belltech®

INSTALLATION GUIDE

PART NUMBER: 6850
FLIP KIT AND C-NOTCH KIT
GM C10 / C15 | 1973-1987

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 the installation of your new Belltech product and before operating your vehicle. For any questions or concerns regarding the steps in the installation process, please do not hesitate to call or email our customer support team 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 of the components listed on the parts list is 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 absolutely 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, at 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.

DIFFICULTY:

INSTALLATION TIME: 4-5 Hours

RECOMMENDED TOOLS:

- Properly rated floor jack
- Support stands
- Wheel chocks
- Safety glasses
- Marking pen
- Wrench set
- Socket wrench set
- Grinder with abrasive cut-off wheel
- Power drill and drill bits
- Large C-clamps
- Medium weight ball peen hammer and center punch
- Tape measure
- Steel construction square
- 1/2” drive torque wrench up to 200 ft lbs.

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.

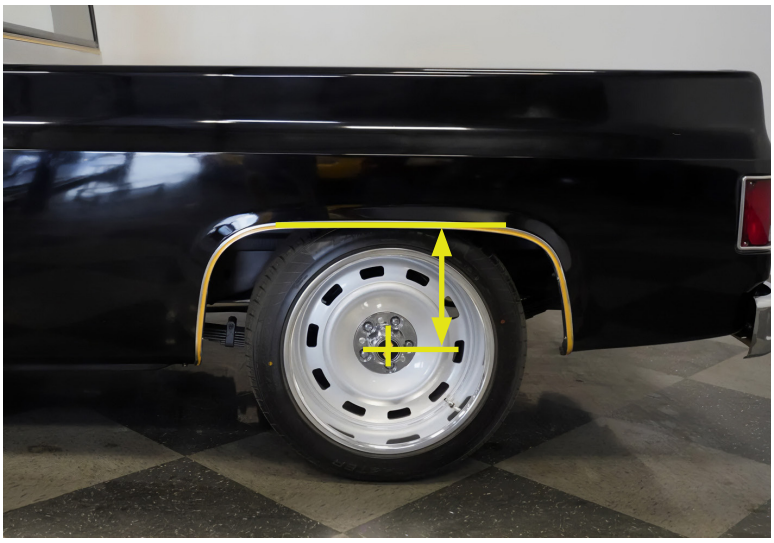
Before:

LF:_____

RF:_____

LR:_____

RR:_____



After:

LF:_____

RF:_____

LR:_____

RR:_____

JACKING, SUPPORTING, AND PREPARING THE VEHICLE

1. Park your vehicle on a smooth, level, concrete or seasoned asphalt surface.
2. Block the front wheels of the vehicle using wheel chocks. Make sure the vehicle's transmission is in "PARK" (automatic) or 1st gear (manual).
3. Activate the parking brake.
4. Break loose, but do not spin the wheel lug nuts to ease in removal when the wheels are in the air.
5. Lift the rear of the vehicle off the ground using a properly rated floor jack. Lift the vehicle so the rear tires are approximately 6-8 inches off the ground.
6. Place support stands rated for the vehicles weight. The stands should be positioned, two on each of the frame rails, just forward of the front leaf spring hangers and just below the rear leaf spring shackle hangers. 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. Place a support stand under each side of the axle to support the weight of the axle. Make sure these are only supporting the weight of the axle; allowing the other 4 support stands to support the frame.
8. Lower the vehicle slowly onto the stands.
9. Remove the rear wheels.
10. For improved access to the rear suspension and to simplify the installation, we recommend removing the truck bed. Remove the eight bed-to-frame mounting nuts after disconnecting the fuel filler neck(s) and all electrical connections. Before lifting the bed, verify that all hoses, wiring, and other attachments have been disconnected.

Technician reminder:

Never work under a vehicle supported only by a jack. It is necessary to place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

REAR SUSPENSION REMOVAL

11. Support the axle using a floor jack so that it can be raised and lowered. Additionally, support the rear axle near the rear U-joint to keep the axle from rotating.

12. Remove the upper mount nuts and lower mount bolts to detach the rear shock assemblies from the vehicle.

13. Remove the U-bolt nuts, U-bolt plate, and U-bolts to detach the rear axle from the leaf springs.

14. Use the floor jack to raise the rear axle just enough to remove the load from the shackles. Break loose the shackle bolts but do not remove the leaf spring mount bolts and the shackle mount bolts yet.

Technician warning:

Leaf springs may be under significant tension and can store substantial energy. Exercise extreme caution during the following steps to avoid personal injury and/or vehicle damage. Take care to prevent damage to brake hoses and the driveline while relocating the rear axle assembly.

