Router Set-Up For Techno DaVinci

IMPORTANT INFORMATION ABOUT SET-UP FOR TECHNO THREE AXIS ROUTER SYSTEM IS PROVIDED BELOW. READ ALL INSTRUCTIONS BEFORE ATTEMPTING TO SET UP YOUR EQUIPMENT! DO NOT OPERATE EQUIPMENT BEFORE READING ENCLOSED MANUALS.

Follow the steps below for router set-up. For detailed information on a specific step, refer to the corresponding attachment.

1. Remove contents from crate and check against packing list. *See Attachment A.*

2. Install router mounting bracket and router.*See Attachment B.* (The 8'x8' DaVinci comes with these already installed.)

3. Mount CAM clamps and clamp bars. *See Attachment C.*

4. Set up electronics:
   - Connect serial cable from PC to DaVinci
   - Connect router to DaVinci
   - Attach power cord
   See Attachment D.

5. Load software. *See Attachment E.*

6. Perform self-test. *See Attachment F.*
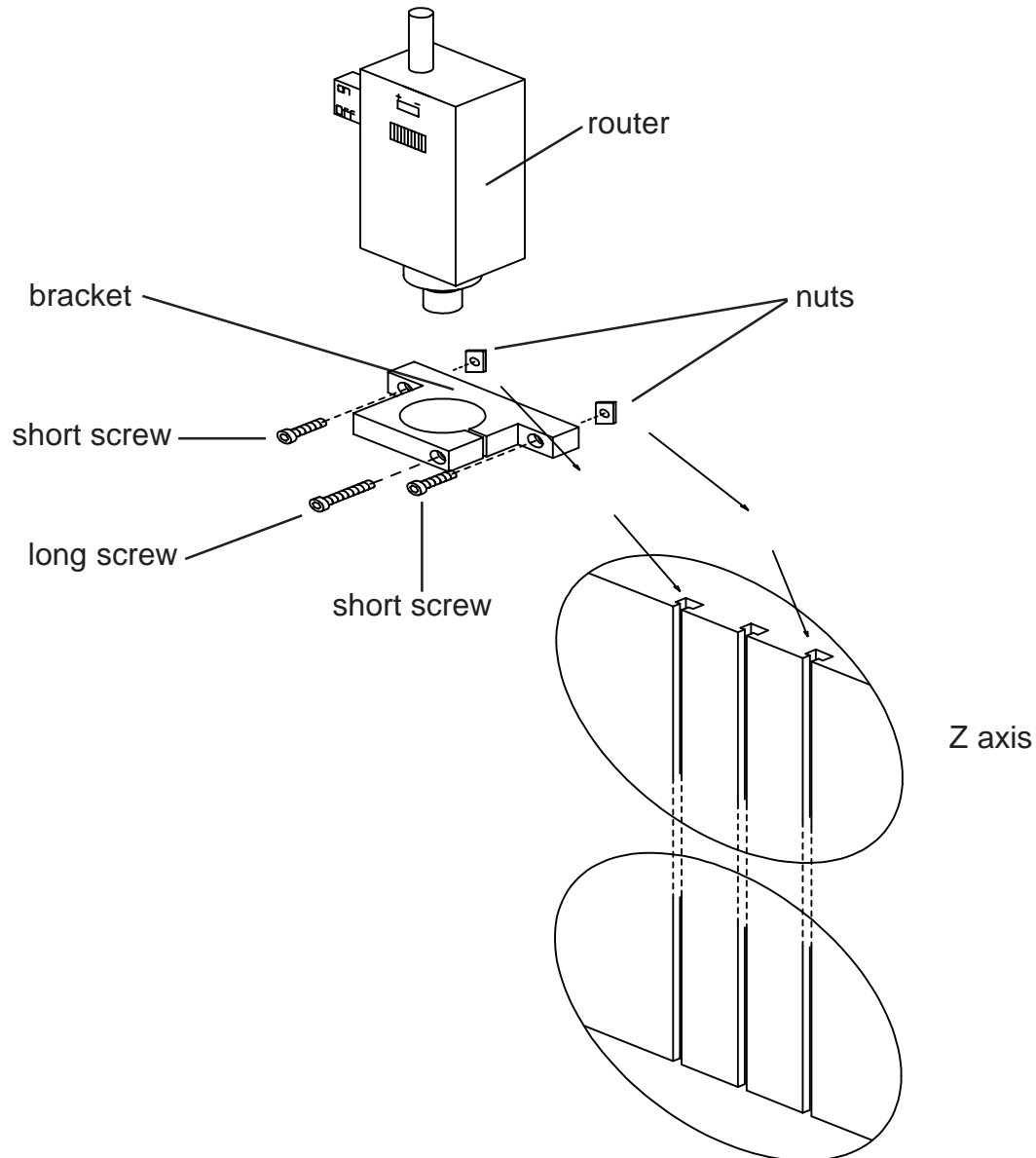
ATTACHMENT A

Materials Checklist

The following items are included as part of the DaVinci package. Contact Techno immediately if any item is missing.

- ☐ (1) DaVinci controller (#EP1090)
- ☐ (1) Kress router (installed on 8'x8' DaVinci)
- ☐ (1) router mounting bracket (installed on 8'x8' DaVinci)
- ☐ (1) 6mm collet (installed on router)
- ☐ (2) CAM clamps with mounting hardware
- ☐ (2) clamp bars with mounting hardware
- ☐ (8) oval T-nuts
- ☐ (8) large T-nuts
- ☐ (3) hex keys
- ☐ (1) 9 to 9 pin RS232 serial cable
- ☐ (1) 9 to 25 pin adapter
- ☐ (1) power cord
- ☐ (1) PAL software disk

