

DEKRA CZ a.s.

Pověřená zkušebna Ministerstva dopravy České republiky

Authorized testing laboratory of the Ministry of Transport of the Czech Republic

Homologační zkušebna

Homologation testing laboratory

Typová zkušebna - zkušebna vozidel Klíčany

Type testing laboratory - vehicle testing laboratory Klíčany

page 1 of 8

TECHNICAL REPORT No.

18292/2019

Test of vehicle with added components
according to the directive 2007/46/EC last amended by Regulation (EU) No. 2015/758

Výsledky zkoušek uvedené v tomto protokolu se týkají jen zkoušeného vzorku.

Test results contained in this report concern the tested sample, only.

Bez písemného souhlasu zkušebny se nesmí tento protokol reprodukovat jinak než celý.

Without written permission of the test laboratory, it is not allowed to reproduce this protocol in a different way than in the form of a full photographic facsimile.

DEKRA CZ a.s.

Adresa pro poštovní styk: Türkova 1001, 149 00 Praha 4

zapsaná u Městského soudu v Praze, oddíl B, vložka 1967

IČO: 49240188, DIČ: CZ49240188

bankovní spojení: Komerční banka Praha 4, č. účtu 4508 - 071 / 0100

pracoviště Praha 4-Chodov: Türkova 1001, 149 00 Praha 4, tel.: 267 288 111, fax: 267 288 259

pracoviště Klíčany: Klíčany 108, 250 69 Vodochody, tel.: 284 001 211, fax: 284 890 206

pracoviště České Budějovice: Homole 245, 370 01 České Budějovice, tel.: 386 352 250



I. Technical description of the base vehicle

0.	<u>General:</u>	
0.1	Make (trade name of manufacturer):	ISUZU MOTORS LTD.
0.2	Type:	ATFS (e4*2007/46*0413*--)
0.2.1	Commercial name:	D-MAX
0.4	Category of vehicle:	N1G
0.5	Company name and address of manufacturer of base vehicle:	ISUZU MOTORS LIMITED, 26-1 MINAMI-OI, 6-CHOME, SHINAGAWA-KU, TOKYO, JAPAN

II. Technical description of added components

1.	Type of added components:	Springs and dampers to improve vehicle ride height
2.	Make (trade name of manufacturer):	OldManEmu
3.	Type:	Front axle: Coil spring OldManEmu (part number 3057) and damper (part number 90022) – for vehicle without bar and winch with turbodiesel engine (vehicle ride height about + 30 mm) Coil spring OldManEmu (part number 2883) and damper (part number 90023/90022) – for vehicle with bar and without winch with turbodiesel engine (vehicle ride height about + 30 mm) Coil spring OldManEmu (part number 2869) and damper (part number 90023) – for vehicle with bar and with winch with turbodiesel engine (vehicle ride height about + 30 mm) Coil spring OldManEmu (part number 3114) and damper (part number 90023) – for vehicle with bar, winch and accessories with turbodiesel engine (vehicle ride height about + 30 mm)

Rear axle:

Medium load - leaf spring OldManEmu (part number EL072R) and damper (part number 60116) – for all models (vehicle ride height about + 30 mm)

Constant load 300 kg - leaf spring OldManEmu (part number EL073R) and damper (part number 60117, respectively 60116) – for all models (vehicle ride height about + 30 mm)

Constant load 600 kg - leaf spring OldManEmu (part number EL074R) and damper (part number 60117) – for all models (vehicle ride height about + 30 mm)

