

KELSEY-HAYES COMPANY
BRAKE DYNAMOMETER TEST

Sheet No. 8 of
Dyna. Test No. 797
Date: 1-16-79

BRAKE: VW 48 mm

LINING: Delco

DRUM (ROTOR) Solid

Step 13. Pressure Sensitivity

Cycles - 1 application at each pressure.
Speed - 80 KPH to 0 KPH (804 rpm to 0 rpm)
Hyd. Pressure Control - 290 psi (20 Bar), 580 psi (40 Bar),
870 psi (60 Bar), 1160 psi (80 Bar),
1450 psi (100 Bar).
Initial Rotor Temperature - 140°F (60°C) at beginning of each stop.
Cooling Air: ON.

Km/h
04 RPM
it Rotor
mp. 140°F
(60°C)

Stop No	Press PSI	Stop Time Sec.	Revs to Stop	Avg. Decel. M/Sec ²	Torque Lb. Ft.			Torque Lb. Ft. Avg.	μ
					Init	Sust	Final		
1	290	12.3	86.8	1.81	175	150	200	192	.376
2	580	6.1	43.2	3.64	300	350	400	388	.379
3	870	4.0	27.9	5.55	500	550	650	592	.385
4	1160	3.0	21.5	7.40	700	800	825	789	.383
5	1450	2.4	17.9	9.25	900	1000	1100	987	.385

Step 14. Temperature Sensitivity (Heat Behavior)

Cycles - 1 application at each temperature.
Speed - 80 KPH to 0 KPH (804 rpm to 0 rpm)
Hyd. Pressure Control - 870 psi (60 Bar).
Initial Rotor Temperature - 86°F (30°C), 212°F (100°C), 392°F (200°C), 572°F (300°C), 752°F (400°C),
932°F (500°C).
Cooling Air - OFF.

Km/h
04 RPM

d. Press.
0 PSI
60 Bar)

Stop No	Rotor Temp. °F °C	Stop Time Sec.	Revs to Stop	Avg. Decel. M/Sec ²	Torque Lb. Ft.			Torque Lb. Ft. Avg.	μ
					Init	Sust	Final		
1	86 30	3.7	26.1	6.00	500	600	700	640	.416
2	212 100	3.7	25.8	6.00	550	600	650	640	.416
3	392 200	3.7	25.3	6.00	600	650	600	640	.416
4	572 300	3.9	26.7	5.70	575	625	525	607	.395
5	752 400	4.0	26.8	5.55	525	600	500	592	.385
6	932 500	3.8	25.2	5.84	515	650	600	623	.405

NOTE: Cooling Air Blower on for Step 14 at 200 Ft/Min Velocity to Remove Brake Dust

Step 15. Final Measurements

1. Measure Pads, record 5 places.
2. Weigh pads, record.
3. Measure rotor 3 places, record.
4. Weigh rotor, record.

COMMENTS: See Sheet No. 9 For Measurements

TEST CONDUCTED BY: R Buggs

DATE RUN: 1-17-79