



General Information

1. It is the responsibility of the bin owner or his designated agent to have the modification of any bin for installation of the add-on roof manway kit reviewed and approved by the original bin manufacturer or other appropriate knowledgeable professionals.
2. If the add-on roof manway is to be installed for bin entry, the bin owner or his designated agent is responsible to make sure all necessary modifications to the bin are made for safe bin entry and all appropriate procedures are followed.
3. The add-on roof manway is intended only for use with corrugated grain bin roofs of common industry construction type. No structural member, support pipe or stiffening roof ribs shall be modified for installation of the kit. The owner or his agent is wholly responsible for verifying the bin roof panel adequacy to have the access opening added, and dimensional compatibility of the system to the owner's bin and as built constructed arrangement. Similarly, adequacy of all access systems are wholly the responsibility of the owner.
4. As a retrofit kit, additional sealing measures to those shown in the instructions may be necessary. The installer, in conjunction with agreements made with the owner, is responsible for all such measures.
5. Make sure there are no sharp edges the user may be exposed to from the field cut opening.
6. The add-on roof manway kit is intended for use in corrugated grain bin roofs of common industry construction type, and placement near the eave of the bin. It is not to be used for any other purpose, any other location in the bin, or any other structure type.
7. Supplemental hardware and sealing material will have to be supplied by the installer.
8. The add-on roof manway is without warranty. AGCO Grain/GSI assumes no liability for the kit, any structure it is added to, or any stored product damage.



Oval Add-On Roof Manway Kit Installation

Installation

- Place the add-on manway panel (4) on the existing roof panel (10). Using the edges of the roof ribs as a template, mark the add-on manway panel (4) location. (See Figure 1.)

NOTE: Make sure to use the inside edges of the roof rib for marking (12), so that the add-on panel (4) fits within the roof ribs of the existing panel (10).

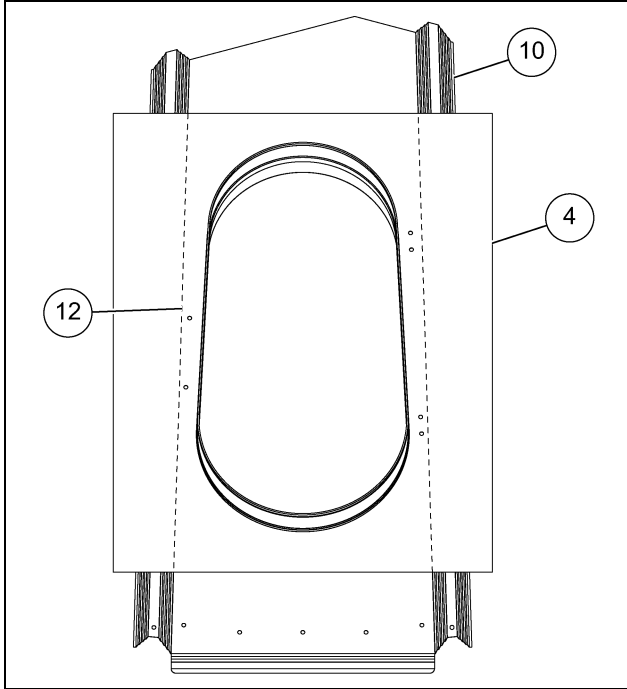


Figure 1 Marking the Add-On Manway Panel

Ref #	Description
4	Add-On Manway Panel (MW-309)
10	Existing Roof Panel
12	Rib Markings for Trimming

- Trim (13) the add-on manway panel (4) and make sure it fits between the roof ribs by placing on the existing roof panel (10). (See Figure 2.)

