# ECONO-PLUS 36DV-RV

# INSTALLING AND OPERATING YOUR ECONO-PLUS 36DV GAS-BURNING FIREPLACE

Please leave this manual with the owner

## CHECK LOCAL CODES PRIOR TO INSTALLATION

# FOR YOUR SAFETY IF YOU SMELL GAS:

- 1. OPEN WINDOWS.
- 2. DON'T TOUCH ELECTRICAL SWITCHES
- 3. EXTINGUISH ANY OPEN FLAME.
- 4. IMMEDIATELY CALL YOUR GAS SUPPLIER.

## FOR YOUR SAFETY:

DO NOT STORE OR USE ANY FLAMMABLE VAPOURS OR LIQUIDS NEAR THIS OR ANY OTHER GAS-BURNING APPLIANCE.

## READ INSTRUCTIONS CAREFULLY BEFORE INSTALLING

# MODEL ECONO-PLUS 36DV-RV





## INTRODUCTION

The **Econo Plus 36DV-RV** is rated at 16,000 BTUs (4.7 Kilowatts) for Natural & Propane Gas

The Econo Plus warranty will be voided by, and Canadian Heating disclaims any responsibility for, the following actions:

- Modification of the fireplace and/or components including Direct-Vent assembly or glass doors.
- Use of any component part not manufactured or approved by Pacific Fireplaces in combination with an Econo Plus fireplace system.
- Installation other than as instructed in this manual.

Consult your local Gas Inspection Branch about the particular requirements concerning installation of factory-built gas fire-places. All work should be done by a qualified contractor, and installation must conform with the current CAN/CGA B-149.1 & .2 Gas Installation Code and local regulations.

## **CAUTIONS**

- \* Due to its high operating temperatures, the appliance should be located out of traffic & away from furniture and draperies.
- \* Children and adults should be alerted to the hazards of the high surface temperature, which could cause burns or clothing ignition.
- \* Young children should be carefully supervised when they are in the same room as the appliance.
- \* Clothing or other flammable materials should not be placed on or near the appliance.

## SELECTING YOUR FIREPLACE LOCATION

The fireplace may be installed in any location that is free of air condition ducts, electrical wiring and plumbing. Safety, as well as efficiency of operation, must be considered when selecting the fireplace location. Try to select a location that does not interfere with room traffic, has adequate ventilation, and offers an accessible pathway for Direct Vent & Combustion Air Kit installation.

The fireplace dimensions are shown below:

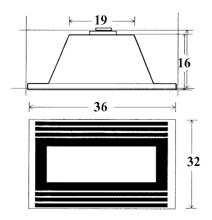


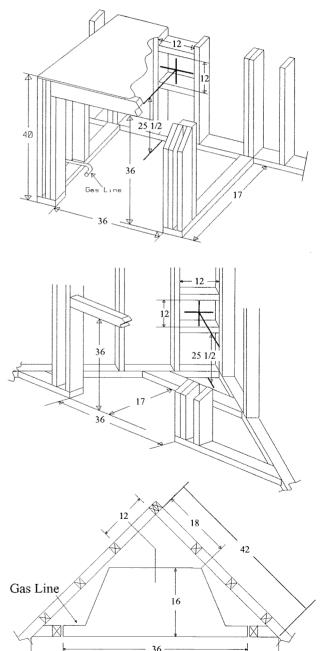
FIGURE 1. FIREPLACE DIMENSIONS

## INSTALLING THE FIREPLACE

The Econo Plus 36DV-RV clearances to combustible materials are 0" back, 1" sides, 0" floor and 4" top. The Econo Plus 36DV-RV must not be installed any closer than 8 inches to any unprotected combustible wall perpendicular to the fireplace opening.

For protection against freezing temperatures, it is recommended that the outer walls of the chase be insulated with a vapour barrier. This will reduce the possibility of a cold-air convection current on the fireplace.

