

Cylinder, Core & Keying





CYLINDER, CORE & KEYING - CONVENTIONAL CYLINDERS

Keying Options

Keyed function locks are supplied standard with Schlage 'C' keyway cylinder, cylinder drilled 6-pin, keyed 5-pin and will be keyed different with two operating keys unless otherwise specified.

- Keyed Alike, 0 Bitted, 1 Bitted
- Master Keyed [must specify quantity of Master keys where applicable, 3961 (5-pin) or 3962 (6-pin)]
- Construction Master Keyed (Schlage C, E & F)
- Keyed to Specific or Existing Number
- Submit master keying form; pages 88-91 or at www.hagerco.com
- Extra Cut Keys (3961 - Cut 5-pin, 3962 - Cut 6-pin)
- Key Markings: 1AA, 2AA etc. (per key)
- Key Markings other than Key Set (per key)
- Cylinder markings
- Bitting Lists are available, ordered separately from Master Keyed order, specify 3998
- All optional keyways below may not be immediately available. Contact customer service for more information on a particular keyway.

Optional Keyways (Conventional Cylinders)



Arrow AR1



Corbin 60



Corbin 77



**Corbin/
Ruswin L4**



Kwikset KW1



Weiser E



Ruswin D1



Sargent LA



Schlage E



Schlage F



**Yale E1R
(PARA)**



Yale GA

Keys



**3955
Key Blank**
5-pin, C keyway



**3961
Cut Key**
5-pin, keyed to specific or existing number



**3956
Key Blank**
6-pin, C keyway



**3962
Cut Key**
6-pin, keyed to specific or existing number





CYLINDER, CORE & KEYING - CONVENTIONAL CYLINDERS

Cylinders



3960
Key-in Lever/Doorlock Cylinder
 Includes two operating keys
 Specify keyway, tailpiece, and how keyed
 Note: Cylinder instructions and ordering guide available on www.hagerco.com



2-639-7008
Tailpiece 9
 Pack of 10 tailpieces for use with 3653L, 3670L and 3680L



2-639-7018
Tailpiece W
 Pack of 10 tailpieces for use with 3473L

Tailpieces



2-639-7000
Tailpiece 1
 Pack of 10 tailpieces for use with 3453L, 3450L, 3480L, 2580L



2-639-7087
Tailpiece Z
 Pack of 10 tailpieces for use with 3570L and 3573L



2-639-7001
Tailpiece 2
 Pack of 10 tailpieces for use with 3470L



2-639-7094
Tailpiece X
 Pack of 10 tailpieces for use with 3495L



2-639-7002
Tailpiece 3
 Pack of 10 tailpieces for use with 3453K, 3480K, 3550L, 3553L, 3553K, 3579L, 3580L, 3580K, 3753L, 2550L, 2553L



2-639-7192
Tailpiece K
 Pack of 10 tailpieces for use with 4700 key-in-lever trim (KE, KN)



2-639-7003
Tailpiece 4
 Pack of 10 tailpieces for use with 3470K, 3570K



2-639-7322
Tailpiece V
 Pack of 10 tailpieces for use with 2570L



2-639-7005
Tailpiece 6
 Pack of 10 tailpieces for use with 3114DB and 3214DB exterior cylinders

Rim Cylinder Housing



3901
Rim Cylinder

- Conventional cylinder supplied drilled 6-pin, keyed 5-pin standard
- Furnished with trim ring, mounting plate, and break off screws
- Long tail piece standard
- Supplied with two operating keys



2-639-7006
Tailpiece 7
 Pack of 10 tailpieces for use with 3114DB and 3214DB interior cylinders



2-639-7007
Tailpiece 8
 Pack of 10 tailpieces for use with 3115DB, 3118DB, 3215DB, 3710DB, 3753DB

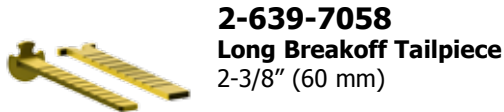


3903
Rim Dummy Cylinder



CYLINDER, CORE & KEYING - CONVENTIONAL CYLINDERS

Rim Cylinder Accessories



2-639-7058
Long Breakoff Tailpiece
2-3/8" (60 mm)



