



## 1997-2001 Honda CRV2WD/4WD 4" ULTIMATE lift kit installation guide

*Professional installation is recommended*

**FOR OFF-ROAD USE ONLY!**

### **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: 205/70/15 (26.3")  
205/75/15 (27")  
225/70/15 (27.4")  
215/75/15 (27.7")  
225/75/15 (28.2")  
235/75/15 (29")  
30x9.50R15 (30") (cutting may be necessary)

***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 2.0" front lift spacers 5202  
2 3.5" rear lift spacers 5200  
4 1.25x1.5" 12mm spacers (rear subframe)

5 1.25x1.5" 12mm spacers (engine/trans)  
2 3" Trailing arm spacers (rear trailing arms)  
8 1.25x1.5" 14mm spacers (main subframe)  
2 2.75x1.5" 10mm spacers for rear differential (4WD kit)  
2 1x1.5" 10mm spacers (propeller shaft)  
6 1x1.5" 10mm spacers (chassis stiffener braces)  
2 1.5" 10mm "H" spacers (torque mounts)  
4 .75x1" 8mm spacers (driveshaft safety loops)  
2 Rear camber arm relocation brackets  
2 Rear toe adjuster relocation brackets  
2 Rear brake line relocation brackets  
4 M10x25mm bolts (lift spacers)  
2 M10x20mm bolts (camber brackets)  
4 M10 nuts (camber brackets, toe brackets)  
2 M10x50mm bolts (toe brackets)  
6 M10x60mm bolts (torque mounts, propeller shaft)  
6 M10x60mm bolts (chassis stiffener braces)  
2 M10x60mm bolts (camber brackets)  
4 M14x125mm bolts (front subframe)  
4 M14x135mm bolts (front subframe)  
4 M12x140mm bolts (trailing arms)  
4 M12x120mm bolts (rear subframe)  
3 M12x60mm bolts (manual transmission only)  
2 M12x80mm bolts (auto transmission only)  
2 M12x60mm bolt (engine)  
4 M8x40mm bolts (driveshaft safety loops)  
4 M8x16mm bolts (rear brake line brackets)  
4 M8 nuts (rear brake line brackets)  
1 Steering shaft extension  
2 Adjustable rear camber arms  
3 extended muffler hangers

**NOT INCLUDED IN THE KIT:** Truhart silver front upper control arms for lifted applications. (please follow link in description of 4 inch lift kit)



**Tools required:** Floor jack, lug wrench, metric socket set to 19mm, metric wrench set to 17mm, impact wrench, heavy hammer, pry bar, common pliers, power drill, 1/2" drill bit, torque wrench, paint pen.

**Installation time:** 8 hours

**Note to installer:** All bolts removed to install subframe kit will be replaced with longer bolts. Some OEM hardware will

be reused.

### Installation video:



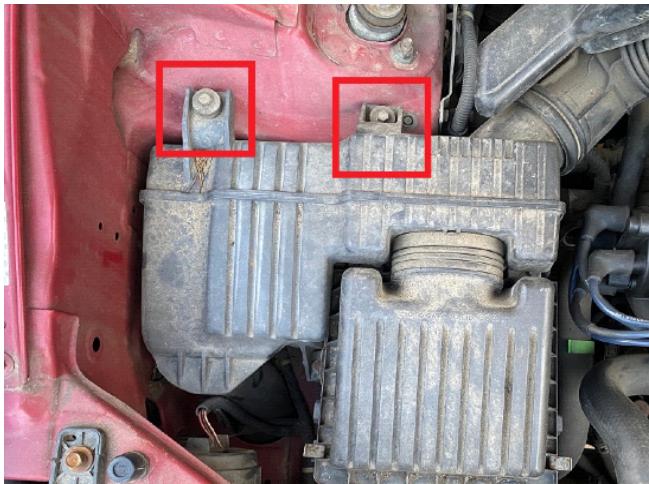
### Front installation:

Step 1. Disconnect and remove battery.

Step 2. Remove battery tray.

