





For maximum effectiveness and safety, please read these instructions completely before proceeding with installation.

Failure to read these instructions can result in an incorrect installation.

PERFORMANCE SUSPENSION PARTS

Introduction

The purpose of this publication is to assist with the installation, maintenance and troubleshooting of this Honda Civic (9th GEN) Performance kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information includes a hardware list, step-by-step installation information, maintenance tips, safety information and a troubleshooting guide.

NOTATION EXPLANATION

Hazard notations appear in various locations in this publication. Information which is highlighted by one of these notations must be observed to help minimize risk of personal injury or possible improper installation which may render the vehicle unsafe. Notes are used to help emphasize areas of procedural importance and provide helpful suggestions. The following definitions explain the use of these notations as they appear throughout this guide.

INDICATES IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

WARNING INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.

INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN DAMAGE TO THE MACHINE OR MINOR PERSONAL INJURY.

NOTE

DANGER

CAUTION

Indicates a procedure, practice or hint which is important to highlight.

IMPORTANT SAFETY NOTICES

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

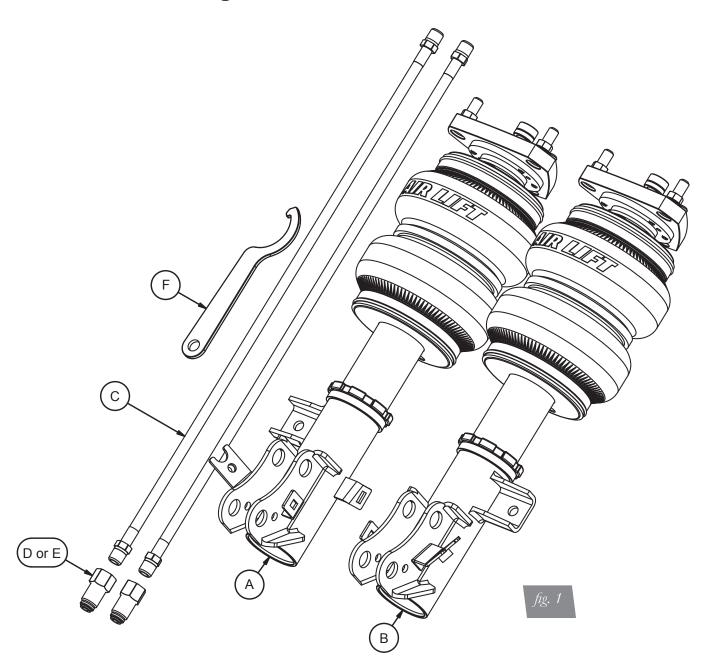
Gross Vehicle Weight Rating: The maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

Payload: The combined, maximum allowable weight of cargo and passengers that the vehicle is designed to carry. Payload is GVWR minus the Base Curb Weight.

WARNING DO NOT INFLATE AIR SPRINGS WHILE OFF OF THE VEHICLE. DAMAGE TO ASSEMBLY MAY RESULT AND VOID WARRANTY.

A CAUTION

DO NOT WELD TO, OR MODIFY PERFORMANCE STRUTS/SHOCKS IN ANY WAY. DAMAGE TO UNIT MAY OCCUR AND WILL VOID WARRANTY.

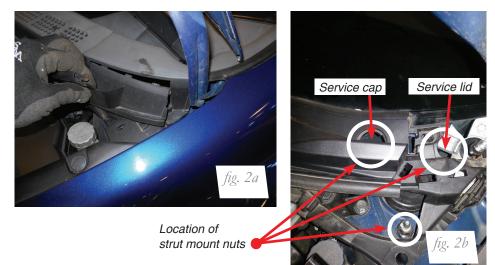


HARDWARE LIST

ltem	Part #	DescriptionQ	ty
Α	35318	Strut, Civic (9th Gen) right front	1
В	35317	Strut, Civic (9th Gen) left front	1
С	20997	Leader Hose, 1/4" ID	2
D	21810	Union, 1/4"FNPT X 1/4" PTC, DOT	2
E	21987	Union, 1/4"FNPT X 3/8" PTC, DOT	2
F		Spanner Wrench	1

Installing the Air Suspension PREPARING THE VEHICLE

1. Key the ignition on and activate the windshield wipers. Turn the ignition off when the wipers' position is nearest the A-pillar. Remove the service cap above the strut mounts as well as the service lid (fig. 2a). This provides access to the upper strut mount nuts (fig. 2b).



