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**Operator’s Manual  
 for Morse Omni-Lift Karrier  
 405 Series**

Serial Number 1210 to 0517 (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 drum holder assembly. Inspect drum holder assembly for proper operation. Perform necessary load test, inspections, operator training, etc.








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**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.

-   **CAUTION** – Do Not Transport with Drum Raised. Always lower the drum holder to lowest position before transporting.
-  **WARNING** - The Omni-Lift Karrier is designed to handle one drum of the types listed below. Machine Description. DO NOT attempt to handle any other type of drum or object. DO NOT exceed the weight capacity of 800 Lb.
-  **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** - 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.

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

The Specialist  
In Drum  
Handling  
Equipment

**800 Lb.**  
**( 363 kg )**  
**Max.**  
**Capacity**

Made in U.S.A.

**Machine Description**

The Omni-Lift Karrier is designed to lift, transport, and dispense a ribbed 55-gallon steel drum 22.5" in diameter. The maximum full-drum capacity is 800 Lb. The capacity is derated to 500 Lb. for a half-full drum. The half-full rating is based on the tilt mechanism's capacity for handling an unbalanced bottom-heavy drum.

**Option (shown at right)**

A 55-gallon plastic drum can be handled with Option # AP405 installed.



Omni-Lift Karrier  
with Option AP405 installed.

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**Important**

1. 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.
2. Please read all instructions thoroughly before attempting to operate your new Morse drum handler.
3. The Omni-Lift Karrier has a maximum capacity rating of 800 Lb. full drum and 500 Lb. half-full drum and is designed to lift, move and pour a 55-gallon steel drum. DO NOT exceed these ratings. Exceeding these ratings or handling drums other than those mentioned above is unsafe and could result in equipment damage, excessive wear or awkward handling.
4. Omni-Lift Karriers are intended for lifting, moving, and holding drums for tilting, pouring or racking. Drums may be lifted upright to or from the floor or other suitable surface on dollies, scales, etc.
5. 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.
6. Prior to initial use, inspect all moving parts and test rotation of drum holder assembly. Inspect drum holder assembly for proper operation. Perform necessary load test, inspections, operator training, etc.

**Operating Instructions**

1. Roll the Omni-Lift Karrier to the drum.
2. Position the drum holder assembly into the vertical position with the cross bar on top. Swing open ratchet hinge plate. The cinch chain can be kept from dragging on the floor by hanging it on the pin at the front of the gear block.
3. Roll forward to mate the drum holder squarely and tightly to the drum. If necessary, turn drum tilt control to adjust attitude of the drum holder to fit flush to the drum.
4. Secure the drum: Drape the cinch chain across the face of the drum and engage a link into the slot on the ratchet. Turn ratchet handle clockwise to tighten the chain. If ratchet turns to the extent that the pawl is beyond the last ratchet tooth and the chain is not tight, back up and try putting the next link in the slot. The chain should tighten as the ratchet turns and be held tight by the teeth of the ratchet and pawl. See pages 5 for how it might look when it's tight.
5. Pump the lever handle (or operate the power lift) to raise the drum enough to clear the floor.
6. Move the Omni-Lift with the drum to the racking area. NOTE: DO NOT TRANSPORT WITH A RAISED DRUM. TRANSPORT THE DRUM UPRIGHT AT A HEIGHT CLEAR OF THE FLOOR. DO NOT ALLOW THE DRUM TO IMPACT ON FLOOR, RACKING STATION, ETC. OR A SPILL OR DAMAGE COULD OCCUR.
7. Raise the drum (hand pump or power lift) to the desired racking height. Drum attitude may be adjusted during the lift. (Turn the crank or use the power tilt control). Note: Before releasing your grip on the hand crank, pull out the crank stop pin to block the crank from spinning freely. Disconnect cinch chain with drum in horizontal and place drum into rack.
8. To lower the drum with the hand pump, open release valve slowly, a part of a turn. Allow the drum to descend at a controlled rate. The valve may be reclosed to hold the drum at any height. To lower the drum with the power lift, lower the left control valve.
9. When retrieving drum from rack, raise drum slightly, back unit out of rack and lower with drum in horizontal position to a point where the cinch chain can be reattached. Lower drum to the floor in a vertical or horizontal position and disconnect cinch chain to release drum.
10. The screw-down floor lock may be used if there is a tendency for the unit to roll while dispensing.

