



PILOT

2009-2015 3-inch Ultimate lift kit installation guide

Professional installation is recommended.

IMPORTANT!

Lifting and modifying the suspension on your vehicle may result in drive line vibrations, damaged bushings, erratic handling characteristics, and shortened suspension component life. HRG Off-road recommends the following:

- Checking and/or replacing worn drive axles with new parts, not remanufactured.
- Checking and/or replacing all worn factory rubber bushings with urethane bushings, such as Prothane.
- Checking and/or replacing worn shock absorbers and bump stops.
- Performing a 4-wheel alignment after working on suspension components.

Lift kits may not be legal for use on public highways in your area. Please check local laws before installing!!

WARNING!

Lifted vehicles are more prone to rolling over.

Some HRG Off-road products are designed to improve off-road capabilities. Modifying the suspension of your vehicle may result in handling characteristics that are different from a factory equipped vehicle. Extreme care must be used to prevent a rollover or loss of control. Always operate your modified vehicle at a reduced speed to ensure your ability to maintain control under all driving conditions. Driving your vehicle in an unsafe manner may result in serious injury or death. HRG Off-road lift kits are designed and tested to work together. HRG Off-road does not recommend combining this lift kit with any other type of suspension or body lift. Always wear your seat belt.

Recommended tire/wheel sizes:

Stock: 245/65/17 or 245/60/18 (29.5")

17" wheels

255/65/17 (30.0")

245/70/17 (30.4")

265/65/17 (30.5")

255/70/17 (31.0")

265/70/17 (31.5")

18" wheels

245/65/18 (30.5")

255/65/18 (31.0")

265/65/18 (31.5")

Be sure to check fitment prior to installation! These sizes are only suggestions. HRG is not responsible for improperly fitted wheels/tires!

Included in the kit:

2 2.5" front lift spacers

2 .25" front shim spacers

2 2.0" rear lift spacers

12 M10 flange nuts (front spacers)

2 M10 flange nuts (rear shock extension)

2 M10x50 bolts (rear shock extension)

2 1x0.25" M10 spacers (rear shock extension)

2 Sway bar end links

2 2" brake line extension brackets

2 2" rear shock extension brackets

2 17mm camber adjustment bolts (optional)

2 Adjustable rear upper control arms (optional)

4 2.75x1" M14 spacers (front subframe)

4 3.5x1" spacers (rear subframe)

4 1.25x1" M14 spacers (rear trailing arms)

6 1.25x1" M12 spacers (front subframe bolt retaining brackets)

2 1x1" M10 spacers (passenger side engine mount)

2 1x1" M10 spacers (center driveshaft carrier bearing)

4 .75x1" M8 spacers (driveshaft safety loops)

4 M8x40mm bolts (driveshaft safety loops)

4 M14x135mm bolts (rear subframe)

4 M14x90mm bolts (rear trailing arms)

2 M10x50mm bolts (center driveshaft carrier bearing)

2 M10x70mm bolts (passenger side engine mount)

6 M12x50mm bolts (front subframe bolt retainer brackets)

1 1" foam seal (steering coupler)

Installation time: Approximately 4-5 hours.

Tools required:

Jack, lug wrench, jack stands, impact wrench, socket extension, metric socket set to 21mm, metric wrench set to 18mm, heavy hammer, pry bar, common pliers, screwdriver, plastic panel removal tool, torque wrench, paint pen.

Front installation:

Step 1. Disconnect negative battery terminal.

Step 2. Support engine/transmission with floor jack, taking care not to damage oil pan.

Step 3. Remove 2 M10 bolts holding passenger side engine mount to engine bracket.

Step 4. Remove lower plastic splash guard under front valence to gain access to front main subframe bolts. Take care not to break plastic retainer clips. Save hardware for re-installation.

Note: for steps 6-8 refer to diagram on back page.

Step 5. Remove 4 M12 bolts holding main subframe bolt retainer brackets to body.

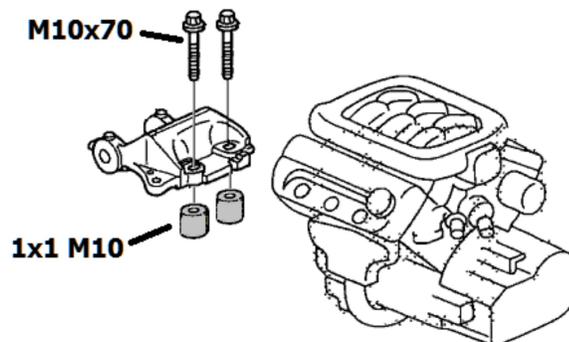
Step 6. Loosen but do not remove 4 M14 main subframe bolts allowing subframe to drop approximately one inch.

