

**INSTALLATION INSTRUCTIONS**

Original Issue Date: **9/02**

Model: **17/22RY, 10/12RY/RZ, 10/12CCE/CCZ, and 8/10/12.5E Generator Sets**

Market: **Residential/Commercial and Marine**

Subject: **Ignition Module Service Kit GM17891**

**Introduction**

Use ignition module service kit GM17891 to replace ignition module 246065 or A-246065 on model 17/22RY, 10/12RY/RZ, 10/12CCE/CEZ, and 8/10/12.5E generator sets. Ignition control module GM17769-S and MAP module GM17771-S are required to replace ignition control module 246065. Use the adapter plates and hardware included in the kit to mount the new ignition module and MAP module onto the existing bracket on the unit.

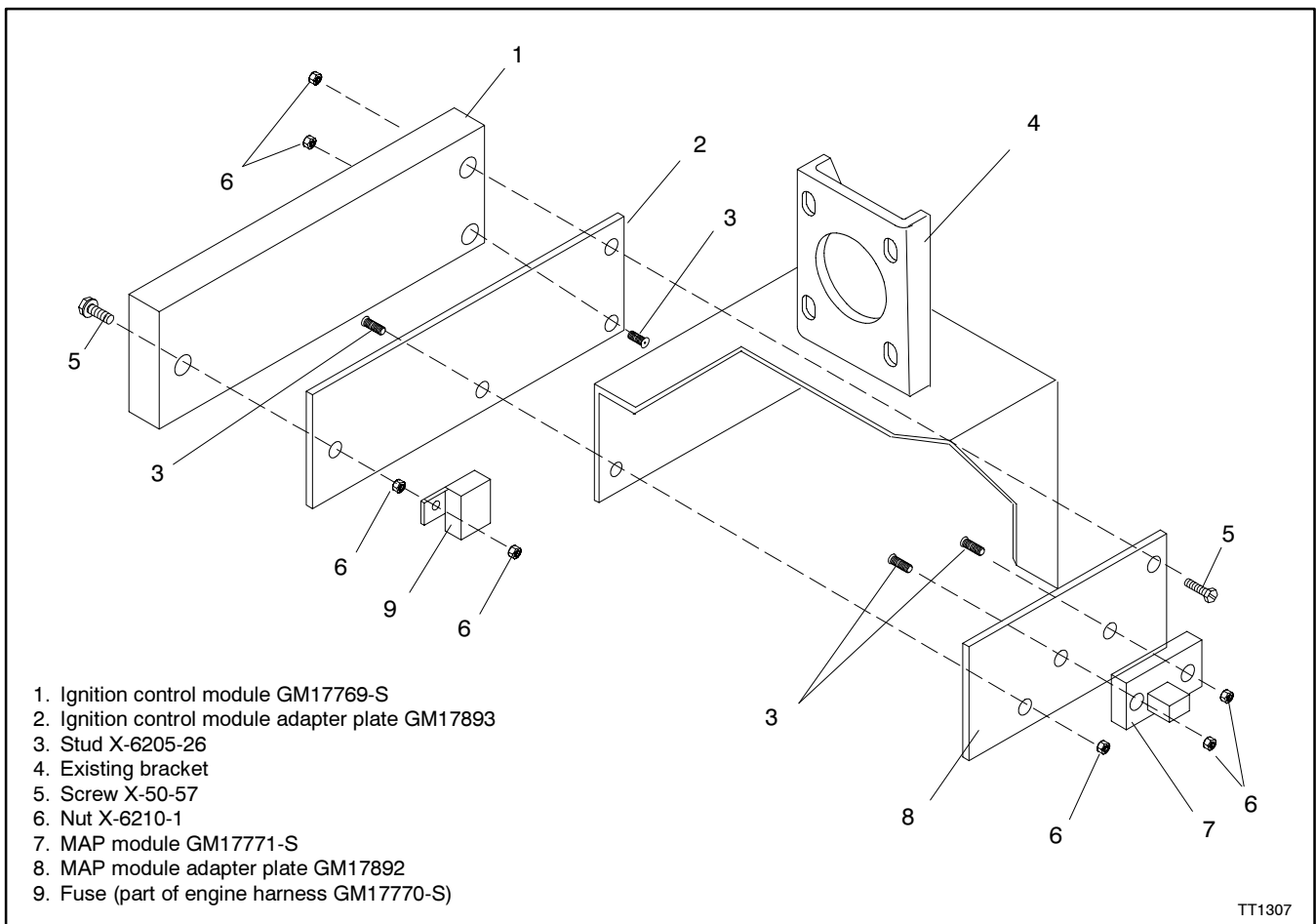
Refer to the Engine Service Manual, TP-5346, for ignition system diagnostic and test information.

