





# INSTALLATION GUIDE

### PART NUMBER: 25121 Control Arm Kit 2019+ Ford Ranger 2WD / 4WD

COMPATIBLE WITH ALUMINUM KNUCKLES ONLY

300 W. PONTIAC WAY. CLOVIS, CA 93612 Phone: 800-445-3767 | Email: Info@Belltech.com THANK YOU

Thank you for choosing our high quality Belltech product. We have spent a great deal of time developing our line of products so that you will receive maximum performance with minimal difficulty during installation. Soon your vehicle will be on the road looking and feeling much improved.

Please take a moment to read all instructions and warnings prior to installation of your new Belltech product and before operating your vehicle. If you have any questions or concerns regarding any step in the installation process, please do not hesitate to call or email our customer support specialists who are trained to help you through any portion of this process.

#### Before You Begin:

It is of the utmost importance that you confirm all the components listed on the parts list are in the kit. You can find this list located on the last page(s) of your instructions. Do not begin installation if any part is missing. Instead, please call our Belltech customer service specialists.

**Belltech Customer Support:** 

Phone: 1-800-445-3767

Email: info@belltech.com

#### Safety Information:

Warning: Do not work under a vehicle supported only by a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

Proper use of safety equipment and eye/face/hand protection is necessary when performing any of the following instructions.

We strive for an exceptional experience for all our valued customers. If for any reason you need assistance with your Belltech products, please do not return the product to the store you purchased from, but rather call our dedicated customer service experts, from 7am to 5pm PST.

We recommend that a qualified mechanic, in a properly equipped facility, perform this installation.

It is very helpful to have an assistant available during installation.

#### **Before Driving Your Vehicle:**

It is important to double check all brake hoses, cables, and other components to be sure there is no interference. You must also check for wheel/tire to chassis/body interference. If any issues are found, review your installation instructions to be sure no steps were missed, and any problems are corrected.

Make sure your vehicle is aligned immediately following installation.

Check all hardware and torque at intervals for the first 10, 100, and 1000 miles.

Some of Belltech's products are designed to improve your vehicle's off-road performance. Leveling/lifting your vehicle may result in an altered center of gravity. It is crucial to use extreme care when operating your vehicle to prevent rollover and/or loss of control.

Any changes in your vehicle's suspension may result in transformed handleability. Please test-drive your vehicle in a remote location so you can become accustomed to the revised driving characteristics.

Perform headlight check and adjustment.

Failure to drive any modified vehicle in a safe manner may result in harm or death.

Never operate your modified vehicle under the influence of drugs, alcohol, or lack of adequate sleep.

Always wear your seatbelt.



#### **RECOMMENDED TOOLS:**

- Properly rated floor jack
- Support stands
- Wheel chocks
- Metric socket wrench set
- Metric wrench set
- Tape measure
- Marking pen
- Torque wrench up to 150 ft lbs.



#### **SPECIALTY TOOLS:**

- Ball joint removal tool
- Tie-down strap or large zip ties

#### FITMENT NOTE:

These control arms were designed to be used with Belltech lowering struts or coilovers. Belltech control arms are not compatible when paired with OE struts. Belltech has not tested cross-compatibility with any other brands and cannot guarantee results when used with another brands products.

#### **INSTALLATION PREPARATION:**

Before beginning the installation process, measure the hub to fender heights for your vehicle and record them in the "Before" section. After your vehicle has been modified, record the new measurements in the "After" section. This way, you can compare the resulting height to the original. When taking the measurements, measure vertically from the center of the wheel to the inner edge of the fender.



#### JACKING, SUPPORTING, AND PREPARING THE VEHICLE

- 1. Park your vehicle on a smooth, level, concrete, or seasoned asphalt surface.
- Block the rear wheels of the vehicle using wheel chocks. Make sure the vehicle's transmission is in "PARK" (automatic) or first 2. gear (manual).
- 3. Activate the parking brake.
- 4. Loosen, but do not remove, the front wheel lug nuts.
- Lift the front of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so the front tires are approximately 6-8 5. inches off the ground.
- Place support stands rated for the vehicle's weight. The stands must be positioned in the factory specified locations. (Refer to 6. the owner's manual). Prior to lowering the vehicle onto stands, make sure the support stands will contact the chassis. It is very important that the vehicle is properly supported to prevent any harm to oneself or to the vehicle.
- 7. Lower the vehicle slowly onto the stands.
- Remove the front wheels. 8.



