TB 9-3439-203/1

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

CONVERSION OF WELDING ELECTRODE HOLDER (3439-238-1638) FOR SUPPLEMENTAL AIR-ARC METAL CUTTING

Headquarters, Department of the Army, Washington, D.C.
18 May 1967

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Section I. GENERAL

1. Purpose. This bulletin provides technical information for field units to convert common and collet type manually operated welding electrode holders for use as an air-arc cutting device. The conversion of the holder is useful to accomplish metal cutting and/or removing and repairing of weldments.

2. Scope. Common clamp type and collet "stub-saver" type manually operated welding holders, 3439–238-1638, may be used as an efficient air-arc cutting device by attaching a simple air tube to the holder in such a manner as to direct a stream of air on the workpiece at the point of electrode contact. Conversion procedures do not require modification of the holders and after the conversion has served its purpose the parts may be removed and the holders quickly returned to its original state.

3. Conversion and Cutting Materials. Items required to convert the holders may be acquired from parts available at most installations. The suggested parts consist of the following items:

a. A piece of copper tubing 6 to 12 inches long, having an inside diameter of 1/16 to 1/8 inch.

b. Drain cock to use as an air shutoff valve and fitting(s) suitable for attaching it to the available air hose.

c. Radiator hose clamp(s) for clamping the assembled attachment to the holder.

d. Friction or electrical tape to bind the attachment to the holder and provide insulation against electrical shock.

e. If the above materials are not locally available it may be necessary to requisition one or more of the items listed in table 1, to complete the conversion.