



## INSTALLATION INSTRUCTIONS

300 W. Pontiac Way Clovis, CA 93612 toll free: 1-800-445-3767 web: www.belltech.com

### 6850 FLIP KIT 73-87 C-10 PICKUP

**Thank you for being selective enough to choose our high quality BELLTECH PRODUCTS. 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: *0-75 lb ft. range*
- Ratcheting socket wrench and socket sets
- Heavy duty drill / hand grinder or die grinder
- Safety Glasses

#### **Addendum:**

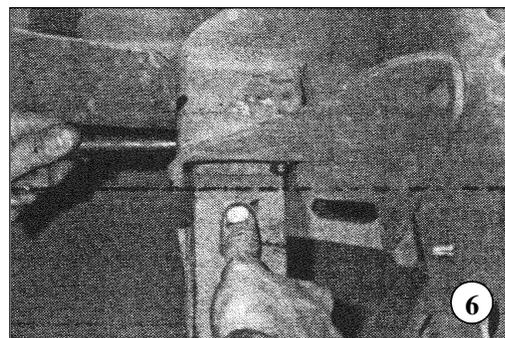
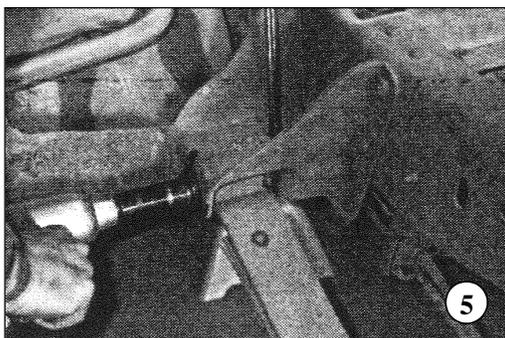
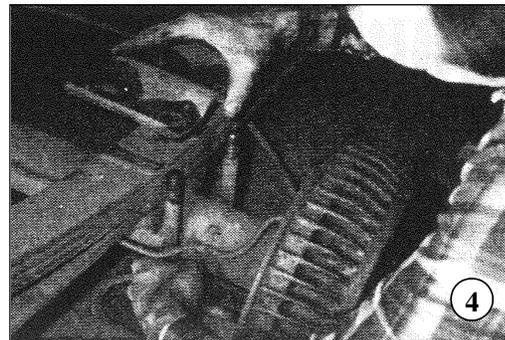
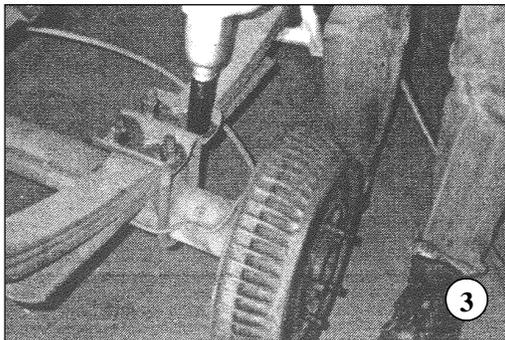
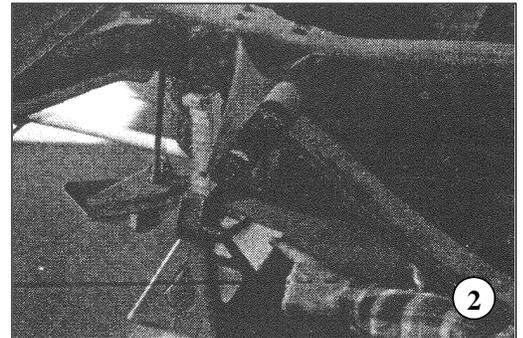
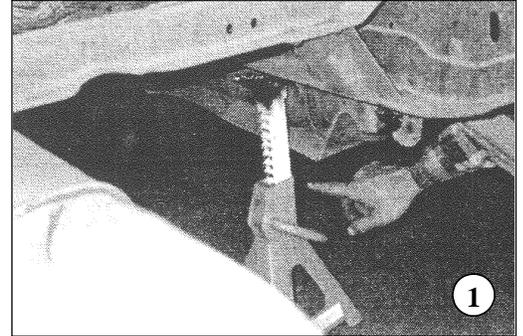
**For P/N 6852-188 it is advised to re-arch your leaf springs approx. 2"**

