SIZE	DWG NO	SH	REV
A	ETX680-24-TSO-C172	1	IR

THIS DOCUMENT SHALL BE REVISED IN ITS ENTIRETY. ALL SHEETS OF THIS DOCUMENT ARE THE SAME REVISION LEVEL AS INDICATED IN THE REVISION BLOCK.

REVISION BLOCK			
REV	DESCRIPTION	DATE	APPROVED
NEW	Initial Release	5/10/2024	Nicoson

General Notes

1. Applicability: see AML
2. See manual 200408 for return to service checks.

Parts List

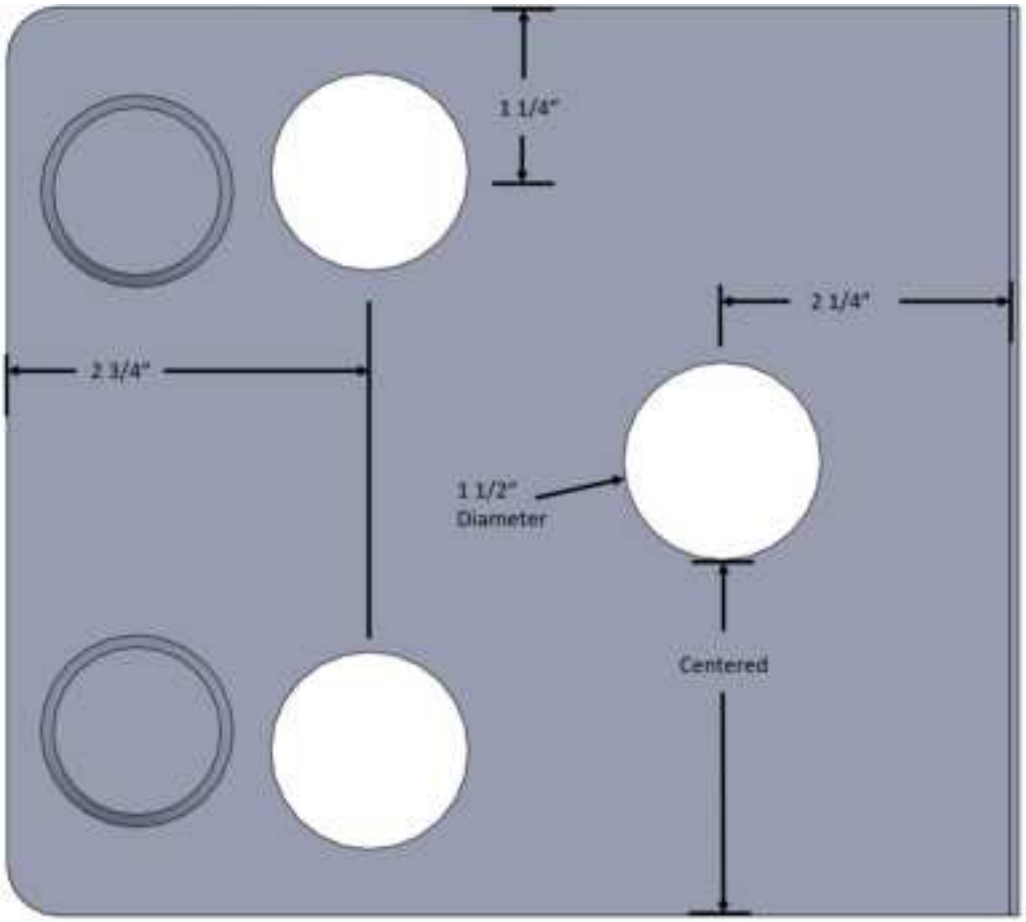
Install Kit Weight: 0.8lb

Item	Qty	Part Number	Part Description
1	1	ETX680-24-HDB	Battery Hold Down Bracket
2	1	230908	11Ah Battery Box Spacer
3	1	11MM24	MIL Spec Amber 24 Volt LED
4	1	200208	Fault Indicator Placard
5	3ft	5239K15	3/8” Teflon Tubing
6	2	5670K18	90 Degree 3/8” SS Elbows

