

RUGGED OFF ROAD

Step by step instructions and checklist:

Use the proper tools and safety equipment to perform all work. Torque all fasteners to proper specifications and double check work. Align your vehicle after installation.

25-10405

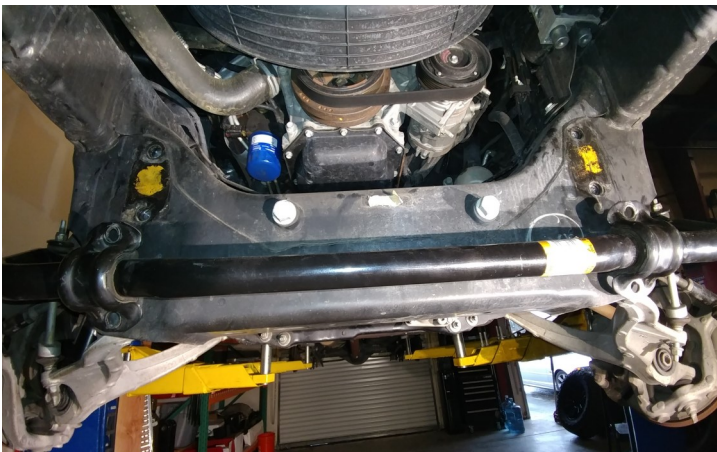
Park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Disconnect the vehicle power source at the ground terminal on the battery. Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms.

Remove the front wheels and support the lower control arm with a suitable jack.



Remove the outer tie rod from the knuckle. Strike the tie rod boss on the knuckle with a dead blow hammer to dislodge the taper.



Remove the sway bar from the frame. Let hang out of the way.



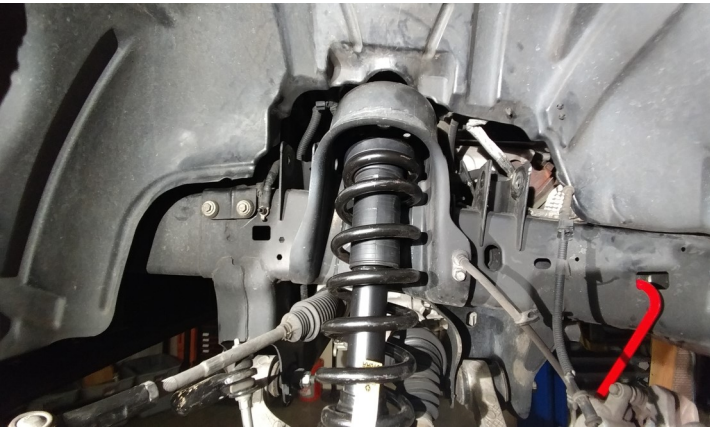
Remove the brake caliper from the knuckle. Using a suitable device, hang the caliper out of the way. DO NOT let the caliper hang by the brake line.



Remove the axle nut.



Remove the upper ball joint from the knuckle. Strike the ball joint boss with a dead blow hammer to dislodge the taper.



Remove the upper control arm from the frame.



Support the lower control arm with a suitable jack. Remove the lower strut from the lower control arm.

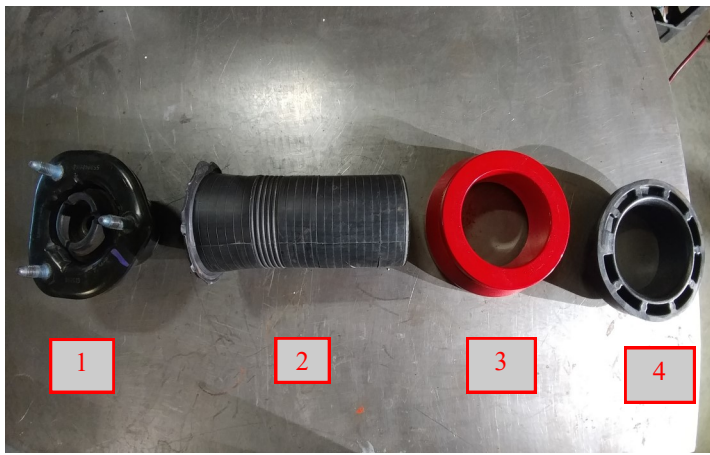
Loosen the lower control arm at the frame and lower the control arm until the strut clears. The axle will need to be released from the hub bearing to allow enough travel to install the completed strut assembly.

