

CHOICE™
**MODULAR INTERCHANGEABLE
CORE SYSTEM**

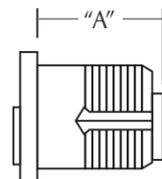


Mortise and rim cylinder housings are a component of Arrow's total interchangeable core offering. These housings operate in either Arrow or competitive manufacturer's products and are compatible with cores manufactured by a wide range of companies. Mortise housings feature "screw on cams," ideal for flexible inventory and simple field service.

MORTISE CYLINDER HOUSINGS:

Body: Brass, 1-5/32" diameter
Finishes: 3, 4, 10, 10B, 26, 26D
Furnished with: Cam (specify) and cylinder collar 16-113A, less core.

CAT NO.	LENGTH "A"	APPLICATION
C16CR-16	1 1/8"	6 pin only
C16CR-27	1 1/4"	*6 or 7 pin
C16CR-16D	1 1/8"	6 pin only, drill resistant
C16CR-27D	1 1/4"	*6 or 7 pin, drill resistant
C16CRT-16	1 1/8"	6 pin only, tapered
C16CRT-27	1 1/8"	*6 or 7 pin, tapered
C16CRT-16D	1 1/8"	6 pin only, tapered, drill resistant
C16CRT-27D	1 1/8"	*6 or 7 pin, tapered, drill resistant
C16CRH-26	1 5/16"	6 pin only, hotel function
C16CRH-26D	1 5/16"	6 pin only, hotel function, drill resistant



Note: With the exception of hotel housing, all cylinder housings utilize screw on cams. Please specify cam required, if no cam is specified, Arrow will supply 001 cam. Cam is field changeable.

*These housings are pre-set at the factory to accept 6 pin cores. Simple change of adapter assembly for 7 pin cores. This is required for Plus/HS cores only.



16CR-27D,001 cam shown

CAM	APPLICATION
001	12, 22, 23, 24, 32(i/s), 33
002	11, 13, 16, 19, 20, 31, 34, 41, 42, 44
003	32(o/s)
004	N Series, Exit Device, Alarms

CAM	APPLICATION
005	17
006	Schlage
AR18	Adams Rite

Ordering example: 16CR-27Dx001-6 or 7 pin housing, 001 cam

RIM CYLINDER HOUSINGS:

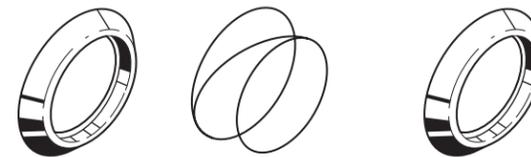
Body: Brass 1-5/32" diameter
Finishes: 3, 4, 10, 10B, 26, 26D
Furnished with: Blackplate, cylinder collar 16RC-113, 2 screws, 1-3/4" door tailpiece #16RCR-44, less core

CAT NO.	APPLICATION
C16RCR-16	6 pin only
C16RCR-27	6 or 7 pin
C16RCR-16D	6 pin only, drill resistant
C16RCR-27D	6 or 7 pin, drill resistant



CYLINDER COLLARS:

I.C. Mortise Cylinder Collar 16-113A
 (Standard for 16CR-16, 16CR-27, 16CRH-26)
I.C. Rim Cylinder Collar 16RC-113
 (Standard for C16RCR-16, C16RCR-27)



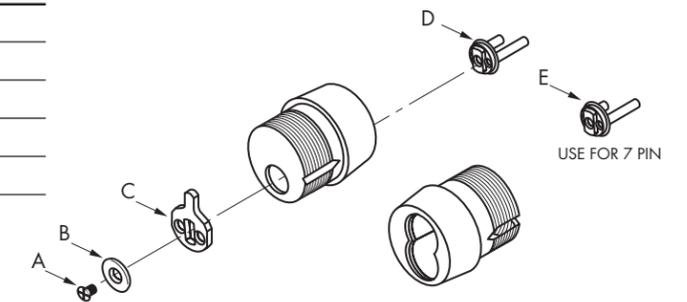
SPACER RINGS:

16CR-123-1 1/8" Thick
16CR-123-2 1/4" Thick
16CR-123-3 3/8" Thick



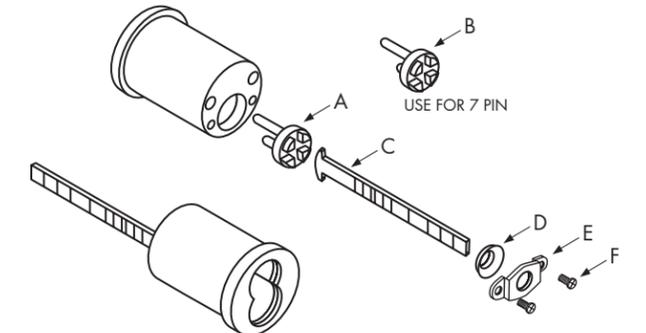
MORTISE HOUSINGS-MISC. PARTS:

Part No.	Description
A) 3-48 x 3/16	Cam Set Crew
B) C16CR-122	Washer
C) Cam	Specify
D) C16CR-121A-1	Adapter Assembly-6 pin
E) C16CR-121A	Adapter Assembly-7 pin



RIM HOUSINGS-MISC. PARTS:

Part No.	Description
A) 16RCR-121A-1	Cam Assembly-6 pin
B) C16RCR-121A	Cam Assembly-7 pin
C) 16RCR-44	Cam Bar (tailpiece)
D) 16RCR-125	Curved Spring Washer
E) 961CR-117	Yoke-Cam Bar
F) 4-40x1/4	Self-Tapping Screw



Incorporating the main elements of the interchangeable core concept, Cho/Ce™ offers a variety of features and functions, making it the ideal core for a wide range of users. Patented technology, precision manufacturing and unmatched flexibility are value added components never before seen in interchangeable core. Cho/Ce™ Base is our standard level of product. Available in Arrow and competitive keyways, Base is capable of all levels of keying for new or existing key systems. With an option to have drill resistant pins in the front, plug and shell, Cho/Ce™ Base offers convenience as well as a higher level of security.

