

DAFs and the roller brake test

Important updates and reminder

Over the years we have learnt that the DAF Variomatic transmission doesn't like the roller brake test at the MoT station. Some of us have learnt to our peril the dangers the rollers present to our DAFs and are well aware of the transmission damage that can occur when a roller is used to undertake the brake efficiency test.

DAF dealers were well in the know and if they were involved in testing they reverted to the Tapley brake testing device.

With the demise of DAF dealers, interest in the cars waned and those test stations that were unaware of the peculiarities of the DAF had no reason to think that the DAF should not be tested on the rollers.



A DAF must not be tested on a rolling road

Eventually we were able to get a note included in the *MoT Testers Manual* which warned against putting a DAF on the rollers. But if your tester had not read the manual then he would not know of the note and would need telling.

**Better to be safe than sorry.
DAFs are not an everyday sight or job for many MoT testers.**



A Tapley meter should be used to MoT test DAF brakes

Telling a tester who considers himself to be a professional and the designated expert is not easy from the position of a humble and lay car owner. Unless you could refer to the exact page in the manual and get him to read it, your voice would not be very authoritative.

Time has marched on and many testers have retired or moved onto other things, so the pool of knowledge within the testers has diminished and it is a safe bet that the majority of testers don't realise that DAFs should not be subjected to the roller brake test.

Over the page we have reproduced the relevant page from the March 1992 testers manual which quite clearly says a belt driven transmission should not be roller tested.

Unfortunately, the current version of the manual omits this guidance and I can only presume that the very small numbers of DAFs on the road and being tested means that there is no longer considered sufficient need to repeat the advice. The current August 2014 manual page is also reproduced.

It is therefore necessary for you to remind your MoT tester of the dangers of running your DAF on the rollers, and by showing him the old and current pages he will be more understanding.

This is the original 1992 version which mentions vehicles including those with belt-drive transmissions that should not be tested on rolling roads. PLEASE SHOW THIS TO THE MOT TESTER

<h1 style="margin: 0;">3.7 Brake Performance (Roller Brake Test)</h1>	
Information	Method of Inspection
<p>The brake performance test must be carried out on a properly calibrated and maintained slow-speed roller-brake tester designated as acceptable for the statutory tests, except</p> <ul style="list-style-type: none"> ▪ Vehicles for which a roller brake tester is not appropriate, or ▪ At premises without a roller brake tester where approval has been granted for the test to be carried out by other means <p>Vehicles not to be tested on a roller brake tester</p> <p>Certain vehicles should not be tested on a roller brake tester, eg vehicles with</p> <ul style="list-style-type: none"> ▪ More than one driving axle permanently engaged ▪ Limited-slip differential ▪ Belt-driven transmission ▪ Brakes for which the servo operates only when the vehicle is moving <p>These vehicles should be tested using a properly calibrated and maintained decelerometer or a plate brake tester designated as acceptable for the statutory tests, see Sub Section 3.7 B, page 24, and C, page 25.</p> <p>A roller brake test is also not appropriate for vehicles with damaged, under-inflated or studded tyres.</p> <p>Automatic transmission</p> <p>Vehicles with automatic transmission must never be roller brake tested with the gear selector in the "P" park position.</p>	<p>A. Roller Brake Test</p> <p>If the vehicle is of a type which can be tested on a roller brake tester</p> <p>Preparation</p> <ol style="list-style-type: none"> 1. Examine the tyres of the vehicle to ensure that they are not obviously under-inflated. 2. Determine whether the vehicle has a split (dual) braking system. <p>Note: To determine whether the vehicle has a split (dual) braking system, check the number of pipes from a hydraulic master cylinder or air foot valve. Split (dual) systems normally have at least two pipes. Some hydraulic systems have two master cylinders.</p> <ol style="list-style-type: none"> 3. Select the direction of rotation of the roller brake testers so that the vehicle wheels rotate forward. <p>Positioning the vehicle</p> <p>Position the front wheels of the vehicle in the rollers of the brake tester and then run both sets of rollers together to align the vehicle.</p> <p>Note: In some cases, it may be necessary to chock the wheels not under test.</p>
Cont'd ▼	Cont'd ▼
18	The M.O.T. Inspection Manual

Below is the current version that no longer shows the information about belt-driven cars

<h1 style="margin: 0;">3.7 Brake Performance Testing</h1>		3.7 - page 1
Information	Method of Inspection	Reason for Rejection
<p>The brake performance test must be carried out on the primary brake tester approved at the VTS i.e. a roller brake tester or plate brake tester.</p> <p>Where the primary brake tester is not suitable for the vehicles drive configuration, transmission type or braking system, a full or partial decelerometer test may be appropriate.</p> <p>Additional information available from the vehicle manufacturer should also be taken into account.</p> <p>A very small number of large vehicles, such as some American motor caravans, have a parking brake which is not suitable for a dynamic brake test. In these circumstances a gradient test must be carried out; see sub-section E.</p> <p>When testing a veteran car or a vehicle with special controls the driver should be allowed to operate the controls during the test if he/she wishes, including for any road test.</p> <p>For the method of calculating brake efficiency and brake out of balance, see Section 3.8.</p> <p>Rear brake imbalance and secondary brake checks do not apply to tricycles or quadricycles.</p> <p>If the required brake efficiency is only just met, but the tester knows that a higher performance figure is normally obtained for the type of vehicle, the vehicle presenter should be advised.</p> <p>If the vehicle is fitted with an electronic parking brake, refer to VSI or the manufacturer's operating instructions for the test procedure.</p>	<p>A. Brake Performance Test</p> <ol style="list-style-type: none"> 1. Ensure that the vehicle is in a fit condition to carry out an appropriate brake test. <p>Note: This includes aspects such as damaged, studded or under-inflated tyres.</p>	<ol style="list-style-type: none"> 1. Brake performance test unable to be carried out.
The M.O.T. Inspection Manual		Issue Date: August 2014