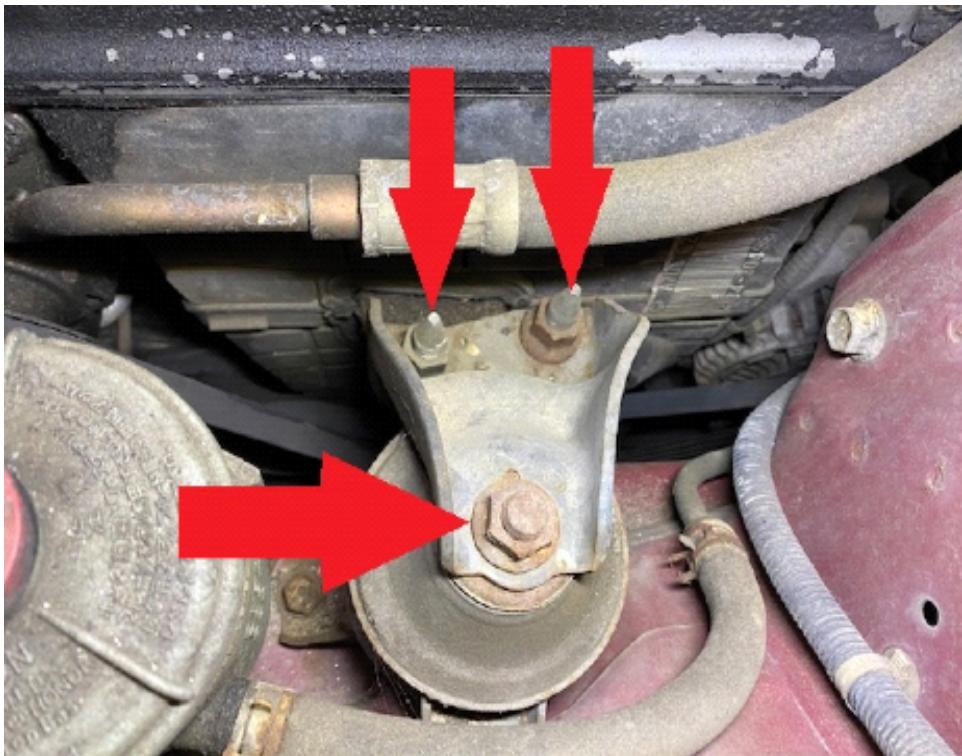


Step 3. Remove factory air box and cruise control module. (if applicable)



Step 4. Support engine/transmission with a floor jack and a square of plywood.

Step 5. Remove 3 17mm nuts, remove upper engine mounting bracket.



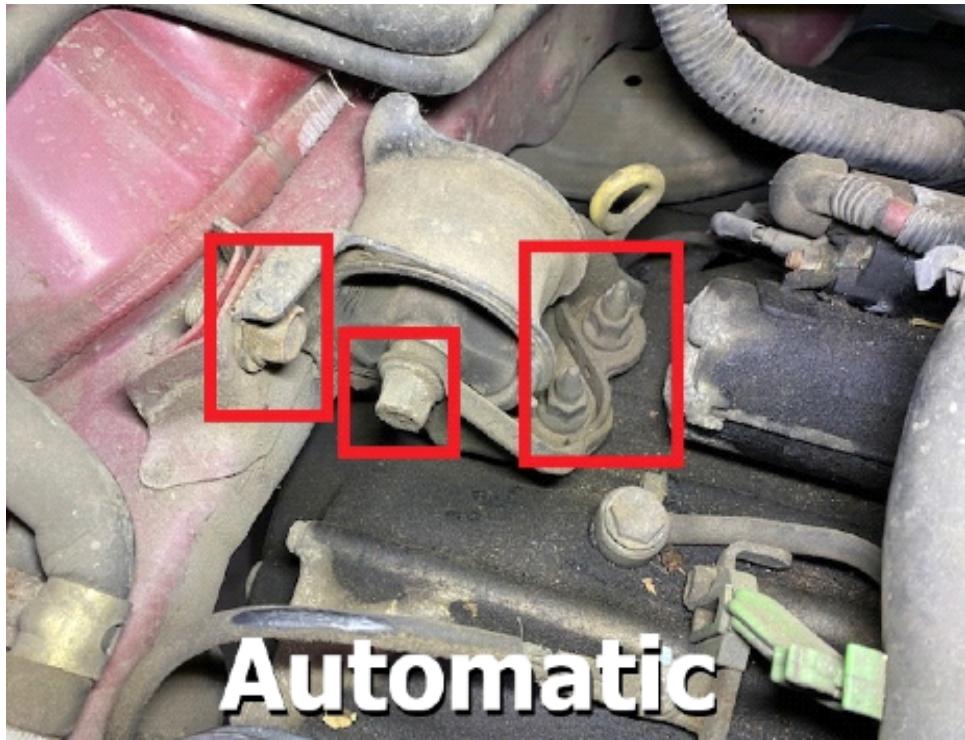
Step 6. Remove stud(s) from engine block bracket. This can be done by tightening 2 17mm nuts against each other and backing the stud out of the bracket. Alternative method: weld nut to stud and back out with an impact gun.



