



TECHNICAL BULLETIN

A211-04

12/2003

Subject

Vehicle Drift (Left or Right) Without Braking

Model: X-TYPE

Year: 2001.5 Onwards

VIN C00294 Onwards

Section: 211-00

Steering System

Summary

A211-04: This Technical Bulletin has been issued to address customer concerns that the vehicle drifts (left or right) without braking on straight roads.

Vehicle Drift

Vehicle drift is the lateral displacement of the vehicle when the steering wheel is released. Drift is measured in seconds to change one highway lane.

Vehicle Drift Acceptance Criteria

The vehicle must not drift more than 3.7 meters or 12 feet (equivalent to a change of one highway lane) in eight seconds, at a speed of 60mph (96.6kph).

Road and Test Conditions

Before relaxing the grip on the steering wheel to start the drift test, it is crucial that the vehicle is traveling straight and driven at a constant speed (use speed control if installed) and the road is clear and safe to complete road test.

In order to road test the vehicle for drift, a section of road must be identified that is suitable for use at this speed and maneuver, that has a flat surface, and must not suffer from strong crosswinds or gusts.

Note: When the vehicle is re-tested, the same section of road MUST be used to enable a true comparison.

Preliminary stage

Prior to carrying out the road test, ensure that all the suspension and steering bushings are in good condition.

Road test the vehicle and confirm that the vehicle drifts.

Stage 1

Measure the front and rear tire pressures and record on the job card.

Note: Adjust all tire pressures to that stated on the vehicle tire pressure label and specified for the vehicle wheel and tire size for speeds of above 100mph (160kph).

Re-test the vehicle. If the drift issue is resolved and there was a difference of three psi, or greater, across either front or rear axle, inform the customer that their tire pressures were not at the correct pressure. If the vehicle is still drifting continue with stage 2.

Note: The job card must be marked 'STAGE 1 OF DRIFT PROCESS COMPLETE'.

Stage 2

If the tire pressures are within specification and/or the vehicle still drifts on road test, swap the front wheel/tire assemblies across the axle, ensuring the high spot marking is located correctly.

Re-test the vehicle. If the drift issue has not been resolved, continue with stage 3.

Note: The job card must be marked ' STAGE 2 OF DRIFT PROCESS COMPLETE' .

Stage 3

If the vehicle still drifts after carrying out stage 2, carry out a geometry check and record all figures on the job card.

Note: Please ensure that the geometry test equipment has a valid calibration certificate.

The front camber angles need to be reviewed and the front subframe needs to be adjusted. If the car drifts to the left adjust the subframe to the left, if the car drifts to the right, adjust the subframe to the right (the camber angle data can be found in the vehicle specification book).

The front castor angles then need to be reviewed and the subframe adjusted to balance the castor so it does not affect vehicle drift.

Castor for each side is increased if the frame is moved forward in the vehicle and reduced if moved rearward. (In general, the drift effect is towards the side of low castor). The spec is 2.2 +/- 0.5 degrees. Following adjustment, the vehicle needs re-tracking and the front camber and castor angles recording on the job card.

Note: The job card must be marked ' STAGE 3 OF DRIFT PROCESS COMPLETE' .

Note: The vehicle must be within the vehicle geometry specification after adjustments. If the drift is noticed when carrying out the PDI, please record all information on the job card and submit the information through the EPQR system for investigation.

Stage 4

If the vehicle still drifts on road test, contact Dealer Technical Support (DTS) on (+44) 0 2476 203990 for further support.

Warranty Information

Description	SRO	Labor Time Allowance	Causal Part
Swap front wheel and tire assemblies across axle	74 20 06	0.3 Hours	C2S 4975
Petrol			
Four wheel geometry and front wheel alignment - check and adjust	57 65 14	0.7 Hours	C2S 4975
Front subframe - reposition (during geometry check)	76 94 42	0.7 Hours	
Diesel			
Four wheel geometry and front wheel alignment - check and adjust	57 65 14	0.7 Hours	C2S 4975
Front subframe - reposition (during geometry check)	76 94 42	0.8 Hours	