

Barnes 4WD B4WK12324

Barnes 4WD Superduty Dana 60 Axle Truss Swap Kit for Jeep JK Instruction Manual

Model: B4WK12324

PRODUCT OVERVIEW

The Barnes 4WD Superduty Dana 60 Axle Truss Swap Kit is engineered to facilitate the installation of a 2005-2022 Ford Superduty Dana 60 front axle into a Jeep JK. This kit is specifically designed for a driver-drop Dana 60 front axle from a Ford F-250 or F-350. Its keyed design ensures straightforward component alignment during installation, with all suspension brackets locating off the main truss.

Key Features:

- Keyed design for simplified installation.
- Heavy-duty construction for durability.
- Low-profile design for optimal clearance.

SETUP AND INSTALLATION

Important: This installation requires welding and advanced fabrication skills. Professional installation is recommended. Ensure all safety precautions are followed, including proper eye protection, ventilation, and fire prevention measures.

Required Tools and Materials (Not Included):

- Welding equipment and consumables
- Grinding tools
- Measuring and marking tools
- Cutting tools (e.g., plasma cutter, angle grinder)
- Vehicle lift or jack stands
- Basic hand tools

Installation Steps:

- 1. Prepare the Axle:** Remove the existing front axle from your Jeep JK. Prepare the Superduty Dana 60 axle by cleaning it thoroughly.
- 2. Trimming Requirements:** Trimming of the casting on the driver's side of the Dana 60 axle and the inner C's is required for proper fitment of the truss and associated brackets. Carefully measure and mark the areas to be trimmed before cutting.

3. **Position the Truss:** Center the main truss component on the Dana 60 axle. The keyed design will help in aligning the truss correctly.
4. **Set the Angle:** Adjust the angle of the truss to match your desired suspension geometry. Once the angle is set, all other components will locate off from the truss.
5. **Install Suspension Brackets:** Attach all included suspension brackets to the truss and axle. These brackets are designed to integrate with the keyed truss system.
6. **Welding:** Securely weld all components to the axle and truss. Ensure full penetration welds for maximum strength and safety. Allow welds to cool properly.
7. **Frame Side Track Bar Bracket:** Install the new frame side track bar bracket (included in the kit) to accommodate the new axle setup.
8. **Custom Components:** Note that custom lower control arms and a custom track bar are required and are not included in this kit. These must be fabricated or sourced separately to complete the installation.
9. **Final Checks:** After welding and assembly, inspect all welds and connections. Ensure proper clearance for all moving parts.

Important Installation Notes:

- The lug pattern on the Superduty Dana 60 is 8x170, which will not match the factory lug pattern on your Jeep JK. This requires corresponding wheel and tire changes.
- Brake lines, driveshaft modifications, vent tube routing, and steering linkages are the responsibility of the end user and must be addressed for a complete and safe installation.



Figure 1: Overview of the Barnes 4WD Superduty Dana 60 Axle Truss Swap Kit components. This image displays the main truss structure along with various brackets and mounting points, illustrating the heavy-duty construction and keyed design elements.

POST-INSTALLATION CONSIDERATIONS

After completing the installation, it is crucial to perform thorough checks and adjustments to ensure safe and proper vehicle operation.

- **Alignment:** Have a professional alignment performed immediately after installation to ensure correct steering and suspension geometry.
- **Fastener Torque:** Re-check the torque on all fasteners after the first 50-100 miles of driving and periodically thereafter.
- **Fluid Levels:** Verify axle fluid levels and ensure no leaks are present.
- **Brake System:** Bleed the brake system if brake lines were modified or replaced. Test brake function in a safe environment.
- **Steering System:** Confirm that the steering system operates smoothly and without binding.

MAINTENANCE

The Barnes 4WD Axle Truss Kit is designed for heavy-duty use. Regular inspection is key to maintaining its performance and longevity.

- **Visual Inspection:** Periodically inspect all welded areas and mounting points for cracks, corrosion, or signs of stress, especially after off-road use.
- **Component Integrity:** Check all associated suspension components, including control arms, track bar, and bushings, for wear or damage.
- **Cleaning:** Keep the axle and truss free from excessive mud, dirt, and debris to prevent corrosion and allow for easier inspection.

TROUBLESHOOTING

This section addresses common issues that may arise during or after the installation of the axle truss kit.

