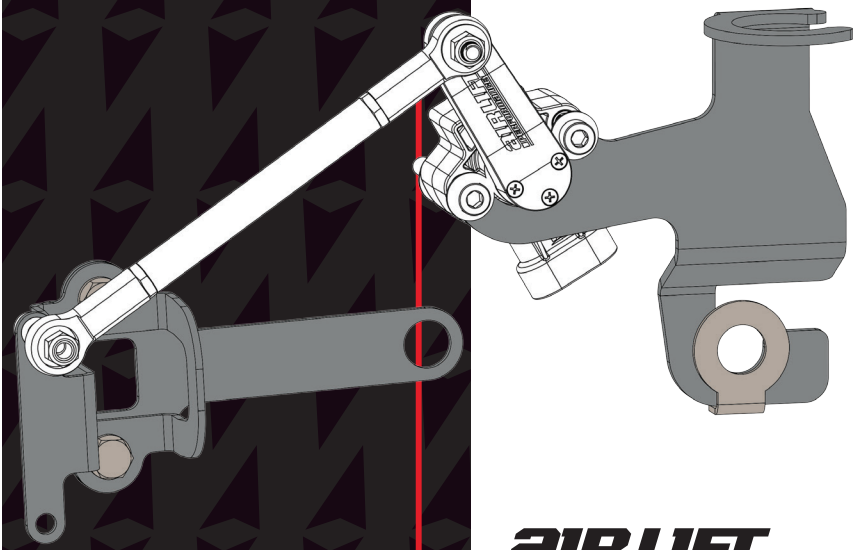
Kit 14034

2016+ Chevrolet Camaro

Front and Rear Applications

Height sensor brackets



AIR LIFT PERFORMANCE

INSTALLATION GUIDE

For maximum effectiveness and safety, please read these instructions completely before operating.

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

MN-1063 • (011709) • ERN 8747

Introduction

The purpose of this publication is to assist with the installation of the Air Lift Performance 3H height sensor bracket kit. The height sensors, sensor arms, linkages and all hardware are included with the 3H kit.

Read the entire user guide before beginning the installation. The information includes step-by-step instructions for the installation of the brackets. This kit is designed to work in conjunction with the 3H control system. Development was done on a 2017 Chevrolet Camaro SS. Modifications might be necessary if using a different configuration. See the 3H instruction guide and user's guide for additional information about setting up the 3H system.

Air Lift Company reserves the right to make changes and improvements to its Air Lift Performance products and publications at any time. For the latest version of this manual, contact Air Lift Company at **(800) 248-0892** or visit **www.airliftperformance.com**.

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.

IMPORTANT SAFETY NOTICE

CAUTION BEFORE SERVICING THE VEHICLE, MAKE SURE TO TURN OFF "RISE ON START" AND "PRESET MAINTAIN." THIS WILL ELIMINATE ANY UNINTENDED SUSPENSION CYCLING IF YOU NEED TO TURN THE KEY ON IN THE VEHICLE FOR ANY REASON.

CAUTION THIS KIT REQUIRES THE REMOVAL OF FACTORY TORQUE-TO-YIELD BOLTS. THESE BOLTS ARE DESIGNED TO BE REPLACED AFTER ONE USE. THESE BOLTS ARE NOT INCLUDED WITH THIS KIT.

Air Lift Company reserves the right to make changes and improvements to its products and publications at any time. For the latest version of this manual, contact Air Lift Company at **(800) 248-0892** or visit **www.airliftperformance.com**.

