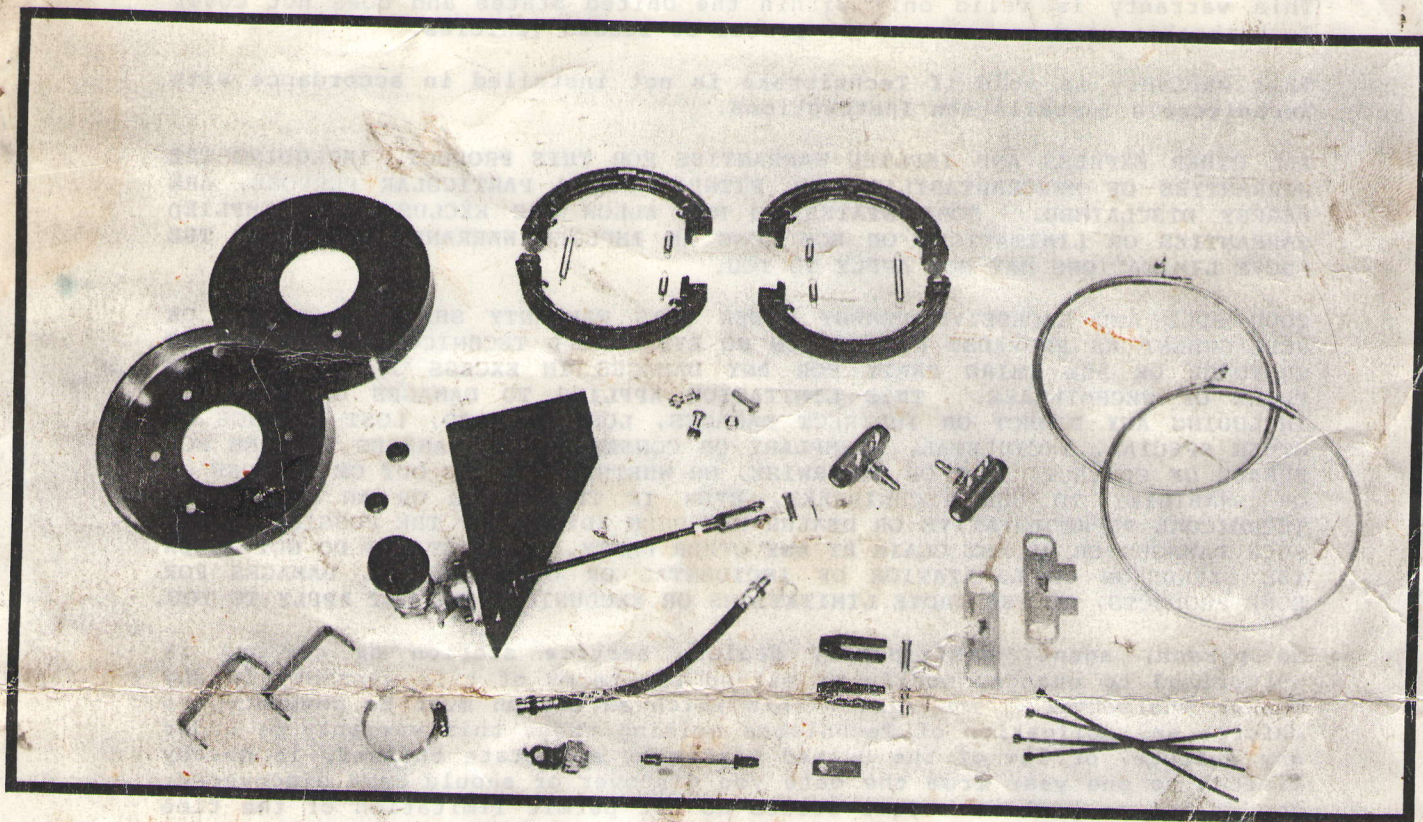


TECHNIBRAKE™

Installation Instructions and Warranty Information



T **Technicore**

427 John Dietsch Blvd., N. Attleboro, MA 02760 • Tel: 508-695-4996 • Fax: 508-695-5629

LIMITED WARRANTY FOR TECHNIBRAKE

Technicore, Inc. ("Technicore") warrants to the original purchaser only, the material and workmanship of this Technibrake for a period of Ninety (90) days from the date of original purchase.