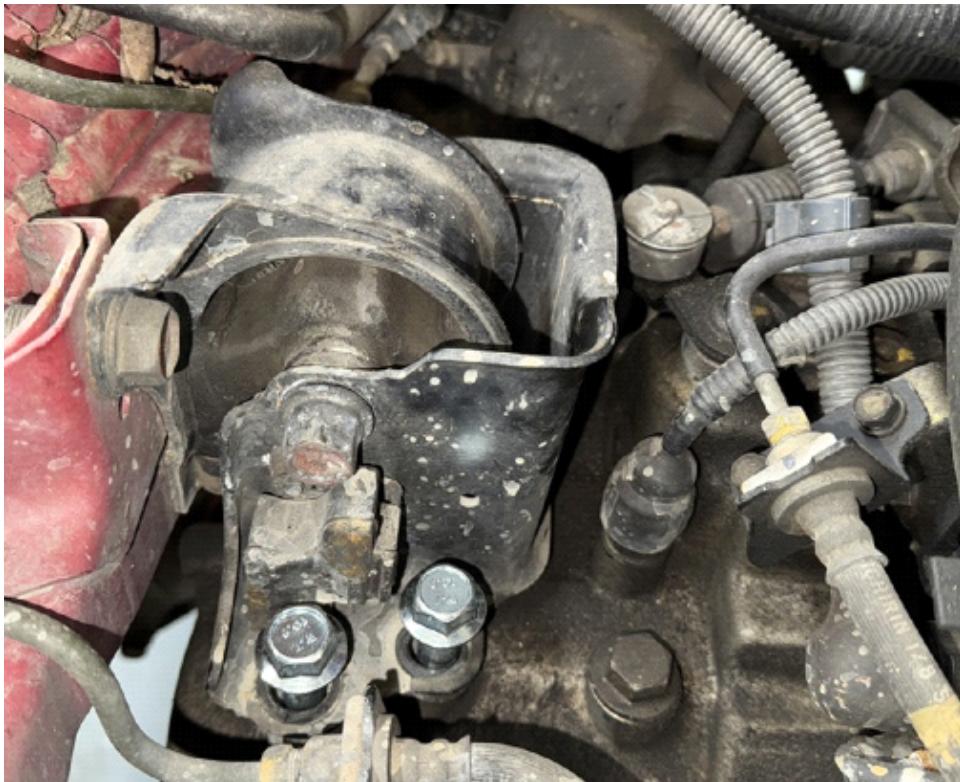
Step 7a. (Manual transmission) Remove transmission mounting bracket and remove studs from transmission case using same technique as removing engine studs. Do not remove transmission mount from frame rail.



Step 7b. (Automatic transmission) Remove transmission mounting bracket AND transmission mount from frame rail. Remove studs from transmission using same technique as removing engine studs.



Step 8a. (Manual transmission) Reinstall transmission bracket and temporarily install 3 M12x60 bolts.

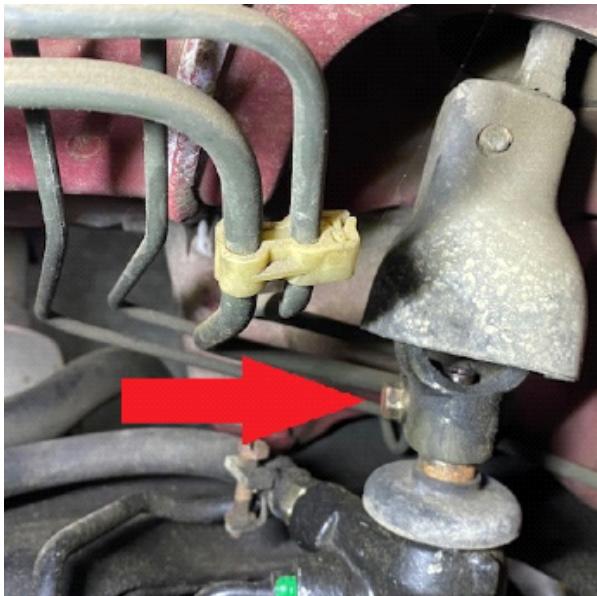


Step 8b. (Automatic transmission) Reinstall transmission bracket and transmission mount. Temporarily install 2 M12x80 bolts.

Step 9. Reinstall engine mounting bracket and temporarily install 2 M12x60 bolts in place of engine studs.



Step 10. Rotate the steering wheel as needed to access bolts holding steering shaft universal joint. Remove 2 10mm bolts in steering shaft universal joint coupler. Save mounting bolts! **Steering coupler will be removed and replaced with a longer one in a later step.**



Step 11. Turn the wheels straight and secure the steering wheel by passing the seat belt through it as shown.

