



Climate Control Solutions
Bard Manufacturing Company, Inc.
Bryan, Ohio 43506

INSTALLATION INSTRUCTIONS

CMA-6

LOW AMBIENT

FAN CYCLING CONTROL

DESCRIPTION

The CMA-6 is a field installable low ambient fan cycling control. The CMA-6 consists of:

1. Installation Instruction 7960-236C
2. Low Ambient Control (LAC) 1804-0280
3. Terminal Block 8607-017
4. CMA-6 unit label 7961-312-003

For use with all WA/WL series, P series and WG series air conditioners.

INSTALLATION INSTRUCTIONS FOR WA/WL SERIES AND P SERIES

Disconnect all power to unit. Remove control panel inner and outer covers, and right side condenser inlet grille. Circled numbers on Figure 2 (3 or 4) correspond to installation instruction steps. Dashed lines indicate that a wire has been disconnected from this terminal and reconnected to another terminal.

Use Figure 2 for WA182 through WA372

Use Figure 3 for WA423 through WA721

Use Figure 4 for P series.

Step 1. Mount terminal block in position shown in Figure 2, 3 or 4, Step 1.

Step 2. Disconnect black high voltage outdoor motor lead from compressor contactor and reconnect to terminal block. Route wires through wire holder as shown in Figure 2, 3 or 4, Step 2.

Step 3. Route low ambient control wires up through the bushing in the bottom of the control panel. Replace sealing compound after routing wires through the bushing. Route the wires through the wire holders in the control panel as shown in Figure 2, 3 or 4. Connect the low ambient control wires between the terminal block and T2 of the compressor contactor. See Figure 2, 3 or 4, Step 3.

Step 4. For WA/WL series units remove the service port cap on the liquid line. For P series units remove the service port cap on the discharge line. Install the low ambient control on the liquid line for a WA/WL series unit, or on the discharge line for a P series unit with the flare tee dill valve after installation to insure that the dill valve in the unit service port was depressed by the flare tee connector. Check for leaks at the flare tee connectors. Replace service port cap on the flare tee service port and tighten. See Figure 5.

Step 5. Check wiring. See Figure 1. Check for proper operation of the unit by energizing in cooling mode. The condenser fan motor should not run until the discharge pressure has exceeded 280 PSI. Should the discharge pressure fall below 180 PSI while running, the condenser fan motor will de-energize until the head pressure builds to 280 PSI.

Step 6. Apply "This unit equipped with CMA-6 control module" label to the inside of the control panel cover above the wiring diagrams.

Step 7. Replace all panels and covers. This completes installation.

