



DATE:
February 2012

DESCRIPTION:
Old Man Emu Suspension System.

APPLICATION:
Jeep Wrangler JK 2 & 4 Door 4" Lift

PART NO:
OMEJK4

AVAILABILITY DATE:
March 2012



PRODUCT SPECIFICATION

OME SUSPENSION SYSTEMS:

Aftermarket four-wheel drive suspension is extremely complex. Determining the right solution for your vehicle and your requirements demands special attention to many factors. Unlike numerous aftermarket JK suspension systems on the market that only target lift height, OME offers a complete boxed kit that contains all the required components to fine tune the suspension for ride height and additional weight of accessories. All while maintaining the world famous OME ride quality.

DESIGN & DEVELOPMENT:

OME's engineering objective was to develop a complete 4 inch lift kit for the 2007+ Jeep Wrangler JK 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 that provides excellent ride and handling characteristics. OME is offering an integrated 4 inch kit that easily bolts on and has undergone countless hours of engineering and testing. Lifting 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 using 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 4" of down travel at the 4 inch lift. Careful consideration was given to maximize 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 optimized for maximum down travel while retaining factory drive shafts, brake lines and shock mounts.



ADJUSTABLE FORGED TRACK BAR (PANHARD ROD):

To center 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 optimize design.

Note: Track bar bushings come pre installed (not shown in photograph).



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 centers the axle but also raises the rear roll center 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 tire is kept off the body work and optimizes shock extended and compressed lengths to allow maximum compression and rebound travel.



CASTER CORRECTION & DRIVELINE KIT:

To achieve a 4 to 5 degree caster correction it only requires 7mm longer arms or a 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 uses factory control arms and provides a reliable, solid solution to return the factory caster angle. A spacer washer has been provided to create clearance between the auto cross member and driveshaft at full droop. The use of this spacer allows maximum travel with the front factory driveshaft.



SWAY BAR DISCONNECT KIT:

New longer front and rear sway bar links have 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 Jeep JK to address front end wobbles initiated by anything from worn ball joints to out of balance large diameter tires.



STEERING DAMPER RELOCATION BRACKET:

For all LHD Jeep Wrangler JK models, a steering stabilizer fit kit has been developed to relocate the stabilizer above the tie rod. By repositioning the stabilizer, it is less vulnerable to damage as it's 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 is shipped in a full color display carton with UV gloss finish and highlights all the features and benefits of the 4 inch kit. Weight 122lbs, Dimensions 32" (L) x 19" (W) x 19" (H).

Easy to follow installation instructions, Old Man Emu decal and Old Man Emu can cozy are included in the kit.



SHOCK ABSORBER SPECIFICATIONS:

Nitrocharger Sport Part Number	Open Length (inch/mm)	Closed Length (inch/mm)	Upper Mount Bush Kit Part Number		Lower Mount Bush Kit Part Number	
			Original Kit	Bushes Only	Original Kit	Bushes Only
60066M	25.4 / 646	15 / 382	SMP658	OMEB42	N/A	N/A
60067L	27.8 / 706	16.6 / 422	N/A	N/A	N/A	N/A

COIL SPECIFICATIONS:

Spring Part Number	X5K Steel	Bar Dia. Mm	Free Height (inch/mm)		No. Of turns	Coil Weight lb	Spring Rate		OE Spring Rate Lbs
			A	B			Lbf/in	N/mm	
2642	X	14	21.26 / 540	21.26 / 540	10.5	10	135	24	120
2643	X	14.5	18.11 / 460	18.11 / 460	9	9.5	175	31	100

STEERING DAMPER SPECIFICATIONS:

Part Number	Upper Mount Type	Lower Mount Type	Open Length (inch/mm)	Closed Length (inch/mm)	Mounting Kit Number
OMESD48	Eye With Bush	Eye With Bush & Sleeve	19.65 / 499	12.2 / 310	5004981

IMPORTANT NOTES:

- For 2012 models with the 3.6 Liter engine, modifications to the exhaust or driveshaft are required to avoid contact between the driveshaft and exhaust when suspension is at full droop.
- When fitting larger tires, aftermarket wheels (rims) with greater offset (less backspacing) may be required to clear swaybar links and control arms.
- The Wrangler JK shown in the images below is RHD. Steering stabilizer location and position will be different when installed on a LHD Wrangler JKs.

