

SAE-J715

ADOPTION NOTICE

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FSC 3830

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TABLE 2—DIMENSIONS ASSOCIATED WITH IMPLEMENT (SEE FIGURE 3)

Dimensions designated in Figure 2 (A, B, etc.)	Category I	Category I	Category II	Category II	Category III ⁴	Category III ⁴	Category IV ⁴	Category IV ⁴
	mm Min	mm Max	mm Min	mm Max	mm Min	mm Max	mm Min	mm Max
A ₁ Lwr hitch pin or adapt. outs. dia ¹	36.33	36.58	36.33	36.58	36.33	36.58	49.7	50.8
B ₁ Lwr hitch pin inner shldr. spread ¹	681.0	684.3	822.5	825.5	963.7	966.7	1162	1165
C ₁ Lwr hitch pin outer shldr. spread ¹	750.83	753.88	970.28	973.33	1111.50	1114.55	1358	1361
D ₁ Lwr hitch pin in & out shldr. dia ¹	50.55	63.75	50.55	63.75	50.55	63.75	63	101.6
E ₁ Coupler mast pin diameter	31.50	31.75	31.50	31.75	31.50	31.75	44.2	45
F ₁ Coupler mast pin vertical spacing	379.48	382.53	379.48	382.53	481.08	484.13	684.5	687.5
G ₁ Coupler mast pin horizontal spacing ²	-	38.1	-	38.1	-	38.1	-	50.8
H ₁ Lower socket clearance ³								
J ₁ Upper hook clearance ³								
K ₁ Lower hitch pin or adapt. alignment	To be in line within 0.015 mm per 1 mm of pin length							

¹ For implements with cantilever mounted lower hitch pins, special quick coupler hitch pins must be supplied to Dimensions A₁, B₁, C₁, and D₁. Adapter bushings may be supplied which convert existing three-point hitch pins to Dimensions A₁, B₁, C₁, and D₁ in lieu of special quick coupler hitch pins.

For three-point hitch implements on which the lower hitch points consist of straddle mounted pins, no additional thrust surfaces are required, providing the pin diameter and support dimensions conform to Dimensions A₁, B₁, C₁, and G₁.

The method used and dimensions related to attaching the pins or adapter bushings to the implement shall be at the discretion of the implement manufacturer.

² The lower implement attaching point on the quick-attaching coupler shall be located in the vertical position such that the lift range, power range, and leveling adjustment, as specified in Table 2 of SAE J715, are fulfilled.

Implement components, other than the hitch pins, that are in alignment with the Lower Socket Width (Dimension B, See Figure 2 and Table 1) shall not extend forward of the centerline of the lower socket for a distance of 203 mm above the lower socket.

Components above this height and extending laterally more than 381 mm from the coupler centerline shall not extend more than 25 mm forward of the vertical centerline through the upper hook opening.

³ The implement must provide clearance when attached to the coupler to permit lowering all elements of the coupler 120.9 mm for Category I, II, and III and 146 mm for Category IV-N and IV minimum for satisfactory attachment and detachment of the implement from the coupler.

The upper hook on the quick coupler shall be on center of the lower sockets within 3.0 mm.

Provision shall be made for adequate upper hook clearance on those implements which require landing or leveling.

⁴ See Section 4 for Category IV-N or III-N, narrow hitch, dimensions.

THREE-POINT FREE-LINK HITCH ATTACHMENT OF IMPLEMENTS TO AGRICULTURAL WHEELED TRACTORS—SAE J715 JUN93 SAE Standard

Report of the Tractor Technical Committee, approved April 1959, revised by the Agricultural Tractor Technical Committee September 1983, reaffirmed October 1988, and revised June 1993. Rationale statement available.

Foreword—This SAE Standard is functionally equivalent to ISO 730. However, there are dimensional differences between this Standard and ISO 730. Most are minor with the exception of mast height where ISO 730 uses the larger European mast height, and the minimum height above ground for lower link rear ball where ISO 730 specifies 230 mm vs. 203 mm for this Standard.

(R) **1. Scope**—This SAE Standard sets forth requirements for the attachment of three-point hitch implements or equipment to the rear of agricultural wheeled tractors by means of a three-point free-link in association with a power lift.

In order to assure proper performance of certain implements, standard dimensions for mast height, mast pitch adjustment, and implement leveling adjustment are included. Location of link attachment points is not restricted and is, therefore, left to the discretion of the tractor designer.

If draft links are used for trailing power take-off implements, a means shall be included for locking the draft links in a fixed position, and a drawbar hitch point shall be positioned in conformance with power take-off standards.

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

TABLE 1—DIMENSIONS

Category	Maximum Drawbar Power, kW ^{1,3}
I	15 to 35
II	30 to 75
III and III-N ²	60 to 168
IV and IV-N ²	135 to 300

¹ Based on SAE J708 and J2708, paragraph 2.5.

² Refer to Special Hitch Categories, Section 3.

³ Reference SAE J1548, paragraph 2.1.



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