Product Name:

Product Description: Product Number: BRA Ford F150 2013+ Ecoboost Boost Reference Adapter TS-0720-1005



IMPORTANT NOTES:

- Please thoroughly read and understand these instructions before commencing this installation.
- The thread on the BRA ports for the vacuum source is 1/8" NPT 28 TPI. The supplied fittings can be changed to an AN#4 fitting with the necessary adapters if desired.
- Make sure that the engine is cold before installing this product.

RECOMMENDATIONS

• <u>Turbosmart recommends that your Boost Reference Adapter (BRA) is fitted by an appropriately qualified</u> <u>technician</u>

Please check that the following items have been provided in your kit

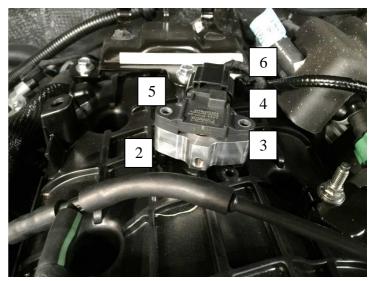
Quantity	Description	Use
1	12.00 X 2.00 O-Ring	Sealing O-Ring (MAP adapter)
1	1/8th NPT Blank	Port blank for boost reference adapter
2	1/8th NPT nipples	Provides BOV and other devices such as boost gauges with
		vacuum/pressure source
1	Boost reference adapter	Adapter between MAP sensor and manifold for boost/vacuum source.
1	M5x20 button head bolt	Secures OEM MAP sensor on MAP adapter
2	6mm spring clamps	Secures pressure lines
2	250mm cable ties	Fixing pressure lines in position
2	100mm cable ties	Fixing pressure lines in position

HOW TO INSTALL YOUR BOOST REFERENCE ADAPTER

 Locate the OEM MAP sensor on the top of the intake plenum. Remove the OEM bolt holding the MAP sensor in position, note that the sensor is only secured by using **one bolt only** from factory. Unplug the MAP sensor plug off of the MAP sensor. Remove the MAP sensor by gently pulling straight up.



- Install the supplied 1/8" NPT nipple on the MAP adapter. Blank off the second port on the MAP adapter if it is not in use. Use thread sealant. Route the vacuum hose from the nipple towards your accessory. Use one of the supplied spring clamps to secure the vacuum hose onto the nipple.
- 3. Mount the MAP adapter into the intake plenum. Ensure that the O-ring on the MAP adapter is not kinked or damaged during installation.
- 4. Use the OEM bolt to secure the MAP adapter onto the intake plenum. Please note that the OEM bolt will only fit into one of the screw holes on the MAP adapter.
- 5. Use the supplied M5 button head screw to secure the OEM MAP sensor onto the MAP adapter.



Ensure that the O-ring is not kinked or damaged during installation.

6. Re-plug the MAP sensor with the OEM plug.

TROUBLE SHOOTING

The following points should be checked if you find that your engine is dipping below normal idle and/or stalling. Please note: the following checks will cure 99% of problems experienced with a BRA.

- Check the vacuum hose for splits, cracks, loose connection, kinking or any obstruction old or fatigued hose may collapse under vacuum causing an obstruction.
- Check to see if the BRA is blocked or contaminated with dirt or debris.
- Ensure the spring clamps are secured on silicon hoses and fittings.
- Ensure that the internal O-ring is installed and is not kinked or torn.

ONE YEAR LIMITED WARRANTY

Turbosmart is a company built on Customer Satisfaction and Service. That is why all of our products go through regimented test procedures before they are packaged and shipped. Turbosmart stands behind its products for one full year after purchase. Terms of Warranty, Service and Returns are as follows:

Limited Warranty: Turbosmart warrants its products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of Turbosmart to the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall Turbosmart be liable for special or consequential damages. This warranty is only valid on products purchased from Turbosmart Authorized Dealers.

Service: After the warranty period has expired, repair service is charged based on a minimum and maximum charge rate. (Contact Customer Service for current rate).

Returns: When returning a Turbosmart product for repair, it must be accompanied by a completed Customer Warranty Form and RMA number. To access this form please go to our website www.turbosmartonline.com and you will find it on the Downloads page.

