SVX Transmission Problems

Within the forums, the only component which has been reported as proven to fail is the high ratio clutch pack. All other suggestions amount to conjecture. Heat as such does not cause the clutches to fail. Localised heat is generated by friction if and when the clutches start to slip.

Clutch closing pressure depends on proper line pressure. If the closing pressure is inadequate the clutch slips, ongoing friction creates heat and the clutch becomes destroyed. The SVX transmission was one of the first to be electrically and electronically controlled. Mechanical operations are completely dependent on line pressure, which therefore must be maintained at a correct level and significantly this pressure depends on the proper functioning of a single very much overworked component.

Trouble as is usually experienced commences with transmission slippage and or the system becoming locked in limp, or get-yo- home mode. The latter restricts the gear selection to the lower ratios as a means reducing the torque load. At this point owners will seek the services of a transmission specialist and a set of circumstances resulting in spiralling costs commences. In the event that the car continues to be driven and is not immediately laid up the, friction surfaces and in particular the high ratio clutch plates will likely become worn beyond repair.

Unfortunately in the modern world, the extent of most technicians ability is confined to replacing defective components and the immediate reaction will be to advise that a complete transmission overhaul will be involved. The existence of profit motive surely does not require explanation. N.B.The official manual advises that the first point of diagnosis involves the simple testing of line pressure and the transmission is provided with an easily accessible port for this exact purpose. Even so, very few workshops have a suitable pressure gauge on hand. The SVX test port has a 10 x 1 mm straight thread and an adaptor can be easily made up.

The all important SVX transmission line pressure is regulated by means of pulse width modulation (PWM), achieved by means of a simple normally open solenoid valve designated “A” controlled by a computer module. In the event that this valve does not close properly, line pressure will fall below the required level.

When the car is running the valve operates continually at a rate of around fifty times every second, i.e. at a severely arduous duty rate. Unfortunately a dedicated solenoid was not selected for this purpose and the same item is used as for other simple control functions. Therefore solenoid valve “A” has a strictly limited life and this calls for replacement at regular intervals.

In the event that imbedded foreign matter prevents the valve closing properly, or causes damage to the valve seat, there will be a similar outcome.

“**If all else fails read the instructions**” is longstanding worthy advice which should be abided by in respect of the SVX transmission. The instructions within the manuals covering transmission diagnostics, clearly advise as a first step to first check the line pressure. In the event of low line pressure, the next step should be to drop the oil pan and remove the valve body whereupon solenoid A can be examined and any adjacent filter checked.

It has been reported that early models are more prone to the problem than later examples. As a result of detailed research, the writer turned up some very interesting a pertinent information covering a small filter adjacent to solenoid A. This could indicate a fault which was corrected in later models but was never disclosed due ramifications calling for an extensive recall of cars for an expensive modification. A text has been prepared to cover the subject and should be referred to.