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# Installation kit for the Diesel Oxidation Catalyst switches on the 69RG15 -24 series gensets

**Tools and Item Required:** 

1. Center Punch
2. Drill
3129133 Drill bit (Ref. Wire Gauge 30)
4. Pneumatic/electric Rivet Tool (required)
5. Zip tie gun (required)
6. 7/16", ½", 9/16" socket
7. Drill Stop
8. 14 AWG crimpers
9. Isopropyl cleaner

Package content (note: extra rivets and zip ties provided):

Item No.	Description	P/N	Qty
1	Thermal Switch	12-00954-00	2
2	Permatex Ultra Red 81630/ 81624	Purchase Local	
3	Rivets	34-00928-01	5
4	Wire Harness	22-04668-00	1
5	Thinner Side Edge clip & zip tie	44-60150-04	1
6	mini Zip tie	66-u13882-4	3
7	Thicker side edge clip & zip tie	44-60150-03	1
8	Top Edge clip	58-01428-00	1
9	Zip ties	58-00079-00	7
10	Male spade terminal	22-01502-01	1
11	Schematic label	62-12431-00	1
12	Attention Label	62-12430-00	1
13	All-purpose Silicon (for grommet only)	Purchase Local	
14	RG instructions	98-02769-00	1

# **WARNING**

Before starting the installation of this kit, make sure the unit is OFF and negative battery terminal is disconnected.

Follow your regional lockout tag out procedure.

Beware of moving poly V-belt, belt driven components and hot exhaust components.

#### **Beware of pinch points**

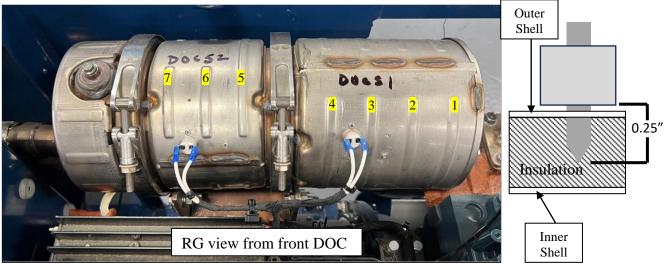
<u>Used On:</u> CARB GenSet	Prepared By:	Approved By:	Date:
	Swidler	Hoover	Apr 3, 2024

Carrier	No.: 98-02769-00  Date: April 3, 2024	Rev: C  Authorization #:
TRANSICOLD		
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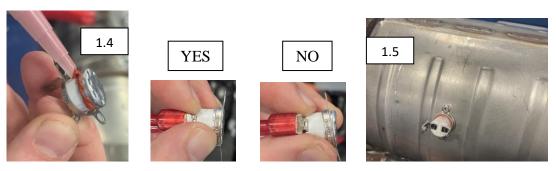
### **Procedure:**

# 1. Mounting Switches to Diesel Oxidation Catalyst (DOC)

- 1.1. Remove genset cover and disconnect battery. If DOC blanket is found, remove and discard as it is no longer required.
- 1.2. Using the switches (item 1), mark and punch locations for drilling. Position so switches are against the body of the DOC and align between rib 3 and 4 and between rib 6 and 7. Ensure bracket goes along radius of DOC. The switch brackets are positioned forward so they sit above the battery charger at the 2 o'clock position when viewed from the outlet.



- 1.3. Drill holes through the outer shell of the DOC with a .129-.133" drill bit and drill stop at 0.25" at the punched holes.
- 1.4. Apply silicone (item 2) to rim of switch to help seal it. Ensure contact area remains clean.
- 1.5. Attach Switches to DOC using rivets (item 3) and rivet tool. Ensure bracket is flat against switch head. Use <u>pneumatic</u> or <u>electronic</u> rivet gun to ensure tightness of installation.



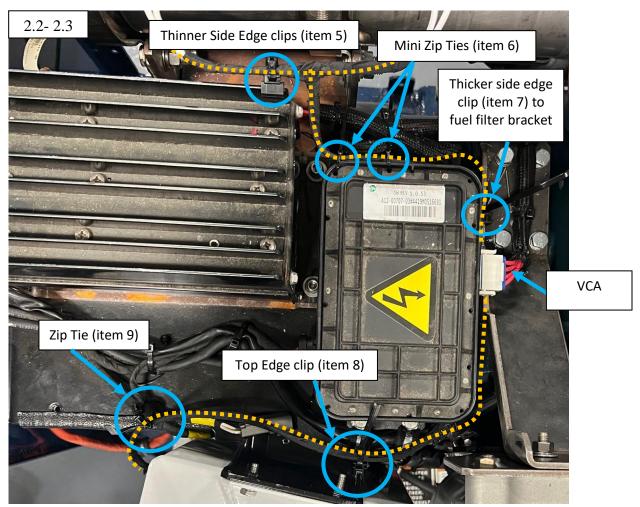
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#### 2. Route Harness RG

- 2.1. Connect harness (item 4) to the switches and apply silicone (item 2) <u>fully</u> around the terminal connections.
- 2.2. Route harness along battery charger and around the voltage controller, going <u>under</u> the VCA connection. Use zip ties and edge clips (items 5-9) to secure. (see below).
- 2.3. Continue routing harness around the voltage controller (under the connection) and behind control box. Ensure cable does not come into contact with voltage controller (see below).