**Note: For P/N 6852 Do not cut your frame for C-sections.**

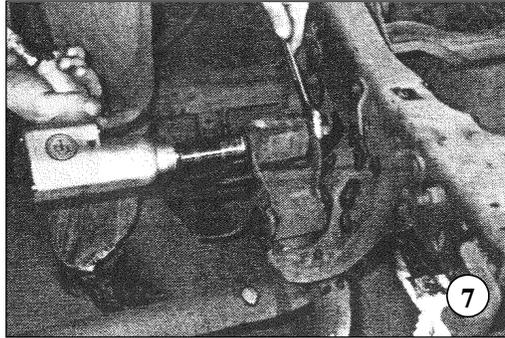
**There are no C-sections in the 6852 kit.**

## KIT INSTALLATION

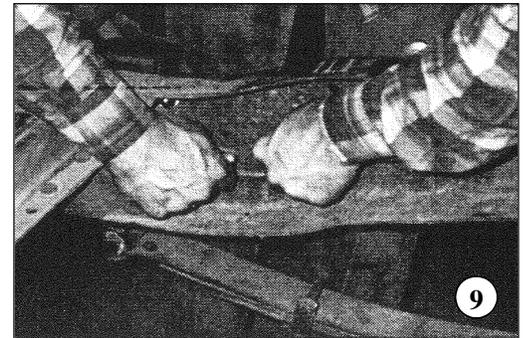
1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 3) to verify that all parts are present.
2. For better access to the rear suspension and to simplify the installation procedure we recommend the removal of the bed from the truck. There are eight large nuts that hold the bed to the frame, which must be removed. Gas filler neck(s), and electrical wiring must be disconnected first. Be sure to check all these prior to removal.
3. Block the front wheels and raise the rear of the truck using a hydraulic floor jack under the center of the rear axle. Place the frame on jack stands just ahead of the front spring hangers, and just behind the rear shackle hangers. **(Photos 1 & 2)** Remove the wheels from the truck. **IMPORTANT:** The jack stands **must be** used as shown. This is mandatory when installing C-sections in the frame. It must be supported on both sides of the spring hangers.
4. Lower the jack so that all the pressure is off of the leaf spring assemblies. **CAUTION: Leaf springs are under tension, use caution when disconnecting.**
5. Detach shock absorbers at lower shock mounts. Remove the nuts on the stock U-bolts that hold the axle to the springs. **(Photo 3)** Remove the U-bolts and spring plates. **(Photo 4)**
6. Loosen and remove the bolts attaching the leaf spring to the front spring hangers. **(Photos 5 & 6)**



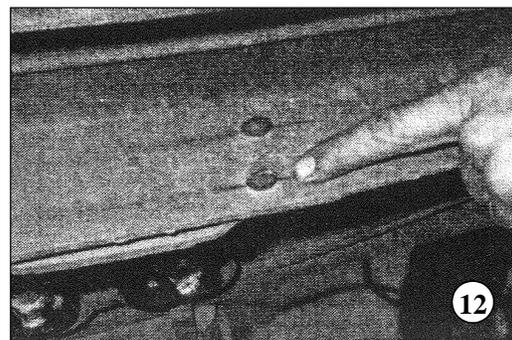
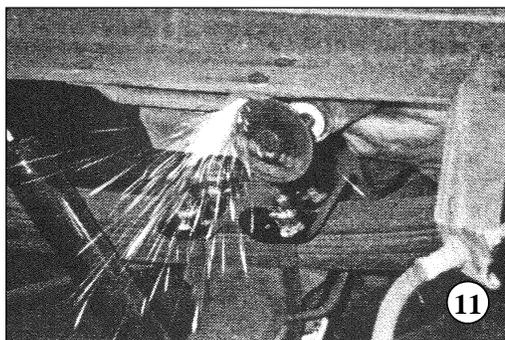
7. Loosen and remove the bolts attaching the leaf springs to the rear shackles. **(Photo 7)**
8. Remove the stock leaf springs from the truck and set aside to reassemble later. **NOTE:** Be sure to mark the springs right and left, front and rear for reassembly. **(Photo 8)**

