



**BEST**   
dormakaba Group

D Series  
Service Equipment  
by BEST



BEST: Setting the Standard for Security

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## Combinating Service Equipment

### CD431 Combinating Kit

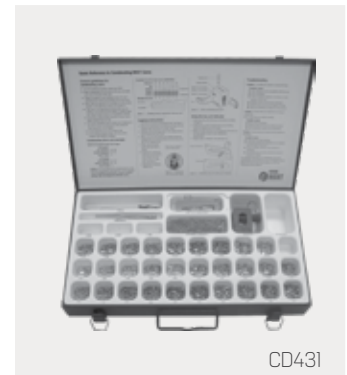
This small desk-drawer size kit contains everything necessary to combine a BEST® core. It includes a complete selection of pin segments, springs, caps, a capping block, two capping pins, an ejector pin, tweezers, two standard keys and a key gauge. When securely closed, the kit may be carried in any position without mixing contents. Kits can be ordered separately or combined (1C core) & (5E cylinder).

#### To order 1C kit only:

CD431-2 (A2 system)  
 CD431-3 (A3 system)  
 CD431-4 (A4 system)

#### To order 1C & 5E combined kit:

CD431-25E (A2 system)  
 CD431-35E (A3 system)  
 CD431-45E (A4 system)



CD431

**Pin segments (included in kit)** Close tolerance segments assist in accurate combinating.

**Core springs (included in kit)** This properly sized spring facilitates consistent action in all BEST® figure 8 cores.

**To order specify:** 22S springs. Core caps (included in kit) Barrels are securely sealed by applied core caps.

**To order specify:** 21C caps

### 5ED250 Combinating Kit (Single Shearline)

Similar to standard CD431 kit for figure 8 cores, the single shearline kit provides a special 5ED261 capping block, springs (5ES1) and caps (5ECP). 5ED253 thread tap. See page 5 for details.

**To order specify:** 5ED250 – 2 (for A2 system), 5ED250 – 3 (for A3 system), 5ED250 – 4 (for A4 system)

### AD433 Key Combinator

The key combinator is used to cut new or additional keys when required. BEST® combinations are cut in accordance with the original masterkeyed code with no reliance on a pattern key. As a result, inaccurate tolerances are not introduced into and compounded within the system as second, third and fourth generation keys are cut. Note: Key combinator is available for standard, premium, or Peaks systems.

**To order specify:** AD433-2 (A2 system); AD433-3 (A3 system); AD433-4 (A4 system); AD433P (Premium); AD436 (Peaks 6-pin); AD437 (Peaks 6-pin).

### AD434 Key Carriages

Additional key carriages for the AD433 key combinator allow you the flexibility to change from one keyway style to another. Changing carriages is simplified by the modular design of the combinator and chassis.

NOTE: The AD502(D) Calibration Gauge must be used when changing carriages to verify the accuracy of key cuts. (Please refer to the key combinator service manual for detailed instructions).

**To order specify:** AD434 Carriage; AD434P Carriage for premium keyways

(Available only to registered BEST® Master Keyed System owners.)



AD433



Spanner Wrench A70558

# Combining Service Equipment

## AD501 Key Cut Indicator (included in kit)

The key cut indicator makes it possible to immediately determine the proper cut of BEST® keys. (For accurate test, use AD502[D] Digital Calibration gauge; see below.) Key cut indicator is heavy steel, 2-13/16" x 1-1/4".

### To order specify:

AD501-2 (for A2 system)

AD501-3 (for A3 system)

AD501-4 (for A4 system)

## AD502[D] Digital Calibration Gauge

The new combinator calibration gauge (Manual or [D] Digital) is designed to be used with the AD433 and AD433P key combinators. It can be used for normal combinator inspection and adjustments, or for calibrating the combinator after changing carriages. Each gauge comes complete with detailed instructions for use.

**To order specify:** AD502 Manual; AD502[D] Digital

## CD517 Core Capping/ Decapping Press (Heavy Duty)

In one smooth operation, this press seals all barrels of either a 6 or 7 pin combined core. The cap seating depth is adjustable. This very rugged tool bolts to the bench and lasts indefinitely.

