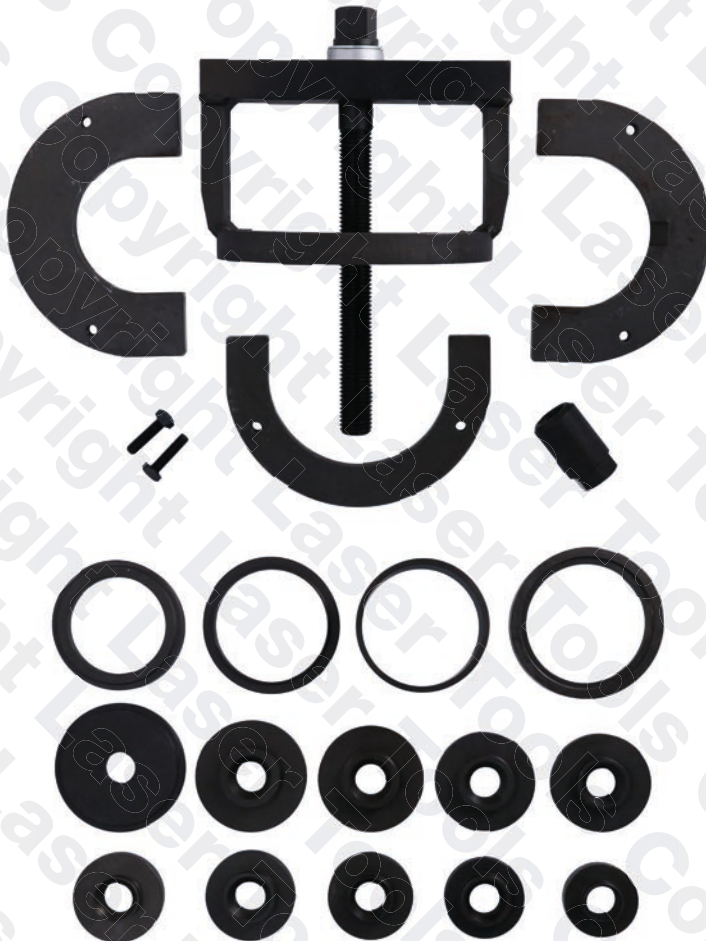


Part No. 7879

LASER[®]

Wheel Hub & Bearing Master Kit



www.lasertools.co.uk

Introduction

Designed to extract and install the drive flanges and wheel bearings on front and rear wheel drive vehicles where a one-piece bearing is used. Use on driven axles only.

- Front and rear drive flange and wheel bearing removal.
- Front wheel drive applications include: Chrysler, Ford, Honda, Hyundai, Infiniti, Kia, Lexus, Mazda, Nissan, Toyota and VAG.
- Rear wheel drive applications include: BMW, Mercedes-Benz and Porsche.
- 7879 utilises a mechanical force screw. Always apply molybdenum disulphide grease before use.
- **Not** suitable for fitting GEN2 bearing assemblies.

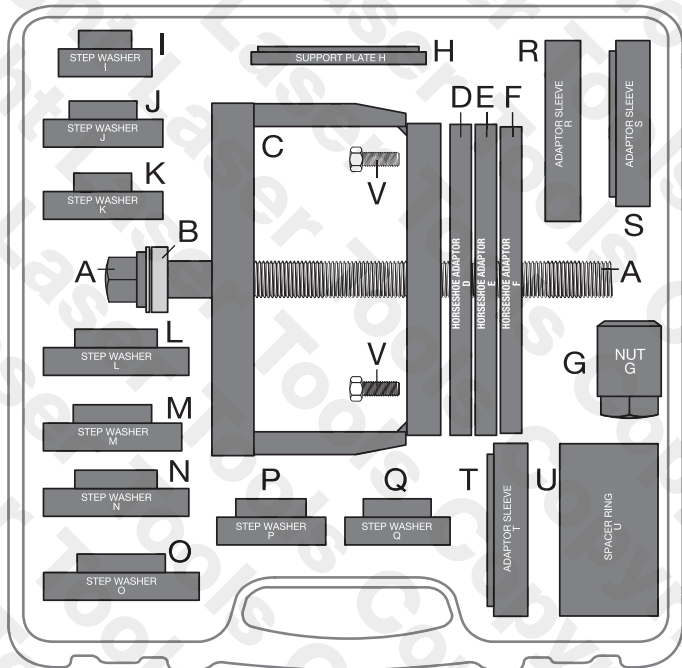
Note: the kit is not designed to work with tapered roller wheel bearings, or on solid/live rear axle bearings.