FIGURE 2

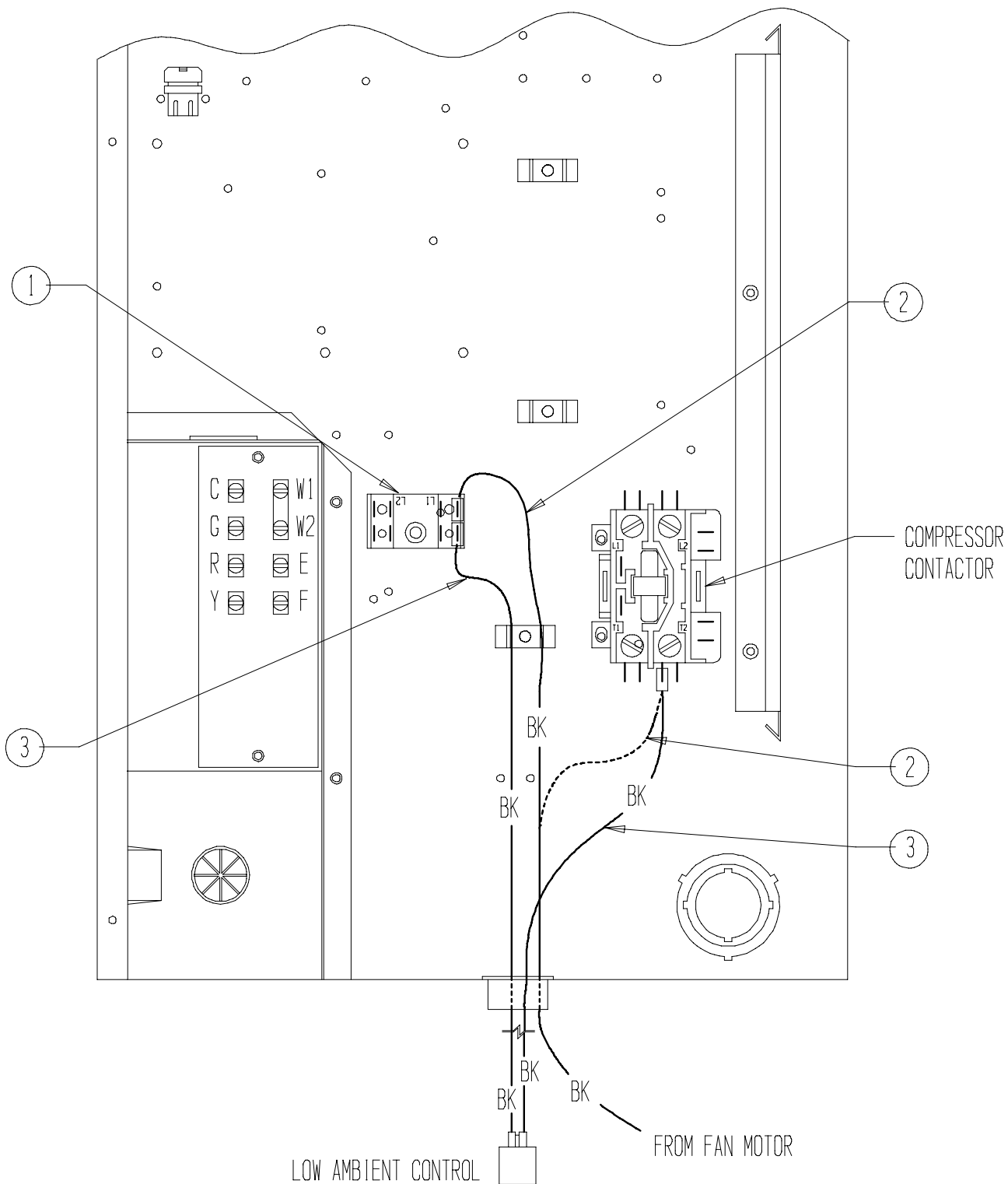
