GROUP 4

PARKING BRAKE

CONTENTS

DATA AND SPECIFICATIONS

Type	Internal Expanding External Contracting (Manual Transmission)
Location	Propeller Shaft at Rear of Transmission
Drum Diameter	7 inches
Lining Type	Internal—Moulded Asbestos
Width	2 inches
Thickness	5/32 inches
Clearance	.015 to .020 inches

TIGHTENING REFERENCE

	Foot-Pounds	Inch-Pounds
Parking Brake Cable Bracket Clamp Bolt	20	
Parking Brake Lever to Instrument Panel	20	
Parking Brake Adjusting Bolt Cover Bolt		130
Transmission Shaft Flange Bolt Nut 5/16		95
3/8	35	
7/16	50	

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The foot operated parking brake pedal and release handle is located to the left of the steering column. The brake is applied by pressing down firmly on the pedal. The brake is released when the "T" shaped handle is pulled and depressed. The pedal and release handle are serviced as a unit and need only periodic lubrication.

A steel enclosed brake cable connects the pedal and release handle assembly to the parking brake located on the rear of the transmission. All Chrysler Models equipped with the standard three speed transmission have a 7 inch external contracting parking brake (Fig. 1).

EXTERNAL CONTRACTING TYPE PARKING BRAKE

The external type parking brake consists of a brake drum bolted to the universal joint flange and an external contracting type band, mounted at the rear of the manual transmission (Fig. 1).

The brake lining should be replaced if the lining has worn so that the depth of the rivet counterbore is less than $\frac{1}{32}$ inch. When relining the parking brake, care should be taken not to distort the band from its original shape.

Parking brake drums should be replaced if the braking surface is worn, rough, scored or damaged.

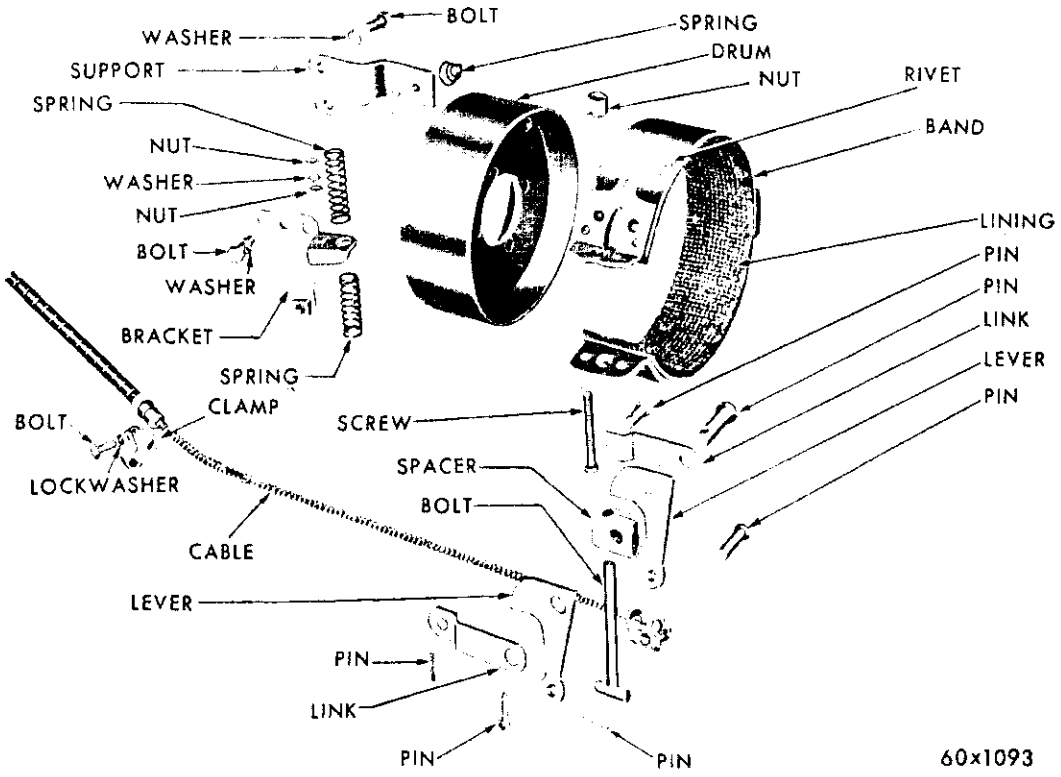

Fig. 1—External Contracting Brake (Disassembled View)

