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Instruction Manuals

2007 & up Chevrolet 1500 Flipkit
07-UP CHEVROLET 1500 REAR AXLE FLIP

RECOMMENDED TOOLS:
• Properly rated floor jack and six (6) support stands
• Wheel chocks
• Die grinder equipped with abrasive cut-off wheel
• ½” drive torque wrench
• Standard socket wrench set
• Air powered ½” drive impact wrench
• Flat bladed screw driver
• Safety glasses
• Air powered chisel

KIT INSTALLATION
As this is a relatively involved installation, we recommend that a qualified mechanic at a properly equipped facility perform it. We also recommend that the installation be performed on a firm, flat and level surface, such as seasoned asphalt or concrete. The use of safe and properly maintained equipment is very important! We also recommend measuring and recording all stock driveline angles prior to installing this kit. This information maybe helpful if vibration problems arise after installation.

1. JACKING, SUPPORTING AND PREPARING THE VEHICLE
1a) Block the front wheels of the vehicle with appropriate wheel chocks. Make sure the vehicle’s transmission is in “Park” (automatic) or 1st gear (manual. Activate the parking brake.

1b) Loosen, but DO NOT REMOVE the rear lug nuts.

1c) Using a properly rated floor jack, lift the rear of the vehicle off the ground. Lift the vehicle so that the rear tires are approximately 6-8 inches off the ground surface.

1d) Support the vehicle using four (4) support stands, rated for the vehicle’s weight. The stands should be positioned, two on each of the frame rails, just forward of the front leaf spring hangers and just below the rear leaf spring shackle hangers. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the straight, flat portions of the frame area.
   ! It is very important that the vehicle is properly supported during this installation to prevent frame damage and personal injury! Make sure that the support stands are properly placed prior to performing the following procedures.

1e) Slowly lower the vehicle onto the stands and, before placing the vehicle’s weight on them, again check that they properly and securely contact the frame rails described above. Check for possible interference with any lines, wires or cables.
   REMINDER: Check for safe vehicle stability before proceeding under the vehicle to begin the following procedures. Never work under a vehicle supported by only a jack. Always use properly rated support stands to support the vehicle.

2. TRAILER HITCH REMOVAL (IF APPLICABLE)
2a) If your vehicle has come equipped with a Trailer Hitch, more than likely, this will interfere with the installation process. This will need to be removed. This makes access easier when mounting the REAR SHACKLE hardware.
2b) Disconnect the wire plug, as shown below in

2c) Using a 21mm wrench, remove all the mounting hardware for the Trailer Hitch. There is a total of six bolts, three (3) per side.

2d) Lower and remove the Trailer Hitch and place out of the way, along with the hardware.

3. GAS TANK PROTECTIVE SHIELD AND GAS TANK REMOVAL
3a) In order to get to the front mounting hardware that mounts the leaf spring (driver’s side), the GAS TANK will need to be lowered to get access to the bolt head.

3b) First, support the GAS TANK from underneath. NOTE: This step would be easier to do if the GAS TANK was near empty. Otherwise, moving a half-full or a full tank of gas is going to be more laborious.

3c) The PROTECTIVE SHIELD that shrouds the GAS TANK is mounted with three (3) mounting bolts on one side (driver’s side), that mount directly to the frame. Using a 13mm wrench, remove the bolts completely and set aside. On the inside (opposite of driver’s side), the SHIELD hangs on four (4) rectangular hooks. Lift this side up above the hooks. You should now be able to wiggle the PROTECTIVE SHIELD down and out. Set this aside. Put the three (3) mounting hardware back in their respective mounting holes for safe keeping.

3d) Holding the GAS TANK in place are two (2) straps that are mounted at each end of the TANK. Each strap is mounted directly to the frame on one end only. The opposite end is attached primarily by a hook attachment.

3e) Remove the two mounting bolts completely. These are located on the driver’s side of the TANK itself and the inside part of the frame chassis.

3f) Pull the straps down from the driver’s side and un-hook the straps from the other end.

3g) Next locate the three (3) mounting hardware that bolts the GAS NOZZLE INTAKE, behind the gas door. Remove the three (3) bolts completely.

3h) With the GAS TANK supported from underneath, slowly lower the GAS TANK six (6") to (12") inches, pulling the rubber gas neck down as the GAS TANK travels down.

4. U-BOLT REMOVAL
4a) Before unbolting the u-bolts you will need to properly support the axle to keep it in place so it cannot fall from the leaf springs.

4b) There are two (2) sets of U-BOLTS, two per each LEAF SPRING, that is attached to the rear axle. Using a 21mm wrench, (Photo 6) un-bolt all mounting hardware (nuts and washers) on each U-BOLT. Remove all four (4) stock U-BOLTS completely and set aside as they will be used with the new kit.