CHO/CE BASE:

CAT. NO.	Description
C6S	6 pin core, combined with two cut change keys
C7S	7 pin core, combined with two cut change keys
C6D	6 pin core, drill resistant, combined with two cut change keys
C7D	7 pin core, drill resistant, combined with two cut change keys

Note:

- Arrow IC or ID keyway standard
- For uncombined cores – suffix “UC” to catalog number (ex: C6S-UCX keyway)
- Available in competitive keyways: AB, BB, CB, DB, EB, FB, GB, HB, JB, KB, LB, MB, QB

CAT NO.	Description
C6Sxred	6 pin construction core
C7Sxred	7 pin construction core
PL725PA	Plastic actuator for construction phase

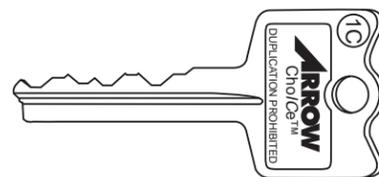
CHO/CE BASE KEYS:

Arrow keyways: 1C, 1D (standard), and restricted keyways (consult factory for availability).

Competitive keyways: A, B, C, D, E, F, G, H, J, K, L, M, Q.

Part Numbers:

CH x Keyway–6 or 7 pin blank.
 CHP x Keyway–6 or 7 pin blank, plain bow.



Keyways:

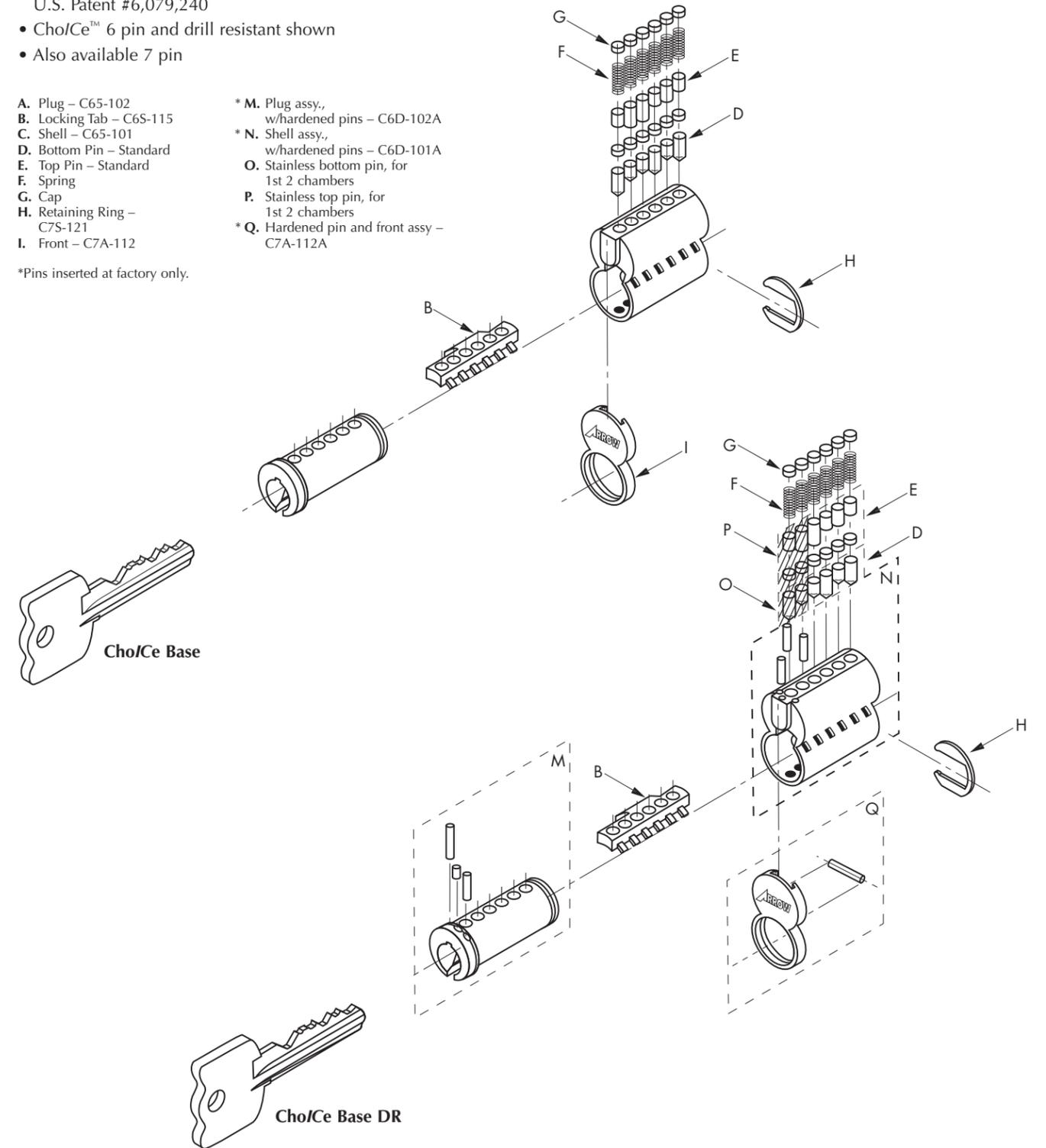


CHO/CE BASE COMPONENTS:

- Modular Interchangeable Core System, U.S. Patent #6,079,240
- Cho/Ce™ 6 pin and drill resistant shown
- Also available 7 pin

- A. Plug – C65-102
- B. Locking Tab – C6S-115
- C. Shell – C65-101
- D. Bottom Pin – Standard
- E. Top Pin – Standard
- F. Spring
- G. Cap
- H. Retaining Ring – C7S-121
- I. Front – C7A-112
- * M. Plug assy., w/hardened pins – C6D-102A
- * N. Shell assy., w/hardened pins – C6D-101A
- O. Stainless bottom pin, for 1st 2 chambers
- P. Stainless top pin, for 1st 2 chambers
- * Q. Hardened pin and front assy – C7A-112A

*Pins inserted at factory only.



