

Designation: F471 – 76 (Reapproved 2002)

Standard Terminology Relating to Combination Locks¹

This standard is issued under the fixed designation F471; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

All terms are listed alphabetically. When a subsidiary term is defined in conjunction with the definition of a more generic term, an alphabetically listed cross reference is provided.

bolt—the component or part of a combination lock that locks or blocks another mechanism from operating until it is retracted.

burglar-resistant spindle—a tapered, shouldered, or other specially designed and treated spindle intended to resist punching, pulling, and drilling.

combination change key—a key used in resetting a key change combination.

cover—the section of the lock case designed to be removed for access to components within the case.

curb—a component for holding the tumblers in place.

dial—a numerically calibrated part used to align the tumblers and operate the lock.

dial and ring (spy-resistant)—a dial and ring designed to restrict the unauthorized observation of combination dialing.

dial shield—a shroud to shield the dial from unauthorized observation of combination dialing.

drive cam—a cam that actuates the tumblers by a drive pin and is gated to retract or accept a locking mechanism.

drive pin—a protrusion on or through a drive cam or tumbler which drives or turns the next tumbler.

fence—a part of the lever that fits into tumbler gates, permitting the lever to engage the drive cam.

fly—a part that makes contact with the drive pin for rotation of the tumblers.

gate cover—a component to prevent the lever from entering the tumbler gateway while changing combination.

hand of combination, lock installation—a type of lock installation that is determined by the position of the lock bolt viewed from the cover side of the door, that is, vertical up, vertical down, right hand, or left hand.

index, changing—the mark on the dial ring used when changing the combination.

index, L.O.B.C. (locked on by combination)—the mark on the

dial ring used to set the combination so the back cover can be removed.

index, opening—the mark on the dial ring used when dialing the combination to open the lock.

inner spindle assembly—a component in some manipulation-resistant locks that connects the knob with the cam slide.

key locking dial—a dial that can be locked with a key to prevent rotation.

key locking dial ring—a dial ring containing a key lock to lock dial and prevent rotation.

knob—a component of some manipulation-resistant-locks that is rotated on the dial to operate the cam slide.

lever—a part or component that retracts the bolt after alignment of proper combination.

lever screw—attached lever to the bolt.

lever spring—applies directional force to the lever.

locating boss—an integral part of the case used to align the lock in mounting (not used in all locks).

lock case—the housing into which all components parts are installed or attached.

manipulation resistant lock—a combination lock designed so as to resist manipulation.

outside drive—a lock that is gear-driven by a spindle located outside the lock case on either the end, top, or bottom of the lock case.

relocking device—a mechanism separate from the combination lock designed to block the safe bolt work if the lock is punched. It may also incorporate a thermal or shock-releasing device.

relocking trigger—a component of the combination lock designed to block the bolt if the spindle is punched.

removable dial—a dial that is removable from the spindle.

retaining ring—a component that holds the tumbler pack on the tumbler post.

spindle—a component or part that connects the dial and drive

spline key—a part that secures the position of drive cam on a spindle in relation to correct dial calibrations.

table nut—a hexagon nut used to attach the dial ring to the tube.

¹ This terminology is under the jurisdiction of ASTM Committee F12 on Security Systems and Equipment and is the direct responsibility of Subcommittee F12.50 on Locking Devices.

Current edition approved March 10, 2002. Published December 1976. DOI: 10.1520/F0471-76R02.