

Automotive Hydraulic Brake System—Metric Connections—SAE J1258

SAE Recommended Practice
Approved January 1979

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AUTOMOTIVE HYDRAULIC BRAKE SYSTEM— METRIC CONNECTIONS—SAE J1258

SAE Recommended Practice

Report of Hydraulic Brake Systems Actuating Committee approved January 1979.

Scope—This recommended practice documents dimensional metric specifications for hydraulic brake system tubing with flared ends, threaded ports, male tube nuts, and banjo bolts for the interconnection of major components in automotive hydraulic brake systems. Banjo blocks are not covered by this recommended practice. The purpose of this document is to recommend preferred metrically dimensioned components, (including alternative choices) that are intended to be functionally compatible with International Standard Organization Specification ISO 4038-1977 (E). Some applications may require sizes or forms other than those shown herein, and this document does not preclude such other details when they are required.

1. Tubing and Flares—Tubing and tubing end flares should be dimensioned as shown in Fig. 1 and Table 1.

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2. Threaded Ports (Tube Nuts)—Threaded ports for disc brake calipers, drum brake wheel cylinders, combination valves, pressure switches, metering valves, proportioning valves, master cylinders, brake hose and fittings, tubing fittings, and other brake circuit components should be dimensioned as shown in Fig. 2 and Table 2.

3. Male Tube Nuts (Fittings)—Male tube nuts should be dimensioned as shown in Fig. 3 and Table 3.

4. Threaded Ports (Banjo Bolts)—Threaded ports for banjo bolts should be dimensioned as shown in Fig. 4 and Table 4.

5. Banjo Bolts—Banjo bolts should be dimensioned as shown in Fig. 5 and Table 5.

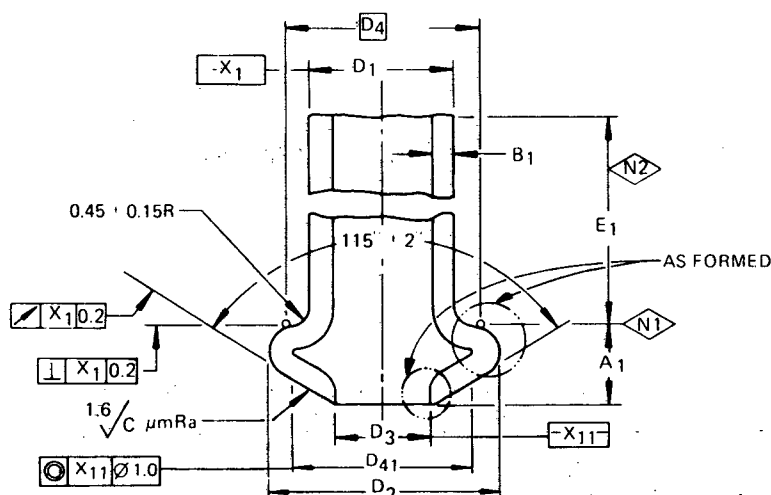


FIG. 1—END FLARE (mm)

TABLE 1—DIMENSIONS AND TOLERANCES—FOR TUBING AND
END FLARE (mm)

D1 Tube φ	D2	D3	D4	D41	A1	B1	E1
±0.07	±0.18	±0.3 -0.2		min	±0.3	±0.07	min
4.75	7.1	3.2	6.0	5.5	2.5	0.70	16
6.00	8.4	4.5	7.3	6.8	2.5	0.70	18
8.00	10.7	6.5	9.3	8.8	2.7	0.70	24
10.00	12.7	8.5	11.3	10.8	3.0	0.70	28

N1 Datum Line

N2 Squareness and runout applies
about diameter D1 over length E1

For information relative to brazed double wall low carbon steel tubing refer to SAE J527b (August, 1972), SAE J1047 (October, 1974). For additional information on flares refer to SAE J533b (January, 1972), ISO 4038 - 1977.