4c) The LEAF SPRING is now detached from the rear axle remove it from the vehicle.
4d) Remove the stock leaf spring block from the axle it will not be used in the kit

5. LEAF SPRING REMOVAL
! CAUTION: LEAF SPRINGS may be under tension. SPRINGS under tension store a great amount of energy. Use caution during the following steps to avoid personal injury and/or damage to the vehicle. BE CAREFUL not to damage the brake hoses/and or driveline when re-locating the rear axle assembly.
Note: For ease of removal and reinstallation it might be helpful to detach the shocks from the axle housing.

5a) With the vehicle raised and the chassis supported with stands, raise the rear axle to remove the load from the shackles.

5b) Starting with the front end of the LEAF SPRING towards the engine (front), using a 21mm wrench, un-bolt the hardware and remove completely. With the GAS TANK lowered slightly, you should be able to get to this hardware. Once the bolt is removed, the LEAF SPRING should be able to sit atop the rear axle.

5c) With the LEAF SPRING sitting atop the rear axle, move back to the REAR SHACKLE HANGER. Using a 21mm wrench, un-bolt the hardware and remove completely.

5d) Also, for ease of re-installation, mark each LEAF SPRING left, right, front or rear to insure that the same ones go back on the same side as they were removed.

5e) The center bolt pin on both the LEAF SPRINGS will need to be reversed for proper reinstallation. Use a C-clamp to keep the leaf spring assembly in tack while reversing the center bolt. Reverse both center bolts and re-torque.

6. AXLE SADDLE PREPARATION
6a) Locate the bracket under the stock saddle that holds the brake line and sensor wire. Detach the brake line and sensor wire from this mount and cut the mount from the axle. The new saddle will have an incorporated mounting surface to reattach these components.

7. LEAF SPRING & SHACKLE INSTALLATION
7a) Loosely install the shackle onto the leaf spring before it is inserted into the vehicle. (if doing a 3" drop)

7b) Start with the front end of the LEAF SPRING (towards the engine) With the GAS TANK still slightly lowered, install the original hardware from the GAS TANK side outward towards the driver’s side of the vehicle, thru the frame and the LEAF SPRING eye. Start the lock nut, but do not tighten completely.

7c) Swing the LEAF SPRING upward. The LEAF SPRING will now locate underneath the rear axle.
7d) Swing the rear of the LEAF SPRING upward to the SPRING SHACKLE MOUNT, align the LEAF SPRING eye with the SPRING SHACKLE MOUNT holes. Insert the hardware and but do not tighten completely. This is to be done once the vehicle has been lowered and put on the ground.

7e) Using a 21mm wrench, re-tighten the front hardware on the LEAF SPRING.

8. AXLE SADDLE AND U-BOLT INSTALLATION
8a) Place the U-BOLT SPRING PAD MOUNTS on top of the axle spring pad and with the stock u-bolts place the horizontal portion inside the two bent flanges so they are locked in position.

8b) Install the U-BOLT PLATES below (under the LEAF SPRINGS), with the off-set holes forward, so the U-BOLTS pass through the appropriate slot. Attach the PLATES using washers and locknuts. Tighten and torque locknuts to 90 lb ft.

9. TRANSMISSION SPACER INSTALATION
9a) We have included a transmission to correct a small drive line vibration. The spacer will install between the transmission mount and the rubber isolator.

9b) Remove the two bolts from the isolator to the transmission, lift and insert the spacer, install the two supplied 10mm bolts thru the spacer and back into the transmission.

10. BUMP STOP INSTALLATION
10a) The Stock BUMP STOP and mount will need to be removed from the chassis to allow for additional travel. Unbolt the bump stop. To remove the bump stop mount from the chassis use an abrasive cutting wheel to cut thru the welds around the mount, make sure NOT to cut into the chassis.

10b) once the welds have been cut you will need to use a hammer and possibly a chisel to remove the mount from the frame.

10c) once the bracket has been removed use an abrasive grinder to remove the excess weld on the frame. Use black spray paint to protect the raw exposed material.

10d) you will need to drill a pilot hole for the self threading bolt. (Drill size 3/16”) Locate the hole centered over the axle so the bump stop will come in contact with the bump pad on the axle.
10e) Use the supplied self tapping bolt with washer to attach the stock bump stop to the Chassis.

11. All hardware being fastened to the vehicle’s original fastening points should be torqued to the proper specifications. To prevent chassis damage, never over-torque the hardware.

12. Check that all components and fasteners have been properly installed, tightened and torqued.

13. Lift vehicle and remove support stands. Carefully lower vehicle to ground.

14. Immediately test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.

15. Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

Parts List: Axle flip kit
2 - Axle Saddle
2 - U-Bolt Plate
2 - U-Bolt Spring Pad Mount
1 - Transmission Spacer
2 - HHCS 8mm-1.25 x 20 (Axle Saddle)
2 - Flange Nut 8mm x 1.25 (Axle Saddle)
2 - HHCS 10mm-1.5 x 35mm (Transmission Spacer)
2 - Flat Washer 3/8” (Axle Saddle)
2 - ¼” Self Tapping Bolt (Bump Stop)
2 - Flat washer 5/16 (Bump Stop)