Air Lift
PERFORMANCE

Kit 75651

Subaru Impreza, WRX and STi

rear application

INSTALLATION GUIDE

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 Subaru 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, tool 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.

⚠ DANGER 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.

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

NOTE *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.

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

Installation Diagram

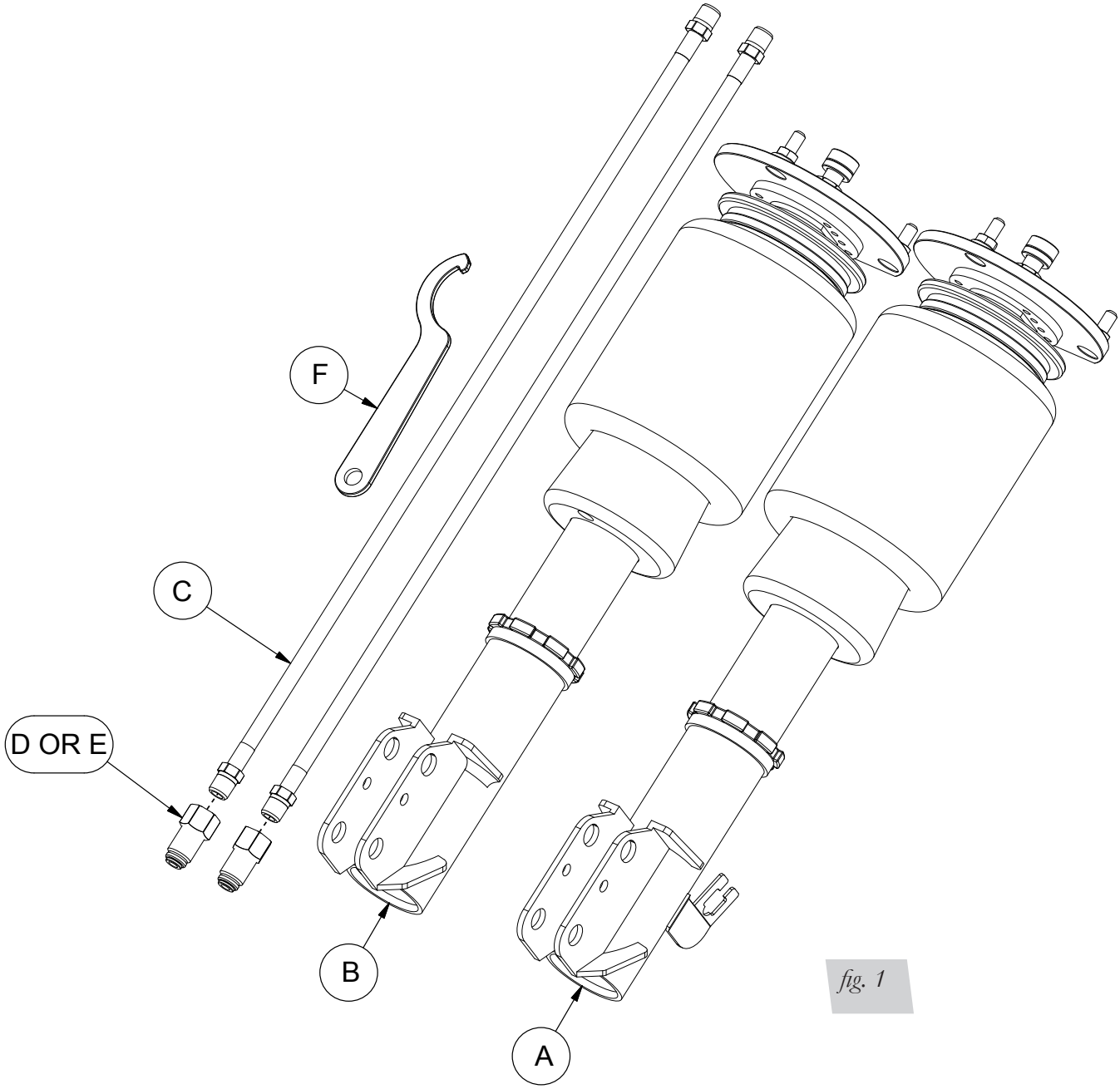

fig. 1

HARDWARE LIST

Item	Part #	Description	Qty
A	35212	Strut Assembly (GD Chassis) Rear Right	1
B	35213	Strut Assembly (GD Chassis) Rear Left	1
C	20997	Leader Hose, 1/4” ID	2
D	21810	Union, 1/4”FNPT-1/4”PTC “DOT”	2
E	21987	1/4”FNPT x 3/8” Fitting “DOT”	2
F		Collar Wrench	1