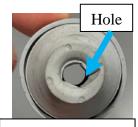


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#### 3. Install harness into control box.

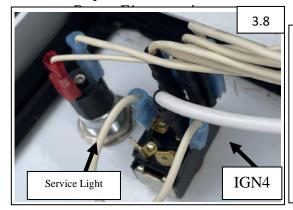
- 3.1. Ensure battery is disconnected.
- 3.2. Open control box.
- 3.3. Remove bottom grommet from side of control box, if populated use top.
- 3.4. Remove hole in the end of the grommet using needle nose pliers and feed cables through.
- 3.5. Slide grommet over the heat shrink on wire, placing it in the middle of the heat shrink.
- 3.6. Feed cables into control box and seat grommet.
- 3.7. Crimp stripped cable with male spade terminal (item 10).
- 3.8. Remove connectors from IGN4 receptacle. Separate IGN4-F1 spade from the piggy-back connectors. (see right, below)
- 3.9. Connect IGN4-F1 female spade to the IGN4-DOCS2 male connector. (see below)
- 3.10. Connect IGN4-DOCS1 female connector to IGN4 piggy-back connectors and reseat into IGN4. (see below)
- 3.11. Open F1 fuse connector, ensure continuity between F1 and IGN4.

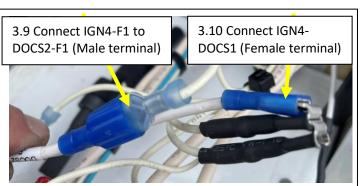


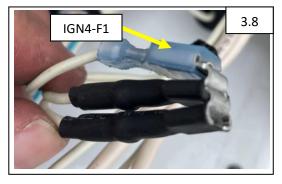
3.4 Cut Grommet

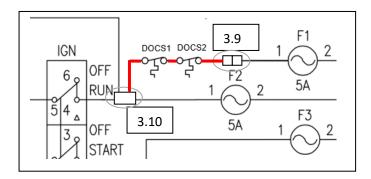


3.7 Male Spade terminal









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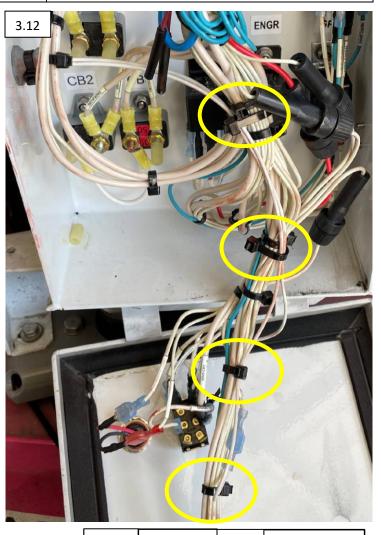
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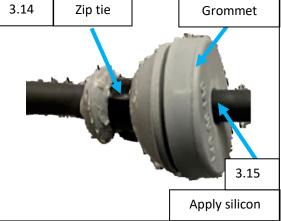
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- 3.12. Secure wires with zip ties (item 9). **NOTE:** Save two for next steps.
- 3.13. With a zip tie (item 7), create a drip loop on the exterior of the control box. (see below)
- 3.14. With a zip tie (item 7), secure nozzle of grommet inside of the control box. (see below)
- 3.15. Apply Permatex or other allpurpose silicone inside the grommet from exterior.
- 3.16. Close control box, ensure gasket is in place.
- 3.17. Clean area around old schematic label on cover using isopropyl cleaner. Apply new schematic label (item 11) on top of old label.
- 3.18. Reconnect Battery.









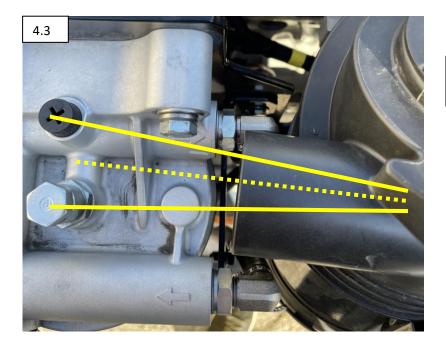
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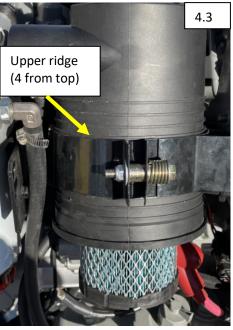
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## 4. Final Steps

- 4.1. Apply attention sticker (item 12) and brown indicator dot to the outside of the control box cover. Ensure surface is clean with isopropyl cleaner and dry.
- 4.2. Remove the lower cover of the air filter element and loosen the air filter element bracket screw.
- 4.3. Rotate the upper intake so that it faces towards the fuel filter head, between the solid lines (see below). Ensure intake does not touch fuel lines and the air filter bracket is in the element's grooves (see below).
- 4.4. Tighten the air filter element bracket and reattach lower cover.
- 4.5. Inform your field service engineering manager of unit(s) that are completed. Ensure to include Genset ID, Serial Number, Unit hours, and Date of completion in report.







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