



## **2007-2013 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 Offroad 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 Offroad 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 Offroad lift kits are designed and tested to work together. HRG Offroad 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 5321  
2 2.0" rear lift spacers 5300  
6 M10 nuts  
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" M14 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 .625x1" 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)

**Tools required:**

Jack, lug wrench, jack stands, impact wrench, socket extension, 12, 14, 17, 18 and 21mm sockets, 14 and 18mm wrenches, heavy hammer, pry bar, torque wrench and paint pen.

**Note to installer:** Some bolts removed to install lift kit will be replaced with longer bolts. Some OEM hardware will be reused. **Installing this kit requires cutting of plastic splash shield and sheet metal surrounding steering coupler to allow clearance.**

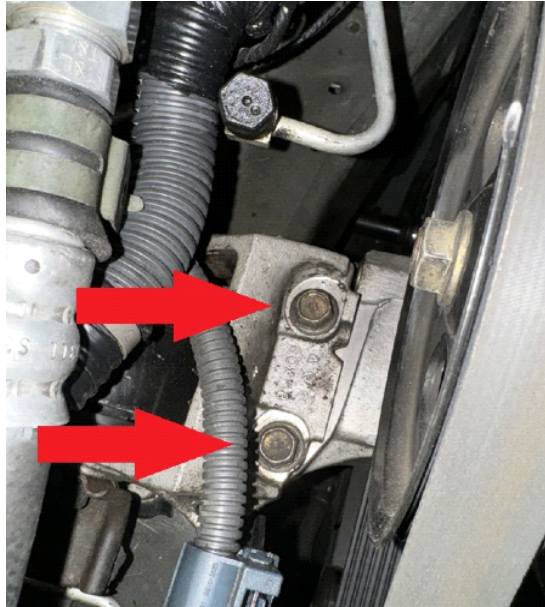
**Approximate installation time 4-6 hours.**

**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.

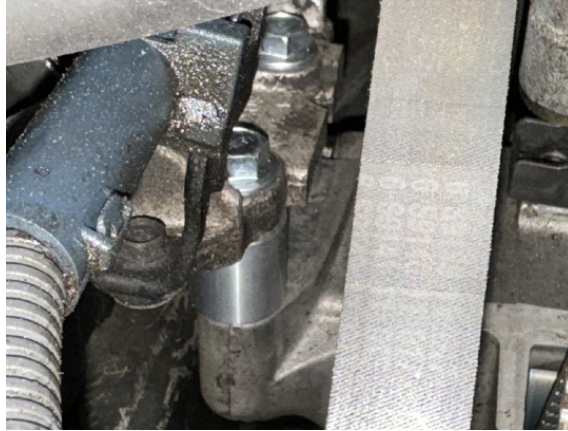
Step 5. Remove 4 M12 bolts holding main subframe bolt retainer brackets to body.

Step 6. Loosen but do not remove 4 M14 main subframe bolts. This keeps the subframe secure and aligned during installation.

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, reinstalling the OEM bolts.

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.



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.

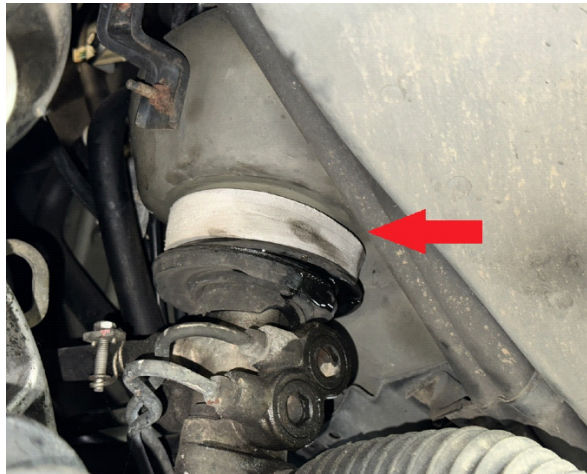




**TIP: Loosen the bolts in the steering column couplers and re-tighten them to eliminate binding.**



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 reach upper strut mounting nuts.



