



# OLD MAN EMU FITTING INSTRUCTIONS

## JEEP WRANGLER JK 2" LIFT SUSPENSION SYSTEM

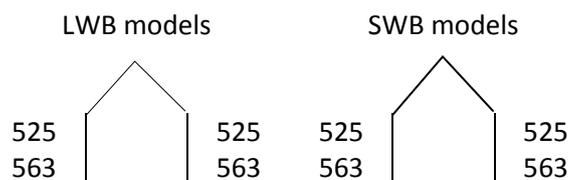
### WARNING

- ◆ This product must be installed exactly as per these instructions using only the hardware supplied.
- ◆ In the event of damage to any suspension component, contact your nearest authorised ARB stockist. Repairs or modifications to the suspension system components must not be attempted.
- ◆ Do not use this product for any vehicle make or model, other than those specified by ARB.
- ◆ Do not remove labels from suspension components.
- ◆ This product or its fixing must not be modified in any way.
- ◆ The installation of this product may require the use of specialized tools and/or techniques
- ◆ It is recommended that this product is only installed by trained personnel
- ◆ These instructions are correct as at the publication date. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer
- ◆ During installation, it is the duty of the installer to check correct operation/clearances of all components
- ◆ Work safely at all times

**Note:** These fitting instructions should be read in conjunction with the vehicle workshop manual or torque reference chart.

### RIDE HEIGHTS REFERENCE

Manufacturer's specified ride heights, measured from **centre of hub to guard**, as published by the Australian government in Road Vehicle Descriptor documents. RVDs can be accessed on the web via these sites:  
<http://myrta.com/rvd/welcome.do> or [http://rvcs-prodweb.dot.gov.au/pls/www/pubrvcs.Notify\\_Search](http://rvcs-prodweb.dot.gov.au/pls/www/pubrvcs.Notify_Search)



# FITTING REQUIREMENTS

## HAND TOOLS REQUIRED

Ring open end spanner set metric  
Socket set metric  
Ball joint puller  
Lever bar  
Paint Marker  
Thread locking compound

## OPTIONAL HAND TOOLS

Ratchet spanners metric

## WORKSHOP TOOLS REQUIRED

Vehicle hoist or jack and axle stands  
Spring compressor  
Tape measure  
Trolley jack  
Rubber Grease  
Thread locking compound

## OPTIONAL WORKSHOP TOOLS

Vehicle hoist  
Impact driver

## SAFETY EQUIPMENT REQUIRED

Protective eyewear



Hearing protection



**Note:** 'WARNING' notes in the fitting procedure relate to OHS situations, where to avoid a potentially hazardous situation it is suggested that protective safety gear be worn or a safe work procedure be employed. If these notes and warnings are not heeded, injury may result.

## GENERAL CARE AND MAINTENANCE

By choosing Old Man Emu suspension, you have bought a product that is one of the most sought after 4WD products in the world. Your suspension system is a properly engineered, reliable, quality accessory that represents excellent value. To keep your suspension in original condition it is important to care and maintain it following these recommendations:

- As part of any Pre Trip Preparation, or on an annual basis, it is recommended that a thorough visual inspection of all components is carried out. Make sure that all bolts and other components are torqued to the correct specification. Also check that all bushings, mountings, and fasteners are free of damage. Replace any components as necessary. This service can be performed by your local authorized Old Man Emu licensed workshop.
- Vehicles fitted with leaf springs require leaf spring liners and polyurethane bushes to be greased as part of the annual regular maintenance. Follow instructions in Old Man Emu suspension maintenance guide for detailed procedures.

## Front Suspension Fitment



Before starting, check all part numbers match invoice, Old Man Emu catalogue, or application guide.

Measure hub to guard heights and note rim diameter.

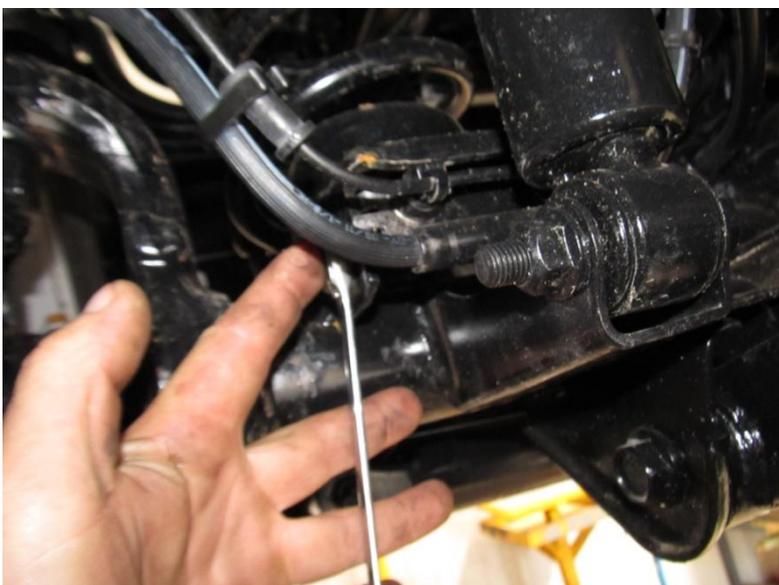
Fill out warranty form.

