

OPERATOR'S MANUAL for MORSE 285A-BP BATTERY-POWERED FORK-LIFT KARRIER
for standard 55 gallon steel, ribbed drums
Serial number 1202 to 0206 (MMYY)

A. 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, hardhat and other personal protective devices are recommended.
2. Please read all instructions *thoroughly* before attempting to operate your new MORSE drum handler.
3. The model 285A-BP has a maximum capacity rating of 1200 lb. full drum and 600 lb. half-full drum and is designed to lift, move and pour *55 gallon steel drums*. (This model can also handle a fibre drum with the appropriate 55/30 saddle adaptor and E14 fibre drum strap installed*.) **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. 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.
5. Because the 285 series are front-end attachments for a forklift, OSHA recommends "... *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.*"

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

B. OPERATING INSTRUCTIONS:

1. Before sliding forklift forks into the fork tubes, adjust forks to an inside spread of 24-1/2" minimum. Lock forks into position on the forklift carriage.
2. Drive the forklift forward to slip the forks into the fork tubes (item #27). Tighten tee screws (item #43) to secure the Forklift Karrier to the forks.
3. Release the cinch chain (item #2) and hang the loose end from the upright peg on the front of the guard. Allow the ratchet hinge plate to swing 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 (item #17). Turn the ratchet handle clockwise to tighten the cinch chain around the drum (see detail).
6. Remove pendant assembly (item #37) from holder on guard and place near operator's seat.
7. Raise forks to clear the floor and transport drum in **vertical** position to dispensing location.
8. To pour drum: press the down button on the pendant, rotating drum to angle required for dispensing.

When dispensing is completed, rotate the drum back to vertical by pressing the up button on the pendant 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.

CAUTION: DO NOT exceed weight capacity of 1200 L.b for FULL drum, 600 Lb. for HALF-FULL drum.

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

C. MAINTENANCE:

1. Lubricate cylinder pins (items 40 & 42) and linkages (items 33 & 41).
2. Clean and oil ratchet, pawl, saddle hinge, and other moving parts periodically. (Clean & lubricate more often in environments where dust, dirt or other foreign particles will effect the performance of moving parts.)
3. Hydraulic pump has been filled with Dexron III automatic transmission fluid. Inspect the hydraulic system for oil drips, hose damage, or other signs of wear. Inspect the level & condition of the hydraulic fluid. Replace any parts that show signs of wear (see parts diagrams for pump & cylinder).
4. Periodically inspect all moving parts, framework, and contact areas for signs of wear, fatigue, or loosening. Tighten adjust or replace parts as necessary to prevent failure and maintain proper function.

* For each size fiber drum, this model requires a 55/30 series saddle adaptor and E14 Fiber Drum Strap.

