

Date of hosting on website: 22nd April 2021

Last date for comments: 22nd May 2021

CHECK LIST FOR PREPARING AMENDMENT TO AUTOMOTIVE INDUSTRY
STANDARDS (AIS)

Draft Amendment No. 6 to AIS-113:- Code of Practice for Type Approval of Trailers / Semi-trailers of categories T2, T3 and T4 being towed by Motor Vehicles of categories N2 and N3

Comments on the draft Amendment may please be forwarded on email:- comments-morth@gov.in with in period of thirty days.

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AUTOMOTIVE INDUSTRY STANDARD(AIS)**

**Draft Amendment No. 6 to AIS-113:- Code of Practice for Type Approval
of Trailers / Semi-trailers of categories T2, T3 and T4 being towed by
Motor Vehicles of categories N2 and N3**

SR. NO.	PARTICULARS	REMARKS
1.0	Is the amendment related to: i) Changes in technical requirements; ii) Corrigendum iii) Any other (Pl. specify)	iii) Max. allowable dimensions for newly introduced road trains are already notified vide GSR 414(E) dated 26 th June 2020 and Amendment is proposed to extend the scope of AIS-113 to road trains and to bring clarity on requirements of such combinations.
2.0	Indicate details of base reference standard (amendments).	No specific reference standard, however AIS-113, CMV Rules 93 and EU Regulation 2018/858 is appropriately cross referred.
3.0	Add an explanatory note indicating deviations from the above base referred standard (amendments) in Sr. 2.	NA
4.0	If amendment is for provisions in technical requirements :	Yes
4.1	a) Does amendment call for re-type approval of component / vehicle, which is already type approved? b) Is amendment applicable to fresh type approval of component / vehicle c) Do components / vehicles manufacturers / Test agencies require lead time to meet requirements of amendment?	No. Since road-trains are newly notified, it will be applicable for new type approvals No.
4.2	If amendment is related to corrigendum : a) Whether changes are required in previous approvals	No
5.0	What are the test equipment for establishing compliance to amendment?	As per AIS-113
6.0	If possible, identify such facilities available in India.	ARAI / VRDE / CIRT / ICAT
7.0	Are there any points on which special comments or information is to be invited from AISC/ CMVR-TSC If yes, are they identified?	No.
8.0	Recommendation of date for implementation of amendment.	Approval of amendment in meeting of AISC / CMVR-TSC.

Explanatory note based on ECE/EEC Directive practices:

1. Amend.X = an amendment issued to the text of the AIS.
2. Rev.X = a Revision of the text comprising all previous text(s) of the AIS.
3. Corr.X = a Corrigendum consists of editorial corrections of errors in the issued texts.

DRAFT AMENDMENT NO. 6-----2021

TO

AIS-113: Code of Practice for Type Approval of Trailers / Semi-trailers of categories T2, T3 and T4 being towed by Motor Vehicles of categories N2 and N3

1. Page 1/50, clause No. 1.0

Substitute following scope for existing scope of the standard

“1.0 SCOPE

This standard lays down the requirements applicable to Trailers of Category T2, T3, T4 and vehicle carrier trailers, used to transport goods, being towed by motor vehicles of N2 and N3 category. Provisions of this standard are also applicable to Road-trains.

Note: (1) Trailers of category T1 and T5 are not covered in this standard.

(2) The scope of this standard does not cover design aspects and is restricted to type approval purpose only.

(3) The scope of the standard does not cover special purpose trailers, vehicle carriers (other than vehicle carrier trailers) and trailers towed by Category M vehicles.

(4) In the case of a converter dolly, the maximum mass to be considered for classifying the vehicle shall include the maximum mass of the semi-trailer borne by the fifth wheel coupling. Further specific requirements for Converter dolly and Load dividing dolly are as specified in Annexure 10.”

2. Page 4/50, Clause 3: DEFINITIONS

Add new clause 3.43 to 3.45 after clause 3.42

“3.43 Road Trains: are combination of vehicles as specified in CMV Rule 93 sub-rule (1) (A), clause (VII) Trailer Category T, sub- clause (v).

3.44 Intermediate Trailer: means a trailer wherein front of the trailer is connected to towing vehicle and rear end connected to another trailer portion longitudinally.

3.45 Road tractor: For the purpose of this standard, Road Tractor is a towing vehicle that is designed and constructed exclusively to tow trailers.”

3. Page 14/50, Clause 9: SAFETY CRITICAL ITEMS

Add new clause 9.12 to 9.14 after clause 9.11

“9.12 Trailer Converter dolly and Load dividing dolly: requirements of under run protection devices and light-signaling devices shall be exempted.

9.13 Intermediate Trailer: are exempted from requirements of RUPD, front and rear lighting and light signaling devices.

9.14 Warning Signs: Rear of rear-most trailer of road-trains shall display either retro-reflective 'ROAD TRAIN' warning signs or a retro-reflective 'LONG VEHICLE' warning sign. This is also required when road-train is towing a converter dolly as the rearmost trailer.

9.14.1 Warning sign shall be in the form of a Tape or Plate having yellow retro reflective background with black letters, fitted horizontally on rear of road train.

9.14.2 Dimensions:

Minimum length of warning sign - 1 m
Minimum height of warning sign - 200 mm
Minimum height of letters – 180 mm

9.14.3 If the length of “road train” or “long vehicle” warning sign is split into 2 parts, the part fitted on the left must show the word ‘ROAD’ or ‘LONG’ and the part fitted on the right must show the word ‘TRAIN’ or ‘VEHICLE’.”

4. Page 18/50, clause No. 14.0

Substitute following text for existing text of clause 14.0

“14.0 CRITERIA FOR EXTENSION OF APPROVAL

The criteria for extension of type approvals would be in accordance with the details given at Annexure-8. Tractor-trailer or Truck-trailer approved earlier can also be extended for the road train purpose referring extension criteria specified under Annexure 8. Additional recommendatory provisions for road-train are as specified in Annexure 9”

5. Page 48/50

Annexure 8, Sr. No. 2, substitute “GCW” for “GVW”.

6. Page 48/50

Add new Annexures 9 to 14 after Annexure 8 and renumber existing Annexures 9 and 10 as Annexures 15 and 16

“ANNEXURE- 9

(See 14.0)

Additional requirements for Road-trains

1. This Annexure specifies additional requirements, since these requirements are not specifically mentioned under CMVR for Road Trains.
 - (a) Max. speed of the Road-trains shall be limited to 80 km/h.
 - (b) In the case of Road-trains, permission of the State Government shall be obtained regarding their plying on selected routes depending upon local road conditions, width, maneuverability of the vehicle in traffic, as deemed fit.
 - (c) CCTV or camera shall be provided for Road Train; for driver to ensure indirect vision for 360 degree vision, covering left, right and rear of the Road Train. For this purpose, compliance with requirement of class II mirror vision area as specified in AIS-002 (Rev. 1) (Part 1) and rear vision area requirement as specified for RPAS in Annexure 7 of AIS-145 shall be considered.
 - (d) Centre Axle trailer(s) shall not be used in road-train combination.
 - (e) Road Train(s) shall comply with the requirements of ABS or EBS as specified in IS 11852 as amended from time to time and Vehicle Stability Function, shall comply with AIS-150 as amended from time to time.
 - (f) Road Train(s) shall have provision of simultaneous blinking of side marker lamps with direction indicators.
2. A truck or road tractor or tractor unit for semi-trailer of category N3 complying all requirements under CMVR shall be used. In addition, it shall comply with following CMVR provisions:
 - (a) having minimum two axles and at least half of the axles (one axle out of two in case of 2 axle vehicle; two axles out of three in the case of a three axle vehicle; and three axles out of five in the case of a five axle vehicle) designed to be driven simultaneously, irrespective of whether one powered axle can be disengaged;
 - (b) that is designed for towing exceptional load transport trailer of category T4; and
 - (c) that has a minimum power to weight ratio of 3.5 kW/tonne.

“ANNEXURE- 10

(See 9.12)

**Additional / Specific requirements for Converter dolly
and Load dividing dolly**

1. Mudguards shall cover all wheels of the converter dolly.
2. Rear marking plates, as specified in AIS-089 shall be fitted to the rear of the converter dolly. Alternatively, retro-reflective marking as per AIS-090 is also acceptable.
3. The drawbar of the dolly being carried shall be well secured to the trailer loaded above it, so as to minimize rear overhang.
4. To improve conspicuity while travelling at night, a rear facing delineator is attached to the extreme end of the dolly drawbar and a warning light is attached to the rear of the combination vehicle which has contact with the road.
 - 4.1 A delineator is a rigid piece of material at least 300mm by 300mm in size that is coated with yellow retro-reflective material.
 - 4.2 A warning light is a yellow rotating light that flashes between 120 and 200 times a minute and has a power of at least 55 watts or amber warning light complying requirements of UN R 65 may be used.
5. Converter dolly shall be provided with ABS / EBS braking systems. After coupling of converter dolly with a semi-trailer, it becomes a full trailer. GCW of such full trailer shall be considered for braking performance test (combination of converter dolly and semi-trailer) as per IS 11852 as amended from time to time. Electrical braking systems conforming to the requirements of Annex N of IS 11852: 2013 may be permitted.

Annexure 11

List of already notified provisions under CMVR and /or AIS-113 applicable for Road Train(s)

Requirements given below (including latest revision / amendments) needs to be verified for Road Train approval in combination with Annexure 9 and 10 inserted through this amendment 6. In case of requirements in addition to requirements given below are stipulated / notified in CMVR for the purpose of road train, same shall also be complied with.