2-300-0118
Extra Long Breakoff Screws
2-3/8" (60 mm)



2-649-0137
Retaining Cup
Can be used with 45PN, 47PN, and 47RN

Mortise Cylinder Housing



3902
Mortise Cylinder

- Conventional cylinder supplied drilled 6-pin, keyed 5-pin standard
- 3975 standard cam attached and 3972 Adams Rite cam shipped loose in the box
- Thread size is 1.150" x 32 UNS
- Cylinder face diameter is 1.360"
- Supplied with two operating keys
- 1-1/8" (29 mm) standard length, 1-1/4" (31 mm), and 1-5/8" (41 mm) for mortise exit devices
- Other lengths may be available with extended lead time
- **Must specify length, cam, keyway, and keying requirements**



3904
Mortise Dummy

- 1-1/8" (29 mm) length
- 1-1/4" (31 mm) length



3905
Mortise ADA Turn Knob

- 1-1/8" (29 mm) length
- 1-1/4" (31 mm) length

Note: Ships with Schlage "L" Cam; specify if different

Mortise Cylinder Cams



3971
Yale Cam
Radius .722" (18 mm)



3972
Adams Rite Cam
Radius .560 (14 mm)



3973
Standard Cloverleaf
Radius .741" (19 mm)



3974
Marks Cam
Radius .755" (19 mm)



3975
Standard Cam
Radius .723" (18 mm)
For use with Hager exit devices and trim



3976
Schlage L Cam
Radius .637" (16 mm)
For use with Hager mortise locks (all functions)



3977
Sargent/Yale Cam
Radius .733" (18.6 mm)



3978
Corbin/Ruswin/Best Cloverleaf
Radius .725" (18.5 mm)





CYLINDER, CORE & KEYING - SMALL FORMAT INTERCHANGEABLE CORE

Keying Options

Cores are furnished keyed different unless otherwise specified. Other keying options include:

- Keyed Alike
- Construction Cores
- Master keyed (Must specify quantity of master keys, control keys, or additional change keys, 3984.)
- Keyed to specific or existing number
- Key Markings: 1AA, 2AA etc. (per key) - VKC
- Key markings other than key set
- Core markings (Visual or concealed)
- Do not duplicate
- Bitting Lists are available, ordered separately from Master Keyed order, specify 3998

* Construction master keyed not available.

SFIC Keyways (Best) - A, B, C, D, E, F, G, H, J, K, L, M, Q

SFIC Cores



3981-C
Combinated Core 6-Pin
 Includes two change keys
 Finishes include US4 or US26D

3981-U
Uncombinated Core 6-Pin
 Includes two key blanks
 Finishes include US4 or US26D

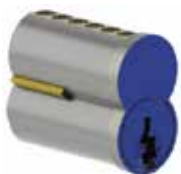


3982-C
Combinated Core 7-Pin
 Includes two change keys
 Finishes include US4 or US26D

3982-U
Uncombinated Core 7-Pin
 Includes two key blanks
 Finishes include US4 or US26D

SFIC Construction Cores

Construction Small Format Interchangeable Cores are available in blue or red and are keyed alike. Will receive full credit, less shipping, of original cost upon return of construction cores with keys.



3981-Blue or 3981-Red
Construction Core
 Combinated, 6-pin
 Includes two operating keys



3982-Blue or 3982-Red
Construction Core
 Combinated, 7-pin
 Includes two operating keys

SFIC Keys



3983
SFIC Key Blank
 Best Keyways used with 6-pin and 7-pin cores



3984
SFIC Cut Key
 Best Keyways used with 6-pin and 7-pin cores

SFIC Construction Core Keys



2-639-7168
3984 Control Key (BA IC 6 Blue)

2-639-7169
3984 Control Key (BA IC 7 Blue)

2-639-7170
3984 Control Key (BA IC 7 Red)

2-639-7113
3984 Control Key (BA IC 6 Red)

Note: Two (2) control keys will be shipped with an order unless otherwise specified.



