

**MAGNASPHERE ROLL UP DOOR BRACKET KIT INSTALLATION INSTRUCTIONS: HSS Level 2 and HS L1.5
(P/N: 1450, 1451, 1452 & 1453)**



- Read these instructions fully and make sure you understand them before starting installation.
- Make sure there are no obstructions on the front face of the frame where the magnet bracket will travel. The Magnet bracket "floats" in front of the door frame as the door rises or lowers.



- Make sure door is limited in vertical travel! Magnet and door cannot roll into coil or other interference!**
- Door stop must be adjusted to limit vertical travel.**

Required Tools and Components

Provided by Manufacturer (per module set)

- Magnet (T) Bracket (with Magnet Module).
- Switch Bracket (with Switch Module and L-Bracket Assembly)
- Hardware Pack for switch and magnet bracket sets.
(screws, washers, bolts, threaded inserts and a light-duty threaded insert installation tool.)

Provided by Installer

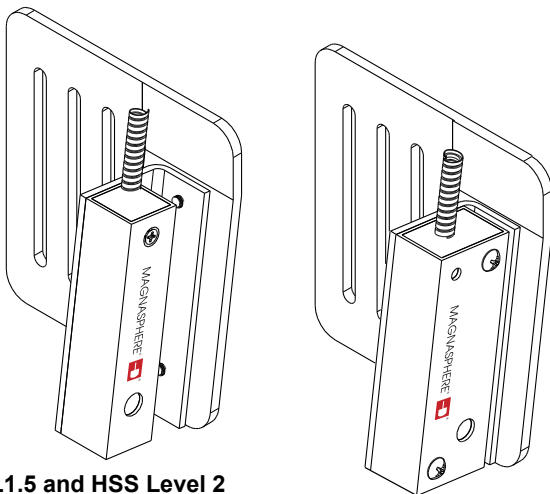
- Sharpie or other marking implement.
- Phillips head screwdriver
- Adjustable wrench or socket set
- Open end wrenches (for threaded insert installation tool)
- Center Punch
- 1/4-20 tap and appropriate drill bit (#7 or 7/32")
- Tap Handle
- Electric Drill
- Threaded insert installation tool (basic)
- Basic hand tools

General

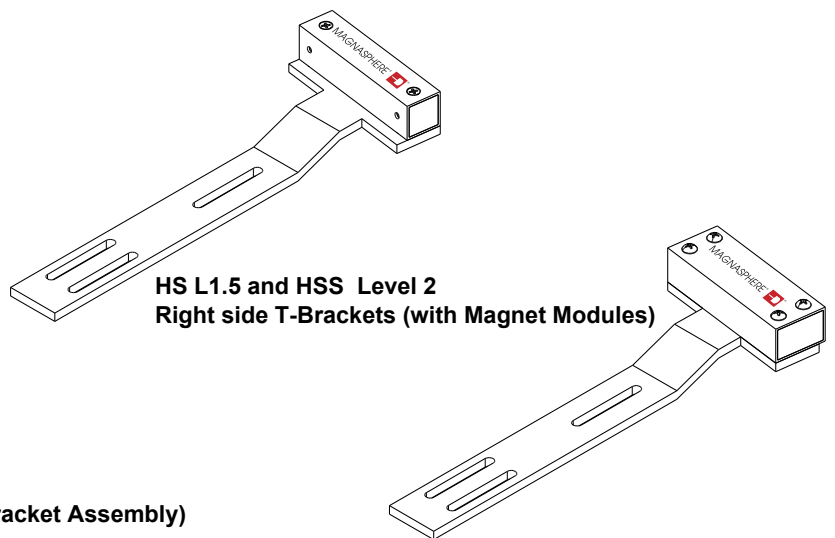
- Loctite may be used if desired. Blue (releasable) Loctite is recommended if used.
- Locate incoming cable and junction box within reach of the armored cable on the switch. Make sure installation does not create a trip hazard.
- Fasten the installed armored cable appropriately.

Standard Components

Special note: Right side bracket sets are shown below (Left hand installations are of opposite orientation).



