

SURFACE VEHICLE STANDARD

SAE J1548

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Submitted for recognition as an American National Standard

(R) DRAWBARS—AGRICULTURAL WHEEL TRACTORS

1. Scope

1.1 This SAE Standard provides dimensions and vertical static load limits for drawbars of agricultural wheel type tractors.

1.1.1 To facilitate interchangeability of towed implements and wheeled type tractors within established power categories.

1.1.2 To facilitate interchangeability of drawbar attachments such as drawbar extenders and safety chain attachments.

1.1.3 To provide limits for the vertical static loads imposed by towed implements.

1.1.4 To provide dimensions relating the drawbar to the tractor power take-off shaft.

1.2 Dimensions comprising the standard specifications are divided into four categories as shown in Table 1:

TABLE 1—STANDARD SPECIFICATIONS

Category	Maximum Drawbar Power kW (P)
I	15 – 35
II	30 – 75
III	60 – 170
IV	135 – 300

2. References

2.1 **Applicable Documents**—The following publications form a part of this specification to the extent specified herein.

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

SAE J708 DEC84—Agricultural Tractor Test Code
 SAE J711 MAR91—Tire Selection Tables for Agricultural Machines of Future Design
 SAE J1170 JUN91—Rear Power Take-off for Agricultural Tractors
 SAE J2708 SEP88—Agricultural Tractor Test Code (OECD)

2.1.2 ASAE PUBLICATIONS—Available from ASAE, 2950 Niles Road, St. Joseph, MI 49085-9659.

ASAE S338—(ANSI/ASAE S338)—Safety Chain for Towed Equipment

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 15096-0001.

SAE J715 OCT88—Three Point-Link Attachment for Hitching Implements to Agricultural Tractors
 SAE J721 MAY87—Operating Requirements for Tractor and Power Take-Off Driven Implements

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

ISO 500—Agricultural tractors—Power take-off and drawbar
 ISO DIS 6489-3, 1990—Agricultural vehicles—Mechanical connections on towing vehicles—Part 3: Tractor drawbars

2.3 Definitions

2.3.1 MAXIMUM DRAWBAR POWER is that obtained per SAE J708 and J2708.

2.3.2 REGULAR DRAWBAR—The operating position of the drawbar, matching the standard dimension from hitch pin hole to end of PTO shaft for the particular type PTO shaft on the tractor.

2.3.3 EXTENDABLE DRAWBAR—An adjustable multiple operating position drawbar matching the standard dimension from hitch pin hole to end of PTO shaft for the particular type PTO shaft on the tractor plus providing extended and/or retracted hitch pin hole dimensions.

2.3.4 DRAWBAR EXTENDER—An add-on bar or similar means attached to the tractor drawbar to lengthen the distance from end of PTO to hitch pin hole beyond the standard dimension.

2.3.5 SHORT DRAWBAR POSITION—A position intended to connect non-PTO driven equipment which applies a high vertical load to the drawbar.

2.3.6 EXTENDED DRAWBAR POSITION—A position intended for a special PTO driveshaft condition where equal angularity of the driveshaft joints cannot be obtained using the regular position.

2.3.7 DRIVELINE CLEARANCE PLANE—The imaginary horizontal plane which establishes the uppermost permissible limit of protrusion of the drawbar hitch assembly or any component thereof.

3. Specifications

3.1 The drawbar dimensions shall conform to Figures 1, 2, 3 and Tables 2 and 3.

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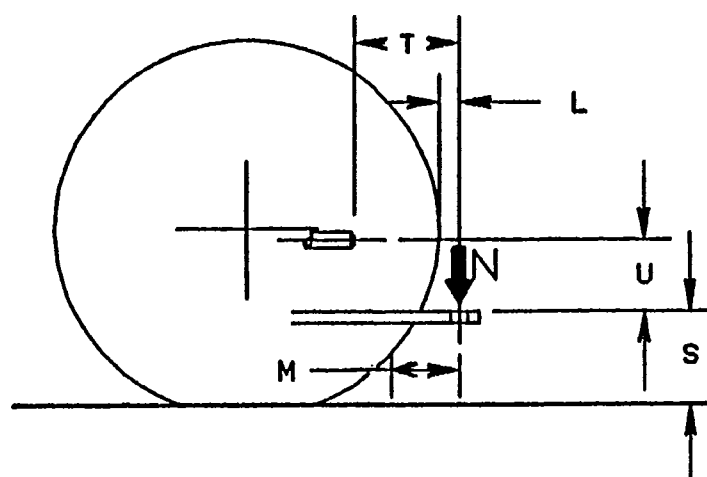


FIGURE 1—TRACTOR POWER TAKE-OFF AND DRAWBAR

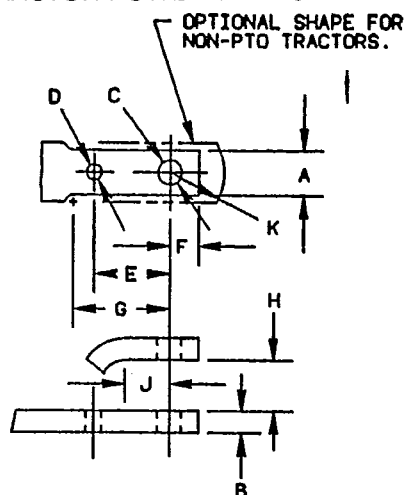


FIGURE 2—TRACTOR DRAWBAR AND CLEVIS

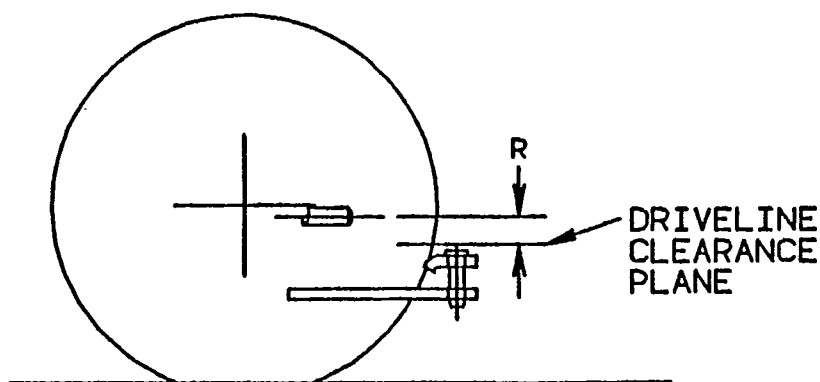


FIGURE 3—DRIVELINE CLEARANCE PLANE