CYLINDER, CORE & KEYING - SMALL FORMAT INTERCHANGEABLE CORE

SFIC Tailpieces



2-639-7060
Pack of 10 tailpieces for use with 2500/3500 Series SFIC lever (6-pin/7-pin combo)



2-639-7061
Pack of 10 tailpieces for use with 3400/3500 Series SFIC knob (6-pin/7-pin combo)



2-639-7090
Pack of 10 tailpieces for use with 3753 Interconnected Lock SFIC lever (6-pin/7-pin combo)



2-639-7091
Pack of 10 tailpieces for use with 3114/3214 SFIC deadbolt (6-pin/7-pin combo)



2-639-7095
Pack of 10 tailpieces for use with 3115/3118/3215 and 3710/3753 SFIC deadbolt (6-pin/7-pin combo)

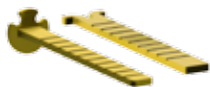
SFIC Rim Cylinder Housing



3901 Rim Cylinder

- Furnished with trim ring, mounting plate, and break off screws
- Long tail piece standard
- Small Format Interchangeable Core housing supplied less core
- Specify 6- or 7-pin

SFIC Rim Cylinder Accessories



2-639-7058 Long Breakoff Tailpiece
2-3/8" (60 mm)



2-300-0118 Extra Long Breakoff Screws
2-3/8" (60 mm)



2-649-0137 Retaining Cup
Can be used with 45PN, 47PN, and 47RN

SFIC Mortise Cylinder Housing



3902 Mortise Cylinder

- 2-639-7082 standard cam; 2-639-7083 Adams Rite cam shipped loose in the box
- Thread size is 1.150" x 32 UNS. Cylinder face diameter is 1.360"
- Small Format Interchangeable Core housing supplied less core
- **Must specify length and cam, 6-pin 1-1/4", 7-pin 1-3/8", 7-pin 1-5/8" (for mortise exit device)**

SFIC Mortise Cylinder Cams



2-639-7082 Standard Yale Cam



2-639-7083 Adams Rite Cam



2-639-7084 Standard Cloverleaf Cam



2-639-7085 Schlage "L" Cam
For use with Hager mortise locks (all functions)



2-639-7086 Sargent/Yale Cam





CYLINDER, CORE & KEYING - LARGE FORMAT INTERCHANGEABLE CORE

Keying Options

Cores are furnished zero bitted - unless otherwise specified. Other keying options include:

- Keyed alike
- Keyed different
- Master keyed (must specify quantity of master keys, control keys or additional change keys)
- Construction master keyed
- Keyed to specific or existing number
- Key Markings: 1AA, 2AA etc. (per key) - VKC
- Key markings other than key set
- Core markings (visual or concealed)
- Bitting Lists are available, ordered separately from master keyed order, specify 3998

LFIC Cores (Available in Schlage C Only)



3919

Zero Bitted Core 6-Pin

Includes two key blanks
Finishes include US4 or US26D

Combinated Core 6-Pin

Includes two change keys
Finishes include US4 or US26D

LFIC Tailpieces



2-639-7645

50, 53 and 80 functions only



2-639-7646

70 function only



2-639-7647

73 and 95 functions only

LFIC Rim Cylinder Housing



3901

Rim Cylinder

- Furnished with trim ring, mounting plate, and break off screws
- Tail piece supplied standard
- Large Format Interchangeable Core housing supplied less core.
- 6-pin only

LFIC Keys



3956

Key Blank

Schlage C Keyway, 6-pin only



3962

Cut Key

Schlage C Keyway, 6-pin only



3963

3919 Control Cut Key



2-639-7649

3919 Control Key Blank

LFIC Rim Cylinder Accessories



2-639-7578

Breakoff Tailpiece Assy

2-3/8" (60 mm)



2-300-0175

Breakoff Screws

2-1/8" (54 mm)



CYLINDER, CORE & KEYING - LARGE FORMAT INTERCHANGEABLE CORE

LFIC Mortise Cylinder Housing



3902

Mortise Cylinder

- 2-639-7082 standard cam;
2-639-7083 Adams Rite Cam shipped loose in the box.
- Thread size is 1.150" x 32 UNS.
Cylinder face diameter is 1.360".
- Large Format Interchangeable Core housing supplied less core
- **Must specify cam, 1-1/2" length**

