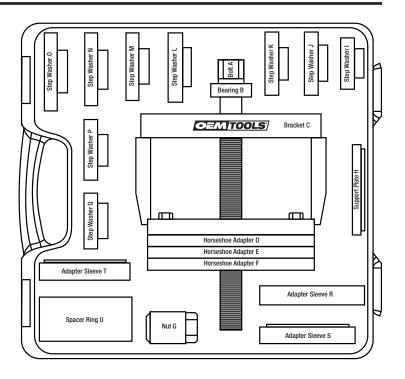
Please read and save these instructions. Read through this owner's manual carefully before using the product. Protect yourself and others by observing all safety information, warnings and cautions. Failure to comply with these instructions could result in personal injury and/or damage to the product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



## MASTER WHEEL HUB AND BEARING REMOVER AND INSTALLER KIT

### 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 Master Wheel Hub and Bearing Remover and Installer Kit if broken, bent, cracked or damaged parts (including labels) are noted. Any Master Wheel Hub and Bearing Remover and Installer Kit that appears damaged in any way, operates abnormally or is missing parts should be removed from service immediately. If you suspect that the Master Wheel Hub and Bearing Remover and Installer Kit was subjected to a shock load (a load that was dropped suddenly, unexpectedly, etc.) immediately discontinue use until it has been



### **A** WARNING

The following safety information is provided as a guideline to help you operate your Master Wheel Hub and Bearing Remover and Installer Kit 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 tool. Failure to follow instructions listed below may result in serious injury. In addition, make certain that anyone who uses the equipment understands and follows these safety instructions as well.

### **Explanation of Safety Signal Words**

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

**A** 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:

#### 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.



## **⊘** <del></del> M TOOLS

## MASTER WHEEL HUB AND BEARING REMOVER AND INSTALLER KIT



## IMPORTANT INSTRUCTIONS AND SAFETY RULES

- Know your tool. Read this manual carefully. Learn the tool's applications and limitations, as well as, potential hazards specific to it.
- Keep work area clean and well lit. Cluttered or dark work areas invite accidents.
- Keep children away. All children should be kept away from the work area.
   Never let a child handle a tool without strict adult supervision.
- Do not operate this tool 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.
- 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.
- Wear proper apparel. Loose clothing, gloves, neck-ties, rings, bracelets or other jewelry may present a potential hazard when operating this tool. Keep all apparel clear of the tool.
- Don't overreach. Keep proper footing and balance at all times when operating this tool.
- Check for damage. Check your tool regularly. If part of the tool is damaged it should be carefully inspected to make sure that it can perform its intended function correctly. If in doubt, the part should be repaired. Refer all servicing to a qualified technician. Consult your dealer for advice.
- Keep away from flammables. Do not attempt to operate this tool near flammable materials or combustibles. Failure to comply may cause serious injury or death.
- Store idle tools out of the reach of children and untrained persons. Tools
  may be dangerous in the hands of untrained users.
- 11. Maintain tools with care.
- 12. Keep tools dry and clean.
- Properly maintained tools are less likely to bind and are easier to control.
   Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation.
- If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.
- Tool service must be performed only by qualified repair personnel.
   Service or maintenance performed by unqualified personnel could result in a risk of injury.
- When servicing a tool, use only identical replacement parts. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
- 19. 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.
- Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact OEMTOOLS® for a replacement.

- Before use, read and understand all warnings, safety precautions, and instructions as outlined in the vehicle manufacturer's service manual. It is beyond the scope of this manual to properly describe the correct procedure and test data for each vehicle.
- 22. Always perform vehicle service in a properly ventilated area. Never run an engine without proper ventilation for its exhaust. Stop work and take necessary steps to improve ventilation in the work area if you develop momentary eye, nose, or throat irritation as this indicates inadequate ventilation.
- 23. Engine parts that are in motion and unexpected movement of a vehicle can injure or kill. When working near moving engine parts, wear snug fit clothing and keep hands and fingers away from moving parts. Keep hoses and tools clear of moving parts. Always stay clear of moving engine parts. Hoses and tools can be thrown through the air if not kept clear of moving engine parts.
- 24. The unexpected movement of a vehicle can injure or kill. When working on vehicles always set the parking brake and chock the wheels.
- Avoid accidental fire and/or explosion. Do not smoke near engine fuel and battery components.
- 26. 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.
- For safety purposes and the prevention of damage to expensive components it is advised that the user have an understanding of basic automotive repair and a working knowledge of automotive systems.
- 28. 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. Always refer to specific instructions and technical information supplied by vehicle manufacturer.
- 29. The manufacturer declines any and all responsibility for damage to vehicles or components 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.
- This equipment is intended only for professional use by personnel trained in performing the service functions for which it is has been designed.
- 31. This equipment is designed for servicing a variety of vehicles in a safe, convenient manner. However, differences in vehicle makes and models may make it impossible to use this equipment as it is intended. Do not attempt to force the use of this equipment on an application for which it is not designed to perform.
- The procedures documented in this manual are to serve as guidelines for the use of this equipment.
- In addition to these guidelines, always follow the manufacturer's recommended procedures when servicing each unique vehicle.
- 34. The use of this equipment is simple and straightforward if you follow the instructions. When operating this equipment, use common sense, and always stop to think before using this tool.

