



TECH TIP

Bottom-Load Header Manual Revision A

Prepared by: Jeff Bonas

Engineer: Ron Laliberte

Tech Tip: TT072707

PCN: 07-38a

RDW: _____

Reference Tech Tip: _____

Engineering Document Number: _____

Summary Information

Product Information

- Bifold
- Slide

- Swing
- Class 2

- Accessories
- Controls

- Operators / Drives
- Panels / Hardware

- Sensors

Tech Tip Classification

- Adjustment
- Installation

- Customer Complaints
- Clarifications

- FAQs
- Service

- Retrofit/Upgrade Instructions
- Design Change Description

Release Action

Level 1 - Does not impact maintenance or operation of door. (Only Safety/Liability and Engineering need to sign.)

Level 2 - Full sign off required.

Release Information (initial and date)

Safety/Liability _____

Engineering _____

Technical Support _____

Field Operations _____

Quality _____

If you have any questions concerning this procedure, contact
Access Technologies Technical Support, at 1-800-422-6489 Option 3.



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Action Required

- Replacement Required
 None, Information Only
 Inspection Required
 Where Symptom Exists
 New Installation Only
 Inspect During Maintenance

Attached is a copy of the 'Bottom-Load Header Installation Instructions, Quick-Reference Guide, 204039, Rev. A, 2/20/07'.

This manual provides instructions for installing the Stanley Access Technologies bottom-load header. This manual also provides a listing of the bottom-load header replacement parts.

The bottom-load header allows installation of the Magic-Force operator and MC521 controller through the bottom of the header versus the typical installation through the front of the header. Header mounting depends on site conditions and application. The bottom-load header can be installed in the following applications:

- Between two jambs
- Surface mounted (in the case where there are no jambs)
- Concealed (in the case where the header is located above the ceiling and the bottom of the header is flush with the ceiling surface)

The bottom-load header can accommodate single or dual Magic-Force operators used in inswing and out-swing configurations.

Stanley Access Technologies

Installation Manual



Bottom-Load Header Installation Instructions

Quick-Reference Guide

204039

Rev. A, 2/20/07

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Stanley Access Technologies

Quick-Reference Guide

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1. PURPOSE

1.1 **Discussion**

This manual provides instructions for installing the Stanley Access Technologies bottom-load header. This manual also provides a listing of the bottom-load header replacement parts.

The bottom-load header allows installation of the Magic-Force operator and MC521 controller through the bottom of the header versus the typical installation through the front of the header. Header mounting depends on site conditions and application. The bottom-load header can be installed in the following applications:

- Between two jambs
- Surface mounted (in the case where there are no jambs)
- Concealed (in the case where the header is located above the ceiling and the bottom of the header is flush with the ceiling surface)

The bottom-load header can accommodate single or dual Magic-Force operators used in in-swing and out-swing configurations. (See Attachment 2.)

This manual is intended for use by Stanley authorized personnel.

1.2 **Applicability**

This manual is applicable to the Stanley Access Technologies bottom-load header that houses the Magic-Force™ operator(s) and MC521 controller. For additional information refer to the following manuals:

- Stanley Access Technologies Manual No. 204027, “Magic-Swing™, Magic-Force™, and Bifold MC521 Control Box Quick-Reference Guide”
- Stanley Access Technologies Manual No. 203967, “Magic-Force™ Operator Installation Instructions Quick-Reference Guide”

2. PREREQUISITES

2.1 Protective barrier (caution/warning tape) has been set up to prevent unauthorized access to installation area.

2.2 Attachment 1 has been reviewed for the following:

- Definitions of the terms used in this procedure
- A listing of the additional documents required during this procedure
- A listing of the tools, equipment, personnel, and consumables used in this procedure.

3. PRECAUTIONS

3.1 Personal protective equipment such as safety glasses, steel-toe shoes, hearing protection, and hard hats must be used in all designated working areas.

3.2 Block off work area to protect unauthorized personnel from hazards during work.

4. INSTALLATION INSTRUCTIONS

4.1 **Checking the Rough Opening**

- 4.1.1 SWEEP floor.
- 4.1.2 ENSURE floor is level across the entire opening.

NOTE

Opening width should be package width plus $\frac{1}{2}$ " ($\frac{1}{4}$ " each side for shim and caulk clearance). This clearance can be as small as $\frac{1}{8}$ " for a tight appearance with the aluminum storefront construction.

