



TEST REPORT:

Back to Back Wear Testing


REPORT/JOB NUMBER:

VSP289425

MANUFACTURER DETAILS	
Manufacturer's Representative	Steve Payne
Manufacturer's Name	EBC Brakes
Manufacturer's Address	EBC Brakes World HQ, Upton Valley Way East, Pineham, Northampton, NN4 9EF United Kingdom
Trade Name	EBC Brakes
Lining Material reference	EBC Double-H Sintered

TEST DETAILS	
Reason for Test	Back to Back Wear Testing
Location of: Dynamometer Test	EFI Ltd, Enterprise House, 6/7 Bonville Road, Brislington, Bristol, BS4 5NZ, United Kingdom.
Dynamometer	Dyno 6 / Microface
Date of Test	13 November 2013

TEST SPECIFICATION AND WORST CASE RATIONALE
Back to back pad wear tests carried out on the dyno, following the test procedure found in this test report.

CONCLUSION	
The above mentioned pads were tested in accordance to the Dynamic Test Requirements detailed in this report.	
Signature	
Name	Richard Bailey
Position	Type Approval Engineer
Date	13 November 2013

LIST OF ANNEXES		
ANNEX	No of PAGES	SUBJECT
1		
2		
3		
4		





TEST REPORT:
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REPORT/JOB NUMBER:
VSP289425

Application Range			
Part			
EFI		Competitor	
Material	Part Number(s)	Material	Part Number(s)
EBC Double-H Sintered	FA188 HH	AD	Gold Fren Type 039 (KBA60878)

Additional Information
None





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Test procedure

Using Dyno 6, back to back testing was carried out on the EBC Pad and the Gold Fren Pad to the following test schedule: (Ref: Schedule 027)

Stage 1: Bedding

No. Stops: 100
Initial Disc Temp. 100°C
Speed 80 to 0 km/h
Deceleration 4 m/s/s

Stage 2: Performance

Total No. Stops: 16
Initial Disc Temp. 100°C

Group 1:

No. Stops: 4
Speed 50 to 0 km/h
Pressure 3, 10, 17 and 24 Bar

Group 2:

No. Stops: 4
Speed 80 to 0 km/h
Pressure 3, 10, 17 and 24 Bar

Group 3:

No. Stops: 4
Speed 110 to 0 km/h
Pressure 3, 10, 17 and 24 Bar

Group 4:

No. Stops: 4
Speed 160 to 0 km/h
Pressure 3, 10, 17 and 24 Bar

Stage 3: Fade

Run 1:

No. Stops: 16
Speed 100 to 0 km/h
Deceleration 4 m/s/s
First 12 stops run with no delay and no cooling
Initial Disc Temp. 30 °C
Final Disc Temp. 430°C
Last 4 stops are run with cooling and the initial disc temps are set to 400,300,200 and 100°C

Run 2:

Repeat Run 1





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VSP289425

Dynamometer Test Data	
Vehicle category:	
Dynamic rolling radius	304mm
Masses and inertia	
Test inertia IAdj	15.25 kgm2
Brake	
Test brake disc :	EBC Brakes
Part number:	MD3058X
Brake effective radius	141mm
Brake calliper / brake drum mechanism	
Manufacturer:	Suzuki GSX 1300R
Type:	6 piston





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VSP289425

MANUFACTURERS DOCUMENTATION

Manufacturers documentation is complete and reflects the agreed specification for the vehicle tested and covers all variants and versions agreed in the worse case rationale Yes

FACILITY AND EQUIPMENT CHECKS

- | | | |
|---|---|-----|
| 1 | Risk assessment completed and stored in electronic job folder | Yes |
| 2 | Facilities and test equipment are appropriate | Yes |
| 3 | Calibration certificates checked and valid, recorded below | Yes |

Equipment	Serial No.	Calibration data
Load cell	LC009	02/10/2013
Temperature 1	T658-Ch1-33X1	02/10/2013
Pressure Regulator	P656-Channel 8	02/10/2013
Speed sensor	SP002	02/10/2013