Refer to the manufacturer's service documentation and read and understand these instructions before commencing work. These instructions are intended as a guide only.

Always check that the puller is **correctly assembled** and is **correctly aligned, straight and square with the bearing housing**, etc. Danger of breakage or damage if this is not adhered to. **DO NOT USE AIR TOOLS WITH THIS PRODUCT.**



Components



Ref.	Description
A	Force screw
B	Thrust bearing
C	Main bracket
D	Horseshoe adaptor
E	Horseshoe adaptor
F	Horseshoe adaptor
G	Tapered nut (27mm)
H	Support plate
I	Step washer
J	Step washer
K	Step washer

Ref.	Description
L	Step washer
M	Step washer
N	Step washer
O	Step washer
P	Step washer
Q	Step washer
R	Adaptor sleeve
S	Adaptor sleeve
T	Adaptor sleeve
U	Spacing Ring
V	13mm set screw (x2)

Instructions

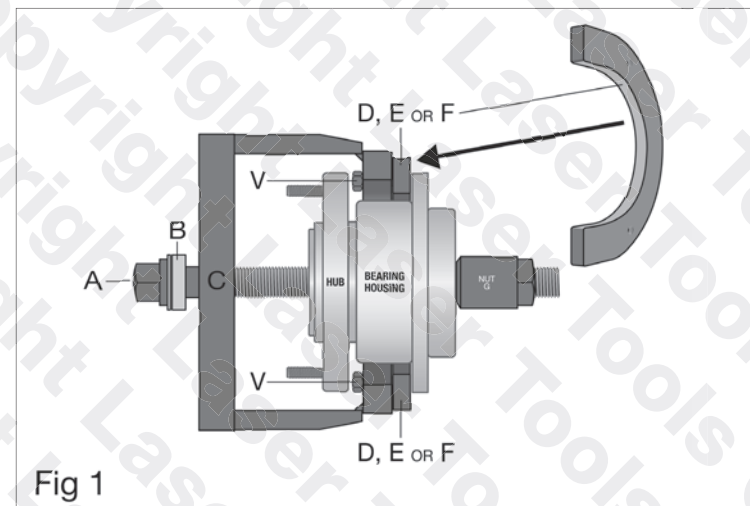


Fig 1

1: Extracting the hub from the bearing/spindle housing.

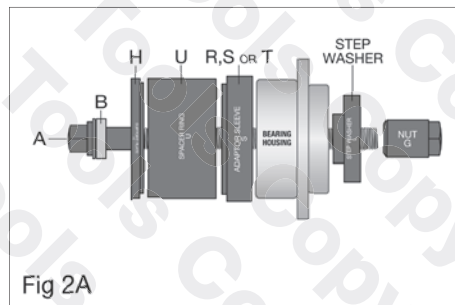
1. Raise vehicle and remove components to gain access to the hub and bearing (road wheel, brake caliper, track rod, axle retaining nut, brake disc, control arm, drive-shaft, etc).
2. Swing the wheel bearing housing and strut assembly out of the way and off the stub axle.
3. Refer to **Figure 1**: Select the horseshoe adaptor (**D**, **E** or **F**) that best fits the spindle bearing housing and assemble the hub puller as shown. The horseshoe adaptor is secured to the main bracket (**C**) with the two set screws (**V**)
4. Important: Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
5. Tighten the tapered nut (**G**) against the hub and then hold steady.
6. Turn the force screw (24mm spanner/socket) to extract the hub.
7. **Important: Do not use power tools.** This can damage the puller and will void the warranty.

