

ANSI®  
B71.1-2003  
Revision of ANSV OPEI B71.1-1998

American National Standard  
for Consumer Turf Care Equipment –  
Walk-Behind Mowers and Ride-On  
Machines with Mowers –  
Safety Specifications

Sponsor  
Outdoor Power Equipment Institute

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The operator's spine shall remain generally vertical in a lateral plane. The machine shall be checked in both directions. The mower shall remain operational without having to exert other than the normal contact with the operator-presence control.

14.2.1.7.2 If the operator sensor described in 14.2.1.5 and/or 14.2.1.6 is a seat sensor, then the sensor shall undergo one of the following test procedures:

*Procedure 1*

- a) Place the machine on a surface level within 1°;
- b) With the seat located in the position established in 14.2.1.7.1, place the seat index point (SIP) measuring device (as described in ANS/SAE J1163), without the weights, on the seat cushion, and slide the device rearward to contact the seat back. The SIP should be centered on the cushion in the normal operator position;
- c) Add weights as indicated by the vertical arrow in Figure 1 of ANS/SAE J1163 to bring the total mass of the device to within 28 kg to 30 kg (62 lb to 66 lb), and adjust the device to a level position;
- d) The SIP device shall be tipped 15° to the right and to the left without slipping, or until the SIP device movement is restricted. The SIP shall be held stationary for at least 5 seconds. The mower blades, engine ignition, and traction drive shall remain continuously operational.

*Procedure 2*

- a) Place the machine on a surface level within 1°;
- b) Utilize an operator as described in 14.2.1.7.1. The operator shall be seated in the normal operating position with both hands on the steering wheel and shall be in contact with the seat buttock support;
- c) The seat shall be adjusted for the operator such that operation of the steering, traction drive (transmission of speed selection, traction drive disengaging means, or both), PTO drive (mower drive), and service brake can be accomplished through their full operating range;
- d) The operator shall lean to the right and to the left a minimum of 15° from vertical or until further movement is restricted. The operator shall attempt to keep the spinal column straight. The operator shall hold the maximum left- and right-hand lean positions for at least 5 seconds. The mower blades, engine ignition, and traction drive shall remain continuously operational.

14.2.1.8 A means shall be provided that prevents reverse drive operation at a ground speed greater than 0.3 m/s (1 ft/s) with powered blade(s). An override capability may be provided to permit reverse drive with powered blades temporarily. If an override capability is provided, it shall automatically reset when one or more of the following actions occurs: (1) the blade(s) is (are) re-engaged or (2) the engine is restarted or (3) the directional control is moved from reverse. Ride-on machines with zero turn radius capability and machines with front mount mowers are excluded from the requirement.

14.2.1.9 A means may be provided to allow stationary operation of the PTO with the operator not in the operator's position. Such means shall automatically return to the operational mode described in 14.2.1.5 when the operator resumes mobile operation.