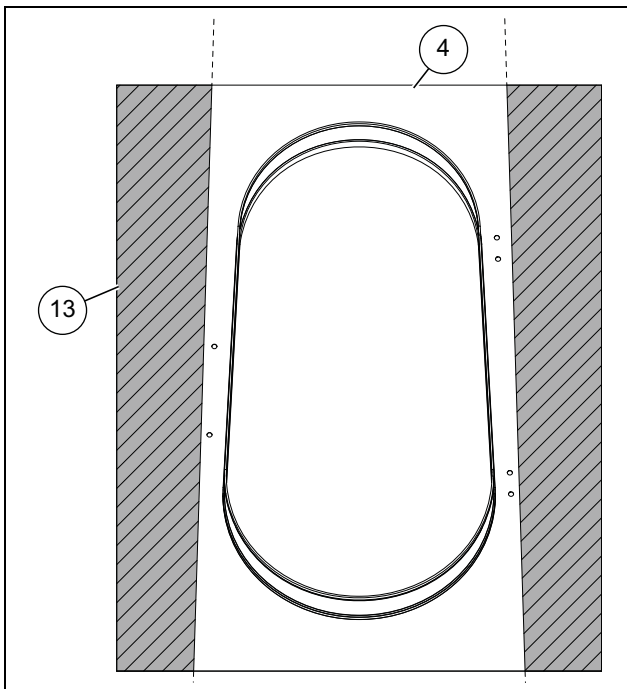


Figure 2 Trimming the Add-On Manway Panel

Ref #	Description
4	Add-On Manway Panel (MW-309)
13	Trimming Area

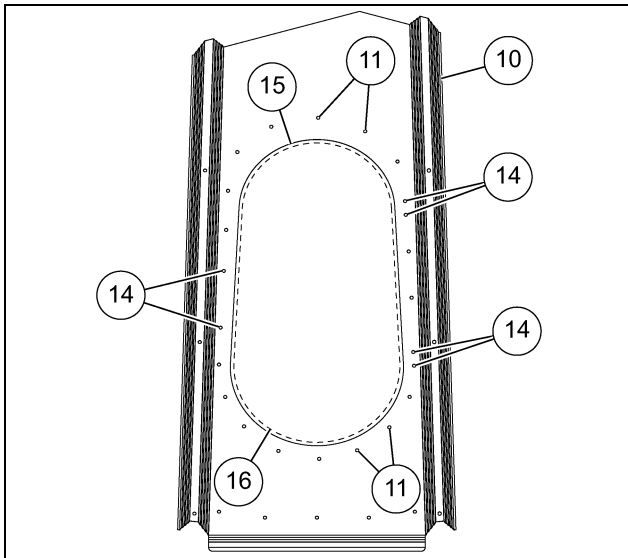
Installation (Continued)

3. After trimming the add-on manway panel (4), place it on the existing roof panel (10). Using the add-on manway panel (4) as a template, mark the manway hole and six 3/8" holes for the hinge and bracket attachment on the existing roof panel (10). (See Figure 3.)

4. Remove the add-on manway panel (4) and field drill 3/8" holes on the existing roof panel (14) at the marked locations. Also, cut the marked manway hole (15) on the existing roof panel (10).

NOTE: Make sure to cut the manway hole (15) on the existing roof panel (10) **larger** than the add-on manway entrance (16) without any sharp edges.

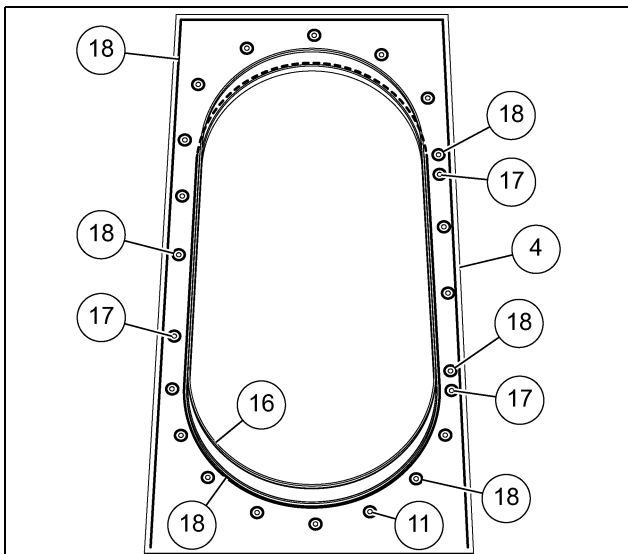
5. Field drill additional 3/8" holes (11) on both the panels (4 and 10) as needed for securing the existing roof panel (10) to the add-on manway panel (4). (See Figure 3 and Figure 4.)



