

Ford Excursion 4x4 SUV .. Reno, Nevada, USA

This 2002 Ford Excursion 4x4 SUV is fitted with a 7.3 litre Powerstroke diesel, 235 Hp stock, weighs 8000lbs and being unmodified, the owner felt better performance was required, so several power upgrades were installed.

Nevada law states that diesel vehicles from 1991 cannot exceed 40% visible emissions,(black smoke). This vehicle was initially tested with the same opacity meter used by California & Nevada law enforcement - the Smoke Check 1667 - made by Red Mountain Engineering. With no modifications to the vehicle, the average result over two tests was 38% and hence it passed the test. After installation of a HyperTech 60 Hp power chip and a K&N Air Raid intake the vehicle was re-tested, again over an average of two tests resulting in 53%. It failed the test. As a result of this failure in emission testing, the owner installed two Filter Technology filters, an FMO1 on the engine oil and an FMF1 on fuel and drove the vehicle 5 miles. It was then re-tested, again over two tests, with the final opacity result being 35%, passing the emission test with the modifications as fitted and the FTA filters.

This has eliminated any need to deprogram or alter the vehicle's computer to comply with Nevada laws. It was also noted that with the filters fitted the engine ran noticeably smoother, with less vibration and the throttle response was also noticeably smoother. With this new found power and smoothness the owner reports the vehicle is now a pleasure to drive and feels much safer especially when passing and towing.

Standard 7.3 litre 235HP Ford Excursion	38% visible emissions - pass
with HyperTech 60 chip and K&N Air Raid intake	53% visible emissions - fail
then fitted FTA fuel and oil filters	35% visible emissions - pass