Marine and mobile generator sets use a different installation procedure than residential/commercial generator sets. Be sure to use the appropriate procedure for your generator set.

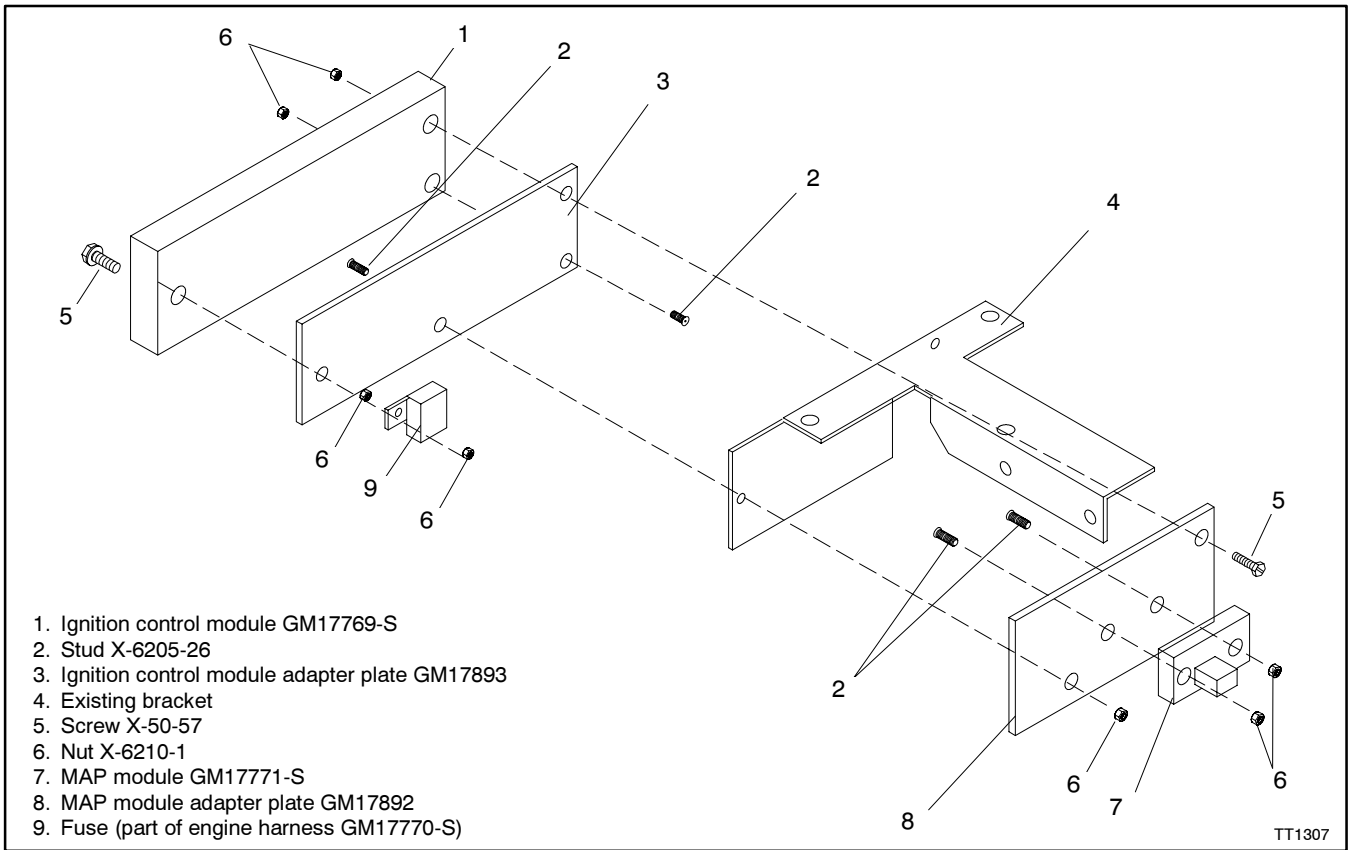
Read the entire installation procedure and compare the kit parts with the parts list at the end of this publication before beginning installation.

