

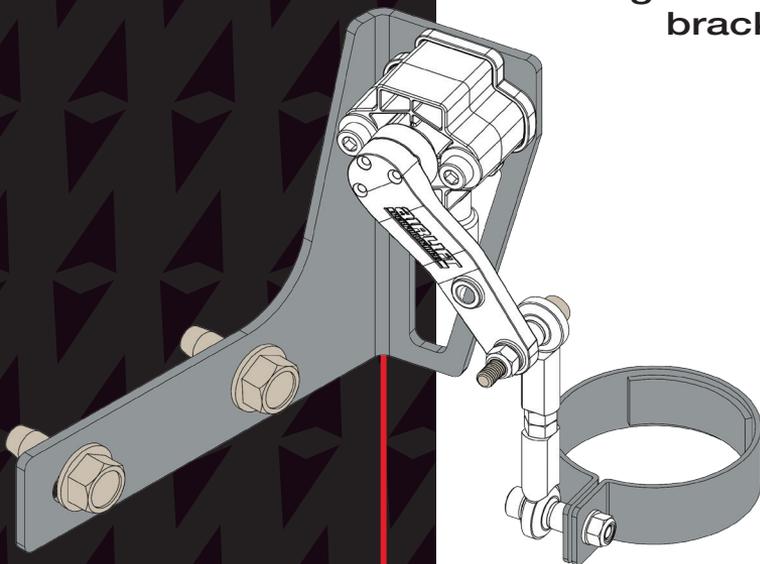


Kit 14035

Infiniti Q50

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.

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 2013 Infiniti Q50. 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**.

IMPORTANT SAFETY NOTICE



WARNING

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.

