

AUTOMOTIVE INDUSTRY STANDARD

**Requirements of Coupling Device
(Front) of Agricultural Tractors**

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ON BEHALF OF
AUTOMOTIVE INDUSTRY STANDARDS COMMITTEE

UNDER
CENTRAL MOTOR VEHICLE RULES – TECHNICAL STANDING COMMITTEE

SET-UP BY
MINISTRY OF ROAD TRANSPORT & HIGHWAYS
(DEPARTMENT OF ROAD TRANSPORT & HIGHWAYS)
GOVERNMENT OF INDIA

September 2012

Status chart of the Standard to be used by the purchaser for updating the record

Sr. No.	Corrigen da.	Amend-ment	Revision	Date	Remark	Misc.

General Remarks:

INTRODUCTION

The Government of India felt the need for a permanent agency to expedite the publication of standards and development of test facilities in parallel when the work on the preparation of the standards is going on, as the development of improved safety critical parts can be undertaken only after the publication of the standard and commissioning of test facilities. To this end, the erstwhile Ministry of Surface Transport (MOST) vide order No. RT-11028/11/97-MVL dated September 15, 1997. The standard prepared by AISC will be approved by the permanent CMVR Technical Standing Committee (CTSC). After approval, the Automotive Research Association of India,(ARAI), Pune , being the Secretariat of the AIS Committee, has published this standard . For better dissemination of this information ARAI may publish this document on their Web site.

Front coupling devices are used for attaching connection such as a tow-bar or a tow-rope for towing purpose. This standard specifies various dimensions and fitment position of front coupling device.

While formulating this standard considerable assistance has been derived from the European Council Directive

<p>EEC Directive 79 / 533 / EEC (Annex I) as amended by commission Directive 1999/58/EC</p>	<p>on the approximation of the laws of the member states relating to the coupling device and the reverse of wheeled agricultural or forestry tractors.</p>
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The AISC panel and the Automotive Industry Standard Committee (AISC) responsible for preparation of this standard is given in Annex A and B respectively.

Requirements of Coupling Device (Front) of Agricultural Tractors

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Requirements of Coupling Device (Front) for Agricultural Tractors

1.0 SCOPE

This standard lays down requirements of coupling device (front) for agricultural tractors.

2.0 DEFINITION

Agricultural Tractor: As defined in AIS-053 : Automotive Vehicles - Types - Terminology.

3.0 COUPLING DEVICE

3.1 Number

Every tractor shall have a special device to which it shall be possible to attach a connection such as a tow-bar or a tow-rope for towing purposes.

3.2 Position

The device shall be fitted to the front of the tractor preferably at the centre, which shall be equipped with a coupling pin.

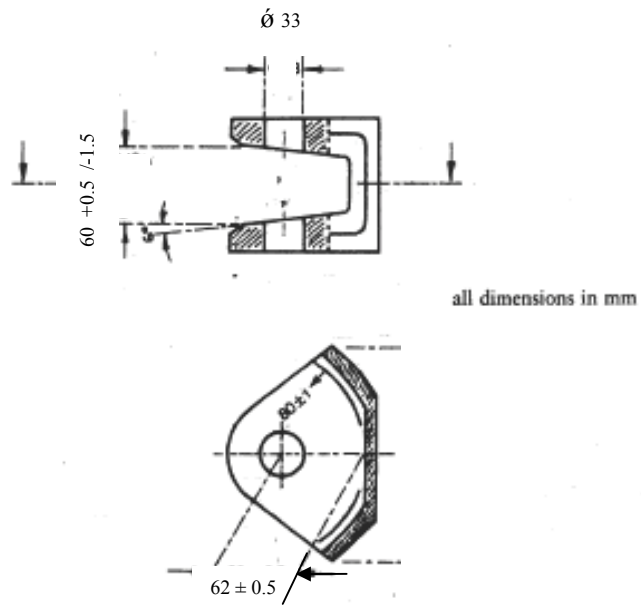
3.3 Design

The device shall be of the slotted-jaw type. The opening at the centre of the locking pin shall be $60 + 0.5/- 1.5$ mm and the depth of the jaw measured from the centre of the pin shall be 62 ± 0.5 mm.

The coupling pin shall have a diameter of $30 + 1.5$ mm and be fitted with a device preventing it from leaving its seating during use. The securing device shall be non-detachable.

The tolerance of $+ 1.5$ referred to above shall not be regarded as a manufacturing tolerance but as a permissible variation in nominal dimensions for pins of different designs.

The figure given below is an example



Coupling Device (Front)

ANNEX A

(See Introduction)

**COMPOSITION OF AISC PANEL ON
AIS ON AGRICULTURAL TRACTOR SUBJECTS***

Convener	
Mr. T.C. Gopalan,	Tractor Manufacturers Association (TMA)
Members	Representing
Mr. A. V. Mannikar,	The Automotive Research Association of India (ARAI)
Mr. A. A. Badusha,	The Automotive Research Association of India (ARAI)
Mr. V. V. Shinde,	The Automotive Research Association of India (ARAI)
Mr. D. P. Saste	Central Institute of Road Transport (CIRT)
Representative from	International Centre for Automotive Technology (ICAT)
Representative from	Vehicle Research and Development Establishment (VRDE)
Representative from	Central Farm Machinery Training & Testing Institute (CFMTTI)
Dr. N. Karuppaiah	National Automotive Testing and R&D Infrastructure Project (NATRIP)
Mr. K. N. D. N. Nambudripad	Automotive Component Manufacturers Association of India
Shri K. Rajeswar	Mahindra & Mahindra Ltd. (TMA)
Shri Philip Koshy	John Deere Equipment Pvt. Ltd
Shri Manu Singh	International Tractor Ltd.
Shri S. Lakshmipathy	Tractor and Farm Equipment Ltd.
Shri R. M. Kanitkar	Force Motors Ltd.
Shri V. K. Taneja	New Holland Tractors Ltd.
Shri Mohit Kumar	Escorts Ltd.
Shri K. K. Gandhi	Society of Indian Automobile Manufacturers (SIAM)
Mr. T. V. Singh	Bureau of Indian Standards (BIS)
Shri K. C. S Bisht	Bureau of Indian Standards (BIS)

* At the time of approval of this Automotive Industry Standard (AIS)

ANNEX B
(See introduction)

COMMITTEE COMPOSITION *
Automotive Industry Standards Committee

Chairman	
Shri Shrikant R. Marathe	Director, The Automotive Research Association of India, Pune
Members	Representing
Representative from	Ministry of Road Transport & Highways (Dept. of Road Transport & Highways), New Delhi
Representative from	Ministry of Heavy Industries & Public Enterprises (Department of Heavy Industry), New Delhi
Shri S. M. Ahuja	Office of the Development Commissioner, MSME, Ministry of Micro, Small & Medium Enterprises, New Delhi
Shri T. V. Singh	Bureau of Indian Standards, New Delhi
Director Shri D. P. Saste (Alternate)	Central Institute of Road Transport, Pune
Dr. M. O. Garg	Indian Institute of Petroleum, Dehra Dun
Director	Vehicles Research & Development Establishment, Ahmednagar
Representatives from	Society of Indian Automobile Manufacturers
Shri T. C. Gopalan	Tractor Manufacturers Association, New Delhi
Shri K.N.D. Nambudiripad	Automotive Components Manufacturers Association of India, New Delhi

Member Secretary
Mrs. Rashmi Urdhwareshe
Sr. Deputy Director
The Automotive Research Association of India, Pune

* At the time of approval of this Automotive Industry Standard (AIS)