**START UP PROCEDURES**

PUMP ROTATION IS CLOCKWISE VIEWING FROM THE MOTOR END. JOG THE MOTOR TO DETERMINE PROPER ROTATION. IN THE EVENT FLUID DOES NOT FLOW, CHECK MOTOR WIRING DIAGRAM FOR CLOCKWISE ROTATION.

**Maintenance**

1. Grease wheel bearings periodically. Oil or grease all moving parts including: the three clevis pins and the surfaces of the boom which contact the inside of the mast cap, the hinge pin, the pump handle-socket linkage, the gears and sprockets in the tilt drive, and the ratchet and pawl.
2. Information for hydraulic components is provided on other sheets.
3. Periodically inspect all framework and parts for signs of wear, fatigue or loose hardware, etc. Replace, tighten or adjust as necessary to maintain proper function and prevent failures.

**Parts Information**

Worn or damaged parts must be properly replaced with the correct, genuine Morse parts.

## Operator's Manual for Morse Omni-Lift Karrier 405 Series Serial Number 1210 to 0517 (MMYY)

ITEM	MODEL	QTY.	PART #	DESCRIPTION
1		4	1521-P	3/8 - 16 X 3" HHCS GR 5 STL
2		8	1166-P	WASHER, 3/8 USS 1" OD
3		9	1169-P	NUT, 3/8-16 REV HEX LOCK
4		2	134-84-P	LEG WELD, 400A-84, 96, 405
5		1	96CP13-23	HANDLE, LEVER W/ GRIP, STAR
6		8	215-P	HHCS, 5/16-18 X 5/8 GR2
7		8	491-P	NUT, 5/16-18 REV HEX LOCK
8		1	96MK1939-P	PUMP, HYD, HAND STAR
9		3	138-P	CLEVIS PIN 5/8 X 3"
10		4	1572-P	HHCS, 3/8-16 X 1 GR2
11		1	765-P	HYD FITTING, MALE ELBOW
12 *		2	705-P	CAP, HUB, PUSH-ON, 3/4"
13		2	704-P	AXLE, 3/4", USE WITH PUSH-ON
14 *		2	87-P	WHEEL, MORTUF, 8", 3/4" BRG
15 *		2	3308-P	CASTER, 4" SWIVEL, DBL RACE
16		1	135-P	ASM, TOWER, 400A-60 72 CASTERS
17		1	139-P	OVERHEAD WELD, 405
18 (Note 1)	405	1	139CPT-P	OVERHEAD ASM, 405
18 (Note 1)	405M	1	139MCPT-P	OVERHEAD ASM, 405M
19		1	766-P	HYD HOSE ASM, 12"
20		7	17-P	WASHER, 5/8 SAE FL 1-5/16 OD
21		5	64-P	ROLL PIN, 3/16 X 1-1/4
22		1	781-P	CYLINDER, 1.5 X 22.625, SAE
23		4	136-P	GRIP, HANDLE 7/8" X 4-3/4"
24		1	5U-P	HAND CRANK, W/ SOCKET TUBE
25 *		1	735-P	KEY, WOODRUFF, SIZE 9, ASA606
26 *		1	19-P	BEARING, 3/4" ID X 2-1/2"
27	405	1	100-P	STOP PIN, HAND CRANK, 1/2 X 5
27	405M	1	100SS-P	STOP PIN, HAND CRANK, 1/2", SS

