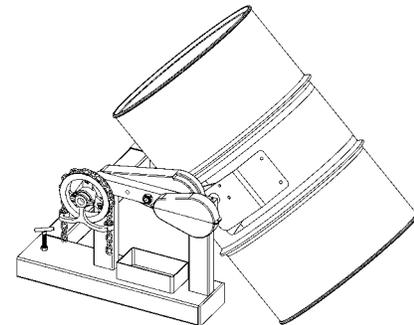
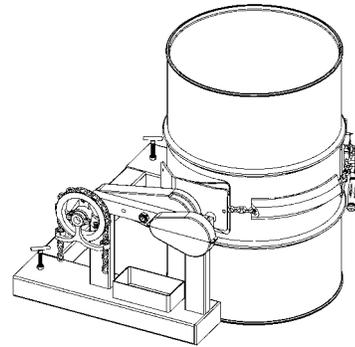


CONTENTS

	Page
Receiving Procedures.	1
Warranty.	1
Safety Information.	1 - 2
Machine Description.	3 - 4
Operating Instructions.	4
Maintenance.	5
Dimensions to Calculate Lost Load.	5
Parts Lists and Diagrams.	6 - 7

Operator's Manual
for Morse Stainless Steel
Heavy-Duty Forklift-Karrier
Model 285A-HDSS

Serial Number 0818 to ____ (MMYY)



Receiving Procedures

Every Morse drum handler is inspected prior to shipping. However, damage may be incurred during transit.

- Check for visible damage. If you choose to accept damaged freight, always sign noting the damage on the **Bill of Lading**.
- Document the damage and have the truck driver sign. We recommend keeping a digital camera at your receiving dock for this purpose.
- Open packages expeditiously to check the condition of the goods. There is only a 24 hour window to notify the carrier of any concealed damage.
- Immediately **report all damage to the shipping company!** Then you may contact Morse for assistance with your freight claim.
- Morse Manufacturing will not be held responsible for any damaged freight that is not signed for as damaged.

Limited 2 Year Warranty

Morse drum handling equipment is guaranteed against defects in workmanship or materials for two years when used properly within its rated capacity. Warranty does not cover wear from normal use or damage from accident or abuse. Motors and other purchased parts carry the warranties of their manufacturers.

For warranty claims, contact your Morse Dealer to obtain a return authorization number, and for return freight advice. Return freight must be prepaid.

In all instances, liability is limited to the purchase price paid or to repairing or replacing the product. Customer assumes liability for any modifications, unauthorized repairs or parts substitution.

Safety Information

While Morse Manufacturing Co. drum handling equipment is engineered for safety and efficiency, a high degree of responsibility must be placed upon the machine operator to follow safe practices, based primarily on common sense, upon which true safety depends.

Failure to follow the safety precautions in this manual can result in personal injury or property damage. Observe the same precautions as with similar machinery where carelessness in operating or maintenance is hazardous to personnel. Carefully read the safety precautions below and throughout this manual.

Review the Material Safety Data Sheet(s) for the material(s) in the drum(s) and take all necessary precautions. Safety shoes, work gloves, hard hat and other personal protective devices are recommended.

Prior to initial use, inspect all moving parts and test rotation of chain wheel and saddle assembly. Inspect saddle assembly for proper operation. Perform necessary load test, inspections, operator training, etc.



morsedrum.com



service@morsedrum.com



(315) 437-8475



103 kuhn Rd.
Syracuse, NY, 13208 U.S.A.

**Operator's Manual for Morse Stainless Steel Heavy-Duty Forklift-Karrier Model 285A-HDSS
Serial Number 0818 to ____ (MMYY)**

Safety Information (continued)

	DANGER - Indicates a situation which, if not avoided, will result in serious injury or death. This signal word is limited to the most extreme situations.
	WARNING - Indicates a situation which, if not avoided, could result in serious injury or death.
	CAUTION - Indicates a situation which, if not avoided, can result in damage to the machine.



WARNING - The Heavy-Duty Forklift-Karrier is designed to handle one drum of the types listed at the top of page 3. Machine Description. DO NOT attempt to handle any other type of drum or object. DO NOT exceed the weight capacity of 1500 Lb. (680kg). Exceeding these ratings is unsafe and could result in equipment damage, excessive wear or awkward handling.



