

INSTRUCTIONS AND REPAIR PARTS LIST

**F60MB, F60MB+20
MBSLGT, MBSLGT+20
MINI BINS
MB3PK, MB8PK
EC2PK, EC7PK KITS**

Model No.	Description and approximate capacities
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F60MB	2 Shells, 64 bushel, 1.6 Tons (1454.5 kg)
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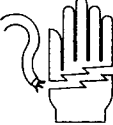
F60MB+20	3 Shells, 84 bushel, 2.1 Tons (1909.1 kg)
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F60MB and F60MB+20 are set up with a poly transition and a transfer plate and slide assembly which will accept either rigid auger or flexible auger.

MBSLGT	2 Shells, 64 bushel, 1.6 Tons (1454.5 kg)
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MBSLGT+20	3 Shells, 84 bushel, 2.1 Tons (1909.1 kg)
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MBSLGT and MBSLGT+20 come with a slide gate for feed discharge in the bottom of the cone. These bins cannot be used with rigid auger or flexible auger.



⚠ CAUTION ⚠

- 1. IF ANY ELECTRICAL FEED AUGER OR OTHER CONVEYANCE IS TO BE ATTACHED TO MINI-BIN, BIN MUST BE GROUNDED. FAILURE TO DO SO COULD CAUSE ELECTRICAL SHOCK OR DEATH.**
- 2. MINI-BIN MUST BE POSITIONED ON CONCRETE PAD. ANCHOR ASSEMBLIES (Ref. No. 16) MUST BE ANCHORED TO CONCRETE PAD. FAILURE TO DO SO COULD CAUSE BIN TO FALL OVER, CAUSING INJURY.**

READ ALL DIRECTIONS CAREFULLY BEFORE BEGINNING INSTALLATION

TOOLS REQUIRED: 3/8", 7/16", 1/2", 9/16" Wrenches (sockets are handy); Straight Blade Screwdriver; Phillips Head Screwdriver; 2 Drift Punches.

ASSEMBLY INSTRUCTIONS

DO NOT TIGHTEN ANY FASTENERS UNTIL INSTRUCTED TO DO SO!

STEP 1: Cut banding which holds crating, pull top of crating off, remove (4) bolts in shells (discard), pull top shell out and set aside, lay cover aside. Now lay out all parts, place similar pieces together, for easy identification.

STEP 2 for F60MB and F60MB+20.

Bolt collar (Ref. No. 7) to hopper cone (Ref. No. 4) using slotted truss head bolts with rubber washers provided in plastic bag. Be sure to install caulking at the edge of the collar before tightening bolts. Tighten bolts evenly.

STEP 2 for MBSLGT and MBSLGT+20

Bolt slide gate assy. (MBSLGT10) to hopper cone (Ref. No. 4-2) see Exhibit C using bolts, nuts & lockwashers on slide gate assy. Hand tighten only, you will have to add leg to hopper braces later.

STEP 3: Telescope ends of lower shell (Ref. No. 2) (NOTE: The lower shell has a curl on both the top and bottom) together with (1) 1/4-20 x 1 screw (Ref. No. 34), (2) flat washers (Ref. No. 22), lockwasher (Ref. No. 33) and nut (Ref. No. 23). Line up row of holes, and bolt through the 2nd hole from the top (leave loose).

MODEL NUMBER

The MODEL NUMBERS are: F60MB, F60MB+20, MBSLGT, MBSLGT+20 MINI-BINS

WHEN ORDERING PARTS

(1) Show MODEL NUMBER and NAME: Example - F60MB MINI-BIN

(2) Show PART NUMBER and FULL DESCRIPTION of part: Example - F60G83 Ladder Rung

HOW TO ORDER PARTS

Repair parts may be ordered from your dealer.

NOTE FOR F60MB and F60MB+20: BEFORE PROCEEDING TO STEP 4, PLEASE READ THIS: When you attach the cone (Ref. No. 4-1) to the Bottom Shell (Ref. No. 2), line up the Collar Brace holes in the collar (Ref. No. 7 shown on Exhibit A) with the leg holes in the shells. The collar brace holes need to be vertically aligned with the leg holes in the shells. Now proceed to STEP 4.

