

Spectra W/CYL. leaked part evaluation result

2004. 5. 28.

 **KASCO**

SPT W/CYL Leaked part evaluation result



NO	Dealer	Sales date	Driving Distance (km)	Repair date	Customer complaint	Evaluation result		W/CYL LOT NO
						AIR LEAK (mmH ₂ O)	Vacuum density (mmHg)	
1	DONGBU Maintenance	03.01.22	13,071	04.5.6	leakage	0.1	0	8C (02.09.05)
2-1	SONGDO DONGSUH AUTO	03.01.25	32,613	04.5.3	.	0	NG	.
2-2	.	.	.	.	.	0	3.7	8S (02.09.19)
3-1	SUWON SANGSANGCHONG	03.02.13	28,998	04.5.19	.	0.3	NG	.
3-2	.	.	.	.	.	0.1	NG	8C (02.09.03)
4-1	INCHON GANSUK North Branch	02.10.21	29,328	04.5.19	.	0.4	NG	9C (02.10.07)
4-2	.	.	.	.	.	0.1	NG	.

Test condition

- AIR LEAK : 5□/□×7sec time maintained and afterward LEAK volume 6mmH₂O↓
- Vacuum density : 710mmHg×7sec time maintained and afterward LEAK volume 6mmHg↓

NO.1



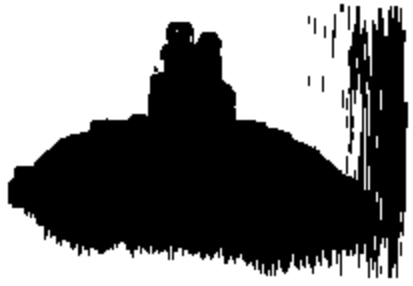
NO.2-1



NO.2-2



NO.3-1



NO.3-2



NO.4-1



NO.4-2



Spectra wheel cylinder's Warranty Returned Parts Fluid
Leakage Verification

2004. 6. 2





NO	Dealer	Sales Date	Driving Distance (km)	Repair date	Customer complaint	Total leakage volume	Operation Frequency	Leakage volume for 1 time operation	Test condition
1	DONGBU Maintenance	03.01.22	13,071	04.5.6	Leakage	0.25cc	1,000TIMES	0.00025cc	Fluid pressure 70 /.
2-1	SONGDO DONGSUH AUTO	03.01.25	32,613	04.5.3	.	0.05cc	2,000TIMES	0.000025cc	
2-2	.	.	.	.	.	0.14cc	1,000TIMES	0.00014cc
3-1	SUWON Sangseongcheol	03.02.13	28,998	04.5.19	.	0.05cc	1,000TIMES	0.00005cc	
3-2	.	.	.	.	.	0.08cc	1,000TIMES	0.00008cc
4-1	INCHON GANSUK North Branch	02.10.21	29,328	04.5.19	.	0.05cc	2,000TIMES	0.000025cc	
4-2	.	.	.	.	.	0.06cc	1,000TIMES	0.00006cc

Test setting and test sample



NO.1



NO.2-1



NO.2-2



NO.3-1



NO.3-2



NO.4-1



NO.4-2



◆ TEST REPORT ◆

Dept.	Vehicle Testing Team 3			Control No.	04TRA-SD-001	Rep. NO	
Preparer	Park, Byung-sup sr(6745)			Draft date	2004. 8. 8	M/F NO	Original NO
Subject	SPECTRA Rr. W/Cyl. warranty-returned part brake performance evaluation result report						
Part No.	-					Part name	-
Proj. NO	Devel. stage	ENG.	T/W	BODY	Material	Test method	-
G340	Mass prod.	AGD	AT	-	-		
Test term	2004. 8. 3 ~ 2004. 8. 5					Supplier	-
Circulated	N. Aerion Quality Maintenance Support Team, Passenger Chassis Design Team 3, Design Enhancement Team 3, Quality Assurance Team 1					Result status	Yes / No (1 sheet)

Test purpose: Spectra Rr. W/Cyl. Oil leakage from warranty-returned part(O/R receipt) brake performance evaluation result report.

<Content>

1. Test specification

1-1. Evaluated vehicle : Spectra AT 2001(SGuh 0910 (41,000km))

1-2. Wheel cylinder : O/R-received warranty returned part

2. Conclusion

■ Upon Spectra Rr. W/Cyl. Oil leakage warranty-returned part related evaluation result, no change in braking distance nor BRAKE PEDAL FEELING.

□ With Rr. W/Cyl. warranty-returned part, no braking distance change on RESERVE TANK OIL LEVEL MIN./MAX.
(OIL LEVEL MIN. : 47.2m , MAX.:47.0m)

□ With R/R cyl. warranty-returned part, after BURWISH 500times INSPECTION result, RR w/cyl. had a minute trace of oil leak occurring. (No PEDAL FEELING change and no RESERVE TANK OIL LEVEL change.)

