#16-NA-056: Track and Competitive Driving Wheel Alignment Tips - (Feb 22, 2016)

Subject: Track and Competitive Driving Wheel Alignment Tips

Attention: This Bulletin also applies to any of the models that may be Export vehicles.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Corvette	2014	2016				

Condition	Some customers may want the vehicle's wheel alignment set-up for track events and competitive driving. Additional tips in this communication will be helpful for setting the wheel alignment.

Service Procedure

Important: Using these wheel alignment settings may cause excessive tire wear. Only use these wheel alignment settings for track events or competitive driving. Excessive tire wear is NOT covered under the vehicle warranty.

Note: DO NOT adjust the trim height.

Important: The vehicle must be returned back to the original specifications after track events and competitive driving events.

If the vehicle is equipped with the Z51 package or is a Z06, the track event and competitive driving wheel alignment settings should be set as described here. Alignment should be performed by first removing washers between the upper control arms and frame according to the following instructions:

Z51 – Remove maximum of 1 washer per front upper control arm bolt.

Remove maximum of 1 washer per rear upper control arm bolt.

Z06 – Remove maximum of 1 washer per front upper control arm bolt.

Do not remove washers from rear upper control arm bolts.

Proceed by adjusting the lower control arm cam bolts until alignment is within specifications. The Owner Manual Track Events and Competitive Driving section does not list a + / - tolerance for any of the alignment specs. The dealer should reference the tolerances listed in SI Alignment Specifications for the applicable measurement.

Front (per corner)

Caster: +7.0 degrees

Camber: −2.0 degrees

Toe: 0.005 degrees toe in

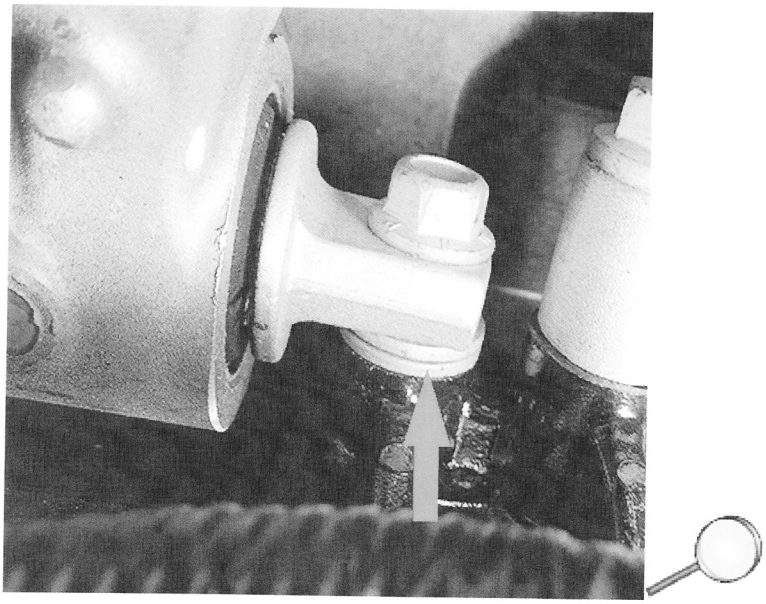
Rear (per corner)

Caster: 0 degrees

Camber: −2.0 degrees

Toe: 0.005 degrees toe in

Thrust Angle: 0 degrees



Warranty Information

Please communicate to the customer that changing the alignment is **NOT** covered under GM warranty.

Version	1
Modified	

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.

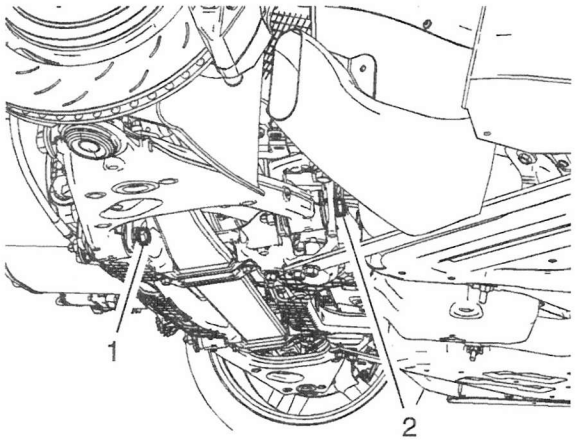
WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION

Rear Caster and Camber Adjustment

Special Tools

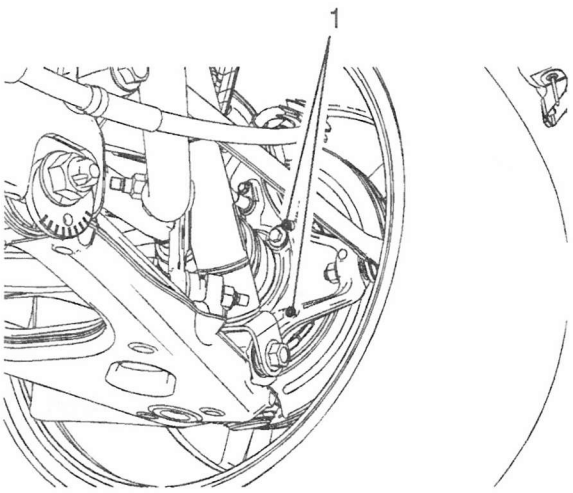
- *CH-47960* Digital Angle Gauge
- *CH-47960-10* Digital Angle Gauge Adapter

Equivalent regional tools: Special Tools.