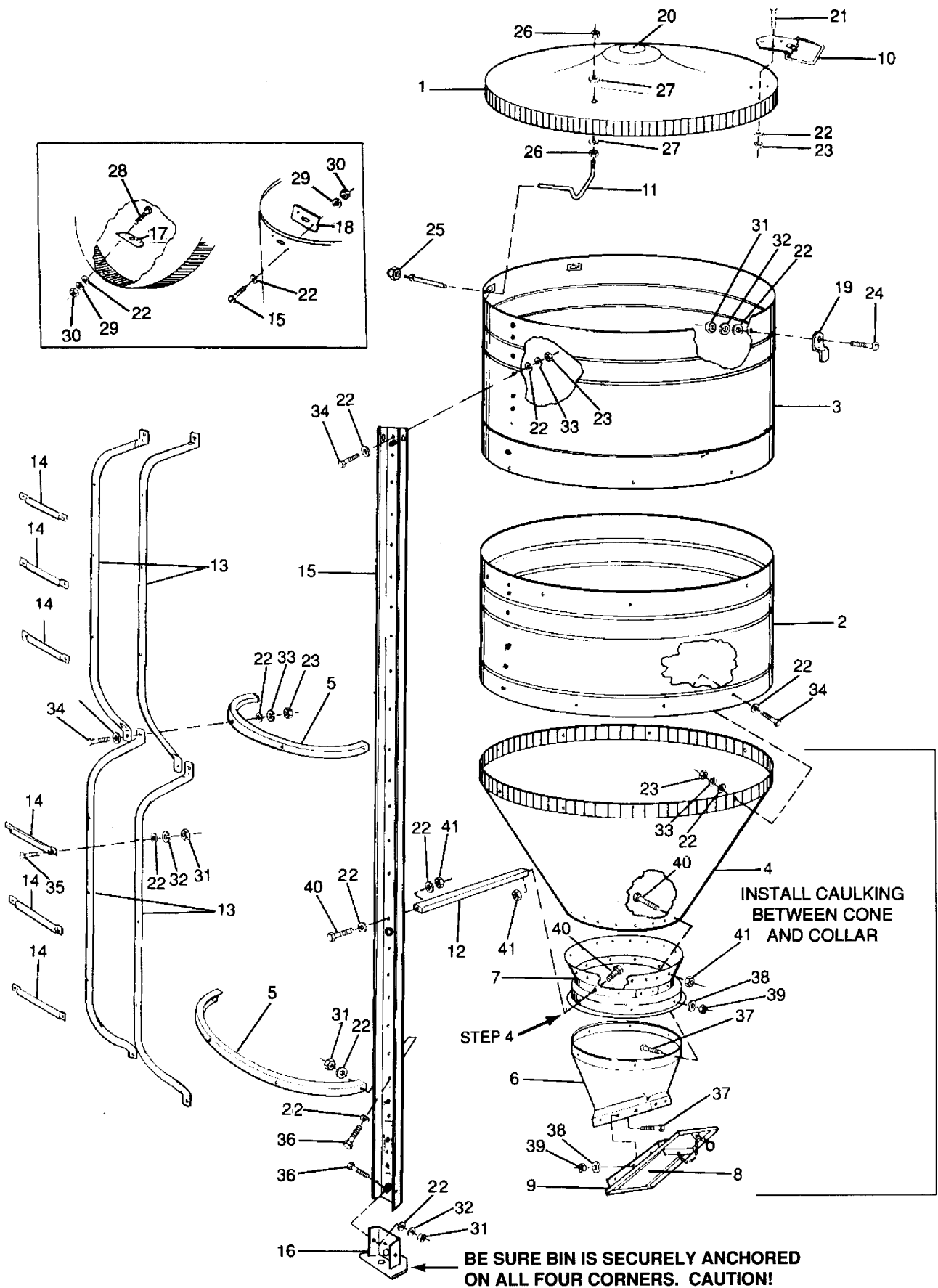
NOTE FOR MBSLGT and MBSLGT+20: Align cone (Ref. No. 4-2) so that the slide gate will be centered between legs on 1 side. The 4 bolts on bottom of cone need to be vertically aligned with leg holes in the shells..

