



VCA Headquarters

1 The Eastgate Office Centre
Eastgate Road
Bristol, BS5 6XX
United Kingdom

Switchboard: +44 (0) 117 951 5151
Direct line: +44 (0) 117 952
Main Fax: +44 (0) 117 952 4103
Email: enquiries@vca.gov.uk
Web: www.vca.gov.uk

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

Rev 1/03



COMMUNICATION CONCERNING THE APPROVAL GRANTED OF A
REPLACEMENT BRAKE LINING ASSEMBLY OR REPLACEMENT DRUM
LINING PURSUANT TO ECE REGULATION NO: 90.01

Approval No: 90R-01184 / 3278

1. Applicant's name and address:

Juratek Ltd. Unit 16, Carcroft Enterprise Park, Station Road, Doncaster DN6 8DD

2. Manufacturer's name and address:

3. Make and type of brake lining assembly: DP11556

4. Make and type of brake lining: TD3

5. Vehicles/axles/brakes for which the brake lining assembly/drum brake lining type qualifies as original brake lining assembly: Not applicable

6. Vehicles/axles/brakes for which the brake lining assembly/drum brake lining type qualifies as replacement brake lining assembly: See Manufacturer's Information Documents

An executive agency of the Department for Transport



- 7. Submitted for approval on: 30 October 2006
- 8. Technical Service responsible for approval tests: Vehicle Certification Agency
- 8.1 Date of test report: 14 August 2006,20 November 2006,15 August 2006 and 20 November 2006
- 8.2 Number of test report: VSG076369,VSG078081,VSG078079 and VSG076364.

9. Approval GRANTED

10. Place: BRISTOL

11. Date: 19 December 2006

12. Signature: 

A. W. STENNING
Head of Product Certification

13. Annexed to this communication is a list of documents in the approval file deposited at the administrative services having delivered the approval and which can be obtained upon request.

VSG078072



30/10/06	VCA Job No	VSG078072
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Dear Ted,

Please find enclosed the necessary documentation for you to submit applications for approval for various brake lining assemblies DP11556 in TD3 material pursuant to ECE Regulation No. 90/1. This application is on behalf of Juratek Ltd and cross-references to our DP TD3 application details. We would like the application made to the VCA; I have addressed the formal letter of application accordingly.

The documents contained are: -

1. Formal letter of application
2. Manufacturers declarations
3. Lab test results :-
 - Friction test results
 - Shear test results
 - Compressibility test results
4. Vehicle fitment details
5. Disc pad assembly drawings
6. General disc pad marking drawing

Please note: Allocated with E11 90R-01184/3278 as a provisional number. This approval is based on VSG076369, VSG078081 and VSG078079 plus additional OE Materials testing on VSG076364.

Yours sincerely,



Susan Owens
Q.B.T.



30/10/06	VCA Job No	VSG078072
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For vehicles / axles / brakes for which the lining assembly qualifies as replacement brake lining assembly, see following application list.

Assembly Number	Equivalent to	Also supplied as Assembly Number
DP11556 TD3	Equivalent to	SLB1589 Ieca-TD3
	Equivalent to	

Yours faithfully



Susan Owens
Q.B.T.



30/10/06	VCA Job No	VSG078072
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Manufacturer's Declaration

for granting of Approval for replacement brake lining according to ECE Regulation No. 90/1.

We, the company

declare herewith that

Replacement pad assemblies DP11556 TD3

are produced in our factory

We certify that no application has been made regarding this permission/approval by us or by companies appointed by us in countries which as contract parties would also be entitled to grant permission/approval.

We are aware of the following: -

A type marking of vehicles/vehicle components of the above mentioned type with the officially assigned approval mark can only be granted if the products have been manufactured in the above mentioned factory or at one of our listed and approved manufacturing sites, and if they comply with the official approval documents.

Companies manufacturing products for our company or under license may not use the officially assigned approval mark for vehicles/vehicle components produced at their factories unless they are listed as an approved manufacturing site, and fully comply with our quality procedures.

A marking of vehicles/vehicle components of the above mentioned type with different factory or trade marks but the same approval mark is only permissible if written consent has been obtained from the Vehicle Certification Agency.



Susan Owens
Q.B.T.



30/10/06	VCA Job No	VSG078072
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Friction test results

Conducted in accordance with Annex 8, of ECE Regulation No. 90 Rev1 including supplement 2 to the 01 series of amendments. (TRANS/SC1/WP29/GRRF/R90 Rev 1).