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INSTALLATION DIAGRAM

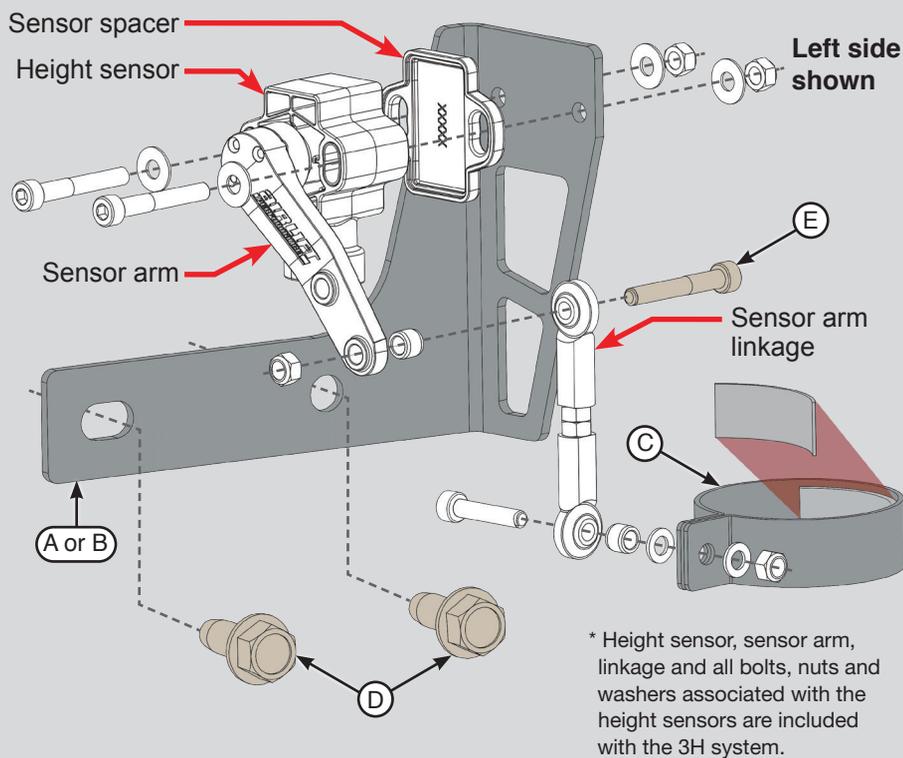


fig. 1

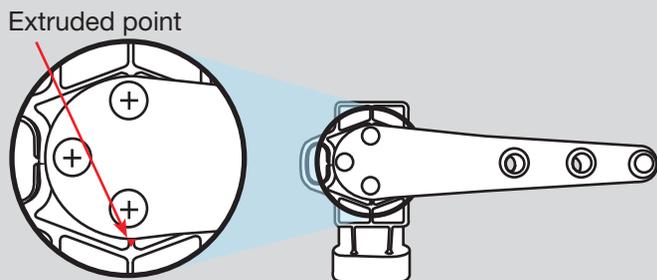
** If not using the hardware supplied with the 3H height sensors, it is important to use nylon lock nuts and non-magnetic hardware so as not to interfere with the height sensor values.

HARDWARE LIST

Item	Part #	Description.....	Qty
A	11152	Left front height sensor bracket	1
B	11153	Right front height sensor bracket.....	1
C	11119	Lower bracket	2
D	17129	3/8"-16 x 1" Self-threading bolt	4
E	17535	M5-.8 x 35 Stainless steel socket-head cap screw	2

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, the arm needs to be rotated 90 degrees so that the extruded point is 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.
Upper bracket bolts	16	12		
Height sensor to bracket bolts	2.5		22	
Linkage bolts	2.5		22	
Height sensor arm	.01-.14			14-20

CHECK FOR BINDING

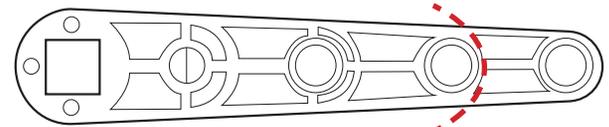
Inflate and deflate the system (do not exceed 8.6BAR [125 PSI]) to check for clearance or binding issues. With the air springs deflated, check clearances on everything so as not to pinch the height sensor cable. Clear cables if necessary.

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.

- Optional: Trim the height sensor arm to the second hole (Fig. 3).



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

fig. 3

- Trim the threaded rod that comes with the 3H linkage height sensor pack to 40mm (1 9/16") (Fig. 4). The linkage assembly will be 64mm (2 1/2") from eye to eye. The linkage must have a minimum of five threads of engagement on both ends.

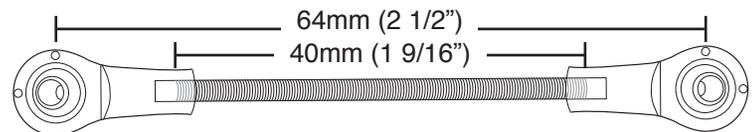


fig. 4

- Attach the linkage with the M5-.8 x 35 bolt (E) included with the height sensor bracket kit along with the nut and spacer from the 3H kit to the second hole on the height sensor arm and attach the assembly to the bracket (Fig. 5). Rotate the sensor on the bracket as far as possible counterclockwise (clockwise for the right side) to give the sensor maximum range before tightening it. See chart for torque specifications.



fig. 5

- Remove the top two plastic pins holding the inner fender shield (Fig 6).

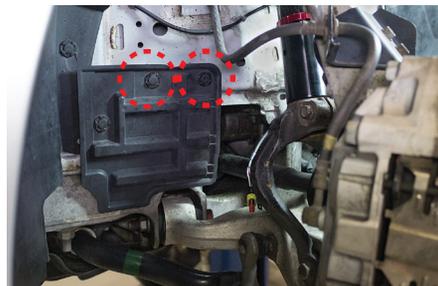


fig. 6

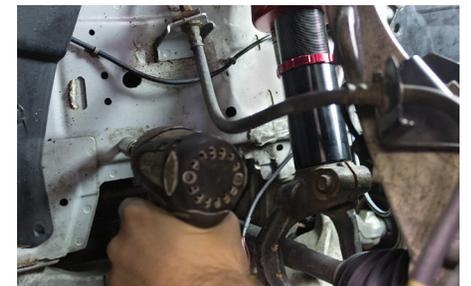
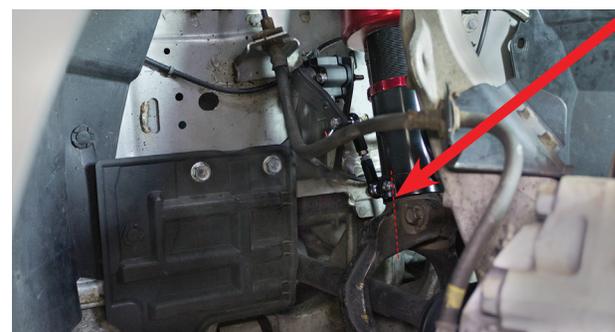


