

A A L N 0432

Date: 29th December 2016

CERTIFICATE

| | | | |
|-------------|--------------|------------|---------------|
| Cert | Brief | Drg | Total |
| 5 | 7 | 2 | 14 Pgs |

FOR COMPLIANCE TO THE CENTRAL MOTOR VEHICLES RULES.

1. In order to establish compliance to the provisions of CMVR, 1989, applicable as on date, documental verification/ necessary testing was carried out, on the following **base model**, submitted by the vehicle manufacturer referred below:

| Documental Reference | | | Vehicle Manufacturer | | | |
|---|----------------------------------|-------------------|---|---------|--|--|
| Current Certificate | | | M/s. Tata Motors Ltd., Pimpri, Pune – 411018 Plants: Jamshedpur/ Pune/ Lucknow/ Dharwad/ Pantnagar | | | |
| Diesel Engine | | | Engine Manufacturer | | | |
| Model | Power | cc | M/s. Tata Cummins Ltd. | | | |
| ISBe5.9 230 40 | 170 kW @ 2500 rpm | 5883 | Plant: Jamshedpur / Phaltan | | | |
| Base Model | Type (Category: N3) | Wheel Base, mm | Seating Capacity (Incl. Driver) | GVW, kg | Gross Combination Weight (GCW), kg | |
| TATA LPS 4923 CR BS IV Haulage Tractor with sleeper cab | Haulage Tractor with sleeper cab | 3800 | 2 Persons | 25000 | 49000-When coupled with a suitable 3 axle semi-trailer | |
| Variants | | Refer ANNEXURE-II | | | | |

- 1a. Brief technical specifications (No. STN01610, A) of the base model and its variants, as declared by the vehicle manufacturer are enclosed with this certificate. Detailed specifications (No. STN01610, A) of the base model and its variants, are also separately issued to the vehicle manufacturer.
2. It is certified that the above base model and its variant comply with the provisions of the Central Motor Vehicles Rules, 1989, as amended up-to-date, including following requirements, (as detailed at ANNEXURE-I, IA & IB):

| Standards | | Notification | Date | Effective From | Applicable CMVR |
|---|-----------------------|---------------|------------|---|---|
| Bharat Stage-IV | For Notified Areas | GSR 84(E) | 09.02.2009 | OBD I 01.04.2010 OBD II 01.04.2013 | 115(15) (a), (b)(ii), (A) |
| | | GSR 443(E) | 21.05.2010 | 01.06.2010 | |
| Free Acceleration Smoke | Maximum Smoke Density | GSR 103(E) | 23.02.2012 | 23.02.2013 | 115 (2) (ii) |
| Passby Noise Limits | | GSR 111(E) | 10.02.2004 | 01.04.2005 | 120 (2) |
| Brakes/Lamps/Reflex Reflectors/ Category of vehicle/ Tyres/VIN Number/ Seats, Anchorages, Head Restraints Mechanical Coupling Devices and other Safety Components | | S. O. 1365(E) | 13.12.2004 | Notified dates | ANNEXURE- I / ANNEXURE- IA / ANNEXURE- IB |
| | | GSR 589(E) | 16.09.2005 | | |
| | | GSR 784(E) | 12.11.2008 | | |
| | | S.O. 436(E) | 15.03.2012 | | |
| | | GSR 290(E) | 15.04.2015 | | |
| | | GSR 291(E) | 24.04.2014 | | |
| | | GSR 389(E) | 09.06.2014 | | |
| | | GSR 225(E) | 26.03.2015 | | |
| Gross Combination Weight (as amended by S.O. 517 (E) dt. 26.05.2000) | | S.O. 728(E) | 18.10.1996 | 18.10.1996 | --- |

3. This Certificate is issued as per CMV Rule 126, to establish compliance with the Central Motor Vehicles Rules, 1989, and shall not be construed as a certificate of compliance to any rules other than those listed in ANNEXURE-I, IA & IB. Compliance to these rules has been verified based on the use of specific components/parts assemblies etc. details of which would be given in the detailed specifications duly endorsed by ARAI as mentioned at para. 1a above. However, the attested drawings showing the actual installations wherever applicable and mentioned in the ANNEXURE-I are enclosed. It is the vehicle manufacturer's responsibility to ensure fitment of same components/parts/assemblies etc. before submission of the vehicle for registration.



A. A. BADUSHA
SR. DEPUTY DIRECTOR & HEAD
HOMOLOGATION MANAGEMENT, REGULATION &
VEHICLE EVALUATION, ARAI, PUNE.

Place of Issue : Pune



AUTHORISED SIGNATORY



Mrs. RASHMI URDHWARESHE
DIRECTOR
ARAI, PUNE.

Following rules are verified and found to be complying.

