Automotive Hydraulic Brake System—Metric Banjo Bolt Connections —SAE J1291 JUL80

SAE Recommended Practice
Approved July 1980

THIS IS A PREPRINT WHICH IS SUBJECT TO REVISIONS AND CORRECTIONS. THE FINAL VERSION WILL APPEAR IN THE 1982 EDITION OF THE SAE HANDBOOK.

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LAND SEA AIR SPACE

PREPRINT

AUTOMOTIVE HYDRAULIC BRAKE SYSTEM—METRIC BANJO BOLT CONNECTIONS—SAE J1291 JUL80

SAE Recommended Practice

Report of the Hydraulic Brake Systems Actuating Committee, approved July 1980.

Scope—This recommended practice documents dimensional metric specifications for hydraulic brake system threaded ports 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). 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. *Threaded Ports (Banjo Bolts)*—Threaded ports for banjo bolts should be dimensioned as shown in Fig. 1 and Table 1.

2. *Banjo Bolts*—Banjo bolts should be dimensioned as shown in Fig. 2 and Table 2.

Note: This recommended practice supersedes SAE J1258 (January, 1979). Tubing, end flares, threaded ports for tube nuts, and male tube nuts are covered by SAE Recommended Practice J1290 JUL80.

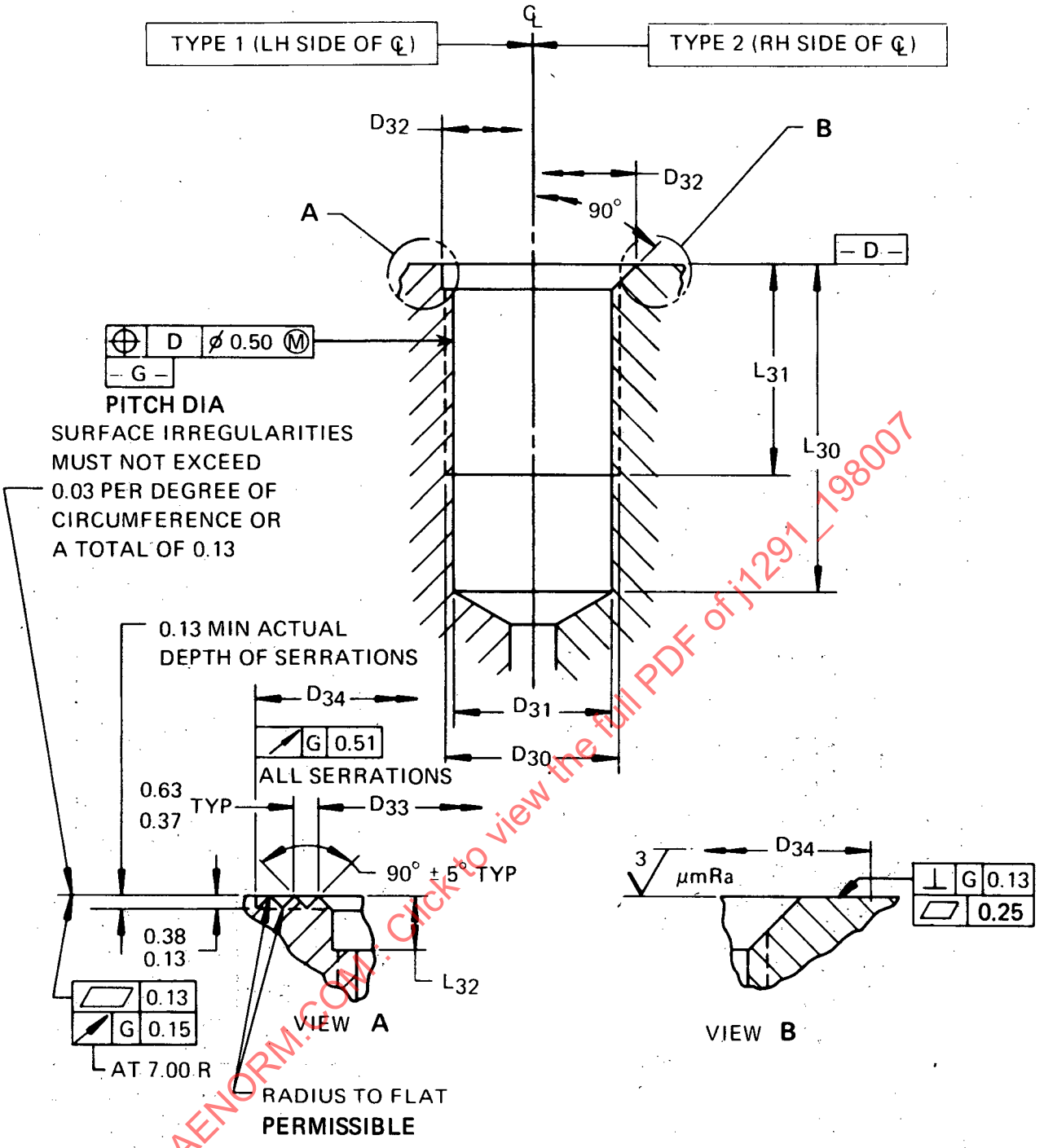

FIG. 1—THREADED PORTS FOR BANJO BOLTS (mm)

TABLE 1—DIMENSIONS AND TOLERANCES FOR THREADED PORTS FOR BANJO BOLTS (mm)

D_{30} Thread 6H			Pitch ϕ		Minor ϕ		D_{31} +0.0 -0.3	D_{32} +0.0 -0.2		D_{33} +0.0 -0.5	D_{34} +0.0 -0.5		L_{30} +0.0 -1.0	L_{31} min	L_{32} +0.0 -1.0
Preference		Pitch													
1	2		max	min	max	min		Type 1	Type 2		Type 1	Type 2			
M10		1.0	9.500	9.350	9.153	8.917	8.50	10.25	11.6	11.25	18.25	48.3	18.5	12.5	1.80
		1.5	9.206	9.026	8.676	8.376	8.70	10.25	11.6	11.25	18.25	48.3	18.5	12.5	1.80
	M11	1.0	10.500	10.350	10.153	9.917	9.40	11.25	12.7	12.25	19.25	48.3	18.5	12.5	1.80
		1.5	10.206	10.026	9.676	9.376	9.70	11.25	12.7	12.25	19.25	48.3	18.5	12.5	1.80
M12		1.0	11.510	11.350	11.153	10.917	10.30	12.25	13.8	13.25	20.25	48.3	18.5	12.5	1.80
		1.5	11.216	11.026	10.676	10.376	10.70	12.25	13.8	13.25	20.25	48.3	18.5	12.5	1.80