

PACKAGED UNIT KITS AND ACCESSORIES

507832-01
3/2018

ECM BLOWER MOTOR CONTROL MODULE REPLACEMENT KIT

INSTALLATION INSTRUCTION FOR INDOOR ECM BLOWER MOTOR CONTROL MODULE REPLACEMENT KIT

MOTOR CONTROL MODULE



⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause personal injury, loss of life, or damage to property.

Installation and service must be performed by a licensed professional installer (or equivalent) or a service agency.

⚠ WARNING

Electric Shock Hazard.

Can cause injury or death.

Foil-faced insulation has conductive characteristics similar to metal. Be sure there are no electrical connections within a 1/2" of the insulation. If the foil-faced insulation comes in contact with electrical voltage, the foil could provide a path for current to pass through to the outer metal cabinet. While the current produced may not be enough to trip existing electrical safety devices (e.g. fuses or circuit breakers), the current can be enough to cause an electric shock hazard that could cause personal injury or death.

⚠ CAUTION

As with any mechanical equipment, contact with sharp sheet metal edges can result in personal injury. Take care while handling this equipment and wear gloves and protective clothing.

Shipping and Packing List

Package 1 of 1 contains:

- 1 - Replacement control module

Application

Table 1 lists the applicable catalog numbers based on motor size.

Table 1. Catalog Numbers

Cat. #	Assembly No.	Motor HP	LGH/LCH Unit
16X36	105561-01	1/2	036
16X37	105561-02	1	060-072
16X38	105561-03	3/4	048

⚠ WARNING

Wait five minutes before continuing service procedures to avoid electrical shock. This will allow internal capacitors to fully discharge

Motor Control Module Removal

1. Disconnect electrical power to unit.
2. Remove unit access panel.
3. Unplug the **two** harnesses from the motor control module.
4. Remove the two hex head bolts securing the motor control module to the motor (see figure 1).
5. Slide the motor control module away from the motor to access and disconnect the internal three wire connector. It is not necessary to remove blower motor itself. Set both hex head bolts aside.

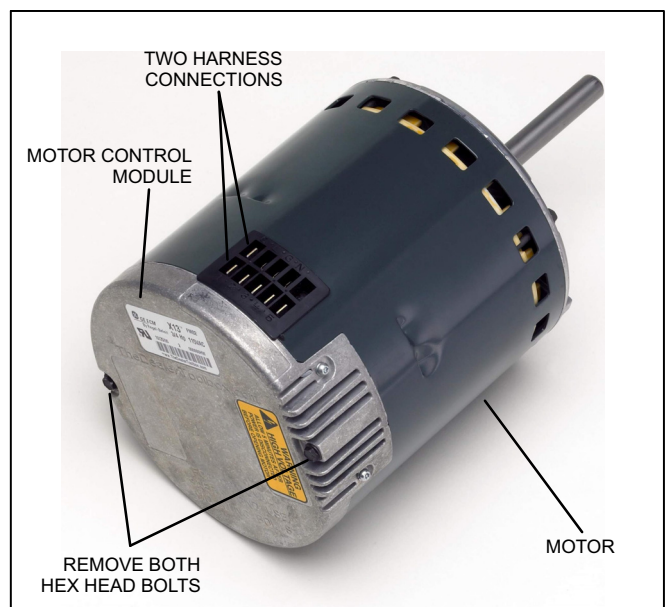


Figure 1. Motor Control Module (Rear View)

Testing Motor

If any motor fails the below tests, do not install the new control module. The motor is defective and it also must be replaced. The new control can fail if placed on a defective motor.

1. Using an ohmmeter, check the resistance from any one of the motor connector pins to the aluminum end plate of the motor. This resistance should be greater than 100k ohms.
2. Check the resistances between each of the three motor connector pins. These should all read approximately the same resistance within an ohm.
3. Check to see if the blower wheel spins freely.



Figure 2. Motor Test

Motor Control Module Installation

All replacement motor control modules look similar; however, each module is designed for a specific motor size (see table 1). It is very important to make sure that you are using the correct replacement motor control module. **USE OF THE WRONG MOTOR CONTROL MODULE MAY RESULT IN UNEXPECTED UNIT OPERATION.**

1. Verify electrical power to unit is disconnected.
2. Connect three-wire harness from motor to control module.
3. Mount new motor control module to motor using two hex head bolts removed in figure 1. Torque bolts to 22 inch pounds or 1/16th clock turn as exemplified in figure 3.
4. Reconnect the **two** harnesses to the motor control module.
5. The electrical connectors of the motor should be facing down to form a drip loop. This will direct moisture away from the motor and its electric connections on the motor.

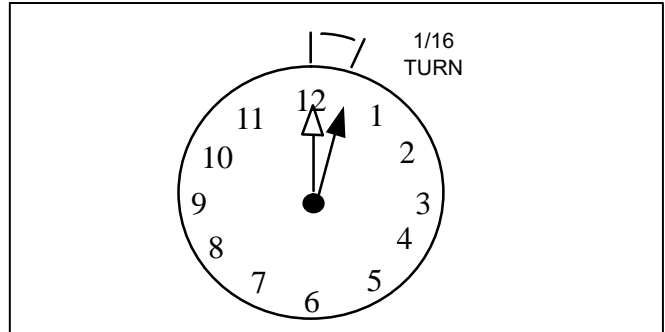


Figure 3. Torque Hex Head Bolts

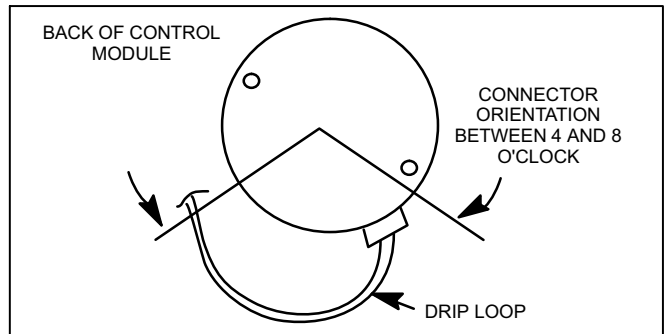


Figure 4. Drip Loop