WARNING - Do Not Modify the Unit. Under no circumstances should any modifications be made to the Morse machinery without factory authorization. Any modifications may void the warranty. This machine was designed to perform a specific job and alterations may result in injury to operator or machine.



WARNING - No Loose Fitting Clothing. Wear close-fitting clothing and safety equipment appropriate to the job. Loose fitting clothing may become caught on the machinery and cause severe personal injury.



CAUTION – Do Not Transport with Drum Raised. Always lower the drum holder to lowest position before transporting.



CAUTION - Wear safety shoes with non-slip soles and hard toe protection.



CAUTION: DO NOT allow drum to impact on floor, ground, or dumping station, etc.



WARNING: This product can expose you to chemicals including cobalt, titanium dioxide, and 2-methylimidazole, which are known to the State of California to cause cancer, and bisphenol-A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

**Operator's Manual for Morse Stainless Steel Heavy-Duty Forklift-Karrier Model 285A-HDSS
Serial Number 0818 to ____ (MMYY)**

Machine Description

The Model 285A-HDSS Heavy-Duty Forklift-Karrier is designed to lift, transport, and dispense a ribbed 55-gallon (210 liter) steel or fiber drum 22" to 23.5" (56 to 59.7 cm) in diameter. The maximum full-drum capacity is 1500 Lb. (680 kg). The capacity is derated to 800 Lb. (363 kg) for a half-full drum. The half-full rating is based on the tilt mechanism's capacity for handling an unbalanced bottom-heavy drum.

MORSE
Mfg. Co., Inc.
E. Syracuse, NY

1500 Lb.
(680 kg)

Max. Capacity

The Specialist In Drum Handling Equipment

Made in U.S.A.

ACCESSORIES

55/30SS Series Stainless Steel Diameter Adapters for drum with diameter smaller than 22" (56 cm). To handle a smaller drum, insert the correct size Diameter Adapter into the standard drum holder. See Diameter Adapter info at: <https://morsedrum.com/products/diameter-adapters>

ONLY Diameter Adapters for drum with 17.5" (44.5 cm) diameter or smaller have integrated brackets to prevent drum slipping length-ways.

NOTE: For 30-gallon (114 Liter) PLASTIC drum, insert Diameter Adapter; **AND** install Bracket or Top Rim Clamp to prevent drum slipping.

IMPORTANT: To prevent 30 to 55 gallon (114 to 210 L) size plastic drum from slipping, you **MUST** install either Top Rim Clamp Kit or Bracket Assembly Kit.

- 1. Stainless Steel Bracket Assembly Kit # 4556SS-P** is **required** to handle a RIMLESS plastic drum (figure 2.1), and is also recommended for a fiber drum. The Bracket adjusts for a 31" to 39" (79 to 99 cm) tall drum. You can also handle a rimmed drum with the Bracket installed.
- 2. Stainless Steel Top Rim Clamp Kit # 4560BSS-P** to handle a RIMMED plastic drum (figure 2.2). Install the Top Rim Clamp Kit to handle a RIMMED plastic, steel or fiber drum with suitable top rim.

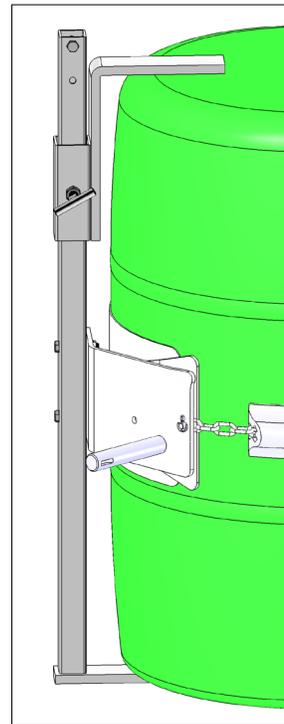


Figure 2.1

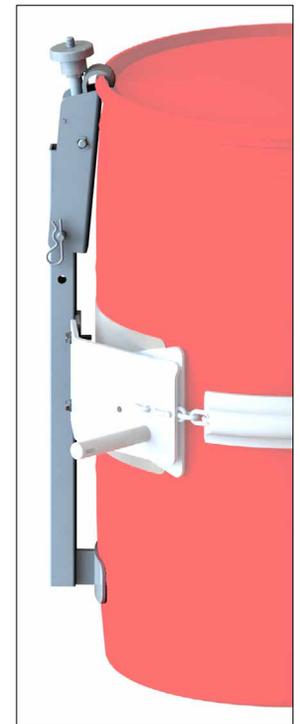


Figure 2.2

MORStop™ Tilt-Brake with Stainless Casing Kit # 3900SS-P

Automatically holds drum tilt angle until you move it.



