

Los Angeles City Fire Department
TRAINING BULLETIN NO. 33

November, 1983

I. DESCRIPTION OF EQUIPMENT

PNEUMATIC POWER CHISEL

The pneumatic power chisel is a forcible entry and physical rescue tool designed to be operated with the compressed air supply of a standard L.A.F.D. breathing air bottle. When in continuous operation, it has an approximate working time of two minutes when used with a 30 minute bottle, or four minutes when used with a 60 minute bottle. It will cut through mild steel plate up to one-quarter inch thick, mild steel bolts to three-quarter inch in diameter, and various thicknesses of sheet metal-all quickly and without producing sparks.

There are three different models currently assigned to field units Jiffy, Chicago, and Black and Decker. All three models operate basically in the same manner. Included in each kit are two 25-foot sections of air hose, retainers, retainer springs, and various types of chisels.

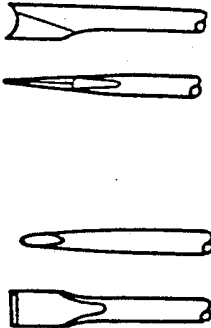
Each model is lightweight and easy to handle.

II. REGULATOR DESCRIPTION

There are two different types of regulators in operation: Meco P-IDA and Norgren 11-010. The Meco regulator is designed to have a maximum intake pressure of 6000 psi. The Norgren regulator is designed to have a maximum intake pressure of 3000 psi. Both Meco and Norgren regulators have an outlet pressure of 150 psi. Also, both regulators are preset at 140 psi. At this setting, 100 psi working pressure will be supplied at the chisel through the two 25-foot sections of air hose. **DO NOT ATTEMPT TO ADJUST THESE REGULATORS.** All three units (Jiffy, Chicago, and Black and Decker) are designed to operate at a maximum of 100 psi. Pressure in excess of 100 psi will not improve the performance of the tool; it will however, reduce the working time of the air cylinder and possibly damage the "O"-rings in the gun.

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III. CHISEL DESCRIPTION



CUTTER

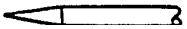
Used to remove quarter panels, rocker panels and inner-door panels. Also used to open up areas surrounding locks and hinges.

CHISEL

Used to break spot welds, split nuts, shear hinges and locks. Also used to remove car roofs.

Designed for hard to reach places such as door hinges with a deep inset.

EXTENSION CHISEL



PUNCH

Used to punch-out wedged or swelled rivets and trunk lid locks. Also used to punch holes to locate inner locks more readily.

IV. OPERATING INSTRUCTIONS

- A. Connect the regulator to the air bottle making certain the coupling is tight and the quick shutoff at the regulator outlet is open.
- B. Connect hoses to regulator.
- C. Open valve of air bottle fully.
- D. Attach the proper bit to the gun using the quick-change retainer (Figure A), or the quick change springs (Figure B), making certain they are screwed on securely.
- E. Attach the gun to the air hose.
- F. Start the tool only after the bit contacts the work surface.
- G. After use, shut off air bottle.
- H. Bleed lines to relieve pressure in regulator.

I. Disconnect unit.

NOTE: Under no circumstances should this tool be connected to the air compressor system of an apparatus.

V. MAINTENANCE

After each use:

- A. Check for worn or damaged parts.

Check the alien screws on the quick-change retainer for tightness.

Disconnect the gun from air supply. Put two drops of Air Motor Lubrication Oil #288 down the air in-take hole. Reconnect gun to air supply and operate unit for one to two seconds. This will lubricate the piston and valve. Do not use heavy oil for lubrication, as it will cause the piston and valve to stick and result in poor performance.

NOTE: Additional oil may be obtained from the Division of Supply and Maintenance.

VI. SAFETY PRECAUTIONS

- A. Gloves and goggles should always be worn.
- B. Always disconnect the gun from the air supply prior to changing bits.
- C. Station a safety member at the air bottle out of the working area to shut down in the event of-an emergency.
- D. Never connect the gun to any compressed air or gas supply other than that of the standard L.A.F.D. breathing, air bottle.
- E. Never use the chisels to break or cut glass.

PAGE 4 PICTURES NOT INCLUDED