Consult service manual for 7 pin cores

Incorporating the Cho/Ce™ technology, the Flex concept combines flexibility and integrity. The system employs a unique core security feature and patented key design. The security feature being a pin assembly which runs through the center of the keyway preventing standard IC keys from entering the core. Only the patented Flex key can operate these cores. Flexcore can be used with standard cores to form a dual level security system. Making it ideal for schools, universities, hospitals, sports facilities, and institutions where key control is an issue. Adding drill resistant pins in the front, plug and shell increases the level of security offered by Cho/Ce™ Flex.

CHO/CE FLEX:

CAT NO.	Description
C6FS	6 pin combined core, with two cut change keys
C7FS	7 pin combined core, with two cut change keys
C6FD	6 pin combined core, drill resistant, with two cut change keys
C7FD	7 pin combined core, drill resistant, with two cut change keys

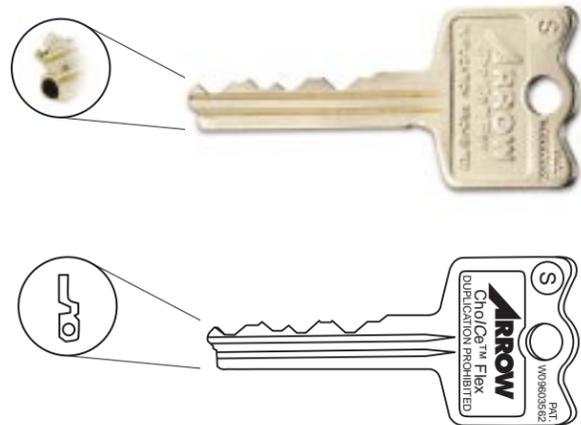
Note: For uncombined cores – suffix “UC” to catalog number (no keys supplied)
 EX: C6FS-UCX Keyway
 Flex keyways: 51, 52, 53, 54, 61, 64, 81, 83, 84, 91
 (All keyways are factory assigned)
 Flex keyways available with Cho/Ce™ Base.

CHO/CE FLEX KEYS:

Arrow Keyways: 51, 52, 53, 54, 61, 64, 81, 83, 84, 91.

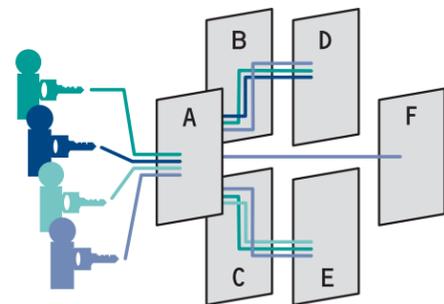
Part Numbers:

CHX x Keyway-6 or 7 pin blank, with hole through blade of key.
 CH x Keyway-6 or 7 pin blank, without hole.



DUALEVEL MASTERKEYING CAPABILITIES:

The unique pin assembly runs through the center of the core keyway preventing standard I.C. core keys from entering the lock cylinder. Only the patented Flexcore key can operate locks with the Flexcore cylinder. Flexcore can be used with standard interchangeable cores to form a dual level security system.



- Maintenance (A, B, C, D, E)
- Supervisor A (A, B, D)
- Supervisor B (A, C, E)
- General Manager (All doors)†

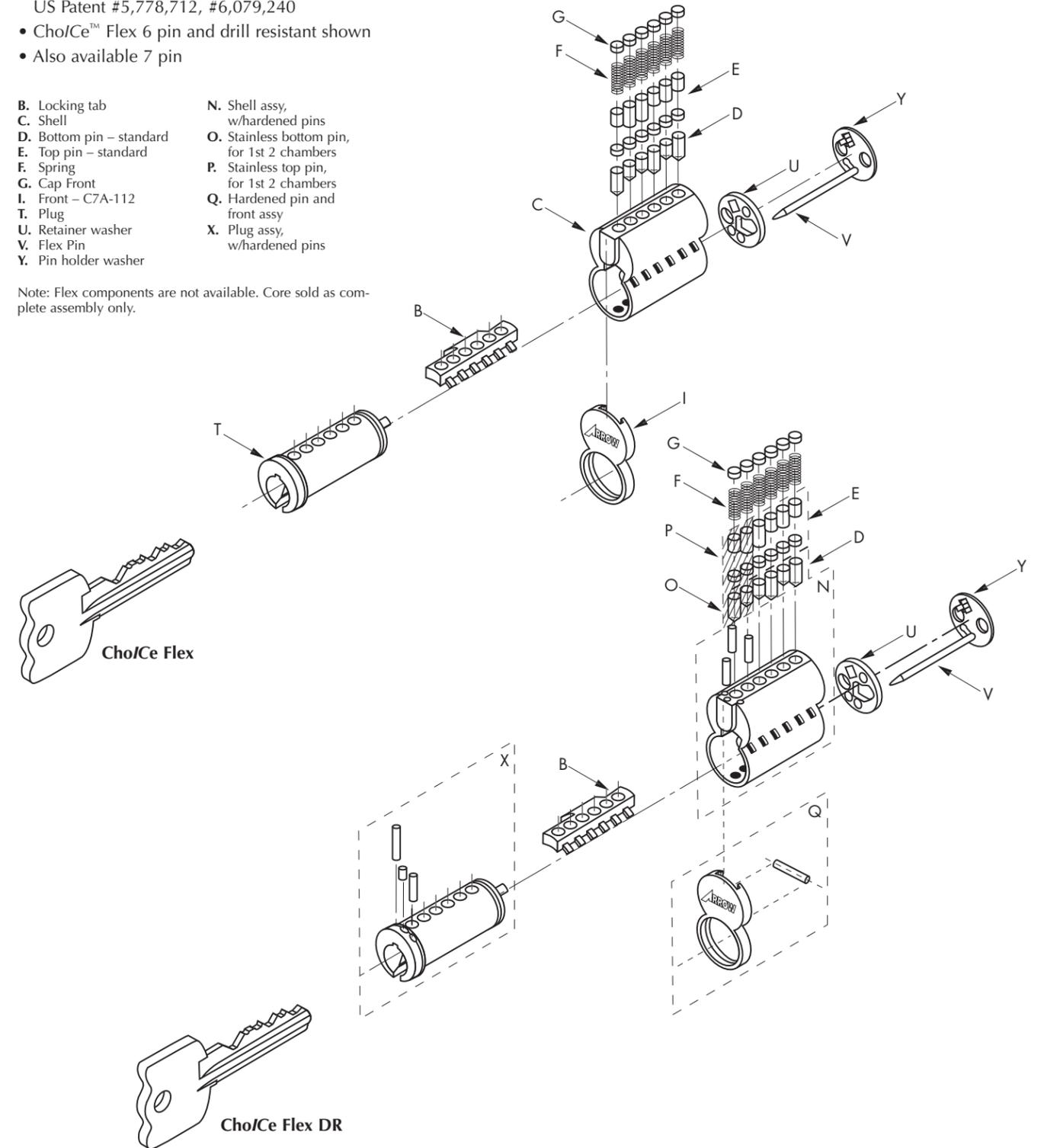
† Door “F” uses Flexcore within masterkey system.

