



2014-2020 2.5 inch 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 size:

- 245/60/18 (stock)(29.6")
- 255/60/18 (30.0")
- 245/65/18 (30.5")
- 265/60/18 (30.5")
- 255/65/18 (31.1") May require fender modification

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 (1L, 1R)
- 2 1.5" or 2.0" rear lift spacers 5281 or 5280
- 12 M10 nuts (front lift spacers)
- 6 M10x25mm grade 10.9 bolts (rear lift spacers)
- 6 M10 nuts (rear lift spacers)
- 2 Replacement front sway bar links
- 2 0.75x1 M8 spacers (driveshaft protector)
- 2 M8x40 bolts (driveshaft protector)

- 2 M10x90 bolts (engine mount)
- 2 M10x50 bolts (driveshaft carrier bearing)
- 2 M10x50 bolts (gas tank bar)
- 4 M14x150 bolts (front subframe)
- 8 M12x50 bolts (front subframe brackets)
- 2 M14x160 bolts (rear subframe)
- 2 M14x180 bolts (rear subframe)
- 4 M12x50 bolts (rear subframe brackets)
- 2 1x1 M10 spacers (gas tank bar)
- 2 1x1 M10 spacers (driveshaft carrier bearings)
- 2 1x1 M10 spacers (engine mount)
- 8 2.5x1 M14 spacers (front and rear subframe)
- 12 1.25x1 M12 spacers (front and rear subframe brackets)

TOOLS REQUIRED: Floor jack, lug wrench, metric socket set to 21mm, 36mm axle socket, metric wrench set to 19mm, impact wrench, pliers, heavy hammer, screwdriver, plastic cutting tool, 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 behind front bumper and sheet metal surrounding steering coupler to allow clearance.**

Approximate installation time: 6 hours.

Front installation:

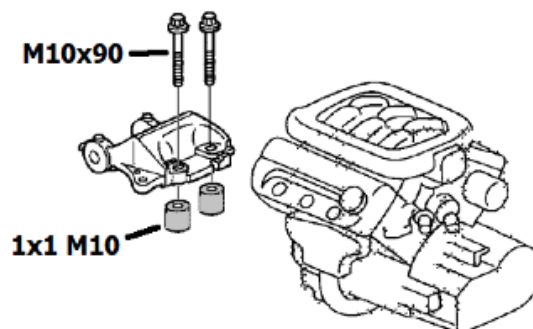
Step 1. Disconnect negative battery terminal.

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

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

Step 4. Install 2 1x1 M10 steel spacers between engine mount and engine bracket, using supplied M10x90mm bolts. (See diagram.) It may be necessary to return to this step after subframe is lowered.

**RIDGELINE/PILOT/MDX
ENGINE SPACER DIAGRAM
(C)HRG OFFROAD 2023**



Step 5. 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 6. Remove aluminum heat shield behind subframe.

Step 7. Remove 8 M12 bolts holding main subframe bolt retainer brackets to body.

Step 8. Loosen but do not remove M14 main subframe bolts allowing subframe to drop approximately one inch. Remove main OEM subframe bolts one at a time and slip 2.75x1 M14 spacers between subframe and body, installing M14x150 bolts as you go. This keeps the subframe square and aligned during installation. (see photo)



Step 9. Install 8 1.25x1 M12 steel spacers between main subframe bolt retainer brackets and body using supplied M12x50 bolts. (see photo)



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

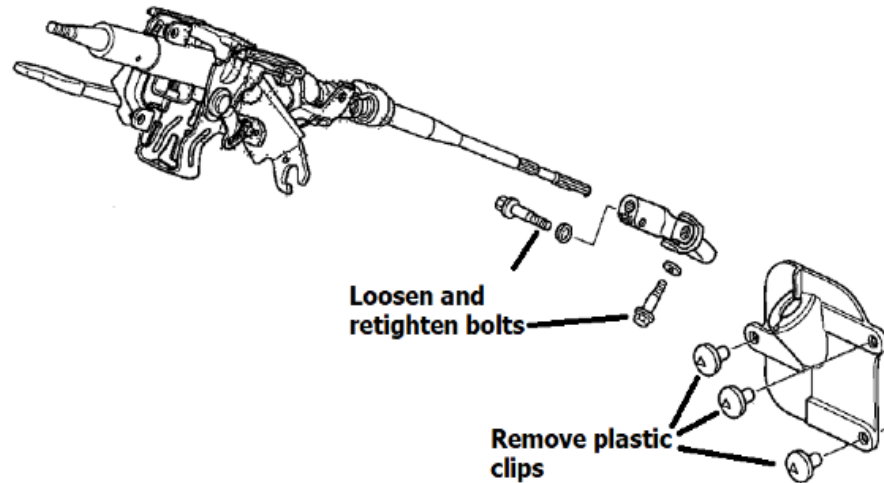
Step 11. Re-install aluminum heat shield, bend as necessary to fit with lowered subframe. Re-attach using OEM hardware.

