



INSTALLATION INSTRUCTIONS

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2100 DROPPED FRONT SPINDLE CHEVROLET 2WD S-10 / S-15 PICKUP / BLAZER / JIMMY, including models with ABS General Motors G-Body Rear Wheel Drive Cars

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

Note: Confirm that all of the hardware listed in the parts list is in the kit. **DO NOT** begin this 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 the 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 the installation process.

Note: We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

RECOMMENDED TOOLS:

- Blocks and Wheel chocks
- Ratcheting Socket Wrench
- Safety Glasses
- Properly rated floor jacks and support stands
- Combination Wrench
- Torque wrench: 0-75 lb ft. range

KIT INSTALLATION

1. Belltech 2" Dropped Front Spindles are designed to work with factory wheels and most aftermarket wheel. Because it is not possible to test every wheel for this application, you must determine carefully that the wheels you choose do not have wheel rim contact with any 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. Remove the wheel and tire assembly (Photo 1).
4. Remove the brake caliper by removing the two caliper bolts accessible from the backside of the brake caliper (Photo 2). **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.

5. Remove the hub and rotor assembly from the spindle by removing the grease cap (Photo 3), cotter pin and the nut from the spindle pin (Photo 4). Carefully slide the assembly of the pin not letting the outer bearing come out of the hub. Set it aside in a safe place (Photo 5).
6. Remove the dust cover from the spindle by removing the three bolts from the face of the cover.
7. Remove the cotter pin from the one on the outer tie rod end. Loosen the nut, but don't remove it completely (Photo 6, 6A). With a large hammer, strike the side of the steering arm until the tie rod frees itself. **CAUTION: DO NOT STRIKE THE NUT OR TIE ROD END ITSELF.** This will damage the part. Swing the rod out of the way.
8. Place a floor jack under the lower control arm and lift until a slight compression of the suspension is achieved (Photo 7). Turn the spindle to access the lower ball joint without interference.
9. Remove the cotter pin and loosen the lower ball joint nut on the threads. DO NOT remove the nut completely. Strike the lower portion of the spindle beside the ball joint, this will loosen it from the taper (Photo 8)
10. 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, this will loosen it from the taper (Photo 9).
11. Raise the upper control arm to disengage the upper ball joint and lift the spindle off of the lower ball joint (Photo 10).
12. Place the new Belltech spindle on the lower ball joint and replace the nut (Photo 11). Pull the upper control arm down so the upper ball joint is in its correct position in the spindle and replace the nut (Photo 12). Tighten both nuts and install the cotter pins.
13. Install the tie rod end back into position on the steering arm. Tighten the nut and install the cotter pin (Photo 13).

IMPORTANT NOTE: If your vehicle is equipped with ABS refer to page 4 for re-mounting information **BEFORE PROCEEDING.**

14. **DUST SHIELD MODIFICATION:** For this modification, the DUST SHIELD needs to be slightly altered.
 - A. On the backside or inside of the DUST SHIELD, located approximately 5" from the point shown, a concaved clearance indentation needs to be added (see white dotted out line) (Photo 14, 14A), to avoid any interference with the lower control arm, when the lower control arm moves upward.
 - B. Using a ball-peen hammer, knock inward the outlined area, approximately 3/16"-1/4" for clearance purposes.
15. Before re-installing the hub and rotor assembly, take time to determine that the bearings are in good condition and are packed with enough grease. Inspect the inner bearing cavity of the rotor to determine that it is sufficiently coated with grease. When in doubt, repack the bearings and recoat the inner bearing cavity.
16. Re-install the hub and rotor assembly onto the new spindle. Make sure the bearing, washer and nut is in the correct position (Photo 15).
17. Tighten the spindle nut to 12ft lbs. While turning the wheel forward by hand to seat the bearings. Back off the nut to a "just loose" position. Hand-tighten the spindle nut. Loosen the spindle nut (not more than 1/2 flat) to align the nearest hole in the spindle pin with the slots in the nut.
18. Insert the cotter pin into the hole in the spindle pin (Photo 16). Bend the ends of the cotter pins against the nut and cut them off so they will not interfere with the dust cap. Install the dust cap.
19. Install the caliper onto the new spindle. Make sure the brake pads are in their correct position. Tighten the mounting hardware (Photo 17). Make sure there is no interference between the brake lines and other components.
20. If severe toe-out conditions exist, loosen the two nuts on the tie rod adjusting sleeves and turn them approximately 2 or 2 1/2 turns or until 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 clamp bolts (Photo 18).
21. Install the wheels and tires onto the truck. Turn the wheels by hand to make sure the wheel and tire does not contact any suspension components. Depending on your wheel choice, some slight grinding of the lower control arm may be necessary. **CAUTION: Always wear eye protection when using power tools** (Photo 19). **SEE 14A & 14B FOR OTHER OPTIONS.**
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.

