



## INSTALLATION INSTRUCTIONS

6000 - 6010 - 6100 - 6110

6200 - 6202

Lowering Block Kit  
All Truck Applications

**Thank you for being selective enough to choose our high quality BELLTECH PRODUCT. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation.**

- Note: Confirm that all of the hardware listed in the parts list is in the kit. **Do not** begin installation if any part is missing. Read the instructions thoroughly before beginning this installation.
- Warning:** **DO NOT** work under a vehicle supported by only a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.
- Warning:** **DO NOT** drive vehicle until all work has been completed and checked. Torque all hardware to values specified.
- Reminder: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!
- Note: It is very helpful to have an assistant available during installation.

### **RECOMMENDED TOOLS:**

- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench set
- Torque wrench: *0-150 lb ft. range*
- Ratcheting socket wrench and socket sets
- Safety Glasses

### **WARNING:**

**When lowering any vehicle equipped with a rear LSPV it is recommended that the valve be re-adjusted to the manufacturer's specifications for proper braking. It is advised to have the work preformed by a qualified service facility.**

**A Load Sensing Proportioning Valve (LSPV) controls the appropriate braking pressure for the rear wheels based on the load level to prevent unnecessary wheel lock-up.**

## **1. JACKING, SUPPORTING AND PREPARING THE VEHICLE**

- a) Park the vehicle on a flat surface, preferably asphalt or concrete. Block the wheels on the end not being worked on so that the vehicle cannot move. Raise the end of the vehicle being worked on with a floor jack. Place the jack stands under the vehicle on a stable portion of the frame, nearest the point of the vehicle being worked on. (Figure B & D) Be sure the jack stands are rated to carry the weight of the vehicle.

**CAUTION: DO NOT PUT THE STANDS UNDER THE AXLE TUBES OF THE REAR END. PUT THEM UNDER THE FRAME RAILS ONLY!**

- b) Once the vehicle is on the stands, and the tension is taken off the leaf spring assemblies, (Figure B & D) let the jack remain under the axle housing to support it.
- c) Remove the stock U-bolts and nuts from the axle housing.
- d) If the axle housing is above the leaf spring, (figure B) slowly raise the jack to create space between the leaf spring and the housing. If the axle is below the leaf springs, (Figure D) slowly lower the jack to create space.
- e) Once the space has been achieved, the lowering or lift block can be placed between the leaf spring and the axle housing. Make sure that the spring center bolt (Figure A & C Item #5) locates itself in the recess on the block and the centering pin cast into the block (Figure A & C Item #4) locates itself into the centering hole on the spring perch in the axle housing. (Figure A & C Item #1)
- f) Now that blocks are in place, lower the jack so that the weight of the axle is on the block and leaf spring. If you are using lift blocks, raise the jack to push the blocks and spring together.
- g) Install the U-bolts as shown in (Figure A & C Item #2) and install the washers and nylon lock nuts, and tighten to 80 FT. pounds of torque.
- h) Once the hardware is in place and you have re-checked all the procedures, place the tires & wheels back on the vehicle. Jack the vehicle up and remove the stands from under the frame.
- i) Now, lower the vehicle back to the ground. Check under the vehicle for any clearance problems, if there is none, the installation is complete.

**Note: Some states have bumper height limitations whether lifting or lowering. Please check local & state laws.**

- j) Hardware being fastened to the vehicle's original fastening points should be torqued to the proper specifications. To prevent chassis damage, never over-torque the hardware.
- k) Check that all components and fasteners have been properly installed, tightened and torqued.
- l) Check brake hoses, and other components for any possible interference.
- m) Lift the vehicle and remove the support stands. Carefully lower the vehicle to ground.
- n) Immediately test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.
- o) Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