Kit for customer to install on EXISTING manual tilt drum handler.

Hand Crank or Hand Wheel

Replace standard pull chain to turn drum



9" (22.9 cm)
Hand Crank
Kit # 1460SS-P

16" (40.6 cm)
diameter
Hand Wheel with
speed knob
Kit # 2690SS-P

Stainless Steel Kit # 4556SS-P

Install Bracket Assembly Kit to handle RIMLESS or RIMMED plastic drum

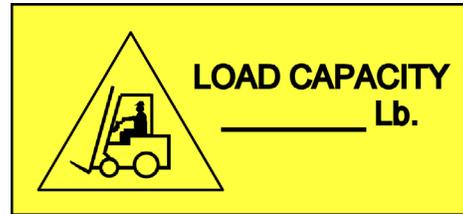
Stainless Steel Kit # 4560BSS-P

Install Top Rim Clamp Kit to handle RIMMED plastic drum

**Operator's Manual for Morse Stainless Steel Heavy-Duty Forklift-Karrier Model 285A-HDSS
Serial Number 0818 to ____ (MMYY)**

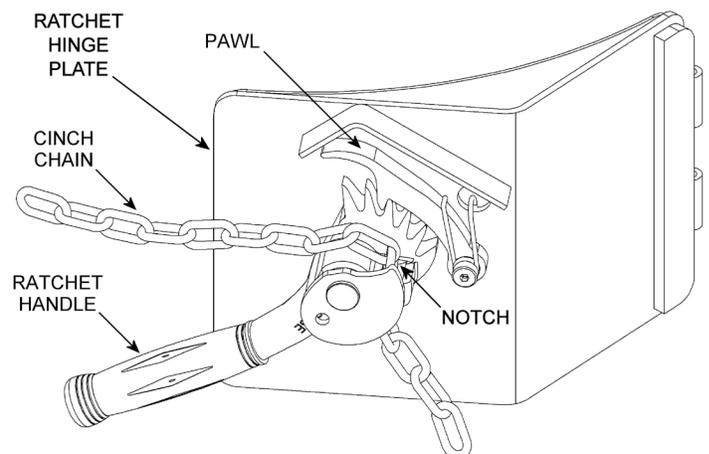
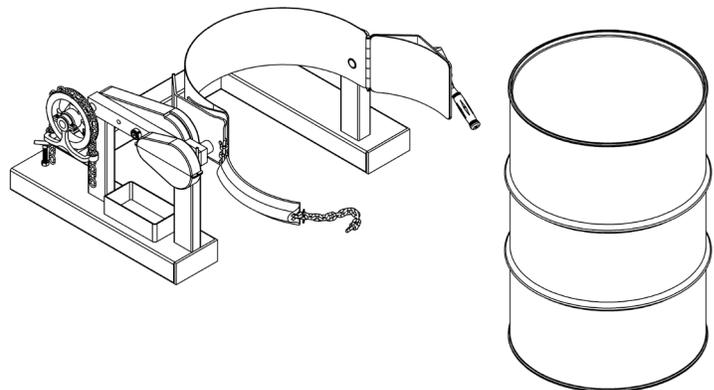
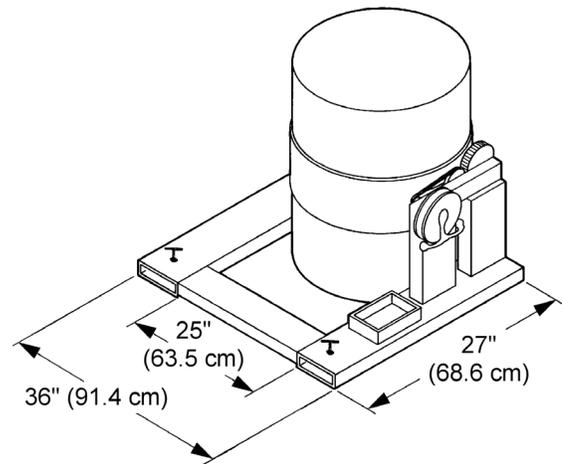
Important

1. Please read all instructions thoroughly before attempting to operate your new Morse drum handler.
2. When loading, unloading, operating, or maintaining your MORSE drum handler, always use care and good judgment. Maintain secure footing and a firm hold. Keep hands and loose clothing away from all moving parts. Never allow anyone to be below any part of a raised drum handler or drum. Read operating instructions and review the pictures in the sales brochure before operation.
3. This model is a front-end attachment for a forklift, OSHA recommends that "... the truck (forklift) be marked to identify the attachment(s) and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered." See center of gravity dimensions on page 5 for calculating lost load on your equipment.



