

Air Lift™

PERFORMANCE

Kit 75527

Chrysler LX, LD, LC Platform
300C, Charger, Challenger
and Magnum

(includes SRT 8 models,
excludes AWD models)

Front 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 Chrysler LX, LD, LC Platform 300C, Charger, Challenger, and Magnum 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.

 **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.

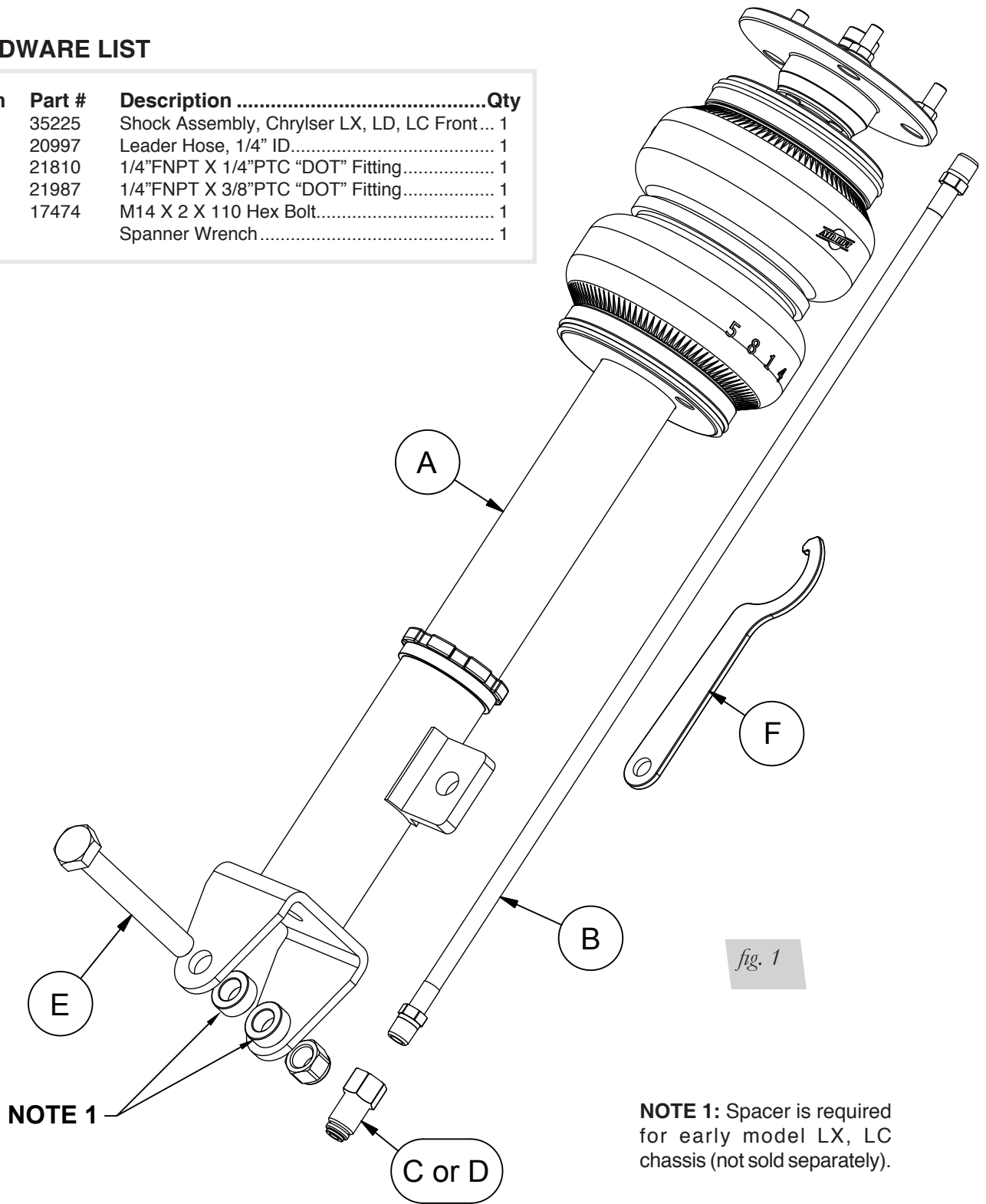
 **CAUTION**

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

Installation Diagram

HARDWARE LIST

Item	Part #	Description	Qty
A	35225	Shock Assembly, Chrysler LX, LD, LC Front...	1
B	20997	Leader Hose, 1/4" ID.....	1
C	21810	1/4"FNPT X 1/4"PTC "DOT" Fitting.....	1
D	21987	1/4"FNPT X 3/8"PTC "DOT" Fitting.....	1
E	17474	M14 X 2 X 110 Hex Bolt.....	1
F		Spanner Wrench.....	1



Installing the Air Suspension

PREPARING THE VEHICLE

1. Elevate the vehicle and support the body with a hoist or jack stands.
2. Remove the front wheels (fig. 2).