Sr. No.	Provision / requirement	Truck or Road Tractor or Tractor of category N3	Trailer or Semi-trailer T4 or T3
1.	Permissible sound level	IS 3028 under CMV Rule 120	Not applicable
2.	Liquid fuel tanks	AIS-095 and IS 15547	Not applicable
3.	Rear Underrun Protective Devices (RUPDs) and their installation; rear underrun protection (RUP)	Exempted for road train, when in combination.	IS 14812
4.	Space for mounting and fixing rear registration plates	CMV Rule 50	CMV Rule 50
5.	Steering equipment ^{2/}	CMV Rule 98 IS 11948	Not applicable
6.	Audible warning devices and signals	IS 1884	Not applicable
7.	Devices for indirect vision and their installation ^{1/}	AIS-001 (Part 1) (Rev. 1) and AIS-002(Part 1) (Rev. 1)	Rear camera for rear vision shall be provided.
8.	Braking of vehicles and trailers ^{1/}	Rule 96 and ABS compliance as per IS 11852	Clauses 7 & 8.1 of AIS-113, Rule 96 and trailer Brakes as per IS 11852:2013.
9.	Electromagnetic compatibility	AIS-004(Part 3)	AIS-004(Part 3) and AIS-113
10.	Protection of motor vehicles against unauthorised use	AIS-075	Not applicable
11.	Seats, their anchorages and any head restraints	AIS-023	Not applicable
12.	Manoeuvrability ^{1/}	IS 12222	Clause 8.3.1 of AIS-113 (TCCD 28m)
13.	Speedometer equipment including its installation	IS : 11827	Not applicable
14.	Manufacturer's statutory plate and VIN	AIS-065	ANNEXURE 7 of AIS-113
15.	Safety-belt anchorages	Rule 125	Not applicable
16.	Installation of lighting and light-signaling devices on vehicles	AIS-008(Rev. 1)	Clause 5.3 of AIS-113
17.	Retro-reflecting marking for power-driven vehicles and their trailers	AIS-090	Clause 8.2.3. of AIS-113
18.	Front and rear position lamps, stop-lamps and end-outline marker lamps	AIS-012 (Part 6) (Rev.1)	AIS-012 (Part 6) (Rev.1)

Sr. No.	Subject	Truck or Road Tractor or Tractor of category N3	Trailer or Semi-trailer T4 or T3
19.	Daytime running lamps for power-driven vehicles, if provided.	AIS-012 (Part 10) (Rev. 1)	Not applicable
20.	Side-marker lamps for motor vehicles and their trailers	AIS-012 (Part 9) (Rev.1)	Annexure 6 of AIS-113
21.	Direction indicators for power- driven vehicles and their trailers	AIS-012 (Part 5) (Rev.1)	Annexure 6 of AIS-113
22.	Illumination of rear-registration plates of power-driven vehicles and their trailers	AIS-012 (Part 4) (Rev.1)	Annexure 6 of AIS-113
23.	Filament lamps for use in approved lamp units of power- driven vehicles and their trailers	AIS-034 (Part 1) (Rev. 1)	AIS-034 (Part 1) (Rev. 1)
24.	Motor vehicle headlamps equipped with gas-discharge light sources	AIS-010 (Part 2) (Rev. 1)	Not applicable
25.	Motor vehicle headlamps equipped with gas-discharge light sources	AIS-010 (Part 4) (Rev. 1)	Not applicable
26.	Adaptive front-lighting systems (AFS), if provided.	AIS-127	Not applicable
27.	Power-driven vehicle front fog lamps, if provided.	AIS-012 (Part 1) (Rev. 1)	Not applicable
28.	Rear fog lamps for power-driven vehicles and their trailers	AIS-012 (Part 2) (Rev. 1)	AIS-012 (Part 2) (Rev. 1)
29.	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	AIS-034 (Part 2) (Rev. 1)	Not applicable
30.	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	AIS-010 (Part 1) (Rev. 1)	Not applicable
31.	Reversing lights for power-driven vehicles and their trailers	AIS-012 (Part 7) (Rev. 1)	Annexure 6 of AIS-113
32.	Parking lamps for power-driven vehicles	AIS-012 (Part 8) (Rev. 1)	Annexure 6 of AIS-113
33.	Safety-belts	Rule 125 for Safety belt.	Not applicable
34.	Location and identification of hand controls, tell-tales and indicators	AIS-071 (Part 1 & 2)	Not applicable
35.	Windscreen wiper and washer systems	IS:15802	Not applicable
36.	Emissions (BS VI) requirements	AIS-137 (Part 4)	Not applicable
37.	Gradeability of road-train ²	AIS-003	AIS-003
38.	Lateral protection devices	IS 14682	Clause 4.5 of AIS-113
39.	Spray suppression systems	AIS-013 (Rev. 1)	Clause 4.6 of AIS-113 and AIS-013 (Rev. 1)

Sr. No.	Subject	Truck or Road Tractor or Tractor of category N3	Trailer or Semi-trailer T4 or T3
40.	Safety glazing	CMV Rule 100 and IS 2553(Part 2)	Not applicable
41.	Installation of tyres	AIS-051	AIS-051
42.	Pneumatic tyres for commercial vehicles and their trailers	IS 15636	IS 15636
43.	Speed limitation of vehicles	AIS-018	Not applicable
44.	Masses and dimensions	SO 3467(E) with SO 3881(E) for axle load Dimensions: Rule 93	SO 3467(E) with SO 3881(E) for axle load Dimensions : Rule 93
45.	External projections forward of the cab's rear panel	CMV Rule 124(1), Table Sr. 11 IS : 13942	IS : 13942
46.	Mechanical coupling components of combinations of vehicles and interchangeability ^{1/}	AIS-091 (Part 1)	9.1 of AIS-113, AIS-091 (Part 1)
47.	Close-coupling device (CCD); fitting of an approved type of CCD ^{1/}	AIS-092, If fitted	AIS-092, If fitted
48.	Front underrun protective devices (FUPDs)	AIS-069	Not applicable
49.	Hydrogen system	AIS-157	Not applicable
50.	Electric safety	AIS-038(Rev.1)	Not applicable
51.	Brake Palm (Pneumatic) couplings		7.7 of AIS-113
52.	Electrical Coupling		5.4 of AIS-113
53.	Landing Gears	Not applicable	9.4 of AIS-113
54.	Wheel Rims	9.11 of AIS-113	9.11 of AIS-113
55.	Type approval of Trailers	Not applicable	11. of AIS-113
56.	Specifications on Technical information to be submitted by the manufacturer	AIS-007 (Rev. 5) requirements for N3 and Annexure 13 in this amendment 6 to AIS-113.	Annexures 5 and Annexure 14 in this amendment 6 to AIS-113.
57.	Vehicle Stability Function ^{1/}	AIS-150	AIS-150

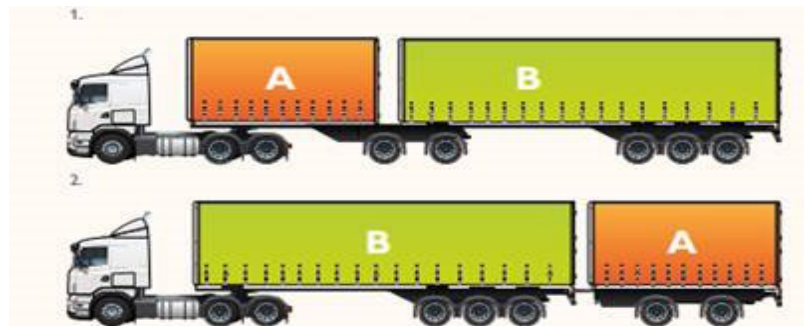
^{1/} These tests / verification are carried out in complete combination i.e. Truck/Tractor with all trailers.

^{2/} These tests are carried out in combination (i.e. Truck/Tractor and single trailer) with GCW of Road Train.

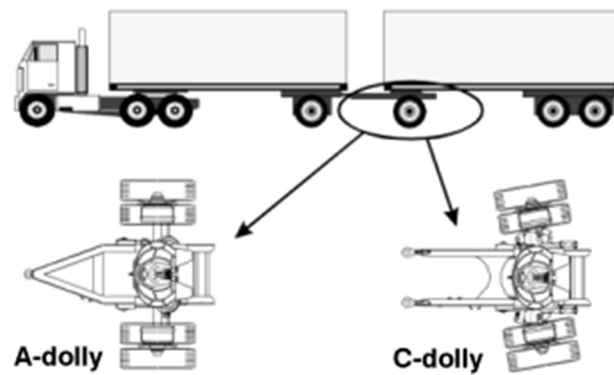
Annexure 12

Schematics and pictures of Road Train(s) only for informative purpose

Road train combination



Converter dolly



Annexure 13

(TO BE SUBMITTED BY THE VEHICLE MANUFACTURER / BODY BUILDER TO THE TEST AGENCY)		
TECHNICAL INFORMATION ON ROAD TRACTOR USED IN ROAD TRAIN		
1.0	Details of Road Tractor Manufacturer	
1.1	Name & address of the vehicle manufacturer	
1.2	Telephone No.	
1.3	Fax. No.	
1.4	E-mail address	
1.5	Contact person	
1.6	Plant(s) of manufacture	
1.7	Type and General commercial description (s)	
2.0	Vehicle type	
2.1	Type of vehicle (rigid truck for road train / road tractor for road train)	
2.2	Usage (goods / tractor / others)	
2.3	Control (forward / semi-forward / normal / others)	
2.4	Drive (4x2 / 4x4 / 6x4 / others)	
2.5	Cab type (fully built sleeper cab/ fully built non-sleeper cab)	
2.6	Load body, type and drawing	
3.0	Category of vehicle	
3.1	As per AIS-053 / IS 14272 as amended from time to time	
4.0	Engine details	
4.1	Make	
4.2	Model	
4.3	Type	
4.4	Bore x stroke (mm)	
4.5	No. of cylinders	
4.6	Displacement	
4.7	Compression ratio	
4.8	Max. Engine output (kW @ rpm)	
4.9	Max. Torque (Nm @ rpm)	
4.10	Air cleaner type	
4.11	Type of Fuel	

5.0	Power to weight ratio (minimum 3.5 kW/t)	
6.0	Clutch	
6.1	Type	
7.0	Gear box	
7.1	Make model	
7.2	Type	
7.3	No. of gears	
7.4	Gear Ratios	
	1 st	
	2 nd	
	3 rd	
	4 th	
	5 th	
	6 th	
	Reverse	
	Drive Axle (Front / Rear / All)	
	Front axle ratio	
	Rear axle ratio	
8.0	Road tractor Suspension	
8.1	Front axle Type / Description	
8.2	Rear axle Type / Description	
9.0	Brake	
9.1	Make	
9.2	Type (Mechanical/hydraulic/air/air assisted/vacuum assisted/others)	
9.3	Schematic layout indicating method of split of brake system, location of valves, reservoirs, ABS components etc. (Attach drawing and indicate the drawing number)	
10.0	Make of ABS / EBS on Road Tractor	
10.1	Category of ABS / EBS	
10.2	Nos. of directly controlled wheel(s)	
10.3	No. of sensors	
10.4	Make of sensors	