- STEP 4: Slide lower shell (Ref. No. 2) over crimped edge of cone (Ref. No. 4). Lift shell into position, bolt bottom hole of vertical seam to cone using 1/4-20 x 1 screws (Ref. No. 34), (2) flat washers (Ref. No. 22), lockwasher (Ref. No. 33) and nut (Ref. No. 23). Line up row of holes and bolt through the 2nd hole from the top (leave loose).
- STEP 5: Working your way around the hopper in one direction, install hex head bolts between vertical rows of holes. Install 1/4-20 x 1 screws in bottom hole in vertical row of holes. (Ref. Nos. 34, 22, 33 and 23).
- STEP 6: Telescope ends of top shell (Ref. No. 3) or shells (if 84 bu.), together. With (3) hex head bolts, flat washers, lockwashers and nuts, align and bolt the top three shell lap holes (snug bolts, do not tighten). Do not put a bolt in top hole if 84 bu. capacity.
- STEP 7: Set top shell (Ref. No. 3) over lower shell (Ref. No. 2) lining up end laps, align first slot to the right of the lap and bolt with 1/4-20 x 1" hex head bolt, (2) flat washers, lockwasher and nut. (Ref. Nos. 34, 22, 33 and 23).
- STEP 8: Work your way around the hopper in one direction, install hex head bolts between vertical rows of holes. Leave bottom hole of vertical rows open. Also leave open the (2) holes at 7 and 8 o'clock, the vertical lap being 12 o'clock.
- STEP 9: Lay legs (Ref. No. 15) out side by side, nest the anchors (Ref. No. 16) inside of them. There is a top and bottom to the leg. The larger 1" hole closest to the edge of the leg goes up. Bolt with 5/16 x 1 1/2 bolts, flat washers, lockwashers and nuts. (Ref. No. 36, 22, 32 and 31). See Exhibit B.
- STEP 10: Lay bin over with lap side up. The top hole of the leg bolts to the 4th hole from the top of the top shell on the vertical seam (or 4th hole on the center shell if assembling an F60MB+20 or MBSLGT+20). Use 1/4-20 x 1" hex head bolts, (2) flat washers, lockwashers, and nuts. (Ref. Nos. 34, 22, 33 and 23).
- STEP 11: Bolt all the lap holes (snug bolts, do not tighten). Continue to the next leg until all legs are completed.
- STEP 12: For F60MB and F60MB+20, assemble collar braces (Ref. No. 12-1) to collar and legs (Ref. Nos. 7 and 15). Ref. No. 12-1 brace is 20 1/4" long. Use existing hardware to plug holes. Attach plastic transition to collar using bolts in plastic hardware bag. Using same, assemble adapter plate and slide assembly to transition.
- For MBSLGT and MBSLGT+20, assemble leg to Ref. No. 12-2 Hopper Braces to slide gate assembly. Using 4 bolts on slide gate assembly & 4 bolts on leg to hopper brace. Ref. No. 12-2 brace is 26" long. Refer to Exhibit C.
- STEP 13: If you have a third shell, install it at this point. Keep end laps in line. Put bolts in every hole (do not tighten).
- STEP 14: Install shell reinforcement plates (1 x 3 unpainted plate, 3 holes -Ref. No. 18) at this time. Use the small 10-24 screws (Ref. No. 28), flat washers (Ref. No. 22), lockwashers (Ref. No. 29) and 10-24 nuts (Ref. No. 30) as shown.
- STEP 15: Install latch (Ref. No. 19) at this time opposite the end lap. Use 5/16-18 x 1" Phillips head shoulder bolt (Ref. No. 24), flat washer, lockwasher and nut as shown.
- STEP 16: Bolt ladder rungs (Ref. No. 4) (1" conduit flattened both ends) to the outside of the offset of the side rails (Ref. No. 13) (1" conduit bent both ends) with the offset ladder rung between side rails. Bolt very loosely with 5/16" carriage bolts, 5/16" nuts, flat washers and lockwashers (Ref. Nos. 35, 22, 32 and 31).
- STEP 17: All ladders start in top shell at upper edge and bolt to shell side on the opposite side that the slide gate assembly pulls open. Refer to Exhibit A. Ladders should be centered between 2 legs. The ladder sections will bolt to bin side using existing holes. When lower ladder sections are added, the bottoms need to be supported by ladder stand off angles. The stand off angles are horizontally attached to the legs. Refer to leg hole usage diagram for bolt placement. (Exhibit B)
- STEP 18: Put silver spring hole seal (Ref. No. 20) in center hole of the cover (Ref. No. 1). Install the cover reinforcement plates (galvanized 3 holes) on inside of cover's crimped edge (Ref. Nos. 17 secured with Ref. Nos. 28, 22, 29 and 30). Install cover handle also (Ref. No. 10).