LFIC Mortise Cylinder Cams



2-639-7570 **Standard Yale Cam**



2-639-7571 **Adams Rite Cam**



2-639-7572 **Schlage "L" Cam** For use with Hager mortise locks (all functions)



2-639-7573 **Corbin Cam**



2-639-7574 **Sargent/Yale Cam**





CYLINDER, CORE & KEYING - CONVENTIONAL CYLINDERS - HAGER KEYWAY - (7-PIN ONLY)

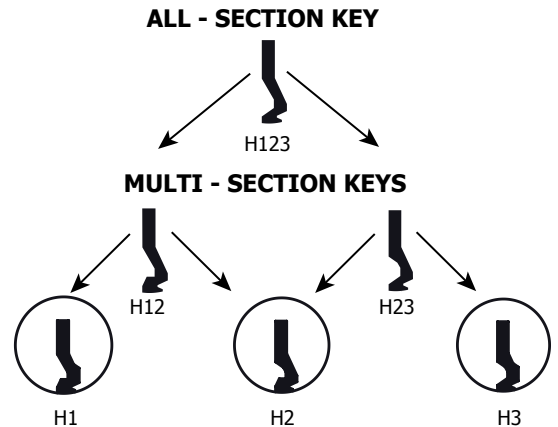
Keying Options

Keyed function locks are supplied keyed different unless otherwise specified.

- Keyed alike, 0 bitted, 1 bitted
- Master keyed (must specify quantity of Master keys where applicable)
- Construction master keyed
- Keyed to specific or existing number
- Submit master keying form (page 86)
- Extra cut keys (3908 - Cut 7-pin)
- Key markings: 1AA, 2AA etc. (per key)
- Key markings other than key set (per key)
- Cylinder markings (visual or concealed)
- Do not duplicate standard
- Bitting lists are available, ordered separately from Master keyed order, specify 3998

Notes: • Keys are cut bow to tip

- Must purchase capping block/press and key punch due to 140 pin spacing



Hager Keyway (Conventional Cylinders)



Hager H1



Hager H2



Hager H3

Cylinders



3906

Key-in Lever/ Deadlock Cylinder

- 140 Pin spacing
- Includes two operating keys
- Specify Hager keyway, tailpiece, and keying requirements

Note: Cylinder instructions and ordering guide available online.

Rim Cylinders



3901

Rim Cylinder

- 140 Pin spacing
- Conventional cylinder supplied 7-pin only
- Furnished with trim ring, mounting plate, and break off screws
- Long tail piece standard
- Supplied with two operating keys

Mortise Cylinders



3902

Mortise Cylinder

- 140 Pin spacing
- Conventional cylinder supplied 7-pin only
- 3975 standard cam attached and 3972 Adams Rite cam shipped loose in the box
- Thread size is 1.150" x 32 UNS
- Cylinder face diameter is 1.360"
- Supplied with two operating keys
- 1-1/8" (29 mm) standard length, 1-1/4" (31 mm) available, 1-5/8" (41 mm) for mortise exit devices
- **Must specify length, cam, keyway, and keying requirements**

Keys



3907

Key Blank

Hager keyways (H1, H2, H3, H12, H23, H123)



3908

Cut Key

- Hager keyways (H1, H2, H3, H12, H23, H123)
- Specify keying required (masterkey, construction masterkey, control key)



CYLINDER, CORE & KEYING - SFIC - HAGER KEYWAY - (7-PIN ONLY)

Keying Options

Cores are furnished keyed different unless otherwise specified. Other keying options include:

- Keyed alike
- Master keyed (must specify quantity of master keys, control keys or additional change keys)
- Keyed to specific or existing number
- Key markings: 1AA, 2AA etc. (per key) - VKC
- Key markings other than key set
- Core markings (visual or concealed)
- Do not duplicate standard
- Bitting lists are available, ordered separately from master keyed order, specify 3998
- * Construction master keyed not available.