Installing the Air Suspension

NOTE

****Impreza and WRX owners*** When setting negative camber, check around the air spring and upper air spring end cap for clearance to the inside of the strut tower. When inflated at ride height, there should be at least .5" (12mm) of clearance around the air spring. STi rear strut towers have more clearance around the air spring than the Impreza and WRX. Full camber usage does not require modifications to towers for the STi/GDF platform.*

PREPARING THE VEHICLE

1. FOR SEDANS: Remove the rear seat cushions. The bottom cushion is attached with two bolts, remove both and lift the bottom cushion up and out of the vehicle. The seatback cushion is attached with 4 bolts at the base and tabs at the top. Remove the four bolts and lift the seatback up to release it from the tabs. Carefully remove the seatback cushion from the vehicle (figs. 2 and 3).
   FOR WAGONS: Lift the access panel and sound deadening on the strut tower to gain access to the strut upper mounts (figs. 4 through 9).

Sedan:


fig. 2

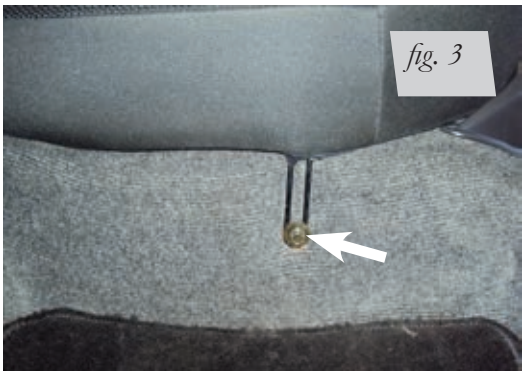
fig. 3

Wagon:


fig. 4

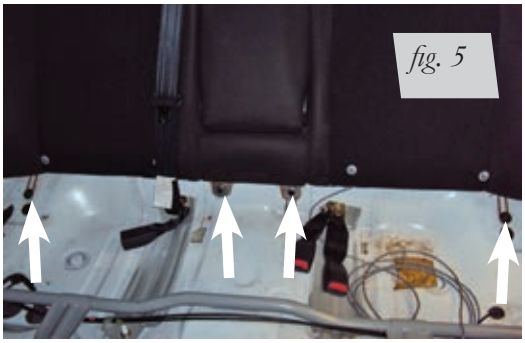
fig. 5

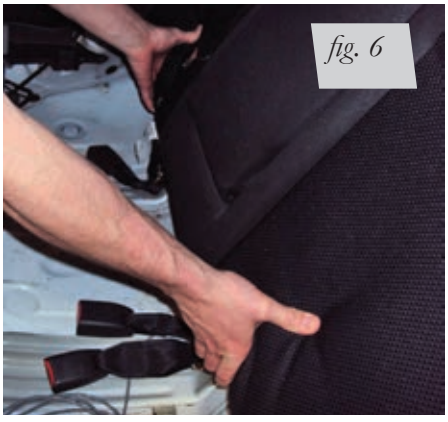
fig. 6


fig. 7

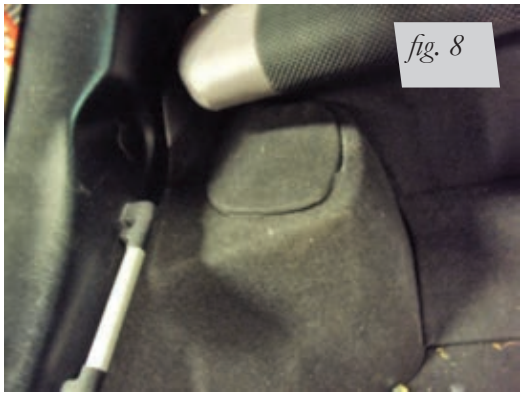
fig. 8


fig. 9

2. Support the vehicle with jack stands or a hoist at approved lifting points.
3. Remove the rear wheels.

STOCK STRUT REMOVAL

1. Remove the clips retaining the brake hose (fig. 10).

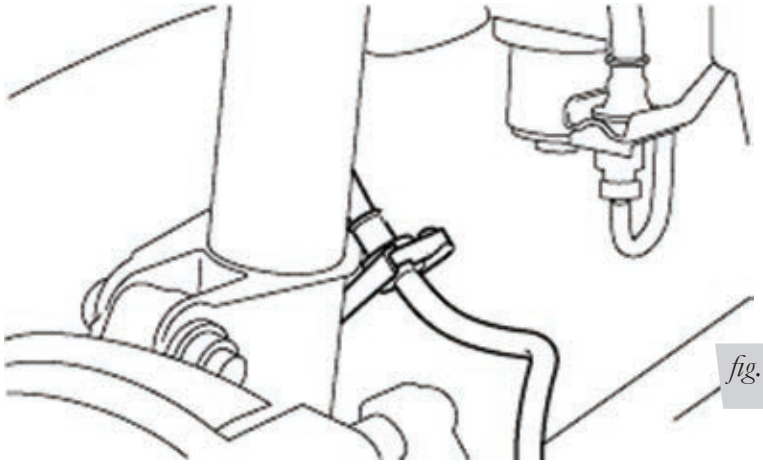
fig. 10

2. Support the hub then unbolt and remove the two lower strut mount bolts (fig. 11).


fig. 11

3. Unthread the three upper mount nuts within the cabin compartment and remove the strut from the vehicle (fig. 12).

fig. 12

AIR SUSPENSION INSTALLATION

1. Begin by installing the leader line into the air spring (fig. 13). Wrap the threads of the leader hose with Teflon tape or thread sealant. Tighten the appropriate fitting to the airline 1 ¾ turns beyond hand tight. Tighten the leader line into the air spring 1 ¾ turns beyond hand tight.

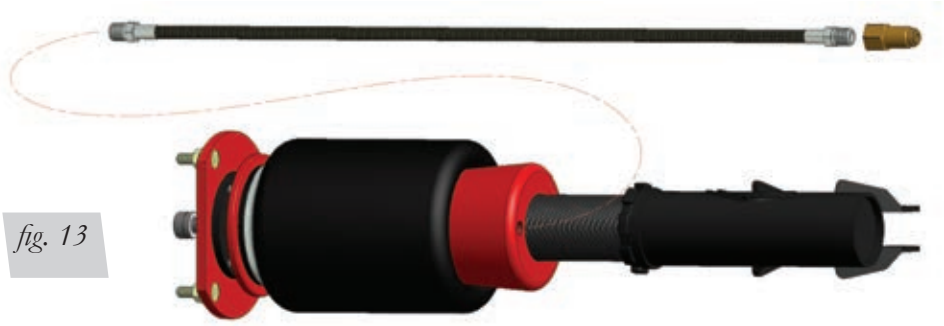

fig. 13

2. Align the strut assembly with the upper bracket holes in the strut tower. Thread the nuts onto the camber plate studs. Lift the hub assembly into the strut lower mount and reinstall the bolts. *See Torque Specifications chart (Table 1 on page 7).*

NOTE

****Impreza and WRX owners*** When setting negative camber, check around the air spring and upper air spring end cap for clearance to the inside of the strut tower. When inflated at ride height, there should be at least .5" (12mm) of clearance around the air spring. STi rear strut towers have more clearance around the air spring than the Impreza and WRX. Full camber usage does not require modifications to the strut towers for the STi/GDF platform.*

fig. 14

3. Reinstall the brake hose and clip.
4. Route the braided air line in a manner where the line will not be kinked or rubbed by anything. Cycle the suspension up and down; turn the wheel lock-to-lock to verify the air line is protected from damage. Generally, routing the air lines along with the brake line is a good place to start.
5. Reinstall the rear wheels. *See Torque Specifications chart (Table 1).*
6. To add the flexible damping adjuster extension, place the extension over the adjuster knob and lock in place by tightening the side set screw with a 2mm hex key.


fig. 15


fig. 16


fig. 17


fig. 18

7. FOR SEDANS: Reinstall the rear seat cushions.

Table 1

Torque Specifications		
Location	Nm	ft. lbs.
Camber plate to chassis	20	15
Camber plate adjustment bolts	15	11
Strut lower mount bolts	200	145
Wheel bolts	90	66

DAMPING ADJUSTMENT

The struts in this kit have 30 settings or “clicks” of adjustable compression and rebound damping characteristics. Damping is changed through the adjuster above the lower eye mount. Turn the adjuster clockwise and the damping settings are hardened. Turn the adjuster counterclockwise and the damping is softened. Each rear strut is preset to “-15 clicks”. This means that the strut is adjusted 15 clicks away from full stiff. Counting down from full stiff is the preferred method of keeping track/setting of damping. This setting was developed on a 2005 STi and may need to be adjusted to different vehicles and driving characteristics.

fig. 19

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 (fig. 11). Once they have been loosened, re-torque to stock specifications (Table 1).

NOTE

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 based on the custom ride height.