If the Technibrake System fails due to defective material or workmanship during this Ninety (90) day warranty period, Technicore will, at its option, repair or replace the defective parts without charge. Repair parts and/or components of Technibrake may be either new or reconditioned at Technicore's discretion. This limited warranty does not include service or replacement to repair or correct damage from improper installation, normal wear and tear, improper or failure to service, accident, lightning, disaster, misuse, abuse or modifications to Technibrake not approved in writing by Technicore. Any service outside the scope of this limited warranty shall be at Technicore's or its Authorized Service Provider's rates and terms then in effect.

This warranty is valid only within the United States and does not cover Technibrakes used on commercial, rental or leased vehicles.

This warranty is void if Technibrake is not installed in accordance with Technicore's Installation Instructions.

ALL OTHER EXPRESS AND IMPLIED WARRANTIES FOR THIS PRODUCT, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY DISCLAIMED. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. IN NO EVENT WILL TECHNICORE BE LIABLE TO CUSTOMER OR ANY THIRD PARTY FOR ANY DAMAGES IN EXCESS OF THE PURCHASE PRICE OF TECHNIBRAKE. THIS LIMITATION APPLIES TO DAMAGES OF ANY KIND INCLUDING ANY DIRECT OR INDIRECT DAMAGES, LOST PROFITS, LOST SAVINGS OR OTHER SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES WHETHER FOR BREACH OF CONTRACT, TORT OR OTHERWISE, OR WHETHER ARISING OUT OF THE USE OF OR INABILITY TO USE TECHNIBRAKE, EVEN IF TECHNICORE OR AN AUTHORIZED TECHNICORE REPRESENTATIVE OR DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR OF ANY CLAIM BY ANY OTHER PARTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR SOME PRODUCTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

No person, agent, distributor, dealer, service station or company is authorized to change, modify or extend the terms of this warranty in any manner whatsoever. The time within which an action must be commenced to enforce any obligation of Technicore arising under this warranty or under any statute, or law of the United States or any state thereof, is hereby limited to one year from the date you discover or should have discovered, the defect or problem. Some states do not permit limitation of the time within which you may bring an action beyond the limits provided by state law so the above provision may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

TO OBTAIN WARRANTY SERVICE

1. You must provide proof of your purchase of Technibrake and of the purchase date before any warranty service can be performed.
2. Within Ninety (90) days of the date of original purchase, return Technibrake to Technicore for repair or replacement, at Technicore's option. Defective parts must be securely packaged with a description of defect, and shipped prepaid to Technicore.

IMPORTANT

The Technibrake is a supplemental, retrofit hydraulic brake system for use on Model "T" Fords in conjunction with the existing planetary transmission braking system, brake pedal and emergency brake handle. Final adjustment of the hydraulic brake actuation rod is critical for proper operation of the hydraulic system while retaining the planetary transmission braking ability if necessary.

The Technibrake system kit contains the following items for complete installation:

QTY.

DESCRIPTION

- | | |
|---|--|
| 1 | Master cylinder assembly consisting of a Master cylinder, mounting bracket, actuation rod with yoke, clevis and cotter pin, jamb nut, cylinder mounting bolts, bracket mounting hardware, flexible hose and fittings |
| 1 | Brake pedal adaptor |
| 1 | Tee fitting |
| 1 | Stainless steel clamp |
| 2 | Hydraulic brake lines |
| 4 | Tie-wraps |
| 2 | Wheel cylinder assemblies |
| 4 | Brake shoes with adjusters |
| 2 | Retainers |
| 4 | 1.500" long extension springs |
| 2 | 2.500" long extension springs |
| 2 | Brake drums |
| 2 | 3/4" long roll pins |
| 2 | Emergency brake yokes, clevis & cotter pins |

INSTALLATION

For best results, the master cylinder should be bled of trapped air prior to mounting in chassis. Clamp the master cylinder assembly to a bench top or mount in a bench vise. Fill the reservoir with brake fluid, remove plastic end cap from flexible hose and place hose end in reservoir. Bleed cylinder by repeatedly depressing the actuation rod to cycle fluid thru the cylinder and back into the reservoir. After all the air is bled, remove the hose and replace plastic end cap.

