

# **Fork Mounted Swivel Hooks**

## Model : MFSH-14

## **Installation and Safety Manual**



DOC# MFSH142015

www.haugenattachments.com

Marv Haugen Enterprises Inc. \* 1851 Heartland Ave. \* Casselton ND 58012 \* Phone: 877-580-6218



## Thank you for choosing a Haugen Swivel Hook

## Before you use this Swivel Hook you must read and understand the Operator's Manual

Keep a copy of this manual on the Swivel Hooks at all times If you have questions call us at 1-877-580-6218

#### Swivel Jibs

Haugen Swivel Hooks are designed for use on rough terrain extendable or straight mast forklifts, and industrial lift trucks. They have been tested, proven and rated for the Load Capacities as shown on the Swivel Hook. Haugen Attachments has been building Industrial Swivel Hooks for many years, these units have proven themselves durable and extremely safe throughout the United States and Canada

Swivel Hooks are designed to hold a Swivel Hook at a standard 24" load center. Forklifts are normally designed with a 24" loader center. Since the swivel hook is located at the 24" loader center the forklifts load chart will normally apply, less the empty weight of the attachment, rigging and the weight of the load. A seperate down rated load chart should not be needed for the forklift.

Note the rating of the Swivel Hook does not reflect the rating of the Forklift or Telehandler. The total load must never exceed the rating of the Forklift or Telehandler.

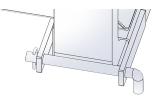
#### **Engineering Certification**

The Haugen Swivel Hooks have been designed and built to comply with the ANSI/TISDF B56.6-2011 and the CSA B335 safety standards. The Swivel Jibs have been tested and certified by a third party Certified Professional Engineer. A copy of their report is at the back of the owners manual. If required a copy of the full engineering report is available upon request.



#### **Installation Safety Pins**

The Swivel Hooks are very easily installed by inserting your forklift tines fully into the pockets so the ears extend behind the Forks. Then install the safety retainer pin behind the fork and insert the security clip. (As Shown on the diagram) The safety retainer pins are chained to the Jib to prevent loss of the pins. These must be properly installed and secured before using the Jib. Note: Swivel Hook Frame, Hook and retainer pins should be fully inspected before every use.



## - Operating Rules for Swivel Hooks -

#### Inspection

- 1. Check the Swivel Hook, Latch, Bolt and Sleeve making sure that it is properly installed and in good working condition.
- 2. Check the Bolt and sleeve for any wear or distortion
- 3. Safety pins must be installed and secured with the cotter pin.
- 4. Check the Swivel Hook Frame for any excessive wear, cracked or broken welds.
- 5. Check each of the holes for any elongation.
- 6. The Swivel Jibs load capacity rating and empty weight decals must be present and legable.
- 7. The operator must have read and understands the operators manual.

### **Installing on a Lift Truck**

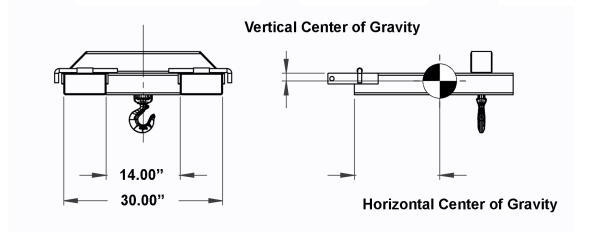
- 1. Secure the safety pins behind the heel of each fork.
- 2. Optional Safety chains when used are only to be used in addition to the safety retainer pins, not in lieu of.
- 3. Disable any hydraulic functions to the Forklift Carriage. Such as tilting or swinging functions.
- 4. Position the fork tines so that the Swivel Hook will hold the load centered on the Forklift.



## **General Operating Rules**

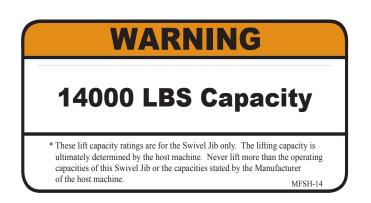
- 1. Inspections as stated above must be made prior to each use of the Swivel Hook
- 2. Before each use make sure the Swivel Hook is properly installed on the fork tines and that the hook is secured to the Swivel Hook frame and the bolt is tight.
- 3. Determine that the load your lifting is within the capabilities of the Swivel Jib and the capacity of the Lift Truck. Never exceed the capacities on either the Forklift or the attachment, Remember that capacity of the Forklift decreases when the load is raised and especially with Telehandlers when the load is extended.
- 4. Before picking up a load make sure that it is balanced and level. Make sure that the slings, straps or any other rigging is properly secured and is not twisted or entangled in anyway.
- 5. Do not pull loads. The Swivel Jib is designed for vertical lifting ONLY.
- 6. Carry all loads low and use tag lines to keep loads from swinging.
- 7. Be sure forklift is on a level /firm surface before raising the load.
- 8. Forks should always be level or slightly tilted back, never tilted forward when using the Swivel Jib.
- 9. The Forklift operator must remain in the seat at the controls with the engine running whenever there is a load on the Swivel Jib.
- 10. Only qualified and trained personal should operate the forklift. Operators should know and follow all local, state and federal safety regulations
- 11. All safety regulations must be followed at all times.
- 12. Any personal working around the Swivel Jib must wear hard hats and steel toed boots
- 13. When lifting loads there should be no personel within a minimum of ten feet in all directions of the fall zone, never put yourself or any part of your body under a suspend load.
- 14. Do not use the Swivel Jib in anyway to lift personal.
- 15. Refer to the Forklift's operators manual for more information on handling elevated loads and additional safety tips.





