

# SERVICE INSTRUCTIONS

## LEVER LOCK WILL NOT HOLD

### CAUSE 1.

Leaks at any of the tubing connections, or at wheel cylinder will cause a pressure bleed-off and LEVER LOCK will not be able to hold vehicle.

### CORRECTION 1.

Check for this by holding brake pedal down for a few minutes. A pedal loss during this operation indicates a leak somewhere in the system. Slight or slow leaks may not always be found by above method, therefore check system for indications of moisture caused by leaking fluid.

(The above, as well as interfering with LEVER LOCK operation, indicates a dangerous service brake condition.)

### CAUSE 2.

Entrance of excessive dirt into the brake system can cause internal Valve (LL611) and Valve Stem (LL612), Rod Assembly (LL92), or both to stick in open position. When this happens the Spring (103-11) may not have enough force to position valve against the seat.

### CORRECTION 2.

Disconnect brake lines from LEVER LOCK at inlet and outlet fittings. Loosen Jam Nut (LL140) Hold next Body (LL624) with a wrench and unscrew Clevis Assy. (LL25) by means of Operating Handle (LL70). Place hex of Body in a vise and unscrew steel Plug (LL30) from end of Body. Compression Spring (103-11) and Valve (LL611) and Valve Stem (LL612) can be removed from open end. Push Rod Assembly (LL92) should be pulled out of small end of Valve Body. Flush entire brake system. Wash all component parts in alcohol and re-assemble. A spot of grease between Cam (LL80) and Push Rod Assembly (LL92) aids in longer, trouble-free operation of LEVER LOCK. After re-installing, bleed system carefully.

### CAUSE 3.

Use of inferior brake fluid or fluid other than brake fluid may cause "O" Ring (LL120) to swell. Increased drag due to this swelling can hold the Valve in an open position.

### CORRECTION 3.

Same as detailed disassembly for Correction 2 above, except replace Push Rod Assembly (LL92). (Order under Part No. LL-92, which includes new "O" Ring.)

Note: Neither of the conditions outlined in 2 or 3 will interfere with normal brake operation.

## LEVER LOCK WILL NOT RELEASE

### CAUSE 4.

Repeated operation of a dirty system or on a swollen "O" Ring can cause the Wear Pad of Rod Assembly (LL92) to wear and become concave – conforming to the shape of the Cam (LL80). When this happens the Cam cannot move the Valve Stem (LL612) from its seat and the LEVER LOCK cannot be released.

### CORRECTION 4.

To correct this condition, loosen Jam Nut (LL140), hold Body (LL624) with a wrench and unscrew Clevis Assy. (LL25) by means of Operating Handle (LL70). Replace Rod Assembly (LL92), (order under Part No. LL-92), or replace entire unit with factory rebuilt unit.

### CAUSE 5.

A gap between Cam (LL80) and Push Rod Assembly (LL92) when the handle is in the Down position, which may be the result of loosening or maladjustment of Clevis Assy. (LL25) and LEVER LOCK Body (LL624), prevents the unseating of Valve Stem (LL612) and LEVER LOCK cannot be released.

### CORRECTION 5.

To check this, loosen Jam Nut (LL140). Hold Body (LL624) and turn Clevis Assy. (LL25) by means of Operating Handle (LL70) in a clockwise direction until two sections are secure. Now reposition complete assembly with Clevis and Instruction Plate in original position, solid against Mounting Bracket (LL82), and re-tighten Jam Nut (LL140). (In an emergency, if Corrections 4 and 5 are impractical, slightly unscrew nut on outlet tube at end of LEVER LOCK, allow a few drops of brake fluid to escape, and re-tighten nut. Now operate brake pedal. Brakes should release. Make complete correction before using LEVER LOCK again.

NOTE: Trouble may be somewhere other than the Lever Lock. To establish this, disconnect the line at the INLET side of the Lever Lock. If the brakes release, the cause of the failure is not in the Lever Lock but the trouble is in the master cylinder or booster. If disconnecting line at inlet side of lever Lock does not release brakes, then disconnect at OUTLET end of Lever Lock. If brakes release, trouble is in the Lever Lock.