Remove front floor boards and brake pedal. Align brake pedal adaptor and weld to brake pedal as shown in fig. 1. Re-install brake pedal and adjust the planetary bands for braking action at the lowest possible pedal position while allowing bands to remain functional.

Remove the two 5/16" bolts from the emergency brake crossmember on the drivers' side and mount the master cylinder assembly inside the chassis rail using two of the three supplied 5/16-24 bolts, nuts and 5/16 lockwashers. Using a size 5/16" drill bit, drill thru the top of the chassis rail and the mounting bracket as shown in fig. 2 and install the third 5/16-24 bolt, nut and 5/16" lock washer. Do not attach the yoke to the brake pedal adaptor at this time. This will be done later.

Remove both rear wheels. Inspect grease seals. Leaky seals must be replaced to avoid permanent damage to brake linings. Remove existing emergency brake shoes and the brake shoe pivot bolts. Remove the radius

rod mounting bolts and install the brake retainer as shown in fig. 3 using existing radius rod bolts and nuts. Tighten the radius rod nuts finger tight. Mount the wheel cylinder to the backing plate by putting the threaded fitting thru the existing emergency brake pivot bolt hole as shown in fig. 4, with the bleeder valve at the top of the cylinder. Tighten the 7/16-20, nut finger tight only, at this time.

Uncoil the two lengths of steel brake line. A close bend has been formed at the end with the female fitting; attach the brake lines to the wheel cylinders and route them along the inside of the radius rod avoiding contact with the emergency brake rod hangers to a point at the top front center of the drive shaft torque tube. Attach this end to the stainless steel clamp. Secure the lines to the radius rods with tie wraps at a convenient location using the rubber sleeves as a cushion. Connect flexible brakeline adaptor to the tee. Tighten all brake line fittings.

Pull the brake pedal all the way back. Adjust yoke on master cylinder actuation rod and insert clevis and cotter pin, leaving a maximum of 1/8" free travel at top of the brake pedal. Install the brake bleed brackets over both wheel cylinders. Slightly loosen the brake line fitting at the wheel cylinders and rotate cylinders so that the bleeder screws are at a vertical position to allow all air to escape from wheel cylinder as shown in fig. 5. Add brake fluid as necessary to the master cylinder and bleed the brakes in the normal manner. It is advisable to attach the short length of plastic tubing to the bleeder screw to avoid harming the paint on the backing plate.

After bleeding both wheel cylinders, rotate the cylinders as shown in fig. 6. The outer radius of the wheel cylinder must be concentric to the diameter of the backing plate to insure that the cylinder is positioned in a vertical position. Tighten the fittings at the wheel cylinders and the 7/16-20 nut to secure the cylinder to the backing plate. With a 5/32" diameter drill bit, drill thru the backing plate using either hole in the cylinder as a guide. Using a hammer and punch, drive a roll pin into the wheel cylinder and thru the backing plate as shown in fig. 6. Remove the bleed brackets and install the brake shoes using two 1.500" long springs and one 2.500" long spring as shown in fig. 7. Center the shoes by sliding the retainer from front to back to achieve symmetrical clearance and then tighten the radius rod bolts. **DO NOT DEPRESS BRAKE PEDAL UNTIL WHEELS ARE MOUNTED ON AXLES.**

Emergency brake adjustment is made as follows:

Remove existing yokes from emergency brake handle end of rod and replace with slotted yokes. Pull emergency brake handle back until transmission is in neutral. View the emergency brake cams at the rear wheels and adjust yoke such that when the cams are horizontal, the clevis pin is in contact with the front of the slotted yokes as shown in fig. 8.

Remove steel brake drums from wheels. Install the new supplied cast iron drums. Re-install wheels and drums. Using a screwdriver, adjust brakes by turning serrated adjusting bolt until contact is made between brake lining and brake drum. Tighten allen set screw to lock adjusting bolts. Add second allen set screw to act as a check stop against the first one. Install plastic hole plugs into brake drums.