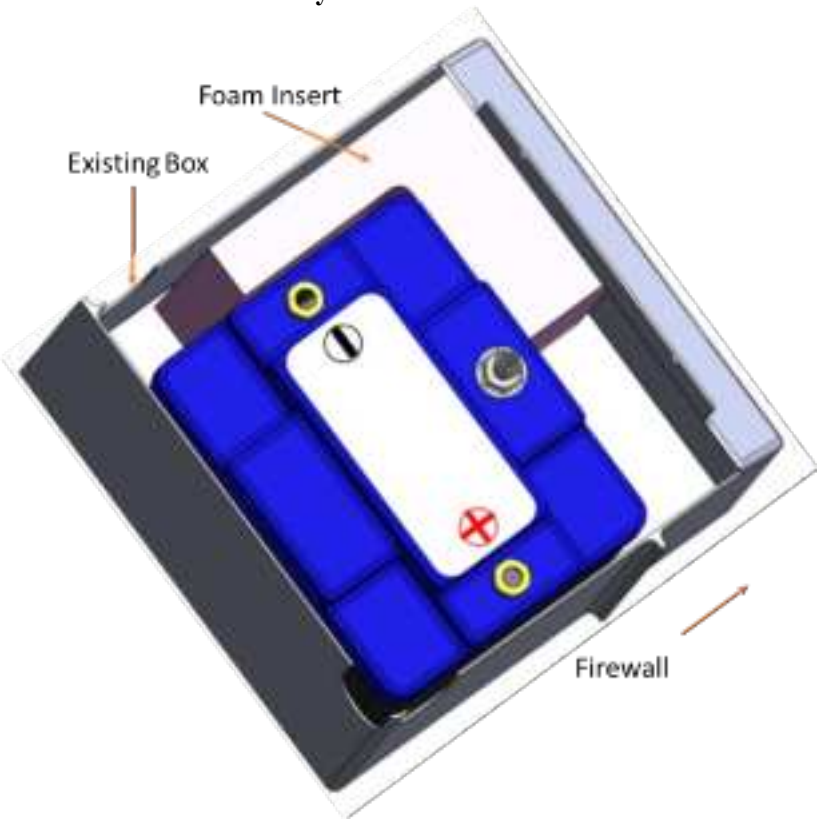
Battery Mounting (early N model, serial # 17269310-17272885)

Place the ETX680-24-TSO battery into the battery box with the Foam Insert (230908). Modify the existing battery box cover; cut three 1 ½” holes in the cover for the battery vent and terminals shown below. Replace cover in same orientation and secure using original hardware.

EarthX	Windsor, CO	SIZE	DESCRIPTION	
DRAWN	KWOODBURN	A	ETX680-24-TSO C172 Installation	
ISSUED	R NICOSON	SCALE	N/A	SHEET 1