Operating Instructions

1. Before sliding forklift forks into the fork tubes, adjust forks to an inside spread of 25" (63.5 cm) minimum. Lock forks into position on the forklift carriage.
2. Drive the forklift forward to slip the forks into the fork tubes. Tighten tee screws (item #8) to secure the Forklift Karrier to the forks.
3. Release the cinch chain (item #112) and hang the loose end from the upright peg on the front of the gear block. Swing the ratchet hinge plate to the open position.
4. Drive the forklift with the Forklift Karrier near floor level to position the saddle band around the middle of the drum between the ribs.
5. Drape the cinch chain across the front of the drum and insert one link into the slot on the ratchet handle (shown right). Turn the ratchet handle clockwise to tighten the cinch chain around the drum (see detail).
6. Remove pull chain (item #11) from chain box on base frame and place end of loop near operator's seat.
7. Raise forks to clear the floor and transport drum in vertical position to dispensing location.
8. To pour drum: pull on chain (item #11), rotating drum to angle required for dispensing. To control the pouring angle of the drum, pay out one side of chain and pull the other side to prevent the drum from free-wheeling.
9. If the Heavy-Duty Forklift-Karrier is equipped with the MORStop Tilt-Brake, there is no need to hold tension on both sides of the chain loop. Braking is immediate and self-actuating, without additional steps by the operator. To add the MORStop Tilt-Brake to your Heavy-Duty Forklift-Karrier, order kit for field installation (part # 3900SS-P).
10. When dispensing is completed, rotate the drum back to vertical and return drum. While transporting, ensure that the drum is raised away from the floor to prevent the drum bottom from interfering with a pallet or other obstacle.



**Operator's Manual for Morse Stainless Steel Heavy-Duty Forklift-Karrier Model 285A-HDSS
 Serial Number 0818 to ____ (MMYY)**