**Note:** Perform the steps in the order shown.

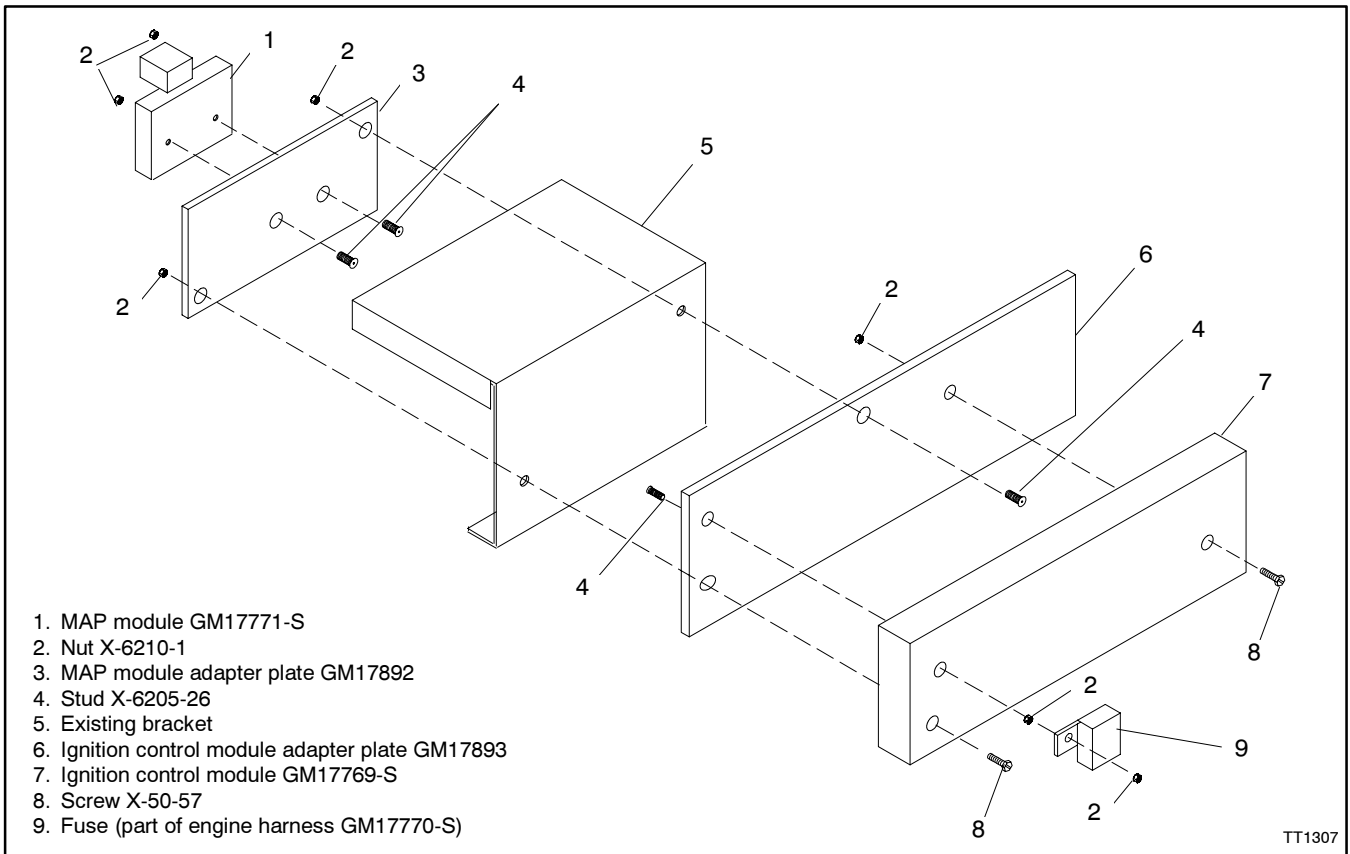
See Figure 1, Figure 2, and Figure 3 for exploded kit illustrations.



