



RAINBOW

TECHNOLOGY CORPORATION

Instructions for Cylinder Devalving Tool

DIRECTIONS FOR USE

1. Determine cylinder type and applicable tool to use.
2. Cylinders must be EMPTY before proceeding. Full cylinders must be safely relieved of pressure by use of a regulator before proceeding with deactivation of the valve. Vent contents outdoors or under a properly rated lab hood. Flammable gas mixtures must be emptied away from all possible sources of ignition. Read the SDS if you are not sure about the flammability of the gas mixture. Some residual gas may escape during the procedure. Always wear safety glasses and proceed slowly when working with the cylinders.
3. Hold cylinder with valve away from face. Use caution when working with calibration cylinders. If you are unfamiliar with their use, contact someone who is knowledgeable.
4. Prepare the tool for use by making sure the center punch is retracted completely into the body of the tool. The center punch is retracted by turning it counter clockwise until it stops.
5. Screw the tool on the cylinder as you would a regulator. If working with a flammable gas mixture perform the remaining operations with the cylinder and tool immersed in a water bath to preclude friction as a possible source of ignition.
6. Turn the handle slowly clockwise. You will feel increasing resistance until the resistance lessens (or you hear a rattle at the bottom of the cylinder). At this point, you will have pushed the valve stem retainer (and possibly valve stem) out of the valve. There may be some venting during this procedure. If venting occurs, allow gas pressure to dissipate. The tools are designed with gas relief ports in the event that cylinders contain residual gas.
7. Retract and remove the tool by turning the handle counter clockwise several turns and then turning the knurled body with your fingers until it comes unthreaded from the cylinder valve. Do NOT use the handle ONLY to remove the recycling tool from the valve as this may impart undue stress on the center punch. After retraction there will be a visible hole in the cylinder valve. The valve stem or retainer may rattle in the bottom of the cylinder.

WARNINGS

1. Always wear safety glasses when using these tools.
2. If you feel unusual resistance while turning the handle, stop immediately and inspect the cylinder valve for damage.
3. Do not use wrenches or pliers to attach the tool to a cylinder, use only hand pressure.
4. Use the cylinder tools in a well ventilated area.
5. Do not use the tool if it fails to engage properly with the cylinder threads, otherwise injury may occur.
6. Always empty cylinders before using devalving tools.



RTC #75213

(externals threads)

Male Tool for Aluminum C10 Female Cylinders



RTC #75214

(internal threads)

Female Tool for Steel CGA600 Male Cylinders