**Failure to secure the steering wheel can result in damage to air bag ribbon cable!**

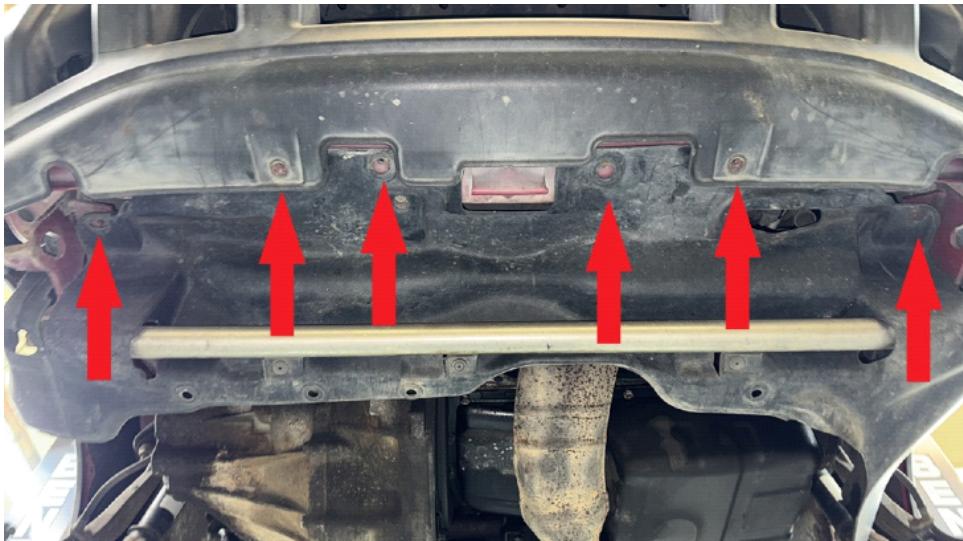


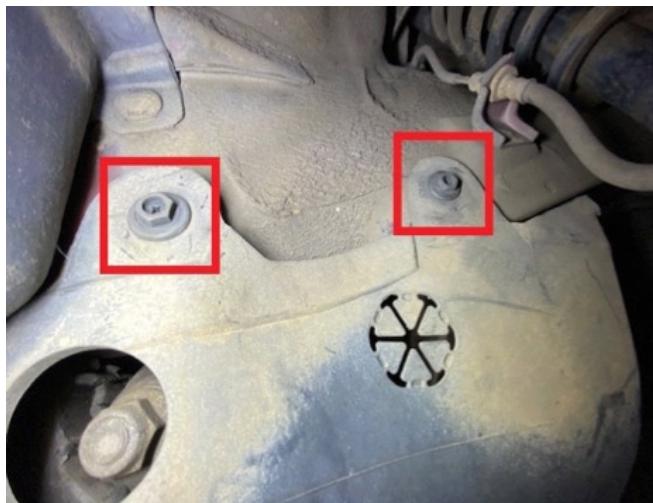
Step 12. Lower jack supporting engine until engine is supported by bolts temporarily installed in previous steps.

Step 13. Lift vehicle and support with jack stands.

Step 14. Remove wheels.

Step 15. Remove plastic splash shield and bar from under front bumper (if applicable)





Step 16. Support subframe with floor jack or safety jack. Remove main subframe bolts one at a time and replace them with the bolts included with the kit. There are 4 short bolts and 4 long bolts in the subframe. The short bolts will be replaced by the M14x125, and the long bolts will be replaced by the M12x135



**Caution: Do not remove all of the subframe bolts at once!**

Step 15. Remove 14mm bolts holding torque mounts.

Step 16. Place 2 1.5" "H" spacers between torque mounts and frame rail and install 4 M10x60 bolts in torque mounts.



Step 17. Remove steering coupler from steering rack.

Step 18. Install extended coupler onto steering shaft coming through firewall. Push the coupler up as far as it will go to allow room to slide over splines on steering rack.



Step 19. Release seat belt holding steering wheel, and rotate wheel as needed to allow access to the coupler bolts. Tighten coupler bolts.

Step 20a. For **automatic** RT4WD and 2WD transmissions: install 2 1.25x1.5" M12 spacers between transmission bracket and transmission, install 2 M12X80 mm bolts.

Step 20b. For **manual** RT4WD and 2WD transmissions: Install 3 1.25x1.5" M12 spacers between transmission bracket and transmission, Install 3 M12x60 bolts.

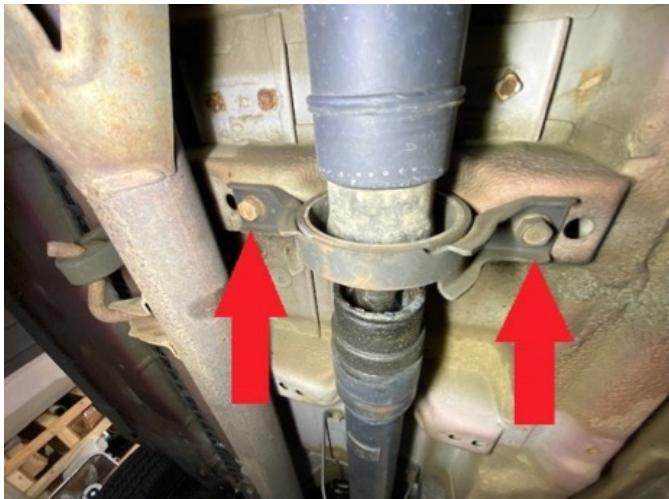
Step 21. Install 2 1.25x1.5 M12 spacers between engine bracket and mount. Reinstall engine mount using 2 M12x60mm bolts.



