FORD SINGLE ANCHOR

All Models (Rear)

DESCRIPTION

The single anchor duo servo brake assembly consists of a support plate, 2 brake shoes, return springs, automatic adjuster components and a wheel cylinder. The automatic adjuster consists of a cable (with hook and anchor fitting), a cable guide, adjusting lever, adjusting screw, pivot nut, socket and spring. The adjuster uses movement of the secondary shoe during reverse brake application to turn brake adjusting screw and maintain proper lining-to-drum clearance.

ADJUSTMENT & SERVICING

BRAKE SHOE ADJUSTMENT

All Models – 1) Adjustment is made with brake drums at room temperature and parking brakes correctly adjusted. Using a suitable measuring gauge (Rotunda 11-0001 for Bronco, 100 and 150 Series; 11-0002 for 250 and 350 Series), measure inside diameter of drum. See *Fig. 1*. Reverse tool and apply to brake shoes on a line parallel to vehicle and through center of axle. Hold automatic adjuster lever away from adjusting screw and turn screw until outside diameter of shoes contacts gauge. See *Fig. 2*.

2) Apply a small amount of lubricant at shoe-to-backing plate contact points. Install brake drum and wheel. Complete adjustment by applying brakes several times while driving vehicle in reverse. Check brake operation by making several stops while driving forward.