| Rule No | Sub Rules | Description | Std. & effective dt. | | Drg |
|---------|---|---|---|---|--|
| 93 | (e) (1), (2), (4), (6), (7) | Overall dimension of motor vehicles | ---- | ---- | |
| 94 | --- | (1), (2) & (3) Condition of tyres | ---- | ---- | |
| 95 | --- | (1) Size & Ply rating of tyres | As amended by GSR 784(E) dt. 12.11.08 – Ref. ANNEXURE-IB | | Nil |
| | | (2), (3), (4), (5) & (6)(i) & (iii) (Fr: Single & Rr: Dual) Fr & Rr: 10.00R20, 16PR Make: JK/ Michelin (Spain)/ MRF/ Apollo/ Ceat/ Bridgestone Part 1 to 8 as applicable | IS:11852 | 01.04.06 | |
| 96 | --- | Brakes (1), (2), (3), (4)(ii), (5), (6), (7)(a), (8) & (9) (As amended by GSR 389(E) dt. 09.06.14 & GSR 225(E) dt. 26.03.15) | Automatic Wear Adjustment | IS:11852:2001 (Part 2) | 01.04.15 |
| | | | Fitted with ABS | IS:11852:2003 (Part 9) | 01.04.15 |
| | | | | IS:11948-1999 | 01.05.03 |
| 98 | --- | Steering gear (1), (2) & (3) | ---- | ---- | |
| 99 | --- | Forward and backward motion | ---- | ---- | |
| 100 | (e1) (1), (2) & (3) | Safety glass | As amended by GSR 784(E) dt. 12.11.08 – Ref. ANNEXURE-IB | | |
| 101 | (e1) (1) & (2)(ii) | Windscreen wiper | IS:15802-2008 | 01.10.14 | As amended by GSR 291(E) dt. 24.04.14 |
| 102 | --- | (1) & (2) Signalling devices, direction indicators & stop lights | ---- | ---- | |
| 103 | --- | (1) & (2) Position of the indicator | ---- | ---- | |
| 104 | (e) (1), (2) (e2), (4) & (5) | Fitment of reflectors | AIS:057:2005 | 01.04.06 | As amended by GSR 784(E) dt. 12.11.08 – Ref. ANNEXURE-IB |
| 104 | (e) (D) | Fitment of rear marking plate | AIS 089-2005 | Not Applicable | As amended by GSR 291(E) dt. 24.04.14 |
| 105 | (e) (1)(a), (2), (3), (4), (5) (e3) & (7) | Lamps (Amended by GSR 589(E) dt. 16.09.2005) | ---- | ---- | |
| 106 | --- | (1) Deflection of lights | ---- | ---- | |
| 107 | (e2) --- | Top Lights | ---- | ---- | |
| 108 | (e) (1) | Use of red or white lights | ---- | ---- | |
| 109 | --- | Parking light | ---- | ---- | |
| 111 | --- | Prohibition of spotlights etc. | ---- | ---- | |
| 112 | --- | Exhaust gases | ---- | ---- | |
| 113 | --- | Location of exhaust pipes | ---- | ---- | |
| 115 | (e3) (1),(2)(ii), (15)(a), (b)(ii), (A) | Emission of smoke, vapour, etc. from motor vehicle | ---- | ---- | |
| 117 | --- | (1) & (2) Speedometer | IS:11827-2008 | 01.04.15 | As amended by GSR 291(E) |
| 118 | --- | (1), (2) & (3) Speed Governor (Speed Limiting Function)-(ECU: Cummins) | AIS:018/2001 | 01.10.15 | |
| 119 | (e) (1) & (2) | Horns (As amended by GSR 214(E) & GSR 291(E)) | IS:1884-1993 | 18.03.99 | Limit Measured Value |
| | | | IS:15796-2008 | 01.10.14 | 93 dB(A) to 112 dB(A) 94.8 dB(A) to 104.6 dB(A) |
| 120 | --- | (1) Silencers | IS:3028-1998 | | 01.01.03 |
| | | | (2) 4 W (GVW > 3.5 t) Engine Power > 150 kW | Pass By Noise Limits (MoRTH Notification No. 111(E) dt. 10.02.04 w.e.f. 01.04.2005) | |
| | | | 80 dB(A) | 79 dB(A) | |
| 122 | --- | (1) & (2) Embossment of the Chassis Number & Engine Number and date of manufacture (Ref: Table 11 of the Brief Technical Specifications) | As amended by GSR 784(E) dt. 12.11.08 – Ref. ANNEXURE-IB | | |
| 124 | (e) --- | S. O. 1365(E) dt.13.12.2004 Refer ANNEXURE-IA & IB | Safety standards of components as applicable | | |
| | | (1A) | Rear Under Run Protection Device | IS:14812-2005 | Not Applicable |
| 125 | (e) --- | (1) & (2) Rear View Mirror | Specifications | AIS:001/2001 | 01.05.03 |
| | | | Installation | AIS:002/2001 | |
| | | | (6) (M2, M3, N1, N2 & N3) Safety Belt, Seats & their anchorages, Head Restraints | AIS:023:2005 | 01.10.09 |
| 125D | --- | (2)(a) Interchangeability | AIS-091 (Part 1) | 01.04.16 | As amended by GSR 409(E) |
| 138 | --- | 4(c) Warning Triangles | Size & Specifications | AIS:022-2001 | 01.01.03 |
| | | | Installation | | |

Engine Power

| | | | | |
|-------------|-------------------------|---|---|--------------------|
| Note | 1. | Compliance has been established for the above parameters, based on a prototype model / mockup sample representing completely built vehicle, submitted by the vehicle manufacturer. | | |
| | 2. | Vehicles with incomplete configurations of the body work: | | |
| | (#) | Installation to be checked by RTO, as per attested drawings given in the detailed specifications. Fitment & location for items marked (#) as approved, are indicated in the drawings. These are representative drawings, styling etc. may differ. | | |
| | (e) | To be verified after body building at the time of registration, in addition to the rules marked (e) | | |
| | (e1) without windshield | (e2) Goods application | (e3) Bus application, (Mass Emissions for Auxiliary Engine if fitted) | (e4) without doors |

AUTHORISED SIGNATORY

(Signature)

A. A. BADUSHA
SR. DEPUTY DIRECTOR & HEAD
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VEHICLE EVALUATION, ARAI, PUNE.



(Signature)

Mrs. RASHMI URDHWARESHE
DIRECTOR
ARAI, PUNE.

