valves are now available as are NOS valves. However some NOS valves are now quite old (the "O in NOS - new old stock) and have prematurely failed belching coolant on to the top of the engine. If you do not replace the valve with an original type but use a right angle pipe fitting you will not be able to shut the heater off — i.e. you will always have hot water flowing thru the heater core. There are aftermarket right angle pipe fittings that have an integral manual shut off valve which will provide you with hot water control if you don’t mind getting under the hood to regulate the heater.

If there is no vacuum at the hose mentioned above now is the time to check out all the vacuum hoses for leaks, cracks, etc. However, if you want to check out the water control valve first, just run a spare piece of vacuum hose from the fuel pump metal vacuum line directly to the valve. If the valve is working properly, it will open when vacuum is applied to it and hot water will flow to the heater core. (This is an easy way to get the heater working in an emergency but the wipers will not function unless you tee into the vacuum line.) Check the vacuum lines for cracks starting at the line coming from the top of the fuel pump tracing all the way back along the system. When you reach the tee under the dash you should have vacuum at both ports. Check the short vacuum line leading to the wiper motor. When you reach the temperature regulating valve you probably will find the problem. This valve is a frequent source of trouble. Bypass the valve by connecting the in and out vacuum lines together with a short length of tubing and check the vacuum line's condition leading to the water control valve. If all the lines are in good shape and all the connections are tight you should now have vacuum at the water control valve.

This means the bypassed temperature regulating valve is at fault. I believe these valves are being reproduced and some NOS and used valves are also available. Replace the valve and you have solved the lack of heat problem.

**Note:** An alternate solution to a heater control problem (if your T’Bird is a driver and not a Concours car) is the replacement of the troublesome vacuum valve system with the mechanical activation kit offered by CASCO. This kit is an inexpensive, easy to install conversion that will not detract from the Thunderbird. It uses the original dashboard heater control slide panel, locates a small manually controlled valve inconspicuously in the engine compartment and may be removed at a later date if the return to 100% originality is desired.

*Barry Thomas*
*North Reading, Massachusetts*