Installation of Technibrake is now complete. **HAPPY MOTORING!**

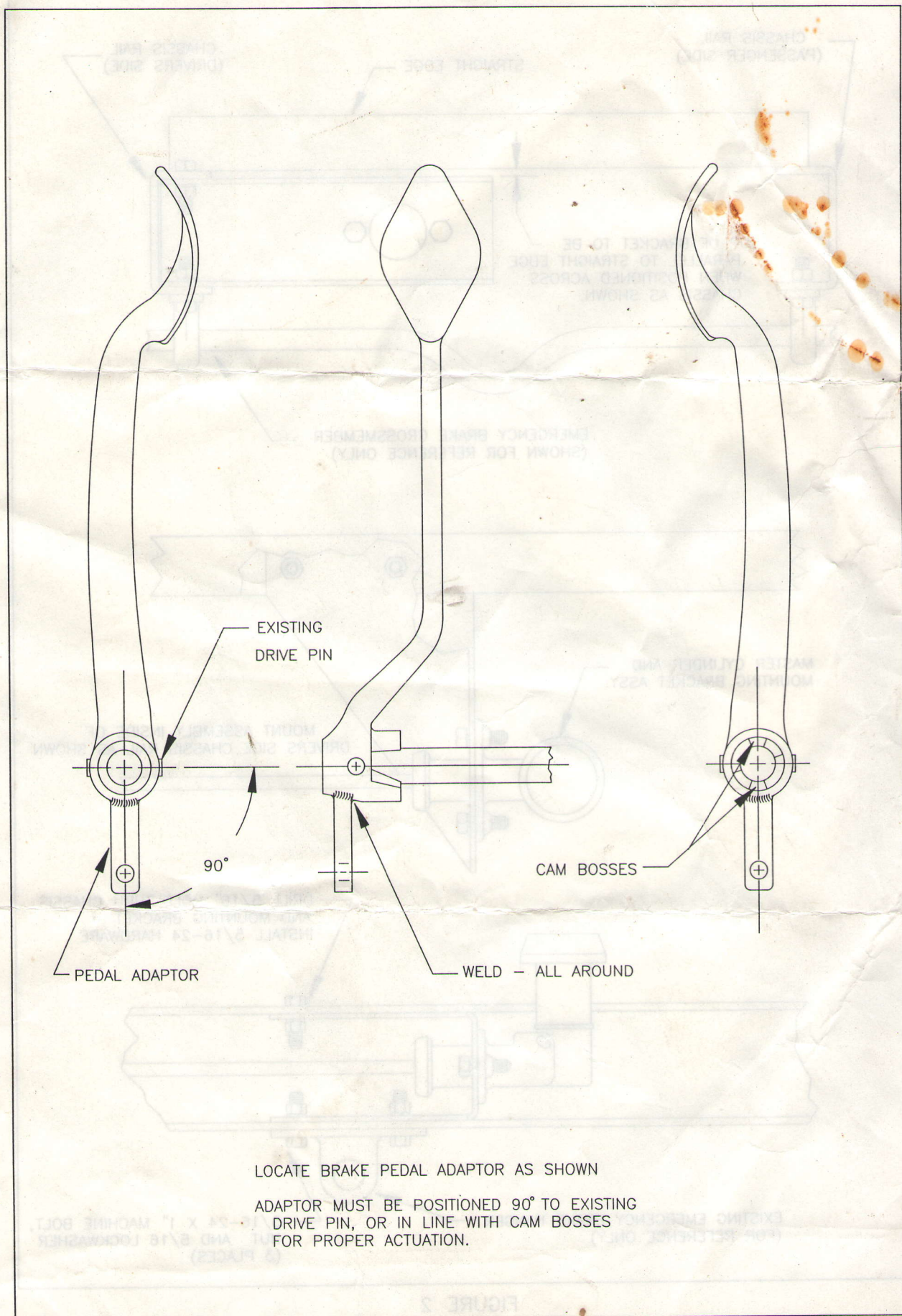