4. Customer:

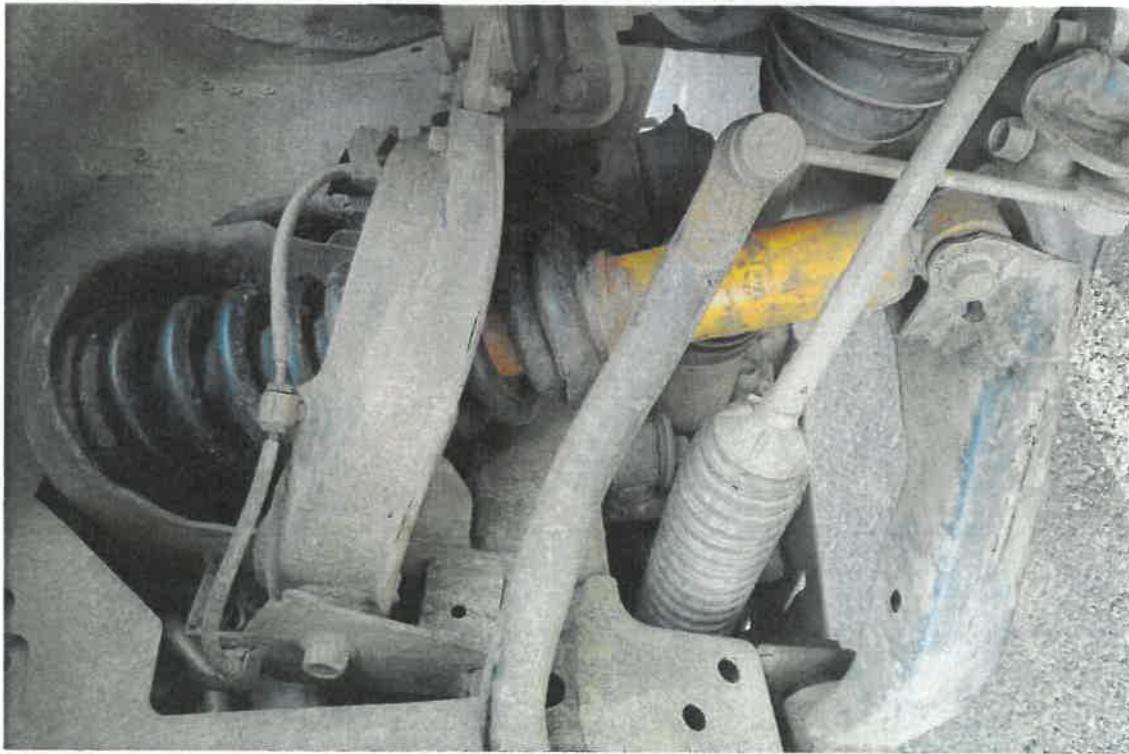
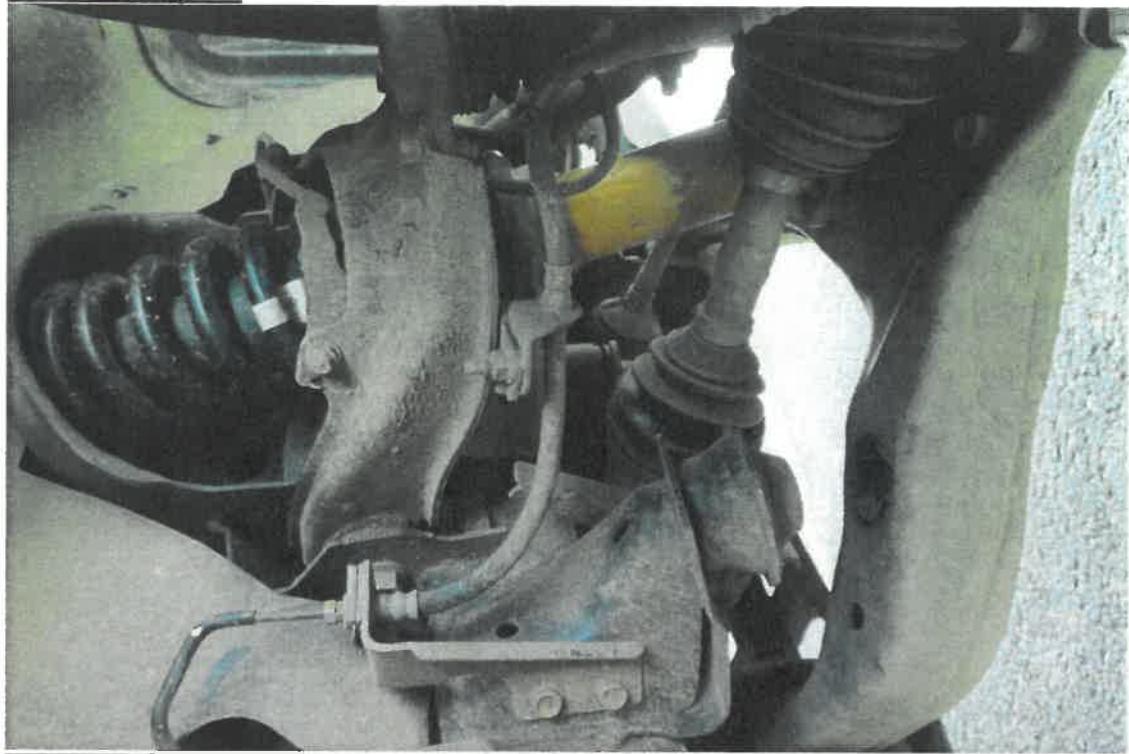
ARB Europe s.r.o.
Na Dlouhém č. 80
251 01 Říčany – Jažlovice
Czech Republic

