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# TRUCK UTILITY HEAVY (TUH), 4x4, REYNOLDS BOUGHTON - ALL VARIANTS

# INSPECTION STANDARD PART 1 COMPLETE EQUIPMENT

This publication contains information covering the requirements of Category 5-3 at information levels 2 and 3

BY COMMAND OF THE DEFENCE COUNCIL

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#### **PREFACE**

- 1 Amendments are identified by marginal side lining.
- 2 Comments on this publication are to be forwarded in accordance with AESP 0100-P-011-013 to Vehicles and Weapons Branch REME, Chobham Lane, Chertsey, Surrey KT16 OEE.

#### **INSPECTION STANDARD PART 1**

#### **EQUIPMENT IDENTITY**

- 1 This standard covers the following equipment:
  - 1.1 Truck Utility Heavy (TUH), 4x4, Reynolds Boughton (All Variants).

#### INTRODUCTION

- 2 This publication details the Acceptable Quality Levels (AQL) for the complete equipment, to meet the quality standards of levels 2 and 3.
- 3 It is to be applied in conjunction with the general principles contained in Chap 150 of EMER T&M, A 028.
- 4 The following abbreviations are used H = High L = Low.

#### INDEX TO SCHEDULE

5 The main breakdown of inspection and testing of the complete equipment is as follows:

#### Serial

- 1 Engine
- 2 Gearbox
- 3 Front axle
- 4 Rear axle
- 5 Steering
- 6 Brakes
- 7 Suspension
- 8 Roller brake test
- 9 Road test

## **SCHEDULE**

6

Serial	Detail	Acceptable (	Remarks	
		Level 2	Level 3	
(1)	(2)	(3)	(4)	(5)
1	ENGINE			
	1.1 Compression pressure at starter cranking speed, normal operating temperature all injectors removed.	H 33. L 22.8 bar	.1 bar L 25.5 bar	
	1.2 Maximum variation between cylinders.	2.1 bar H 102 mm L 19 mm L 25.4 mm		·
	1.3 Fan belt adjustment remaining, belts at correct tension.			Measured at slot of alternator bracket.
	1.4 Hydraulic pump belt adjustment remaining, belt at correct tension.		2 mm L 51 mm	Measured at slot of pump bracket.
	1.5 Rock at tip of fan blades.	N/A See remarks H 700 L 650 2600 H 4.69 bar L 2.76 bar		Viscous fan fitted.
	1.6 Engine, hot to idle smoothly at (rev/min).			
	1.7 Maximum governed speed at full load (rev/min).			Maximum no- load speed 2960 rev/min.
	1.8 Lubricating oil pressure, hot at 2000 rev/min.			Minimum of 2.76 bar required at 2000 rev/min for piston cooling jets).
	1.9 Coolant temperature (max).	95	5°C	
2	GEARBOX			
	2.1 Backlash measured at rim of output flange.		7 mm mm	Top gear engaged.
				(continued)

Serial	Detail	Acceptable Quality Level (AQL)		Remarks	
		Level 2 Level 3			
(1)	(2)	(3)	(4)	(5)	
	2.2 Lift at output flange.	H 1.5 mm L Zero			
3	FRONT AXLE				
	3.1 Hub end float	H 0.15 mm L 0.05 mm			
	3.2 Lift at input flange.	H 1.5 mm L Zero			
	3.3 Backlash at wheel input held.	H 75 mm L 50 mm			
4	REAR AXLE				
	4.1 Hub end float	H 0.25 mm L 0.025 mm			
	4.2 Lift at input flange.	H 1.5 mm L Zero			
	4.3 Backlash at wheel input held.	H 75 mm L 50 mm			
5	STEERING				
	5.1 Toe out	4.7 ± 1 mm		Measured at wheel rim.	
	5.2 Turning circle	H 16 metres L 15 metres		Steering stops set to allow 31 degrees from straight ahead to full lock.	
	5.3 Free play, measured at steering wheel rim.	H 12.7 mm L 6.35 mm			
6	BRAKES				
	6.1 Pedal free play.	H 19 L 13	(continued)		

Serial	Detail	Acceptable Quality Level (AQL)		Remarks	
		Level 2	Level 3		
(1)	(2)	(3)	(4)	(5)	
7	SUSPENSION	H 75 mm L 50 mm H 150 mm L 130 mm			
	7.1 Front spring deflection unladen.				
	7.2 Rear spring deflection unladen				
8	ROLLER BRAKE TEST				
	8.1 Service brake.		H 75 % L 55%		
	8.2 Parking brake	king brake H 35% L 20%		(tonnes) F/Axle 2.24 R/Axle 1.28 TOTAL 3.52	
9	ROAD TEST				
     .	9.1 Oil consumption		0.5% of fuel . consumption		
	9.2 Time to accelerate from 20 to 40 mile/h in top gear. (32 to 64 km/h)	Not more	than 20 s	Level road unladen.	
	9.3 Braking efficiency by Tapley Meter	H 9 L 7			
	9.4 Distance to pull up from 20 mile/h. (32 km/h)	H 8 metres		Unladen	
		L 5.5 i	netres		
	9.6 Handbrake to hold on a gradient of:	16 (1 in	6.25)	In either direction.	
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