

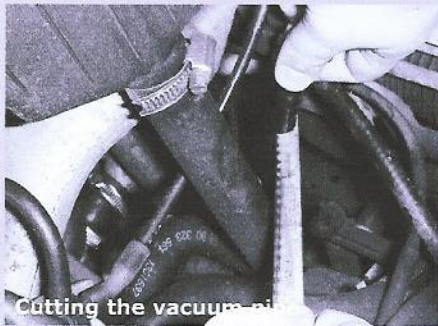
MIG Product Test - CB-26P Ecotek Valve

The CB-26P, commonly referred to as the Ecotek valve, claims to reduce emissions and improve fuel economy. After seeing many posts on MIGWeb by users asking whether this product worked or not, I felt it was time to do a proper test and find out once and for all.

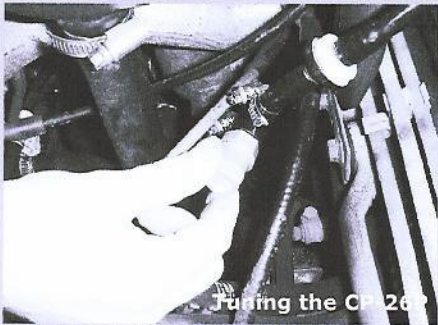
The valve is designed to regulate un-metered air into the inlet manifold via the vacuum pipe. This leans the mixture, but the extra turbulence in the inlet manifold causes a cleaner burn, so the leaner mixture does not adversely effect the engine.

The test car was my 1996 Astra Mk3 Sport 1.8 16v. To be fair, this car already has good economy and clean exhaust emissions. If the CB-26P can make a noticeable difference here, then it should also show a difference on most other engines too.

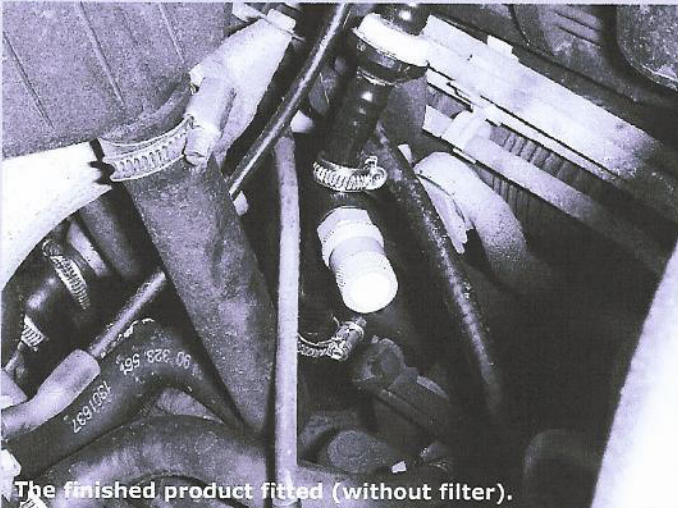
Fitting was easy - the unit comes with detailed instructions so I will not go into the fitting details in this article. Just be careful not to cut yourself while cutting the vacuum pipe - as I managed to do!



Cutting the vacuum pipe



Tuning the CB-26P



The finished product fitted (without filter).

Once fitted it needs to be adjusted correctly. Follow the instructions carefully at this stage as a badly set-up CB-26P will not deliver the goods. Once mine was set-up correctly there was a bit more induction noise, but it was not too intrusive. Inside the car it was not noticeable even with the stereo off. I also had a CB-26P silencer, but I left this off for the initial test. Fitting the filter did reduce overall noise produced by the valve.

With the valve in place, driving felt largely unchanged. It is easy to be tricked psychologically into thinking there are differences in the way the car feels - cleaning your car can have the same effect. If I was pressed to state perceived improvements, these would be that the engine takes slightly longer to spin down - this makes for smoother gear changes, also there does seem to be slightly better throttle response.

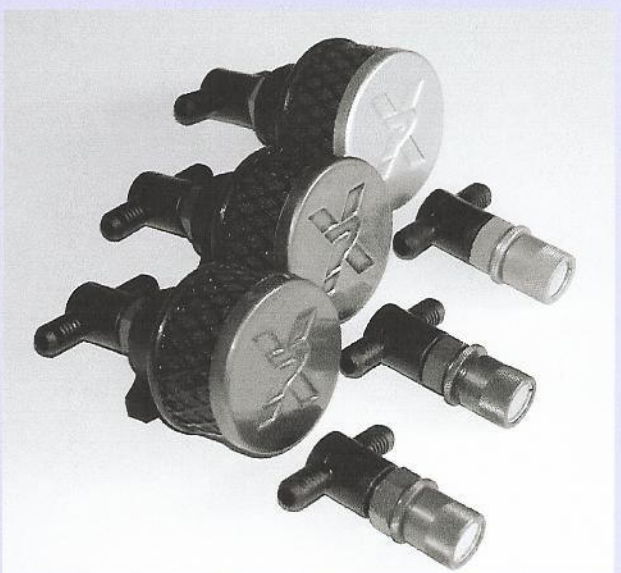
When testing a product like this it is important to maintain a normal driving style. It would be easy to give this product a hard time - but this will not give reliable results. On the other hand, it would also be easy to coax better economy out of the car with the product fitted. I tried my best to drive as I usually do.

Before the valve was fitted I completed almost 1000 miles without the trip computer being reset and on the same fuel. This returned a stable 35.3mpg. After 1000 miles with the CB-26P this figure had increased to 37.7MPG. This shows a marked increase in fuel economy and should give up to an extra 25 miles per tank. This would save the average motorist over £100 a year in fuel. Within six months this unit will have paid for itself.

There have been many other tests on this product and it seems that the savings depend on the particular application. My Astra is a fairly

economical car anyway, so an extra 2.4mpg is good going. Other tests have shown far greater savings, especially on older cars.

On testing the emissions I found that they were already extremely low as my car has a cat fitted. Tested at idle, the car started out with a CO level of 0.02%. With the Ecotek valve fitted, this dropped to 0.01%. This is only a very small drop, but you could look



at it as a 50% reduction - which isn't bad! Similar results were obtained at 3000rpm.

Carb'ed cars are going to benefit most from a reduction in emission. As we were unable to test this, here are some archive results from previous tests: Cavalier 1.6 43% reduction in CO at idle, 50% reduction at 3000rpm. Mercedes 190 53% reduction in CO at idle, 51% reduction at 3000rpm. Unlike with my car, this reduction typically represents a drop from 8% CO to 4% CO! Now that really is a major reduction in emissions.

Overall, the Ecotek CB-26P appears to do exactly what Ecotek PLC says. It does reduce fuel consumption



Emission testing

and emissions, as well as making the car feel a bit smoother and livelier.

You can order your own valve from www.ecotekplc.com. Price for the valve start at £48.99 which includes VAT and postage. I suggest buying one with a filter - this starts at £69.99 depending on which colour you go for. Alternatively, why not enter this months caption competition as Ecotek have given us and vavle and filter to give away to one lucky member!

Many thanks to: Barclay at Ecotek PLC. You can vist their website at www.ecotekplc.com, call 01483 204444 or email ecotek.help@virgin.net.

The MOT Workshop, Chichester 01243 536841 for doing the emission tests.

Words and images by Mike Warner