

## FANUC 5T Control Installation Instructions

A20B-0003-0744	A BOARD
A20B-0003-0754	B BOARD
A20B-0004-0500	TAPE MEMORY PCB
A20B-0006-0640	ALT TAPE MEMORY
SOFTWARE: 0141	

### INSTALL PROCEDURE FOR THE “A” BOARD

1. Install correct software.
2. Check all jumpers. (See below.)
3. Install in control and connect all cables.
4. Power on the control. Machine should blink the software version in the display. Sometimes the ready light will come on and sometimes not. Highlight the parameter setting on the LED. Display may have all 1's or all 0's.
5. To clear the memory, turn on the PRM switch on the back of the keyboard and power down.
6. Hold down the RESET key and power up. The ready light should now be on and the drive relays should kick in. If not, stop and check the cables, voltages on the A and B board, etc.
7. After the control is in the READY state, place it into MDI mode and highlight the PRM on the display. Parameters should now be all 0's.
8. Begin inputting parameters. The correct parameter can be viewed by using the UP arrow key on the key board. There is an arrow key for each digit. Once the correct information is in the display, press the INPUT key. The alarm light will light, but it can be ignored until all parameters are entered. When all parameters have been entered, power down the control.
9. Control is now ready to run.

## **JUMPERS FOR “A” BOARD**

1. SERVO MOTOR JUMPERS: (Location H7 AND I7) Jumper 5 & 8 on both axes.
2. SERVO MOTOR JUMPERS: (Location I9 AND H9) Jumper 4 & 7 on both axes.
3. BYPASS 3<sup>RD</sup> AXES JUMPERS: (Location F1) Jumper 1, 3, 4, 5, 6, and 8.
4. Jumper SIF located in the middle of the board.
5. CPU AND CLOCK JUMPERS: (Location E23) Jumper all but 2.
6. LOCATION A25 JUMPER: Jumper (with small jumper) all pins to the one above or below it. They line up in 2 rows in an up and down row.

## **INSTALL PROCEDURE FOR THE “B” BOARD**

1. Check all the jumpers on the board. (See below.)
2. Install the board in the machine.
3. Re-install the “A” board and connect all the cables.
4. Machine should be ready to run.

## **JUMPERS FOR TAPE MEMORY**

1. Location B3: Jumper all but pins 6 and 7. Some of these are spares.
2. Location B7: Jumper the bottom 4.

## **INSTALL PROCEDURE FOR THE TAPE MEMORY PCB**

1. Install the software on the tape memory board. NOTE: Software must match the software on the “A” board. (Example: 0141 on the “A” board = 0141 on the “B” board.) There are usually 3 chips.
2. Check all jumpers on the tape memory board.
3. Install the board in the control and connect all cables.
4. Turn on power. The control may or may not come up with an alarm. If the alarm display is highlighted, it may display a 70 Alarm or a 3079 Alarm. This is normal. If the control does not display an alarm, it will when programming is attempted.
5. To clear the tape memory, put the control in MEM mode. Press the red “C” on the keyboard and then the ERASE key at the same time. Power down and back on. Turn the mode switch to EDIT. If the alarm light comes on, the memory did not clear and the above procedure will have to be repeated. WARNING: These boards are temperamental. Sometimes this procedure has to be repeated several times. If this procedure does not clear the memory, try pressing the RESET key just before the power down. If all else fails, try another board.

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6. After the memory has been successfully cleared, put the control into EDIT mode to enter a program.
7. Start with a program line number. (Example: Type in N100 and press the INSERT key.) If N100 shows up on the display, the entry was successful. Make sure that the “N” light is lit on the display before the entry is made.
8. Next, use the arrow keys to light the “G” function on the display. Type in 00 and press INSERT. The 00 should light on the display.
9. To enter an axis move command, highlight the axis light (X or Z) and type in the amount of movement to be made. The MINUS key can be used to make the servo go in reverse. More than one axis can be commanded to move at a time, so enter all necessary axes movement.
10. Next, press the EOB key and then the INSERT key. This ends the first line of program. To begin the next line, type in a new line number (example: N200) and press INSERT. Repeat the above process until the entire program is entered.
11. Sample program:

N 100	M 99
G 00	EOB
X 99999	
Z 99999	
EOB	
N 200	
G 00	
X -99999	
Z -99999	
EOB	
12. Remember that the first letter does not have to be entered. It only has to illuminate on the display when the numbers are entered.



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