Ref #	Description
10	Existing Roof Panel
11	Additional 3/8" Holes for Attachment to Roof Panel
14	3/8" Field Drilled Holes on the Existing Roof Panel
15	Manway Hole Cut-Out
16	Add-On Manway Entrance

Figure 3 Cutting the Manway Hole and Field Drilling the Holes on the Existing Roof Panel

6. Apply caulking (18) around the six 3/8" holes (17), additional 3/8" holes (11) and along the edges of the add-on manway panel (4). Also, apply necessary amount of caulking (18) around the manway entrance (16) on the add-on manway panel (4). (See Figure 4.)



Ref #	Description
4	Add-On Manway Panel (MW-309)
11	Additional 3/8" Holes for Attachment to Roof Panel
16	Add-On Manway Entrance
17	3/8" Holes on Add-On Manway Panel
18	Caulking (S-4458)

Figure 4 Apply Caulking on the Add-On Manway Panel

Oval Add-On Roof Manway Kit Installation

Installation (Continued)

7. Position the add-on manway panel (4) under the existing roof panel (10) and align the holes. Place a latch assembly (5) and two hinge bases (6) on top of the existing roof panel (10) and secure together with add-on manway panel (4) using 5/16" x 1" flange bolts (1) and 5/16" hex nuts (3).

NOTE: Install the latch assembly (5) to the left and two hinge bases (6) to the right of the manway entrance (16).

8. Secure the add-on manway panel (4) to the existing roof panel (10) by installing 5/16" flange bolts (20) and 5/16" flange nuts (21) to the additionally field drilled 3/8" holes (11). (See Figure 5.)