**Figure 1** Ignition Module Kit with the Existing Bracket for the 17/22RY



**Figure 2** Ignition Module Kit with the Existing Bracket for the 10/12RY/RZ



**Figure 3** Ignition Module Kit with the Existing Bracket for the 10/12CCE/CEZ and the 8/10/12.5E

## Safety Precautions

Observe the following safety precautions while installing the kit.

### 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.

**Disabling the generator set. Accidental starting can cause severe injury or death.** Before working on the generator set or connected equipment, disable the generator set as follows: (1) Move the generator set master switch to the OFF position. (2) Disconnect the power to the battery charger. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent starting of the generator set by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer.

**Disabling the generator set. Accidental starting can cause severe injury or death.** Before working on the generator set or equipment connected to the set, disable the generator set as follows: (1) Place the generator set start/stop switch in the STOP position. (2) Disconnect the power to the battery charger, if equipped. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent the starting of the generator set by the remote start/stop switch.

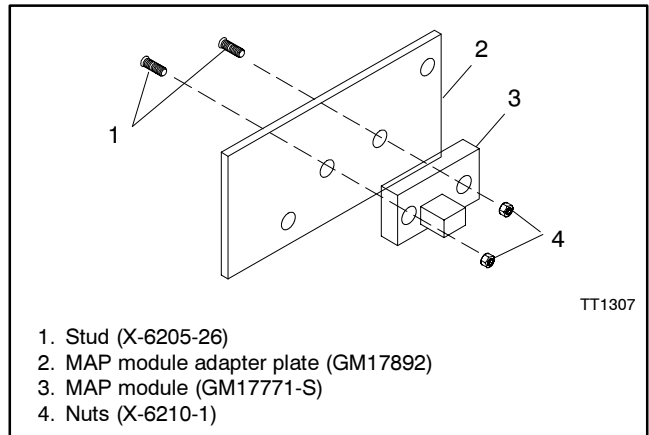
## Installation Procedures

### 1.1 Models 17/22RY and 10/12RY/RZ

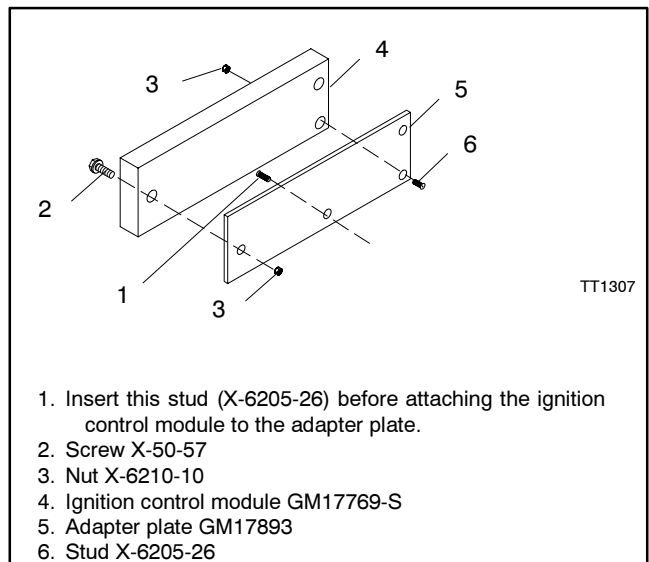
Refer to Figure 1 for model 17RY or 22RY generator sets. Refer to Figure 2 for model 10/12RY/RZ generator sets.

1. Place the generator set master switch in the OFF position.
2. Disconnect the power to the battery charger, if equipped.
3. Disconnect the generator set engine starting battery(ies), negative (-) lead first.

4. Disconnect and remove the existing ignition module.
5. Mount the MAP module (GM17771-S) onto the MAP module adapter plate (GM17892) using two studs (X-6205-26) and two nuts (X-6210-1) as shown in Figure 4.
6. Insert one stud (X-6205-26) through the center hole of the ignition control module adapter plate (GM17893). See Figure 5.
7. Use one stud (X-6205-26) with a nut (X-6210-1) and one screw (X-50-57) with a nut (X-6210-1) to attach the new ignition control module (GM17769-S) to adapter plate GM17893 as shown in Figure 5. Tighten the nuts before proceeding.