FIGURE 1

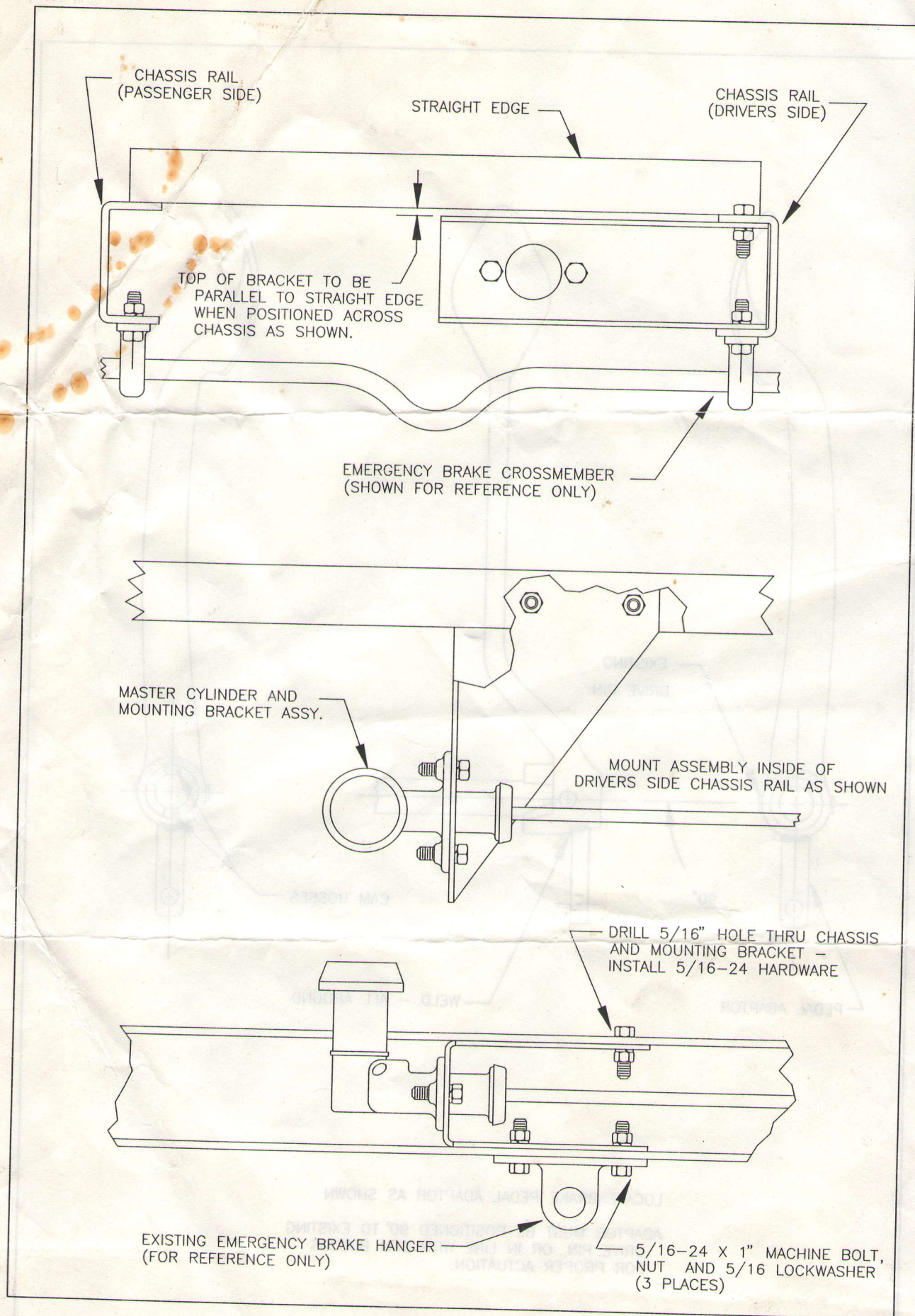


FIGURE 2

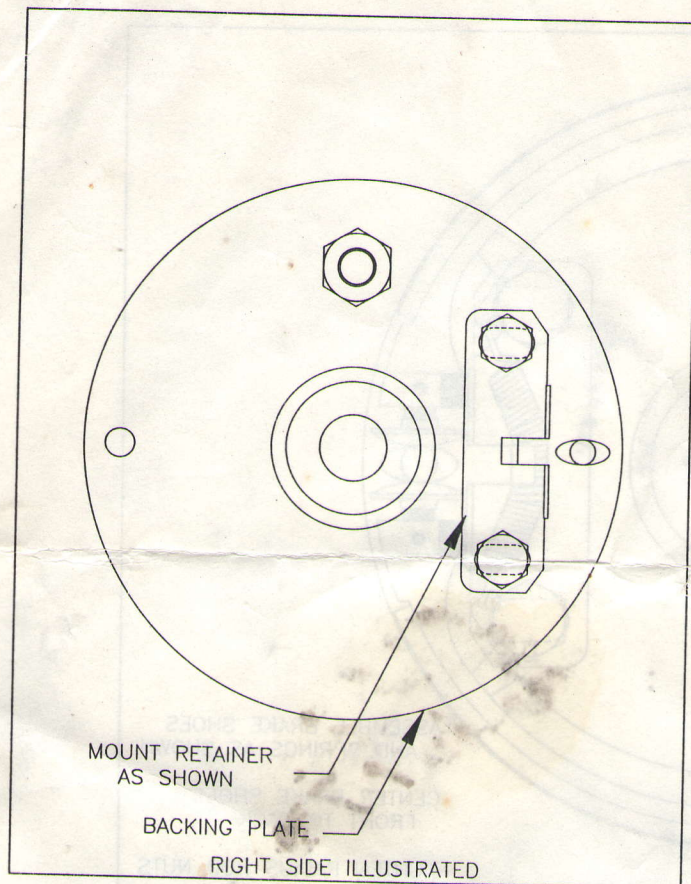