Step 22. Remove 4 12mm bolts holding driveshaft safety loops to body. Install 4 0.75x1" spacers and M8x40 bolts as shown.



Step 23. Support propeller shaft aka drive shaft with floor jack, carefully remove 2 bolts holding center carrier bearing on propeller shaft, install 2 1x1.5" spacers and 2 M10x60mm bolts.



Step 24. Using a pry bar, bend loops to clear driveshaft if necessary.



Step 25. Remove rubber exhaust pipe hanger next to carrier bearing and replace with extended hanger provided in the kit.



Step 26. Remove 17mm bolt connecting driver side strut fork to lower control arm, remove 14mm bolt connecting strut fork to strut, remove strut fork. Save hardware.



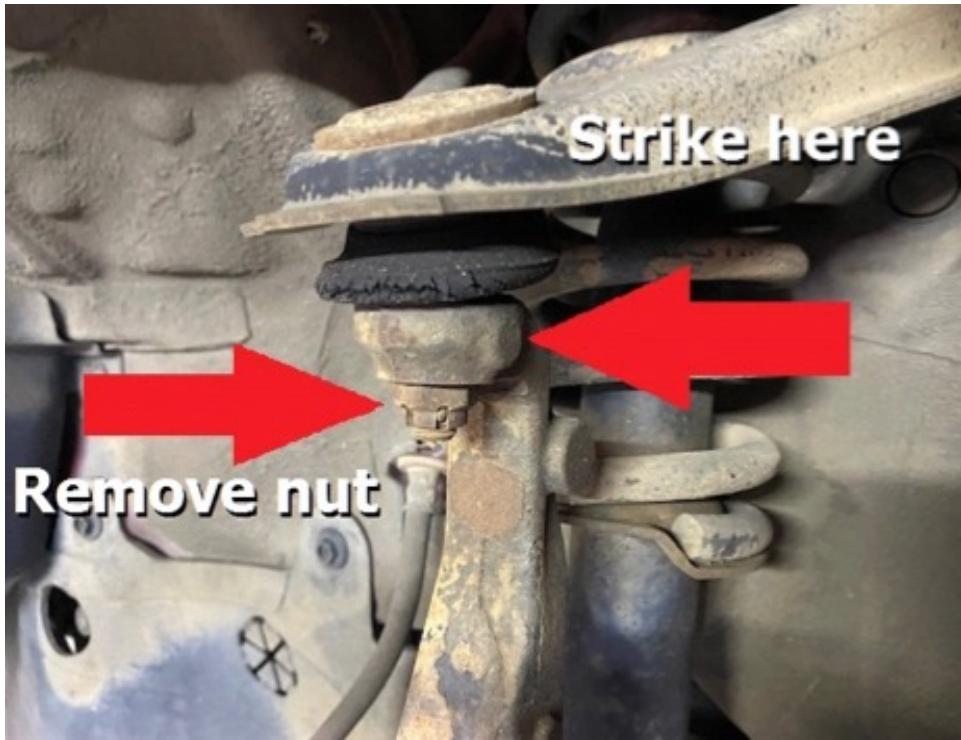
Step 27. Remove nut holding sway bar end link to lower control arm.

Step 28. Remove 10mm bolts holding ABS wire and wheel sensor to knuckle (if applicable). Move ABS wiring out of the way.

