

AB-01: Set Up Machine

SAFETY FIRST

- Follow all Caterpillar facility safety standards when performing this task.
- Be aware of water and sparks from the electrode.

EQUIPMENT

- tap burner
- holding device: clamp, vise, corner knee, or knee
- adjustable wrench

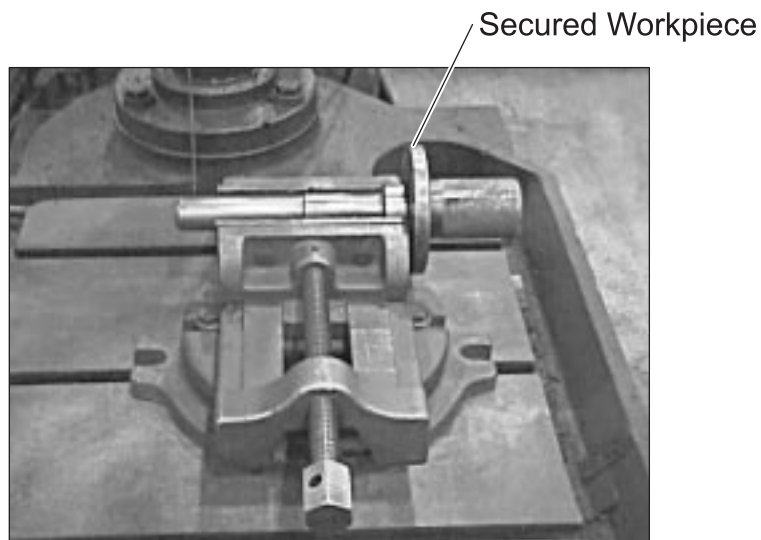
RESOURCES

- manufacturer's manual
- Electrode Selection Chart

Set Up Machine

Tap Burner

1. **Determine the requirements to secure the part.**
 - A typical setup uses a vise; however, other pieces may require a knee, corner knee, or clamping to the table.



2. Select the required electrode.

- Determine which size electrode is required depending upon the size of the drill or tap hole, as shown below.



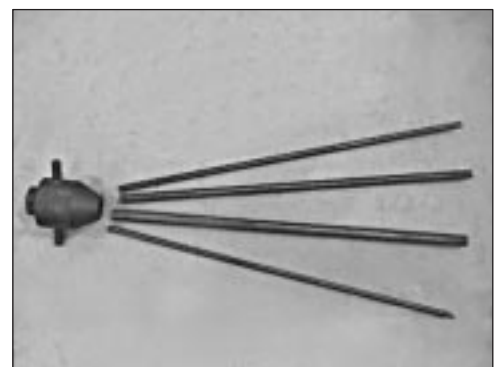
Tap Size	Elec. Size	Power Setting	Drill Size	Elec. Size	Power Setting
4-40	.060	2	1/16	.035	1
6-32	.070	3	1/8	.075	2
8-32	.090	3	3/16	.110	4
10-32	.110	4	1/4	.140	5
1/4-20	.140	5	5/16	.187	7
5/16-18	.170	6	3/8	.218	6
3/8-16	.200	6	7/16	.250	7
7/16-20	.230	7	1/2	.250	7
1/2-12	.250	7	9/16	.312	8
5/8-11	.312	8	5/8	.342	8
3/4-10	.400	9	3/4	.417	9

ALL ELECTRODES AVAILABLE FROM STOCK
 GAMMANN MANUFACTURING COMPANY, INC.
 2705 KRICKERBOCKER ROAD, DAY VILLAGE, OHIO 44140

Electrode Selection Chart From the Tap Burner

3. Install the electrode.

- Depending upon the type of electrode, either thread the electrode into the holding device or set up the tap burner with a chuck.



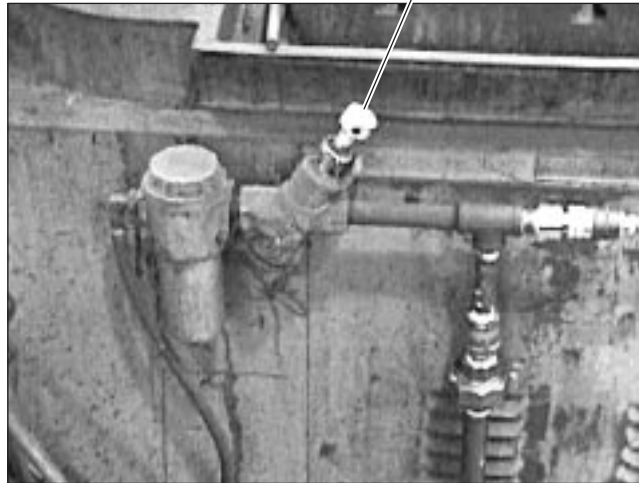
Two Types of Electrode

4. Turn on the air supply.

- Check the main air supply connection. The valve should be pushed in if off or pulled out if on.



"OFF" When Pushed In

**Pneumatic Controls****5. Check the coolant level.**

- Fill the coolant tank until the level is near the level shown below.

Fill With Water



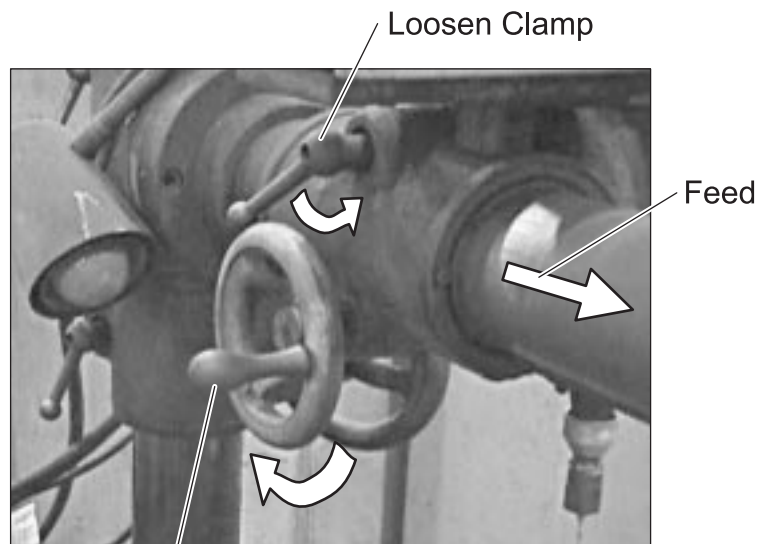
6. Align the electrode with the hole to be burned.

- Loosen all three clamps on the back of the tap burner, as shown below.



Loosen All
3 Clamps

- Swing and feed the work head to line the electrode up with the hole, as shown below.



Rotate Clockwise
to Feed Work Head Out

7. Secure the work head in place.

- Retighten the clamps on the back of the tap burner.

8. Remove the broken piece according to the Toolmaker procedures.