

# Bridgeport CNC knee mill (Series I / V2XT Retrofit upgrade)

159 Gates Road  
Howard, PA 16841 USA  
(814) 353-9256  
www.centroidcnc.com

Typical CENTROID "All-in-One-DC" CNC control board, reusing many stock Bridgeport components and retaining the stock reversing contactors for spindle motor control.

Reused Stock Bridgeport parts indicated in RED  
Centroid CNC parts indicated in Blue

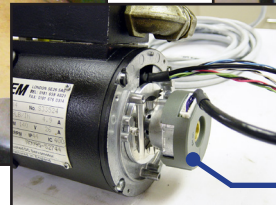
Servo motor power step down transformer

220 vac to 110 vac step down transformer

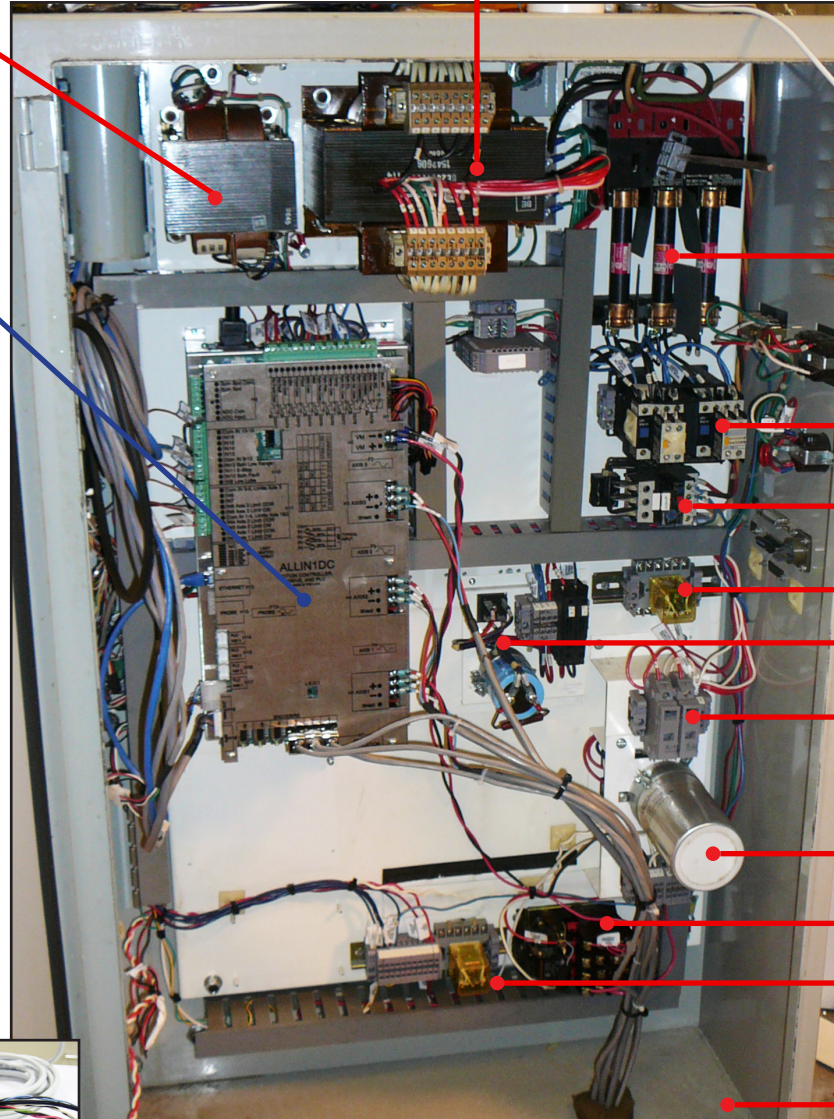
All-in-One-DC CNC control board

Your PC and Touch Screen LCD-OR-CENTROID M400 Console with CNC PC

Stock Bridgeport servo motors



New Centroid encoders installed on stock Bridgeport servo motors



Main 3 phase fuses (use a VFD to run on single phase)

Spindle Reversing contactor (24vdc coil)\*

Spindle Overload

Flood Pump Relay

24 VDC power supply

Spindle Motor Fuses

Servo DC Power Supply Capacitor

Estop contactor

Spare Relay

Bridgeport Electrical Cabinet

\* a new AC Inverter (VFD) can also be used to replace the stock spindle reversing contactors and gain programmable spindle speed at the same time and allows to run machine on single phase 220 VAC