Remove the strut from the frame.

*****Caution, the spring is under extreme pressure and can cause bodily injury and/or death if handled improperly.*****



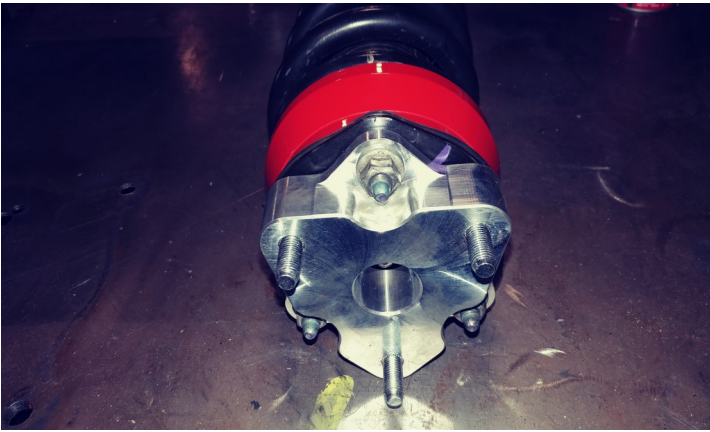
Mark the orientation of the strut assembly, spring to strut, and spring to top hat. These will be needed to be assembled in the same orientation as factory. Using a spring compressor, relieve spring pressure from the strut top hat. Remove the factory top hat. Remove the plastic spring lock from the top hat.



Install the pre-load spacer in between the top hat rubber isolator/dust sleeve and the plastic spring lock. **1.** Factory top hat and rubber isolator, **2.** Factory dust shield, **3.** ReadyLIFT® pre-load spacer, **4.** Factory plastic spring lock. Torque to **30-ftlbs**.



Install the factory top hat onto the strut.



Install the strut extension to the strut assembly using factory hardware. Torque to **25 ft-lbs**.



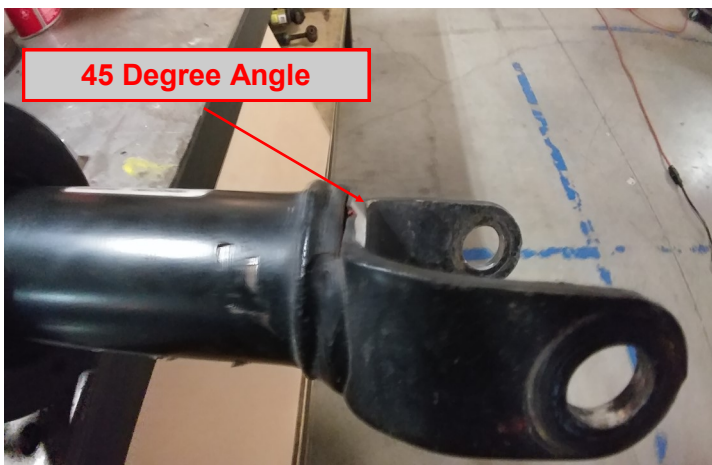
Mark the area on the lower control arm right above the strut mount.



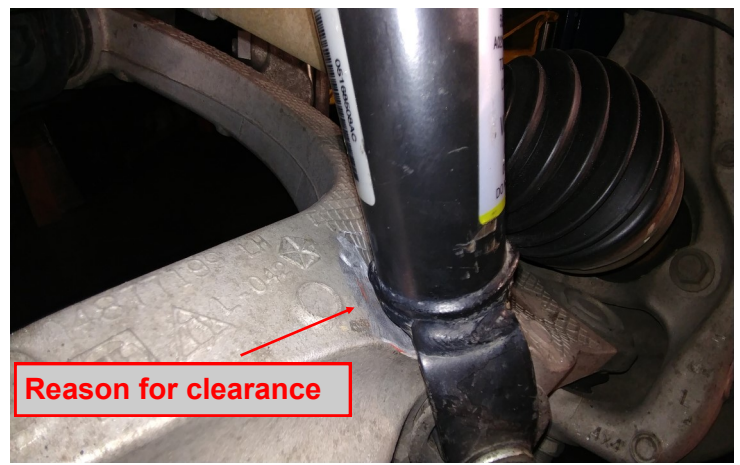
Using a suitable tool, grind down this area for clearance when the strut is installed.