| Rule 124 (1) Sr. No. | Particulars | | Compliance Verified for | Goods Carrier | |
|---|---|---------------------------|---|----------------|----------------------|
| | | | | 13 Dec '04 | 01 Apr '05 |
| 1. | Automobiles Lamps | | AIS-034/2004 | — | ✓ w.e.f. 01.10.05 |
| 2. | Hydraulic Brake Hose | | IS:7079-2008 | Not Applicable | |
| 3. | Hydraulic Brake Fluid | | IS:8654-1986 | | |
| 4. (e) | 'T' Signs | | IS:9942-1981 | ✓ | — |
| 7. | Fuel Tank | Non-Plastic | IS:12056-1987 | ✓ | — |
| 8. | Wheel Rims | | IS:9438-1980 | ✓ | — |
| 11. (e) | External Projections | | IS:13942-1994 | ✓ | — |
| 14. | Wheel Nuts, Disc & Hub Caps | | IS:13941-1994 | ✓ | — |
| 15. | Accelerator Control System | | IS:14283-1995 | ✓ | — |
| 16. (e) | Door Locks and Door Retention Components | | IS:14225-1995 | ✓ | — |
| 17. | Hood Latch | | IS:14226-1995 | Not Applicable | |
| 18. | Tell Tale symbols and control | | AIS-071-2009 (Part-1 & Part-2) | — | ✓ w.e.f. 15.03.13 |
| 20. | Installation of Lighting/ Signalling Devices | Performance Requirements | AIS-012/2004 | — | ✓ w.e.f. 01.10.05 |
| | | Installation Requirements | AIS-008 (Rev. 1)-2010 | | ✓ w.e.f. 01.10.12 |
| 21. | (ii) | EMC | AIS-004 (Part 3)- 2009 | — | ✓ w.e.f. 01.10.15 |
| 23. | Gradeability | | AIS-003/1999 | ✓ | — |
| 31. | Fuel Consumption | | IS:11921-1993 | — | ✓ |
| Compliance to additional requirements vide Notification No | | | S.O. 1431(E) dt. 20.08.2007 w.e.f. 01.04.2008 | | |
| | | | S.O. 1129(E) dt. 12.07.2007 w.e.f. 01.10.2008 | | |
| | | | S.O. 2714(E) dt. 04.11.2010 w.e.f. 01.04.2012 | | |
| | | | S.O. 1558(E) dt. 18.06.2014 w.e.f. 01.04.2016 | | |
| | | | S.O. 411(E) dt. 09.02.2016 w.e.f. 01.10.2016 | | |
| 33. | Spray Supression | | AIS-013 (Rev.1)/2014 | — | ✓ w.e.f. 01.10.16 |
| 42. | Requirements for handholds fitted on L5, M and N categories of vehicles (S.O. 1431(E)) | | AIS:046-2005 | — | ✓ w.e.f. 01.04.08 |
| 35. | The survival space for the protection of occupants in a cab manufactured and fitted by OE vehicle manufacturers on vehicles manufactured on and after 1st October 2008 (S.O. 1129(E)) | | AIS:029/2004 | — | ✓ w.e.f. 01.10.08 |
| 38. | The interior fittings on automotive vehicles of M2, M3, N1, N2 and N3 categories (for existing models) | | AIS:047-2009 | — | ✓ w.e.f. 01.04.12 |
| 22(a) | Mechanical coupling devices and components | | AIS-091(Part 1)/2009 | — | ✓ w.e.f. 01.04.16 |
| 40. | Interior Noise Level Requirements | | IS:12832:2010 | — | ✓ w.e.f. 01.10.16 |

Note: (•) To be verified after body building at the time of registration.

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Mrs. RASHMI URDHWARESHE
DIRECTOR
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ANNEXURE-IB

To

CMVR CERTIFICATE No.

| | | | | |
|---|---|---|---|------|
| A | A | L | N | 0432 |
|---|---|---|---|------|

 dt. 29th December 2016

| CMV Rule | | Test Standards | Effective From | Compliance Verified | |
|---|---|--|----------------|---------------------|---|
| 2 (x) | Definitions (Classification of the Vehicle) - N3 | AIS:053:2005 | 12.11.2008 | ✓ | |
| 95(1) | Size and Ply rating of tyres | IS:15636-2005 | 01.04.2009 | ✓ | |
| 104(1) | Fitment of Reflectors | N1, N2, N3, N3G | AIS:090-2005 | 01.04.2009 | ✓ |
| 122(1) | Vehicle identification number including month and year of manufacture. | VIN Number | AIS:065:2005 | 01.04.2009 | ✓ |
| | | Manufacturer's Plate (for N Category Vehicles) | | ✓ | |
| 125(1-C) | Temporary Cabin fitted on drive away chassis | AIS:070-2004 | 01.04.2009 | ✓ | |
| CMV Rule 124(4) The procedure for type approval and establishing conformity of production for components | | | | | |
| As applicable for M & N Category | | | | | |
| 1, 3 & 4 | Safety Glass, Horn, Tyre | AIS:037-2004 | 01.04.2009 | ✓ | |
| 7, 8, 11, 12, 13, 14 | Bulb, Rear View Mirror, Wheel Rims, Lighting and light signaling devices, Retro-reflectors and Warning Triangle | AIS:037-2004 | 01.10.2009 | ✓ | |
| 19, 20 & 21 | Door Locks and Door Retention Components, Fuel Tanks & Reflective Tapes | AIS:037-2004 | 01.04.2010 | ✓ | |
| CMV Rule - 125 | | | | | |
| Sub-Rule (1-B) | The Front Under Run Protective Devices fitted on N2 and N3 Categories of the motor vehicles | AIS:069-2006 | 01.10.2009 | ✓ | |

Disclaimer:

1. ARAI issues "Type Approval Certificates" (TAC) for vehicles/ components/ parts/ assemblies etc. based on the documents produced and /or prototype/s submitted by the applicant and testing thereof.
2. ARAI issues TAC in compliance to Motor Vehicle Act / Central Motor Vehicles Rules and their provisions as amended from time to time or any other statutory orders under which ARAI is authorised. Other Rules/ Acts are outside the purview/ scope of TAC.
3. Test(s) on prototype(s) is/are carried out on the basis of standard procedures as notified under specific rules. Results of such tests are the property of bearer of TAC. These results cannot be disclosed unless specifically so ordered by Government, Court, etc.
4. The bearer of the TAC is under obligation to ensure production strictly as per the provisions of the specific TAC.
5. ARAI is not responsible for testing each vehicles/ components/ parts/ assemblies etc. for which TAC is issued. Further, ARAI is not responsible for ensuring manufacturing quality of the type approved vehicles/ components/ parts/ assemblies etc.
6. ARAI is in no way responsible for any misuse or copying of any design/ type/ system in connection with entire vehicle/ components/ parts and assemblies covered under the TAC.
7. Breach of any statutory provision of Indian laws or laws of other countries, will be the sole responsibility of the bearer of TAC and ARAI shall not be liable for any claims or damages. The bearer shall alone be liable for the same, and shall undertake to indemnify ARAI in this regard.
8. ARAI has the right, but not under obligation, to initiate cancellation/ withdrawal of the certificate issued, in case of any fraud, misrepresentation, when it surfaces and comes in the knowledge of ARAI.

The appropriate local courts at Pune shall have the jurisdiction in respect of any dispute, claim or liability arising out of this certificate/ Report.

