

# PRODUCT SAFETY WARNING



Ironman 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.

Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions.

## PRE-INSTALLATION NOTES

1. Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of all components.
2. Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
3. Larger rim and tyre 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, slip joints on shaft may require replacement, shafts may need to be lengthened or trued, and universal joints may need to be replaced.
5. Secure and properly block vehicle prior to installation of Ironman Suspension components.
6. Always wear safety glasses when using power tools.
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 settings. 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 brake hoses and breathers at full extension for adequate slack. Failure to perform hose check/replacement may result in component failure. Longer replacement hoses, if needed should be purchased.

3. Perform head light check and adjustment.

4. Torque check all fasteners after 500km.

Always inspect fasteners and components during regular servicing.

Ironman recommend Lift Kits only be installed by competent mechanics with experience in such vehicle modifications.

Installation of these lift kits should NOT be performed when:

- A) The fitter does not have sufficient experience or training.
- B) The fitter does not have the necessary, equipment, tools, including alignment and measuring tools.
- C) The fitter is restricted for time.
- D) No suitable alternative transport is available.

It should be noted that lifts of this nature do bring with the possibility of variables which can and do require modification work to be completed. Not all vehicles will result in the same outcome.

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**The Ironman Competition Suspension Lift Kit is only intended for Offroad Competition use. Full vehicle certification of any / every component within will be required before use onroad. Certification must be obtained from your local roads authority prior to driving onroad.**

## COIL SPRINGS

Raise the suspension ride height by the suggested amount. Additional accessories such as Bullbar, Winch, Long Range Tank, Roofracks, Rear Wheel Carriers, Luggage, Occupants, Larger Spare Wheels, Tool Boxes, Drawer Systems, Recovery Equipment, Steel Trays, may alter the outcome.

Lifts quoted are based upon original factory weighted vehicles.

It must be noted that with larger lifts, a small lean or weight discrepancy will affect the rake and yaw of the vehicle more than with a smaller lift. A cause for a 10mm lean in a 50mm lift vehicle would create approximately 15mm-20mm lean in a vehicle with 6" lift.

## SHOCK ABSORBERS

Shock Absorbers are matched in length, available specifically for 4" (100mm) and 6" (150mm) lifts. Shock Absorbers should only be matched with Coil Springs as specified in the catalogue for the same lift.

For vehicle lifts above 3" (75mm) special alignment components are required.

## ALIGNMENT COMPONENTS

Designed specifically for vehicles with lifts between 4" (100mm) to 6" (150mm). The following components should be used within this range in order to successfully maintain a geometrically correct suspension system.

CASTER PLATES OR BUSHES  
PANHARD RODS  
SWAY BAR EXTENSION BRACKETS AND LINKS  
EXTENDED BRAKE LINES  
EXTENDED DIFF BREATHER HOSES

**As each vehicle can differ, please be aware you MAY still need to obtain other special components beyond this recommendation or that is supplied in the Ironman Suspension Kit.**

**These parts may not be available from Ironman 4x4.**

## CASTER CORRECTION

Vehicles may need to be tested for alignment after lift has been completed but prior to caster correction installation.

Some vehicles may require more or less than others.

Ironman Caster Correction Bushes can provide 2 - 3.5 degrees of correction.

Ironman Caster Plates can provide 5 degrees of correction.

\* A general rule: For every 25mm (1") of lift, results in approx. 1 degree reduction in caster.

## ADJUSTABLE PANHARD RODS

Used to adjust the sideward axle shift after the vehicle has been raised. Setting adjustment must be completed carefully whenever ride height is changed.

## EXTENDED SWAY BAR BRACKETS

Used to lengthen the linking attachment of the Sway Bar to chassis. Lifting the vehicle beyond 3" (75mm) requires their use, otherwise damage to the sway bar or chassis can occur together with unsafe vehicle handling.

## BRAKE HOSES

Brake Lines may not have sufficient length to allow for the increased wheel droop allowed by the longer shock absorbers.

Installing Extended Brake Lines should only be performed by a brake specialist.

\*Longer Diff Breather Hoses may be needed for the same reasons.

## GEARBOX SPACERS

Not used by default in ironman Kits, but can be used to lower the gearbox crossmember to achieve more desirable driveline angles after raising suspension. Each vehicle can differ in requirement. Can also be used on smaller lifts from 40mm+.

## SPRING SPACERS

Not used by default in Ironman Kits, but can be used to trim the vehicle ride height by 15mm or 30mm.