

OPERATOR'S MANUAL FOR MORSE 80 SERIES

Serial Number 0103 to ____ (MMYY)

Model 80A and 80A-M for 55 gallon standard steel drums (22½" diameter)

Model 80C for steel or fiber drums (21-23" diameter)

Model 80i for 55 gallon steel drum (22-½" diameter). Accepts 55/30 Series Adaptors for smaller diameter drum.

Model 80APS for DOT 34-35 Polyethylene drum (22½-24" diameter, 34-36" tall), also standard 55 gallon steel drum

A. ASSEMBLY INSTRUCTIONS ARE ON PAGE 5.

B. 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 Model 80 series has a maximum capacity ratings of 800 Lb. in a full drum or 500Lb. in a half-full drum. Mobile-Karriers are made for various drum sizes and types as listed above. *DO NOT* exceed these ratings or an unsafe condition may result which could cause damage, excessive wear, or make the unit awkward or dangerous to handle.
4. Mobile-Karriers are intended for lifting, moving, and holding drums for tilting. 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.

C. OPERATING INSTRUCTIONS:

1. Roll the assembled Mobile-Karrier to the drum. (Assembly instructions are on page 5.) NOTE - For Model 80C ONLY: It may be necessary to adjust for drum diameter by "taking-up" or "letting-out" band length by relocating the two 1/4" carriage bolts and nuts to alternate holes in the drum band.
2. Grip the push-handle, squeeze both release rods and raise the handle to a position straight up. This lowers the saddle to reach the middle of the drum. The cinch chain can be hung on the chain pin on top of left stanchion to keep it off the floor.
3. Roll the Mobile-Karrier forward and push the saddle so that it slips around the drum near the mid-point of the drum.
4. Secure the drum: Drape the cinch chain across the face of the drum and engage a link into the notch in the hub of the ratchet. Pull up on ratchet handle 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 notch. The chain should tighten as the ratchet turns and be held tight by the teeth of the ratchet and pawl. Firm hand pressure on the ratchet handle should tension the chain sufficiently to secure the drum. *DO NOT* use mechanical aids such as a pipe to extend ratchet handle for extra leverage. See page 4 (#42) for how it might look when it's tight.
5. Pull down the push-handle to raise the drum. The Mobile-Karrier will hold up the drum and may be rolled away carrying the drum.
6. Either one of the two spring loaded plunger tilt locks may be locked to hold the drum upright. Unlocking both will permit the drum to be tilted. Either one may be locked to hold the drum in the tilted position. It is not necessary to lock both tilt locks. Before unlocking the tilt lock it is recommended that you steady the drum and be prepared to resist its tendency to tilt toward its heavy end.
7. Before unloading the drum, release the tilt locks and return the drum to upright.
8. It is necessary to have a firm, two hand hold to lower the push-handle and squeeze the release rods. With both release rods squeezed, the handle will unlock and allow the weight of the drum to make the handle tend to rise. Apply sufficient force to allow the handle to rise slowly to control the descent of the drum.
9. **LEVERAGE AND HEIGHT ADJUSTMENTS:** The Mobile-Karrier will hold a vertical drum and raise it as high as 11". With the drum held horizontally, there can be as much as 17" floor clearance. There are extra holes in the handle plates and links to provide adjustment for various heights and drum weights. The greatest leverage, with the least lift height is obtained when using the handle holes nearest the handle pivot. This position is recommended for ease of use when extra floor clearance is not necessary.

D. MAINTENANCE:

1. Lubricate ratchet, pawl, links, ½" carriage bolts, locks, fulcrum pins, wheels and other moving parts periodically to maintain free action and reduce wear.
2. The inner, drum-gripping friction surface of the fibre drum strap (Item #26, part E14, found on model 80C) should be kept clean to maintain its ability to grip the drum.
3. Tighten all nuts and bolts periodically except the four ½" carriage bolts (assembly steps #2 and #3) which should be just loose enough to permit a hinging motion of the links and handle.