Notes: • Keys are cut bow to tip
• Must purchase capping block/press and key punch due to 140 pin spacing

Keyways (Hager) - H1, H2 and H3 SFIC Cores



- 3969**
Combined Core 7-Pin
- Includes two change keys
 - Finishes include US4 or US26D
 - 140 Pin spacing



- 3909**
Uncombined Core 7-Pin
- Includes two key blanks
 - Finishes include US4 or US26D
 - 140 Pin spacing

SFIC Keys



- 3907**
SFIC Key Blank
Hager keyways (H1, H2, H3, H12, H23, H123)



- 3908**
SFIC Cut Key
- Hager keyways (H1, H2, H3, H12, H23, H123)
 - Specify keying required (masterkey, construction masterkey, control key)

SFIC Rim Cylinder Housing



- 3901**
Rim Cylinder
- Furnished with trim ring, mounting plate, and break off screws
 - Long tail piece standard
 - Small Format Interchangeable Core housing supplied less core
 - Specify 7-pin

SFIC Mortise Cylinder Housing



- 3902**
Mortise Cylinder
- 2-639-7082 standard cam; 2-639-7083 shipped loose in the box
 - Thread size is 1.150" x 32 UNS. Cylinder face diameter is 1.360".
 - Small Format Interchangeable Core housing supplied less core
 - **Must specify length and cam, 7-pin 1-3/8"**





CYLINDER, CORE & KEYING - HAGER KEYWAY ACCESSORIES

2-639-7511

Pin Kit

- Includes top pins, SFIC bottom pins, full size bottom pins and springs
- Does not include SFIC caps

2-639-7517

Construction Balls

- Used for lost ball construction key
- Order in multiples of 1,000

2-639-7519

Retaining Pin Spring

Sold in multiples of 100

2-639-7520

Individual SFIC Caps

Sold in multiples of 500

2-639-7526

Retaining Pin

Secures screw cap on KIK cylinder

2-639-7527

Plug Follower (KIK)

2-639-7529

Decombinating Punch

2-639-7530

Capping Punch

2-639-7531

Decombinating Block (Punch Included)

2-639-7532

Manual Capping Block (Punch Included)

140 spacing

2-639-7534

Cap Saver Press

- Recommended for field pinning uncombined SFIC cores
- 140 spacing

2-639-7535

Key Punch

140 spacing

2-639-7536

HPC 1200 Series Code Card

140 spacing



CYLINDER, CORE & KEYING - PINS

Original Manufacturer Nickel Silver Pins (Sold in multiples of 100)		
Part Number	Description	Size
2-639-8188	Top Pin	#2
2-639-8189	Top Pin	#3
2-639-8190	Top Pin	#4
2-639-8191	Top Pin	#5
2-639-8192	Top Pin	#6
2-639-8193	Top Pin	#7
2-639-8194	Top Pin	#8
2-639-8195	Top Pin	#9
2-639-8196	Top Pin	#10
2-639-8197	Top Pin	#11
2-639-8198	Top Pin	#12
2-639-8199	Top Pin	#13
2-639-8200	Top Pin	#14
2-639-8201	Top Pin	#15
2-639-8202	Top Pin	#16
2-639-8203	Top Pin	#17
2-639-8204	Top Pin	#18
2-639-8205	Top Pin	#19
Full Bottom		
2-639-8210	Full Bottom	#0
2-639-8211	Full Bottom	#1
2-639-8212	Full Bottom	#2
2-639-8213	Full Bottom	#3
2-639-8214	Full Bottom	#4
2-639-8215	Full Bottom	#5
2-639-8216	Full Bottom	#6
2-639-8217	Full Bottom	#7
2-639-8218	Full Bottom	#8
2-639-8219	Full Bottom	#9
SFIC Bottom		
2-639-8220	SFIC Bottom	#0
2-639-8221	SFIC Bottom	#1
2-639-8222	SFIC Bottom	#2
2-639-8223	SFIC Bottom	#3
2-639-8224	SFIC Bottom	#4
2-639-8225	SFIC Bottom	#5
2-639-8226	SFIC Bottom	#6
2-639-8227	SFIC Bottom	#7
2-639-8228	SFIC Bottom	#8
2-639-8229	SFIC Bottom	#9



