

Universal Bearing & Bush/ Press & Pull Sleeve Kit User Manual



Read Carefully Before Use
Keep for Future Reference

Safety Information

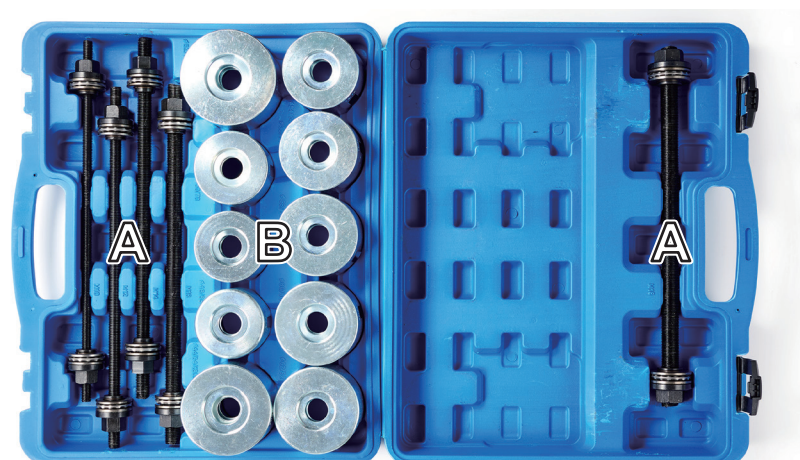
DANGER!

- Read these instructions carefully before use and only use this toolkit for its intended use, removing or installing bearing or bush. Do not allow children or people unfamiliar with this product or these instructions to operate it. Keep children and bystanders away while using this product.
- **DO NOT** use this product while you are tired or under the influence of drugs, alcohol, or medication. **DO NOT** allow persons with impaired mental sobriety and physical capability to use this toolkit.
- **ALWAYS** ensure that the person using this tool is adequately trained and qualified for the task.
- Ensure all health and safety, local authority and general workshop practice regulations are adhered to when using these tools.
- **ALWAYS** wear safety equipment appropriate for your work. **ALWAYS** wear eye protection and heavy-duty work gloves. Other safety equipment may be necessary for your project.
- Dress properly. **DO NOT** wear loose clothing or jewelry while using this product. Keep your hair, clothing, and gloves away from any moving parts.
- Keep your work area clean and well lit. Cluttered or dark areas invite accidents.
- **DO NOT** use tools if seals or threads are damaged. This may incur false readings and personal injury.
- Maintain the tools in good, clean condition for optimum performance. Any defective seals **MUST** be replaced before use to avoid incorrect readings.
- **ALWAYS** park your vehicle on firm and level ground and turn off its engine before beginning work.
- **ALWAYS** ensure that your vehicle has been jacked up and is adequately supported with axle stands.
- Ensure that the correct press is used for the engine/vehicle being tested.
- Account for all tools and parts being used and **DO NOT** leave them in or near the engine.
- Always refer to your vehicle's workshop manual, or a proprietary manual, to establish the correct procedure and data.
- **DO NOT** overreach. Keep proper footing and balance at all times.
- Maintain this product. Check for misalignment or binding of parts, breakage of parts, and any other condition that may affect this product's operation. If damage is detected, have this product repaired before further use.
- In case of an accident or injury, have a first aid kit and a communication device (e.g., a phone) readily available. Know the location of emergency medical facilities.
- **ALWAYS** follow the protocols for using a workshop airline or other sources of compressed air.
- Automotive repair is an inherently dangerous activity. This manual and the separate vehicle service manual cannot cover all possible situations that may arise, and training, common sense, and care must be supplied by the operator.
- **ALWAYS** use penetrating oil for parts that bind too firmly. Always lubricate the screw threads with molybdenum disulfide (black grease) before using the tool.
- **NEVER** use power or pneumatic tools with this tool.

Specifications

Pulling Spindles	Drive	M10, M12, M14, M16, M18
Press Sleeves	Inner Diameter	34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 75, & 80 mm.
	Outer Diameter	44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 85, & 90 mm

Package List



No.	Item	Qty.
A	Pulling Spindles	5
B	Press Sleeves	22

Not Included but Necessary
Rachets

Operation

Removing Bush & Bearing

1. Park your vehicle and lift it up using a car lift or a jack. Remove all the assemblies and accessories on the control arm you're to service.
2. Pick out the thickest of the pulling spindles (A) that will fit through the bush or bearing.
3. Lubricate the chosen spindle and its nuts with quality molybdenum disulfide.
4. Choose a correct sized press sleeve (B) for pressing out the bush or bearing.

⚠ The outer diameter of the sleeve **MUST** be wider than the inner diameter of the bush or bearing, but narrower than the outer diameter of the bush or bearing.

5. Choose a correct sized removal sleeve.

⚠ The outer diameter of the sleeve **MUST** be no wider than the control arm so they press tight and square. The inner diameter of the sleeve **MUST** be wide enough to receive the bush or bearing as it is pressed out.

6. Arrange the press and removal sleeves and the pulling spindle as shown, aligning them so that they stay aligned as you drive the nuts on both ends.

 Note that the tool can be used on bush or bearing in situ or on vise, depending on your specific condition.



7. Align the viewing slots on both sleeves so you can watch the removal.
8. Use your rachets to drive the nuts towards the control arm, steadily forcing the bearing or bush out.
9. Unscrew and remove the nuts to release sleeves and retrieve bush or bearing.

Installing Bush & Bearing

1. Pick out the thickest of the pulling spindles (A) that will fit through the bush or bearing.
2. Lubricate the chosen spindle and its nuts with quality molybdenum disulfide.
3. Choose a correct sized press sleeve (B) for pressing in the bush or bearing.

 The outer diameter of the sleeve **MUST** be wider than the inner diameter of the bush or bearing, but narrower than the outer diameter of the bush or bearing.

4. Choose a correct sized installation sleeve.

 The outer diameter of the sleeve **MUST** be no wider than the control arm so they press tight and square.

5. Gently press the chosen installation sleeve against the control arm.
6. Remove the nuts on the chosen spindles and feed it through the installation sleeve and control arm. Reinstall one of the removed nuts on the side of the installation sleeve.
7. Fit the bearing or bush, press sleeve, and the remaining nut onto the spindle from the other side of the control arm. Pre-tighten the nut so the sleeve is perfectly aligned with the bush or bearing.
8. Turn the sleeves so that you can see the bush or bearing being pushed into the control arm.
9. Use your rachets to drive the nuts towards the control arm, steadily forcing the bearing or bush until it is flush with the control arm.

Maintenance

- Clean the tools with a soft damp cloth using a mild detergent or solution after use. Do not rinse them or use abrasive cleaners or caustic chemicals.
- For best results, lubricate the tool with high-quality anticorrosive oil between uses.
- If this kit will ever be unused for an extended period, clean all components, place them in their storage case, and store in a cool dry location inaccessible to children and away from direct sunlight.

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us at **support@orionmotortech.com** and we'll resolve your issue ASAP!

For a .pdf copy of the latest version of these instructions, use the appropriate app on your smartphone to scan the QR code to the right.



