



491 W. Garfield Ave., Coldwater, MI 49036

Phone: 517-279-2135

Web/live chat: www.bds-suspension.com

E-mail: tech@bds-suspension.com

Part#: **012456, 012457**

Product: **Add-A-Leaf Kit**

Application: **Dodge 3/4 Ton Pickup 4WD**

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.

PRODUCT SAFETY WARNING Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices.

You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/ reassembly procedures of OE and related components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
4. Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
6. If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
7. Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.

POST-INSTALLATION WARNINGS

1. Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.
2. Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.
3. Perform head light check and adjustment.
4. Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

PARTS LIST

Part #	Qty	Description
	2	Long add-a-leaf 113209-1
	2	Long add-a-leaf 113209-2
	2	7/16" center pins w/ nuts
	4	Sleeves
	4	U-bolts
	8	9/16" high nuts
	8	9/16" flatwasher
	2	2" spacer blocks
	4	Leaf alignment brackets (U-Brkts)
	1	Hardware pack
	4	M8 Flathead bolts w/ nuts
	4	3/8 x 4 1/2" bolts
	4	3/8" nuts
	4	3/8" flatwashers
	1	Brake valve relocation bracket
	2	7/16 x 1" bolt
	2	7/16" nuts & washers

INSTALLATION INSTRUCTIONS

1. Safely raise the rear of vehicle and support with jack stands for safety.
2. Remove the tires and wheels.
3. Place support floor jack under the rear axle.
4. Remove the OE shock absorbers.
5. Install brake proportioning valve drop bracket with supplied 7/16" fasteners.

Complete the following steps one side at a time.

6. Lower the vehicle until the springs hang freely. With the rear axle well supported remove the leaf spring u-bolts.
7. Use C clamps to hold the spring assembly securely together.
8. Remove the leaf spring center pin and slowly remove the C clamps.
9. Remove the leaf alignment clamps with an air chisel. Replace these clamps with the supplied clamps using the M8 flathead bolts and nuts. Two clamps are required per side.
10. Install the add-a-leaves in the pack so that the longest leaf (main) is on top and the smallest leaf is on the bottom. The spring pack should be an inverted pyramid in shape. One of each size add-a-leaf should be installed in each side.
11. Install the new 7/16" center pin up through the leaf pack and start the nut to hold the pack together.
12. Do not use the center pin to draw the leaf pack together. Use a C clamp on each side of the center pin to draw the pack together while ensuring that the leaves are in line. After the pack is drawn together, then tighten the center pin.
13. Remove the C clamps. Cut off any excess center bolt.
14. Install the supplied sleeves between the leaf alignment clamps using the 3/8" x 4 1/2" bolts, nuts and washers. Tighten to specification.
15. Install the provided 2" tapered block on the axle. The short end of the block goes toward the front of the vehicle.
16. Position the spring on 2" block so that the center bolt head is inserted into the locating hole in the block.
17. Install two u-bolts over the spring seat, spring pack, stock block, and axle tube. From the under side of the axle tube, reinstall the bottom u-bolt plate and hold assembly together with the 9/16" high nuts & washers.
18. If a rear sway bar is present, the links will have to be sectioned & lengthened.
19. Install appropriate BDS shock absorbers.
20. Install wheels and tires. Lower the vehicle.
21. Torque the u-bolts to 100-120 ft-lbs.
22. Check all fasteners after 500 miles.