

# 4074ERU Modutrol IV Motor Weatherproofing Kit

## INSTALLATION INSTRUCTIONS

### APPLICATION

This kit is used to weatherproof Modutrol IV motors for outdoor use. The kit can be used on either spring return or non-spring return motors. The kit contains the following items:

203885	Cover gasket
203886	Front Cover Gasket
203887	J-Box Gasket
203888	Shaft Seal, Non-spring return (1-3/16 in. O.D.)
203999	Shaft Seal, Spring return (1-3/8 in. O.D.)
133637	Grease capsule (2)

Refer to the appropriate procedure below for weatherproofing spring return or non-spring return motors.

### INSTALLATION

#### WHEN INSTALLING THIS PRODUCT...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Installer must be a trained, experienced service technician.
3. After installation is complete, check out product operation as provided in these instructions.



### CAUTION

**Disconnect power supply before beginning installation to prevent electrical shock or equipment damage.**

**NOTE:** To completely weatherproof the installation, prevent moisture from entering the motor at the conduit connections by using liquid-tight conduit and liquid-tight connectors. Mount the motor above the lowest height of conduit to minimize water entry from the condensation of moist air within the conduit.

Weatherproofing (See Fig. 1):

1. Remove top cover by removing four screws.

2. Disconnect transformer secondary leads (if installed) and other connections to the printed wiring board.
3. Remove auxiliary switches (if installed).
4. Remove wiring box by removing four screws.
5. Remove front cover by removing four screws.
6. *Dry-fit* front cover gasket to motor body to check alignment. If correct, remove protective backing from adhesive side of gasket and firmly press gasket into the motor body groove.

**NOTE:** Make sure that motor hub and cam are correctly seated and Kevlar bearing is correctly seated in front cover (key on Kevlar bearing aligned with keyway in cover).

**NOTE:** Please ensure that the two white gears remain aligned with each other during installation so the motor functions properly after assembly.

7. Replace and secure front cover with four screws.
8. *Dry-fit* J-Box weatherproofing gasket to check alignment. If correct, remove protective backing from adhesive side of gasket and firmly press gasket to the underside of the J-Box.
9. Replace and secure J-Box with four screws.

**NOTE:** Reinstall auxiliary switches (if applicable) making sure that the switches are properly aligned (left switch on front cam and right switch on rear cam). Reconnect transformer secondary and any other printed wiring board connections (if applicable).

10. *Dry-fit* top cover gasket to cover. If fit is good, remove protective backing from adhesive side of gasket and firmly press gasket into cover.
11. Replace top cover and secure with four screws.

**NOTE:** There are two different shaft seals in this kit. One is designed for spring return motors (larger seal—203999) and the other for non-spring return motors (smaller seal—203888). Make sure that the correct seal is used. Using the spring return seal on a non-spring return motor will result in a loose fit and no weather seal. The non-spring return seal will not fit over the shaft housing of a spring return motor.

12. Apply grease to the motor shaft where the shaft protrudes from the front of the motor and also to the key slot in the motor shaft at the shaft bearing location. Slide the shaft seal (203888 for non-



spring return motors and 203999 for spring return motors) over the shaft and front cover boss and against the front cover.

13. Reconnect the power and check the motor for proper operation by running it through at least two cycles.

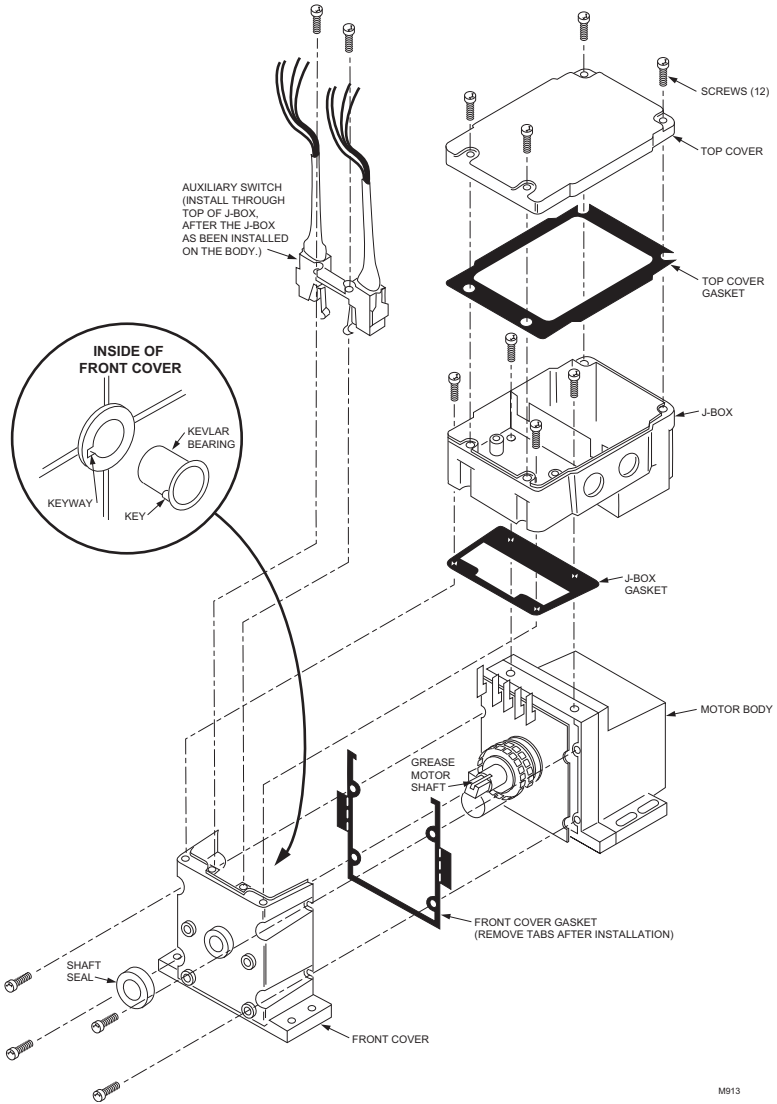


Fig. 1. Modutrol IV Motor—Exploded view showing placement of weatherproofing gaskets and seals.

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