fig. 7

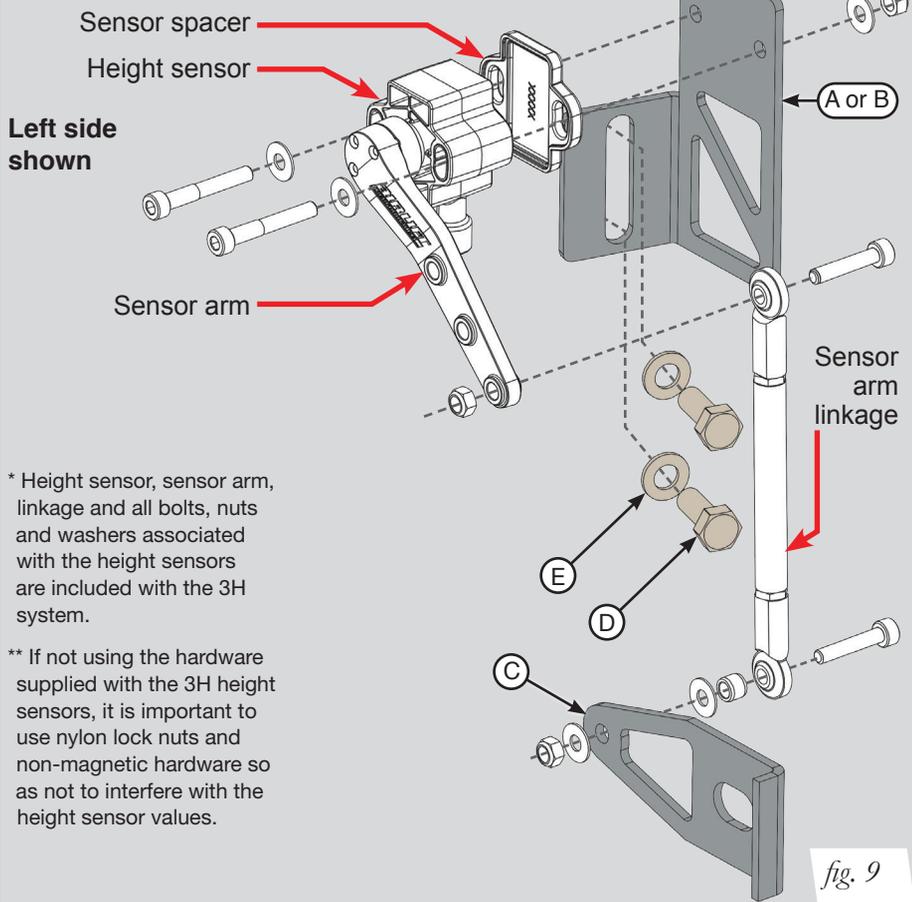
- Use a 3/8"-16 x 1" self-threading bolt (D) to tap the threads in the sheetmetal for both holes. It helps to use a cordless drill to drive the self-threading bolts (Fig. 7). Remove the bolts after tapping the threads.
- Attach the upper bracket and inner fender shield to the body with the bolts previously used to tap the threads. The bracket goes between the shield and the chassis. See chart for torque specifications. Do not overtighten (Fig. 8).
- Attach the rubber pad to the inside of the lower bracket opposite the bracket flanges (Fig. 1). Spread the lower bracket (C) apart so that it will fit over the strut body. It clamps over the strut so that it sits on top of the lower mount. To keep the linkage from binding, align the bracket flanges with the outside edge of the lower mount arm. (Fig. 8)
- Attach the linkage to the lower bracket with hardware provided in the 3H kit. See chart for torque specifications.



