

Please read and save these instructions. Read through this owner's manual carefully before using product. Protect yourself and others by observing all safety information, warnings, and cautions. Failure to comply with instructions could result in personal injury and/or damage to product or property. Please retain instructions for future reference.



MANIFOLD STUD EXTRACTION TEMPLATE

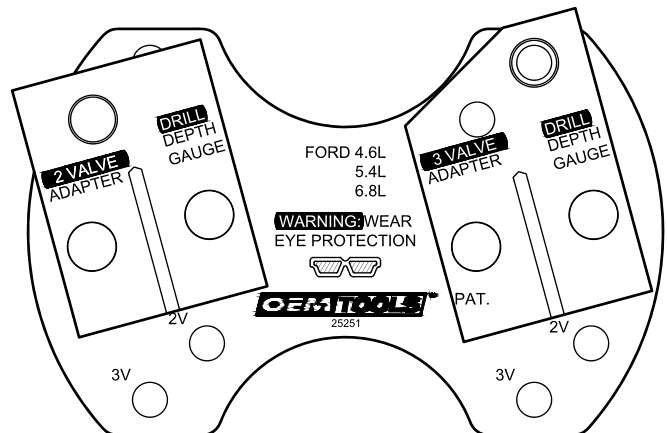
FOR CUSTOMER SERVICE

Technical Question?

CALL 1-866-458-2472
customerservice@oem-tools.com

UNPACKING

After unpacking the unit, inspect carefully for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. If any damage is observed, a shipping damage claim must be filed with the carrier. DO NOT use the OEMTOOLS™ Template if broken, bent, cracked or damaged parts (including labels) are noted. Any Template that appears damaged in any way, operates abnormally or is missing parts should be removed from service immediately. If you suspect that the Template was subjected to shock load (a load that was dropped suddenly, unexpectedly, etc.), immediately discontinue use until it has been checked by a factory authorized service center.



⚠ WARNING

The following safety information is provided as a guideline to help you operate your Template under the safest possible conditions. Any tool or piece of equipment can be potentially dangerous to use when safety or safe handling instructions are not known or not followed. The following safety instructions are to provide the user with the information necessary for safe use and operation. Please read and retain these instructions for the continued safe use of your Template. Failure to follow instructions listed below may result in serious injury. In addition, make sure that anyone who uses the equipment understands and follows these safety instructions as well.

Explanation of Safety Signal Words

⚠ WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTES: Provide clarity and helpful information.

Thank you very much for choosing an OEMTOOLS™ Product!

For future reference, please register your new tool at www.oem-tools.com and complete the owner's record below:

Model: _____ **Purchase Date:** _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it. This product is designed for certain applications only. OEMTOOLS™ cannot be responsible for issues arising from modification. We strongly recommend this product is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted customer service to determine if it can or should be performed on the product.



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⚠ IMPORTANT INSTRUCTIONS AND SAFETY RULES

1. Know your product. Read this manual carefully. Learn the product's applications and limitations, as well as potential hazards specific to it.
2. Keep work area clean and well lit. Cluttered or dark work areas invite accidents.
3. Keep children away. All children should be kept away from the work area. Never let a child handle tools or equipment without strict adult supervision.
4. DO NOT operate this product if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, DO NOT attempt to operate.
5. Use safety equipment. Eye protection should be worn at all times when operating this tool. Use ANSI approved safety glasses. Everyday eyeglasses are NOT safety glasses. Dust mask, non-skid safety shoes, hard hat or hearing protection should be used in appropriate conditions.
6. Wear proper apparel. Loose clothing, gloves, neck-ties, rings, bracelets or other jewelry may present a potential hazard when operating this product. Keep all apparel clear of the product.
7. DO NOT overreach. Keep proper footing and balance at all times when operating this product.
8. Check for damage. Check equipment regularly. If part of the product is damaged, it should be carefully inspected to make sure that it can perform its intended function correctly. If in doubt, discontinue use of product.
9. Keep away from flammables. DO NOT attempt to operate this product near flammable materials or combustibles. Failure to comply may cause serious injury or death.
10. Store this product out of the reach of children and untrained persons. This product may be dangerous in the hands of untrained users.
11. Keep this product dry and clean.
12. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one product may become hazardous when used on another product.
13. Service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
14. When servicing a product, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
15. Maintain a safe working environment. Keep the work area well lit. Make sure there is adequate surrounding workspace. Keep the work area free of obstructions, grease, oil, trash, and other debris. DO NOT use this product in a damp or wet location.
16. Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact OEMTOOLS™ for a replacement.

