

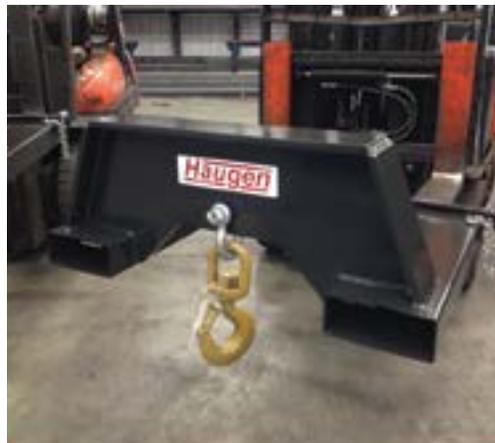


Marv Haugen Enterprises
1851 Heartland Ave. - Casselton, ND 58012
Toll Free 877-580-6218
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Fork Mounted Swivel Hooks

Model : MFSH-30

Installation and Safety Manual



DOC# MFSH302016

www.haugenattachments.com

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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 separate down rated load chart should not be needed for the forklift.

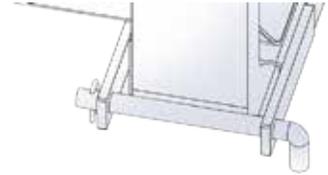
Note the rating of the Swivel Hook does not reflect the rating of the Forklift or Telehandler. The total load must never exceed the rating of the Forklift or Telehandler.

Engineering Certification

The Haugen Swivel Hooks have been designed and built to comply with the ANSI/TISDF B56.6-2016 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.



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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 suspened 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.

Haugen

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August 12, 2014

Jeff Haugen
Haugen Attachments - Marv Haugen Enterprises
1851 Heartland Ave.
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RE: MFSH-30 Swivel Jib
Capacity/Structural Analysis

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

Mr. Haugen:

Heyer Engineering has completed an analysis of the MFSH-30 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, 30,000 lbs. with an impact factor of 20%. The jib structure was analyzed with the 30,000 lbs. force vertically down and laterally. Documents given to Heyer Engineering from Haugen Attachments include the weldment drawings for the above listed Swivel Jib with a title "30kip Swivel Hook" dated 6/16/2014.

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 5/16 in. fillet weld.

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

- Bending unity= $0.886 < 1.0$, **ok**
- Shear unity= $0.129 < 1.0$, **ok**
- Block shear unity= $0.986 < 1.0$, **ok**
- Maximum deflection= 0.018 in. (downward)
- Maximum lateral deflection= 0.037 in. (horizontal – perpendicular)

In conclusion, the MFSH-30 Swivel Jib is structurally sufficient to support a 30,000 lbs. load **ONLY** 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