CHO/CE FLEX COMPONENTS:

- Modular Interchangeable Core System, US Patent #5,778,712, #6,079,240
- Cho/Ce™ Flex 6 pin and drill resistant shown
- Also available 7 pin

- B. Locking tab
- C. Shell
- D. Bottom pin – standard
- E. Top pin – standard
- F. Spring
- G. Cap Front
- I. Front – C7A-112
- T. Plug
- U. Retainer washer
- V. Flex Pin
- Y. Pin holder washer
- N. Shell assy, w/hardened pins
- O. Stainless bottom pin, for 1st 2 chambers
- P. Stainless top pin, for 1st 2 chambers
- Q. Hardened pin and front assy
- X. Plug assy, w/hardened pins

Note: Flex components are not available. Core sold as complete assembly only.



Consult service manual for 7 pin cores

Another patented product in the Cho/Ce™ family of cores. Utilizing the Cho/Ce™ design concept, Plus cores contain a mechanism built into the plug and shell that works in conjunction with a special groove machined in the key. The patented Plus key will operate both cores with and without the mechanism, however, a non-Plus key will not operate a Plus core. The addition of drill resistant pins in the front, plug and shell supplements the patented system and offers resistance to physical attack. Plus is perfect for facilities looking to expand on an existing key system, increase the level of protection and control, while at the same time, maintaining the integrity of the records and keyways from an existing phase(s).

CHO/CE PLUS:

CAT NO.	Description
CP6S	6 pin core, combined, with two cut change keys
CP7S	7 pin core, combined, with two cut change keys
CP6D	6 pin core, drill resistant, combined, with two cut change keys
CP7D	7 pin core, drill resistant, combined, with two cut change keys



Note: Arrow IC or ID keyway Standard
 For uncombined cores: suffix "UC" to catalog number (ex: CP6D-UCX keyway)
 Available in Competitive keyways: AB, BB, CB, DB, EB, FB, GB, HB, JB, KB, LB, MB, QB.

CHO/CE PLUS KEYS:

Arrow keyways: 1C, 1D (standard), and restricted keyways—consult factory for availability.
Competitive keyways: A, B, C, D, E, F, G, H, J, K, L, M, Q.

Part Numbers:
 CPS x Keyway—6 or 7 pin, Plus keyblank.



Keyways:

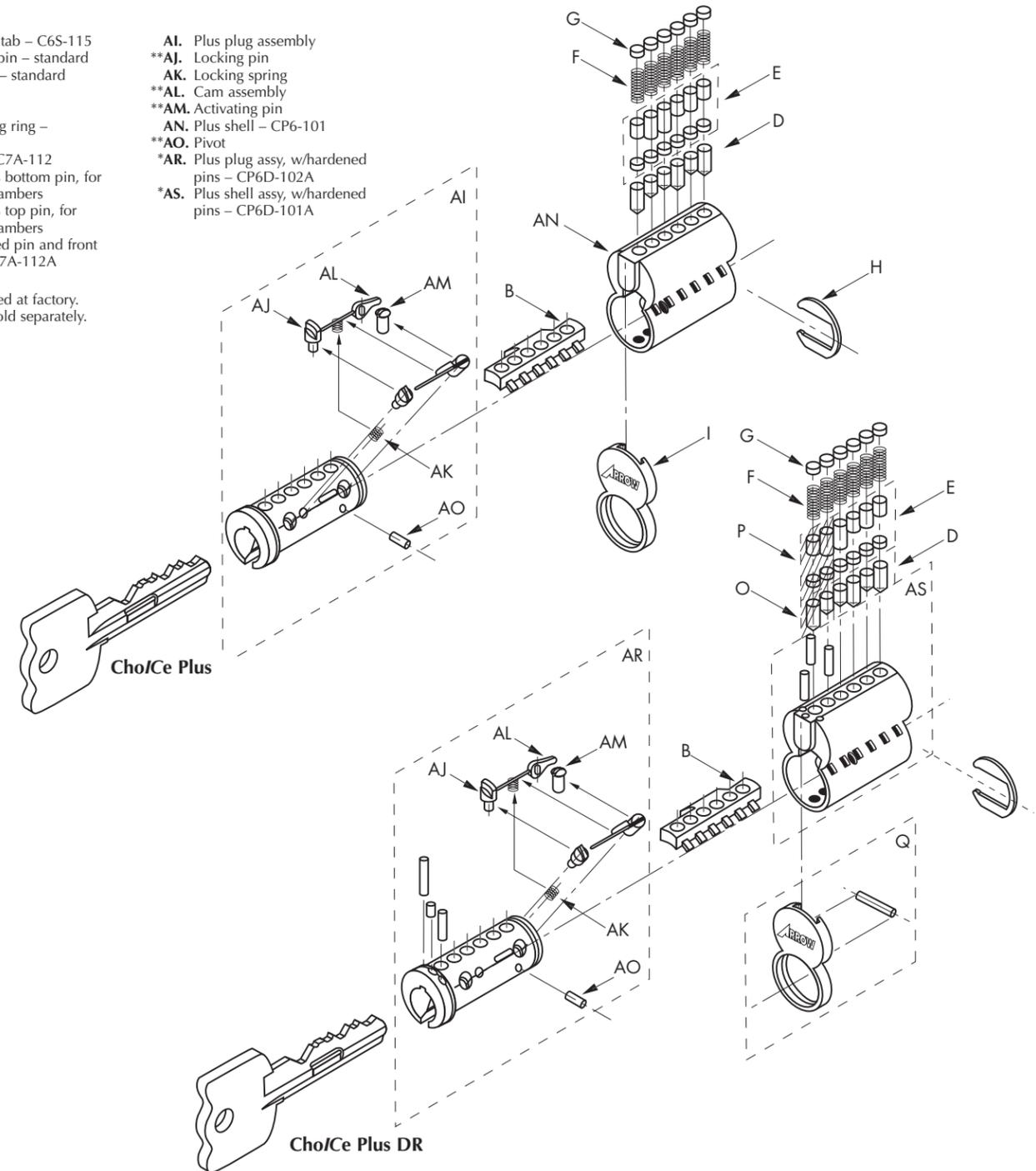


CHO/CE PLUS COMPONENTS:

- Modular Interchangeable Core System, US Patent #6,079,240, and Patent Pending
- Cho/Ce™ Plus 6 pin and drill resistant shown
- Also available 7 pin

- B. Locking tab – C6S-115
- D. Bottom pin – standard
- E. Top pin – standard
- F. Spring
- G. Cap
- H. Retaining ring – C7S-121
- I. Front – C7A-112
- O. Stainless bottom pin, for 1st 2 chambers
- P. Stainless top pin, for 1st 2 chambers
- *Q. Hardened pin and front assy – C7A-112A
- AI. Plus plug assembly
- **AJ. Locking pin
- AK. Locking spring
- **AL. Cam assembly
- **AM. Activating pin
- AN. Plus shell – CP6-101
- **AO. Pivot
- *AR. Plus plug assy, w/hardened pins – CP6D-102A
- *AS. Plus shell assy, w/hardened pins – CP6D-101A

* Pins inserted at factory.
 ** Parts not sold separately.



Consult service manual for 7 pin cores

Offering the highest degree of key control and security, Cho/Ce™ HS and HSD blend design with function. The design process allows for a second locking mechanism to be incorporated, the side bar. When hardened pins are added, the core meets and exceeds the requirements of UL437 for pick and drill resistance.

CHO/CE HS/HSD:

CAT NO.	Description
CH7S	7 pin core, combined, with 2 cut change keys.
CH7D	7 pin core, drill resistant, combined, with 2 cut change keys.

Note: For uncombined cores: Suffix "UC" to catalog number (ex: CH7S-UC) plus assigned sidebar code.

For unassembled cores: Suffix "LS" to catalog number (ex: CH7S-UCxLS)—you will receive an uncombined core, less sidebar. Combined cores are not supplied less sidebar.



CHO/CE HS/HSD KEYS:

Arrow keyways: 40

Part Numbers:
CHHS x Keyway x Sidebar-ID.

