

# 1/2" - 3/4" SQ DRIVE TORQUE MULTIPLIER -FORD ECOBOOST

MODEL NO: VSE5180.V2

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.





Refer to Instructions

Wear eye Protection

## 1. SAFETY

- **WARNING!** Wear approved eye protection. Wear appropriate Personal Protective Equipment. A full range of Personal Protective Equipment is available from your Sealey stockist.
- □ WARNING! Ensure that Health & Safety, Local Authority Regulations and general workshop practice Regulations are adhered to when using tools.
- DO NOT use tools if damaged.
- ✓ Maintain tools to ensure that they are in an adequate condition for safe use and optimum performance.
- ✓ Ensure that a vehicle that has been raised by a jack is adequately supported. Use axle stands.
- ✓ Wear suitable clothing to avoid snagging. DO NOT wear jewellery. Tie back long hair.
- Account for all tools, parts and components being used. DO NOT leave these in or near the engine. Return tools to suitable storage after use.
- ▲ IMPORTANT! These Instructions are provided as a guide only. Always refer to the vehicle manufacturer's service instructions or a proprietary manual to establish the correct procedure and data.
- □ **WARNING!** The warnings, cautions and instructions in this manual cannot cover all possible conditions and situations. The Operator / user must apply caution and common sense (good practical sense).
- ✓ When timing an engine, always prevent the engine from being turned over. Use a notice and/or inhibit the engine.
- □ **WARNING!** Incorrect or out of phase camshaft timing can result in contact between the valve head and the piston crown. This will cause damage to the engine.

## 2. INTRODUCTION

For removal and installation of crankshaft pulley to replace timing belt on Ford Ecoboost engines. Torque multiplier has 1/2"Sq drive input and 3/4"Sq drive output. Specially designed with the correct reduction ratio for the Ford Ecoboost engine. Contains securing bracket and fixings. Maximum Torque input: 300Nm, Max Torque Output: 500Nm. Supplied in storage case.

## 3. SPECIFICATION

Model No:			VSE5180.V2
Drive:	1/2"Sq Input (F	emale), 3	/4"Sq Output (Male)
Gear Ratio:			1:5
Torque Rating(	s):		
Maximum Rate	ed Input		300Nm(225lh ft)

## 4. CONTENTS

Item	Part no.	Description	
1	VSE5180-V2-01	Torque multiplier	
2	VSE5180-V2-02	Mounting Bolt/Rod Holder	
3	VSE5180-02-03	Mounting plate	
4	VSE5180-V2-04	3/4" Dr Impact Socket 24mm	
5	VSE5180-V2-05	3/4" Dr Impact Socket 21mm	
6	VSE5180-V2-06	Fixing Stud for Mounting Bolt/ Rod/Holder	
7	VSE5180-V2-SC	Storage Case	
Associated tools			
	VSE5150	Petrol Engine Set/Locking kit - Ford 1.0 EcoBoost - belt drive	



# 5. APPLICATIONS

#### Models:

## Ford:

B-Max (12-18), C-Max (12-20), Grand C-Max (17-20), EcoSport (13-22), Fiesta (12-22), Focus (12-20), Mondeo (15-18), Puma (19-20), Transit Custom & Tourneo Custom (19-22), Transit Courier (14-22), Transit Connect (13-20), Grand Tourneo Connect (13-18), Tourneo Courier (14-20), Tourneo Connect (18-20)

## **Engines:**

1.0 EcoBoost: B3DA, B3GA, B7DA, B7JA, B7JB, M0JA, M1CA, M1CB, M1DA, M1DC, M1DD, M1JA, M1JC, M1JE, M1FA, M1JH, M1JJ, M1JP, M1JU, M2DA, M2DB, M2DC, M2GA, M2GB, P4JA, P4JB, P4JC, P4JD, SFCA, SFCB, SFCC, SFCD, SFCE, SFCF, SFDA, SFDB, SFDC, SFJA, SFJB, SFJC, SFJD, SFJE, SFJH, SFJJ, SFJK, SFJL, SFJN, SFJP, XMJA, XMJB, XMJC, XMJD, YYJA, YYJB, YYJC, YYJD, YYJF, YYJG

1.1 EcoBoost: XPJA, XPJB, XPJC, XPJD, XYJA, XYJB, XYJC, XYJD, XYJE, YYJA, YYJB, YYJC, YYJD, YYJE, YYJG

## 6. OPERATION

The torque multiplier has a 1/2" drive input and 3/4" drive output.

To remove the front pulley of the Ford 1.0L EcoBoost engine when an engine repair is required or when replacement of the timing belt or front main seal is required, the very tight pulley securing bolt will need to be removed. A torque multiplier is needed for this, to both undo, and re-tighten the bolt.

- 6.1. Lock the engine flywheel, remove the right-hand driveshaft bracket, the main bracket and fittings from the adaptor kit are bolted onto the engine. The torque multiplier is now fitted and turned with a 1/2" drive bar or ratchet.
- 6.2. The pulley bolt is a stretch-bolt and a new one must be used on re-assembly. A new crankshaft pulley friction washer must also be fitted.
- **6.3.** The tightening sequence includes the use of a torque wrench, then the torque multiplier, observe the manufacturer's specifications for reassembly.



## **ENVIRONMENT PROTECTION**

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



**Note**: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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