



BRAKES

ENGINEERED SOLUTIONS

Bulletin BES 19-02

Subject: Premature brake wear, dragging brakes, overheating brakes, noise

Vehicles Involved: All

Condition: Internal Brake Hose Issue

Repair Procedure: If a vehicle exhibits one or more of the following complaints, brakes dragging, premature brake wear or overheated brakes, the technician may replace the caliper to correct the problem. The caliper may actually be the problem but many times the brake hose is the root cause. The brake hose may be internally collapsed allowing high pressure fluid from the master cylinder to apply the brakes but not allow the square seal in the caliper to flex back and return piston. This check valve issue can be hard to diagnose even when bleeding. Figures 1 & 2 show the hose cut in half and a paper clip attempting to be pushed thru. The paper clip could not be pushed all the way in. In this case the metal crimp may have rusted and actually choked the rubber hose. This hose came off a Ford Escape that had new calipers installed for a brake overheating complaint. Needless to say, the vehicle returned in a day or two with the same problem. To sum it up, don't guess or go with the most popular repair. A thorough inspection that included having an assistant apply the brakes while you watch for proper caliper operation could have prevented this "come back".



Fig 1



Fig 2