E. PARTS INFORMATION

Worn or damaged parts must be replaced with the correct, genuine Morse parts. Please refer to the attached diagram and list. When ordering, specify model number, serial number, part numbers and descriptions. See pages 2, 3 and 4.

PARTS LIST

Models 80A, 80A-M, 80APS, 80C and 80i
Serial Number 0103 to ____ (MMYY)

ITEM NUMBER	MODEL LETTER SUFFIX see note #1	QUANTITY REQUIRED PER UNIT	PART NUMBER	DESCRIPTION
1		1	80-P	STANCHION LEFT, W/ PIN, 80
2		2	66-P	FOLLOWER RELEASE ROD
3		2	70-P	FOLLOWER SPRING
4		2	68-P	RATCHET FOLLOWER 80
5		2	64-P	ROLL PIN, 3/16 X 1-1/4
6		2	62-P	WASHER, 3/4 SPRING
7		2	61-P	ROLL PIN, 3/16 X 2-1/2
8		2	60-P	PLUNGER SPRING, 80, 85
9		2	59-P	PLUNGER, 80, 85
10		2	717-P	PUSH NUT, 1/4"
11		1	800-P	HANDLE WELDMENT ONLY, 80
12*		1	800CPT-P	HANDLE ASM CPT, 80
13	A, A-M, APS, C	2	815-P	LINK WELDMENT, LEFT/ RIGHT 80A
14*	A, A-M, APS, C	2	815CPT-P	LINK ASM CPT, L OR R, 80A 80C
15	i	1	820-P	LINK WELDMENT, LEFT, EL
16*	i	1	820CPT-P	LINK ASM CPT, LEFT, EL
17	i	1	825-P	LINK WELDMENT, RIGHT, EL
18*	i	1	825CPT-P	LINK ASM CPT, RIGHT, EL
19		1	830-P	BASE WELDMENT, 80 SERIES
20*		1	830CPT-P	BASE ASM CPT, 80
21	A, APS	1	130A-P	SADDLE WELD, 80A, 85A
21	A-M	1	130AM-P	SADDLE WELD, 80A-M, 85A-M SR
21	C	1	130C-P	SADDLE WELD, 80C, 85C
21	i	1	130I-P	SADDLE WELD, 80I, 85I
22	APS	1	101APS-P	SADDLE ASM, 80APS
22	A	1	101A-P	SADDLE ASM, 80A, 85A
22	A-M	1	101AM-P	SADDLE ASM, 80A-M, 85A-M, SR
22	C	1	101C-P	SADDLE ASM, 80C, 85C
22	i	1	101I-P	SADDLE ASM, 80I, 85I, 82A
23		3	82-P	3/8 - 16 X 2-1/4 HHCS GR 2 STL
24		3	1169-P	3/8 - 16 REV HEX LOC NUT
25	A, APS, I	1	180-P	CHAIN, CINCH, 3/16 ALLOY 33 LK
25	A-M	1	1287-P	CHAIN, CINCH, 3/16" SS 33 LINK
26	C	1	E14	FIBRE DRUM STRAP 14"
27	APS	2	860-P	STRIP, ANTI- SLIP, 29" 80APS
28		2	805-P	CARRIAGE BOLT, 1/2 - 13 X 1-1/4
29		4	807-P	WASHER, 1/2 USS 1-3/8 OD
30		2	806-P	CARRIAGE BOLT, 1/2 - 13 X 3"

PARTS LIST

Models 80A, 80A-M, 80APS, 80C and 80i
Serial Number 0103 to ____ (MMYY)