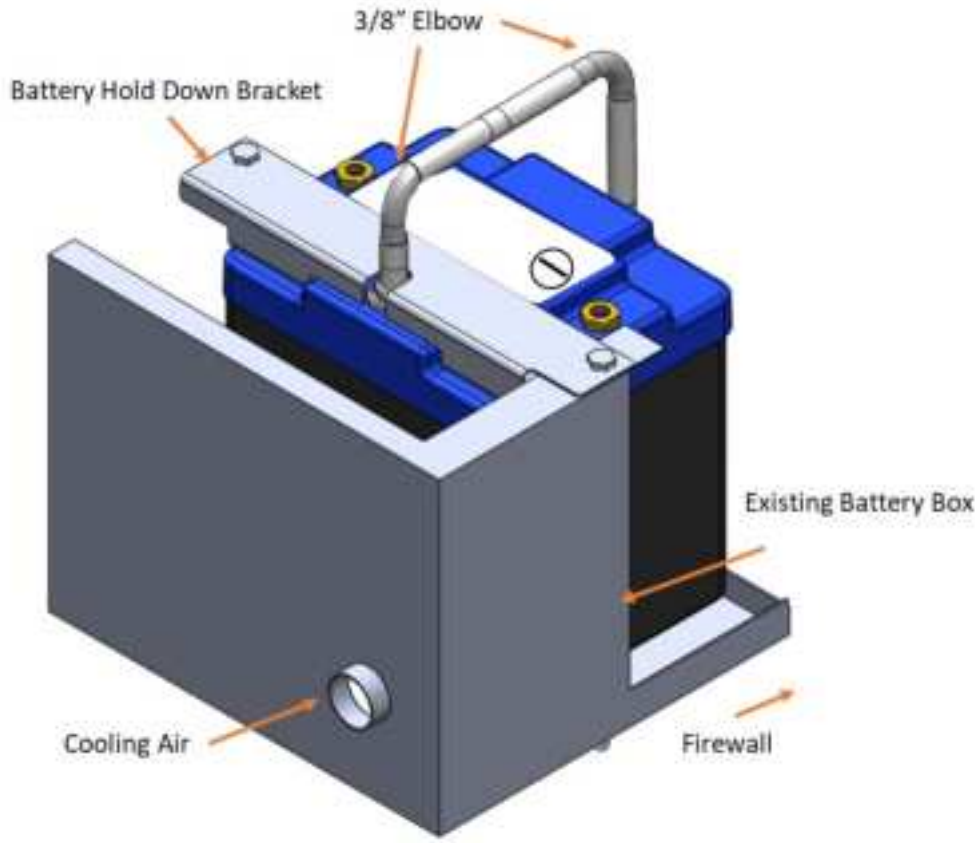
Battery Cover Modification



Battery Mounting

Battery Mounting (N model serial #17272886 and later, and P,Q,R and S models)

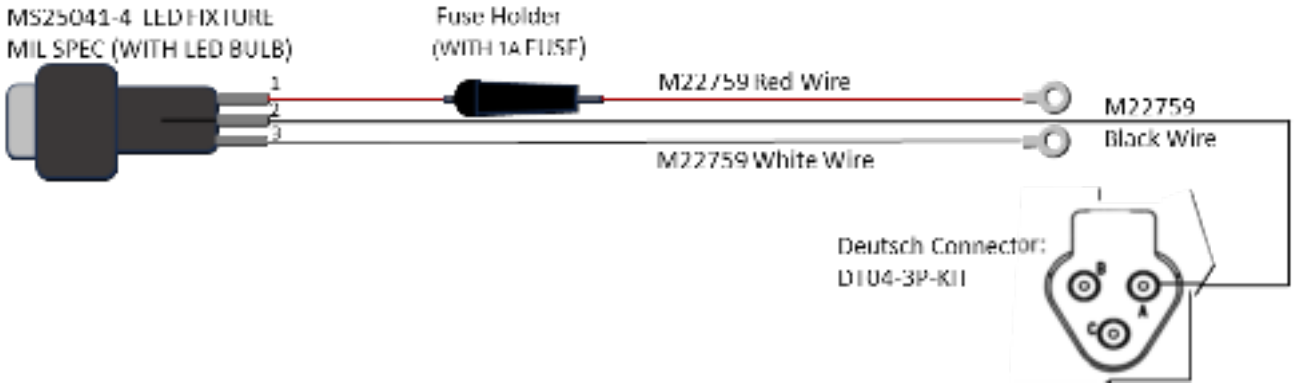
Place the EarthX battery into the battery tray. Place the new battery hold down bracket (ETX680-24-HDB) into the battery and battery tray side wall, shown below. Re-install the existing hold down bolts. The bolts should be snug, but not over-tightened to a point it bends the hold down bracket.



Battery Mounting (late model N and newer)

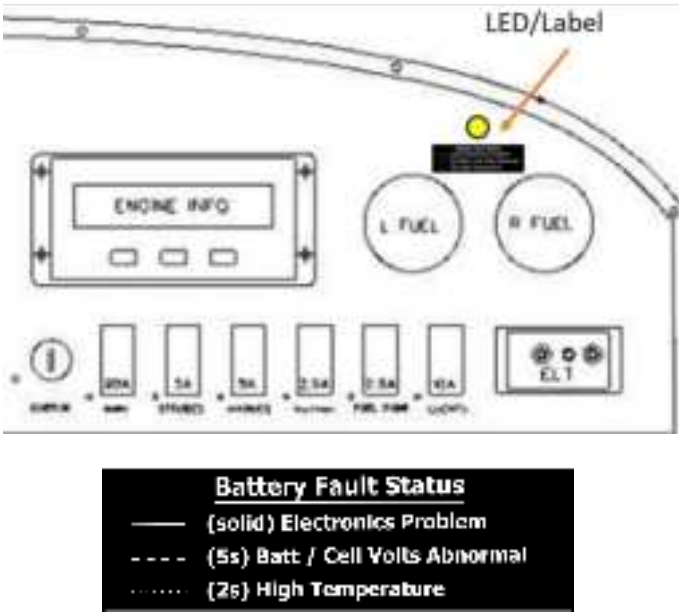
Fault/Status Indicator Installation

The ETX680-24-TSO battery has a discrete output that can be connected to a remote mounted LED. The installation of the EarthX supplied LED (part# 11MM12) is detailed below.