- 2. Elevate and support the vehicle from approved lifting points.
- 3. Remove the front wheels (fig. 3).



REMOVING THE STOCK SUSPENSION

1. Unclip the wheel sensor harness from the strut (figs. 4, 5, and 6).



2. Unbolt the brake line tab from the bracket (figs. 7 and 8).



3. Disconnect the stabilizer bar end link from the strut and stabilizer bar (figs. 9 and 10).



4. Support the hub and remove the two lower strut bolts (figs. 11 and 12).

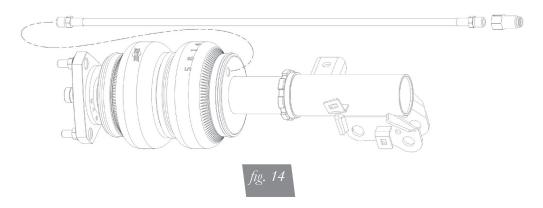


5. Remove the three strut upper mount nuts and remove the strut from the vehicle (fig. 13).



AIR SUSPENSION INSTALLATION

1. Begin by installing the leader line into the air spring. Apply thread sealant to the threads of the leader hose. Tighten the appropriate fitting to the air line (one and three-quarter turns beyond hand-tight). Tighten the leader line into the air spring (one and three-quarter turns beyond hand-tight) (fig. 14).



2. Attach the camber plate to the chassis (fig. 15). Torque nuts to 59 Nm (44 ft-lbs.).



NOTE

When adjusting the camber in the negative direction with the camber plates, check clearance around the inflated air spring throughout the suspension travel. Fasteners located inside the strut tower alongside the air spring may require trimming to prevent the air spring from rubbing (fig. 16).



ANY CONTACT WITH THE AIR SPRING WILL CAUSE PREMATURE WEAR AND WILL NOT BE COVERED UNDER WARRANTY.

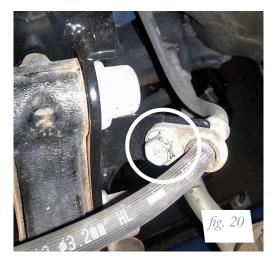


3. Re-attach the spindle (fig. 17). Standard models: torque bolts to 115 Nm (85 ft-lbs.). Si models: torque bolts to 157 Nm (116 ft-lbs.).





5. Reattach the brake line tab (fig. 20) and torque bolt to 22 Nm (16 ft-lbs.).



6. Clip the wheel speed sensor harness into the supporting bracket on the strut (fig. 21).



4. Connect the supplied stabilizer bar end link to the strut and stabilizer bar (figs. 18 and 19). Torque nut to 34 Nm (25 ft-lbs.).

7. Reinstall the service cap and lid (fig. 22).



- 8. Fully compress the suspension using a jack. With the suspension compressed, review the best routing for the leader hose that is clear of all suspension components and axle. Routing should also allow for the suspension to extend without kinking or pulling the line tight or rubbing on other components. Following the brake line routing is often a good place to start. Check clearances to all other components.
- With the suspension fully compressed, take a measurement from the fender to some reference point – typically the center of the axle. Record this measurement as Max Compression.
- 10. Cycle the suspension to Max Extension and record the measurement from the same reference points.
- 11. Add ME and MC then divide by 2. Set the suspension to this point. This position will give 50% stroke in either direction and is a starting point for ride height (fig. 23).



12. With the suspension at this position, loosen, then re-torque the lower control arm bolts to manufacturer's specifications (Table 1).