ITEM NUMBER	MODEL LETTER SUFFIX see note #1	QTY. REQ'D PER UNIT	PART NUMBER	DESCRIPTION
31		4	810-P	1/2 - 13 REV HEX LOC NUT
32		1	81-P	STANCHION RIGHT, W/O PIN, 80
33		1	165-P	RATCHET, MALLEABLE, FOR SADDLE
34		1	136-P	HANDLE GRIP, 7/8" X 4-3/4"
35		1	168-P	PAWL, WITH DRILLED HOLE
36		1	169-P	PAWL SPRING
37		1	170-P	3/8" DIA X 5/8" SHOULDER SCREW
38		1	710-P	RETAINER, RATCHET PUSH ON 3/4"
39		1	165KIT-P	KIT, RATCHET CHAIN TIGHTENER
40	i	1	1296-P	1/4 - 20 X 7-1/2 HHCS GR 5 STL
41	i	1	1297-P	1/4 - 20 REV HEX LOC NUT
42	i	1	726-P	RATCHET HINGE PLATE CPT 1/4" A
43		1	1578-P	HARDWARE BAG, 80 SERIES
44		2	704-P	AXLE, 3/4", USE WITH PUSH-ON
45		2	87-P	WHEEL, MORTUF, 8", 3/4" BRG
46		2	705-P	PUSH-ON HUB CAP, 3/4"
47		4	215-P	5/16 - 18 X 5/8 HHCS GR 2
48		4	491-P	5/16 - 18 REV HEX LOC NUT
49		1	86-P	CASTER, SWIVEL, 4"

Note #1: If no letter is shown, the part is for Models 80A, 80A-M, 80APS, 80C, 80i.
If a letter is shown, the part is for the model with that letter suffix only.

Note #2: "SADDLE ASSEMBLY" includes the drum band and appropriate attached moving parts, such as 39, 25 or 26, 40, 41, 42.

"SADDLE WELDMENT" has no moving parts added.

