

#017250, #017400

Installation Instructions

Box Kit

1985-1995 Suzuki Samurai



READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS PRIOR TO INSTALLATION OF SYSTEM AND OPERATION OF VEHICLE.

SAFETY WARNING

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

PARTS LIST

Part #	Qty	Description
40-1	4	5/8 x 0.065 x 2.500" sleeve
41-1	8	5/8 x 0.049 x 2.500" sleeve
2045B	8	Bushing
2081B	16	Bushing
N12FH	16	1/2" fine high nut
W12S	16	1/2" SAE flatwasher
122340512R	6	1/2 x 2-3/4 x 5-1/2" U-bolt
123000634R	2	1/2 x 3 x 6-3/4" U-bolt
01009	1	Anti-sway bar extension-DS (017400 only)
01010	1	Anti-sway bar extension-PS (017400 only)
BP123401	2	Bolt pack (017400 only)

FRONT INSTALLATION

1. Safely raise the front of vehicle and support the frame with jack stands for safety.
2. Remove the tires and wheels.

Perform the following procedures one side at a time. Retain all OE hardware.

FRONT LEAF SPRING REMOVAL

3. Support the axle with a floor jack under the differential. Raise the axle until there is no spring pressure on the shocks.
4. Remove the OE shocks.
5. **4" LIFT ONLY:** Remove the anti-sway bar from below the radiator.
6. Lower the jack to relieve any spring pressure. Remove the spring U-bolts and spring plate.

7. While still supporting the axle with the floor jack, remove the spring-to-frame pivot bolt as well as the spring-to-shackle bolt and remove the spring from the vehicle.
8. Remove the shackle-to-frame pivot bolt and remove the shackles. Remove the OE spring shackle bushings from the frame.

FRONT LEAF SPRING INSTALLATION

9. Install the small bushings in the frame shackle pivot point and in the small eye of the new springs. Install the large bushings in the large eye of the springs.
10. Install the 12mm ID sleeves in the large spring eye bushings. Install the 13mm ID sleeves in the small spring eye bushings and the frame shackle bushings.
11. Install the OE shackles with the OE hardware to the frame. Do not tighten the pivot bolt at this time.
12. It may be necessary to enlarge the U-bolt holes in the spring plate to accommodate the BDS supplied U-bolts. Also check the spring center pin hole in the plates for clearance of new springs. Clean the spring-to-axle mating points.
2-1/2" LIFT ONLY: #007351 front leaf spring is for the driver's side and #007352 front leaf spring is for the passenger's side.
13. While supporting the axle with a floor jack, install the new spring to the frame and the shackle with the OE hardware. Do not tighten at this time.
14. Lower the axle onto the spring while ensuring the spring center pin lines up with the spring perch hole. Install the spring plate and U-bolts, nuts, and washers. Torque the U-bolts to 70-85 ft-lbs.
15. Install new BDS shocks with the OE hardware and tighten to manufacturer's specifications.
16. **4" LIFT ONLY:** Install the front sway bar drop brackets. The brackets are installed so that the "U" faces the center of the vehicle and the angle goes toward the rear. Mount the brackets to the original location with 3/8" x 1-1/4" bolts, nuts and washers. Attach the sway bar to the relocation brackets using 3/8" x 1-1/4 bolts, nuts and washers. **Note: Other modifications may be necessary for 1988-1/2 model years and newer.**

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17. When both sides are complete, install the wheels and tires. With the suspension unloaded and hanging, cycle steering lock to lock, while manually spinning the wheels. Inspect steering, suspension, and driveline for proper operation, clearances and lengths. Pay close attention to brake and axle vent hoses.

Note: BDS offers a drop pitman arm #087401 to eliminate any bump-steer and for centering of the steering wheel. Install pitman arm at this time.

18. If additional tire to front bumper clearance is needed, remove the four bolts mounting the bumper to the bumper tube. Drill the new mount holes 1" forward of the OE holes. Reinstall bumper with OE fasteners and torque to manufacturer's specifications. Do not use bumper relocation on air bag equipped vehicles.
19. Lower the vehicle to the ground. Bounce the vehicle to settle the suspension. Torque the spring-to-frame pivot bolt to 42 ft-lbs. Torque the shackle bolts to 30 ft-lbs.

REAR INSTALLATION

REAR LEAF SPRING REMOVAL

20. Safely raise the rear of vehicle and support the frame with jack stands for safety.
21. Remove the tires and wheels.
22. Support the axle with a floor jack under the differential. Raise the axle until there is no spring pressure on the shocks.
23. Remove the OE shocks.
24. Lower the jack to relieve any spring pressure. Remove the spring U-bolts and spring plate.
25. While still supporting the axle with the floor jack, remove the spring-to-frame pivot bolt as well as the spring-to-shackle bolt and remove the spring from the vehicle.
26. Remove the shackle-to-frame pivot bolt and remove the shackles. Remove the OE spring shackle bushings from the frame.

REAR LEAF SPRING INSTALLATION

27. Install the small bushings in the frame shackle pivot point and in the small eye of the new springs. Install the large bushings in the large eye of the springs.
28. Install the 12mm ID sleeves in the large spring eye bushings. Install the 13mm ID sleeves in the small spring eye bushings and the frame shackle bushings.
29. Install the OE shackles with the OE hardware to the frame. Do not tighten the pivot bolt at this time.
30. While supporting the axle with a floor jack, install the new spring to the frame and the shackle with the OE hardware. Do not tighten at this time.
31. Lower the axle onto the spring while ensuring the spring center pin lines up with the spring perch hole. Install the spring plate and U-bolts, nuts, and washers. Torque the U-bolts to 70-85 ft-lbs.
32. Install new BDS shocks with the OE hardware and tighten to manufacturer's specifications.

33. When both sides are complete install the wheels and tires.
34. With the suspension unloaded and hanging, while manually spinning the wheels, inspect suspension and driveline for proper operation, clearances, and lengths. Pay close attention to brake and axle vent hoses.

TRANSFER CASE

35. BDS highly recommends checking and replacing as needed all mounts for the transfer case. These are available through your local parts store or Suzuki dealer.
36. Check all fasteners for proper torque.
37. The vehicle will need to have a front end alignment.
38. Align headlights.
39. Check all fasteners after 500 miles.