**To order specify:** CD517 core capping press

## Keyway Block-out Kit

A block-out blade may be inserted into any BEST system to prevent insertion of an operating or control key. Provides quick, efficient lockout. Available for Standard, Premium and Kaba® Peaks® cores. (contact your local BEST office for order information)

## CD540 Best Core Capping Block (included in kit)

The barrels of the core are in alignment with corresponding barrels in the capping block, and meter the "set" of the cap when the hand capping pin is employed. Size 1-1/4" x 1-1/4" x 2".

**To order specify:** CD540 core capping block

## CD547 Hand Capping Pin (included in kit)

With the core held securely in the capping block, the hand capping pin may be used to seat the cap and thus seal the segments into each barrel of the BEST core.

**To order specify:** CD547 hand capping pin

## CD548 Ejector Pin (included in kit)

The ejector pin of this handy tool may be inserted into the ejector pin hole, located at the bottom of each barrel opposite the cap of every BEST core, to eject the pins, spring and cap from the barrel preparatory to recombining.

**To order specify:** CD548 ejector pin

## CD549 Combining Tweezer (included in kit)

Combining tweezers are available to assist in handling the small caps, springs and pins used in combining BEST cores.

**To order specify:** CD549 combining tweezers

(Available only to registered BEST® Master Keyed System owners.)



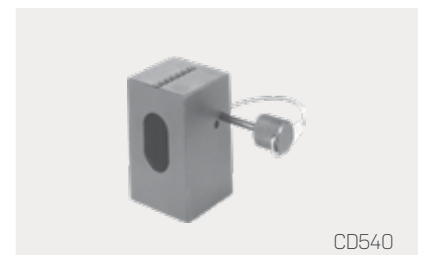
AD501



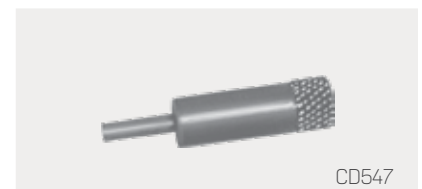
AD502[D] Digital Calibration Gauge



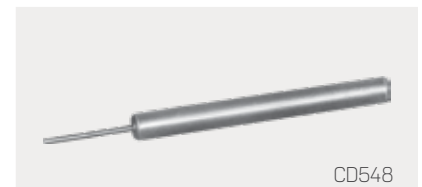
CD517



CD540



CD547



CD548



CD549

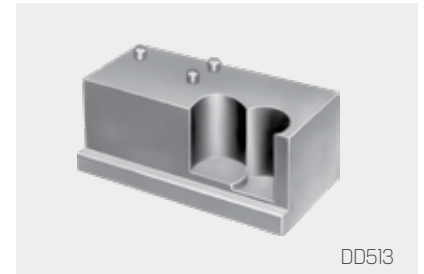
# Combining Service Equipment

## DD513 Core and Key Marking Block

This steel tool securely holds any BEST® core and/or key for accurate stamping with letter and number dies. Size is 1" x 1-1/4" x 2-1/4".

NOTE: Marking the face of Peaks® cores can damage the face, resulting in faulty operation.

**To order specify:** DD513 marking block



## DD514 Core and Key Marking Plate

This plate can hold 5 cores for end-marking, 5 cores for side-marking and 10 keys for bow-marking at one time. It speeds the marking process and helps avoid error in sequential numbering and lettering. A heavy casting 8-1/4" x 6" x 1".

NOTE: Marking the face of Peaks® cores can damage the face, resulting in faulty operation.

**To order specify:** DD514 marking plate; CD504B stamping plate face only (87 cores); CD504C stamping plate side only (50 cores); DD514A magnetic strip



## CD535 Graphite Gun

Flaked graphite provides penetrating lubrication to all working lock parts and remains dry throughout lock life. Degrease and clean previously lubricated locksets before applying graphite.

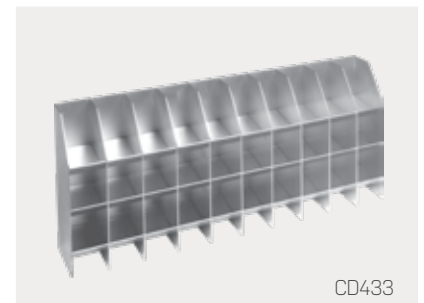
**To order specify:** CD535 Graphite; CD535A One-pound (refill) graphite



## CD433 Combining Parts Bin

These convenient bin racks are available for all size BEST systems. All bin racks are free standing and made for use on any desk or table top. Bins are designed for quick, easy access to pin segments and parts; yet, lessen the possibility of accidental intermixing of pin segments when segment is dropped. Extra bins may be used for storage of pins and caps.