SPECIAL INSTRUCTIONS FOR VEHICLES WITH ABS

- A.** After removing the hub and rotor assembly as described on page 2, locate the ABS cable retainer bolt on the upper control arm (Photo 20).
- B.** Using a ratchet and wrench, loosen and remove the nut and bolt. We recommend the use of the ratchet and wrench to prevent accidental damage to the cable, retainer, or mounting hardware (Photo 21).
- C.** Move the ABS cable out from behind the upper control arm to prevent damage during the dust shield removal.
- D.** Remove two of the three dust shield bolts. **DO NOT** remove the upper ABS sensor bolt (Photo 22).
- E.** Loosen, but do not remove the third dust shield bolt. This bolt will prevent the dust cover from falling and putting strain on the ABS cable.
- F.** Hold the dust shield with one hand and remove the remaining dust shield bolt.
- G.** Use wire tie or twine to hang the dust shield from the frame or body support to prevent damage to the ABS cable or sensor
- H.** Reverse the procedure for re-installation.

PART LIST FOR 2100 DROPPED SPINDLE KIT

| PART NUMBER | DESCRIPTION | QTY. |
|--------------------|---------------------------|-------------|
| 2100-350 | SPINDLE CASTING LH | 1 |
| 2100-450 | SPINDLE CASTING RH | 1 |
| 2100-110 | COTTER PIN PACK | 1 |