INSTALLATION DIAGRAM

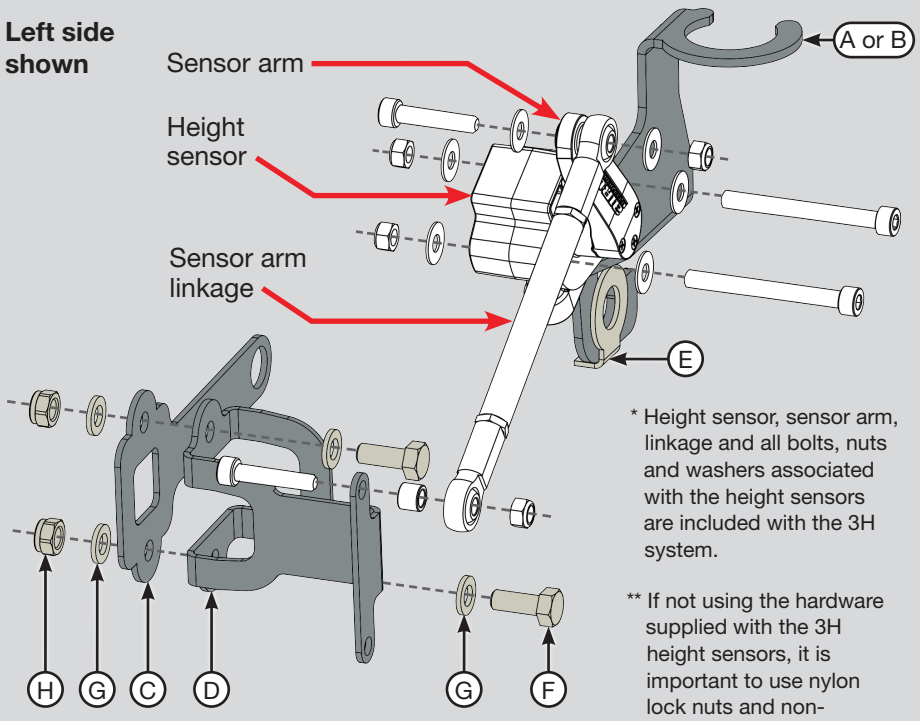


fig. 1

* Height sensor, sensor arm, linkage and all bolts, nuts and washers associated with the height sensors are included with the 3H system.

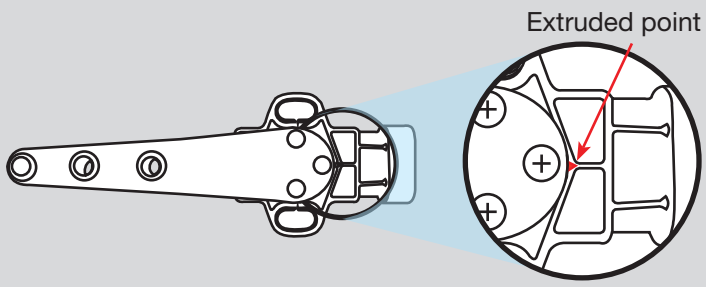
** If not using the hardware supplied with the 3H height sensors, it is important to use nylon lock nuts and non-magnetic hardware so as not to interfere with the height sensor values.

HARDWARE LIST

Item	Part #	Description	Qty
A	11429	Left front upper height sensor bracket	1
B	11430	Right front upper height sensor bracket	1
C	11431	Front lower linkage bracket 1	2
D	11432	Front lower linkage bracket 2	2
E	11433	Tabbed washer	2
F	17389	M6-1 x 16 Hex-head cap screw	4
G	18579	M6 Flat washer	8
H	18569	M6-1 Nylon lock nut	4

SETTING UP THE HEIGHT SENSOR ARM

The extruded point on the height sensor must point at the connector when the suspension is at its midpoint (Fig. 2). See the “Height Sensors” section of the 3H/3P Installation Guide for additional information. In this application, do not rotate the arm. The electrical connector must be pointed toward the connector. See chart for torque specifications.



The extruded point must point toward the electrical connector.

fig. 2

ADJUSTING THE HEIGHT SENSOR LINKAGE

To adjust the sensor arm linkage, loosen and remove the lower bolt and nut. **NOTE**: Leave proper drip loops when connecting the wiring harness.

Torque Specifications				
Location	Nm	Lb.-ft.	Lb.-in.	Oz.-in.
Lower control arm bracket bolts***	100 + 90-105 degrees	74 + 90-105 degrees		
Height sensor to bracket bolts	2.5		22	
Linkage bolts	2.5		22	
Height sensor arm	.01-.14			14-20

*** Torque-to-yield bolts should be replaced after they have been loosened.

CHECK FOR BINDING

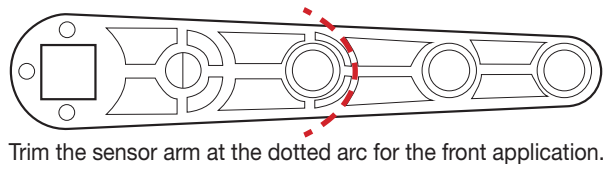
Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch the height sensor cable. Clear cables if necessary.

Refer to the 3H/3P Installation Guide for additional information about proper setup of the system.

Front Height Sensor Installation

These instructions assume that the suspension is stock with the addition of Air Lift Performance dampers. Adjustments may be necessary in different scenarios. Consult the 3H/3P Installation Guide for additional information about installing height sensors.

1. Optional: Trim the height sensor arm to the first hole (Fig. 3).



Trim the sensor arm at the dotted arc for the front application.

fig. 3

2. Trim the threaded rod that comes with the 3H linkage height sensor pack to 82mm (3 3/16”) (Fig. 4). The linkage assembly will be 122mm (4 13/16”) from eye to eye. The linkage must have a minimum of five threads of engagement on both ends.