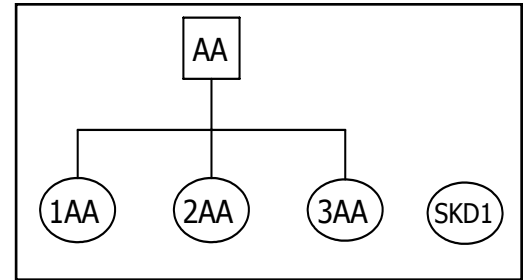


CYLINDER, CORE & KEYING - HOW TO ORDER KEY SYSTEMS

2 LEVEL SYSTEMS

Simple Master Key System

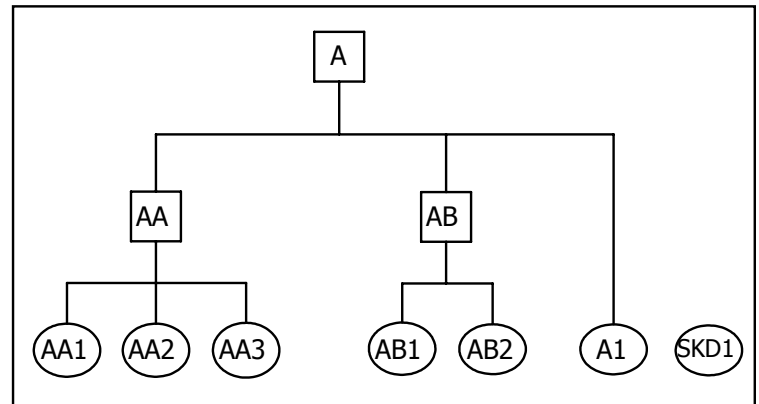
The master key symbol consists to TWO letters, **AA**. The change key numbers are added to the master key letters. The numbers come FIRST for a simple master key system, example: **1AA, 2AA, 3AA, etc.**



3 LEVEL SYSTEMS

Grand Master Key System

The grand master keyset symbol is assigned ONE letter, starting with **A**. The master keyset symbols under this grand are assigned TWO letters, the first of which will be the same as the grand; **AA, AB, AC, etc.** are all masters under the grand **A**. (Caution: **Do not use the letters, I, O, Q or X** because of the possible confusion with the numbers 1 & O. X is reserved for identifying cross keying.) Change key numbers come **AFTER** the letters, example: **AA1, AA2, AA3, etc.**



For master keyset symbols beyond AZ, insert a number between the letters to designate which pass through the alphabet they represent. **A2A** through **A2Z** represent the second pass through the alphabet of masters under the Grand **A**. **A3A** through **A3Z** would be the third pass through the alphabet. Change keys under these masters have the numbers suffixed in the usual way **A2A1, A2A2, A2A3, etc.**

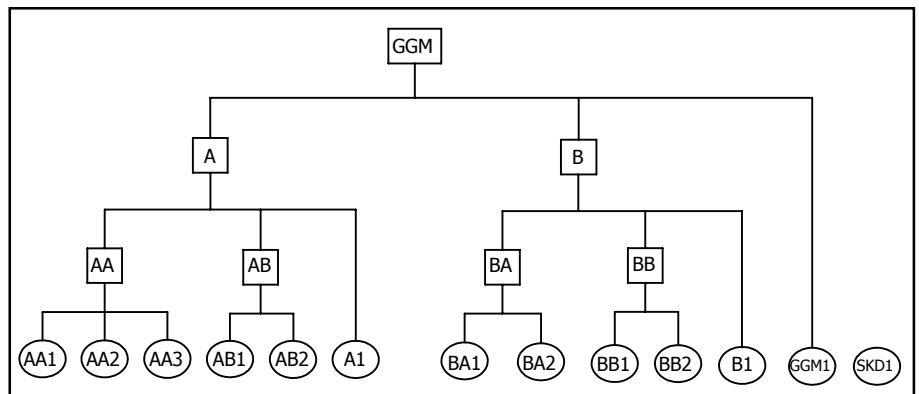
If a cylinder is to be operated by its change key and the GMK only (No master), the change number is added to the GMK symbol. This is illustrated by the keyset symbol **A1** in the schematic shown.