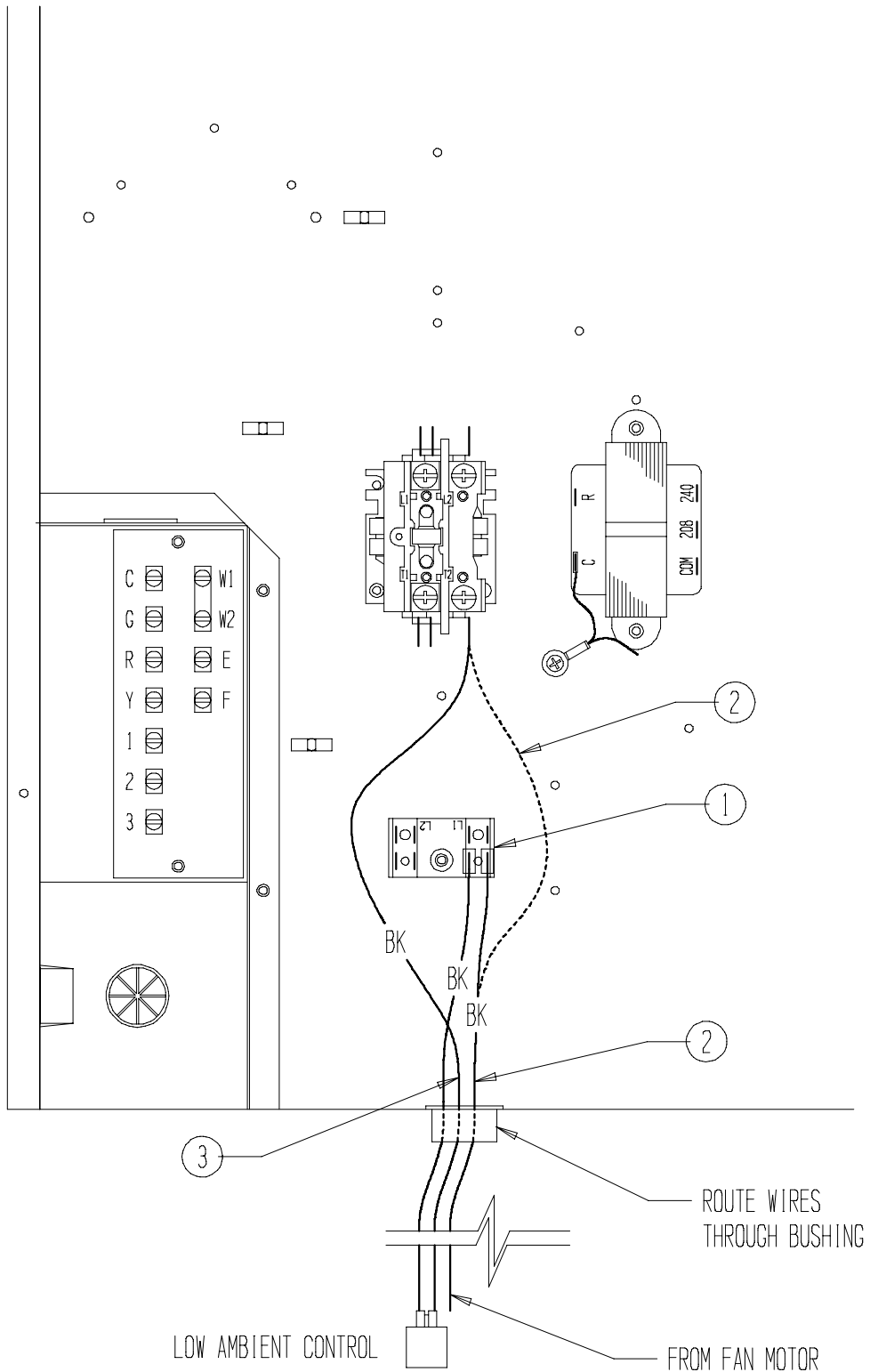