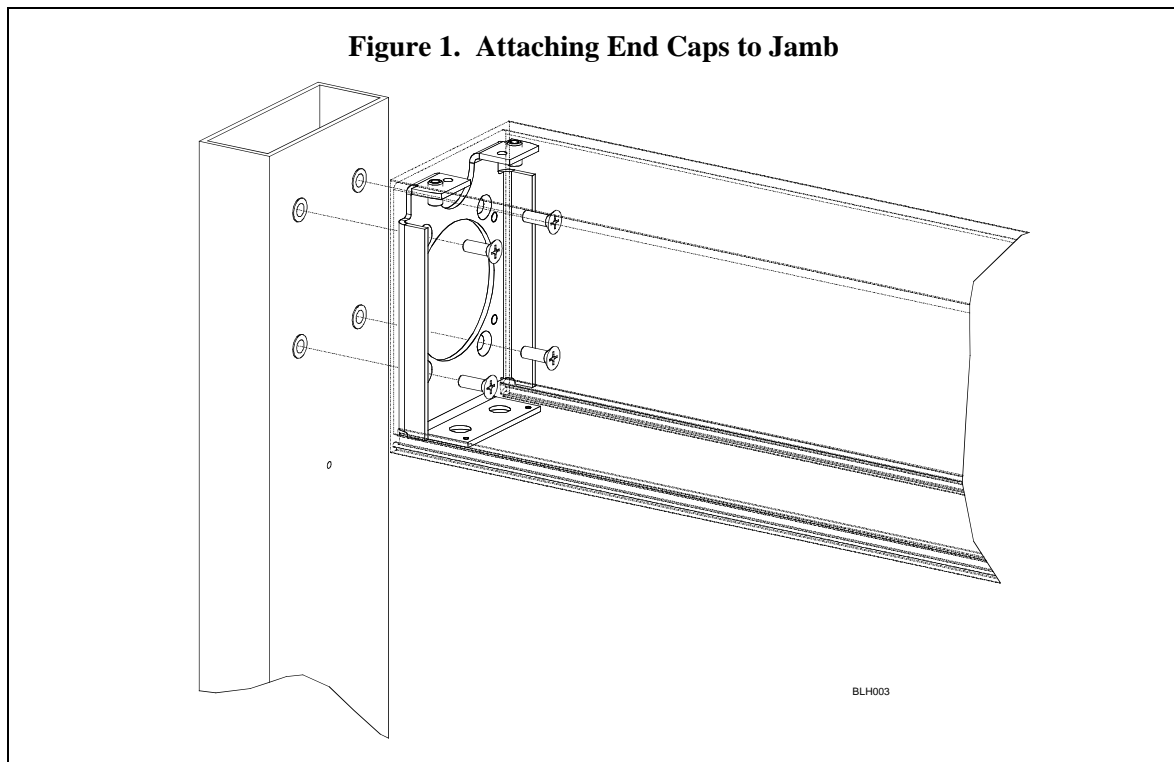
- 4.1.3 CHECK opening width.
- 4.1.4 CHECK opening height from *finished* floor.
- 4.1.5 ENSURE opening width and height are sufficient for door package.

NOTE

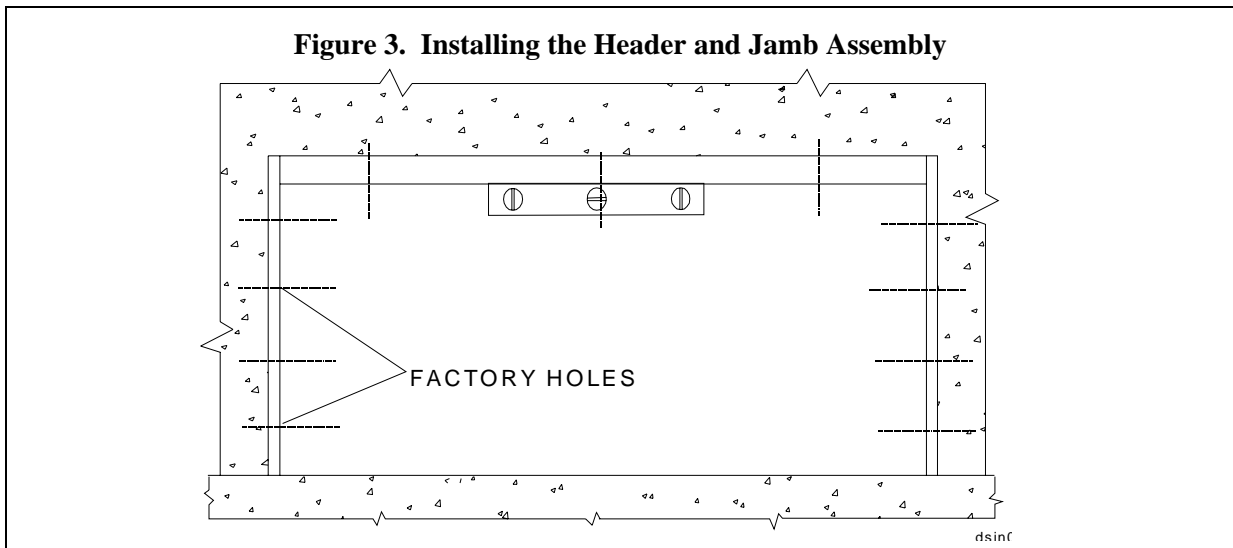
The bottom-load header can be installed between two jambs, surface-mounted, or concealed. Sections 4.2 through 4.4 describe each mounting arrangement.