AUTHORISED SIGNATORY



Rashmi

Mrs. RASHMI URDHWARESHE
DIRECTOR
ARAI, PUNE.

A. A. Badusha
A. A. BADUSHA
SR. DEPUTY DIRECTOR & HEAD
HOMOLOGATION MANAGEMENT, REGULATION &
VEHICLE EVALUATION, ARAI, PUNE.

ANNEXURE-IB

To

CMVR CERTIFICATE No.

| | | | | |
|---|---|---|---|------|
| A | A | L | N | 0432 |
|---|---|---|---|------|

 dt. 29th December 2016

| Variants | | Type (Category: N3) | Wheel Base, mm | Seating Capacity (Incl. Driver) | GVW, kg | Gross Combination Weight (GCW), kg |
|----------|--|--|----------------|---------------------------------|---------|--|
| 1 | TATA LPS 4923 CR BS IV Haulage Tractor chassis with cowl | Haulage Tractor chassis with cowl | 3800 | 1 Person | 25000 | 49000 - When coupled with a suitable 3 axle semi-trailer |
| 2 | TATA SIGNA 4923.S CR BS IV Haulage Tractor with facelift sleeper cab | Haulage Tractor with facelift sleeper cab | 3800 | 2 Persons | | |
| 3 | TATA SIGNA 4923.S CR BS IV Haulage Tractor chassis with facelift cowl | Haulage Tractor chassis with facelift cowl | 3800 | 1 Person | | |
| 4 | TATA LPS 4923 CR BS-IV, Haulage Tractor with sleeper cab | Haulage Tractor with sleeper cab | 3880 | 2 Persons | | |
| 5 | TATA LPS 4923 CR BS-IV, Haulage Tractor with Cowl | Haulage Tractor with Cowl | 3880 | 1 Person | | |
| 6 | TATA SIGNA 4923.S CR BS-IV, Haulage Tractor with Facelift sleeper cab | Haulage Tractor with Facelift sleeper cab | 3880 | 2 Persons | | |
| 7 | TATA SIGNA 4923.S CR BS-IV, Haulage Tractor chassis with Facelift Cowl | Haulage Tractor chassis with Facelift Cowl | 3880 | 1 Person | | |



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ARAI, PUNE.



Brief Technical Specifications :Table7 of AIS007

Manufacturer's name and address Tata Motors Ltd., Mumbai, Jamshedpur, Pune, Lucknow, Dharwad, Pantnagar.

Importer's Name and address (in case of CBU) NA

Vehicle Data

Basic Model TATA LPS 4923 CR BS-IV
 Type/Description Haulage Tractor with sleeper cab
 Variant(s) Refer Annexure- B
 Type/ Description Refer Annexure- B
 Category of the vehicle N3
 Category of variant(s) N3

Engine

Make Tata Cummins Limited, Jamshedpur/Phaltan.
 Model ISBe5.9 230 40
 Type Compression Ignition
 Bore x Stroke, mm 102x120
 No. Of cyllinders 6
 Displacement 5883
 Compression Ratio 17.2:1 (+/- 0.5).
 Max. Engine Output, kW@rpm 170 kW @ 2500 rpm (+/- 5%)
 Max. Torque, Nm@rpm 850 Nm AT 1300-1800 rpm
 Air Cleaner type Dry type remote mounted

Clutch


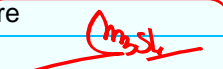

Type Dry Single plate

Gear box

Make & Model G1150/9-DA (12.87)
 Type Synchromesh
 No. Of Gears 9 Forward + 1 Reverse

Gear Ratio

| | G B Ratio-I | Overall Ratio-I | G B Ratio-II | Overall Ratio-II | G B Ratio-III | Overall Ratio-III |
|-------------------|-------------------|-----------------|--------------|------------------|---------------|-------------------|
| Final Drive Ratio | Refer Annexure'A' | | | | | |
| 1st Gear | | | | | | |
| 2nd Gear | | | | | | |
| 3rd Gear | | | | | | |
| 4th Gear | | | | | | |
| 5th Gear | | | | | | |
| 6th gear | | | | | | |
| Over Drive | | | | | | |

| | | | | | | | |
|--|--|--------------------------------------|--|---|--|---|--|
| Manufacturer: TATA MOTORS LTD. | | Document No.: STN01610 , A | | Test Agency: | | Cert No.: | |
| Signature  | | | | Signature  | |  ARAI Progress through Research THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA | |
| Name: S V Joshi | | Sheet No.1 of 9 | | Name: A. A. BADUSHA SR. DEPUTY DIRECTOR & HEAD, HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE | | | |
| Designation: DGM(Certification)ERC | | Date 06.09.2016 | | Designation | | Page No.-....of.... | |



Brief Technical Specifications :Table7 of AIS007

| | | | | | |
|----------|--|--|--|--|--|
| Reverse | | | | | |
| 7th Gear | | | | | |
| 8th Gear | | | | | |




