



2265 Crosswind Dr. Prescott, AZ 86301
(928) 636-3175 www.p-a-g.net

Chrysler/Dodge 4" SUSPENSION Dodge 1/2 Ton 4x4 W100, W150 Dodge 3/4 Ton 4x4 W200, W250 D4AX, D4BX, D4CX

Parts List:

Add-A-Leaf (R2536)	2
Cast Block (2KB-W)	2
U-Bolt (0932212Q)	4
U-Bolt (0918234R) (D4AX)	2
U-Bolt (0922334R) (D4AX, D4BX)	1]
U-Bolt (0918300R) (D4BX)	2
U-Bolt (0920212Q) D4CX)	4
Front Leaf Spring Pack (D4S)	2
Spring Bushing (BSDGE)	8
Spring Bushing Sleeve (14)	4
Stud (96400DES) (D4AX, D4BX)	2
Hex High Nut 9/16 (N96FH)	16
Flat Washer 9/16 (W96S)	16
Axle Shim (2124Shim)	2
Brake Line Adapter (SBLA)	1
Brake Line Adapter -90% (90BA)	2
Center Pin 3/8" (380412FCP)	2
Hex Nut -Fine (N38FS)	2
Bolt, 5/16" x 1" (56100 CHHC)	1
Locknut 5/16" (N56CL)	1
Flat Washer 5/16" (W56F)	1
Warning Label (WL002)	1

Read and understand all instructions and warnings prior to installation of system or the operation of the altered vehicle.

SAFETY WARNING: Trail Master recommends this system be installed by a certified technician! These instructions address installation of the Trail Master system and may not include OE recommended procedures for disassembly / reassembly of OE components. Research the areas requiring certification. In addition to these instructions, professional knowledge of disassembly / reassembly procedures as well as post installation checks are required. Attempts to install this system without knowledge and expertise may jeopardize the integrity and or operating safety of the vehicle.

PRODUCT SAFETY WARNING: Certain Trail Master 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. Use of oversize tires, suspension lifts, body lifts and other suspension modifications may raise your vehicles center of gravity, resulting in an increased tendency for the vehicle to "pitch and roll" during sudden turns or abrupt maneuvers. Extreme care must be used to prevent loss of control or vehicle roll over. Failure to drive your modified vehicle safely may result in serious injury or death. Drive at reduced speeds to ensure your ability to maintain control of the vehicle under all driving conditions. Always wear a safety belt.

PRODUCT SAFETY LABEL: Supplied in this kit is a Safety Warning Label. Install this label inside of the vehicle's cab, in a highly visible location to all operators of the vehicle. Trail Master does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. See Product Safety Warning above. Combining lift devices may require altering your vehicle's track width to ensure safe handling characteristics. Consult a professional mechanic with off-road experience before combining any lifting device. Larger rim and tire combinations may increase leverage on suspension, steering, and related components. As you increase the size of the rim and tire combinations over stock, you also increase the possibility of OE related component failure.

PRE-INSTALLATION NOTES:

1. Back space of wheels and tire pull over must be such that the possibility of the combination will not interfere with any mobile, fixed, or rotating components; failure to do so may result in serious vehicle damage!
2. Special literature or tools required; OE service manual for model / year of vehicle. Refer to OE manual for proper disassembly / reassembly procedures of OE related components.
3. Compare parts included in your system with the enclosed parts list. Placing hardware with the components before you start may reduce installation time. Contact your Trail Master dealer if any parts are missing or appear to be different than those indicated on the parts list.
4. **Always wear safety glasses.** Use appropriate safety equipment at all times.

GLOSSARY OF TERMS:

TM:	Trail Master
DRV:	Drivers side of the vehicle
PASS:	Passengers side of the vehicle
OE:	Original equipment

FASTENERS: Adhere to recommendations when replacement fasteners, retainers, and keepers are called out in the OE service manual. When reassembling the vehicle it is recommended by the vehicle manufacturer that certain fasteners are replaced in order to maintain proper retaining characteristics. This system may not include all replacement hardware as recommended by the OE service manual. Additional replacement hardware should be obtained prior

to installation of this system to meet the requirements of the OE service manual.

TORQUE SPECIFICATIONS: See OE manual for torque values and procedures when reusing an OE fastener.