Step 15. Remove nuts holding driver side front strut to body. (leave one nut on so struts do not fall when lifting vehicle to access bottom bolts)

Step 16. Jack up vehicle and support with jack stands.

Step 17. Remove wheels.

Step 18. Remove brake line and unclip ABS wiring from strut.

Step 19. Remove and discard OEM sway bar links.



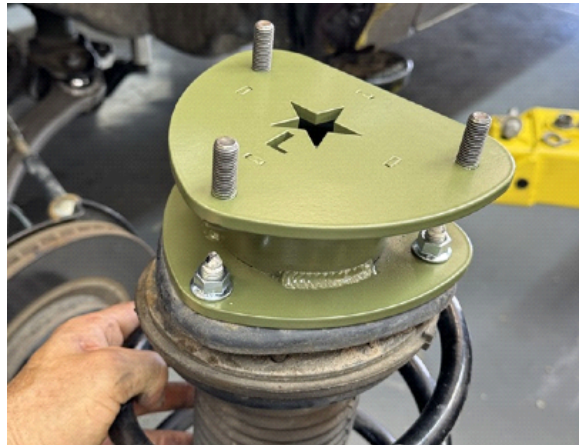
Step 20. Remove bolts connecting strut to hub. (See diagram.) Save hardware for reinstallation. If installing camber adjustment bolts, only one original bolt from each side will be reused. (See instructions included with camber bolts.)



Step 21. Using a length of wire, or large zip ties, temporarily secure hub so as to prevent axle shaft from slipping out of inner hub.

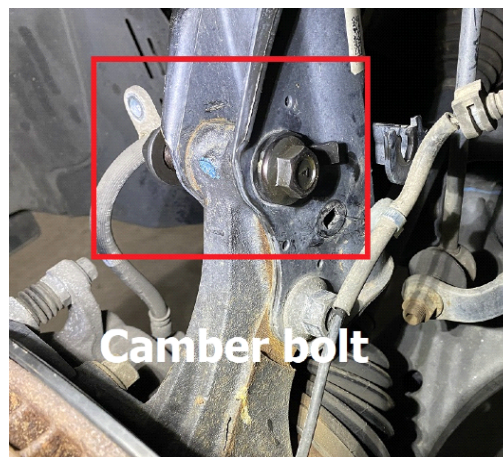
Step 22. Remove strut.

Step 23. Install spacer onto strut using supplied M10 nuts.



Step 24. Reinstall strut in reverse order, using supplied M10 nuts to attach spacer to body.

Step 25. Install camber adjustment bolts in place of top strut mounting bolt. Refer to camber bolt instructions. (see photo)



Step 26. Install new sway bar end link (included in the kit).

Step 30. Install brake line bracket (see photo)





Step 31. Repeat steps 20-30 for passenger side.

### **Rear installation:**

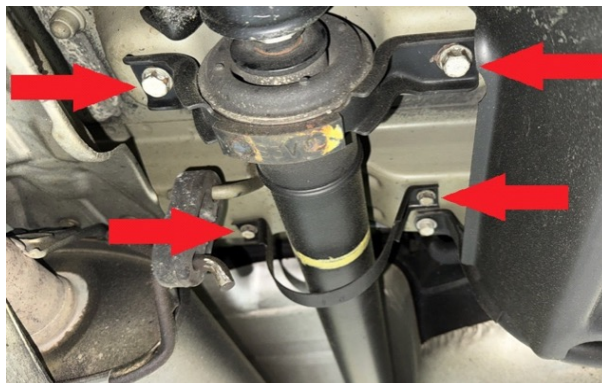
Step 1. Support rear cross member with floor jack.

Step 2. Loosen but do not remove 4 main bolts holding subframe to body, lower the subframe enough to install one 3.5x1 M14 spacer between subframe and body.