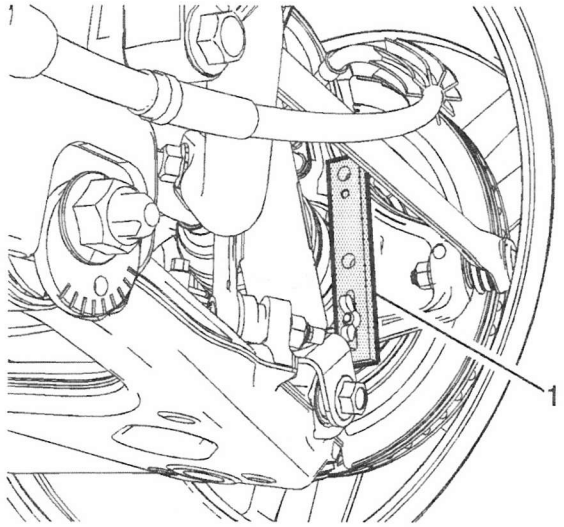


Note: Both cams affect caster to some extent. Set the camber first, then caster.

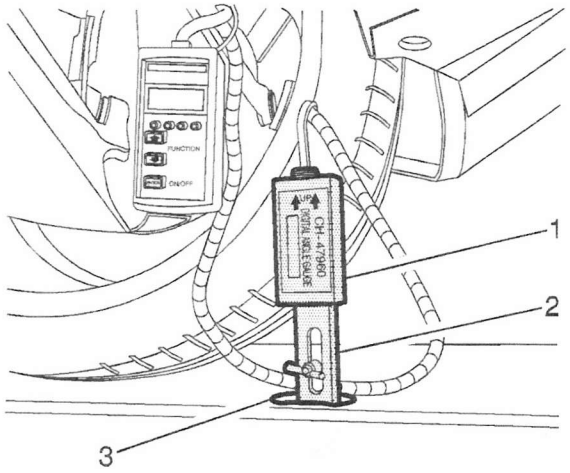
1. Adjust settings in the following order:
   1.1. Camber (1)
   1.2. Caster (2)
   1.3. Toe



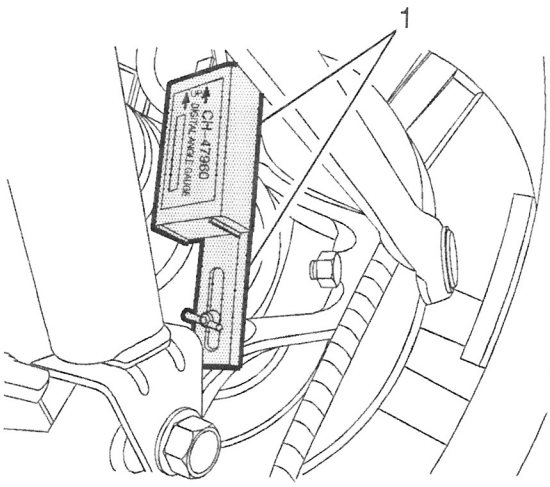
2. Before installing the adapter to the knuckle, use a soft (nylon) bristle brush to clean debris from the adapter holes (1) . Do not use power tools or abrasives.



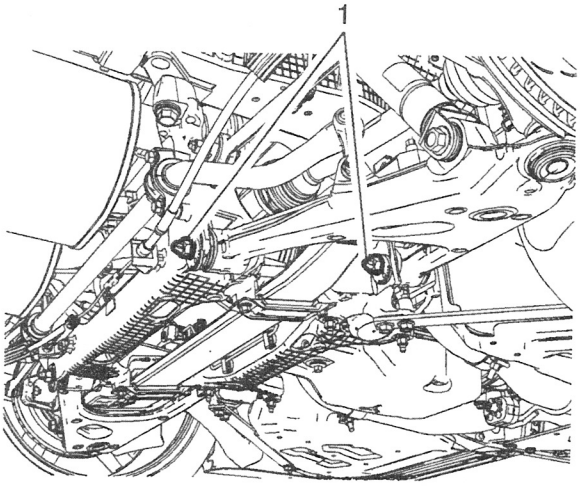
3. Loosen and adjust the locator pin on the *CH-47960–10* digital angle gauge adapter (1) and install in the adapter holes retighten locator pin.
4. Remove the adapter from the knuckle assembly.
5. Prepare the *CH-47960* digital angle gauge for use by following this process:
   5.1. Turn the unit on.
   5.2. Choose driver or passenger side



6. Zero the sensor with the following procedure:
   6.1. Attach the *CH-47960* digital angle gauge sensor (1) or equivalent tool to the *CH-47960–10* digital angle gauge adapter (2) and place on a cleaned off portion of the alignment rack (3) making sure the adapter and the rack set flush to one another.
   6.2. Choose the zero setting on the key pad and push enter.



7. Install the *Ch-47960* digital angle gauge and the *CH-47960-10* digital angle gauge adapter (1) as a unit to the knuckle.



8. Loosen the lower control arm cam bolt nuts (1) .
9. Using the alignment machine to measure rear wheel camber and the digital angle gauge to measure rear wheel caster , perform the adjustment procedure.
10. Rotate the cam bolts to the required camber setting (1) . Maintain the camber settings while tightening the cam bolt nuts. Wheel Alignment Specifications
11. Rotate the cam bolts to the required caster setting (2) . Maintain the caster settings while tightening the cam bolt nuts. Wheel Alignment Specifications

    Caution: Refer to Fastener Caution.
12. Maintain the caster or camber setting while tightening the cam bolt nuts.
    Tighten
    Tighten the control arm cam bolts nuts to **170 N•m (125 lb ft)**.
13. Re-check the caster and camber settings after tightening.
14. Adjust the rear toe. Rear Toe Adjustment