

Tech Tip L-TT-0027-10

October, 2010

Best Practices for Brake Fluid

USA

Service Category

Pre-Delivery Service

Applicability All Models

APPLICABLE VEHICLES

All Models

CONDITION

Brake fluid is hygroscopic, meaning it can absorb moisture from the air over time. Excess moisture in the brake fluid reduces the average boiling point of the brake fluid and may decrease braking efficiency.

Section

Rubber seals in brake system components are designed to function correctly when interacting with the correct brake fluid as recommended by the vehicle manufacturer.

Brake system rubber seals are not compatible with petroleum based fluids. Interaction with petroleum based fluids, even in trace amounts, will cause the rubber to soften and swell, decreasing braking efficiency and / or creating brake fluid leaks (caliper piston seals, flex hoses, master cylinder rear seal into brake booster, etc...)

Incorrect vehicle brake system maintenance and brake fluid handling / storage may allow brake fluid to become contaminated.

Follow the recommendations below when servicing brake systems or storing brake fluid to ensure brake fluid remains fresh and clean.

RECOMMENDATIONS

NOTICE

Use of brake fluid not in accordance to the recommendations listed below may allow moisture, debris, petroleum based fluids, or other contaminants into the brake system, which may damage brake system components and decrease braking efficiency.

- 1. Follow the manufacturer's recommended maintenance schedule for brake fluid inspection.
- 2. ONLY use high quality brake fluid: Toyota brand brake fluid or equivalent
- 3. When possible, use a NEW, unopened bottle of brake fluid for brake system bleed or part replacement procedures.
- 4. Properly dispose of any brake fluid that is recovered from bleed procedures, that is not in a sealed container, that is mixed with any fluid, or for which the age is unknown.
- 5. Clean the exterior of the brake system components prior to service to prevent contaminants from mixing with the brake fluid, i.e. bleeder screws, banjo fittings, and master cylinder reservoir cap.
- 6. Directly pour brake fluid from the original container into the vehicle's brake system.
 - a. Avoid the use of funnels or hoses when adding brake fluid to a vehicle's brake system (even if they appear clean)
- 7. Keep petroleum based products away from all rubber components when servicing brake systems.
- 8. When bench bleeding brake master cylinders, do NOT direct brake fluid from output port lines back into the brake master cylinder reservoir.
 - a. Direct brake fluid into a separate container (even when using new, clean bleeder plugs / hoses). Do NOT refill brake master cylinder with brake fluid cycled during bleeding process.
 - b. Always maintain proper brake master cylinder fluid level using ONLY NEW brake fluid.



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Market

All Models

RECOMMENDATIONS

Refer to the following if using brake fluid from a previously opened bottle to ensure only clean, fresh brake fluid is used:

- 1. Store brake fluid ONLY in its original container with a cap that seals properly to prevent moisture absorption.
- 2. Do NOT refill brake fluid containers.
- 3. Do NOT mix brake fluid with ANY fluid, including other brake fluids from partially filled bottles.

LINKS

Policy 7.6: Parts Reimbursement