

## TECHNICAL SERVICE BULLETIN

To: Minuteman Dealers and Customers

From: Minuteman Technical Support

Date: 1/12/2011

Subject: TSB for the KIT # **K-FRSPEEDSWT**. For the FR17115, FR17220, FR20115 and FR20220 models.

### Reason for Change

Some machines may experience issues starting under load, such as delayed, sluggish starting or tripping the circuit breaker. Our supplier has informed us that the spacing between the top metal motor cover and stationary switch contacts may be incorrect on some motors.

### Improvement

1. This change improves the motors starting ability.
2. This change will eliminate the motor tripping the circuit breaker during start up in most cases.

Note: Further trouble shooting may required, if the kit does not resolve the issue, which may have similar symptoms.

### Models/Serial Numbers Affected

| Model # | Serial Numbers Between                |
|---------|---------------------------------------|
| FR20220 | EFR202200821 through EFR202200835     |
| FR17220 | EFR172201403 through EFR172201607     |
| FR17220 | EFR17220600876 through EFR17220600905 |
| FR17115 | EFR171151216 through EFR171151275     |
| FR20115 | EFR201151331 through EFR201151630     |

The replacement motor part number 200025, may also be affected having the following date codes: 26 MAY 2010 through 21 JUL 2010. See the motor date abbreviation chart below.

| MONTH    | ABBREVIATION | MONTH     | ABBREVIATION |
|----------|--------------|-----------|--------------|
| January  | JAN          | July      | JUL          |
| February | FEB          | August    | AUG          |
| March    | MAR          | September | SEPT         |
| April    | APR          | October   | OCT          |
| May      | MAY          | November  | NOV          |
| June     | JUN          | December  | DEC          |

**Note: The FR20115-2S and the FR20220-2S models were not affected by this issue.**

**Reference Kit Instructions** –Use the new kit **K-FRSPEEDSWT** to repair machines affected.

The instructions are shown on the following pages.

This bulletin was created:  For Information  For Purchase  For Warranty

**Note:** This TSB does not extend the original manufacturer's warranty.

**For further assistance, questions, or comments contact Technical Support at 800-323-9420 (USA)**

# KIT # K-FRSPEEDSWT

## FRONT RUNNER SPEED SWITCH FIX KIT



**AFFECTS MODEL NUMBERS:**

FR17115, FR17220, FR17220-60, FR20115, FR20220, FR20220-60

# Purpose



## Reason for Change

- **The start switch is not allowing the motor to come up to full speed. Due to a machining error on the lid casting, too much material was removed preventing the switch from fully engaging its contacts, this may cause a high current condition and trip the circuit breaker.**

## Improvement(s)

- **This Kit resolves this issue**

# Contents



This KIT contains:

| Part Number | Description      |
|-------------|------------------|
| 999136      | Instructions     |
| 712764      | Flat Washers (2) |
| 715459      | Motor Decal      |

# Instructions

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**Unplug the electrical power cord from outlet before beginning**



Remove the decal (715459) that covers the motor cover screws

999136 REV \* 11/10 JP



Remove the three motor cover screws (710354) and set them aside for reassembly later.