BOLT SIZE	GRADE 5	GRADE 8
1/4"-20 fastener	10'LBS	10'LBS
1/4"-28 fastener	10'LBS	12.5'LBS
5/16"-18 fastener	17'LBS	22.5'LBS
5/16"-24 fastener	20'LBS	25'LBS
3/8"-16 fastener	30'LBS	40'LBS
3/8"-24 fastener	35'LBS	45'LBS
7/16"-14 fastener	50'LBS	65'LBS
7/16"-20 fastener	55'LBS	70'LBS
1/2"-13 fastener	75'LBS	100'LBS
1/2"-20 fastener	85'LBS	110'LBS
9/16"-12 fastener	105'LBS	135'LBS
9/16"-18 fastener	115'LBS	150'LBS
5/8"-11 fastener	150'LBS	195'LBS
5/8"-18 fastener	160'LBS	210'LBS
3/4"-16 fastener	175'LBS	225'LBS

INSTALLATION INSTRUCTIONS:

- 1.Raise front of vehicle.
- 2.Place jack stands under front axle of vehicle.
- 3.Remove wheels from each side of front of vehicle.
- 4.Remove shock absorbers from each side.
- 5.Remove U-bolts from front axle.
- 6.Raise body of vehicle off front axle.
- 7.Remove existing front springs from vehicle.
- 8.Install bushings and sleeves in TRAILMASTER springs.
- 9.Install new TRAILMASTER springs placing wedge shaped shims between springs and axle pads to reduce driveshaft angle. (Tapered end towards rear of vehicle.)
- 10.Lower body back on front axle taking care to align spring center pins, and shims properly.
- 11.Install new U-bolts and studs provided in kit and tighten.
- 12.Install new TRAILMASTER shock absorbers.
- 13.Install wheels and remove jack stands and lower vehicle.

REAR INSTALLATION:

- 1.Raise rear of vehicle.
- 2.Place jack stands under rear axle.
- 3.Remove wheels from both sides of rear end.
- 4.Remove shock absorbers from both sides of vehicle.
- 5.Remove U-bolts from rear axle housing.
- 6.Raise body off axle.
- 7.Remove center bolt from spring, make sure to have clamp on spring. They are under tension and can be dangerous.
- 8.Remove overload leaf (the bottom one) and replace with new TRAILMASTER helper leaf provided in kit.

NOTE; The overload leaf is usually the bottom leaf and is considerably thicker than the rest of the leaves. It should look similar to the 2" helper leaf. On vehicles not equipped with overload leaves the 2" helper leaf should

not exceed length of leaves above it and should be longer than leaves below it.

- 9.Using new center bolts re-assemble springs with new TRAILMASTER leaf installed.
- 10.Install rear riser blocks between axle pad and springs. Blocks are marked with a "F" and a "E" for front and rear.
- 11.Lower body and install new U-bolts.
- 12.Install new TRAILMASTER shock absorbers.
- 13.Install wheels and lower vehicle.
- 14.Re-check all nuts and bolts and make sure brake lines were not damaged when raising vehicle.

NOTE; All nuts and bolts should be checked periodically.

IMPORTANT: Due to increased angle of driveshafts the "ears" on the C.V. of the front driveshaft may have to be ground down some to prevent binding. Also due to increased angle of driveshafts, U-joints will have to be replaced more frequently, so keep a close watch on them.

POST INSTALLATION WARNINGS

- 1.Check all fasteners for proper torque. Check to ensure there is adequate clearance between all rotating, mobile, fixed, and heated members. Ensure that there is adequate clearance between exhaust and brake lines, fuel lines, fuel tank, floor board, and wiring harnesses. Check steering gear for interference and proper working order. Test brake system.
- 2.Perform a steering sweep. Check to ensure bracket hoses have sufficient slack and will not contact rotating, mobile, or fixed members, adjust lines and brackets to eliminate interference and maintain proper working order. Failure to perform inspection may result in component failure.
- 3.Do not operate vehicle in 4WD on hard dry surfaces.
- 4.Driveline Note: Post installation vehicles may experience driveline vibrations. Driveline angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened, shafts may need to be trued, and U-joints may require replacement. This system does not incorporate components to accommodate two piece rear drive shafts.
- 5.Bump stops and extension stops must be in place on all vehicles! Note: Allowing suspension to become over extended or compressed by neglecting to install or maintain stops and extensions or by failing to install the correct shock absorbers may cause serious damage to OE and related components as well as void your warranty.
- 6.Perform headlight adjustment.
- 7.Set the alignment within OE specifications. The size of rim and tire combination should be considered when making front end adjustments. Please make certain that all Dodge recommended alignment procedures are followed specifically. Failure to do so may result in alignment and/or driveability problems.
- 8.Re torque all fasteners after 500 miles. Visually inspect components and re torque fasteners during routine vehicle service.
- 9.Retain this and all information regarding your altered vehicle.**Thank You for choosing Trail Master. For questions or Suggestions, contact our Technical Assistance Department at (928) 636-3175**