Step 12. Under driver side dash, remove plastic dust cover on steering column to gain access to steering coupler.

Step 13. Using a screwdriver or round bar, bend sheet metal back about 1/4 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. (see diagram)

**2017-22 RIDGELINE STEERING COLUMN DIAGRAM
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Step 14. Install foam weather seal between steering rack and body.



Step 15. Re-install dust cover on steering column below interior dashboard.

Step 16. Remove plastic access panels under hood to reach Driver side front upper strut mount.

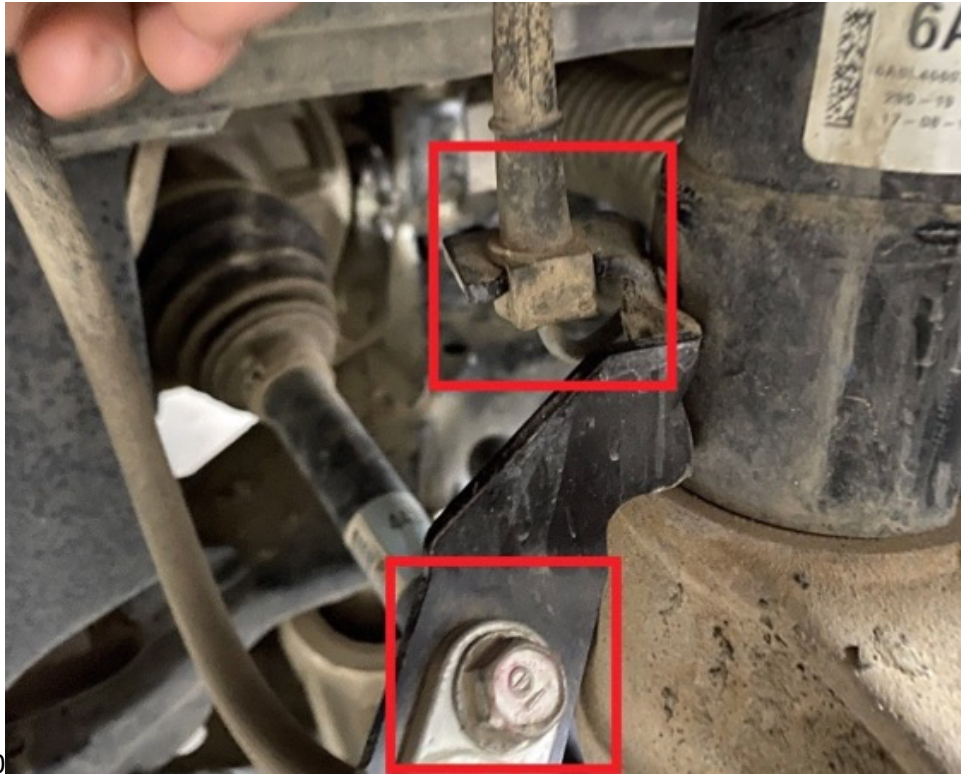


Step 17. Remove nuts holding struts to body, leave one nut on so struts do not fall when lifting vehicle to access bottom bolts.

Step 18. Jack up vehicle and support with jack stands.

Step 19. Remove wheels.

Step 20. Remove brake line and unclip ABS wiring from strut.



Step 21. Remove nut holding tie rod end to hub, strike knuckle with heavy hammer to dislodge tie rod end.



Step 22. Remove caliper (never loosen the brake line hoses) and use a length of wire to secure it out of the way.

Step 23. Remove brake rotor and axle nut.



Step 24. Remove and discard OEM sway bar links.

Step 25. Remove bolt connecting strut to hub (see photo) Save hardware for reinstallation.



Step 26. Remove lower ball joint nut and using a heavy hammer, strike lower arm to carefully unseat lower ball joint from bottom of hub.



Step 27. Remove hub bolt at rear of hub where it attaches to bottom of strut and carefully guide axle out of hub. (Do not allow inner axle spline to slip out).

Step 28. Remove hub. Hub should slide free from strut.

Step 29. Remove strut assembly.

