



X-TYPE

DATE 12/03

XT204-07

SERVICE

TECHNICAL BULLETIN

Vehicle Drifts Left Or Right With Brakes Released – Diagnosis

MODEL 2002 MY-ON
X-TYPE

VIN C00001-ON

Issue:

Some customers may express a concern that the vehicle drifts (left or right) without braking on straight roads.

Action:

Refer to the information below when analyzing the amount of drift that a particular vehicles exhibits:

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 is not exposed to 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.

NOTE: The information in Technical Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers." Do not assume that a condition described affects your car. Contact a Jaguar retailer to determine whether the Bulletin applies to your vehicle.

Road test the vehicle and confirm that the vehicle drifts. A road test with the customer may be necessary to understand the customer concern.

STAGE 1

Measure the front and rear tire pressures and record on the repair order.

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 repair order 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 refer to Technical Bulletins XT204-04 and XT204-02, Tire Optimization Process.

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

Note: The repair order 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 repair order.

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 within the limits of the specifications. 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 or Technical Bulletin XT204-03).

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, reset the toe and record the front camber and castor angles on the repair order.

Note: The repair order 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 repair order and submit the information through the EPQR system for investigation.

STAGE 4

If the vehicle still drifts on road test, contact the Technical Hotline at 1-888-JAG-DLRS

Warranty Information:

Warranty claims should be submitted quoting the information found in the table below. This will result in payment of the stated time and, where applicable parts/miscellaneous expense codes as listed.

Description	SRO	Time	Causal Part Number
Swap front wheel and tire assemblies across axle	74.20.06	0.3 hrs	C2S 4975
Four wheel geometry and front wheel alignment - check and adjust	57.65.14	0.7 hrs	C2S 4975
Front subframe - reposition (during geometry check)	76.94.42	0.7 hrs	C2S 4975