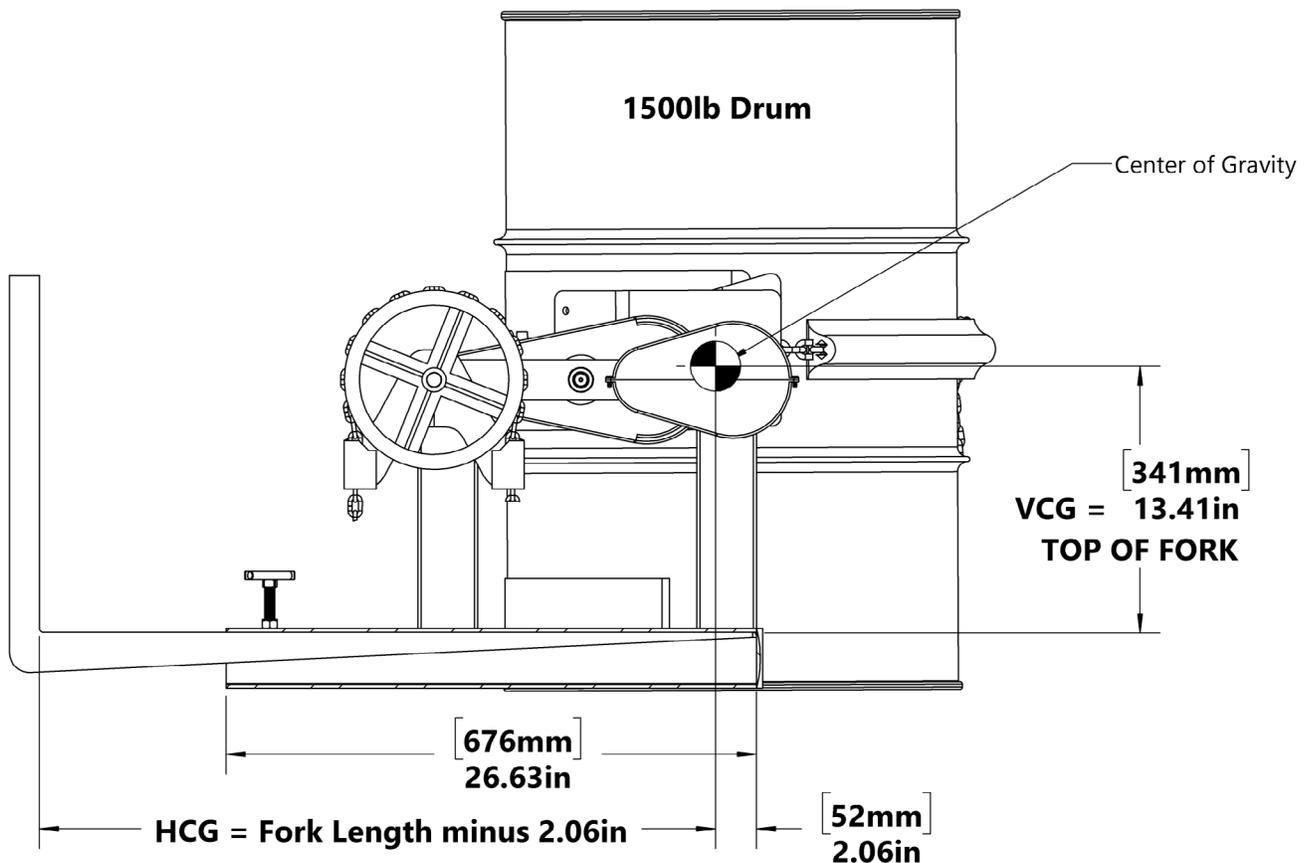
Maintenance

Periodic inspection for the general condition of structural and mechanical components is imperative for safe and efficient operation.

1. Lubricate gear teeth and roller chain.
2. Clean and oil ratchet, pawl and other moving parts periodically. Clean and lubricate more often in environments where dust, dirt or other foreign particles will effect the performance of moving parts.
3. Periodically inspect all moving parts, framework, drum holder and contact areas for signs of wear, fatigue, or loosening. Tighten, adjust, or replace parts as necessary to prevent failure and maintain proper function.
4. Worn or damaged parts must be properly replaced with the correct, genuine Morse parts.