TIGHTEN ALL BOLTS & NUTS.

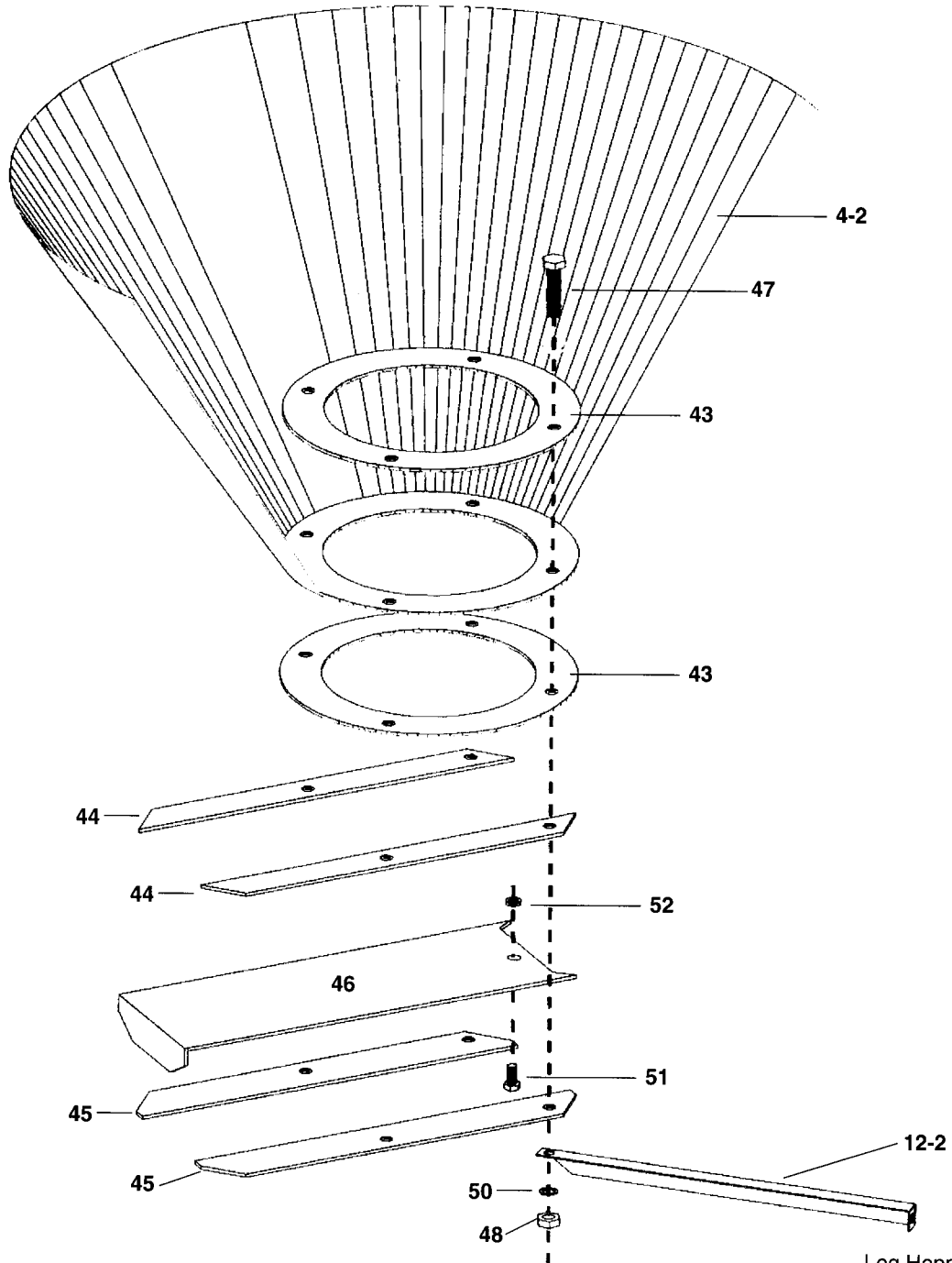
- STEP 19: With bin still on its side, roll it over until cover rod holes are easily accessible in the top shell. Set cover over top shell, lining up cover rod holes in both. Slip cover rods (Ref. No. 11) through the holes and attach to cover using 3/8-16 nuts and flat washers (Ref. No. 26 and 27) one on top, one under. Flip bin up to its anchor plates.
- STEP 20: Position bin on concrete pad and anchor well. Failure to anchor could cause the bin to fall over, causing injury.

