

TECHNICAL INSPECTION REPORT ('B' VEHICLES) :TATA 2.5 TON 713C & 715 TC

Nature of Inspection (Sec SAO 01/S/98) : ANNUAL TECH INSPECTION

Make, Model and type :	Holding unit : _____
B. A. Number : _____	Maint Wksp : _____
Distance/hours run : _____	Date of inspection : _____
(a) Since entry into service : _____	Date veh taken into service : _____
(b) Last base overhaul : _____	Date of overhaul : _____
(c) On the present engine : _____	Date of last engine change : _____
Tools and equipment: (a) As per VKL: Yes/ No If no, demand no _____ (b) Serviceability: S/ UNSV	Documentation : (a) Log book : Yes/ No (b) Previous CEME Form: Yes/ No (c) _____ (d) Cannibalization certi for main assy, if any : Yes/ No
(a) Maintenance : Adequate/ Inadequate	Engine No : _____ Chassis No : _____ Rotary Pump No: _____ Battery No : _____
(b) Lubrication : Adequate/ Inadequate	
(c) Cleanliness : Adequate/ Inadequate	
(d) Adjustment/free play: Correct/ Incorrect	
(e) KPL:	Tyre rotation carried out: Yes/No
(f) Mod done, if any with auth:	

ROAD TEST :

Engine : S/ UNSV	Steering : S/ UNSV
Governor : S/ UNSV	Brakes : Efficient/ Inefficient
Gear changing : Easy/ Difficult	Transmission : S/ UNSV
Synchronization : S/ UNSV	Noises/Squeaks/leaks: Yes/ No

Inspectors Remarks :

Classification :	Signature _____	Countersigned _____
Date :	Name of inspector : _____	Name : _____
	Designation : _____	Designation : _____

Action by Unit / LRW

Date : _____ OC Unit

Action by Wksp

Classification After Repair

Date : _____ OC Unit

PART 'A' (TATA 2.5 TON 713C & 715 TC): INITIAL INSP AND CHECKING WITH DIAGNOSTIC**TOOLS AND EQPT****OIL LEVEL**

Ser	Item	Specification	Reqd Tool	Value Obtained	Time duration (Min)
1	Lubrication oil condition	Oil level- 14.3 Ltr Grade- 15W40	1. Check oil level using oil dipstick		10 Min
02	Steering oil level condition	Grade – ATF 'A' Capacity – 3 Ltr (Rane)	Check oil level using oil dipstick		
03	Main gear box	Grade- 80W90 Capacity – 713 TC- 5.2 Ltr 715 TC- 7.5 Ltr	Check oil level upto 'Level plug'		
04	Aux Oil level & condition	Oil grade – 80 W 90 Capacity – 4.0 Ltr	Check oil level upto 'Level plug'		
05	Front axle Oil	Grade- 80 W 90 Oil level – 3.5 Ltr	Check oil level upto 'Level plug'		
06	Rear axle Oil	Grade- 80 W 90 Oil level – 7.5 Ltr	Check oil level upto 'Level plug'		
07	Brake fluid level	Brake fluid – DOT 3 Capacity – 1.5 Ltr	Up to mark level		

Note- Refer preventive maint of B Veh VW/A 029 No 8 Issue I, Apr 2006, Table-XVI, Pages -37 to 41**CHECKING WITH DIAGNOSTIC TOOLS AND TEST EQPT**

Ser	Item	Specification	Reqd Tool	Value Obtained	Time duration (Min)
ENGINE					
1	Running	Idling RPM 600+/- 50	Digital Tachometer		02 Min
2	Oil Pump Pressure	2.07 bar at max RPM (2800)	Oil pressure gauge		02 Min
COOLING SYSTEM					
3	Radiator cap & PVRV	Activation at 0.5 kg/cm ² (0.5 kg/cm ² to be maint in the cooling sys)	1. Check pr using cooling system pr kit		04 Min
4	Temp gauge/ Warning	Maximum Eng temperature – 120° at 2500 RPM (Red/Green)	Temp gauge		04 Min
IGNITION/ELECT					
5	Battery	Bty Voltage 12V 180 AH Specific gravity -1.21 to 1.28	Multi meter Hydrometer/ Refractometer		05 Min
6	Dynamo/ Alternator	Regulator voltage – 13 to 14.5 V	Digital multi meter		02 Min
7	Head Light	Marking line should be dark and 5 mm thick with sharp feature	Head light Beam Aligner		02 Min
WHEELS/TYRE					
8	Tyre tread depth	Max 1.6 mm	Vernier caliper		1 Min
9	Tyre Pressure Front/ Rear	65 PSI	Tyre pressure Gauge		02 Min

EXHAUST SYSTEM					
10	Emission	<u>Pre BS-IV Norms</u> <u>Light Absorption</u> <u>Coefficient(1/Meter): 2.45</u> HSU: 65 <u>As Per BS-IV Norms</u> <u>Light Absorption</u> <u>Coefficient(1/Meter): 1.62</u> HSU: 50	Diesel smoke meter		30 Min
STEERING GEOMETRY					
11	Caster, camber, Toe in	Caster – 1°±30' + ve Camber – 1° + ve Toe In – 0 to 3 mm KPI - 9°-30'	Computerized wheel aligner		10 Min
12	Tie rod ball joint	Tightening torque 14-18 mkg			02 Min
GEAR BOX					
13	Mounting	Tightening torque 9 Kgm			
14	Gear shifting link	Tightening torque 9 Kgm			
BRAKES					
15	Brake fluid level	Brake fluid – DOT 3 Capacity – 1.5 Ltr	Brake oil quality tester to check quality and moisture content		02 Min
16	Brake performance	Perfect - 90% Excellent - 77% Good - 70% Fair - 60% Poor - 50% Bad - 37% Very bad - 30%	Brake efficiency tester		05 Min
TOTAL TIME					01:23 Hrs