Mounting Router Bracket And Router

router

bracket
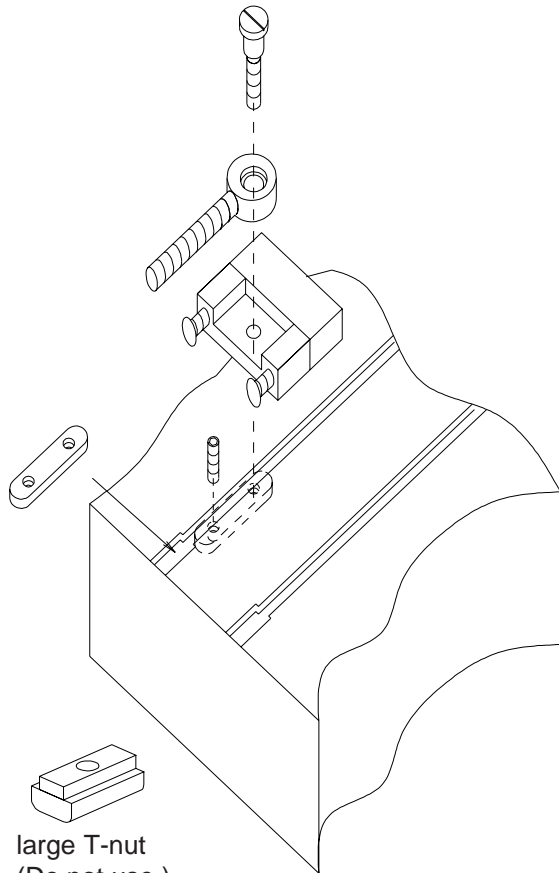
nuts

short screw
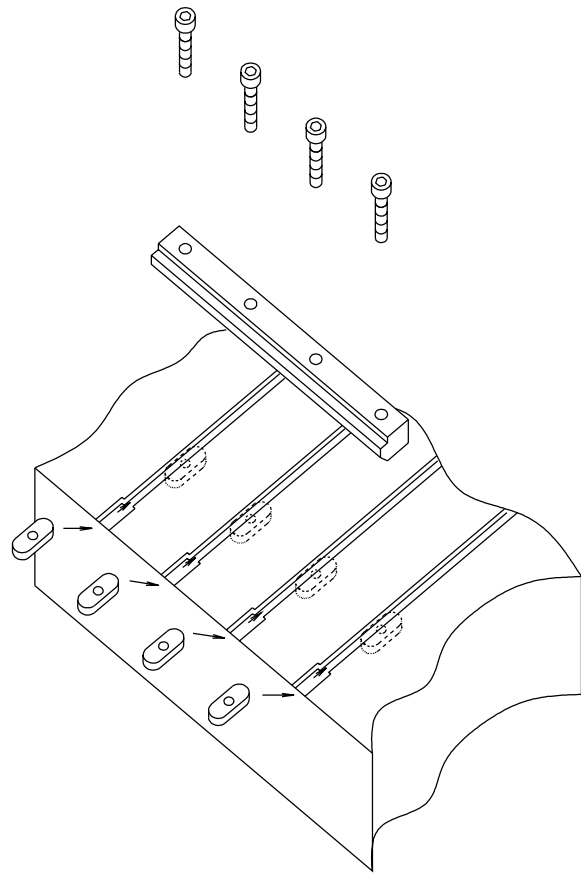
long screw

short screw

Z axis

INSTRUCTIONS:
1. Attach router mounting bracket as shown, using two short screws provided.
2. Mount router on bracket, then clamp into bracket by tightening long screw provided.

ATTACHMENT C

Mounting CAM Clamps And Clamp Bars

large T-nut
(Do not use.)