EXHIBIT A



Hopper
Assembly
for
F60MB
and
F60MB+20

EXHIBIT C
Slide Gate Assembly
for MBSLGT and MBSLGT+20



Leg Hopper Brace
 attaches to leg using Ref.
 No. 49 $\frac{3}{8}$ x 1 Bolts, Ref.
 No. 50 $\frac{3}{8}$ Lockwashers
 and Ref. No. 48 $\frac{3}{8}$ Nuts.

REPAIR PARTS LIST – See Exhibits A and C on pages 3 and 5 for location of parts.

Ref. No.	Part No.	Description	Quantity by Model Number			
			F60MB	F60MB+20	MBSLGT	MBSLGT+20
1	F60B11	Cover	1	1	1	1
2	F60G66	Lower Shell with Leg Holes	1	1	1	1
3	F60G67	Top Shell with Leg Holes—+20 uses 2	1	2	1	2
4-1	F60G69	Hopper Cone - for F60MB & F60MB+20	1	1	0	0
4-2	F60G69SL	Hopper Cone for MBSLGT & MBSLGT+20	0	0	1	1
5	F60G73	Ladder Support Angle	0	1	0	1
6	312845	Plastic Transition	1	1	0	0
7	319052	Collar Assembly with bolts	1	1	0	0
8	316008	Slide	1	1	0	0
9	313289	Transfer Plate	1	1	0	0
10	F60C85	Cover Handle Assembly	1	1	1	1
11	F60B26	Cover Rod	2	2	2	2
12-1	F60G74	Collar Brace for F60MB & F60MB+20, 20 1/4" long	4	4	0	0
12-2	F60G74SL	Collar Brace for MBSLGT & MBSLGT+20, 26" long	0	0	4	4
13	988-1013	Ladder Side Rail	4	6	4	6
14	F60G83	Ladder Rung	6	9	6	9
15	9501326G	Leg	4	4	4	4
16	9501197	Anchor Assembly	4	4	4	4
17	M60A32	Cover Reinforcing Plate	2	2	2	2
18	F60B39	Shell Reinforcing Plate	2	2	2	2
19	F60C84	Cover Latch	1	1	1	1
20	85F30	D3161 Hole Plug, Zinc	1	1	1	1
21	OF143	1/4-20 x 1/2 Hex Head Cap Screw, Zinc	3	3	3	3
22	OF120	5/16" ID x 3/4" OD Washer, Zinc, 1/4	230	270	230	270
23	OF55	1/4-20 Hex Nut, Zinc	90	110	90	110
24	OF22	5/16-18 x 1 Phillips Pan Head Shoulder Bolt, Zinc	1	1	1	1
25	OF458	3/8-16 Nylon Insert Locknut, Zinc	2	2	2	2
26	OF167	3/8-16 Hex Nut, Zinc & Yellow	4	4	4	4
27	OF128	7/16 ID x 1 1/4 OD x .087 Washer, Zinc	4	4	4	4
28	OF214	10-24 x 1/2 Slotted Round Head Machine Screw, Zinc	8	8	8	8
29	OF112	#10 Split Lockwasher, Zinc	8	8	8	8
30	OF53	10-24 Hex Machine Screw Nut, Zinc	8	8	8	8
