

ANSI/ASAE S338.5 MAY2006 (R2016)
Field Equipment for Agriculture — Safety Chain for Towed Equipment



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Field Equipment for Agriculture — Safety Chain for Towed Equipment

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Keywords: Chain, Drawbar, Hitch, Safety

1 Scope

1.1 This Standard covers the specifications for an auxiliary attaching system to retain a connection between towing and towed agricultural field equipment in the event of separation of the primary attaching system long enough to bring the machines to a stop. It should not be construed that this auxiliary system can ensure that control or connection will be maintained in the event of incidents such as loss of control, rollover, jackknife, or collision.

1.2 This Standard applies to all combinations of towing and towed agricultural field equipment when traveling on highways. Requirements for braking of towed equipment and recommendations for maximum travel speeds are given in ASAE S365.6.

2 Normative References

2.1 The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. At the time of publication, the edition was valid. All standards are subject to revision, and parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Standards organizations maintain registers of currently valid standards.

2.1.1 ANSI/ASAE S365.6 APR2000, Braking System Test Procedures and Braking Performance Criteria for Agricultural Field Equipment.

2.1.2 ASAE S390.4 JAN2005, Definitions and Classifications of Agricultural Field Equipment.

3 Definitions

3.1 highway: the entire width between the boundary lines of every way publicly maintained when any part thereof is open to use of the public for purposes of vehicular travel (Uniform Vehicle Code)

3.2 agricultural field equipment: agricultural tractors, self propelled machines, implements, and combinations thereof designed primarily for agricultural field operations. ASAE S390.4 provides definitions for types of agricultural field equipment. In this standard, machine refers to agricultural field equipment.

3.3 towing machine: any unit of agricultural field equipment that furnishes the forces necessary to move and control a towed machine

3.4 towed machine: any unit of agricultural field equipment whose motive force and directional control is derived from one point of attachment to a towing machine. In a series of more than two machines, the same unit may be both a towed and a towing machine.

3.5 primary attaching system: the means by which the motive and controlling forces are transferred from the towing to the towed machine under ordinary operating circumstances. The primary attaching point is the principal location of articulation in the system.

3.6 auxiliary attaching system: a supplementary attaching means intended to retain a connection between the towing and towed machines in the event of failure of the primary attaching system. A safety chain is the preferred means for providing an auxiliary attaching system function. While the use of chain is preferred, nothing in this standard shall require the use of a chain, or preclude the use of an alternate attachment system which will effectively maintain connection between towing and towed machines in the event of separation of the primary attaching system as defined above and meet the system specifications outlined in section 5.

3.7 safety chain: a chain, of designated size and strength, equipped with a latching hook on one end and a suitable attachment link on the other end for permanent chain installations. Pass through links may be used for the attachment link for non permanent installations.

4 Safety Chain Specifications

4.1 The safety chain, its hook, and its end fitting including pins shall conform to the specifications given in Table 1 and illustrated in Figure 3. Other alternative configurations for end fittings and hooks are permissible as long as the chain can be securely retained by the latching mechanism regardless of chain tension. The hook must stay in contact with the same chain link as originally connected.

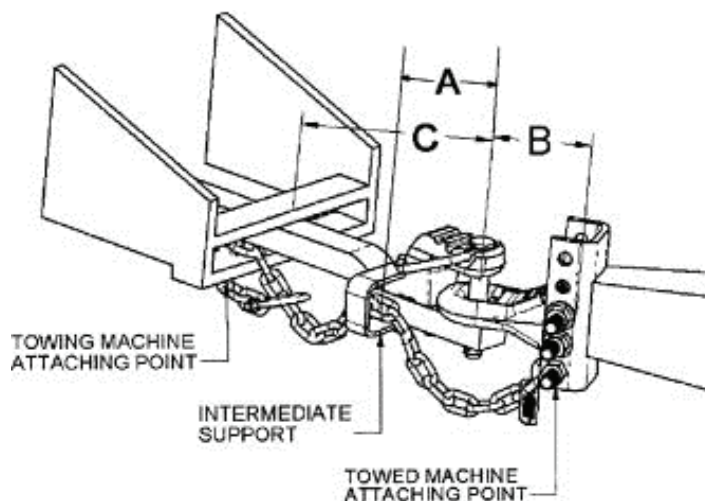


Figure 1 – Example auxiliary attaching system with intermediate support