Type of assembly: Part Number DP11094 in material TD3
(Previously agreed single test reference)

Type of test:	Constant torque (para. 2.2.2.2)
$\mu_{op: 1}$	0.354
$\mu_{op: 2}$	0.361
$\mu_{min:}$	0.278
$\mu_{max:}$	0.422

Test dates: 02/06/2006



Susan Owens
Q.B.T.



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Bench tests

Manufacturer:			
Type of brake lining assy:	DP11094 TD3	Page	1/2

1. Shear strength test¹
(5.3.2.1 of ECE Regulation No. 90 Rev 1)

- Sample

Type of assembly: DP11094 TD3

Shear area [cm²]: 43.46

- Shear strength measured

Mean value [N/cm²]: 630

Required [N/cm²]: 250

Test date: 03/06/2006

1) Test procedure according to ISO Standard 6312 (2001)



Susan Owens
Q.B.T.



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Manufacturer:			
Type of brake lining assy:	DP11094 TD3	Page	2/2

2. Compressibility test²
(5.3.2.2 of ECE Regulation No. 90 Rev 1)

- Sample

Type: III
Type of assembly: DP11094 TD3
Thickness, d_0 (nominal value) [mm]: 18.5
Pad area [cm²]: 43.464
Ram dia (corresponding to caliper piston dia) [mm]: 54

- Compressibility at specific surface pressure of 8000 kPa

Measured at ambient temperature

Mean value: $\frac{d_4 - d'_3}{d_0} = 0.16\%$

Required: $\leq 2\%$

Measured at 400°C

Mean value: $\frac{d_4 - d'_3}{d_0} = 0.65\%$

Required: $\leq 5\%$

Test dates: 03/06/2006

2) Test procedure according to ISO Standard 6310 (2001)