## LEVER LOCK LEAKS

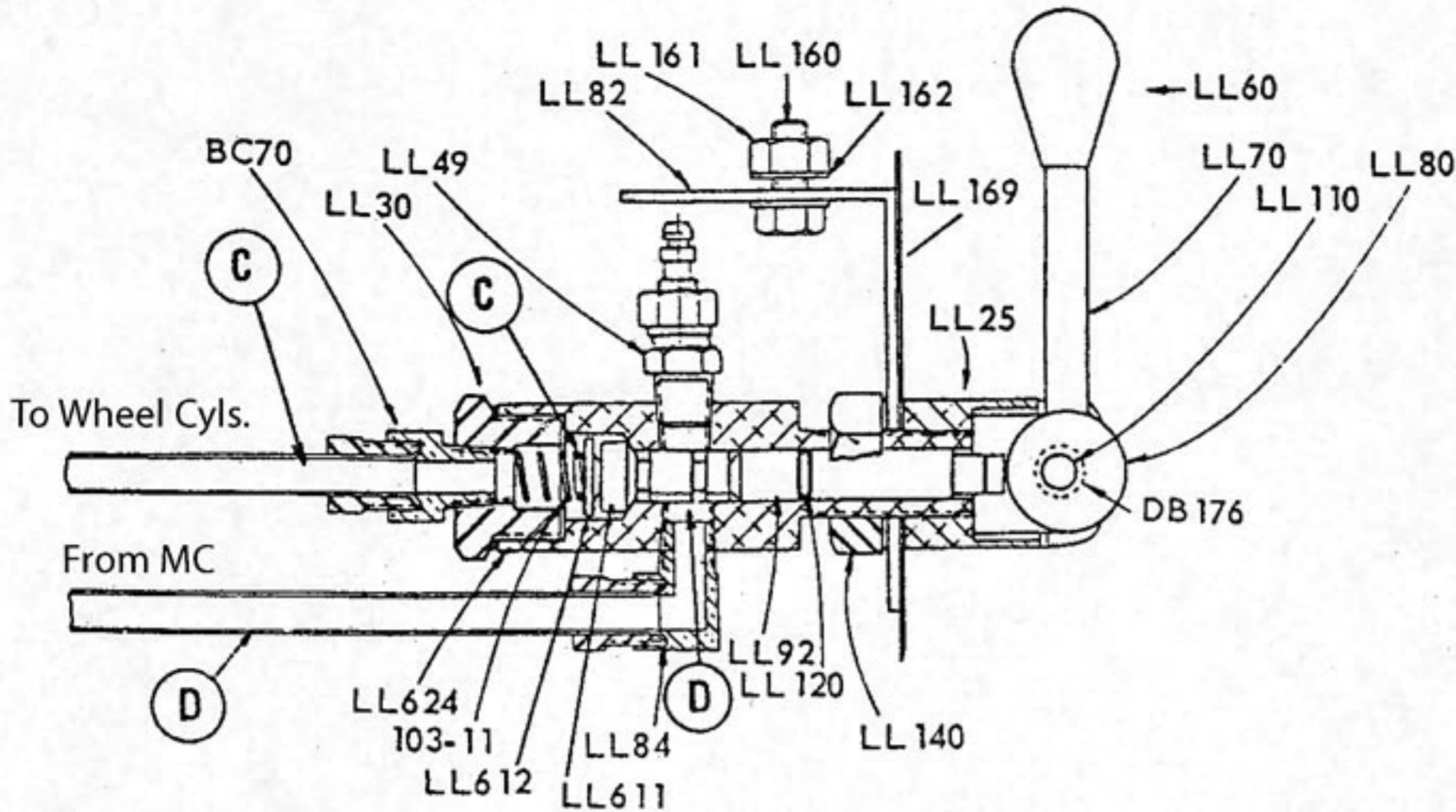
### CAUSE 6.

Undue wear or damage to "O" Ring (LL120) will permit escape of fluid.

