

Instruction Sheet for Happ CCFL Retrofit Kits

These Installation Instructions apply to these kits:

95-2630-00 CCFL RETROFIT KIT FOR F15T8 W/TWO CCFL ELEMENTS

95-2630-10 CCFL RETROFIT KIT FOR F15T8 W/ONE CCFL ELEMENT

95-2630-20 CCFL RETROFIT KIT FOR F14T8 W/ TWO CCFL ELEMENTS

95-2630-30 CCFL RETROFIT KIT FOR F14T8 W/ONE CCFL ELEMENT

Complete CCFL Retrofit Kits: Includes CCFL module(s), UL inverter(s), Velcro hook and loop strips, power harness(es) and 12 VDC power supply.

Part Number	Description
95-2693-00UL	F15T8 Complete Retrofit Kit with Dual Element Module
95-2693-10UL	F15T8 Complete Retrofit Kit with Two Dual Element Modules
95-2693-20UL	F15T8 Complete Retrofit Kit with Three Dual Element Modules

Basic CCFL Retrofit Kits: Includes CCFL module(s), UL inverter, Velcro hook and loop strips and power harness(es).

Part Number	Description
95-2630-00UL	F15T8 Retrofit Kit with Two Dual Element Modules
95-2630-20UL	F14T8 Retrofit Kit with Two Dual Element Modules
95-2630-30UL	F14T8 Retrofit Kit with One Dual Element Module

1. Remove power from the machine you are retrofitting.
2. Open the machine to access the lamp you want to replace.
3. **IMPORTANT:** Disconnect any power connector going to the ballast or sockets of the lamp you are retrofitting.
4. Remove the existing lamp.
5. Using the supplied Velcro, fasten the CCFL Inverter (blue box) near a lamp socket on the lamp fixture in the machine.
6. Connect 2-pin connector on the supplied power harness 50-0347-00 to the inverter.
7. Put the CCFL retrofit lamp into the existing sockets as you would a regular fluorescent lamp. Be sure that the painted strip on the lamp is oriented toward the inside of the cabinet (See Configuring note below.)
8. Connect the white CCFL lamp wires to the inverter.

Connecting to +12 VDC power: The CCFL kit can only be powered by +12VDC (+13 for IGT). This can be obtained from the machine or from an optional power supply.

See accessories below. If using the optional 80-0414-20 +12VDC power supply, connect its 4-pin connector to the CCFL power harness. Plug the power supply into a switched service outlet inside the machine. If using the optional 95-2686-00 Power Extension Kit with Splices, connect the 4-pin connector to the CCFL power harness. Splice the two loose wires into existing +12VDC (+13 for IGT) wires in the machine using the supplied IDC splices. If using the 96-0644-00 Power harness for IGT and WMS, unplug the Coin Lamp (for S2000) or the cabinet fan (for Bluebird) connector. Connect the unplugged connector to the mating harness connector and connect the other harness connector to the lamp board (S2000) or fan (Bluebird).

If not using any of these, splice the Yellow wire on the CCFL power harness to +12VDC and the Black wire to Ground.

