

Service Information
for

TRAILER
Buddy[®]
DISC BRAKES
MODEL DB35



TRAILER
Buddy[®]
PRODUCTS BY UFP
San Marcos, CA • Winchester, TN

TRAILERING WITH DISC BRAKES

Disc brakes offer several advantages over drum brakes that you will appreciate. Disc brakes have improved resistance to fade on downhill grades. They are self adjusting, so as pads wear, braking efficiency is not reduced. They recover quickly after being submerged. They require less maintenance, are easier to flush out, and are less susceptible to water induced corrosion.

Your trailer's brakes are designed to energize automatically when the tow vehicle's brakes are applied. These are known as "surge brakes". When the vehicle slows down or stops, the forward momentum (surge) of the trailer against the hitch ball develops hydraulic pressure in a master cylinder inside the trailer brake actuator. Hydraulic lines are used to transfer pressure to the brakes and engage them.

Follow the tow vehicle manufacturer's guidelines with respect to towing capability, hitch requirements, and other towing considerations.

OPERATING TIPS

Check Your Brake System Before Each Trip

1. Follow the pre-towing instructions that came with your actuator.
2. Make sure there are no leaks in the hydraulic system.
3. A surface rust will build up on the rotor brake surface if the trailer isn't used for a week or more. The brake pads will wipe off the rust in the first few miles of travel. If the trailer has been idle for several months, or has been frequently submerged in salt water and the brakes not flushed out, severe corrosion can occur. Review the maintenance instructions in the following section.

When Starting Out

1. The trailer should tow easily. If it seems hard to pull or wants to swing toward one side, a rotor may not be rotating freely. Investigate and solve the problem.
2. Try your brakes at slow to moderate speeds and develop the "feel" to sense they are functioning properly.

On The Road

Drive carefully, obey speed limits and don't follow too closely. When towing a trailer, even with brakes, you will need extra distance to stop. Allow for it.

On long, gentle downhill grades, try to avoid downshifting. Running in a low gear (which uses the engine as a brake) can actuate the trailer's surge brakes continuously for the duration of the grade, causing them to overheat. A better procedure is to slow down before the start of the downgrade run and maintain a controlled downhill speed with repeated application and release of tow vehicle (and thus trailer) brakes. This technique permits the brakes to cool down between applications. This will help ensure reserve braking capacity in an emergency.

On moderate and steep sections of road, downshifting into lower gears may be necessary and desirable to help control speed. Again, slow down before the grade and keep vehicle speed under control. Do not stay on the brakes continuously because they can overheat. Don't hesitate to pull over when possible during or after severe braking situations to let everything cool down.

Running a stretch of highway where you don't brake is the quickest way to cool down the brake system because a high volume of air flows thru the vented rotors and over the brake pads to cool them.

If you decide that stopping capability is not what it should be:

1. Have the tow vehicle and trailer brakes checked for proper operation.
2. Review tow vehicle manufacturer's recommendations and instructions for towing.
3. If the trailer has only one set of brakes, consider adding a second set.

Towing conditions, tow vehicle/trailer combinations impose many variables. Make sure your outfit is safe and that you feel comfortable with your particular circumstances before you begin your trip.

Before Launching

If the brakes are hot, it is a good idea to let them cool down. The sudden change in temperature when submerging very hot calipers and rotors stresses all parts and could cause damage.

Upon Return Home

If you have been into saltwater, flush rotors and calipers thoroughly with fresh water to minimize subsequent corrosion.

Back-up Feature

We offer an electrically operated valve that is mounted on the actuator and is connected to the tow vehicle back-up lights. Whenever they are energized, the valve opens and prevents pressure buildup in the system. Otherwise, you could not back up. Most trailer manufacturer's use this valve.

If you try to back up and can't, check the valve. When it is energized (by shifting into reverse) you can hear a noticeable "click" sound. If you don't, check for an electrical problem.

Storage

Whenever you park the trailer, make sure the actuator is fully extended. This position relieves pressure on the brakes. Actuators sometimes freeze up in the compressed position from corrosion. The next time out, the brakes will drag and overheat.

ROUTINE MAINTENANCE

Hose Them Off

If you have been in saltwater, the single most important maintenance step for disc (or drum) brakes is to flush them thoroughly with fresh water.

Watch For Corrosion

Light surface rust on rotors is common and not a problem as discussed elsewhere.

Extremely thick, heavy rust on rotor surfaces will not allow the wheel assembly to rotate freely, resulting in heat build-up and premature wear on components. Clean or replace components as necessary.

We recommend you check for rust damage at least annually. More frequently if used in very humid environments, or in saltwater.

Pad Wear

Pads must be replaced when 3/32' (.094') or less of the pad friction material is left.

 **WARNING:** If you are not familiar with disc brake pad replacement, have this work performed by a qualified service shop. Improper pad replacement may decrease braking effectiveness, potentially causing an accident from not being able to stop the tow vehicle combination within an acceptable distance.

Rotor Damage

Rotors should be resurfaced by a qualified brake specialist if extreme galling or wear marks are present.

 **WARNING:** Rotors must be replaced if the distance between brake surfaces becomes less than 0.670" (17.0mm) due to wear or machining. Otherwise, brake effectiveness and rotor integrity will be reduced resulting in loss of brakes.

Check pad and rotor condition at least annually.

Actuator and Hydraulic Line Service

Follow actuator manufacturer's suggested service routine. Always be sure hydraulic fluid is clean. Be sure that fluid level is within 1/2 inch of top of reservoir. **Do not** fill beyond that level. Brake systems use DOT 3 hydraulic fluid. Check for leaks in the brake lines and fittings. Leaks will lead to loss of trailer braking ability. Repair or replace as necessary.

Replacement Parts

All replacement parts can be purchased from the trailer manufacturer or UNIQUE FUNCTIONAL PRODUCTS. Replacement pads, pistons and dust boots can also be purchased from auto part stores:

<u>YEAR</u>	<u>MODEL</u>
1997-2000	Kia Sephia

NOTE: Use only organic, non-metallic pads. Metallic pads will rust and depreciate rotor surface.

ITEM NO.	PART NO.	QTY./AXLE	DESCRIPTION
1	41050	2	CALIPER BODY COMPLETE
2	33061	2	BLEEDER SCREW
3	32307	2	BANJO BOLT
4	32275	2	BANJO FITTING – SINGLE PORT
5	32230	4	COPPER WASHER
6	32408	4	7/16" STAR WASHER
7	33090	4	7/16"-20 x 1" HEX HEAD BOLT* w/ LOCTITE
8	33003	4	PAD SEAT
9	33009	2	BRAKE PAD – INNER, WITH CLIP
10	33008	2	BRAKE PAD – OUTER
11	33006	2	ANTI-RATTLE CLIP
12	-----	2	DUST BOOT**

* When installing (7/16"-20) bolts apply Loctite # 242 and torque to 55 ft. lbs.

** Dust Boot automotive replacement: Kia# OK240-3324Z, 1999-2002 Kia Sephia- Front

Note: When mounting caliper, make sure bleeder screw is on TOP.