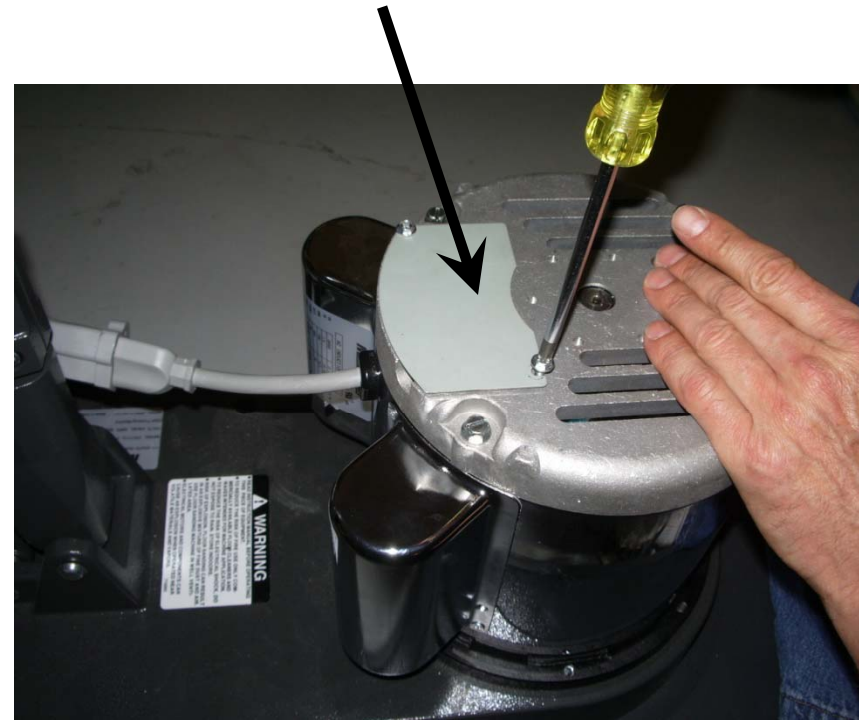
# Instructions

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Remove motor cover (195004) and set aside for reassembly

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Remove electrical connection cover and set aside

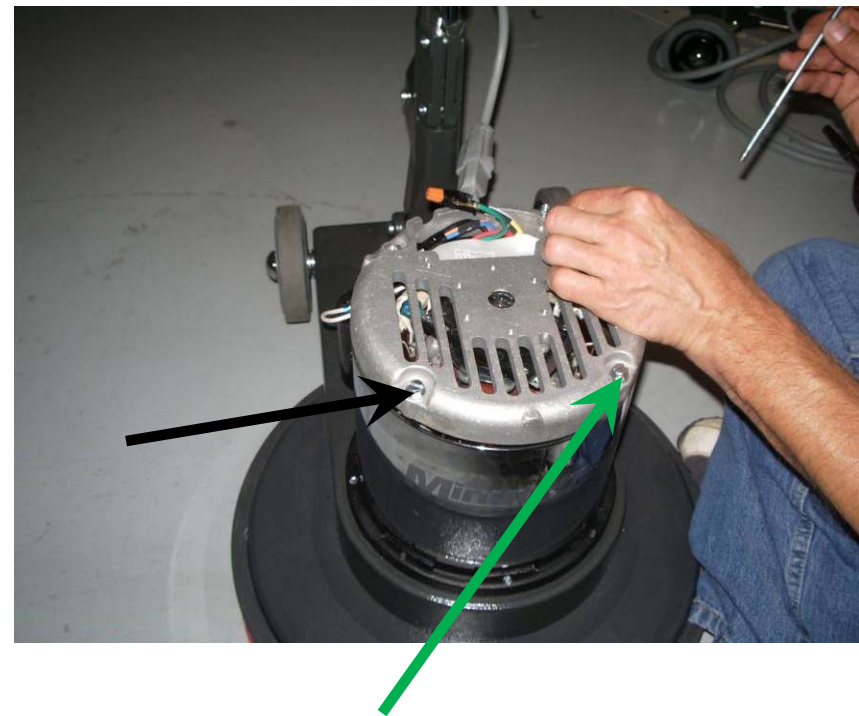
# Instructions

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Remove the screw holding the green ground wire to motor, set aside for re-assembly.

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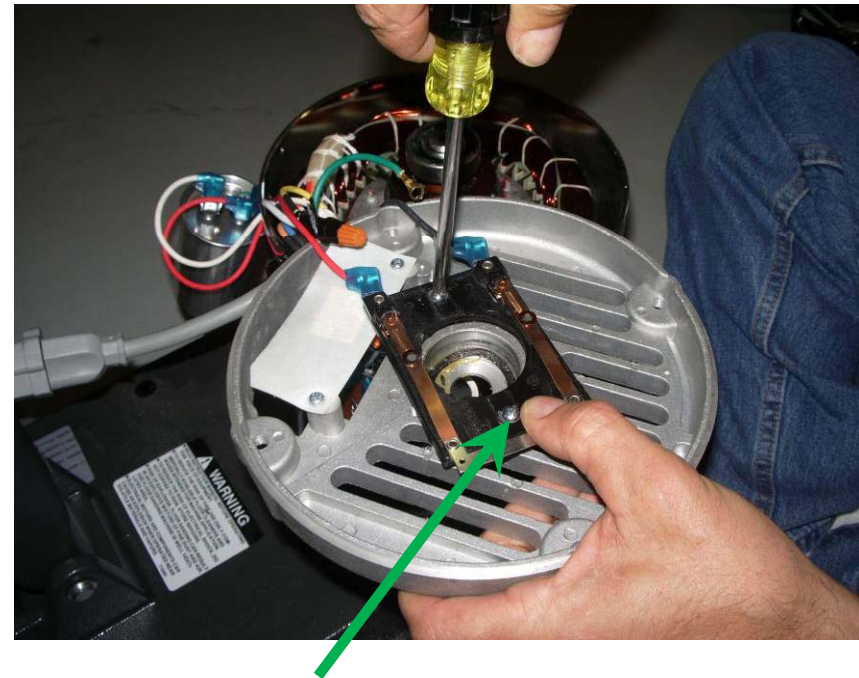
Remove the four bolts that hold the motor top casting in place. Set aside for re-assembly

