

SERVICE BULLETIN

Original Issue Date: 8/05

Model: 4-32 kW

Market: Marine, Commercial/Recreational Mobile, and Residential/Commercial

Subject: ADC 2100 Updates

Introduction

This bulletin addresses recent changes to the ADC 2100.



Figure 1 ADC 2100

Continuous Power Mode Jumper (P7) Eliminated

The upgraded ADC 2100 is similar in appearance to earlier versions but it does not contain the continuous power mode jumper (P7). See Figure 2 for the P7 jumper location.

This upgrade allows the ADC 2100 to power up when the generator set master switch is moved to the AUTO position. This modification to the ADC 2100 appears on application program version 1.18 or later so that:

- If the ADC 2100 is configured for a CAN gauge (*communications parameter setting Cn01 or Cn02*), the controller will not power down.
- If the ADC 2100 is not configured for a CAN gauge (*communications parameter setting Cn00*), the controller will power down after 48 hours. If the generator set has been started, the controller will power down 48 hours after the generator stops if not restarted.

If application program version 1.18 or later is installed on earlier units equipped with the P7 jumper hardware, but

without the jumper installed, the ADC 2100 will require the Remote Start/Stop input to be closed once to turn on, but will NOT power down after 48 hours if configured for a CAN gauge.

Note: Do not install ADC application program version 1.18 on 5/7.3ECD & 4/6EFC marine models. These models use ADC application program version 2.00 (or greater). Do not use application program version 2.00 on any other models. See Page 4 for details.

Note: Earlier ADC application program version(s) (before version 1.18) should not be loaded on the upgraded (P7 jumper eliminated) ADC 2100. Unless the generator set has been started using the Remote Start/Stop input, the ADC 2100 will NOT power down after the 48 hours, and eventually drain the batteries.

Note: See Page 2 for special instructions regarding 10/13/15EG, 10/13/15ERG, 15/30RES, and 15/30RYG models.

To determine if a certain unit contains the upgraded ADC 2100 hardware (without the P7 jumper), check the generator set serial number for 2051416 or higher.

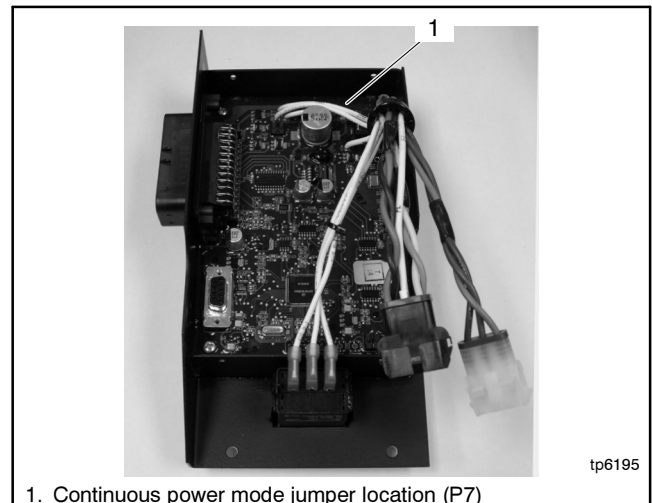


Figure 2 ADC 2100 P7 Jumper Location
Shown with the Back Cover Removed)

| Routing | Service Manager | Sales Manager | Parts Manager | Technician No. 1 | Technician No. 2 | Technician No. 3 | Return This to |
|--------------|-----------------|---------------|---------------|------------------|------------------|------------------|----------------|
| Initial Here | | | | | | | |

| ADC Hardware | ADC Application Program Version | | |
|--------------------|--|--|--|
| | Pre-1.18 | 1.18 or later | 2.00 or later (5/7.3ECD and 4/6EFCD only) |
| P7 Enabled | <ul style="list-style-type: none"> • ADC display active. | <ul style="list-style-type: none"> • ADC display active. | <ul style="list-style-type: none"> • ADC display active. |
| P7 Disabled | <ul style="list-style-type: none"> • ADC display active for 48 hours following generator operation. | <ul style="list-style-type: none"> • ADC display active if Cn01 or Cn02 parameter setting is selected. • ADC display active for 48 hours following generator operation if Cn00 parameter setting is selected AND a remote start occurs † | <ul style="list-style-type: none"> • ADC display active if Cn01 or Cn02 parameter setting is selected. • ADC display active for 48 hours following generator operation if Cn00 parameter setting is selected AND a remote start occurs † |
| P7 Not available * | Not recommended | <ul style="list-style-type: none"> • ADC display active if Cn01 or Cn02 parameter setting is selected. • ADC display active for 48 hours following generator operation if Cn00 parameter setting is selected. | <ul style="list-style-type: none"> • ADC display active if Cn01 or Cn02 parameter setting is selected. • ADC display active for 48 hours following generator operation if Cn00 parameter setting is selected. |

* Generator set serial numbers 2051416 or higher.

