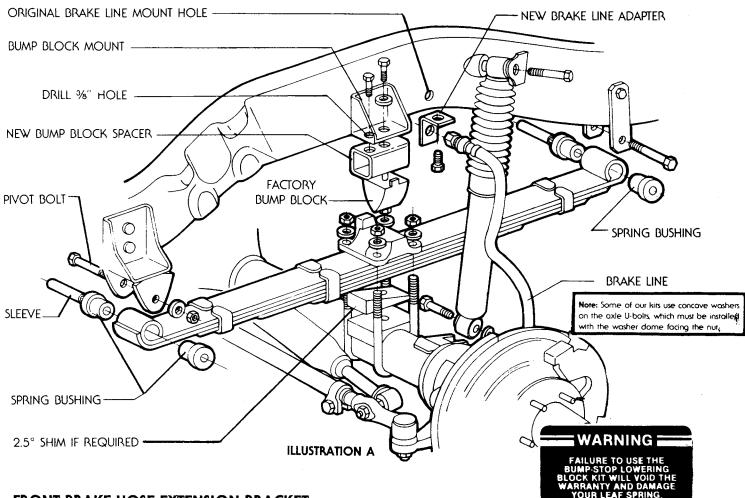
# INSTALLATION INSTRUCTIONS

Form No. 8874

PLEASE READ ALL INSTRUCTIONS FROM START TO FINISH BEFORE YOU BEGIN THE INSTALLATION. THIS INSTRUCTION IS USED FOR MANY OF OUR SUSPENSION SYSTEMS, PLEASE OMIT SECTIONS THAT DO NOT APPLY TO YOUR SUSPENSION



## FRONT BRAKE HOSE EXTENSION BRACKET

- Disconnect (front) brake hoses from brake lines connected at the frame (right and left sides). NOTE OF CAUTION: Whenever disconnecting brake hoses or lines avoid getting brake fluid in your eyes or on face.
- Remove the bottom bolt from the left side of frame, which connects with cross-member. See Illustration A. Using the bolt removed, install the brake line adapter on frame. DO NOT STRETCH, KINK, OR PINCH BRAKE HOSES OR LINES.
- 3. Disconnect steel brake line from frame and equalizer valve.
- 4. Re-route the end of the line through Rancho bracket and re-connect brake line.
- 5. Re-route rubber brake hose through Rancho bracket and re-connect brake line.

- 6. Now follow the same procedure for the right side of the frame.
- 7. BLEED BRAKE SYSTEM, FAILURE TO DO SO WILL RESULT IN THE LOSS OF BRAKES.

# FRONT SPRING'S REMOVAL

- 1. Raise the front of vehicle and support the frame ahead of axle with jack stands or use a bumper jack. Place a floor jack under axle housing.
- 2. Remove U-bolts, nuts and washers. See Illustration A
- 3. Disconnect front axle vent hose.
- 4. Disconnect front shock absorbers.
- 5. Remove spring pivor bolts and nuts.
- 6. Lower axle enough for spring to be removed.



### FRONT SPRING INSTALLATION

 ON GENERAL MOTORS CHEVROLET 1980-ON AND GMC 1/2-3/4 TON TRUCKS YOU will use a 21/2 degree shim placed between front leaf spring and axle mount pad so axle housing is rotated up to improve drive line angle. (To aid in installation, we recommend you use masking tape to hold shim to leaf spring.

**See Illustration A.** The spring bushing holes and faces lubricate with anti-selze compound or moly grease.

Install pivot bolts and nuts, DO NOT tighten at this time.

- 3. Raise axle, align spring center bolts and install U-bolts, tighten nuts to 85-110ft/lbs, torque.
- 4. Install front Rancho Shocks.
- 5. Connect axle vent hose.
- 6. Remove supports and lower vehicle to the ground.
- 7. Tighten pivot bolts to 20-35 ft/lbs. torque.

#### **BUMP-BLOCK INSTALLATION**

To see if this section applies to your installation, refer to chart located on this page.

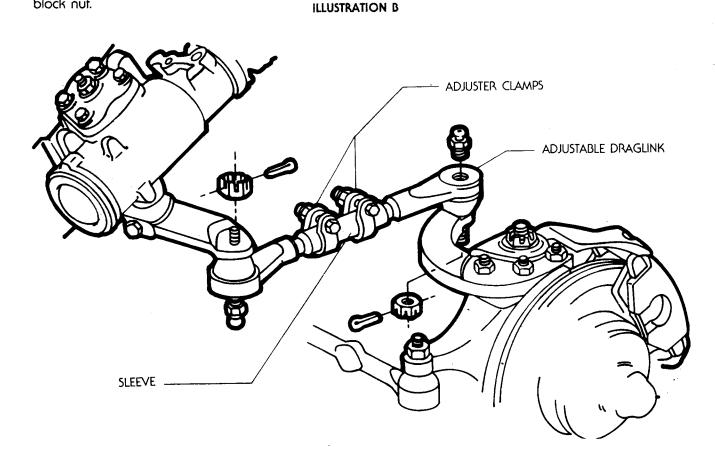
- 1. Remove stock bump-blocks.
- Using nut and bolt supplied position the Rancho Bump-Block Spacer onto the bump-block mount located on frame, drill a %" hole for new bolt.
  See Illustration A.
- 3. Attach stock bump-block to bottom of the Rancho Bump-Block Spacer using your original bump-block nut.