PHOTO 1



PHOTO 4

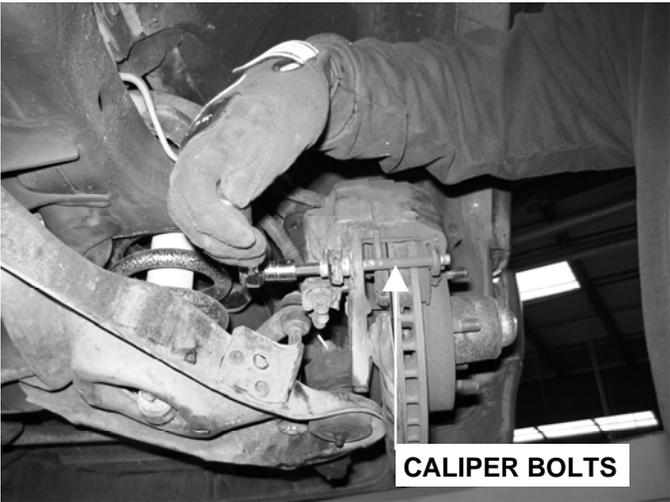


PHOTO 2

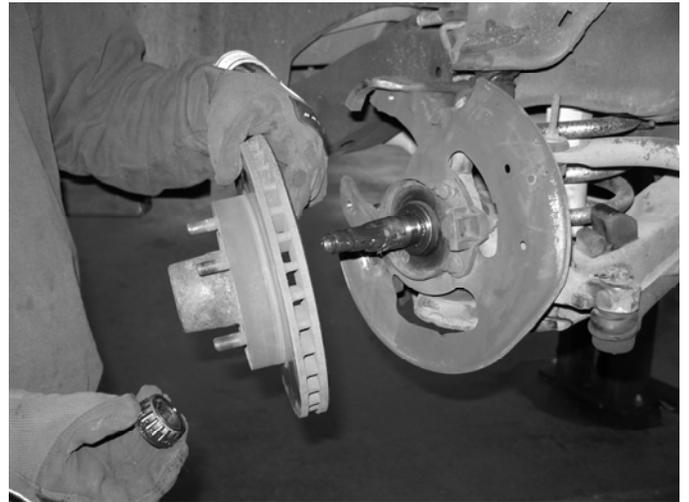


PHOTO 5



PHOTO 3

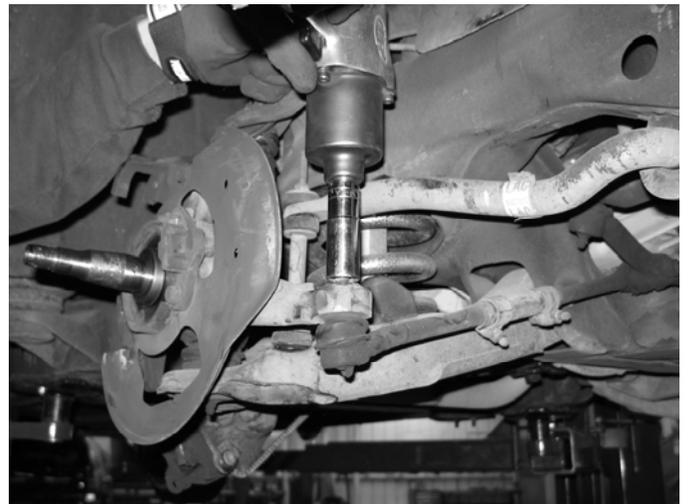


PHOTO 6



PHOTO 6A

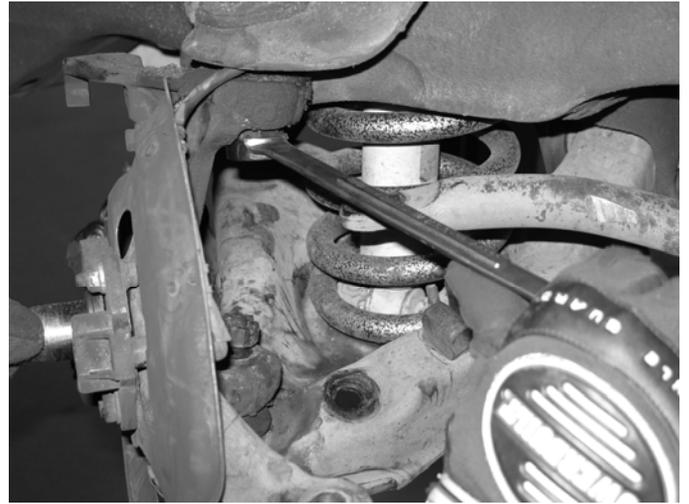


PHOTO 9



PHOTO 7

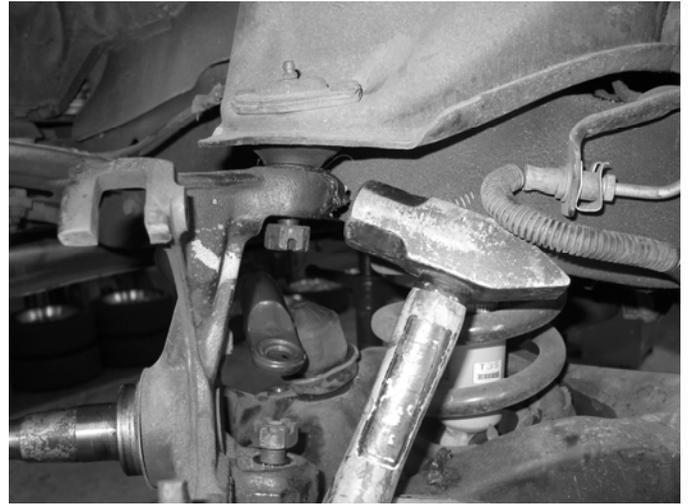


PHOTO 10



PHOTO 8

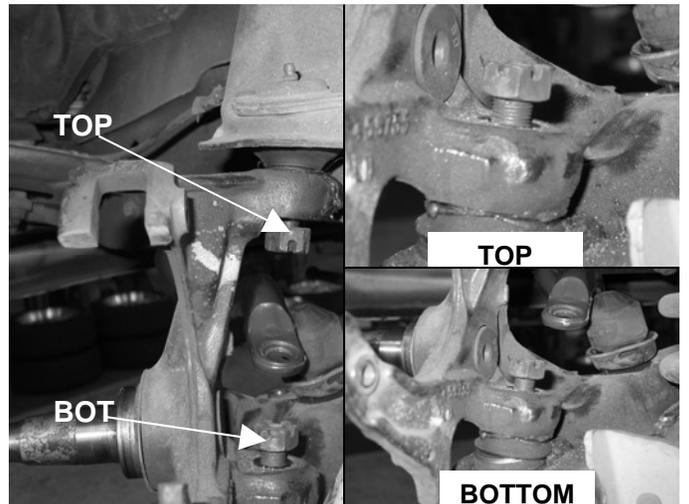