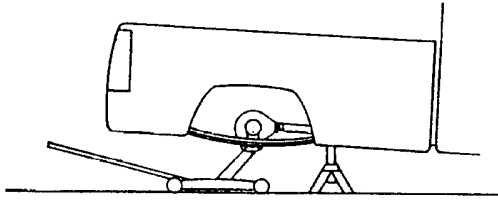


Figure B

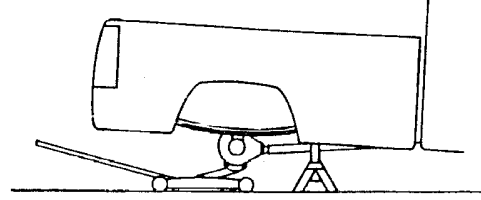


Figure D



Figure A

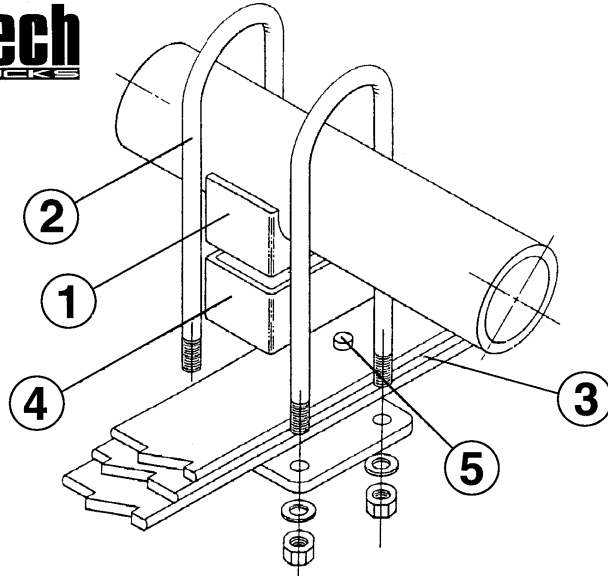
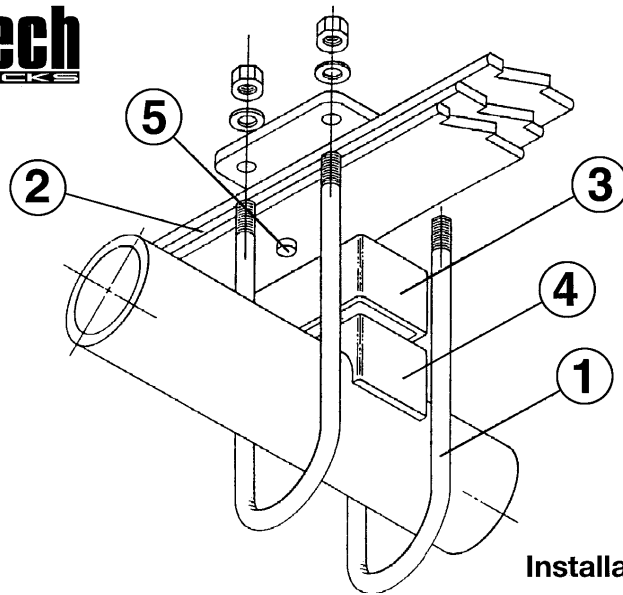


Figure C



Installation Instructions



## INSTALLATION INSTRUCTIONS

2005  
DROPPED SPINDLE  
DATSUN 720 2 WHEEL DRIVE PICK-UPS  
NISSAN HARDBODY 2WD PICK-UPS

**Congratulations! You were selective enough to choose a BELLTECH PRODUCT. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation.**

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

**Warning:** **DO NOT** drive vehicle until all work has been completed and checked. Torque all hardware to values specified.

**Reminder:** Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!

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

### **RECOMMENDED TOOLS:**

- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench: 9/16"
- Torque wrench: 0-75 lb ft. range
- Ratcheting socket wrench and sockets: 10mm, 9/16"
- Safety Glasses

### **KIT INSTALLATION**

1. Belltech 2" Dropped Front Spindles are designed to work with factory wheels and most aftermarket wheels. Because it is not possible to test every wheel for this application, you must determine carefully that the wheels you choose do not have rim contact with any of the suspension components.
2. Make sure the vehicle is on a flat surface, preferably asphalt or concrete. Block the rear wheels and set the parking brake.
3. Raise the front of the vehicle with a floor jack and place jack stands in a stable position on the frame rails, not under the lower control arms.
4. Remove the wheel and tire assembly.
5. Remove the brake caliper by removing the two large bolts accessible from the backside of the brake caliper. **CAUTION:** When the brake caliper is removed, do not allow it to hang unsupported from the brake line. Support the caliper with a piece of wire to prevent damage to

the line. **NOTE:** Retain the shorter of the two caliper bolts for re-installation onto the new spindle. The longer of the two will not be used later.