4 LEVEL SYSTEMS

Great Grand Master Key System

The great grand master is assigned the keyset symbol **GGM**. The rest of the symbols are the same as those in a 3 level system.

The grand master keys under the GGM are assigned the keyset symbol of single letters of the alphabet **A, B, C, D, etc.**, starting with **A**. The master keyset symbols under this grand are assigned TWO letters, the first of which will be the same as the grand; **AA, AB, ..., BA, BB, ..., CA, CB, ..., etc.** (Caution: **Do not use the letters, I, O, Q or X** because of the possible confusion with the numbers 1 & O. X is reserved for identifying cross keying.) Change key numbers come **AFTER** the letters, example: **AA1, AA2, AA3, etc.**



For masters beyond AZ, insert a number between the letters to designate which pass through the alphabet they represent. **A2A** through **A2Z** represent the second pass through the alphabet of masters under the Grand **A**. **A3A** through **A3Z** would be the third pass through the alphabet. Change keys under these masters have the numbers suffixed in the usual way **A2A1, A2A2, A2A3, etc.**

If a cylinder is to be operated by its change key and the GGM only (No grandmaster, no master), the change number is added to the GGM keyset symbol. This is illustrated by the keyset symbol **GGM1** in the schematic shown.

CYLINDER, CORE & KEYING - HOW TO ORDER KEY SYSTEMS

SINGLE KEYED DIFFERENT (SKD) (Example: Narcotics Room, Pharmacies)

When requirements are such that no other key operates the cylinder (master, other change keys, etc.) they are referred to as "single keyed different" and given the keyset symbol **SKD**. When more than one SKD is required in a facility, they are numbered **SKD1, SKD2, SKD3, etc.**

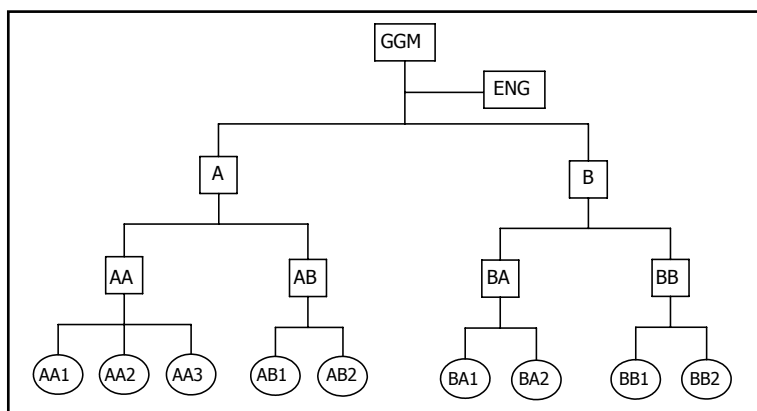
NO MASTER KEY (NMK)

When keying requirements are such that all higher levels of master keys do not operate the cylinder, the suffix **(NMK)** is added to the keyset symbol. For example, **AA1 (NMK)** is operated by the change key **AA1** only. Neither the A grand, nor the **AA** master operate the cylinder. A keyset symbol, **AA (NMK)** indicates the cylinder to be operated by the **AA** master only, the **A** grand does not operate the cylinder.

SELECTIVE MASTER KEYS

It is often useful in large keying systems to issue a high level master key to maintenance personnel which allows access across all master and grand master key boundaries of a keying system.

To designate that a lock be operated by a selective master key, suffix the symbol in parentheses to the standard symbol. Example: **AA1 (ENG)**. This must be added every time the selective key is to operate and left off whenever the selective key is NOT to operate. For instance, you may lay out a system in which key **AA1** is to operate two different offices. Inside one of them is an electrical cabinet which must be accessible to maintenance personnel carrying the **ENG** key. That lock must be specified as **AA1 (ENG)**, while the lock for the other office must be specified as **AA1**.



Selective master key is a convenience feature which decreases the security of the cylinders it operates and limits the expansion and flexibility of the overall keying system. Each selective master key typically eliminates 20-25% of the capacity of the system where it is used, so it should only be specified when absolutely required. It is recommended that no more than one system-wide selective master key be used within the same system.

