

WHEEL ALIGNMENT

FRONT WHEEL ALIGNMENT

This procedure must be performed after any front suspension mechanical components have been serviced in order to align the position of the wheels in relation to the body (e.g. control arms, steering knuckles, shock absorbers, springs etc.).

Introduction

The wheel geometry/angle checks must be performed using appropriate alignment equipment after checking and adjusting the tire inflation pressure to the proper specifications and ensuring that the vehicle exhibits the following load conditions:

- Vehicle including spare tire, tools, accessories, and a full tank of fuel.

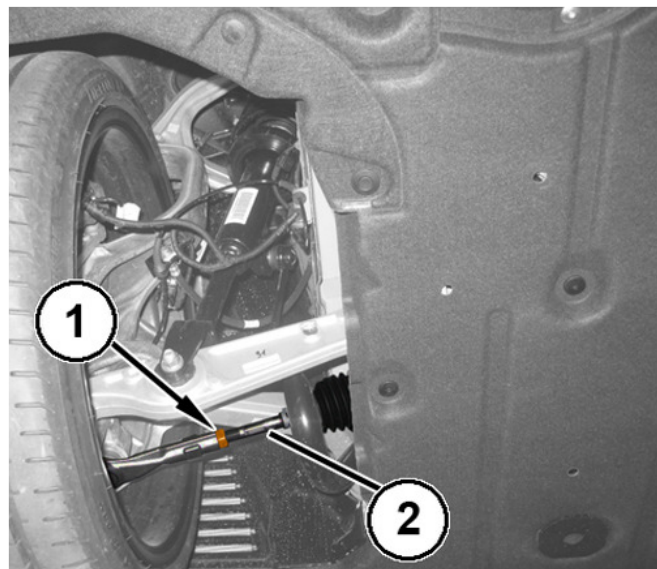
HALF TOE-IN CHECK

Check that the front wheel half toe-in is within the proper specifications ([Refer to 02 - Front Suspension/Wheel Alignment/Specifications](#)).

If the front wheel half toe-in value is not within the proper specifications, adjust it according to the instructions given below.

Make sure the steering wheel is perfectly straight and locked using a suitable tool.

1. Loosen the jam nuts on the left and right tie rod ends.
2. Tighten or loosen the steering links until the toe-in is correct, keeping the front wheels aligned.



NOTE: When the adjustment is completed, the number of free threads on the right tie rod should be the same as the number of free threads on the left tie rod.

3. Tighten the jam nuts on the left and right tie rods to the proper [\(Torque Specifications\)](#).

CAMBER CHECK

NOTE: The front wheel camber cannot be adjusted. If the reading is not within the proper specifications, check the control arms and the body for damage.

Check that the front wheel camber is within the proper specifications [\(Refer to 02 - Front Suspension/Wheel Alignment/Specifications\)](#).

CASTER CHECK

NOTE: The front wheel caster cannot be adjusted. If the reading is not within the proper specifications, check the control arms and the body for damage.

Check that the front wheel caster is within the proper specifications [\(Refer to 02 - Front Suspension/Wheel Alignment/Specifications\)](#).

Connect the diagnosis equipment to the vehicle OBD II port, go to the Electric Power Steering (EPS) control unit in the "miscellaneous functions" menu and start the "steering electrically controlled device position sensor calibration" procedure.

REAR WHEEL ALIGNMENT

This procedure must be performed after any rear suspension mechanical components have been serviced in order to align the position of the wheels in relation to the body (e.g. struts, shock absorbers, springs etc.).

Introduction

The wheel geometry/angle checks must be performed using appropriate alignment equipment after checking and adjusting the tire inflation pressure to the proper specifications and ensuring that the vehicle exhibits the following load conditions:

- Vehicle including spare tire, tools, accessories, and a full tank of fuel.

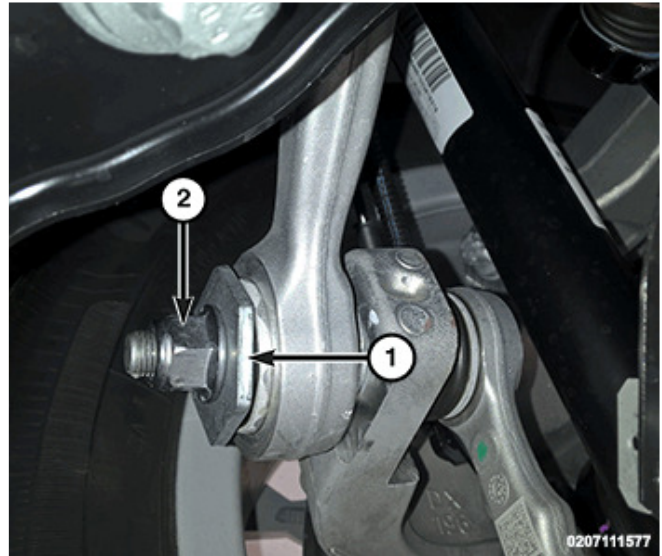
HALF TOE-IN CHECK

Check that the rear wheel half toe-in is within the proper specifications [\(Refer to 02 - Front Suspension/Wheel Alignment/Specifications\)](#).