REAR SUSPENSION REMOVAL CONTINUED

15. At the front end of the leaf springs remove the nuts and bolts from the hangers. Once the hardware is removed, the leaf springs will rest on top the axle.

16. At the rear end of the leaf springs remove the nuts and bolts from the lower shackle to hanger only.
17. Mark the leaf springs with left, right, front, and rear to confirm their locations when placed back on the vehicle.
18. Detach both leaf springs from the vehicle. If necessary, lower the axle to gain clearance.
19. Remove the clamps securing the steel brake line to the chassis to free the brake line. Remove the retaining clip from the bracket connecting the steel brake line to the rubber brake hose. This will allow the brake line to slide through the bracket, helping prevent damage during installation. Do not let the rear axle drop to the point where the brake lines and/or shaft are strained. Continued to use a floor jack to support the rear axle.

CHASSIS PREPARATION

Technician warning:

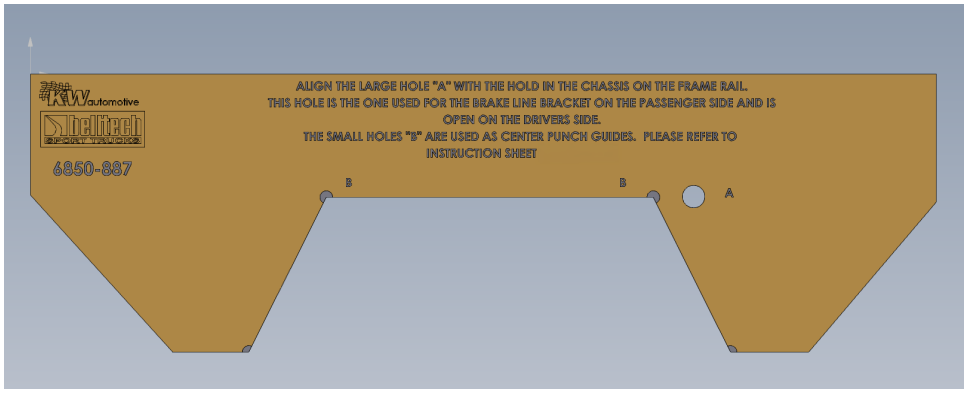
Proper use of safety equipment and eye/face/hand protection is absolutely required when performing the following procedures.

To avoid chassis damage, perform the following procedures to only ONE frame rail at a time.

20. Ensure the frame rail is clear of all brake lines, electrical wiring, and other components before cutting. Loosen any retaining clips or fasteners as needed and move the lines and wiring away from the cutting area to prevent damage.

21. Grind the heads off the rivets holding the bump stop brackets to the chassis. Detach the bump stop brackets from the chassis

22. Position the supplied template against the frame rail, aligning the guide hole in the template with the corresponding hole in the chassis. On the passenger side, this hole may contain the brake line retaining bolt. If it was removed earlier, reinstall it temporarily on both sides to aid in properly locating and securing the template.



23. Using a center punch, mark the four hole locations indicated on the template. Remove the template and drill a 1/2” hole at each marked location.

CHASSIS PREPARATION CONTINUED

24. Clean the surface where the notch will be made so that using a permanent marker to mark the chassis is visible.

25. Using a marker, draw the cut lines by connecting the drilled holes, ensuring each line terminates at the center of the adjacent hole. This creates a radiused corner at each end of the cut, which helps reduce stress concentrations and minimizes the risk of stress cracks.

26. Use a die grinder with a cut-off blade to carefully cut along the marked lines, DO NOT remove any material from the frame rail that is not shown or described here.

Technician warning:

Alternatively, a reciprocating saw or plasma cutter could be used to cut the notch. DO NOT use any type of cutting torch.

27. Slide the C-notch bracket over the chassis. It may be necessary to use a soft face hammer to position the bracket over the frame.

Technician note:

Minor trimming of the chassis may be required after cutting with the supplied template. Due to normal manufacturing tolerances, chassis dimensions can vary between vehicles. Modify the opening as needed until the C-Notch bracket fits properly over the chassis.

28. Secure the C-Notch brackets to the chassis using C-clamps or locking pliers. This will hold the brackets in position and aid in the drilling and fitment process.