10.5	Type of sensors	
10.6	Modulator	
10.7	Nos. of Modulators	
10.8	Make of Modulators	
10.9	Identification No. / Part No. of Modulator	
11.0	Vehicle Stability Function as per AIS:150	
11.1	Make and Country of manufacturer(if imported)	
11.2	Vehicle stability function information document	
11.3	System	
11.4	System variants	
11.5	System options	
11.6	Control function (directional/roll-over/both) including an explanation of the basic function and/or philosophy of the control	
11.7	System configurations (where appropriate)	
11.8	System identification including software level identifier	
12.0	Vehicle Dimensions (Specify drawing reference)	
12.1	Road tractor Length (mm)	
12.2	Length with road train combination (mm)	
12.3	Road tractor Width (mm)	
12.4	Height (Unladen) (mm)	
12.5	Road tractor height (mm)	
12.6	Road tractor Wheel base (mm)	
12.7	Minimum axle spacing, (mm) (for articulated/combination vehicles)	
12.8	Road tractor Wheel track (mm)	
12.8.1	Front	
12.8.2	Rear	
12.8.3	Other axles (for articulated/combination vehicles)	
12.9	Road tractor Body overhang (mm)	
12.9.1	Front end	
12.9.2	Rear end	

13.0	Weights	
13.1	Unladen weight	
13.1.1	Front axle	
13.1.2	Rear axle	
13.1.3	Total	
13.2	Road tractor Gross vehicle weight (kg)	
13.3	Road tractor Maximum permissible axle weights (kg)	
13.3.1	Front axle	
13.3.2	Rear axle	
13.4	Gross combination weight (Road tractor + convertor dolly + semi –trailer) (kg)	
13.4.1	Road tractor Front axle	
13.4.2	Road tractor Rear axle 1	
13.4.3	Road tractor Rear axle 2 (if applicable)	
13.4.4	Convertor dolly	
13.4.5	Trailer rear axle 1	
13.4.6	Trailer rear axle 2 / (tandem axle)	
13.4.7	Trailer rear axle 3 / (tridem axle)	
13.4.8	Total GCW of combination	
14.0	Road Tractor Wheels and tyres	
14.1	Wheel rim make	
14.2	Wheel rim size	
14.3	Tyre make	
14.4	Tyre size designation including ply rating	
14.5	Speed index	
14.6	Load index / Load rating	
14,7	Tyre Type (Radial / Cross / Tube / Tubeless)	
14,8	Laden Tyre pressure (front) (kg/cm ²)	
14,9	Laden Tyre pressure (Rear) (kg/cm ²)	
15.0	Road tractor Seating capacity	
15.1	Maximum (including driver) for completely built vehicles	
15.2	Sketch showing layout of seats with appropriate dimensions of seats & their location on the vehicle platform	

16.0	Road tractor Maximum Stable inclination	
16.1	Left	
16.2	Right	
17.0	Rear Under run Protective device (RUPD) (Applicable when not plying in combination)	
17.1	Height of lower edge of the device from the ground (mm)	
17.2	Width of the device (mm)	
17.3	Drawing of the rear under-run protective device with dimensions.	
17.4	Material (Metal/Fibre/etc.)	
18.0	Lateral Protection (Side Guards)	
18.1	Height of the lower edge of the Side Guard.	
18.2	Drawing of the lateral protection device fitted on the vehicle with dimensions	
18.3	Material (Metal/Fiber/etc.)	
19.0	Road tractor Spray Suppression System	
19.1	Make, Country of origin (If imported)	
19.2	Type (Water separator / Pulveriser)	
19.3	Identification No. / Part No.	
19.4	Size	
19.5	Drawing / Photographs showing the mounting details with dimensions	
20.0	Road tractor Towing devices (Compliance to AIS-091 (Part 1))	
20.1	Type	
20.2	Name of manufacturer	
20.3	Capacity	
21.0	Electrical Circuit	
21.1	Circuit Diagram (attach details):	
22.0	Electrical Palm couplings	
22.1	Name of producer :	
22.2	Type of coupling :	
23.0	Brake Palm couplings	

23.1	Name of producer :	
23.2	Type of coupling :	
24.0	Fuse	
24.1	Type & Make	
24.2	Name of producer	
25.0	Master switch for electrical	
25.1	Type & Make	
25.2	Name of producer	

ANNEXURE – 14

DETAILED TECHNICAL INFORMATION ON COMBINATION OF TRAILERS USED IN ROAD TRAIN TO BE SUBMITTED BY TRAILER MANUFACTURER TO TESTING AGENCY

1.0	Details of combination of Trailers used in Road Train manufacturer	
1.1	Name & address of the Trailer manufacturer	
1.2	Telephone No.	
1.3	Fax. No.	
1.4	E-mail address	
1.5	Contact person	
1.6	Plant(s)of manufacture	
1.7	Type and Brief Description of combination of Trailers in Road Train (For Example: Road tractor: Tractor with fifth wheel coupling + Trailer 1: Semi trailer with fifth wheel coupling Pin at front & with Draw bar coupling at Rear + Trailer 2: Full trailer or Road tractor: Tractor with fifth wheel coupling + Trailer 1: Semi trailer with fifth wheel coupling Pin at front & with Draw bar coupling at Rear + Converter Dolly + Trailer 2: Semi trailer with fifth wheel coupling Pin at front or Road tractor: Rigid Truck with Draw bar coupling + Trailer 1: Full Trailer with Draw bar coupling at Rear + Converter Dolly + Trailer 2: Semi trailer with fifth wheel coupling Pin at front, etc.) with drawings	
2.0	Trailer 1 Details	
2.1	Trailer Dimensions, mm	
2.1.1	Length	

2.1.1.1	With draw bar (for independent trailer)	
2.1.1.2	Without draw bar (for independent trailer)	
2.1.1.3	Length (in case of semi-trailer)	
2.1.2	Distance between kingpin and rear end (Max. length)	
2.1.3	Height at front end (unladen condition), mm	
2.1.3.1	Height of floor from ground at rear	
2.1.3.2	Overall Height at rear	
2.1.3.3.	Height of draw bar (hinge point on trailer)	
2.1.4	Width, mm	
2.1.5	Wheel Track, mm	
2.1.5.1	Front (in case of draw bar trailer)	
2.1.5.2	Rear	
2.1.6	Body overhang, mm	
2.1.6.1	Front (from fifth wheel in case of semi-trailer)	
2.1.6.2	Rear (from the rearmost axle)	
2.1.7	Wheelbase (from fifth wheel king pin in case of semi-trailer)	
2.1.8	Center of gravity (height of CG from ground & distance from one end) Laden/Unladen, If applicable	
2.1.9	Dimensional drawing No.	
2.2	Height of fifth wheel coupling (king pin) from ground (laden/unladen tractor), mm	
2.3	Axles	
2.3.1	No. of Axles	
2.3.2	First axle	
2.3.2.1	Type	
2.3.3	Second axle	
2.3.3.1	Type	

2.3.4	Third axle				
2.3.4.1	Type				
2.3.5	Axle spacing (provide drawing)				
2.4	Trailer Weights				
2.4.1	Unladen weight of the trailer				
2.4.2	Total unladen vehicle weight (TUVW)	TUVW	Front axle/Kingpin weight	Rear axle(s) weight	FAW / RAW
2.4.3	Gross Vehicle Laden Weight (GLW)	GLW	Max. Permissible FAW/Kingpin weight	Max. Permissible RAW	
2.4.4	Payload details				
2.5	Tyres				
2.5.1	No. and arrangement of wheels				
2.5.1.1	1st axle				
2.5.1.2	2nd axle				
2.5.1.3	3rd axle				
2.5.1.4	Others				
2.5.2	Tyre type (Radial/cross ply), size & ply rating				
2.5.3	Rolling radius, mm				
2.5.3.1	Static				
2.5.3.2	Dynamic (if data is available)				
2.5.4	Inflation pressure –				

	Unladen in kg/cm ² / kPa	
2.5.4.1	1st axle	
2.5.4.2	2nd axle	
2.5.4.3	3rd axle	
2.5.4.4	Others	
2.5.5	Other axle(s) Inflation pressureLaden in kg/cm ² /kPa	
2.5.5.1	1st axle	
2.5..5.2	2nd axle	
2.5.5.3	3rd axle	
2.5.5.4	Others	
2.5.6	Make	
2.5.7	Tread Wear Indicator, Provided (Yes/No)	
2.5.8	Month & Year code of manufacture, Provided (Yes/No)	
2.5.9	Maximum loading capacity, Provided (Yes/No)	
2.6	Suspension	
2.6.1	Type and description (Leaf / Air / Semi-pneumatic / Hydraulic)	
2.6.1.1	Front	
2.6.1.2	Rear	
2.6.2	Make	

2.6.2.1	Front		
2.6.2.2	Rear		
2.6.3	Type of spring		
2.6.4	If leaf spring		
2.6.4.1	Main spring		
2.6.4.1.1	Stack height		
2.6.4.1.2	Width at the center point / stack point		
2.6.4.1.3	Thickness at the center point/stack point		
2.6.4.1.4	Flat length		
2.6.4.1.5	Free camber		
		Left	Right
2.6.4.1.6	No. of leaves		
2.6.4.1.7	No. of spacers		
2.6.4.2	Auxiliary Spring		
2.6.4.2.1	Stack height		
2.6.4.2.2	Width at the center point/stack point		
2.6.4.2.3	Thickness at the center point/stack point		
2.6.4.2.4	Flat length		
2.6.4.2.5	Free camber		
		Left	Right
2.6.4.2.6	No. of leaves		

2.6.4.2.7	No. of spacers		
2.6.5	If air suspension or semi pneumatic		
2.6.5.1	Ride height		
2.6.5.2	Suspension stroke		
2.6.5.3	Size of the air bellows		
2.6.5.4	Make of air bellows		
2.6.5.5	Type of Height control valve		
2.6.5.6	Make of height control valve		
2.6.6	If Hydraulic suspension		
2.6.6.1	Size of cylinder		
2.6.6.2	Ride height of suspension		
2.6.6.3	Suspension stroke		
2.6.7	Suspension-Shock absorber		
2.6.7.1	Type and Number		
2.6.7.1.1	Front		
2.6.7.1.2	Rear		
2.6.8	Suspension configuration- Single/Tandem/Tridem		
2.6.9	Any load equalizing device provided		
2.7	Rear Under run Protective device		
2.7.1	Height of lower edge of the device from the ground, (mm)		
2.7.2	Width of the device (mm)		

2.7.3	Drawing of the rear under-run protective device with dimensions. (Including part drawing)	
2.7.4	Material (Metal/Fiber/etc.)	
2.8	Lateral Protection (Side Guards)	
2.8.1	Height of the lower edge of the Side Guard.	
2.8.2	Drawing of the lateral protection device fitted on the vehicle with dimensions	
2.8.3	Material (Metal/Fiber/etc.)	
2.9	Chassis Frame	
2.9.1	Type	
2.9.2	Drawing with dimensions	
2.9.3	Type of platform	
2.10	Brakes	
2.10.1	Type and Brief Description	
2.10.2	Service brakes	
2.10.2.1	Name of producer	
2.10.2.2	Type (Mechanical/hydraulic/air assisted/ vacuum assisted/others)	
2.10.2.3	Control system & braking wheel	
2.10.2.4	Schematic layout indicating method of split of brake system, location of valves, reservoirs etc.	
2.10.3	Anti-Lock braking system Provided (Yes/No)	
2.10.3.1	If yes, details	
2.10.3.2	ABS make	
2.10.4	Electronic Control Unit (ECU)	