The framing dimensions are shown below:



## INSTALLING THE GAS LINE

The gas line must be installed before finishing the Econo Plus 36DV-TV Fireplace. **Natural Gas** requires an inlet pressure of 7" W.C. & a manifold pressure of 3.5" W.C. **Propane Gas** requires an inlet pressure of 11" W.C. & a manifold pressure of 10.5" W.C. It is also required that provisions be made for a 1/8" N.P.T. plugged tapping and be accessable for test gauge connection immediately upstream of the gas supply controls to the appliance. The fireplace gas connection and the main operating gas valve is located behind the removable brass trim at the bottom of the unit and need only be attached to the gas line with an approved fitting, as required by the **CAN/CGA B-149.1** and .2 Gas Installation Code.

## **CAUTIONS**

\*After gas line is connected, it is a CAN/CGA B149.1 & .2. code requirement (Section 8.25.3 (e)) that "each appliance connection, valve, valve train, shall be checked while under normal operating pressure with either a liquid solution, or leak detection device, to locate any source of leak." Tighten any areas where bubbling appears or leak is detected until bubbling stops completely or leak is no longer detected. Do NOT use a flame of any kind to test for leaks.

## VENT TERMINATION LOCATION

Refer to the section on selecting a fireplace location to determine where your Econo Plus 36DV-RV will be installed.

Next, determine the vent terminal location. (see figure 3) for allowed areas. The outlet must be framed with an 12" x 12" inside dimension (see Figure 4).

VENT TERMINATIONS SHALL NOT BE RECESSED IN WALLS OR SIDING.

## **CAUTION**

- Extremly important: In heavy snow areas take extra care to prevent against blocking vent termination with snow removal equipment.
- Flue gases exiting vent terminals are very hot and must not be restricted to assure fireplace combustion is not affected.
- 3). Do not place, build any obstruction, plant any bushes or for any reason attempt to conceal the vent termination. To do so will affect the operation of the fireplaceand may be hazardous.
- 4). Do not recess vent terminals into walls or siding.
- 5). Terminals with components which exceed 180 F+ ambient while under continuous operation are required by National Standards to be protected with an additional screen on patio's, decks and any areas accessible to public. For maximum safety we recommend all terminals below 7' from grade level be installed with a certified Econo Plus Heat Guard.

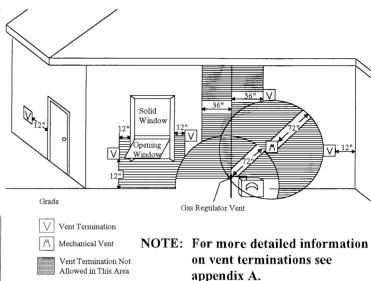


FIGURE 3. VENT TERMINATION.

FOR VINYL SIDING APPLICATIONS ALL TERMINATIONS MUST BE INSTALLED WITH A HEAT SHIELD (MTKG) TO PROTECT THE SIDING FROM ANY HEAT DAMAGE.

## **IMPORTANT:**

When using ETK-5 with MSR: Framed opening must be 12" X 12"

★ When using ETK-5F:
Framed opening must be 11" X 11"

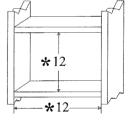


FIGURE 4. VENT TERMINATION FRAMING.

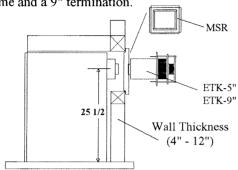
## INSTALLING DIRECT VENT

Note: It is imperative for satisfactory operation of the Econo Plus 36DV-RV fireplace that no venting component be modified in any way. All components have been manufactured to eliminate the need for modification when properly selected and installed.

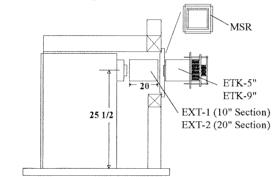
# CLEARANCES: All vent pipes must maintain a minimum of 1" clearance to combustible materials.

The Econo Plus 36DV-RV has been designed for four possible installations.