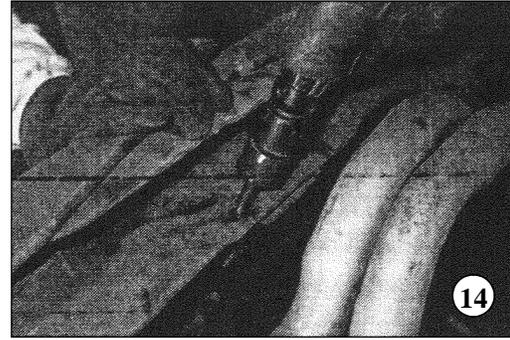
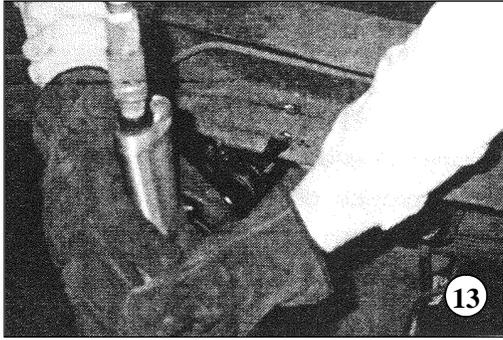


9. Lower the jack and rear end assembly to provide room to work before installing C-sections. There are clamps holding the steel brake line to the frame. **(Photo 9)** Remove these to free the line and remove the clip from the bracket between the steel and rubber line. This will let the line slip through the bracket so it will not be damaged. **(Photo 10)** **CAUTION:** Do not let the rear axle drop to the point where the brake lines and/or shaft are strained. You may want to use a jack to support the rear end housing at this point.



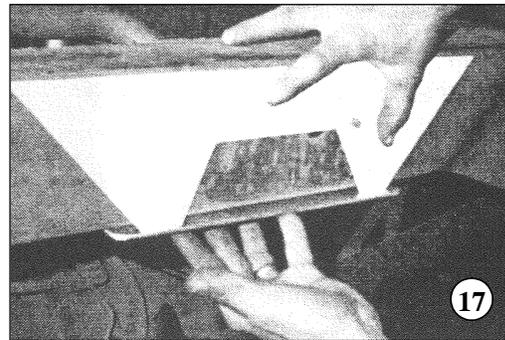
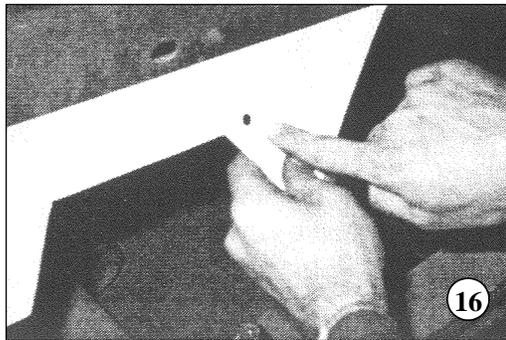
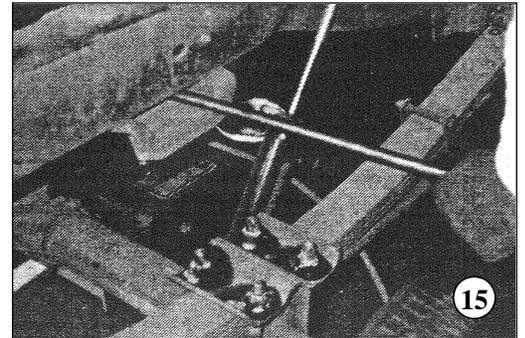
10. Remove the rivets holding the rubber snubber to the chassis. Cutting a slot in the heads of the rivet aids in the removal. **(Photo's 11 & 12)** Shown here is the method of using an Air Chisel. **(Photo's 13 & 14)** Grinding the head off the rivet is an alternative. Remove the snubber, prying may help. **(Photo 15)** **CAUTION: Always wear eye protection when using power tools.**