Align the lower bracket with the outside edge of the lower mount arm.

fig. 8

INSTALLATION DIAGRAM



* 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.

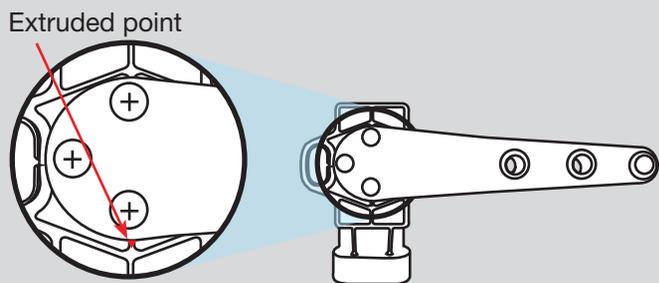
fig. 9

HARDWARE LIST

Item	Part #	Description	Qty
A	11154	Left rear height sensor bracket.....	1
B	11155	Right rear height sensor bracket	1
C	11156	Rear lower bracket	2
D	17496	M8-1.25 x 20 Hex-head bolt.....	4
E	18501	M8 Flat washer	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. 10). See the "Height Sensors" section of the 3H/3P Installation Guide for additional information. In this application, the arm needs to be rotated 90 degrees so that the extruded point is toward the connector. See chart for torque specifications.



The extruded point must point toward the electrical connector.

fig. 10

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.
Upper mount bolts	14	10		
Lower shock bolt	123	91		
Height sensor to bracket bolts	2.5		22	
Linkage bolts	2.5		22	
Height sensor arm	.01-.14			14-20

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. Trim the threaded rod that comes with the 3H linkage height sensor pack to 93mm (3 11/16") (Fig. 11). The linkage assembly will be 117mm (6 5/8") from eye to eye. The linkage must have a minimum of five threads of engagement on both ends.

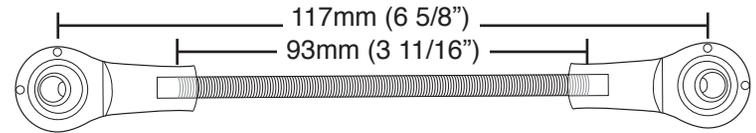


fig. 11

2. The upper bracket (A or B) uses two factory holes with welded nuts that have nothing in them (Fig. 12). There is likely to be some rust on the threads. Use an M8-1.25 thread tap to chase the threads.

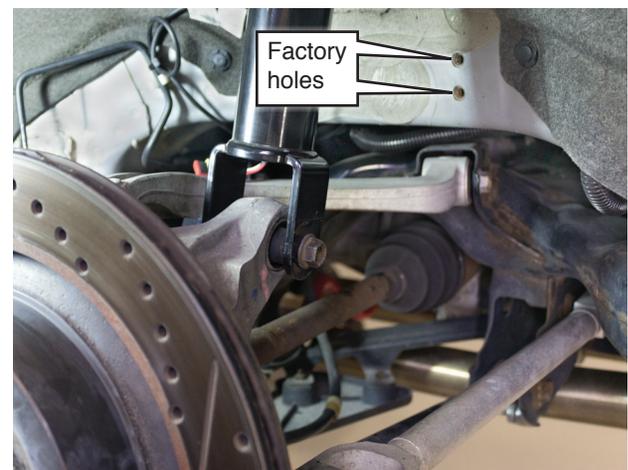


fig. 12

3. Attach the upper bracket with M8-1.25 x 20 hex-head bolts (D) and M8 flat washers (E) (Fig. 13). Position the bracket as low as possible on the chassis. Adjust the bracket up or down after checking the range of the height sensor. See chart for torque specifications.



fig. 13

4. Remove the lower shock bolt and nut. Reattach with the lower bracket (C) in place. See chart for torque specifications.
5. Assemble the height sensor with the linkage (Fig. 13).
6. Attach the height sensor assembly to the upper bracket. Attach the linkage to the lower bracket (Figs. 9 & 13). See chart for torque specifications.

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.



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