

1963-73 MG MIDGET

Midget (1963-73)

DESCRIPTION

Midget brake system is made up of two independent circuits: a hydraulic foot brake and a mechanical hand brake. Hand brake is lever operated and, when set, locks rear wheels. Foot brakes are either leading-trailing drum type or dual piston caliper disc type. Rear brakes in all instances are leading-trailing drum type with manual adjusters. Master cylinder is tandem type with each of its halves feeding a separate circuit. There is a brake warning light located on instrument panel to indicate fluid loss in either side of master cylinder.

ADJUSTMENT

DISC BRAKES

Disc brakes are self-adjusting; therefore, no adjustment in service is required.

DRUM BRAKES

Raise and support vehicle and remove wheel to be serviced. Rotate drum until front hole and front shoe adjuster mechanism are lined up with each other. Use screwdriver or other suitable tool to turn adjuster wheel until brake shoe contacts drum. Back off adjuster until drum is just free to turn. Repeat adjustment on rear shoe adjuster.

PARKING BRAKE

Following procedure should only be followed after rear brake shoes have been adjusted: Set parking brake on third actuating notch and adjust sleeve nut on brake cable until drum can just be rotated.

BLEEDING SYSTEM

Begin with wheel farthest from master cylinder and end with one nearest it. Fit a hose to bleed fitting and submerge free end in a half-full container of brake fluid. Open bleed fitting and push pedal its full travel, letting it return slowly. After all air bubbles have stopped, close bleed fitting (pedal fully depressed). Repeat procedure at each wheel.

LINING REPLACEMENT (DISC BRAKES)

Removal – Remove tire and wheel. Depress friction pad retaining spring and remove cotter pins. Remove retaining springs. Carefully twist friction pads and remove damper shims. Lift out friction pads. Using a clean rag, wipe any foreign material from piston head and cylinder cavity.

Installation – Using suitable tool (18G-590), fully seat piston in cylinder bore. *NOTE* – Fluid level will rise during this procedure. Insert friction pads into caliper and ensure they have free movement. Install damper shims between pistons and friction pads. Fit pad retaining springs, press down spring and insert cotter pins. Install tire and wheel.

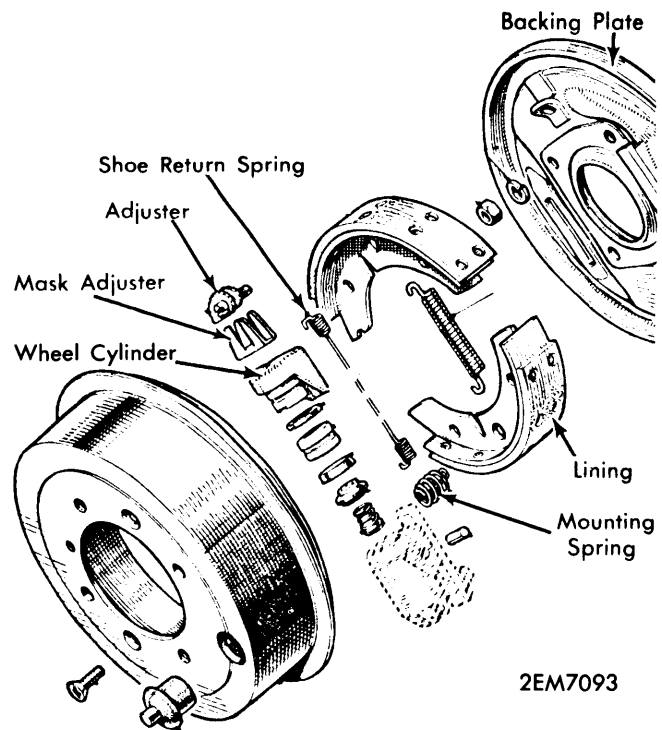
LINING REPLACEMENT (DRUM BRAKES)

Removal (Front) – Remove tire and wheel. Remove counter-sunk screw or nuts (wire wheels) holding brake drum and lift off. Pull brake shoe against tension of return spring freeing shoe from its position on wheel cylinder. Remove Micram adjuster. Disconnect return springs and remove both shoes and springs. Remove other shoe in similar manner.

Installation – To install, reverse removal procedure.

Removal (Rear) – Remove tire and wheel. Loosen brake shoes at adjuster and remove drum. Disconnect brake mounting springs. Pull trailing shoe against tension of return springs away from its abutment at either end. With return spring tension released detach mounting springs and remove both shoes. Remove Micram adjuster.

Installation – To install, reverse removal procedure. *NOTE* – Ensure adjuster is in slot in leading shoe.