### CORRECTION 6.

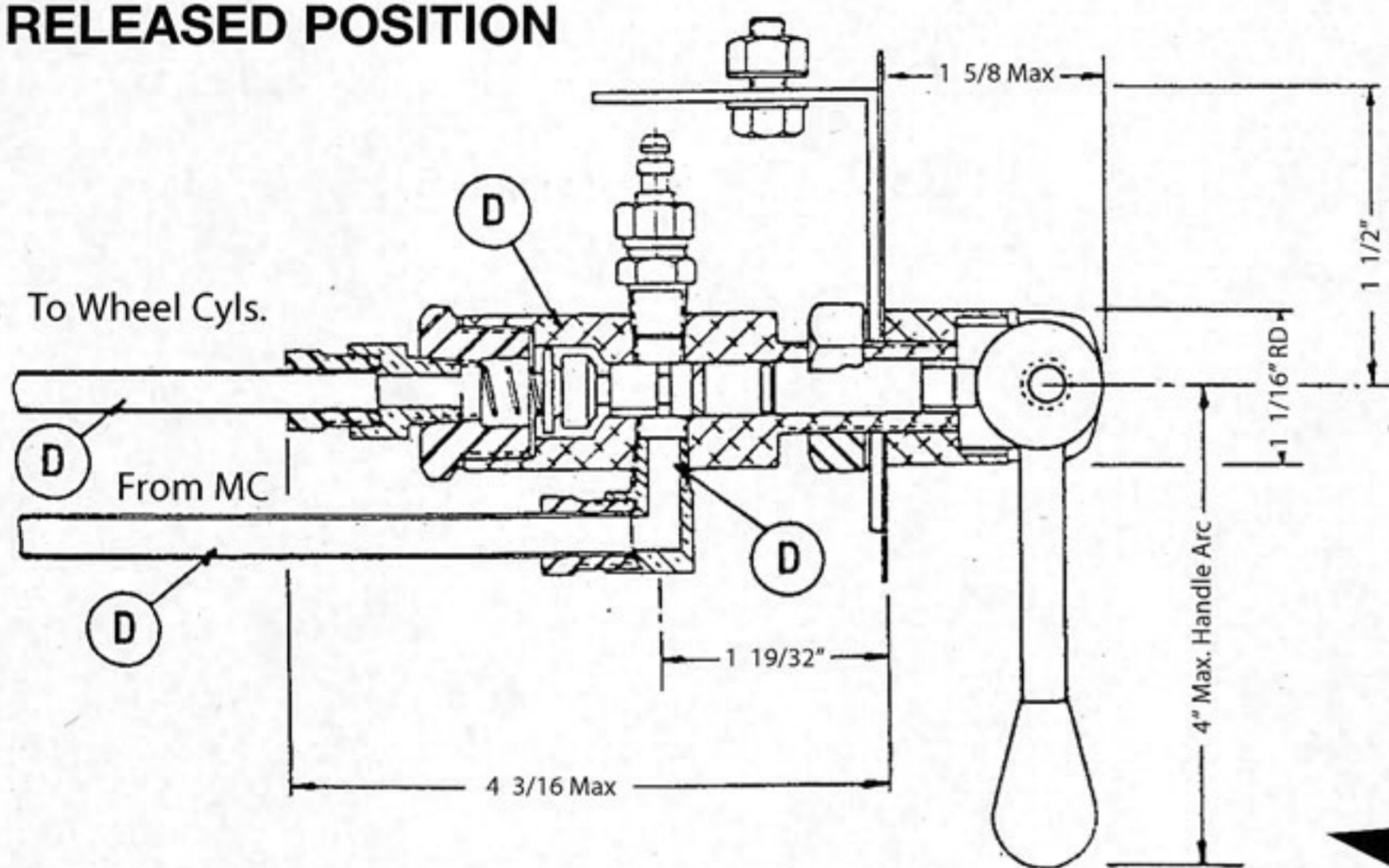
To correct this condition, loosen Jam Nut (LL140), hold Body (LL624) with a wrench and unscrew Clevis Assy. (LL25) by means of Operating Handle (LL70). Replace Rod Assembly (LL92), (order under Part No. LL-92), or replace entire unit with factory rebuilt unit.

## LOCKED POSITION



Lock by raising Operating Handle (LL70), moving Cam (LL80) into a position which will allow Spring (103-11) to seat Valve Stem (LL612) and Valve (LL611) thus locking p pressure in Area C and preventing return of fluid into Area D.

## RELEASED POSITION



Release by lowering Operating Handle (LL70) to the down position. Cam (LL80) causes Rod Assembly LL92 to unseat Valve Stem (LL612) just prior to unseating Valve (LL611), thus allowing an easy release of locked up pressure and a slow return of fluid to power source. Fluid in Area D can again flow unrestricted through the Lever Lock.