MOUNTING CAM CLAMP

MOUNTING CLAMP BAR

INSTRUCTIONS:

1. Place oval nut in desired T-slot. (Use oval nut only. Do not use large T-nut for mounting CAM clamp.)
2. Bolt CAM clamp to nut as shown above.
3. Mount clamp bars by sliding oval nut into desired T-slot and bolting bar to nut with screws provided.

   Note: Large T-nut can be used for mounting to Z axis T-slots on 8'x10' DaVinci only.
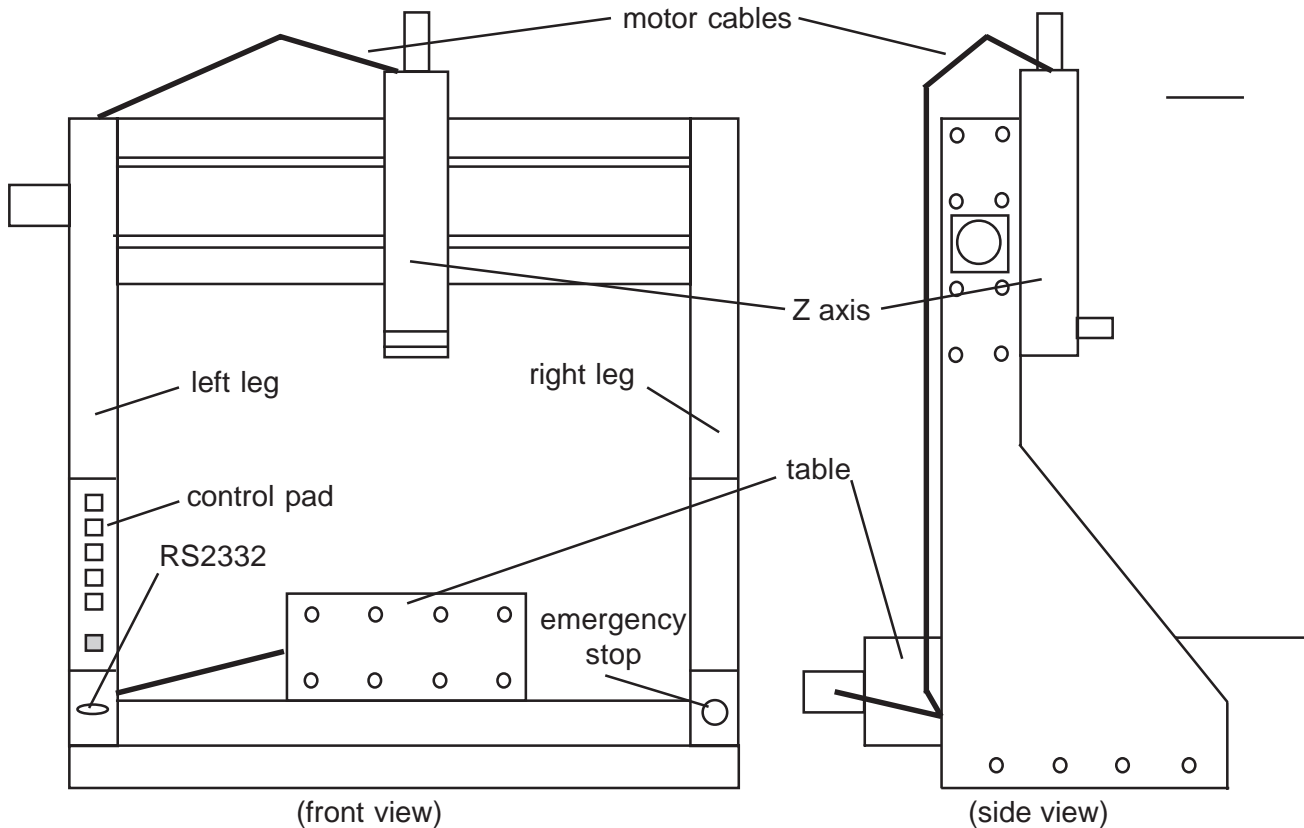
ATTACHMENT E