REAR BRAKE ASSEMBLY

REMOVAL & INSTALLATION

BRAKE CALIPER

Removal – Remove tire and wheel. Remove friction pads. Disconnect brake caliper line. Remove nuts securing caliper hose mounting plate to caliper. Remove studs securing caliper to axle stud and lift off caliper.

Installation – To install, reverse removal procedure. *NOTE* – After reinstallation, bleed hydraulic system.

BRAKE ROTOR (DISC)

Removal – Remove tire and wheel. Extract friction pads and brake caliper. Remove dust cover cap, cotter pin, locking nut and washer. Withdraw hub assembly from axle, using suitable puller (18G-304 with adaptors 18G-304-F for standard wheels, or 18G-363 for wire wheels, early models, or 18G-1032 for wire wheels, late models). Remove bolts securing brake rotor to hub and remove rotor.

Installation – To install, reverse removal procedure.

MASTER CYLINDER

Removal (Midget Mk I) – Disconnect electrical leads from heater blower. Remove screws securing blower unit to firewall

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and lift from vehicle. Disconnect master cylinder brake lines. Remove bolts mounting master cylinder to firewall. Disconnect push rods at clevis pins on pedals (clutch) and lift out master cylinder.

Installation – To install, reverse removal procedure. **NOTE** – After reinstallation, bleed hydraulic system.

NOTE – Procedures for Midget Mk I are slightly different (see illustration).

Removal (All Others) – Remove pedal box lid. Disconnect hydraulic line from master cylinder. Withdraw cotter pin from clevis pin connecting push rod to brake pedal. Remove two bolts mounting master cylinder to pedal box and remove cylinder.

Installation – To install, reverse removal procedure.

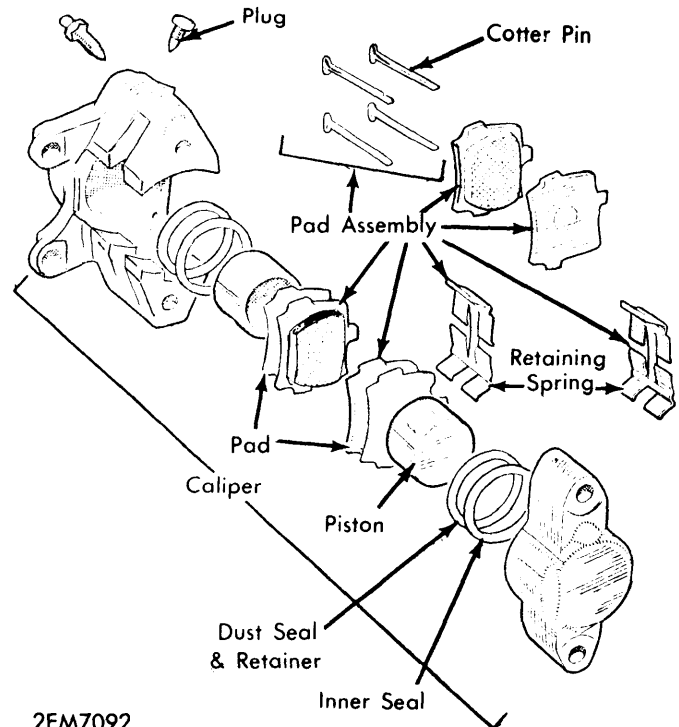
OVERHAUL

BRAKE CALIPER

Disassembly – Remove tire, wheel, friction pads and brake caliper as previously described. Clean outside of assembly. Reconnect fluid feed hose and support unit. Using suitable tool (18G-590), clamp piston in mounting half of caliper. Depress pedal until rim half has emerged enough to be removed. After withdrawing piston, pry dust seal retainer from caliper bore. Remove dust seal, being careful not to damage seal groove. Remove fluid seal from its position in caliper. **NOTE** – To remove mounting half piston, it is necessary to first refit lip half of piston.

Cleaning & Inspecting – Clean all parts in approved grade brake fluid. Inspect all components for rust, grooves or distortion.

Reassembly – Lightly coat all components with brake fluid. Seat new fluid seal into its groove. Loosen bleed fitting one turn. With notched portion of piston faced downward, insert it into cylinder so 5/16" of piston is protruding from bore. Fit seal and retainer on protruding portion of piston. Using suitable tool (18G-595), seat piston and seal. Retighten bleed fitting. Reassemble mounting half in similar manner.