fig. 2

REMOVING THE SHOCKS

1. Support the spindle using jack.
2. Locate the shock cover under the hood of the car (fig. 3).

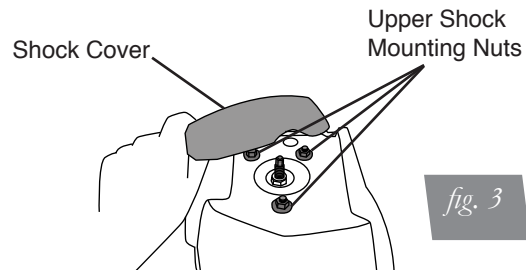


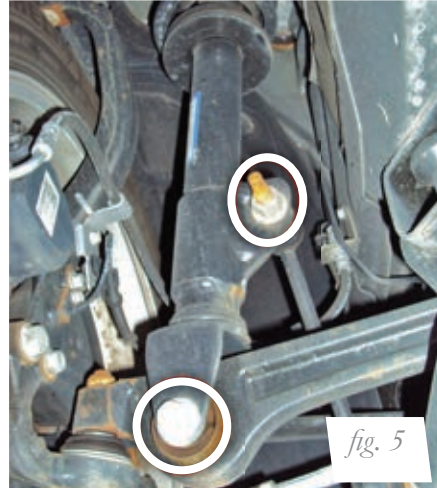
fig. 3

3. Remove the shock cover and loosen the upper shock mounting nuts (fig. 4).

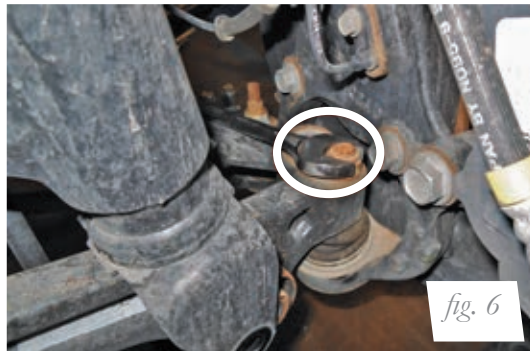


fig. 4

4. Remove the OEM sway bar nut and OEM shock clevis bolt from the spindle (fig. 5).



5. Disconnect the lower ball joint from the spindle and remove the shock from the vehicle (figs. 6-8).



6. Trim the tabs from the flange nuts that connect the upper control arm to the chassis (figs. 9-11).



CAUTION

FAILURE TO TRIM TABS MAY ALLOW THE AIR SPRING TO RUB THE TAB. ANY RUB CAN CAUSE AIR SPRING FAILURE AND WILL VOID THE WARRANTY.

INSTALLING THE NEW SHOCK ASSEMBLY



1. Insert the completed shock assembly into the shock tower with the sway bar tab pointing towards the engine compartment (fig. 13).