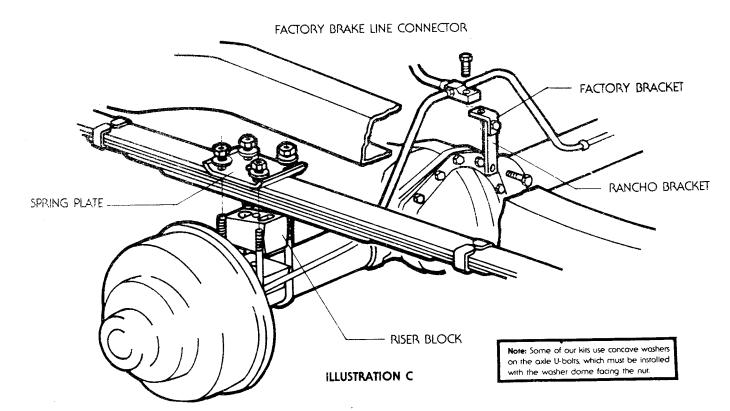
- 4. Tighten all nuts used in bump-block relocation securely.
- 5. Check and repeat on opposite side of vehicle.
- 6. FAILURE TO LOWER BUMP-BLOCK WILL VOID YOUR WARRANTY AND DAMAGE YOUR LEAF SPRINGS.

	Bump Block
Spring	Necessary
400545	No
410545	No
86202	Yes
86206	Yes
86207	Yes

#### DRAGLINK ADJUSTMENT

- Adjust steering draglink for proper steering wheel location. If you don't have an adjustable draglink, it will be necessary to purchase a new draglink from the dealer. He can assist you in getting the proper one for your truck (A 1978 or later draglink works well).
- To adjust draglink, loosen clamps, drive the vehicle back and forth in a straight line a couple of times. This will center steering box. Turn draglink, adjusting sleeve until steering wheel is in proper location, then tighten clamp nuts. See Illustration B.





# REAR BRAKE ADAPTER INSTALLATION

- 1. Remove brake hose bracket from rear end housing.
- 2. install new bracket in place where brake hose bracket was removed. **See Illustration C.**
- Connect brake hose bracket to new bracket using nut and bolt supplied. DO NOT STRETCH, KINK, OR PINCH BRAKE HOSES OR LINES.

# REAR RISER BLOCKS PRE-INSTALLATION

- Raise the rear of vehicle and support frame behind axle using jack stand or a bumper jack.
  See Illustration C
- Place the floor jack under the rear axle housing and adjust until the spring has almost all the tension released.
- 3. Remove the standard U-bolts and nuts.
- 4. Remove the standard shocks and studs at the top of the frame.

5. Lower the floor jack until the rear spring clears the pad by approximate 4".

# REAR RISER BLOCKS INSTALLATION

- Place the riser block with pin in position, check to make sure the pin in the block is in the hole of the axle housing spring pad. NOTE: SHORT SIDE OF BLOCK GOES TOWARD THE FRONT OF VEHCILE See Illustration C. Install blocks so pinion moves up.
- 2. Raise the axle housing up until the pin in the springs aligns with the hole in the block
- 3. Re-mount axle to springs by sliding new U-bolts up from under axle housing into U-bolts spring plates, tighten nuts. NOTE: On 1969-72 remove U-Bolt pads and install new spring plates as supplied in kit. U-bolt torque is 85-110 ft/lbs.
- 4. Install new Rancho Studs and longer shocks.

#### FINAL VEHICLE CHECK

- 1. Making sure rear end is jacked up allowing axle to hang free, check rear drive shaft spline, if less than 1 inch is left in transfer case slip spline or less than 1 inch is left in drive shaft slip spline you should add 1 inch to drive shaft length. NOTE: On General Motors Chevrolet & GMC ½-¾ ton trucks from 1980-on, use Rancho Part #6631 Spacers on transfer case cross-member and place between cross-member & frame to lower unit about ½ inch. Lower truck to ground.
- Jack up front end, letting axle hang free, check for any binding universal joints. If binding occurs you may be able to grind relief in the front differential yoke. You may also use shims as stated in FRONT SPRING INSTALLATION - Step 1. On some vehicles the cross-over exhaust pipe may need to be lowered.
- 3. Re-check all previous steps, then proceed to remove supports and lower vehicle.
- 4. RANCHO RECOMMENDS A FRONT END ALIGNMENT CHECK BEFORE YOU DRIVE MORE THAN 50 MILES TO PREVENT TIRE WEAR.