# Instructions

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Remove the motor top casting and fold back for access to the start switch. Note: It may be necessary to **tap** on the casting with a rubber mallet to remove it. Use caution so there is no damage to the internal components.



Remove the two screws that hold the start switch in place. Set them aside for re-assembly later.

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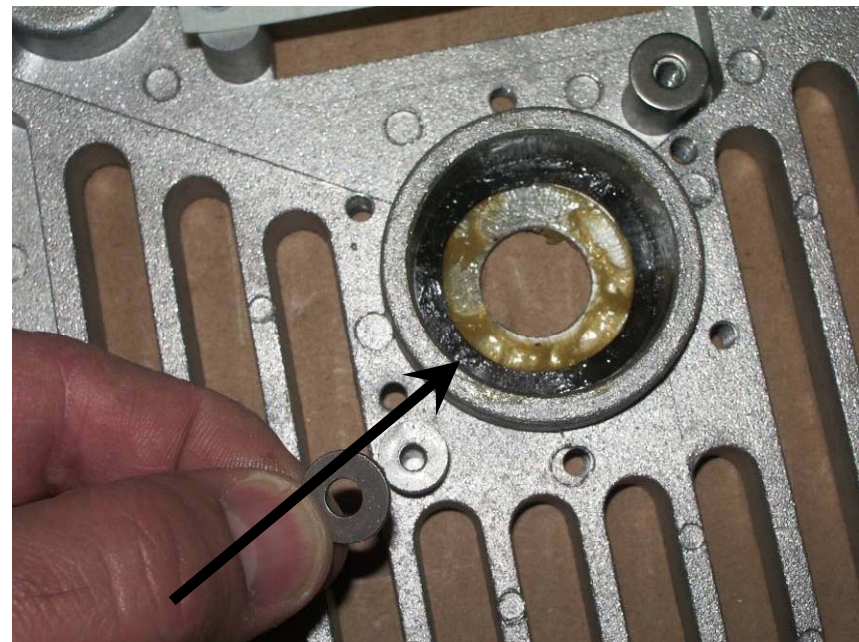
# Instructions

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Place the two washers (712764) on the start switch stand offs. One washer is required on each standoff.

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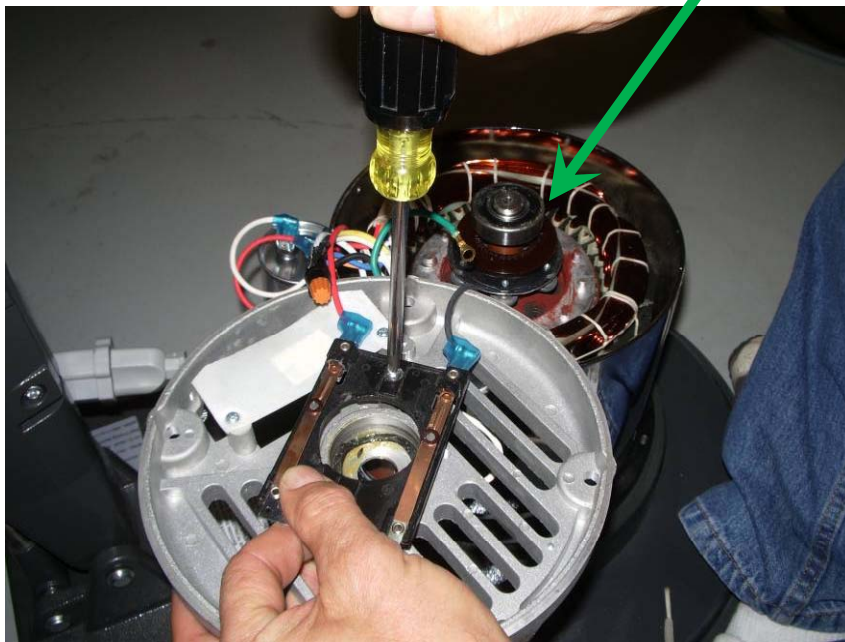