Software Set-Up

1. Install PAL software. Refer to PAL Programmer's Manual for instructions on loading the software.

2. Walk through tutorial for PAL software. Refer to PAL Programmer's Manual for tutorial instruction.

   NOTE: FOR THOSE WHO DO NOT READ MANUALS, THE TUTORIAL PROVIDES A QUICK WALK THROUGH THE PROGRAM.

Electrical Set-Up For DaVinci

page 1 of 2

motor cables

Z axis

left leg

right leg

control pad

RS2332

table

emergency stop

(front view)

(side view)

DaVinci Components

INSTRUCTIONS:

1. Connect 9-9 pin RS232 serial cable from 9 pin PC COM port to RS232 port on DaVinci. If PC COM port has 25 pins, attach 9-25 pin adapter to 9-9 pin RS232 serial cable, and connect from 25 pin PC COM port to RS232 port on DaVinci. Use only specially wired RS232 serial cable provided. Refer to DaVinci Set-Up Manual for more detailed information on wiring connections.

   On RS232 serial cable, connect end marked PC/AT to PC. DO NOT SUBSTITUTE STANDARD SERIAL CABLE FOR SPECIALLY WIRED RS232 SERIAL CABLE. Doing so may result in damage to DaVinci unit and/or PC.

   NOTE: The default settings are 9600 BAUD and 75 Hz/msec. Do not adjust these unless necessary.

3. Plug one end of DaVinci power cord into power connector on rear
    right leg of machine. Plug other end into 120VAC outlet.

    **Make sure all axes on DaVinci are at least 1/2 inch away from the
    end of travel before turning on power to controller. To move axis
    off home sensor while power is off, turn knob at end of motor
    until axis has moved away. NO AXIS MAY BE IN CONTACT WITH
    ITS HOME SENSOR WHEN ATTEMPTING TO RUN ANY
    PROGRAM.**

    Turn on power by pressing power switch on rear right leg of machine,
    next to power connector.

    NOTE: If power does not turn on, release red emergency stop button
    on front right leg of DaVinci by turning clockwise. Emergency stop
    immediately cuts power to machine when pushed in.

Performing DaVinci Self-Test

INSTRUCTIONS:

1. Start PAL software running on PC.

2. To open communication screen, first press function key 10 (F10), then W, and then C.

3. Turn off power to DaVinci.

4. Press and hold down START button on front panel. While holding it down, turn on power. Release start button several seconds after power turns on. X and Y axes should move slightly back and forth; Z axis will remain stationary.

5. If DaVinci and PC are communicating properly, DaVinci will display self-test message on computer screen. Self-test message consists of character stream, which continues until space bar is pressed. After space bar is pressed, any characters typed on computer will appear on computer screen and will be sent as message to DaVinci. When message is received by DaVinci, it will send same character back to computer. That character will appear on computer screen twice - once after being typed in, and once after being sent back from DaVinci.

6. If test is successful, press RESET button on DaVinci, and proceed to program.