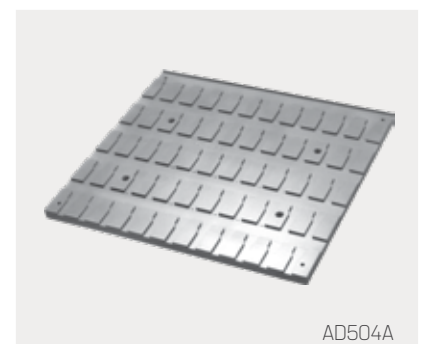
**To order specify:** CD433



## AD504A Key Marking Plate

This popular key marking plate makes bow marking large amounts of keys even easier by allowing 55 keys to be placed at one time. Both standard and patented keys can be used with this plate. This size is 13" x 12" x 1/2".

**To order specify:** AD504A



# Combining Service Equipment

## DD502 Letter and DD503 Number Dies

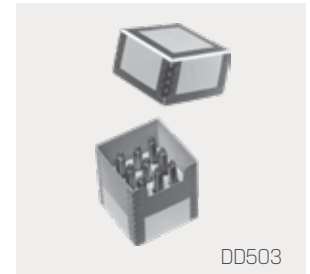
Durable high carbon steel number and letter dies for marking BEST® cores and keys are available in 1/16" or 3/32" letter heights.

**To order specify:** DD502 letter dies or DD503 number dies and add the height of letter required.

**Example:** DD502 letter dies x 3/32".



DD502



DD503

## 5ED261 Slide Capping Block

The capping process for single shearline 5E cylinders requires the following:

### Slide Caps (5E): For 5E Cylinder:

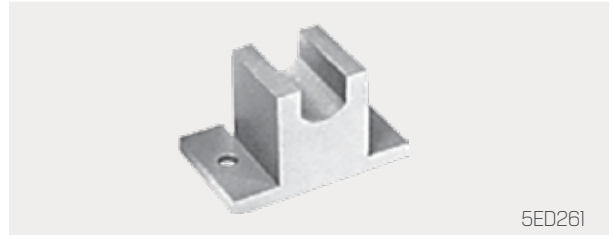
5ECP6 – 6 Pin 5ED261 Capping Block

5ECP7 – 7 Pin 5ED262 Cap Depressor

## 5ED253 Thread Tap

Matches standard 24 thread on 5E series cylinder locks. To order specify:

5ED253 thread tap



5ED261



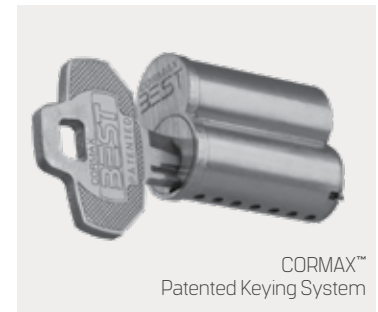
5ED253

# CORMAX™ Patented Keying System

BEST® CORMAX™ is the premier patented keying system offered by BEST. CORMAX will meet your needs for security, key control, and convenience. A simple solution with no compromising allowed. CORMAX is the upgrade path for existing BEST Standard, Premium, and MX8 customers; and it is an essential element of non-residential access control as security administrators strive to eliminate the unauthorized duplication of keys.

## CORMAX offers the following features and benefits:

- A long-term US utility patent that guarantees the extended useful life of the system through 2027.
- A second, independent locking mechanism that utilizes a patented set of built-in side pins to provide higher security.
- Several levels of geographical exclusivity, including national exclusivity, are available via the patented side pin feature.
- CORMAX cores and keys are available exclusively through BEST sales offices. Key blanks are only sold to individuals authorized by the customer to ensure key blanks do not end up in the possession of unauthorized personnel either inside or outside the customer's facility.
- CORMAX cores are certified to meet the security, safety, and reliability requirements of BHMA A156.5 Grade 1.
- Picking and drilling resistance options are available if higher levels of security are desired.
- Complete factory masterkeying service offered, and at no charge with purchase of BEST locksets and PHI exit devices.
- Keyways are organized in families of four keyways each, with double-milled and quad-milled key levels to facilitate the design of masterkey systems in multi-building campuses.
- BEST CORMAX cores are compatible with all existing BEST interchangeable core housings, eliminating the need for new or modified locksets.