THE TURBOSMART PLEDGE

DO NOT USE ANY TURBOSMART PRODUCT UNTIL YOU HAVE CAREFULLY READ AND UNDERSTOOD THE FOLLOWING AGREEMENT. Please call if you have any questions or do not understand this agreement. Refer to our brochure, website or catalogue for terms and conditions and further information regarding your product. Turbosmart appreciates your business and pride ourselves on our customer service. We are always happy to offer you advice and will provide you with help in any way we can. The purpose of this agreement is to avoid any problems or hard feelings

We sometimes make mistakes, as do our dealers, distributors and suppliers. Even customers can sometimes order the wrong parts. Do not use, modify, install, trial assemble, nick, drop, scratch or adjust any part until you first check for any damage. Damage must be reported immediately. NO EXCEPTIONS. If there are any components missing please contact your authorized reseller immediately upon receipt of your shipment. Missing components must be reported within five (5) business days of receipt. Parts returned for any reason MUST BE IN RESALABLE CONDITION. It is YOUR responsibility, "THE CUSTOMER" to carefully package any returns to avoid shipping damage. Insurance is highly recommended. Credit cannot be issued for damaged goods.

Warranty as to Defects - Australian Consumer Law 1.1

- We warrant for a period of twelve (12) months from the date of supply of the Goods and/or Services that if due to the fault of Turbosmart the Goods
 - and/or Services (as the case may be) provided by Us are defective then We will, as determined by Us do one or more of the following: In the case of Goods; the replacement of the Goods, the supply of equivalent Goods, the repair of the Goods, the payment of the cost of 1. replacing the Goods or of acquiring equivalent Goods, or the payment of having the Goods repaired; or
 - In the case of Services; the supplying of the Services again, or the payment of the cost of having the Services supplied again.
 - You will only be entitled to the benefit of the warranty set out in this pledge, if You have not wholly or partially caused or contributed to the defect

1.2 to the Goods by the misuse of the Goods or the failure to use the Goods in accordance with any specifications or instructions applicable to the Goods. The warranty contained in this pledge is provided by Turbosmart Pty Limited of 32 Milton Street North, Ashfield NSW 2131, Australia, Telephone: 1.3

- +(61) 1300 735 506, Email: sales@turbosmart.com.a
- In order for a You to make a claim on the warranty You must within twelve (12) months of delivery of the Goods or Services give written notice to Us 1.4 at the address specified in clause 1.3 above of the details of any defects in respect thereof. Any Goods referred to in a notice given pursuant to this clause should be left in the state and condition in which they were delivered until such time as We or Our duly authorised agent have inspected the Goods with such inspection to be carried out within a reasonable time after service of such notice. If the Goods are not so left in the state and condition in which they were delivered then the You shall be deemed to have accepted the Goods and the warranty contained in this pledge shall not apply. You shall be responsible for all expenses associated with making a warranty claim under this pledge however if the Goods and/or Services are found to 15
- be defective due to Our fault then We shall reimburse You for any expenses incurred by You in making a warranty claim upon receiving evidence satisfactory to Turbosmart to support such expenditure.
- 1.6 The benefits to You given by the warranty contained in this pledge are in addition to other rights and remedies of You have under a law in relation to the Goods or Services to which the warranty relates. In accordance with the Australian Consumer Law We makes the following statement: "Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure."

EXCEPT AS PROVIDED BY LAW, THIS LIMITED WARRANTY IS THE ONLY EXPRESS WARRANTY, WHICH APPLIES TO TURBOSMART PRODUCT AS EXPRESSLY GIVEN IN LIEU OF ANY OTHER WARRANTY EXPRESSED OR IMPLIED, INCLUDING THAT OF MERCHANTABILITY. ANY IMPLIED WARRANTY INCLUDING THAT OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICCULAR PURPOSE IS HEREBY LIMITED BY THE SAME TERMS AND TIME LIMITATIONS SET FORTH IN THIS LIMITED EXPRESS WARRANTY AND OTHERWISE EXCLUDED.

EXCEPT FOR THOSE OBLIGATIONS ASSUMED HEREIN, TURBOSMART ASSUMES NO OTHER OBLIGATIONS IN CONNECTION WITH THE SALE OF ITS PRODUCTS

IN THE EVENT THAT THE INDIVIUDAL PURCHASER DOES NOT AGREE WITH THIS AGREEMENT THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UN-USED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN SEVEN (7) DAYS FROM THE DATE OF PURCHASE FOR A FULL REFUND.

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE INDIVIDUAL PURCHASER HAS READ AND UNDERSTOOD THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

Happy motoring! The Turbosmart Team

Turbosmart Pty Limited P.O. Box 264 Croydon, NSW 2132 Australia ABN: 69 081 069 794 Ph: +61 1300 735 506 Fax: +61 1300 735 509 Email: instructions@turbosmart.com.au www.turbosmartonline.com