† Remote start signal needs to occur once after V1.18 or later is downloaded. Master switch must be in AUTO position.

Figure 3 ADC Application Program Versions

10/13/15EG, 10/13/15ERG, 15/30RES, and 15/30RYG Models

On the generator set models shown in Figure 4, ADC application program version 1.18 (or greater) causes the ADC controller to shut down the generator set on overcrank (OC) after the first crank cycle.

| Model | Market | Before Serial Number |
|----------------------------------|---------------------------------------|----------------------|
| 10EG 13EG 15EG | Marine | 2053692 |
| 10ERG 13ERG 15ERG | Commercial/ Recreational Mobile | |
| 15RES 30RES 15RYG 30RYG | Residential/ Commercial | |

Figure 4 Models Requiring Starting Circuit Procedure

Correct functioning of the ADC 2100 allows three crank cycle attempts before the overcrank shutdown occurs. In order to obtain correct functioning of the ADC 2100 on an overcrank condition, perform the following procedure.

Starting Circuit Procedure

1. Place the generator set master switch in the OFF position.
2. Disconnect the power to the battery charger, if equipped.

⚠ WARNING



**Accidental starting.
Can cause severe injury or death.**

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

3. Disconnect the generator set engine starting battery(ies), negative (-) lead first.
4. Remove the cover on the ECM connector.
5. Locate pin #9.
6. Cut and remove a 1-inch section of the gray/orange lead entering pin #9 in the wiring harness at the ECM connector. See Figure 5. This allows the ADC 2100 (and not the ECM) to control the starting circuit.
7. Replace the cover on the ECM connector.
8. Reconnect the generator set engine starting battery, negative (-) lead last.
9. Reconnect power to the battery charger, if equipped.

5/7.3ECD and 4/6EFCD Marine Models

5/7.3ECD and 4/6EFCD model generator sets are shipped with ADC application program version 2.00. Application program version 2.00 is designed specifically for the 5/7.3ECD and 4/6EFCD marine models only.

Do not install application program version 1.18 on 5/7.3ECD and 4/6EFCD models.

Do not install application program version 2.00 on any other generator set models.

The ADC 2100 part number has changed to GM46776 on the 5/7.3ECD and 4/6EFCD models. ADC part number GM46776 also has the P7 continuous power mode jumper eliminated (see Page 1 for details).

| Model | Spec No. | Application Program Version | ADC Part No. |
|-----------------|-------------|-----------------------------|--------------|
| 5ECD 4EFCD | GM39685-GA1 | 2.00 | GM46776 |
| 7.3ECD 6EFCD | GM39685-GA2 | | |

Figure 6 5/7.3ECD ADC 2100 Details

ADC 2100 Part Numbers per Model

| Model | ADC 2100 Part Number |
|--|----------------------|
| Residential/Commercial | GM28707 * |
| 8.5RES | |
| 12RES | |
| 15RES | |
| 30RES | |
| 15RYG | |
| 30RYG | |
| 10REOD/REOZD | |
| 15REOD/REOZD | |
| 20REOD/REOZD | |
| Mobile | |
| 10ERG | |
| 13ERG | |
| 15ERG | |
| 10EORD/EORZD | |
| 9EFORD/EFORZD | |
| 15EORD/EORZD | |
| 12.5EFORD/EFORZD | |
| 20EORD/EORZD * | |
| 16.5EFORD/EFORZD | |
| Marine | |
| 10EG/EGZ | |
| 13EG/EGZ | |
| 15EG/EGZ | |
| 8EOZD/6.5EFOZD | |
| 9EOZD/7EFOZD | |
| 10EOZD/9EFOZD | |
| 13EOZD/11EFOZD | |
| 14EOZD/11.5EFOZD | |
| 15.5EOZD/13EFOZD | |
| 20EOZD/17EFOZD | |
| 20EOZD/17.5EFOZD | |
| 23EOZD/20EFOZD | |
| 24EOZD/20EFOZD | |
| 28EOZD/23EFOZD | |
| 32EOZD/27EFOZD | |
| 5ECD 4EFCD 7.3ECD 6EFCD | GM46776 |
| * For 20EORZD spec number GM38880-SA1, the ADC part number is GM42037. | |

Figure 7 ADC 2100 Part Numbers