Step 7. Carefully lower engine/subframe with floor jack, remove main subframe bolts one at a time and slip 2.75x1 M14 spacers between subframe and body. This keeps the subframe secure and aligned during installation.

Step 8. Install 4 1.25x1 M12 spacers between main subframe bolt retainer brackets and body using supplied M12x50 bolts.

Step 9. Install 2 1x1 M10 spacers between engine mount and engine bracket, using supplied M10x70mm bolts (See diagram).

03-15 PILOT/01-13 MDX/06-14 RIDGELINE ENGINE SPACER DIAGRAM (C) HRG OFF-ROAD 2023



Step 10. Trim plastic splash shield as necessary to fit with lowered subframe, reinstall using original hardware.

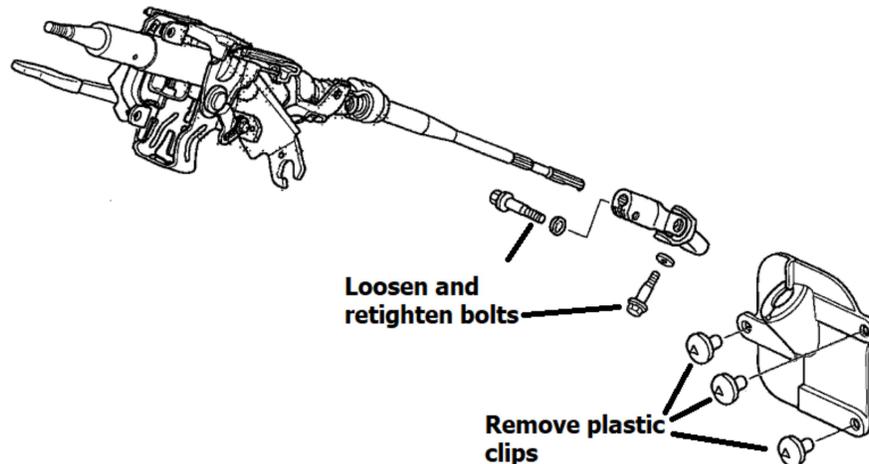
Step 11. Under driver dash, remove plastic dust cover on steering column to gain access to steering coupler.

Step 12. Using a body saw, trim sheet metal for clearance around steering coupler. This can also be done by simply

bending the sheet metal back about 1/2 inch around the coupler. Turn steering wheel to verify the coupler has proper clearance.

TIP: If steering feels tight after installation, loosen (do not remove) and retighten bolts holding steering coupler to steering shaft. This will allow the column to self-adjust. (See diagram)

**03-15 PILOT/ 01-13 MDX/06-14 RIDGELINE STEERING COLUMN
DIAGRAM (C) HRG OFF-ROAD 2023**



Step 13. Install foam weather seal between steering rack and body.

Step 14. Re-install dust cover on steering column below interior dashboard.

Step 15. Remove plastic access panels under hood to gain access to strut mounting nuts.

Step 16. Remove nuts holding struts to body, leave one nut on so struts do not fall when lifting vehicle to access bottom bolts. Save hardware.

Step 17. Jack up vehicle and support with jack stands.

Step 18. Remove wheels.

TIP: Installation is made easier by disassembling both left and right-side suspension at the same time.

Step 19. Remove brake lines and ABS lines from strut.

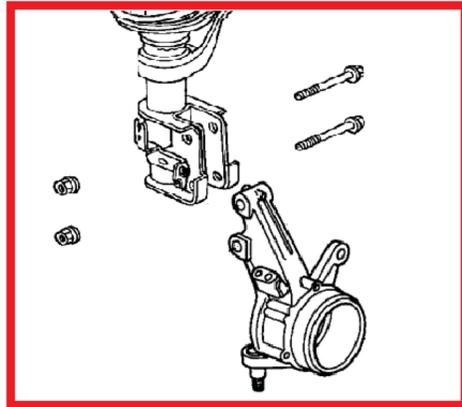
Step 20. Disconnect and remove sway bar links.

