KIT PART NUMBER 6360058 INSTRUCTIONS FOR INSTALLING A MODIFICATION KIT IN A EURODRINK MERCHANDISER (MODEL 636)

This kit will enable your EuroDrink Merchandiser to deliver a hot drink at the proper temperature and with the correct appearance of cream on top.

CHECK THE PARTS RECEIVED IN THE KIT WITH THE PARTS LIST IN THESE INSTRUCTIONS. IF ANY PARTS ARE MISSING, CONTACT THE NATIONAL VENDORS PARTS DEPARTMENT IMMEDIATELY.

Read these instructions carefully before installing the kit. Keep these instructions for part numbers and for future reference.

IMPORTANT NOTE

Make sure that the front-mounted mixing bowl exhaust system is in place in the machine prior to installing this kit.

PART NUMBER	DESCRIPTION	QTY
-	EPROM	1
2206028	THUMBSCREW - SIDEWALL	2
3157060	SCREW - GROUND	1
1451097	SCREW - #8-32 X .31 HEX HD. TF - BLACK	1
4402043	NUT - #8-32 KEPS ZINC PLATE	2
6231207	LABEL - CAUTION HOT SURFACE	1
6231229	LABEL - WARNING HIGH VOLTAGE	1
6360062	INSTRUCTIONS - KIT	1
6361030	HEATER ASSEMBLY	1
6361031	SPOUT ASSEMBLY	1
6361032	CUP DEFLECTOR, L.H.	1
6367020	WHIPPER ASSEMBLY	1
6367025	INSULATION - BOTTOM - HWT	1
6367027	TUBE, RIGHT - COVER, FRONT - (STAINLESS STEEL)	1
6367028	TUBE, MIDDLE - COVER, FRONT (STAINLESS STEEL)	1
6367029	TUBE, LEFT - COVER, FRONT - (STAINLESS STEEL)	1
6367030	COVER - FRONT - WATER TANK	1
6367031	TUBE CLAMP	6
6367032	TUBE - TOP - 2.25" LONG X .375" ID (SILICONE)	3
6367033	TUBE - BOTTOM, RIGHT & MIDDLE - 14.75" LONG X .375" ID (SILICONE)	2
6367034	TUBE - BOTTOM, LEFT - 16.00" LONG X .375" ID (SILICONE)	1
6367035	TUBE - 7.25:" LONG X .188" ID (SILICONE)	1

This kit contains the following:

Part I: Prepare the machine:

- 1. Unplug the machine from its power source. If possible, allow the hot water tank to cool so you will not be exposed to hot surfaces which have the potential to cause burns.
- 2. Remove the following parts to gain access to the hot water tank: all product canisters, the cabinet service light, and the water valve cover.

Part II: Modify the hot water tank:

- 1. Remove and discard the tubing from the three right hand hot water (coffee) valves.
- 2. Remove the tubing from the remaining water valves, but do not discard it.
- 3. Remove the hot water tank cover. From the old cover, remove all hardware and the top piece of insulation. Save these parts.
- 4. Install the insulation and all hardware removed in the previous step to their respective places on the new tank cover (6367030).
- 5. Attach the top silicone tubes (6367032) to the tops of the three stainless steel tubes (6367027, 6367028, and 6367029). Secure them with clamps (6367031)(See Figure 1).
- 6. Attach the right and middle bottom silicone tubes (6367033) to the bottoms of the right and middle stainless steel tubes (6367027 and 6367028). Secure with clamps (6367031).
- 7. Attach the left bottom silicone tube (6367034) to the bottom of the left stainless steel tube (6367029). Secure with a clamp (6367031).
- 8. Insert the bottom hot water tank insulation (6367025) at the rear of the tank cover (6367030).
- 9. From the rear of the tank cover, insert the three tube assemblies out through the front as shown. Place the stainless steel tubes so they lay flat against the rear of the tank cover (See Figure 2).
- 10. Install the tank cover to the hot water tank. Secure with the attaching hardware you removed previously. The installation should look precisely as shown (See Figure 2).
- 11. Connect the short pieces of silicone tubing to the water valves as shown.
- 12. Connect the ends of the three long tubing assemblies to their respective mixing bowls. Be sure the water lines go to the same locations as they did prior to disassembly.







Part III: Install the mixing bowl heater:

- 1. Remove the standard tube support bracket (See Figure 3).
- 2. Mount the heater assembly (6361030) to the front canister support bracket, as shown. Secure with two thumbscrews (2206028).
- 3. Remove the two screws holding the cabinet high voltage interlock switch. Drop the switch and cover down to gain access to the interior of the switch cover (See Figure 4).
- 4. From the rear of the monetary panel, pass the end of the heater harness (part of heater assembly 6361030) with the single connector into the interlock switch cover.
- 5. Connect the heater harness to one of the unused 2-pin connectors inside the interlock switch cover.
- 6. Replace the interlock switch and cover.
- 7. Route the heater harness down the rear of the monetary assembly and connect the other end to the two heaters. Secure the heater harness at various intervals using tie wraps.
- 8. Install screw (1451097) in the position shown. This screw will be used to hang the mixing bowl heater assembly on when performing maintenance on the machine (See Figure 3).
- 9. Connect the loose end of the ground wire from the heater assembly to the cabinet as shown, using one ground screw (3157060).

