

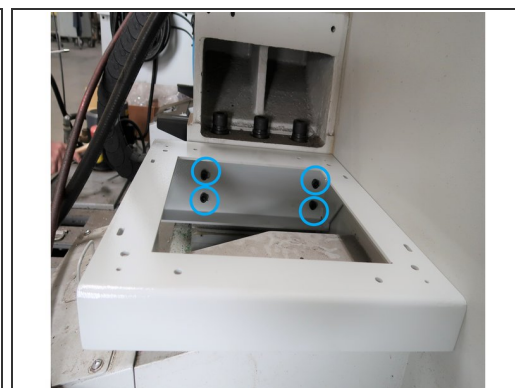
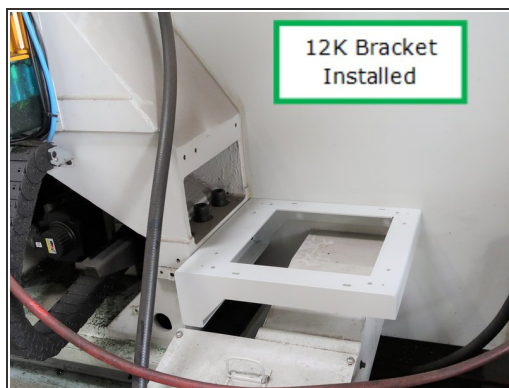


# 12K Spindle - Add Spindle Cooler

Written By: Trent Plungas

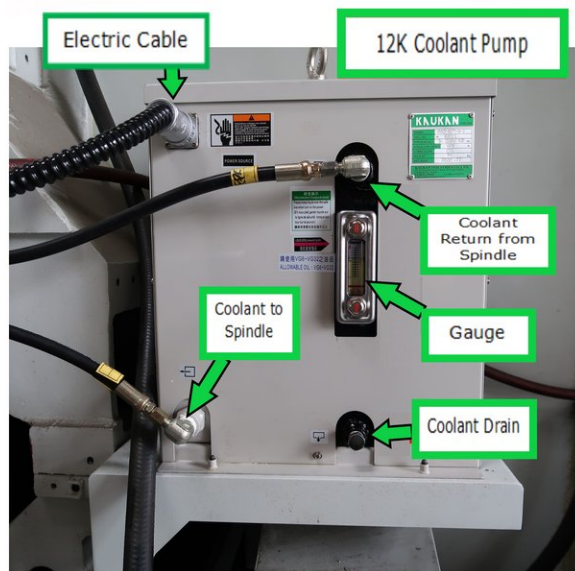


## Step 1 — Add Bracket to Casting



- TMC left rear corner without the 12K Spindle Cooling option installed. Note that there are two sets of holes drilled for options to be installed.
- Installed bracket in the proper location to support 12K pump.
- Bracket is secured by 4 bolts included in the 12K kit.

## Step 2 — Add 12K Pump to Bracket



- There are four bolt included in the kit that need to be installed to secure the pump housing to the bracket. The two in the front are labeled with two others in the rear.
- Pump connections are shown for the two hydraulic lines and the electric cable. Illustration shows the specific location for the outgoing and incoming coolant.
- ⓘ Always on when the mill is operational so no switching on and off.