3. Result summary

Case No.	Warranty	RESERVE TANK OIL LEVEL	Braking distance		Remarks
			MIN.	MAX.	
CASE 1	Existing part	MAX.	12.7m	49.1m	Oil leak RED. 13m ↓ / 50m ↓
CASE 2	Warranty return part	MAX.	12.5m	47.2m	
		MIN.	12.6m	47.0m	
CASE 3	Warranty return part	MIN.	12.8m	47.3m	BURWISH 500times

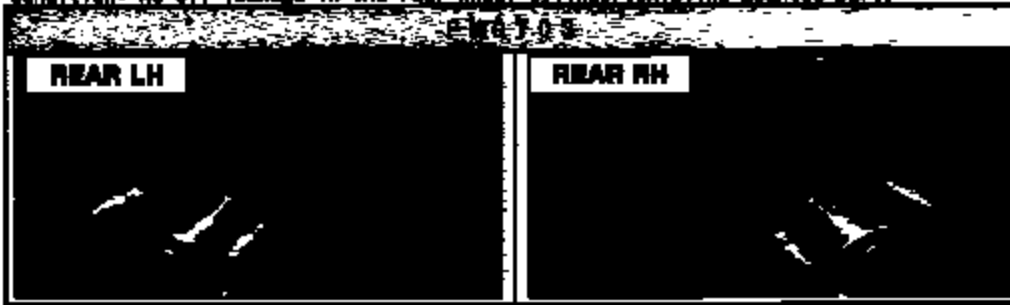
4. Attached : Detailed evaluation result and photos

1. Indicated category is an item prepared by a technical management dept. 2. Please be certain to include the part No. 3. Color photo and data originals are separately managed.	Assigned	Reviewer	Approval
	Authorized	Authorized	Authorized

Attachment. Detailed evaluation result and photos

Case 1

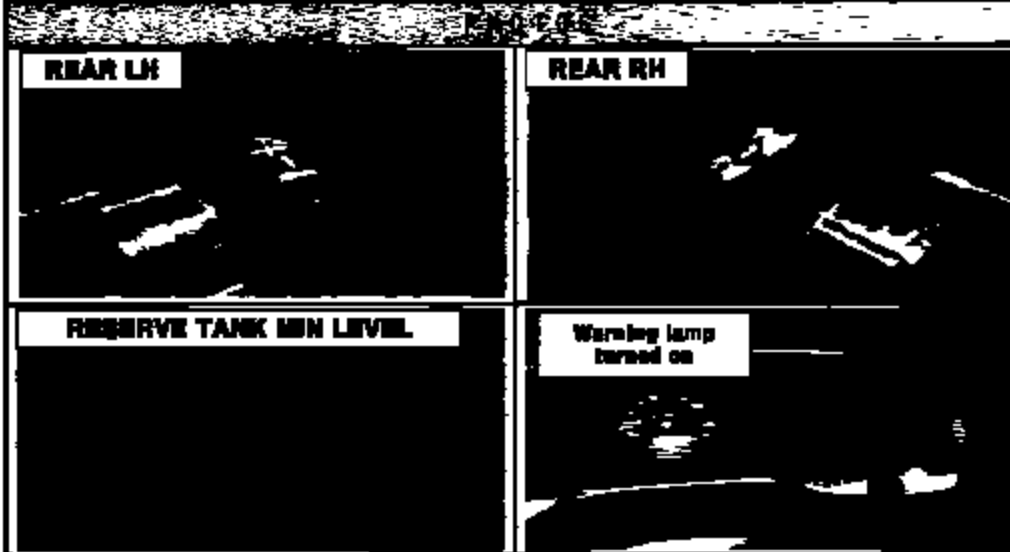
Condition: No oil leakage in the rear wheel cylinder(existing mounted part)



Speed	Oil Level
50KPH	12.7a
100KPH	48.1a

Case 2

Condition: Rear wheel cylinder mounted with warranty-returned part. RESERVE TANK OIL MIN LEVEL.

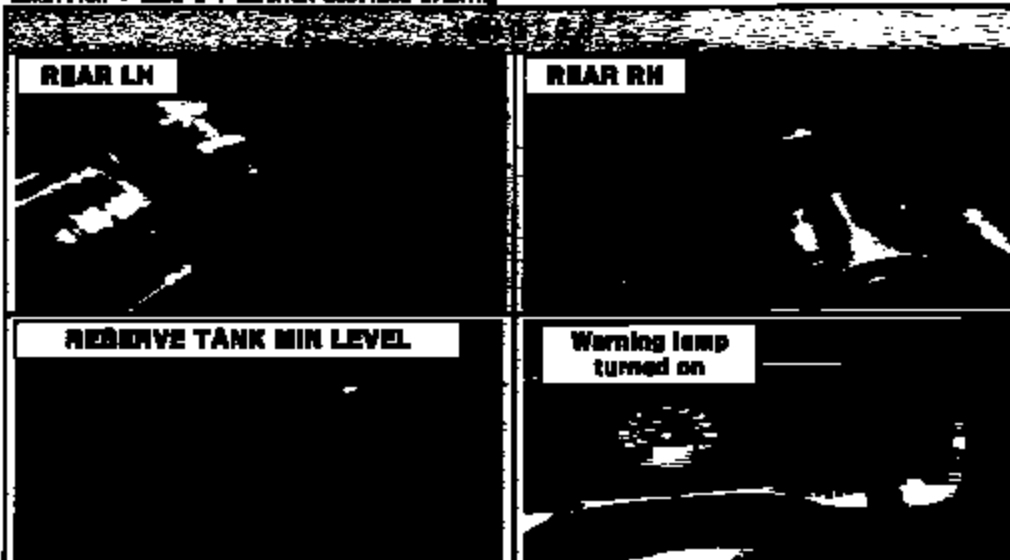


RESERVE TANK MAX LEVEL	
Speed	Oil Level
50KPH	12.6a
100KPH	47.2a

RESERVE TANK MIN LEVEL	
Speed	Oil Level
50KPH	12.8a
100KPH	47.0a

Case 3

Condition : Case 2 + BURNIISH 500times braking



Speed	Oil Level
50KPH	12.6a
100KPH	47.3a

① Minute RH OIL leakage occur after braking 500times
② RESERVE TANK OIL LEVEL is not changed
③ Braking distance is not changed
④ B/PEDAL FEELING is not changed

