

### DATE:

January 2012

### **DESCRIPTION:**

Old Man Emu Suspension System.

### **APPLICATION:**

Jeep JK Wrangler 2&4 Door 4in Lift See important Note On Page 5

### PART NO.:

OMEJK4 (LHD Models)
OMEJK4RHD (RHD Models)

### FITTING:

6 Hours

#### **AVAILABILITY DATE:**

March 2012



# PRODUCT SPECIFICATION

### **OME SUSPENSION SYSTEMS:**

Aftermarket 4WD suspension is extremely complex. Determining the right solution for your vehicle and your requirements demands special attention to many factors. Unlike numerous aftermarket suspension systems, which are only available in a single configuration targeting lift height, OME offers a range of tuned and matched integrated suspension systems to ensure the right suspension is available to suit how the vehicle is outfitted and the conditions it will encounter.

### **DESIGN & DEVELOPMENT:**

OME engineers objective was to develop a complete 4 inch lift kit for the current model JK Wrangler both 2 door and 4 door variants. After researching the market on what options were available and the solutions that competitors offered a decision was made to offer a value for money well engineered solution which provides excellent ride and handling characteristics. OME is offering an integrated 4 inch kit that easily bolts on and has endured countless hours of engineering resources. Raising the JK Wrangler ride height beyond 2 inches introduces a range of new challenges which the OME engineers have addressed with a complete suspension solution.





### **SPRINGS:**

4 inch lift was achieved by linear rate springs utilising X5K high grade steel tuned to provide compliant ride on road while maintaining off road performance. Trim packers have been included to assist in fine tuning ride height that may be caused by various accessory fitments.



## **SHOCK ABSORBERS:**

A new front Nitrocharger sport shock (60066M) was developed which allows 100mm of down travel at the 4 inch lift. Careful consideration was given to maximise the down travel but also to ensure the front drive shaft doesn't bind and no need for a costly replacement drive shaft (Ref Note page 5). Both front and rear Nitrocharger Sport shocks have vehicle specific valving tuned for optimal blend of ride control and comfort. Shock lengths have been optimised for maximum down travel while retaining factory drive shafts, brake lines and shock mounts.



# ADJUSTABLE FORGED TRACK BAR (PANHARD ROD):

To centre and fine tune the location of the front axle, Old Man Emu has developed an adjustable forged track bar as a replacement to the original. A Hi grade 4140 forged steel adjustable track bar was chosen for it's superior strength, durability and freedom to optimise design.



# TRACK BAR (PANHARD ROD) RELOCATION KIT:

A rear Track Bar relocation bracket was developed to address the positioning of the rear track bar. This relocation bracket not only centres the axle but also raises the rear roll centre to provide positive rear stability. Old Man Emu engineers have used Design Solid Modelling and FEA to ensure strength and durability







### **BUMP STOP SPACER KIT:**

A bump stop spacer kit is used to ensure a larger diameter tyre is kept off the body work and optimises shock extended and compressed lengths to allow maximum compression and rebound travel



# CASTER CORRECTION & DRIVELINE KIT:

To achieve a 4 to 5 degree castor correction it only requires a 7mm longer arms or bracket adjustment. For this small shift Old Man Emu has developed an offset washer which is the most cost effective solution. The offset washer is machined steel, fixed position, rectangular in shape and utilises factory control arms and provides a reliable, solid solution to return to factory caster angle. A spacer washer has been provided to provide clearance between the auto cross member and driveshaft at full droop. With the use of this spacer this allows maximum travel with the front factory driveshaft.



## **SWAY BAR DISCONNECT KIT:**

New longer front and rear sway bar links have to been developed to correct sway bar alignment due to increased lift. The rear link is the factory style with two ball joints. The front link has an upper ball joint and the lower has a disconnect function using a greasable pin.



### STEERING DAMPING:

The steering damper has been specifically tuned for the JK Jeep to address front end wobbles initiated by anything from worn ball joints to out of balance large diameter tyres







# STEERING DAMPER RELOCATION BRACKET (LHD ONLY):

For all LHD models of Jeep Wrangler JK a steering stabiliser fit kit has been developed to relocate the stabiliser above the tie rod. By repositioning this ensures the stabiliser is less vulnerable to damage as it is no longer the lowest part of the front suspension



## **BRAKE LINE RELOCATION KIT:**

Brake line relocation brackets have been developed to reroute factory brake lines to work with this kits extended shock lengths. The relocation bracket provides a cost effective, fitter friendly solution and no brake bleeding is required. A handbrake relocation bracket lowers the brake line mounting position to relieve stress on brake lines resulting from the higher ride height



### **PACKAGING:**

The entire kit comes shipped in a full colour display carton with UV gloss finish and highlights all the features and benefits of the 4 inch kit and features outstanding images of the 4" JK jeep in action. Weight 55kg, Dimensions 800mm (L) x 470mm (W) x 460mm (H)



## SHOCK ABSORBER SPECIFICATIONS:

Nitrocharger Sport Part Number	Open Length (mm)	Closed Length (mm)	Upper Mount Bush Kit Part Number		Lower Mount Bush Kit Part Number	
			Original Kit	<b>Bushes Only</b>	Original Kit	<b>Bushes Only</b>
60066M	646	382	SMP658	OMEB42	N/A	N/A
60067L	706	422	N/A	N/A	N/A	N/A