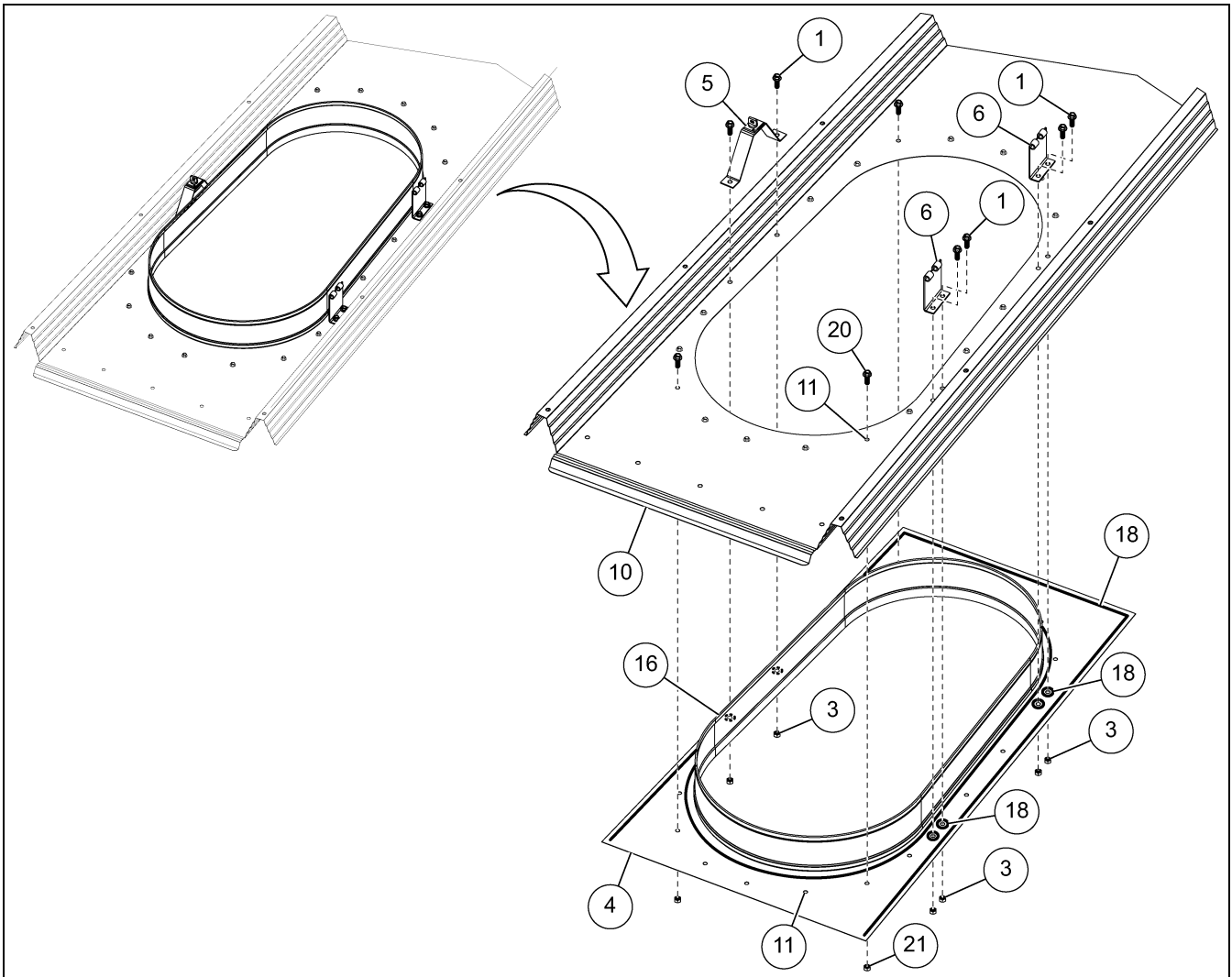


Figure 5 Installing the Add-On Panel with Latch Bracket and Hinge Bases

Ref #	Part #	Description
1	S-10260	5/16" x 1" Flange Bolt with Sealing Washer
3	S-396	5/16" Hex Nut
4	MW-309	Add-On Manway Panel
5	MW-311	Manway Latch/Hasp Assembly
6	MW-303	Manway Hinge Base
10		Existing Roof Panel

Ref #	Description
11	Additional 3/8" Holes for Attachment to Roof Panel
16	Add-On Manway Entrance
18	Caulking (S-4458)
20	5/16" Flange Bolt with Sealing Washer
21	5/16" Flange Nut

Installation (Continued)

9. Assemble the latch bar (7) and two hinge leaves (8) to the manway cover (9) using 5/16" x 1" flange bolts (1) and 5/16" hex nuts (3). (See Figure 6.)

NOTE: Install the latch bar (7) to the left and two hinge leaves (8) to the right of the manway cover (9).