Mark the bottom of the strut body as shown. This needs to be done to the inside edge of the strut. Note: the strut mounts 180 degrees from the original orientation, so this mark will be on the original outside face which will then be the inside face once installed into the vehicle.



Using a suitable tool, grind down this area at a 45 degree angle for clearance when the strut is installed. Do not grind into the strut body, only on the lower mount. Paint the exposed metal with a quality rust preventative paint.



This is for full droop clearance and easier install of the lower strut mount.



Install the completed strut assembly into the frame using **M10 flange nuts**. Raise the lower control arm up and install the lower strut mount using **factory hardware**. Do not tighten at this time.

Prepare the new control arms for installation:
Install the bushings and crush sleeves into the control arms using the provided one time grease pack. Lightly grease the bushings and sleeves and slide into the pivot points on the control arms.



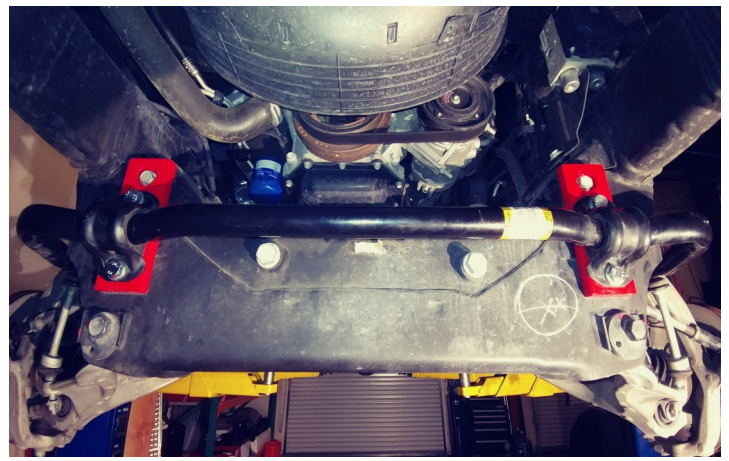
Install the appropriate side upper control arm to the frame side that you are working on using **factory hardware**. (The control arms are identified by the ABS mounting hole, the hole will line up just like the factory arm towards the rear of the vehicle) Do not tighten at this time.



Install the upper ball joint to the knuckle using **provided hardware**. Make sure to install the **ball joint spacer** under the nut. Torque to **45 ft-lbs**. Install the provided cotter pin.



Install the rotor and caliper using factory hardware. Torque to **130 ft-lbs**. Install the outer tie rod end to the knuckle using factory hardware. Torque to **65 ft-lbs**. Install the axle nut. Torque to **185 ft-lbs**.



Install the sway bar spacers to the frame using **factory hardware**. Torque to **45 ft-lbs**. Install the sway bar to the Ready-LIFT drop brackets using **M12 x 20mm bolts and washers**. Torque to **45 ft-lbs**.

Front Final Steps:

Install the front wheels and lower the vehicle to the ground. Jounce the suspension a few times to get it to settle to the new ride height. Torque the lug nuts to the wheel manufacturer specs, upper strut mount to **30 ft-lbs**, upper control arms, lower control arms, and lower strut mount to **120 ft-lbs**. Lower control arm to have final torque set by alignment shop. Use an appropriate tool, grease the upper ball joint just until the boot just starts to expand. Do not over grease.

Rear Installation:

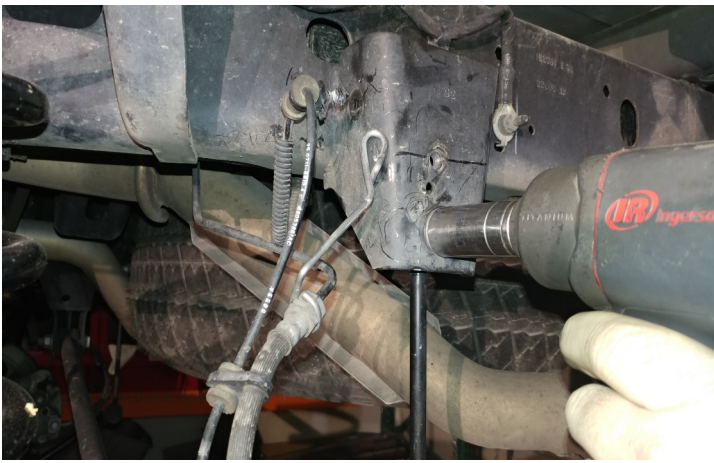
Block the front wheels and jack the rear up. Place jack stands at the frame rails in front of the lower control arms. Removal of the wheels and inner liner is not necessary, but recommended for ease of install.