* 800CPT-P includes items 2, 3, 4, 10 and 11

815CPT-P includes items 7, 8, 9 and 13

820CPT-P includes items 7, 8, 9 and 15

825CPT-P includes items 7, 8, 9 and 17

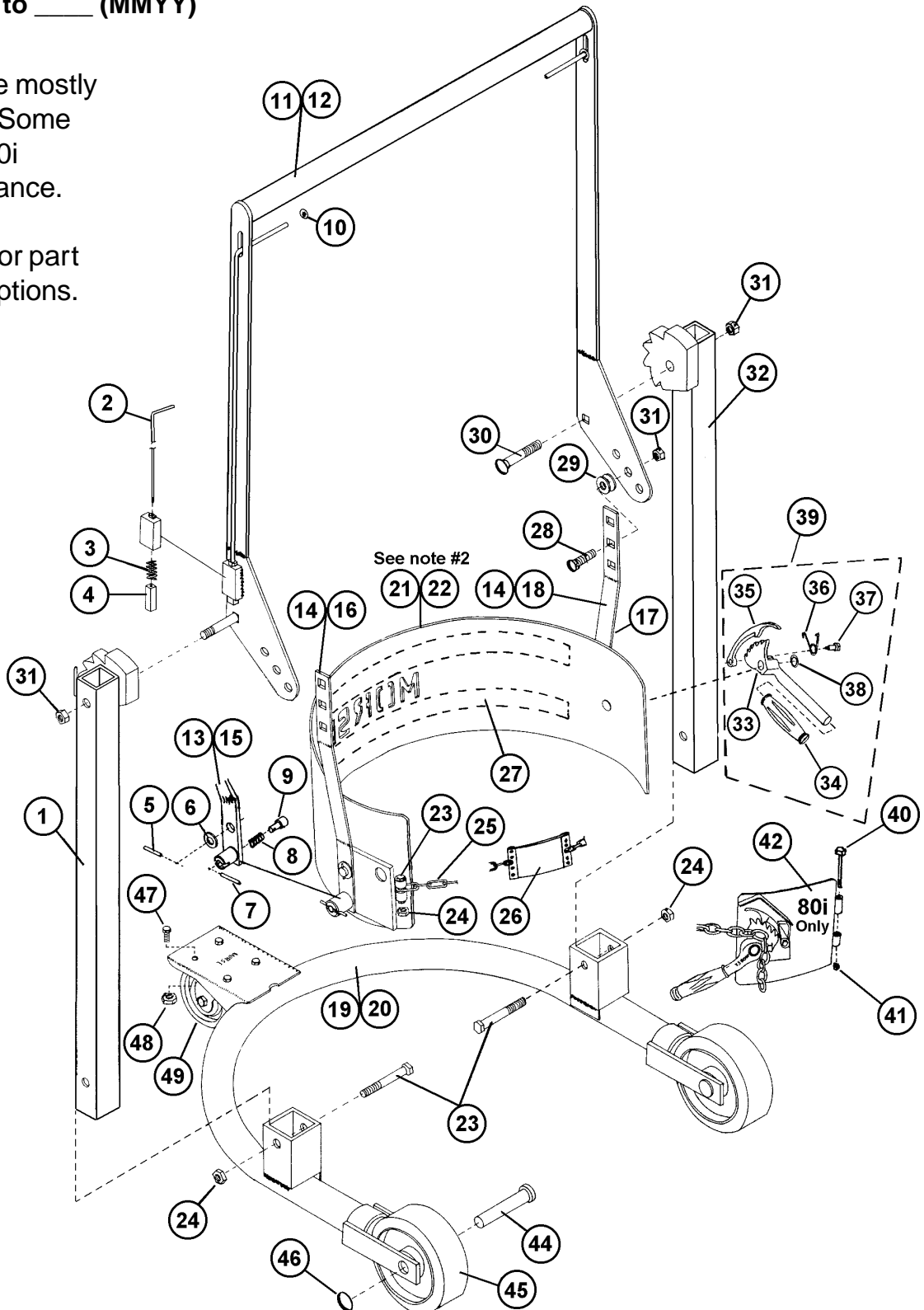
830CPT-P includes items 19, 44, 45, 46, 47, 48 and 49

PARTS DIAGRAM FOR MORSE 80 SERIES

Serial Number 0103 to ____ (MMYY)

The parts shown are mostly for 80A and 80APS. Some parts for 80C, and 80i may differ in appearance.

See pages 2 and 3 for part numbers and descriptions.



ASSEMBLY INSTRUCTIONS FOR MORSE 80 SERIES

Serial Number 0103 to ____ (MMYY)

Please unpack and identify the following items:

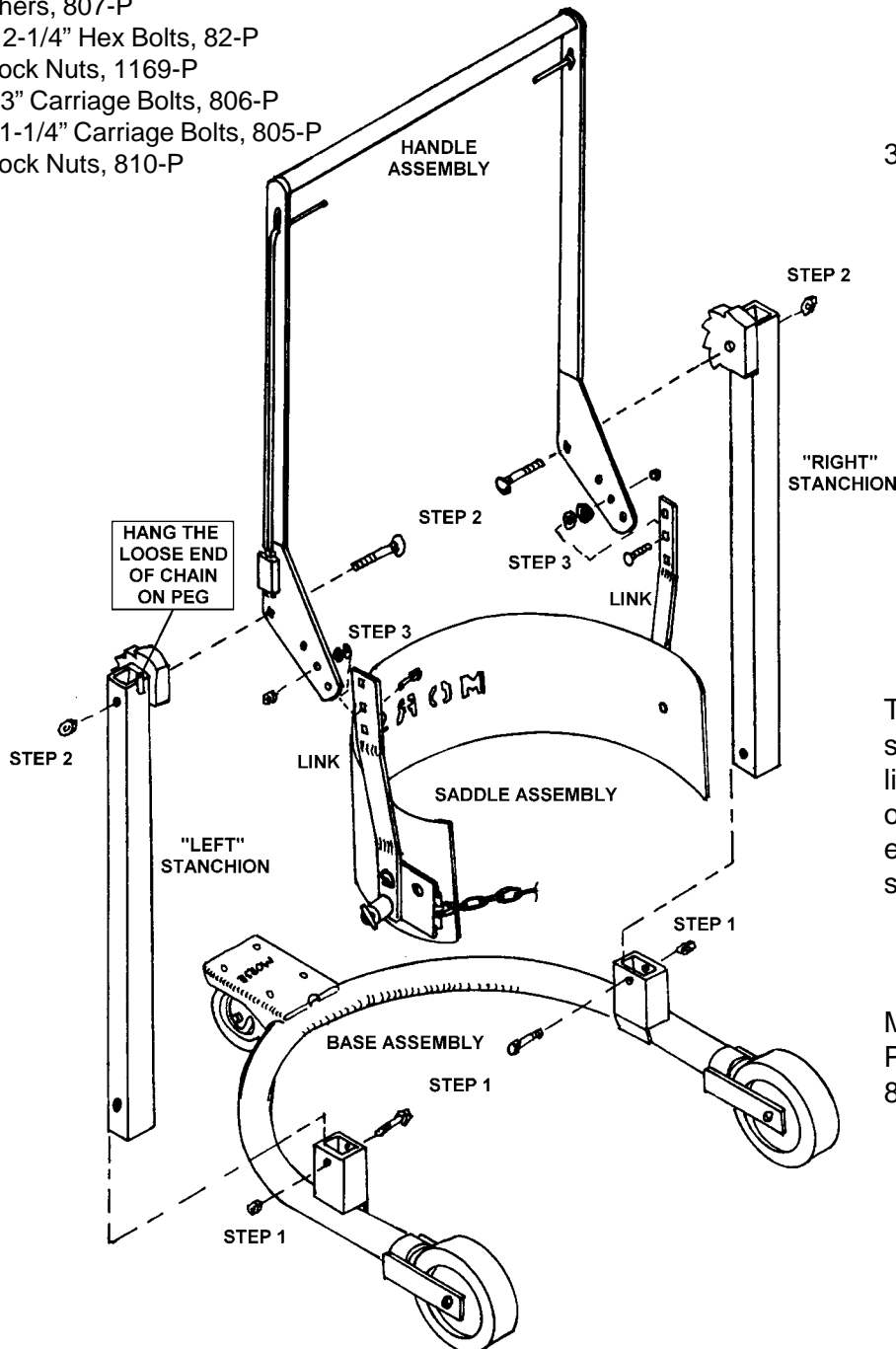
- Handle Assembly
- Left and Right Stanchions
- Saddle Assembly
- Base Assembly

Hardware Bag 1578-P, Containing:

- 4 pc 1/2" washers, 807-P
- 2 pc 3/8-16 x 2-1/4" Hex Bolts, 82-P
- 2 pc 3/8-16 Lock Nuts, 1169-P
- 2 pc 1/2-13 x 3" Carriage Bolts, 806-P
- 2 pc 1/2-13 x 1-1/4" Carriage Bolts, 805-P
- 4 pc 1/2-13 Lock Nuts, 810-P

ASSEMBLY PROCEDURE:

1. Slip stanchions into sockets on base and fasten with 3/8-16 x 2-1/4" bolts and 3/8-16 lock nuts.
2. Attach handle to stanchions as shown using 3" carriage bolts. Run 1/2" lock nuts on far enough to minimize play but allow free pivot of handle.
3. Connect links and 1/2" washers inside handle ends. Note: two 1/2" washers should be "sandwiched" between each link and each handle end. Leave nuts loose to allow links to pivot.



The three handle holes (on each side) allow a trade-off between lifting effort (leverage) and range of lift height. The three holes in each link permit a choice of starting or finishing lift heights.

Model 80A is shown. Procedure for 80C, 80i and 80APS is similar.