FIGURE 3

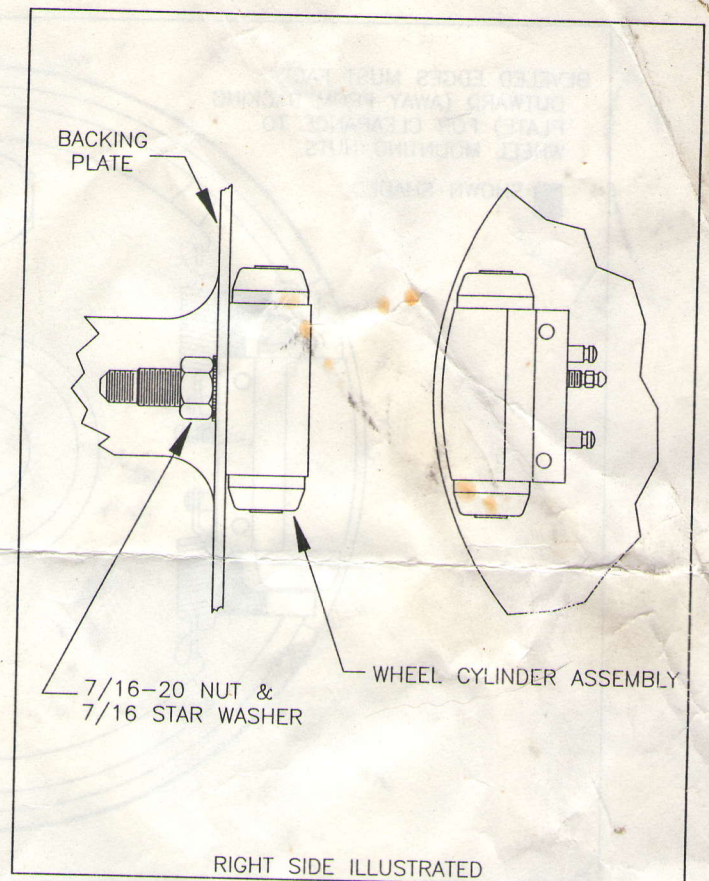


FIGURE 4

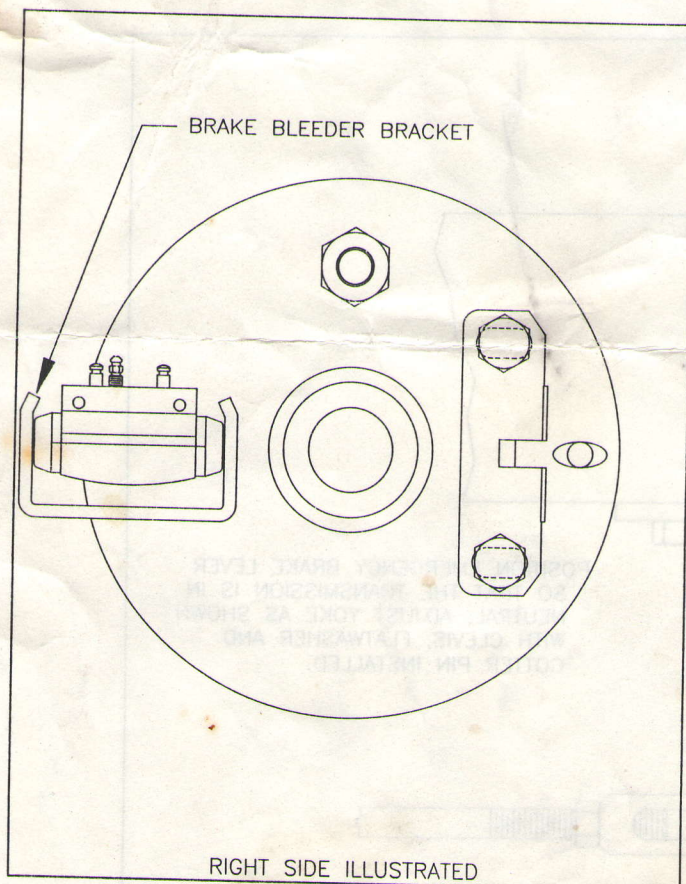