Instructions

2A: Extracting the wheel bearing from the spindle housing.

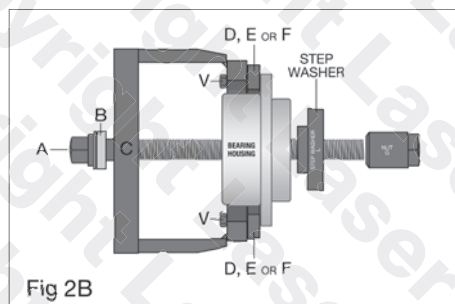
Note: Some bearings will have a snap ring connector — remove this before attempting to remove the bearing.

1. Refer to **Figure 2A**: Select the adaptor sleeve (**R, S** or **T**) that best fits the housing and allows the bearing to pass through.
2. Select the smallest step washer that will not pass through the bearing.
3. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the bearing.
4. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
5. Hold the tapered nut steady and turn the force screw to extract the bearing.
6. **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.



2B: Alternative method of extracting the wheel bearing from the spindle housing.

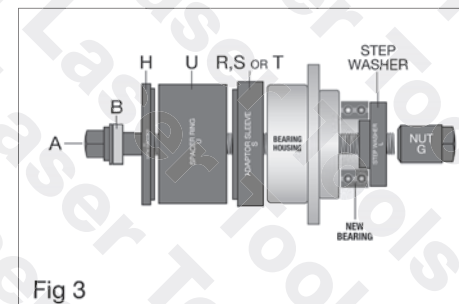
1. Refer to **Figure 2B**: An alternative method is to use the main bracket (**C**) and suitable horseshoe adaptor (**D, E** or **F**) to push against the bearing housing and extract the bearing. The horseshoe adaptor is secured to the main bracket (**C**) with the two set screws (**V**).
2. Select the smallest step washer that will not pass through the bearing.
3. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the bearing.
4. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
5. Hold the tapered nut steady and turn the force screw to extract the bearing.



Instructions

3: Installing new inner wheel bearing into the bearing housing.

1. Refer to **Figure 3**: Select the largest step washer that best fits the new bearing but does not exceed the outer diameter of the bearing.
2. Select the adaptor sleeve (**R, S** or **T**) that best fits the bearing housing.
3. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the bearing.
4. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
5. Hold the tapered nut steady and turn the force screw to pull in the bearing.



Instructions

4A: Installing new outer wheel bearing into the bearing housing.

1. Refer to **Figure 4A**: Select the largest step washer that best fits the new bearing and does not exceed the outer diameter of the bearing.
2. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the bearing.
3. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
4. Hold the tapered nut steady and turn the force screw to press in the bearing.

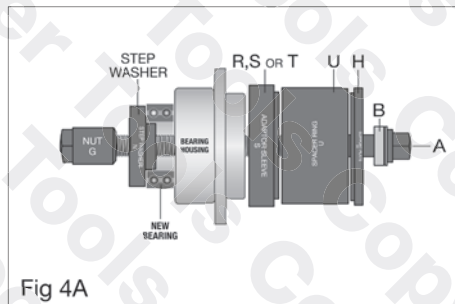


Fig 4A

4B: Alternative method of installing new outer wheel bearing into the bearing housing.

1. Refer to **Figure 4B**: Select the largest step washer that best fits the new bearing and does not exceed the outer diameter of the bearing.
2. On the housing side, select the largest step washer that will sit flat and level against the housing.
3. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the bearing.
4. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
5. Hold the tapered nut steady and turn the force screw to press in the bearing.