#### Technician reminder:

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#### **ORIGINAL CONTROL ARM REMOVAL**

- 9. Place a floor jack under the lower control arm and lift until a slight compression of the suspension is achieved. This will support the suspension during the upper control arm upgrade.
- 10. Support the knuckle with a strap or large zip ties to prevent it from hanging during installation. Keep the brake lines safe from overextending or other damage once the arm is removed.
- 11. Cut the cable ties to detach the speed sensor wire from the bottom of the original upper control arm.



- 12. Remove the upper ball joint nut with an 18mm wrench. Use the hex stud on the ball joint to prevent the stud from turning while removing the nut. Use a ball joint separator tool to detach the ball joint from the knuckle. Alternatively, you can strike the ball joint boss on the spindle to dislodge the ball joint.
- 13. Note the original position of the ball joint on upper control arm, this is closer to the rear of the vehicle.
- 14. Use 18mm and 21mm wrenches to remove the upper arm bolt and nut. Detach the control arm from the vehicle.

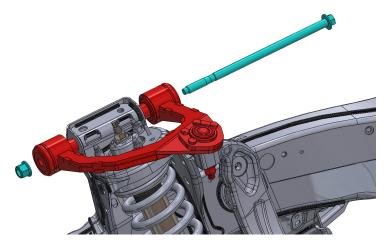


#### **BELLTECH CONTROL ARM INSTALLATION**

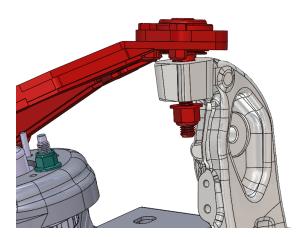
15. The new Belltech upper control arm will be attached in the same position as the original control arm. Left and right will be labeled with a "L" or "R" at the end of the part number printed on the control arm.



16. Attach the Belltech control arm with the original bolt and nut. Hand tighten but do not torque yet.



17. Mount the upper ball joint into the knuckle with the original nut. A pry bar may help to pull the arm down. Hand tighten but do not torque yet.



#### **BELLTECH CONTROL ARM INSTALLATION CONTINUED**

- 18. Continue to support the lower control arm with the floor jack to keep the suspension loaded.
- 19. Adjust the height of the lower floor jack to reach the same distance measured from the center of the hub to the lip of the fender during the installation preparation.



- 20. Torque the upper ball joint nut to 46 ft lbs.
- 21. Torque the upper control arm nut to 122 ft lbs.

## FINALIZING THE INSTALLATION

- 22. Mount the wheels and tighten the lug nuts.
- 23. Lift the vehicle and remove the support stands.
- 24. Carefully lower the vehicle onto the flat ground.
- 25. Torque the lug nuts to 100 ft lbs.
- 26. Check that all components and fasteners have been properly installed and torqued.
- 27. Read and perform all tasks in the "Before Driving Your Vehicle" section of page 1 of your instructions.





#### THANK YOU FOR CHOOSING BELLTECH.



You are now a part of the Belltech family and we are eager to catch a glimpse of your newly modified vehicle. Give us a shout out and let us know how much you love our product. Don't forget, we offer other Belltech related merchandise for you and your vehicle on our website www.belltech.com

If you have any questions, concerns, or warranty related issues regarding your Belltech product, please call or email our experienced customer service specialists.

**Belltech Customer Support:** 

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## KIT CONTENTS



UPPER CONTROL ARM KIT		
Part number	Description	Qty
25121-100L	LEFT CONTROL ARM	1
25121-100R	RIGHT CONTROL ARM	1