FIGURE 5

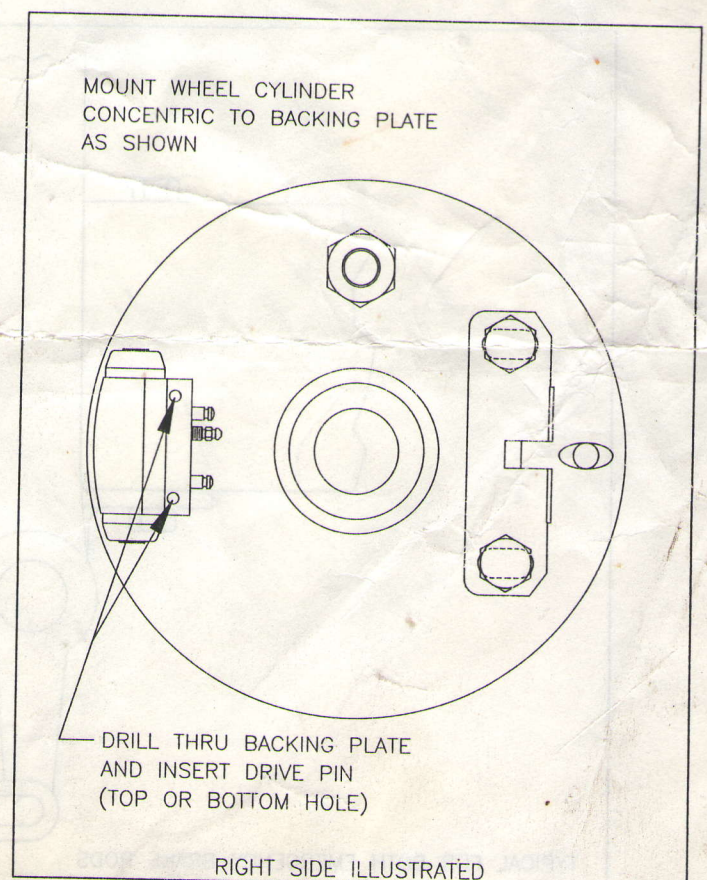
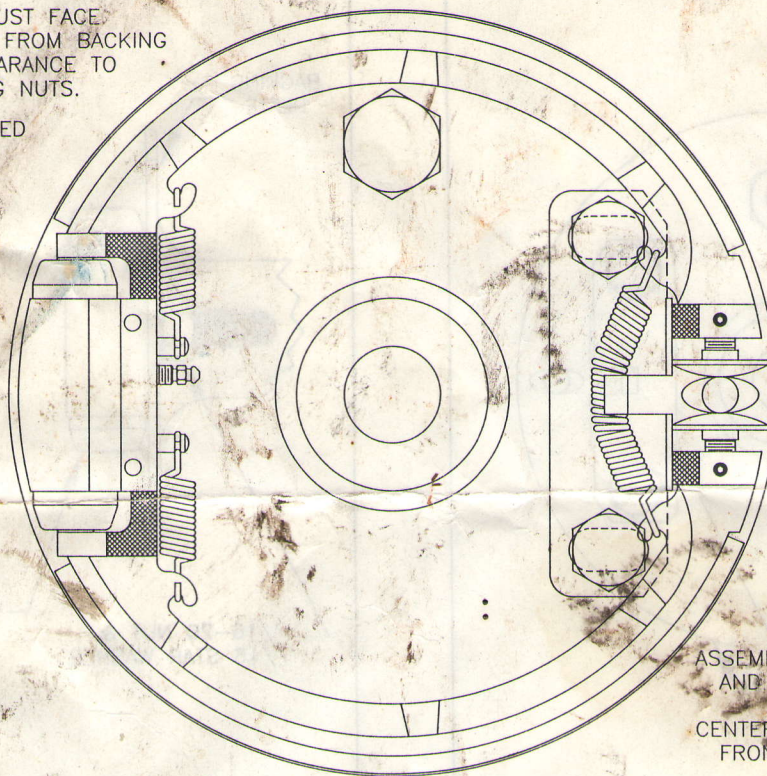