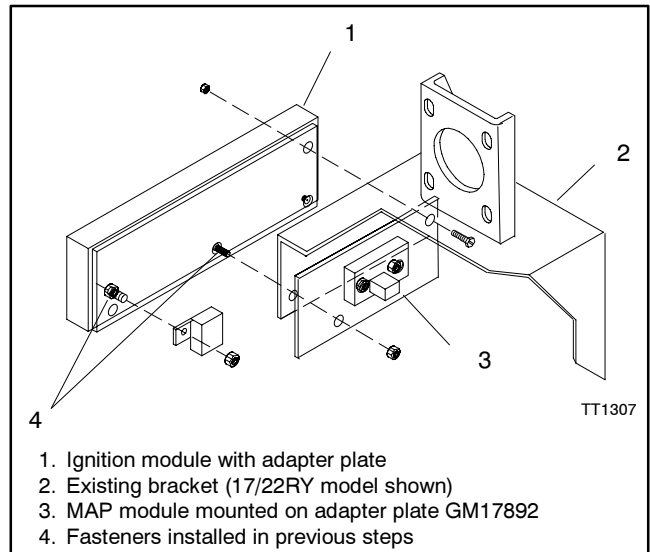


**Figure 4** Mount the MAP Module onto Adapter Plate GM17892

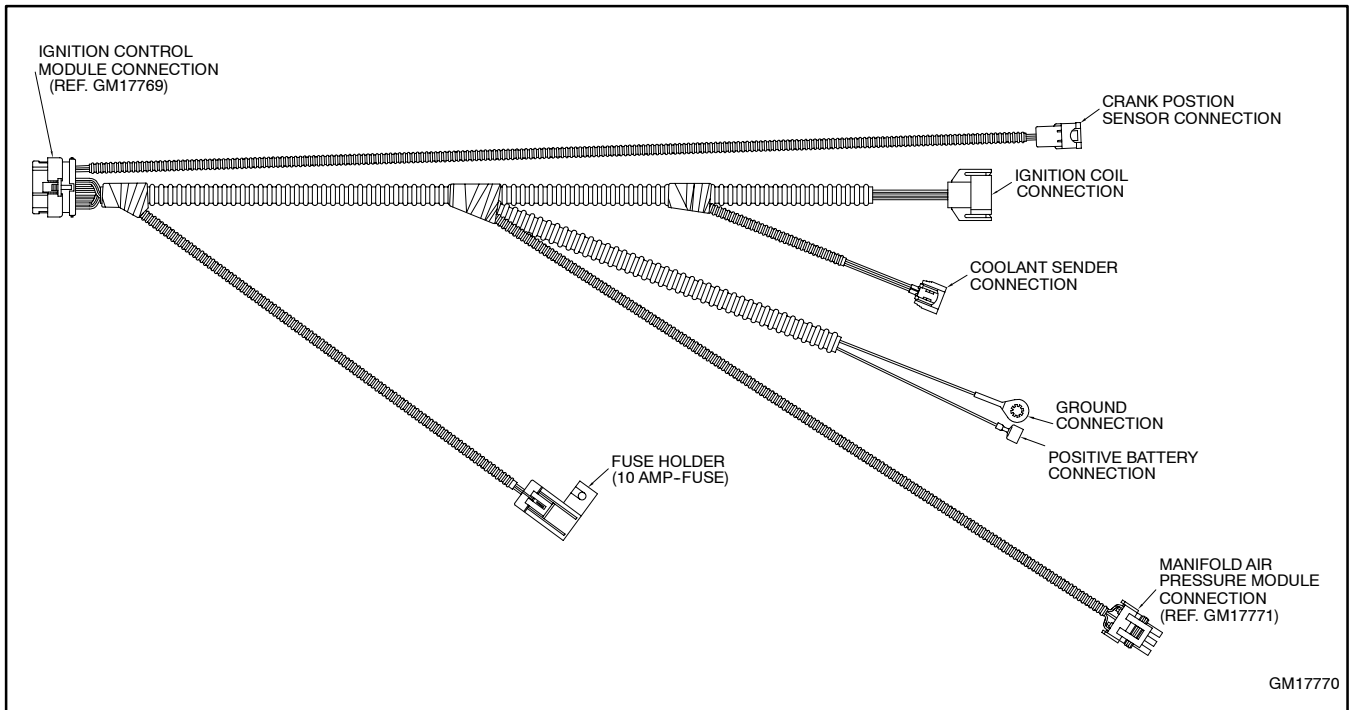


**Figure 5** Mount the Ignition Control Module onto Adapter Plate GM17893

8. Assemble the ignition control module and MAP module with their adapter plates to the existing bracket as shown in Figure 6. Insert one screw (X-50-57) through the MAP adapter plate. Use a nut (X-6210-1) on that screw and a nut on the stud that was inserted through the ignition control module adapter plate in step 6 to secure the parts.
9. Use a nut (X-6210-1) to attach the fuse holder to the ignition control module adapter plate. See Figure 6. The fuse holder is attached to the engine wiring harness (GM17770-S). See Figure 7.
10. Disconnect and discard the old engine wiring harness. Connect the new engine wiring harness (GM17770-S). See Figure 7.
11. Check that the generator set master switch is in the OFF position.
12. Reconnect the generator set engine starting battery, negative (-) lead last.