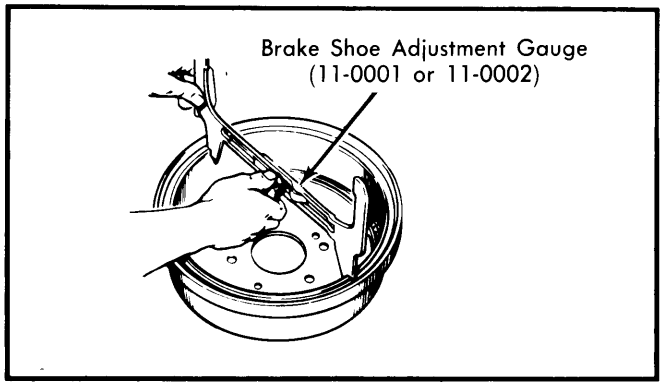

Fig. 1 Measuring Brake Drum Diameter

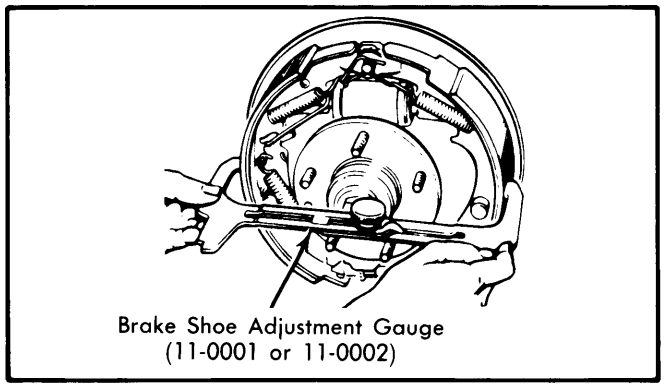

Fig. 2 Measuring Brake Shoe Diameter

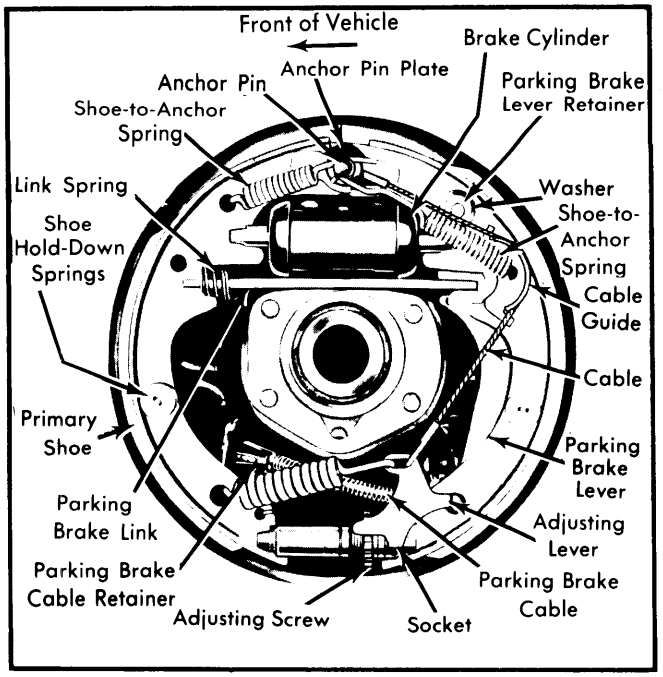

Fig. 3 Ford Rear Brake Assembly (E & F100/150 & Bronco Models)

PARKING BRAKE ADJUSTMENT

NOTE – *If front brake cable tension limiting device is replaced, follow initial adjustment procedure outlined below prior to adjusting cable. If tensioner is not replaced, follow regular parking brake adjustment procedure.*

Initial Adjustment (with new Tension Limiter) – Depress the parking brake pedal. Grip the tension limiter bracket to prevent it from spinning and tighten equalizer nut 2½" up the rod. Check to make sure the cinch strap has slipped so that less than 1⅜" remain exposed.

Regular Cable Adjustment (E100/350) – 1) Release parking brake pedal. Grip automatic adjuster to prevent it from spinning and tighten equalizer nut 6 full turns past its original position.

2) Depress pedal and check tension. Release pedal and check rear wheel drag. If drag is noted on E250/350 models, remove drums and check for clearance between parking brake lever and cam plate. Clearance should be .015" with brakes fully released. If not to specification, readjust cable.

Regular Cable Adjustment (F100/350 & Bronco) – 1) Depress parking brake pedal 2 notches. Attach suitable tension gauge (Rotunda 210018) behind equalizer assembly. Turn equalizer adjusting nut until tension gauge reads 250 ft. lbs.

2) Back off equalizer nut until tension gauge reads 50 ft. lbs. Retighten adjusting nut until tension gauge reads between 60-100 ft. lbs. Check parking brake operation.

BLEEDING SYSTEM

See Hydraulic Brake Bleeding in this Section.

FORD SINGLE ANCHOR (Cont.)

REMOVAL & INSTALLATION

BRAKE SHOES

Removal (E & F100/150 & Bronco) – 1) Remove wheel and drum. Place a suitable clamp over ends of wheel cylinder. Disengage adjusting lever from adjusting screw by pulling backwards on lever.

2) Move outboard side of adjusting screw up and back off pivot nut as far as possible. Pull adjusting lever, cable and automatic adjuster spring down and toward rear to unhook pivot hook from large hole in secondary shoe.

NOTE – *DO NOT pry pivot hook from hole.*

3) Remove automatic adjuster spring and adjusting lever. Remove shoe to anchor springs, cable anchor and anchor pin plate.

4) Remove cable guide, shoe hold-down springs, shoes, adjusting screw, pivot nut and socket. Remove the parking brake spring and link.