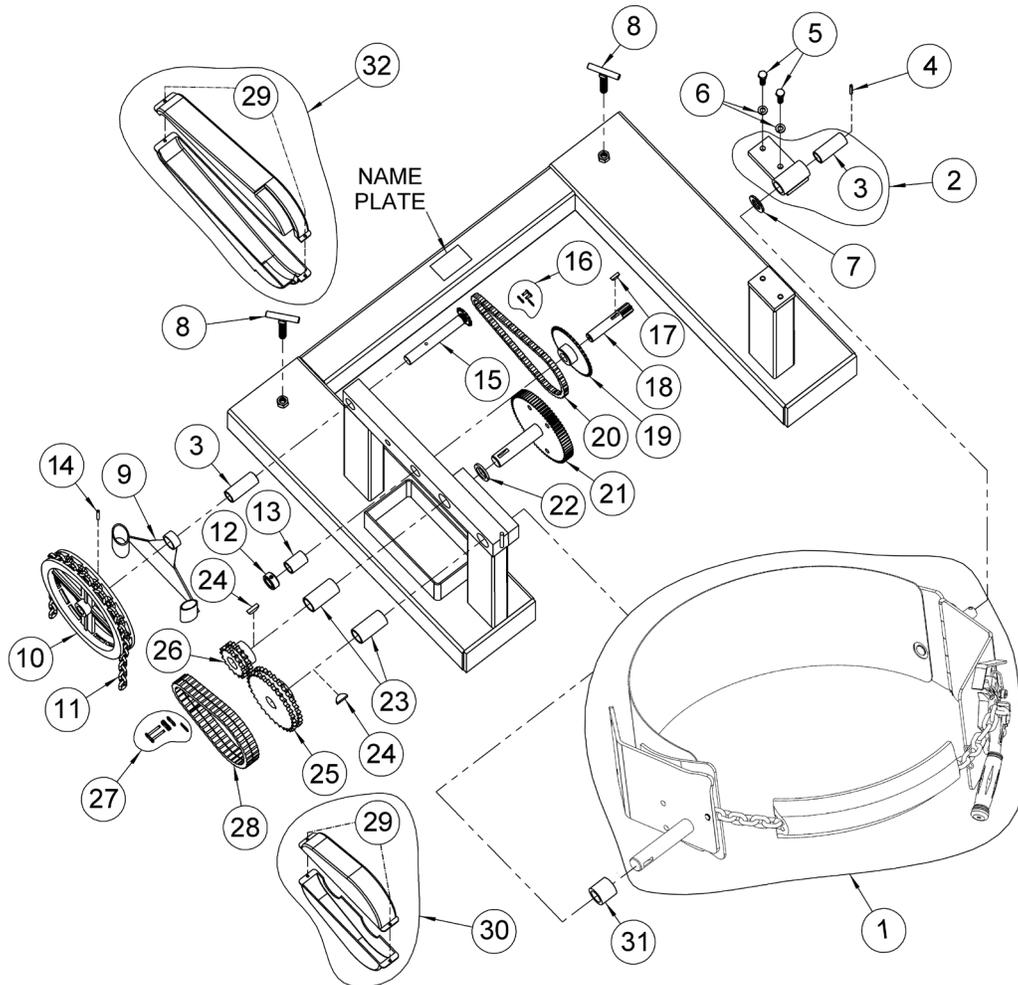
MORSE MODEL 285A-HD

Center of gravity shown for Morse attachment combined with max drum: 1,672lb [758kg]
 Applies to models: 285A-HD, 285AM-HD, 285G-HD and 285A-HDSS
 Approx. net weight 180 Lb. (92kg)



(DIMENSIONS ASSUME FORKS ARE TOUCHING FORK TUBE END CAPS.)

Operator's Manual for Morse Stainless Steel Heavy-Duty Forklift-Karrier Model 285A-HDSS Serial Number 0818 to (MMYY)

