

# Brake Systems

## JEEP SINGLE ANCHOR – LEVER ADJUSTER

Cherokee  
Wagoneer  
J-Series

### DESCRIPTION

Single anchor brake assembly consists of a support plate, two brake shoes, brake shoe return springs, adjuster lever and single wheel cylinder. Rear units contain linkage for parking brake operation.

*Shoe Installation in this Article.* During overhaul it is sometimes necessary to back off shoes to remove brake drums. This is done by turning star wheel adjuster which is accessible through a hole in brake backing plate. A thin blade screwdriver or similar tool must be used to disengage automatic adjuster lever while making manual adjustment.

### ADJUSTMENT & SERVICING

#### BRAKE SHOE ADJUSTMENT

Brake shoes adjust automatically when brakes are applied while vehicle is traveling in reverse. Manual adjustment is required if shoes have been removed and reinstalled. See *Brake*

#### PARKING BRAKE ADJUSTMENT

**NOTE** – Brake shoes must be adjusted before parking brakes. Adjustment is not necessary in normal service; automatic adjusters also adjust parking brake. In case of brake overhaul or to compensate for stretched cables, adjust as follows: Check first for binds, kinks, or any frayed condition of cables. Replace as necessary. Release parking brake. Loosen lock nuts at equalizer under vehicle. Tighten cables until wheels, when rotated by hand, have a slight drag from shoes. Loosen cables until wheels rotate freely and no drag is felt. Tighten lock nut and check operation of parking brake.

