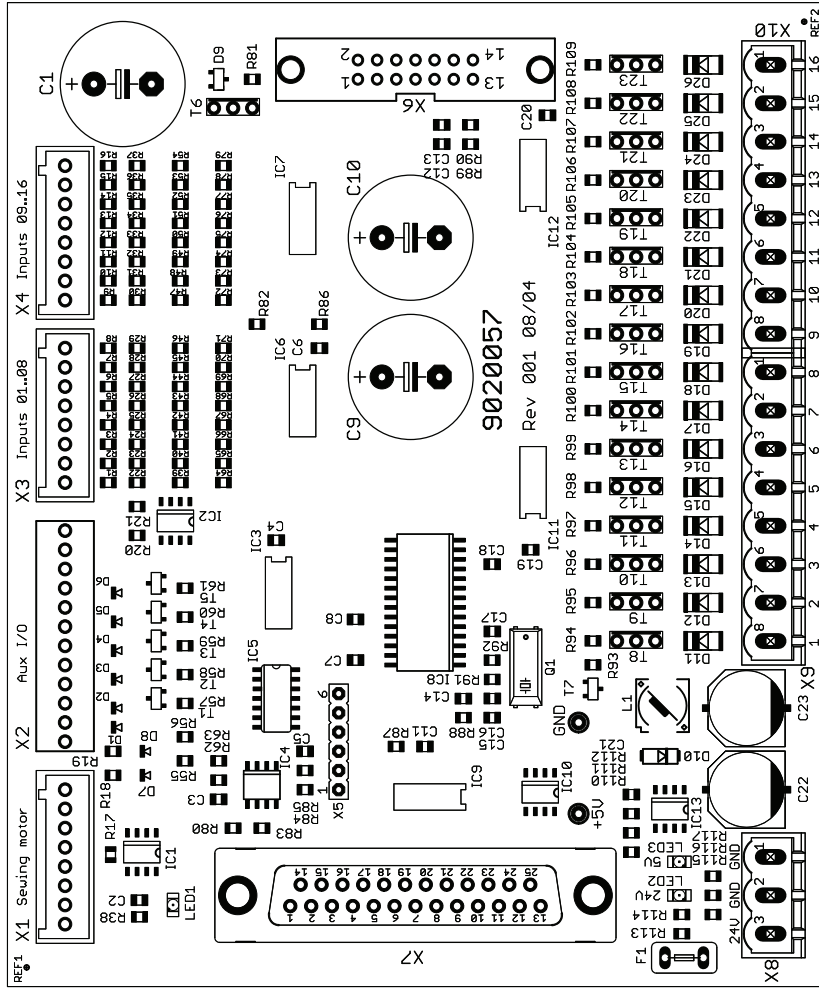01=   START AND END PHOTOCELL

OUTPUT

01 =   FOOT UP
04 =   FABRIC LIFT AIR BLOW
05 =   WORK PIECE END AIR BLOW
06 =   THREAD CUTTING VACUUM
07 =   STACKER
08 =   FRONT FABRIC WHEEL
09 =   REAR FABRIC CARRIAGE WHEEL
10 =   FABRIC CURVE WHEEL
10 =   FABRIC CURVE UP DOWN
12 =   DUST SUCKING VACUUM
15 =   CURVE BLOW
16 =   TENSION RELEASE
22 =   FOOT PRESSURE 1--2

NewTech 1600/1 + 1700/1

9020057 Rev 001 08/04

OUTPUTS (X10)

Terminal	Function
Y01:	Foot up
Y02:	Contour to left
Y03:	Contour close+blow
Y04:	Table blowing
Y06:	Chain cutter
Y07:	Stacker impuls
Y08:	Puller down
Y09:	Roller/Stamp down
Y12:	Vacuum suction
Y15:	Guide at foot
Y16:	Thread open
Y22:	Foot 2.position
Y05:	Blowing at end
Y10:	Contour down
Y13:	Stamp move
Y14:	Arm swing

INPUTS

X3 Inputs 01..08

Terminal	Function
S11:	Clamp pos. to open
S12:	Loading clamp home
S13:	Loading clamp reset
S14:	Loading clamp close
S--:	

X4 Inputs 09..16

Terminal	Function
S01:	Photocell sewing
S02:	Photocell at end
S03:	Contour left/right
S--:	

EFKA

Terminal	Function
IC1N:	EFKA/23
IC1P:	EFKA/22
PAIN:	EFKA/21 + '56 X1/4
PAIP:	EFKA/20 + '56 X1/3
485N:	EFKA/2
485P:	EFKA/3
N.C.	
GND:	EFKA/14

X1 Sewing motor
X2 Aux I/O
C1

New-tecH

Sewing Systems

YAZICI DIKIS MAKINA SANAYI VE TIC. LTD. STI.

FACTORY:	ÇAKIL MAH. ELBASAN KÖY YOLU ÜZERİ 1.KM ÇATALCA İSTANBUL / TURKEY
TEL:	+90 212 776 46 41-42-43
FAX:	+90 212 776 46 48
E-MAIL:	info@new-tech.com.tr; marketing@new-tech.com.tr

BRANCH:	PERPA İŞ MERKEZİ B BLOK KAT: 5 NO: 279 OKMEYDANI İSTANBUL / TURKEY
TEL:	+90 212 210 22 29 – 20 29 – 05 62
FAX:	+90 212 210 05 66

WAREHOUSE:	SUCUZADE MAH. 17.SOK. 13/B SEYHAN ADANA / TURKEY
TEL/FAX:	+90 322 351 70 05

www.new-tech.com.tr