◆ TEST REPORT ◆

Dept.	Vehicle Test Team 3 Control No 04TRA-SOFL-002				*Rep.NO	
Preparer	Woo, Jong-soo (8745)	Draft date	6/11/2004	*M/F NO		*Original NO
Subject	SPECTRA Rr.W/CYL. leakage pt. brake performance evaluation result report					
Part No.	-				Part name	-
Proj.NO	Devel. stage	ENG.	T/M	BODY	Material	TDP-04-01-05
G340	Mass prod.	ASD	AT	-	-	
Test term	2004. 6. 9 ~ 2004. 6. 11				Supplier	-
Circulated	Passenger Chassis Design Team 3, Design Enhancement Team 3, N. America Quality Maintenance Support Team, G.A. Team 1				Result etch.	Yes / No (3 sheets)

Test purpose : To evaluate Spectra Rr.w/cyl. Oil leakage pt. braking performance.

<Content>

1. Test A:specification

- 1-1. Evaluated vehicle : Spectra Seoul 47 Du 6202 (KNAFB22631A0B2988)
- 1-2. odo : 39,394km
- 1-3. Test W/CYL. : Rr.RH w/cyl. mounting of oil leakage part.
(70bar 100times run during total 1.0cc oil leakage : 1time run during 0.01cc leakage)

2. Conclusion

- ☐ Rr. w/cyl. normal part without oil leakage satisfies requirement standards for test result value.
- ☐ Rr. w/cyl. oil leakage part relative to normal part tended to perform worse or under 10% increase rate.
(Braking effect sensation showed over 10% rise but deemed no problem as leakage part result was within requirement standards.)
- ☐ Lining and Drum in contaminated state due to oil leakage during leakage part test.
- ▶ Rr. w/cyl. effect on oil leakage part evaluation result, performance deemed not great.

3. Result summary

Pedal stroke [mm]	20kgf	60.2	63	5%	75mm ↓	
	50kgf	74.5	77	3%	95mm ↓	
Braking sensation (100km/h)	Effect feeling [kgf]	0.3g	3.9	4.4	13%	8kgf ↓
		0.8g	8.8	10.9	11%	15kgf ↓
	Pedaling feel [mm]	0.3g	42	44	6%	43mm ↓
		0.8g	54	56	4%	58mm ↓
Braking distance[m]	nom, 100km/h	48.1	51.7	7%	50m ↓	

4. Attached : Test Data

- <Ref> 1. *Indicated category is an item prepared by a technology management dept.
2. Please be certain to indicate the part No.
3. Color photo and Data originals are separately managed.

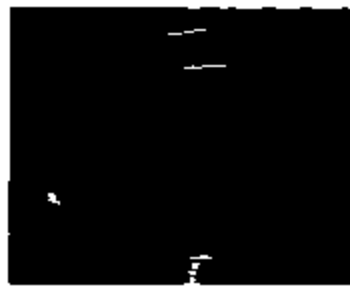
Assigned	Review	Approval
signed	signed	signed

Aligned, related photo

W/oil, normal part



Rr. LH
W/OYL



Rr. RH
W/OYL



Rr. LH
LINING



Rr. RH
LINING

W/oil, leaked part



Rr. RH
on initial mounting



Rr. RH
on initial mounting



Rr. RH
Post-driving
leaked condition



Rr. RH
Post-driving lining
oil contamination



Rr. RH
Post-driving drum
oil's scattered
contamination

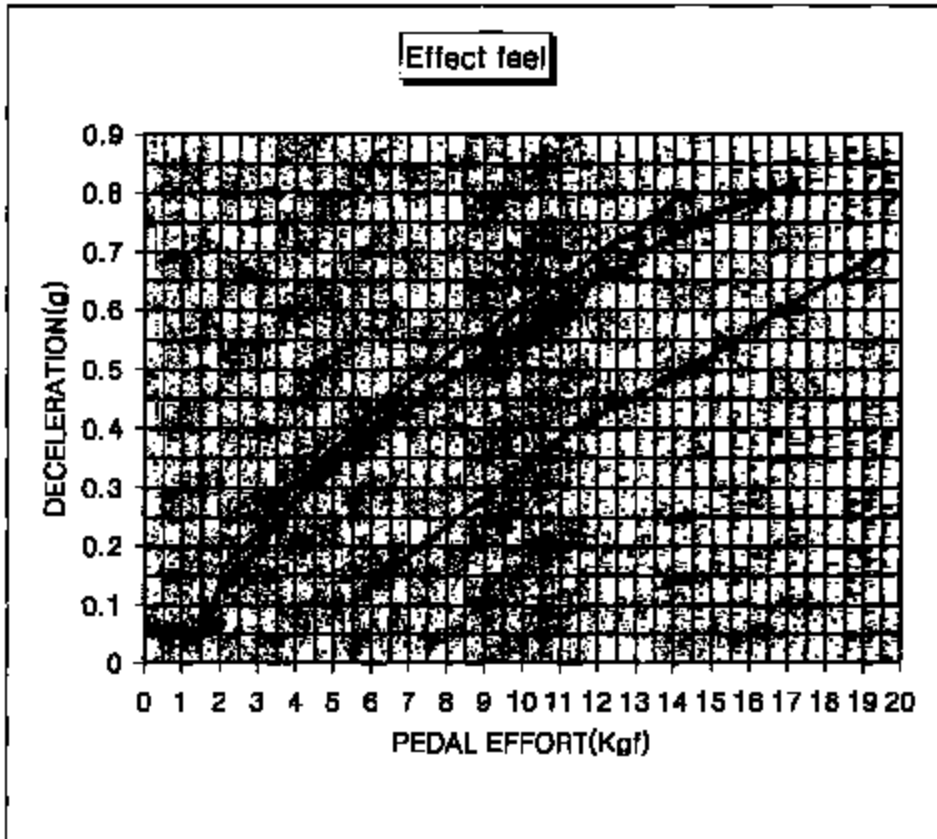


Rr. RH
Post-driving drum
oil's scattered
contamination

Braking feel test

Test Item : SPECTRA (100km/h)