Part IV: Install the new whipper:

1. Remove the existing coffee whipper and replace it with the new whipper assembly (6367020) (See Figure 3).







Figure 4

Part V: Install the new EPROM:

CAUTION

Do not remove the new EPROM from its shipping carton until you are ready to use it.

- 1. Turn the machine power switch OFF.
- 2. The controller cover is located behind the monetary door near the top of the machine. Remove the controller cover:
 - a. Loosen the hex head screws securing the controller cover to the machine.
 - b. Move the controller cover out of your way.

CAUTION

This EPROM device is sensitive to electrostatic discharge. Observe electrostatic discharge precautions to protect the electronics from damage while they are being handled (See the ESD cautions on Page 12). Wear a grounded wrist strap connected to any unpainted metal part of the machine. If a wrist strap is not available, remove any electrostatic charge (static electricity) from yourself by touching any unpainted metal part of the machine before handling any electronic component. Do this often during the removal and installation process.

- 3. See the shaded area representing EPROM U4 in Figure 5. These devices have various means of showing how they are to be oriented on the circuit board. Some EPROMs will have a small notch which matches the notch printed on the controller board. Other EPROMs may have a small dimple as shown, others may have a painted stripe. Take note of where the locating mark is on the EPROM currently mounted on the controller board. Your new EPROM will be placed in that same orientation. The EPROM in use is a 28-pin device, so it does not use the entire socket. The shaded area on the figure is where the new EPROM will go, leaving the four holes at the bottom of the socket empty.
- 4. Carefully remove the old EPROM from the controller board. Use an EPROM removal tool or a thin tool such as a small screwdriver or knife blade to gently rock the EPROM from its socket. Note the orientation of the notch in the top of the EPROM.
- 5. Carefully insert the new EPROM in the controller board. MAKE SURE THE LOCATING MARK (NOTCH, DIMPLE, STRIPE) ON THE EPROM IS FACING THE SAME WAY AS ON THE OLD EPROM! Make sure each of the pins is in its respective hole in the socket before pushing the EPROM into place.





Figure 5

Part VI: Modify the cup station:

- 1. Remove the cup station from the machine (See Figure 3).
- 2. Remove and discard the left cup deflector from the cup station.
- 3. Install the new left cup deflector (6361032).
- 4. Remove and discard the old coffee spout assembly from the cup station.
- 5. Install the new spout assembly (6361031) and adjust it to provide clearance as cups drop into the cup station.

NOTE

Adjust the nozzle to its lowest position and angle the nozzle so that the drink liquid strikes the cup wall below the "full level" line (See Figure 6). This procedure will minimize the creation of large bubbles in the drink and prevent the drink from staining the inside cup surface between the drink level and the rim of the cup.

- 6. Connect the 7.25" tube (6367035) to the inlet side of the new coffee spout.
- 7. Reinstall the cup station and connect the 7.25" tube (6367035) from the coffee spout to the new whipper assembly.

Part VII: Complete the installation.

- 1. Make sure all plumbing and electrical connections are secure.
- 2. Replace all items in the machine you removed to gain access to the water tank.
- 3. Apply power to the machine and allow the tank to refill and the heating systems to reach their operating temperatures.
- 4. Test vend drinks and adjust the left cup deflector and spout assembly until you are satisfied with the results.



Figure 6





PREVENTING CIRCUIT DAMAGE FROM ELECTROSTATIC DISCHARGE

Electronic printed circuit board assemblies are susceptible to physical damage, for example, broken components due to rough handling. In addition, printed circuit board assemblies (and their components, such as EPROMs) are subject to damage by various types of static electricity. Damage of this type is called **ELECTROSTATIC DISCHARGE (ESD)**. ESD can cause immediate damage to components on a circuit board assembly, or it can weaken them to the point where the damage will show up days, weeks, or months later.

PRECAUTIONS TO TAKE WHEN HANDLING PCB ASSEMBLIES

- 1. The PCB assembly is usually shipped in a cardboard shipping carton to prevent physical damage. Inside the carton, the PCB was placed in 1 of 3 types of closed protective bags: black translucent, smoked gray transparent, or pink transparent.
- 2. For storage, the best protection for the assembly is to leave it in its shipping carton. If it is removed from the carton, leave the assembly in its *CLOSED* storage bag while transporting, or until it is ready to be installed in a machine.
- 3. Before handling the PCB assembly, be sure you are wearing a conductive wrist strap or other suitable ESD protective device. The conductive wrist strap should be connected to ground in the machine. This can be any *PLATED exposed metal part. DO NOT CONNECT YOUR WRIST STRAP TO A PAINTED PART.*
- 4. Remove the new PCB assembly from its bag. Set the PCB assembly on top of the bag on a flat surface while you remove the old PCB assembly from the machine.
- 5. Pick up the new PCB assembly and set the old one down on the protective bag. Install the new PCB assembly in the machine.
- 6. Insert the old PCB assembly into the protective bag. Seal the bag.
- 7. If the old PCB assembly is to be returned to National Vendors, it is best to ship it in the same shipping carton you received with the new PCB assembly.
- 8. Carefully seat the EPROM into place using uniform pressure all around.
- 9. Replace the controller cover and tighten both screws.
- 10. Restore power to the machine.