Installation Instructions



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TRUCK REAR SHACKLE Kit – 3811.820 Chevrolet / GMC C1500, 2WD only, 88-98* Chevrolet / GMC Tahoe / Yukon, 2WD only, 95>* Chevrolet / GMC C-3500, 2WD only, 92>* Dodge 1500, 2WD only, 94>* Dodge 2500, 2WD only, 94>* Ford F150, 2WD only, 97>*

* On some applications of the C10/15, it may be necessary to trim the rib on the underside of the bed directly above the shackle.

Kit Contents	Description	Part Number	Qty	
	Shackle		2	
	Bushings		4	
	Sleeve		2	
	Information Kit	EPAK	1	

Preparing the vehicle for the Shackle Kit Installation:

- 1. Verify the individual Shackles and necessary hardware is correct for your vehicle. Use the Bill of Materials Checklist to verify all hardware.
- 2. The installation of this kit should be performed by a technician, certified in suspension work and/or familiar with your particular vehicle.
- 3. Before starting the installation of this kit, carefully measure all Four Corners of the vehicle to determine current ride height (take this measurement from the middle of the wheel or hub center straight up to the fender lip). Document the measurements here:
- **LF RF LR RR 4.** Protective eyewear should be worn throughout the installation of this kit.

Removing the factory Shackle:

- 5. Block the front wheels (left & right side) and raise the rear of the truck at the differential housing. Place the jack stands under the frame just in front of the rear suspension mounting point at the spring hanger. Never work on/or under a vehicle that is solely supported by a jack!!
- 6. With the truck elevated on the jack stands, remove the rear wheels and place a floor jack under the rear axle. Raise the rear axle just enough to take the weight off of the spring shackles (rear of the leaf spring). Do not raise the vehicle off the jack stands.

<u>Caution:</u> the leaf springs have a load / tension on them. Be careful in the next step as the spring may cause pinching between itself and the shackle.

- 7. Loosen and remove the leaf spring retaining bolt at the shackle mount.
- 8. Loosen the retaining bolt at the leaf spring. **Do not remove.** This will allow the shackle to rotate for more clearance during the removal and replacement of the shackle mount.
- **9.** Lower the jack down, slowly. This will allow the rear leaf spring and shackle to lower out of the way of the shackle mount.
- 10. Remove the Shackles from the vehicle.

11. Installing the new *Eibach* Shackle:

<u>Note</u>: On some applications of the C10/15, it may be necessary to trim the rib on the underside of the bed directly above the shackle

- 12. Loosely install the New *Eibach* Shackle to the leaf spring assembly using he retaining bolt.
- **13.** Raise the rear axle until the shackle is positioned in the factory shackle mount.
- 14. Tighten the shackle retaining bolts to the recommended factory specifications.
- **15.** Repeat this procedure for the opposite side of the truck.
- <u>Leveling adjustments:</u> If the rear of the truck seems uneven side-to-side, it may be because the retaining bolts were tightened down to a fixed position while the truck was still on the jack stands. To remedy, first loosen all (4) retaining bolts both sides / front & rear. Second, jounce the rear of the truck to allow the leaf spring o move freely at eyelets. Re-tighten the retaining bolts to factory specifications. The leafs must be free to move slightly at both the front and the rear.
- <u>Pinion Angle Adjustments</u>: Test drive the vehicle and determine whether there is any need for adjustment of the rear axle pinion angle. The need for adjustment will be indicated by a hum or vibration in the rear of the vehicle, usually heard at lower speeds but has been heard at highway speeds. If noticeable, it is the result of the pinion pointing up too high in relation to the rear of the drive shaft, causing noise out of the awkwardly angled rear U-joint.

While it is uncommon that an adjustment is needed on the Ford compact trucks with a drop of 4" or less using *Eibach* Springs lowering components, each truck comes off the assembly line with its own unique characteristics which in some cases requires attention. Conditions of this nature should not cause a major concern, due to the easy remedy of this noise. To correct such a condition, obtain a pair of pinion shims from your local sport truck or off-road center. The same types of shims are used on trucks, when a lift kit is installed.

Normally, for a 4" rear spring hanger & shackle combination drop, a 2-degree shim should suffice if a hum or vibration exists. A 4-degree shim kit is available, but is in most cases only used on trucks that have been lowered 6-7 inches. A 6 degree shim kit is also available, but is normally only needed for Ford F-series trucks.

Pinion shims are small, wedge shaped parts with a forked opening so that they can be inserted between the spring perch and the leaf spring stack. The forked opening allows the shim to be installed around the leaf spring centering pin with greater ease.

On this vehicle the leaf springs are mounted over the axle, the thicker end of the shim should be towards the front of the vehicle so as to force the pinion down in better alignment with the rear of the drive shaft.