



SUBJECT: P/N 3320 - FJ Cruiser 3" Lift Kit Stg2 Installation Instructions

SUBJECT: FJ Cruiser Front Coil Spring Spacer Kit Installation Instructions

IMPORTANT: Warrior recommends that this kit be installed by a certified technician. While these instructions are complete, a thorough professional knowledge of disassembly and reassembly procedures, as well as post-installation checks is important. Installing this system without this knowledge and expertise may compromise the operating safety of the vehicle.

Before beginning this installation, take a look at the end of the install instructions. You will find a torque specification chart. Reference this chart when tightening any bolts. This chart is located toward the end of the step-by-step instructions.

Disassembly

1. Set the parking brake. You may also want to chock the rear tires.
2. Raise the front of the vehicle and secure it on a level surface with jack stands on the frame.
3. Remove the front tires.
4. Mark each strut driver and passenger so that you do not switch them during re-installation.
5. Unbolt and remove the front skid plate.
6. Unbolt and separate the sway bar end links from the knuckle. Twist the sway bar up and out of the way as far as you are able to.
7. Remove the cotter pin from the castle nut that holds the upper control arm to the knuckle. Loosen the nut most of the way, but do not remove. You now need to break the ball joint taper free from the knuckle. Illustration 1 shows the location at which you can safely strike the knuckle to break the taper free. Once the taper comes loose, remove the castle nut. Repeat on both sides of the vehicle.
8. Remove the 3 nuts from the top of each strut that secure the strut to the frame.
9. Remove the lower bolt on each side that secures the strut to the lower control arm.
10. Carefully remove the struts from each side of the vehicle.



Assembly

1. Place one of your new front coil spring spacers over the studs on top of each of the struts and use the factory nuts removed in step 8 above to secure them to the strut. Tighten to torque spec using the reference chart below.
2. Slide the struts back into place and attach to the lower control arm re-using the factory hardware.
3. Attach top of strut with new spacer installed to the frame bracket using the included flat washers and nylock nuts.
4. Re-assemble knuckle to upper control arm. Torque down and re-install cotter pin.
5. Install sway bar links back into knuckle.
6. Use chart below to be sure you've torqued all bolts and nuts to the proper specification.
7. Re-install lower front skid plate.
8. You may now finish your installation by re-installing your wheels and tires and lowering the vehicle back onto the ground. Be sure to double check all bolts and nuts, including lug nuts to ensure they are tight. Test drive and check again. It is also recommended that after a few hundred miles, all bolts be passed over and re-torqued.

SUBJECT: Front Differential Spacer Kit Installation Instructions

Before beginning this installation, take a look at the end of the install instructions. You will find a torque specification chart. Reference this chart when tightening any bolts. This chart is located toward the end of the step-by-step instructions and before any illustrations.

11. If you are installing this while installing your lift kit, you may have already done this step. Begin by unbolting and removing the front skid plate.

12. Support the differential with a floor jack and unbolt the differential from the two attachment points on the front crossmember.
13. With bolts removed, lower differential with floor jack carefully until there is enough space to slide the spacer in between the differential mounts and the crossmember.
14. Slide spacers into place.
15. Using the provided 6.5" long bolts with washers and top lock nuts, thread the bolt through the diff mounts, spacers, and crossmember. Torque to spec @ 90 lb-ft.
16. Lower floor jack and remove it.
17. To reinstall the front skid plate, spacers and longer bolts for the lower mount points have been provided.
18. You will likely be unable to align the front two bolts on the skid plate. To get these to fit once again, you will need to grind the mount hole on the skid plate to an obround shape in order to be able to thread the bolts.



SUBJECT: FJ Cruiser Rear Coil Spring Spacer Kit Installation Instructions

Disassembly

19. Put the vehicle in 4WD High and chock the front tires.
20. Raise the rear of the vehicle and secure it on a level surface with jack stands on the frame.
21. Support the axle with a floor jack and remove the rear tires.
22. Unbolt the sway bar end links from the sway bar.
23. Unbolt and slide the bottom of the shocks free of the axle. If you are replacing shocks, unbolt them from the frame as well and remove them completely.
24. Unbolt the track bar (panhard bar) from the frame.
25. Lower the axle until there is plenty of room to slide the coil springs out. Be sure to keep track of driver and passenger sides as well as top and bottom of the springs.

Assembly

9. Set your new coil spring spacers on top of the factory spring. The spacers have a taper on them which should point up, and a shoulder on them which will sit over the spring and factory rubber isolator.
10. Slide the coil spring and new spacer back into place on the axle. The spring must be rotated so that the end of the coil is locked into the pocket on the coil perch on the axle. If it is not put into place properly, your lift may end up uneven.
11. With both coils and spacers now in place, begin raising the axle to put pressure on the top and bottom of the coils. As the coils make contact with their frame end perches, make sure they are properly aligned.
12. Re-assemble track bar (panhard bar) to frame. Torque to specification using the chart below.
13. If you are using new shocks, now is the time to install them. Otherwise, secure the lower end of the shock back onto the axle. Tighten to spec.
14. Install sway bar end links onto sway bar and tighten.

You may now finish your installation by re-installing your wheels and tires and lowering the vehicle back onto the ground. Be sure to double check all bolts and nuts, including lug nuts to ensure they are tight. Test drive and check again. It is also recommended that after a few hundred miles, all bolts be passed over and re-torqued.

SUBJECT: FJ Cruiser Rear Bump Stop Spacer Kit Installation Instructions**Disassembly**

26. Unbolt the 2 Bolts on each side that are holding the bump stops to the frame.

Assembly

15. Slide new longer bolts with a flat washer and lock washer through your factory bump stop.
 16. Slide bump stop spacer over the bolts next.
 17. Attach bump stop with spacer back into the factory location.
 18. Tighten to 18lb/ft - 20lb/ft. We also recommend using a thread locker to ensure that your bump stops do not loosen over time.

STANDARD BOLT TORQUE SPECIFICATIONS						
INCH SYSTEM			METRIC SYSTEM			
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 8.8	Class 10.9	Class 12.9
5/16	15 Ft – Lbs	20 Ft – Lbs	M 6	5 Ft – Lbs	9 Ft – Lbs	12 Ft – Lbs
3/8	30 Ft – Lbs	35 Ft – Lbs	M 8	18 Ft – Lbs	23 Ft – Lbs	27 Ft – Lbs
7/16	45 Ft – Lbs	60 Ft – Lbs	M10	32 Ft – Lbs	45 Ft – Lbs	50 Ft – Lbs
½	65 Ft – Lbs	90 Ft – Lbs	M12	55 Ft – Lbs	75 Ft – Lbs	90 Ft – Lbs
9/16	95 Ft – Lbs	130 Ft – Lbs	M14	85 Ft – Lbs	120 Ft – Lbs	145 Ft – Lbs
5/8	135 Ft – Lbs	175 Ft – Lbs	M16	130 Ft – Lbs	165 Ft – Lbs	210 Ft – Lbs
¾	185 Ft – Lbs	280 Ft – Lbs	M18	170 Ft – Lbs	240 Ft – Lbs	290 Ft – Lbs