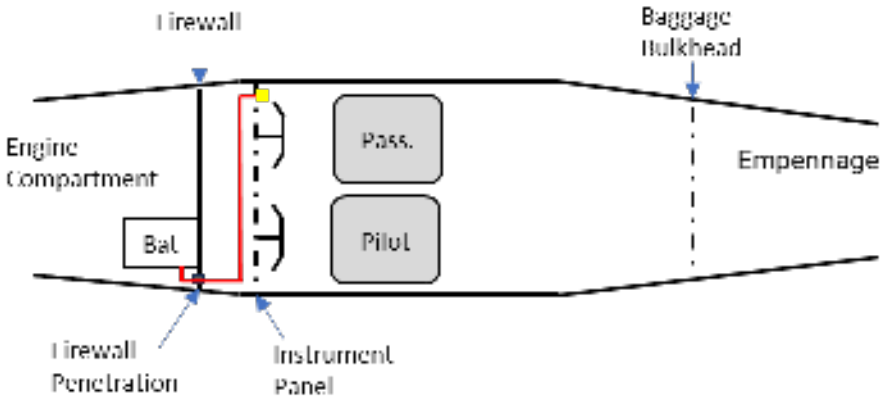
11MM24

1. A suitable location for the Fault/Status Indicator and label/placard (p/n 200208) will be determined by the installer. One example is shown below, but aircraft will vary. Find an open area that will not interfere with other equipment and in plain view of the pilot. LED must be visible in all operating conditions. Follow shop best practices and AC 43.13 guidance.



Label Installation Example

2. Removed trim panel - drill a 7/16" hole in the panel.
3. Remove one panel nut from the LED housing and feed the LED housing through the hole from the back side of the panel.
4. Secure the LED in place with the panel nut removed in the previous step.
5. Secure the LED label (1" x 3") to the trim panel in close proximity to the LED.
6. Route the black wire from the LED to the battery box through main wire bundle; secure in place with zip ties. The wire routing from a firewall mounted battery to the back side of the instrument panel, via an existing firewall connector passthrough, is shown below.



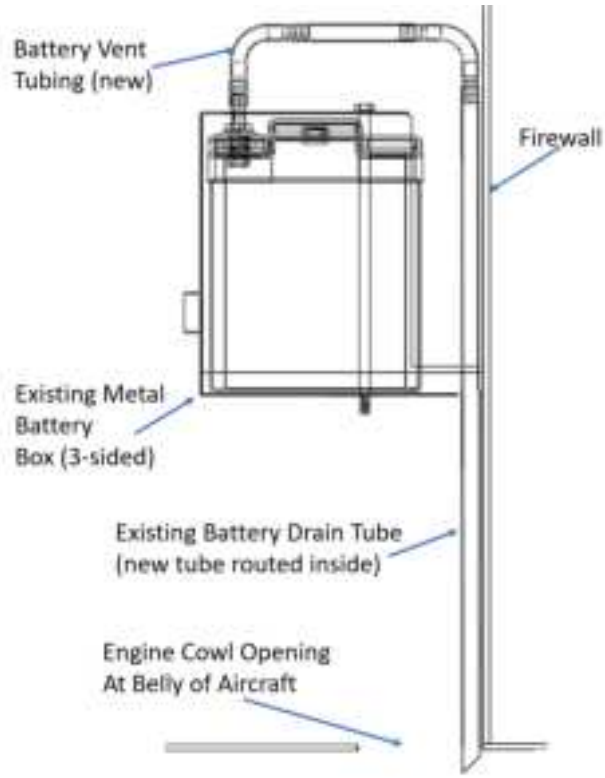
Status Indicator (LED) Wire Routing

7. Plug the 3-pin connector into the battery.
8. Behind the instrument panel, route the red wire (with inline fuse) to an instrument (or annunciator lights) circuit breaker; crimp on (supplied) #6 ring lug to wire and secure to breaker.
9. Route the white wire to an available ground stud, crimp on (supplied) #6 ring lug and secure in place.

Vent Tube Installation

Follow these steps to install the battery vent, as well as the installation practices of AC 43.13-1B, paragraphs 11-19 and 11-22.

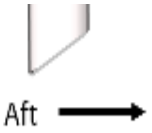
1. Use the supplied 3/8" vent tubing (5239K15) and 3/8" elbows (5670K18) to vent the battery to the belly of the aircraft. The tubing minimum bend radius is 3", so elbows are required to make small radius bends.



Battery Vent Installation

2. The new vent tubing is routed inside the original battery drain tubing (and drain tube clamps), so no new clamps are required.

3. Cut the vent tube to length; at least 1" should be exposed on the outside of the aircraft. Cut the tube at an angle towards the aft of the aircraft.



Battery Vent Tube Cut Example