

Distributor Vacuum Hoses - Where Do They Go?

by Jim Thompson

Over the years, many a 71-74 Beetle and 71 Bus with Dual Diaphragm Distributors have graced my doors and about half the time the vacuum lines are backwards. So here's the poop:

First, take a look at your Vacuum can. On the flat side of the can is a hose fitting - for the larger (4.5mm GREEN) hose. This is the RETARD side.

Second, on the cone (or rounded) side of the can is the smaller hose fitting. This uses a 3.5mm hose, usually black. This is the ADVANCE side.

Third, look at your 34PICT Carburetor. The fitting on the LEFT side of the carb is for the ADVANCE side of your Vaccum can. Connect appropriately.

Fourth, look at your 34PICT Carb again. On the rear (RIR) of the carb should be a fitting up towards, but not on the carburetor top. This push-on fitting is just slightly larger than then one on the side. This is for your RETARD side of your Vacuum can. Connect appropriately with the 4.5mm Green Hose.

Fifth, Any other fittings on your 34PICT Carb are for the infamous Throttle Positioner sometimes improperly called a "Decel Valve". The fitting for this jewel is an angled one right at the rear base of the carburetor. Connect the small vacuum hose to it to the Throttle Positioner Diaphragm Fitting. If your Throttle Positioner has two fittings (as original on 71 Buses, 71-74 Beetles), connect another length of 3.5mm vacuum hose from that to the Throttle Positioner Solenoid, usually located in the left side of the engine compartment. If you don't have the Throttle Positioner, cap off all the remaining fittings on your carburetor.

If you're running one of those new replacement H30/31PICT carbs, the procedure above is the same as they come with these fittings like their distant 34PICT cousins. Original 30PICT Series did not have the RETARD fitting, except for Beetle Auto-Suck Models - BUT - this fitting was for the Auto-Suck Solenoid, not the distributor because they were still single vacuum models (Actually, the Auto-Suck use a combined

Timing is usually 5 degrees AFTER Top Dead Center when using a Dual Diaphragm Distributor, give or take a degree or two - no two engine setups or running conditions are the same, so you'' have to fool with with of course. One other thing - Strobe Light at idle speed with the hoses CONNECTED. Sorry, no static timing with these, except to initially set the distributor at 0 TDC, start the engine, then strobiscopically time it after it warms up.

For those wanting to put a stock push-pull distributor back on their 71 Dual Port 1600 with a 34PICT (or other Bus with the same arrangement, here's the skinny on interchangeable distributors. All have the same Advance/Retard Curve specifications:

Vacuum: 2-5deg Adv @ 6.7 In. Hg, 11-13deg Ret @ 9.1 In. Hg Centrifugal Advance: 6-12deg @ 1500rpm, 22-25deg @3800rpm

Distributors:

211-905-205Q * 0231 167 055 (Stock T2 '71)

211-905-205S * 0231 173 001 (Stock T2 '71)

Note: Originally equipped w/Speed Limiting Rotor, but can use a regular 04 033 Bosch Rotor)

113-905-205AH * 0231 167 053 (Beetle Auto-Suck 71-73)

043-905-205D * 0231 176 033 (Beetle Auto-Suck Calif. 1974)