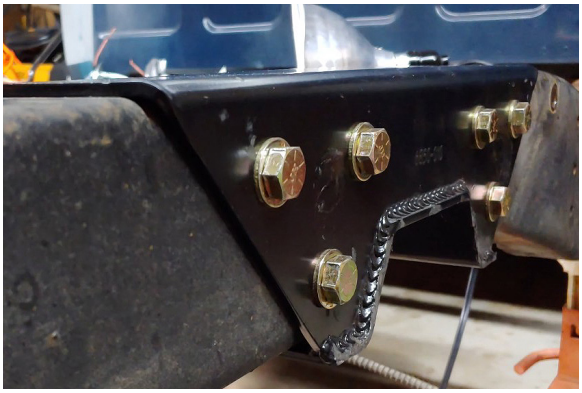
29. The C-Notch brackets are secured to the chassis with eight fasteners: three on each side of the bracket and two on the bottom.

30. Using the brackets as a guide, drill the six side mounting holes with a 1/4” pilot drill, then enlarge each hole to 1/2”. Drill the two bottom mounting holes to 3/8”.

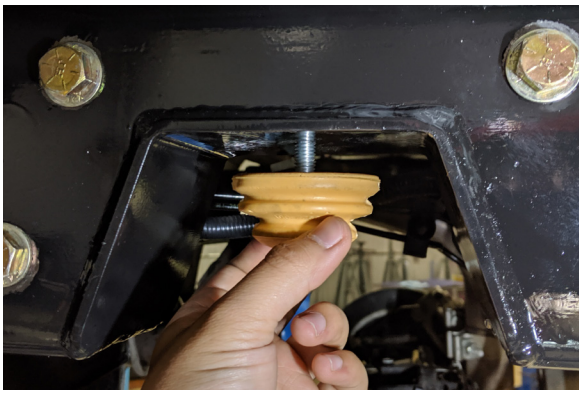
31. Temporarily remove the C-Notch brackets. Deburr all cut edges and drilled holes, then apply spray paint to all exposed bare metal surfaces to help prevent corrosion.

BELLTECH C-NOTCH INSTALLATION

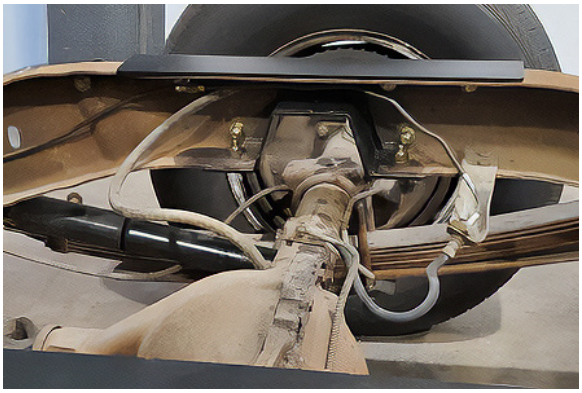
32. Place the C-notch brackets on the chassis and fasten with the supplied 1/2”-20 x 1-1/4” bolts, 1/2” Stover lock nuts, and 1/2” washers on the sides of the brackets. Fasten the bottom with the supplied 3/8”-24 x 1” bolts, 3/8” Nyloc nuts, and 3/8” washers. Torque the 3/8” bolts to 45 ft lbs. and the 1/2” bolts to 120 ft lbs.



33. Attach the supplied bump stops in the hole found at the bottom of the C-Notch brackets using the hardware included with the bump stops.



34. After the C-notch brackets are fastened, the brake lines and electrical wires must be securely tied and tucked into their original positions on the chassis rails.



BELLTECH FLIP KIT INSTALLATION

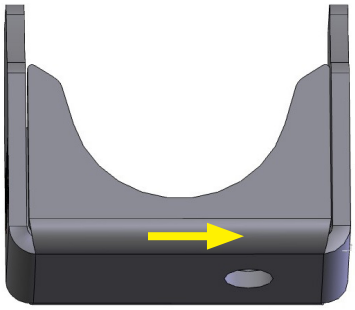
35. Raise the axle for clearance to place the leaf springs under the axle and into the leaf spring mounts.

36. Use the original hardware to attach the front of the leaf springs first; fasten but do not torque yet.

37. Swing the rear of the leaf spring upward to the hanger. The leaf spring will now sit underneath the rear axle. Align the rear hanger bolt hole with the shackle bolt hole.