SERVICE PROCEDURES

PARKING BRAKE BAND LINING

a. Removal

(1) Remove the cotter pin, pivot pin and lever assembly (Fig. 1).

(2) Remove the adjusting nut, bolt and springs.

(3) Remove the guide screw lock nuts, guide screw and springs.

(4) Remove the anchor screw locking wire and anchor screw.

(5) Remove the band assembly from the drum and off of the propeller shaft.

CAUTION

Take care not to lose the anchor spring as the band is pulled off of the brake anchor.

b. Relining Brake Band (Band Removed)

If the lining is not already tailored to fit the band, the lining must be cut to insure tight adherence to the band. Cut the lining ¼ inch longer than the inside contour of the band. The rivet hole counterbores must be ½ of thickness of the lining.

(1) Cut off the lining rivet heads and remove the old lining.

(2) Thoroughly clean the inside surface of the brake band.

(3) Place the lining within the brake band with the ends of the lining flush with the ends of the band (the center of the lining will have a slight hump in it).

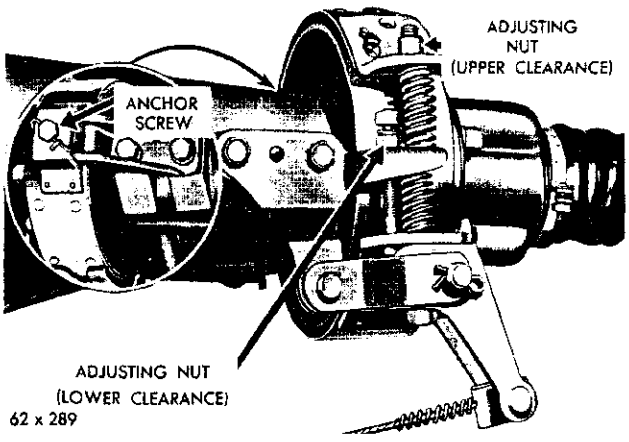

Fig. 2—Parking Brake Adjustment

(4) Drill and counterbore the end rivet holes and rivet the ends of the lining.

(5) Compress the hump in the center of the lining and force the lining snugly against the brake hand.

(6) Drill, counterbore and rivet the balance of the lining.

(7) Chamfer the two ends of the lining to reduce noise and grabbing effect.

c. Installation

(1) Position the brake band over the propeller shaft.

(2) Install the anchor spring into the recess of the brake anchor.

(3) Holding the brake anchor spring compressed, slide the brake band over the drum and anchor.

(4) Install the anchor screw finger tight.

(5) Install the guide bolt and locking bolts.

(6) Install the adjusting bolt, springs, and adjusting nut.

(7) Install the pivot pin through the lever assembly and spacer. Install a new cotter pin.

d. Adjustments

Before adjusting the parking brake, inspect the vertical free play between the brake anchor bracket and the brake anchor (Fig. 2). If free play exceeds .005 inch brake band distortion may occur when brakes are applied. Excessive clearance may be reduced by compressing the anchor bracket in a vise.

(1) Place the parking brake pedal and lever assembly in the fully released position.

(2) Using a feeler gauge, adjust the anchor bolt so that the clearance between the lining and the drum is from .015 to .020 inch.

(3) Install locking wire through the anchor screw.

NOTE: The locking wire should not be drawn tight as it may distort the position of the brake band.

(4) Adjust the guide screw so there is a slight drag from the bottom half of the brake band.

(5) Tighten the adjusting nut so that there is only a slight drag from the top half of the brake band.

(6) Apply the parking brake several times and test for excessive dragging when released.

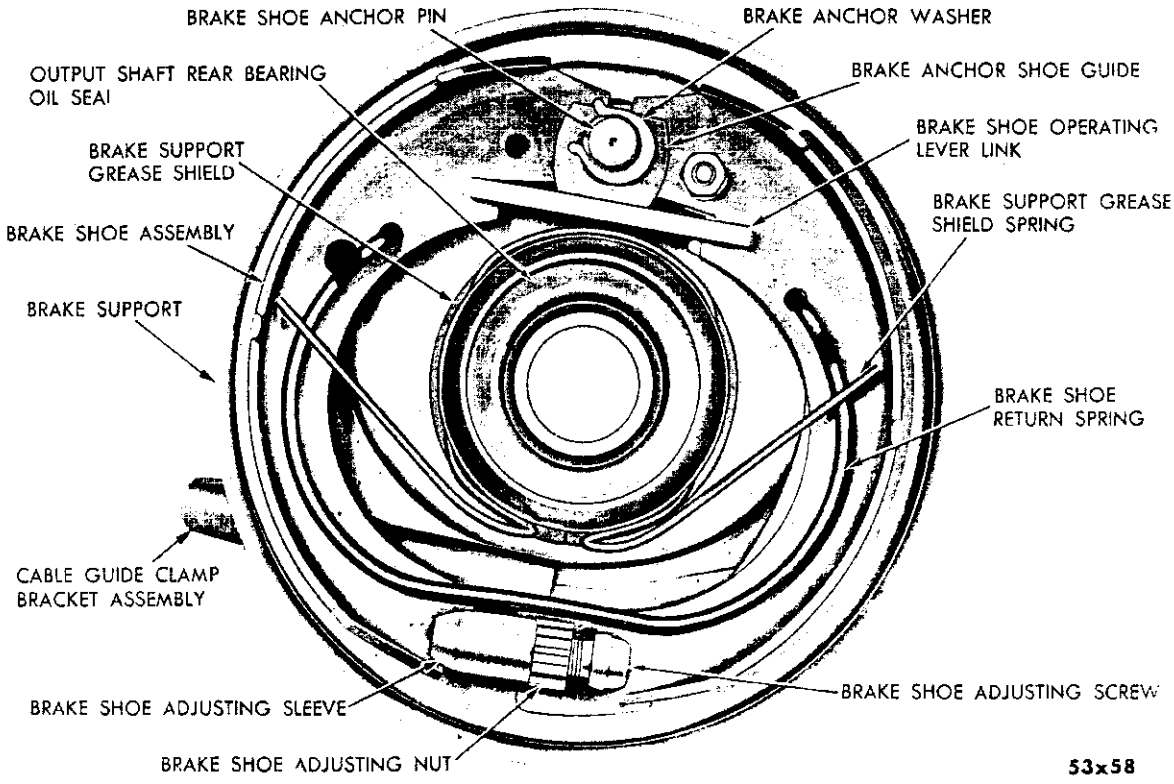

Fig. 3—Parking Brake Internal Expanding

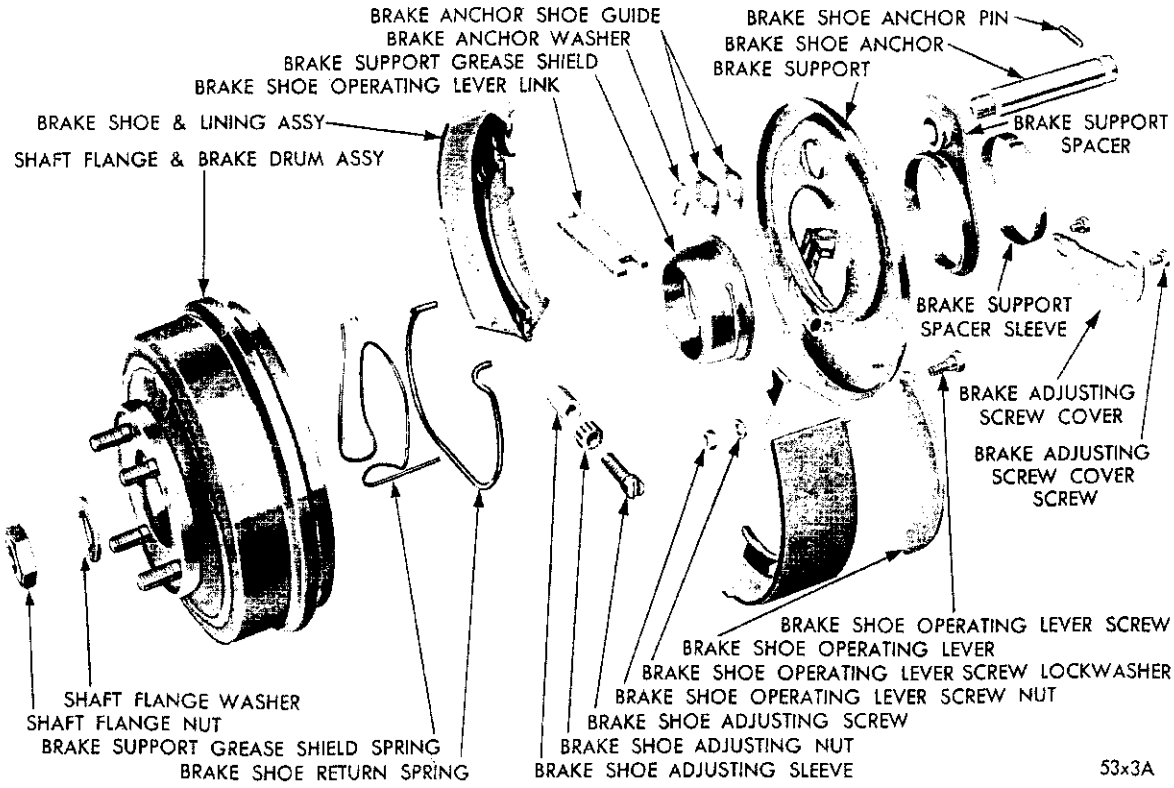

Fig. 4—Parking Brake Internal Expanding (Disassembled View)

PARKING BRAKE (Internal Expanding Type)

(Figures 3 and 4)

All Models equipped with the automatic transmission have a 7 inch internal expanding two shoe parking brake Fig. 3).

a. Disassembly

(1) Disconnect the propeller shaft at the transmission.

(2) Engage the holding Tool C-3281 with the companion flange, loosen and remove the companion flange nut, lockwasher and flatwasher.

(3) Install the puller Tool C-452 on the companion flange, removing flange and brake drum.

(4) Disengage the ball end of cable from the operating lever (Fig. 5).

(5) Separate the shoes at the bottom, allowing the brake shoe adjusting nut, screw and sleeve to drop out, then release the shoes.

(6) Pry the brake shoe return spring up and over the right brake shoe pin, then work the spring out of the assembly.

(7) Pry out the brake shoe retaining washer and remove outer guide.

(8) Slide each shoe out from under the guide spring. (As the shoes are removed, the operating lever strut will drop out of place.)

(9) Separate the operating lever from the right brake shoe by removing nut, lockwasher and bolt.

The brake has now been disassembled as far as necessary for replacement of worn or damaged parts.

b. Assembly (Figure 3)

(1) Assemble the operating lever to the right brake shoe.

(2) Slide the right and left hand brake shoes under the guide spring and up on top of the inner anchor guide.

(3) Spread the shoes and insert the operating lever strut with the wide slot toward the operating lever, and stamped "top" facing up.

(4) Work the shoe return spring under the grease shield spring and secure ends in proper holes in webs of shoes, as shown in Figure 3.

(5) Spread the bottom of both shoes apart and install the brake shoe adjusting nut screw and sleeve.

NOTE: Install the adjusting nut, screw and sleeve in the proper position, as shown in Figure 3. If installed in the reverse position, adjustment would be difficult.

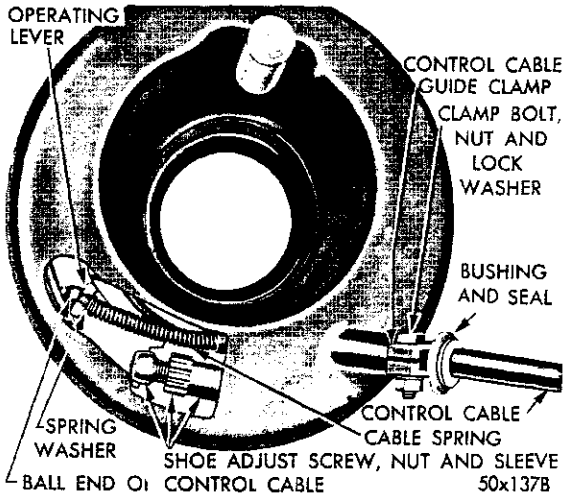

Fig. 5—Rear View of Internal Parking Brake

(6) Place the outer anchor guide over the anchor, then attach the shoes with the retaining washer.

(7) Turn the brake shoe adjusting nut until the shoes are in the fully released position, then install the brake drum.

NOTE: Be sure the brake shoes are centered on the backing plate and are free to move.

(8) Adjust the brake shoes and control cable as outlined below.

c. Adjustment

(1) Remove the adjusting screw cover plate.

(2) Turn the brake shoe adjusting nut, as shown in Figure 5, to decrease shoe-to-drum clearance until a slight drag is felt on the drum. Back off the adjusting nut at least one full notch (using spanner wrench Tool C-3723) or until brake drum is free.

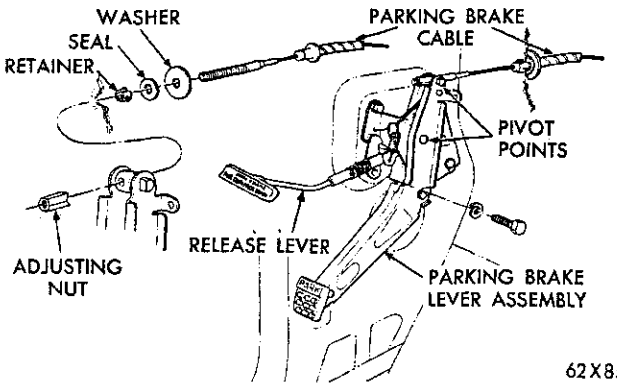

Fig. 6—Parking Brake Pedal, Lever and Cable Assembly (Models SC-1, SC-2, SC-3)

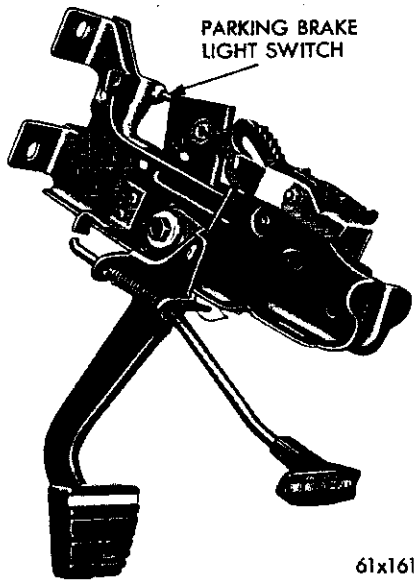

Fig. 7—Parking Brake Pedal and Lever Assembly (Models SY-1)

Be sure the two raised shoulders on the adjusting nut are seated in the groove on the adjusting sleeve.

(3) Test the parking brake lever for travel. When properly adjusted, there should not be more than 3½ inches of parking brake pedal travel. **Never substitute a brake shoe adjustment by adjusting the cable.**

(4) Install the adjusting screw cover plate.

PARKING BRAKE CABLE

a. Removal (Figures 6 and 7)

(1) Release the parking brake.

(2) Remove the cable adjusting nut from the end of the cable at the upper end of parking brake lever.

(3) From the engine compartment, remove the upper end of cable from dash panel.

(4) Loosen the guide clamping bolt at the brake support, as shown in Figure 5, then remove the adjusting screw cover plate.

(5) Pry the ball end of the cable up and out of the operating lever slot with a screwdriver.

(6) Remove the control cable from the guide clamp bracket.

b. Installation

(1) Slide the cable into the guide clamp bracket at the brake support. Insert Tool C-3015 between the spring retainer washer and the ball on the end of cable.

(2) Hook the cable into the slot in the operating lever, with the lever between the ball and the washer, as shown in Figure 5. The cable must be installed so that the cable conduit is not pulled taut between any of the fastening points. To provide free cable operation, care must be used to prevent kinking of the housing, also, all bends must have a radius of 6 inches or more.

(3) Route cable from transmission up the front of dash panel.

(4) Install the plastic seal and washer on the cable (Fig. 4) and insert the cable through dash panel opening.

(5) Install the housing retainer.

(6) Insert the threaded end of the cable in the pedal trunnion, depress the foot pedal to do so, return foot pedal to released position, and install the cable adjusting nut.

(7) Tighten the cable adjusting nut so that the nut is seated on the trunnion without pulling any additional cable through the dash panel.

(8) After the adjustment has been completed, apply and release the foot pedal several times. Then, when fully released check to insure that the cable adjusting nut is seated on the trunnion. Readjust if necessary.

(9) To check for correct adjustment, apply approximately 60 pounds-foot pressure on the pad and measure pedal travel. The travel at the pad should not be more than 3½ inches. With the foot pedal fully released, the parking brake must release and the propeller shaft revolve freely.

SERVICE DIAGNOSIS

Condition	Possible Cause	Correction
Dragging Brake	(a) Improper cable or brake adjustment.	(a) Adjust brake shoes and cable.
	(b) Broken brake shoe return spring.	(b) Replace brake shoe return spring.

SERVICE DIAGNOSIS—CONT'D.

Condition	Possible Cause	Correction
	(c) Broken brake support spring.	(c) Replace brake support spring.
	(d) Oil soaked brake lining.	(d) Replace transmission oil seal and brake shoes.
	(e) Bent or distorted drum.	(e) Replace brake drum.
	(f) Bent or broken brake shoe.	(f) Replace brake shoe.
	(g) Frozen brake pedal assembly.	(g) Lubricate and free up brake pedal assembly.
Overheating Brake	(a) Improper cable or brake adjustment.	(a) Adjust brake shoes and cable.
	(b) Broken or misaligned brake support spring.	(b) Replace or align brake support spring.
	(c) Broken or disconnected brake shoe return spring.	(c) Replace or align brake.
	(d) Missing brake shoe anchor retaining washer.	(d) Install new brake shoe retaining washer.
	(e) Bent or distorted drum.	(e) Replace brake drum.
	(f) Bent or broken brake shoe.	(f) Replace broken brake shoe.
	(g) Frozen brake pedal assembly.	(g) Lubricate and free up brake pedal assembly.
Brake Grabbing	(a) Improper brake or cable adjustment.	(a) Adjust brake and cable.
	(b) Oil soaked brake lining.	(b) Replace transmission oil seal and brake shoes. Clean off drum.
	(c) Loose brake drum.	(c) Tighten brake drum.
	(d) Loose or broken anchor pin.	(d) Replace anchor pin.
	(e) Warped or bent brake drum.	(e) Replace brake drum.
	(f) Scored or cracked brake drum.	(f) Replace brake drum.
Brake Chattering	(a) Improper brake or cable adjustment.	(a) Adjust brake and cable.
	(b) Oil soaked lining.	(b) Replace transmission oil seal and brake shoes.
	(c) Worn or distorted brake lining.	(c) Replace brake shoes.
	(d) Loose anchor pin.	(d) Replace anchor pin.
	(e) Scored or cracked drum.	(e) Replace brake drum.