Techno Inc. CNC Router Systems
In Business Since 1986

ATC SPINDLE LC/ RG SERIES SHEET

I. **LC SERIES**
II. **LC PLUS**
III. **RG SERIES**
IV. **INTERFACE**
V. **PULL STUDS**

This Technical Sheet instructs the end-user on connecting and setting up the cable, Interface and Air Pressure for an Automatic Toolchange Spindle.

⚠ Make sure power to the machine and computer are OFF!

I. LC SERIES

The Standard LC Series Machine ships with the Automatic ToolChanger (ATC) already connected (the toolchanger box connects to the controller board via the JP4 I/O Connector - see circled area of PICTURE 1). The customer needs to set the air regulator and Interface settings.

STEP 1: AIR REGULATOR

The air regulator needs to be set to 90 PSI. Lift the cone atop the air regulator and turn to adjust.

STEP 2: INTERFACE SETTINGS

The first time you attempt to run the Techno CNC GCODE Interface (after installation) a screen prompt will appear asking if your machine has "an AUTOMATIC toolchanger?" Click **YES**. See SCREEN CAP 1.

II. LC PLUS SERIES

The LC Plus Series Machine requires connecting the black cable with the I/O Connector (See PICTURE 2) to the JP2 connector on the Techno Riser Card (See PICTURE 3). The customer also needs to set the air regulator and Interface settings.

STEP 1: CONNECT TOOLCHANGER CABLE

The Toolchanger cable (see circled area of PICTURE 2) gets connected to the JP2 connector on the Techno Riser Card (See PICTURE 3). The Techno Riser Card is connected, via a ribbon cable, to the Techno Controller Card, which in turn is installed into an available PCI slot in your computer. Read the Setup Instructions for more information on the Techno Servo Controller and Riser Card setup.

IMPORTANT! The Toolchanger cable's connector needs to be plugged into the Riser Card in a specific way. The ribbon cable has a reddish colored end that needs to be plugged into the JP2 Connector with that colored end toward Pin 1 (which is the side closest to the printing "TECHNO IO Riser Card" - see PICTURE 3).

WARNING! Failure to connect the toolchanger cable to the Riser Card with the correct orientation will cause damage to the card and the machine.

PICTURE 1
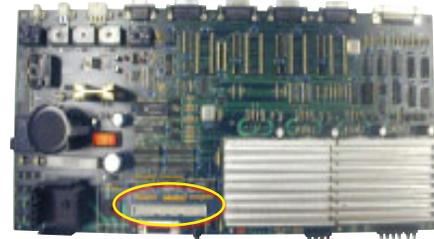
SCREEN CAP 1
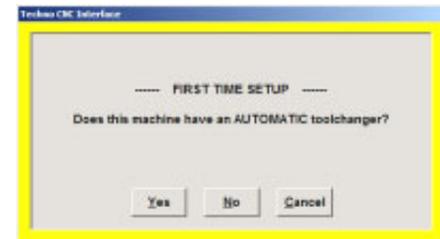
PICTURE 2
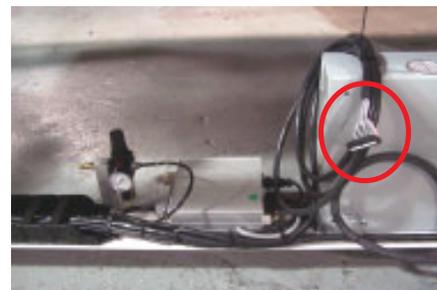
PICTURE 3
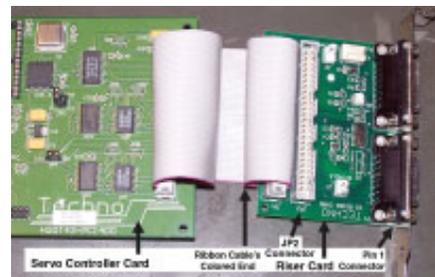
STEP 2: AIR REGULATOR

The air regulator needs to be set to 90 PSI. Lift the cone atop the air regulator and turn to adjust.

STEP 3: INTERFACE SETTINGS

The first time you attempt to run the Techno CNC GCODE Interface (after installation) a screen prompt will appear asking if your machine has "an AUTOMATIC toolchanger?" Click **YES**. See SCREEN CAP 2.

