

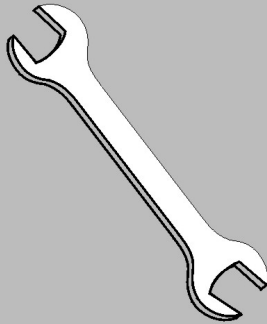
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# Kit Instruction—

## KMLVINVRTO KMHVINVRTO



# Please Read

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This manual may contain references to "yellow pages." Although the pages containing troubleshooting procedures are no longer printed on yellow paper, troubleshooting instructions, if any, will be contained in the easily located "Troubleshooting" chapter or section. See the table of contents.

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# INVERTER RETROFIT KIT KMLVINVRTO KMHVINVRTO

## **PREPARATIONS**

Understand and Avoid Safety Hazards

### **DANGER:**

#### **ELECTROCUTION AND ELECTRICAL BURN HAZARDS**

Contact with high voltage will electrocute or burn you. Power switches on the machine and the control box do not eliminate these hazards. High voltage is present on the machine unless the main machine power disconnect is OFF.

- Do not service the machine unless qualified and authorized.
- Keep bystanders well clear of the machine.
- Lock off and tag out power at the main machine disconnect before servicing.

### **DANGER:**

#### **ENTANGLE, CRUSH AND SEVER HAZARDS**

These operations require personnel to work in and around areas of the machine where there is a possibility of becoming entangled with electrical wiring, air tubing or machine parts. Certain machine parts can move in such a way as to crush or sever limbs or cause serious injuries.

#### **TOOLS REQUIRED:**

Basic hand tools

Drill and bits

3/4" Knock out punch

1 1/2" Knock out punch

Crimpers for #8 wire terminals

#### **ADDITIONAL MATERIALS FOR FXJ MACHINES:**

3/8" wall anchors

3/4" conduit from machine to inverter box

1 1/2" conduit from machine to inverter box

HMLVINVRTO  
99501

8awg wire for 8 runs from machine to inverter plus ground  
10 conductor 18awg shielded wire

#### ADDITIONAL MATERIALS FOR FXP/W MACHINES:

3/8" wall anchors

3/4" conduit from machine to inverter box

1 1/2" conduit from machine to inverter box

8awg wire for 8 runs from machine to inverter plus ground

6 conductor 18awg shielded wire

4 conductor 18awg shielded wire

This kit will be utilized in the replacement of inverters on our 42032Fxx series machines. We are increasing the size and power handling capacity of the inverters to provide for more dependable operation. This retrofit will require the installation of a new control box that will house the inverter and the braking module. We recommend that the box be mounted on a wall as close to the washer/extractor as possible. The inverter enclosure assembly weighs approximately 50 pounds (22.6kg), therefore you must use appropriate mounting hardware, i.e. 3/8" toggle bolts, lead anchors etc.

The approximate time to complete the retrofit is four man-hours. Before beginning the modification, it is necessary to familiarize yourself with all safety precautions in the equipment manuals - please observe all safety precautions. It is also imperative that these instructions, including the attached drawing, are read and understood before beginning the retrofit. Pay close attention to the notes on the attached drawing. While working on any electrical or electronic equipment, tag and lockout the power. Also, inventory the parts received with the kit.

The service technician will provide wiring from the inverter (Fig.2) to the machine. We specify 10-conductor 18AWG shielded wire for the controls in the FxJ machine. For the FxP/W machines, we recommend two separate shielded cables. A 6-conductor 18AWG shielded cable for the control wires and the 4-conductor 18AWG shielded cable for the D/A controls to terminals "FV" and "FC". As with all shielded cabling used in our machines, we recommend that only one (1) end of the cable be grounded. The 8AWG are for the AC line (L-1, L-2, and L-3), the motor (T-1, T-2, and T-3) ground and the braking resistor connections.

To install the new inverter control, you will remove the existing inverter and install the cover plate (Fig.1) that we provide. This plate has terminal block connections for the line, motor, control and brake wiring, as well as holes for the conduits that will be run from the machine to the inverter. You need to run a 3/4" and a 1 1/2" conduit from the inverter box to the machine for the interconnecting wiring (consult your local codes for type of conduit that will be acceptable). Connect the control wires from the old inverter control board terminals to the 14 terminal connector as necessary - all terminals will not be used. The L-1, 2, 3 wires to the upper left 3-pole terminal and the T-1, 2, 3 wires to the upper right terminal block. The braking resistors will be attached to the lower right hand 3 pole terminal block. The line, motor and braking wires will be run through the 1 1/2" conduit along with an 8AWG ground wire. The controls will run through the 3/4" conduit. This shielded cable will be grounded at one end only.

With kit KMLVINVRTO, the braking resistors will be connected to the braking module, terminals B and Po. The braking module is mounted below the new inverter control box. The wires connecting the braking resistors can be run through the inverter to the empty conduit that is connected to the braking module. The necessary connections from the inverter to the braking module are already made.

The braking module is not furnished with the KMHVINVRTO; therefore the braking resistors will be connected internal to the inverter to the B1 and B2 terminals.

Once the installation is complete, you will program the inverter as normal, using the latest constants provided by MILNOR Technical Support.

We recommend that after the inverter is programmed, you operate the machine in manual test mode. Go to the clockwise wash test and verify the basket rotation is clockwise when viewed from the load door.

If there are any questions regarding this installation please call Pellerin Milnor at (504) 467 9591 extension 75.