CROSS KEYING

Like selective master keying, cross keying is a convenience feature and will limit the expansion and flexibility of the overall key system. Whenever two or more different change keys such as **AA1 and AA2** are both required to operate the same cylinder, the cylinder's security is reduced. This is called cross keying. When the cross keying occurs under all the same higher levels (MK, GMK, GGMK), such as **AA1 and AA2**, it is known as controlled cross keying. When you combine keys under different higher levels (MK, GMK, GGMK), such as **AA1 and AB1**, it is known as uncontrolled cross keying, which you NEVER want to do.

Convenience may reduce cylinder security and hinder the overall key system expansion. Cross keying usually imposes limits on the flexibility and expansion of the overall keying system. This is especially true of uncontrolled cross keying. For these reasons, it is strongly recommended to allow personnel to carry more than one key. Cross keying should be discouraged whenever possible. However, when cross keying is required, it is specified as follows, and should be summarized at the beginning of each order. It cannot normally be added later. Each cross keyed set should also be limited to keys which are all under the same higher level master keys. Prefix the keyset symbol with the letter **X** (example: **XAA3**) All keys which are to operate the cylinder are to be listed following the keyset symbol with the phrase "to be operated by" ("TBOB", "OB", "operated by" are also common phrases/abbreviations used. Example: **XAA3**, operated by **AA1, AA2, AA**, and **A**. Note that **X** is a cylinder designation only. The change keyset would be **AA3**.

NOTE: HAGER WILL NOT DO UNCONTROLLED CROSS KEYING DUE TO THE REDUCED SECURITY IT CAUSES.





CYLINDER, CORE & KEYING - HOW TO ORDER KEY SYSTEMS

CONSTRUCTION MASTER KEYING

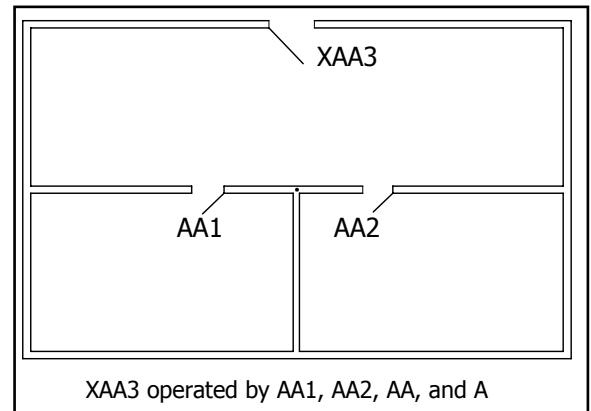
Hager uses the lost ball method for construction keying for conventional cylinders. If you have ordered Small Format Interchangeable Core (SFIC), you will be able to order temporary cores (Blue & Red are stock). Permanent cores will be shipped with permanent keys.

Recommendation:

Use as many keyed alike groups to conserve bitting combinations. Study blueprints and/or master plans for campuses to identify areas where more than one door leads into the same space, and where several different areas are used by the same personnel. These areas should be keyed alike (use the same keyset symbol). This conserves key bitting combinations for future use as well as reduces the need to issue master keys. Remember, key systems are much like a rubber band, it only stretches so far. You can stretch it horizontally to create more master keys, or vertically to create more changes under each master, but there is a finite number of combinations available.

Case #1 (Cross Keying)

Cylinder requires its own change key. The illustration depicts part of a small medical building where two doctors share a common receptionist. The receptionist gets the **AA3** change key. Each doctor carries a key which operates only one office, but also operates the entrance from the corridor, by cross keying that cylinder to include the following keys to operate it. **XAA3, TBOB** (To Be Operated By) **AA1, AA2, AA and A**.



Case #2

The hall door cylinder does not require its own change key. This illustration depicts a section of a floor in a dormitory. Each student's bedroom change key operates the hall door cylinder. There is no need to construct a change key which operates only the hall door.

In this case, place an **X** at both the beginning and the end of the keyset symbol and a number between them. Example: **X1X, X2X, etc.** Again, always include the "TBOB" (to be operated by) phrase with a complete listing of the keyset symbols to operate the cylinder.

