

### INSTALLATION INSTRUCTIONS

# 5502 REAR ANTI-SWAY BAR 1999-UP CHEVROLET SILVERADO

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 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- 5/8", 9/16", 15mm
- Torque wrench- 10-75 ft. lb. range
- Ratcheting socket wrench and sockets- 9/16", 14mm
- Socket Head Hex Wrench (Allen™ Wrenches)- 6mm
- Tape measure
- Electric or Pneumatic hand drill
- Quality Carbide drill bit-5/16", 3/8"
- Round File or De-burring tool
- Safety Glasses

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

SAFETY REMINDER: PROPER USE OF SAFETY EQUIPMENT AND EYE/FACE/HAND PROTECTION IS ABSOLUTELY NECESSARY WHEN USING THESE TOOLS TO PERFORM

PROCEDURES!

#### KIT INSTALLATION

- 1. Open the hardware kit and remove all the contents. Refer to the part list (Page 4) and Photo 1 to verify all parts are present.
- **2.** Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the FRONT wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1<sup>st</sup> gear (manual) or "Park" (automatic).
- **3.** Using a properly rated floor jack, lift the rear wheels of the vehicle off the ground. Place support stands, rated for the vehicle's weight, and in the factory specified locations. Refer to the vehicle

Owner's Manual. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the chassis.

It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage! Make sure that the supports stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

- 4. Slowly lower the vehicle onto the stands and, before placing the vehicle's entire weight on them, again check that they properly and securely contact the chassis as described above. Check for possible interference with any lines, wires, cables, or other easily damaged components. Remove the rear wheels.
- 5. Locate the oval hole on the bottom sides of the frame rails just in front of the axle (Photo 2). Prepare the frame rails using a rag and solvent; thoroughly clean the area around the oval holes. Each of these over-sized holes will be used as one of the boltholes for each End-Link Bracket. Using tape measure, mark the location of the hole to be drilled by measuring approximately 2" behind the rearward most edge of the oval hole (Photo 3). Confirm the proper location prior to drilling in the following steps.
- **6.** Before drilling the holes, use a punch and hammer to accurately mark the holes to be drilled on the left and right side frame rails (Photo 4). Use a 3/8" drill bit and drill motor to make the required holes in the frame rail (Photo 5). Thoroughly de-burr the holes with a small round file or de-burring tool. Check the hole spacing by using one of the End-link drops down bracket as a guide (Photo 6). If the spacing is not accurate, the holes may need to be slightly enlarged. Resize the holes just enough to allow proper fit. Blow out or vacuum the metal chips before continuing.

**CAUTION**: The fuel tank is heavy, especially when containing a full tank of fuel. Extreme care should be used when working with the fuel tank and other fuel system components. If possible, the following procedures should be conducted with a small amount of fuel in the tank. **IMPORTANT NOTE:** gasoline is flammable and its' vapors are explosive. Avoid all sources of ignition and/or flame when working with the vehicles' fuel system.

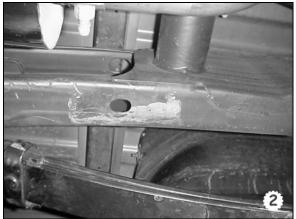
- 7. The fuel tank must be moved away from the frame to allow access to the inner frame rail on the driver side. Support the fuel tank with properly rated stands or straps. If stands are used, place a section of wood under the tank to distribute its' weight over a larger portion of the tanks underside. Be careful not to damage the tank or other components of the fuel system. Both tank straps must be unbolted (Photo 7 and 8) and positioned out of the way or removed.
- **8.** Place the studded backing plates in the frame rails with the threaded studs protruding downward (Photo 9). Place the drop down brackets onto the frame with the end-link holes towards the rear (Photo 10). Fasten the brackets to the studs using the 3/8" Stover lock nuts and washers. Carefully align the brackets so they are parallel with the frame rails. Torque the hardware to 34ft. lbs
- **9.** Lift and locate the fuel tank back into its' original position. Re-install the two fuel tank straps and bolts. Tighten and torque the fuel tank straps bolts to 36 ft-lb.
- **10.** Fasten the "dog bone" end links to the drop down brackets using the 3/8"-16 X 2¾" HHCS's, flat washers and lock nuts (Photo 11). The HHCS's should be positioned with the hex head facing out. Torque the lock nuts to 34ft.lbs.
- 11. The emergency brake cable guide bracket and cable must be moved up to allow additional clearance for the new rear Anti-Sway Bar. Remove the bracket located on the outer surface of the driver side shock mount (Photo 12). Carefully pry the bracket open and remove it from the brake cable (Photo 13).