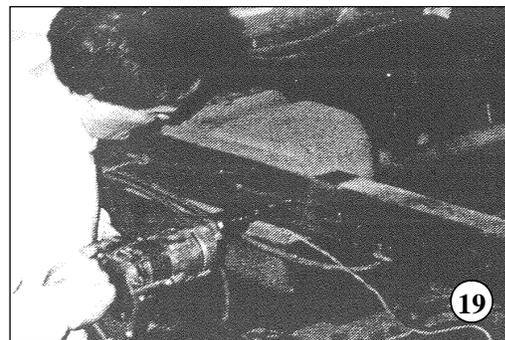
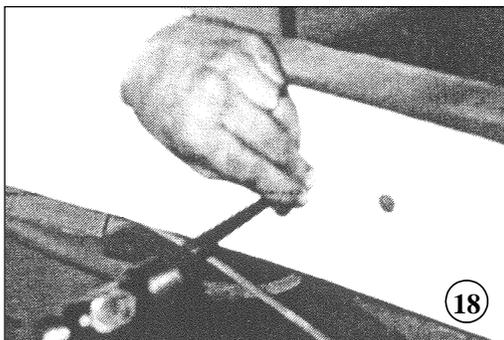


11. You are now ready to install the C-section frame rails. The frame rail should be cleared of all brake lines and electrical wiring. They should be loosened from their attaching hardware and moved to avoid damage.

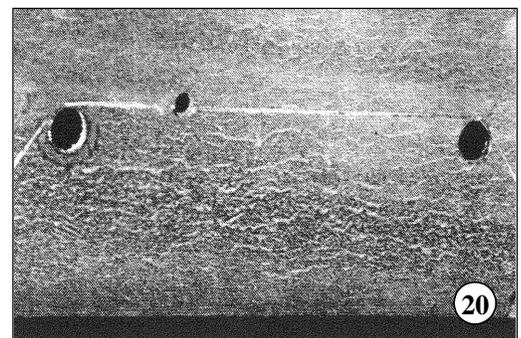
12. Using the template supplied, align the guide hole in the template (Photo 16) with the corresponding hole in the chassis. There is a bolt in the hole that holds the brake line on the passenger side, removed in step eight. This can screw back in both sides, which help in the alignment of the template. (Photo 17)



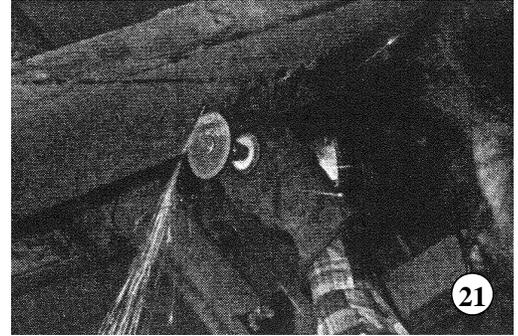
13. Mark the frame with a punch at the designated locations on the template. (Photo 18) Move the template and drill a 1/2" hole in the frame at the four points. (Photo 19)



14. Using a marker or scribe, draw a line between each hole on the frame. (Photo 20) Mark the line to the center of the hole. Do this so that there is a round corner at each point. This will prevent the possibility of stress cracks at the end of each cut line.

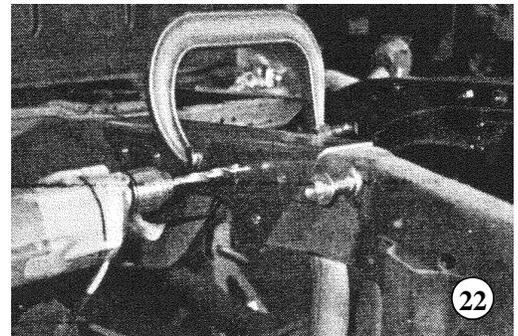


15. There are several methods in which the notch can be cut. The method shown is a die grinder with a cut-off saw blade. **(Photo 21)** A saw-saw, or a plasma cutter will also work. **DO NOT use any type of cutting torch. CAUTION: Always wear eye protection when using power tools.**

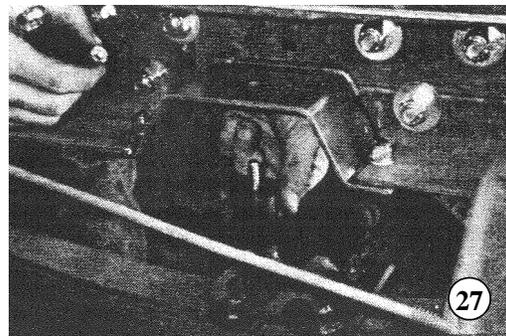
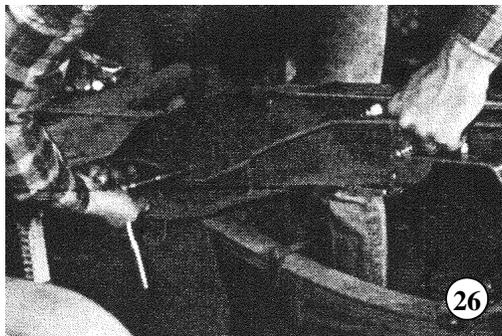