17. Keep this product dry, clean, and free from brake fluid, oil, and grease.
18. Avoid accidental fire. DO NOT smoke near this product.
19. The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which cannot be built into this product but must be supplied by the operator.
20. We believe the information contained herein to be reliable. However, general technical information is given by us without charge and the user shall employ such information at their own discretion and risk. We assume no responsibility for results or damages incurred from the use of such information in whole or in part.
21. The manufacturer declines any and all responsibility for property damage or injury if said damage is the result of unskillful handling by the operator or of failure to observe the basic safety rules set forth in the instruction manual.
22. The procedures documented in this manual are to serve as guidelines for the use of this equipment.
23. The use of this equipment is simple and straightforward if you follow the instructions. When operating this equipment, use common sense, and only use this equipment for its intended purpose.

PRODUCT DESCRIPTION

The OEMTOOLS™ 25251 Manifold Stud Extraction Template is engineered to extract damaged or broken exhaust manifold studs while protecting cylinder head integrity.

PRODUCT SPECIFICATIONS

APPLICATIONS:	2 and 3 valve Ford Triton engines (4.6L, 5.4L and 6.8L V10)
ADAPTERS INCLUDED:	2V and 3V
MATERIAL:	Aluminum Base Plate

CONTENTS:

- (1) Base Plate, (2) Adapters, (2) Knurled Thumb Screws, (1) Long Alignment Pin, (1) Short Alignment Pin, (1) 1/8" Drill Bit, (1) 3/16" Drill Bit, (1) EVA Tray

SPECIFIC SAFETY INSTRUCTIONS

⚠WARNING: ALWAYS read and understand the product manual prior to attempting use. Failure to comply with Base Plate placement, alignment and drill depths can cause damage to the vehicle.

⚠WARNING: ALWAYS park the car on a level surface, apply the parking brake, and chock the wheels prior to attempting service.

⚠WARNING: Allow engine to cool prior to attempting engine service. Failure to comply may lead to serious personal injury.





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▲WARNING: ALWAYS wear protective gloves and safety glasses when performing maintenance. DO NOT wear loose fitting clothing, jewelry or neck-ties when performing service.

▲WARNING: ALWAYS be mindful of tight spaces within the engine. There are moving parts and pinch points that can cause injury.

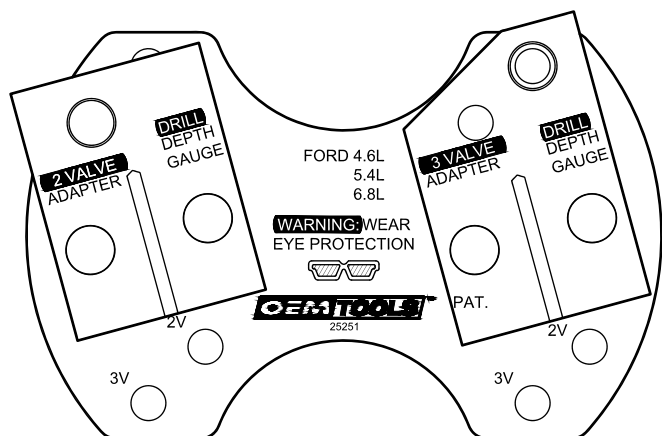


FIGURE 1

INSTRUCTIONS

1. Load the 1/8" Drill Bit into your drill. With the Depth Gauge printed on the Adapter, adjust the length of the drill bit.

▲CAUTION: Failure to properly measure the drill bit length will risk drilling through the broken stud and into the water jacket.

