PRODUCT SPECIFICATION

**BP-51 NOW RELEASED FOR JEEP JK WRANGLER**

Old Man Emu is pleased to release the latest application of BP-51 High Performance Bypass Shock Absorbers engineered specifically for the Jeep JK Wrangler with larger lifts of 3.5 to 4.5 inch. Consisting of 4 shocks and 2 fits kits this application will fit both the LWB (Unlimited) and SWB variants for all year models from 2006 onwards.

2 front shock absorbers were developed with the primary difference being the extended length which differ by 50mm. BP5160021 has been specifically matched to the Old Man Emu JK 4 inch suspension kit and is a direct replacement for the front shock absorber found in the kit. A longer version has also been developed (BP5160022) for longer travel applications*. The front fit kit includes all mounting hardware required to fit the shock absorber and reservoir. A lower shock absorber mount has been designed that repositions the shock to provide clearance between the shock body and the chassis rail.

The rear shock has been designed to fit within the factory mounts and includes a stone guard to protect the shaft from front wheel stone damage. The rear fit kit consists of a reservoir piggy back clamp and mounting hardware. It is worth noting the fitting instructions to ensure correct positioning of the reservoir to ensure clearance to other components.

Both front and rear shock absorbers will be factory set in compression and rebound. Recommended settings for variations in load and accessory fitment are suggested in the included fitting instructions.

*As JK Wranglers can be a vehicle with heavy modifications which may include axle upgrades, thorough checking of fit suitability and clearance to other components is recommended as all development was conducted on original equipment. Areas for consideration may include location of shock mounts, bump stop spacing, brake line lengths, coil entrapment and driveshaft travel.
OLD MAN EMU BRINGS RACING TECHNOLOGY TO EVERY DAY APPLICATIONS

BP-51 (Bypass 51mm diameter bore) shock absorbers feature revolutionary, patent pending technology developed to deliver unparalleled on and off road performance for your 4x4.

Developed and extensively tested under the harshest conditions in Australia, these big bore, position sensitive bypass shock absorbers with remote reservoir are designed to bolt onto your vehicle without any vehicle modifications and combine considerable ride comfort around town with significant amounts of end-zone damping for exceptional chassis control and handling off road.

The damping performance is easily adjustable across a wide range in both rebound and compression, resulting in significant changes to the ride performance of your vehicle, enabling a custom tune to suit the conditions and vehicle set up.

The body, reservoir and components are all made from 6061 T6 aluminium, Type 3 40 micron hard anodised ensuring exceptional heat dissipation, corrosion resistance and resistance to stone damage.

Not only designed, developed and tested entirely by ARB's team of Old Man Emu ride engineers, all BP-51 shock absorbers are manufactured in-house by ARB. In order to achieve this, significant investment has been made in state of the art machinery and hard anodising equipment, allowing ARB total control of the manufacturing process to ensure the highest possible quality.

DESIGN & DEVELOPMENT:

The OME engineers were set a challenge to design a high performance shock absorber for the modern day vehicle. With more and more vehicles moving to an independent front suspension set up, the challenge grows as you have limited travel and restrictions to what you can actually fit within a coil over strut set up.

With traditional velocity sensitive shock absorbers, achieving exceptional ride quality and the balance between comfort and control tuning requires a great deal of time and effort, with many valving changes required to get the balance correct. You still end up with a compromise with either a slightly firmer controlled set up or softer comfort orientated result.

Bypass technology exists to overcome some of these ride quality challenges but presents a new challenge as traditional multiple bypass tube products simply won’t fit inside a coil over independent front or many rear shock absorber applications.

Other areas that had to be considered were corrosion, heat dissipation, durability and how do you cater for individual ride preferences or vehicle loading scenarios. The product also needs to easily bolt into a large range of vehicle applications without modifications to the actual vehicle.

After 4 years of extensive design, development and testing the challenge has been met and it’s called BP-51

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Please note: BP5160021 is specifically designed to work with the OMEJK4 suspension system
FEATURES:

INTERNAL BYPASS, SHIM CONTROLLED, POSITION SENSITIVE DAMPING (PATENT PENDING):

- Provides comfort at ride height
- Damping increases as you get closer to the end zone
- Increased control at end zones

KIDNEY BYPASS PORTS/51MM BORE DIAMETER:

- Maximum bore size & Bypass Diameter
- Greater oil volume
- More tunable, ability to generate force

VEHICLE SPECIFIC APPLICATIONS:

- No fitting modifications required
- Fit kits included

EXTERNAL COMPRESSION AND REBOUND ADJUSTMENT:

- On car adjustable
- Independent adjustment of compression and rebound
- Ultra wide range to suit varying loads and ride preferences
BODY/RESERVOIR/COMPONENTS 6061 T6 ALUMINIUM:
- Heat dissipation
- Corrosion resistance

TYPE 3 40 MICRON HARD ANODISED FINISH:
- Corrosion resistance
- Abrasion resistance to stone damage

DASH 6 HIGH TEMPERATURE TEFLON HOSE WITH HIGH FLOW FITTINGS:
- No restriction of oil flow

LARGE TEFLON LINED SPHERICAL BEARINGS:
- Durability

NOTE: Coil over applications only
ADJUSTABLE SPRING PRELOAD / RIDE HEIGHT:

- Cater for varying loads

NOTE: Coil over applications only

HIGH PRESSURE NITROGEN RESERVOIR WITH ALUMINIUM, ANODISED FLOATING PISTON:

- Increased oil volume
- Maximise travel

IMPACT RESISTANT, REPLACEABLE SHAFT GUARD:

- Protects against stone damage

19MM HARD CHROMED GROUND SHAFT:

- Low friction
- Strength
ADDITIONAL FEATURES:

QUALITY OVERSIZED RUBBER BUSHINGS:
• Durability

100% RE-BUILDABLE AND RE-VALVEABLE:
• Longevity
• Tuneability

HIGH TEMPERATURE VITON AND TEFLON SEAL PACK:
• Durability of seals

HIGH PERFORMANCE, HIGH VISCOSITY INDEX OIL:
• Durability and consistency of performance

51 MM BORE DIAMETER:
• Greater oil volume
• More tunable, ability to generate more force

1900MPA POLISHED, HIGH STRENGTH, HIGH FATIGUE SHIMS:
• Durability
• Strength

3 YEAR / 60000 KM WARRANTY