ITEM	MODEL	QTY.	PART #	DESCRIPTION
28		1	15-P	COLLAR, 3/4" ID
29 *		1	7-P	BEARING, 3/4" ID X 1-1/2"
30		1	16-P	COLLAR, 1" ID
31 *		1	18-P	BEARING, 1" ID X 2-1/2"
32		2	55-P	WASHER, 3/4 SAE FL 1-1/2 OD
33 *		1	1302-P	SHAFT W/ 12T SPROCKET, POCKET
34		1	795-P	LINK, MASTER, #35 CHAIN
35 *		1	12-P	CHAIN, ROLLER, #35 W/ M LINK
36 *		1	13-P	SPROCKET #35 36T, 3/4" BORE
37		1	718-P	NUT, PUSH, 1/2"
38 *		1	14-P	GEAR, PINION, 7 TOOTH
39 *		1	23-P	GEAR, SPUR, 72T, 1" HOLE
40		1	29-P	SPACER, SPUR GEAR .15"
41		2	22-P	SHCS, 3/8-24 X 5/8
43 (Note 2)	405	1	1180-P	SADDLE ASM, 405
43 (Note 2)	405M	1	1118-P	SADDLE ASM, 405M
44 *	405	1	5017-P	CHAIN, CINCH, 9/32, 38 LINK
44 *	405M	1	4408-P	CHAIN, CINCH, 9/32 SS, 38 LINK
45		1	4079-P	HHCS, M8 X 60 MM CL8.8, 8MM
46		1	1632-P	HINGE BOLT, 3/8 - 16 X 7-1/2
49		1	168-P	PAWL, WITH DRILLED HOLE
51		1	169-P	SPRING, PAWL
52		1	170-P	SCREW, 3/8 DIA X 5/8 SHOULDER
54		1	2021-P	IDLER ANGLE SUPPORT, 405
55		2	1474-P	WASHER, 3/8 SPLIT LOCK
56		2	535-P	HHCS, 3/8-16 X 1-1/4 GR5
57 *	405	1	156A-P	RATCHET PLATE CPT, 405
57 *	405M	1	156AM-P	RATCHET HINGE PLATE CPT, 405M
58		1	4081-P	NUT, M8 ESNA, 8MM
59		1	1411-P	SPACER, SHAFT W/ 12T SPROCKET

\* Recommended spare parts

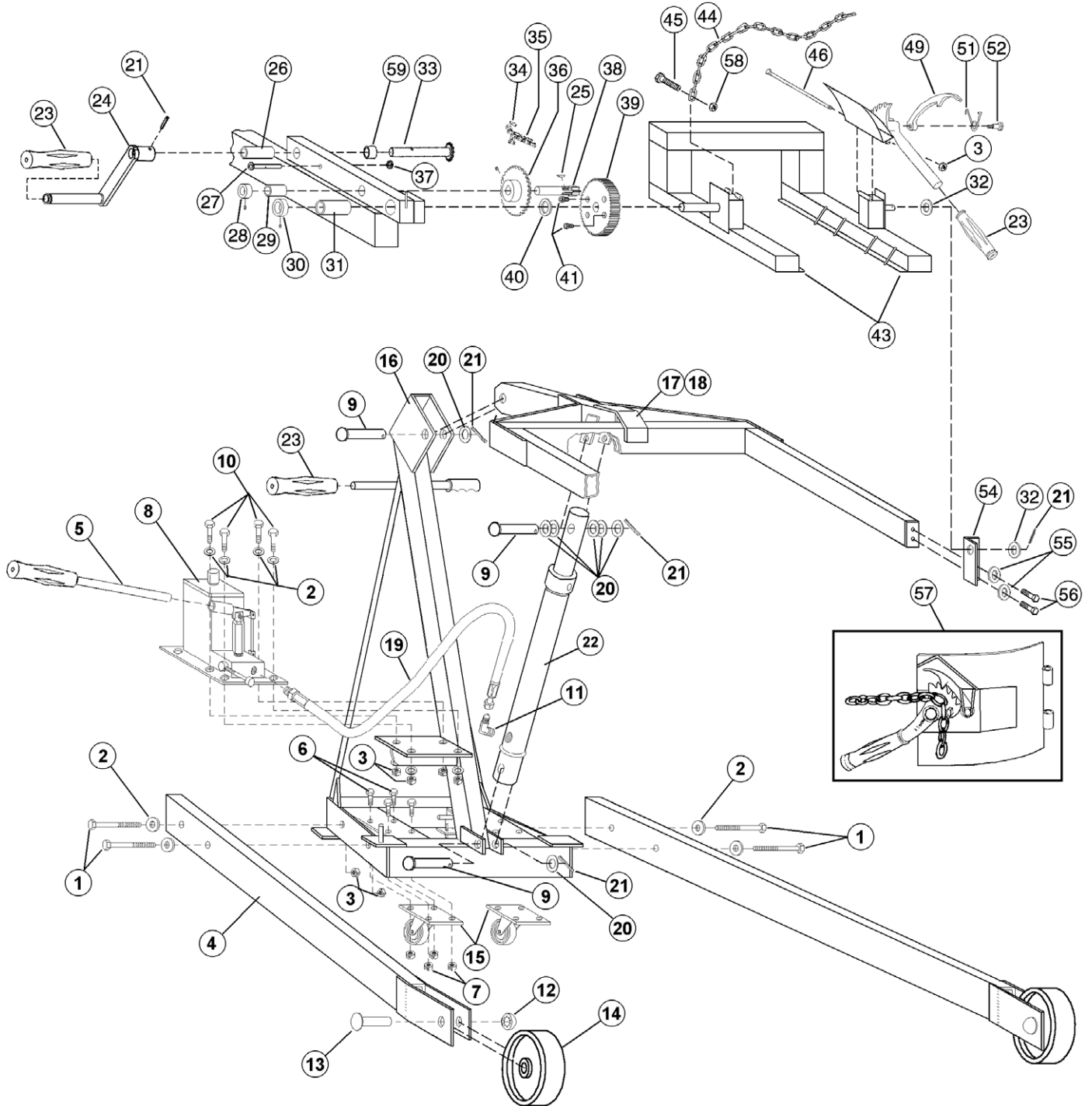
NOTE #1: "Overhead Assembly" includes the overhead weldment #17, saddle assembly #43, tilt gear assembly #24 with related parts and #26 through 41, etc., all factory assembled.