2.10.4.1	Make	
2.10.4.2	Identification mark	
2.10.5	Wheel Speed Sensor	
2.10.5.1	Make	
2.10.5.2	Identification mark	
2.10.5.3	No. of sensors used	
2.10.6	Hydraulic Modulator	
2.10.6.1	Make	
2.10.6.2	Identification mark	
2.10.7	Solenoid Valve	
2.10.7.1	Make	
2.10.7.2	Identification mark	
2.10.7.3	Max. designed pressure, kg/cm ²	
2.10.7.4	Max. working pressure, kg/cm ²	
2.10.8	Safety lamp provided (Yes/No)	
2.10.9	Schematic layout of the ABS system	
2.10.10	If ASR is used, give details	
2.10.11	Brake lining (or) Pad	
2.10.11.1	Nominal Dimensions, (mm) (Length x Width x thickness)	
2.10.11.1.1	Front wheel	
2.10.11.1.2	Rear wheel	
2.10.11.1.3	Others (in case of Tandem axle, give axle wise data)	
2.10.11.2	Effective area per axle (cm ²)	
2.10.11.2.1	Front axle	
2.10.11.2.2	Rear axle	
2.10.11.2.3	Others (in case of Tandem axle, give axle wise data)	

2.10.11.3	Material	
2.10.11.4	Make and Designation	
2.10.11.4.1	Front wheel / axle	
1.10.11.4.2	Rear wheel / axle	
2.10.11.4.3	Others (In case of Tandem axle provide data for each axle)	
2.10.11.5	Whether asbestos or asbestosfree?	
2.10.12	Brake drum or disc	
2.10.12.1	Effective diameter, mm	
2.10.12.1.1	Front wheel	
2.10.12.1.2	Rear wheel	
2.10.12.1.3	Others (in case of tandem axle or articulated trailers)	
2.10.12.2	Material (if the braking surface is non ferrous)	
2.10.12.2.1	Front	
2.10.12.2.2	Rear	
2.10.12.2.3	Others	
2.10.13	Master cylinder or brake valve	
2.10.13.1	Make	
2.10.13.2	Type	
2.10.13.3	Inner diameter of the master cylinder, mm	
2.10.13.4	Operating stroke mm	
2.10.14	Type of supply tank	
2.10.15	Wheel cylinder diameter, mm	
2.10.15.1	Front	
2.10.15.2	Rear	
2.10.15.3	Others	

2.10.16	Wheel cylinder type (single acting/double acting)			
2.10.16.1	Front			
2.10.16.2	Rear			
2.10.16.3	Others			
2.10.17	Booster			
2.10.17.1	Name of producer			
2.10.17.2	Type			
2.10.17.3	Boost ratio			
2.10.17.4	Size of the booster, mm (diameter)			
2.10.17.5	Vacuum or air assistance			
2.10.17.6	Pressure kg/cm ²			
2.10.17.6.1	Nominal (P2 as per IS 11852: 2001)			
2.10.17.6.2	Cut in			
2.10.17.6.3	Cut out			
2.10.18	Type of vacuum pump or air compressor			
2.10.19	Type of pressure regulator			
2.10.20	No. of tanks			
2.10.20.1	Tank Capacity, lit.	Description	Capacity	
2.10.20.1.1	Tank 1			
2.10.20.1.2	Tank 2			
2.10.20.1.3	Tank 3			
2.10.20.1.4	Tank 4			
2.10.21	Brake Chamber	Front	Rear	Parking
2.10.21.1	Make and type			
2.10.21.2	Size, mm			
2.10.21.3	Internal diameter, mm			
2.10.21.4	Stroke, mm			

2.10.22	Slack adjuster – Manual/Automatic	
2.10.22.1	Make	
2.10.22.2	Lever length in mm	
2.10.22.3	Load sensing valve	
2.10.22.3.1	Make	
2.10.22.3.2	Model No.	
2.10.22.4	Set pressure, unladen in kg/cm ²	
2.11	Safety Critical Components	
2.11.1	Wheel rim	
2.11.1.1	Size	
2.11.1.1.1	1st axle	
2.11.1.1.2	2nd axle	
2.11.1.1.3	3rd axle	
2.11.1.1.4	Other axle(s)	
2.11.1.2	Name of manufacturer	
2.11.1.3	Identification mark	
2.11.1.4	Pitch circle diameter of mounting bolts, mm	
2.11.1.5	Number of mounting bolts	
2.11.1.6	Material (Steel/Aluminum alloy etc.)	
2.11.2	Wheel nut, Wheel cap and Hub cap	
2.11.2.1	Wheel Nut	
2.11.2.1.1	Name of manufacturer	
2.11.2.1.2	Size	
2.11.2.1.3	No. of nuts Per wheel	
2.11.2.1.4	Tightening torque	
2.11.2.2	Wheel cap / wheel disc	

2.11.2.2.1	Name of manufacturer	
2.11.2.2.2	Size	
2.11.2.2.3	Material (Plastic / Metal)	
2.11.2.2.4	Method of fitment (Press/bolted/others)	
2.11.2.3	Hub cap	
2.11.2.3.1	Name of manufacturer	
2.11.2.3.2	Size	
2.11.2.3.3	Method of fitment (Press/bolted/others)	
2.11. 3	Fifth wheel coupling	
2.11. 3.1	Size	
2.11. 3.2	Drawings with dimensions	
2.11. 3.3	Compliance to IS 15101 (Yes/ No)	
2.11. 4	Fifth wheel king pin	
2.11. 4.1	Size	
2.11. 4.2	Drawings with dimensions	
2.11. 4.3	Compliance to IS : 6763 (Yes/ No)	
2.11. 5	Draw bar and Draw bar coupling	
2.11. 5.1	Size	
2.11. 5.2	Drawings with dimensions	
2.11. 5.3	Compliance to IS : 13284 (Yes/ No)	
2.11. 6	Landing gear	
2.11. 6.1	Size	
2.11. 6.2	Drawings with dimensions	

2.11. 6.3	Compliance to IS 10752 (Yes/ No)	
2.11. 7	Tow hook	
2.11. 7.1	Size	
2.11. 7.2	Drawings with dimensions	
2.11. 7.3	Compliance to AIS-091, (Part 1) (Yes/ No)	
2.11. 8	Towing jaw	
2.11. 8.1	Size	
2.11. 8.2	Drawings with dimensions	
2.11. 8.3	Compliance to AIS-091(Part 1) (Yes/ No)	
2.11. 9	Draw bar eye	
2.11. 9.1	Size	
2.11. 9.2	Drawings with dimensions	
2.11. 9.3	Compliance to IS :12807 (Yes/ No)	
2.11. 10	Turn table	
2.11. 10.1	Size	
2.11. 10.2	Drawings with dimensions	
2.11. 10.3	Compliance to IS :13544 (Yes/ No)	
2.11. 11	Towing devices, if any	
2.11. 11.1	Type	
2.11. 11.2	Name of manufacturer	
2.11. 11.3	Capacity	
2.11. 12	Coupling devices, if any	

2.11. 12.1	Name of the manufacturer	
2.11. 12.2	Identification mark	
2.11. 12.3	Type of coupling device for mechanical	
2.11. 12.4	Type of coupling device for electrical	
2.11. 12.5	Type of coupling device for brake	
2.11.13	Any other Accessories provided	
2.11.13.1	Compliance to any Standard	
2.12	Electrical items	
2.12.1	Rear Fog Lamp :	
2.12.1.1	Make and Country of origin (if imported)	
2.12.1.2	Type of lens (Glass / Plastic)	
2.12.1.3	Identification No. / Part No.	
2.12.1.4	Number and Colour of Lens	
2.12.2	Registration Plate lamp :	
2.12.2.1	Make and Country of origin (if imported)	
2.12.2.2	Type of lens (Glass / Plastic)	
2.12.2.3	Identification No. / Part No.	
2.12.2.4	Number and colour of Lens	
2.12.3	Rear Position Lamp	
2.12.3.1	Make and Country of origin (if imported)	
2.12.3.2	Type of lens (Glass / Plastic)	
2.12.3.3	Identification No. / Part No.	
2.12.3.4	Number and colour of Lens	
2.12.4	Rear Parking Lamp	
2.12.4.1	Make and Country of origin (if imported)	

2.12.4.2	Type of lens (Glass / Plastic)	
2.12.4.3	Identification No. / Part No.	
2.12.4.4	Number and colour of Lens	
2.12.5	Stop lamp (S1 / S2)	
2.12.5.1	Make and Country of origin (if imported)	
2.12.5.2	Type of lens (Glass / Plastic)	
2.12.5.3	Identification No. / Part No.	
2.12.5.4	Number and colour of Lens	
2.12.7	Reversing lamp :	
2.12.7.1	Make and Country of origin (if imported)	
2.12.7.2	Type of lens (Glass / Plastic)	
2.12.7.3	Identification No. / Part No.	
2.12.7.4	Number and colour of Lens	
2.12.8	Direction indicator Lamp :	
2.12.8.1	Rear	
2.12.8.1.1	Make and Country of origin (if imported)	
2.12.8.1.2	Type of lens (Glass / Plastic)	
2.12.8.1.3	Identification No. / Part No.	
2.12.8.1.4	Number and colour of Lens	
2.12.8.2	Side	
2.12.8.2.1	Make and Country of origin (if imported)	
2.12.8.2.2	Type of lens (Glass / Plastic)	
2.12.8.2.3	Identification No. / Part No.	
2.12.8.2.4	Number and colour of Lens	

2.12.8.3	Type of flasher	
2.12.9	Hazard warning signal :	
2.12.9.1	Rear	
2.12.9.1.1	Make and Country of origin (if imported)	
2.12.9.1.2	Type of lens (Glass / Plastic)	
2.12.9.1.3	Identification No. / Part No.	
2.12.9.1.4	Number and colour of Lens	
2.12.9.2	Side	
2.12.9.2.1	Make and Country of origin (if imported)	
2.12.9.2.2	Type of lens (Glass / Plastic)	
2.12.9.2.3	Identification No. / Part No.	
2.12.9.2.4	Number and colour of Lens	
2.12.10	Reflector :	
2.12.10.1	Rear	
2.12.10.1.1	Make and Country of origin (if imported)	
2.12.10.1.2	Type	
2.12.10.1.3	Identification No. / Part No.	
2.12.10.1.4	Number and colour of Lens	
2.12.10.1.5	Area	
2.12.10.1.6	Shape	
2.12.10.2	Side	
2.12.10.2.1	Make and Country of origin (if imported)	
2.12.10.2.2	Type	
2.12.10.2.3	Identification No. / Part No.	
2.12.10.2.4	Number and colour of Lens	
2.12.10.2.5	Area	