Torque Specifications				
Location	Nm	lb-ft		
Camber plate to chassis	59	43		
Lower spindle nuts	115	85		
Lower spindle nuts (Si models)	157	116		
Brake line bracket	22	16		
Stabilizer end link	34	25		
Wheels	108	80		
Air fitting (use thread sealant)	1 and 3/4 turns beyond hand-tight			



NOTE

DAMPING ADJUSTMENT

The struts in this kit have 30 settings, or "clicks", of adjustable compression and rebound damping characteristics. Damping is changed through the strut rod using the supplied adjuster (figs. 24 and 25) or a 3mm allen wrench.

Turn the adjuster clockwise and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened.

Each strut is preset to "-17 clicks". This means that the strut is adjusted 17 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track of, or setting, damping. This setting was developed on a 2013 Civic Si Sedan and may need to be adjusted to different vehicles and driving characteristics.



ALIGNING THE VEHICLE

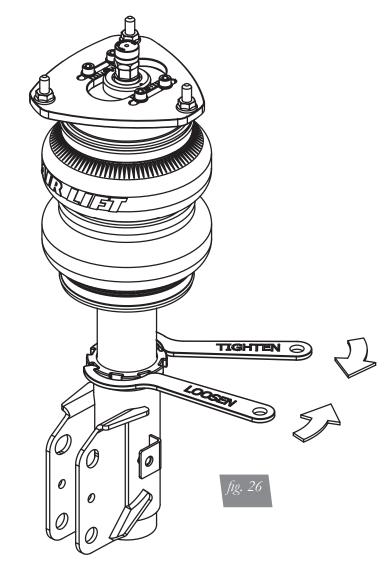
- 1. Using the control system, set the vehicle height to the new custom ride height.
- 2. If the custom ride height is lower than stock, we recommend loosening all pivot points (bolts, nuts) on any control arm, strut arm or radius rod that contains bushings. Once they have been loosened, re-torque to stock specifications.

It may be necessary to cycle the suspension to loosen the bushing up from its mount. This will help re-orient the bushing at its new position and increase life of the bushings based on the custom ride height.

ADJUSTING EXTENDED OR DROP HEIGHT USING LOWER MOUNT

Your struts have been pre-set at the factory to provide maximum drop height while maintaining adequate tire clearance to the air spring. If you wish to gain more extended height (lift), which is the same as reducing drop height, or want to lower the chassis further and there is still adjustment available at the lower mount, please use the following procedure:

- 1. Support the vehicle with jack stands or a hoist at approved lifting points.
- 2. Remove the wheel.
- 3. Using the supplied spanner wrench, loosen the lower locking collar (fig. 26).



- 4. Deflate the air spring to 0 PSI on the corner you are adjusting.
- 5. Disconnect lower mount from suspension.
- 6. Spin the lower mount to the desired location.

Not all models will have further drop height available.

- 7. Re-install lower mount to suspension and torque fasteners.
- 8. Tighten the lower locking collar to the lower mount using significant force.

NOTE

A CAUTION

WHEN ADJUSTING HEIGHT UPWARDS, MAKE SURE THAT THE STRUT BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT (FIG. 27). WHEN ADJUSTING DOWNWARDS, MAKE SURE THERE IS ADEQUATE AIR SPRING CLEARANCE TO THE TIRE/WHEEL ASSEMBLY. CLEARANCE MUST BE CHECKED WITH SYSTEM FULLY DEFLATED AS WELL AS FULLY INFLATED TO ENSURE THAT NO RUBBING OCCURS. FAILURE TO MAINTAIN ADEQUATE CLEARANCE CAN RESULT IN AIR SPRING FAILURE AND WILL NOT BE COVERED UNDER WARRANTY.

A CAUTION

DO NOT ADJUST HEIGHT BY SPINNING AIR SPRING ON STRUT! DOING SO MAY CAUSE AN AIR LEAK AND COMPROMISE THE ASSEMBLY.

FOR SHOCKS:

FOR STRUTS:

