

SUBARU

1400

DESCRIPTION

Subaru brake system consists of a hydraulically operated footbrake. All models except GL Coupe use a duo-servo, single anchor type front brake with self-adjuster. GL Coupe models use a front, single cylinder disc brake with self-adjuster. Rear brakes, on all models, are drum type with leading-trailing shoes. Parking brake operates on front brakes and is mechanically operated. A tandem master cylinder is located under the hood to supply hydraulic pressure. **NOTE** — Because the Subaru is front wheel drive, front brakes are mounted inboard to drive axle and are connected directly to differential carrier.

ADJUSTMENT

PEDAL FREE PLAY

Adjust brake pedal free play to .24-.55" (4-14 mm) by disconnecting wiring from stop light switch and turning switch.

FRONT BRAKES

Self-adjusting, no adjustment required.

REAR BRAKES

Raise vehicle and loosen lock nut. Turn adjusting wedge until wheel locks, then back-off adjuster until wheel is just free to rotate. Tighten lock nut.

PARKING BRAKE

Engage brake lever three serrations. Loosen cable lock nut and adjust turnbuckle for necessary cable length. Parking brake is correctly adjusted when ratchet travel is seven to eight serrations (floor shift, sedan & station wagon), twelve to thirteen serrations (column shift, sedan & station wagon) or eight to nine serrations (GL Coupes).

HYDRAULIC SYSTEM BLEEDING

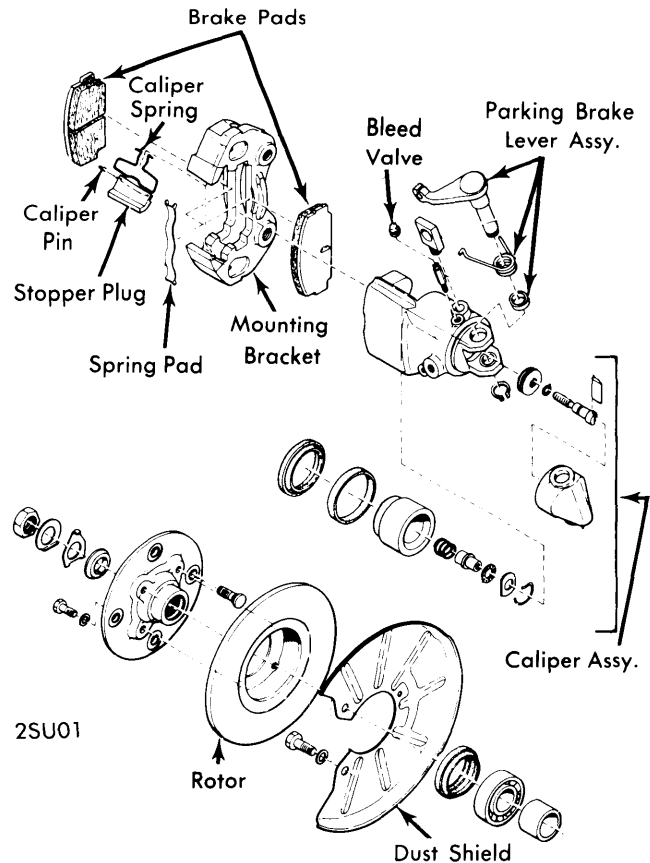
Begin bleeding with wheel furthest from master cylinder and end with wheel nearest master cylinder. With pressure on pedal, open bleed fitting and push pedal its full travel. When pedal is fully depressed, close fitting and let pedal return to fully released position. Repeat procedure until all air is bled from system.

REMOVAL & INSTALLATION

FRONT DISC BRAKE PADS

Removal — Disconnect handbrake cable. Remove pin and stop plug. Force caliper body from brake pad and lift-off pad. **NOTE** — It is not necessary to disconnect brake line to change pads.

Installation — Return piston to bottom of caliper bore by turning it clockwise with a screwdriver. Place new lining in position. Re-install stop plug and pin and connect handbrake cable.



FRONT DISC BRAKE ASSEMBLY

FRONT DISC BRAKE ROTOR

Removal — Remove wheel, handbrake cable, stoppers and calipers. Remove two bolts and lift off caliper bracket. Pull rotor from axle using suitable tool (925200000). Remove four bolts to separate rotor from hub.

Installation — To install, reverse removal procedure.

FRONT BRAKE DRUM

Removal — Remove wheel cap and loosen axle nut. Raise vehicle and remove wheel. Remove axle nut and pull off drum using suitable tool (925200000).

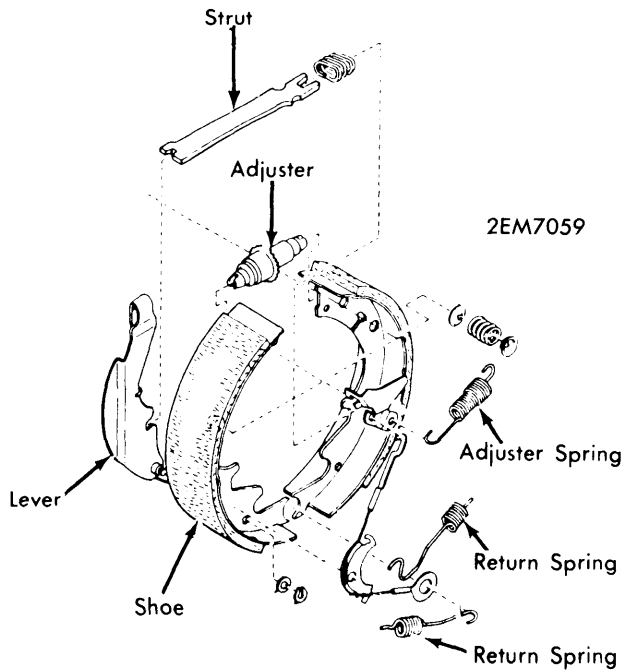
Installation — To install, reverse removal procedure.

FRONT BRAKE SHOES

Removal — Remove brake drum. Remove automatic adjuster spring and lever. Remove handbrake cable. Remove shoe return springs using suitable tool (925110000), then remove adjuster cable. Remove shoe set springs using suitable tool (925110000) and remove brake shoes.

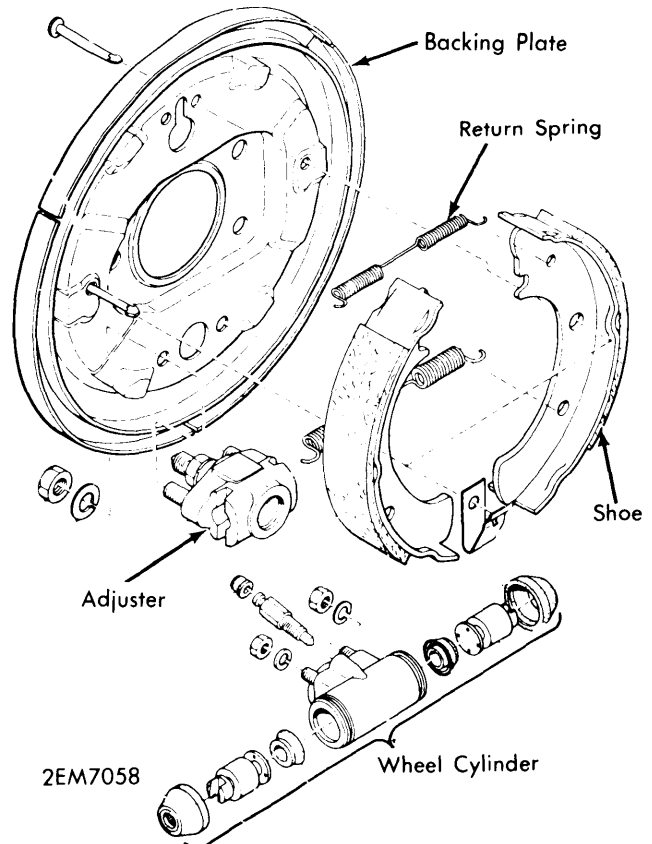
Installation — To install, reverse removal procedure.

SUBARU (Cont.)



FRONT DRUM BRAKE ASSEMBLY

Installation — To install, reverse removal procedure.



REAR BRAKE ASSEMBLY

REAR BRAKE DRUM

Removal — Remove wheel cap and loosen wheel nuts. Raise vehicle and remove wheel. Remove three cap bolts, washers, cap and stopper plate. Remove cotter pin and loosen castle nut. Remove brake drum using suitable puller (925240000).

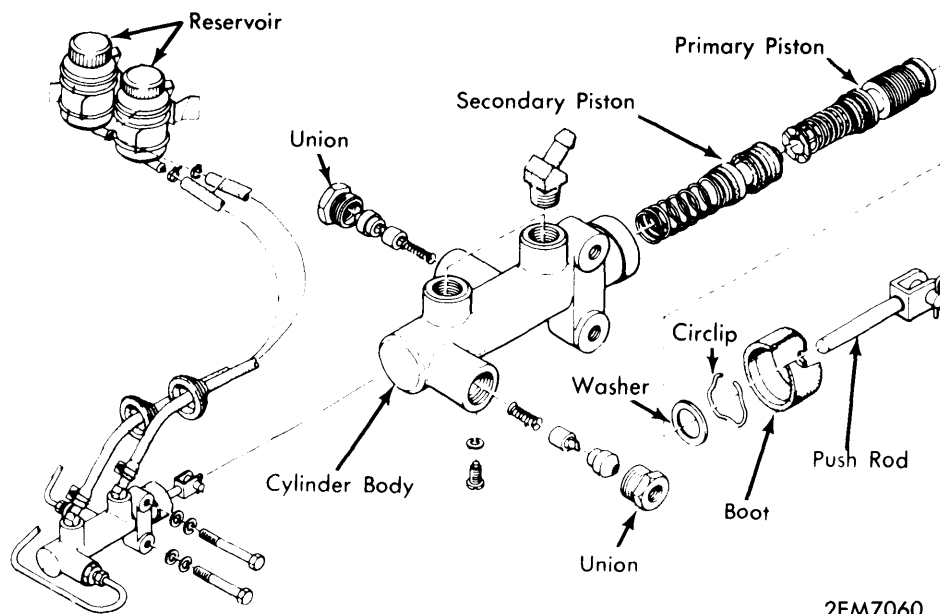
Installation — To install, reverse removal procedure.

REAR BRAKE SHOES

Removal — Remove brake drum. Remove three bolts securing back plate and remove brake assembly. Remove shoe setting spring and remove anchor side of shoe first.

MASTER CYLINDER

Removal — Remove nuts securing brake lines to cylinder. Remove nuts securing cylinder to firewall and remove master cylinder.



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TANDEM MASTER CYLINDER

SUBARU (Cont.)

Installation — To install, reverse removal procedure.

OVERHAUL**WHEEL CYLINDER**

Disassembly — Remove boot and take out wheel cylinder, taking care not to scratch cylinder bore. Also remove spring located in center of rear wheel cylinder.

Cleaning & Inspection — Clean all parts in brake fluid or alcohol. Inspect cylinder bore for smoothness and roundness. Replace cylinder if scored or out of round. Do not hone cylinder.

Reassembly — To reassemble, reverse disassembly procedure.

MASTER CYLINDER

Disassembly — Remove boot from cylinder, then remove stop ring and plate. Remove stopper pin and gasket, pull out primary and secondary piston assembly. Remove return spring, screw, retainer and secondary cup.

Cleaning & Inspection — Clean all parts in clean brake fluid. Inspect cylinder bore for smoothness and roundness. Replace cylinder if scored or out of round. Do not hone cylinder. Inspect piston-to-cylinder clearance and replace if worn.

Reassembly — To reassemble, reverse disassembly procedure.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Front Brake Mounting Bolt.....	30 (4.2)
Backing Plate Mounting Bolts.....	24 (3.3)
Drum-to-Double Offset Joint.....	54 (7.5)
Brake Lines.....	14 (1.9)
Wheel Bearing Nut.....	115-133 (15.9-18.4)

DISC BRAKE ROTOR SPECIFICATIONS

Application	Disc Diameter In. (mm)	Lateral Runout In. (mm)	Parallelism In. (mm)	Original Thickness In. (mm)	Minimum Refinish Thickness In. (mm)	Discard Thickness In. (mm)
Coupe	7.2 (184)39 (10)	.33 (8.5)

BRAKE DRUM SPECIFICATIONS

Application	Drum Diameter In. (mm)	Original Diameter In. (mm)	Maximum Refinish Diameter In. (mm)	Discard Diameter In. (mm)
All Models				
Front	9.00 [Ⓞ] (229)	9.00 (229)	9.08 (230)
Rear	7.09 (180)	7.09 (180)	7.17 (182)

[Ⓞ] — Coupe models use front disc brakes.

SUBARU (Cont.)

BRAKE SYSTEM SPECIFICATIONS				
Application	Drum Diam. In. (mm)	Wheel Cylinder Diameter		Master Cylinder
		Front In. (mm)	Rear In. (mm)	Diameter In. (mm)
All Models	9.00 ^① (229)	.938 ^② (23.8)	.678 (15.8)	1.16 (29.5)

- ① — Front drum. Rear drum is 7.09" (180 mm).
- ② — Coupe models use front disc brakes. Caliper bore diameter is 2.125" (53.9 mm).