2.12.10.2.6	Shape	
2.12.11	End – outline marker lamp (Top light)	
2.12.11.1	Rear	
2.12.11.1.1	Make and Country of origin (if imported)	
2.12.11.1.2	Type of lens (Glass / Plastic)	
2.12.11.1.3	Identification No. / Part No.	
2.12.11.1.4	Number and colour of Lens	
2.12.12	Diagram of vehicle indicating location, reference axis, mark of apparent surface, contour of vehicle parts limiting geometric visibility of all lights and light signaling devices, location of extreme outer edges and longitudinal median plane of vehicle including following dimensions in mm.	
2.12.13	Along width of vehicle-horizontal distance between inner illuminating surfaces, distance between inner illuminating surfaces and outer most part of vehicle and distance between nearest point of illuminating surfaces of indicators and dipped- beam head lamp	
2.12.14	Along length of vehicle (where applicable)-distance between the transverse plane corresponding to the longitudinal rearmost extremity to center of reference of rear indicators	
2.12.15	Heights of highest and lowest point of illuminating surfaces	
2.12.16	Automotive bulbs :	
2.12.16.1	Parking Lamp bulb – Rear	
2.12.16.1.1	Make and Country of origin (if imported)	
2.12.16.1.2	Designation as per AIS-034	
2.12.16.2	Direction indicator lamp bulb -rear	
2.12.16.2.1	Make and Country of origin (if imported)	
2.12.16.2.2	Designation as per AIS-034	
2.12.16.3	Direction indicator lamp bulb -side	

2.12.16.3.1	Make and Country of origin (if imported)	
2.12.16.3.2	Designation as per AIS-034	
2.12.16.4	Rear Position Lamp (tail lamp)Bulb	
2.12.16.4.1	Make and Country of origin (if imported)	
2.12.16.4.2	Designation as per AIS-034	
2.12.16.5	Stop lamp bulb	
2.12.16.5.1	Make and Country of origin (if imported)	
2.12.16.5.2	Designation as per AIS-034	
2.12.16.6	Number plate lamp bulb	
2.12.16.6.1	Make and Country of origin (if imported)	
2.12.16.6.2	Designation as per AIS-034	
2.12.16.7	End out Marker bulb	
2.12.16.7.1	Make and Country of origin (if imported)	
2.12.16.7.2	Designation as per AIS-034	
2.12.16.8	Reversing lamp bulb	
2.12.16.8.1	Make and Country of origin (if imported)	
2.12.16.8.2	Designation as per AIS-034	
2.12.16.9	Stop Lamp Bulb (S3)	
2.12.16.9.1	Make and Country of origin (if imported)	
2.12.16.9.2	Designation as per AIS-034	
2.12.16.10	Rear Fog Lamp Bulb	
2.12.16.10.1	Make and Country of origin (if imported)	
2.12.16.10.2	Designation as per AIS-034	
2.12.16.11	Side Marker Lamp Bulb	

2.12.16.11.1	Make and Country of origin (if imported)	
2.12.16.11.2	Designation as per AIS-034	
2.13	Motor Vehicle stability function information document	
2.13.1	Detailed description	
2.13.2	List of Hardware used	
2.13.3	Details of controller	
3.0	Trailer 2 Details	
3.1	Trailer Dimensions, mm	
3.1.1	Length	
3.1.1.1	With draw bar (for independent trailer)	
3.1.1.2	Without draw bar (for independent trailer)	
3.1.1.3	Length (in case of semi-trailer)	
3.1.2	Distance between kingpin and rear end (Max. length)	
3.1.3	Height at front end (unladen condition), mm	
3.1.3.1	Height of floor from ground at rear	
3.1.3.2	Overall Height at rear	
3.1.3.3.	Height of draw bar (hinge point on trailer)	
3.1.4	Width, mm	
3.1.5	Wheel Track, mm	
3.1.5.1	Front (in case of draw bar trailer)	
3.1.5.2	Rear	
3.1.6	Body overhang, mm	
3.1.6.1	Front (from fifth wheel in case of semi-trailer)	
3.1.6.2	Rear (from the rearmost axle)	
3.1.7	Wheelbase (from fifth wheel king pin in case of semi-trailer)	

3.1.8	Center of gravity (height of CG from ground & distance from one end) Laden/Unladen, If applicable				
3.1.9	Dimensional drawing No.				
3.2	Height of fifth wheel coupling (king pin) from ground (laden/unladen tractor), mm				
3.3	Axles				
3.3.1	No. of Axles				
3.3.2	First axle				
2.4.2.1	Type				
2.4.3	Second axle				
2.4.3.1	Type				
2.4.4	Third axle				
2.4.4.1	Type				
2.4.5	Axle spacing (provide drawing)				
3.4	Trailer Weights				
3.4.1	Unladen weight of the trailer				
3.4.2	Total unladen vehicle weight (TUVW)	TUVW	Front axle/Kingpin weight	Rear axle(s) weight	FAW / RAW
3.4.3	Gross Vehicle Laden Weight (GLW)	GLW	Max. Permissible FAW/Kingpin weight	Max. Permissible RAW	
3.4.4	Payload details				
3.5	Tyres				
3.5.1	No. and arrangement of wheels				
3.5.1.1	1st axle				

3.5.1.2	2nd axle	
3.5.1.3	3rd axle	
3.5.1.4	Others	
3.5.2	Tyre type (Radial/cross ply), size & ply rating	
3.5.3	Rolling radius, mm	
3.5.3.1	Static	
3.5.3.2	Dynamic (if data is available)	
3.5.4	Inflation pressure – Unladen in kg/cm ² / kPa	
3.5.4.1	1st axle	
3.5.4.2	2nd axle	
3.5.4.3	3rd axle	
3.5.4.4	Others	
3.5.5	Other axle(s) Inflation pressure Laden in kg/cm ² /kPa	
3.5.5.1	1st axle	
3.5.5.2	2nd axle	
3.5.5.3	3rd axle	
3.5.5.4	Others	
3.5.6	Make	
3.5.7	Tread Wear Indicator, Provided (Yes/No)	

3.5.8	Month & Year code of manufacture, Provided (Yes/No)		
3.5.9	Maximum loading capacity, Provided (Yes/No)		
3.6	Suspension		
3.6.1	Type and description (Leaf / Air / Semi-pneumatic / Hydraulic)		
3.6.1.1	Front		
3.6.1.2	Rear		
3.6.2	Make		
3.6.2.1	Front		
3.6.2.2	Rear		
3.6.3	Type of spring		
3.6.4	If leaf spring		
3.6.4.1	Main spring		
3.6.4.1.1	Stack height		
3.6.4.1.2	Width at the center point / stack point		
3.6.4.1.3	Thickness at the center point/stack point		
3.6.4.1.4	Flat length		
3.6.4.1.5	Free camber		
		Left	Right
3.6.4.1.6	No. of leaves		

3.6.4.1.7	No. of spacers		
3.6.4.2	Auxiliary Spring		
3.6.4.2.1	Stack height		
3.6.4.2.2	Width at the center point/stack point		
3.6.4.2.3	Thickness at the center point/stack point		
3.6.4.2.4	Flat length		
3.6.4.2.5	Free camber		
		Left	Right
3.6.4.2.6	No. of leaves		
3.6.4.2.7	No. of spacers		
3.6.5	If air suspension or semi pneumatic		
3.6.5.1	Ride height		
3.6.5.2	Suspension stroke		
3.6.5.3	Size of the air bellows		
3.6.5.4	Make of air bellows		
3.6.5.5	Type of Height control valve		
3.6.5.6	Make of height control valve		
3.6.6	If Hydraulic suspension		
3.6.6.1	Size of cylinder		

3.6.6.2	Ride height of suspension	
3.6.6.3	Suspension stroke	
3.6.7	Suspension-Shock absorber	
3.6.7.1	Type and Number	
3.6.7.1.1	Front	
3.6.7.1.2	Rear	
3.6.8	Suspension configuration-Single/Tandem/Tridem	
3.6.9	Any load equalizing device provided	
3.7	Rear Under run Protective device	
3.7.1	Height of lower edge of the device from the ground, (mm)	
3.7.2	Width of the device (mm)	
3.7.3	Drawing of the rear under-run protective device with dimensions. (Including part drawing)	
3.7.4	Material (Metal/Fiber/etc.)	
3.8	Lateral Protection (Side Guards)	
3.8.1	Height of the lower edge of the Side Guard.	
3.8.2	Drawing of the lateral protection device fitted on the vehicle with dimensions	
3.8.3	Material (Metal/Fiber/etc.)	
3.9	Chassis Frame	
3.9.1	Type	
3.9.2	Drawing with dimensions	
3.9.3	Type of platform	
3.10	Brakes	
3.10.1	Type and Brief Description	

3.10.2	Service brakes	
3.10.2.1	Name of producer	
3.10.2.2	Type (Mechanical/hydraulic/air assisted/ vacuum assisted/others)	
3.10.2.3	Control system & braking wheel	
3.10.2.4	Schematic layout indicating method of split of brake system, location of valves, reservoirs etc.	
3.10.3	Anti-Lock braking system Provided (Yes/No)	
3.10.3.1	If yes, details	
3.10.3.2	ABS make	
3.10.4	Electronic Control Unit (ECU)	
3.10.4.1	Make	
3.10.4.2	Identification mark	
3.10.5	Wheel Speed Sensor	
3.10.5.1	Make	
3.10.5.2	Identification mark	
3.10.5.3	No. of sensors used	
3.10.6	Hydraulic Modulator	
3.10.6.1	Make	
3.10.6.2	Identification mark	
3.10.7	Solenoid Valve	
3.10.7.1	Make	
3.10.7.2	Identification mark	
3.10.7.3	Max. designed pressure, kg/cm ²	
3.10.7.4	Max. working pressure, kg/cm ²	
3.10.8	Safety lamp provided (Yes/No)	

