



Technical Service Information

SATURN MOVES FORWARD ALL GEAR SELECTIONS REVERSE AND/OR FORWARD WITH THE SELECTOR IN PARK OR NEUTRAL

COMPLAINT: There are currently 3 different design levels of the Manual Valve, and 2 different design levels of the Manual Valve Link, that can create the complaints listed above if they are installed wrong, and/or parts mis-matched.

The vehicle moves forward in all selector lever positions, including Neutral, and tries to move forward in Park, on all late 1992 and all 1993 model Saturn transaxles that use the 2nd design Manual Valve.

CAUSE: The vehicle tries to move Forward and/or Reverse with the selector lever in Park, and can move unexpectedly Forward and/or Reverse with selector lever in Neutral, on 1993/1994 Saturn transaxles.

2nd design Manual Valve installed improperly with the "Notch" facing down towards the case. The "Notch" MUST face up towards the top pan (See Figure 1).

1994 (3rd Design) Manual Valve used with a 91-93 "Stamped Form" Manual Valve Link, that allows extra play in the shift linkage because of mis-matched parts. Refer to Figure 2 for dimension differences

CORRECTION: On ALL 1991 to 1993 models, remove the valve body and orient the Manual Valve with the "Flat" (1st Design) or "Notch" (2nd Design) on the Manual Valve facing UP TOWARDS THE TOP PAN, as shown in Figure 1. Reinstall the valve body and torque to proper specifications.

Install the proper design level Manual Valve Link with the matching Manual Valve. Functionally, the 1994 (3rd Design) Manual Valve is the same as the late 1992 and 1993 (2nd Design) Manual Valve. There are two different stem diameters on the Manual Valve Links, where it goes into the manual valve.

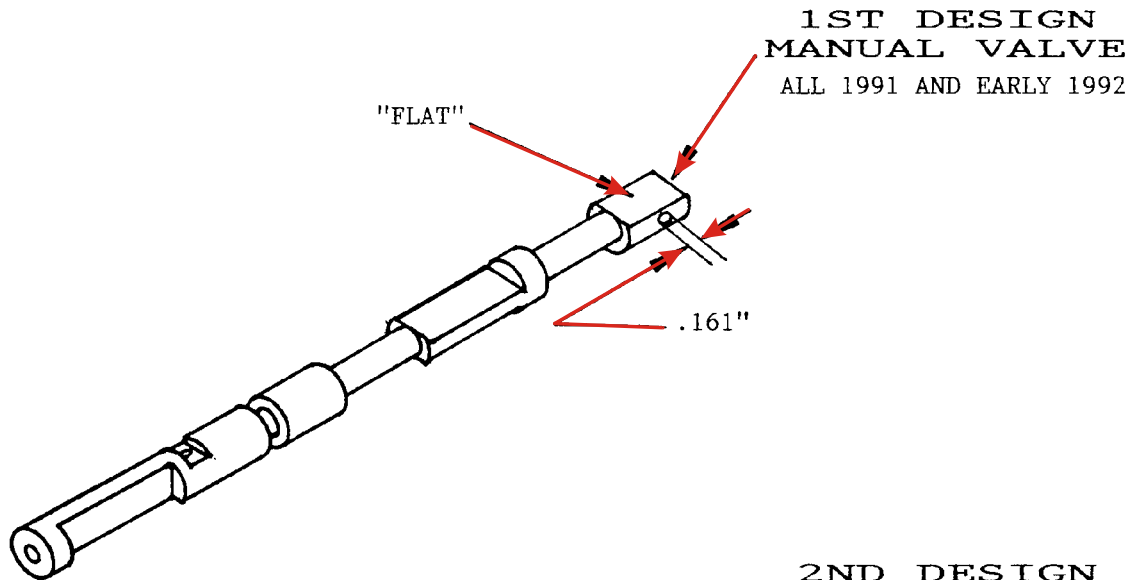
1st design "Stamped Form" Manual Valve Link is used on all 91-93 models, and the stem diameter is .153" (See Figure 1).

2nd design "One Piece Wire" Manual Valve Link is used on all 1994 models, and the stem diameter is .194" (See Figure 2).

As a result of the change to the Manual Link, the hole in the Manual Valve also had to increase in diameter from .161" to .202", to accommodate the 2nd design manual link (See Figure 2).

There was also a plastic cap added to the 1994 (3rd Design) Manual Valve as an assembly aid to prevent the manual valve from being installed to the manual link backwards (See Figure 2).

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"FLAT" OR "NOTCH MUST BE
INSTALLED FACING UP TOWARDS
THE TOP PAN.

