EARTHMOVING MACHINERY—COUPLING OF ATTACHMENTS TO SKID STEER LOADERS—SAE J2513 JUN2000

SAE Standard

Report of the SAE Machine Technical Committee SCI—Loaders, Crawlers, Scrapers, and Mounted Attachments approved June 2000. Rationale statement available.

1. Scope —This SAE Standard sets forth standard dimension requirements for the loader attachment bracket and attachment interface to allow interchangeability of attachments on skid steer loaders whose operating mass (see SAE J/ISO 6165) is 4,500 kg or less. Narrow skid steer loaders may have a width that does not allow compliance with this standard.

The design of the loader attachment bracket locking system is not restricted by this standard and is left to the discretion of the manufacturer.

1.1 Purpose—The purpose of this document is to provide dimensions to standardize the coupling interface between skid steer loaders and their attachments that are manufactured worldwide.

2. References

2.1 Applicable Publication—The following publication forms a part of this specification to the extent specified herein. Unless otherwise indicated, the latest version of SAE publications shall apply.

2.1.1 SAE publications—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-001.

SAE J/ISO 6165:1999—Earthmoving Machinery—Basic Types—Vocabulary

2.2 Related Publications—The following publications are provided for information purposes only and are not a required part of this document.

2.2.1 SAE publications—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-001.

SAE J1116 MAR1999—Categories of Off-Road Self-Propelled Work Machines

SAE J731 FEB1985—Component Nomenclature—Loader

2.2.2 ISO publication—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ISO 7131:1997—Earth-moving machinery—Loaders—Terminology and commercial specifications

3. Definitions

3.1 Skid Steer Loader—Compact loader normally having an operator station between attachment-support structures, and steered by using variation of speed and/or direction of rotation between traction drives on opposite sides of a machine with fixed axles.

3.2 Loader Attachment Bracket—Loader mounted device to facilitate quick interchange of attachments.

3.3 Attachment—Removable device (working tool) mounted on a loader attachment bracket to fulfill the primary function of the machine or for a specific use. Example: bucket, log grapple, blade, ripper.

3.4 Attachment Interface—Elements of an attachment that facilitate the quick mounting and removal of an attachment to the loader attachment bracket

4. Dimensions—The mounting dimensions for the attachment interface are illustrated below in Figures 1 to 4. The attachment shall only have components outside the described space. The loader attachment bracket shall not protrude above surface A, forward of surface B, and lower than surface C.

NOTE—Some attachments may require added support structure to the attachment interface between surfaces A and B.

