

Drying Chamber Low-Level Rotary Switch Installation

The rotary switch with the longest extension is the drying chamber low-level rotary switch and indicates when the grain in the drying chamber is low.

What You Should Know

It is recommended to use rivet nuts to install the rotary switches for easier service. Use fastenal rivet nut tool (#0126106) with knurled nuts and the nose that matches the bolt diameter.

- 1. Measures from the top of the roof sheet down a distance of (C) referenced in the chart and mark the location.
- 2. Drill a 2" hole through the roof sheet at the marked location (A).
- 3. Center the mounting plate (E) over the 2" hole and drill the four (4) corner holes using the mounting plate (E) as a template.
- 4. Attach the flexible shaft coupler (F) to the drive shaft of the rotary power pack (G) using a roll pin (D).
- 5. Apply Teflon tape or pipe sealant (not included) to the rotary switch power pack threads and thread the rotary switch power pack into the mounting plate coupling (E).
- 6. Thread the rotary power pack (G) into the mounting plate (E).

NOTE: Make sure the conduit opening on the rotary power pack (G) is facing towards the eave of the bin.

- 7. Thread the 1/4" shaft extension (K) into the flexible shaft coupler (F) and fasten using a roll pin (D).
- 8. Slide the 1-1/4" guard pipe (L) over the 1/4" shaft extension (K) and thread the 1-1/4" guard pipe (L) into the mounting plate (E).
- 9. Thread the 1/4" shaft coupler (H) onto the end of the 1/4" shaft extension (K) and fasten with a cotter pin (I).
- 10. Insert the 1-1/4" shaft guard (L) through the 2" hole in the roof panel and attach the mounting plate to the roof panel using bolts (M) and nuts (N).

NOTE: Using a rivet tool with knurled nuts to attach the mounting plate will make removal for service much easier.

11. Thread the single vane paddle (J) into the 1/4" shaft coupler (H) and fasten with a cotter pin (I).



Drying Chamber Low-Level Rotary Switch Installation (Continued)

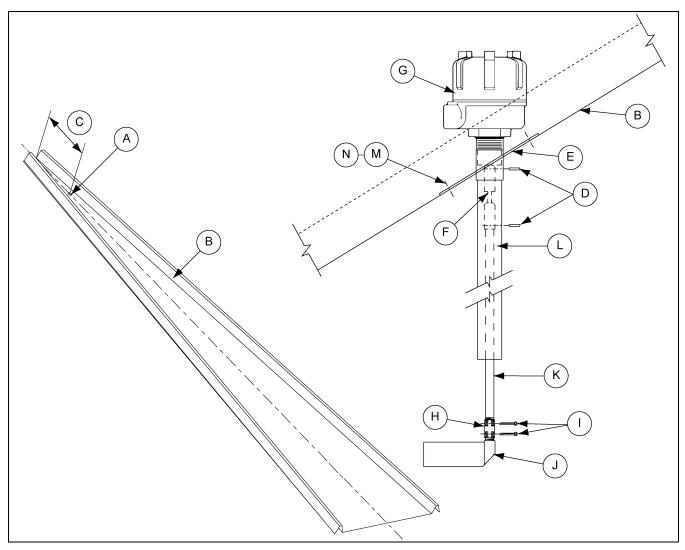


Figure 1 Drying Chamber Low-Level Rotary Switch

Ref #	Part #	Description
Α		Field Drill 2" Hole
В		Roof Panel
С		Distance to Drill the Hole
D		Roll Pins
Е	TD-100627	Mounting Plate
F	TAF-100075	Flexible Shaft Coupler
G	TD-100076	Rotary Power Pack

Ref #	Part #	Description
Н	TAF-6107	1/4" Shaft Coupler
I *	S-7241	Cotter Pin
J	TAF-6085	Single Vane Paddle
K	TAF-6094	1/4" Shaft Extension
L	TAF-6093	1-1/4" Shaft Guard
М	S-10260	5/16" x 1" Flange Bolt
N	S-396	5/16" Hex Nut

^{*} Cotter pin (I) is optional. You can also use MS screw (S-8896) and nylock nut (S-9100) instead of cotter pin (I).

TopDry Bin Diameter	Distance (C)
24'	19-3/16"
30'	20"
36'	30"

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Drying Chamber High-Level Rotary Switch Installation

The drying chamber high-level rotary switch senses when the drying chamber is full and signals the system to stop loading the grain. The high-level rotary switch has an adjustable mount to allow positioning of the switch to match the fill rate.