| | |
|--|---|
| Drive Axle (Front/ Rear/ All) | REAR |
| Front axle ratio | DO NOT FILL |
| Rear axel ratio | 5.857 (41/7); 5.57 (39/7) |
| Steering | |
| Type/ Description | M/S ZF(India) Ltd., M/s Rane Power Steering Systems Ltd.; M/s Forni Steering Gear Co.Ltd.China. |
| Steering wheel diameter, mm | Option I: 550 & 500 dia., Option II: 470 dia. |
| Ratio | Option I: 20.2:1 for ZF & Rane; 20.4:1 for Forni, Option II: 23.6:1 for ZF & 22.3:1, 24.1:1 for Rane. |
| Frame | |
| Long member size, mm | 285 X 65 X 7 |
| Number of cross members | 7 |
| Suspension | |
| Type/ Description (Front) | Leaf Spring |
| Type/ Description (Rear) | Leaf Spring |
| Spring | Opt-I: Front-Semi Elliptic Multileaf Spring, Rear-Inverted Leaf Tandem Bogie suspension; Opt-II: Front-Parabolic Leaf Spring, Rear-Inverted Leaf Tandem Bogie suspension; Opt-III: Front-Semi Elliptic Multileaf Spring, Rear- Inverted Leaf Tandem TML Bogie suspension; Opt-IV: Front-Parabolic Leaf Spring, Rear- Inverted Leaf Tandem TML Bogie suspension; Opt-V: Front-Semi Elliptic Multileaf Spring, Rear- Semi Elliptic Multileaf Spring; Opt-VI: Front- Parabolic Leaf Spring, Rear- Semi Elliptic Multileaf Spring; Opt-V: Front-Semi Elliptic Multileaf Spring, Rear- Semi Elliptic Multileaf Spring; Opt-VI: Front- Parabolic Leaf Spring, Rear- Semi Elliptic Multileaf Spring. |
| Anti-roll bar (Front) | YES |
| Anti-roll bar (Rear) | Not Applicable |
| Shock absorbers (Front) | Hydraulic double acting telescopic type- (2 Nos.) |
| Shock absorbers (Rear) | Not Applicable |
| Brake | |
| Service Brake (Brief Description) | Dual Treadle valve acting on all wheel swith Automatic wear adjuster fitted. |
| Auto slack adjuster fitted (Yes/No/Optional) | Yes |
| ABS Fitted (Yes/ No/ Optional) | Yes |
| Front (Disc / Drum) | Drum |
| Rear (Disc / Drum) | Drum |
| Total Breaking Area (Front),Sq.cm. | Option I: 2180, Option II: 2470; Option III: 2366; Option IV: 2496. |
| Total Breaking Area (Rear), Sq.cm. | Opt I:- 2470 x 2; Opt II:- 2764 x 2. |

| | | | |
|---------------------------------------|---|--|---------------------|
| Manufacturer: TATA MOTORS LTD. | Document No.: STN01610 , A | Test Agency: | Cert No.: |
| Signature | | Signature | |
| Name: S V Joshi | Sheet No.2 of 9 | Name: A. A. BADUSHA SR. DEPUTY DIRECTOR & HEAD, HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE | |
| Designation: DGM(Certification)ERC | Date 06.09.2016 | Designation | Page No.-....of.... |



Brief Technical Specifications :Table7 of AIS007


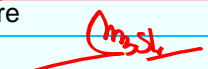

| | |
|--|---|
| Parking Brake | Graduated Valve controlled Spring Brake Chamber integral with Rear Brake. |
| Secondary Brake | Right Hand operated graduated spring brake acting on all 4 rear wheels of Tandem Axle |
| <u>Wheels and tyres</u> | |
| Wheel rim Size, Front | Option-1) 7.5 X 20, Option-2) B7.5HD x 20, Option -3) 7.5 HD x 20. |
| Wheel rim size, Rear | Option-1) 7.5 X 20, Option-2) B7.5HD x 20, Option -3) 7.5 HD x 20. |
| <u>Tyre Size designation including Ply Rating</u> | |
| Front | Radial with tube - 10.00R20, 16PR, K, 3000/ 2725kg [For JK, MRF, Apollo, CEAT, JK (Cavendish), Bridgestone]; 10.00R20, 16PR, K, 3075/2725kg (For Michelin - Spain). |
| Rear | Radial with tube - 10.00R20, 16PR, K, 3000/ 2725kg [For JK, MRF, Apollo, CEAT, JK (Cavendish), Bridgestone]; 10.00R20, 16PR, K, 3075/2725kg (For Michelin - Spain). |
| Tyre Size (Other) | NA |
| Speed Index | For 10.00R20,16PR: K for JK, MRF, Apollo, Bridgestone, Michelin Spain, CEAT, JK (Cavendish). |
| Load Index/Load Rating | For 10.00R20,16PR: 3000/2725kg [For JK, MRF, Apollo, CEAT, JK (Cavendish), Bridgestone]; 3075/2725kg (For Michelin- Spain). |
| Tyre Type (Radial/ Cross/ Tube/ Tubeless) | Radial Ply with Tube |
| Laden tyre pressure, kg/sq.cm, Front | RADIAL TYRE: 8.5 kg/sq.cm (10.00R20) |
| Laden Tyre pressure, kg/sq.cm, Rear | RADIAL TYRE: 7.0 kg/sq.cm (10.00R20). |
| Laden Tyre Pressure, Kg/sq.cm, Other | NA |
| <u>Electrical system</u> | |
| System Voltage, V | 24 V (2 nos. of 12V) |
| Battery Rating, Ah | 100Ah / 120Ah / 130Ah / 150Ah / 180Ah |
| Wiper Motor | Option I: 17W, 2Speed Wiper Motor, Option II: 15SW61, Permanent Ferrite Magnet Field Motor (52Nm), 2Speed Wiper Motor |
| Wiping System(Brief Description) | POWER OPERATED |
| <u>Fuel tank</u> | |
| Material | SHEET EDD-513, SS:4011 OR SS:4010 |
| Capacity, ltr | 400 ltrs (Single), 600 Ltrs (2 Nos. of 300 ltrs. each), 300 ltrs (Single), 400 ltrs (300 ltrs + 100 ltrs) |
| <u>Dimensions</u> | |
| Wheel base, mm | Refer Annexure - B |
| Overall Width, mm | Refer Annexure - B |
| Overall Length, mm | Refer Annexure - B |
| Overall Height, mm | Refer Annexure - B |
| Front Track, mm | 1964 |

| | | | |
|--|---|--|---|
| Manufacturer: TATA MOTORS LTD. | Document No.: STN01610 , A | Test Agency: | Cert No.: |
| Signature  | | Signature  |  |
| Name: S V Joshi | Sheet No.3 of 9 | Name: A. A. BADUSHA SR. DEPUTY DIRECTOR & HEAD, HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE | |
| Designation: DGM(Certification)ERC | Date 06.09.2016 | Designation | Page No.-....of.... |