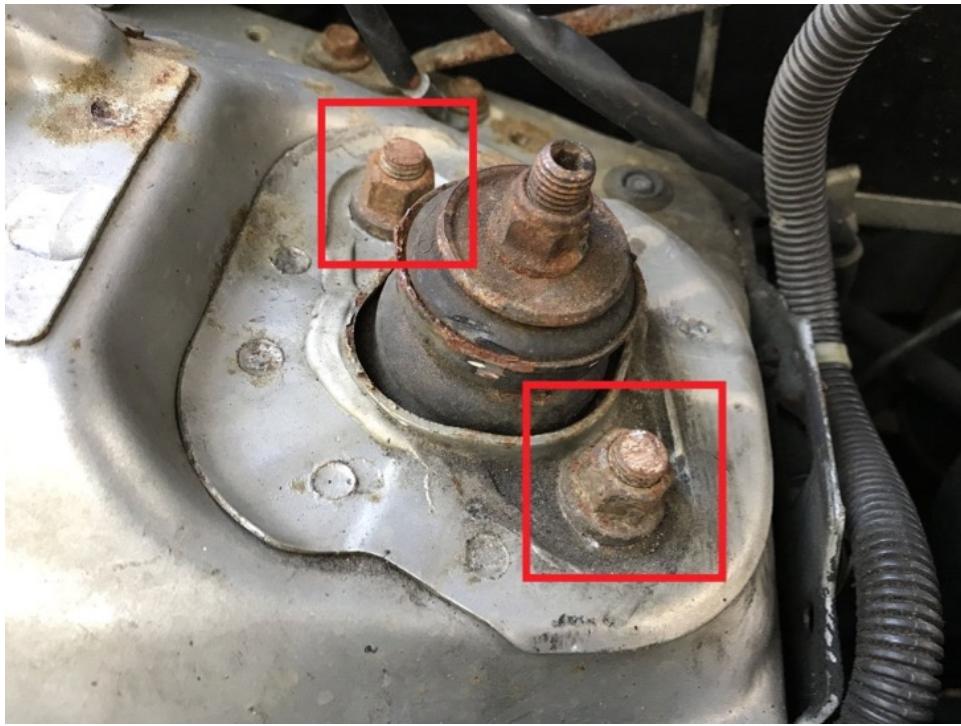
Step 29. Remove 2 10mm bolts holding brake line to knuckle.

Step 30. Remove cotter pin and castle nut on upper ball joint.

Step 31. Carefully strike knuckle with a large hammer to dislodge ball joint, allowing front suspension to drop down. Take care not to allow the axle to pop out of the inner socket.



Step 32. Remove 14mm nuts at the top of the strut connecting strut to strut tower. Remove strut. Save hardware for reinstallation.



Step 33. Bolt 2-inch spacer to top of strut using OEM Honda nuts.



Step 34. Reinstall strut and spacer combo with M10 bolts provided in the kit.

Step 35. Reinstall lower strut fork.

Step 36. Remove clutch fluid reservoir (manual transmission only) to gain access to front upper control arm bolts.

Step 37. Remove 14mm bolts holding upper control arm to shock tower. Remove arm.

Step 38. Install Truhart front upper control arm in place of OEM arm.



Step 39. Using a floor jack, compress suspension to align upper ball joint and knuckle.

Step 40. Install castle nut and cotter pin on upper ball joint.

Step 41. Reinstall wheel sensor and ABS wiring (if applicable)

Step 42. Relocate brake line bracket to upper mounting hole on knuckle



Step 43. Repeat installation process on passenger side.

Step 44. Reinstall air box.

Step 45. Reinstall battery tray and battery.

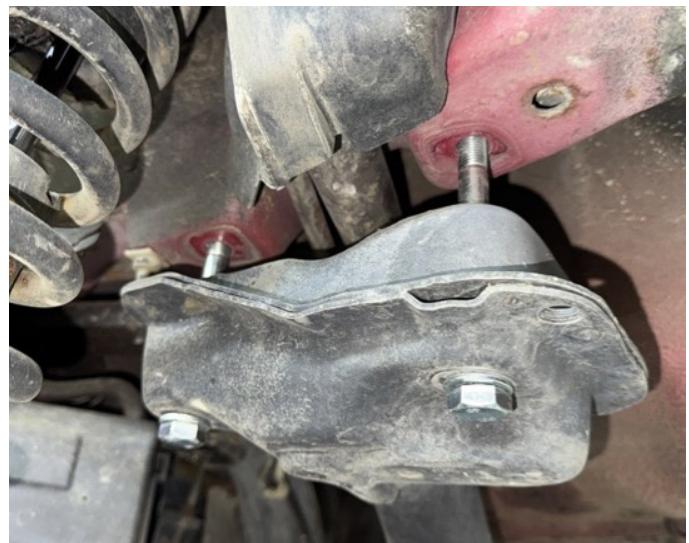
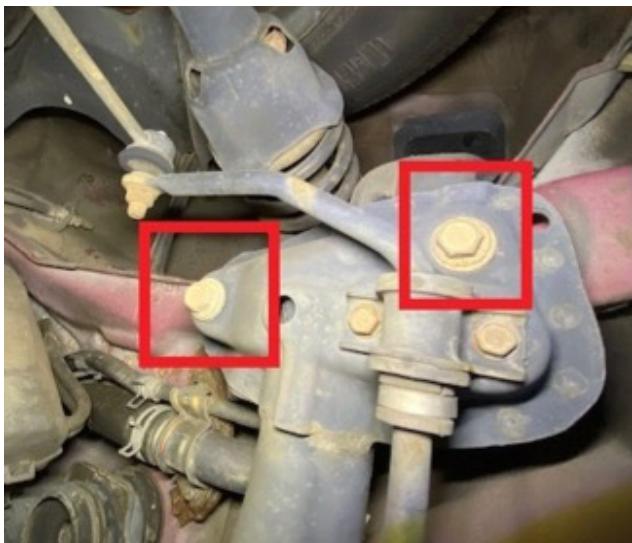
Step 46. Reinstall cruise control module.