13. Reconnect power to the battery charger, if equipped.



**Figure 6** Attach the Modules with Adapter Plates to the Existing Bracket (17/22RY model shown)



**Figure 7** Engine Harness

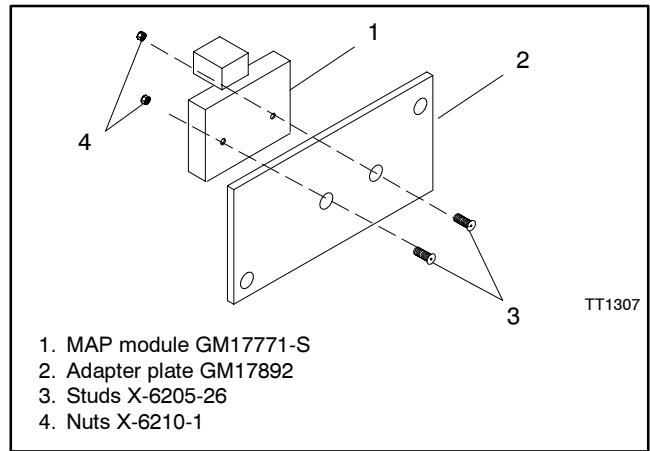
## 1.2 Models 8/10/12.5E and 10/12CCE/CEZ

Refer to Figure 3.

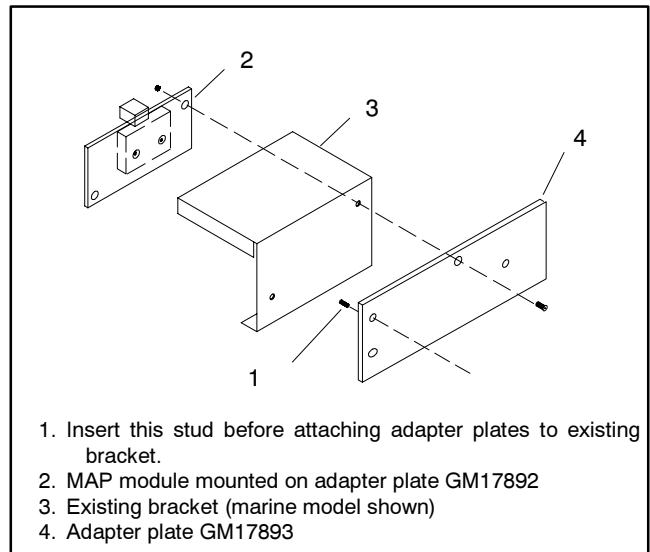
1. Place the generator set start/stop switch in the STOP position.
2. Disconnect the power to the battery charger, if equipped.
3. Disconnect the generator set engine starting battery(ies), negative (-) lead first.
4. Disconnect and remove the existing ignition module.
5. Mount the MAP module (GM17771-S) onto the MAP module adapter plate (GM17892) using two studs (X-6205-26) and two nuts (X-6210-1) as shown in Figure 8.

**Note:** For some older model generator sets, it may be necessary to shorten the 2 studs used in this location to avoid interference with the actuator. Cut 3 mm (1/8 in.) from the end of each stud, if necessary.