Step 21. Remove cotter pin and nut holding tie rod end to strut, save hardware.

Step 22. Remove bolts connecting strut to hub (see diagram) Save hardware for reinstallation. If installing camber

adjustment bolts, only one original bolt from each side will be reused. (See diagram included with camber bolts)

2003-2015 PILOT
1999-2017 ODYSSEY
2006-2014 RIDGELINE
2007-2013 ACURA RDX
FRONT STRUT DIAGRAM
(C) HRG OFF-ROAD 2023

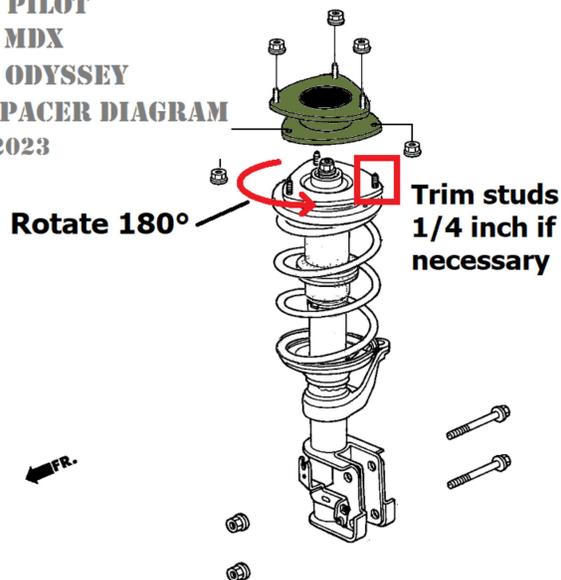


Step 23. Using a length of wire, or large zip ties, secure wheel hub to prevent axle shaft from slipping out of inner joint.

Step 24. Remove strut.

Step 25. Install spacer onto strut using original hardware saved from step 16.

2006-2022 HONDA RIDGELINE
2003-2022 HONDA PILOT
2001-2019 ACURA MDX
1999-2016 HONDA ODYSSEY
2.5 INCH FRONT SPACER DIAGRAM
(C) HRG OFF-ROAD 2023



Step 26. Reinstall strut in reverse order, using supplied hardware (M10x25) to bolt strut to body (see diagram).

Step 27. Install new sway bar end links (included in the kit).

Step 28. Install brake line bracket (see photo included with brackets).

Step 29. Reinstall tie rod end, be sure to install cotter pin!

Step 30. Referring to factory service manual, torque all bolts to spec and mark with paint pen once completed.

Step 31. Reinstall wheels and lower vehicle.

Rear installation:

TIP: Steps 1-6 are performed with the vehicle sitting on the ground.

Step 1. Support rear cross member with floor jack.

Note: for steps 2-6 refer to diagram on back page.

Step 2. Loosen but **do not remove all** 4 main M14 bolts holding subframe to body, lower the subframe enough to remove one bolt and install one 3.5x1" spacer between subframe and body. These spacers will slide over the alignment pins on the frame.

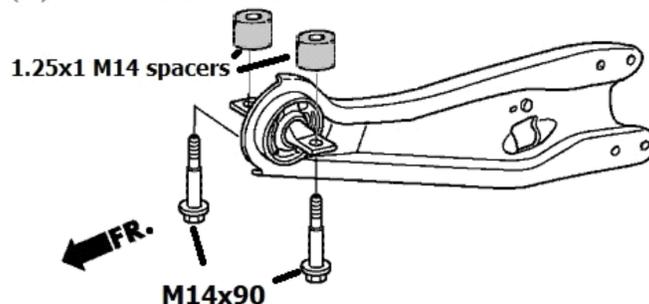
Step 3. Remove the remaining OEM rear subframe bolts one by one, installing remaining 3 spacers and replacing with M14x135 bolts. (Refer to diagram)

Step 4. Loosen M10 bolts holding center drive shaft carrier bearing. Remove one bolt, install 1x1" M10 spacer and M10x50 bolt, and then repeat process for second bolt.

Step 5. Remove M8 bolts from both front and rear driveshaft safety loops, install (2) 0.625x1" M8 spacer and M8x40 bolts between loops and body.

Step 6. Remove one M14 bolt and loosen second M14 bolt in driver side rear trailing arm. Install 1.25x1" M14 spacers one at a time and replace OEM bolts with supplied M14x90 bolts. Take extreme care not to cross thread these bolts!