Support the axle with a suitable jack. Remove the lower shock from the axle.



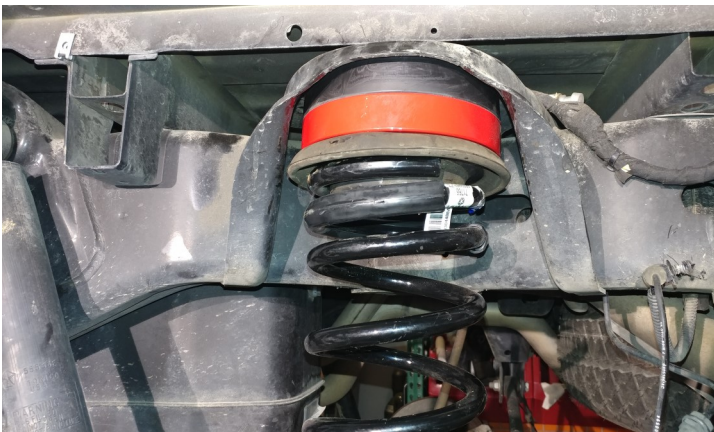
Remove the ABS, brake line bracket



Remove the sway bar end link at the frame.



Loosen but do not remove the upper control arms, lower control arms, and track bar hardware at the frame and axle.



Lower the axle enough to remove the springs. Install the rear spring spacers onto the springs making sure to keep the factory isolator on top of the spring. Raise the axle while locating the spring assembly to the frame.



Install the bump stop extension to the axle using **M10 X 60MM bolts, washers, and nuts**. Torque to **35 ft-lbs**.

Install the lower shock to the axle using factory hardware. Do not tighten at this time.



Install the rear sway bar bracket to the frame using **M12 x 35mm bolts, washers, and nuts**. (Part shown on outside of frame for reference, install to the inside of the frame.) Torque to **45 ft-lbs**.



Install the sway bar end links to the drop brackets using factory hardware. Do not tighten at this time.

If removed, install the inner fender liner and wheels. Lower the vehicle to the ground. Jounce the vehicle a few times to get it to settle to the new ride height. Torque the lug nuts to the wheel manufacturer specs, the upper, lower control arms to 200 ft-lbs, track bar hardware to 125 ft-lbs, lower shock hardware to 65 ft-lbs, and sway bar link to 45 ft-lbs. Install the vehicles power source at the negative terminal. Cycle the steering wheel and make sure that there is clearance between all moving components and brake/ABS lines. Adjust as necessary. Have the alignment set to the recommended specs at the back of the instruction manual.

	Driver	Passenger	Tolerance	Total / Split
Camber	-+0.0	+0.0	+/- 0.5	+0.0
Caster	+3.0	+3.0	+/- 0.5	+0.0
Toe	+.05	+.05	+/-0.05	+.20

RECOMMENDED ALIGNMENT SPECS

Final Checks & Adjustments

Post Installation Warnings: Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque wheels to the manufacturers specs. Move the vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels from lock to lock and verify adequate tire, wheel, brake line, and ABS wire clearances. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brake hoses and ABS lines for adequate slack at full extension. Failure to perform the post inspection checks may result in vehicle component damage and/or personal injury or death to driver and/or passengers. Test drive vehicle and re-check the torque of all fasteners.

Wheel Alignment/Headlamp Adjustment

It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory or provided specifications. It is recommended that your vehicle alignment be checked after any off-road driving. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment.

Vehicle Re-Torque and Safety Inspection

Upon completion of all services and adjustments performed on your vehicle, and within 50 miles of driving, check to ensure that all fasteners and hardware are properly torqued to specification as noted in the vehicles factory service manual.

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