

# Brake Systems

## JEEP SINGLE ANCHOR – LEVER ADJUSTER

Cherokee  
Wagoneer  
J-Series

### DESCRIPTION

Single anchor brake assembly consists of a support plate, 2 brake shoes, brake shoe return springs, adjuster lever and single wheel cylinder.

### 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 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.

#### PARKING BRAKE ADJUSTMENT

**NOTE** – Brakes 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.

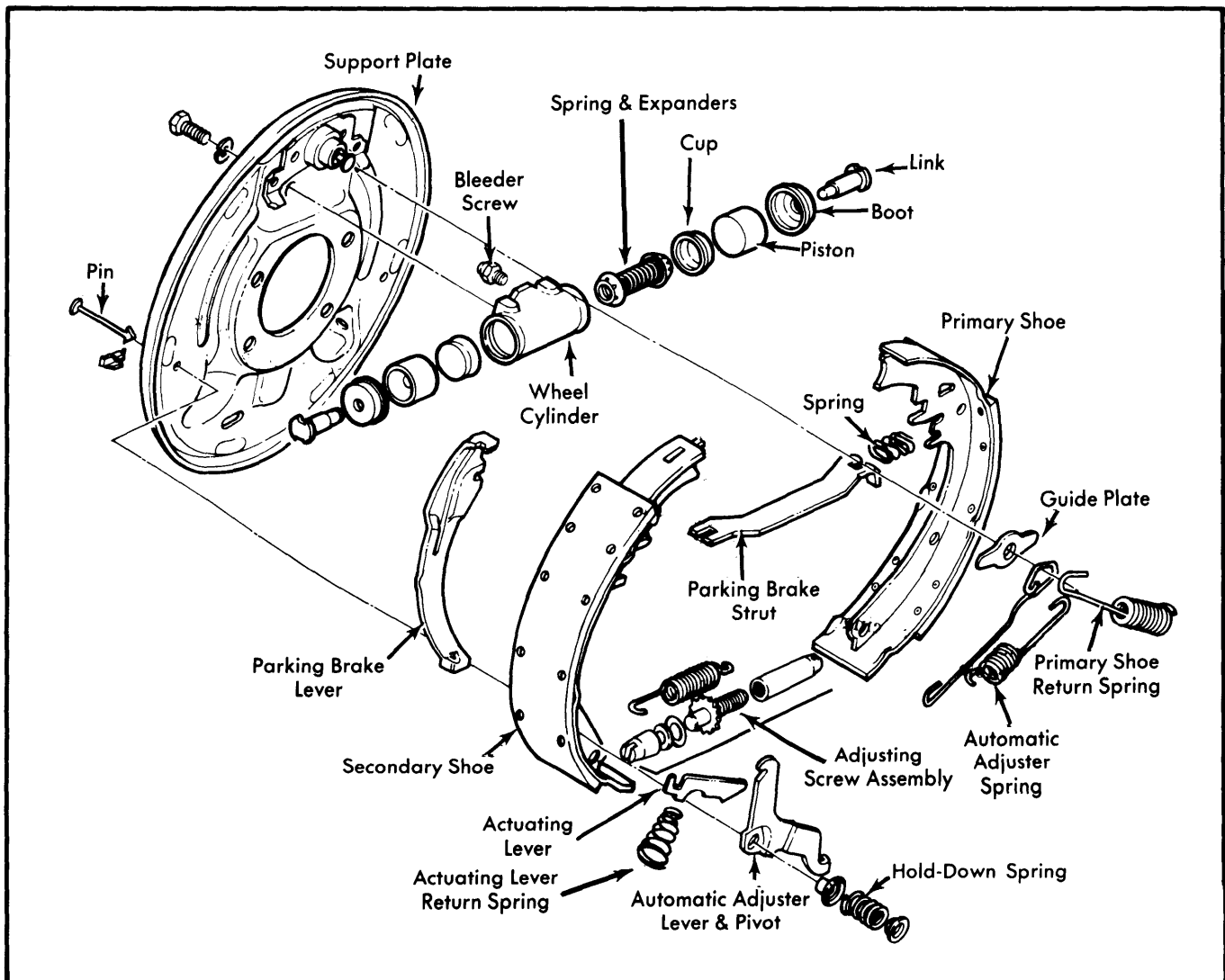


Fig. 1 Exploded View of Jeep Drum Brake Assembly

## 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 on safety stands. Remove necessary wheels. On models with full floating rear axle, remove 2 screws that locate rear drums on hubs. Remove primary return spring, automatic adjuster actuator spring and secondary shoe return spring. Remove hold down springs and brake shoe assemblies. 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 rivets on riveted lining, replace linings. If worn to  $\frac{1}{16}$ " of total thickness on bonded linings, replace linings. Inspect lining wear pattern. If wear is uneven across width of lining, replace lining and inspect 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 materials.

**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 moly sulphide grease, NLGI No. 2 chassis lubricant, or lithium based lubricant to support plate ledges, anchor pin, adjuster screw threads and pivot and adjuster lever-to-secondary brake shoe contact surface. Lubricate parking brake lever pivot and portion of lever that contacts secondary brake shoe. 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, and install drum.

3) If no gauge is available, adjust shoes until drum just drags. Now back off adjuster screw until drum turns freely. Disengage automatic adjuster with thin bladed screwdriver or similar device while making manual adjustment. Test brake operation before moving vehicle. Make final adjustment on 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 .....	40-50
$\frac{3}{8}$ "-24 .....	40-140
Brake Line .....	120-200
Application	Ft. Lbs.
Brake Backing Plate	
J-20 .....	45-55
All Others .....	35-55

BRAKE SPECIFICATIONS	
Application	Specification
Drum Radial Runout .....	.005"
Maximum Oversize	
11" Drum .....	11.060"
12" Drum .....	12.060"

BRAKE SYSTEM SPECIFICATIONS				
Application	Drum Diam.	Drum Width	Wheel Cylinder Diameter	Master Cylinder Piston Diameter
Cherokee	11"	2"	$\frac{15}{16}$ "	$1\frac{1}{8}$ "
Wagoneer	11"	2"	$\frac{15}{16}$ "	$1\frac{1}{8}$ "
J-10	11"	2"	$\frac{15}{16}$ "	$1\frac{1}{8}$ "
J-20	12"	$2\frac{1}{2}$ "	$1\frac{1}{8}$ "	$1\frac{1}{8}$ "