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WHEN GOOD DOORS GO BAD

by Tim O'Leary

For a locksmith, it seems to me that doors are the object of their affection. The locking hardware and accessories are their affection, and the doors are where they install them.

Although there are individuals who specialize in locks who do not deal with door repair issues, I learned early on that whatever I'm planning to put on doors, whether it was a multiple door access control system or a standalone keypad, the success of my efforts have a lot to do with the working condition of the door on which I was installing the hardware, locks and electronics.

It is important to be prepared for dealing with an ailing door, because clients tend to favor full service firms, rather than having to find, contact then coordinate several vendors. Even if you use a subcontractor, you are the go-to-guy for your customer, and your likelihood of retaining the client and having successful projects increases substantially the more control you have over how the project is managed.

One locksmith I had an association with was a busy shop with split residential and commercial clients. Part of his work involved installing mortise locks on luxury homes, so he had a designated "Doorman" who was used to dealing with the mortise machine and had the physical strength to remove a door from its hinges and then reinstall it. The geographic area where the shop was located was densely populated and had a good mix of residential, commercial, industrial and commercial structures. Additionally this locksmith did not engage in bidding new installations; he was very busy and content with his traditional locksmithing activities. In a pinch the doorman could tackle more involved commercial door work, or a door specialist would be called in. This is not uncommon, since it is hard to be good everything.

A frequent service issue would be where the glass on an opening was broken. Sometimes the whole storefront would have been taken out by a stray vehicle. Glaziers and storefront mechanics would be called in when the going got rough. For less severe situations, every road tech was prepared to install and replace door closers and other routine items.

Another shop had several "divisions." They had a retail lockshop, a sign division, a door division, a window gate division, and an electronic security division. I managed the electronic security division where we serviced retail banks and sold access controls, alarms and video surveillance systems. Since there was a dedicated door division, the owner's stance on door repair was very different. Designated door crews were available for service and installations.

Along the way I became familiar with doors, and was able to size up a situation quickly and develop solutions for the client that worked for both my shop and the client.

These days, the ability to inspect and repair doors is a more valuable skill than ever with the yearly inspection of Fire Doors becoming a requirement in more and more jurisdictions.

Beyond traditional locksmithing, the locksmith's realm has expanded to "keep up" as competition ramps up, markets shift and vanish, and other trades continue to encroach on our turf. It is imperative that the locksmith engage in ongoing in-service training and self-study of new products and the latest tools and technologies.

Hager Door Components

"One of the biggest problems seen with exterior commercial doors deteriorating is failing to incorporate the proper hardware during the specification process or when supplying the doors. One of the largest factors of improper hardware utilization is driven by cost – appropriate hardware usually brings up the total cost of the door, which can act as a deterrent for the proper products specified being supplied," according to Hager.

Products typically missed on exterior applications are overhead door holders and stops. These are recommended where any other type of door stop cannot be utilized due to floor or wall conditions. Even when doors are furnished with door closers, it is recommended to use an overhead door stop because a closer is not intended to stop the door and should not be expected to perform the functions of a door stop. Most closers have the ability to include an arm with a built-in stop; however, many times exterior conditions will become extreme and the closer arm or closer itself will typically fail. Incorporating an item that is designed to only stop the door is always the best practice. Depending on the door configuration, floor stops and wall stops are also options to incorporate into an exterior opening.

Hager Companies offers a variety of door hardware products to accommodate virtually all door openings. Two great overhead door holder and stop options from Hager include the 7000 Series Grade 1 Heavy Duty and the 6000 Series Grade 2 Medium Duty. Both options feature adjustable arms for easy installation and adjustability in the field, slide track designs, and heavy shock absorber springs providing 5-degree to 7-degree compression before the dead stop."

Hager Companies overhead door holders and stops have been engineered and designed to meet the requirements of many door applications. The streamlined channel design along with the adjustment arm accommodates various door sizes and applications. The adjustable arms simplify the selection by combining door width ranges into only two sizes of overhead door holders and stops. This feature makes installation simple and minimally impacts a customer's inventory.

The 7000 and 6000 series of overhead door holders and stops are mounted at the top of the door to eliminate tripping hazards and vandalism that are typical of floor or wall mounted stops. The purpose of the overhead door holders is to absorb the abusive shock with a heavy duty spring. They evenly distribute the load and impact along the entire track of the unit. Overhead door holders and stops are compatible with a variety of door closers and are ideal for meeting the demands of high traffic areas.

The 6000 Series Grade 2 Medium Duty Overhead Door Holder includes adjustable arms for easy installation, a slide track design and field adjustability. The heavy shock absorber spring provides 5° to 7° compression before deadstop. Special templating is available upon request.

Certifications:
- BHMA Certified ANSI A156.8
- UL/cUL Listed for up to 3 hours (stop only)
- UL10C Positive Pressure Rated (stop only)
- UL10B Neutral Pressure Rated (stop only)

6000 / 7000 Series Features:
- Five-year warranty
- Mounting style: Concealed
- Surface DOORS: Single acting doors for concealed and surface mounted
- Double acting doors for concealed mounted only
- DOOR THICKNESS: 1-3/4" (44 mm) thick door
- Standard - 1-3/8" - 2-1/4" (36 mm - 57 mm) thick door
- Optional FUNCTIONS: - 15 Friction, 16- Stop Only, 17- Hold Open
- Door Sizes

- 6000 Series Door Width: - Size 1 (SZ1) = 18"-33" (concealed mounted) 20"- 33" (surface mounted) - Size 2 (SZ2) = 33"-51":

- 7000 Series Door Width: - Size 1 (SZ1) = 24"- 40"
- Size 2 (SZ2) = 41"- 55"

- Non-handed OPENINGS:

- Degree of opening is fully adjustable and can be adapted to changing needs between 85°-110°

- Materials: - Steel, - Stainless steel
- Finishes: - US3, US10B, US26D (for steel), US32D (for stainless steel)
- ALM FASTENERS: - Standard screw packet included for wood or metal door and frame applications

Hager Pivots

If you've been working on doors, you will agree that a common point of failure is the hinges and pivots. They carry the moving weight of the door and are subject to abuse and weather, and are rarely maintained.

I can recall situations where a door failure could be traced back to a pivot becoming loosened due to vibration and use, and then after an extended period, the pivot and the frame and door to which it was installed became severely damaged, complicating the servicing of the opening.

Locksmiths should train themselves to observe maintenance issues on doors while they are rekeying or replacing locks and door accessories before they reach a critical state.

HAGER has an extensive inventory of door components and tech support to help you through when you need it. These pivots we're showcasing are in the heavy duty range of product. Your doors may not require something this robust.

495 Ball and Thrust Bearing - Heavy Weight

Dimensions: Top 8 5/8 x 1/4-20 1 1/2 x 14

Recommendations for use: - For doors up to and including 3'0" x 8'0" (91 x 244 cm) weighing maximum of 350 pounds, apply all three pivots #495, #496, #497 –

For doors over 3'6" (107 cm) up to 4'0" (122 cm) in width, add one additional intermediate pivot #496 - For each additional 12" (305 mm) in door height over 8'0" (244 cm) add one intermediate pivot #496

496 Ball and Thrust Bearing Intermediate

Dimensions: 10 5/8 x 1/4-20 1 1/2 x 14

Recommendations for use:- For doors up to and including 3'0" x 8'0" (91 x 244 cm) weighing maximum of 350 pounds, apply all three pivots #495, #496, #497

For doors over 3'6" (107 cm) up to 4'0" (122 cm) in width, add one additional intermediate pivot #496

For each additional 12" (305 mm) in door height over 8'0" (244 cm) add one intermediate pivot #496

More Info: www.hagerco.com