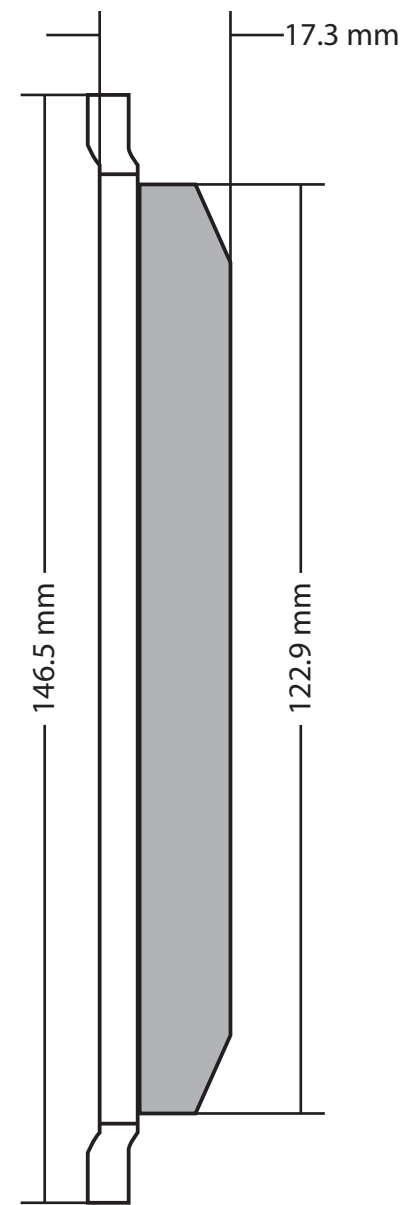
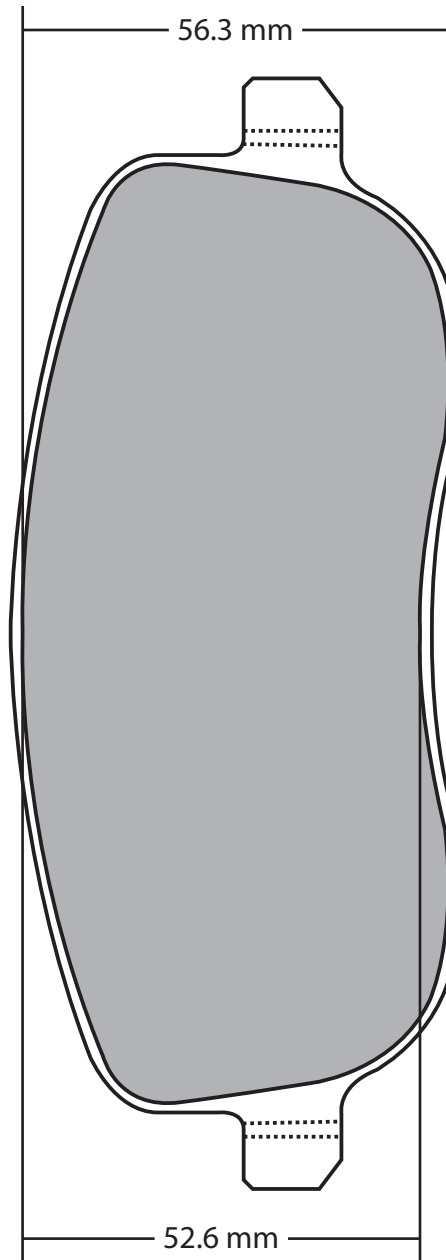
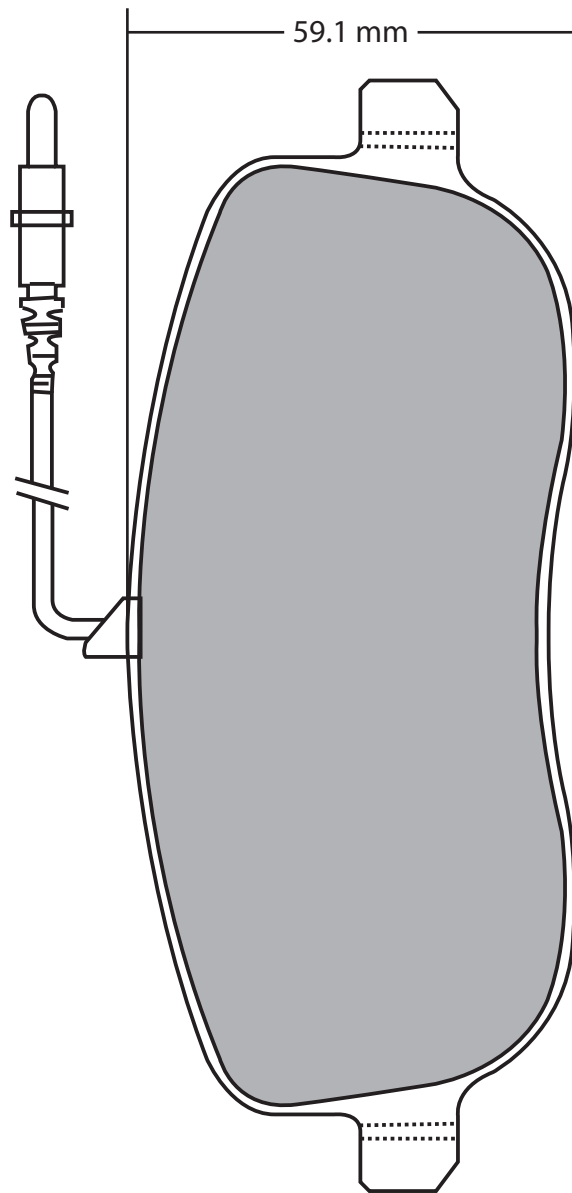
Susan Owens
Q.B.T.