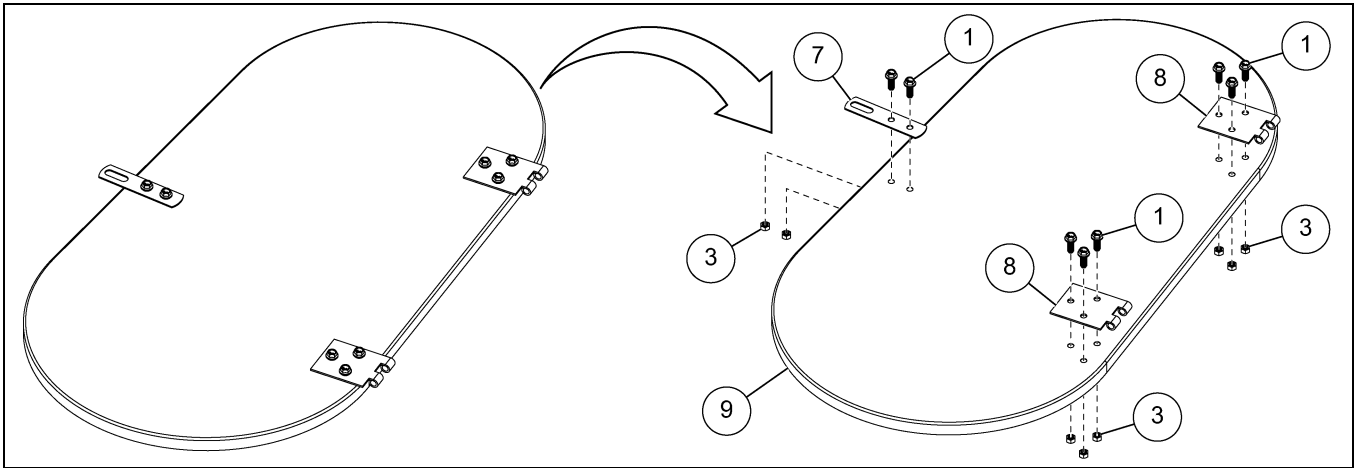


Figure 6 Assembling the Manway Cover with Latch and Hinge Leaves

Ref #	Part #	Description
1	S-10260	5/16" x 1" Flange Bolt with Sealing Washer
3	S-396	5/16" Hex Nut
7	MW-306	Manway Latch Bar

Ref #	Part #	Description
8	MW-304	Manway Hinge Leaf
9	MW-301D	Manway Cover

10. Align the hinge leaves (8) of the manway cover assembly (19) with the hinge bases (6) and install using 5/16" x 4" HHCS bolts (2) and 5/16" hex nuts (3). (See Figure 7.)

NOTE: Make sure to double nut each HHCS bolt (2) and the latch bar (7) aligns with the hasp in the latch/hasp assembly (5).

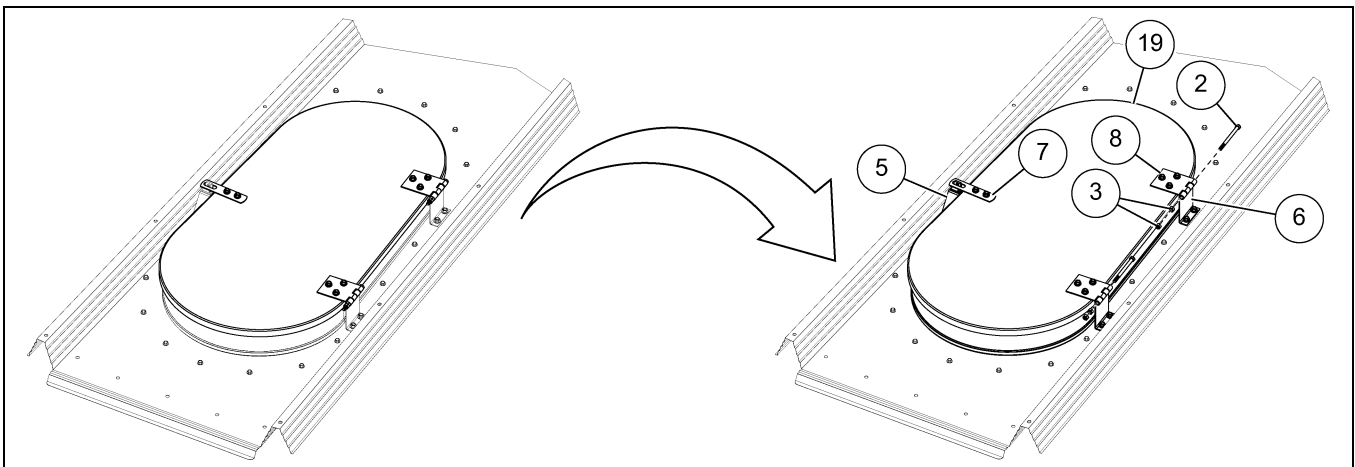


Figure 7 Installing the Manway Cover

Ref #	Part #	Description
2	S-855	5/16" x 4" HHCS Bolt
3	S-396	5/16" Hex Nut
5	MW-311	Manway Latch/Hasp Assembly
6	MW-303	Manway Hinge Base

Ref #	Part #	Description
7	MW-306	Manway Latch Bar
8	MW-304	Manway Hinge Leaf
19		Manway Cover Assembly