Figure 1 - isometric with forward travel noted

Figure 2 - rear view with width dimensions

Figure 3 - Section XI-XI

Figure 4 - Section X2-X2

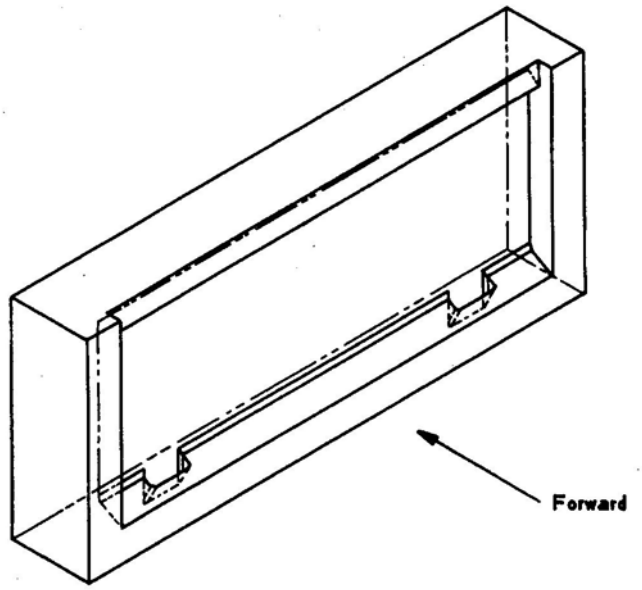

FIGURE 1—ATTACHMENT INTERFACE FORWARD DIRECTION OF TRAVEL

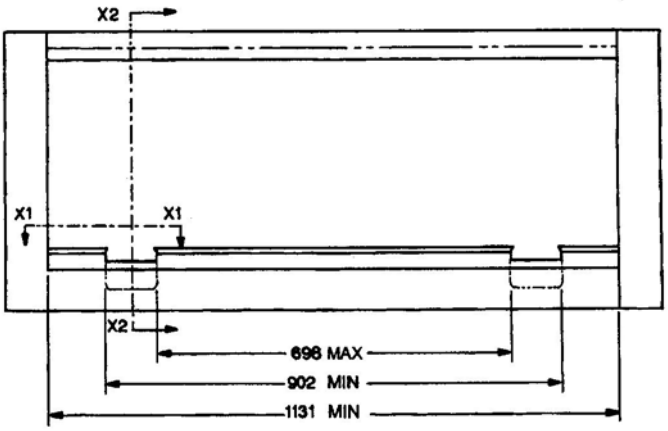

FIGURE 2—REAR VIEW

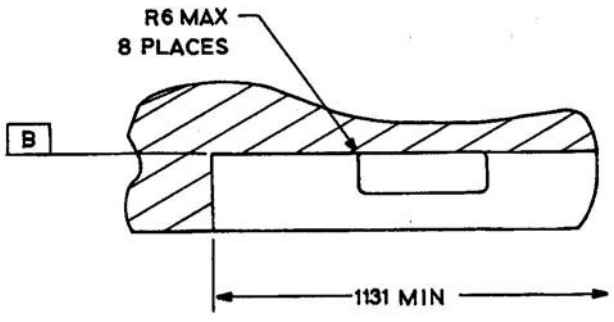

FIGURE 3—SECTION X1 – X1

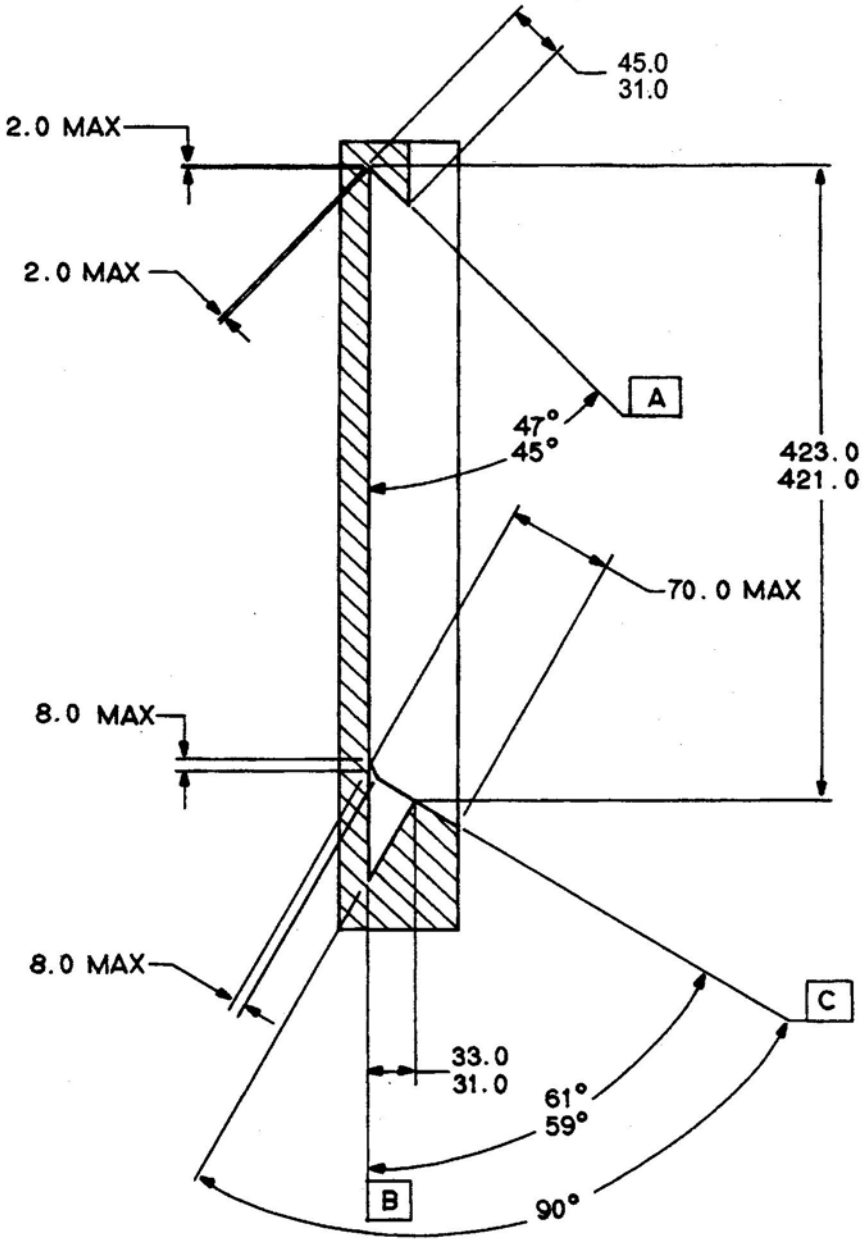

FIGURE 4—SECTION X2 – X2

Inches = Millimeters x .03937

Millimeters	Inches	Fractional Inches
Figure 2		
698	27.48	27 1/2
902	35,51	35 1/2
1131	44.52	44 1/2
Figure 4		
2	.0787	1/16
31	1.22	1 7/32
45	1.77	
421	16.57	16 9/16
423	16.65	16 5/8
70	2.75	2 3/4
8	.315	5/16
31	1.22	1 1/4
33	1.30	1 5/16

Note: this conversion to nearest 16th of an inch is NOT part of the SAE J2513 Standard.