4.2 **Installing the Header Between Jambs**

- 4.2.1 ATTACH standard end caps to the header.
- 4.2.2 POSITION header between jambs.
- 4.2.3 Refer to Figure 1, and, using four $\frac{1}{4}$ -20 bolts, ATTACH end cap to factory-mounted rivnuts in jamb.



- 4.2.4 LIFT header and jamb assembly, and POSITION it into door opening.
- 4.2.5 Temporarily SECURE header and jamb assembly in place as necessary to prevent it from falling.
- 4.2.6 SHIM beneath jamb(s) as necessary to level header and maintain required height from highest point of finished floor.
- 4.2.7 INSPECT one jamb for plumb in vertical and horizontal planes. IF required, SHIM back of jamb.
- 4.2.8 Refer to Figure 3, and, using the pre-drilled jamb holes as a guide, DRILL holes in rough opening for the following fasteners as required:
 - IF rough opening is concrete, DRILL a ¼" dia. hole for concrete screw, and ENSURE screw will be embedded 1½" minimum.
 - IF rough opening is steel, DRILL for a #14 SMS (Note 18 GA steel minimum).
 - IF rough opening is wood, DRILL for a #14 wood screw, and ENSURE screw will be embedded 1½" minimum.



- 4.2.9 INSTALL, but do *not* tighten, fasteners securing one jamb to opening, and ENSURE jamb remains plumb.
- 4.2.10 INSPECT opposite jamb for plumb in vertical and horizontal planes. IF required, SHIM back of jamb.
- 4.2.11 Using the pre-drilled jamb holes as a guide, DRILL holes in rough opening.
- 4.2.12 INSTALL, but do *not* tighten, fasteners securing one jamb to opening, and ENSURE jamb remains plumb.
- 4.2.13 Starting at the top of jamb and moving downward, SHIM jambs as necessary to ensure jambs remain level and plumb, and TIGHTEN fasteners securing jambs to opening.
- 4.2.14 INSTALL and TIGHTEN fasteners securing header to opening, and ENSURE header remains level.
- 4.2.15 INSTALL jamb inserts into jamb.

4.3 Installing the Header in a Surface-Mounted Configuration

NOTE

The bottom-load header can be surface mounted in two ways--using the optional flanged end caps or by fastening the back of the header to the mounting surface.

- 4.3.1 If installing the header with the optional flanged end caps, **PERFORM** the following:
- INSTALL** the flanged end caps onto the header.
 - POSITION** the header in place, and **MARK** the location of the flanged end cap mounting holes onto the mounting surface.
 - DRILL** mounting holes as required.
 - FASTEN** the header to the mounting surface as required.
- 4.3.2 If fastening the back of the header to the mounting surface, **PERFORM** the following:
- POSITION** the header in place and **MARK** the location of the header mounting holes onto the header mounting surface.
 - DRILL** mounting holes through the header at the marked locations.
 - POSITION** the header in place and **MARK** the location of the header mounting holes onto the header mounting surface.
 - DRILL** mounting holes into mounting surface as required.
 - FASTEN** the header to the mounting surface as required.

4.4 Installing the Header in a Concealed Configuration

- 4.4.1 **POSITION** the header in place and **MARK** the location of the header mounting holes onto the ceiling mounting surface.
- 4.4.2 **DRILL** mounting holes as required.
- 4.4.3 **FASTEN** the header to the mounting surface as required.

4.5 Installing the Required Bracket Assemblies

NOTE

- The operator(s) and MC521 controller(s) are supported and secured in the header with a series of common brackets. The brackets are positioned into the header and twisted in place. After moving the brackets to their required locations in the header, the bracket setscrews can be tightened to secure the brackets in place.
- The number of brackets required depends on whether the arrangement is a single-or dual-door configuration and the operator pivot locations ($2\frac{3}{4}$ ", $3\frac{3}{4}$ ", or $5\frac{1}{2}$ "). The replacement parts list in Attachment 3 shows the required number of brackets required per arrangement.

- 4.5.1 Refer to Attachment 3, and DETERMINE the required number of brackets.
- 4.5.2 With the bracket mounting lugs oriented in the correct position, POSITION the bracket into the header and TWIST it so that it locks into position.
- 4.5.3 SLIDE the bracket into the correct location within the header, but do not tighten the bracket setscrews.
- 4.5.4 REPEAT steps 4.5.2 through 4.5.4 for each required bracket.

4.6 Installing the Operator in the Header

NOTE

The operator comes from the factory with a bottom plate pre-installed. This plate must be removed and replaced with a mounting plate that is unique to the bottom-load header design.