2. Line up the Base Plate on the cylinder heads with the appropriate holes for 2V or 3V. Put the Alignment Pin in the hole on top of the broken stud. If the stud is broken, use the Short Alignment Pin to line up the Base Plate. If the stud came out in one piece, use the Long Alignment Pin over the threaded hole on the base plate. By doing this, the Base Plate will be centered over the stud hole. Tighten the other fasteners (use all 3 if able).
3. Depending on the engine model, place either the 2 or 3 Valve Adapter over the Threaded Bushings in the Base Plate. Place the provided Nylon Washers over each of the Knurled Thumb Screws. Install the Knurled Thumb screws manually to a finger tightness on the Base Plate.
4. Using the 1/8" Drill Bit, create your pilot hole in the broken stud. Remember to coat your drill bit with a light weight oil; this will help your bits last longer, cause the shavings to stick to the bit, and keep the temperature of the bit cooler. Drill your pilot hole for 8-10 seconds and wipe the bit with a rag once you have finished. Apply more oil if needed to finish the pilot hole. Remove the Base Plate when you have completed drilling your pilot hole.
5. Load the provided 3/16" Drill Bit into your drill. Ensure the bit only protrudes 1" beyond the drill chuck. Apply a light oil as needed and, using a back-and-forth motion, drill into the damaged stud. This will pull the shavings out as you work.

▲CAUTION: DO NOT use the Drill Gauge in Step 5, as only 1" drill depth is needed. Failure to comply may result in drilling into the water jacket.

▲CAUTION: ALWAYS drill at the center of the stud. Drilling the perimeter may damage the existing threads and block.

6. Find the Square Extractor provided in the kit. If you have one, a Tap Socket #4 is a great method of turning the Extractor. Turn the stud until completely removed.
7. Install the replacement exhaust stud. If the job requires drilling out another broken stud, clean all shavings from the Base Plate and adapter. Repeat the above process as needed.

PRODUCT MAINTENANCE

▲WARNING: This product has no serviceable parts. If you suspect the product is damaged, discontinue use and contact customer service for further support.

▲WARNING: DO NOT attempt to modify this product. The product has been designed for very specific use.

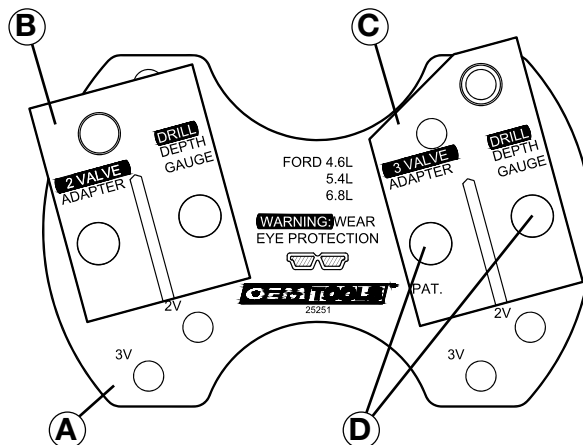
DISPOSAL

At the end of the useful life of the OEMTOOLS™ Manifold Stud Extraction Template, dispose of the components in accordance with all federal, state and local regulations.

PRODUCT LAYOUT

Figure	Description	Qty.
A	Base Plate	1
B	2 Valve Adapter	1
C	3 Valve Adapter	1
D	Knurled Thumb Screws	2
E	Stud Extractor*	1
F	Long Alignment Pin*	1
G	Short Alignment Pin*	1
H	3/16 Inch Double Sided Drill Bit*	1
I	1/8 Inch Double Sided Drill Bit*	1
J	Nylon Washers*	2

* Not Shown





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OEMTOOLS™ LIMITED LIFETIME WARRANTY

For as long as you own this OEMTOOLS™ product, if you find any defect in material or workmanship, through normal usage, return it to the place of purchase or to OEMTOOLS™ for repair or replacement at our discretion. In order to obtain this service, send your tool and proof of purchase (transportation pre-paid) to:

OEMTOOLS™ Q.A. Dept., 3580 E. Raines Road #3, Memphis, TN 38118.

We will not be responsible for lost or damaged goods during transportation; please insure your package. If our inspection verifies the defect, we will either repair or replace the product, or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

OEMTOOLS™ does not provide warranty for products labeled other than OEM® or OEMTOOLS™. OEMTOOLS™ will not provide any warranty for products subjected to abnormal use. Abnormal use includes (but is not limited to) abuse, accident, alteration, neglect, and unauthorized or unreasonable use or repairs. This warranty does not cover bits, blades, files, batteries, or calibration. We recommend that you maintain your tools and sharpen or replace blades, bits, files, and batteries as necessary. OEMTOOLS™ reserves the right to make any changes in construction or design at any time without any obligation in incorporating such changes to tools or equipment previously sold.

OEMTOOLS™ makes every effort to ensure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear or to lack of maintenance.

We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Don't forget to register your new OEMTOOLS™ product at www.oem-tools.com.

CONTACT US

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