ST 110 CNC UPGRADE KIT

This kit is designed to upgrade all our older machines from 1990 to 2009 with 3 axis CNC drive. All of those machines came equipped standard with the drive pulleys installed on the machine, the mounting plates built in and the pulleys for the stepper motors in the accessory box. If any of the above items are missing from your machine, we can supply replacements at extra cost. The drive belt lengths vary with different models, and we will supply the proper ones based on your machine serial #. Some model machines such as QuadraLift, Bridgemill and Tri-Power had the option of a 4th axis drive to raise and lower the mill head. If you want a 4 axis system, the extra stepper, belt and hardware can be added for 179.95. The Gecko 540 drive has 4 outputs.

COMPONENT LIST FOR 3 AXIS SYSTEM

1   GECKO G540 DRIVER

1   POWER SUPPLY

3   410 OZ/IN STEPPER MOTORS-PRE CABLED WITH

　　 CURRENT SET RESISTOR FOR GECKO DRIVE

3 CNC DRIVE BELTS

1 E-STOP SWITCH

1 CNC POWER ON-OFF SWITCH

1 STEPPER MOTOR ON-OFF SWITCH

1 RED INDICATOR LIGHT

1 MOUNTING HARDWARE ASSORTMENT

WIRING DIAGRAMS WILL BE SENT BY E-MAIL

INSTALLING THE SYSTEM

Your machine will have the stepper mounting points already installed, so it is a simple matter of bolting the steppers to the mounts with the 5 mm socket head screws. The belt lengths were pre- determined at the factory, so there should be no adjustment necessary if you are using the original pulleys supplied with the machine.   On early machines- 17-20 XM, XMTC and Eldorado units there is not enough room in the housing for the CNC electronic components, so you will need to fabricate a box for the components. Bridgemills had a front shield which can be used for the mounting, and Tri Power machines had a full enclosure included. Once you have mounted your Gecko drive and power supply, you will need to drill some holes for the switches.   Wiring is straight forward and we will send diagrams, and we prefer to help you step-by step by phone or e-mail to make the process quick and easy. You will need a small roll of 22 gauge wire and one of 14 gauge for the various connections- a single color is fine if you prefer, or multi colors for easier tracing if you have them. An assortment of connectors is handy as well.

Computer Requirements

You will need a Windows based 32 bit computer with any system from Win XP up to Win 10. You will need a parallel port output from the computer. (USB-Parallel port adapters will not work)

SOFTWARE

We will send you the Mach 3 software (working freeware version) , the correct XML files for your machine and instructions on loading them to your computer. The

full license for Mach 3 can be purchased from DMAUCH@SEANET.COM

OPTIONS

If you want to read your RPM on the computer, you can install the magnetic sensors on lathe or mill or both. The sensors can also send feedback to Mach 3 for threading and tapping for those of you who have VFD drives.

You can also install limit switches on the machine and the Gecko drive has the necessary pins for 3 axes.

Those wishing to convert to full VFD drive can order the VFD conversion set part # ST111