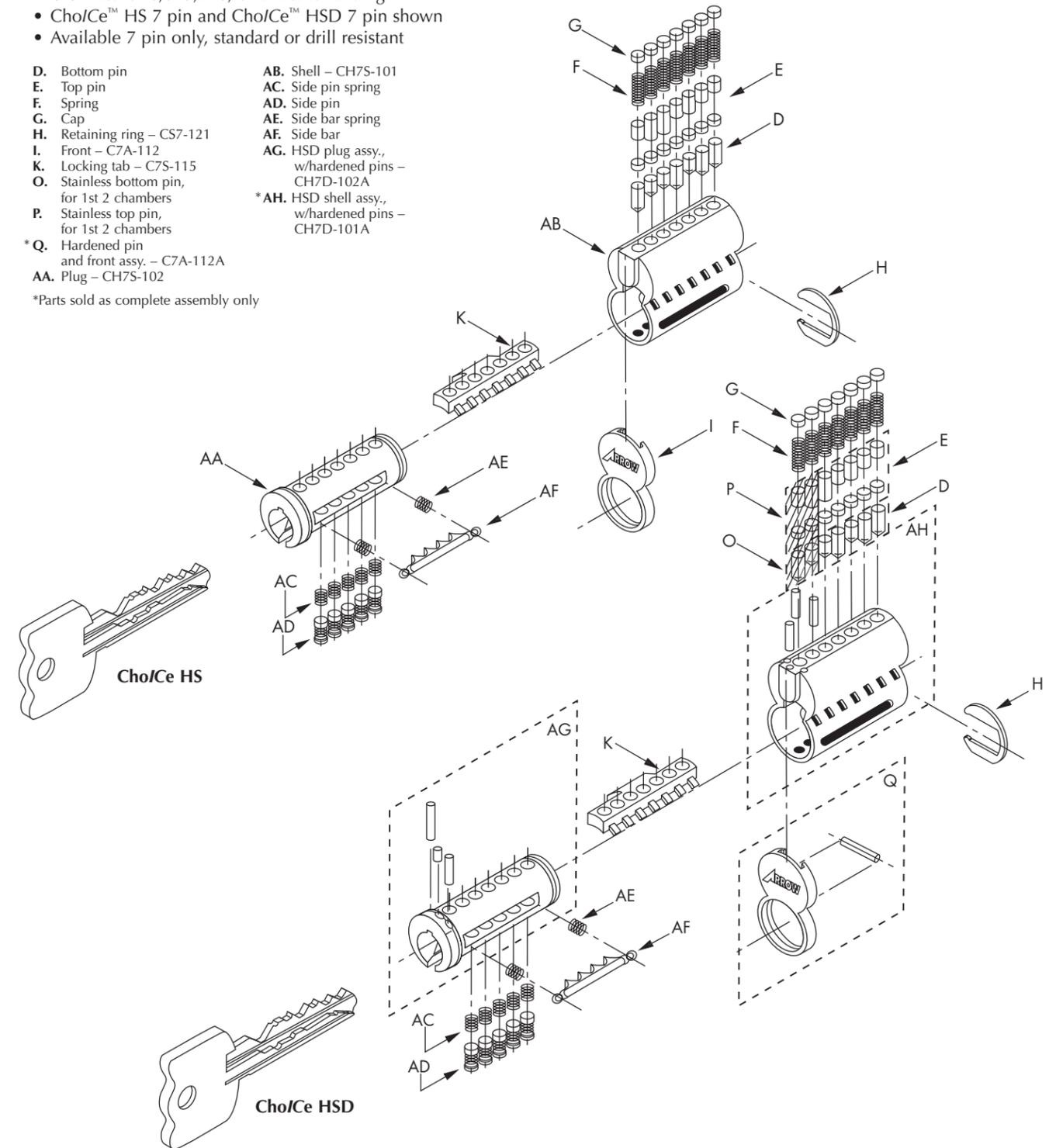


CHO/CE HS/HSD COMPONENTS:

- Modular Interchangeable Core System, U.S. Patent #6,079,240, one Patent Pending
- Cho/Ce™ HS 7 pin and Cho/Ce™ HSD 7 pin shown
- Available 7 pin only, standard or drill resistant

- D. Bottom pin
- E. Top pin
- F. Spring
- G. Cap
- H. Retaining ring – CS7-121
- I. Front – C7A-112
- K. Locking tab – C7S-115
- O. Stainless bottom pin, for 1st 2 chambers
- P. Stainless top pin, for 1st 2 chambers
- *Q. Hardened pin and front assy. – C7A-112A
- AA. Plug – CH7S-102
- AB. Shell – CH7S-101
- AC. Side pin spring
- AD. Side pin
- AE. Side bar spring
- AF. Side bar
- AG. HSD plug assy., w/hardened pins – CH7D-102A
- *AH. HSD shell assy., w/hardened pins – CH7D-101A

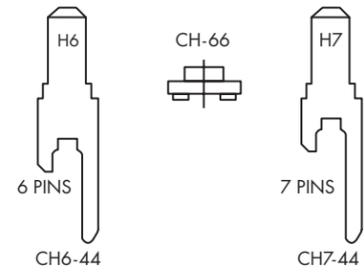
*Parts sold as complete assembly only



Because of the location of the Cho/Ce™ Plus activating mechanism, and the HS sidebar, all tailpieces require one shorter leg. Old style tailpieces will operate other levels of Cho/Ce™.

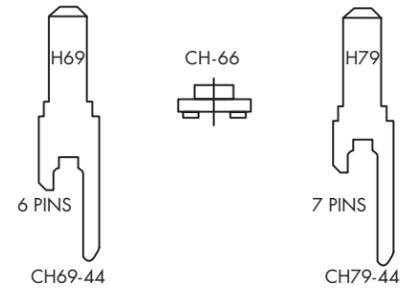
H SERIES KNOB:

For all functions except 15 and 19 functions



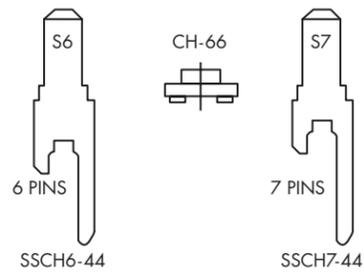
H SERIES KNOB:

For 19 function only



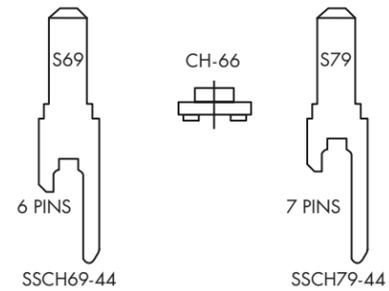
S SERIES KNOB:

For all functions except 15 and 19 functions



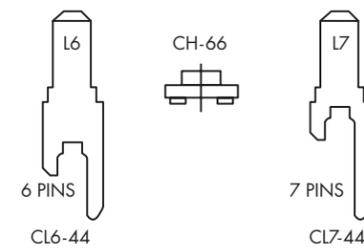
S SERIES KNOB:

For 19 function only



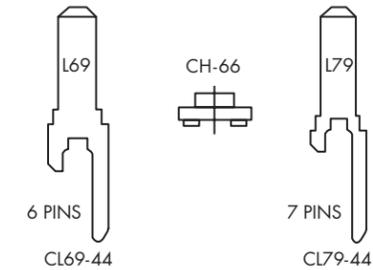
M, W, Q SERIES LEVER HANDLE:

For all functions except 15 and 19 functions

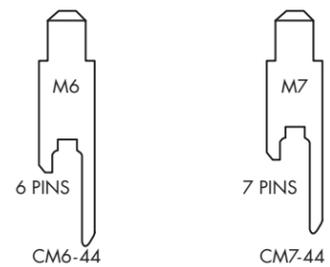


Q SERIES LEVER HANDLE:

For 19 function only, and all OverDrive functions.