FIGURE 6

BEVELED EDGES MUST FACE
OUTWARD (AWAY FROM BACKING
PLATE) FOR CLEARANCE TO
WHEEL MOUNTING NUTS.

■ SHOWN SHADED

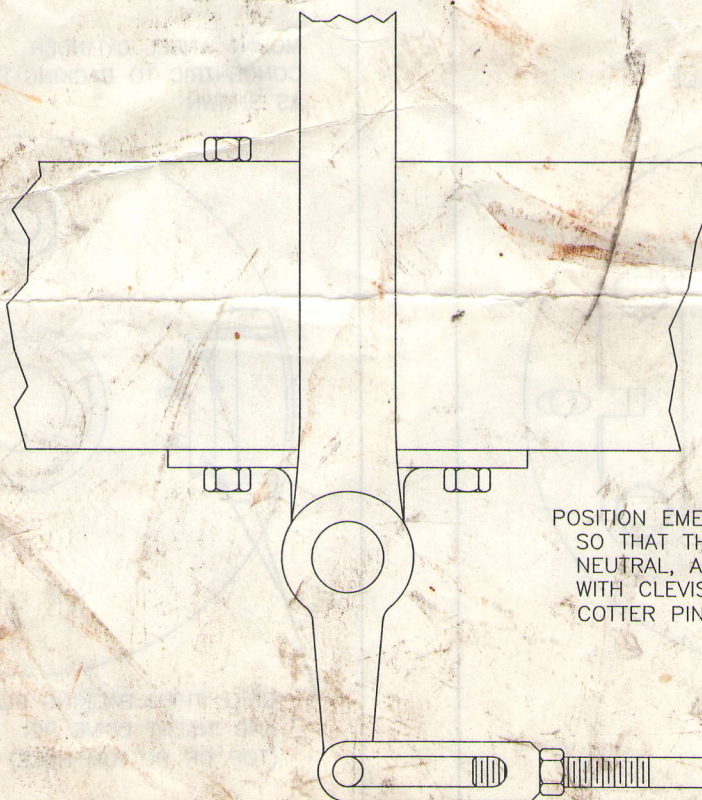


ASSEMBLE BRAKE SHOES
AND SPRINGS AS SHOWN

CENTER BRAKE SHOES
FRONT TO BACK

TIGHTEN RADIUS ROD NUTS

FIGURE 7



POSITION EMERGENCY BRAKE LEVER
SO THAT THE TRANSMISSION IS IN
NEUTRAL, ADJUST YOKE AS SHOWN
WITH CLEVIS, FLATWASHER AND
COTTER PIN INSTALLED.

TYPICAL FOR BOTH EMERGENCY BRAKE RODS

FIGURE 8