- **12.** Fasten the original 5/16" HHCS to the bracket with the 5/16" nut supplied in the kit (Photo 15). This will prevent the bracket from slipping while drilling a new index hole. Measure ½" down from the original hole and mark with a punch. Place the bracket in a vise and use a drill motor equipped with a 5/16" drill bit to make the new hole (Photo 16).
- **13.** Install the bracket in the reverse order of removal. Fasten the bracket and cable in place using the original HHCS and the new hole (Photo 17).
  - When installing the new Belltech Anti-Sway Bar, it is best to attach the Anti-Sway Bar to the vehicle by the end links first and then to the axle.
- **14.** Attach the ASB to the "End-Links". Using the hardware provided (Photo 18). NOTE: Attach the Bar to the outside of end-link. (Not as shown in photo #18)
- **15.** Thoroughly lubricate the inside of the new polyurethane bushings using the grease provided (Photo 19). Locate the bushings on the Belltech Anti-Sway Bar. Once located, rotate the bushings slightly to evenly spread the lubricant.
  - WD-40<sup>TM</sup> is recommended to help remove excess lubricant. Re-greasing the pivot bushings should be performed at regular intervals. Climate and driving conditions will govern the time between services. Remember to check all hardware while performing bushing maintenance.
- **16.** Now install the U-bolts and flanges onto the axles, in between the differential and the shock brackets (Photo 20). Be careful to avoid damaging brake lines or other components. Place the pivot bushing brackets that are provided with the kit onto the new bushings. Install the Anti-Sway Bar onto the U-bolts and loosely thread the hardware into place (Photo 21). Shift the bar side-to-side and front-to-back to center on the chassis. Torque hardware to 19lb.ft.
- 17. Check that all components and fasteners have been properly installed, tightened and torqued.
- **18.** Re-install the rear wheels. Tighten and torque the lug nuts to the Manufacturer's specifications.
- **19.** Check brake hoses, cables, lines and other components for any possible interference.
- **20.** Lift vehicle and remove support stands. Carefully lower vehicle to ground.
- **21.** 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.
- **22.** Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

