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TEST REPORT

Number of test report:	A-9305/10
Number of pages of test report:	8
Name and address of test laboratory:	TÜV NORD-KTI Kft. Járműtechnikai és Munkavédelmi Laboratórium H-1119 Budapest, Thán K. u. 3-5.
Name and address of customer:	SJS PRO-PRODUCTS CO LTD Address as below.
Manufacturer of the tested superstructure (canopy):	SJS PRO-PRODUCTS CO LTD Latkrabang Estate Export Peocessing Zone 2 No. 140 Moo 4 Chalong Krung Road Lamplathiew Sub-District, Latkrabang District Bangkok 10520 Thailand www.sjs4x4.com
Name of the tested superstructure (canopy):	SJS PRO-PRODUCTS pick-up loading area deck
Time of the test:	26.11.2010.
Subject of the test:	General configuration and safety inspection of loading area deck for pick-ups in N1 category
Regulation forming the basis of the test:	The applicable requirements of the 6/1990 KÖHÉM regulation
Attachments:	1. Mounting instructions 2. Type description of the body

Annexes are inseparable parts of the Test Report!
This Test Report may only be copied in full!

Budapest, 03. 12. 2010.

Zoltán Tóth
head of section

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1.

Dénes Péter
technical expert

1. Details of the tested vehicle:

Type of the tested vehicle:	Volkswagen Amarok
Registration No. of the tested vehicle:	W-19594S
Identification number of the tested vehicle (VIN):	WV1ZZZ2HZB8012999
Category the tested vehicle:	N1
Type of loading area deck:	SJS PRO-PRODUCTS HARDTOP STAR-JET STANDARD
Identifier No. of loading area deck:	-
Mass of loading area deck (supplied by the manufacturer):	65
Tire size:	205 R16 C 110/108T
Measured tire pressures at max load:	
- front:	3,0 bar
- rear:	3,0 bar

2. Weight of the vehicle during the tests:

Loading case	Mass [kg]	Axle load front [kg]	Axle load rear [kg]
Unladen, mass of running order	2072	1180	892
With load on the roof, during the tests	2163	1180	983

3. Test results

The experiences of the test-driving, the general configuration, and the applicable requirements of the 6/1990 KÖHÉM regulation served the base judging the loading area deck in respect that, there are not exact requirements of this topic.

3.1. Short description of the canopy:
Its material is glass-fiber reinforced epoxy resin on the steel frame. The interior is upholstered, equipped with interior lighting that switches on, when the upper part of tailgate is opened. This door is lockable with key. There are two longitudinal rails on the top of the deck to anchoring the roof rack. The rails are firmly attached to the frame of the deck. The load capacity of the roof rack: 50 kg. The body is glazed around, there is a supplementary stop lamp the behind rear window. Two gas-springs make easier to open the upper part of the tailgate, which is opening from inside also. The body is fixed with 6 pieces of special assembly unit onto the vehicle.

3.2.
The body is mounted onto the vehicle according to the installation manual.
Complies.

3.3. Glazing:
The glasses of the deck are approved, safety glasses:

Place of the glass	Manufacturer	Approval No.
Opening side-windows	SJS Pro-Products	V E4 43R-000007 (side sliding window) V E4 43R-000008 (pop-up side window, lockable)
Front glasses	PMC	V E4 43R-000007
Glass of the upper door	PMC	V E4 43R-000007

Complies.

3.4. Auxiliary stop light:
Number of approval of the auxiliary stop light installed above the canopy's rear window is: S3 E9 021192
Complies.

3.5. Rain test:
The sealing of the body was tested with a simulated rain test.
Complies.

3.6. External projections:
This test should not performed on vehicle in N1 category according to the Annex A/16 of 6/1990 KÖHÉM regulation. We did not perform the test, because the deck is going to be installed only onto N1 category vehicles.
Complies.

3.7. Changing of masses and dimensions
The deck does not project over lengthwise and laterally the vehicle. The deck and the rail on the roof together increased the height of the tested vehicle with 100 mm. The deck increases the rear axle load of the vehicle with 65 kg.
Complies.

3.8. Tail gate (6/1990 KÖHÉM, 82. §)
The upper part of the door does not open when the vehicle is running (see point 3.9), and lockable with key to prevent the unauthorized access.
Complies.

3.9. Test of the deck's, the roof-rail's and the fixation's construction reckon with the DIN 75302 standard:
Bigger by half than the nominal load loaded the rails on the roof, this means 90 kg in this case. We performed the following tests with the laden vehicle:

- Belgian-track vibration test with 10 – 50 km/h speed

- Trench-crossing test
- High speed test at ~150 km/h speed
  The body did not do any abnormal movement and oscillation, was not damaged during the trench-crossing and the high speed test
- Test of lengthwise strength with emergency braking from 60, 70 and 80 km/h
  The extreme value of the achieved longitudinal deceleration: 9,6 – 10,2 m/s^2
- Test of lateral strength with circular path
  The extreme value of the achieved lateral acceleration: 7,2 – 7,6 m/s^2

The longitudinal and lateral forces did not caused any deformation on the deck and on the roof-rails; the mounting of the body remained secure.
The fixing screws were checked before and after the test. The fixing was safe without any loosing

Complies.