MAKE	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	F/R	D	A	T	E	OE Caliper Manufacturer	S/V Dr	Disc /	Max Th Disc
													Drum /	Shoe Width
DP11556	CITROEN	C8	2.0i 16V			F	07	02			Lucas	V	285	28
DP11556	CITROEN	C8	2.0 HDi			F	07	02			Lucas	V	285	28
DP11556	CITROEN	C8	2.2i 16V			F	07	02			Lucas	V	285	28
DP11556	CITROEN	C8	2.2 HDi			F	07	02			Lucas	V	285	28
DP11556	CITROEN	C8	3.0i V6 24V			F	07	02			Lucas	V	285	28
DP11556	CITROEN	Dispatch / Jumpy	1.6i			F	07	02			Lucas	V		
DP11556	CITROEN	Dispatch / Jumpy	1.9 D, 1.9 TD			F	07	02			Lucas	V		
DP11556	CITROEN	Dispatch / Jumpy	2.0 HDi			F	07	02			Lucas	V		
DP11556	FIAT (includes ABA	Ulysse (07/02-->)	2.0i 16V			F	07	02			Lucas	V	285	28
DP11556	FIAT (includes ABA	Ulysse (07/02-->)	2.0 JTD			F	07	02			Lucas	V	285	28
DP11556	FIAT (includes ABA	Ulysse (07/02-->)	2.2i 16V			F	07	02			Lucas	V	285	28
DP11556	FIAT (includes ABA	Ulysse (07/02-->)	2.2 JTD			F	07	02			Lucas	V	285	28
DP11556	FIAT (includes ABA	Ulysse (07/02-->)	3.0i V6 24V			F	07	02			Lucas	V	285	28
DP11556	FIAT (includes ABA	Scudo	1.6i			F	07	02			Lucas	V	285	28
DP11556	FIAT (includes ABA	Scudo	1.9 D, 1.9 TD			F	07	02			Lucas	V		
DP11556	FIAT (includes ABA	Scudo	2.0 JTD			F	07	02			Lucas	V		
DP11556	FIAT (includes ABA	Scudo	2.0i			F	07	02			Lucas	V		
DP11556	LANCIA	Phedra	2.0i 16V			F	03	02			Lucas	V	285	28
DP11556	LANCIA	Phedra	2.0 JTD			F	03	02			Lucas	V	285	28
DP11556	LANCIA	Phedra	2.2 JTD			F	03	02			Lucas	V	285	28
DP11556	LANCIA	Phedra	3.0 V6			F	03	02			Lucas	V	310	32
DP11556	PEUGEOT	807	2.0i 16V			F	07	02			Lucas	V	285	28
DP11556	PEUGEOT	807	2.0 HDi			F	07	02			Lucas	V	285	28
DP11556	PEUGEOT	807	2.2i 16V			F	07	02			Lucas	V	285	28
DP11556	PEUGEOT	807	2.2 HDi			F	07	02			Lucas	V	285	28
DP11556	PEUGEOT	807	3.0i V6 24V			F	07	02			Lucas	V	285	28
DP11556	PEUGEOT	Expert	1.4i			F	07	02			Lucas	V		
DP11556	PEUGEOT	Expert	1.6i			F	07	02			Lucas	V		
DP11556	PEUGEOT	Expert	1.9 D, 1.9 TD			F	07	02			Lucas	V		
DP11556	PEUGEOT	Expert	2.0 HDi			F	07	02			Lucas	V		

CALIPER ACTUATION	BRAKING SPLIT F/R, DIAG or H / I	CALIPER PISTON DIA	HERST NUMBER	TYP / SCHL NUMBER	MAX SPEED Km/h	80% V MAX Km/h	VEHICLE /		ENERGY FACTOR .5 MV 2	MAXIMUM ROLLING RADIUS	INERTIA UNLADEN	VEHICLE INERTIA LADEN
							AXLE WEIGHT UN-LADEN	VEHICLE WEIGHT LADEN				
Hyd	Diag	57	3001	771	185	148	1645	2380	26065760	0.33	68.9690925	99.78507
Hyd	Diag	57	3001	773, 774	174	139	1736	2505	24269242	0.33	72.784404	105.0258825
Hyd	Diag	60	3001	772	196	157	1681	2400	29503488	0.33	70.4784465	100.6236
Hyd	Diag	60	3001	775	182	146	1783	2505	26552198	0.33	74.7549495	105.0258825
Hyd	Diag	60	3001	792	205	164	1837	2540	34157920	0.33	77.0189805	106.49331
Hyd	Diag	57	3001	707, 708	157	126	1551	2285	18023349	0.33	65.0280015	95.8020525
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Hyd	Diag	60	3001	772	196	157	1681	2400	29503488	0.33	70.4784465	100.6236
Hyd	Diag	60	3001	775	182	146	1783	2505	26552198	0.33	74.7549495	105.0258825
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Hyd	Diag	57	3001	707, 708	157	126	1551	2285	18023349	0.33	65.0280015	95.8020525
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Hyd	Diag	57	3001	707, 708	157	126	1551	2285	18023349	0.33	65.0280015	95.8020525
Hyd	Diag	60	4136		185	148	1645	2380	26065760	0.33	68.9690925	99.78507
Hyd	Diag	60	4136		174	139	1736	2505	24269242	0.33	72.784404	105.0258825
Hyd	Diag	60	4136		182	146	1783	2505	26552198	0.33	74.7549495	105.0258825
Hyd	Diag	60	4136	544	200	160	1783	2505	32064000	0.33	74.7549495	105.0258825
Hyd	Diag	57	3001	771	185	148	1645	2380	26065760	0.33	68.9690925	99.78507
Hyd	Diag	57	3001	773, 774	174	139	1736	2505	24269242	0.33	72.784404	105.0258825
Hyd	Diag	60	3001	772	196	157	1681	2400	29503488	0.33	70.4784465	100.6236
Hyd	Diag	60	3001	775	182	146	1783	2505	26552198	0.33	74.7549495	105.0258825
Hyd	Diag	60	3001	792	205	164	1837	2540	34157920	0.33	77.0189805	106.49331
Hyd	Diag	57			148	118	1460	2195	15385370	0.33	61.21269	92.0286675
Hyd	Diag	57			148	118	1460	2195	15385370	0.33	61.21269	92.0286675
Hyd	Diag	57	3001	707, 708	157	126	1551	2285	18023349	0.33	65.0280015	95.8020525
Hyd	Diag	57	3001	707, 708	157	126	1551	2285	18023349	0.33	65.0280015	95.8020525