6. Remove the hub and rotor assembly from the spindle by removing the grease cap, cotter pin, the tin nut cover lock, and the nut from the spindle pin (Photo 1). Carefully slide the assembly off the pin, not letting the outer bearing come out of the hub. Place it in a safe place.
7. Remove the dust cover from the spindle by removing the four Phillips screws from the face of the cover. **NOTE:** Keep these screws; you will be using these in the new Belltech spindle later.
8. Remove the cotter pin from the nut on the outer tie rod end. Loosen the nut, but don't remove it completely. With a large hammer strike the side of the steering arm until the tie rod end frees itself. This will damage the part. Swing the rod out the way (Photo 2).
9. Place a floor jack under the lower control arm until a slight compression of the suspension is achieved. Turn the spindle to access the lower ball joint without interference (Photo 3).
10. Remove the cotter pin and loosen the lower ball joint nut. **Do not** remove it completely. Strike the lower portion of the spindle beside the ball joint, this will loosen it from the taper.
11. Loosen the upper ball joint nut with the same procedure as the lower, leaving the nut on the threads. Using the hammer method as above, loosen the ball joint from its position (Photo 4).
12. The upper ball joint and control arm should lift itself out of its stock location.

**CAUTION:** Keep hands free from the area of the upper arm at this time to prevent injury. Remove the lower nut and slide the spindle off the lower ball joint.

13. Place the new Belltech spindle on the lower ball joint and replace the nut. Pull the upper control arm down so the upper ball joint is in its correct position in the spindle and replace the nut. Tighten both nuts and replace the cotter pins (Photo 5).
14. Because of the positioning of the steering arm on the new Belltech spindle, trimming of the length of the outer tie rod ends on both sides is necessary. The amount to be removed is approximately  $\frac{3}{16}$  to  $\frac{1}{4}$  of an inch. Before trimming the end, mark the position of the tie rod end in the adjusting sleeve with a piece of tape around the thread. Trimming can be achieved by using a hacksaw or a grinder.

**CAUTION:** Always wear eye protection when using power tools. (Photo 9).

15. Deburr the threads on the tie rod ends, making sure they are not damaged. Screw the tie rod end back into place in the adjusting sleeve to the position marked with the tape. Install the tie rod end into place on the new spindle, tighten the nut and install a new cotter pin.
16. Replace the dust shield onto the new Belltech spindle using the four Phillips screws and tighten.
17. Install the hub and rotor assembly onto the new spindle by reversing the procedure of removal in Step 6.

18. Install the caliper onto the new spindle, making sure the brake pads are in the correct position. There are two different size bolts attaching the steering arm to the stock spindles. Remove the bolts holding the stock arm and use the shorter of the two on each side to re-attach the caliper to the new spindle (along the other bolts retained in Step 5) and tighten securely. Turn the rotor assembly to make sure it is free from any interference.
19. On the 720 models Nissan pick-up, the two spacers must be installed between the caliper and the spindle. This spaces the caliper to the outside in order for the rotor and caliper to correctly align them-selves (Photo 7).
20. Loosen the two nuts on the tie rod adjusting sleeves and turn them approximately 4 to 4 ½ turns until the wheels appear straight. This will temporarily adjust the toe in of the vehicle, to enable you to drive the vehicle to an alignment shop. Tighten the tie rod clamps (Photo 8).
21. Install your wheel and tire combo onto your truck. Turn the wheel by hand to make sure there are no clearance problems. Turn the wheel completely right to the left and set the steering stop so the wheel and tire does not contact any of the other components. Depending on your wheel choice, some slight grinding on the lower control arm may be necessary.
22. Raise the vehicle with a floor jack, remove the stands and lower to the ground. Check to see that there are no clearance problems. Take immediately to a qualified alignment shop.

#### **PART LIST FOR 2005 DROPPED SPINDLE KIT**

<b>PART#</b>	<b>DESCRIPTION</b>	<b>QTY</b>
2005-350	Spindle casting L.H.	1
2005-450	Spindle casting R.H.	1
111092	HH Cap Screw	4
110908	Cotter Pin 7/64" x 1 ¼" Zinc	2
110910	Cotter Pin 1/8" x 1 ½" Zinc	6
2005-007	Spacer tube	4