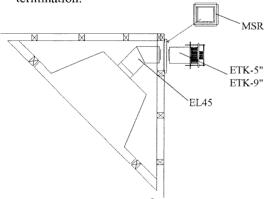
1). Standard 4" or 6" stud walls. For 4" walls use a stucco frame and a 5" termination. For 6" walls use a stucco frame and a 9" termination.



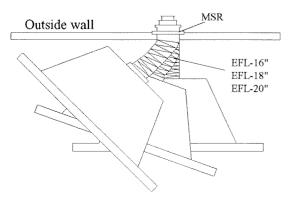
2). Extended vent kit. For extended vent use a stucco frame, 20" extended vent and a termination. Note: 20" kit may be cut to desired length but must never exceed 20".



3). 45° corner kit. Use a 45 °elbow, stucco frame and a 5" termination.



4). Corner installation of 45° or less: Use a Flexible section (available in EFL 16", 18", or 20") a stucco frame and termination. Flex may be turned to obtain desired degree of angle required but must not exceed 45°. See diagram below:



## INSTALLING THE REMOTE SWITCH

The **Econo Plus 36DV-RV** is equipped with a remote-operated valve, located behind the removable brass grille, to the right of the gas control valve (refer to figure 10.) The valve is pre-wired and completely self contained to generate its own power **DO NOT** connect any external power to it. **Note:** The switch location must not exceed 30' from fireplace.

## FIREPLACE MANTEL AND FACING

Combustible mantels and mouldings may be safely installed over the top and on the front of the fireplace provided that they do not project beyond shaded area shown in **figure 5A**. Side wall clearances are 0". Combustible surrounds may be installed with 0" clearance to the side of the fireplace as shown in **figure 5B**.

## FIREPLACE FACING

When selecting the finish material for your fireplace, it is important to remember the following: BRASS TRIMS MUST NOT BE OBSTRUCTED IN ANY WAY - to do so restricts the air supply for the control compartments and heat exchanger it also prevents access for servicing controls.

The face of the fireplace may be painted to match the room decor, provided you use a heat-resistant paint. Decorative facing must not extend past the fireplace opening at all, because it will interfere with the access to retainers for removal of glass panel and combustion door.

## **MANTELS & SURROUNDS**

**NOTE:** National Canadian Gas Association mantel test requirements are for fire hazard prevention to combustible materials.

New technology, to meet consumer and government demands for the wise use of energy, has prompted us to manufacture many models of fireplaces which are hot, fuel and energy efficient.

Please be aware; temperatures over the mantel will rise above normal room temperature and walls above fireplace may be hot to touch.

We recommend careful consideration be given to the effects of elavated mantel temperatures which may be in excess of product design, for example: candles, plastic or pictures. This can cause melting, deformation, discoloration or premature failure of T.V. and radio components.

<u>Painting</u>: Special care is recommended by the Master Painters and Decorators Association, when painting the fireplace surrounds, to select and apply a quality <u>Alkyd sealer</u> prior to the applying of latex paints. This is to prevent leaching of water from evaporation and causing a brownish staining effect to paint over coats.

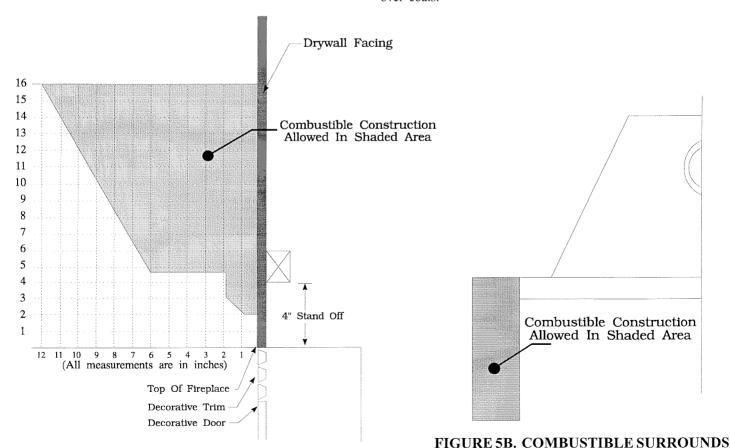


FIGURE 5A. COMBUSTIBLE MANTLES & FACINGS

## REMOVAL OF OUTER DOOR

Easily removed for cleaning and servicing. Although this pane is made of a very tough tempered glass, always handle it carefully and place in a safe location where it will not be broken or damaged.