Note accessories already fitted.



Raise vehicle and support front axle with axle stands.

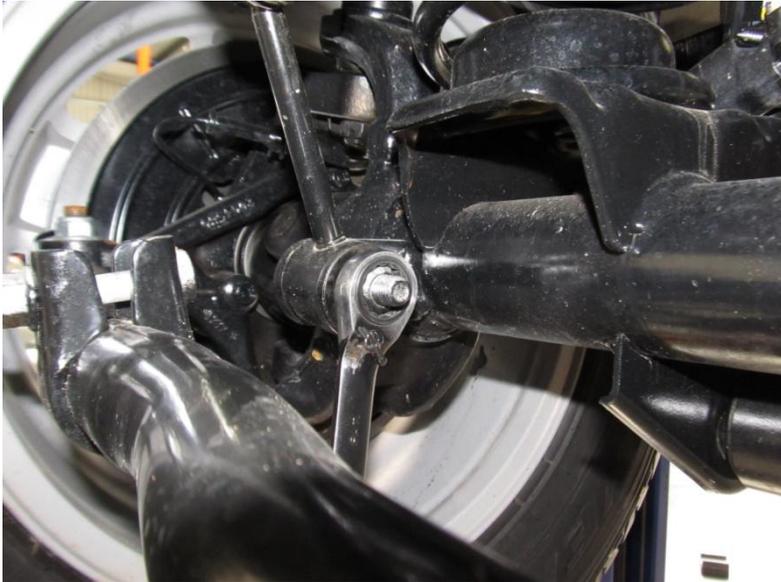
Tools:  
Jack and axle stands or vehicle hoist  
Wheel brace or 19mm socket



Remove brake and ABS sensor line bracket from axle housing.

Also remove differential breather pipe from axle housing.

Tools:  
10mm spanner



Remove the front sway bar links on both sides of the vehicle.

Tools:  
19 mm socket and ratchet or spanner



Remove bolt that connects front panhard rod to the axle housing.

Tools:  
21mm socket and ratchet  
21mm spanner



Undo shock absorber bottom mounting bolt.

Tools:  
18mm socket and ratchet  
18mm spanner



Undo shock absorber top mounting bolt.

Use spanner on flat section below stud to prevent shock from spinning

Tools:  
16mm socket and ratchet  
16mm spanner



Remove front shock absorber



Disconnect steering drag link from the pitman arm. Hold ball joint from spinning with Allen key end of threaded section.

Tools:  
21mm spanner  
7mm Allen key



Using a Paint marker, mark driveshaft alignment for re assembly.

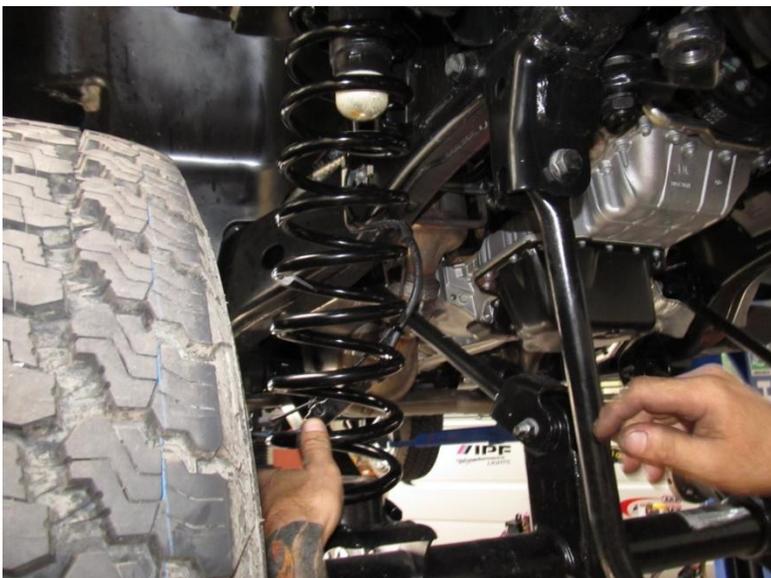
Disconnect four driveshaft flange bolts at the rear of the differential housing.

