

INTRODUCING THE NEW DV+ DIVERTER VALVE FOR FORD RANGER 2.3 ECOBOOST APPLICATIONS!

GFB'S DV+ SOLUTION COULDN'T BE SIMPLER: *KEEP WHAT WORKS AND REPLACE WHAT DOESN'T.*

GFB expands the DV+ range with a direct-fit performance diverter solution for the 2019-on Ford Ranger with the 2.3 EcoBoost engine.

Derived from the popular T9358 DV+ kit that has already become popular on the Ranger, this new kit includes screws designed specifically for fastening to the factory plastic flange, rather than the machine screws supplied with the T9358 that are designed for metal flanges.

The solenoid coil itself from the factory-fitted diverter is great so why replace it? The weak point is the valve mechanism itself. GFB's DV+ solves this problem by replacing the valve parts with an anodised billet aluminium housing, fitted with a brass piston machined to exacting tolerances.

*** REGISTERED PATENTS AND DESIGN PATENTS, PCT PATENTS PENDING ***

() BEWARE OF COUNTERFEIT PRODUCTS!

GFB products are made in Australia, and to ensure you get the genuine product ONLY buy from authorized dealers on our website.

KEY FEATURES

- » Retains the factory solenoid coil for seamless integration
- » Replaces plastic valve parts with metal for reliability, strength, and unlimited boost holding
- » Direct-fit replacement with GFB's TMS benefits for improved throttle response
- » Exclusive "pilot-actuated" valve mechanism for fastest valve response

Pilot Operation

As an additional benefit, the solenoid in the DV+ assembly no longer directly drives the movement of the piston, instead controlling the movement of the piston with boost pressure. This is known as "pilot operation", which greatly increases the actuation forces within the valve, improving operation speed and reliability. Plus, the piston can now move progressively in response to how much boost pressure it needs to vent, instead of only fully open or closed like the factory diverter.

The result is sharper throttle response, lightning-fast valve actuation, the ability to hold as much boost as you can throw at it, and operation so reliable it comes with a lifetime warranty!

Read the full DV+ story over page ...

NORTH AMERICA Global Performance Parts www.gfb.us sales@globalperformanceparts.com Ph: 616 399 9025



Order Part #: T9365

HEAD OFFICE/AUSTRALIA Go Fast Bits www.gfb.com.au Sales@gfb.com.au Ph: +612 9534 0099



DV+ T9365 DIVERTER VALVE FOR FORD RANGER 2.3 ECOBOOST APPLICATIONS



THE DV+ STORY

Other manufacturers' products often replace the entire diverter and solenoid, resulting in a significantly (and unnecessarily) higher priced product.

GFB's DV+ solution on the other hand is more responsive, less expensive, and doesn't cause compressor surge/turbo flutter/chirp (those sounds are a sign the diverter's NOT doing what it's supposed to!).

The 2.3 EcoBoost engine uses an ECU controlled solenoid-type diverter valve which is common on many modern turbo engines. However, even though these types of valves have been around since the mid 2000s, they still have significant reliability and performance shortcomings that the only the DV+ can solve.

PROBLEM 1: LEAKING

The factory diverter uses a piston that owing to its moulded plastic design cannot be effectively sealed. This results in leaks that are large enough to cause slow spool up and high RPM boost drop off.

The DV+ ensures your hard-earned boost gets to the engine by using a bonded silicone face seal and a precision piston-to-bore clearance and surface finish.

PROBLEM 2: RELIABILITY

In the factory diverter valve, the solenoid is required to move the piston through a large range of travel, which significantly weakens the magnetic force that the solenoid can apply to open the piston. This means a weak return spring must be used, leaving little headroom to accommodate increases in boost pressure or friction in the valve assembly without causing sticking and reliability problems.

The DV+ solves this issue by re-purposing the solenoid to control a short-stroke pilot valve for super-fast reaction time and higher actuation forces. Using the pilot valve, the DV+ uses boost pressure to open AND close the piston. This means the acting forces are directly proportional to boost pressure, and therefore the movement of the piston can respond accordingly. If boost is low, the piston only opens a small amount. If boost is high, it opens all the way. Once the solenoid turns off, the boost pressure then slams the piston shut. This way, the DV+ completely eliminates sticking as a result of friction and weak solenoid forces, and blowing open at high boost.



NORTH AMERICA Global Performance Parts www.gfb.us sales@globalperformanceparts.com Ph: 616 399 9025



HEAD OFFICE/AUSTRALIA Go Fast Bits www.gfb.com.au Sales@gfb.com.au Ph: +612 9534 0099