3.10.9	Schematic layout of the ABS system	
3.10.10	If ASR is used, give details	
3.10.11	Brake lining (or) Pad	
3.10.11.1	Nominal Dimensions, (mm) (Length x Width x thickness)	
3.10.11.1.1	Front wheel	
3.10.11.1.2	Rear wheel	
3.10.11.1.3	Others (in case of Tandem axle, give axle wise data)	
3.10.11.2	Effective area per axle (cm ²)	
3.10.11.2.1	Front axle	
3.10.11.2.2	Rear axle	
3.10.11.2.3	Others (in case of Tandem axle, give axle wise data)	
3.10.11.3	Material	
3.10.11.4	Make and Designation	
3.10.11.4.1	Front wheel / axle	
3.10.11.4.2	Rear wheel / axle	
3.10.11.4.3	Others (In case of Tandem axle provide data for each axle)	
3.10.11.5	Whether asbestos or asbestosfree?	
3.10.12	Brake drum or disc	
3.10.12.1	Effective diameter, mm	
3.10.12.1.1	Front wheel	
3.10.12.1.2	Rear wheel	
3.10.12.1.3	Others (in case of tandem axle or articulated trailers)	
3.10.12.2	Material (if the braking surface is non ferrous)	
3.10.12.2.1	Front	
3.10.12.2.2	Rear	

3.10.12.2.3	Others	
3.10.13	Master cylinder or brake valve	
3.10.13.1	Make	
3.10.13.2	Type	
3.10.13.3	Inner diameter of the master cylinder, mm	
3.10.13.4	Operating stroke mm	
3.10.14	Type of supply tank	
3.10.15	Wheel cylinder diameter, mm	
3.10.15.1	Front	
3.10.15.2	Rear	
3.10.15.3	Others	
3.10.16	Wheel cylinder type (single acting/double acting)	
3.10.16.1	Front	
3.10.16.2	Rear	
3.10.16.3	Others	
3.10.17	Booster	
3.10.17.1	Name of producer	
3.10.17.2	Type	
3.10.17.3	Boost ratio	
3.10.17.4	Size of the booster, mm (diameter)	
3.10.17.5	Vacuum or air assistance	
3.10.17.6	Pressure kg/cm ²	
3.10.17.6.1	Nominal (P2 as per IS 11852 :2001)	
3.10.17.6.2	Cut in	
3.10.17.6.3	Cut out	
3.10.18	Type of vacuum pump or air compressor	
3.10.19	Type of pressure regulator	

3.10.20	No. of tanks			
3.10.20.1	Tank Capacity, lit.	Description	Capacity	
3.10.20.1.1	Tank 1			
3.10.20.1.2	Tank 2			
3.10.20.1.3	Tank 3			
3.10.20.1.4	Tank 4			
3.10.21	Brake Chamber	Front	Rear	Parking
3.10.21.1	Make and type			
3.10.21.2	Size, mm			
3.10.21.3	Internal diameter, mm			
3.10.21.4	Stroke, mm			
3.10.22	Slack adjuster – Manual/Automatic			
3.10.22.1	Make			
3.10.22.2	Lever length in mm			
3.10.22.3	Load sensing valve			
3.10.22.3.1	Make			
3.10.22.3.2	Model No.			
3.10.22.4	Set pressure, unladen in kg/cm ²			
3.11	Safety Critical Components			
3.11.1	Wheel rim			
3.11.1.1	Size			
3.11.1.1.1	1st axle			
3.11.1.1.2	2nd axle			
3.11.1.1.3	3rd axle			
3.11.1.1.4	Other axle(s)			
3.11.1.2	Name of manufacturer			
3.11.1.3	Identification mark			
3.11.1.4	Pitch circle diameter of mounting bolts, mm			
3.11.1.5	Number of mounting bolts			

3.11.1.6	Material (Steel/Aluminum alloy etc.)	
3.11.2	Wheel nut, Wheel cap and Hub cap	
3.11.2.1	Wheel Nut	
3.11.2.1.1	Name of manufacturer	
3.11.2.1.2	Size	
3.11.2.1.3	No. of nuts Per wheel	
3.11.2.1.4	Tightening torque	
3.11.2.2	Wheel cap / wheel disc	
3.11.2.2.1	Name of manufacturer	
3.11.2.2.2	Size	
3.11.2.2.3	Material (Plastic / Metal)	
3.11.2.2.4	Method of fitment (Press/bolted/others)	
3.11.2.3	Hub cap	
3.11.2.3.1	Name of manufacturer	
3.11.2.3.2	Size	
3.11.2.3.3	Method of fitment (Press/bolted/others)	
3.11. 3	Fifth wheel coupling	
3.11. 3.1	Size	
3.11. 3.2	Drawings with dimensions	
3.11. 3.3	Compliance to IS 15101 (Yes/ No)	
3.11. 4	Fifth wheel king pin	
3.11. 4.1	Size	
3.11. 4.2	Drawings with dimensions	
3.11. 4.3	Compliance to IS : 6763 (Yes / No)	

3.11. 5	Draw bar and Draw bar coupling	
3.11. 5.1	Size	
3.11. 5.2	Drawings with dimensions	
3.11. 5.3	Compliance to IS : 13284 (Yes/ No)	
3.11. 6	Landing gear	
3.11. 6.1	Size	
3.11. 6.2	Drawings with dimensions	
3.11. 6.3	Compliance to IS 10752 (Yes/ No)	
3.11. 7	Tow hook	
3.11. 7.1	Size	
3.11. 7.2	Drawings with dimensions	
3.11. 7.3	Compliance to AIS-091(Part 1) (Yes / No)	
3.11. 8	Towing jaw	
3.11. 8.1	Size	
3.11. 8.2	Drawings with dimensions	
3.11. 8.3	Compliance to AIS-091(Part 1) (Yes/ No)	
3.11. 9	Draw bar eye	
3.11. 9.1	Size	
3.11. 9.2	Drawings with dimensions	

3.11. 9.3	Compliance to IS :12807 (Yes/ No)	
3.11. 10	Turn table	
3.11. 10.1	Size	
3.11. 10.2	Drawings with dimensions	
3.11. 10.3	Compliance to IS :13544 (Yes/ No)	
3.11. 11	Towing devices, if any	
3.11. 11.1	Type	
3.11. 11.2	Name of manufacturer	
3.11. 11.3	Capacity	
3.11. 12	Coupling devices, if any	
3.11. 12.1	Name of the manufacturer	
3.11. 12.2	Identification mark	
3.11. 12.3	Type of coupling device for mechanical	
3.11. 12.4	Type of coupling device for electrical	
3.11. 12.5	Type of coupling device for brake	
3.11.13	Any other Accessories provided	
3.11.13.1	Compliance to any Standard	
3.12	Electrical items	
3.12.1	Rear Fog Lamp :	
3.12.1.1	Make and Country of origin (if imported)	
3.12.1.2	Type of lens (Glass / Plastic)	
3.12.1.3	Identification No. / Part No.	
3.12.1.4	Number and Colour of Lens	
3.12.2	Registration Plate lamp :	
3.12.2.1	Make and Country of origin (if imported)	
3.12.2.2	Type of lens (Glass / Plastic)	
3.12.2.3	Identification No. / Part No.	

3.12.2.4	Number and colour of Lens	
3.12.3	Rear Position Lamp	
3.12.3.1	Make and Country of origin (if imported)	
3.12.3.2	Type of lens (Glass / Plastic)	
3.12.3.3	Identification No. / Part No.	
3.12.3.4	Number and colour of Lens	
3.12.4	Rear Parking Lamp	
3.12.4.1	Make and Country of origin (if imported)	
3.12.4.2	Type of lens (Glass / Plastic)	
3.12.4.3	Identification No. / Part No.	
3.12.4.4	Number and colour of Lens	
3.12.5	Stop lamp (S1 / S2)	
3.12.5.1	Make and Country of origin (if imported)	
3.12.5.2	Type of lens (Glass / Plastic)	
3.12.5.3	Identification No. / Part No.	
3.12.5.4	Number and colour of Lens	
3.12.7	Reversing lamp :	
3.12.7.1	Make and Country of origin (if imported)	
3.12.7.2	Type of lens (Glass / Plastic)	
3.12.7.3	Identification No. / Part No.	
3.12.7.4	Number and colour of Lens	
3.12.8	Direction indicator Lamp :	
3.12.8.1	Rear	
3.12.8.1.1	Make and Country of origin (if imported)	
3.12.8.1.2	Type of lens (Glass / Plastic)	

3.12.8.1.3	Identification No. / Part No.	
3.12.8.1.4	Number and colour of Lens	
3.12.8.2	Side	
3.12.8.2.1	Make and Country of origin (if imported)	
3.12.8.2.2	Type of lens (Glass / Plastic)	
3.12.8.2.3	Identification No. / Part No.	
3.12.8.2.4	Number and colour of Lens	
3.12.8.3	Type of flasher	
3.12.9	Hazard warning signal :	
3.12.9.1	Rear	
3.12.9.1.1	Make and Country of origin (if imported)	
3.12.9.1.2	Type of lens (Glass / Plastic)	
3.12.9.1.3	Identification No. / Part No.	
3.12.9.1.4	Number and colour of Lens	
3.12.9.2	Side	
3.12.9.2.1	Make and Country of origin (if imported)	
3.12.9.2.2	Type of lens (Glass / Plastic)	
3.12.9.2.3	Identification No. / Part No.	
3.12.9.2.4	Number and colour of Lens	
3.12.10	Reflector :	
3.12.10.1	Rear	
3.12.10.1.1	Make and Country of origin (if imported)	
3.12.10.1.2	Type	
3.12.10.1.3	Identification No. / Part No.	
3.12.10.1.4	Number and colour of Lens	
3.12.10.1.5	Area	

3.12.10.1.6	Shape	
3.12.10.2	Side	
3.12.10.2.1	Make and Country of origin (if imported)	
3.12.10.2.2	Type	
3.12.10.2.3	Identification No. / Part No.	
3.12.10.2.4	Number and colour of Lens	
3.12.10.2.5	Area	
3.12.10.2.6	Shape	
3.12.11	End – outline marker lamp (Top light)	
3.12.11.1	Rear	
3.12.11.1.1	Make and Country of origin (if imported)	
3.12.11.1.2	Type of lens (Glass / Plastic)	
3.12.11.1.3	Identification No. / Part No.	
3.12.11.1.4	Number and colour of Lens	
3.12.12	Diagram of vehicle indicating location, reference axis, mark of apparent surface, contour of vehicle parts limiting geometric visibility of all lights and light signaling devices, location of extreme outer edges and longitudinal median plane of vehicle including following dimensions in mm.	
3.12.13	Along width of vehicle-horizontal distance between inner illuminating surfaces, distance between inner illuminating surfaces and outer most part of vehicle and distance between nearest point of illuminating surfaces of indicators and dipped- beam head lamp	
3.12.14	Along length of vehicle (where applicable)-distance between the transverse plane corresponding to the longitudinal rearmost extremity to center of reference of rear indicators	
3.12.15	Heights of highest and lowest point of illuminating surfaces	

