


Static Stability Tilt	Millbrook Proving Ground Ltd.		
	Project	VG0414-001-01	
	Datapak	MBK18-2056	
	Test Date	30/10/2018	

Test Vehicle

Make:	Ausa
Model:	Taurus
Registration:	N/a
Identification:	N/a



Figure 1 - Test Vehicle

Result Overview

The vehicle remained stable at a platform angle of 16.3° in the RH direction without the camera boom levelled, and 21.7° in the RH direction with the camera boom levelled. The customer did not wish to proceed to higher tilt angles in order to prevent damage to the vehicle.

Contact Details

Author:	Craig Elliott	
Position:	Engineer	
Department:	Vehicle Measurement	
Email:	craig.elliott@millbrook.co.uk	
Phone Number:	+44 1525 842536	
Panavision Witnesses:	Alan Smith, Felix Pages	

Approver:	Robert Taylor	
Position:	Principal Engineer	
Department:	Vehicle Measurement	

Issue No.	Effective Date:	VMF014
4	12th April 2018	Page 1 of 4

Test Vehicle Details					
Make:		Ausa			
Model:		Taurus			
Registration:		N/a			
Identification:		N/a			
VIN / Chassis Number:		46580269			
Class:		N/a			
Gross Vehicle Weight (kg):		5545			
Max. Front Axle Weight (kg):		2350			
Max. Rear Axle Weight (kg):		3350			
Front Tyre Make, Model, & Size:		BKT MP567 10.0/75 - 15.3			
Rear Tyre Make, Model, & Size:		BKT MP567 10.0/75 - 15.3			
Front Tyre Pressures:		As received			
Rear Tyre Pressures:		As received			
Test Vehicle Weights					
Unladen 'As Received' Corner Weights (kg):					
LHF		Front		Total	
RHF					
LHR		Rear			
RHR					
Test Corner Weights (kg):					
LHF	1329	Front	2525	Total	4731
RHF	1196				
LHR	1139	Rear	2206		
RHR	1067				
Test Load Comments:		Driver and passenger @ 75 kg, 51kg on nose of boom, 26 weights @ 15 kg mounted either side of the camera boom (52 weights in total).			
Instrumentation					
Instrumentation		Serial No.	Calibration Due		
Inclinometer, Platform		21-0095-48	01 May 2019		
Inclinometer, Body Front		21-9762-55	01 October 2019		
Inclinometer, Body Rear		21-9763-58	01 October 2019		
Workshop Weighbridge - Front Pads		41-9820-46	04 April 2019		
Workshop Weighbridge - Rear Pads		41-9820-47	04 April 2019		
Tyre Pressure Gauge		-	-		
Millbrook Weather Station		04-1363-40	06 June 2019		
Issue No.		Effective Date:		VMF014	
4		12th April 2018		Page 2 of 4	

Tilt Test Results		
Regulation:	-	
Stable Requirement:	-	
Vehicle Setup:	Neutral, park brake OFF	
RH Tilt Angles (°)	Test 1	Test 2
Platform	14.9	16.3
Body Front	18.5	20.2
Body Rear	18.4	20.2
Test Comments, 1 & 2:	Camera boom vertical prior to tilt. No wheel lift was observed at the tilt angle achieved.	
RH Tilt Angles (°)	Test 3	Test 4
Platform	17.8	21.7
Body Front	20.2	25.2
Body Rear	20.1	25.1
Test Comments, 3 & 4:	Camera boom leant away from direction of tilt at maximum boom angle of 16° on the end of the boom. Static body angle front: 1.3°, static body angle rear: 1.5°. No wheel lift observed at the tilt angle achieved.	
Centre of Gravity Calculation		
Wheelbase:		m
Front Track:		m
Rear Track:		m
X - Longitudinal CofG from Front Axle:		m
Y - Lateral CofG from LH Side:		m
Z - Vertical CofG from Ground		m
Static Stability Factor (SSF):		-
Weather Conditions		
Wind Speed (m/s):	2.15	
Wind Direction (°):	269	
Tilt Axis (°):	240 / 60	
Issue No.	Effective Date:	VMF014
4	12th April 2018	Page 3 of 4

Photographic



Figure 2 - RH Front View, Test 2



Figure 3 - RH Front View, Test 4



Figure 4 - RH Rear View, Test 2



Figure 5 - RH Rear View, Test 4



Figure 6 - Driver and Passenger Load



Figure 7 - Load on Side of Camera Boom

Issue No.	Effective Date:	VMF014
4	12th April 2018	Page 4 of 4