III. RG SERIES

The RG Series Machine requires connecting the black cable with the I/O Connector (See PICTURE 4) to the JP2 connector on the Techno Riser Card (See PICTURE 5). The customer also needs to set the air regulator and Interface settings.

STEP 1: CONNECT TOOLCHANGER CABLE

The toolchanger cable (see circled area of PICTURE 4) gets connected to the JP2 connector on the Techno Riser Card (See PICTURE 5). The end-user needs to first take off the front-left side-panel to access the cable and then snake the cable out the square opening in the middle of the RG base out under the machine to the computer. The Techno Riser Card is connected, via a ribbon cable, to the Techno Controller Card, which in turn is installed into an available PCI slot in your computer. Read the Setup Instructions for more information on the Techno Servo Controller and Riser Card setup.

IMPORTANT! The toolchanger cable's connector needs to be plugged into the Riser Card in a specific way. The ribbon cable has a reddish colored end that needs to be plugged into the JP2 Connector with that colored end toward Pin 1 (which is the side closest to the etching "TECHNO IO Riser Card" (see PICTURE 5).

WARNING! Failure to connect the toolchanger cable to the Riser Card with the correct orientation will cause damage to the card and the machine.

STEP 2: AIR REGULATOR

The Air regulator needs to be set to 90 PSI. Lift the cone atop the air regulator and turn to adjust.

STEP 3: INTERFACE SETTINGS

The first time you attempt to run the Techno CNC GCODE Interface (after installation) a screen prompt will appear asking if your machine has "an AUTOMATIC toolchanger?" Click **YES**. See SCREEN CAP 2.

PICTURE 4

PICTURE 5

Servo Controller Card | Ribbon Cable's Colored End | JP2 Connector Riser Card Connector | Pin 1
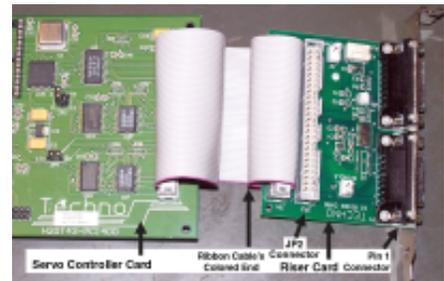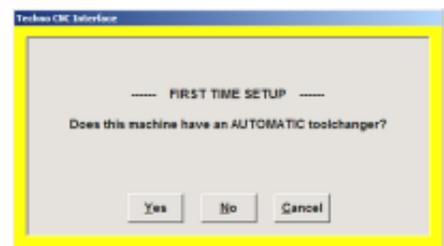
SCREEN CAP 2

IV. ATC INTERFACE SETTINGS

Several of the Techno CNC GCODE Interface default settings for an automatic toolchanger will automatically configure to your specific machine the first time you attempt to run the machine (see Screen Cap 2). Some settings still need the end-user to configure.

STEP 1: SPINDLE CONTROL MODE

Go into SETUP/ADVANCED/SPINDLE CONTROL and input "2" into "Spindle Control Mode" (see Screen Cap 3).

Configuring the Spindle Control Mode option will allow you to control the speeds at which the spindle runs by using the Interface (i.e. G-CODE and the Interface Main Screen).

If inputting "2" does not work, call Techno for support at (516) 328-3970 or contact a representative through e-mail at: support@technocnc.com

STEP 2: TOOL SENSOR / SAFETY SLIDE

Go into SETUP/ADVANCED/HARDWARE SWITCHES (see Screen Cap 4).

HSD AUTOMATIC TOOLCHANGE SPINDLE
Select "IGNORE TOOLCHANGER TOOL SENSOR"

COLOMBO AUTOMATIC TOOLCHANGE SPINDLE
Make sure "IGNORE TOOLCHANGER TOOL SENSOR" is **NOT** selected.

V. REPLACE PULL STUDS

t is necessary to replace tool holder pull studs every six months. Part Numbers listed below:

FOR COLOMBO	PART NUMBER
ISO 30	H24G10-ISO30PS1
ISO 25	H24G10-ISO25PS1

FOR HSD	PART NUMBER
ISO 30	H24G10-ISO30PS2
ISO 25	H24G10-ISO25PS2

SCREEN CAP 3

SCREEN CAP 4

COLOMBO ATC SPINDLE

If you have any questions, call Techno Technical Support at (516) 328-3970 or e-mail Techno at: support@technocnc.com