Tools:  
Paint Marker  
21 mm socket and ratchet



Raise vehicle until springs are no longer captive. Take care to ensure that brake lines and ABS wires are not over stretched.

Remove original springs



Fit new Old Man Emu springs to vehicle.



Align spring assembly on bottom seat. There should be approximately 15 mm between the end of the spring and the spring seat.



Carefully lower vehicle to compress suspension.



With axle closer to body re connect the drag link and panhard rod.

It may be necessary to re locate the axle using by turning the steering wheel to allow the panhard rod to be re fitted.

Tools:  
21mm socket and ratchet or spanner  
7mm Allen key  
Lever bar



Fit retaining washer and one bushing to the top shock absorber stud.



Fit new Old Man Emu shock absorber to top mount.

Place locater washer, bushing then retainer washer over top stud as shown and secure with new top nut.

Tighten until nut contacts shoulder on stud.

Use spanner on flat section near bottom of strut to stop shock absorber from spinning.

Tools:  
19mm socket and ratchet or spanner



Fit new Old Man Emu shock absorber to top mount.

Attach using original nut and bolt.

Tighten to manufacturer's torque specification.

Tools:  
18mm socket & ratchet or spanner.  
Torque wrench



Re apply thread locking compound to all driveshaft flange bolts

Tools:  
Thread locking compound



Re fit driveline flange bolts.

Tighten bolts progressively and evenly to manufacturers torque specification.

Tools:  
21mm socket & ratchet or spanner.  
Torque wrench



Re connect sway bar linkages.

Tighten bolts to manufacturers torque specification.

Refit differential breather pipe to axle housing.

Tools:  
18mm socket & ratchet or spanner.  
Torque wrench

## Rear Suspension Fitment



Raise vehicle on hoist.

Support rear axle with axle stands.

If you do not have a hoist use trolley jacks.

Tools:

Jack and axle stands or vehicle hoist  
Wheel brace or 19mm socket



Disconnect the rear brake line brackets on both sides of the vehicle.

Tools:

10mm spanner or socket



Remove rear sway bar links on both sides of the vehicle.

Tools:

19mm spanner or socket



Disconnect the rear panhard rod at the chassis end & back off the torque at axle the end.

Tools:  
21mm socket  
Breaker Bar



Remove rear shock absorbers.

Remove lower mount first then upper mount.

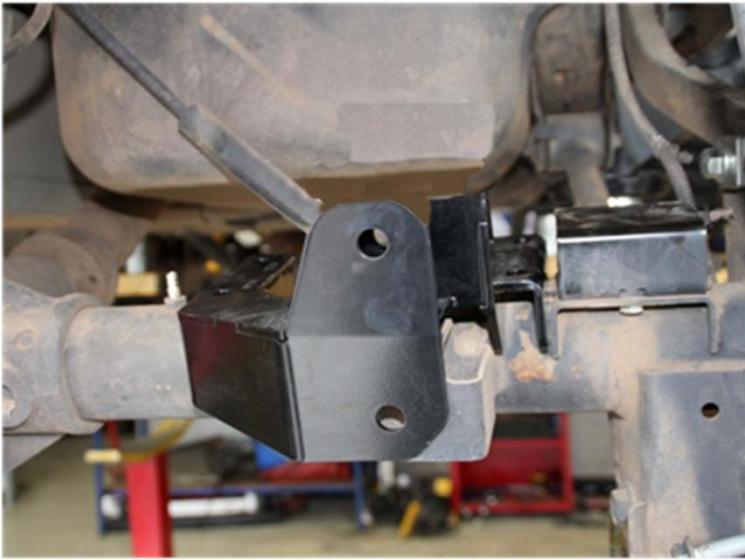
Tools:  
18mm socket and ratchet or spanner  
16mm socket and ratchet or spanner



Unclip rear handbrake cable from retaining clip on underside of body.



Disconnect rear differential breather tube from axle housing.



Using FK 60 / 61 with included instructions, install panhard rod relocation bracket.

**NOTE:** After spring fitment reinstall panhard rod as per instructions, described later.



Using FK 60 / 61 with included instructions, install rear bump stop spacers.



Carefully raise vehicle to remove load on rear springs allowing them to become untrapped.

Remove original equipment springs.

Retain original rubber isolator. Rubber isolator may stick to upper spring mount.



Before fitting measure and note free height of both left and right hand springs.