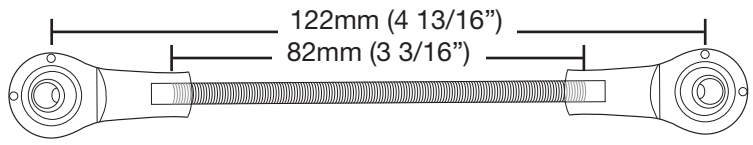


fig. 4

3. Remove the middle section of the inner fender liner (Figs. 5 & 6).

fig. 5

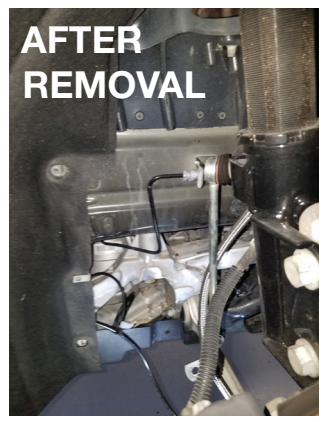


fig. 6

4. Attach the height sensor to the upper bracket (A or B).
5. Remove the inner lower control arm nut. Fit the flange on the upper bracket around the subframe bolt. Reattach the lower control arm nut with the lower control arm bolt*** and the tabbed washer (E) and the bracket in place (Fig. 7). See chart for torque specifications.
6. Disconnect the headlight alignment linkage from the lower control arm. The hole on the long flat part of the lower bracket (C) goes over the headlight alignment linkage to locate the bracket on the control arm. Assemble the two pieces of the lower bracket on the lower control arm and secure with M6-1 x 16 (F) bolts, M6 flat washers (G) and M6-1 nylon lock nuts (H). Reattach the headlight alignment connector (Figs. 8 & 9).

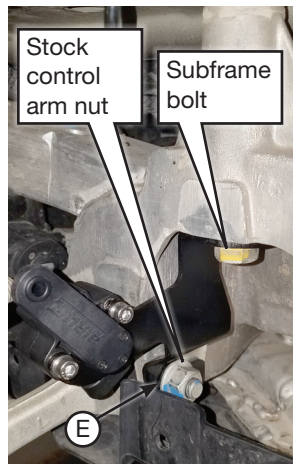


fig. 7

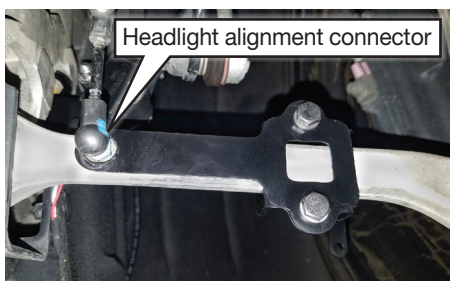


fig. 8

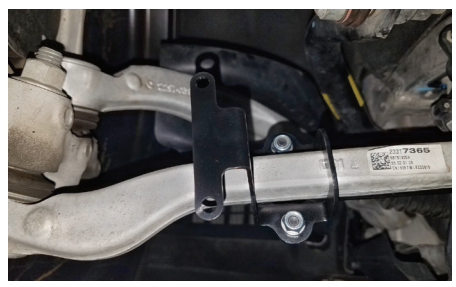


fig. 9

7. Attach the height sensor assembly to the upper bracket and attach the linkage to the lower bracket (Fig. 10). The fender liner must be modified for reinstallation.

