

Technical Information

FROM: Maserati TSO

TO: Maserati Network



PERSONAL SERVICE LAB

MASTERS OF CARE

Wheel Alignment Checklist

DATE: January 24, 2024

As part of Maserati's continuous dedication to maintain customer satisfaction and product quality, kindly refer to the procedures outlined in this bulletin regarding vehicle alignment anomalies. If a wheel alignment is required either during PDI or in response to a customer concern, and it falls within the White Book limits (Wheel Alignment, balancing, and adjustments covered only for the initial 3 months of service), kindly follow the specified procedures outlined in this bulletin.

Prior BOL authorization is mandatory for all alignments.

NOTE: Before initiating a wheel alignment, ensure that the vehicle adheres to factory standards. For instance, no aftermarket wheels or accessories should be installed, and there should be no suspension modifications, etc.

MODELS: All Maserati models and MYs

CUSTOMER CONCERN: The vehicle pulls to the left or right and/or the steering wheel is crooked.

Note on drivability characteristics:

New models featuring a double wishbone front suspension geometry, and steering reactivity have been emphasized, providing a heightened sense of connection to the road profile. This characteristic is particularly pronounced in cars equipped with standard suspensions incorporating the double-wishbone front suspension geometry.

Preliminary Inspection:**1) Check the condition of the wheels (rims), tires, and tire pressures. Check tire tread wear and depth.**

- Check and, if necessary, adjust the tire pressures to the required specifications for all 4 tires.
- Check and document tire tread wear on all 4 tires.

2) Perform a dynamic (road) test on a straight and level (flat) road. (Perform both a and b.)

Note: During the road test, the steering wheel must always be held with both hands. The driving assistance systems (ADAS) could amplify any deviations or oscillations of the same induced by the roughness of the road surface.

- Crooked steering wheel check:** Set the cruise control to approximately 20 to 25 mph (35 km/h). While driving on a straight flat road, verify if the steering wheel is straight and within the design tolerance of ± 2 degrees.
- Vehicle pull check:** Set the cruise control to a speed range of approximately 40 to 45 mph (70 km/h). While driving on a straight flat road, check if the steering wheel is straight and if the vehicle pulls within or beyond the distance of approximately 300 to 330 feet (100 meters).

Note: If the vehicle pulls for a lane change beyond the distance of 100 meters, then the vehicle is within the design tolerance.

3) INSPECTION RESULTS:

- **OK ▶** Vehicle is within tolerance and is operating to factory standards (Steps 1a, 1b, and Steps 2a and 2b) = wheel alignment is not needed.

Example of OK: (2a) The steering wheel is straight and within the design tolerance of ± 2 degrees in either direction and **(2b)** the vehicle does not pull within a distance of 100 meters.

- **NOT OK ▶** If the vehicle pulls and/or the steering wheel is not straight (one or both inspection tests 2a and 2b not within design tolerance) Continue to Step 4.

4) Please carry out a preliminary alignment inspection via an alignment machine (refer to the workshop manual for details) and complete the **WHEEL ALIGNMENT CHECKLIST** (Page 3). Then submit a BOL as "Support Request" and attach the following and wait for further instructions:

1. Printout of the preliminary alignment inspection (before any adjustments).
2. **WHEEL ALIGNMENT CHECKLIST** (Page 3).
3. A picture of the vehicle on the alignment machine and using the Digital Level P/N 900000537 showing the "steering wheel off center angle". Be sure the front wheels are parallel and straight as possible with the vehicle.

5) Wait for BOL approval/authorization BEFORE performing wheel alignment adjustment. Once approved, perform the adjustments per the workshop manual and attach the "After Adjustment" results (Printout) to the BOL and wait for further instructions.

NOTE: Wheel alignment preliminary check and/or adjustment procedures can be found in the Workshop Manual generally located via Section; 0.20.037 Complete vehicle setup preliminary checks and Section 0.20.031 Complete vehicle setup.

Always check whether the vehicle is equipped with OPT "SDD" (Performance Suspensions). Reason: The alignment specifications are different.

BOL Documentation

Please be detailed as possible when describing the two Inspections (2a and 2b) in the BOL. Detail if either one or both of the two inspections was **NOT OK**. For step 2a, describe which direction the steering wheel is pointing at and how much in degrees. For step 2b describe how much distance of travel it took for the vehicle to drift.

WARRANTY CLAIM INFORMATION

Before submitting a warranty claim, ensure that the following items are attached to the BOL:

1. **Alignment printouts** = One preliminary check and one final adjustment printout.
2. **A printout of the WHEEL ALIGNMENT CHECKLIST completely filled out** (On page 3 of this Bulletin).

Warranty claims submitted without the requested items attached to the BOL may be subjected to warranty review and rejection.

Please note: These items are required only for the BOL, not the warranty claim.

WHEEL ALIGNMENT CHECKLIST

Vehicle Information:

Chassis Number	
Model	
Mileage	
Sport Suspension (OPT SDD)	<input type="checkbox"/> YES <input type="checkbox"/> NO
Customer Concern	

Tire information:

(Step 1a)

Tire Pressures	Left Front	Right Front	Left Rear	Right Rear
[PSI/Bar]				

(Step 1b)

Tread Depth (Wear)	Left Front	Right Front	Left Rear	Right Rear
[mm/inches]				

NOTE: Document any abnormal tire wear, attach pictures to the BOL.

Anomaly Information:

(Step 2a)

Steering Wheel off Center Direction	LEFT <input type="checkbox"/>	RIGHT <input type="checkbox"/>
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NOTE: Attach pictures to the BOL.

(Step 2b)

Vehicle pull direction	LEFT <input type="checkbox"/>	RIGHT <input type="checkbox"/>
Vehicle pull distance		[Ft/m]

Steering Wheel Straightness

Steering wheel off center angle (digital level readout)	[°]
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Attach this checklist including a “before adjustment” preliminary alignment inspection printout to the BOL. Wait for further instructions.