Stand the spring, on a flat and level surface.

Measure the distance between the lowest point on the spring and the top point of the spring wire.

Check the measurement against the specification chart to ensure correct spring is used.



Fit the original rubber spring mounts to the new Old Man Emu springs.



Fit the new spring assembly to the vehicle.



Align spring assembly on bottom seat.

Spring pigtail should be seated in same position as original spring.

Reinstall panhard rod as per FK 60 /61 instructions.

**NOTE:** It may be necessary to re locate the axle using a lever bar to allow the panhard rod to be re fitted.

Secure bolt but do not torque at this stage.



Fit new shock absorber to top mounting position using original bolts.

Torque bolts to manufacturer's Torque specification.

Tools:  
16mm socket & ratchet or spanner.  
Torque wrench



Re connect sway bar links.

Torque bolts to manufacturer's Torque specification.

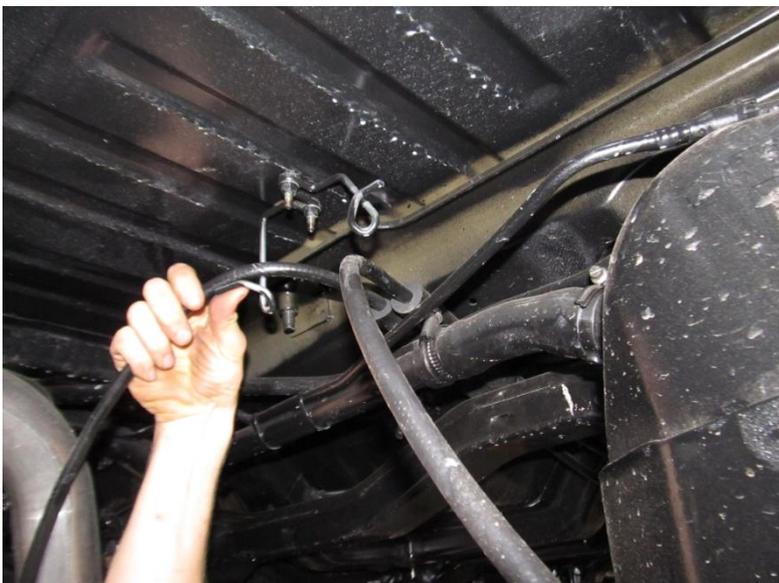
Tools:  
18mm socket & ratchet or spanner.  
Torque wrench



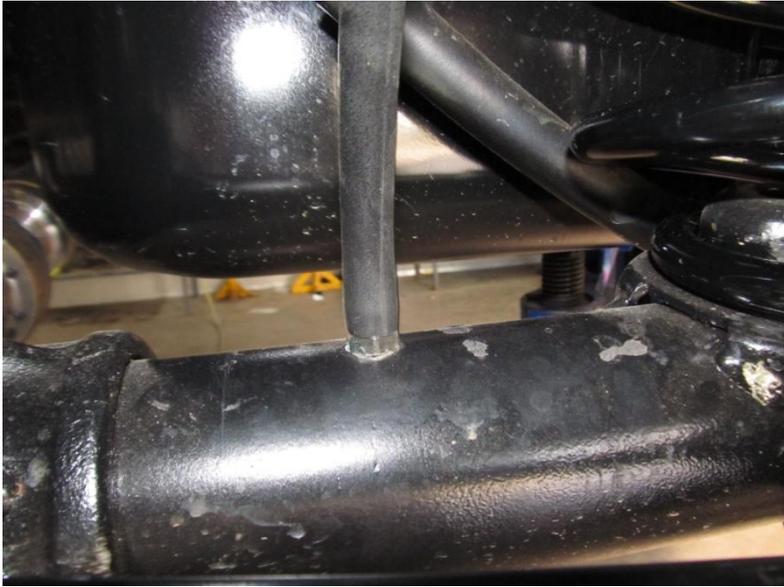
Fit new Old Man Emu shock absorber to the bottom mount.

Torque bolts to manufacturer's Torque specification.

Tools:  
18mm socket & ratchet or spanner.  
Torque wrench



Replace handbrake cable into retaining clips mounted to vehicle floor.



Reconnect differential breather pipe to axle housing.



Lower vehicle to ride height

Bounce the car a couple of times to cycle the suspension.

Tighten front panhard and rear panhard mounting bolts. Torque bolts to manufacturer's specification.

Tools:

21mm Spanner

21mm socket and ratchet or impact driver

Torque wrench



Carry out wheel alignment to manufacturer's specifications.

Road test including brake check.

On return measure ride heights and check all bolts are secure.