P-1

Product Engineering Physical Test Laboratories

BRAKE DYNAMOMETER INSTALLATION SHEET

Procedure DM- 822

E.O. P1586-272
DATE: 6-8-81
TEST NO. MB-267

TECH. VHL
TEST NO. MB-267
SHEET NO. 121

TEST CONDITIONS:

Setup No.: 87 Brake Location: R.R. G.T.W.: 3790 Lbs. Roll. Rod: 0.940 Ft.
Brake Balance: 70 - 30 % Flywheel Discs: 4.0 Inertia: 548 Lb.-Ft. 2

TYPE BRAKE: "X" car duo-servo drum (200 X 45 mm)

DISC BRAKE:

Lining Material: _____ Description _____
Rotor Material: _____ Type of Finish: _____
Surface Finish (Microinches - RMS): _____ Rotor Diameter: _____
Rotor Thickness: _____ Hub & Rotor Weight: _____
Caliper Piston Diameter: _____

DRUM BRAKE:

Lining Material: Pri. ABEX 261-2 RIVETED (ABB-250-FF)
Sec. ABEX 261-2 RIVETED (ABB-250-FF)
Drum Material: Buick production Type of Finish: prod. (interruptive cut)
Surface Finish Microinches : 70 - 80 Drum Diameter: 7.877 inches
Diametral Clearance: .030 inch Drum Weight: 10.06 pounds
Wheel Cylinder Diameter: 17.5 mm

SPECIAL INSTRUCTIONS: Install a plug type thermocouple .040 inch below the rubbing surface on the horizontal centerline adjacent to the backing plate side of the secondary shoe web.
LIMIT LINE PRESSURE TO 1200 PSI. Use three bolt mounting.
USE NO RETURN SPRING ON PARKING BRAKE CABLE.

PURPOSE OF TEST: BRAKE EFFECTIVENESS EVALUATION

SCHEDULE	SHEET NO.
1. C.P.S. at 100 °F.: 20, 30, 40 & 60 mph @ 300 psi	122
2. Repeat item number 1 at 500 psi	123
3. Decelerations at 100 °F.: 30, 60 & 80 mph	124
4. Burnish: (200) 40 mph stops, 12 ft/sec^2 at 270 °F. initial lining temp.	137
5. C.P.S. at 100 °F.: 20, 30, 40 & 60 mph @ 300 psi	125
6. Repeat item number 5 at 500 psi	126
7. Decelerations at 100 °F.: 30, 60 & 80 mph	127
8. Static Breakaway: (a) apply 100 lbs cable load, rotate drum for 1 (forward direction) revolution at 2 rpm. (do 3 times total)	137
(b) Repeat item number 8a at 150 pounds cable load	
(c) Repeat item number 8a at 200 pounds cable load	
(d) Repeat item numbers 8a, b & c at 10 rpm	
9. Repeat item number 8 in reverse direction	137
10. C.P.S.: 40 mph at 500 psi. Make stops at a time interval to increase lining temperature from 150 to 400 °F. in 20 (± 2 stops). Use no external cooling. Repeat 9 more times. (10 heat cycles total)	No DATA
11. After the tenth heat cycle, repeat item numbers 1, 2 & 3 at 400 °F.	128, 129 & 130
12. Repeat item numbers 1, 2 & 3 at 100 °F.	131, 132 & 133
13. Reburnish: Repeat item number 4 except make only 35 stops	137
14. Repeat item numbers 1, 2 & 3 at 100 °F.	134, 135 & 136

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