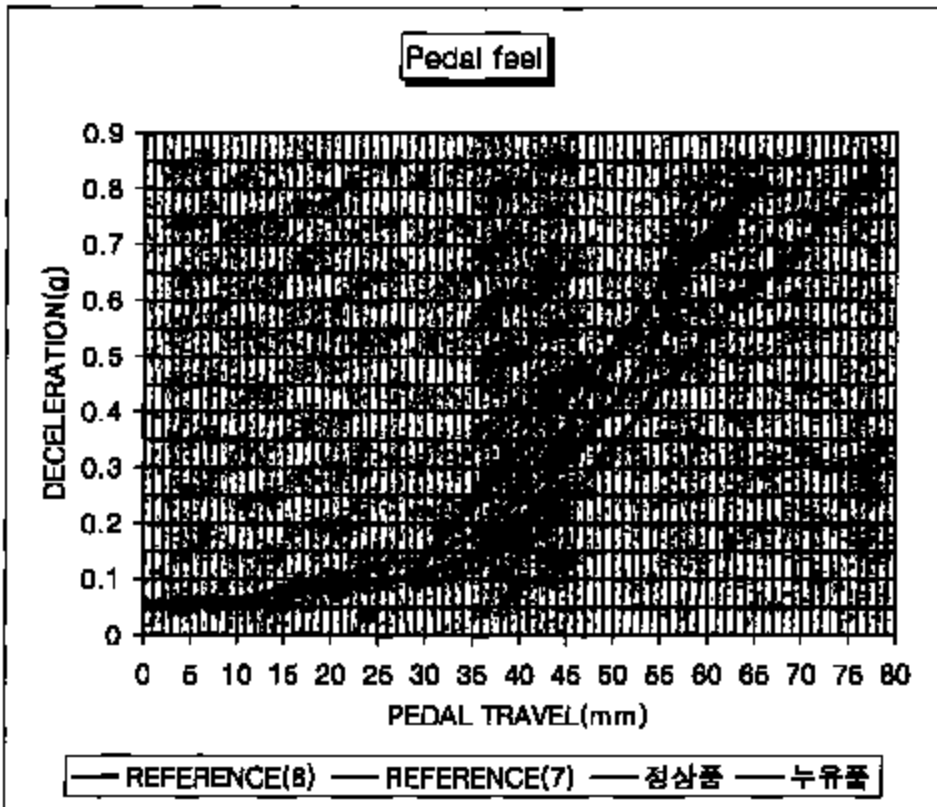
W/CYL. normal part-leaked



06/11/2004
JSM00
SPECTRA
CBS (DI/Dx)
KBF 4016
KBL CB40

3.9
9.5
4.4
10.9

42
54
44
56



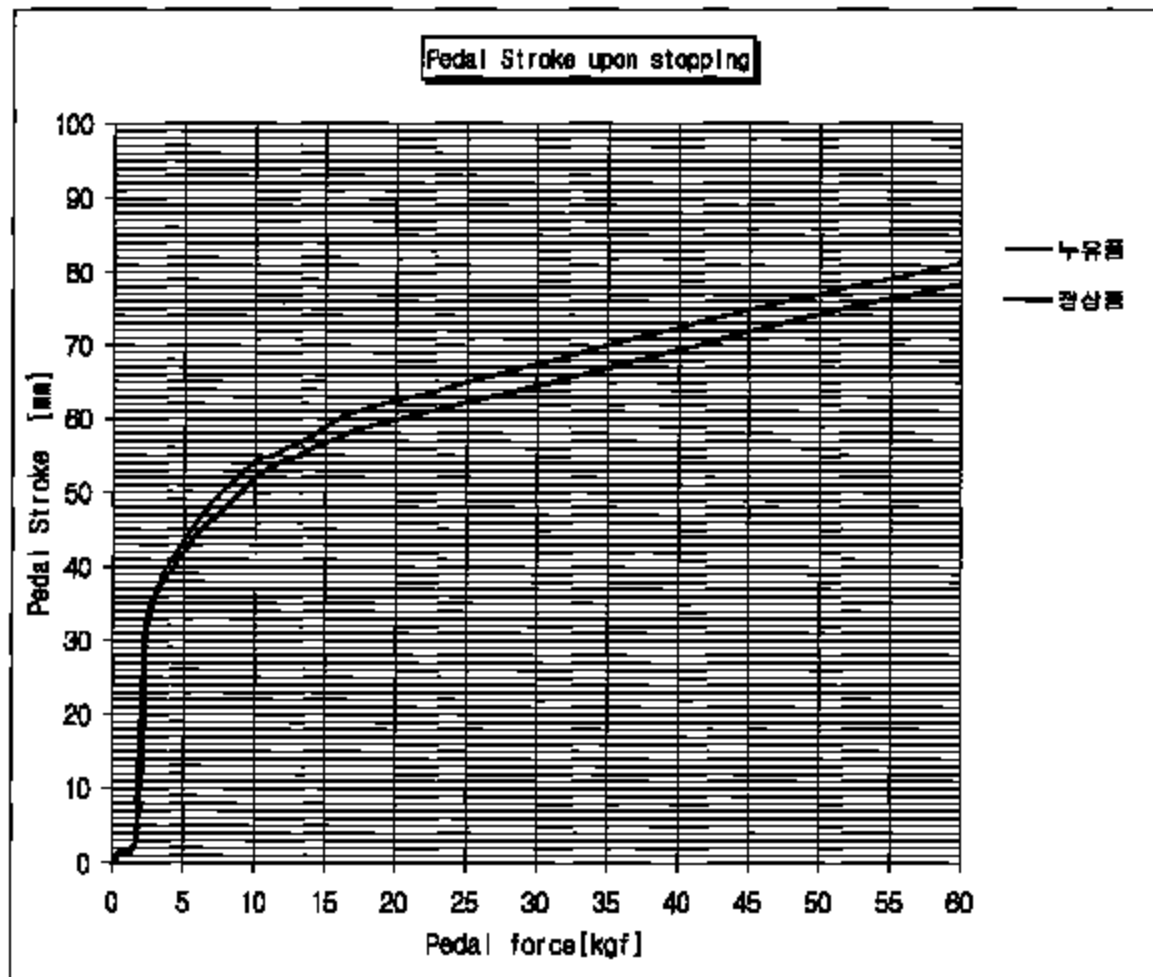
TEST UPON STOPPING (Pedal Stroke)

