AB-02: Remove Broken Piece (or Add a Hole)

SAFETY FIRST

- ☐ Follow all Caterpillar facility safety standards when performing this task.

EQUIPMENT

- ☐ tap burner
- ☐ secured piece
- ☐ electrode and required quill or chuck

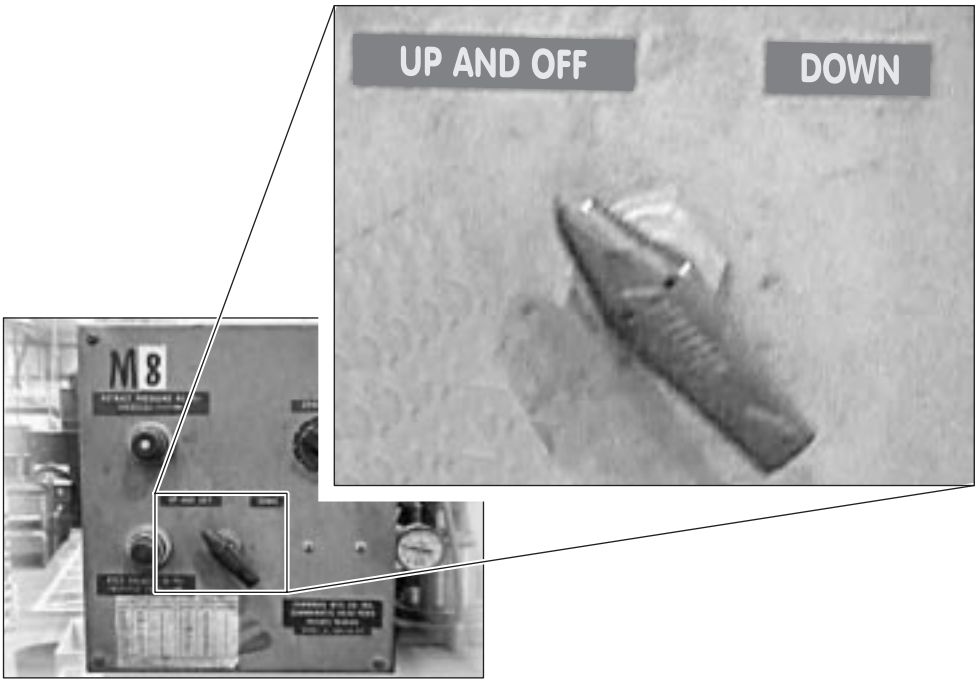
RESOURCES

- ☐ manufacturer's manual
- ☐ Electrode Selection Chart

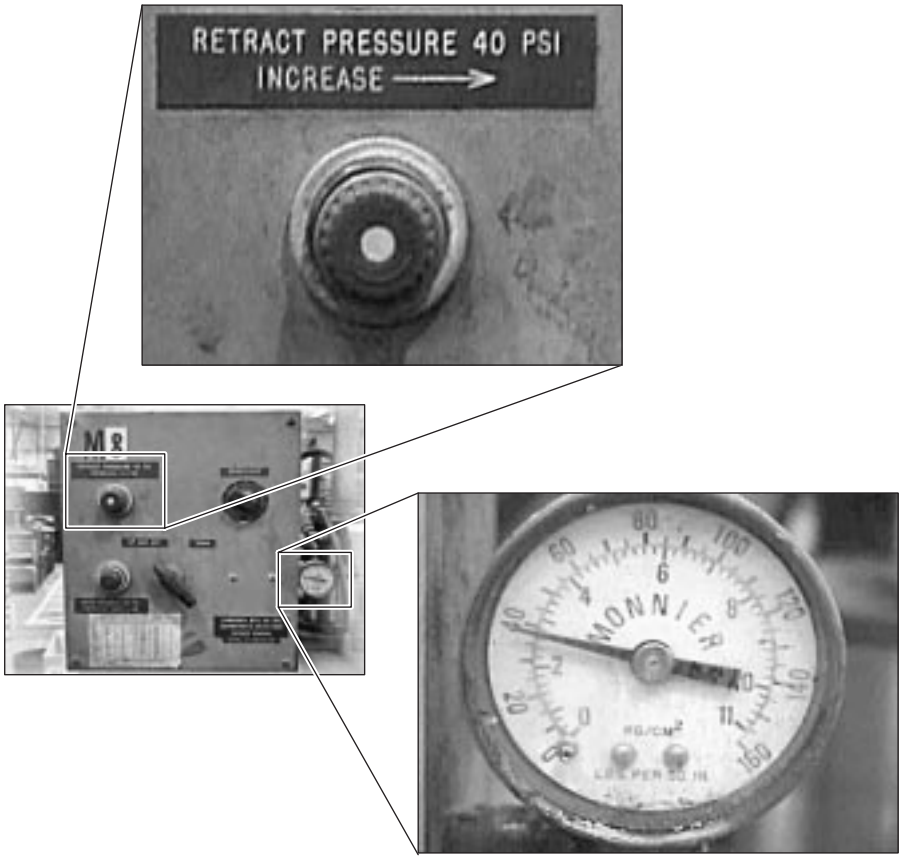
Tap Burner

1. Verify the air pressure feed balance.

☐ Set the spindle quill setting to UP AND OFF.