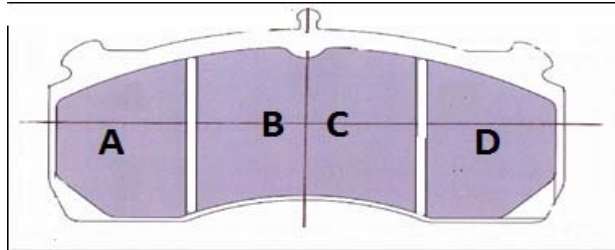
TEST REPORT:
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REPORT/JOB NUMBER:
VSP289425

Record of Test results

Brake pad / Brake Lining	
Manufacturer:	EBC Brakes
Make:	EBC Brakes
Type:	EBC Double-H Sintered (Pt No.FA188 HH)
Test ref	D131113C

Geometric check:



	Before test (mm)				Average Pad Size (mm)	After Test (mm)				Average pad size (mm)	Pad wear
	A	B	C	D		A	B	C	D		
RH Pad	7.84	7.83	7.83	7.84	7.835	7.8	7.83	7.83	7.79	7.813	0.023

Average RH pad wear (mm)	0.023
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	Before test (mm)				Average Pad Size (mm)	After Test (mm)				Average pad size (mm)	Pad wear
	A	B	C	D		A	B	C	D		
LH Pad	7.82	7.81	7.83	7.83	7.820	7.78	7.81	7.81	7.77	7.790	0.030

Average LH pad wear (mm)	0.030
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Average pad thickness	7.83	mm
Back plate thickness	4.08	mm
Overall pad thickness	3.75	mm
Usable pad thickness	3.75	mm
Average pad wear	0.03	mm
Percentage brake pad wear	0.70	%

Weight Check:

	Before test (g)	After Test (g)	Difference (g)	Percentage Difference
Left hand	137.5	137	0.5	0.36 %
Right hand	137.2	136.7	0.5	0.36 %
Average	137.35	136.85	0.5	0.36 %



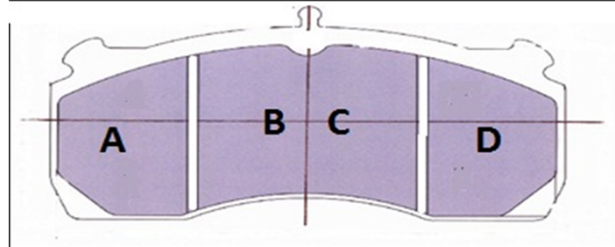


TEST REPORT:
Back to Back Wear Testing

REPORT/JOB NUMBER:
VSP289425

Brake pad / Brake Lining	
Manufacturer:	Gold Fren
Make:	
Type:	039 (KBA60878) material AD
Test ref	D131113B

Geometric check:



RH System	Before test (mm)				Average Pad Size (mm)	After Test (mm)				Average pad size (mm)	Pad wear
	A	B	C	D		A	B	C	D		
Inner pad	8.1	8.08			8.065	7.98	7.96			7.953	0.113
	8.06	8.02				7.97	7.9				

Average RH pad wear (mm)	0.113
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LH System	Before test (mm)				Average Pad Size (mm)	After Test (mm)				Average pad size (mm)	Pad wear
	A	B	C	D		A	B	C	D		
Inner pad	8.18	8.14			8.138	8.03	8.05			8.040	0.098
	8.13	8.1				8.04	8.04				

Average LH pad wear (mm)	0.098
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Average pad thickness	8.10	mm
Back plate thickness	3.82	mm
Overall pad thickness	4.28	mm
Usable pad thickness	4.28	mm
Average pad wear	0.11	mm
	Percentage brake pad wear	2.45%

Weight Check:

	Before test (g)	After Test (g)	Difference (g)	Percentage Difference
Left hand	127.5	126.6	0.9	0.71
Right hand	128	127.2	0.8	0.63
Average	127.75	126.9	0.85	0.67





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5	Test Documents	Not Applicable
6	Appendices Appendix	Not Applicable
7	Date of Test:	13 November 2013
8	This test has been carried out and the results reported in accordance with the test schedule described in this test report.	
	Technical Service conducting the test:	Vehicle Certification Agency

Signed: Richard Bailey Date: 13 November 2013

General Remarks :

None