Test vehicle	SPECTRA	Booster	9 "
Brake System	CBS (Disc/Drum)	M/Cylinder	φ22.22

DATA RESULT SUMMARY

[mm]

Pedal Stroke		0	10	15	20	25	30	40	50	60
Normal time	Normal part	42.2	51.6	56.9	61.3	65.4	70.3	75.2	78.8	
	Leaked part	43.2	54.3	59.2	64.4	67.0	72.8	78.8	81.8	



Spectra brake warning lamp lighting measurement report

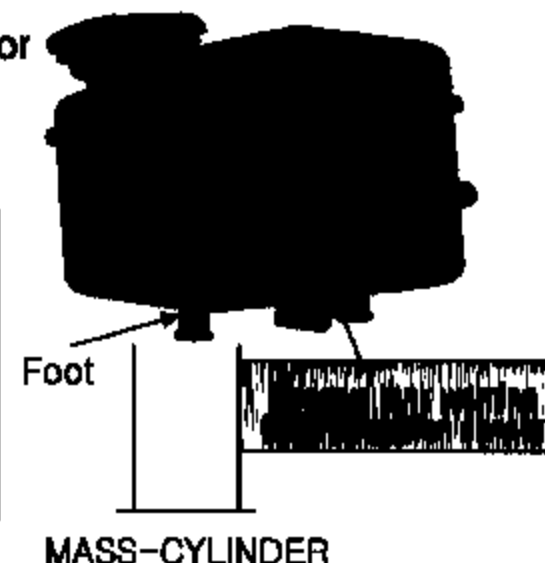
[2004. 11.24 Quality Assurance Team1]

■ Background

- ▶ For measurement/verification of oil vol. when Spectra brake warning lamp is on
(Reserve tank mass-produced good measurement)

■ Testing method(Reserve tank single part test)

- ① In R/TANK single part condition, BRAKE OIL is filled to MAX LEVEL.
- ② MULTI TESTER is connected to R/TANK warning lamp SENSOR terminal .
- ③ R/TANK'S one foot portion is opened and DRAINED BRAKE OIL is received onto MASS-CYLINDER to measure the volume until the buzzer connected to MULTI TESTER'S SENSOR terminal starts to ring.



■ Volume measurement result (N=10EA)

Measure	134.0	133.5	134.0	133.5	134.0	133.5	134.0	134.0	134.0	133.5	133.8
---------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

※ Warning lamp ON LEVEL design value shall be 3 ± 1.5 mm above MIN. LEVEL.

- ① During lower limit standard(1.5mm) : After 147cc oil leakage, warning lamp is turned on
- ② During upper limit standard(4.5mm) : After 131cc oil leakage, warning lamp is turned on

➔ **As a result of current mass-produced good measurement, production is at an upper limit standard**

**Spectra wheel cylinder N. America
warranty–returned part investigation**

2004. 12. 14



NO	MN	R/S No.	Year	Misses	Year	Category	Volume	Time	Volume	Test condition
1	KNAFB1211 25	22035	-	59864	04.10.08	Leakage	0.08cc	1000times	0.00008cc	Fluid pressur e 70kg/cm ²
2	KNAFB1214 25	42393	01.08.20	43403	04.08.01	Pedal Sponge	0.02cc	↑	0.00002cc	
3	KNAFB1211 25	34244	02.01.04	56143	04.10.08	↑	0.04cc	↑	0.00004cc	
4	↑	↑	↑	↑	↑	↑	0.05cc	↑	0.00005cc	
5	KNAFB1219 25	39432	01.11.21	39366	04.10.12	Leakage	0.1cc	↑	0.0001cc	
6	↑	↑	↑	↑	↑	↑	0.15cc	↑	0.00015cc	
7	KNAFB121X 25	60004	01.12.11	55821	-	Pedal Sponge	0.52cc	↑	0.00052cc	
8	KNAFB1211 25	11872	01.05.17	28512	-	Leakage	0.05cc	↑	0.00005cc	
9	KNAFB1216 25	90888	-	39862	04.10.06	Leakage	0cc	↑	0cc	
10	↑	↑	↑	↑	↑	↑	0cc	↑	0cc	
11	KNAFB1212 35	↑	↑	↑	-	Leakage	0.02cc	↑	0.00002cc	