What You Should Know

It is recommended to use rivet nuts to install the rotary switches for easier service. Use fastenal rivet nut tool (#0126106) with knurled nuts and the nose that matches the bolt diameter.

- 1. Measures from the top of the roof sheet down a distance of (C) referenced in the chart and mark the location.
- 2. Drill a 2" hole through the roof sheet at the marked location (A).
- 3. Center the mounting plate (G) over the 2" hole and drill the four (4) corner holes using the mounting plate (G) as a template.
- 4. Attach the flexible shaft coupler (H) to the drive shaft of the rotary power pack (K) using a roll pin (D).
- 5. Apply Teflon tape or pipe sealant (not included) to the rotary switch power pack threads and thread the rotary switch power pack into the mounting plate coupling (G).
- 6. Thread the rotary power pack (K) into the mounting plate (G).
 - **NOTE**: Make sure the conduit opening on the rotary power pack (K) is facing towards the eave of the bin.
- 7. Thread the 1/4" shaft extension (I) into the flexible shaft coupler (H) and fasten using a roll pin (D).
- 8. Slide the 1-1/4" guard pipe (J) over the 1/4" shaft extension (I) and thread the 1-1/4" guard pipe (J) into the mounting plate (G).
- 9. Thread the 1/4" shaft coupler (N) onto the end of the 1/4" shaft extension (I) and fasten with a cotter pin (L).
- 10. Insert the 1-1/4" shaft guard (J) through the 2" hole in the roof panel and attach the mounting plate to the roof panel using bolts (O) and nuts (P).
 - **NOTE:** Using a rivet tool with knurled nuts to attach the mounting plate will make removal for service much easier.
- 11. Thread the 3 vane paddle (M) into the 1/4" shaft coupler (N) and fasten with a cotter pin (L).

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Drying Chamber High-Level Rotary Switch Installation (Continued)

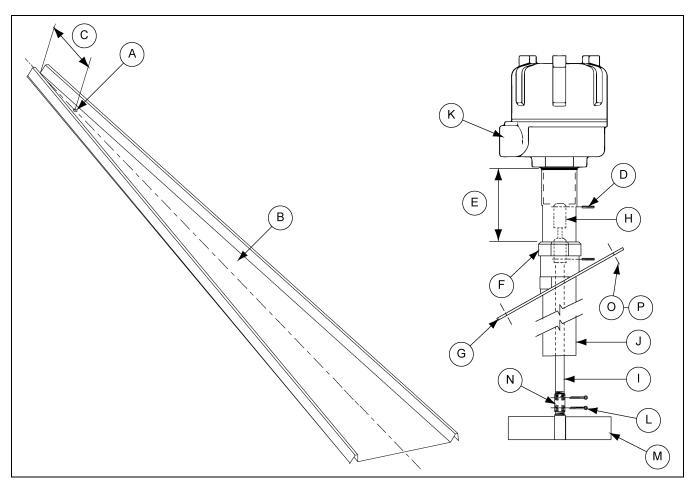


Figure 2 Drying Chamber High-Level Rotary Switch - Adjustable

Ref #	Part #	Description
Α		Field Drill 2" Hole
В		Roof Panel
С		Distance to Drill the Hole
D		Roll Pins
Е		3"
F	TD-101106	Compression Coupler
G	TD-100626	Hi-Limit Mounting Plate
Н	TAF-100075	Flexible Shaft Coupler

Ref #	Part #	Description
I	TAF-6107	1/4" Shaft Extension
J	TAF-6093	1-1/4" Shaft Guard
K	TD-100076	Rotary Power Pack
L*	S-7241	Cotter Pin
М	TAF-6086	3 Vane Paddle
N	TAF-6107	1/4" Shaft Coupler
0	S-10260	5/16" x 1" Flange Bolt
Р	S-396	5/16" Hex nut

^{*} Cotter pin (L) is optional. You can also use MS screw (S-8896) and nylock nut (S-9100) instead of cotter pin (L).

TopDry Bin Diameter	Distance (C)
24'	19-3/16"
30'	20"
36'	30"

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Drying Chamber Overflow Rotary Switch Installation

If a choke fill load system is used, the drying chamber overflow rotary switch does not have to be installed.

What You Should Know

It is recommended to use rivet nuts to install the rotary switches for easier service. Use fastenal rivet nut tool (#0126106) with knurled nuts and the nose that matches the bolt diameter.