## **A** CAUTION

- Always keep forcing screw well lubricated. Use a high-quality, anti-seize compound.
- DO NOT use air tools.

#### **PURPOSE**

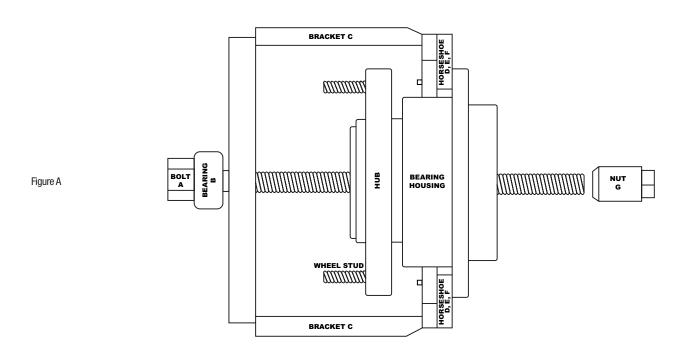
For removal and installation of Front Wheel Hub and Bearings on Asian, Domestic and German Vehicles along with Rear Wheel Hubs and Bearings on European vehicles.





## OPERATION HUB REMOVAL

- 1. Raise Vehicle and Remove Wheel, Brake Caliper, Tie Rod and Axle Retaining Nut.
- 2. Disconnect Strut Assembly from Lower Control Arm and swing off the CV Axle.
- 3. Select Horseshoe Adapter that best fits your spindle bearing housing and assemble Hub Remover as shown in Figure A.
- 4. Tighten the Tapered Nut against the Hub and then while holding the Nut turn the Pressure Screw.
- 5. Continue turning to extract the Hub.



## **A** CAUTION

**DO NOT** USE POWER TOOLS THIS CAN DESTROY THE HUB PULLER AND WILL VOID THE WARRANTY. ALWAYS LUBRICATE THE PRESSURE SCREW AND NUT WITH HIGH PRESSURE GREASE.

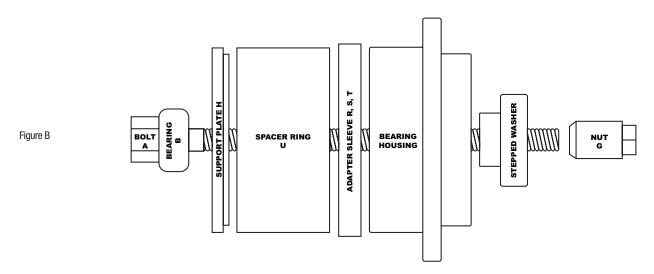


#### **BEARING REMOVAL FROM SPINDLE/BEARING HOUSING**

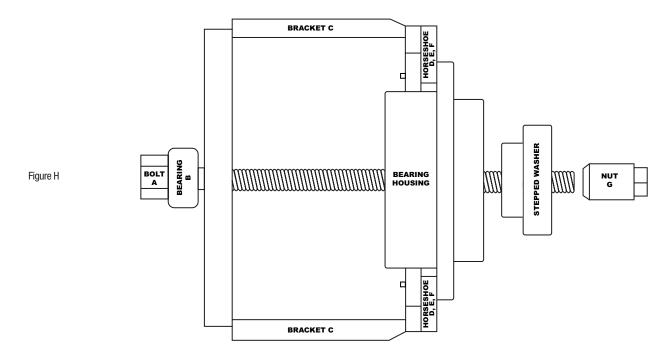
NOTE: Some bearings will have a snap ring retainer and this will have to be removed prior to removing the bearing.

- Select the Adapter Sleeve that best fits your Housing and will allow the bearing to pass through.
- Select the smallest Step Washer that will not pass through the bearing.
- 3. Assemble components as shown in Figure B tightening Tapered Nut and Washer against the bearing.
- 4. Hold the Tapered Nut while turning the Pressure Screw. Continue turning to extract the bearing.

NOTE: On some vehicles the inner bearing race will come out with the Hub. This will need to be removed from the Hub prior to reassembly.



NOTE: An alternative method is to use the Horseshoe Bracket Assembly to push against the spindle bearing housing. (Figure H.)