NOTE#2: "Saddle Assembly" includes the appropriate attached moving parts, such as #3, 44, 45, 46, 57 and 58.

NOTE #3: Basic model 405 includes hand pump hydraulic lift and manually driven geared tilt as pictured. Motor powered hydraulic lift and powered tilt are available options. Power lift is available for retrofit to replace hand pump lift. Contact your dealer for info.

NOTE #4: Unless otherwise specified, parts are for Model 405 or 405M.

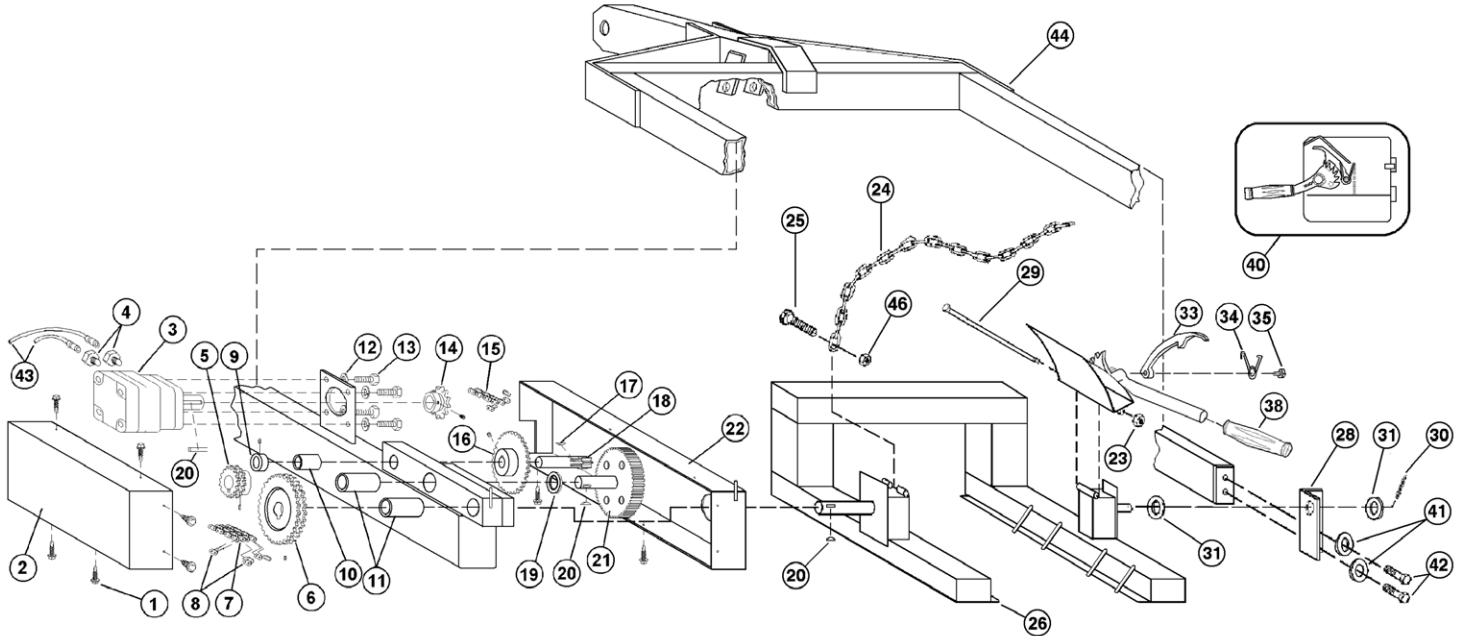
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### Operator's Manual for Morse Omni-Lift Karrier 405 Series Serial Number 1210 to 0517 (MMYY)