If the rear wheel half toe-in value is not within the proper specifications, adjust it according to the instructions given below.

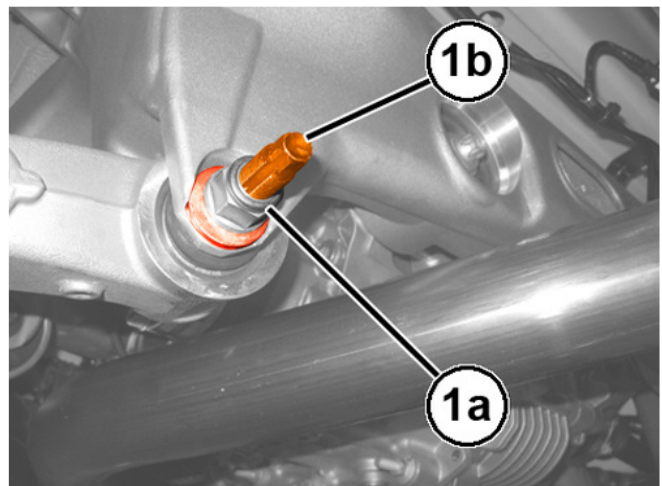
For the rear wheels half toe-in adjustment, loosen the nuts (2) and turn the adjustment ring nut (1).

After the adjustment is complete, tighten the nuts (2) to the proper [Torque Specifications](#).



CAMBER CHECK

Check that the rear wheel camber is within the proper specifications [\(Refer to 02 - Front Suspension/Wheel Alignment/Specifications\)](#).



NOTE: After adjusting the rear camber angle, recheck the half toe-in and if necessary repeat the adjustment.

For the rear wheels half toe-in adjustment, loosen the nuts (1a) and adjust the eccentric screw (1b) until the proper specification is reached.

After the adjustment is complete, tighten the bolt to the proper [\(Torque Specifications\)](#).

02 - Front Suspension/Wheel Alignment/Technical Specifications

SPECIFICATIONS

NOTE: This procedure must be performed after any front suspension mechanical components have been serviced in order to align the position of the wheels in relation to the body (e.g. control arms, steering knuckles, shock absorbers, springs etc.).

The wheel geometry/angle checks must be performed using appropriate alignment equipment after checking and adjusting the tire inflation pressure to the specified values and ensuring that the vehicle exhibits the following load conditions:

- "Standard A" - vehicle including spare tire, tools, accessories, and a full tank of fuel.

Front Wheel Alignment Specifications			
	Toe - Per Wheel	Caster - Per Side	Camber - Per Side
2.9 L	$0.00^{\circ} \pm 0.07^{\circ}$	$6.30^{\circ} \pm 0.30^{\circ}$	$-0.58^{\circ} \pm 0.33^{\circ}$
2.0 L RWD	$0.00^{\circ} \pm 0.07^{\circ}$	$6.13^{\circ} \pm 0.30^{\circ}$	$-0.50^{\circ} \pm 0.33^{\circ}$
2.0 L AWD	$0.00^{\circ} \pm 0.07^{\circ}$	$5.62^{\circ} \pm 0.30^{\circ}$	$-0.50^{\circ} \pm 0.33^{\circ}$

Rear Wheel Alignment Specifications		
	Toe - Per Wheel	Camber - Per Side
2.9 L	$0.22^{\circ} \pm 0.07^{\circ}$	$-1.50^{\circ} \pm 0.33^{\circ}$
2.0 L	$0.22^{\circ} \pm 0.13^{\circ}$	$-1.50^{\circ} \pm 0.33^{\circ}$

TORQUE SPECIFICATIONS

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.	COMMENT
Chassis Domain Control Module (CDCM) to Body Nuts	5	—	44	
Front Stabilizer Bar Bracket to Crossmember Bolt	60	44	—	
Hub and Bearing to Knuckle Bolts	100	74	—	
Lower Control Arm to Crossmember Bolt	60	44	—	
Lower Control Arm to Knuckle Nut	71	52	—	Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Stabilizer Bar Link to Stabilizer Bar Nut	100	74	—	Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Stabilizer Bar Link to Strut Nut	100	74	—	Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Strut to Body Nuts	26	19	—	
Strut Assembly to Lower Control Arm Bolts	60 Plus 135°	44 Plus 135°	—	Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Strut Rod to Strut Mount Nut	50	37	—	
Tension Strut to Knuckle Nut	71	52		Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Tension Strut to Crossmember Bolt	51 Plus 120°	38 Plus 120°		Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Upper Control Arm to Body	28	21	—	Do not reuse fastener. If removed, a new fastener must be installed and tightened to specifications.
Upper Control Arm to Knuckle	48	35	—	