Date:
May 2016

Description:
Old Man Emu Suspension System

Application:
2016+ Toyota Tacoma

Part No. & Pricing
Refer To Application Table

Availability Date:
May 2016



Product Specification

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, Old Man Emu 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 and Development:

Initial evaluation of the new 2016 Tacoma was that the vehicle provided a balanced, compliant ride that gave the OME engineers a good platform for developing a range of suspension solutions. Consideration was given to the front geometry to maximize the lift while maintaining optimal levels of droop, down travel and proper alignment.

This new generation of Tacoma has a different weight bias and total weight than the previous generation, so a full run of ride testing was undertaken to ensure the proper combination of solutions were found.

Front Suspension:

Springs:

Three spring options were chosen to cater for: No Bar, Bar or Winch only and Bar + Winch vehicle setups. As the suspension design is the same as the previous model Tacoma, existing coil part numbers could be used, noting some slight change in application. Factory geometry allowed for a 2-inch lift and while still maintain an adequate level of droop.

Struts:

An extensive development and tuning project was undertaken to correctly match the ride quality to the spring rate and resulted in 2 front strut options depending on spring selection.

A front trim packer is also available for fine tuning front ride heights and correct for any left/right lean.

Rear Suspension:

Springs:

Great emphasis was placed on ride comfort, with and without a payload, which led to three loading scenarios using the same leaf spring part number (CS047R). For stock loads where no weight is added, it is recommended to remove a leaf from the spring pack to maximize ride comfort and achieving a 2 inch ride height increase. For heavy applications an extra leaf has been designed.

Stock loads (0lbs to GVM, optimal performance at loads of 0-300lbs) *Removal of third leaf required

Constant 300lbs (300lbs to GVM, optimal performance at loads of 300-600lbs)

Constant 600lbs (600lbs to GVM, optimal performance at loads of 600lbs plus) *Extra leaf required

Shock Absorbers:

The rear shock absorber has been developed and tuned with particular attention to controlling the vehicle both with and without payloads. Numerous iterations of valving were tested in order to determine the best possible spring and shock absorber combination based on potential payload scenarios. As a result the best possible configuration of ride comfort and vehicle control was achieved.

Bushes and Hardware:

A spring bush kit has been developed to work with the original shackles and the driveline spacer kit is available should the vehicle experience any driveline vibration.

Complete Kits:

For the US market, ARB has create 3 separate complete kits to increase the ease of ordering, purchasing, and outfitting the new generation of Toyota Tacoma's. There is a kit suitable for each of the foreseeable types of additional weight that may be installed on the front of these vehicles, using the range of coil springs available. Customers will find exactly what they need between the Stock, Medium (bumper or winch), and Heavy (bumper + winch) Load kits.

The removal or addition of a leaf spring would need to be completed for those individuals knowing that their rear load scenarios would be lighter or heavier than the constant 300+ lbs load the spring is designed around.

Specifications:

Shocks

Nitrocharger Sport Part Number	Open Length (mm)	Closed Length (mm)	Upper Mount Bush Kit Part Number		Lower Mount Bush Kit Part Number	
			Original Kit	Bushes only	Original Kit	Bushes only
90000	543	413	SMP671	SMP671	110-110-122	110-110-122
90021	543	413	SMP671	SMP671	110-110-122	110-110-122
60091	599	360	SMP474	OMEB13	110-A42-074	110-A42-074

Coil Springs

Spring Part Number	X5K Steel	Bar Dia. mm	Free Height mm		No. of turns	Coil Weight kg	Spring Rate	
			A	B			Lbf/in	N/mm
2887	X	16.5	400	400	9.75	4.7	590	103
2888	X	16.5	405	405	9.75	4.7	590	103
2886	X	17.5	402	402	10.6	5.9	660	115

Leaf Springs

Spring Part Number	Stack Height (mm)	No. of Leaves	Eye Diameter mm		Weight (kg)	Primary Free Cam-ber mm	Spring Rate	
			Front	Rear			Lbf/in	N/mm
CS047R	57	5+2	40	40	32.4	207	182/392	32/69