31	OF59	5/16-18 Hex Nut, Zinc & Yellow	24	30	24	30
32	OF114	5/16" Split Lockwasher, Zinc	12	12	12	12
33	OF113	1/4" Split Lockwasher, Zinc	90	110	90	110
34	OF408	1/4-20 x 1 Hex Head Grade 5 Cap Screw, Zinc	64	84	64	84
35	OF24	5/16-18 x 1 1/4 Hex Head Cap Screw, Zinc	12	18	12	18
36	9079050	5/16-18 x 1 3/4 Grade 5 Carriage Screw, Zinc	12	14	12	14
37	3920270	5/16-18 x 3/4 Truss Head Machine Screw, Zinc	18	18	0	0
38	3920249	5/16 Washer, Nylon	18	18	0	0
39	3920250	5/16 Nut, Nylon	18	18	0	0
	313392	Hopper Boot Hardware Bag				
		Includes Ref. Nos. 37, 38 and 39 and also includes the following 3 parts:				
	3920004	1/2-20 x 1 Hex Head Bolt, Grade 2, Zinc	6	6	0	0
	3920019	1/2-20 Hex Jam Nut, Zinc	6	6	0	0
	3920154	1/2 Weath-R-Seal Washer	6	6	0	0
		Which are used to bolt a boot assembly for an auger to the bottom of Part No. 313289 transfer plate.				
40	3920270	5/16-18 x 3/4 Truss Head Machine Screw, Zinc	34	34	0	0
41	3920152	5/16-18 x 1 1/16 OD Flange Nut	34	34	0	0
		NOTE: Ref. Nos. 40 and 41 come with Ref. No. 7 (the 319052 Collar Assembly with bolts). Use only 26 (3920270) Screws and 26 (3920152) Nuts to bolt the Collar to the Hopper (Ref. No. 7 to Ref. No. 4) and to bolt the Collar Braces to the Collar and to the Stiffeners (Ref. No. 12 to Ref. No. 7 and Ref. No. 12 to Ref. No. 15)				
42	F60G71	Bead Caulking, 60" between F60G69 (Ref. No. 4) and 319052 Collar (Ref. No. 7)—Caulking Not Shown	1	1	0	0
	MBSLGT10	Slide Gate Assembly	0	0	1	1
		Consists of:				
43	F60G90	Slide Gate Ring	0	0	2	2
44	F60G91	Slide Gate Guide, 3/4" wide	0	0	2	2
45	F60G92	Slide Gate Retainer, 1 3/16" wide	0	0	2	2
46	F60G93	Slide Gate	0	0	1	1
47	907-0626	3/8 x 1 1/4 Bin Bolt	0	0	4	4
48	907-0622	3/8 Bin Nut	0	0	8	8
49	907-0620	3/8 x 1 Bin Bolt	0	0	4	4
50	OF115	3/8 Lockwasher	0	0	8	8
51	907-0612	5/16 x 3/4 Bin Bolt	0	0	1	1
52	907-0613	5/16 Bin Nut	0	0	4	4
	OM2	8 1/2" x 18" Decal	1	1	1	1
	ISPF60MB	Instruction Sheet	1	1	1	1