Step 47. Reinstall clutch fluid reservoir. (manual only)

## **Rear installation:**

Step 1. Support rear subframe with floor jack or screw jack.

Step 2. Remove 17mm bolts holding rear subframe to body one at a time and temporarily install M12x120 bolts in place of the OEM bolts.



Step 3. **(4WD ONLY)** Remove the 2 14mm bolts holding rear differential mounting bracket to body. Save bolts.



Step 4. Carefully lower rear subframe and differential approximately 1.5 inches.

Step 5. Remove M12x120 bolts one at a time and install 4 1.25x1.5" M12 spacers between subframe and body.

Step 6. **(4WD ONLY)** Install 2 2.75x1.5" M10 spacers between rear differential support bracket and frame. Reinstall OEM bolts.



Step 7. Remove the bolt holding parking brake cable and 2 bolts holding brake hardline to trailing arm. (see photo)



Step 8. Mount brake line relocation bracket as shown using OEM hardware to attach brake hardline to bracket. (see photo) Reinstall bolt holding parking brake cable to trailing arm.



Step 9. Remove 3 14mm bolts holding chassis bar to frame. Remove chassis bar (98-01 only)



#### Rear Toe Adjuster Bracket (RTAB) installation:

Step 10. Remove bolt holding driver side toe arm to body and pull toe arm free. Save hardware.

Step 11. Slide RTAB into place. It is a tight fit and will need to be tapped into place with a rubber mallet.

Step 12. Install OEM bolt through RTAB and into body.

Step 13. Place 2 1.5x1 M10 spacers between chassis bar and RTAB bracket.

Step 14. Install M10x60 bolts to clamp bracket assembly in place. Use M10x25 on CRVs not equipped with chassis bar.

Step 15. Install toe arm into bracket with supplied M10x60mm bolt and M10 nut. (see photo)



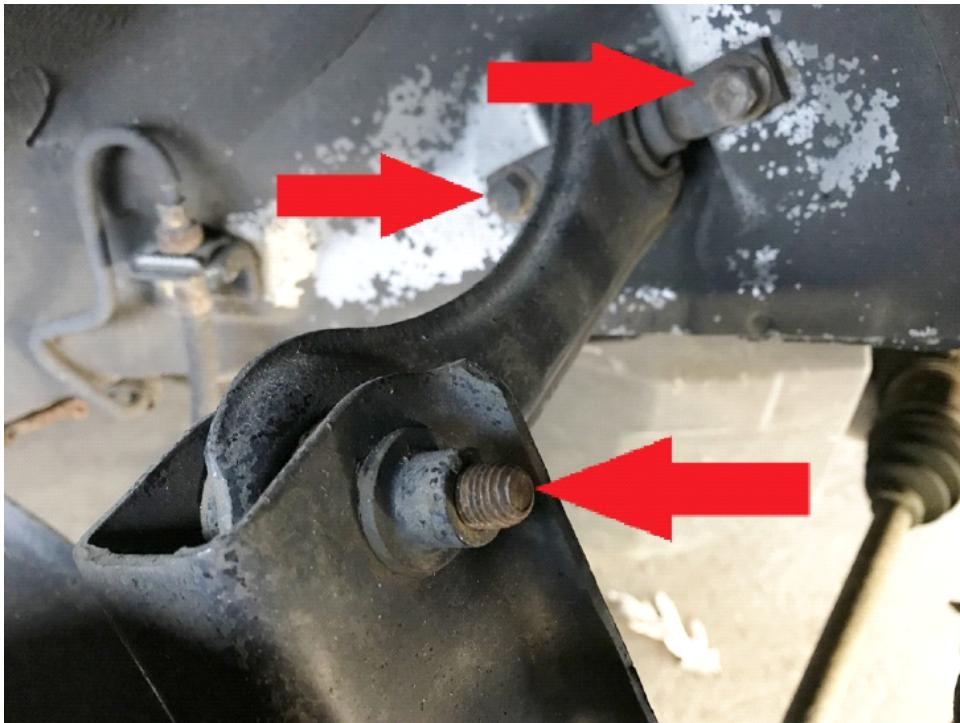
Step 25. Install 3" trailing arm spacers and M12x140mm bolts. (see photo)

Step 26. Place 1 1.5x1 M10 spacer between chassis bar and body, next to trailing arm spacer, install M10x60 bolt. (see photo below)



Step 27. Repeat installation process on passenger side.