#### Overhead Assembly with Power Tilt



ITEM	MODEL (note #1)	QTY.	PART #	DESCRIPTION
1*		9	193-P	SCREW, 12-14 X 3/4 3 PT TEK
2		1	1755-P	COVER HALF SQ, NO HOLES 400 PT
3		1	351-P	MOTOR, HYDRAULIC HYD, 400, 456
4		2	2120-P	HYD FIT, MALE CONNECTOR, 400
5*		1	30-P	SPROCKET #40D 16T, 1" BORE
6*		1	32-P	SPROCKET #40D 32T, 1" BORE
7*		1	31-P	CHAIN, ROLLER, #40D W/ M. LINK
8		1	796-P	LINK, MASTER, #40D CHAIN
9		1	15-P	COLLAR, 3/4" ID
10*		1	7-P	BEARING, 3/4" ID X 1-1/2"
11*		2	18-P	BEARING, 1" ID X 2-1/2"
12		4	1474-P	WASHER, 3/8 SPLIT LOCK
13		4	1657-P	HHCS, 3/8-16 X 3/4 GR2
14*		1	1116-P	SPROCKET #35 17T, 1" BORE
15*		1	12-P	CHAIN, ROLLER, #35 W/ M LINK
16*		1	13-P	SPROCKET #35 36T, 3/4" BORE
17*		1	735-P	KEY, WOODRUFF, SIZE 9, ASA606
18*		1	14-P	GEAR, PINION, 7 TOOTH
19		1	29-P	SPACER, SPUR GEAR .15"
20*		3	736-P	KEY, WOODRUFF, SIZE 15, ASA808
21*		1	27-P	SPUR GEAR W/ 1" SHAFT, HD TYPE
22		1	1772-P	COVER HALF SQ, 1 HOLE, 400 PT

ITEM	MODEL (note #1)	QTY.	PART #	DESCRIPTION
23		2	1169-P	NUT, 3/8-16 REV HEX LOCK
24*	405	1	5017-P	CHAIN, CINCH, 9/32, 38 LINK
24	405M	1	4408-P	CHAIN, CINCH, 9/32 SS, 38 LINK
25		1	4079-P	HHCS, M8 X 60 MM CL8.8, 8MM
26 (Note 1)	405	1	1181-P	SADDLE ASM CPT, 405 PT
26 (Note 1)	405M	1	2781-P	SADDLE ASM CPT, 405M PT
28		1	2021-P	IDLER ANGLE SUPPORT, 405
29		1	1632-P	BOLT, 3/8-16 X 7-1/2 HINGE
30		1	64-P	ROLL PIN, 3/16 X 1-1/4
31		2	55-P	WASHER, 3/4 SAE FL 1-1/2 OD
33		1	168-P	PAWL, WITH DRILLED HOLE
34		1	169-P	SPRING, PAWL
35		1	170-P	SCREW, 3/8 DIA X 5/8 SHOULDER
38		1	136-P	GRIP, HANDLE 7/8" X 4-3/4"
40	405	1	156A-P	RATCHET PLATE CPT, 405
40	405M	1	156AM-P	RATCHET HINGE PLATE CPT, 405M
41		2	1474-P	WASHER, 3/8 SPLIT LOCK
42		2	535-P	HHCS, 3/8-16 X 1-1/4 GR5
43		2	1766-P	HYD HOSE ASM, 405 PT, 91"
44 (Note 2)	405	1	2019-P	OVERHEAD ASM, 405 PT
44 (Note 2)	405M	1	2780-P	OVERHEAD ASM, 405M PT
46		1	4081-P	NUT, M8 ESNA, 8MM

\* Recommended spare parts.

NOTE #1: Saddle Assembly (drum holder) includes the appropriate attached moving parts: #23, 24, 25, 29, & 40.

NOTE #2: Overhead Assembly includes the Saddle Assembly (#26) and part #'s 1 through 42, all factory assembled.