16. The edges of the notch should now be deburred and the sharp edges ground away. **CAUTION: Always wear eye protection when using power tools.**

17. Each insert is fastened to the frame by eight mounting bolts. Three on each side of the cutout and two underneath the frame. Drill a 1/4" pilot hole then use a 1/2" bit to drill the six side mounting holes. The use of c-clamps on the rails will help in the drilling and fitting operation. Now the bottom two mounting holes can be drilled with a 3/8" bit and hardware attached. **(Photo's 22)**

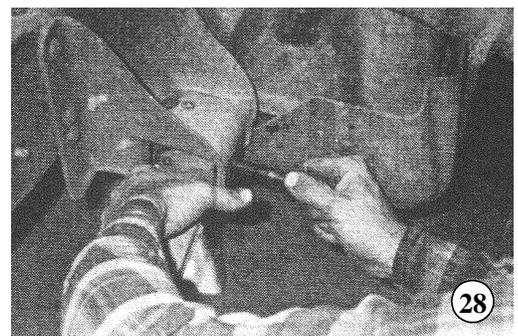


18. Once the C-sections are in place, the brake lines and electrical wires should be wired tied and tucked into the frame rails securely. **(Photo 26)** Install the urethane bump stops in the middle of the C-section in the hole supplied. **(Photo 27)**



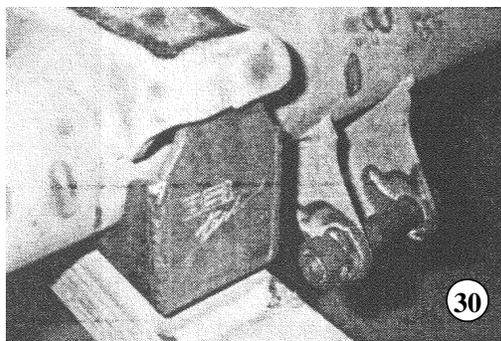
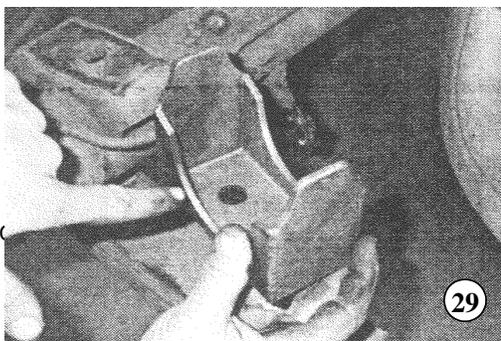
19. Re-install the leaf springs onto the truck. Jack the rear axle up to the point where you can slide the springs under the axle.

20. Attach the front spring eye into its location in the front spring hanger. **(Photo 28)** Swing the rear of the spring up and attach it to the rear shackle on the frame. **DO NOT** tighten this hardware yet.