Model = MFSH-14 Empty Weight = 147 lbs Vertical Center of Gravity = 1.65" Horizontal Center of Gravity = 16.42"

Note: The capacity decals reflects the capacity of the Swivel Hook only and does not reflect the capacity of the forklift nor the maximum load that can be safely handled by a particular forklift.





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#### **HEYER ENGINEERING, PC**

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November 6, 2014

Jeff Haugen Haugen Attachments - Marv Haugen Enterprises 1851 Heartland Ave. Casselton, ND 58012

Copy of the Swivel Hooks Engineering Certification report. A full detailed report is available upon request

RE: MFSH-14 Swivel Jib Capacity/Structural Analysis

Mr. Haugen:

Heyer Engineering has completed an analysis of the MFSH-14 Swivel Jib attachment. The jib structure was analyzed using IBC 2012 and AISC 14th Ed code requirements. Forces used for analysis to carry its maximum load, 14,000 lbs. with an impact factor of 20%. The jib structure was analyzed with the 14,000 lbs. force vertically down and laterally. Documents given to Heyer Engineering from Haugen Attachments include the weldment drawings for the above listed Swivel Jib which is attached to this report.

The above referenced Swivel Jib is understood to be built out of rectangular HSS sections and steel plates. All HSS sections have been analyzed using A500 Gr. B structural steel. All other components have been analyzed using A36 structural steel. It is also understood that all components will be fully welded with a minimum of a 3/8" fillet weld.

The results of the analysis are shown in the attached calculations and are summarized below:

- Bending unity= 0.827 < 1.0 , <u>ok</u>
- Shear unity= 0.395 < 1.0 , <u>ok</u>
- Block shear unity= 0.62 < 1.0 , ok
- Maximum deflection= 0.011 in. (downward)
- Maximum lateral deflection= 0.005 in. (horizontal perpendicular)

In conclusion, the MFSH-14 Swivel Jib is structurally sufficient to support a 14,000 lbs. load <u>ONLY</u> when following the "General Rules" as stated by Haugen Attachments – Marv Haugen Enterprises. If there are any questions or comments with the above listed report, please feel free to contact Heyer Engineering at any time.

Sincerely, Heyer Engineering, PC





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## Warranty Statement

Marv Haugen Enterprises warrants it's products, under normal use and maintenance, to be free from defects in material and workmanship for a period of one year from the purchase date from an authorized Haugen Dealer. The limited warranty is extended only to the original purchaser of Haugen ProductsWarranty Statement

- 1. During the applicable warranty period, Haugen at it's option, will repair or replace any part determined by Haugen to be defective. Such repair or replacement shall take place at Haugen's factory or a location designated by Haugen. Under no circumstances shall Haugen be obligated for the cost of any repair or replacement by anyone other than Haugen without its express written consent.
- 2. Parts may not be returned without the express written authorization from Haugen.
- 3. Some purchased components including but not limited to hooks, cylinders, and hydraulic motors are subject to inspection and warranty of the respective manufacturers.
- 4. This warranty is void if any attempt is made to make field repairs. Make sure to leave the product in its original failed condition.
- 5. To make a claim under this warranty first contact your authorized Haugen dealer. The Haugen dealer shall complete the warranty claim form and obtain written authorization from Haugen to return parts. All warranty claims must include detailed information regarding make and model of the vehicle on which the Haugen product was mounted, hours of use, description of events that led up to the failure, and any other information helpful in reviewing this claim. All warranty returns must be prepaid. Shipments arriving at our factory on a freight collect basis will be refused by our recieving department. The freight charges will be credited if the parts are determined by haugen to be defective, and the associated freight costs in returning those parts will be prepaid by Haugen.
- 6. Products or parts thereof which, as determined by Haugen's examination, show wear from normal use, been improperly operated, damaged by accident or negligence, field repaired, altered or modified are not considered defective in material or workmanship and are not covvered by this warranty. This warranty does not obligate Haugen to bear any cost of labor for field repair, replacement, testing, or adjustment nor damaged caused by accident, abuse, misuse, or environmental elements.
- 7. Any parts or labor required to repair or replace parts not covered under this warranty will be charged to the customer. Parts repaired or replaced by Haugen are then covered by this warranty only for the remainder of the original warranty as if such parts were original parts.
- 8.. Haugen reserves the right to change its specifications and designs at any time.

This warranty is exclusive and in lieu of all other express warranties, if any including implied warranties of merchantability and fitness for a particular purpose. It shall not extend beyond the duration of the expressed warranty provided herein and the remedy for violations of any implied warranty shall be limited to repair or replacement of the defective part pursuant to the terms contained herein. No employee, dealer, salesman,or representative is authorized to change this warranty in any way or grant any other warranty. Haugen shall not be liable for any consequential, incidental, or punitive damages, losses or expenses, including those resulting from or caused by any defects.





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