Brief Technical Specifications :Table7 of AIS007

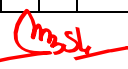
| | |
|--|---|
| Rear Track, mm | 1905 for Bogie suspension, 1817 for Standard suspension |
| Min. ground clearance, mm | 250mm |
| Cargo box dimensions, mm | NA |
| Load body platform area | NA |
| Weights | |
| Maximum GVW, kg (for rigid vehicles) | 25000 |
| Maximum GCW, kg (for articulated / combination vehicles) | 49000 |
| Maximum FAW, kg | 6000 |
| Maximum RAW, kg | 19000 |
| Kerb weight with 90% fuel (with spare wheel , tools, etc.), kg | Refer Annexure - B |
| Maximum gradeability in 1st gear | 11 Degree with 5.857 RAR, 10.5 Degree with 5.57 RAR |
| Seating | |
| Seating Capacity | For Cowl: Driver, For Cab:Driver + 1. |
| Sketch showing seating layout with dimensions | Refer drg. No. a) For Sleeper cab: 2910 0601 40 26; b) For Cowl: 2910 0701 4004 |

| | | | |
|--|--------------------------------------|---|---|
| Manufacturer: TATA MOTORS LTD. | Document No.: STN01610 , A | Test Agency: | Cert No.: |
| Signature  | | Signature  |  |
| Name: S V Joshi | Sheet No.4 of 9 | Name: A. A. BADUSHA SR. DEPUTY DIRECTOR & HEAD, HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE | |
| Designation: DGM(Certification)ERC | Date 06.09.2016 | Designation | Page No.-....of.... |

ANNEXTURE - A

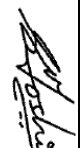
SET OF VALUES


| Clause number | Description | SET OF VALUES | | | |
|--|-------------|-------------------------------------|-------------------------------|---------------------------|-----------------------|
| B4.07 | Gear ratio | GEAR BOX | OVERALL RATIO WITH R.A. RATIO | | |
| | | | G1150/9-DA | OPT-I 5.857 (41/7) | OPT-II 5.57 (39/7) |
| | | Crawler/Low | 12.87 | 75.42 | 71.81 |
| | | 1 st gear | 9.13 | 53.50 | 50.95 |
| | | 2 nd gear | 6.72 | 39.38 | 37.50 |
| | | 3 rd gear | 4.90 | 28.71 | 27.34 |
| | | 4 th gear | 3.57 | 20.92 | 19.92 |
| | | 5 th gear | 2.55 | 14.94 | 14.22 |
| | | 6 th gear | 1.88 | 11.02 | 10.50 |
| | | 7 th gear | 1.37 | 8.03 | 7.64 |
| | | 8 th gear | 1.00 | 5.857 | 5.57 |
| | Reverse | 13.4 | 78.52 | 74.77 | |
| Manufacturer: TATA MOTORS LTD. | | Document No.: STN01610, A | | Test Agency: Signature | |
| Signature:  | | Name | | Cert No.: | |
| Name: S V Joshi | | Designation | | | |
| Designation: DGM (Vehicle Certification) ERC | | Date of issue | | Page No. -1 of 1 | |
| | | Sheet No. 5 of 9 | | | |
| | | Date 06.09.2016 | | | |


A. A. BADUSHA
 SR. DEPUTY DIRECTOR & HEAD,
 HOMOLOGATION MANAGEMENT &
 REGULATION, ARAI, PUNE



ANNEXURE 'B'
(Variant List)