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Typical CENTROID "All-in-One-DC" CNC control board, with VFD Spindle control and reusing many stock Bridgeport components

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220 vac to 110 vac step down transformer

Servo motor power step down transformer

Reused Stock Bridgeport parts indicated in RED

Centroid CNC parts indicated in Blue

Other new CNC parts indicated in Black

Your Touch Screen LCD-OR-  
CENTROID M400 Console

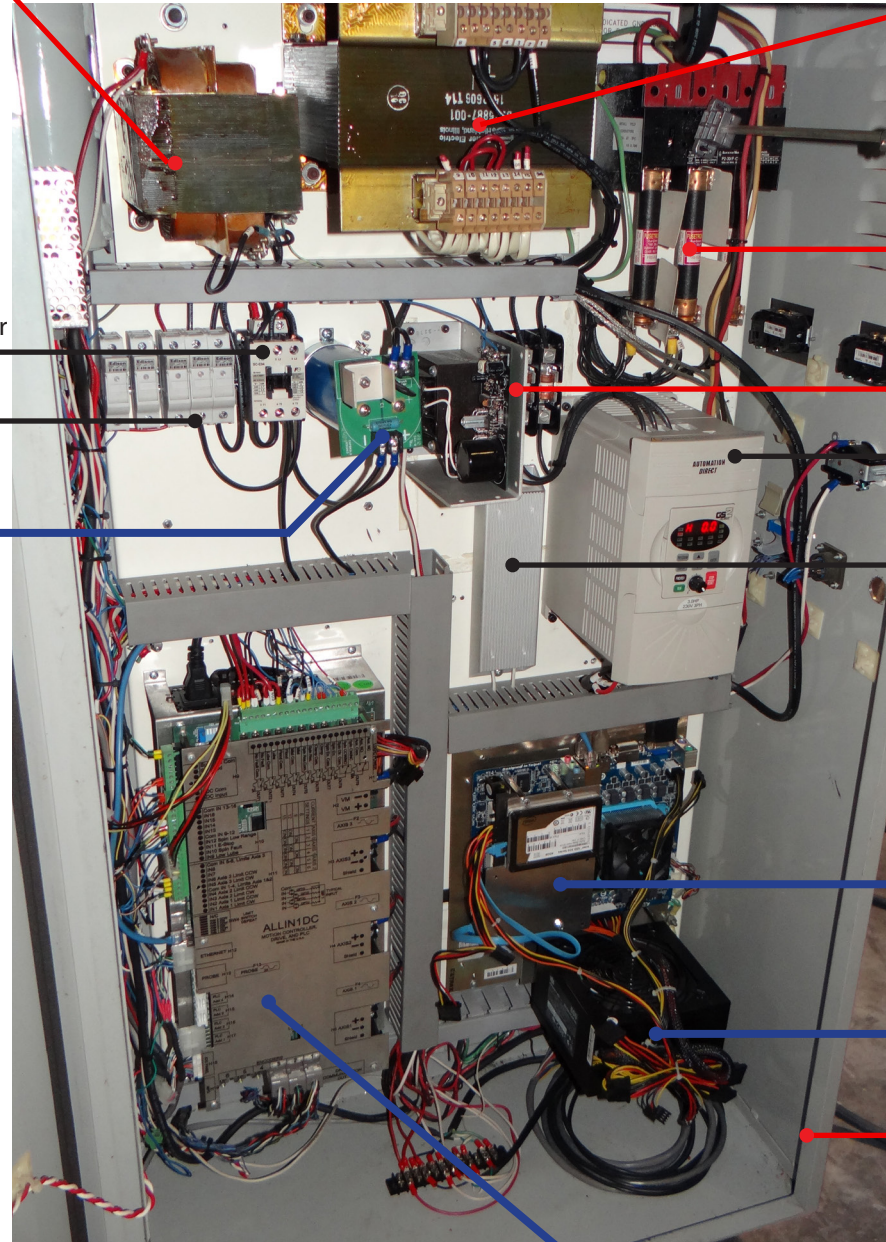
Stock Bridgeport servo motors



Estop contactor

Circuit Breakers

Cap and Bridge DC  
Servo power supply



Main 220 single phase fuses

24 VDC power supply

Spindle Motor VFD

Spindle Motor Braking resistor

CNCPC

CNC PC power supply

Bridgeport Electrical Cabinet

New Centroid encoders installed on  
stock Bridgeport servo motors

Centroid All-in-1-DC CNC control board