03-15 PILOT 01-13 MDX 06-14 RIDGELINE REAR TRAILING ARM DIAGRAM (C) HRG OFF-ROAD 2023



TIP: remove sway bar (if applicable) or disassemble suspension on both sides before installing spacers.

Step 7. Jack up vehicle and support with jack stands.

Step 8. Remove wheels.

Step 9. Support driver side rear lower control arm with floor jack.

Step 10. Remove bolt holding driver side shock to lower control arm.

Step 11. Remove 2 bolts holding upper shock mount to body, remove shock.

Step 12. Remove bolt holding lower control arm to wheel hub.

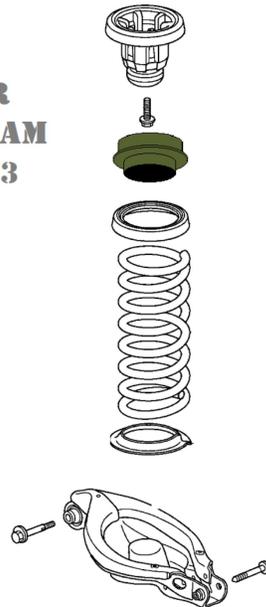
Step 13. Loosen bolts connecting lower arm to subframe to allow lower arm to drop down.

Step 14. Using a floor jack, lower rear control arm to release pressure on spring.

Step 15. Remove spring.

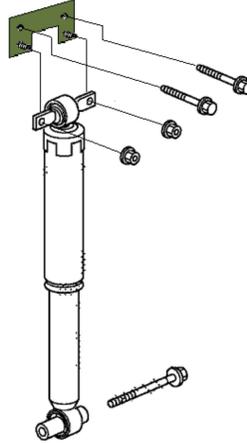
Step 16. Install spacer on the top of the spring, between the spring and the spring seat. re-use rubber spring isolator. (See diagram below)

**2009-2015 PILOT
2007-13 MDX
REAR SPRING SPACER
INSTALLATION DIAGRAM
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Step 17. Install rear upper shock bracket using hardware provided. Place 2 0.25x1" M10 spacers between shock adapter plate and body, secure with hardware provided. (See diagram)

**2009-15 PILOT/2007-13 MDX
REAR SHOCK BRACKET DIAGRAM
(C) HRG OFF-ROAD 2023**



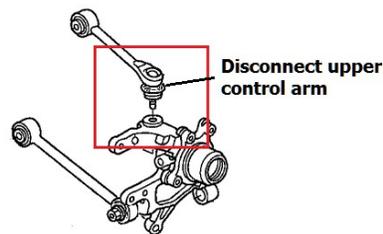
Step 18. Attach shock absorber to shock bracket using hardware provided.

OPTIONAL ADJUSTABLE REAR UPPER CONTROL ARM INSTALLATION:

Step 19. Remove cotter pin and nut holding upper control arm to hub. Save hardware.

Step 20. Shock upper ball joint with large hammer to release it from hub. Take care not to damage the threads on the ball joint. (See diagram below.)

**2003-2015 PILOT
2001-2013 MDX
REAR ARM DIAGRAM
(C) HRG OFF-ROAD 2023**



Step 21. Using a floor jack, compress spring by lifting on the lower arm until the upper control arm can be reinstalled.

Step 22. Reinstall lower shock mounting bolts.

Step 23. Repeat steps 9-22 for passenger side.

TIP: do not fully tighten control arm bolts until vehicle is resting on the ground (this will help prolong bushing life)

Step 25. Reinstall wheels and lower vehicle.

Step 26. Tighten lower control arm bolts.

Step 27. Referring to factory service manual, torque all bolts to spec and mark with paint pen once completed.

Step 28. Get a professional alignment.

Note: Installing a lift kit will change the suspension geometry and will require a 4-wheel alignment.

Warning: Failure to follow the procedures in these installation instructions may result in unsafe handling characteristics, damage to vehicle, or loss of control.

For tech support, please call 1-844- HRG LIFT (474-5438) from 8-5 EST Mon-Sat or email us 24/7 at support@hrgoffroad.com

This product is intended for off-road use only!!

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2009-15 PILOT/07-13 MDX SUBFRAME KIT INSTALLATION DIAGRAM (C) HRG OFF-ROAD 2023

