

**2003 CALIBRATION OF FIELD PLATFORM BALANCE**  
AASHTO Designation M 231

**2003.1 SCOPE**

These balances must be calibrated each year prior to the construction season. While this balance is a very rugged piece of equipment it can still be damaged by improper handling. The main areas where damage occurs are the knife-edges and their respective bearing areas. Calibration is to be done as follows:

**2003.2 PROCEDURE**

- A. Clean the balance thoroughly.
- B. Inspect the knife edges and their respective bearing areas. If damaged, the knife-edges can be replaced; however, the bearing surfaces are not replaceable and would deem the balance unserviceable if any damage is evident.
- C. Place the balance on a firm level surface and check to see if it zeros-out. If not, adjust the weight hanger by removing the screw in the base and either adding or subtracting lead shot until the balance zeros. Calibration can now be started.
- D. Place a 100 gram weight on the balance pan and move the poise on the weigh beam to achieve balance. The balance must indicate 0.22 lbs.  $\pm$  0.1% or 5 grams (0.011 lbs.) whichever is greater. Continue using the following weights: 200g, 500g, 1000g, 2000g, etc. until you reach 14000g.
- E. If the balance checks out O.K., identify the counterpoise weights and hanger with the balance's identification code number so that they will always be used as a unit.

Balances meeting the calibration requirements shall be initialed, marked "O.K." and dated (month and year) with tape or other marking.

**2003.3 PLATFORM SCALE CALIBRATION FORM**

Specification Requirements:

5 Grams or 0.1% or whichever is greater. (Refer to AASHTO M 231, Table 2 for Class G20, general purpose balances.)

WEIGHT APPLIED		Tol. ± Lbs.	BALANCE IDENTIFICATION NUMBER					
Grams	Lbs.							
0	0	0						
100	0.22	0.01						
200	0.44	0.01						
500	1.10	0.01						
1000	2.20	0.01						
2000	4.41	0.01						
3000	6.61	0.01						
4000	8.82	0.01						
5000	11.02	0.01						
6000	13.23	0.01						
7000	15.43	0.02						
8000	17.64	0.02						
9000	19.84	0.02						
10000	22.05	0.02						
11000	24.25	0.02						
12000	26.46	0.03						
13000	28.66	0.03						
14000	30.86	0.03						
DATE INSPECTED								
CHECKED BY								