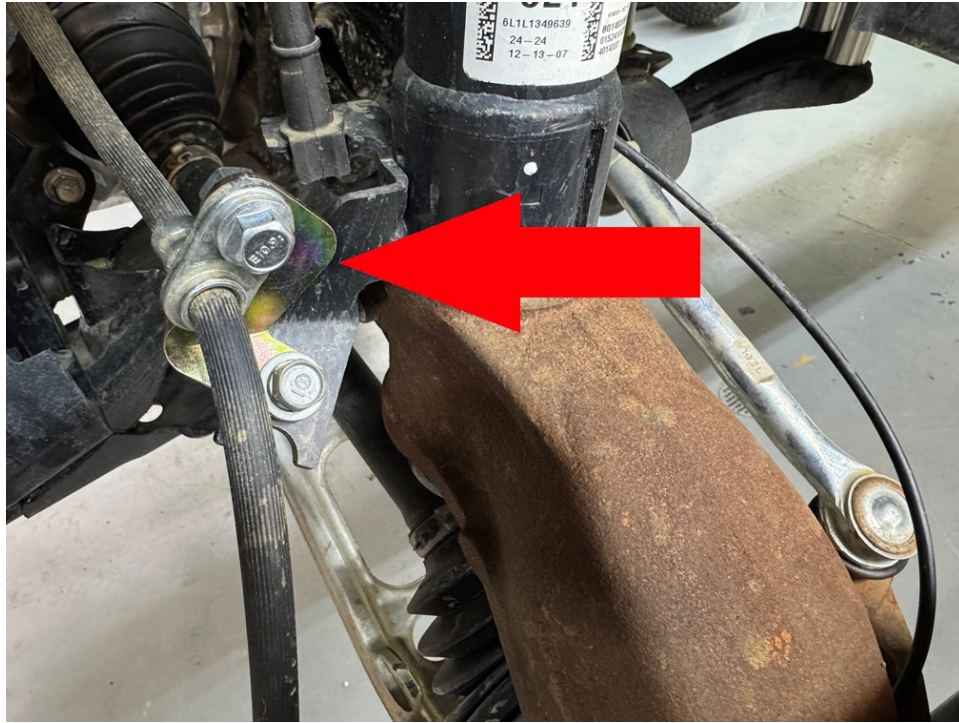
Step 30. Install strut spacers onto top of struts using M10 nuts. "L" spacer is DRIVER SIDE and "R" spacer is PASSENGER SIDE.



Step 31. Reinstall front strut in reverse order. Use M10 nuts to secure strut to body.

Step 32. Install new sway bar end link using supplied hardware.

Step 33. Install brake line relocation brackets as shown:



Step 34. Repeat steps 16-33 for passenger side.

Step 35. Double check all bolts, refer to factory service manual for torque specifications.

Step 34. Reinstall wheels and lower vehicle.

Rear installation:

Step 1. Jack up vehicle and support with jack stands.

Step 2. Support rear cross member with floor jack.

Step 3. Remove 8 bolts holding rear subframe support brackets to body.



Step 4. Loosen 4 main M14 bolts holding subframe to body, removing only the front 2. This allows the subframe enough to install 2 of the 4 3.5x1" M14 spacers between subframe and body. Install M14x160 bolts. Be sure to pass bolts through support brackets! (see photo)



Step 5. Remove rear subframe bolts one by one, installing remaining 3.5x1 spacers and installing M14x180 bolts.

Step 6. Install 8 1.25x1 M12 spacers between support brackets and body, install 8 M12x50 bolts.