NOTE – *Note color and position of springs as removed for reassembly reference.*

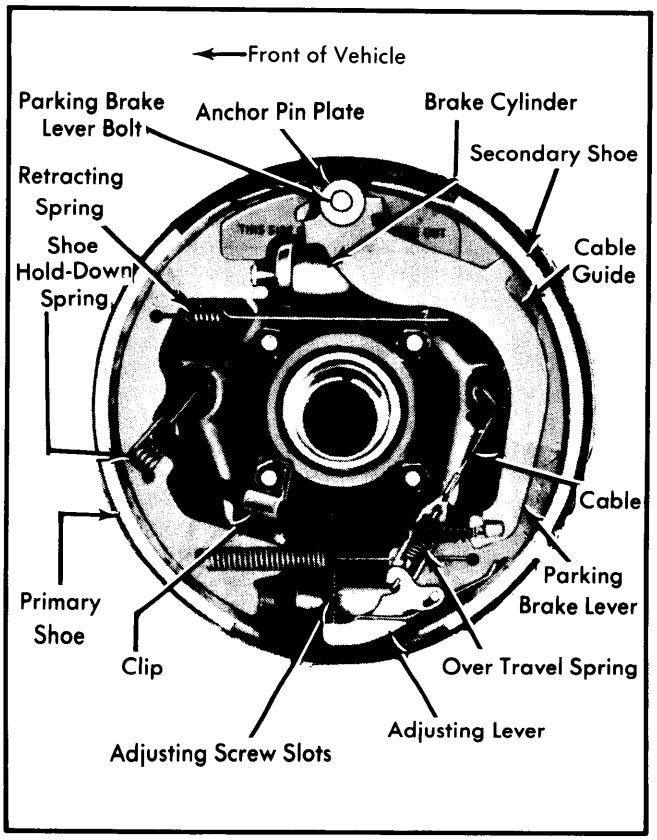

Fig. 4 Ford Rear Brake Assembly (E & F250/350 Models)

5) Disconnect parking brake cable from lever. Remove secondary shoe and disassemble parking brake lever from shoe by removing retaining clip and spring washer.

Installation – To install, reverse removal procedure, making sure of the following: Adjusting cable is in groove of cable guide, cable does not bind on anchor pin, and adjusting screw is mounted on correct side. If adjuster screw is mounted on wrong side, adjuster will operate incorrectly.

Removal (E & F250/350) – 1) Remove wheel and brake drum. Remove parking brake assembly retaining nut from backing plate and remove parking brake assembly. Remove adjusting cable assembly from anchor pin, cable guide and adjusting lever.

2) Remove brake shoe return springs, hold down springs and brake shoes. Remove and disassemble adjusting screw assembly.

Installation – Apply a light coat of high temperature grease to contact points of brake assembly and reverse removal procedure.

WHEEL CYLINDER

Removal & Installation – Remove wheel, drum and brake shoes. Remove cylinder connecting links and disconnect hydraulic brake line from cylinder. Remove brake cylinder retaining bolts and remove cylinder from backing plate. To install, reverse removal procedure. Adjust brakes and bleed hydraulic system.

OVERHAUL

WHEEL CYLINDERS

Disassembly – With wheel cylinder removed from vehicle, remove rubber boots from ends of cylinders. Remove piston return spring, cylinder cups and piston from cylinder. Remove bleeder screw and inspect cylinder bore for damage.

Reassembly – If bore of cylinder is lightly pitted or scratched, hone or replace as necessary. Soak all parts in suitable brake fluid or assembly lubricant and reverse disassembly procedure. Clamp brake cylinder pistons against ends of cylinder.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Front Backing Plate-to-Spindle	
7/16"-14	30-50
1/2"-13	55-70
1/2"-20	55-75
1 3/8"-24	30-40
Rear Backing Plate-to-Axle	
7/16"-14	35-45
1/2"-13	75-105
1/2"-20	50-70
Hydraulic Tube Nuts	
3/8" & 7/16"-24	10-15
1/2" & 9/16"-18	10-17

FORD SINGLE ANCHOR (Cont.)

DRUM BRAKE SPECIFICATIONS

Application	Drum Diam.	Drum Width	Wheel Cylinder Piston Diametr	Master Cylinder Piston Diameter
E100/150 & Bronco	11 1/32"	2 1/4"	15/16"	1"
E250	12"	2 1/2"	15/16"	1 1/16"
E350	12"	3"	1 1/16" ①	1 1/16"
F100②	10"	2 1/2"	15/16"	1"
F100/150	11 1/32"	2 1/4"	15/16"	1"
F250	12"	2 1/2"	15/16"	1 1/16"
F250 H.D. & F350	12"	3"	1 1/16"	1/16"

① – School bus wheel cylinder 1".
② – Available with power brakes and 4650/4750 GVW only.