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Installation Instructions
Cargo Hook Retainer Installation
In
Bell 205/212/412 Series Helicopters

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RECORD OF REVISIONS

<u>Revision</u>	<u>Revised Pages</u>	<u>Revision Details</u>	<u>Revision Date</u>
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LIST OF EFFECTIVE PAGES

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PREFACE

Let the following document serve to detail the installation of a VIHA Cargo Hook Retainer for the Bell 205A, 205A-1, 205B, 212, 412 and 412 EP rotorcraft. This document is intended to accompany V205-110-MDL. In the case of any dissimilarity, the MDL shall take precedence.

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1.0 INTRODUCTION

This document shows details of the installation of the Support Bracket Assembly and shows the location on both the keeper and keeperless cargo hooks where each respective coupler attaches and is to be used in reference to the approved installation drawing (V205-110).

2.0 REFERENCE

- Drawing V205-110

3.0 SUPPORT BRACKET ASSEMBLY INSTALLATION

The support bracket assembly has two different installation procedures depending on rotorcraft model and serial number. Follow the set of instructions below that correspond to the rotorcraft that the Cargo Hook Retainer is being installed on.

3.1. Bell 205; Bell 212 S/N 30849 and Previous (See Figure 1)

1. Locate panel P/N 205-032-106-041.
2. Remove two existing fastener slightly aft of STA 102.0.
3. Align the Support Bracket Assembly center hole at B.L. 0.0 with the return flange facing aft.
4. Drill two 0.2 diameter holes in the flange using the existing bolt spacing as a template.
5. Use Items 12 and 13 (on Sheet 1) to attach the Support Bracket Assembly to the rotorcraft.

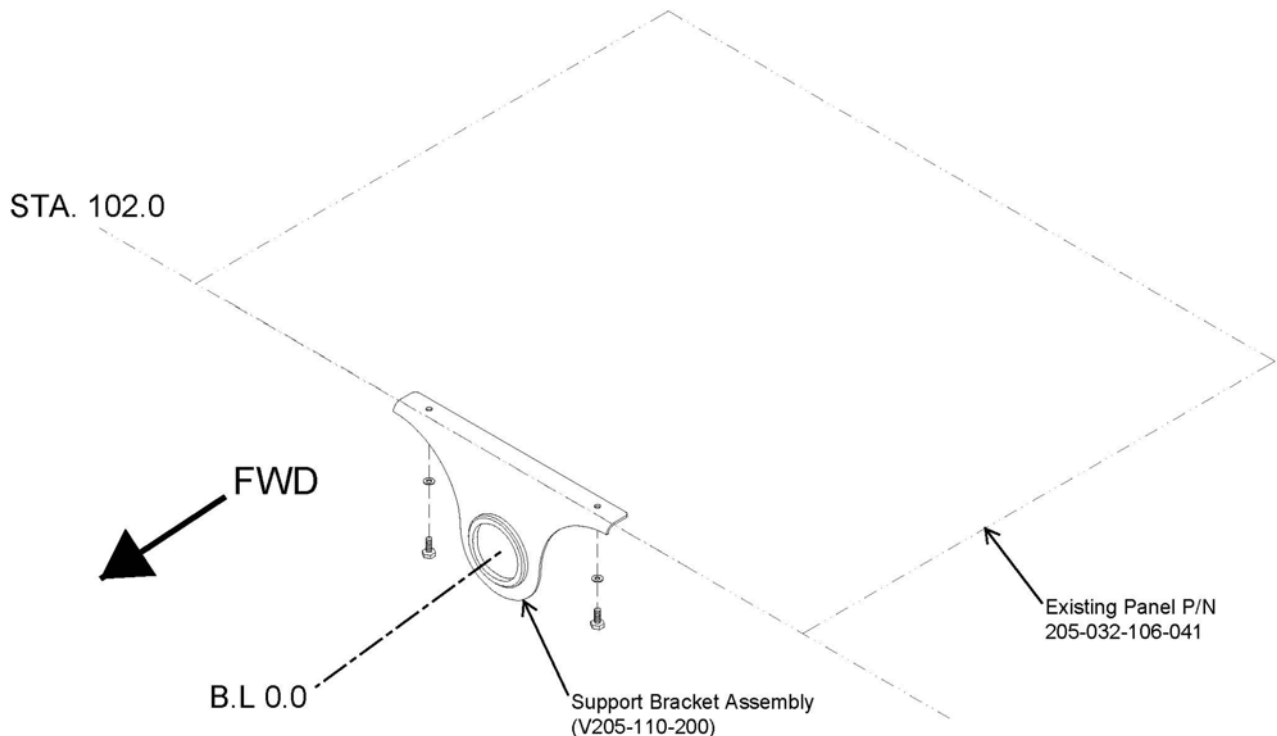


Figure 1: Bell 205; Bell 212 S/N 30849 and Previous

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3.2. Bell 212 S/N 30850 and Subsequent; Bell 412 S/N 33001 thru 33107, 36087 and Subsequent (See Figure 2 and Figure 3)

1. Locate existing access door just forward of STA. 102.0.
2. Align the Support Bracket Assembly center hole at B.L. 0.0 with the return flange facing aft.
3. Drill two 0.2 diameter holes in the flange to aircraft left of B.L. 0.0, using the existing bolt spacing as a template.
4. Drill two 0.2 diameter holes in the flange to aircraft right of B.L. 0.0, using the existing rivet spacing as a template.
5. Remove the rivets (to aircraft right of B.L. 0.0) used for the Support Bracket Assembly drill template.
6. Drill out rivet holes (holes to aircraft right of B.L. 0.0) to a 0.2 diameter hole.
7. Drill 0.098 diameter holes, countersunk at 100° to a depth of 0.036, using nutplates (Item 2 on Sheet 2) as a template (holes to aircraft right of B.L. 0.0).
8. Install nutplates (Item 2 on Sheet 2) using rivets (Item 3 on Sheet 2).
9. Use Items 4, 5 and 6 (on Sheet 2) to attach the Support Bracket Assembly to the rotorcraft.

NOTE

Ensure that washers (Item 6 on Sheet 2) are installed in between the Support Bracket Assembly and the skin of the aircraft (holes to aircraft right of B.L. 0.0). The washers serve to fill the gap created from the support bracket assembly installed on top of the existing access door and to prevent having to flush other existing rivets.

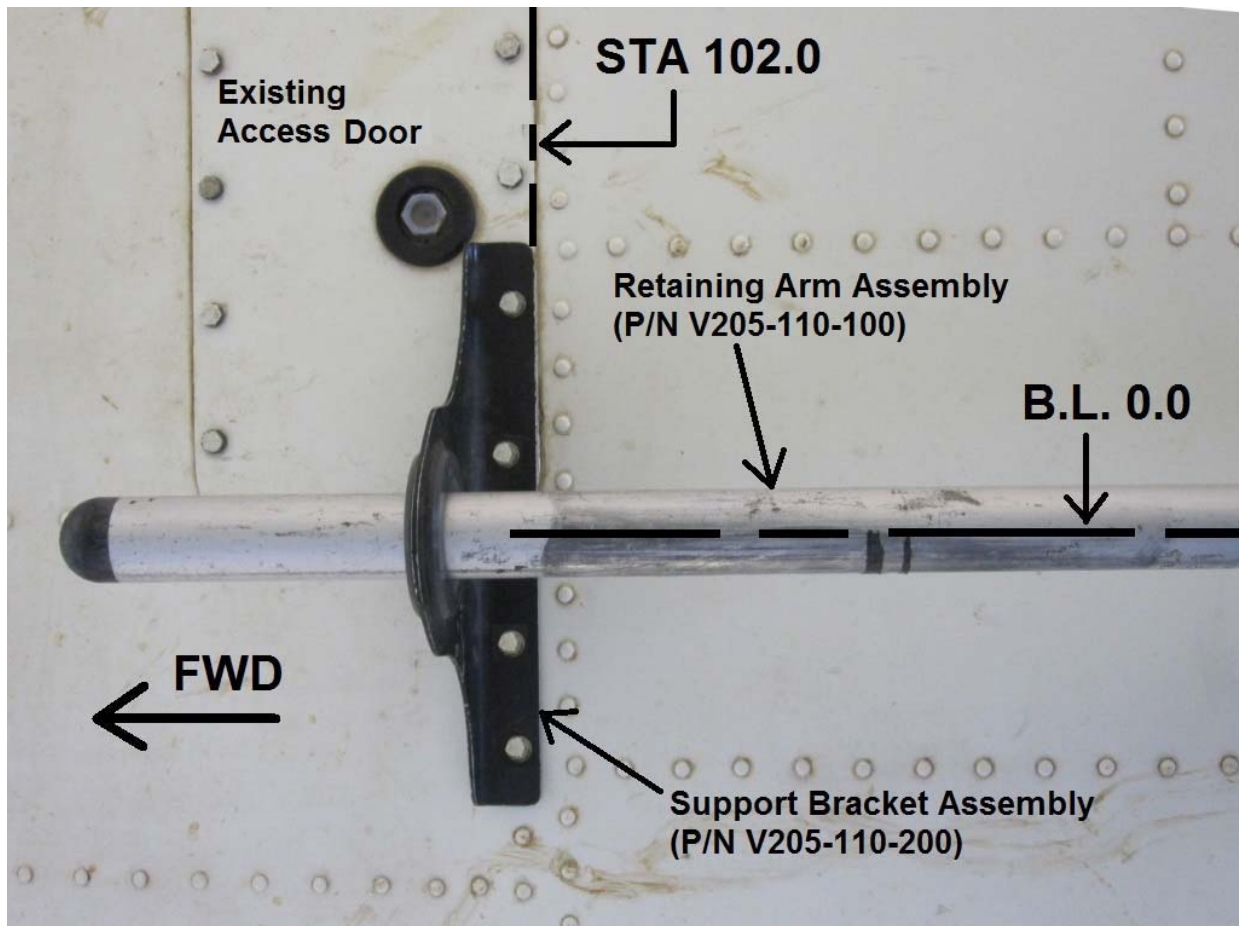


Figure 2: Bell 212 S/N 30850 and Subsequent; Bell 412 S/N 33001 thru 33107, 36087 and Subsequent
(Bell 212 Shown)

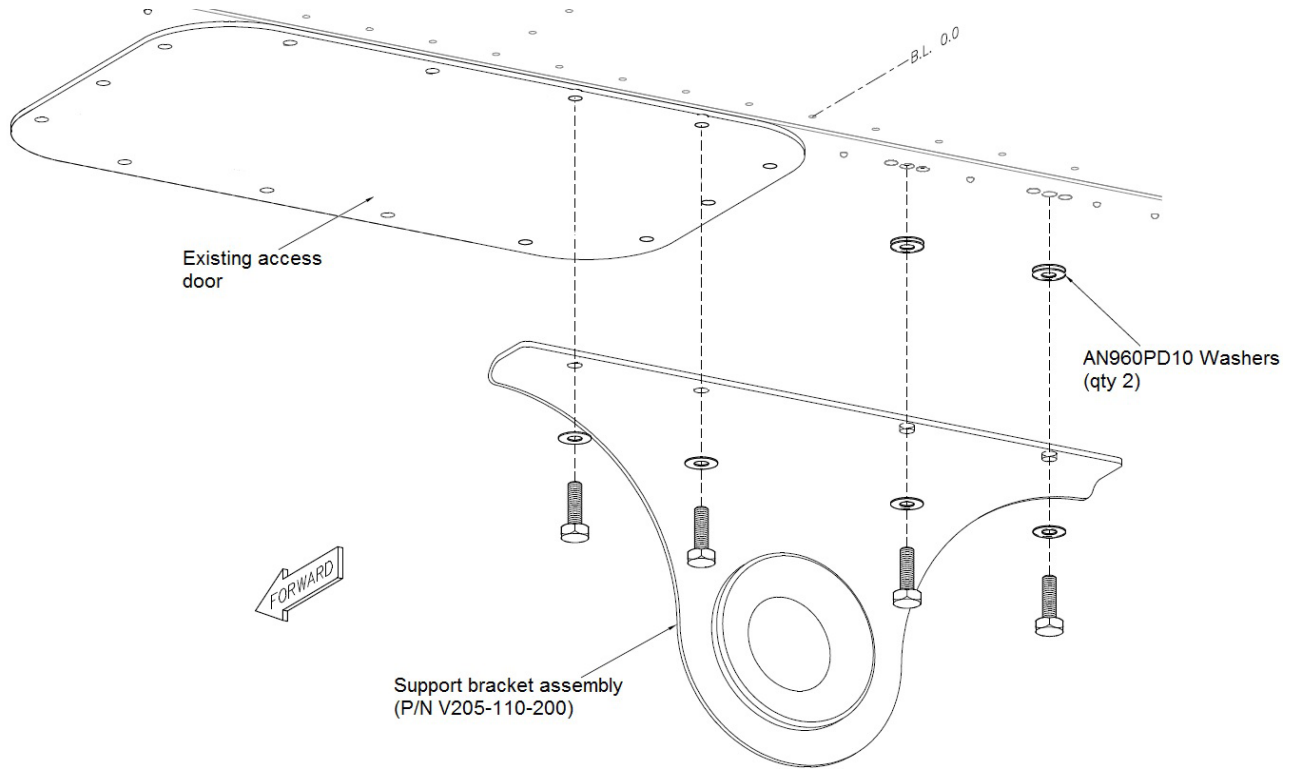


Figure 3: Bell 212 S/N 30850 and Subsequent; Bell 412 S/N 33001 thru 33107, 36087 and Subsequent

4.0 CARGO HOOK COUPLER ATTACHMENT

This section describes how to attach each cargo hook (keeper and keeperless) to their respective coupler.

4.1. Keeper Cargo Hook

1. Remove the existing hardware at the connection point shown in Figure 4.
2. Install Items 3, 5, 7, 9, and 11 (on Sheet 1) in the arrangement shown in Figure 5.

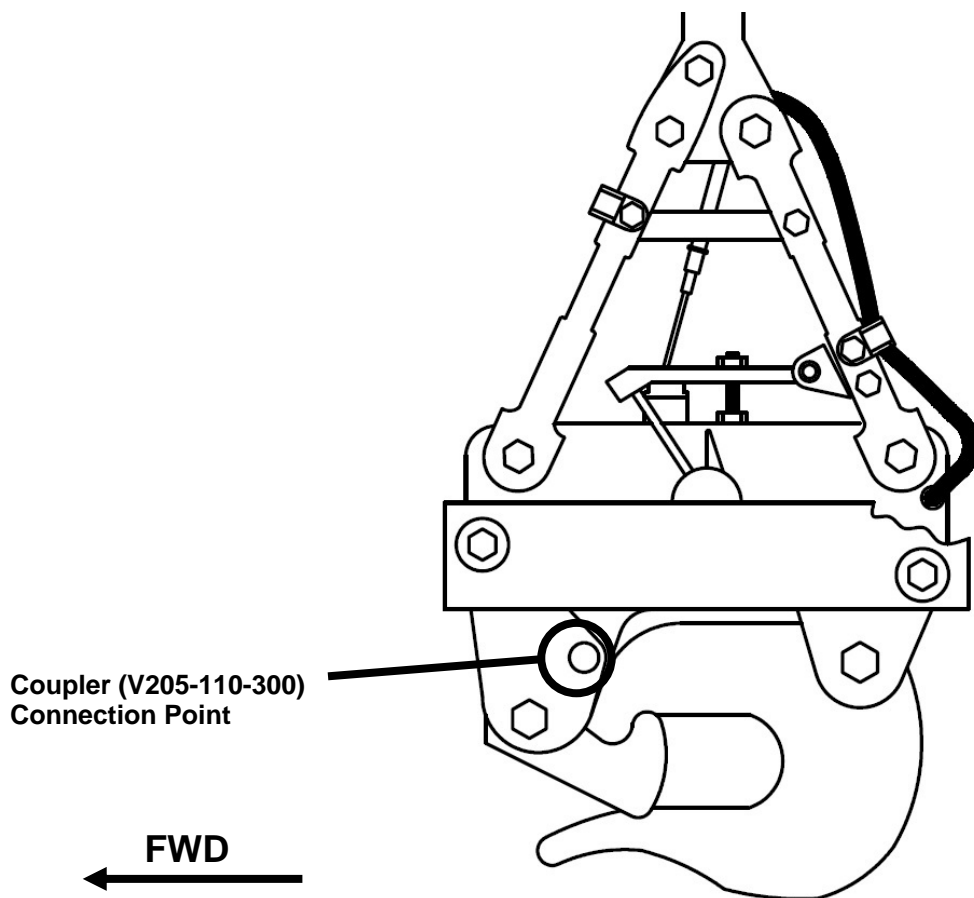


Figure 4: Keeper Hook Coupler Connection Point

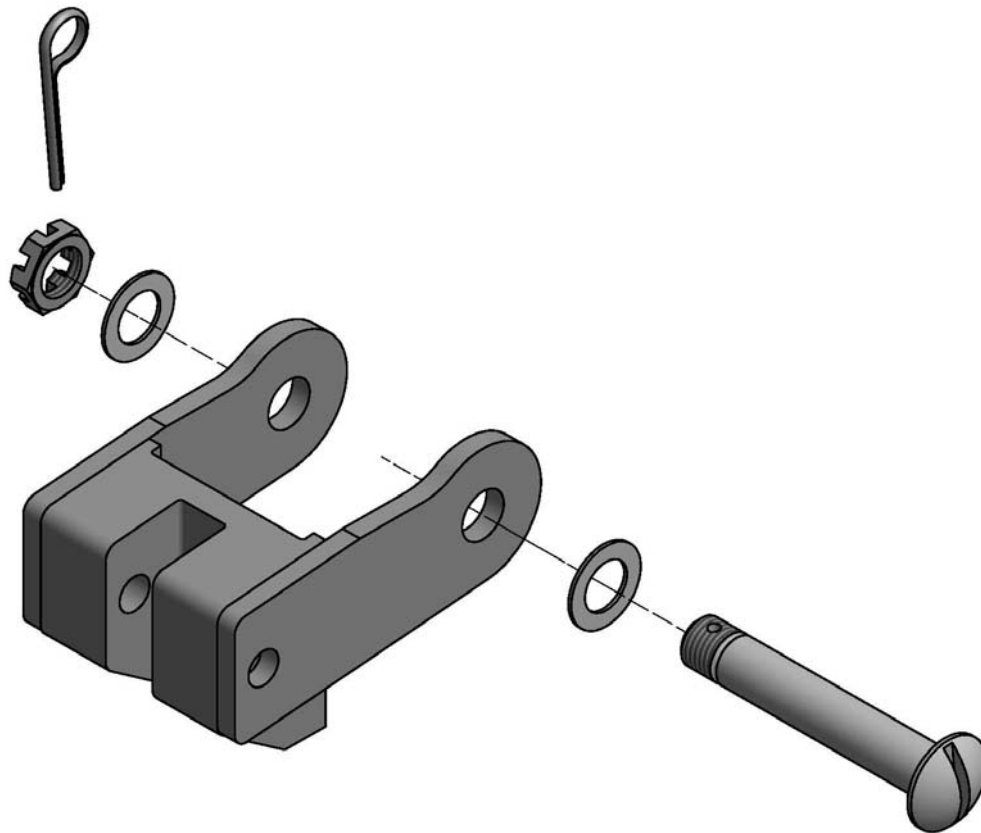


Figure 5: Keeper Hook Hardware Installation

4.2. Keeperless Cargo Hook

1. Remove the existing hardware at the connection point shown in Figure 6.
2. Install Items 4, 6, 8, and 10 (on Sheet 1) in the arrangement shown in Figure 7.

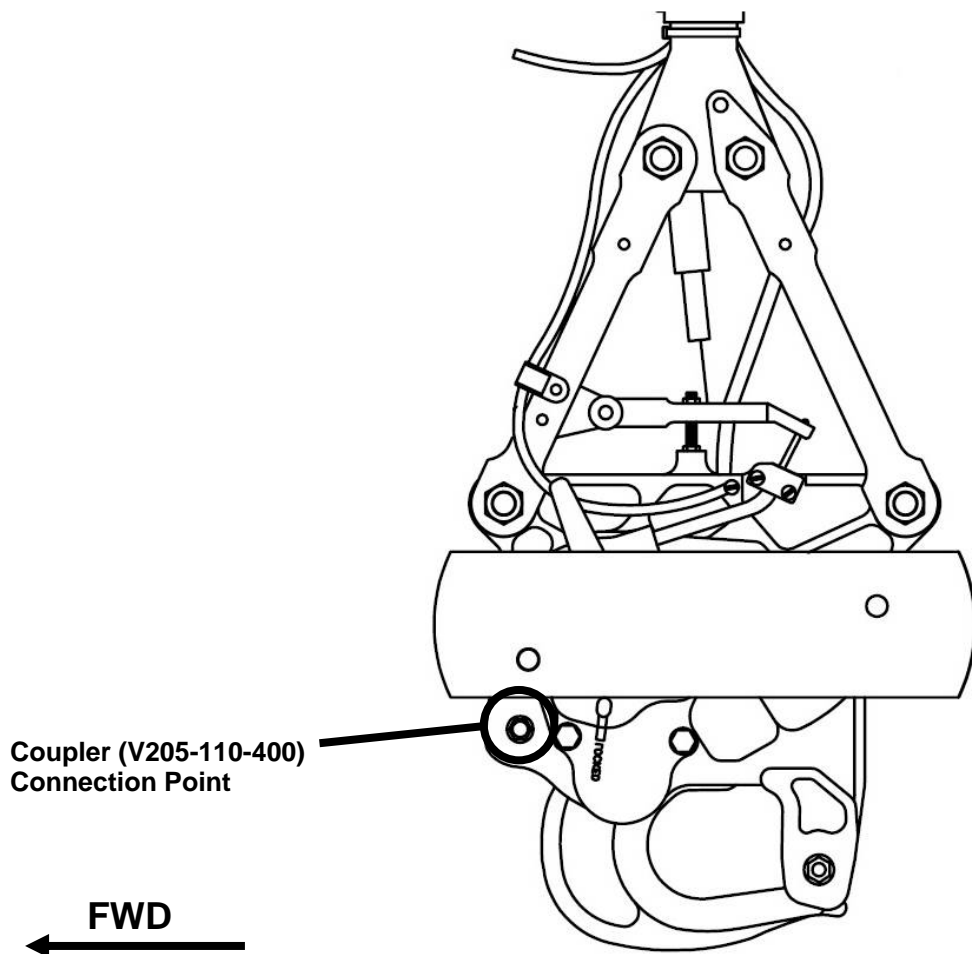


Figure 6: Keeperless Hook Coupler Connection Point

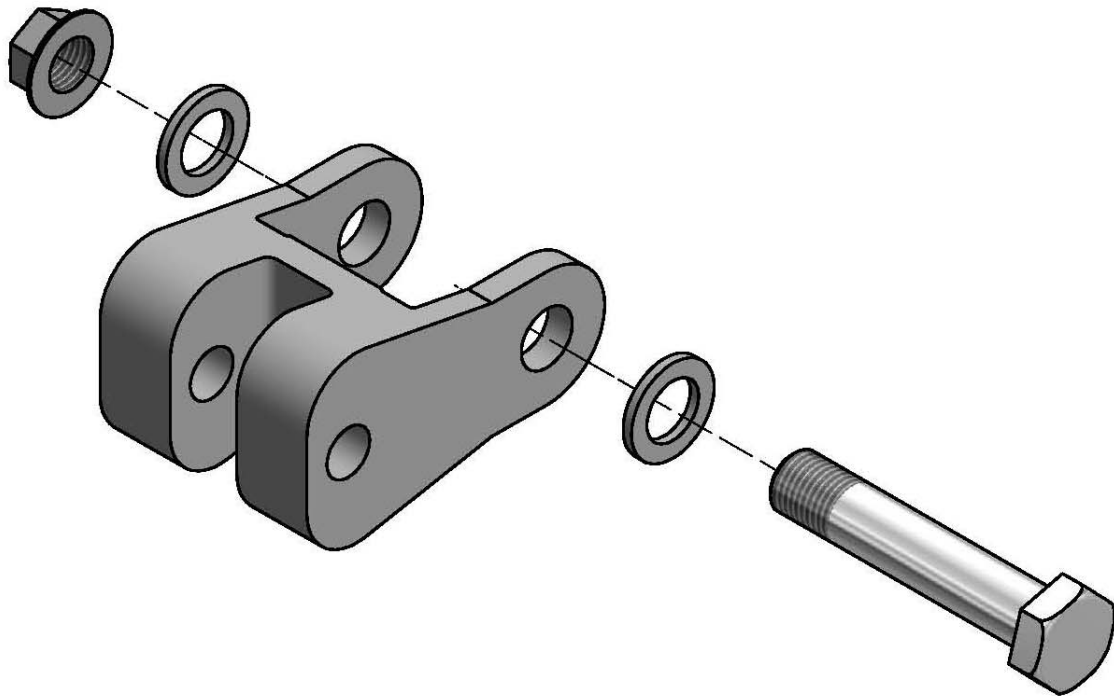


Figure 7: Keeperless Hardware Installation