KITS FOR CONVERTING CAPACITY ROUND FEEDERS (57" HOPPER SHELLS) TO MINI-BINS

"ORDER MODEL MB3PK (for a poly transition) OR MODEL EC2PK (for a slide gate only) WHICH INCLUDES THE COMPONENTS LISTED BELOW, IF YOU HAVE A PRIDE OF THE FARM OR BROWER FEEDER WITH 57" (144.8 cm) HOPPER AND WANT TO MAKE YOUR OWN LADDER AND LEGS. MODEL MB3PK OR MODEL EC2PK DOES NOT INCLUDE LADDER AND LEGS."

"ORDER MODEL MB8PK (for a poly transition) OR MODEL EC7PK (for a slide gate only) WHICH INCLUDES THE COMPONENTS LISTED BELOW, IF YOU HAVE A PRIDE OF THE FARM FEEDER OR BROWER FEEDER WITH 57" (144.8 cm) HOPPER AND WISH TO BUILD A COMPLETE BIN"

PARTS LIST – See Exhibits A and C on pages 3 and 5 for location of parts.

Ref. No.	Part No.	Description	MB3PK	MB8PK	EC2PK	EC7PK
4-1	F60G69	Hopper Cone - for F60MB & F60MB+20	1	1	0	0
4-2	F60G69SL	Hopper Cone for MBSLGT & MBSLGT+20	0	0	1	1
5	F60G73	Ladder Support Angle	0	1	0	1
6	312845	Plastic Transition	1	1	0	0
7	319052	Collar Assembly with bolts	1	1	0	0
8	316008	Slide	1	1	0	0
9	313289	Transfer Plate	1	1	0	0
10	F60C85	Cover Handle Assembly	0	0	0	0
11	F60B26	Cover Rod	0	0	0	0
12-1	F60G74	Collar Brace for F60MB & F60MB+20, 20 ¹ / ₄ " long	4	4	0	0
12-2	F60G74SL	Collar Brace for MBSLGT & MBSLGT+20, 26" long	0	0	4	4
13	988-1013	Ladder Side Rail	0	4	0	4
14	F60G83	Ladder Rung	0	6	0	4
15	9501326G	Leg	0	4	0	4
16	9501197	Anchor Assembly	0	4	0	4
22	OF120	⁵ / ₁₆ " ID x ³ / ₄ " OD Washer, Zinc, ¹ / ₄	0	270	0	270
23	OF55	¹ / ₄ -20 Hex Nut, Zinc	0	110	56	56
30	OF53	10-24 Hex Machine Screw Nut, Zinc	0	8	0	8
31	OF59	⁵ / ₁₆ -18 Hex Nut, Zinc & Yellow	0	12	12	12
32	OF114	⁵ / ₁₆ " Split Lockwasher, Zinc	0	12	12	12
33	OF113	¹ / ₄ " Split Lockwasher, Zinc	0	56	56	56
34	OF408	¹ / ₄ -20 x 1 Hex Head Grade 5 Cap Screw, Zinc	0	20	56	56
35	OF24	⁵ / ₁₆ -18 x 1 ¹ / ₄ Hex Head Cap Screw, Zinc	0	12	12	12
36	9079050	⁵ / ₁₆ -18 x 1 ³ / ₄ Grade 5 Carriage Screw, Zinc	0	6	0	6
37	3920270	⁵ / ₁₆ -18 x ³ / ₄ Truss Head Machine Screw, Zinc	18	18	0	0
38	3920249	⁵ / ₁₆ Washer, Nylon	18	18	0	0
39	3920250	⁵ / ₁₆ Nut, Nylon	18	18	0	0
	313392	Hopper Boot Hardware Bag				
		Includes Ref. Nos. 37, 38 and 39 and also includes the following 3 parts:				
	3920004	¹ / ₂ -20 x 1 Hex Head Bolt, Grade 2, Zinc	6	6	0	0
	3920019	¹ / ₂ -20 Hex Jam Nut, Zinc	6	6	0	0
	3920154	¹ / ₂ Weath-R-Seal Washer	6	6	0	0
		Which are used to bolt a boot assembly for an auger to the bottom of Part No. 313289 transfer plate.				
40	3920270	⁵ / ₁₆ -18 x ³ / ₄ Truss Head Machine Screw, Zinc	34	34	0	0
41	3920152	⁵ / ₁₆ -18 x ¹¹ / ₁₆ OD Flange Nut	34	34	0	0
		NOTE: Ref. Nos. 40 and 41 come with Ref. No. 7 (the 319052 Collar Assembly with bolts). Use only 26 (3920270) Screws and 26 (3920152) Nuts to bolt the Collar to the Hopper (Ref. No. 7 to Ref. No. 4) and to bolt the Collar Braces to the Collar and to the Stiffeners (Ref. No. 12 to Ref. No. 7 and Ref. No. 12 to Ref. No. 15)				
42	F60G71	Bead Caulking, 60" between F60G69 (Ref. No. 4) and 319052 Collar (Ref. No. 7)—Caulking Not Shown	1	1	0	0
	MBSLGT10	Slide Gate Assembly	0	0	1	1
		Consists of:				
43	F60G90	Slide Gate Ring	0	0	2	2
44	F60G91	Slide Gate Guide, ³ / ₄ " wide	0	0	2	2
45	F60G92	Slide Gate Retainer, 1 ³ / ₁₆ " wide	0	0	2	2
46	F60G93	Slide Gate	0	0	1	1
47	907-0626	³ / ₈ x 1 ¹ / ₄ Bin Bolt	0	0	4	4
48	907-0622	³ / ₈ Bin Nut	0	0	8	8
49	907-0620	³ / ₈ x 1 Bin Bolt	0	0	4	4
50	OF115	³ / ₈ Lockwasher	0	0	8	8
51	907-0612	⁵ / ₁₆ x 3/4 Bin Bolt	0	0	1	1
52	907-0613	⁵ / ₁₆ Bin Nut	0	0	4	4
	OM2	8 ¹ / ₂ " x 18" Decal	0	0	0	0
	ISPF60MB	Instruction Sheet	1	1	1	1