

INSTRUCTIONS FOR STONE BREAK-IN PROCESS USING SUNNEN® GH-80049 TRUING GRIT (Sunnen CK-21 Computerized Vertical Honing Machine)

GENERAL

The following procedure is for radiusing in GH233-DMB Metal Bond Stones in cast iron, using GHSS Hone Heads in the Sunnen® CK-21 Computerized Vertical Honing Machine. (All steps should be followed carefully for trouble-free stone break-in.)

SUGGESTED TOOLS & MATERIALS

The following items will be needed for this procedure:

- Can of GH-80049 Truing Grit
- Small Brush
- Clean Towels
- Dykem Marker
- Coolant (*in machine*)

1. Wipe stoneholders, wedge plates and hone head body clean of all grit and grime.
2. Load stones in appropriate holders for work being done.
3. *Optional:* You may want to use dykem on stones before proceeding.
4. Open can containing GH-80049 Truing Grit. Dip some coolant from machine coolant reservoir and fill can to within 1/2 inch (12 mm) of top of can.
5. Stir grit and coolant solution into a slurry.
6. Using the small brush, apply slurry solution to inside of first cylinder bore to be honed.

CAUTION

Use care when working around tool, while machine is ON.

7. Depress Power ON Button.
8. Toggle to RUN screen (*see Figure 1*).
9. Toggle JOG to TOOL.

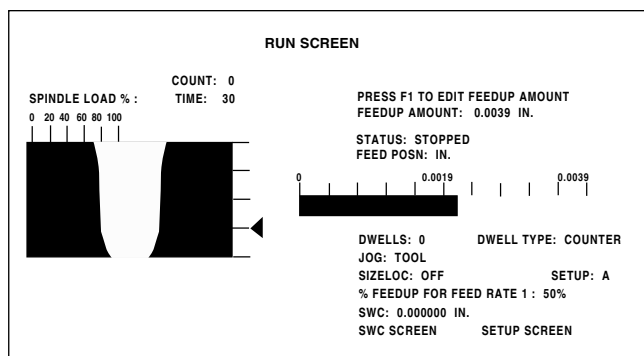


FIGURE 1, Run Screen

10. Use Jog Selector Switch to retract stones enough to enter bore (*see Figure 2*).
11. Lower hone head and insert tool into bore.
12. On screen: Toggle JOG to STROKER.
13. Use Jog Selector Switch to lower tool into cylinder so stones are not visible.
14. On screen: Toggle JOG to TOOL.
15. Use Jog Selector Switch to expand stones so they are touching inside of bore.

CAUTION

Power is still turned ON to Machine.

16. Put a 1/4 inch allen wrench in drive tube (*see Figure 3*).
17. Using allen wrench, manually rotate hone head at least one full revolution in one direction. Then rotate one revolution in the opposite direction.

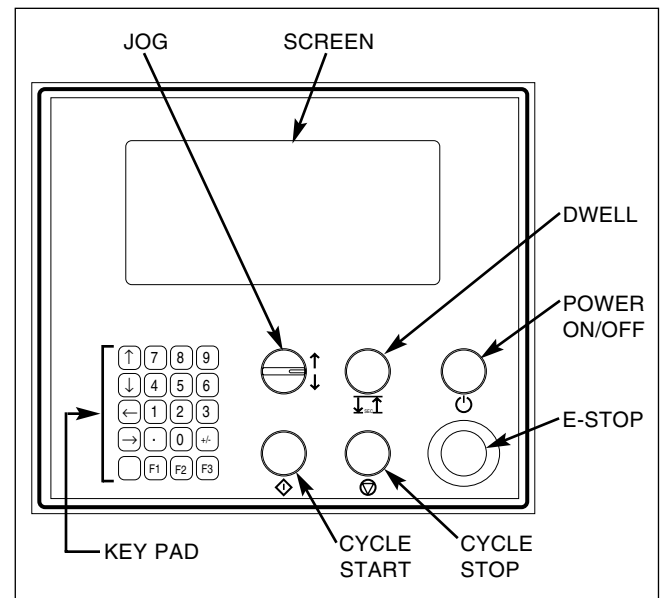


FIGURE 2, Operator Controls

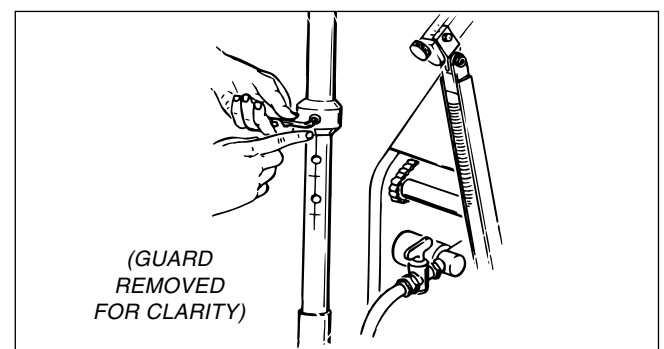


FIGURE 3, Tooling

If it is too tight to rotate; use Jog Selector Switch to retract stones a small amount, and try again.

This procedure aids the radiusing in of the stones.

18. Use Jog Selector Switch to expand stones into bore and *repeat step 17*.

19. Remove allen wrench.

20. Continue to set up machine for normal operation. (Refer to Instructions packaged with your machine. Use whatever feed and speed you normally use for your honing operation.)

21. Turn OFF the coolant at flow control.

22. Now you're ready to start the machine, but leave the *coolant off* for several seconds after pushing start button.

NOTE: This process works best by doing from 10 to 20 strokes, and then repeating entire process until stones are completely radiused. (There is no time limit on getting stones radiused in, because the different grits of DMB stones do not break down at the same rate).

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