4. Details of the established deficiency

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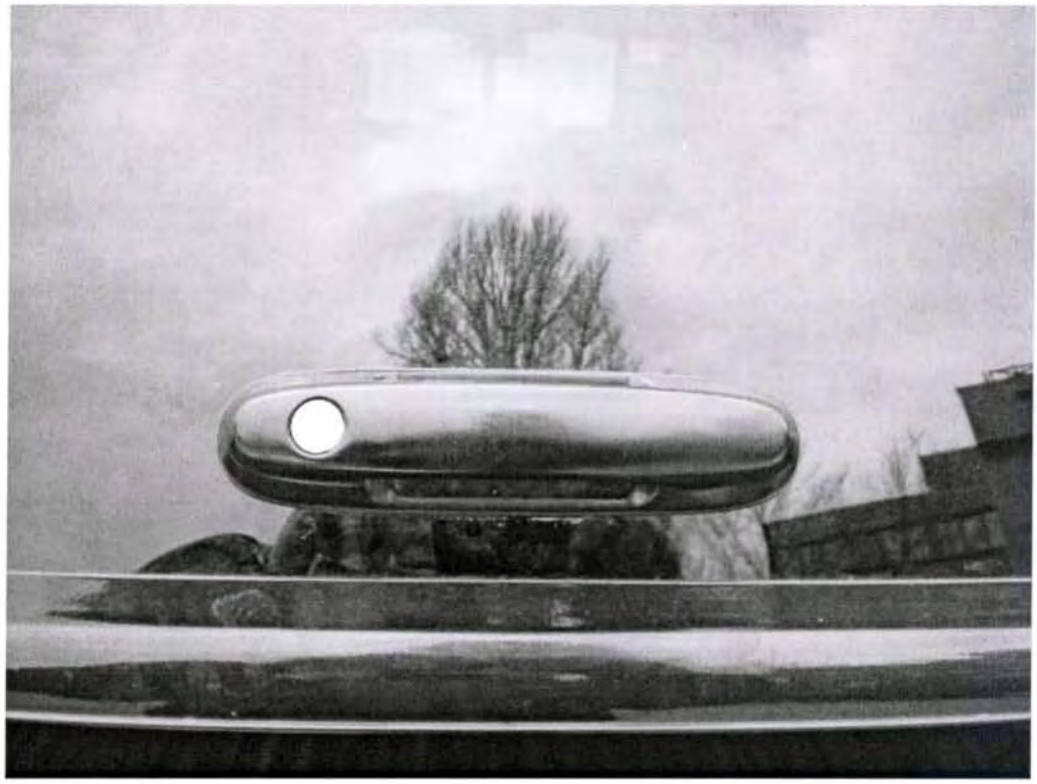
5. Summary

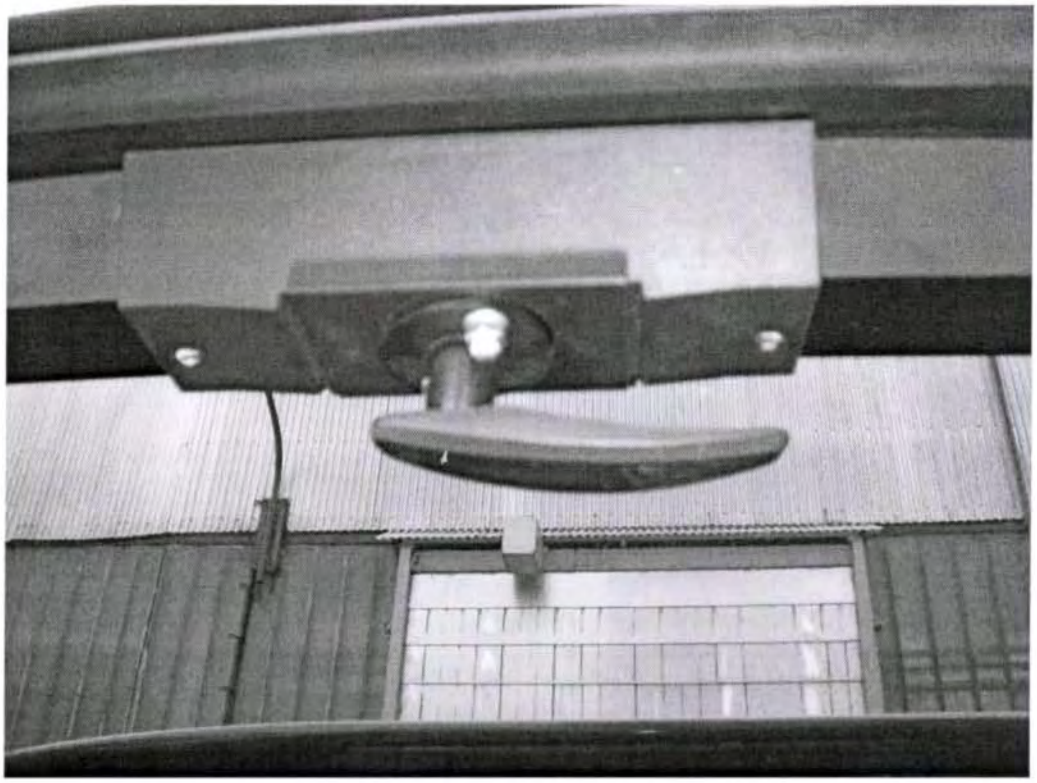
The SJS PRO PRODUCTS type pick-up loading area deck family and its roof-rail - according to the tested representative sample and the documentation – complies from the point of view of structure and safety reckon.

If the deck is installed onto a vehicle, the length and the width of the vehicle do not change; the height increases with 100 mm. The rear axle load increases, the payload capacity decreases with 65 kg in the case of the tested sample. The registered keeper of the vehicle must be informed about the above-mentioned parameters.

INSTRUMENTATION	
Measuring-tape	Manufacturer: ROYAL, Type: 01101011, S/N: 473
Decelerometer	Manufacturer: Moto Meter, Type: 62.500.2001, S/N: 28747

6. Photos



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