Product Engineering Physical Test Laboratories

BRAKE DYNAMOMETER INSTALLATION SHEET

Procedure DM- 822

E.O. P1526-222
DATE: 5-27-81
TEST NO. MB-257

TECH. TEST NO. MB-257 SHEET NO. 87

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 931-222 RIVETED
Sec. ABEX 931-222 RIVETED
Drum Material: Buick production Type of Finish: prod. (interruptive cut)
Surface Finish Microinches : 110 - 130 Drum Diameter: 7.877 inches
Diametral Clearance: .030 inch Drum Weight: 9.91 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	88
2. Repeat item number 1 at 500 psi	89
3. Decelerations at 100 °F.: 30, 60 & 80 mph	90
4. Burnish: (200) 40 mph stops, 12 ft/sec^2 at 270 °F. initial lining temp.	103
5. C.P.S. at 100 °F.: 20, 30, 40 & 60 mph @ 300 psi	91
6. Repeat item number 5 at 500 psi	92
7. Decelerations at 100 °F.: 30, 60 & 80 mph	93
8. Static Breakaway: (a) apply 100 lbs cable load, rotate drum for 1 (forward direction) revolution at 2 rpm. (do 3 times total)	103
(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	103
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)	N. DATA
11. After the tenth heat cycle, repeat item numbers 1, 2 & 3 at 400 °F.	94, 95 & 96
12. Repeat item numbers 1, 2 & 3 at 100 °F.	97, 98 & 99
13. Reburnish: Repeat item number 4 except make only 35 stops	103
14. Repeat item numbers 1, 2 & 3 at 100 °F.	100, 101 & 10

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