TOYOTA

TACOMA 2016 ON

FRONT *Estimated Lift: 50mm*	PART NUMBER	QTY	UNIT PRICE $
SPRING: NO BAR	**2887**	1	
STRUT SPORT	90021 [1]	2	
SPRING: BAR ONLY	**2888**	1	
STRUT SPORT	*90000 / 90021 [1]	2	
SPRING: BAR & WINCH	**2886**	1	
STRUT SPORT	*90000 [1]	2	
TRIM PACKER	OME95PF5		
UPPER STRUT BUSHES	OME3133 [1]		
STRUT TOP HAT KIT	OMETH002 [2]		
BP-51 SELECTION			
COIL OVER TACOMA FRONT LH	BP5190006L	1	
COIL OVER TACOMA FRONT RH	BP5190006R	1	
BP KIT TACOMA FRONT	VM80010016	1	

REAR *Estimated Lift: 50mm*	PART NUMBER	QTY	UNIT PRICE $
SPRING: MEDIUM LOAD	**CS047R** [3]	2	
NITROCHARGER SPORT	**60091**		
SPRING: CONSTANT 150 KGS	**CS047R**	2	
NITROCHARGER SPORT	**60091**		
SPRING: CONSTANT 300 KGS	**CS047R** [4]	2	
NITROCHARGER SPORT	**60091**		
EXTRA LEAF	D29XL	2	
CENTRE BOLT	UCB17		
U BOLT	OMEU53A	4	
SPRING BUSH KIT	OMESB108	2	
DRIVESHAFT SPACER KIT	FK29	1	
BP-51 SELECTION			
SHOCK ABSORBER TACOMA REAR LH	BP5160011L	1	
SHOCK ABSORBER TACOMA REAR RH	BP5160011R	1	
BP KIT TACOMA REAR	VM80010017	1	

REMARKS:

1. No top mounting bushes supplied, use OME3133. OE bushes may be re-used if in good condition.
2. Strut Top Hat Kit may be required if original equipment is worn.
3. For medium load spring removal of 3rd leaf is required.
4. For constant 300kg spring Extra Leaf is required to be added.

Kit Information:

Kit Number	Description	Component Part #	Quantity	Price
OMETAC16LKSB	2 IN 16+ TACOMA STOCK KIT SPORT			$1,291.00
	COILS	2887	1	
	STRUT	90021	2	
	LEAF SPRING	CS047R	2	
	SHOCK	60091	2	
	FIT KIT	FK29	1	
	U BOLTS	OMEU53A	4	
	BUSH KIT	OMESB108	2	
	TRIM PACKER	OME95PF5	1	
	STICKER	216522	2	
	OME HAT	217195	1	
OMETAC16MKSB	2 IN 16+ TACOMA MEDIUM LOAD KIT SPORT			$1,291.00
	COILS	2888	1	
	STRUT	90021	2	
	LEAF SPRING	CS047R	2	
	SHOCK	60091	2	
	FIT KIT	FK29	1	
	U BOLTS	OMEU53A	4	
	BUSH KIT	OMESB108	2	
	TRIM PACKER	OME95PF5	1	
	STICKER	216522	2	
	OME HAT	217195	1	
OMETAC16HKSB	2 IN 16+ HEAVY LOAD KIT SPORT			$1,291.00
	COILS	2886	1	
	STRUT	90000	2	
	LEAF SPRING	CS047R	2	
	SHOCK	60091	2	
	FIT KIT	FK29	1	
	U BOLTS	OMEU53A	4	
	BUSH KIT	OMESB108	2	
	TRIM PACKER	OME95PF5	1	
	STICKER	216522	2	
	OME HAT	217195	1	

Product Information:

Part Number	Description	Price
2887	Coil Spring	$176.00
2888	Coil Spring	$176.00
2886	Coil Spring	$176.00
CS047R	Leaf Spring	$217.00
D29XL	Extra Leaf	$28.50
90000	Strut Sport	$174.00
90021	Strut Sport	$174.00
60091	Nitrocharger Sport Shock	$113.00
FK29	Driveshaft Spacer Kit	$13.00
OMESB108	Spring Bushing Kit	$31.00
OMEU53A	Ubolts	$9.00
OMETH002	Strut Top Hat Kit	$64.00
OME3133	Upper Stut Bushes	$20.00
OME95PF5	Trim Packer Front	$9.00
TP03	Trim Packer Rear	$13.00

ABOUT ARB

ARB Corporation Limited is Australia's largest and industry leading manufacturer and distributor of quality, 4WD vehicle accessories, with distribution in more than 100 countries worldwide. The company manufactures and stocks the worlds most respected and sought after 4x4 accessories.

Product Inquiries

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