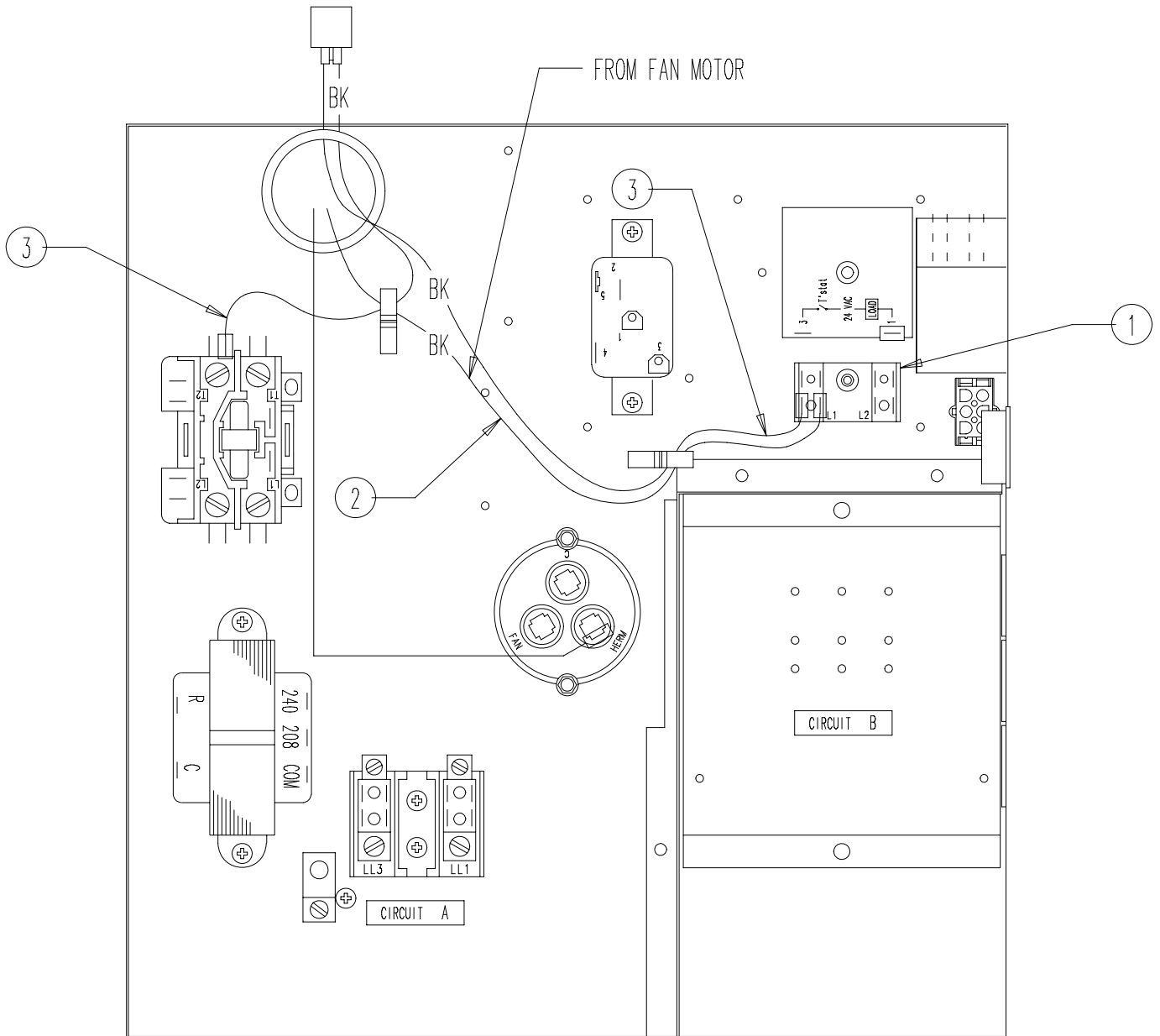