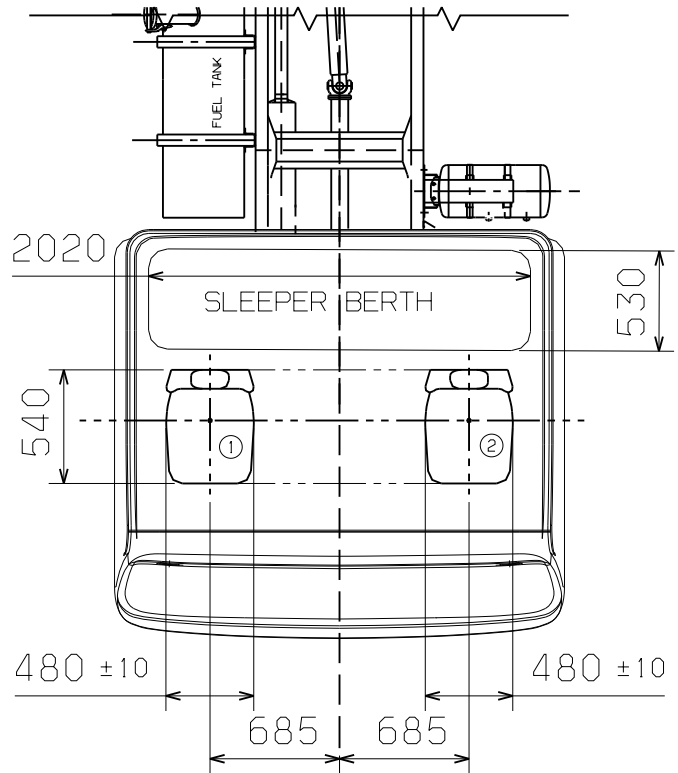
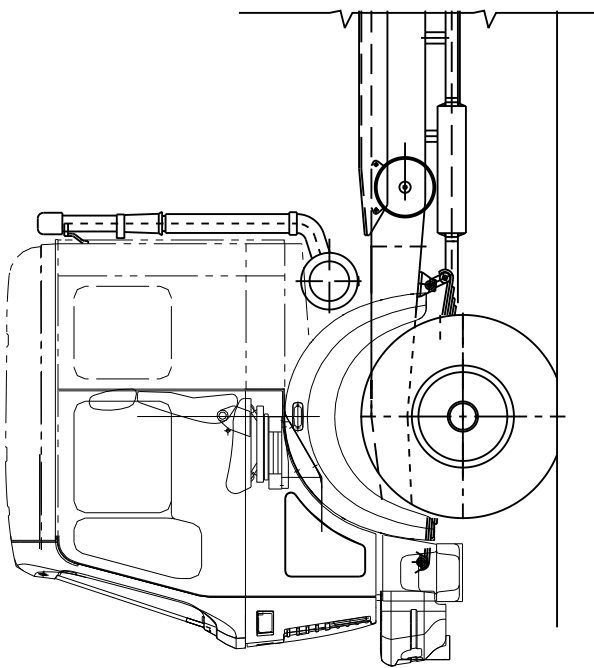
| Model | Description | Suspension Type | Wheel Base in mm | Overall Length in mm | Overall Width in mm | Overall Height in mm | Body Overhang in mm -Front end | Frame Overhang in mm - Rear end | Fuel tank capacity in Ltrs. | Front axle Kerb wt. (kg) | Rear axle Kerb wt. (kg) | Total axle Kerb wt. (kg) | F/F Ratio |
|-------------|--|--|------------------|----------------------|---------------------|----------------------|--------------------------------|---------------------------------|---|---|-------------------------|--------------------------|------------------|
| Base Model | TATA LPS 4923 CR BS IV Haulage Tractor with sleeper cab | Bogie Suspension | 3800 | 6578 | 2598 | 2950 | 1345 | 678 | 300 400 (300+100) 600 (300+300) | 3638 | 4518 | 8156 | 0.81 |
| Variant 1 | TATA LPS 4923 CR BS IV Haulage Tractor chassis with cowl | Bogie Suspension | 3800 | 6578 | 2598 | 2950 | 1345 | 678 | 300 400 (300+100) 600 (300+300) | 3318 | 4518 | 7836 | 0.81 |
| Variant 2 | TATA SIGNA 4923 S CR BS IV Haulage Tractor with facelift sleeper cab | Bogie Suspension | 3800 | 6603 | 2598 | 2950 | 1370 | 678 | 400 (300+100) 600 (300+300) | 3700 | 4580 | 8280 | 0.81 |
| Variant 3 | TATA SIGNA 4923 S CR BS IV Haulage Tractor chassis with facelift cowl | Bogie Suspension | 3800 | 6603 | 2598 | 2950 | 1370 | 678 | 300 400 (300+100) 600 (300+300) | 3318 | 4518 | 7836 | 0.74 |
| Variant 4 | TATA LPS 4923 CR BS-IV, Haulage Tractor with sleeper cab | Standard Suspension (semi elliptic multileaf spring) | 3880 | 6844 | 2598 | 2950 | 1345 | 902 | 300 Ltrs. 400 Ltrs. (300+100) 600 Ltrs. (300+300) | 3500 | 4166 | 7666 | 0.84 |
| Variant 5 | TATA LPS 4923 CR BS-IV, Haulage Tractor with Cowl | Standard Suspension (semi elliptic multileaf spring) | 3880 | 6844 | 2598 | 2950 | 1345 | 902 | 300 Ltrs. 400 Ltrs. (300+100) 600 Ltrs. (300+300) | 3323 | 4166 | 7489 | 0.80 |
| Variant 6 | TATA SIGNA 4923 S CR BS-IV, Haulage Tractor with Facelift sleeper cab | Standard Suspension (semi elliptic multileaf spring) | 3880 | 6869 | 2598 | 2950 | 1370 | 902 | 300 Ltrs. 400 Ltrs. (300+100) 600 Ltrs. (300+300) | 3500 | 4166 | 7666 | 0.84 |
| Variant 7 | TATA SIGNA 4923 S CR BS-IV, Haulage Tractor chassis with Facelift Cowl | Standard Suspension (semi elliptic multileaf spring) | 3880 | 6869 | 2598 | 2950 | 1370 | 902 | 300 Ltrs. 400 Ltrs. (300+100) 600 Ltrs. (300+300) | 3662 | 4360 | 8022 | 0.80 |
| Test Agency | Manufacturer: TATA MOTORS LTD. | | | | | | | | | | | | |
| Signature | Signature:  | | | | | | | | | | | | |
| Name | Name: S V Joshi | | | | | | | | | | | | |
| Designation | Designation: DGM(Certification), ERC | | | | | | | | | | | | |
| Date | Date: 06.09.2016 | | | | | | | | | | | | |
| | | | | | | | | | | Document No. (Indicating revision status) | | STN01610, A | |
| | | | | | | | | | | | | | Sheet No. 6 of 9 |


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 A. A. BADUSKI
 SR. DEPUTY DIRECTOR & HEAD
 HOMOLOGATION MANAGEMENT & REGULATION ARAI PLUNE

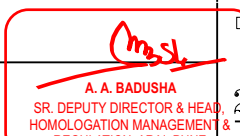



1516 SLEEPER CABS
SEATING LAYOUT

SEATING CAPACITY: DRIVER + 1
(2 SLEEPER BERTHS)



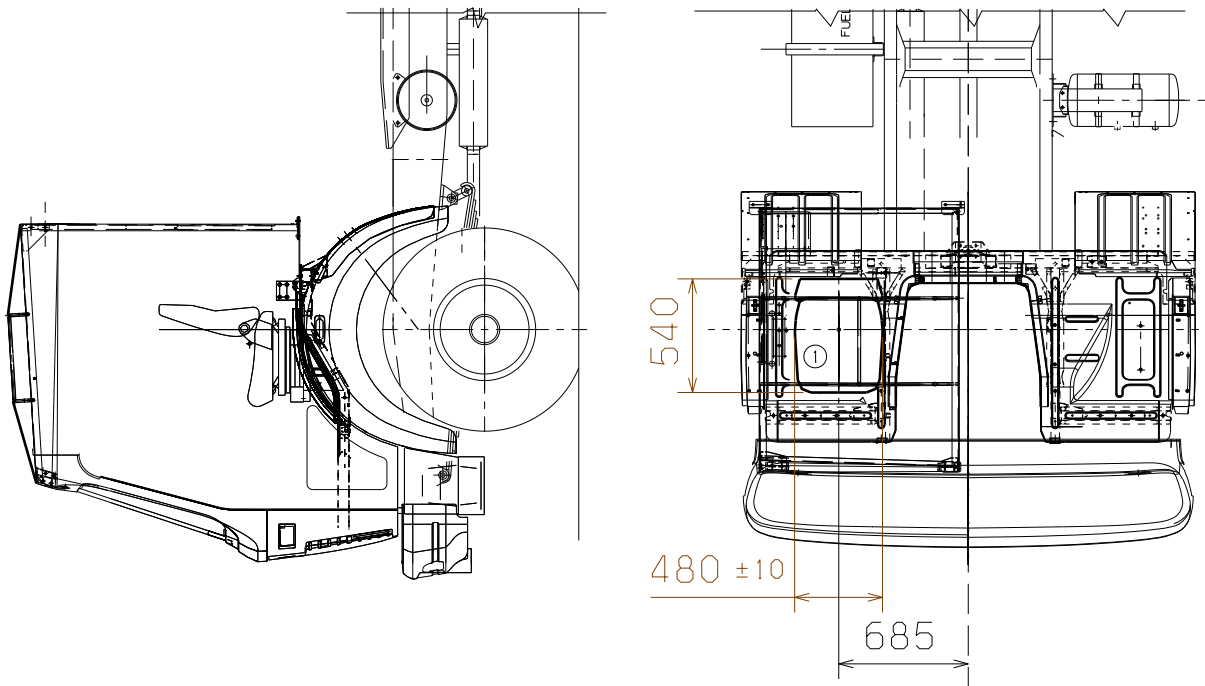
S. V. Joshi
S. V. JOSHI
DGM (Vehicle Certification)
ERC, TATA MOTORS LTD.