To remove the outer glass panel lift upwards and outwards. This will release the panel from the mounting pins. See Figure 6.

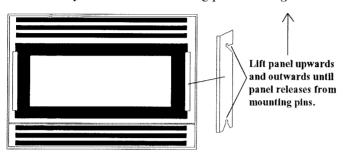


FIGURE 6. OUTER GLASS DOOR

## REMOVAL OF INNER DOOR

To remove inner glass door, outer glass door must first be removed. Next turn the safety door locks outwards as illustrated in **Figure 7**. **Note:** When turning and unlocking the safety door locks a small additional pressure is required to start the unlocking procedure. This is because a latch pin of the safety door lock is seated into a latch plate notch (**see Figure 8**). This ensures the safety door lock is in its correct position, maintaining the door seal is under constant spring pressure.

IMPORTANT: For your safety when replacing inner door to its original position always assure the safety door latch pin is correctly positioned with the notch in the latch plate. (see Figure 8).

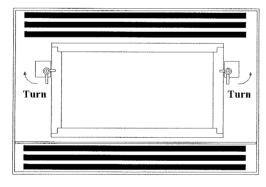


FIGURE 7. INNER GLASS DOOR

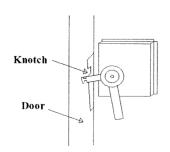


FIGURE 8. SAFETY LOCK

## **INSTALLING 28CD LOGS**

Econo Plus 36DV-RV fireplaces are supplied with four very attractive cultured oak logs. To install simply place log "A's" rectangular shaped extension into the log mounting slot located on rear wall of fireplace. Place log "B" onto front log slots. Place log "C" and log "D" onto pins on the burner bar as shown in Figure 9. below.

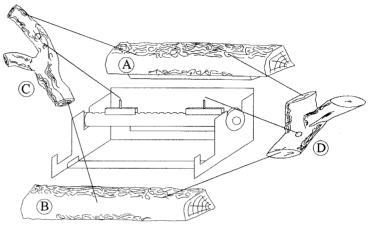


FIGURE 9. LOG PLACEMENT

## LIGHTING PILOT AND MAIN BURNER

To light pilot it is necessary that you remove outer and inner glass door (refer to sections on glass door removal). The gas control valve is located behind the brass trim in the centre of the fireplace (see Figure 10 below). Before lighting the pilot, make sure that the gas line is connected and the gas shut-off valve is turned to the ON position. To light the pilot we recommend the use of a long match or removal of log "B":

- a) Partially depress and turn dial on gas control valve to "OFF" position and wait 5 minutes.
- b) Turn dial to pilot position, depress dial and light pilot burner, hold for 1 minute, then release. If pilot does not remain ignited, repeat, allowing a longer time to elapse before releasing dial.
- c) Re-install inner and outer glass door.

NOTE: For your protection and safety, main gas burner can not be activated until inner glass door has been re-installed to activate a safety cut off switch.

- d) To light the main burner, turn dial to "ON", then turn on remote switch.
- e) Turn off flame with remote switch. For complete shut down, slightly depress gas control valve dial and turn to "OFF" position.

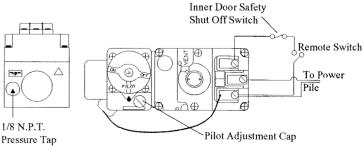


FIGURE 10. GAS CONTROL VALVE

## PILOT BURNER ADJUSTMENT

1. Remove Pilot Adjustment Cap. (see figure 10)

Adjust pilot key to provide properly sized flame. See Figure 11 for properly sized flame.