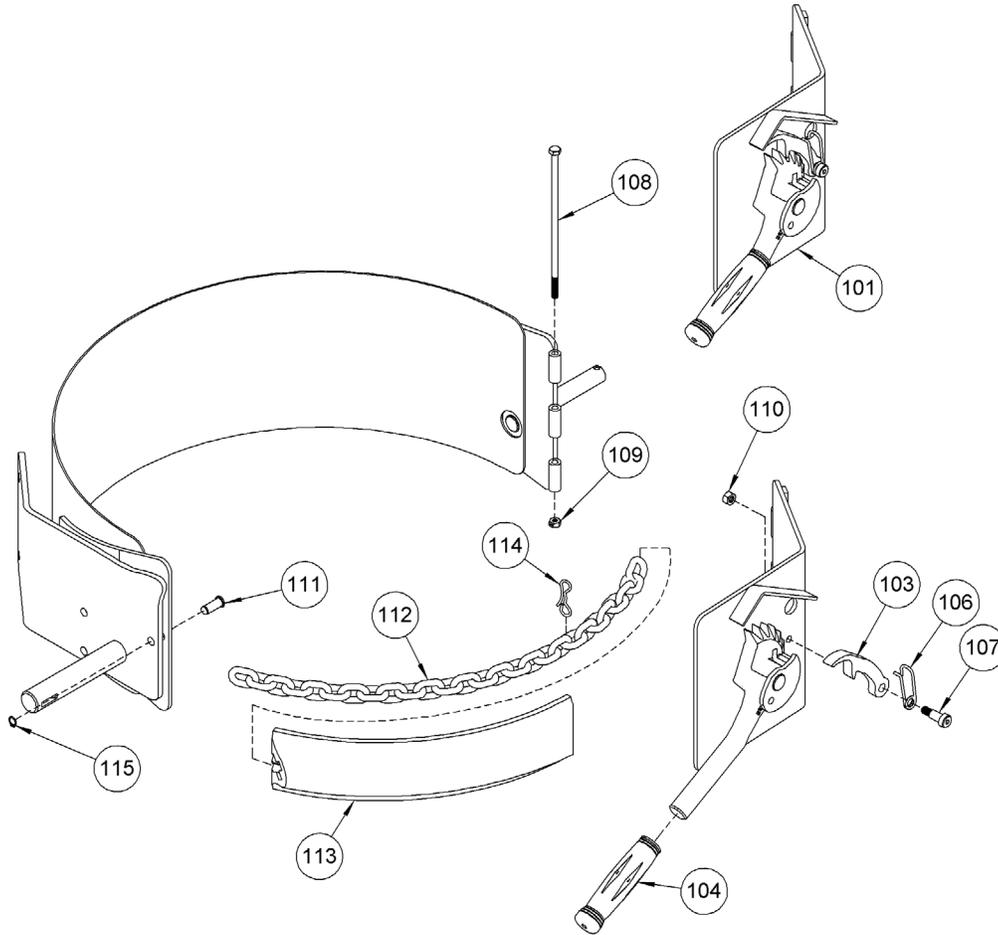


ITEM	QTY.	PART #	DESCRIPTION
1	1	5000SS-P	SADDLE ASM, MORCINCH, MOR, SS
2*	1	3849BSS-P	BEARING ASM, SLIDING IDLER, SS
3*	2	19-P	BEARING, 3/4" ID X 2-1/2"
4*	1	64SS-P	ROLL PIN, 3/16 X 1-1/4, SS
5	2	535SS-P	HHCS, 3/8-16 X 1-1/4, SS
6	2	1474SS-P	WASHER, 3/8 SPLIT LOCK, SS
7	1	55SS-P	WASHER, 3/4 SAE FL 1-1/2 OD SS
8	2	58SS-P	SET SCREW, LOCK TEE, 285, SS
9*	1	5245-P	GUIDE, POCKET CHAIN WHEEL
10*	1	1303SS-P	POCKET CHAIN WHEEL SILVER PC
11*	1	3-285-P	CHAIN, PULL, POCKET 20' LENGTH
12	1	15SS-P	COLLAR, 3/4" ID, SS
13*	1	7-P	BEARING, 3/4" ID X 1-1/2"
14*	1	5269-P	ROLL PIN, 3/16 X 1-3/4
15*	1	5135-P	SHAFT, 12T SPROCKET & SPACER
16	1	795-P	LINK, MASTER, #35 CHAIN
17*	1	735SS-P	KEY, WOODRUFF, 9, T304SS 3/16"

ITEM	QTY.	PART #	DESCRIPTION
18*	1	14-P	GEAR, PINION, 7 TOOTH
19*	1	13-P	SPROCKET #35 36T, 3/4" BORE
20*	1	12-P	CHAIN, ROLLER, #35 W/ M LINK
21*	1	27-P	SPUR GEAR W/ 1" SHAFT, HD TYPE
22	1	29SS-P	SPACER, SPUR GEAR .15", SS
23*	2	18-P	BEARING, 1" ID X 2-1/2"
24*	2	736SS-P	KEY, WOODRUFF, 15, T304SS 1/4"
25*	1	32-P	SPROCKET #40D 32T, 1" BORE
26*	1	30-P	SPROCKET #40D 16T, 1" BORE
27	1	796-P	LINK, MASTER, #40D CHAIN
28*	1	31-P	CHAIN, ROLLER, #40D W/ M. LINK
29	4	4481-P	SCREW, 8-18 X 5/8 FH SQUARE SS (not shown)
30	1	4284-P	COVER SET, 40D SPROCKETS
31	1	4372SS-P	SPACER, HD DRIVE SHAFT 1.4" SS
32	1	4286-P	COVER SET, 30:1 GEARS, HD

* Recommended spare parts.

**Operator's Manual for Morse Stainless Steel Heavy-Duty Forklift-Karrier Model 285A-HDSS
 Serial Number 0818 to ____ (MMYY)**



ITEM	QTY.	PART #	DESCRIPTION
101*	1	4214ASS-P	RATCHET HINGE CPT, MOR, SS
103	1	168SS-P	PAWL, STEEL-IT
104	1	4409-P	GRIP, HANDLE 7/8" X 4-3/4" RED
106	1	169SS-P	SPRING, PAWL, SS
107	1	170SS-P	3/8" DIA X 5/8" SHOULDER, SS
108	1	1296SS-P	HHCS, 1/4-20 X 7-1/2, SS
109	1	1518SS-P	NUT, 1/4-20 NYLON LOCK, SS
110	1	3920SS-P	NUT, 5/16-18 NYLON LOCK, SS
111*	1	4172SS-P	PIN, CINCH CHAIN, 5000M-P
112*	1	4408-P	CHAIN, CINCH, 9/32 SS, 38 LINK
113*	1	4414-P	COVER, CINCH CHAIN, FLEX PVC
114	1	4710-P	PIN, BOW TIE COTTER, MOR
115*	1	4744SS-P	SNAP RING, EXTERNAL, 3/8" SS

* Recommended spare parts.