5. Photodocumentation:





III. Test report



1. **Test conditions:**

1.1 **Test object:**

Vehicle ISUZU, ATFS (D-MAX)

1.2 **Place of test:**

DEKRA CZ a.s., Type testing laboratory, Klíčany 108, Czech Republic

2. **Test results:**

2.1 **Test by regulation EU 1230/2012**

Dimensions altered assembly of suspension were validated - the total height of the vehicle. Measured values are in accordance to submitted manufacturer's details. Changing the height must be stated in the registration documents of the vehicle. New components have same weight as original suspension. Mass in running is not changed. Other components which have influence to vehicle dimensions and masses were not subject of control (roof rack, bar with winch, snorchel).

2.2 **Test by regulation ECE 48**

During check was verified:

a) location of lighting devices with regard to mounting of increasing vehicle suspension - during the inspection it was found that the distance from the roadway lighting device does not exceed the limits set by ECE Regulation No 48. Other requirements are consistent with the approval of the base vehicle. Bar with winch and additional lights was not subject of control.

b) function of corrector of dipped headlamps with respect to use of suspension OldManEmu. Headlamp beam was measured on the vehicle with mass in running order and the technical permissible mass of the vehicle (3 000 kg - the maximum value according to the EC type-approval), respectively maximum value attributable to the rear axle (1 870 kg). The inclination of the headlamps has been checked according to the requirements of ECE Regulation No. 48. Vertical adjustment of the headlamp with a passing beam, measured at a stall in the range of operating to maximum permitted weight of the vehicle must remain within the range of inclination -0.5% to -2.5%. Vehicle with mounted OldManEmu suspension at the specified weights fulfills this requirement.

2.3 **Test by regulation EU 1009/2010**

Measurements were performed in accordance to Regulation EU 109/2011 as last amended by EU Regulation 2015/166 - were applied requirements of the EU regulation 1009/2010 on the vehicle. Was verified influence of the increase of the suspension by assembly OldManEmu suspension on the chassis. Other requirements - see EC approval of the base vehicle.

Wheel covers of front and rear axle for vehicles with suspension OldManEmu meet the applicable requirements of the EU Regulation 1009/2010 - the position of the wheel cover to the tire meets the applicable requirements.

2.4 Test by regulation ECE 58

Distance between the lower edge of the rear underrun protection and the road is less than 550 mm. Other requirements, see EC approval of the base vehicle.

2.5 Test by regulation ECE 55

Suspension OldManEmu increases vehicle height about 30 mm. Suspension is possible mounted only to vehicles with four wheel drive (category N1G). For the category of all-terrain vehicles ("G") isn't by ECE Regulation No. 55 prescribed height of the coupling device. There isn't change in the mounting of coupling device when suspension is mounted. Other requirements, see EC approval of the base vehicle.