M SERIES KNOB:



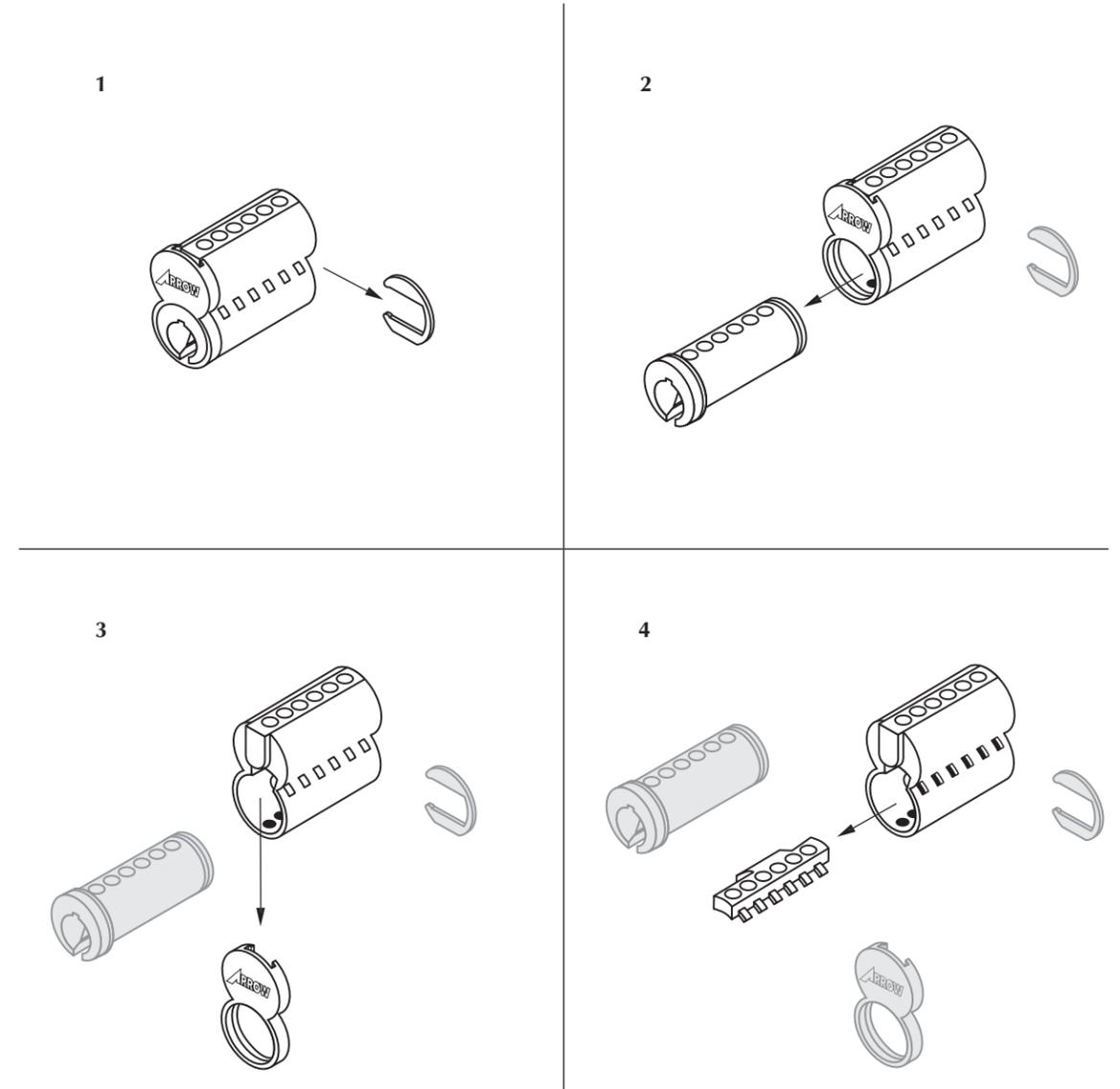
DISASSEMBLE:

1. Remove retaining ring from back of core.
2. Plug will slide out from shell.
3. Slide front plate off (down).
4. Remove locking tab from shell.