PART 'B' (TATA 2.5 TON 713C/715TC): CHECKING BY VISUAL INSP

Ser	Item	Visual Insp	Time	Satisfactory/ Unsatisfactory	Remarks
ENGINE					
1	Bearing	Check if grease is of the same colour and consistency as the specified lubricant. If the lubrication has discolored and has grit in it, this will indicate that the seal has failed and dirt has entered the brg space			Road Test
2	Gasket and seals	Check for leakage due to damaged gasket and seals	02		
3	Compression	Crank the engine and check the performance of engine by compression gauge(If reqd)			Road Test
4	Valve Mechanism, Mounting, Timing gear accessory drive and fly wheel	Crank the engine and check the performance of engine			Road Test

LUBRICATION SYS					
5	Tanks / Sumps / crank case	Check oil sump/tank for dent and oil seals leakage	02		
6	Cooler / Heat exchangers	Check leakage of coolant	02		
7	Filters	Check leakage and choking of oil filter	04		
8	Pipes and hoses	Check leakage of pipes and hoses	01		
COOLING SYS					
9	Radiator	Check for leakage and radiator core damage	01		
10	Radiator cap & PVRV	Check condition of rubber seal	02		
11	Hose pipe	Check for leakage of hoses	01		
12	Fan belt/ drive & fan & pulley	Check for damage	02		
13	Water pump Thermostat and Temperature gauge/ warning	Crank the engine and check the performance	01		
FUEL SYS					
14	Tank	Check for dent and leakage	01		
15	Lines	Check for dent and leakage	01		
16	Filter	Check for leakage, water in fuel sedimentor , choking etc	04		
17	Air cleaner	Check for serviceability	02		
18	Primer	Check for leakage	01		
19	Water Separator	Serviceability Check	01		
IGNITION / ELECT					
20	Horn/ Siren	Check for serviceability & electric connections			MT Drill
21	Wiring	Check for serviceability & electric connections	02		
22	Junction Box		02		
23	Light				MT Drill
24	Ignition and other switches		01		
25	Wiper and fittings				MT Drill
26	Traffic Indicator				MT Drill
27	Starter motor	Cranking & Serviceability Check			Road Test
28	Instrument panel	Check function of gauges, Malfuction Indicator Lamp and other warning lamps	02		
CLUTCH					
29	Pedal and Linkage	Check for proper connection and lubrication			Road test
30	Brake fluid lines	Check for oil level and bleeding of system	01		
31	Clutch master cylinder	Check for leakage	01		

STEERING					
32	Steering gear box	Check for oil leaking and oil seal serviceability	01		
33	Stg Oil filter	Check serviceability	02		
GEAR BOX					
34	Drain plugs	Check for leakages	01		
35	Housing	Check for cracks/ burrs/ damage/ scoring marks/ threaded portion of filler plug and drain plug	01		
36	Gear teeth on Synchro sleeve and hub	Check for rounded off corners/ wear/damage			Road Test
AUX GEAR BOX					
37	Speedometer and cable	Check for Electric connection and wiring harness			Road Test
DRIVES AND FRONT/ REAR AXLES					
38	Prop shaft/chain	Check the status of greasing	02		
39	U and CV joint				
40	Wheel bearing		04		
BRAKES					
41	Master cylinder	Check for serviceability	02		
42	Wheel cylinder	Check for wheel cylinder leakage	02		
43	Lines pipes	Check for brake fluid line leakage	01		
44	Pedals and linkage	Check for serviceability / damage			Road Test
45	Parking Brakes	Check cable serviceability			Road Test
46	Booster	Check for damage	01		
47	Rubber hose	Check for rubber hose leakage	01		
48	Brake drum	Check for cleanliness/ damage	02		
49	Air Compressor	Air pressure cut out – 8.1±0.2 bar. Air pressure cut in- 7.1 bar			Road Test
50	Air dryer	Check the status and Serviceability			Road Test
51	Exhaust Brake Valves	Check the status and Serviceability			Road Test
52	Sy protection Valve	Check the status and Serviceability			Road Test
CHASSIS					
53	Bumper, mud wing	Check for dent and paint	10		
54	Bonnet	Check for dent and paint			
55	Wind screen	Check for brakeage			
56	Chassis frame	Check for chassis mounting			
57	Rivets	Check for damage			
58	Spring / torsion bars	Check for wear/damage			
59	Shock absorbers	Check for serviceability			
60	Wheels/ Tyres	Check for uneven wear, damaged wheels/rims			

BODY/CAB					
61	Convoy lamp	Check for serviceability/uneven wear/damage/crack	15		
62	Front bumper				
63	Front door glass				
64	Cab				
65	Doors/Trims				
66	Body work				
67	Seats				
68	Rear View Mirror				
69	Switches				
70	Glove Box				
71	Air duct side				
72	Centre air vent assy				
73	Assy seat belt RH				
74	Assy seat belt LH				
75	Doors				
76	Body work				
SUSPENSION					
77	Shock absorber	Check for leakage	02		Road Test
78	Spring and ball joints	Check for leakages, damage and proper seating of spring in strut			
SPECIAL FITTINGS OF DEVICES					
79	Firefighting device	Carry out visual insp to check serviceability/ uneven wear/damage/crack.	02		
80	Spare Wheel mechanism				
TOTAL TIME			01:27 Hrs		