#### **INSTALLING NEW INNER WHEEL BEARING**

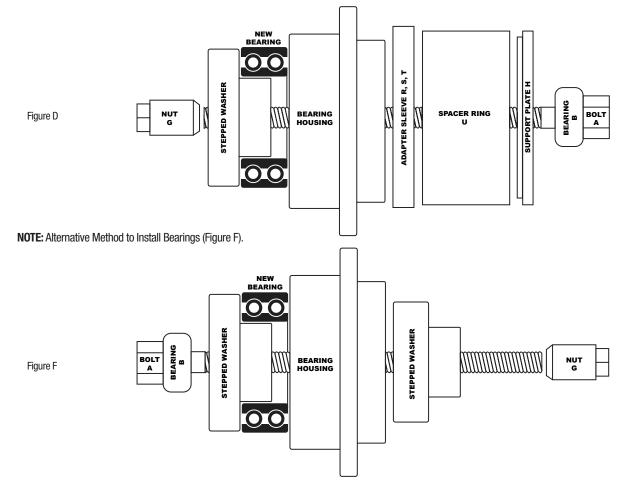
- 1. Select the largest Step Washer that best fits your bearing and does not exceed the 0.D of the bearing.
- Select the Adapter Sleeve that best fits your spindle bearing housing.
- 3. Assemble components as shown in Figure C, tightening Tapered Nut and Washer against the bearing.
  - Figure C

    Spacer Ring

    Spacer R

### **INSTALLING NEW OUTER WHEEL BEARING**

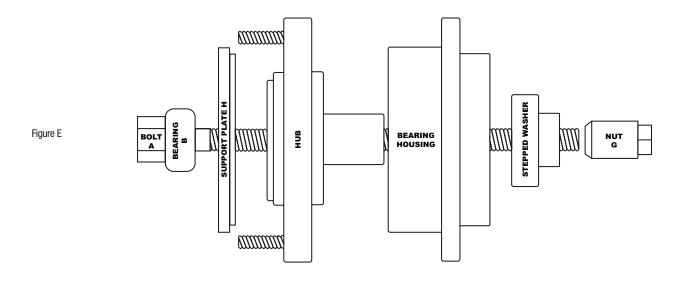
- Select the largest Step Washer that best fits your bearing and does not exceed the O.D of the bearing.
- 2. Select the Adapter Sleeve that best fits your spindle bearing housing.
- 3. Assemble components as shown in Figure D, tightening Tapered Nut and Washer against the bearing.
- 4. Hold the Tapered Nut while turning the Pressure Screw. Continue turning to install the bearing.



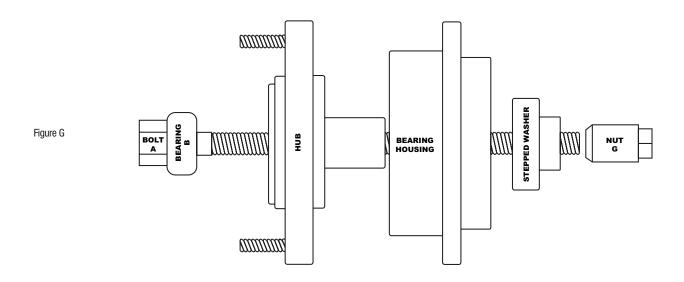


### **INSTALLING THE HUB INTO THE BEARING SPINDLE HOUSING**

- 1. Select the smallest Step Washer that best fits and will apply force to the inner bearing race.
- 2. Assemble components as shown in Figure E, tightening Tapered Nut and Washer against the bearing inner race.
- 3. Hold the Tapered Nut while turning the Pressure Screw. Continue turning to install the Hub.



**NOTE:** Alternative Method to Install the Hub (Figure G).



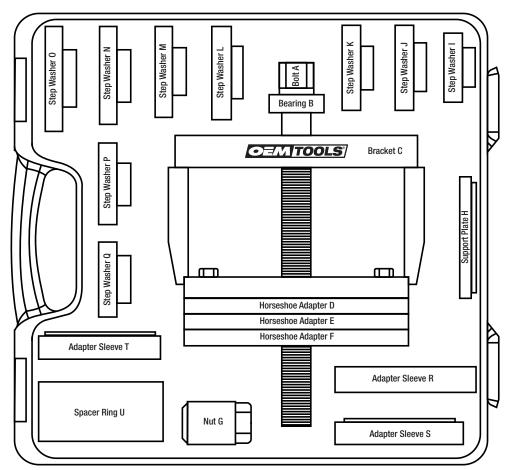


#### **Parts List**

Item #	Description	Qty.
Α	Bolt	1
В	Bearing	1
С	Bracket	1
D	Horseshoe Adapter	1
Е	Horseshoe Adapter	1
F	Horseshoe Adapter	1
G	Nut	1
Н	Support Plate	1
	Step Washer	1
J	Step Washer	1
K	Step Washer	1

Item #	Description	Qty.
L	Step Washer	1
М	Step Washer	1
N	Step Washer	1
0	Step Washer	1
Р	Step Washer	1
Q	Step Washer	1
R	Adapter Sleeve	1
S	Adapter Sleeve	1
T	Adapter Sleeve	1
U	Spacer Ring	1

### **Parts Diagram**



**Note:** Not all components of the Master Wheel Hub and Bearing Remover and Installer Kit are replacement items, but are illustrated as a convenient reference for location and position in the assembly sequence.

The manufacturer and/or its distributor have provided the parts list and assembly diagram in this manual as a reference tool only. Neither the manufacturer nor its distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he or she is qualified to replace any parts of the product. In fact, the manufacturer and/or its distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts thereto, or arising out of his or her installation of replacement parts thereto.