3. Replace pilot adjustment cap.

4. Leak test with a soap solution after installing or servicing with main burner on. Coat pipe and tubing joints, gasket etc. with soap solution. Bubbles indicate leaks. Tighten any areas where the bubbles appear until the bubbling stops completely.

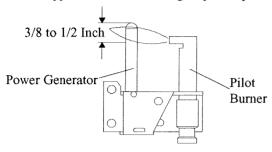


FIGURE 11. PILOT BURNER ADJUSTMENT

## **MAINTENANCE**

The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that burner control compartments, burners and circulating air passageways of the appliance be kept clean. For your convenience a 1/8" pressure tap is supplied on the gas valve for a test gauge connection. See Figure 10. For Natural gas the gas line requires an inlet pressure of 7" W.C. and a manifold pressure of 3.5" W.C. For Propane gas the gas line requires an inlet pressure of 11" W.C. and a manifold pressure of 10.5" W.C. Always keep the fireplace area clear and free of combustible materials, as well as gasoline and other flammable vapours and liquids.

## **CLEANING**

When fireplace is first activated some smoking and visible film on the glass may occur, this is a normal condition of heat burning of protective coatings on new metal.

 Products of combustion do deposit a visable film on the glass which must be cleaned periodically. Film can easily be removed by removing inner and outer doors, handling carefully, and cleaning with normal liquid household products.

WARNING: Do not attempt to clean glass when hot. Do not clean glass with abrasive materials as any glass etching may cause premature glass failure.

- Silicone seals on inner door during initial firing will "off gas", leaving a visual deposit of a white substance on combustion chamber walls. This can easily be removed using normal household products.
- Use a vacuum cleaner or whisk broom to keep the control compartment, burner, and firebox free from dust and lint.
- Logs may be cleaned periodically with soap and water to remove soot.

## **CAUTIONS**

- \* Fireplace gas control must be in the "OFF" position and pilot and main burners extinguished when cleaning appliance with a vacuum.
- \* Doors and logs can get very hot, handle only when logs are cool.

## TROUBLESHOOTING

## The following is a troubleshooting chart of possible problems:

PROBLEM	CORRECTIVE ACTION
Noisy Pilot Flame	Remove pilot adjuster cap, located next to gas shut off valve. Flame is decreased by turning adjustment screw clockwise.
Pilot won't ignite	Disconnect remote wires and try to light pilot. If pilot now works, remote connections are faulty. Check wiring diagram figure 14.
Main burner will not light	<ol> <li>Check wiring (see figure 14)</li> <li>Check wall switch for proper connection.</li> <li>Check door safety switch located center of bottom door rail.</li> <li>Burner ignites, adjust activating pin bottom center of inner glass door</li> <li>Burner does not ignite, check electrical contacts of the door safety switch.</li> </ol>

If your Econo Plus 36DV-RV still does not operate correctly, consult your dealer or the manufacturer.

# All service and repairs should be performed by a qualified agency.

All spare parts, optional fans (see optional fan instruction guide), and optional trim finishes are available from Canadian Heating Products Inc. or your local dealer.

The Econo Plus 36DV-RV has a ten-year limited warranty on the firebox, a five-year warranty on the main burner, pilot burner, and cultured oak logs; and a one-year warranty on the gas control valve and glass doors.

## ECONO-PLUS 36DV-RV DECORATIVE GAS FIREPLACES WARRANTY

## THE WARRANTY

Canadian Heating Products warrants the Econo-Plus 36DV Decorative Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Econo-Plus 36DV there is a ten-year warranty on the firebox and its components; a five-year warranty on the main burner, pilot burner, and cultured oak logs; as well as a one-year warranty on the gas control valve, and a 90-day warranty on the glass panel and bifold glass doors.

## REMEDY AND EXCLUSIONS

The coverage of this Warranty is limited to all components of the decorative gas appliance manufactured by Canadian Heating Products

This Warranty only covers Econo-Plus 36DV decorative gas appliances installed in the United States or Canada.