| | | |
|-------------|--|--|
| TEST AGENCY | MANUFACTURER:- TATA MOTORS LIMITED | DRG. NO. |
| SIGNATURE | SIGNATURE |  A. A. BADUSHA SR. DEPUTY DIRECTOR & HEAD, HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE |
| NAME | NAME :- S.V.JOSHI | |
| DESIGNATION | DESIGNATION :- AGM(Veh.Certification)ERC |  2910 0601 40 26 THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA |
| DATE | DATE :- 16/06/2007 | |
| | | SHEET No. 7 OF 9 |



1516 COWLS
SEATING LAYOUT

CAPACITY : DRIVER



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S. V. JOSHI
DGM (Vehicle Certification)
ERC, TATA MOTORS LTD.

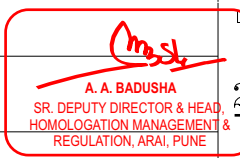

| | | |
|-------------|--|--|
| TEST AGENCY | MANUFACTURER:- TATA MOTORS LIMITED | DRG. NO. |
| SIGNATURE | SIGNATURE |  A. A. BADUSHA SR. DEPUTY DIRECTOR & HEAD, HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE |
| NAME | NAME :- S.V.JOSHI | |
| DESIGNATION | DESIGNATION :- AGM(Veh.Certification)ERC |  2910 0700 40 04 THE ARAI MOTIVE RESEARCH ASSOCIATION OF INDIA |
| DATE | DATE :-16/06/2007 | |

Table 11 of AIS:007 (Rev.05)


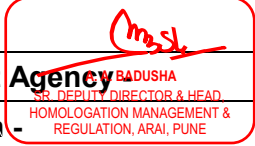

Details of location of Chassis number and code for month and year of Manufacture as per rule 122 of CMVR

| | |
|---|---|
| Name of the Vehicle Manufacturer & Address | TATA Motors Limited, Mumbai, Jamshedpur, Pune, Lucknow, Dharwad, Pantnagar. |
| Name of the Basic model | TATA LPS 4923 CR BS-IV, Haulage Tractor with sleeper cab. |
| Name of Variants, if any | Refer Annexure- B |
| Place of Embossing or etching the Chassis Number (Vehicle Identification Number). Supporting details by drawing or pictures may be provided if necessary. | Front end of the left side long member. |

Code for month and year of production:

| Code for month of production: | | Code for year of production: | | | |
|-------------------------------|----------|------------------------------|----------|------------------------|----------|
| Month | Code | Year | Code | Year | Code |
| January | A | 1.1.2016 to 31.12.2016 | G | 1.1.2031 to 31.12.2031 | 1 |
| February | B | 1.1.2017 to 31.12.2017 | H | 1.1.2032 to 31.12.2032 | 2 |
| March | C | 1.1.2018 to 31.12.2018 | J | 1.1.2033 to 31.12.2033 | 3 |
| April | D | 1.1.2019 to 31.12.2019 | K | 1.1.2034 to 31.12.2034 | 4 |
| May | E | 1.1.2020 to 31.12.2020 | L | 1.1.2035 to 31.12.2035 | 5 |
| June | F | 1.1.2021 to 31.12.2021 | M | 1.1.2036 to 31.12.2036 | 6 |
| July | G | 1.1.2022 to 31.12.2022 | N | 1.1.2037 to 31.12.2037 | 7 |
| August | H | 1.1.2023 to 31.12.2023 | P | 1.1.2038 to 31.12.2038 | 8 |
| September | J | 1.1.2024 to 31.12.2024 | R | 1.1.2039 to 31.12.2039 | 9 |
| October | K | 1.1.2025 to 31.12.2025 | S | 1.1.2040 to 31.12.2040 | A |
| November | N | 1.1.2026 to 31.12.2026 | T | 1.1.2041 to 31.12.2041 | B |
| December | P | 1.1.2027 to 31.12.2027 | V | 1.1.2042 to 31.12.2042 | C |
| | | 1.1.2028 to 31.12.2028 | W | 1.1.2043 to 31.12.2043 | D |
| | | 1.1.2029 to 31.12.2029 | X | 1.1.2044 to 31.12.2044 | E |
| | | 1.1.2030 to 31.12.2030 | Y | 1.1.2045 to 31.12.2045 | F |

| | |
|---|--|
| Position of the code for month of production in the Chassis number | MAT704XXXXXX X XXXXXX (X – Month of Production) 12 th digit from left |
| Position of the code for year of production in the Chassis number | MAT704XXX X XXXXXXXX (X – Year of Production) 10 th digit from left |
| Height of the Chassis No. (Vehicle Identification Number): | 7 mm (Minimum) |
| Example of Engine number | 21C63245567 |
| Example of Chassis No. (Vehicle Identification Number) with Month & Year of Manufacture:- | MAT704251GUJ14805 |

| | | | |
|---|---|--|--|
| Manufacturer : TATA MOTORS LTD Signature:  Name : S V Joshi Designation: DGM(Certification)ERC | Documents No STN01610,A Sheet No 9 of 9 Date – 06.09.2016 | Test Agency  Sign - BADUSHA SR. DEPUTY DIRECTOR & HEAD HOMOLOGATION MANAGEMENT & REGULATION, ARAI, PUNE Name - Designation - Date of issue - | Cert No  Page 9 of 9 Of..... |
| | | | |