



Standard Specification for Paintball Marker Barrel Blocking Devices¹

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INTRODUCTION

This standard is intended to outline basic performance requirements for barrel blocking devices, commonly known as “barrel plugs.” A barrel blocking device is a critical piece of safety equipment used in the sport of paintball.

Paintball is a sport that, like all sports, has intrinsic hazards. These hazards include being hit by paintballs. Protective equipment cannot eliminate all injuries but will substantially reduce their severity and frequency. A barrel blocking device is an additional safety device that, when meeting this standard and properly used, can substantially reduce the severity and frequency of injuries. Paintball marker barrels are not all the same inside diameter, thus necessitating performance specifications for barrel blocking devices that match the barrel blocking device to a barrel diameter. This specification is written within the current state-of-the-art of paintball marker barrel and paintball barrel blocking device technology. The intent is to revise this specification whenever substantive information becomes available which justifies revising existing requirements or adding new requirements.

1. Scope

1.1 This specification covers paintball barrel blocking devices that may be inserted or otherwise function to prevent a paintball from leaving the muzzle or the confines of the barrel blocking device intact.

1.2 The values stated in SI units are to be regarded as the standard. The inch-pound units given in parentheses are provided for information only.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

¹ This specification is under the jurisdiction of ASTM Committee F08 on Sports Equipment and Facilities and is the direct responsibility of Subcommittee F08.24 on Paintball and Equipment.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

F1979 Specification for Paintballs Used in the Sport of Paintball

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 Paintball Marker Terms:

3.1.1.1 *barrel*—that portion of a paintball marker through which the paintball is discharged.

3.1.1.2 *barrel blocking device*—a muzzle blocking, safety device that prevents an intact paintball from being discharged from the muzzle or leaving the confines of the barrel blocking device. The device is often referred to as a barrel plug.

3.1.1.3 *muzzle*—the end of the barrel at which the ball exits the barrel.

3.1.1.4 *muzzle diameter*—the inside barrel diameter as measured at the muzzle.

3.1.1.5 *paintball*—a spherical ball, commonly with a diameter of 17.3 mm (0.68 in.), comprised of a shell and a fill, designed to be expelled from a paintball marker and conforms to Specification F1979.

3.1.1.6 *paintball marker*—a device specifically designed to discharge paintballs. The device is sometimes referred to as a paintball gun.

3.1.1.7 *standard ambient temperature (SAT)*—used to describe a substance at a temperature of $25 \pm 2^\circ\text{C}$ ($77 \pm 4^\circ\text{F}$).