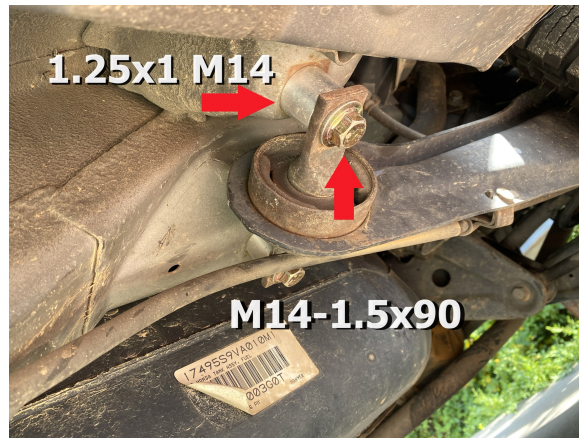
Step 3. Remove remaining OEM rear subframe bolts one by one, installing remaining 3 3.5x1 spacers and replacing with M14x135 bolts.

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

Step 5. Remove M8 bolts from both front and rear driveshaft safety loops, install (2) 0.75x1" 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.



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

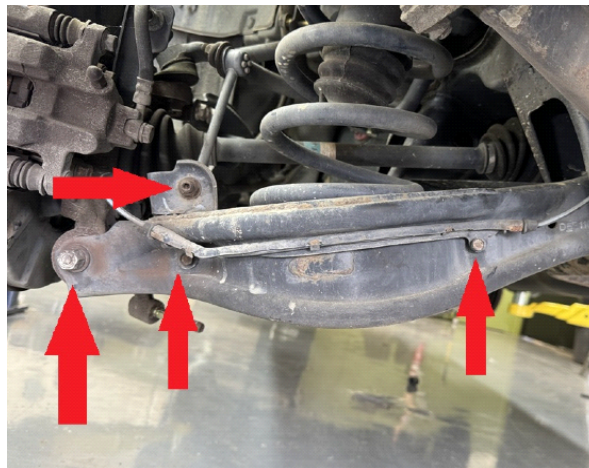
Step 8. Remove wheels.

Step 9. Support driver side rear lower control arm with floor jack. (under spring)

Step 10. Remove bolts holding shocks to lower control arm.

Step 11. Remove bolts holding ABS wiring to lower control arm.

Step 12. Remove nut holding sway bar link to lower control arm.



Step 13. Remove bolt holding rear lower control arm to hub.

Step 14. Loosen bolt connecting lower arms to subframe to allow arm to drop down.

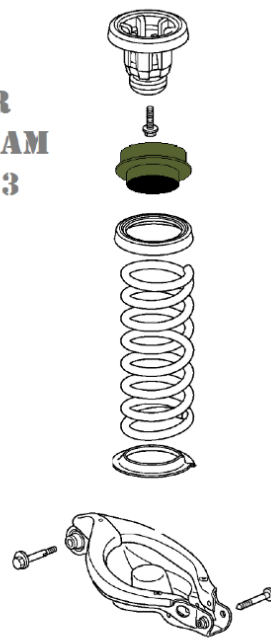
Step 15. Carefully lower rear lower control arm to release pressure on the spring.





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  
(C) HRG OFF-ROAD 2023**



Step 17. Unbolt shock and attach shock absorber to shock bracket using hardware provided.

Step 18. install rear shock and shock bracket using OEM hardware

Step 19. Using a floor jack, compress spring by lifting on the lower arm until the bolt holes for the shock absorber lines up, reinstall OEM bolt.

Step 20. Repeat step 19 to line up bolt hole for wheel hub, reinstall OEM bolt.

Step 21. Repeat steps 9-20 for passenger side.

Step 22. Reinstall wheels and lower vehicle.

**TIP: Do not fully tighten control arm bolts until vehicle is resting on the ground. (This will help prolong bushing life.)**

Step 23. Tighten lower control arm bolts at this time.

Step 24. Referring to factory service manual, torque all bolts to spec and mark with paint pen once completed.

Step 25. Get a professional alignment.

Step 26. Find some trails!

**Note: Installing lift spacers will change the suspension geometry and will require a 4 wheel alignment, and possibly front/rear camber correction kits.**

**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 8-4:30 PM EST Mon-Thu 8-3:30 PM Fri or email us 24/7 at [support@hrgoffroad.com](mailto: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  
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