

The brake lines are made of wound Bundy steel tubing with the following dimensions: $6 \times 1 \text{ mm } \phi$ and $5 \times 0.75 \text{ mm } \phi$, on recent models $4.75 \times 0.72 \text{ mm}$. If a new brake line has to be installed, it should be installed in the place where the worn line was removed. The brake lines must be carefully fastened with the pipe clamps in order to prevent vibration and possible rupture. When the brake lines are installed and bent, avoid damage or kinks.

The pipe connections are of the conical type. The connection is made by means of a coupling nut which overlaps the conically expanded end of the pipe.

If new conical connections have to be formed at the ends of a pipe, the pipe must be squared off and thoroughly deburred inside and outside. Chips must be removed from inside the pipe by tapping and blowing out with compressed air.

After installing the coupling nut, the pipe must be carefully flared. Various flaring tools are available for this operation (Figs. 42 — 13/1, 13/2, and 13/3).

The pipe end is clamped into the jaws of the flaring tool, the length of the protruding end corresponding to the pipe diameter.

Slightly upset the pipe by light hammer blows in order to provide more material for the flaring operation and then flare the pipe end by means of the appropriate forming tool.

When the flaring operation is finished, carefully check the flare for cracks.

If necessary, the same coupling nuts can be used for the $4.75 \times 0.72 \text{ mm}$ pipes as for the $5 \times 0.75 \text{ mm}$ pipes.

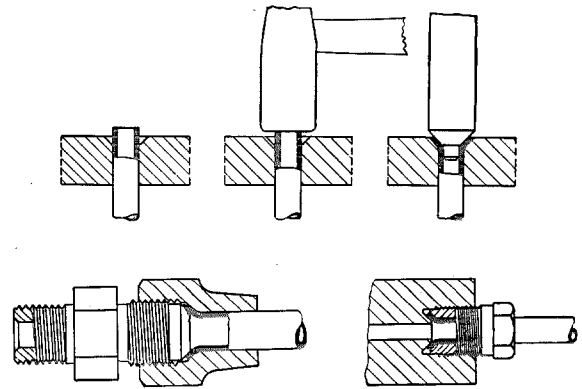


Fig. 42 — 13/2

Pipe connection for 6 mm pipe

Instead of the Flaring Tool AW 35956 manufactured by Messrs. Teves which is supplied with four forming tools for 5, 6, 8, and 9 mm pipes, use can also be made of the Flaring Tool with Pressure Spindle AW 37666 manufactured by Messrs. Teves (Fig. 42 — 13/3).

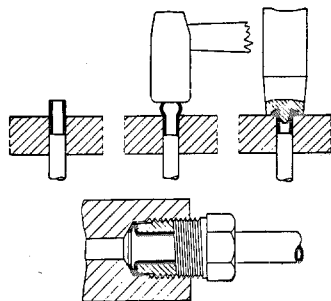


Fig. 42 — 13/1

Pipe connection for 5 mm pipe

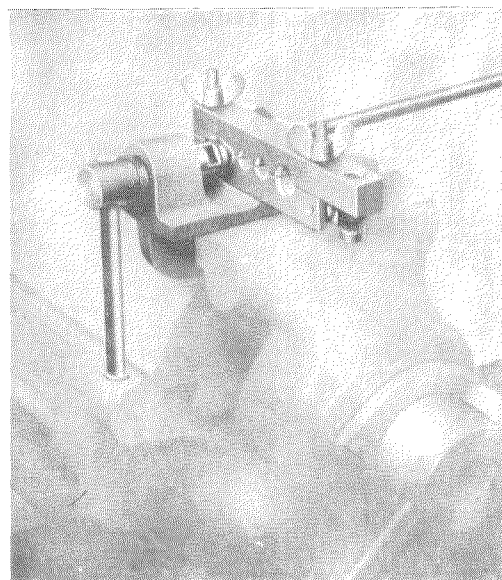


Fig. 42 — 13/3

The flaring tool is designed to permit the flaring of 5, 6, 8, 9, and 13 mm pipes. A clamping plate with two clamping screws contains all necessary recesses. For the 5 mm pipe, a special forming tool is provided, which is screwed onto the clamping plate when not in use. The 6, 8, 9, and 13 mm pipes are flared with the conical

forming tool. The pipe end to be flared should be coated with ATE brake cylinder paste or ATE blue brake fluid. The desired shape of the flare is produced by turning the spindle to the right.

On recent models, only galvanized brake lines are installed.