**HS L1.5 and HSS Level 2
Right Side Switch Brackets (with Switch Module and L-Bracket Assembly)**

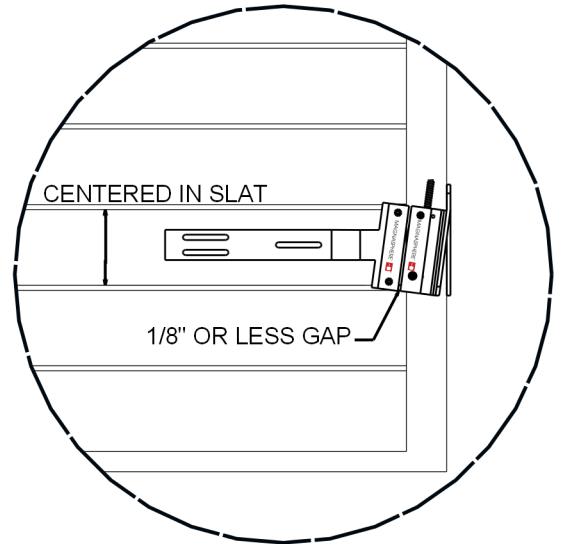


**HS L1.5 and HSS Level 2
Right side T-Brackets (with Magnet Modules)**

STEP # 1 Mark Installation Position On The Door and Frame.

1. Using an assistant (or two), position the magnet and switch brackets on the door and frame. Using a sharpie or similar, mark the slots on the door and the frame while holding the brackets firmly in place.

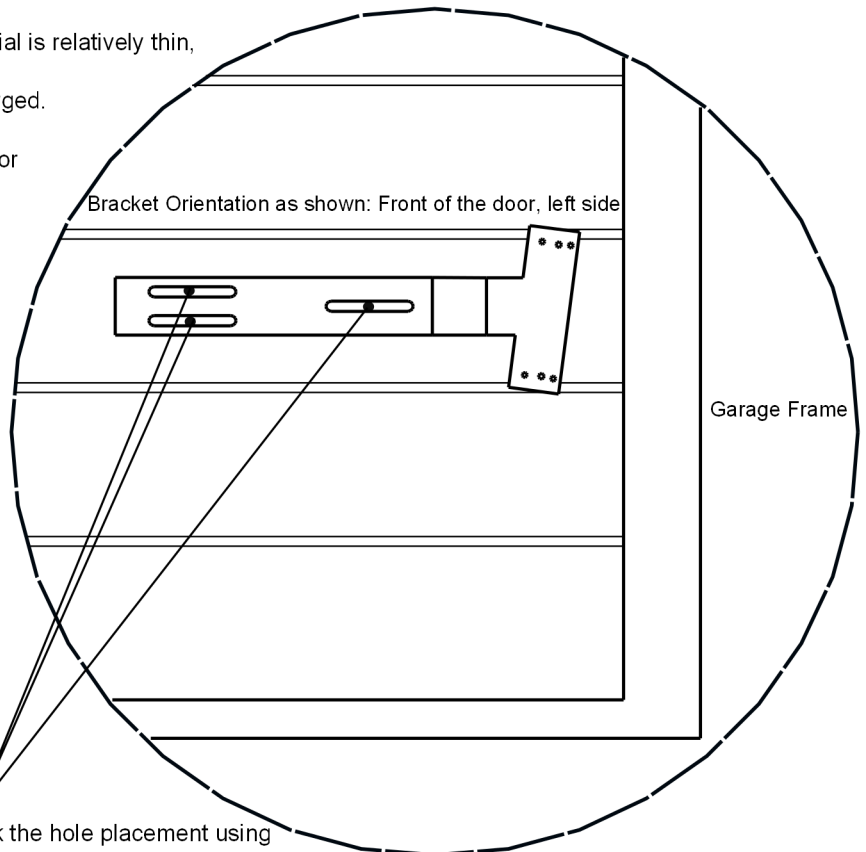
Special note: Make sure you maintain the orientation shown on the sketch.



STEP #2 Install Magnet Bracket to Door

For hollow door slats:

1. Using a center punch, mark the holes for drilling at about the middle of the slot. Drill a hole with 3/8" drill bit. Hole can be little "loose".
2. Insert the thread insert in to the hole. If the door slat material is relatively thin, the insert can be "forced" or tapped in with a hammer. If the door material is thicker, the hole will need to be enlarged.
3. Optionally, end user 1/4-20 hardware can be substituted for the insert if the door is not hollow. (Bolt and nut, carriage bolt and nut, etc.)
4. When installed properly, the magnet part of the bracket should "float" on front of the door frame. Depending on the door construction, it may be required to shim the bracket away from the door. Use 1/4" washers behind the bracket and longer 1/4-20 bolts (not included).



1. Mark the hole placement using the bracket as a stencil.
2. Punch and drill (3/8") holes, for the threaded inserts.

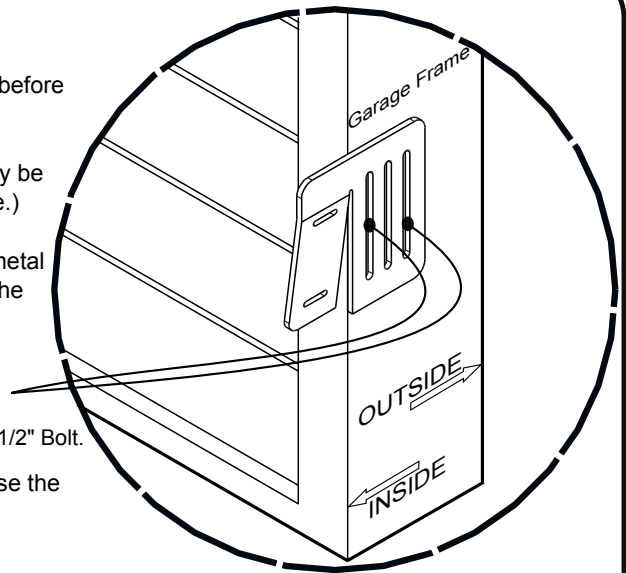
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STEP #3 Install Switch Bracket To Door Frame

1. You are going to drill two holes in the frame and tap them. Inspect your door frame before you drill! There are a couple of things that will make this easier.
 2. The bolts cannot protrude into the frame very far, otherwise the door movement may be affected. (1/2" long hardware provided should be short enough so as not to protrude.)
 3. Depending on the construction of your frame, there may be two or more layers of metal to drill and tap. More metal means more effort and the potential to break the tap in the frame. Try to choose drill sites with only one layer of metal if possible.
 4. Once holes are tapped and cleaned out, install the switch bracket to the frame using 1/4-20 Bolts and Lock Washers.
1. Mark the hole location
 2. Drill and Tap 1/4-20
 3. Attach Bracket to the frame using 1/4-20 x 1/2" Bolt.

Special Note: (Tapping Process)

1. Tap by hand, DO NOT try to use a power drill on the tap. Power tapping will increase the likelihood of the tap breaking.
2. Use oil frequently.
3. If cutting threads becomes difficult with the tap, reverse and withdraw the tap frequently. (As little as 1/8 turn is often sufficient).
4. Taps are wearable items. DO NOT use a tap beyond its useful life. Taps are relatively inexpensive. Replace the tap after every 3 or 4 holes.



ADJUSTMENTS

1. This bracket system allows adjustment in all three axes (x,y and z). It also allows for alignment of the switch to the magnet if the magnet cants in or out as the door closes.
2. Adjust the magnet and switch so that they are in even alignment, with a gap of approximately 1/16" to 1/8". A larger gap may be acceptable on doors that are "sloppy".
3. It may be easiest to do final adjustment on the bracket before wiring the switch up to the system. Using a multimeter, open the door until the switch's contacts "break". If you are satisfied, no further adjustment is necessary. You can adjust the break point up or down by moving the switch bracket up or down on the door frame. Once a suitable "break" point is found, re-adjust the magnet closer or further from the switch and re-test.