If the components of the decorative gas appliance covered by this Warranty are found to be defective within the time frame stated (see Canadian Heating's right of investigation outlined below). Canadian Heating Products will, at its option, replace or repair defective components of the decorative gas appliance manufactured by Canadian Heating Products at no charge, and will also pay for reasonable labor costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, Canadian Heating Products will, at its option, refund the purchase price of the Econo-Plus 36DV decorative gas appliance.

This Warranty covers only parts and labor as provided above. In no case shall Canadian Heating Products be responsible for materials, components, or construction which are not manufactured or supplied by Canadian Heating Products, or for the labor necessary to install, repair or remove such materials, components or Construction. All replacement or repair components will be shipped F.O.B. the nearest Canadian Heating factory.

## **OUALIFICATIONS TO THE WARRANTY**

The decorative gas appliance Warranty outlined above is further subject to the following qualifications:

- (1) The decorative gas apppliance must be installed in accordance with Canadian Heating Products installation instructions and local building codes. The Warranty on this Econo-Plus 36DV decorative gas appliance covers only the component parts manufactured by Canadian Heating. The use of components manufactured by others with this Econo-Plus 36DV decorative gas appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by Pacific Fireplace
- (2) The Econo-Plus 36DV decorative gas appliance must be subjected to normal use. The decorative gas appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the decorative gas appliance, will produce excessive temperatures and will result in a fire hazard.

## LIMITATIONS ON LIABILITY

It is expressly agreed and understood that Canadian Heating Products's sole obligation and purchaser's exclusive remedy under this Warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above.

In no event shall Canadian Heating Products be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by Canadian Heating Products's negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Econo-Plus 36DV decorative gas appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

## INVESTIGATION OF CLAIMS AGAINST WARRANTY

Canadian Heating Products reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

## CANADIAN HEATING PRODUCTS NOT RESPONSIBLE FOR WORK DONE WITHOUT WRITTEN CONSENT

Canadian Heating Products shall in no event be responsible for any warranty work done without first obtaining Pacific's written consent.

## DEALERS HAVE NO AUTHORITY TO ALTER THIS WARRANTY

Canadian Heating Products's employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

## HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this Warranty to be valid, Canadian Heating Products must be notified of the claimed defect in writing or by telephone to Canadian Heating ProductsCorp, attention Customer Service Department, 6011 - 196A Street, Langley, B.C. V3A 1A8, telephone (604) 534-2900, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

## OTHER RIGHTS

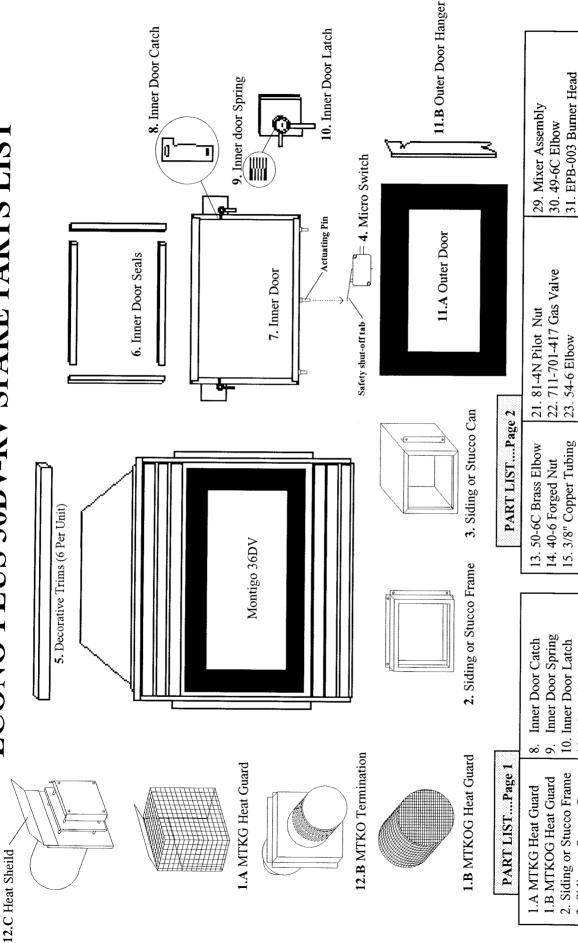
This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Canadian Heating Products reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles, and products.

