

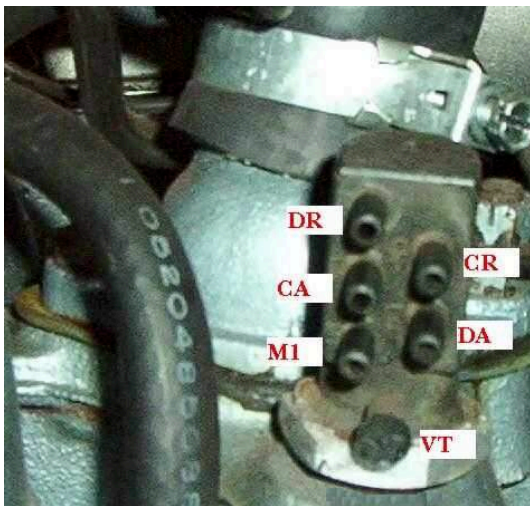


Vacuum Hose Routing

Home

There seemed to be a lack of official GM information regarding the vacuum hose routing of the TVS (thermostatic vacuum switch) to distributor system for the 1st Generation Pontiac Firebirds. As a reoccurring question of discussion on the 1st Gen Firebird web site, I had looked at my '68 400HO with AT which I believed to have the correct connections. After all, it has run well for years. As I collected diagrams, descriptions and pictures of similar '68's with V8 AT I found them differing from each other. So, I set out on a quest to find correct information about the subject.

The logical place should be the '68 Pontiac Service Manual or the Pontiac Parts Book. Neither had any definitive information. I checked with a couple major 1st Gen Firebird parts vendors and a Pontiac expert. Again no luck. On the internet, some good information on vacuum advance/retard could be found, but not specific diagrams. I emailed a manufacturer of replacement TVS's and they had nothing. Finally, I found a Chiltons Firebird 1967-81 Repair Manual which includes vacuum diagrams at the local library. Later, to take a picture of the TVS, I removed the vacuum harness from my TVS and found the answer was possibly there all the time. Instead of port numbers as I had expected, each port was stamped with a two letter abbreviation of it's destination. DOH! (Now I understand what one of the 1st Gen Firebird FAQ's was saying.) I have already switched two connections on my car that long ago were reversed.



TVS Port Id

DR - Distributor Retard

CA - Carb Advance

M1 - Manifold

CR - Carb Retard

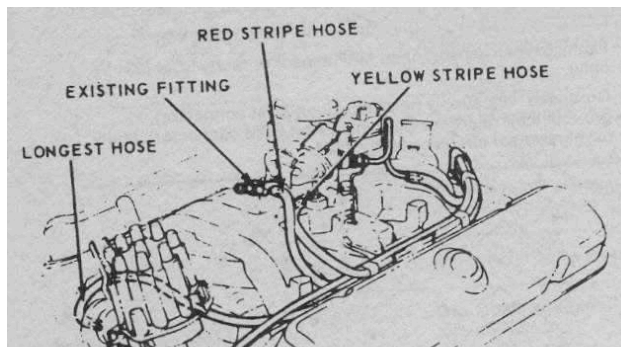
DA - Distributor Advance

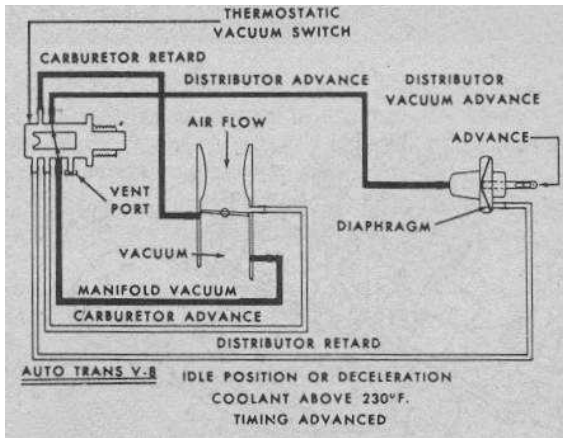
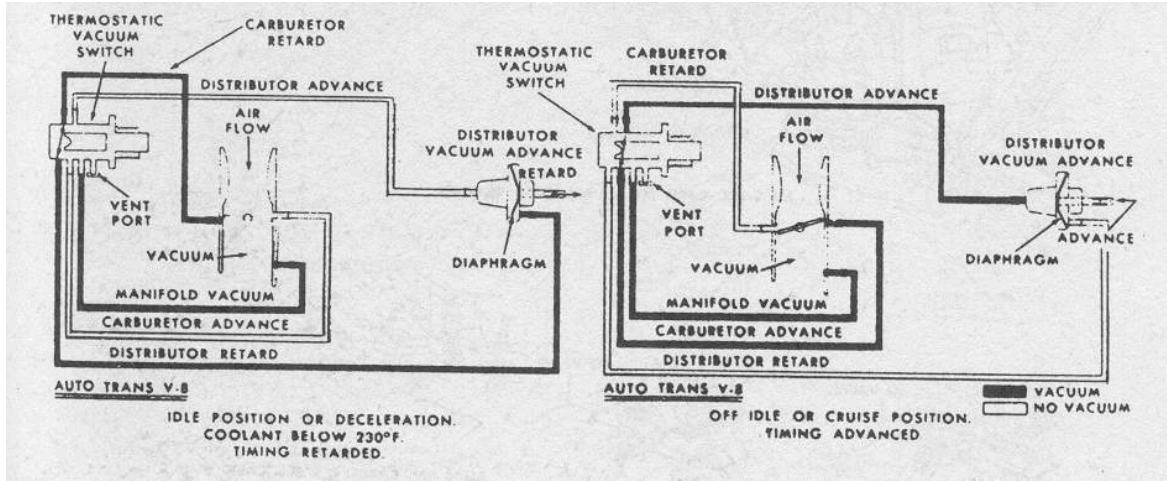
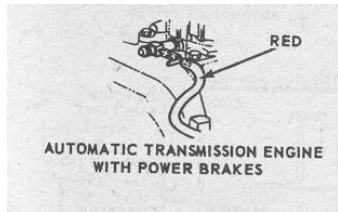
VT- an unknown plugged port (vacuum test??)

I ran a quick test to see how the ports are connected internally. Though I'm not sure of the accuracy, when cold, DR to CR and CA to DA is activated. When hot, CA to CR and M1 to DA are activated.

The following diagrams are from the Chilton Firebird 1967-81 Repair Manual, 1997 Chilton Book Company.

Note that these diagrams are for the 67-69 Firebird dual acting distributor system of V8's with automatic transmission. And they do not reflect changes for the [Pontiac Service Bulletin 68-T-2](#)





Links

- [Geeb's Home Page - Distributor and Timing Paper](#) A good discussion of vac adv and timing
- [1st Gen Firebird FAQ](#) The best single source of 1st Gen Firebird information, including distributor vacuum - and a new posting of all the vacuum diagrams from the Pontiac Diagnostic Manual
- [Generation-1 1967-69 Firebird Registry](#) 1st gen Firebird manual trans vac pictures