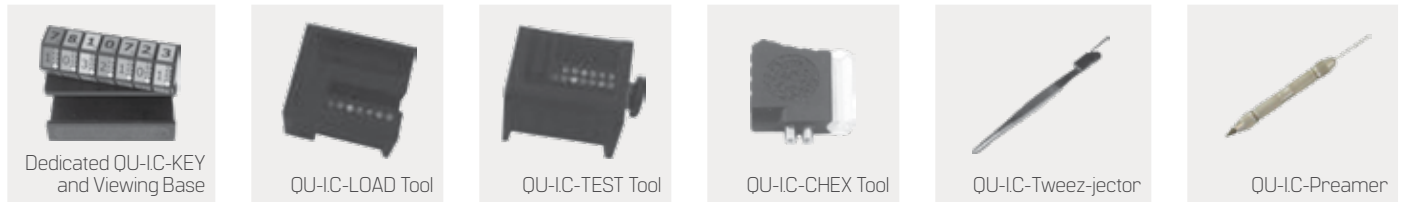
CORMAX™  
Patented Keying System

# QU-I.C-System Combinating Tool Packages

## Dedicated Packages

These QU-I.C-keys are permanently factory built specifically for just one key system. GM and control codes required. Intended for long-term use by institutional locksmiths who continuously work with the same key system(s).

**BQDP – Basic QU-I.C-KEY Dedicated Package** Includes the 7 main system tools



**PQDP – Professional QU-I.C-KEY Dedicated Package**

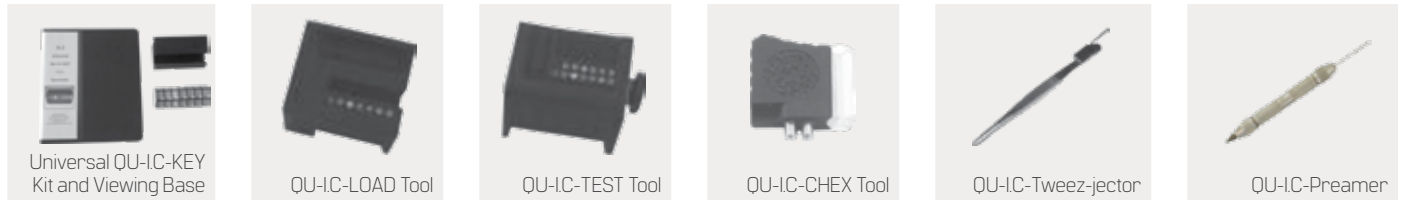


**To order specify:** UL–BQDP or PQDP / A2 or A4 / 6 or 7-pin / GM and CONTROL Codes

## Universal Packages

You get to custom build a QU-I.C-KEY for any A2 key system that you are working with. These kits are better suited for temporary use and re-use – not for long-term / continuous key system use. [A4 System Kits are available].

**BQUP – Basic QU-I.C-KEY Universal Package** Includes the 8 main system tools



**PQUP – Professional QU-I.C-KEY Universal Package**



**To order specify:** UL–BQUP or PQUP / A2 or A4 / 6 or 7-pin

[Available only to registered BEST® Master Keyed System owners.]



# QU-I.C-System Combining Tool Descriptions

## Dedicated QU-I.C-KEY and Viewing Base (QKD / A2 or A4 / 6 or 7-pin / GM and CTL)

This unique tool is permanently built to provide every pin segment calculation for your specific master key system (GM and Control). Every calculation is clearly displayed and incorporates an innovative color-coded system. No math skills are required; no pen and paper are necessary; no slide charts; no computer programs; and no power needed (except for a twist of your wrist). Available in A2 or A4, 6 or 7-pin.

## Universal QU-I.C-KEY Kit and Viewing Base (QKU / A2 or A4)

This kit allows you to custom build a QU-I.C-KEY for any A2 system that you are working on (kits also available for A4 systems). It will provide every pin segment calculation for the system you select. Every calculation is clearly displayed and incorporates an innovative color-coded system. No math skills are required; no pen and paper are necessary; no slide charts; no computer programs; and no power needed (except for a twist of your wrist). The special system strips in this kit are intended to be stored after use and re-used repeatedly.

## QU-I.C-LOAD Tool\* (QLT / 6 or 7-pin)

This tool holds the core during combining and provides color-coded, visual chamber identifiers that match the QU-I.C-KEY pin segment calculator. This provides constant orientation, greatly reduces errors and speeds production.