PHOTO 11

PHOTO 12



PHOTO 13



PHOTO 15

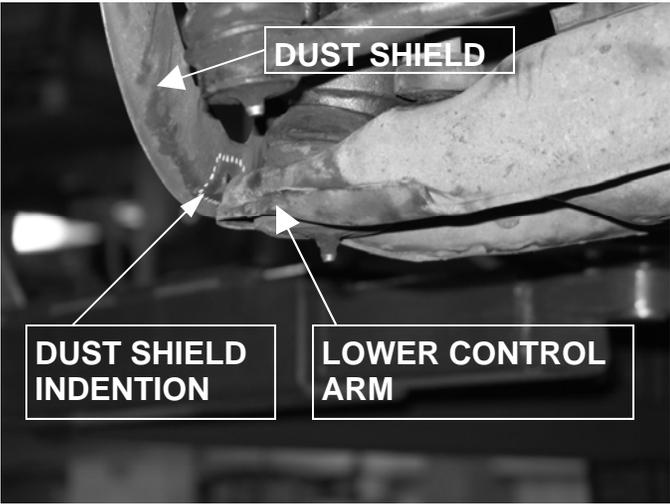


PHOTO 14



PHOTO 16

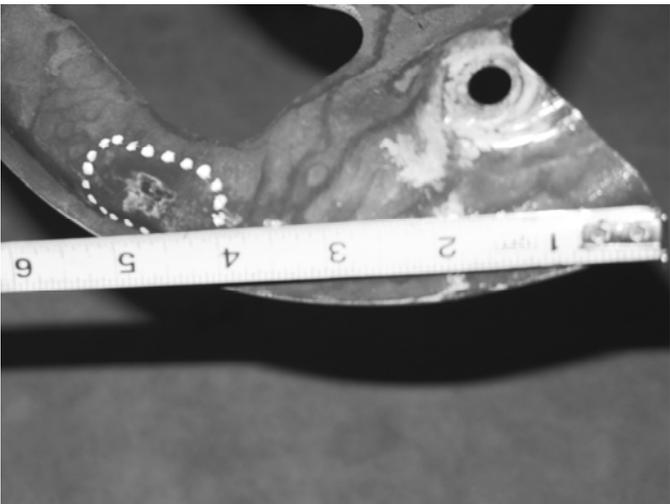


PHOTO 14A



PHOTO 17

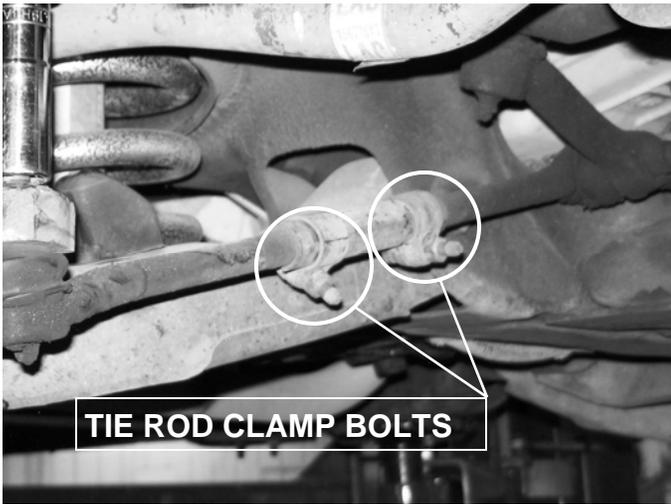


PHOTO 18

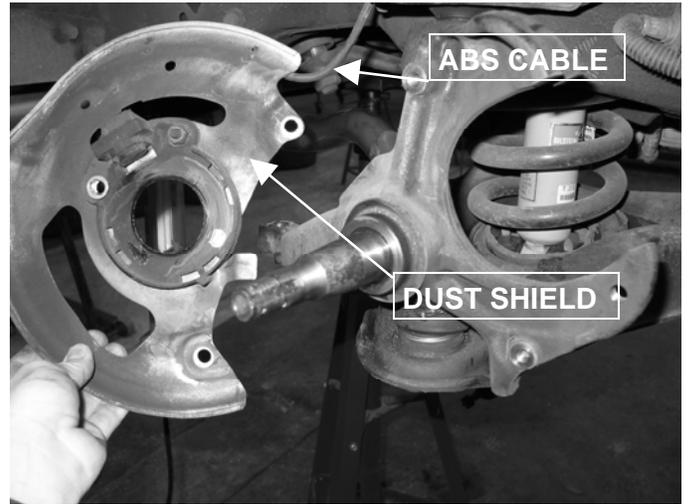


PHOTO 21



PHOTO 19



PHOTO 22



PHOTO 20



PHOTO 23