3.12.16	Automotive bulbs :	
3.12.16.1	Parking Lamp bulb – Rear	
3.12.16.1.1	Make and Country of origin (if imported)	
3.12.16.1.2	Designation as per AIS-034	
3.12.16.2	Direction indicator lamp bulb -rear	
3.12.16.2.1	Make and Country of origin (if imported)	
3.12.16.2.2	Designation as per AIS-034	
3.12.16.3	Direction indicator lamp bulb -side	
3.12.16.3.1	Make and Country of origin (if imported)	
3.12.16.3.2	Designation as per AIS-034	
3.12.16.4	Rear Position Lamp (tail lamp)Bulb	
3.12.16.4.1	Make and Country of origin (if imported)	
3.12.16.4.2	Designation as per AIS-034	
3.12.16.5	Stop lamp bulb	
3.12.16.5.1	Make and Country of origin (if imported)	
3.12.16.5.2	Designation as per AIS-034	
3.12.16.6	Number plate lamp bulb	
3.12.16.6.1	Make and Country of origin (if imported)	
3.12.16.6.2	Designation as per AIS-034	
3.12.16.7	End out Marker bulb	
3.12.16.7.1	Make and Country of origin (if imported)	
3.12.16.7.2	Designation as per AIS-034	
3.12.16.8	Reversing lamp bulb	
3.12.16.8.1	Make and Country of origin (if imported)	
3.12.16.8.2	Designation as per AIS-034	
3.12.16.9	Stop Lamp Bulb (S3)	

3.12.16.9.1	Make and Country of origin (if imported)	
3.12.16.9.2	Designation as per AIS-034	
3.12.16.10	Rear Fog Lamp Bulb	
3.12.16.10.1	Make and Country of origin (if imported)	
3.12.16.10.2	Designation as per AIS-034	
3.12.16.11	Side Marker Lamp Bulb	
3.12.16.11.1	Make and Country of origin(if imported)	
3.12.16.11.2	Designation as per AIS-034	
3.13	Motor Vehicle stability function information document	
3.13.1	Detailed description	
3.13.2	List of Hardware used	
3.13.3	Details of controller	
4.0	Trailer 3 Details (If Provided)	
4.1	All Additional information	

5.0	Convertor Dolly 1 Details (If Provided)	
5.1	Convertor Dolly type	
5.1.1	Type (A or C)	
5.2	No. of axles	
5.3	Wheel rim	
5.3.1	Wheel rim make	
5.3.2	Size	
5.3.2.1	1st axle	
5.3.2.2	2nd axle	
5.3.3	Name of manufacturer	
5.3.4	Identification mark	
5.3.5	Pitch circle diameter of mounting bolts, (mm)	
5.3.6	Number of mounting bolts	
5.3.7	Material (Steel/Aluminum alloy etc.)	
5.4	Wheel nut, Wheel cap and Hub cap	
5.4.1	Wheel Nut	
5.4.2	Name of manufacturer	
5.4.3	Size	
5.4.4	No. of nuts Per wheel	
5.4.5	Tightening torque	
5.5	Wheel cap / wheel disc	
5.5.1	Name of manufacturer	
5.5.2	Size	
5.5.3	Material (Plastic / Metal)	
5.5.4	Method of fitment (Press/bolted/others)	
5.6	Hub cap	
5.6.1	Name of manufacturer	
5.6.2	Size	
5.6.3	Method of fitment (Press/bolted/others)	
5.7	Fifth wheel coupling (Make)	
5.7.1	Size	
5.7.2	Drawings with dimensions	
5.7.3	Compliance to IS 15101 (Yes/ No)	

5.8	Draw bar and Draw bar coupling (Make)	
5.8.1	Size	
5.8.2	Drawings with dimensions	
5.8.3	Compliance to IS : 13284 (Yes/ No)	
5.9	Landing gear (Make) (if provided)	
5.9.1	Size	
5.9.2	Drawings with dimensions	
5.9.3	Compliance to IS 10752 (Yes/ No)	
5.10	Tow hook (Make) (if provided)	
5.10.1	Size	
5.10.2	Drawings with dimensions	
5.10.3	Compliance to AIS-091(Part 1) (Yes/ No)	
5.11	Towing jaw (Make) (if provided)	
5.11.1	Size	
5.11.2	Drawings with dimensions	
5.11.3	Compliance to AIS-091(Part 1) (Yes/ No)	
5.12	Draw bar eye (Make)	
5.12.1	Size	
5.12.2	Drawings with dimensions	
5.12.3	Compliance to IS :12807 (Yes/ No)	
5.13	Turn table (Make)	
5.13.1	Size	
5.13.2	Drawings with dimensions	
5.13.3	Compliance to IS :13544 (Yes/ No)	
5.14	Towing devices, if any	
5.14.1	Type	
5.14.2	Name of manufacturer	
5.14.3	Capacity	
5.14.4	Coupling devices, if any	
5.14.5	Name of the manufacturer	
5.14.6	Identification mark	
5.15	Type of coupling device for mechanical	
5.16	Type of coupling device for electrical	
5.17	Type of coupling device for brake	
5.18	Any other Accessories provided	

5.19	Compliance to any Standard	
5.20	Wheel track (mm)	
5.20.1	Front	
5.20.2	Rear	
5.21	Convertor dolly Body overhang (mm)	
5.21.1	Front (from draw bar eye)	
5.21.2	Rear end	
5.22	Tyre make	
5.22.1	Tyre size designation including ply rating	
5.22.2	Speed index	
5.22.3	Load index / Load rating	
5.22.4	Tyre Type (Radial / Cross / Tube / Tubeless)	
5.22.5	Laden Tyre pressure (front) (kg/cm ²)	
5.22.6	Laden Tyre pressure (Rear) (kg/cm ²)	
5.23	Un-laden weight of convertor dolly	
5.23.1	Rear axle 1	
5.23.2	Rear axle 2	
5.23.3	Total	
5.24	Convertor dolly Maximum permissible axle weights (kg)	
5.24.1	Front axle	
5.24.2	Rear axle	
5.25	Convertor dolly Spray Suppression System	
5.25.1	Make, , Country of Origin(if imported)	
5.25.2	Type (Water separator/Energy absorber)	
5.25.3	Identification: TAC No./ BIS License No./ E-Marking	
5.25.4	Size	
5.25.5	Drawing / Photographs showing the mounting details with dimensions	
5.26	Reflective Surface Area (REFLECTORS)	
5.26.1	Shape(Square/Rectangular/Circular/Elliptical/Other)	
5.26.2	Rear	
5.26.3	Make	
5.26.4	Type	
5.26.5	Identification: TAC No./BIS Licence No./E-Marking	
5.26.6	Number and colour of Lens	

5.27	Reflective Tape	
5.27.1	Rear	
5.27.2	Make and Country of origin(if imported)	
5.27.3	Type	
5.27.4	Identification : TAC No./BIS License No./E-Marking	
5.27.5	Width in (mm)	
5.28	Motor Vehicle stability function information document	
5.28.1	Detailed description	
5.28.2	List of Hardware used	
5.28.3	Details of controller	
5.29	Brakes	
5.29.1	Type and Brief Description	
5.29.2	Service brakes	
5.29.2.1	Name of producer	
5.29.2.2	Type (Mechanical/hydraulic/air assisted/ vacuum assisted/others)	
5.29.2.3	Control system & braking wheel	
5.29.2.4	Schematic layout indicating method of split of brake system, location of valves, reservoirs etc.	
5.29.3	Anti-Lock braking system Provided (Yes/No)	
5.29.3.1	If yes, details	
5.29.3.2	ABS make	
5.29.4	Electronic Control Unit (ECU)	
5.29.4.1	Make	
5.29.4.2	Identification mark	
5.29.5	Wheel Speed Sensor	
5.29.5.1	Make	
5.29.5.2	Identification mark	
5.29.5.3	No. of sensors used	
5.29.6	Hydraulic Modulator	
5.29.6.1	Make	

5.29.6.2	Identification mark	
5.29.7	Solenoid Valve	
5.29.7.1	Make	
5.29.7.2	Identification mark	
5.29.7.3	Max. designed pressure, kg/cm ²	
5.29.7.4	Max. working pressure, kg/cm ²	
5.29.8	Safety lamp provided (Yes/No)	
5.29.9	Schematic layout of the ABS system	
5.29.10	If ASR is used, give details	
5.29.11	Brake lining (or) Pad	
5.29.11.1	Nominal Dimensions, (mm) (Length x Width x thickness)	
5.29.11.1.1	Front wheel	
5.29.11.1.2	Rear wheel	
5.29.11.1.3	Others (in case of Tandem axle, give axle wise data)	
5.29.11.2	Effective area per axle (cm ²)	
5.29.11.2.1	Front axle	
5.29.11.2.2	Rear axle	
5.29.11.2.3	Others (in case of Tandem axle, give axle wise data)	
5.29.11.3	Material	
5.29.11.4	Make and Designation	
5.29.11.4.1	Front wheel / axle	
5.29.11.4.2	Rear wheel / axle	
5.29.11.4.3	Others (In case of Tandem axle provide data for each axle)	
5.29.11.5	Whether asbestos or asbestos free?	
5.29.12	Brake drum or disc	
5.29.12.1	Effective diameter, mm	
5.29.12.1.1	Front wheel	
5.29.12.1.2	Rear wheel	

5.29.12.1.3	Others (in case of tandem axle or articulated trailers)	
5.29.12.2	Material (if the braking surface is non ferrous)	
5.29.12.2.1	Front	
5.29.12.2.2	Rear	
5.29.12.2.3	Others	
5.29.13	Master cylinder or brake valve	
5.29.13.1	Make	
5.29.13.2	Type	
5.29.13.3	Inner diameter of the master cylinder, mm	
5.29.13.4	Operating stroke mm	
5.29.14	Type of supply tank	
5.29.15	Wheel cylinder diameter, mm	
5.29.15.1	Front	
5.29.15.2	Rear	
5.29.15.3	Others	
5.29.16	Wheel cylinder type (single acting/double acting)	
5.29.16.1	Front	
5.29.16.2	Rear	
5.29.16.3	Others	
5.29.17	Booster	
5.29.17.1	Name of producer	
5.29.17.2	Type	
5.29.17.3	Boost ratio	
5.29.17.4	Size of the booster, mm (diameter)	
5.29.17.5	Vacuum or air assistance	
5.29.17.6	Pressure kg/cm ²	
5.29.17.6.1	Nominal (P2 as per IS 11852:2001)	
5.29.17.6.2	Cut in	
5.29.17.6.3	Cut out	