# PART LIST FOR 5502 ANTI-SWAY BAR HARDWARE KIT

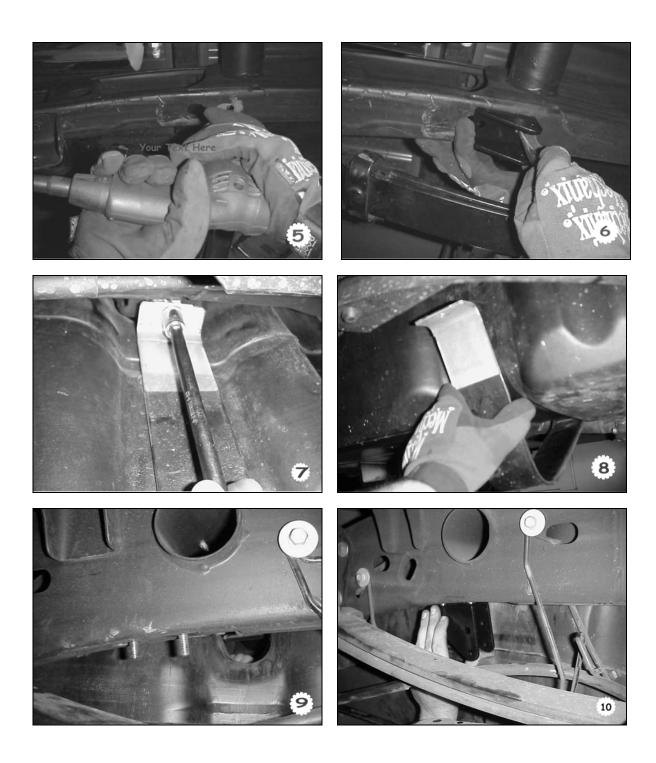
PART#	DESCRIPTION	QTY
5502-300	Rear Anti Sway Bar	1
113075	Urethane pivot bushing	2
114026	Pivot bushing bracket	2
114038	Under bushing support plate	2
114050	"Dog bone" end link	2
114035-005	Studded backing plate	2
114035	End link drop down bracket	2
110255	3/8"- 16 lock nut	8
112318	3/8"-16 stover lock nut	4
	(For studded backing plate)	
110625	3/8" flat washer	16
112110	3/8"- 16 X 2 3/4" HHCS	4
112258	3/8"- 16 X 3" U-bolt w/flange nuts	2
110203	5/16-18 lock nut	1
55000-10	Grease pack	1





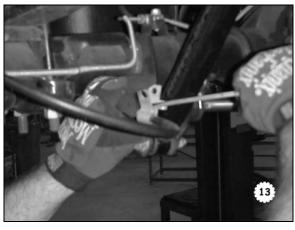




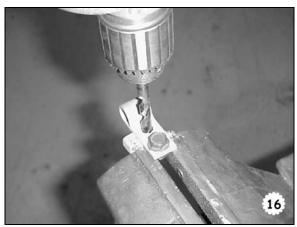








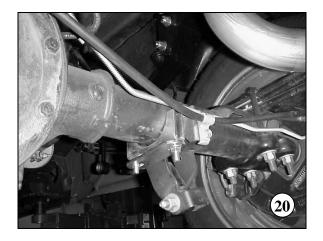


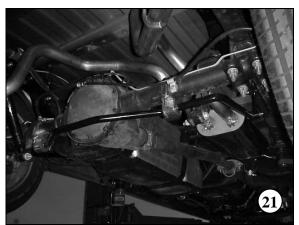








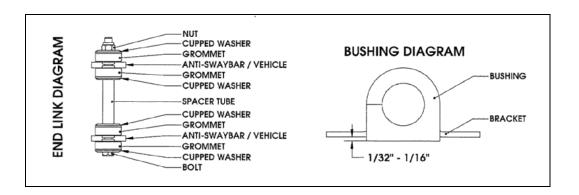




# ! BELLTECH INSTALLATION TIPS

# **LUBRICATION**

Pre-lubricating the inside of the bushing before it's installed is important because the lubrication will greatly reduce noise and it will increase bushing life. Belltech recommends you use Molybdenum disulfide. This will help protect the inside surface of the bushing and will last longer than most types of grease. Thoroughly lubricate the inside of the bushing with this grease.



### **BUSHING INSTALLATION**

Make sure an amount of 1/32" to1/16" of the bushing is showing when you install it onto the bracket. See the diagram above. If the bushing is showing more than 1/16" than use a sander or a sheet of coarse grit sand paper to shave it down to the proper height. In most applications when installing the new bushings on your Belltech Anti-Sway Bar you may refer to your original equipment Anti-Sway Bar to locate the proper location.

## **END LINK INSTALLATION**

It is not required that you use lubricant on the end links since there is not any rotational movement. The Belltech end links are comprise of grommets, cupped washers, a spacer tube, bolt, and lock nut, these assembled components create the end link. See END LINK DIAGRAM above.

# **AXLE CLAMP DIAGRAM**