## AFCO LEVER LOCK

Part No.	Description	No. Req.
LL25	Clevis Assembly	1
LL30	End Plug	1
LL49	Assembly, Bleeder Screw	1
LL60	Knob	1
LL70	Handle	1
LL80	Cam	1
LL82	Mounting Bracket	1
LL84	Elbow, 1/8 Pipe x 1/4 Tube	1
LL92	Rod Assembly	1
LL110	Spring Pin	1
LL120	"O" Ring	1
LL140	Jam Nut	1
LL160	Bolt, Bracket	1
LL161	Nut, Bracket	1
LL162	Washers, Shakeproof, Bracket	1
LL169	Dash Plate	1
LL611	Valve	1
LL612	Valve Stem	1
LL624	Body	1
DB176	Spring	1
103-11	Spring	1
BC70	Male Connector, 1/4 Tube	1

## SAFETY

**BE SURE LEVER LOCK IS RELEASED BEFORE TRYING TO MOVE VEHICLE!**

1. To release, lower Lever into Down position.
2. Leave in Down position when vehicle not in use.

**WARNING!**  
**READ INSTRUCTIONS**  
**BEFORE INSTALLING**

**WARNING!**  
**ADJUST BRAKES**  
**BEFORE INSTALLING**

# AFCO LEVER LOCK INSTALLATION INSTRUCTIONS

THE AFCO LEVER LOCK IS DESIGNED TO BE MOUNTED THROUGH OR UNDER THE DASH, WHICHEVER MAY BE MORE CONVENIENT OR DESIRABLE. A BRACKET IS PROVIDED FOR UNDER DASH MOUNTING. BE SURE THAT CURVATURE OF DASH DOES NOT PREVENT HANDLE FROM RAISING TO A COMPLETE NEUTRAL POSITION. TO PREVENT UNNECESSARY WASTE, STEEL BRAKE TUBING IS NOT PACKAGED WITH THE LEVER LOCK.

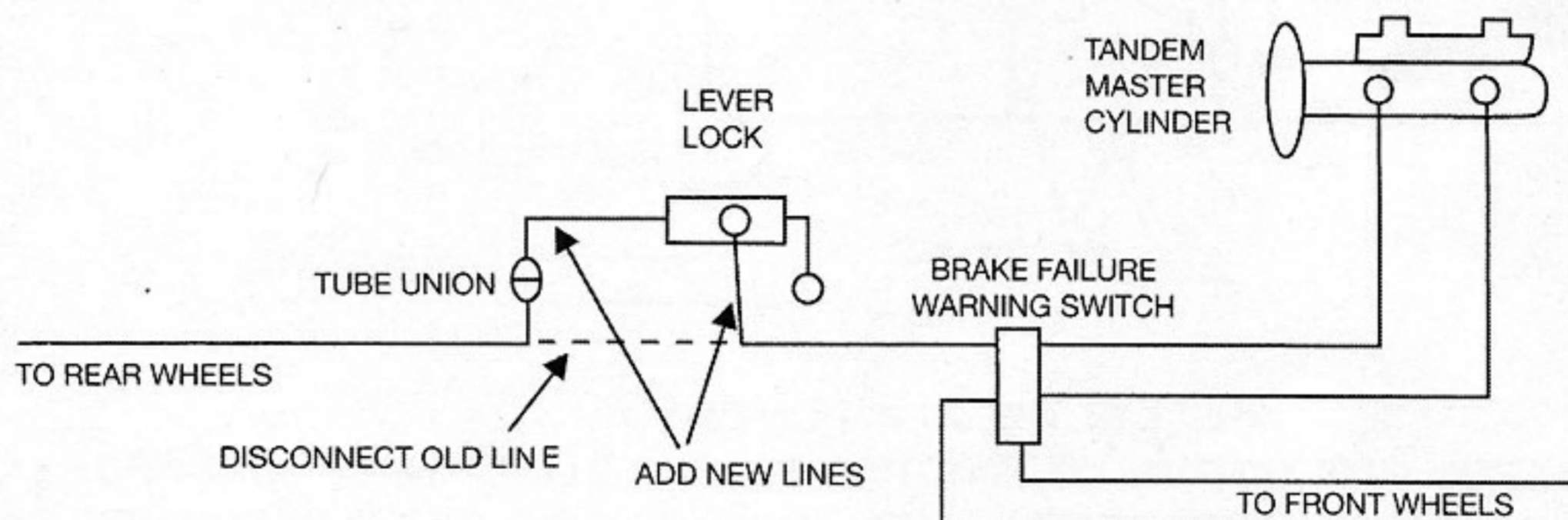
## MOUNTING THE VALVE

WHEN MOUNTING THRU THE DASH, SELECT A LOCATION THAT WILL BE CONVENIENT TO THE OPERATOR AND WHICH WILL ALLOW SUFFICIENT SPACE TO CONNECT THE BRAKE LINES, THEN PROCEED AS FOLLOWS:

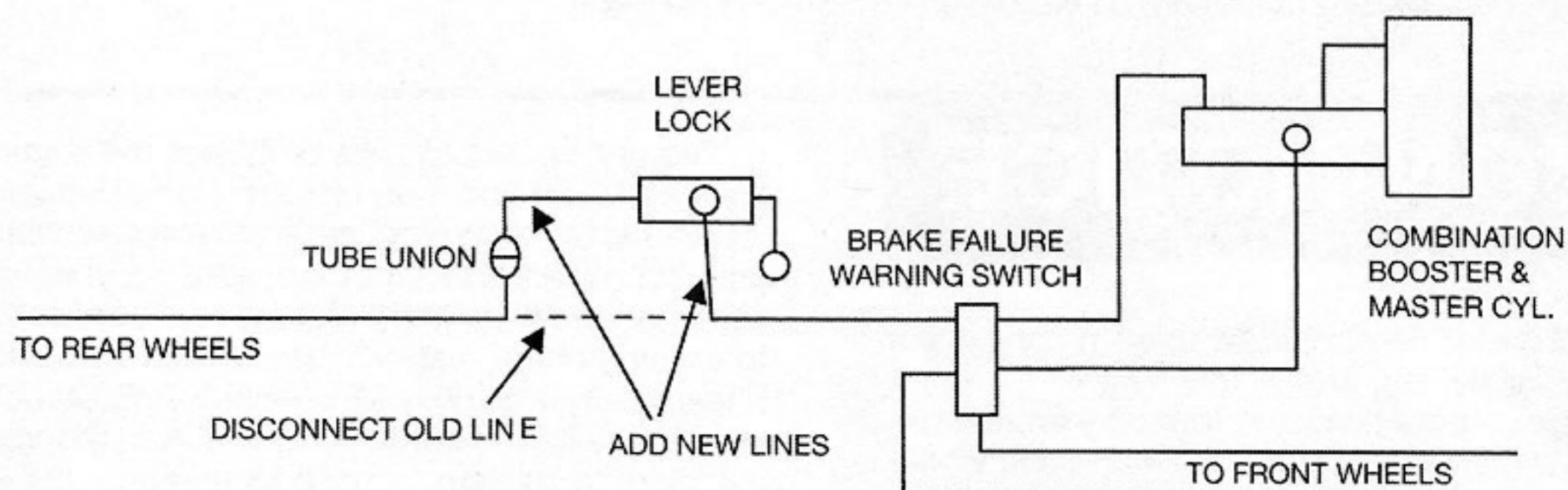
- 1) DRILL A 5/8" HOLE THRU THE DASH AT THE SELECTED LOCATION.
- 2) UNSCREW HANDLE AND CAM ASSEMBLY FROM VALVE BODY LEAVING THE JAM NUT ON VALVE BODY.
- 3) INSERT VALVE BODY THRU HOLE IN DASH, SLIP INSTRUCTION PLATE OVER THREADED SECTION AND SCREW HANDLE AND CAM HAND TIGHT TO THE VALVE BODY.
- 4) TURN LOCK ASSEMBLY IN HOLE UNTIL LEVER IS VERTICAL AND STAMPED WORD "TOP" IS IN THE CORRECT POSITION.
- 5) HOLD IN THIS POSITION AND TIGHTEN 15/16" HEX JAM NUT FROM REAR WITH WRENCH.