NO	VIN	R/O No.	Produce date	Mileage	Repair date	Customer complaint	Total leakage volume	Run frequency	Leakage volume for 1time run	Test condition
12	KNAFB1217 25 [REDACTED]	49073	01.09.13	19529	-	Leakage	0cc	1000회	0cc	Fluid pressure 70kg/cm ²
13	KNAFB1212 25 [REDACTED]	60747	-	43161	04.10.20	↑	0.16cc	↑	0.00016cc	
14	↑	↑	↑	↑	↑	↑	0.1cc	↑	0.0001cc	
15	KNAFB1219 25 [REDACTED]	48849	01.08.27	58363	04.10.20	Slippag e	0cc	↑	0cc	
16	↑	↑	↑	↑	↑	↑	0.05cc	↑	0.00005cc	
17	KNAFB1212 25 [REDACTED]	14988	01.08.30	28591	04.10.14	Leakage	0.05cc	↑	0.00005cc	
18	KNAFB1211 25 [REDACTED]	59562	-	56806	04.09.01	↑	0cc	↑	0cc	
19	↑	↑	↑	↑	↑	↑	0.05cc	↑	0.00005cc	
20	KNAFB1218 25 [REDACTED]	67227	01.05.18	46889	-	↑	0cc	↑	0cc	
21	KNAFB1214 25 [REDACTED]	49709	01.05.17	39357	-	↑	0.15cc	↑	0.00015cc	
22	KNAFB1215 25 [REDACTED]	19177	01.09.13	51352	04.10.12	↑	0cc	↑	0cc	

R.O. Collection - 2002 and 2003 Spectra Rear Brake Wheel Cylinder Replacement Summary

Number	Dealer Code	RO-Claim Number	VIN	Model Year	Mileage	Nature Code	Cause Code	Dealer Repair Order Analysis	
								Customer Complaint / Repair Reason	Dealer Technician Notes
1	IL011	11749 A	KNAFB121125	2002	22431	N87	C38	Brake warning light on while driving	Replaced right rear wheel cylinder
2	IL014	24770 1	KNAFB121225	2002	22437	N87	C38	Brakes are spongy	Replaced left rear wheel cylinder
3	IN001	05065 2	KNAFB121725	2002	47074	N22	C06	For other service	Replaced both rear wheel cylinders
4	IN005	42420 1	KNAFB121925	2002	44364	N87	C06	For other service	Replaced both rear wheel cylinders, (brake shoes (30% left)
5	IN005	42432 1	KNAFB121335	2003	21924	N87	C06	Rear wheel cylinder leaking	Replaced both rear wheel cylinders
6	KS004	39101 C	KNAFB121325	2002	30081	N22	C32	Brake light is coming on and off	Replaced both rear shoes and cylinders
7	KS007	33237 A	KNAFB121525	2002	51202	N87	C00	Brake fluid is low	Replaced one rear wheel cylinder and brake shoes
8	KY001	93152 2	KNAFB121325	2002	31477	N87	C38	For other service	Replaced both rear wheel cylinders
9	KY001	93372 1	KNAFB121225	2002	28888	N32	C06	For other service	Replaced both rear wheel cylinders
10	KY001	93435 1	KNAFB121025	2002	60612	N87	C38	For other service	Replaced both rear wheel cylinders
11	KY001	93040 1	KNAFB121835	2003	10165	N87	C38	For other service	Replaced both rear wheel cylinders
12	KY001	93428 1	KNAFB121835	2003	32748	N87	C38	For other service	Replaced both rear wheel cylinders
13	KY001	92864 2	KNAFB121145	2004	9418	N87	C38	Brake pedal goes all the way down at stops	Replaced both rear wheel cylinders
14	KY008	72096 1	KNAFB121125	2002	31598	N87	C38	For other service	Replaced both rear wheel cylinders and brake shoes
15	KY008	72593 1	KNAFB121725	2002	53801	N87	C38	LR wheel cylinder leaking	Replaced one wheel cylinder
16	MI008	13383 1	KNAFB121325	2002	29273	N87	C38	For other service	Replaced both rear wheel cylinders
17	MI011	49122 2	KNAFB121225	2002	19367	N87	C38	For other service	Replaced one/both rear wheel cylinders
18	MI011	49188 1	KNAFB161425	2002	26375	N87	C11	For other service	Replaced one/both rear wheel cylinders
19	MI011	49073 2	KNAFB121725	2002	19529	N87	C38	Brake noise	Replaced both rear wheel cylinders
20	MI011	49709 2	KNAFB121425	2002	39357	N87	C38	For other service	Replaced one/both rear wheel cylinders
21	MI011	49792 2	KNAFB121225	2002	55790	N87	C38	Hear noise from rear	Replaced both rear wheel cylinders
22	MI011	49410 2	KNAFB121735	2003	26958	N87	C38	Rear brakes are grabby	Replaced one/both rear wheel cylinders
23	MI016	70481 1	KNAFB121X25	2002	42768	N87	C06	Brake warning light on	Replaced both rear wheel cylinders and oil-soaked brake
24	MN001	34244 1	KNAFB121125	2002	56143	N32	C38	Brake pedal is intermittently low	Replaced both rear wheel cylinders
25	MN003	16245 2	KNAFB121225	2002	31263	N87	C06	Fluid leak at rear of vehicle	Replaced both rear wheel cylinders
26	OH007	55638 1	KNAFB121X35	2003	32171	N87	C38	Wheel cylinders leaking	Replaced both rear wheel cylinders
27	OH011	15044 2	KNAFB121625	2002	54441	N87	C06	Brake inspection	Replaced both rear wheel cylinders
28	OH016	61641 D	KNAFB121625	2002	59647	N87	C06	Brake pulsation	Replaced both rear wheel cylinders and brake shoes
29	OH041	25456 4	KNAFB121435	2003	30083	N87	C38	For other service	Replaced both rear wheel cylinders and turned drums
30	OH041	25473 5	KNAFB121335	2003	16517	N87	C38	Brake warning light on	Replaced leaking proportioning valve and replace right rear wheel cylinder
31	OH044	67227 1	KNAFB121625	2002	46889	N87	C06	Brake warning light on	Replace right rear wheel cylinder and brake shoes
32	OH048	14578 3	KNAFB121625	2002	20831	N87	C38	Brake warning light on	Replaced both rear wheel cylinders
33	WI010	90011 A	KNAFB121325	2002	55137	N87	C11	For other service	Replaced right rear wheel cylinder
34	CT006	38069 3	KNAFB121X25	2002	15798	N87	C11	Rear brake fluid leak	Replaced leaking right rear wheel cylinder
35	CT006	38432 4	KNAFB121225	2002	59700	N87	C38	For other service	Replaced leaking left rear wheel cylinder
36	CT008	88414 B	KNAFB121125	2002	26401	N87	C06	Rear brake fluid leak	Replaced both leaking rear brake wheel cylinders
37	MA006	21654 1	KNAFB121925	2002	43307	N87	C11	Failed state emergency brake inspection	Replaced right and left leaking rear wheel cylinders, drums, shoes and emergency brake cables
38	MA007	22445 1	KNAFB121035	2003	23570	N87	C11	Rear brake squeak noise	Replaced both leaking rear wheel cylinders