2. Secure the shock into place using the nuts and washers provided (fig. 14). Torque to 27 Nm (20 lb-ft).



3. Reconnect the ball joint (fig. 15). Install the supplied clevis bolt (fig. 16) with the supplied nyloc nut (fig. 17). Use the supplied spacers on each side of the lower bushing to ensure the clevis fits tightly if the vehicle is early LX/LC platform (see fig. 1).



4. Re-attach the sway bar using the OEM sway bar nut (fig. 18). Torque to 128Nm (95lb-ft).



5. 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 the line or rubbing on other components. Check clearances to all other components.
6. 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.
7. Cycle the suspension to Max Extension and record the measurement from the same reference points.
8. Take the difference between the two numbers and divide by two. Add that value to the original Max Compression number. Set the suspension to this point. This position will give 50% stroke in either direction and is a starting point for ride height.
9. With the suspension at this position, torque the lower shock bolt and upper and lower control arm bolts to manufacturer’s specifications (Table 1).

Formula for calculating ride height (fig. 19):

Step 1:	Step 2:	Step 3:	Answer:	<i>fig. 19</i>
$\frac{ME - MC}{X}$	$\frac{X}{2} = Y$	$\frac{Y + MC}{Z}$	Z = DESIGN HEIGHT	

Torque Specifications		
Location	Nm	lb-ft
Lower Control Arm Cradle Nut	176	130
Lower Control Arm Ball Joint Nut (RWD)	68 + 90° TURN	50 + 90° TURN
Tension Strut Cradle Nut	176	130
Tension Strut Ball Joint Nut	68 + 90° TURN	50 + 90° TURN
Shock Absorber Lower Mounting Bolt (RWD)	174	128
Shock Absorber Upper Mounting Nuts	27	20
Stabilizer Bar Link	128	95
Upper Control Arm Ball Joint Nut	47 + 90° TURN	35 + 90° TURN
Upper Control Arm Body Nuts	75	55

Table 1

DAMPING ADJUSTMENT

The shocks in this kit have 30 settings, or “clicks”, of adjustable compression and rebound damping characteristics. Damping is changed through the shock rod using the supplied adjuster 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 shock is preset to “-15 clicks”. This means that the shock is adjusted 15 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 2012 Dodge Charger SE and may need to be adjusted to different vehicles and driving characteristics.



fig. 20



fig. 21

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.

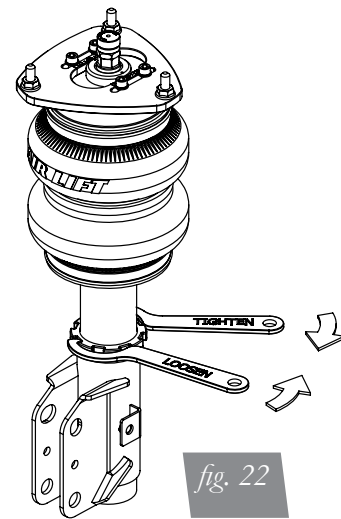
NOTE

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.

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. 22).
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.



NOTE

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.

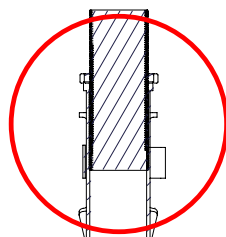
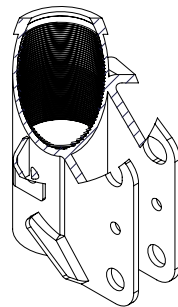
CAUTION

WHEN ADJUSTING HEIGHT UPWARDS, MAKE SURE THAT THE STRUT BODY ENGAGES ALL THE THREADS OF THE LOWER MOUNT (FIG. 23). 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.

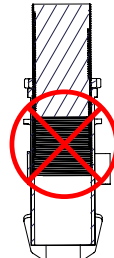
CAUTION

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

FOR STRUTS:



OK, no threads showing.



Not OK, threads are showing.

FOR SHOCKS:

