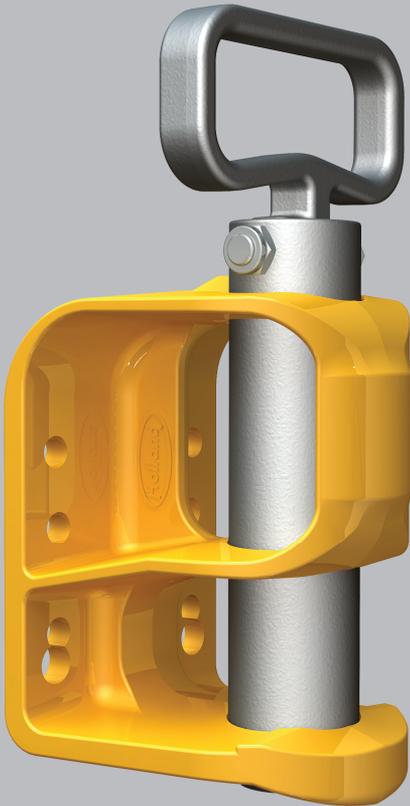


## Owner's Manual

### EH-3050 Series E-Hitch

Installation, Operation and  
Maintenance Procedures



Patent Pending

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## Introduction

This manual provides the information necessary for the proper operation and maintenance of the SAF-HOLLAND EH-3050 E-Hitch.

## Towing Applications

Designed for airport ground support and industrial material handling applications. This product is not approved by SAF-HOLLAND for over-the-road use.

**NOTE:** SAF-HOLLAND reserves the right, without giving prior notice, to change specifications and dimensions as designs are altered or improved.

**IMPORTANT:** Keep this manual in a safe location for future reference.

## Notes, Cautions, and Warnings

You must read and understand all of the procedures presented in this manual before starting any work on the E-Hitch.

Proper tools must be used to perform the maintenance and repair procedures described in this manual.

**NOTE:** In the United States, work shop safety requirements are defined by federal and/or state Occupational Safety and Health Act. Equivalent laws may exist in other countries. This manual is written based on the assumption that OSHA or other applicable employee safety regulations are followed by the location where work is performed.

Throughout this manual, you will notice the terms “NOTE”, “IMPORTANT”, “CAUTION”, and “WARNING” followed by product information. So that you may better understand the manual, those terms are defined as follows:

**NOTE:** Includes additional information to enable accurate and easy performance of procedures.

**IMPORTANT:** Includes additional information that if not followed could lead to hindered product performance.

**CAUTION** Used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, may result in property damage.

**CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

## 1. General Safety Instructions

Before beginning installation read and observe all Warning and Caution hazard alert messages in this publication. They provide information that can help prevent serious personal injury, damage to components, or both.

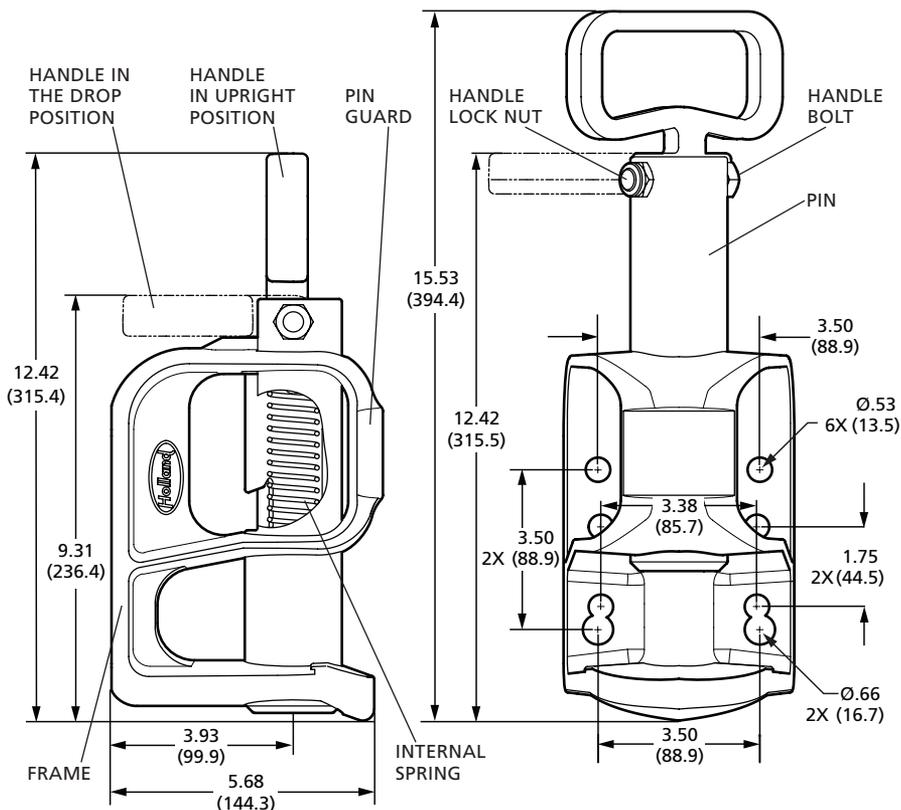
The E-Hitch installation and maintenance must be performed by a trained technician using proper tools and safe procedures.

We highly recommend the use of only SAF-HOLLAND Original Parts.

A list of SAF-HOLLAND technical support locations to supply SAF-HOLLAND Original Parts can be found at [www.safholland.us](http://www.safholland.us) or you can contact SAF-HOLLAND Customer Service at 1-888-396-6501.

Updates to this manual will be published as necessary online at [www.safholland.us](http://www.safholland.us).

## 2. Dimensional Layout /Parts Identification inch (mm)



### 3. Design and Performance Specifications

#### Hitch rating 1/2" bolts

Maximum D.B.P. .... 30,000 lbs. (13,608kg)

Maximum Vertical ..... 500 lbs. (227kg)

Hitch Weight ..... 22 lbs. (10kg)

#### Hitch rating 5/8" bolts

Maximum D.B.P. .... 50,000 lbs. (22,680kg)

Maximum Vertical ..... 500 lbs. (227kg)

Hitch Weight ..... 22 lbs. (10kg)

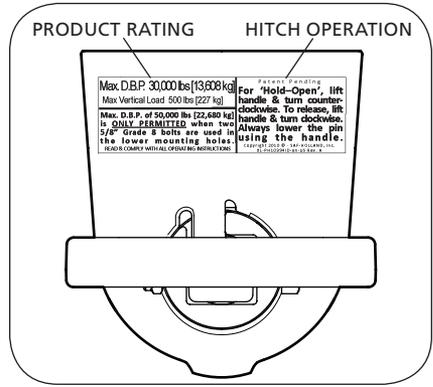
#### Application Drawbar eye

Minimum Inside Dia. .... 2-1/4" (57mm)

Maximum Inside Dia. .... 3" (76mm)

Max. Cross Section Dia. ... 1-3/4" (45mm)

Figure 1



### 4. Model Identification

All EH-3050 E-Hitches have an internal spring and a "Pin Guard" surrounding the top half of the pin. EH-3050 part numbers differentiate only by color.

- EH-3050-13 Frame painted safety yellow
- EH-3050-14 Frame painted white

The rating and operation label is located on the top of the product behind the pin (**Figure 1**).

## 5. Installation Instructions

The SAF-Holland EH-3050 E-Hitch you have purchased can be mounted 3 different ways with two load ratings. Figures 4 thru 6 show the hole pattern configurations that can be used with this product.

**NOTE:** This product has not been tested nor is it rated for use in a weld on application. Welding on the product will change the mechanical state of the material and cause an unsafe condition.

**WARNING** Failure to remove a welded EH-3050 from service will result in unexpected E-Hitch failure, which if not avoided, could result in death or serious injury.

**NOTE:** Mount hitch to a secure structure with sufficient strength to support load rating.

**Rating 30,000 lbs. (13,608kg) (Figure 2)**  
Use four (4) 1/2" Grade 8 bolts with supplied hardened thick flat washers. Torque bolts to 60 ft. lbs. (82 N•m) minimum. Nuts used must be ASTM grade "C" or better.

This hole pattern will match the following products:

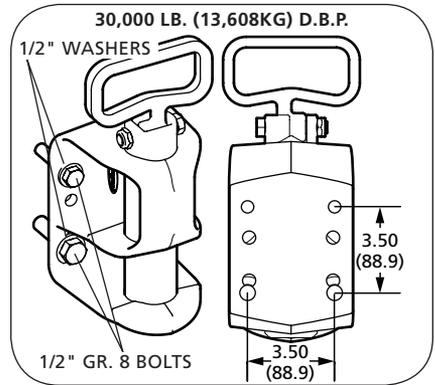
- HOLLAND: EH-20RPXX Series E-Hitches

**Rating 30,000 lbs. (13,608kg) (Figure 3)**  
Use four (4) 1/2" Grade 8 bolts with supplied hardened thick flat washers. Torque bolts to 60 ft. lbs. (82 N•m) minimum. Nuts used must be ASTM grade "C" or better.

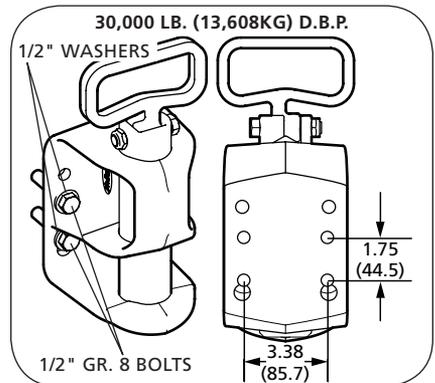
This hole pattern will match the following products:

- HOLLAND: PH-30, PH-30RP Series  
PH-10PR Series  
PH-T-60-AOL-8  
PH-T-60-AL  
BH-200RN Series

**Figure 2**



**Figure 3**



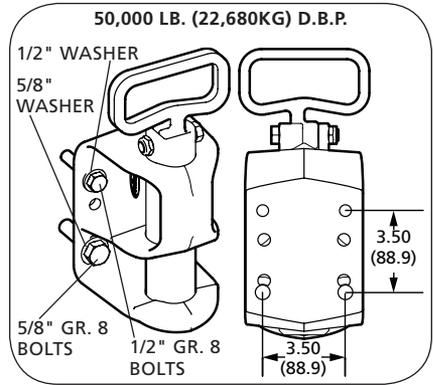
**Rating 50,000 lbs. (22,680kg) (Figure 4)**  
 Use two (2) 5/8" Grade 8 bolts with supplied hardened clipped washers (clipped edge facing down) in lower holes. Torque 5/8" bolts to 120 ft. lbs. (163 N•m) minimum. Use two (2) 1/2" Grade 8 bolts with supplied hardened flat washers in upper holes. Torque 1/2" bolts to 60 ft. lbs. (82 N•m) minimum. Nuts used must be ASTM grade "C" or better.

This hole pattern will match the following products:

- HOLLAND: EH-40RP Series E-Hitches

**⚠WARNING** Failure to use supplied washers or proper bolts when mounting could result in unexpected E-Hitch failure, which if not avoided could result in death or serious injury.

**Figure 4**



## 6. Operating Instructions

### 6A. Opening E-Hitch (Figure 5)

1. To open the E-Hitch:
  - a. Grasp handle and lift until the pin contacts the spring catch.
  - b. Rotate pin counter clockwise until the pin lock rests on top of the hitch body.

### 6B. Closing E-Hitch (Figure 6)

1. Position the drawbar eye in the bottom opening of the E-Hitch. Align the eye of the drawbar under the pin.
2. To close grasp handle, lift slightly and rotate the pin clockwise until the pin contacts the spring catch.
3. Lower the pin thru the drawbar eye, check that the pin is fully seated.

**NOTE:** Be sure the drawbar size is compatible with the coupling device on the tow vehicle. See section 3.

**NOTE:** Pinch points exist where pin slides through E-Hitch frame and where handle attaches to pin.

**CAUTION** Failure to keep fingers away from pin and E-Hitch frame while operating could result in pinched fingers, which if not avoided, may result in minor or moderate injury.

Figure 5

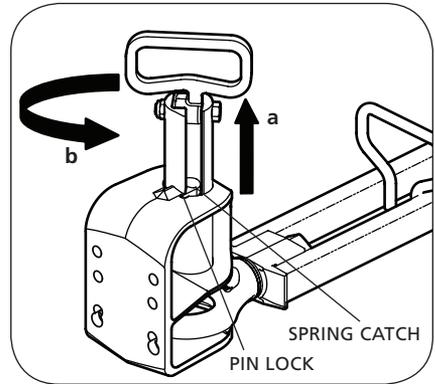
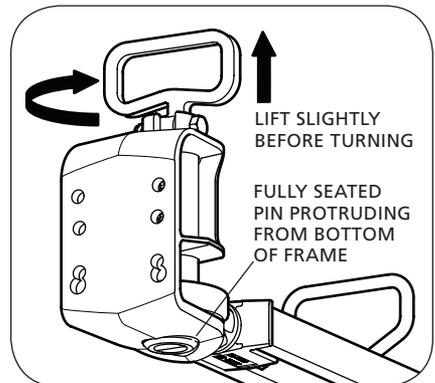


Figure 6



## 7. Converting Handle

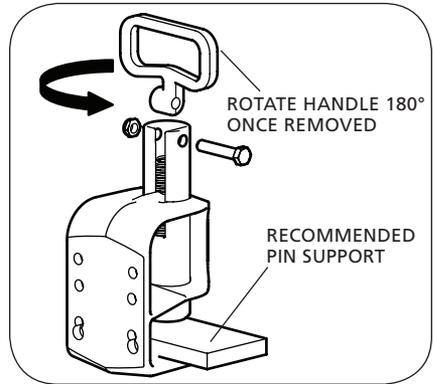
The E-Hitch is packaged with the handle in the drop style position. The following instructions are for converting the hitch handle from a drop style to a fixed upright style or vice-versa.

1. If E-Hitch is not mounted securely to a vehicle the hitch frame should be gripped in a vise of adequate size to secure the Hitch while converting.

**CAUTION** Failure to support hitch pin while changing handle could result in ejection of hitch pin, which if not avoided, may result in minor or moderate injury.

2. Pull up on handle to retract the hitch pin.
3. Place a block of wood between the hitch pin and E-Hitch frame and release the handle.
4. Remove lock nut and bolt, pull out the handle and rotate handle 180° (**Figure 7**).
5. Replace lock nut and bolt. Tighten lock nut to contact with pin plus 1/2 turn. Handle will now fold down towards the rear of the hitch.
6. Pull up on handle and remove block of wood placed in Step 3.
7. Check for proper operation before continued use of E-Hitch.

Figure 7

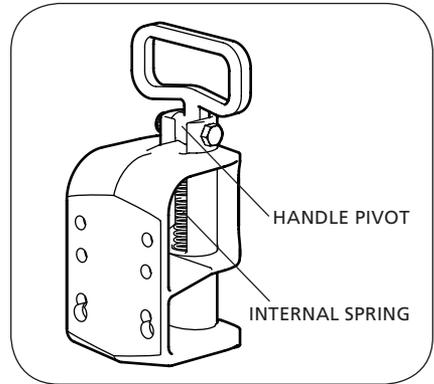


## 8. Maintenance Procedures

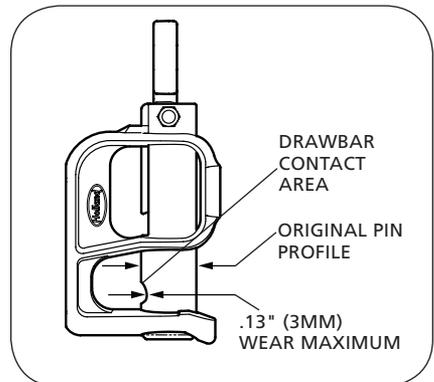
Perform the following every three months for proper performance.

- Clean and check for proper operation.
- Inspect for worn, damaged, or missing parts.
- Inspect mounting and verify it is secure.
- Correct and replace parts as required using only genuine SAF-Holland replacement parts (See section 9 for spare parts).
- Using a light oil, lubricate handle pivot and internal spring (**Figure 8**).
- Inspect the pin contact area for wear and damage. If wear exceeds .13 in. (3mm) from the original surface profile replace the pin (**Figure 9**).
- Inspect the pull force on the pin for proper spring tension. This can be done by use of a hand held force gage. Attach the gage to the handle and pull the pin up until it is approximately one inch above the top of the bottom flange (**Figure 10**).

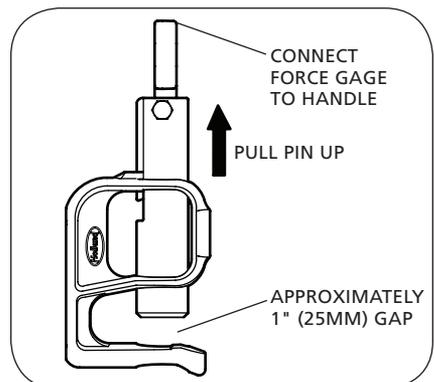
**Figure 8**



**Figure 9**



**Figure 10**

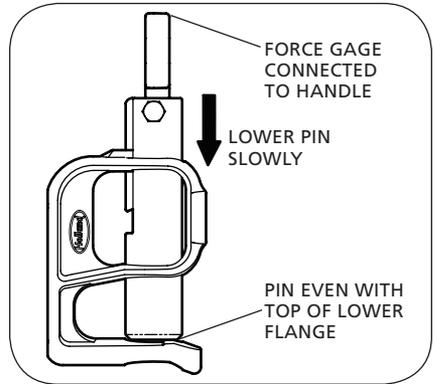


- Lower the pin until the bottom of the pin is even with the top of the bottom flange. This is done to insure there is nothing snagging on the pin to give you a false reading. When the pin bottom is level with the top of the bottom flange the force gage should read no less than 20 lbs. (89 Newtons) (**Figure 11**).

Regardless of the reading on the force gage if the spring is broken it must be replaced. Replacement spring part number is XA-11423-G. See section 9 for ordering information.

**⚠WARNING** Failure to follow the above maintenance instructions could result in unintentional uncoupling during operation which, if not avoided, could result in death or serious injury.

**Figure 11**



## 9. Repair Kits and Ordering Information

Listed below are the repair kits offered for the E-Hitch (**Figure 12**).

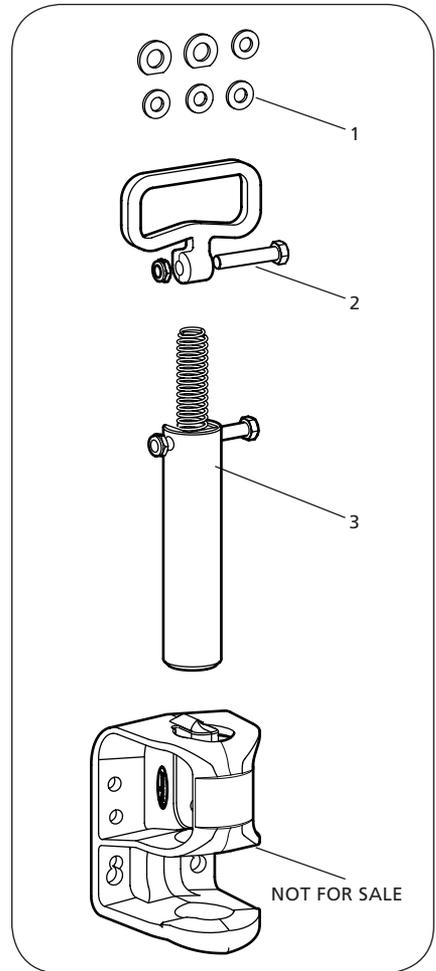
To order please call, SAF-HOLLAND Customer Service at 1-888-396-6501.

Specify the kit numbers you want along with the quantity needed.

**NOTE:** The E-Hitch frame is not a saleable item. In order to receive a frame a full assembly must be ordered.

ITEM	REBUILD AND REPLACEMENT KITS	PART #
1	Washers, (2) 5/8" and (4) 1/2"	RK-11438
2	Handle, Lock Nut, Handle Bolt	RK-11440
3	Pin, Spring, Lock Nut, Handle Bolt	RK-11439
4	E-Hitch Frame Not offered for sale	N/A

**Figure 12**





From fifth wheel rebuild kits to suspension bushing repair kits, SAF-HOLLAND Original Parts are the same quality components used in the original component assembly.

SAF-HOLLAND Original Parts are tested and designed to provide maximum performance and durability. Will-fits, look-a likes or, worse yet, counterfeit parts will only limit the performance potential and could possibly void SAF-HOLLAND's warranty. Always be sure to spec SAF-HOLLAND Original Parts when servicing your SAF-HOLLAND product.

**SAF-HOLLAND USA • 888.396.6501 • Fax 800.356.3929**  
**[www.safholland.us](http://www.safholland.us)**

**SAF-HOLLAND CANADA • 519.537.3494 • Fax 800.565.7753**  
**WESTERN CANADA • 604.574.7491 • Fax 604.574.0244**  
**[www.safholland.ca](http://www.safholland.ca)**

**SAF-HOLLAND MEXICO • 52.1.55.5456.8641 • Fax 52.55.58162230**  
**[www.safholland.com.mx](http://www.safholland.com.mx)**

**[info@safholland.com](mailto:info@safholland.com)**

SAF-HOLLAND USA, INC.  
1950 Industrial Blvd, Muskegon, MI 49443  
[www.safholland.com](http://www.safholland.com)