Material Area		
5980.1 mm		
Modification	Initial Date	

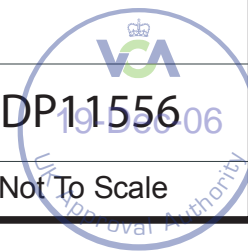
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Date	

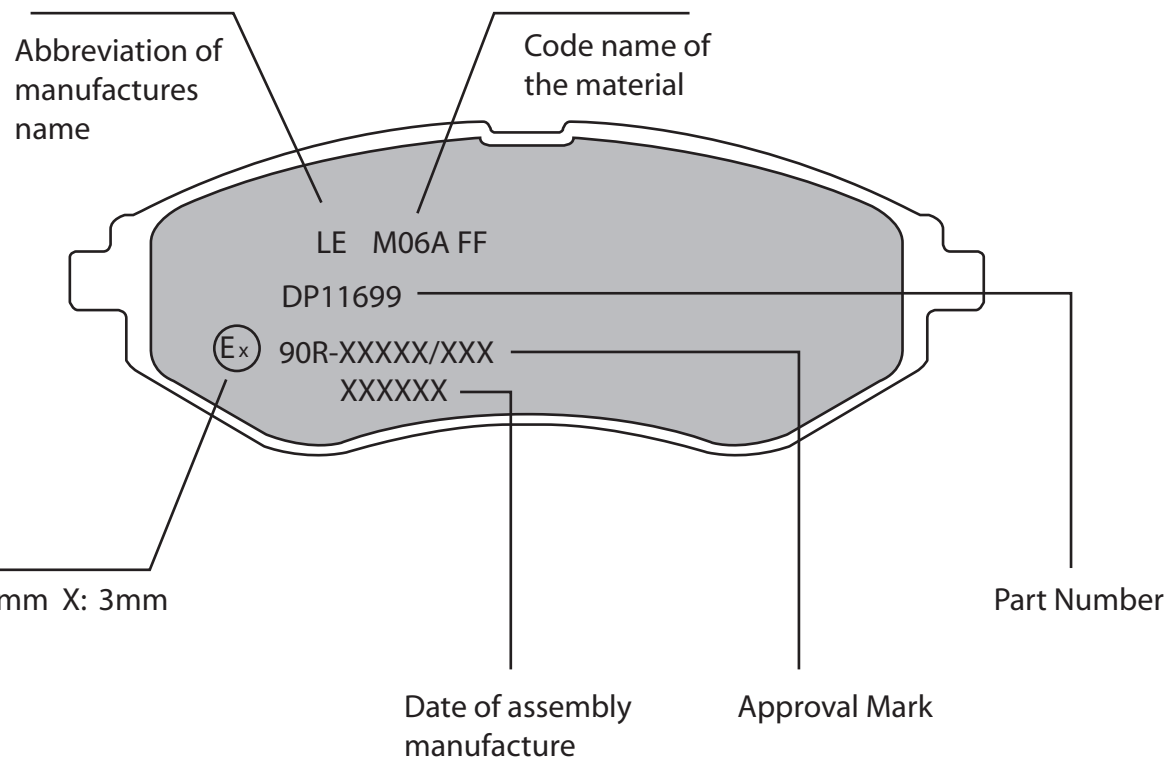
Description	
Disc Pad Assembly	
General Tolerance	

Issue No.	
1	
± 0.25mm	

Part No.	

DP11556
19-20006
Not To Scale





E: 4.5mm X: 3mm

Material Area			Drawn By	Description Disc Pad Assembly	Issue No. 1	Part No.
Modification	Initial Date	Date	General Tolerance		± 0.25mm	