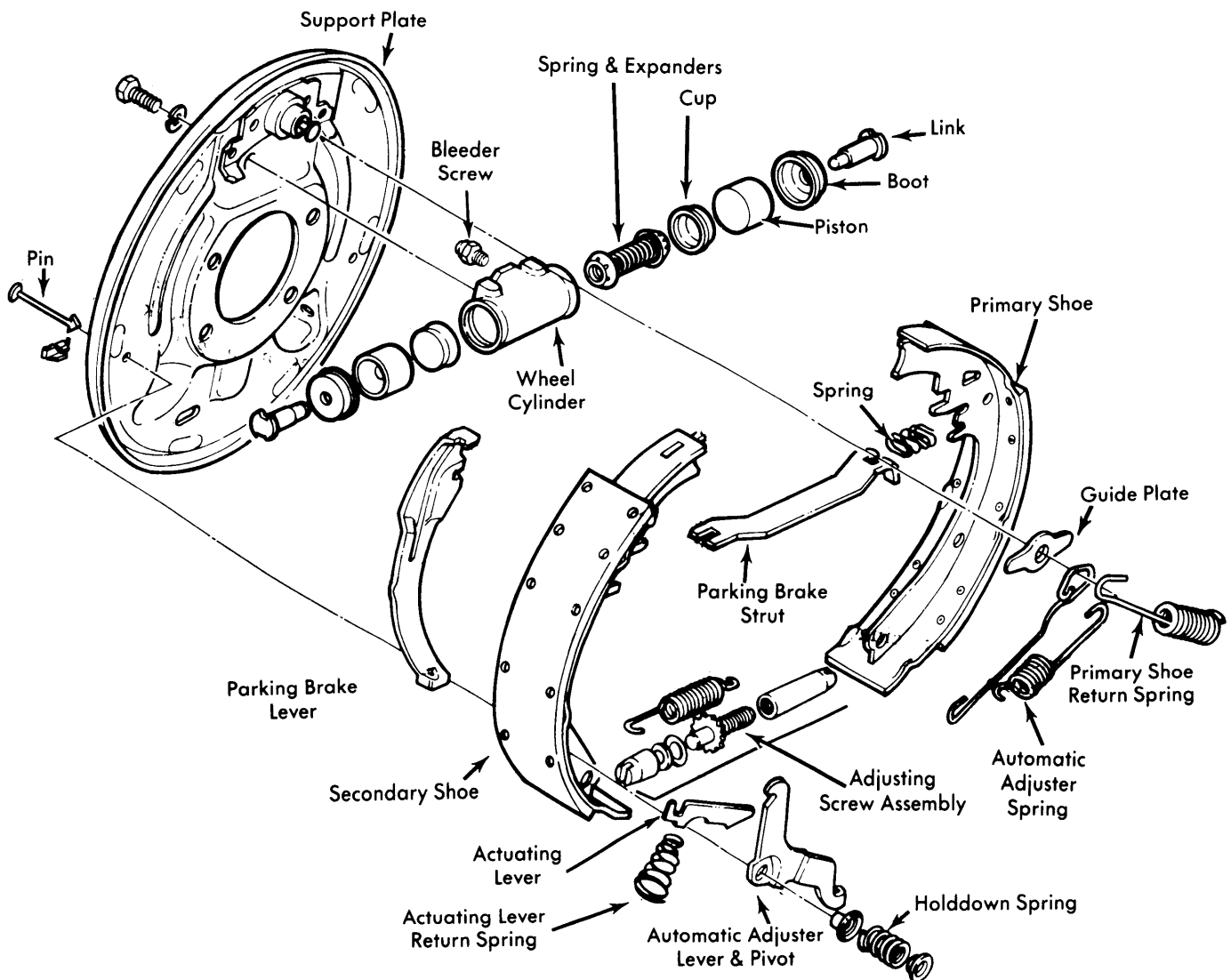


Fig. 1 Exploded View of Brake Assembly

## JEEP SINGLE ANCHOR – LEVER ADJUSTER (Cont.)

### BLEEDING SYSTEM

See *Hydraulic Brake Bleeding in this Section.*

### REMOVAL & INSTALLATION

#### BRAKE SHOES

**Removal** – 1) Raise and support vehicle with wheels off ground. Remove necessary wheels. **NOTE** – *On models with full floating rear axle, the two screws that locate rear drums on hubs must be removed.* Remove primary return spring, automatic adjuster actuating spring, and secondary shoe return spring. Remove hold down springs and brake shoe assemblies. On rear brakes, disengage parking brake cable from parking brake lever. (Parking brake strut is removed with brake shoe assemblies.)

2) Place wheel cylinder clamps over wheel cylinders to retain pistons. Inspect lining wear: If worn to within  $\frac{1}{32}$ " of rivet heads, replace linings. Inspect lining wear pattern. If wear is uneven across width of lining, replace lining and check drum for bell-mouthed condition. If wear is uneven from top to bottom, replace lining and check drum excess runout. Inspect linings for cracks, charred surfaces, or broken rivets. Replace linings if contaminated with brake fluid, axle lubricant, or similar contaminants. **NOTE** – *Light surface contamination on reusable linings should only be removed with alcohol.*

3) Inspect all springs. Replace any springs which are weak, broken, or discolored. Inspect adjuster screw and star wheel serrations for any condition that could effect automatic adjuster operation.

**Installation** – 1) Apply a thin film of molydisulphide grease, NLGI No. 2 chassis lubricant, or lithium base lubricant to support plate ledges, anchor pin, adjuster screw threads and pivot, and adjuster lever- to-secondary brake shoe contact surface. When assembling rear brakes, lubricate parking brake lever pivot and portion of lever that contacts secondary brake shoe. On rear brakes, attach parking brake cable to parking brake lever on secondary shoe.

2) Complete reassembly by reversing removal procedure noting the following: Short hooked end of springs goes on primary shoe; long hooked end on secondary shoe. Make preliminary adjustment of shoes as follows: measure drum diameter, then adjust shoe diameter to approximately the same, install drum. If no gauge is available, adjust shoes until drum just drags. Back off shoes 30 notches on star wheel with drum in place. **NOTE** – *Disengage automatic adjuster using a thin screwdriver or similar device while making manual ad-*

*justment.* Test brake operation before moving vehicle. Make final adjustment of brakes by making several firm stops while vehicle is traveling in reverse.

#### WHEEL CYLINDER

**Removal & Installation** – Disconnect brake line but do not bend it away from cylinder. When cylinder is moved away from backing plate, line will separate easily. Remove cylinder mounting bolts and remove cylinder. To install, reverse removal procedure.

### OVERHAUL

#### WHEEL CYLINDER

**NOTE** – *Vehicle manufacturer recommends that cylinders NOT be honed.*

**Disassembly & Reassembly** – Remove dust caps and push pistons, cups, and spring out of cylinder bore. Clean all metal parts with brake fluid. Light discoloration may be polished with crocus cloth only. Do not use cloth in lengthwise motion in and out of cylinder; polish with circular motions with cloth wrapped around end of finger. Lubricate bore of cylinder with clean brake fluid and reassemble.

### TIGHTENING SPECIFICATIONS

Application	Inch Lbs.
Bleeder Screw	
$\frac{1}{4}$ – 28.....	30-90
$\frac{5}{16}$ – 24.....	40-140
Brake Line.....	120-200
Application	Ft. Lbs.
Front Brake Backing Plate.....	20-30
Rear Brake Backing Plate	
J-20.....	45-55
All Others.....	35-45

### BRAKE SPECIFICATIONS

Drum Radial Runout.....	.005"
Drum Lateral Runout.....	.035"
Maximum Oversize	
11".....	11.060"
12".....	12.060"

### BRAKE SYSTEM SPECIFICATIONS

Application	Drum Diam.	Wheel Cylinder Diameter		Master Cylinder
		Front	Rear	Diameter
Cherokee	11"	1 $\frac{1}{8}$ "	1 $\frac{5}{16}$ "	1"
Wagoneer	11"	①	1 $\frac{5}{16}$ "	1 $\frac{1}{8}$ "
J-10	11"	1 $\frac{1}{8}$ " ②	1 $\frac{5}{16}$ "	1"
J-20	12"	①	1 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "

① – Disc brakes.

② – Disc brakes optional.