Brake Systems

GENERAL MOTORS SINGLE ANCHOR

All Models (Rear Only)

DESCRIPTION

Delco single anchor, duo-servo type brake assemblies are used on the rear of all models. The assemblies consist of a support plate, 2 brake shoes, return springs, automatic adjuster components and a duo-servo wheel cylinder.

Automatic adjusters consist of a connecting link, override lever, override spring, return spring, actuating lever and an adjusting screw. Normal adjustment is accomplished through movement of actuating lever and secondary shoe during application of brakes when vehicle is operated in reverse.

ADJUSTMENT & SERVICING

BRAKE SHOE ADJUSTMENT

1) Knock out lanced area in brake drum with a punch. If drum is installed, it must be removed and all metal removed from brake area. Turn adjusting screw, through hole, until brake shoes expand and brake drums can just be turned by hand.

2) The drag should be equal at all wheels. Back off adjusting screw 30 notches at each wheel. If drum still drags, back off an additional 1 or 2 notches. Install hole cover in drum.

PARKING BRAKE ADJUSTMENT

Rear Wheel Type (Foot Pedal Actuated)

1) With service brakes correctly adjusted, raise vehicle until both rear wheels are off ground. Loosen equalizer adjusting nut. Apply parking brake 4 notches from fully released position.

2) Tighten adjusting nut until a slight drag is felt when wheels are rotated forward. Tighten lock nut. Release parking brake and wheels should rotate forward freely. Lower vehicle.

Rear Wheel Type (Orscheln Lever Actuated)

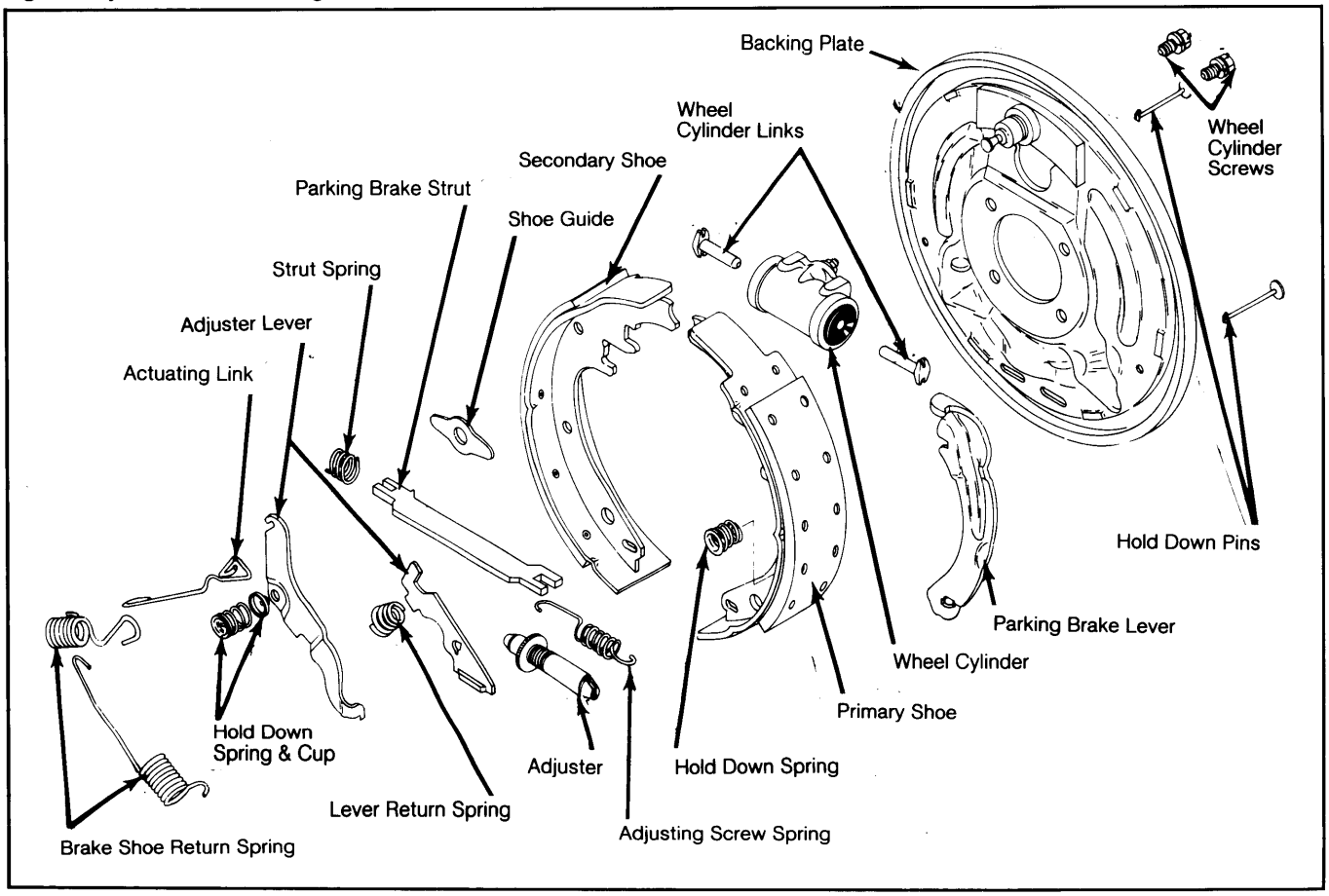
1) With service brakes in proper adjustment, turn adjusting knob on lever counterclockwise to stop. Apply parking brake and raise vehicle until both rear wheels are off ground.

