

# TRACE Stand Alone Gas Module configuration and wiring instructions for Mercury TCI compensators

## Introduction

Two models of TRACE Stand Alone Gas Modules may be used with a Mercury TCI compensator:

- TRACE Gas module 52870K550-207 (configured for Form A pulse counting)
- TRACE Gas module 52870K550-100 (must be reconfigured from Form C to Form A counting)

The two TRACE Gas modules use different wiring connections.

This instruction leaflet describes how to configure the 52870K550-100 Gas module and the wiring diagrams for each of the 52870K550-100 and 52870K550-207 Gas modules.

## Configuring TRACE Stand Alone Gas module 52870K550-100

The TRACE Stand Alone Gas module 52870K550-100 must be configured to Form A mode of operation.

*Note: TRACE Stand Alone Gas module 52870K550-207 is already set for Form A.*

To set the TRACE Stand Alone Gas module 52870K550-100 to Form A:

1. Using the TRACE Short Range Programmer (SRP), press <MODE> repeatedly until the display shows the Read Meter Index screen.
2. Acquire serial number either: (a) by using the Find mode first or (b) by manually entering the serial number in this mode.
3. Press either of the two <INT> buttons.  
The SRP will display the transponder serial number, the current meter index value and the tamper indicator, if applicable.
4. Press <MODE> repeatedly until the display shows the Find SN/VERS/TYPE screen.
5. Enter the module's serial number.
6. Press either of the two <INT> buttons.
7. Press <MODE> repeatedly until the display shows the Set Meter Parameters screen.
8. Press either of the two <INT> buttons.
9. Enter '09940001'.  
The SRP returns a "Carrier not detected" message.
10. Press either of the two <INT> buttons again.

*Note: The last two digits of the response should be 01.*

## Mounting a TRACE Stand Alone Gas transponder onto a Mercury TCI AMR bracket

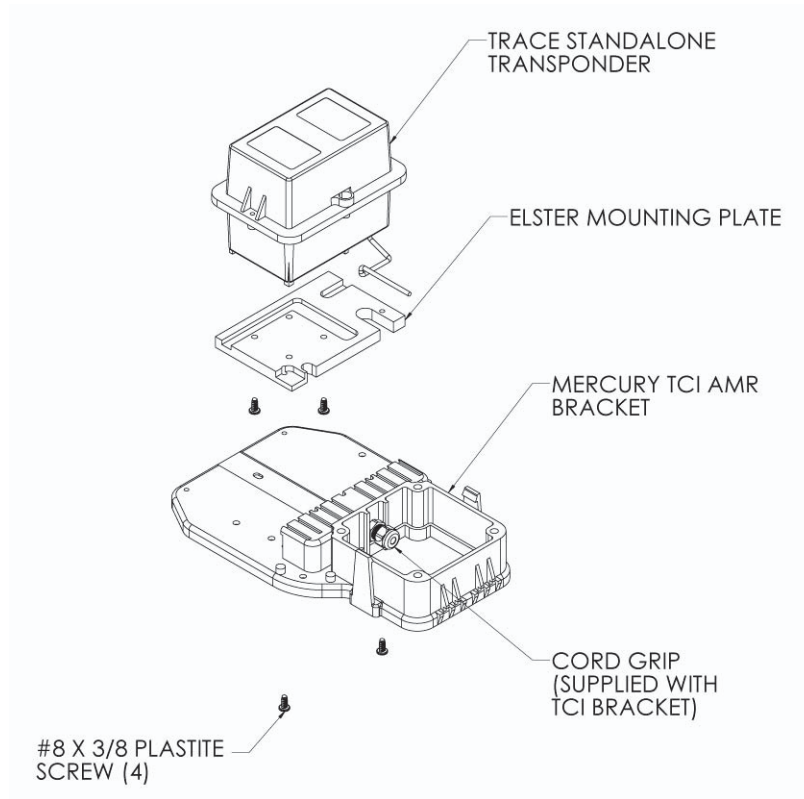
*Note: Requires Elster mounting kit (Part No. 1B11996G01).*

To mount a TRACE stand alone gas transponder to a Mercury TCI AMR bracket:

1. Place the transponder on the Elster mounting plate.

*Note: Make sure to align parts as shown in Figure 1.*

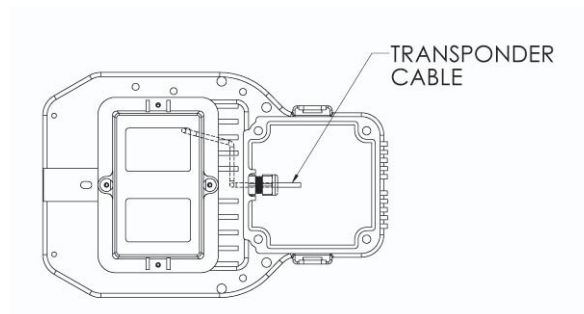
Figure 1. TRACE Gas transponder mounting onto Mercury TCI AMR bracket



2. Secure the transponder to the mounting plate using two (2) #8 X 3/8" Pan Head screws (supplied in Elster mounting kit) as shown in Figure 1.
3. Route the cable through the cord grip on the Mercury TCI AMR bracket (shown in Figure 2). Use cable retention bushing 30205P002 around cable to improve tightness of seal, if required.

Note: Make sure the cable is not pinched (shown in Figure 2).

Figure 2. Routing transponder cable through cord grip



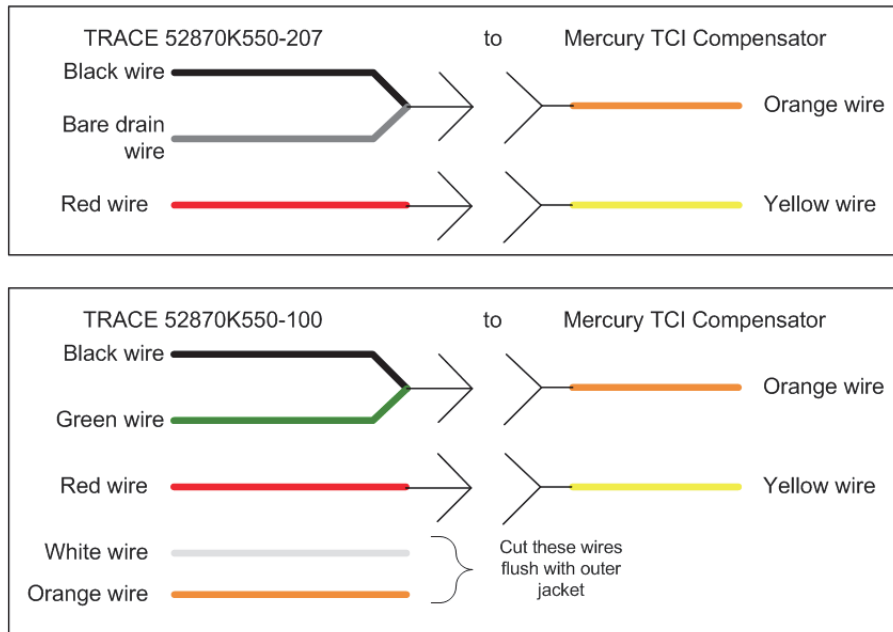
4. Place the mounting plate/transponder assembly onto the Mercury TCI AMR bracket and orient it as shown in Figure 1.
5. Secure the mounting plate/transponder assembly to the Mercury TCI AMR bracket using two (2) #8 X 3/8" Pan Head screws (supplied in the Elster mounting kit).

### Connecting Gas module to Mercury TCI Compensators

The following wiring diagram details the wire connections to be made between the TRACE Gas module and the Mercury TCI Compensator.

- Connections should be made using one 3-position gel splice and one 2-position gel splice.

Figure 3. Wiring TRACE Gas module to Mercury TCI compensator



## FCC and Industry Canada Compliance

User Information (Part 15.105): This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna
- increase the separation between the equipment and the receiver
- connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- consult the dealer or an experienced radio/TV technician for help

If you experience trouble with this equipment, please use the Return Material Request (RMR) feature available at the Online Customer Services at [www.elstersolutions.com](http://www.elstersolutions.com). Do not attempt to repair this equipment itself unless you are replacing the entire module.

Compliance Statement (Part 15.19): This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada.

Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Warning (Part 15.21): Changes or modifications not expressly approved by Elster could void the user's authority to operate the equipment.

RF Radiation Safety Guidelines per Part 2 of FCC Rules and Regulations: The meter should be installed in a location where there will be a separation greater than 20 cm from locations occupied by humans.

Industry Canada Statement: The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Collocation Statement: Collocation of simultaneously-transmitting (co-transmitting) antennas within 20 cm of each other in a final product is not allowed.

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