PARTS LIST

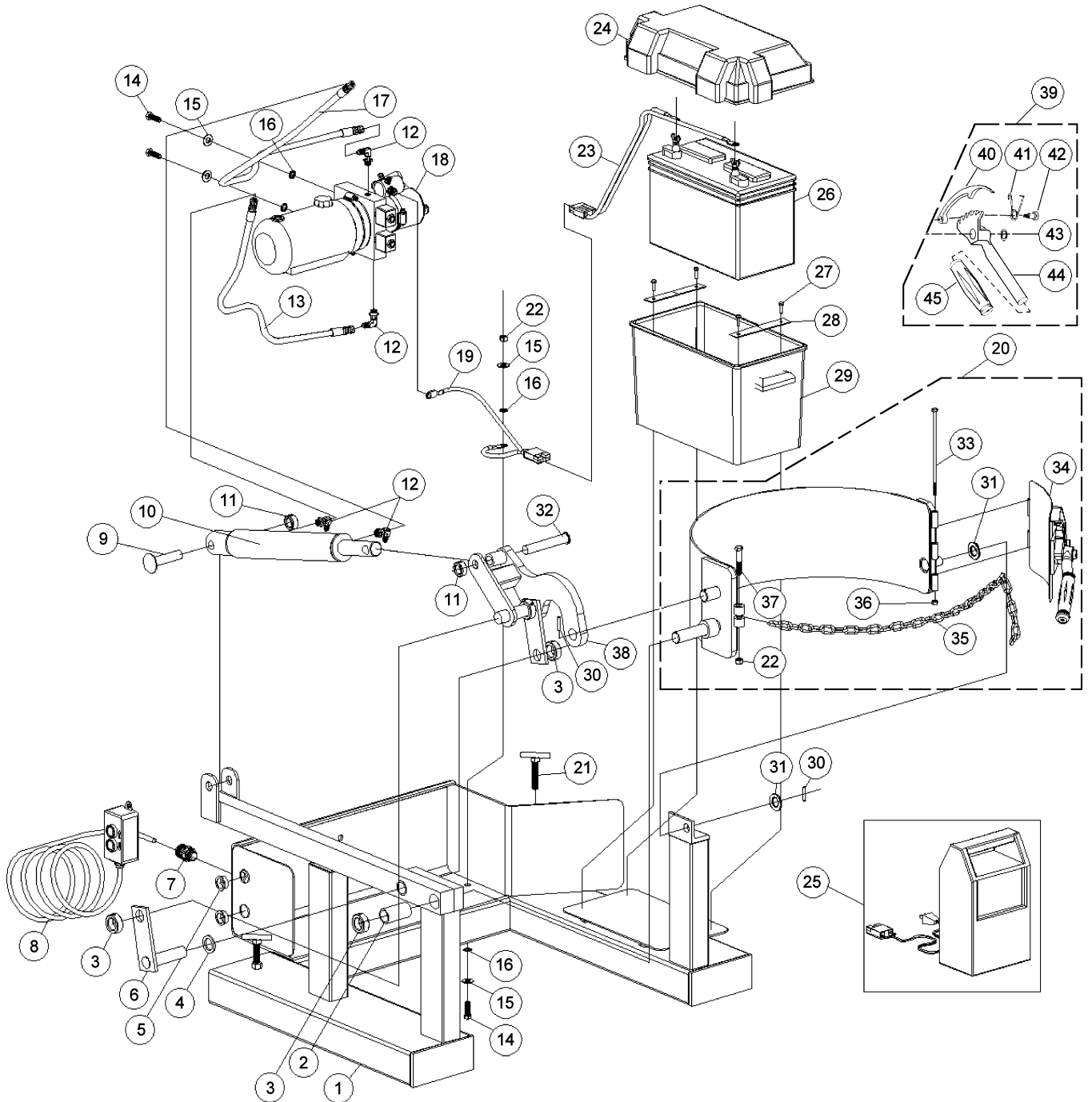
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ITEM #	QTY	PART #	DESCRIPTION
1	1	2476-P	BASE WELD, 285A-BP
2	2	18-P	BEARING, 1" ID X 2-1/2"
3	3	16-P	COLLAR, 1" ID
4	1	29-P	SPACER, SPUR GEAR .15"
5	2	1643-P	GROMMET, 1-1/16" OD
6	1	2500-P	DRAG LINK WELD, A-BP
7	1	3682-P	STRAIN RELIEF, 285A-BP
8	1	3240A-P	PENDANT ASM, WIRED, 285A-BP
9	1	704-P	AXLE, 3/4", USE WITH PUSH-ON
10	1	1279-P	CYLINDER, 2 X 10", SAE, A-BP
11	2	15-P	COLLAR, 3/4" ID
12	4	3610-P	HYD FIT, MALE ELBOW, SAE
13	1	2466A-P	HYD HOSE ASM, 35" 285A-BP
14	3	1657-P	3/8 - 16 X 3/4 HHCS GR 2
15	4	1166-P	WASHER, 3/8 USS 1" OD
16	4	1739-P	WASHER, 3/8 INTERNAL TOOTH LOC
17	1	2467A-P	HYD HOSE ASM, 40" 285A-BP
18	1	M3551-P	HYD POWER PACK, 12V DC, BP
19	1	417-P	CABLE HARNESS 22", 26" 285A-BP
20	1	2473-P	SADDLE ASM, 285A-BP
21	2	58-P	LOCK TEE SET SCREW, 285
22	2	1169-P	3/8 - 16 REV HEX LOC NUT
23	1	416-P	BATTERY CABLE HARNESS 18", 26"
24	1	1728-P	TOP, BATTERY BOX, 400, 285A-BP
25	1	389-P	CHARGER, BATTERY, 110V TO 12V
26	1	388-P	BATTERY, 12V DC
27	10	193-P	SCREW, TEK, 12-14 X 3/4" 3 PT
28	4	1733-P	HOLD DOWN STRIP, BATTERY BOX
29	1	1729-P	BOTTOM, BATTERY BOX, 400
30	2	64-P	ROLL PIN, 3/16 X 1-1/4
31	2	55-P	WASHER, 3/4 SAE FL 1-1/2 OD
32	1	2506-P	CYLINDER PIN WELD, 285A-BP
33	1	1296-P	1/4 - 20 X 7-1/2 HHCS GR 5 STL
34	1	726-P	RATCHET HINGE PLATE CPT 1/4" A
35	1	180-P	CHAIN, CINCH, 3/16 ALLOY 33 LK
36	1	1297-P	1/4 - 20 REV HEX LOC NUT
37	1	82-P	3/8 - 16 X 2-1/4 HHCS GR 2
38	1	1281-P	POWER LINK WELD, A-BP
39	1	165KIT-P	KIT, RATCHET CHAIN TIGHTENER
40	1	168-P	PAWL, WITH DRILLED HOLE
41	1	169-P	PAWL SPRING
42	1	170-P	3/8" DIA X 5/8" SHOULDER SCREW
43	1	710-P	RETAINER, RATCHET PUSH NUT 3/4
44	1	165-P	RATCHET, MALLEABLE, SADDLE
45	1	136-P	GRIP, HANDLE 7/8" X 4-3/4"
NOT SHOWN	1	2511-P	LINKAGE GUARD WELD, 285A-BP
NOT SHOWN	1	2508-P	COVER, HYD POWER PACK 285A-BP

NOTE#2: "Saddle Assembly Complete" includes the appropriate attached moving parts, such as 22, 33, 34, 35, 36 & 37.