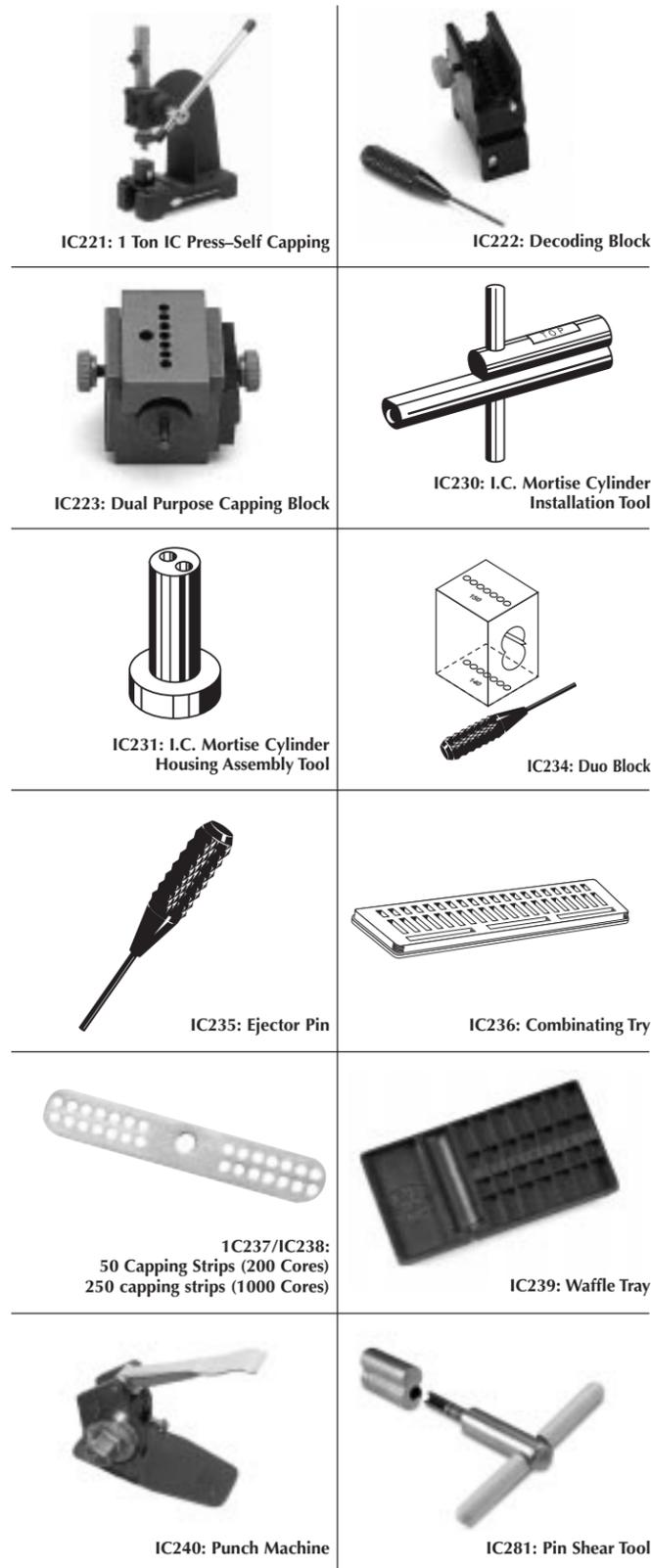
ASSEMBLY:

Follow disassembly directions in reverse.

Tip: Hold shell upside down. From front side of shell, insert locking tab through window of shell, fingers of locking tab will then engage with slots on shell.



Note: When replacing retaining ring, flat should be on bottom, with opening facing toward locking tab.



TOOL:	USES:
Capping Block	This is used to align the core pin chambers for the Hand Capping Pin.
Core Capping Press	Typically used for high volume applications. Will cap up to 7 pin chambers at one time.
Cylinder & Key Stamping Fixture	This is used to stamp keys and cores. Cores can be stamped either on the face or on the side.
Decoding Block	"The Block" offers an efficient method for decoding interchangeable core cylinders to determine the control key code or to find a lost operating key for a core.
Dumping Block	A specialized block used to dump and retain pins and springs from various cores.
Ejector Pin	The Ejector Pin is used to remove unwanted pins from each pin chamber.
Hand Capping Pin	This is used to cap one pin chamber at a time.
I.C. Keying Kit	This kit contains all of the pins and springs needed to combine a core. A different kit is needed for each I.C. system, i.e., (A/2, A/3 or A/4).
Key Combinator	This is used to cut keys by code or additional keys.
Key Gauge	This is used to find the cuts on a key in order to duplicate it.
Mortise Cylinder Installation Tool	This is used as a handle to install mortise cylinders into a mortise lock housing.
Punch Machine	This is used for cutting interchangeable core keys, with a vice change for cutting Cho/Ce™ flex keys.

Note: Most tools are also available from A-1 Manufacturing company.

MISCELLANEOUS SERVICE ITEMS:

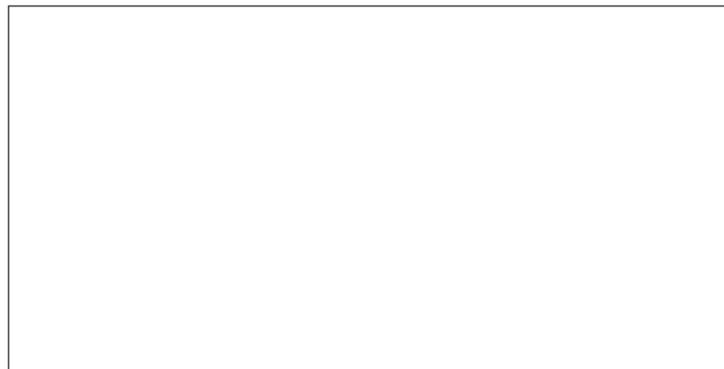
Part No.	Description
RB100-RB109	Bottom Pins
RM102-RM119	Top Pins
100CR-107	Springs
100CR-111	Barrel Caps
*SSRB100-109	Stainless Steel Bottom Pins
*SSRM102-119	Stainless Steel Top Pins

* Suggested for use in first two chambers of drill resistant cores

CHOICE FACTS:

- Cores are combined (pinned) in the same manner as most Best® style cores.
- Pin stack totals for standard A2 system remains 23.
- Best® style key punch machine and pins will operate with Cho/Ce™ keys and cores.
- Cho/Ce™ cores will operate in IC products of other manufacturers (Tailpiece modification will be required for Plus and HS/HSD).
- Keyways for Base and Plus levels are compatible with similar existing keyways.

For more information regarding Arrow's complete architectural product offering, contact your Authorized Distributor or Sales Representative.



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