Oval Add-On Roof Manway Kit Installation

Oval Add-On Roof Manway Kit Parts List

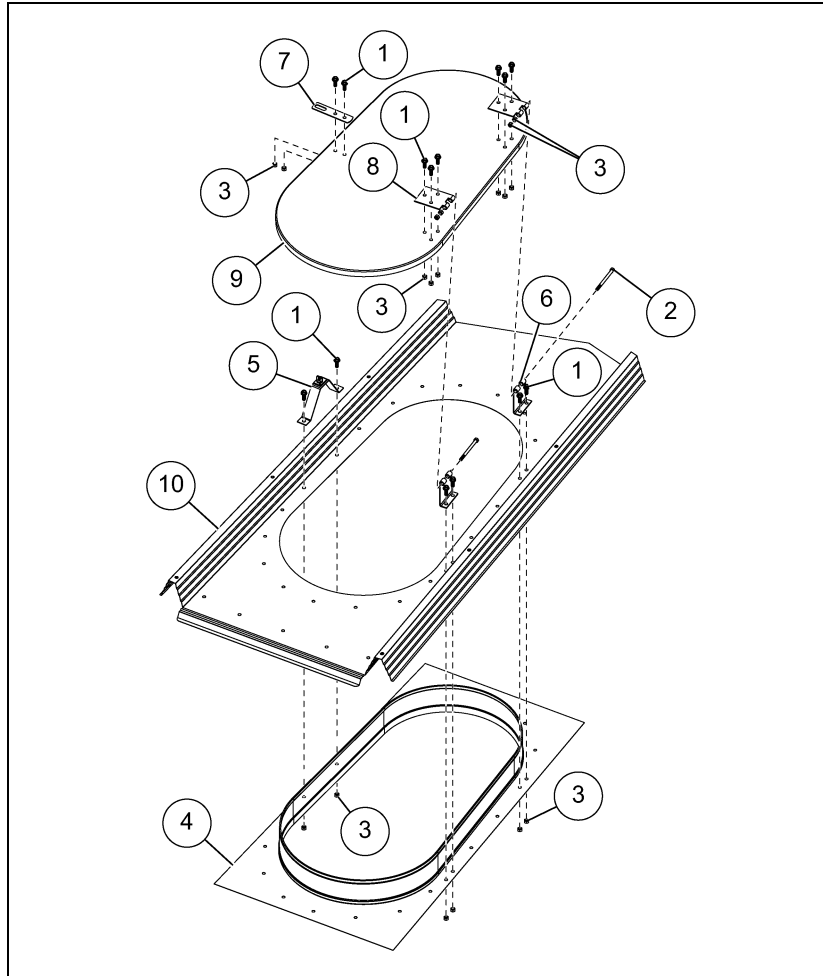


Figure 8 Oval Add-On Roof Manway Kit Parts

Oval Add-On Roof Manway Kit Parts List

Ref #	Part #	Description	Qty
1	S-10260	Bolt, Flange 5/16"-18 x 1" JS500 Grade 8 or 8.2 Full Thread with Sealing Washer	14
2	S-855	Bolt, HHCS 5/16"-18 x 4" ZN Grade 5	2
3	S-396	Nut, Hex 5/16"-18 YDP Grade 2	18
4	MW-309	Add-On Manway Panel	1
5	MW-311	Manway Latch/Hasp Assembly	1
	MW-305	Manway Latch Bracket	1
	S-2009	Screw, MS #10-24 x 5/8" OHP ZN Grade 2	2
	S-2010	Nut, Nylock #10-24 ZN Grade 2	2
	S-10802	Latch, Hasp	1
6	MW-303	Manway Hinge Base	2
7	MW-306	Manway Latch Bar	1
8	MW-304	Manway Hinge Leaf	2
9	MW-301D	Manway Cover with Decals	1
10		Existing Roof Panel	A/R

NOTE: Add-On manway panel (4) to existing roof panel (10) attachment bolts and nuts are not shown.