R.O. Collection - 2002 and 2003 Spectra Rear Brake Wheel Cylinder Replacement Summary

Number	Dealer Code	RO-Claim Number	VIN	Model Year	Mileage	Nature Code	Cause Code	Dealer Repair Order Analysis	
								Customer Complaint / Repair Reason	Dealer Technician Notes
39	MA016	20602 1	KNAFB121125	2002	53422	N87	C38	Loosing brake fluid	Replaced leaking left rear brake cylinder
40	MD018	86497 1	KNAFB121225	2002	49107	N32	C06	Brake fluid leak	Replaced both leaking rear brake wheel cylinders, brake shoes and spring/s
41	NH008	86301 1	KNAFB121235	2003	24216	N31	C31	Right rear brake piston sticking	Replaced frozen right rear wheel cylinder
42	NY027	51010 1	KNAFB121425	2002	37950	N29	C06	Squeak noise from rear wheel	Left rear shoes and drums worn and wheel cylinder leaking. Replaced left rear wheel cylinder and shoes
43	NY022	57215 1	KNAFB121825	2002	24573	N87	C32	For other service	Replaced both leaking rear wheel cylinders
44	NY044	88486 G	KNAFB121225	2002	22906	N87	C38	For other service	Replaced leaking left rear wheel cylinder
45	NY059	51548 1	KNAFB121825	2002	41664	N87	C38	Brake fluid leaking from both rear wheels	Replaced leaking right and left rear wheel cylinders and cleaned shoes and drums
46	PA017	55847 3	KNAFB121425	2002	45783	N87	C38	For other service	Replaced leaking right and left rear wheel cylinders
47	PA037	02025 2	KNAFB121025	2002	38187	N87	C38	For other service	Replaced leaking right rear wheel cylinder
48	PA037	02431 1	KNAFB121735	2003	33343	N87	C38	Brake fluid low / customer had to add	Replaced both leaking rear wheel cylinders
49	PA038	58001 1	KNAFB121725	2002	50825	N87	C38	For other service	Replaced both rear wheel cylinders and brake shoes and turned the drums
50	PA041	48585 A	KNAFB121525	2002	28705	N87	C38	For other service	Replaced both leaking rear wheel cylinders
51	VA027	59485 1	KNAFB121835	2003	44602	N32	C38	For other service	Replaced both leaking rear wheel cylinders
52	VT001	82641 7	KNAFB121325	2002	38907	N87	C11	For other service	Replaced leaking right rear wheel cylinder and all rear brake shoes
53	AL016	59562 C	KNAFB121125	2002	58806	N87	C38	For other service	Replaced leaking right rear wheel cylinder
54	AL018	60698 C	KNAFB121825	2002	34043	N87	C38	Brake scrape noise from front	Replaced leaking left rear wheel cylinder
55	FL023	06436 3	KNAFB121535	2003	24197	N87	C11	For other service	Replaced leaking right and left rear wheel cylinders
56	FL056	47616 1	KNAFB121225	2002	50015	N29	C05	For other service	Replaced leaking right and left rear wheel cylinders
57	FL069	59871 2	KNAFB121835	2003	18819	N87	C38	For other service	Replaced leaking right and left rear wheel cylinders
58	FL070	36459 1	KNAFB121125	2002	31158	N87	C38	For other service	Replaced leaking right rear wheel cylinder
59	FL074	19505 1	KNAFB121835	2003	24859	N87	C06	Brake warning light on while driving	Replaced both rear wheel cylinders and brake shoes and turned the drums
60	GA053	15531 1	KNAFB121825	2002	46523	N87	C38	For other service	Right rear wheel cylinder leaking, replaced both rear wheel cylinders
61	OK003	42393 1	KNAFB121425	2002	43403	N32	C38	Brake warning light on while driving	replaced leaking left rear wheel cylinder and leaking master cylinder
62	TX055	38674 A	KNAFB121X25	2002	23199	N32	C38	Brake warning light on while driving	Replaced both leaking rear wheel cylinders and brake shoes
63	CA168	02336 1	KNAFB121026	2002	25285	N87	C38	Rear brake fluid leak	Replaced leaking right and left rear wheel cylinders and cleaned shoes
64	CO007	09205 1	KNAFB121845	2004	6882	N22	C38	Right rear brake noisy and locks up at times	Replaced both rear wheel cylinders, cleaned brake shoes and turned drums
65	NV001	45980 A	KNAFB121235	2003	14281	N87	C06	Brakes spongy, weak and warning light on	Replaced one leaking rear wheel cylinder
66	WA005	18314 1	KNAFB121135	2003	39178	N87	C06	Rear brake fluid leak	Replaced leaking right rear wheel cylinder
67	WA008	32818 A	KNAFB121835	2003	12822	N87	C38	Rear brake fluid leak	Replaced leaking right and left rear wheel cylinders
68	WA014	06417 1	KNAFB121226	2002	49654	N87	C11	For other service	Replaced leaking right and left rear wheel cylinders