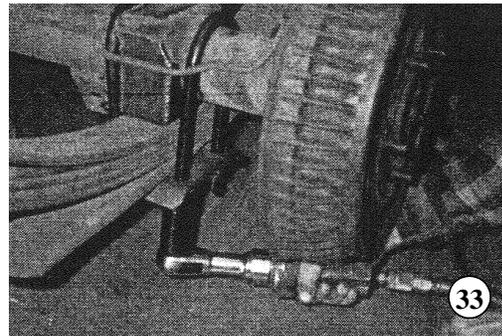
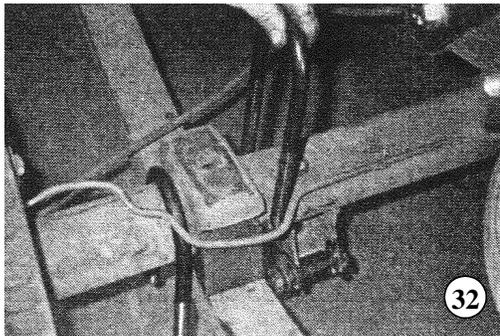
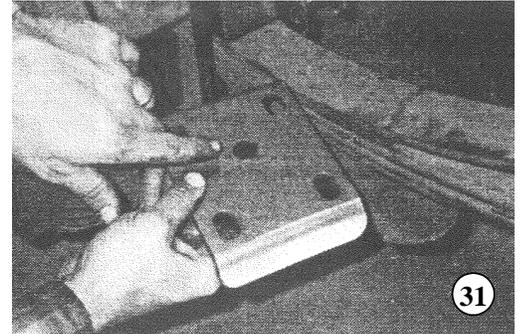
21. The saddle for the axle we supply has an offset hole for the spring center bolt. **(Photo 29)** The offset hole goes toward the front of the truck.

22. Place the new saddles on the springs with the hole over the spring center bolt. Slowly lower the rear axle down onto the saddles. The ears will slip into the stock spring perch on the axle tubes. Make sure both ears on the saddle locate completely into the perch. **(Photo 30)**



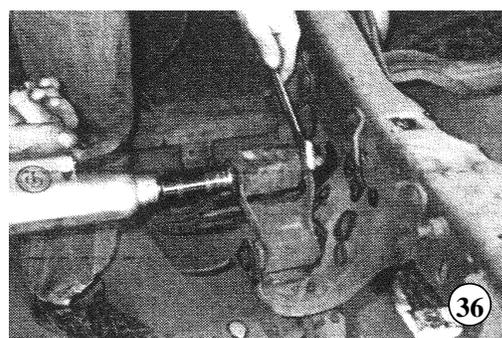
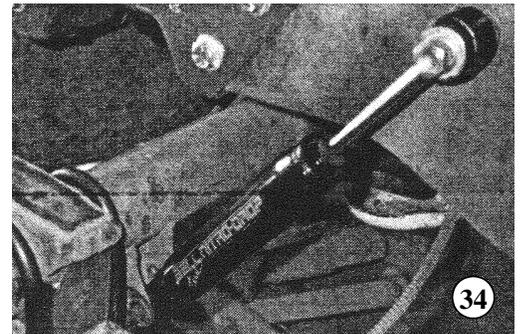
23. New U-bolts and spring plates are provided. The spring plate also has an offset hole that must be installed with the hole toward the front of the truck. **(Photo 31)**

24. Slide the U-bolts down over the axle tubes into the spring plate as shown. **(Photo 32)** Install the new Ny-lock nuts and tighten completely. **(Photo 33)** Once again making sure the ears of the saddles locate completely into place in the spring perches.



25. Re-install the shock absorbers at the lower shock mount. Bell Tech Nitro Drop Shocks should be installed to replace the stock shock absorbers at this time. **(Photo 34)**

26. Once the U-bolts are secure, jack up the rear end just until the jack begins to lift the vehicle off the stands. Now tighten the front and rear spring eye bolts on the hangers and shackles. **(Photo's 35 & 36)**



27. At this time re-check all the mounting hardware to make sure nothing was left untightened. **NOTE:** It is important to check and retighten U-bolts after 100, 500 and 1,000 miles.

28. If the bed was removed it can now be installed onto the truck. Be sure to replace all electrical wires, filler neck(s) and hardware. Install the tires and wheels.

29. Raise the vehicle off the jack stands carefully, remove stands and slowly lower vehicle to the ground. Your installation is now completed.
30. 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.
31. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

### PART LIST FOR 6850 6" FLIP KIT

PART No.	DESCRIPTION	QTY.
6600-010	U-Bolt Plate	2
6600-015	U-Bolt	4
6850-887	Template	1
4923-001	Bump Stop	2
110625	Flat Washer	8
110251	3/8"-24 x 1" HHCS	4
110254	3/8"-24 Ny Lock Nut	4
110402	1/2"-20 Stover Lock Nut	12
110660	Flat Washer	24
110408	1/2"-20 x 1-1/4" HHCS	12
110502	Flat Washer	8
110505	5/8"-18 Ny Lock Nut	8
6850-005	Saddle	2
6850-010	C-Section	2