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FRONT BRAKE CALIPER

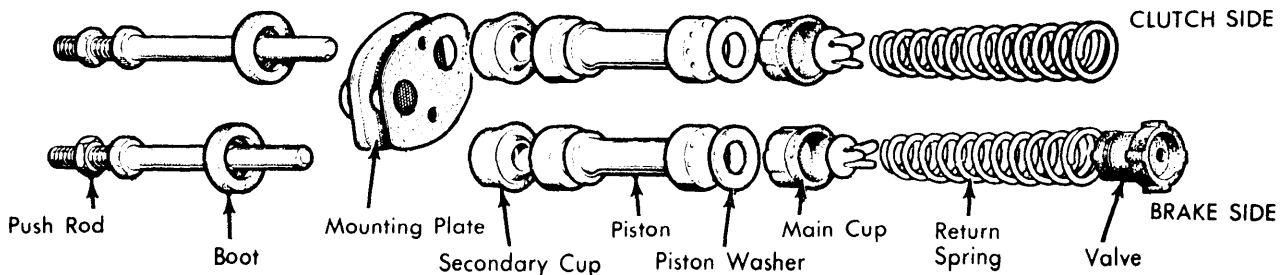
MASTER CYLINDER

Disassembly – Thoroughly clean dirt from outside of cylinder. Detach rubber boot and remove snap ring. Compress return spring and remove circlip. Move piston around in bore to free nylon guide bearing and cap seal. Remove bearing seal and plain washer. Remove inner circlip. Withdraw primary and secondary piston assemblies complete with stop washers. When component parts have been removed, they can be further disassembled.

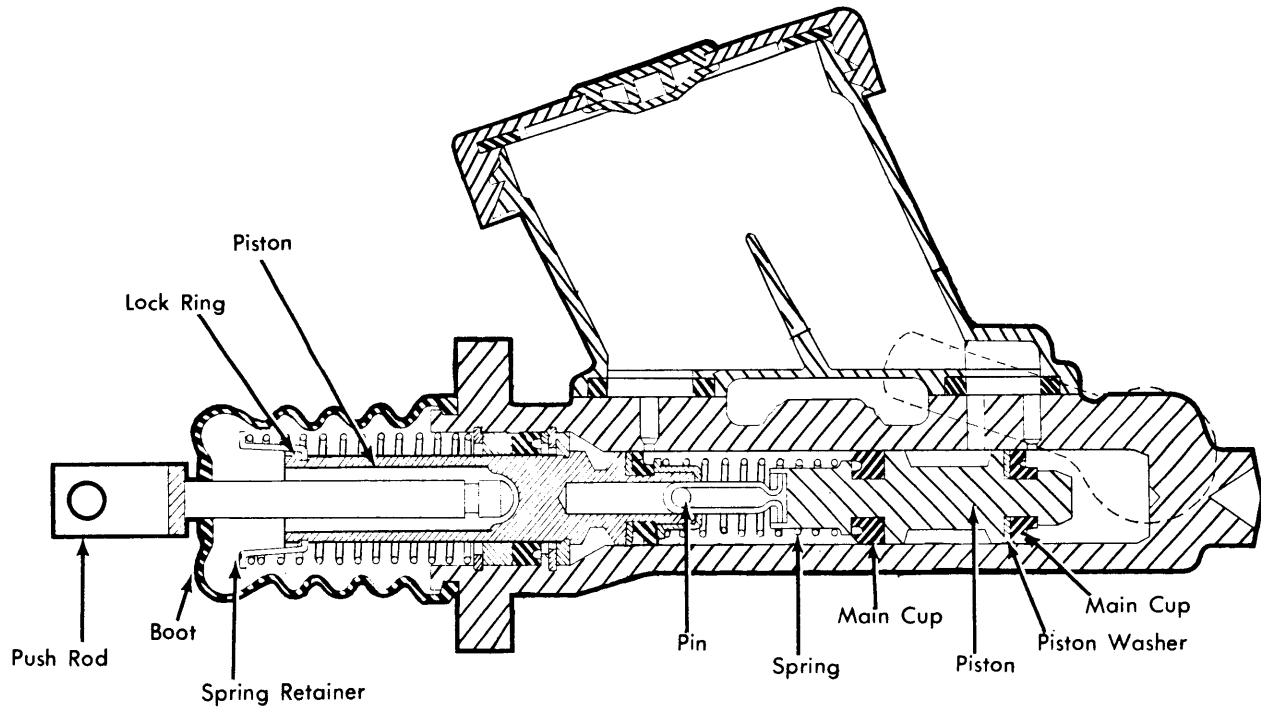
Cleaning & Inspecting – Clean all parts in approved grade brake fluid. Examine all components for signs of rust, grooves or distortion. Replace any parts found out of tolerance.

Reassembly – To reassemble, reverse disassembly procedure.

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MASTER CYLINDER
(MIDGET Mk I)

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**MASTER CYLINDER
(ALL OTHERS)**