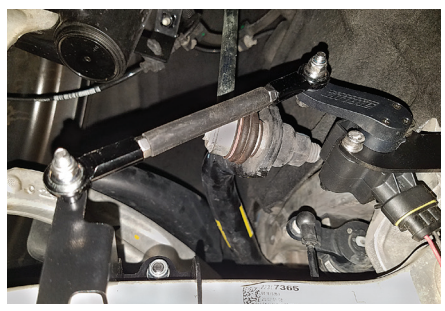


fig. 10

INSTALLATION DIAGRAM

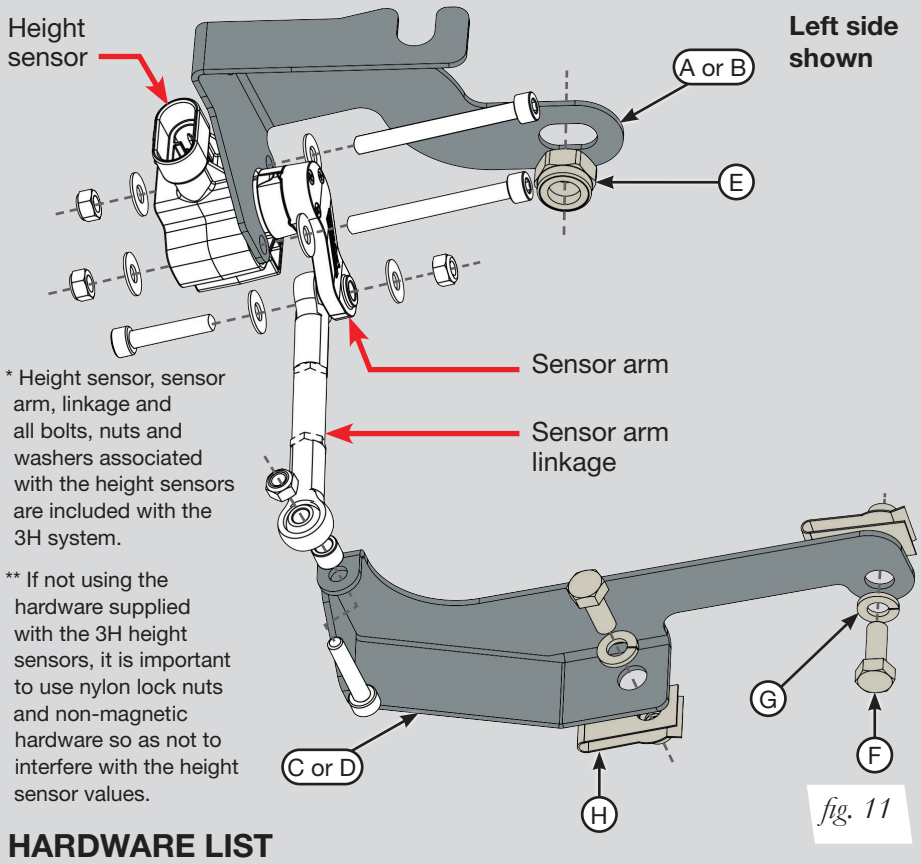


fig. 11

* Height sensor, sensor arm, linkage and all bolts, nuts and washers associated with the height sensors are included with the 3H system.

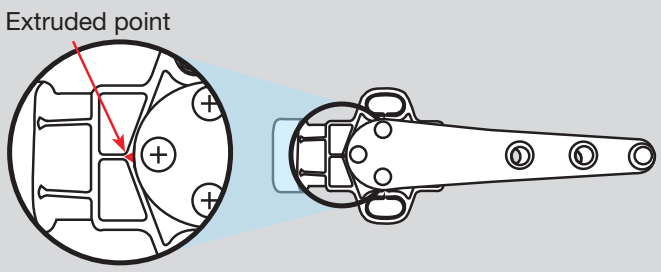
** If not using the hardware supplied with the 3H height sensors, it is important to use nylon lock nuts and non-magnetic hardware so as not to interfere with the height sensor values.

HARDWARE LIST

Item	Part #	Description	Qty
A	11436	Right rear upper height sensor bracket	1
B	11434	Left rear upper height sensor bracket	1
C	11437	Right rear lower height sensor bracket	1
D	11435	Left rear lower height sensor bracket	1
E	18495	M10-1.5 Nylon lock nut	2
F	17389	M6-1 x 16 Hex-head cap screw	4
G	18578	M6 Split lock washer	4
H	18625	M6-1 Clip-on nut	4

SETTING UP THE HEIGHT SENSOR ARM

The extruded point on the height sensor must point at the connector when the suspension is at its midpoint (Fig. 12). See the “Height Sensors” section of the 3H/3P Installation Guide for additional information. In this application, do not rotate the arm. The electrical connector must be pointed toward the connector. See chart for torque specifications.



The extruded point must point toward the electrical connector.

fig. 12

ADJUSTING THE HEIGHT SENSOR LINKAGE

To adjust the sensor arm linkage, loosen and remove the lower bolt and nut. **NOTE**: Leave proper drip loops when connecting the wiring harness.

Torque Specifications				
Location	Nm	Lb.-ft.	Lb.-in.	Oz.-in.
M10-1.5 subframe nut	50	37		
Sway bar bolt***	58	43		
M6-1 x 16mm bolt to control arm	10	7		
Height sensor to bracket bolts	2.5		22	
Linkage bolts	2.5		22	
Height sensor arm	.01-.14			14-20

*** Torque-to-yield bolts should be replaced after they have been loosened.

CHECK FOR BINDING

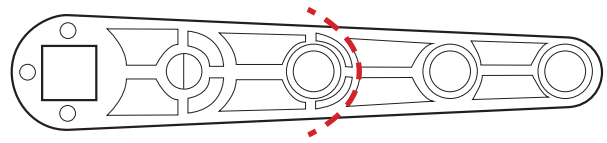
Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch the height sensor cable. Clear cables if necessary.