Step 28. Remove bolts holding OEM rear upper control arm in place.



Step 29. Mark hole to be drilled for M10x20 retaining bolt 1" from top edge of trailing arm using 1/2" drill bit.



Step 30. Install M10x20 retaining bolt/nut, lock RCAB into place. (see photo)



Step 31. Install new adjustable upper control arm in place of original control arm. Take care when installing the 2 14mm bolts holding the upper control arm to the body, as these are prone to cross-threading. Do not mount upper control arm to camber arm relocation bracket at this time.

Step 32. Replace OEM muffler hangers with extended hangers included in the kit.



Step 33. Remove bolt holding strut to lower control arm. **Note: these bolts are prone to seizing inside the lower control arm bushing. If the bolts seize, you will need to cut the bushings and replace them, or replace both struts and the rear lower control arms.**



Step 34. Remove nut holding rear sway bar link to lower control arm (if applicable) allowing arm to drop down.

Step 35. Remove nuts holding strut to shock tower. Remove strut.

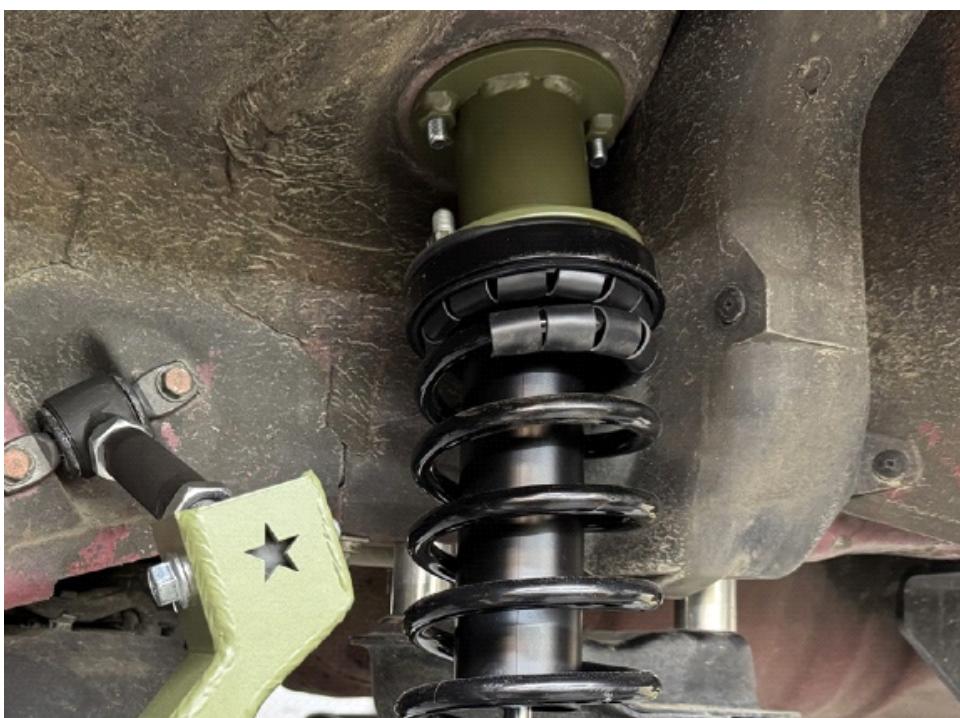


Step 36. Attach 3.5" lift spacer to strut using the OEM Honda nuts.

Step 37. Reinstall strut/spacer assembly to shock tower using supplied M10x25mm bolts. Replace plastic cover.

Step 38. Install bolt holding strut to lower control arm, but do not tighten at this time. Lower control arm bolts will be tightened with weight on the suspension.

Step 39. Using a floor jack, compress suspension to align rear upper control arm and RCAB bracket.



Step 40. With suspension compressed, tighten all lower control arm bolts.

Step 41. Repeat installation process on passenger side.

Step 42. Check clearance between rear strut and trailing arm. Depending on the brand and shape of the rear struts, it may be necessary to trim the trailing arm to gain clearance where the two parts meet.

Step 43. Reinstall wheels and lower vehicle to the ground. Roll back and forth to settle suspension.

Step 44. Using a torque wrench, double check all bolts and mark bolts with paint pen that have been double checked.

Step 45. Get a professional alignment.

Step 46. Find some trails!!



**Installing a lift kit will change the suspension geometry and will require a 4 wheel alignment. Failure to perform a wheel alignment will result in unsafe handling characteristics, accelerated tire wear, and a significant reduction in fuel mileage.**

**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!!*