

## ATC Engraving Tool Holder (Technical)

The ATC engraving tool holder pictured below is designed specifically to hold small engraving tools (3 mm shank) and can be used with an ISO 20 taper spindle or ATC system.



ISO 20 taper

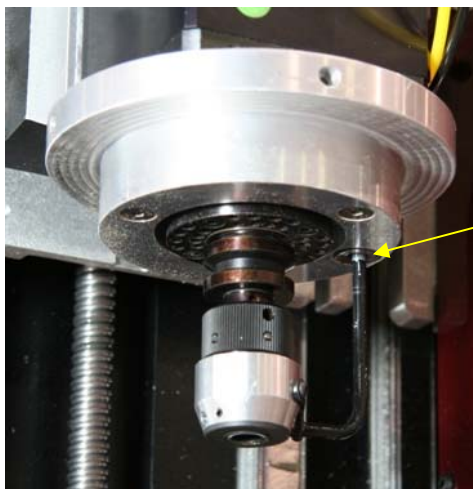
Air system to clear nose ride cavity.

Fine adjustment for "nose ride" depth control.



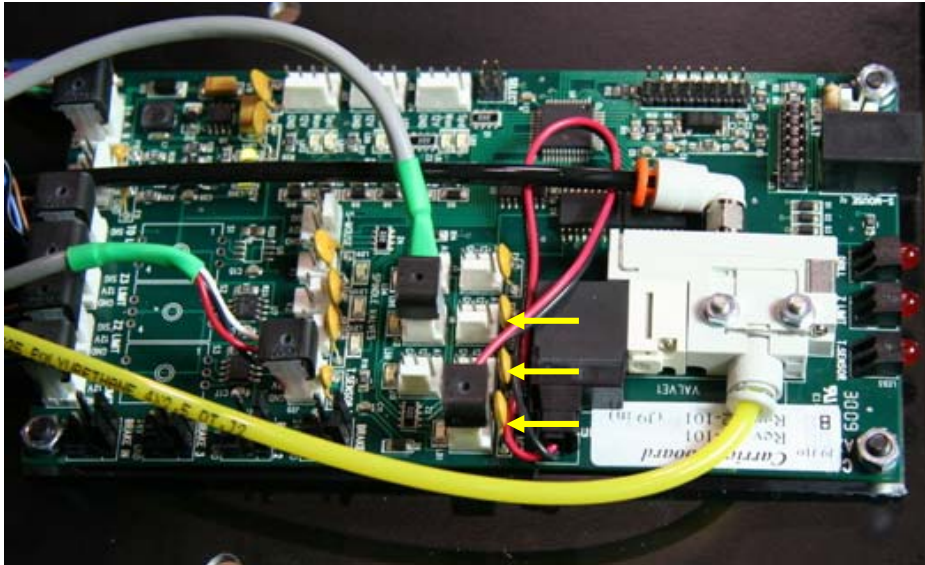
The tool holder fits into a specialized tool cup in a 21G tool changer system shown on the left.

The cup is designed to accurately align the air pipe.



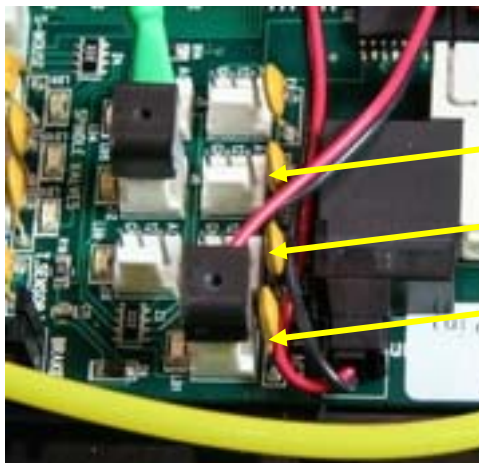
When the spindle picks up the tool holder the air pipe aligns and inserts into a pneumatic air port.

## Connection to Carriage Board



The above picture shows a typical connection to the air pipe. The yellow air line runs through the carriage cover via an air line connector and then to the air pipe supply. This air line is controlled by a solenoid valve which in turn is connected to one of the outputs on the carriage board shown by the yellow arrows. The solenoid valve can be connected to any output that is available.

These outputs in turn are controlled an M code command as follows:



M55 turn ON / M53 turn OFF

M54 turn ON / M53 turn OFF

M52 turn ON / M51 turn OFF

In order to turn on and off the air supply to the engraver's air pipe the correct M codes must be installed into the NC file. In this example the solenoid valve is plugged into the connector "T4-ACT" and is turned on with M52 and off with M51.