FIGURE 3



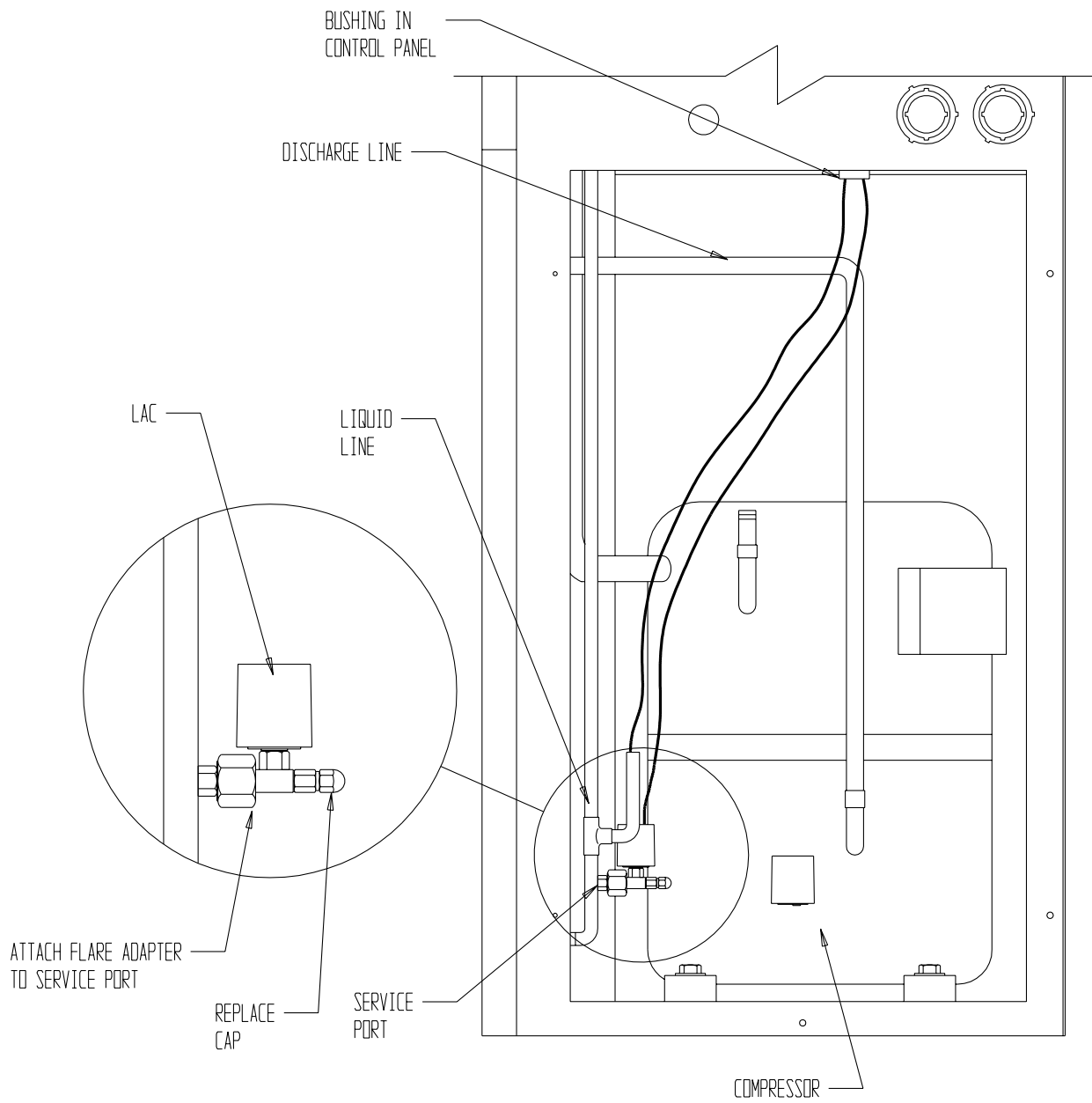
MIS1393

FIGURE 4
P SERIES



MIS-1394

FIGURE 5



MIS-376 A

INSTALLATION INSTRUCTIONS

CMA-6

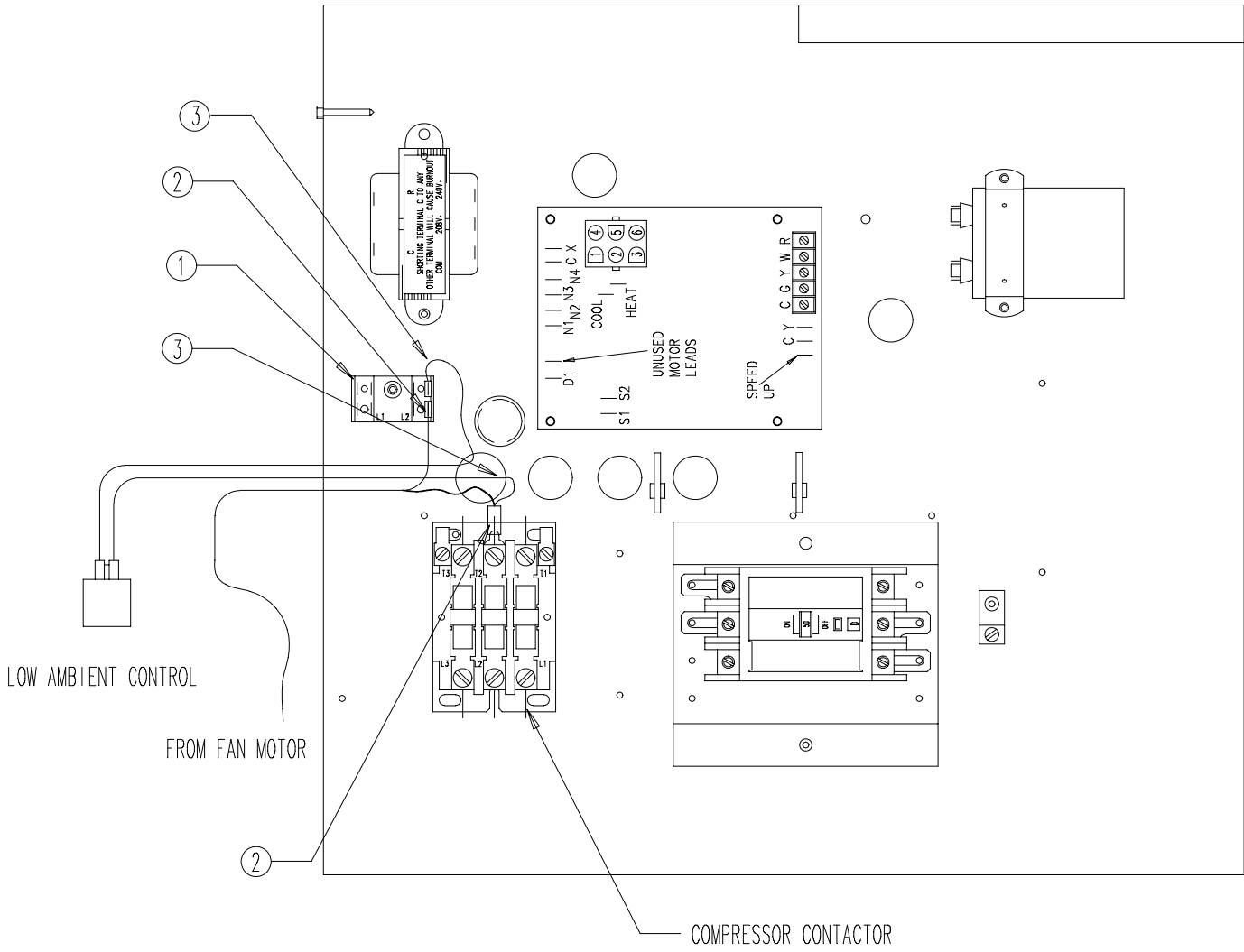
LOW AMBIENT FAN CYCLING CONTROL

INSTALLATION INSTRUCTIONS FOR WG SERIES COMBINATION GAS/ ELECTRIC WALL MOUNTS™

Disconnect all power to unit. Remove control panel inner and outer covers, and blower service door. Circled numbers on Figure 6 correspond to installation instruction steps. Dashed lines indicate that a wire has been disconnected from this terminal and reconnected to another terminal.