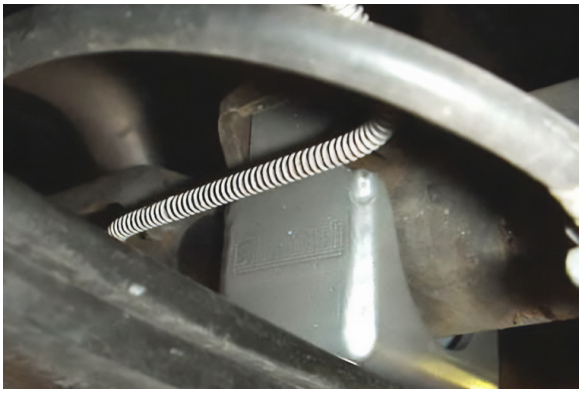
38. Fasten the leaf spring and shackle assemblies to the hangers with the original nuts and bolts and but do not torque yet. The final torque will be done once the vehicle has been lowered to the ground.

39. Place the Belltech axle saddles, part# 6850-005-99, on top of the leaf springs with the hole over the head of the spring center bolt. The offset hole at the bottom of the axle saddle MUST be oriented toward the front of the vehicle.

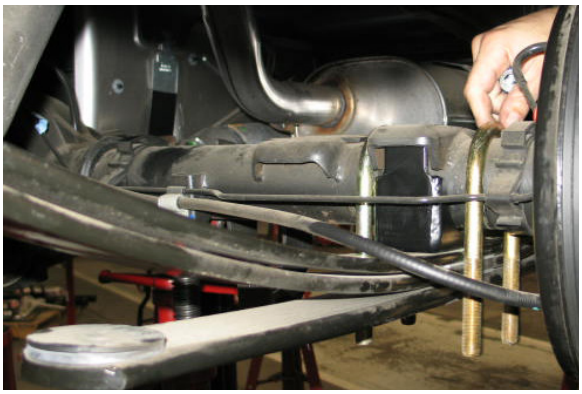
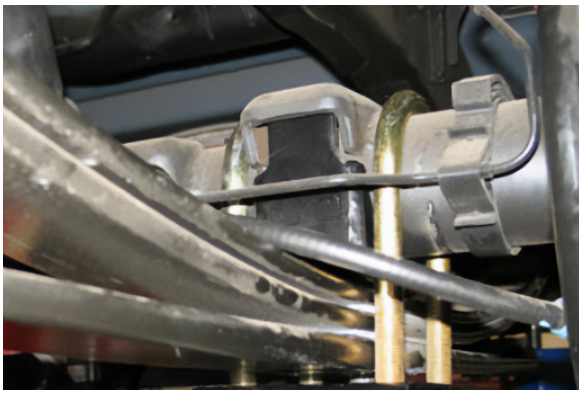


BELLTECH FLIP KIT INSTALLATION CONTINUED

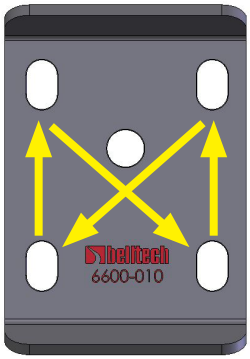
40. Slowly, lower the axle onto the saddles. The ears will fit into the original spring perches on the axle tubes. Make sure both ears on each saddle are located completely in the perches.

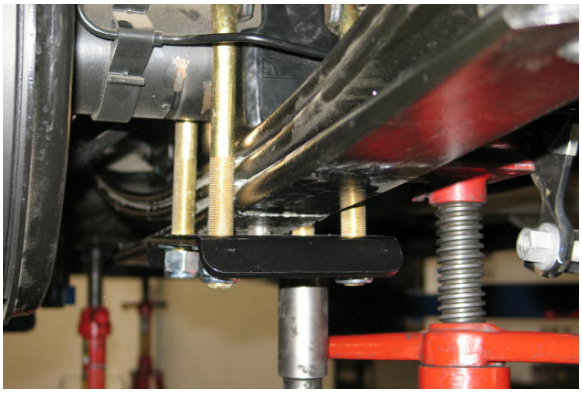



41. Place the supplied U-bolts, part# 11U2008-955, on each side of the saddle. Ensure they are pressed up against the saddle.

42. Position the supplied U-bolt plates, part# 6600-010-99, from below the leaf springs with the offset hole toward the front of the vehicle. This will allow the U-bolts to pass through the appropriate bolt holes. Fasten the U-bolts with the supplied 5/8” washers and 5/8” Nyloc nuts. Torque the nuts in a cross pattern to 95 ft lbs.





Technician warning:

The axle saddles have been designed to properly position the rear axle pinion shaft relative to the driveline. In combination with the driveline adjustments performed, driveline vibration should be eliminated. If driveline vibration *is* experienced after the installation, take the vehicle to a driveline service shop immediately for angle inspection and necessary adjustments. **DO NOT** drive the vehicle if it exhibits extreme driveline vibration as U-joint wear may occur. Ensure the U-joints are lubricated if deemed necessary.

