

**(R) CUTTING EDGE—CURVED GRADER**

1. **Scope**—This SAE Standard is intended for curved cutting edge sections used on graders as defined in SAE J870 and J1057. (See Figure 1 and Table 1.) Hole conformation is further defined in SAE J740 and J1580.

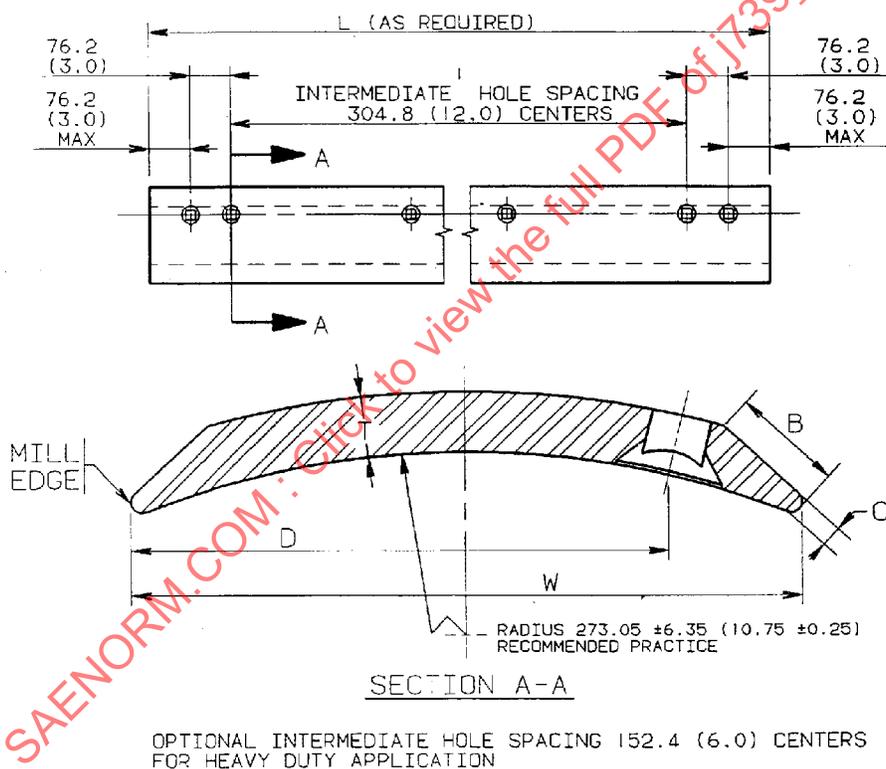


FIGURE 1—

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

QUESTIONS REGARDING THIS DOCUMENT: (724) 772-8512 FAX: (724) 776-0243  
TO PLACE A DOCUMENT ORDER; (724) 776-4970 FAX: (724) 776-0790  
<http://www.sae.org>

SAE J739 Revised JUN91

1.1 **Purpose**—This document specifies hole placement along the length and width of the cutting edge and dimensions for cutting edge cross sections. See Table 1.

TABLE 1—DIMENSIONS OF CURVED GRADER CUTTING EDGES

T ± 0.4 mm	T (±0.015) in	W ±2.3 mm	W (±0.09) in	B ±2.4 mm	B (±0.093) in	C ±1.5 mm	C (±0.06) in	D ±1.5 mm	D (±0.06) in
12.7	0.50	152.4	6.00	28.4	1.12	2.3	0.09	110.0	4.41
12.7	0.50	203.2	8.00	28.4	1.12	2.3	0.09	160.0	6.45
15.7	0.62	152.4	6.00	33.3	1.31	2.3	0.09	110.0	4.41
15.7	0.62	203.2	8.00	33.3	1.31	2.3	0.09	160.0	6.45
19.1	0.75	152.4	6.00	33.3	1.31	5.6	0.22	110.0	4.41
19.1	0.75	203.2	8.00	33.3	1.31	5.6	0.22	160.0	6.45
25.4	1.00	203.2	8.00	33.3	1.31	11.9	0.47	160.0	6.45

2. **References**

2.1 **Applicable Publications**—The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated the latest revision of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J740 JUL86—Countersunk Square Holes for Cutting Edges and End Bits

SAE J870 JUL84—Component Nomenclature—Graders

SAE J1057 SEP88—Identification Terminology of Earthmoving Machines

SAE J1580 DEC89—Metric Countersunk Holes for Cutting Edges and End Bits

3. **Tolerance**—Each countersink and counterbore shall be located within a 3.0 mm (0.12 in) diameter true position, using both end holes as datum points to establish the datum line.

4. **Key Words**—Cutting Edge, Ground Engaging Tools, Grader.

5. **Notes**

5.1 **Marginal Indicia**—The change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

PREPARED BY THE SAE OFF-ROAD MACHINERY TECHNICAL COMMITTEE SC8—  
GROUND ENGAGING TOOLS