

# The SPEEDY - Universal Inner Tie Rod Tool

The **SPEEDY** is a universal tool designed to remove and mount inner tie rods on vehicles. The patented roller and cam mechanism adapts itself automatically to every kind of shape and diameter of the inner tie rod. The **SPEEDY** slips on easily, does away with fumbling for separate size attachments: saving you time and money!

- **Patented roller and cam mechanism**
- **Grips securely on round, hexagonal and octagonal tie rods**
- **Extended working diameter range: 35 mm - 45 mm ( 1-3/8" - 1-3/4" )**
- **Works on 99% of inner tie rod models**
- **Accommodates most every length and diameter of tie rod**
- **No fussing with separate, loose attachments**
- **Narrow profile allows easy use in confined spaces**
- **Long shaft tube helps keep wrenches from damaging auto body**

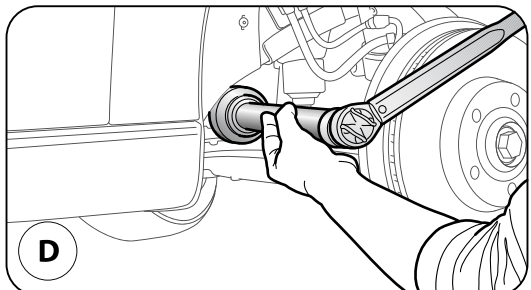
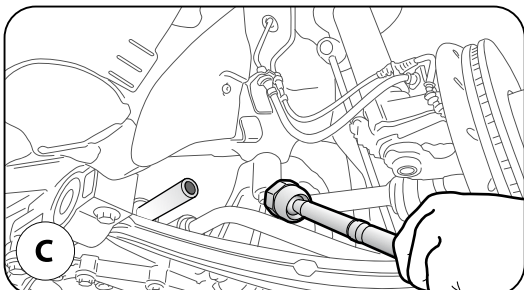
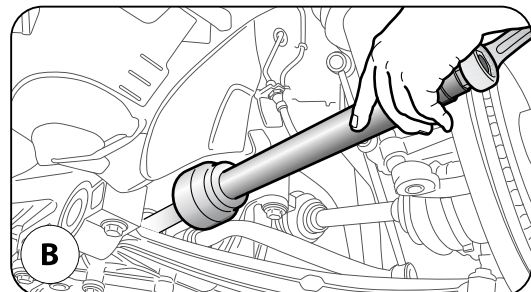
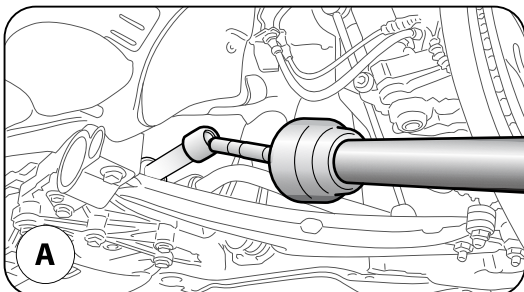
## Technical specs - SPEEDY :

Inner tie rod shape : Round – Hexagon – Octagon

Working range : Minimum diameter : **35 mm / 1-3/8"**  
Maximum diameter : **45 mm / 1-3/4"**

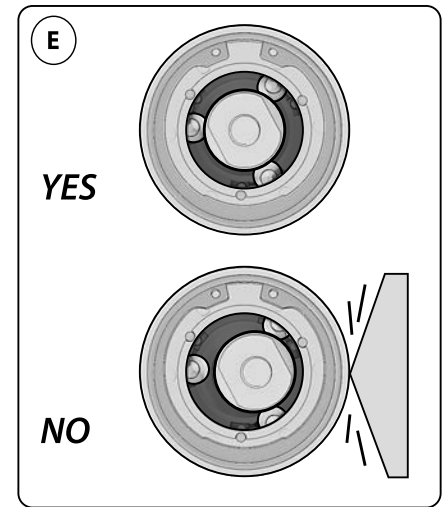
## Step by step use instructions:

1. Disconnect and remove the outer tie rod from the inner tie rod.
2. Remove any rubber cuff or sleeve from around the inner tie rod ball joint.
3. Just prior to use, check to make sure the 3 spring-loaded rollers of the **SPEEDY** are not blocked. In the event that the rollers are blocked, simply rotate the inner assembly of the **SPEEDY** a little bit in either direction until the rollers are free to move again.
4. Slide the **SPEEDY** over the inner tie rod until the ball joint end of the tie rod is enclosed within the the bell head of the **SPEEDY**.  
*(illustration A)*
5. Fix a wrench or socket (**30 mm = 1-3/16"**) to the hex end of the **SPEEDY** shaft tube and apply sufficient torque in the correct direction to loosen the tie rod ball joint from the steering rack. Most tie rods unscrew in a counter-clockwise direction. When in doubt refer to vehicle manufacturer's guidelines. *(illustration B)*
6. Once the tie rod has been loosened, remove the **SPEEDY** and continue to unscrew and remove the tie rod by hand.
7. To mount a new tie rod, first thread the new tie rod onto its mounting point as far as possible by hand. *(illustration C)*
8. Once again, check to see that the rollers of the **SPEEDY** move freely and slide the **SPEEDY** over the new tie rod as in step #4.
9. Fix spanner or torque wrench to the hex end of the **SPEEDY** and turn in the correct direction to tighten the inner tie rod. Consult vehicle manufacturer's guidelines for recommended torque settings. *(illustration D)*



## Warnings and recommendations :

1. The **SPEEDY** is intended only for removal & installation of inner tie rods.
2. Never use a hammer or similar tool to force the **SPEEDY** over the ball joint of the inner tie rod. In case the **SPEEDY** tool does not slide over the ball joint easily, first check that the rollers are not blocked (#3 above). If the rollers move freely but the **SPEEDY** does not slide over the ball joint, then check that the diameter of the tie rod ball joint is not too large for the tool ( $\leq 45$  mm).
3. **Never use a pneumatic or electric impact wrench on the SPEEDY tool.** The **SPEEDY** is designed exclusively for manual wrenches with torque being applied in a smooth and continuous manner. Using impact wrenches of any type can damage the **SPEEDY**.
4. When using the **SPEEDY** it is very important that the outside of the bell-end of the tool does not forcefully contact another part of the car body. The tool functions by a cam action and must be able to center perfectly on the tie-rod ball joint. (*illustration E*)
5. Pay attention that there is not too much grease on the tie rod ball joint or on the inside of the **SPEEDY**. Wipe away any excess grease prior to use. Excess grease may cause slippage, but may also attract dirt which can prevent free rotation of the inner roller assembly of the **SPEEDY** so that the tool will not work properly. (*see care instructions*)



## Care instructions:

The **SPEEDY** is simple to care for and has very few replacement parts.

Take care to avoid excess grease and dirt build-up inside the tool.

The outside protective plastic bell housing can break if subjected to undue shock. If needed this plastic housing can be ordered as a replacement part.

In those cases when it is desirable to clean the **SPEEDY** mechanism, proceed as follows:

Remove the circlip. Slide the roller assembly out of the **SPEEDY**. Wash off excess grease with a light-duty solvent. Clean out the inside bell housing of the **SPEEDY**. Apply a light coating of clean lubricant. Slide the roller assembly back into place. Finally, return the circlip to its original position in the groove of the bell housing.

In the very rare instance where your **SPEEDY** tool mechanism needs to be replaced, the roller assembly (including circlip) is available as a single package. Replacement is simple: Remove the old circlip and slide the old inner mechanism out of the metal bell. Clean out the inside bell housing of the **SPEEDY**. Apply a light coating of clean lubricant. Slide the new mechanism into the bell housing and fix it in place with the new circlip.

**In extreme cases:** If the **SPEEDY** is used over a very long period of time and repeatedly on tie rods of the **same diameter** it can sometimes lead to indenting of the shaped cam on the inside of the bell housing. This may impair the smooth functioning of the tool. To correct this, first remove the circlip and slide the roller assembly out of the **SPEEDY**. Inspect the shaped cam for damage. Any obviously indented areas along the cam should be sanded smooth using a piece of emory paper. Clean away any remaining sanding grit from inside the bell housing. Coat the cam with a thin layer of clean lubricant. Slide the roller assembly back into position and lock in place with the circlip. This should restore smooth operation to the **SPEEDY**.

## Replacement Parts:

- **Protective Plastic Housing**
- **Roller and cam mechanism (including circlip)**

