

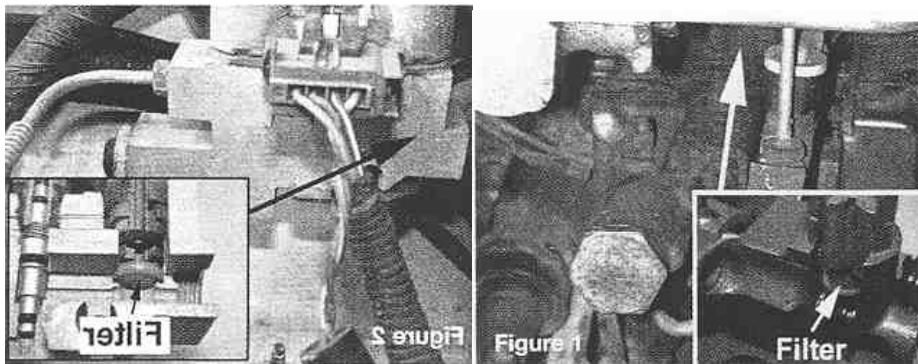
**Bulletin BPI 05-09**

**Subject:** RWAL/RABS Valves Restricting Fluid Flow To The Rear Brakes

**Vehicle Involved:** Kelsey Hayes Rear Wheel ABS Systems, 1987 and Newer

**Condition:** Restricted fluid flow to the rear / rear brakes will not release. These conditions may create symptoms of premature front pad wear or possibly premature rear friction material wear.

**Repair Procedure:** Kelsey Hayes rear wheel ABS valves are equipped with a fine screen inlet filters shown in Figures 1 & 2.



These filters clean the fluid passing through the valve and are subject to restrictions or plugging as the result of sludge and corrosion that can build up in the hydraulic system. This restriction can lead to little or no fluid flow to rear brakes or result in the rear brakes not releasing on vehicles equipped with the RWAL or RABS ABS system.

When the inlet filter becomes restricted it can result in a number of different symptoms. Limited fluid flow to the rear brakes will produce reduced braking ability, which can result in overworking the front brakes and premature wear. The filter can also cause the rear brakes not to release fully, if it restricts the fluid flow back to the master cylinder. This can result in rear brake drag on one or both rear brakes. Whether the drag occurs on one or both depends on how evenly the rear brakes are adjusted.

No fluid flow or restricted fluid flow to rear brakes. To diagnosis this problems perform following steps.

Confirm the problem of fluid flow at the rear bleeders.

Loosen the outlet line at the RWAL/RABS valve and check the amount of fluid flow. If it is good, the rear hose may be restricting the fluid flow. If it is bad, crack and monitor fluid flow at the inlet fitting. If the flow is good the filter screens are blocked inside the valve and the valve must be replaced.

Rear brakes will not release. Duplicate the rear brake drag problem.

Loosen the inlet line into the valve, if the brake drag releases the problem is upstream in the hydraulic system, possibly the combination valve, or a blocked compensation port in the master cylinder.

If the drag continues, crack the valve outlet fitting, if the brakes release the valve is internally blocked and requires replacement.

You can diagnose the rear brake hose as a possible cause by opening either rear bleeder screw. If the rear brakes free up, then the rear hose has a condition that is blocking fluid flow.