

655 SOUTH LINCOLN AVE / SAN BERNARDINO CA. 92408

PHONE 877-470-2975 / FAX 909-890-0703

Web address: globalwest.net

102sh rear shackle bushing kit using a Ford leaf with Caltracs

- 1. Support the vehicle properly, either by jack stands or 2-post lift. Remove the rear leaf springs. If you need instructions a good repair manual such as Chilton or Mitchell will be useful.
- 2. Using a hydraulic press remove both front spring eye bushings.

Working on one spring at a time, proceed as follows:

- 3. Remove the rear spring eye bushing from the leaf. First install the grease fitting into the new bushing housing. The leaf bushing has a step on it. Lube the spring eye with a little grease. Line the grease fitting up so the grease fitting is in line with the split in the leaf. Remember to keep the grease fittings towards the outside of the car. Press the bushing in until the grease fitting just touches the leaf spring.
- 4. Installation of the frame bushing.
 - A. Clean the hole in the frame thoroughly before installing the bushing. All rust must be removed or the bushing may get hung up during the installation. **Do not hammer on the bushing when installing. You will damage it.** Position the bushing with the large hole in the side at the 5 o'clock position on the passenger side and at the 7 o'clock on the driver side. Possers the hole is towards the outside of the control of the second of
 - driver side. Be sure the hole is towards the outside of the car. Place grease inside the frame hole and push the bushing into the frame. Note: A simple tool you can make for installing the frame bushing is to buy a 8 inch piece of ½ inch all-thread rod from the hardware store, 2½ nuts for the rod, and a couple of flat plates with a ½ inch hole drilled in them. Slide the all-thread rod through the bushing and frame. Next place one flat plate on each side of the assembly followed by the nuts. Simply wrench the nuts down and the bushing will pull into the frame. The bushing should seat flush on both sides.
 - B. Drill a #3 hole (.210) in the frame rail, aligned with the side hole in the bushing. Tap the hole with a $\frac{1}{4}$ x 28 tap and install the grease fitting.
- 5. Install the plastic inserts into the bushings you just pressed in. Use grease inside the bushing housing and in the inserts. **We recommend water-resistant grease. Most synthetics are water-resistant.** The insert should be self-explanatory. Short insert goes in the frame bushing and the long insert goes in the rear leaf eyelet.
- 6. Installing the rear shackles is next. There are 3 different thickness thrust washers all with ½ inch holes. You must install the washers in the correct location in order for the shackle to function properly. First locate one shackle halve with the bolts welded in it. This is the outer shackle. Takes one of the thickest thrust washers (.400) and slide it on the bolt of the shackle. Locate the thinnest thrust washer (. 100) and slide it on the bolt below the (.400) thrust washer. Place a little grease on the surface of the thrust washer and bolt. Lift the back of the leaf up close to the frame and slide the shackle into the inserts of the leaf and frame bushing. Next slide one (.200) middle size thrust washer on each bolt. Lubricate the thrust washers. Take the other half of the shackle and slide it onto the bolts. The leaf is now hanging in the car. Place the ½ inch nuts on the shackle bolts. Tighten the nuts down until they contact the shackle plates and the clearance between the thrust washers is taken up. Do not torque the nuts or run them down hard. After the clearance is taken up turn the nut 1/8 of a turn more on the wrench. The preload is now set. If you over torque the shackle bushings to tight you will lock



the shackle up from moving and create a harsh ride. Set properly the bushings will be unnoticed and give you long service. You do not need the vehicle on the ground to torque the bushings.

