

Bending metal pipes

Two diameters of metal pipes are used and are as follows:

Supply. From fluid reservoir to master cylinder— $\frac{1}{4}$ in. diameter with $\frac{7}{16}$ in. 20 T.P.I. UNF. union nuts.

Feed. From master cylinder to servo unit, when fitted, and the wheel cylinders— $\frac{3}{16}$ in. diameter with $\frac{3}{8}$ in. 24 T.P.I. UNF. union nuts.

Should the metal pipes be supplied in straight lengths, they must be shaped to follow the form of the original. In the event of the original being damaged beyond usefulness a master must be made up from a length of heavy gauge malleable wire and then using this as a pattern.

The new straight pipe can easily be shaped with the fingers or on a pipe shaping "dolly", but in its absence a piece of pipe, of similar diameter to the radius of the shape required, can be used. To assist in forming the shape adjacent to the ends of the new pipe length, a three- or four-way connector can be screwed onto the union to provide a better grip.

Union nuts

The union nuts must never be overtightened since their threads may become stripped. Use only short spanners, and tighten the union nuts to the torque given in "General Data".

FLEXIBLE HOSES

To accommodate the constantly changing position of the front suspension wishbones and rear suspension arms whilst the car is moving, flexible hoses are used to connect the pressure pipes to the front wheel cylinders and the metal pipes of the rear wheel cylinders.

They should be examined at regular intervals for chafing, general deterioration and leakage. When there is any doubt concerning the condition of the flexible hose it should be renewed. Should a hose become blocked, it must never be cleared by probing but renewed.

All flexible hoses must be renewed every three years.

To remove and refit—Front

1. Grip the hexagon of the flexible hose adjacent to the support bracket with one spanner and detach the pressure pipe on the opposite side by releasing the union nut with a second spanner.
2. Still holding the hexagon, detach the flexible hose from the support bracket by removing a nut and washer.
3. Remove the flexible hose from the wheel cylinder by applying a spanner to the hexagon at that end and permitting the entire length of flexible hose to rotate.
4. Refitting is the reverse of the removal sequence, but particular attention must be given to the following:—
 - i. It is essential that the flexible hose is fitted to the wheel cylinder first.
 - ii. The second end of the flexible hose is fitted to the support bracket and set to clear all obstructions that may cause chafing by positioning the hexagon with one spanner while fitting the securing nut and metal pipe with other spanners.
 - iii. The brake system is bled of air, see under "BLEEDING THE HYDRAULIC SYSTEM".

To remove and refit—Rear (See Fig. 9)

1. Grip the hexagon of the flexible hose adjacent to the support bracket on the rear suspension main cross-beam with one spanner and detach the metal pressure pipe on the opposite side by releasing the union nut with a second spanner.
2. Still holding the hexagon, detach the flexible hose from the support bracket by removing a nut and washer.