- ☐ Verify that the pressure gage reads 40 psi, adjusting the pressure as required.



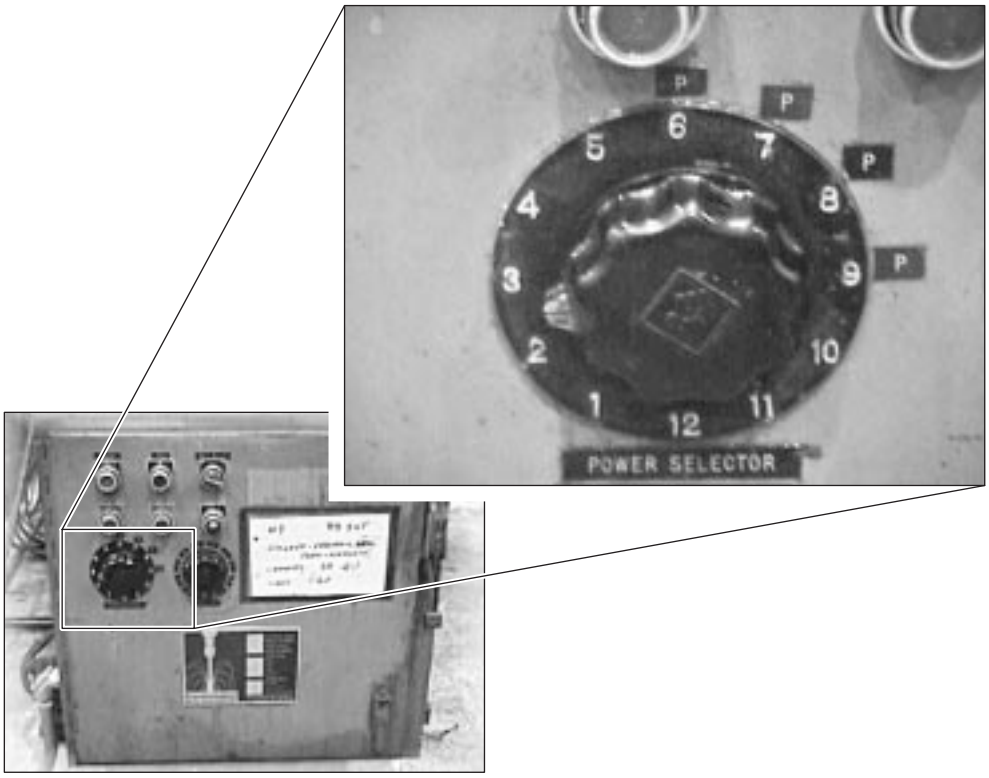
- ☐ Turn the spindle quill setting to DOWN.
- ☐ Verify that the pressure gage reads 16 psi, adjusting as necessary.

2. Check and adjust the free play of the electrode.

- ☐ Free play is the amount of travel on the electrode.
- ☐ Turn the spindle quill counterclockwise for less travel and clockwise for more travel.

Note: A setting that is too loose may allow the electrode to travel too far, possibly damaging the piece or electrode. Too tight a setting will ground the electrode, causing it to stick and weld in the hole, damaging the piece or electrode.