2) Loosen intermediate cable equalizer lock nut and adjust front nut until slight drag is felt when rear wheels are rotated forward. Tighten lock nut. Readjust lever adjusting knob to obtain definite snap-over-center feel. Release parking brake and check that no drag is present when wheels are rotated.

Transmission Mounted (Internal Shoe Type)

1) With at least one rear wheel raised off ground, block wheels and release parking brake. Remove cotter pin and clevis pin connecting pull rod and relay lever. Rotate drum to bring one access hole into line with adjuster screw at bottom of brake shoes (manual transmission) or top of shoes (automatic transmission). Knock out plug in drum for access hole, if needed.

Fig. 1: Exploded View of Single Anchor Brake Assembly



Brake Systems

GENERAL MOTORS SINGLE ANCHOR (Cont.)

2) Rotate adjusting screws with a screwdriver to expand shoes until tight against drum. Drum should not be able to be rotated by hand. Back off adjuster screw 10 notches. Place parking brake lever in full released position.

3) Pull on brake cable enough to take up slack in brake linkage. Adjust pull rod clevis to line up with hole in relay lever. Insert clevis pin and roller pin. Tighten clevis lock nut. Install a new plug in access hole in drum and lower vehicle.

BLEEDING SYSTEM

See Hydraulic Brake Bleeding in this Section.

REMOVAL & INSTALLATION

BRAKE SHOES

Removal

1) Raise vehicle and remove wheel and brake drum. It may be necessary to back off brake shoe adjustment before removing drum. Unlock primary and secondary shoe springs. Remove shoe hold down springs.

NOTE: On some vehicles, it may be necessary to remove axle shafts to remove hub and drum.

2) Lift up on actuator, unhook actuating link from anchor pin and remove link. Spread shoes enough to clear wheel cylinder links. Remove parking brake strut and spring. Disconnect cable from lever. Remove brake shoes.

Installation

1) Lubricate fulcrum end of parking brake lever with suitable brake lubricant. Attach lever to secondary shoe. Make sure lever moves free. Connect brake shoes together with adjuster spring. Place adjuster screw in postion. Make sure spring does not contact starwheel portion of adjusting screw. Right hand thread adjusting screw should be on left side.

2) Make sure starwheel lines up with hole in backing plate. Apply a thin coating of brake lubricant to contact surface on backing plate. Position brake shoes on backing plate. Primary shoe (short lining) is to front. Connect cable to parking brake lever. Install strut between shoes.

3) Install actuator, return spring and actuator link. Install shoe hold down springs. Install both primary and secondary shoe springs. Measure inside diameter of brake drum with measuring gauge (J-21177). Expand brake shoes to dimension obtained on outside caliper portion of tool.

4) Install brake drum and wheel. Bleed system if any portion of hydraulic system was opened. Check fluid level in master cylinder and add as necessary.

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 support plate. To install, reverse removal procedure.

OVERHAUL

WHEEL CYLINDER

Disassembly

Remove rubber boots from ends of cylinder. Remove piston return spring, cylinder cups, and pistons from cylinder. Remove bleeder screw and inspect bore for damage.

Reassembly

If bore of cylinder is pitted and/or scratched, hone or replace as needed. Soak rubber cylinder cups in suitable brake fluid or assembly lubricant and reverse disassembly procedure.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Brake Hose Attaching Nut	13 (17)
Rear Brake Anchor Pin	140 (190)
	INCH Lbs. (N.m)
Bleeder Valves	60 (6.8)
Brake Line Nut	150 (17.0)
Wheel Cylinder Attaching Bolts	50 (5.7)
Brake Line Clips	150 (17.0)

DRUM BRAKE SPECIFICATIONS

Application	Drum Diam. In. (mm)	Drum Width In. (mm)	Max. Drum Refinish Diam. In. (mm)	Brake Cyl. Diam. In. (mm)	Master Cyl. Diam. In. (mm)
C10 & G10					
to 4900 GVW	11.00 (279.4)	2.00 (50.8)	11.06 (280.9)	1.00 (25.4)	1.00 (25.4)
to 5600 GVW	11.00 (279.4)	2.00 (50.8)	11.06 (280.9)	1.00 (25.5)	1.12 (28.4)
C10 — 5200-6100 GVW	11.15 (283.2)	2.75 (69.9)	11.21 (284.7)	1.00 (25.4)	1.12 (28.5)
C, G & K10; C, G, K & P20 to 6800 GVW	11.15 (283.2)	2.75 (69.9)	11.21 (284.7)	[1] .94 (23.8)	1.12 (28.5)
C, K & P20; G & P30 6800-8600 GVW	13.00 (330.2)	2.50 (63.5)	13.06 (331.7)	1.06 (26.9)	1.25 (31.8)
C, G, K & P30	13.00 (330.2)	3.50 (88.9)	13.06 (331.7)	1.19 (30.2)	1.34 (34.0)
S10/15	9.45 (240.0)	.....	9.56 (242.8)	.87 (22.1)	.95 (24.1)

[1] — 1" (25.4 mm) on some 20 series over 6400 GVW.