## QU-I.C-TEST Tool\* (QTT)

This revolutionary tool is used with the QU-I.C-LOAD Tool and allows you to test combined cores before you cap them. It applies temporary spring pressure to all chambers so you can test every key. If a mistake has been made, you can correct the error while it is easy to do, without having to punch out and waste any pins, caps or springs. If all the keys work properly, you can then permanently cap the core with complete confidence.

NOTE: This tool must be used with the QU-I.C-LOAD Tool or QU-I.C-TEST Adapter!

## QU-I.C-CHEX Tool\* (QCT)

This tool allows you to eject the pins into the clear viewing tube to visually inspect the pin segments of any chamber for accuracy without worrying about "balancing" the pin stack. It is easy to safely return the pin stack to the core. Also useful for transporting pin stacks.

## QU-I.C-Tweez-jector (QTJ)

2-in-1 tool that combines a full size, custom tip tweezer with an ejector pin that can tamp down or eject pin segments. A real time saver - no need for a separate ejector pin.

## QU-I.C-Preamer (QPT)

This tool allows you to pre-ream the top of core chambers. This removes any burrs and creates a slight funnel-like effect so that #4 top pin segments can drop more easily into the core. A protective cap is supplied and the other end of the tool contains an ejector pin.

## QU-I.C-Power Preamer (QPP)

This tool attaches to any hand held power screwdriver and allows you to pre-ream the top of the core chambers faster. This is beneficial when doing large combining projects.

## QU-I.C-TEST Adapter (QTA)

This is an accessory for the QU-I.C-TEST Tool and can be attached and removed as required. It enables testing of cores without having to load them into the QU-I.C-LOAD Tool.

## Core & Key Tray (CKT-12)

Provides 12 positions for cores or keys. It safely holds and transports combined cores until they can be capped. Works with 6 and 7-pin BEST® style or PEAKS® interchangeable cores.

## Core & Key Tray (CKT-80)

Provides 80 positions for cores or keys for large combining projects. It safely holds and transports combined cores until they can be capped. Works with 6 and 7-pin BEST style interchangeable cores. Also accommodates PEAKS® I-Cores with extended front.

\* NOT compatible with special .140 spacing cores

To order specify: UL-part number (shown above) / other system information if required



Dedicated QU-I.C-KEY and Viewing Base



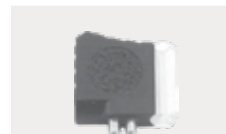
Universal QU-I.C-KEY Kit and Viewing Base



QU-I.C-LOAD Tool



QU-I.C-TEST Tool



QU-I.C-CHEX Tool



QU-I.C-Tweez-jector



QU-I.C-Preamer



QU-I.C-Power Preamer



QU-I.C-TEST Adapter



CKT-12 Core & Key Tray



CKT-80 Core & Key Tray

# Cylindrical/Tubular

## 83KA2A Mortise-to-Cylindrical Lock Adaptor Kits

Mortise lock mounting may be converted to BEST® 6K and 8K cylindrical lock through use of this kit.

### Specifications

**Materials** – Stainless steel

**Finish** – 630 only

**Escutcheon** – 3-1/2" x 8-1/2" x .050 thickness

**Strike** – 1-1/4" x 8" with 6-3/4" lip, 1-1/4" to center

**Face plate:** 83KF1– 8" x 1-1/8" wide

**Backset** – 2-3/4" (Fed spec. 161)

**Door thickness** – Door thickness is increased 7/64" for mounting either 6K or 8K series locksets.

**To order an adaptor kit specify:** 83KA2A adaptor kit

## One-Piece Universal

Mortise/Cylindrical-to-Cylindrical Adaptor Kits

Doors previously mounted with another manufacturer's lockset may be quickly adapted to a BEST® cylindrical 6K and 8K lock through use of one of the following kits.

### Specifications

**Materials** – Stainless steel

**Finish** – 630 only

**Face plate recess** – 2-1/4" x 1-1/8"

**Backset** – 2-3/4" x 1-1/8" (Fed. Spec. 161)

**Door thickness** – 1-3/4"

**To order specify:** Kit number and door thickness.

**Example:** 83KA2B x 1-3/4"

## Adaptation Cutoff Fixture

To assist in adapting cylindrical locksets made by other manufacturer's to BEST's knobs and master keyed cores, adaptation cutoff fixtures are available.