## RANCHO INDUSTRIES USA LIMITED WARRANTY

#### **ABOUT OUR WARRANTY**

Rancho Industries USA, warrants the listed products for the listed time period and/or mileage to the original retail purchaser against defect and wear-out when used on passenger cars and light trucks under normal operating conditions. The warranty does not apply to Rancho products which have been improperly applied or installed. The consumer will be responsible for removing from the vehicle and returning any defective item(s), transportation costs prepaid, to the dealer from which it was purchased or a Rancho Authorized Installer, and for reinstallation of the part upon return. A copy of the sales receipt is required for all warranty adjustments. Rancho Industries will, without charge, repair or replace at its option, defective products or component part(s).

In the case that the customer is unable to return to the original place of purchase or an Authorized Installer, the consumer may contact Rancho Industries at 1-734-384-7804 to obtain a Return Authorization Number prior to shipping. The consumer will be responsible for removing from the vehicle and returning any defective item(s), transportation cost pre-paid, to the following address: 1 International Drive, Monroe MI. 48161. A copy of the sales receipt is required for any warranty adjustments. Rancho Industries will, without charge, repair or replace at its option, defective products or component part(s). Such item(s) will be returned with transportation costs prepaid within the United States from Rancho Industries. The customer will be responsible for reinstallation.

Exclusions from this warranty are sales outside of the United States, the finish, any condition(s) caused by abnormal use or service, and product-specific limitations, if any, listed below.

THE LOSS OF USE OF THE PRODUCT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS OR CONSEQUENTIAL DAMAGES ARE NOT COVERED. RANCHO INDUSTRIES RESERVES THE RIGHT TO CHANGE THE DESIGN OF ANY PRODUCT WITHOUT ASSUMING ANY OBLIGATION TO MODIFY ANY PRODUCT PREVIOUSLY MANUFACTURED.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, WHICH EXTEND BEYOND THIS WARRANTY PERIOD. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE FACE HEREOF. SELLER DISCLAIMS IMPLIED WARRANTY OF MERCHANTABILITY.

THIS WARRANTY SHALL NOT APPLY TO ANY RANCHO PRODUCT WHICH HAS BEEN MODIFIED, CUSTOMIZED OR IMPROPERLY INSTALLED. WARRANTY DOES NOT APPLY TO ANY RANCHO COMPONENTS USED FOR RACING PURPOSED, OR RACE TYPE ACTIVITIES. WARRANTY DOES NOT APPLY TO ANY RANCHO INDUSTRIES RACING PRODUCTS.

The product, time periods and/or mileage under this warranty are as follows:

#### RS5000 / RS5600 / RS9000 / RSX LIMITED LIFETIME WARRANTY

Limited lifetime warranty on these Rancho shock absorbers. Rancho Industries warrants each new shock against factory defects in material and workmanship (except for finish, including the shock boot) for as long as the original retail purchaser owns the vehicle on which the units were originally installed.

## RC9000 REMOTE CONTROL LIMITED 2 YEAR, 24,000 MILE WARRANTY

Limited 2 year, 24,000 mile warranty on these Rancho products. Rancho Industries warrants each new RS4000, Air Rancho shock and RC9000 Remote Control System against factory defects in material and workmanship (except for finish, including shock boot) for the first to occur of 2 years or 24,000 miles after the date of purchase.

#### SUSPENSION COMPONENTS LIMITED LIFETIME WARRANTY

Limited lifetime warranty on all of Rancho's suspension products. Rancho Industries warrants each new Suspension Component against factory defects in material and workmanship (except finish) for as long as the original retail purchaser owns the vehicle on which the products were originally installed.

THIS LIMITED WARRANTY DOES NOT COVER THE FOLLOWING:

- Any component that has been modified, customized, or improperly installed
- Any part that is obsolete and is no longer available or supplied by Rancho

#### **RIGHTS RESERVED**

Rancho Industries reserves the right to make changes in design, material and specifications or to make product changes as deemed necessary without prior notice. Obligations or liabilities will not be assumed with respect to similar products previously advertised.

#### **PRINTING ERRORS**

Every effort has been made to avoid printing errors in our literature. However, if there are any specification or application errors, we must disclaim responsibility.