2.6 Test by regulation EU 130/2012

Suspension OldManEmu increases vehicle height by about 30 mm. Requirements have been verified by the EU Regulation 130/2012 (the entrance to the vehicle) with respect to the increased height of the vehicle. Vehicle meets the requirements given above. Other requirements, see EC approval of the base vehicle.

3. Change data in the vehicle registration documents:

OldManEmu suspension assembly must be indicated in the registration documents of the vehicle.

It must be indicated change of the height of the vehicle: according to the manufacturer's original value + 30 mm (measured actual height of the vehicle).

4. Supply vehicle date: May 27, 2019

5. Date of tests: May 27, 2019

6. Date of report release: May 29, 2019

7. **Final evaluation:**

Described vehicle type

meets all requirements

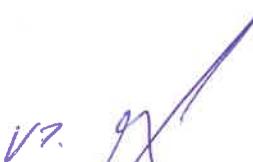
with the Directive 2007/46/EC last amended by Regulation (EU) No. 2015/758

This report consists of 8 pages and 1 page of annex.

Test report is disposed by:



Ing. et Ing. Ondřej Košťál
Test engineer



Ing. Petr Šedivý
Head of approval centre

DEKRA CZ a.s.
zaps. u hřeb. soudu v Praze, odb. B, vл. 1967
149 00 Praha 4, Tříšnová 1001
IČO: 49240188 DIČ: CZ49240188
(15)



HOLDEN / ISUZU / GM

DMAX 2012 ON ALL MODELS COLORADO 2012 ON ALL MODELS

FRONT	DIESEL ENGINE			REMARKS:
	PART NUMBER	QTY	UNIT PRICE \$	
<i>Estimated Lift: 30mm</i>				
SPRING: No Bar	3057	1		1 No top mounting bushes supplied, use OME3134. OE bushes may be re-used if in good condition. OME struts can only be installed with OME coils.
STRUT SPORT	90022	2		
SPRING: Bar	2663	1		2 OMESB98 Bush Kit suits OME Greasable Shackle, OMEGS14.
STRUT SPORT	*90023 / 90022	2		OMESB107 Bush Kit suits OE Shackle. If fitting extra leaf to EL074R, use U Bolt OMEU53B.
SPRING: Bar / Winch	2669	1		
STRUT SPORT	90023	2		
SPRING: Bar, Winch & Accessories	3114	1		4 Handbrake Cable Fit Kit FK66 required for Isuzu DMAX cab chassis and LSM Models. FK87 required for Colorado 2016 On Models.
STRUT SPORT	90023	2		
TRIM PACKER	OME95PF5			
UPPER STRUT BUSHES	OME3134	1		
COIL ISOLATOR	OMESB3014	2		5 Strut Top Hat Kit may be required if original equipment is worn.
STRUT TOP HAT KIT	OMETH004	1		Colorado 04/13 onwards, due to change in top hat OMESB3014 will be required for fitment of OME coils.
REAR				
<i>Estimated Lift: 30mm</i>	ALL MODELS			
REAR	PART NUMBER	QTY	UNIT PRICE \$	Please note: Only needed for up to 2015 Models. Not required for Colorado 2016 On Models or Isuzu DMAX.
SPRING: MEDIUM LOAD	EL072R	2		
NITROCHARGER SPORT	60116			
SPRING: CONSTANT 300 KGS	EL073R	2		
NITROCHARGER SPORT	*60117 / 60116			
SPRING: CONSTANT 600 KGS	EL074R	2		
NITROCHARGER SPORT	60117	2		
GREASABLE SHACKLE KIT	OMEKS14	1		
SPRING BUSH KIT	OMESB98	2		
	OMESB107			
U BOLTS	OMEU53A	4		
	OMEU53B			
EXTRA LEAF	EL39XL	2		
HANDBRAKE CABLE FIT KIT	FK66	1		
	FK87			