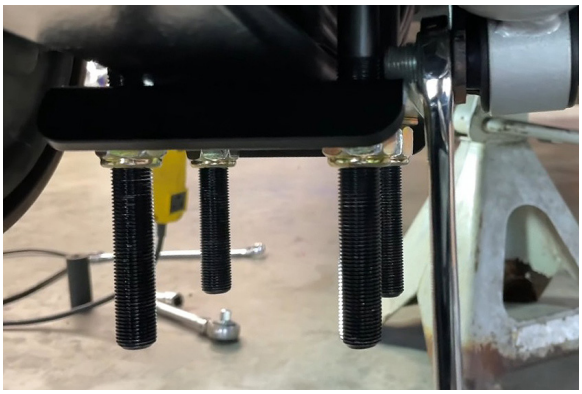
BELLTECH FLIP KIT INSTALLATION CONTINUED

43. Mount the rear shocks with the original hardware. Torque the upper and lower bolts to 70 ft lbs.

Technician note:

We suggest using Belltech Street Performance or Nitro Drop 2 shocks to achieve proper suspension travel with a reduced extended and compressed lengths shock.

44. Attach the retaining clip to the bracket connecting the steel brake line to the rubber brake hose on the chassis.
45. The supplied U-bolts are longer than the originals and can be trimmed as needed.



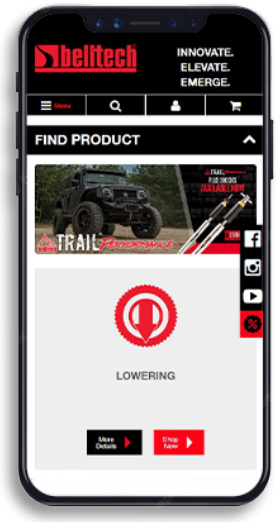
46. Mount the wheels and tighten the lug nuts.
47. Lift the vehicle and remove the support stands.
48. Carefully lower the vehicle onto the flat ground.
49. Place and fasten the bed onto its original position on the chassis using the original hardware.
50. Torque the front leaf spring bolts to 92 ft lbs. and the rear shackle nuts to 50 ft lbs.

FINALIZING THE INSTALLATION

51. Torque the lug nuts to 100 ft lbs.
52. Check that all components and fasteners have been properly installed and torqued.
53. 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



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

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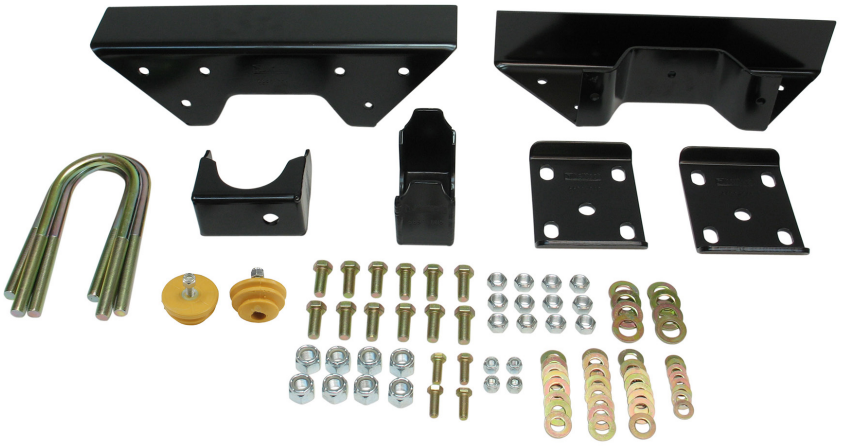
KIT CONTENTS



6850		
Part number	Description	Qty
6850-010-99	C-NOTCH BRACKET	2
6600-010-99	U-BOLT PLATE	2
6850-005-99	AXLE SADDLE	2
11U2008-955	ROUND U-BOLT	4
6850-777	HARDWARE KIT	1
6850-887	TEMPLATE	1

6850-777		
Part number	Description	Qty
110254	3/8”-24 NYLOC NUT	4
110505	5/8”-18 NYLOC NUT	8
110402	1/2”-20 STOVER LOCK NUT	12
110625	3/8” WASHER	8
110502	5/8” WASHER	8
110660	1/2” WASHER	24
110251	3/8”-24 X 1” BOLT	4
110408	1/2”-20 X 1-1/4” BOLT	12
4923-001-BN	BUMP STOP	2

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