3. Set the power selector according to the Electrode Selection Chart setting used to select the electrode.

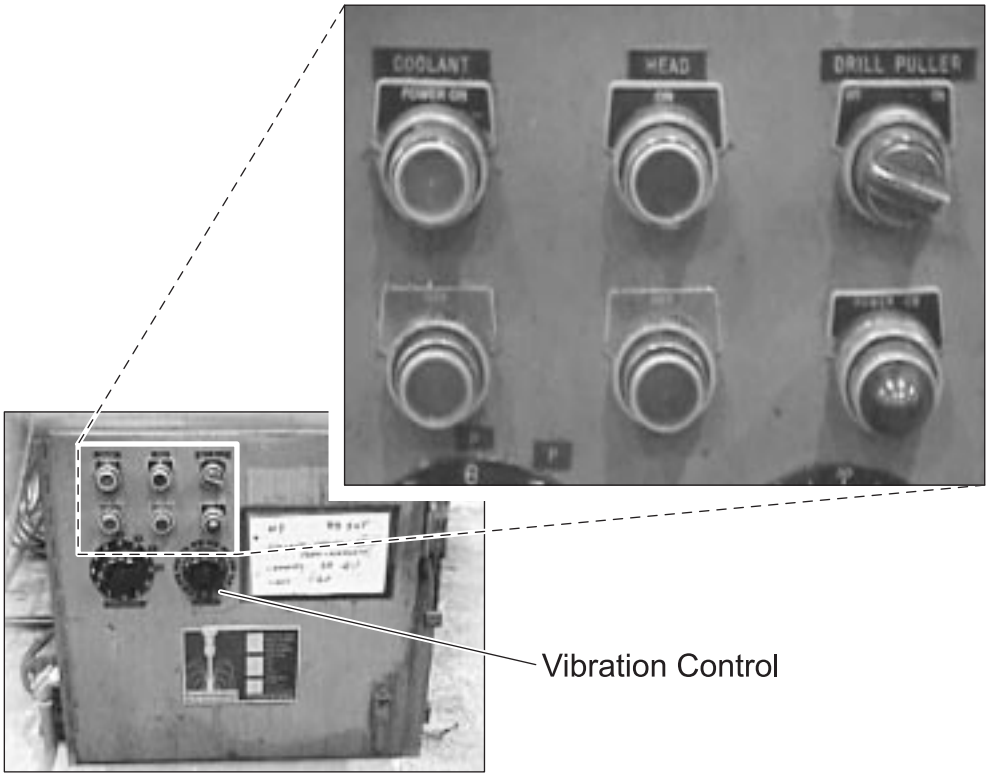


Power Selector Settings

4. Turn on the main power supply, if necessary.

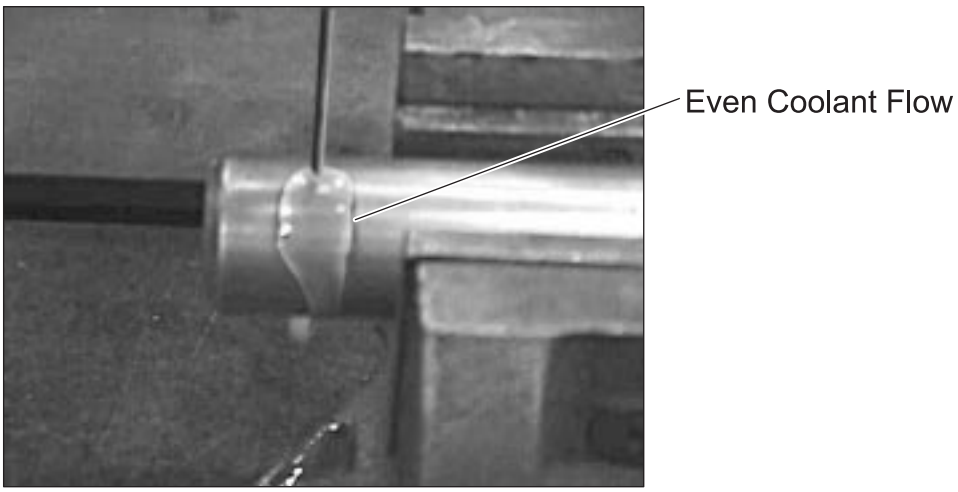
☐ Verify that the main power arm is raised and the red power light is on.

5. **Turn on the coolant power.**



Coolant and Head ON and OFF Buttons

6. **Verify that the coolant flows evenly over the electrode.**

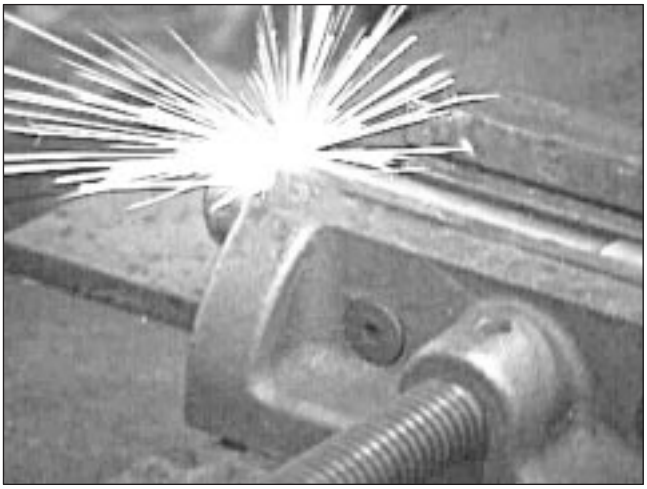


7. **Turn on the work head.**

8. **Turn the spindle quill feed to the DOWN position.**

9. **Adjust the vibration and sensitivity levels.**

   ☐ Adjust until you get an even spark and the electrode bounces consistently.



10. **Continue operating and monitoring the tap burner until the hole is cleared or the electrode burns the new hole.**

11. **Turn off the work head.**

12. **Change the work head setting to the UP AND OFF position.**

13. **Turn off the coolant.**