Inches = Millimeters X .03937

Measurement of Surface B from top of vertical surface to apex of Surface C was computed (15 7/8)

Measurement of hole at intersection of Surface B and Surface C was computed (1 7/16)

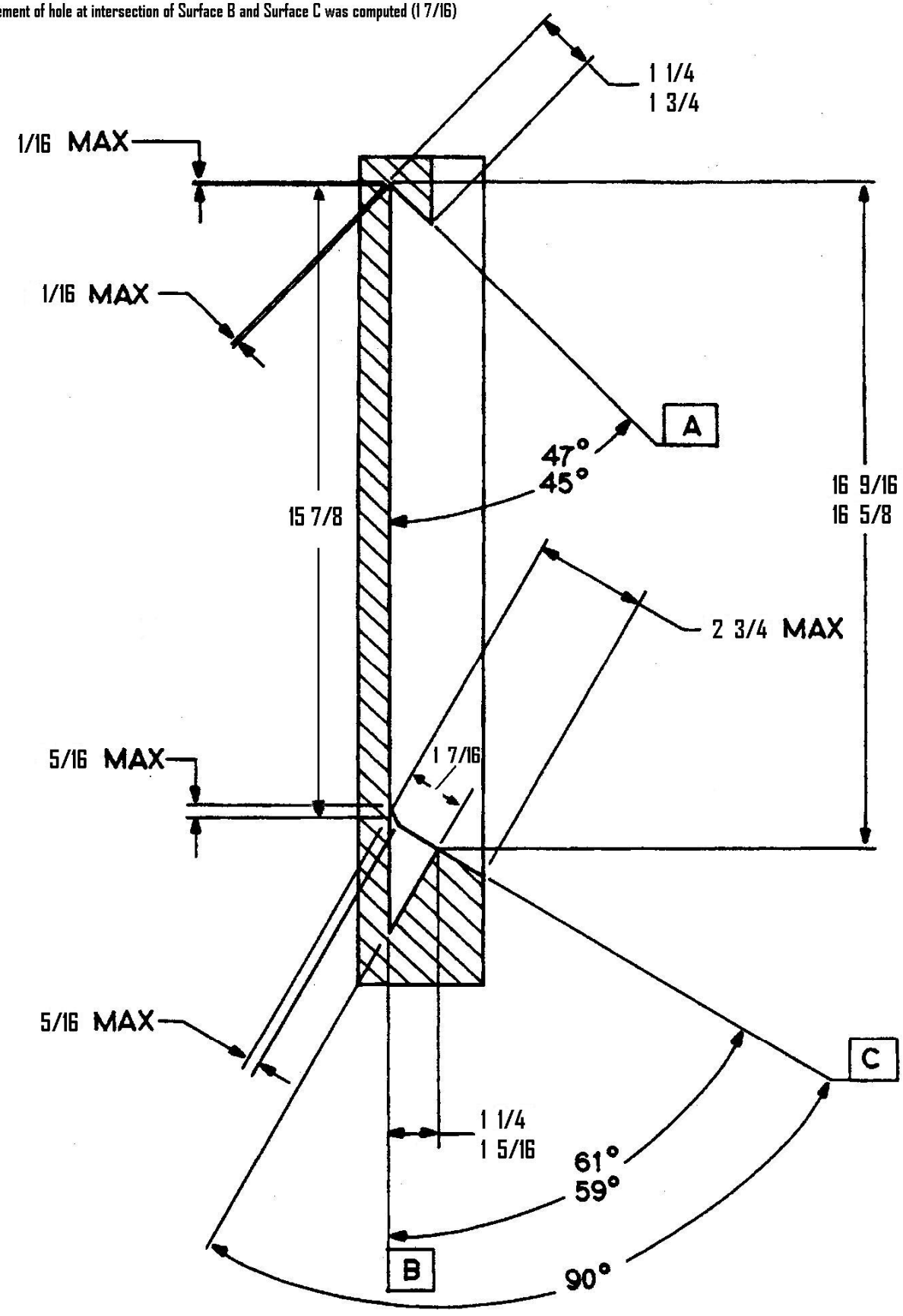

FIGURE 5 –SECTION X2 – X2