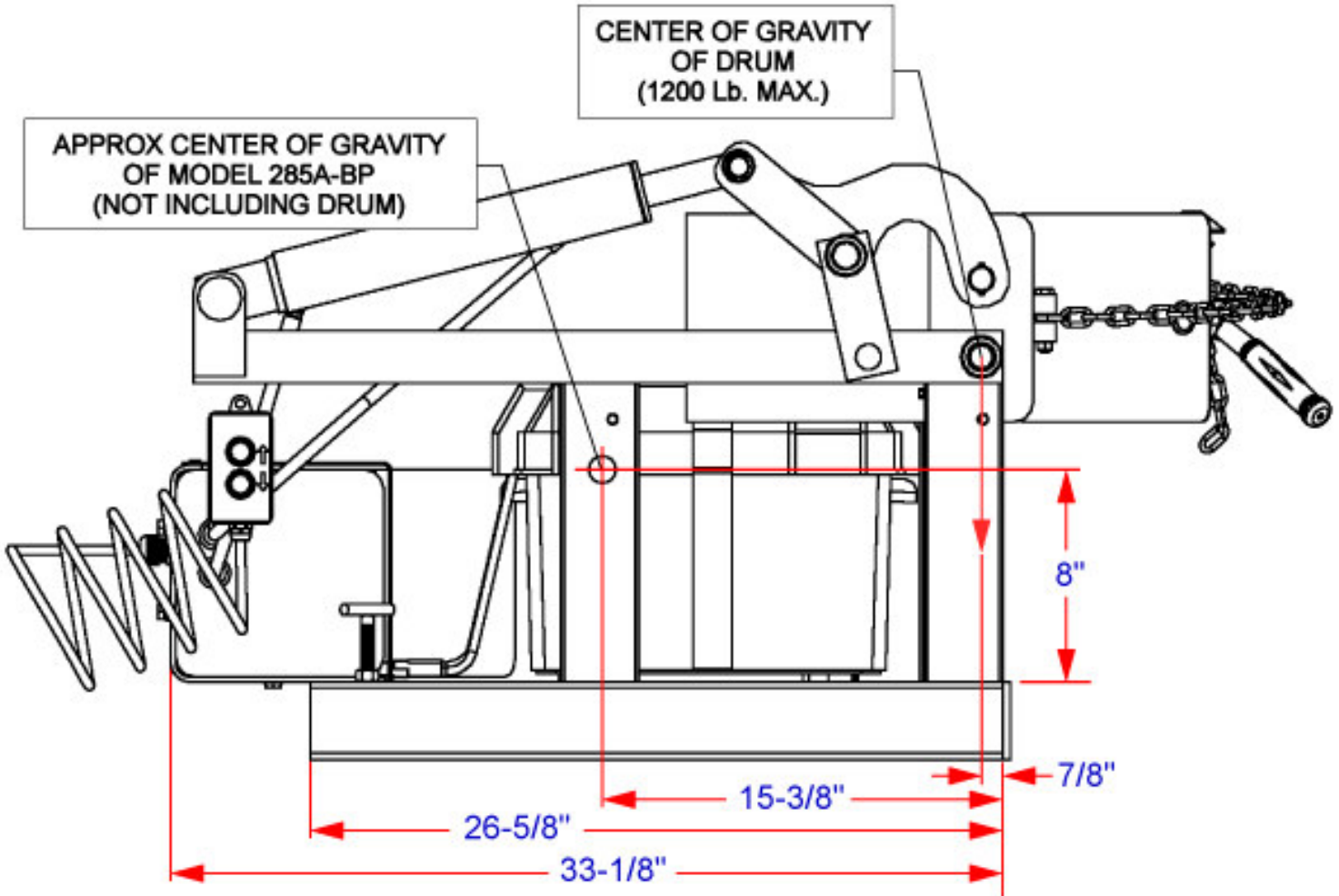
PARTS DIAGRAM

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**LOST LOAD CAPACITY WITH MORSE MODEL 285A-BP
BATTERY POWERED FORK LIFT-KARRIER
Serial # 1202 to 0206 (MMYY)**

CENTER OF GRAVITY DIMENSIONS FOR CALCULATING LOST LOAD ON EQUIPMENT



DIMENSIONS ARE MEASURED FROM INSIDE OF FORK TUBE END. THIS WILL GIVE A FIXED POINT TO WHICH LOST LOAD DATA CAN BE DETERMINED. (FORKS MUST BE TOUCHING THIS FORK TUBE END.)

MODEL: 285A-BP
NET WEIGHT: 295 Lb.

LIMITED 2 YEAR WARRANTY

MORSE DRUM HANDLING EQUIPMENT IS GUARANTEED AGAINST DEFECTS in workmanship or materials for 2 years when used properly within its rated capacity. Motors and other purchased parts carry the warranties of their manufacturers.

For warranty claims, contact Morse to obtain a return authorization number. 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.