- 1. Measures from the top of the roof sheet down a distance of (C) referenced in the chart and mark the location.
- 2. Drill a 2" hole through the roof sheet at the marked location (A).
- 3. Center the mounting plate (E) over the 2" hole and drill the four (4) corner holes using the mounting plate (E) as a template.
- 4. Attach the flexible shaft coupler (F) to the drive shaft of the rotary power pack (G) using a roll pin (D).
- 5. Apply Teflon tape or pipe sealant (not included) to the rotary switch power pack threads and thread the rotary switch power pack into the mounting plate coupling (E).
- 6. Thread the rotary power pack (G) into the mounting plate (E).
 - **NOTE**: Make sure the conduit opening on the rotary power pack (G) is facing towards the eave of the bin.
- 7. Insert the flexible shaft coupler (F) through the 2" hole in the roof panel and attach the mounting plate to the roof panel using bolts (I) and nuts (J).
 - **NOTE**: Using a rivet tool with knurled nuts to attach the mounting plate will make removal for service much simpler.
- 8. Thread the 3 vane paddle (H) into the flexible shaft coupler (F) and fasten with a roll pin (D).

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Drying Chamber Overflow Rotary Switch Installation (Continued)

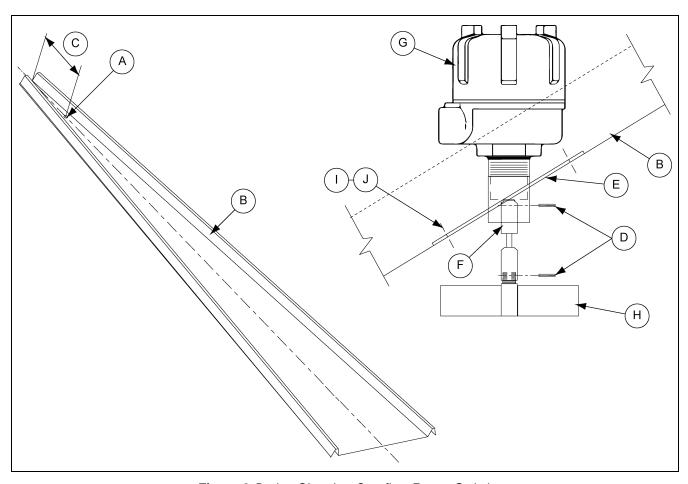


Figure 3 Drying Chamber Overflow Rotary Switch

Ref #	Part #	Description
А		Field Drill 2" Hole
В		Roof Panel
С		Distance to Drill the Hole
D		Roll Pins
Е	TD-100627	Mounting Plate

Ref #	Part #	Description
F	TAF-100075	Flexible Shaft Coupler
G	TD-100076	Rotary Power Pack
Н	TAF-6086	3 Vane Paddle
I	S-10260	5/16" x 1" Flange Bolt
J	S-396	5/16 Hex Nut

TopDry Bin Diameter	Distance (C)
24'	19-3/16"
30'	20"
36'	30"

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Optional Wet Supply Rotary Switch Installation

What You Should Know

NOTE: If the optional wet supply rotary switch is not used, install a jumper between terminals 13 and 14 in the main control box.

It is recommended to use rivet nuts to install the rotary switches for easier service. Use fastenal rivet nut tool (#0126106) with knurled nuts and the nose that matches the bolt diameter.

1. Drill a 2" diameter hole through the hopper bottom. If a flat bottom bin is being used for a wet storage tank the wet supply rotary switch would be mounted 45° up the sidewall from the center of the bin.

Example: If the wet storage bin is 18' diameter then the wet supply rotary switch would be mounted 9' up from he the bottom of the sidewall.

NOTE: If using a flat bottom tank, mount rotary switch to the sidewall.

- 2. Locate the hole in the center of a valley on the outside of the sidewall (L).
- 3. Use the mounting plate (D) as a pattern and drill four (4) 3/8" holes through the sidewall (L) at the rotary switch location.
- 4. Add foam weather strip around the top and sides of the mounting plate (D).
- 5. Caulk the underside of the mounting plate (D), on all sides of the 2" hole and where the plate meets the sidewall (L).
- 6. Bolt the mounting plate (D) to the sidewall (L).
- 7. Attach the flex coupling (M) to the rotary switch (A) using a cotter pin (F).
- 8. Attach the single vane paddle (E) to the flex coupling (M) with a cotter pin (F).
- 9. Make sure that the conduit hole is facing down.
- 10. Apply Teflon tape or pipe sealant (not included) to the rotary switch power pack (A) threads and thread the rotary switch power pack into the mounting plate coupling (D).
- 11. Make sure the conduit opening is facing down.