## DISTRIBUTED BY:

**CANADIAN HEATING PRODUCTS** 

# ECONO PLUS 36DV-RV SPARE PARTS LIST



Page 9 of 11

7. Inner Door

32. G01A32B1 Power Generator 33. 5-CH-12 Pilot Burner

34. 77-4 Bulkhead Union

25. ALT-6 3/8" Copper Tubing 26. 40-6 Forged Nut 27. 48-6C Connector

24. 40-6 Forged Nut

17. BV-5042-6 Ball Valve

11.B Outer Door Hanger 12A. MTK Termination

10. Inner Door Latch 11.A Outer Door

2. Siding or Stucco Frame3. Siding or Stucco Can

5. Decorative Trims 6. Inner Door Seals

4. Micro Switch

18. 34-6 Tube Coupling

19. ALT-4 3/8" Tubing

12B. MTKO Termination 12C. Heat Shield

23. 54-6 Elbow

15. 3/8" Copper Tubing

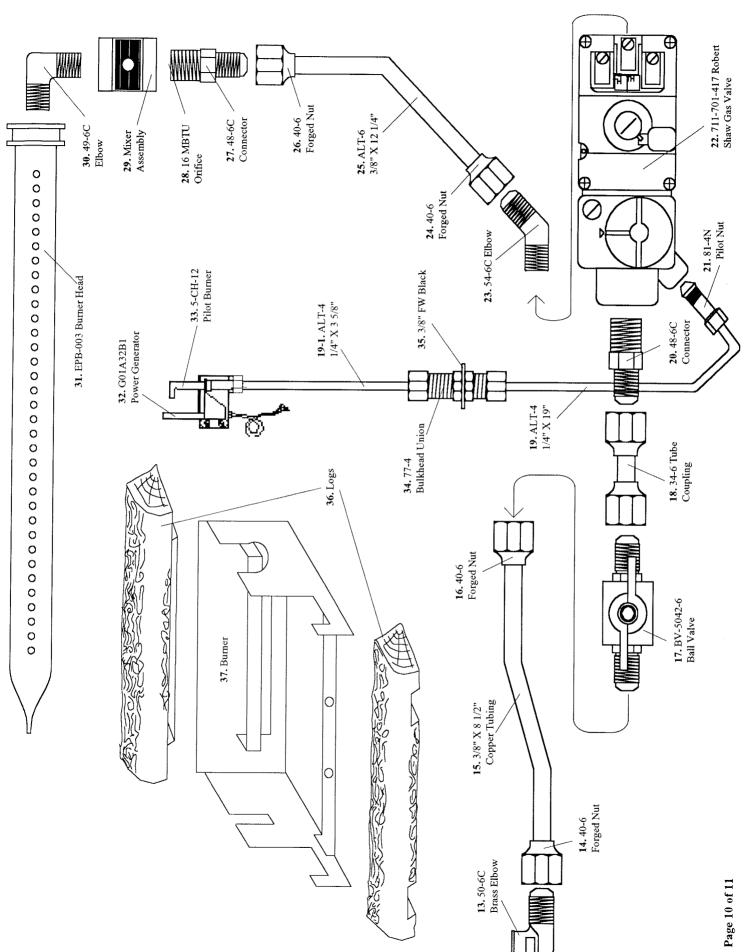
16. 40-6 Forged Nut

28. 16 MBTU/H Orifice

19-1. ALT-4 1/4" Tubing

20. 48-6C Connector

35. 3/8" FW Black



# APPENDIX A. ALLOWED TERMINATION LOCATIONS