PERIOD	PART	GROSS SALES	RETURN QTY	NET SALES
200010	OK2N1 26610	2	0	2
200012	OK2N1 26610	3	0	3
200101	OK2N1 26610	5	2	3
200102	OK2N1 26610	11	0	11
200103	OK2N1 26610	9	0	9
200104	OK2N1 26610	14	0	14
200105	OK2N1 26610	15	0	15
200106	OK2N1 26610	4	0	4
200107	OK2N1 26610	7	0	7
200108	OK2N1 26610	7	0	7
200109	OK2N1 26610	22	4	18
200110	OK2N1 26610	35	0	35
200111	OK2N1 26610	8	1	7
200112	OK2N1 26610	23	2	21
200201	OK2N1 26610	21	4	17
200202	OK2N1 26610	7	2	5
200203	OK2N1 26610	34	3	31
200204	OK2N1 26610	43	0	43
200205	OK2N1 26610	34	2	32
200206	OK2N1 26610	41	1	40
200207	OK2N1 26610	50	3	47
200208	OK2N1 26610	42	0	42
200209	OK2N1 26610	51	0	51
200210	OK2N1 26610	106	4	102
200211	OK2N1 26610	43	0	43
200212	OK2N1 26610	73	2	71
200301	OK2N1 26610	103	0	103
200302	OK2N1 26610	86	0	86
200303	OK2N1 26610	122	0	122
200304	OK2N1 26610	85	9	76
200305	OK2N1 26610	112	0	112
200306	OK2N1 26610	142	13	129
200307	OK2N1 26610	120	2	118
200308	OK2N1 26610	166	5	161
200309	OK2N1 26610	178	0	178
200310	OK2N1 26610	238	7	231
200311	OK2N1 26610	156	0	156
200312	OK2N1 26610	261	0	261
200401	OK2N1 26610	212	2	210
200402	OK2N1 26610	228	3	225
200403	OK2N1 26610	313	4	309
200404	OK2N1 26610	238	10	228
200405	OK2N1 26610	232	0	232
200406	OK2N1 26610	238	10	228
200407	OK2N1 26610	210	7	203
200408	OK2N1 26610	203	4	199
200409	OK2N1 26610	222	0	222
200410	OK2N1 26610	298	5	293
200411	OK2N1 26610	201	5	196
200412	OK2N1 26610	240	8	232
Grand Total		5311	124	5187

PERIOD	PART	GROSS SALES	RETURN QTY	NET SALES
200105	OK30A 28810	8	0	8
200106	OK30A 28810	2	0	2
200107	OK30A 28810	0	0	0
200108	OK30A 28810	0	0	0
200109	OK30A 28810	4	0	4
200110	OK30A 28810	5	0	5
200111	OK30A 28810	5	2	3
200112	OK30A 28810	7	2	5
200201	OK30A 28810	10	0	10
200202	OK30A 28810	27	0	27
200203	OK30A 28810	20	0	20
200204	OK30A 28810	32	0	32
200205	OK30A 28810	18	1	17
200206	OK30A 28810	32	0	32
200207	OK30A 28810	33	0	33
200208	OK30A 28810	39	0	39
200209	OK30A 28810	34	0	34
200210	OK30A 28810	64	0	64
200211	OK30A 28810	41	0	41
200212	OK30A 28810	58	0	58
200301	OK30A 28810	82	2	80
200302	OK30A 28810	61	0	61
200303	OK30A 28810	80	2	78
200304	OK30A 28810	140	0	140
200305	OK30A 28810	145	1	144
200306	OK30A 28810	166	2	164
200307	OK30A 28810	137	0	137
200308	OK30A 28810	142	1	141
200309	OK30A 28810	167	0	167
200310	OK30A 28810	271	1	270
200311	OK30A 28810	221	0	221
200312	OK30A 28810	233	0	233
200401	OK30A 28810	273	0	273
200402	OK30A 28810	293	0	293
200403	OK30A 28810	356	1	355
200404	OK30A 28810	387	1	386
200405	OK30A 28810	320	0	320
200406	OK30A 28810	391	4	387
200407	OK30A 28810	372	8	366
200408	OK30A 28810	361	7	354
200409	OK30A 28810	339	0	339
200410	OK30A 28810	480	2	478
200411	OK30A 28810	454	4	450
200412	OK30A 28810	314	2	312
	Total	6614	41	6573