## KD303 Through Bolt Drill Jig

Special accessory jig aids in aligning 5/16" holes for through bolt mounting of 9K cylindrical locks. Simply install latch first, then insert jig in 2-1/8" bored hole, align with door edge and drill with 5/16" bit.

**To order specify:** KD303





## Cylindrical/Tubular

### KD304A Boring Jig Kit

The KD304A jig kit is made for boring cut-outs in wooden doors for Fed. Spec. 160 and 161 series cylindrical/tubular locksets, doors 1-3/8" to 2-1/4" thick. The KD304A kit includes the boring jig (to drill wood doors for 2-3/8", 2-3/4", 3-3/4", and 5"), a quick-release adaptor for 3/8" drill chuck, a 2-1/8" bit, and a 1" diameter x 9" bit.

The following kit items can also be purchased separately.

KD309 – 2-1/8" bit

KD318 – 1" dia x 9" bit

KD319 – 3/8", quick release adaptor

**To order complete kits specify:** KD304A Kit

### KD312 and KD315 Face Plate Marking Chisel

#### KD325 Strike Plate Location Pin

The KD315 face plate marking chisel (which locates the mortising for the face plate) and the KD325 strike locating pin (which centers the strike for proper installation) and is used for Fed. Spec. 161 cylindrical lockset, (1-1/8" x 2-1/4"), and BEST® series 82T & 83T tubular locks. The KD312 face plate marking chisel is available for Fed. Spec. 160 (1" x 2-1/4") preparation.

**To order specify:**

KD312– face plate marking chisel 1" (160)

KD315– face plate marking chisel 1-1/8" (161)

KD325– strike plate locating pin



KD304A parts



KD304A with case



KD315 (Fed. Spec. 161)



KD325

## Padlock Service Equipment

### F3 – Frangible Shackle Replacement Available for 11B720

The frangible shackle padlock is designed for fire and safety equipment cabinets, etc., where casual entry is to be prevented. For more information on the 11B frangible shackle please refer to the B Series Padlock catalog section or visit: [www.bestaccess.com](http://www.bestaccess.com).

Broken shackles are easily replaced on-site and may be ordered separately. A complete extra frangible shackle kit (including three extra frangible shackles, three extra shackle springs and a disassembly tool) may be ordered by adding suffix "K" to the catalog number. Frangible shackles are available in bronze material only.

**To order specify:**

**Example:** 11B20FK (kit only)

**To order shackle only:** add suffix FF and omit pin size.

**Example:** 11B20FF (frangible shackle only)

### Concerning Proper Installation

Installation instructions for any BEST® product should be carefully followed for proper operation of the installed unit. If improperly installed, malfunction of the unit may result.



11B20FF



BD654

# Mortise and Rim Cylinder

## ED211 Mortise Cylinder Wrench

The BEST® mortise cylinder wrench and test handle is an essential double-purpose tool. It is used primarily to install or remove BEST mortise cylinders without marring the cylinder surface finish. It is also used to align throw pins, and as a testing tool when installing mortise or tubular units. The single end may be used to test the lock operation.

**To order specify:** ED211 mortise cylinder wrench

## ED212 Mortise Cylinder Cam Assembly Tool

Fast attachment of cams to BEST® mortise cylinders is effected with this important device. It works equally well with adaptation cams, permitting relocking of any masterkeyed mortise lockset through use of BEST replacement cylinders. Approximate length 1-3/4".

**To order specify:** ED212 mortise tool

## ED221 Mortise Cylinder Thread Repair Die

Tool for re-threading 1-5/32" diameter cylinder.

**To order specify:** ED221 thread repair die IE cylinder

## ED222 Cylinder Cam Testing Tool

Engages throw pins and activates cam for testing.

**To order specify:** ED222 cylinder cam testing tool

## 3ED224 Hole Tap for 1-1/2" Mortise Cylinder

Tap tool is used to re-thread housing threads for 3E mortise cylinders.

**To order specify:** 3ED224 hole tap for 1-1/2" mortise cylinder

## ED225 Hole Tap for 1-5/32" Mortise Cylinder

Tap tool used to re-thread housing threads for IE mortise cylinder.

**To order specify:** ED225 hole tap for 1-5/32" mortise cylinder



(Available only to registered BEST® Master Keyed System owners.)



For questions about ordering and to be sure you get the right configuration for your needs, [contact your BEST dormakaba sales representative](#).  
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