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Optional Wet Supply Rotary Switch Installation (Continued)

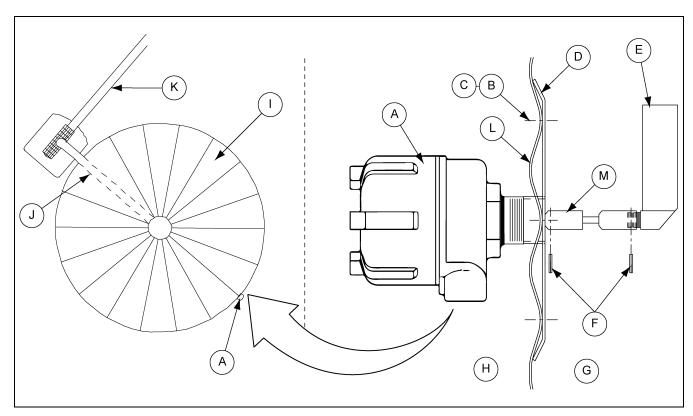


Figure 4 Optional Wet Supply Rotary Switch (TAF-6106)

Ref #	Part #	Description
Α	TD-100076	Rotary Switch
В	S-10260	5/16 x 1" Flange Bolt
С	S-396	5/16" Hex Nut
D	TD-100629	Mounting Plate
E	TAF-6085	Single Vane Paddle
F	S-7241	Cotter Pin
G		Inside the Bin
Н		Outside the Bin
I		Wet Storage Bin
J		Fill System 1
K		Fill System 2
L		Sidewall
М		Flex Coupling

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Storage Chamber High-Limit Rotary Switch Installation

This switch needs to be in close proximity to the duct work and must be easily accessed from the storage chamber platform.

What You Should Know

It is recommended to use rivet nuts to install the rotary switches for easier service. Use fastenal rivet nut tool (#0126106) with knurled nuts and the nose that matches the bolt diameter.

- 1. Drill a 2" diameter hole through the sidewall 3' below the duct entrance (I).
 - NOTE: Make sure to drill the hole centered on an outside valley of the sidewall corrugation.
- 2. Use the mounting plate (D) as a pattern and drill four (4) 3/8" holes through the sidewall (L) at the rotary switch location.
- 3. Add foam weather strip around the top and sides of the mounting plate (D).
- 4. Caulk the underside of the mounting plate, on all sides of the 2" hole and where the plate meets the bin.
- 5. Install the mounting plate (D) to the sidewall (L) using bolts (B) and nuts (C).
- 6. Attach the flex coupling (M) to the rotary switch power pack (A) using a cotter pin (F).
- 7. Attach the single vane paddle (E) to the flex coupling (M) using a cotter pin (F).
- 8. Apply Teflon tape or pipe sealant (not included) to the rotary switch power pack (A) threads and thread the rotary switch power pack into the mounting plate coupling (D).
- 9. Make sure the conduit opening is facing down.

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Storage Chamber High-Limit Rotary Switch Installation (Continued)

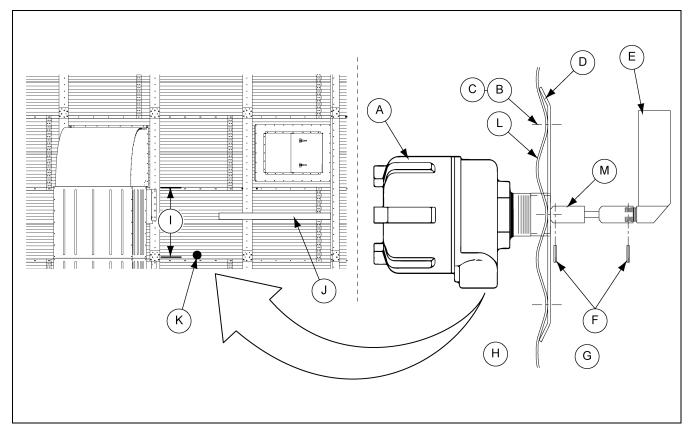


Figure 5 Storage Chamber High-Limit Rotary Switch (TAF-6106)

Ref #	Part #	Description
Α	TD-100076	Rotary Switch
В	S-10260	5/16 x 1" Flange Bolt
С	S-396	5/16" Hex Nut
D	TD-100629	Mounting Plate
Е	TAF-6085	Single Vane Paddle
F	S-7241	Cotter Pin
G		Inside the Bin
Н		Outside the Bin
I		3' From Bottom of the Duct Opening
J		Platform
K		Rotary Switch Mounting Location
L		Sidewall
М		Flex Coupling

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