Make sure center washer stays in position while putting the top casting back on the motor.

# Instructions

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Bearing on motor shaft



Put the start switch back in place and tighten down the mounting screws. Do not over tighten the mounting screws.



Put the top casting back on the motor. Make sure to carefully guide the top casting onto the bearing of the motor shaft.

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# Instructions

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Insert the four bolts that hold the motor top casting to the motor base.



There are slots in the base to make it easier to line up the four bolts into the threaded holes. Once all four bolts are started, tighten bolts gradually and alternating across from the previous bolt. This will insure the motor top casting pulls down evenly.

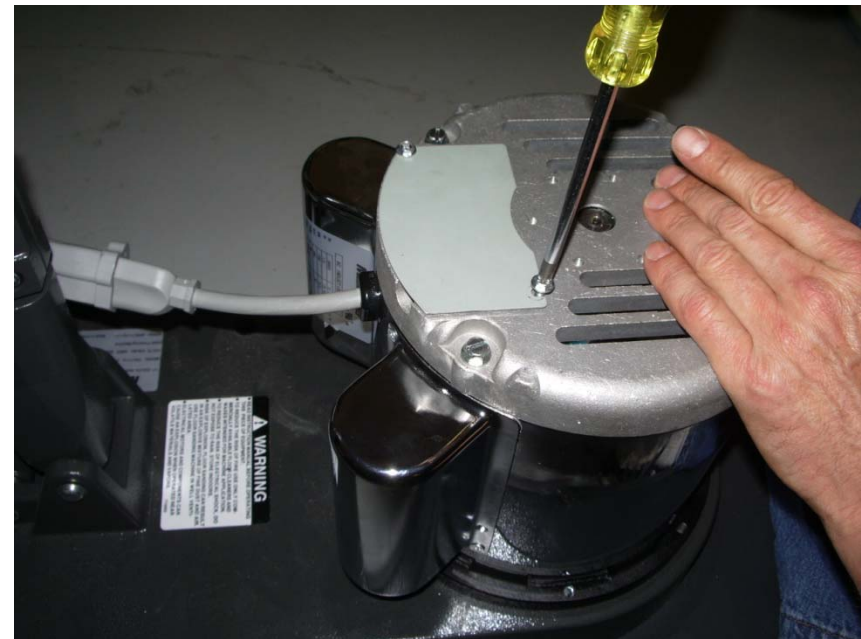
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# Instructions

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Once the motor top casting is secured in place reconnect the ground wire. **DO NOT OPERATE THE EQUIPMENT WITHOUT THE GROUND WIRE CONNECTED.**



Put the electrical connection cover back in place and secure with the screws.

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# Instructions

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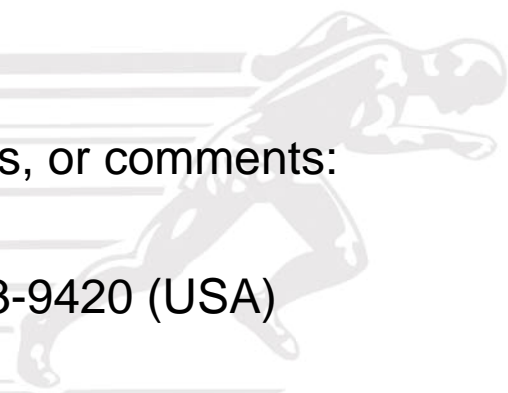


Put the motor cover back in place and attach with screws.

999136 REV \* 11/10 JP



Replace the decal (715459) that covers the motor cover screws, with the new decal included in the kit. Test the motor operation to insure all components have been reassembled properly.



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please contact  
Technical Support at 800-323-9420 (USA)