- **Issue:** Components do not align correctly during assembly.
Solution: Re-verify that the correct Dana 60 axle (2005-2022 Ford F-250/F-350 driver drop) is being used. Ensure all required trimming of the axle casting and inner C's has been performed accurately. The keyed design should guide alignment; if not, re-check measurements and component orientation.
- **Issue:** Vehicle handling issues after installation.
Solution: This often indicates an alignment problem. Ensure a professional wheel alignment has been performed. Also, verify that custom lower control arms and a custom track bar have been correctly installed and adjusted. Check all suspension mounting points for proper torque and integrity.
- **Issue:** Unwanted noises or vibrations.
Solution: Inspect all components for contact points, loose fasteners, or worn bushings. Ensure driveshaft angles are correct and that any necessary driveshaft modifications have been properly executed.

For issues not covered here, please contact Barnes 4WD customer support.

SPECIFICATIONS

Product Name	Superduty Dana 60 Axle Truss Swap Kit
Brand	Barnes 4WD
Model Number	B4WK12324
Compatibility	Jeep JK with 2005-2022 Ford F-250/F-350 Driver Drop Dana 60 Front Axle
Item Weight	40 pounds
Product Dimensions	48 x 8 x 8 inches
Installation Type	Weld-on (Professional installation recommended)

WARRANTY AND SUPPORT

For specific warranty information regarding your Barnes 4WD Superduty Dana 60 Axle Truss Swap Kit,

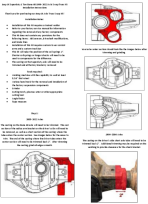
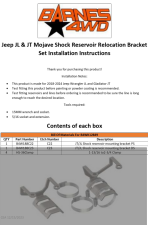
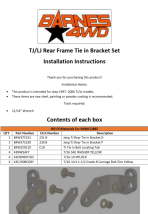

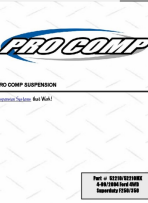
please refer to the official Barnes 4WD website or contact their customer service directly. Support for installation questions or technical assistance can also be obtained through Barnes 4WD customer service channels.

Contact Information: Please visit the official Barnes 4WD website for the most current contact details.

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This manual is for informational purposes only. Barnes 4WD is not responsible for improper installation or use of this product.

Related Documents - B4WK12324

	<p>Jeep JK Superduty 1 Ton Dana 60 Axle Swap Truss Kit Installation Instructions</p> <p>Comprehensive installation guide for the Barnes 4WD Jeep JK Superduty 1 Ton Dana 60 Axle Swap Truss Kit (1999-2022 models). This document details the necessary tools, preparation steps, and assembly procedures for modifying your Dana 60 axle for a Jeep JK application.</p>
	<p>Jeep JL & JT Mojave Shock Reservoir Relocation Bracket Set Installation Instructions Barnes 4WD</p> <p>Comprehensive installation guide for the Barnes 4WD Jeep JL & JT Mojave Shock Reservoir Relocation Bracket Set (Part Number B4WK12849). This guide provides step-by-step instructions for fitting and securing shock reservoirs to your Jeep Wrangler JL or Gladiator JT.</p>
	<p>Jeep TJ/LJ Rear Frame Tie-In Bracket Set Installation Guide</p> <p>Comprehensive installation instructions for the Barnes 4WD Jeep TJ/LJ Rear Frame Tie-In Bracket Set (Model B4WK12885), detailing required tools, parts, and step-by-step assembly for Jeep models 1997-2006.</p>
	<p>Jeep Wrangler TJ, LJ & YJ Front Bumper Welders Kit Fabrication Notes Barnes 4WD</p> <p>Comprehensive fabrication notes and a detailed bill of materials for the Barnes 4WD Front Bumper Welders Kit, designed for 1987-2006 Jeep Wrangler TJ, LJ, and YJ models. Includes essential tools and assembly guidance for a successful installation.</p>
	<p>Pro Comp Suspension 52210/52210MX Lift Kit Installation Instructions for Ford Superduty F250/F350 (1999-2004)</p> <p>Detailed installation guide and parts list for the Pro Comp Suspension 52210/52210MX lift kit, designed for 1999-2004 Ford F-250 and F-350 4WD Superduty trucks. Includes safety precautions, assembly procedures, torque specifications, and parts identification.</p>



[EPIC Roadie Removable Arm Rest Installation Guide](#)

Easy-to-follow installation guide for the EPIC Roadie Removable Arm Rest, designed for Jeep Wrangler and Gladiator (JL/JT). Learn how to attach and adjust your arm rest for optimal comfort.