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Part#: **Add-A-Leaf**

Product: **Add-A-Leaf**

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

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**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.

# INSTALLATION INSTRUCTIONS

1. Raise rear of vehicle and support with jack stands under frame.
2. Remove tires and wheels.
3. Raise the rear axle with a floor jack and support axle with jack stands. Remove shocks.
4. With axle firmly supported by jack stands remove the axle vent hose from the axle housing. Remove the axle u-bolts and spring plates.
5. Lower axle to allow for spring removal.

**⚠ Caution: Be careful not to over extend brake lines, etc. Remove spring eye bolt and shackles bolts. Remove springs from the vehicle.**

6. Using c-clamps or large bench vise, clamp the spring assembly securely together.
7. If applicable, remove any leaf spring alignment clips. Using vise-grips to hold the head of the center bolt, loosen and remove it. If the center bolt is rusted, a hammer and drift punch may be necessary for removal.
8. Carefully remove c-clamps or loosen bench vise.
9. With a small amount of grease applied to both ends of the add-a-leaf, reassemble leaf pack with new add-a-leaf in place. The leaf pack should be assembled as a pyramid with the longest leaf on top to the shortest leaf on the bottom.
10. Use the c-clamp to compress the pack back together, making sure to align the center pin holes in each leaf. Secure with the supplied center pin nut. **Do not use the center pin to tighten the pack.** Use the c-clamps to compress the pack and then tighten the center pin. Cut off any extra pin above the nut. Install the supplied leaf alignment clamps.
11. Install the springs back in to the vehicle. Reinstall the spring eye bolts and/or shackles according to OE instructions, but **do not tighten at this time.** Use the hydraulic jack to raise or lower the axle to the springs (depending on the vehicle) making sure to align the center pin head in the axle seat. Install the new u-bolts and OE spring plates according to OE instructions and torque u-bolt nuts to factory specs.
12. Reconnect the axle vent hose and install replacement BDS shock absorbers.

**🔧 Note: Original shocks will probably be too short.**

13. Lower vehicle to the ground. Bounce on the vehicle several times to allow the shackles to swing out to the proper position, then tighten the spring frame mounting bolts and the shackle bolts to OE specification. Inspect for proper clearance. Test drive.

**You must tighten the u-bolts again after 100 miles.**

**Check all fasteners after 500 miles.**

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## NOTICE TO DEALER/INSTALLER

These instructions, the warning card, and included decals must be given to the owner of this BDS Suspension product.

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For questions, technical support and warranty issues relating to this BDS Suspension product, please contact your distributor/installer before contacting BDS Suspension directly.

**Sold/Installed by:**