Refer to the 3H/3P Installation Guide for additional information about proper setup of the system.

Rear Height Sensor Installation

These instructions assume that the suspension is stock with the addition of Air Lift Performance dampers. Adjustments may be necessary in different scenarios. Consult the 3H/3P Installation Guide for additional information about installing height sensors.

1. Optional: Trim the height sensor arm to the first hole (Fig. 13).



Trim the sensor arm at the dotted arc for the rear application.

fig. 13

2. Trim the threaded rod that comes with the 3H linkage height sensor pack to 28mm (1 1/8”) (Fig. 14). The linkage assembly will be 68mm (2 11/16”) from eye to eye. The linkage must have a minimum of five threads of engagement on both ends.

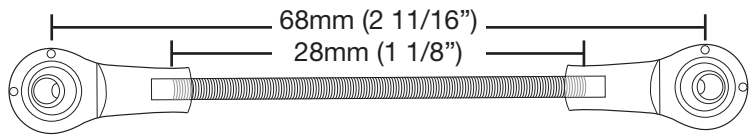


fig. 14

3. Remove the lower control arm cover (Fig. 15).

fig. 15

4. Remove the sway bar clamp bolt. Bolt the upper bracket (A or B) in place with the sway bar bolt***. Secure the bracket to the subframe bolt with the M10-1.5 nylon lock nut (E) (Fig. 16). See chart for torque specifications.

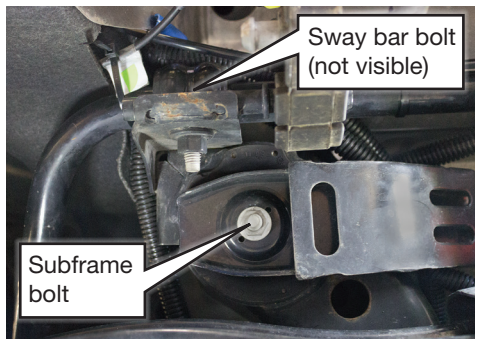


fig. 16

5. Use the clip-on nuts (H) (Fig. 17), M6-1 x 16 hex-head cap screws (F) and M6 split lock washers (G) to attach the lower bracket to the control arm cover mounting holes. See chart for torque specifications. The control arm cover will not be reinstalled. Attach the height sensor to the upper bracket. Connect the linkage to the height sensor arm and the other end to the lower bracket (C or D) (Fig. 18).

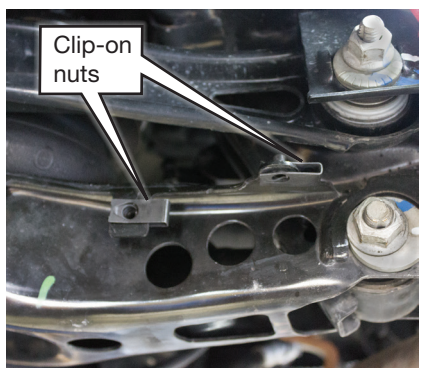


fig. 17

fig. 18

6. Figure 18 shows the completed installation.

Limited Warranty and Return Policy

Air Lift Company provides a 1-year limited warranty to the original purchaser of Air Lift Performance damper kits from the date of original purchase, that the products will be free from defects in workmanship and materials when used on vehicles as specified by Air Lift Company and under normal operating conditions, subject to the requirements and exclusions set forth in the full Limited Warranty and Return Policy that is available online at **www.airliftperformance.com/warranty**.

For additional warranty information contact Air Lift Company customer service.

Replacement Part Information

If replacement parts are needed, call Air Lift customer service at **(800) 248-0892**. Most parts are immediately available and can be shipped the same day.

Contact Air Lift Company customer service first if:

- Parts are missing from the kit.
- Need technical assistance on installation or operation.
- Broken or defective parts in the kit.
- Wrong parts in the kit.
- Have a warranty claim or question.

Contact the retailer where the kit was purchased:

- If it is necessary to return or exchange the kit for any reason.
- If there is a problem with shipping if shipped from the retailer.
- If there is a problem with the price.

Contact Information

Mailing address	P.O. Box 80167 Lansing, MI 48908-0167
Shipping address for returns	2727 Snow Road Lansing, MI 48917
Phone	Toll free: (800) 248-0892 International: (517) 322-2144
Email	service@airliftcompany.com
Web address	www.airliftcompany.com

Need Help?

Contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.

Thank you for purchasing Air Lift Performance products!

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