



Standard Practice for Selection of Release Torque Values for Alpine Ski Bindings¹

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INTRODUCTION

Adhering to these guidelines may help to reduce the risk of injuries resulting from improper release torque selection. However, skiing involves inherent risks. Injury can result from simply falling down, impact with another object, or from many other actions. Many injuries are unrelated to binding release/retention characteristics. Furthermore, even a properly adjusted binding cannot release under all injury-producing loads or retain at all times when retention is desired. Therefore, it is to be clearly understood that compliance with these guidelines in no way guarantees that injury can be prevented.

1. Scope

1.1 This practice provides procedures for the selection of release torque values for Alpine ski/boot/bindings systems. These procedures may be used by ski binding manufacturers in their instructions for installation and use and by ski shops for the adjustment of already mounted ski bindings.

1.2 This practice is applicable to releasable Alpine ski/boot/binding systems.

1.3 Release torque values selected using this practice may not be appropriate for circumstances in which:

1.3.1 The skier carries an object that significantly increases the skier's effective body weight,

1.3.2 The skier grasps or in some manner controls an object such as a sled, or

1.3.3 The skier encounters exceptional snow or terrain conditions not commonly found on developed ski slopes.

1.4 This practice may be inappropriate for nonmechanical bindings or bindings used with boots that reach more than half way up the lower leg.

1.5 Release torque values outside the recommendations of this practice may increase the risk of injury to the skier. However, skiers who are informed of this potential risk may request such settings and have them provided, subject to any guidelines and limitations specified by the binding manufacturer.

1.6 These values refer to recommended release torque for initial adjustment of a ski binding and subsequent readjustment of the binding during routine maintenance or following a suspected malfunction. However, these values are not intended

to apply to the condition of the equipment at any time after it is put into use.

1.6.1 For information concerning applicable tolerances to be used for the adjustment and inspection of releasable Alpine ski bindings in retail operations consult Practice F 1063; for rental applications consult Practice F 1064 .

1.7 *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 limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

F 504 Test Method for Measuring the Quasi-Static Release Moments of Alpine Ski Bindings²

F 1061 Specification for Ski Binding Test Devices²

F 1063 Practice for Functional Inspections and Adjustments of Alpine Ski/Boot/Binding Systems²

F 1064 Practice for Sampling and Inspection of Complete Alpine Ski/Boot/Binding Systems in Rental Applications²

2.2 ISO Standard:

8061 Method for the Selection of Release Torque Values³

3. Terminology

3.1 Definitions:

3.1.1 *release/retention settings*—the release torque of the ski/boot/binding system in twist (M_z) and forward lean (M_y) as defined in Test Method F 504.

3.1.2 *skier type*—a classification selected by the skier for the type of skiing to be undertaken.

3.1.2.1 *I*—a designation that provides lower than average

¹ This practice is under the jurisdiction of ASTM Committee F27 on Snow Skiing and is the direct responsibility of Subcommittee F27.10 on Binding Test Procedures.

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² *Annual Book of ASTM Standards*, Vol 15.07.

³ Available from American National Standards Institute, 11 W. 42nd St., 13th Floor, New York, NY 10036.