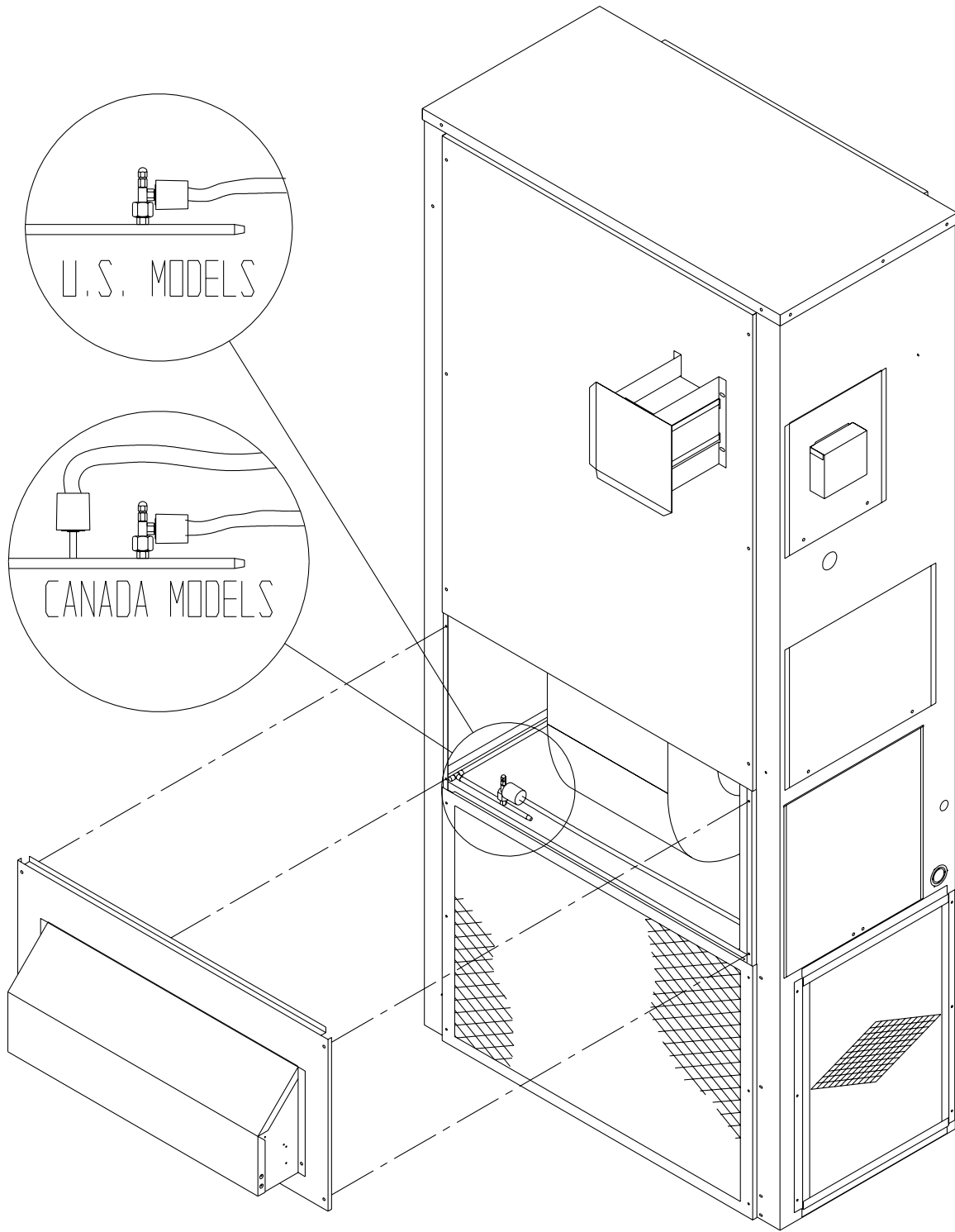
- Step 1. Mount terminal block in position as shown in Figure 6, Step 1.
- Step 2. Disconnect black high voltage outdoor motor lead from compressor contactor and reconnect to terminal block. Route wires through wire holder as shown in Figure 6, Step 2.
- Step 3. Remove condenser fan motor snap bushing. Route low ambient control wire through snap bushing with condenser fan motor leads. Connect the low ambient control wires between the terminal block and T2 of the compressor contactor. Reinstall the snap bushing. See Figure 6, Step 3.
- Step 4. Remove service port cap on liquid line access next to the circulating air blower. Install the low ambient control on the liquid line with the flare tee adapter that is brazed to the low ambient control. Check for pressure at the flare tee dill valve after installation to insure that the dill valve on the unit service port was depressed by the flare tee connector. Replace the service port cap on the flare tee service port and tighten. See Figure 7.
- Step 5. Recheck wiring. See Figure 1. Check for proper operation of the unit by energizing in cooling mode. The condenser fan motor should not run until the liquid pressure has exceeded 280 PSI. Should the liquid pressure fall below 180 PSI while running, the condenser fan motor will de-energize until the liquid pressure builds to 280 PSI.
- Step 6. Apply "*This unit equipped with CMA-6 control module*" label to the inside of the control panel cover above the wiring diagrams.
- Step 7. Replace all panels and covers. This completes installation.

FIGURE 6



MIS-1071

FIGURE 7



MIS-1072 A