## CONNECTING THE BRAKE LINES

Vehicle Without Booster - Split Brake System Fig. 1

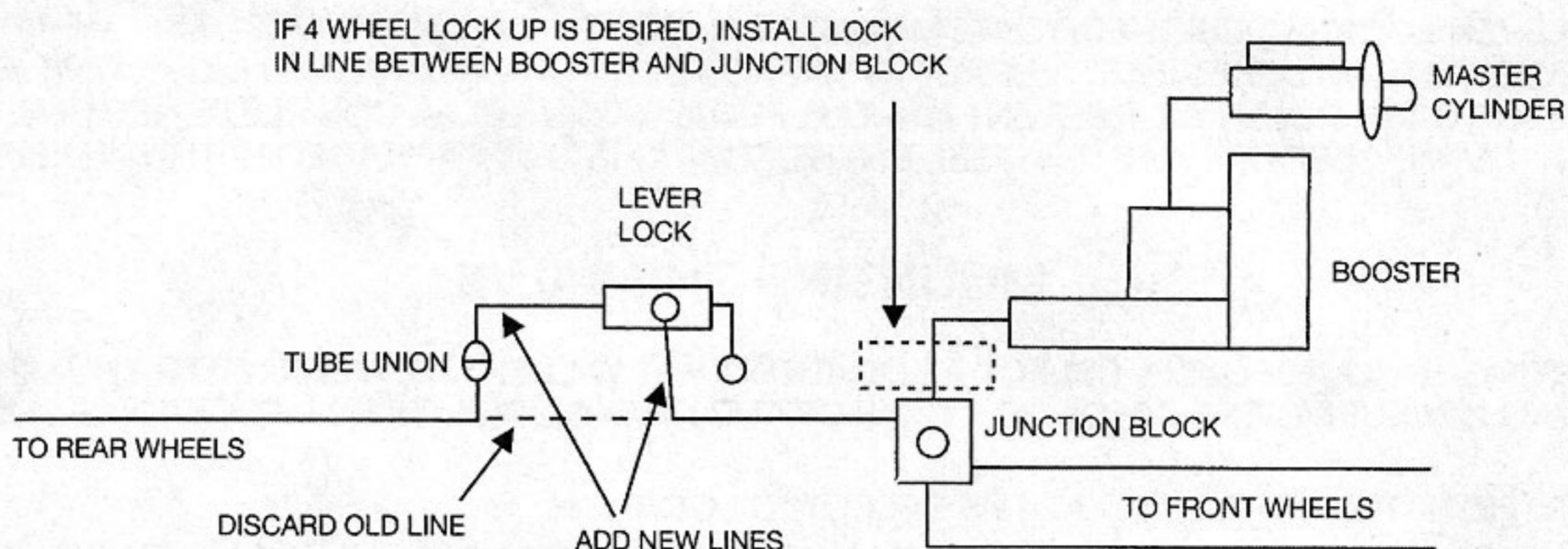


Booster Equipped Vehicle - Split Brake System Fig. 2

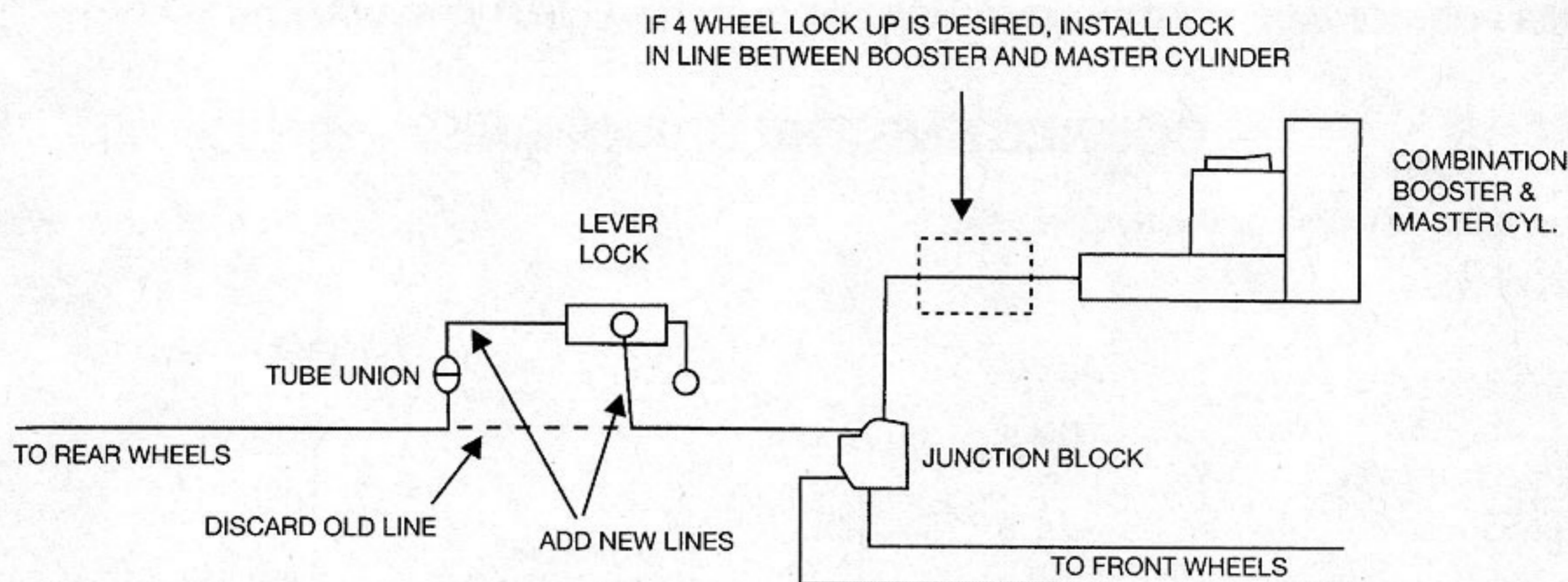


- 1) DISCONNECT LINE FROM REAR WHEEL AT BRAKE FAILURE WARNING SWITCH.
- 2) INSTALL NEW LINE FROM OPENED PORT OF BRAKE FAILURE WARNING SWITCH TO LOWER SIDE PORT OF LOCK. INSTALL BLEEDER SCREW IN UPPER SIDE PORT.
- 3) INSTALL NEW LINE IN "OUTLET" PORT OF LOCK AND CONNECT TO LINE FROM REAR WHEELS USING BRAKE TUBE UNION PROVIDED IN THIS KIT.

### Booster Equipped Vehicles - Separate Units Fig. 3



### Combination Booster - Cylinder Fig. 4



- 1) DISCONNECT LINE FROM REAR WHEEL AT THE JUNCTION BLOCK.
- 2) INSTALL NEW LINE FROM OPENED PORT OF JUNCTION BLOCK TO LOWER SIDE PORT OF THE LEVER LOCK.
- 3) INSTALL NEW LINE IN "OUTLET" PORT OF LOCK AND CONNECT TO LINE FROM REAR WHEELS USING BRAKE TUBE UNION PROVIDED.
- 4) IF A FOUR WHEEL LOCK-UP IS DESIRED, INSTALL IN LINE BETWEEN BOOSTER AND JUNCTION BLOCK, NEVER BETWEEN THE BOOSTER AND THE MASTER CYLINDER.

## CAUTION NOTICE

All AFCO LOCKING DEVICES should be used in conjunction with a vehicle's regular parking brake. To insure maximum safety do not leave a vehicle with only an Afco Lock to hold it. Always set the parking brake and use wheel chocks and/or outriggers as required. After an Afco Lock has been applied it should be checked within 5 to 10 minutes to determine if the pressure is still being held. If an Afco Lock is applied while a vehicle's