5.29.18	Type of vacuum pump or air compressor			
5.29.19	Type of pressure regulator			
5.29.20	No. of tanks			
5.29.20.1	Tank Capacity, lit.	Description	Capacity	
5.29.20.1.1	Tank 1			
5.29.20.1.2	Tank 2			
5.29.20.1.3	Tank 3			
5.29.20.1.4	Tank 4			
5.29.21	Brake Chamber	Front	Rear	Parking
5.29.21.1	Make and type			
5.29.21.2	Size, mm			
5.29.21.3	Internal diameter, mm			
5.29.21.4	Stroke, mm			
5.29.22	Slack adjuster – Manual/Automatic			
5.29.22.1	Make			
5.29.22.2	Lever length in mm			
5.29.22.3	Load sensing valve			
5.29.22.3.1	Make			
5.29.22.3.2	Model No.			
5.29.22.4	Set pressure, unladen in kg/cm ²			
6.0	Convertor Dolly 2 details (If Provided)			
6.1	Convertor Dolly type			
6.1.1	Type (A or C)			
6.2	No. of axles			
6.3	Wheel rim			
6.3.1	Wheel rim make			
6.3.2	Size			
6.3.2.1	1st axle			
6.3.2.2	2nd axle			
6.3.3	Name of manufacturer			
6.3.4	Identification mark			
6.3.5	Pitch circle diameter of mounting bolts, (mm)			

6.3.6	Number of mounting bolts	
6.3.7	Material (Steel/Aluminum alloy etc.)	
6.4	Wheel nut, Wheel cap and Hub cap	
6.4.1	Wheel Nut	
6.4.2	Name of manufacturer	
6.4.3	Size	
6.4.4	No. of nuts Per wheel	
6.4.5	Tightening torque	
6.5	Wheel cap / wheel disc	
6.5.1	Name of manufacturer	
6.5.2	Size	
6.5.3	Material (Plastic / Metal)	
6.5.4	Method of fitment (Press/bolted/others)	
6.6	Hub cap	
6.6.1	Name of manufacturer	
6.6.2	Size	
6.6.3	Method of fitment (Press/bolted/others)	
6.7	Fifth wheel coupling (Make)	
6.7.1	Size	
6.7.2	Drawings with dimensions	
6.7.3	Compliance to IS 15101 (Yes/ No)	
6.8	Draw bar and Draw bar coupling (Make)	
6.8.1	Size	
6.8.2	Drawings with dimensions	
6.8.3	Compliance to IS : 13284 (Yes/ No)	
6.9	Landing gear (Make) (if provided)	
6.9.1	Size	
6.9.2	Drawings with dimensions	
6.9.3	Compliance to IS 10752 (Yes/ No)	
6.10	Tow hook (Make) (if provided)	
6.10.1	Size	
6.10.2	Drawings with dimensions	
6.10.3	Compliance to AIS-091 (Part 1) (Yes/ No)	
6.11	Towing jaw (Make) (if provided)	
6.11.1	Size	

6.11.2	Drawings with dimensions	
6.11.3	Compliance to AIS-091(Part 1) (Yes/ No)	
6.12	Draw bar eye (Make)	
6.12.1	Size	
6.12.2	Drawings with dimensions	
6.12.3	Compliance to IS :12807 (Yes/ No)	
6.13	Turn table (Make)	
6.13.1	Size	
6.13.2	Drawings with dimensions	
6.13.3	Compliance to IS :13544 (Yes/ No)	
6.14	Towing devices, if any	
6.14.1	Type	
6.14.2	Name of manufacturer	
6.14.3	Capacity	
6.14.4	Coupling devices, if any	
6.14.5	Name of the manufacturer	
6.14.6	Identification mark	
6.15	Type of coupling device for mechanical	
6.16	Type of coupling device for electrical	
6.17	Type of coupling device for brake	
6.18	Any other Accessories provided	
6.19	Compliance to any Standard	
6.20	Wheel track (mm)	
6.20.1	Front	
6.20.2	Rear	
6.21	Convertor dolly Body overhang (mm)	
6.21.1	Front (from draw bar eye)	
6.21.2	Rear end	
6.22	Tyre make	
6.22.1	Tyre size designation including ply rating	
6.22.2	Speed index	
6.22.3	Load index / Load rating	
6.22.4	Tyre Type (Radial / Cross / Tube / Tubeless)	
6.22.5	Laden Tyre pressure (front) (kg/cm ²)	
6.22.6	Laden Tyre pressure (Rear) (kg/cm ²)	

6.23	Un-laden weight of convertor dolly	
6.23.1	Rear axle 1	
6.23.2	Rear axle 2	
6.23.3	Total	
6.24	Convertor dolly Maximum permissible axle weights (kg)	
6.24.1	Front axle	
6.24.2	Rear axle	
6.25	Convertor dolly Spray Suppression System	
6.25.1	Make, , Country of Origin(if imported)	
6.25.2	Type (Water separator/Energy absorber)	
6.25.3	Identification: TAC No./ BIS License No./ E-Marking	
6.25.4	Size	
6.25.5	Drawing / Photographs showing the mounting details with dimensions	
6.26	Reflective Surface Area (REFLECTORS)	
6.26.1	Shape(Square/Rectangular/Circular/Elliptical/Other)	
6.26.2	Rear	
6.26.3	Make	
6.26.4	Type	
6.26.5	Identification: TAC No./BIS Licence No./E-Marking	
6.26.6	Number and colour of Lens	
6.27	Reflective Tape	
6.27.1	Rear	
6.27.2	Make and Country of origin(if imported)	
6.27.3	Type	
6.27.4	Identification : TAC No./BIS License No./E-Marking	
6.27.5	Width in (mm)	
6.28	Motor Vehicle stability function information document	
6.28.1	Detailed description	
6.28.2	List of Hardware used	
6.28.3	Details of controller	

6.29	Brakes	
6.29.1	Type and Brief Description	
6.29.2	Service brakes	
6.29.2.1	Name of producer	
6.29.2.2	Type (Mechanical/hydraulic/air assisted/ vacuum assisted/others)	
6.29.2.3	Control system & braking wheel	
6.29.2.4	Schematic layout indicating method of split of brake system, location of valves, reservoirs etc.	
6.29.3	Anti-Lock braking system Provided (Yes/No)	
6.29.3.1	If yes, details	
6.29.3.2	ABS make	
6.29.4	Electronic Control Unit (ECU)	
6.29.4.1	Make	
6.29.4.2	Identification mark	
6.29.5	Wheel Speed Sensor	
6.29.5.1	Make	
6.29.5.2	Identification mark	
6.29.5.3	No. of sensors used	
6.29.6	Hydraulic Modulator	
6.29.6.1	Make	
6.29.6.2	Identification mark	
6.29.7	Solenoid Valve	
6.29.7.1	Make	
6.29.7.2	Identification mark	
6.29.7.3	Max. designed pressure, kg/cm ²	
6.29.7.4	Max. working pressure, kg/cm ²	
6.29.8	Safety lamp provided (Yes/No)	
6.29.9	Schematic layout of the ABS system	

6.29.10	If ASR is used, give details	
6.29.11	Brake lining (or) Pad	
6.29.11.1	Nominal Dimensions, (mm) (Length x Width x thickness)	
6.29.11.1.1	Front wheel	
6.29.11.1.2	Rear wheel	
6.29.11.1.3	Others (in case of Tandem axle, give axle wise data)	
6.29.11.2	Effective area per axle (cm ²)	
6.29.11.2.1	Front axle	
6.29.11.2.2	Rear axle	
6.29.11.2.3	Others (in case of Tandem axle, give axle wise data)	
6.29.11.3	Material	
6.29.11.4	Make and Designation	
6.29.11.4.1	Front wheel / axle	
6.29.11.4.2	Rear wheel / axle	
6.29.11.4.3	Others (In case of Tandem axle provide data for each axle)	
6.29.11.5	Whether asbestos or asbestos free?	
6.29.12	Brake drum or disc	
6.29.12.1	Effective diameter, mm	
6.29.12.1.1	Front wheel	
6.29.12.1.2	Rear wheel	
6.29.12.1.3	Others (in case of tandem axle or articulated trailers)	
6.29.12.2	Material (if the braking surface is non-ferrous)	
6.29.12.2.1	Front	
6.29.12.2.2	Rear	
6.29.12.2.3	Others	
6.29.13	Master cylinder or brake valve	
6.29.13.1	Make	
6.29.13.2	Type	

6.29.13.3	Inner diameter of the master cylinder, mm		
6.29.13.4	Operating stroke mm		
6.29.14	Type of supply tank		
6.29.15	Wheel cylinder diameter, mm		
6.29.15.1	Front		
6.29.15.2	Rear		
6.29.15.3	Others		
6.29.16	Wheel cylinder type (single acting/double acting)		
6.29.16.1	Front		
6.29.16.2	Rear		
6.29.16.3	Others		
6.29.17	Booster		
6.29.17.1	Name of producer		
6.29.17.2	Type		
6.29.17.3	Boost ratio		
6.29.17.4	Size of the booster, mm (diameter)		
6.29.17.5	Vacuum or air assistance		
6.29.17.6	Pressure kg/cm ²		
6.29.17.6.1	Nominal (P2 as per IS 11852:2001)		
6.29.17.6.2	Cut in		
6.29.17.6.3	Cut out		
6.29.18	Type of vacuum pump or air compressor		
6.29.19	Type of pressure regulator		
6.29.20	No. of tanks		
6.29.20.1	Tank Capacity, lit.	Description	Capacity
6.29.20.1.1	Tank 1		
6.29.20.1.2	Tank 2		
6.29.20.1.3	Tank 3		
6.29.20.1.4	Tank 4		
6.29.21	Brake Chamber	Front	Rear Parking

6.29.21.1	Make and type			
6.29.21.2	Size, mm			
6.29.21.3	Internal diameter, mm			
6.29.21.4	Stroke, mm			
6.29.22	Slack adjuster – Manual/Automatic			
6.29.22.1	Make			
6.29.22.2	Lever length in mm			
6.29.22.3	Load sensing valve			
6.29.22.3.1	Make			
6.29.22.3.2	Model No.			
6.29.22.4	Set pressure, unladen in kg/cm ²			
7.0	Gross Combination Vehicle Weight (GCVW) for combination			
7.1	Description with representative drawings			

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