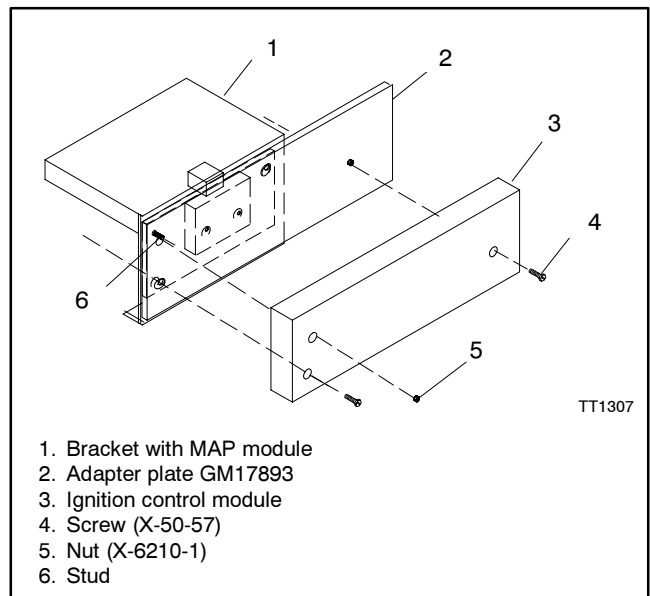
6. Insert one stud (X-6205-26) through the upper left corner (as viewed in Figure 9) of the ignition control module adapter plate (GM17893).
7. Use one stud (X-6205-26) and one nut (X-6210-1) to attach plates GM17893 and GM17892 to the existing bracket as shown in Figure 9.
8. Use one nut (X-6210-1) to attach the new ignition control module (GM17769-S) to the stud at the upper corner of plate GM17893. Insert two screws (X-50-57) through the remaining ignition control module mounting holes. Secure with nuts (X-6210-1). See Figure 10.



**Figure 8** Mount MAP Module onto Adapter Plate

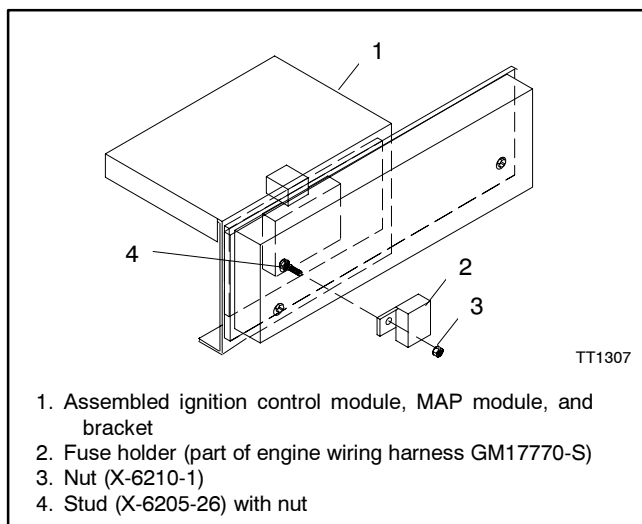


**Figure 9** Attach Adapter Plates to the Existing Bracket



**Figure 10** Attach the Ignition Control Module

9. Use one nut (X-6210-1) to attach the fuse holder on the end of the new engine harness (GM17770-S) to the stud at the upper left corner of the ignition control module. See Figure 11.
10. Disconnect the old wiring harness from the engine and connect the new one (GM17770-S). See Figure 7.
11. Check that the generator set start/stop switch is in the STOP position.
12. Reconnect the generator set engine starting battery, negative (-) lead last.
13. Reconnect power to the battery charger, if equipped.



**Figure 11** Attach the Fuse Holder

## Parts List

### Ignition Module Kit

Kit: GM17891		
Qty.	Description	Part Number
1	Ignition control module	GM17769-S
1	Harness, wiring	GM17770-S
1	Manifold, air pressure module	GM17771-S
1	Plate, adapter	GM17892
1	Plate, adapter	GM17893
2	Screw, slotted round head machine	X-50-57
4	Stud, self-clinching, 10-32 x 1.25 in	X-6205-26
7	Nut, flange whiz, 10-32 (EXP)	X-6210-1