engine is in operation, be sure that the locked-up pressure is maintained at the same level after the engine is shut off. The cooling off of the engine and its related components may cause a decrease in the pressure as it cools and may lower the pressure to unsafe limits.

Before disconnecting lines or fittings the area must be cleaned of dirt and road residue. Use of sealants is not recommended. **Do Not** use tape type sealants. If sealants are not properly used they can cause a brake system to become inoperative. When making new connections or adding to existing brake systems, use procedure outlined in Vehicle Manufacturers Service Manual or S.A.E. Standards. Use only steel brake tubing conforming to S.A.E. Standards. When bleeding the system, consult Manufacturers Service Manual for preferred bleeding sequence. Use only brake fluid conforming to latest S.A.E. Standards.

As routine maintenance on any brake system it is a good policy to seasonally flush the system and add clean brake fluid.

**INSTALLATION & OPERATION INSTRUCTIONS MUST ACCOMPANY AN AFCO LOCKING DEVICE TO END USER.**



# WARNING



## PREVENT ROLLAWAY

Read operating instructions before using Brake Lock.

The Brake Lock is a supplemental safety device. It is not to be used in place of the original equipment parking brake.

Always set parking brake and use wheel chocks and outriggers with Brake Lock.

Release Brake Lock before moving vehicle.

Do not use Brake Lock for overnight or prolonged parking.

# **FLUSH FLUID SYSTEMS BEFORE INSTALLATION**