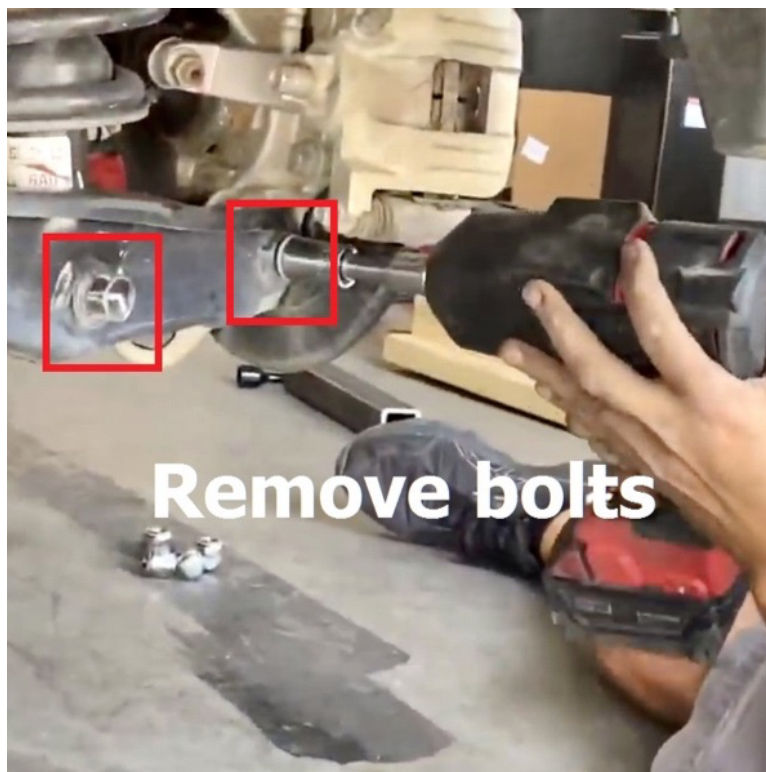


TIP: Remove sway bar (if applicable) or disassemble suspension on both sides before installing spacers.

Step 7. Remove wheels.

Step 8. Remove bolt holding driver side strut to lower control arm.

Step 9. Remove bolt holding lower control arm to wheel hub. (outermost bolt on lower control arm)

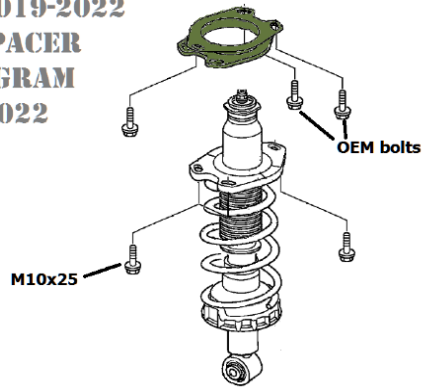


Step 10. Loosen but do not remove bolt holding lower control arm to subframe. (innermost bolt) to allow arm to move freely.

Step 11. Remove 3 bolts holding strut to body and remove strut.

Step 12. Place spacer on top of strut and attach using M10x25 bolts and M10 nuts.

**2016-2022 PILOT/2019-2022
PASSPORT REAR SPACER
INSTALLATION DIAGRAM
(C)HRG OFFROAD 2022**



Step 13. Install strut/spacer combination using OEM hardware.

Step 14. Using a floor jack, lift lower control arm until bolt holes line up.

Step 15. Reinstall bolt holding strut to lower control arm.

Step 16. Using a floor jack, lift lower control arm until bolt holes line up.

Step 17. Reinstall bolt holding lower control arm to hub.

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

Step 18. Install BLB2 on rear brake line mount. (see photo)



Step 19. Repeat steps 8-18 for passenger side.

If 2WD, skip to step 24.

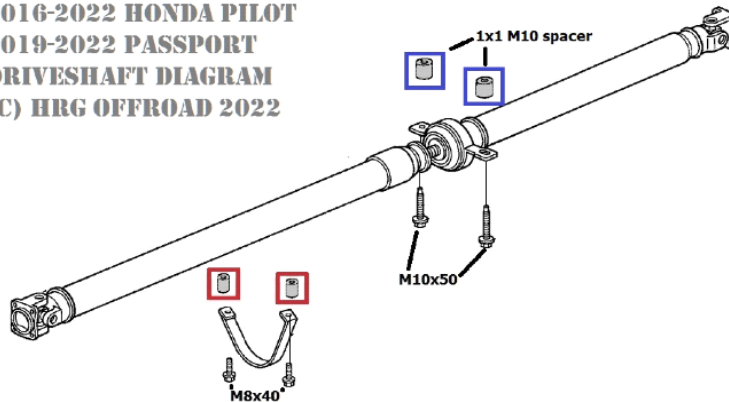
Step 20. Remove 2 M10 bolts holding front propeller shaft carrier bearing.

Step 21. Install 2 1x1 M10 spacers between carrier bearing and body, install 2 M10x50 bolts. (see diagram)

Step 22. Remove 2 M8 bolts holding driveshaft protector loop (U-shaped strap)

Step 23. Install 2 .625x1 M8 spacers between protector loop and body, install 2 M8x40 bolts.

**2016-2022 HONDA PILOT
2019-2022 PASSPORT
DRIVESHAFT DIAGRAM
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Step 24. Reinstall wheels and lower vehicle.

Step 25. Double check all bolts. Refer to factory service manual for torque specifications.

Step 26. 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 8-4:30 PM EST Mon-Thu 8-3:30 PM Fri or email us 24/7 at support@hrgoffroad.com.

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