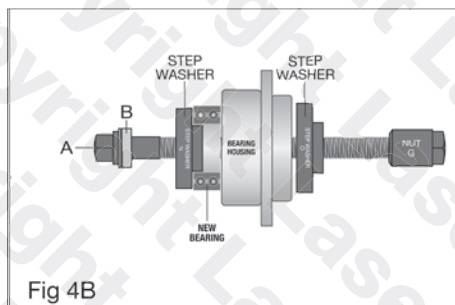


Fig 4B

Instructions

5A: Installing the hub into the bearing/spindle housing:

1. Refer to **Figure 5A**: Select the smallest step washer that best fits and will apply force to the inner bearing race.
2. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the inner bearing race.
3. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
4. Hold the tapered nut steady and turn the force screw to install the hub.

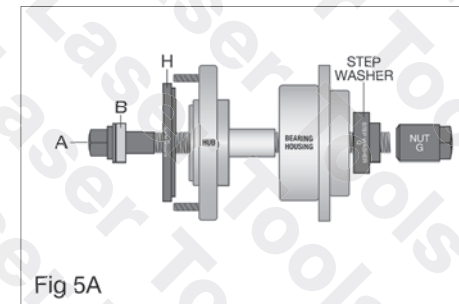


Fig 5A

5B: Alternative method of installing the hub into the bearing/spindle housing:

1. Refer to **Figure 5B**: On many applications, the thrust bearing (**B**) fits snugly onto the hub. Select the smallest step washer that best fits and will apply force to the inner bearing race.
2. Assemble the puller components as shown, then tighten the tapered nut (**G**) and step washer against the inner bearing race.
3. **Important:** Lubricate the force screw (**A**) and tapered nut (**G**) with black molybdenum disulphide grease.
4. Hold the tapered nut steady and turn the force screw to install the hub.

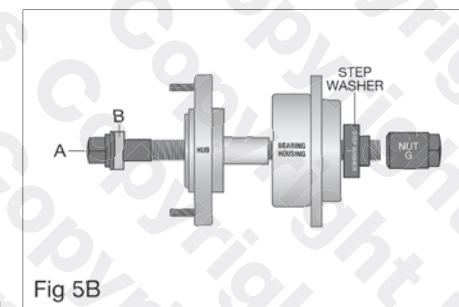
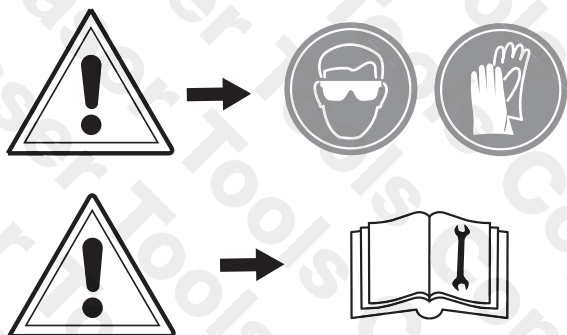


Fig 5B

Notes

- On Mercedes-Benz models, refer to the manufacturer's service documentation and completely disassemble the E-brake shoe assembly. Take care not to damage the E-brake backing plate or the large dust shield.
- On Porsche models refer to the manufacturer's service documentation for the correct method of bearing extraction and installation.



Precautions

- Wear suitable gloves and eye protection.
- Wear suitable clothing to avoid catching or snagging; remove watches, rings, etc. Tie back long hair.
- Use caution when using these tools — components are heavy.
- Do not use these tools for any purpose other than that for which they have been designed.
- Always refer to the vehicle manufacturer's service documentation. These instructions are intended as a guide only.
- If vehicle is raised, ensure it is adequately supported with axle stands, ramps, etc, as appropriate.
- **Do not use air tools with this product.**
- Always grease the centre force screw before and after every job with a high quality molybdenum disulphide grease.
- Always check that the puller is **correctly assembled** and is **correctly aligned, straight and square with the bearing housing**, etc. Danger of breakage or damage if this is not adhered to.
- Do not use tools if damaged or worn.
- When finished, account for all tools and parts being used.
- Maintain the tools in good and clean condition and always return to case for safekeeping.

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

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Safety First. Be Protected.



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