- 4.6.1 Refer to Attachment 3, and REMOVE the existing bottom plate from the Magic-Force operator.
- 4.6.2 ATTACH Magic-Force plate 516882 to operator.

NOTE

In order to ensure proper operation of the door, the operator must be adjusted prior to installation. Following installation, the operator may need to be removed, readjusted, and reinstalled.

- 4.6.3 Refer to Stanley Access Technologies Manual No. 203967, “Magic-Force™ Operator Installation Instructions Quick-Reference Guide,” and PERFORM initial Magic-Force operator installation adjustments.
- 4.6.4 POSITION the operator into the header.
- 4.6.5 SLIDE mounting bracket into the correct location.
- 4.6.6 FASTEN the operator to the brackets.
- 4.6.7 TIGHTEN the bracket setscrews.
- 4.6.8 If a second Magic-Force operator is required, REPEAT steps 4.6.1 through 4.6.7 for the second operator.

4.7 Installing the MC521 Controller in the Header

- 4.7.1 Refer to Attachment 3, and POSITION the MC521 controller into header.
- 4.7.2 SLIDE mounting bracket into the correct location.
- 4.7.3 FASTEN the MC521 controller to the brackets.
- 4.7.4 TIGHTEN the bracket setscrews.
- 4.7.5 Refer to Stanley Access Technologies Manual No. 204027, “Magic-Swing™, Magic-Force™, and Bifold MC521 Control Box Quick-Reference Guide,” and PERFORM the following:
 - a. CONNECT wiring as necessary.
 - b. TUNE-IN door.

4.8 Installing the Close Control Assembly in the Header

- 4.8.1 Refer to Attachment 3, and POSITION the close control assembly into the header.
- 4.8.2 Using Velcro loop tape supplied in the kit, SECURE the close control assembly in the header.
- 4.8.3 If a second close control assembly is required, REPEAT steps 4.8.1 through 4.8.2.

4.9 Performing the Closeout Procedure

- 4.9.1 INSTALL header covers.
- 4.9.2 ENSURE door is secure.
- 4.9.3 ENSURE all metal and glass surfaces are clean.
- 4.9.4 ENSURE door installation area is clean and free of debris.
- 4.9.5 ENSURE Stanley service sticker and all decals/signage are properly displayed.
- 4.9.6 REMOVE caution tape or barriers from around installation site.
- 4.9.7 COMPLETE Work Order and REPORT your actions to the Construction Superintendent.

4.10 Replacement Parts

- 4.10.1 Refer to Attachment 3 for a listing of the bottom-load header replacement parts.

Attachment 1
Documents, Definitions, Special Tools, Equipment, and Consumables
(Sheet 1 of 1)

Documents

- Submittal drawings, work order, door specification, or customer construction documents, if available
- Stanley Access Technologies Manual No. 204027 “Magic-Swing™, Magic-Force™, and Bifold MC521 Control Box Quick-Reference Guide,”
- Stanley Access Technologies Manual No. 203967, “Magic-Force™ Operator Installation Instructions Quick-Reference Guide”

Definitions

- None

Special Tools and Equipment (including, but not limited to)

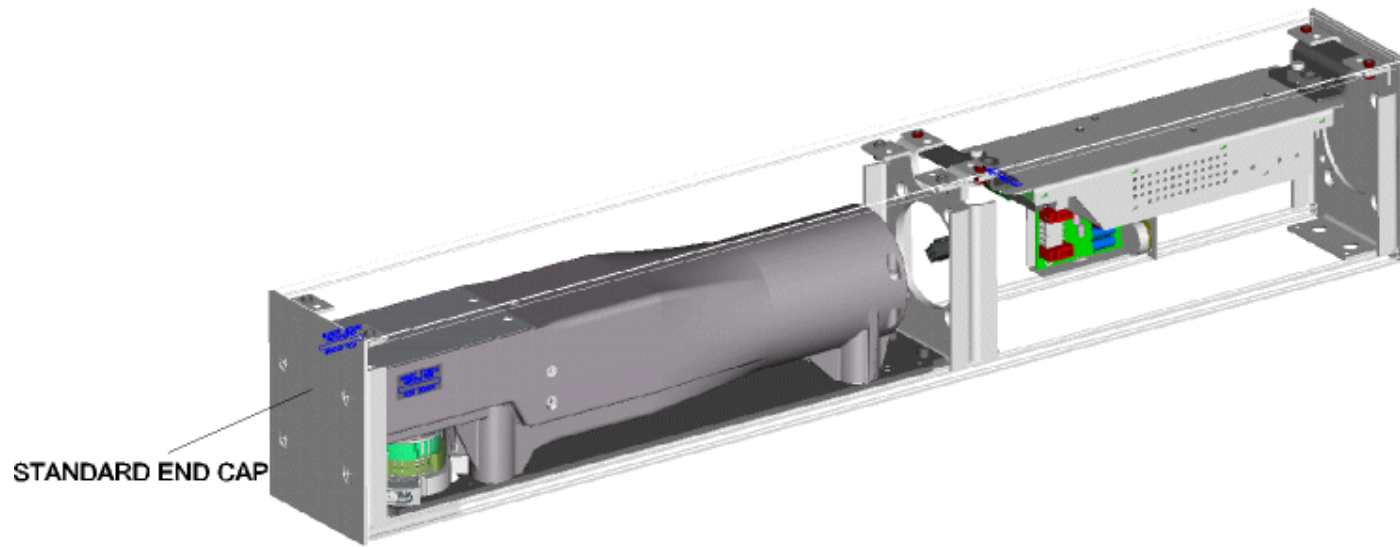
- None

Consumables (including, but not limited to)

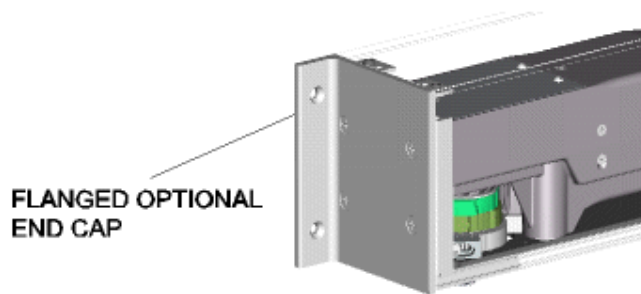
- Caution/warning tape
- Clean rags
- Wire ties

Attachment 2
Bottom-Load Header General Arrangement
(Sheet 1 of 2)

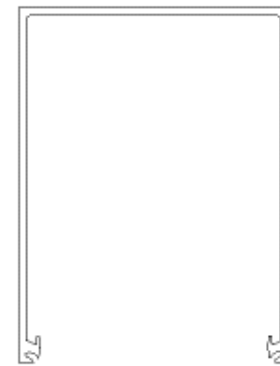
SINGLE MOTOR ARRANGEMENT



STANDARD END CAP



FLANGED OPTIONAL
END CAP



SIDE PROFILE

204039

Rev. A, 2/20/07

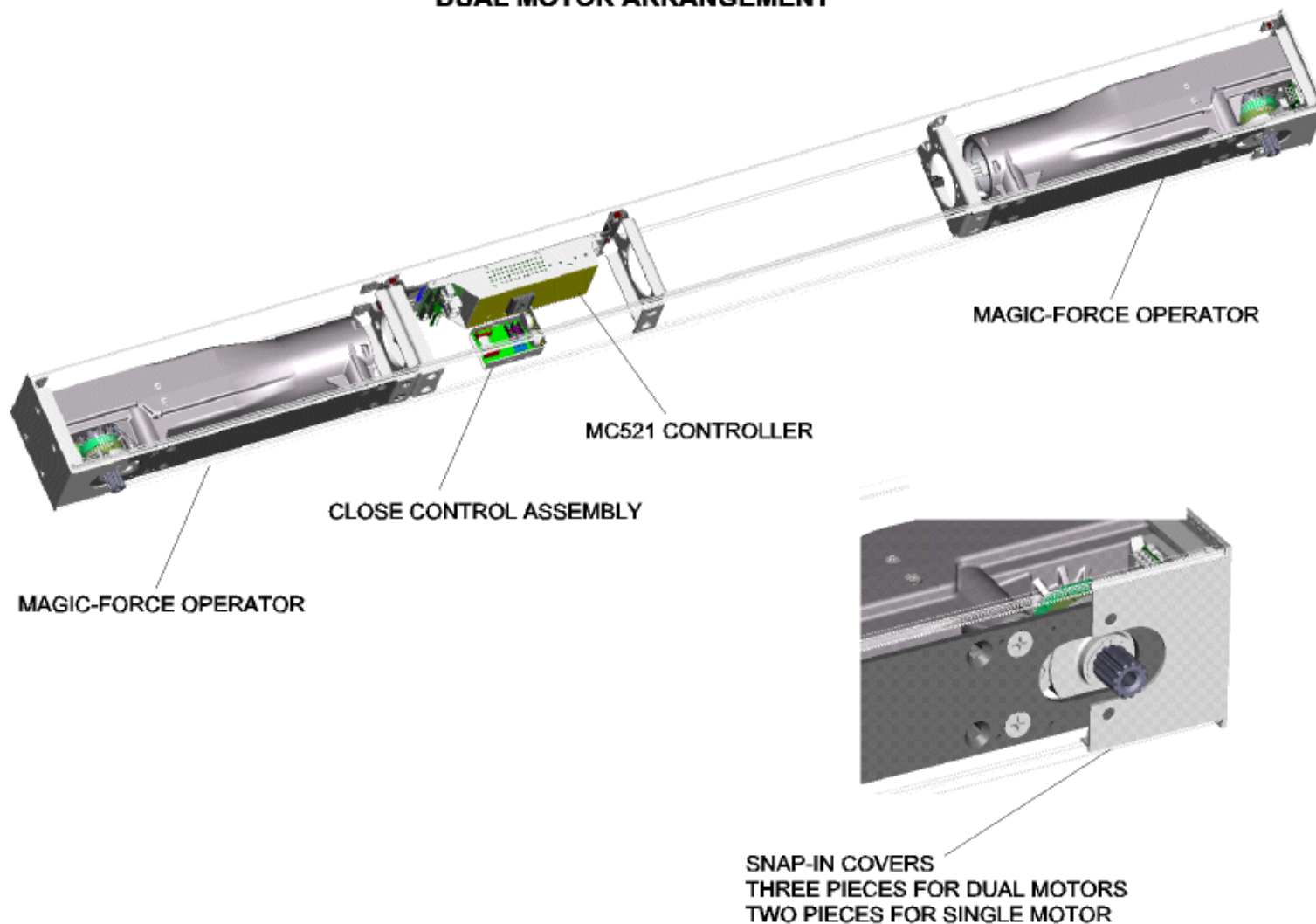
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blh002_1

Attachment 2
Bottom-Load Header General Arrangement
(Sheet 2 of 2)

DUAL MOTOR ARRANGEMENT



Attachment 3
Bottom-Load Header Installation
(Sheet 1 of 4)

313994		
ITEM	PART	DESCRIPTION
1	516867-20000	HEADER EXTRUSION, BOTTOM LOAD - CLR 200"
	536867-20000	HEADER EXTRUSION, BOTTOM LOAD - DKB 200"
2	314052	KIT, BRACKET-BOT LD HDR (set of 4 brackets)
	314058	KIT, BRACKET-SGL-BOT LD HDR (single bracket)
4	314053	KIT, ENDCAP-BOT LD HDR-CLR
	334053	KIT, ENDCAP-BOT LD HDR-DKB
6	314054	KIT, ENDCAP-FLANGE-BOT LD-CLR
	334054	KIT, ENDCAP-FLANGE-BOT LD-DKB
8	314055	KIT, OPER PLATE-BOT LD HDR
11	314056	KIT, CNTR BRKT-BOT LD HDR
17	516888-2C	COVER MACHINING, BOTTOM LOAD (2.75" pivot location, CLR)
	516888-2D	COVER MACHINING, BOTTOM LOAD (2.75" pivot location, DKB)
	516888-3C	COVER MACHINING, BOTTOM LOAD (3.75" pivot location, CLR)
	516888-3D	COVER MACHINING, BOTTOM LOAD (3.75" pivot location, DKB)
	516888-5C	COVER MACHINING, BOTTOM LOAD (5.50" pivot location, CLR)
	516888-5D	COVER MACHINING, BOTTOM LOAD (5.50" pivot location, DKB)
18	516868-20000	COVER EXTRUSION, BOTTOM LOAD - CLR 200"
	536868-20000	COVER EXTRUSION, BOTTOM LOAD - DKB 200"
20	413740	LABEL - STANLEY

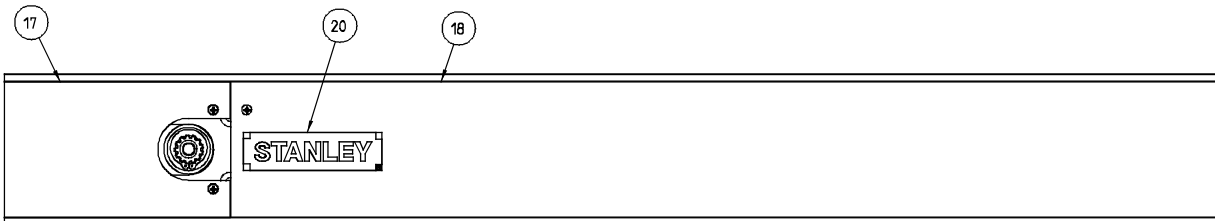
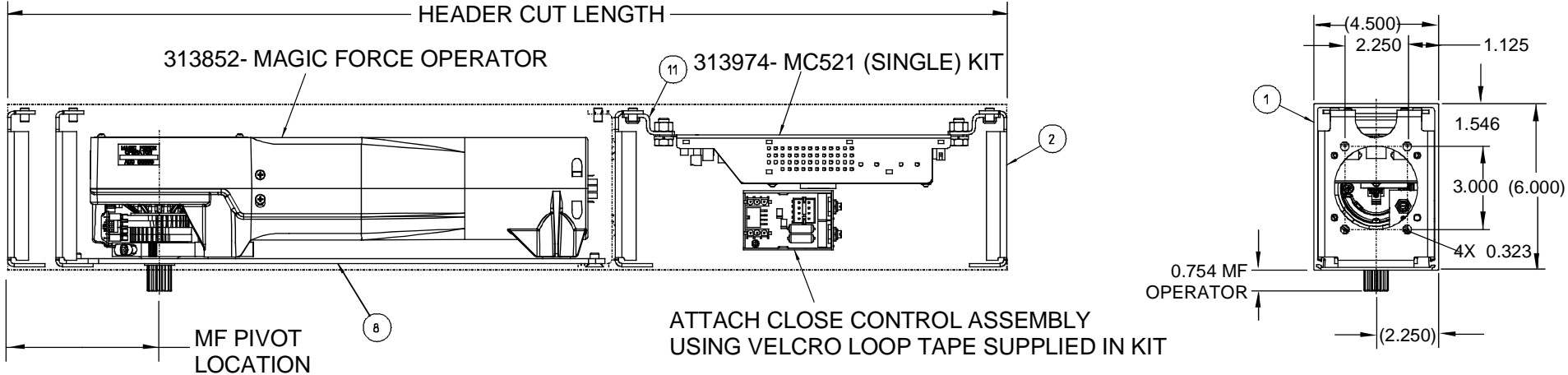
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Attachment 3
Bottom-Load Header Installation
 (Sheet 2 of 4)

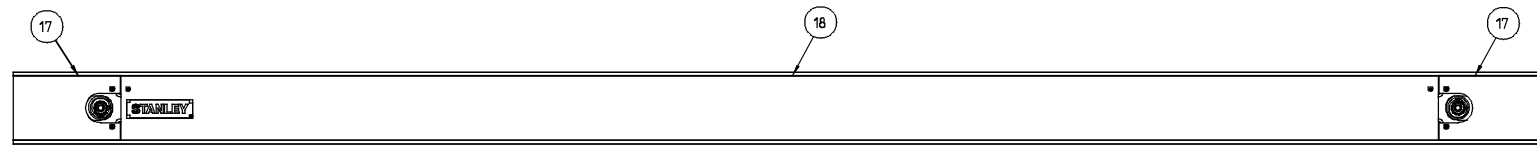
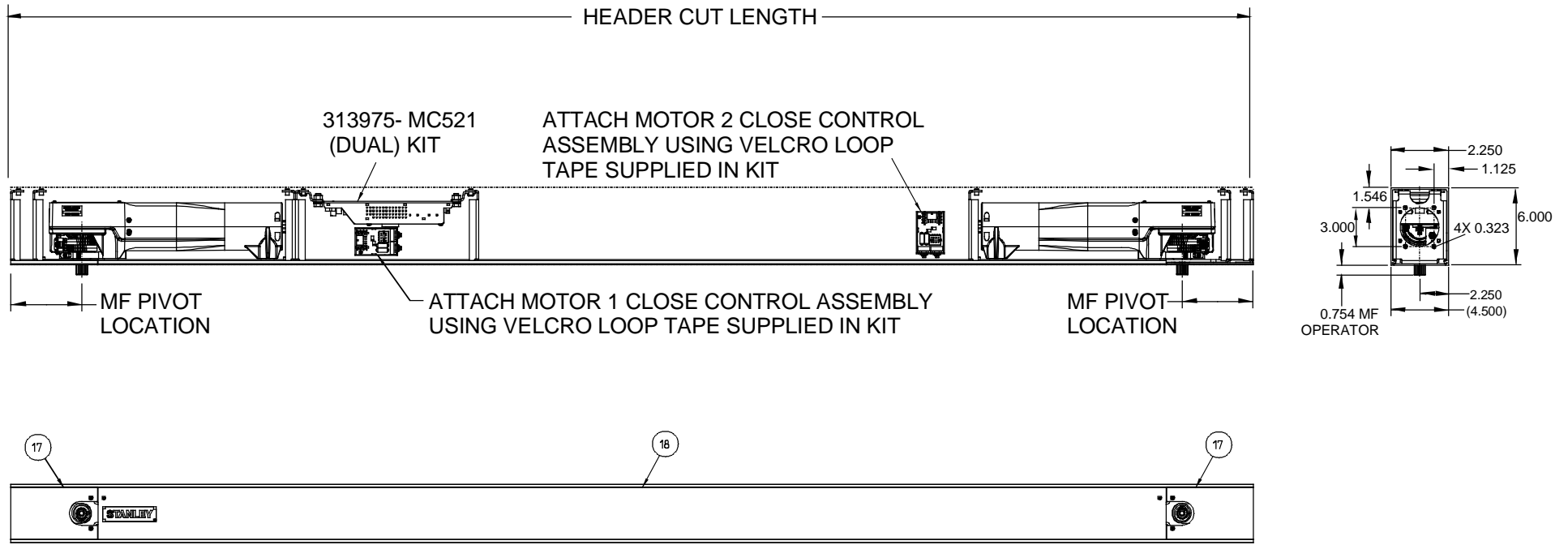


SINGLE MF OPERATOR
 (HEADER END CAPS NOT SHOWN - SEE SHEET 4)

BLH001_1B

Attachment 3
Bottom-Load Header Installation

(Sheet 3 of 4)



DUAL MF OPERATOR
(ASSEMBLE PER SHEET 1, EXCEPT AS SHOWN)
(HEADER END CAPS NOT SHOWN - SEE SHEET 4)

BLH001_2B

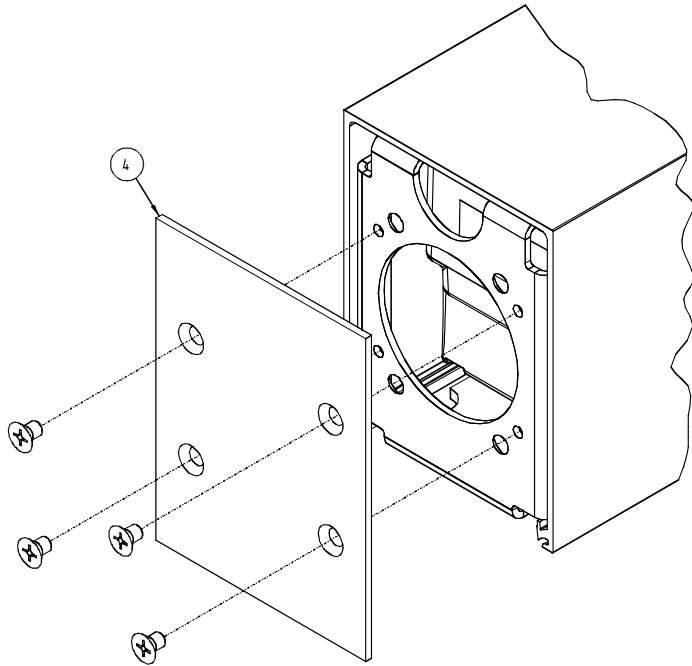
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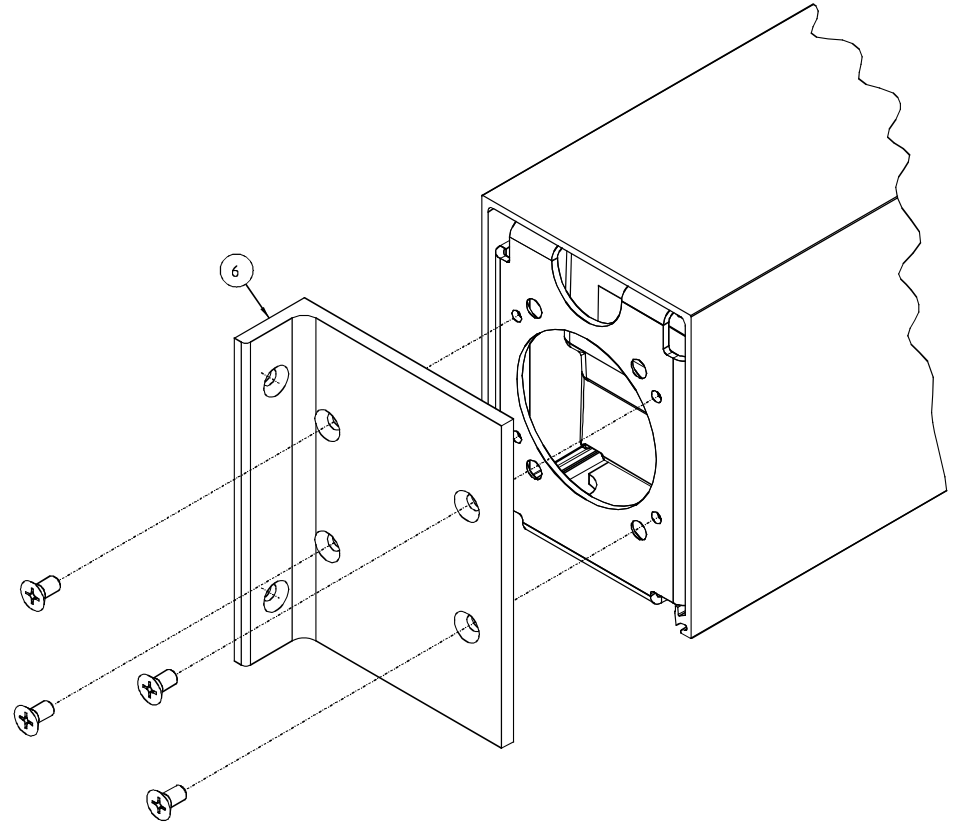
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Attachment 3
Bottom-Load Header Installation
(Sheet 4 of 4)



STANDARD END CAPS
(TYPICAL BOTH ENDS)



OPTIONAL FLANGED END CAPS
(TYPICAL BOTH ENDS)

BLH001_3B

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