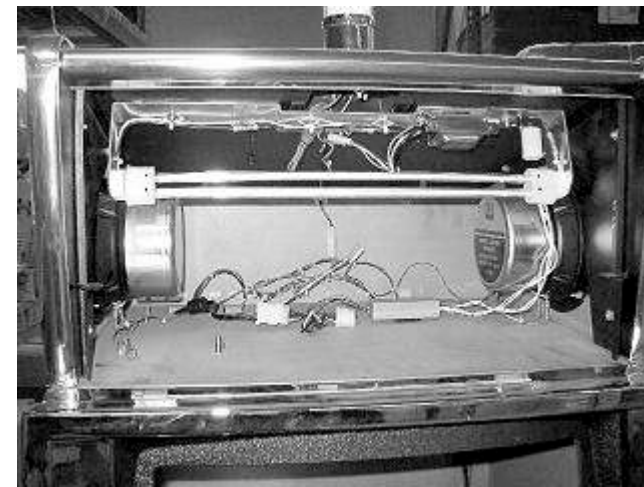
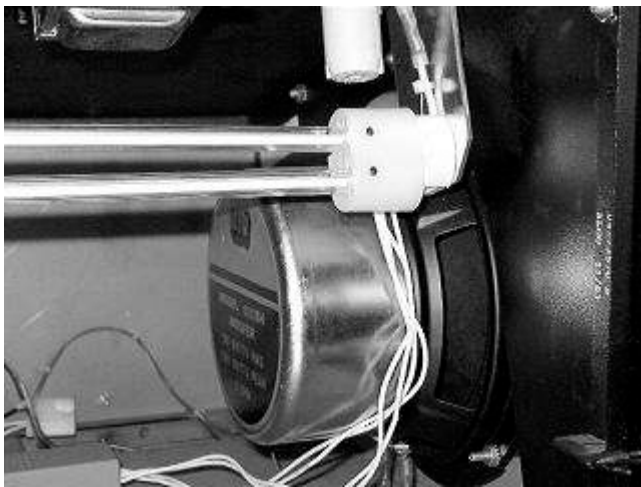
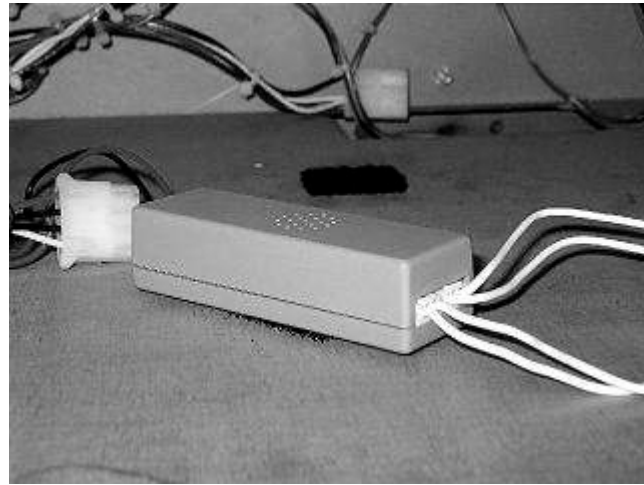
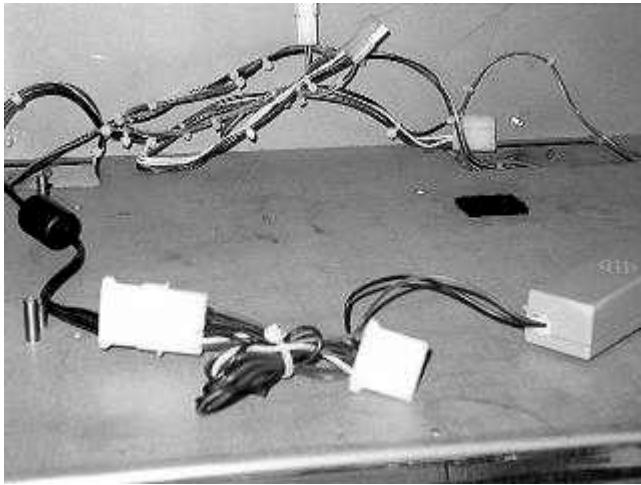
Accessories:

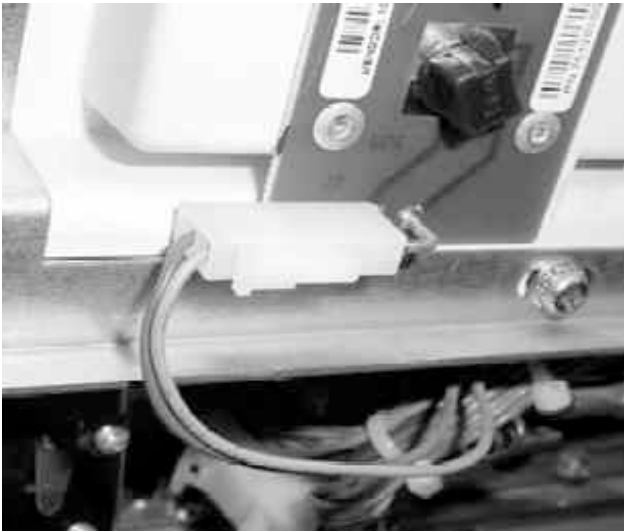
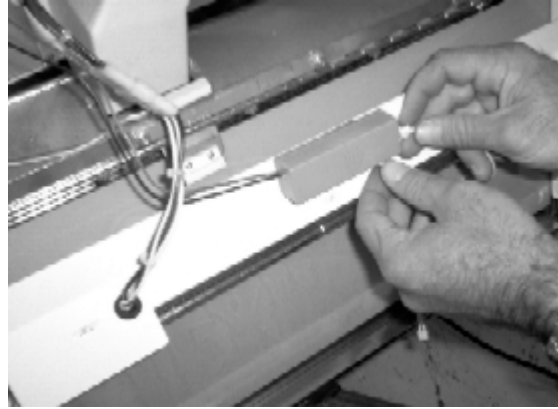
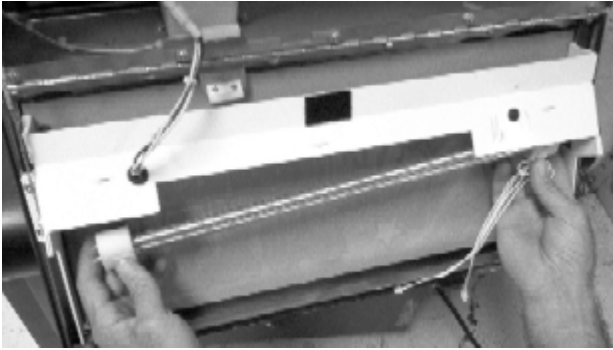
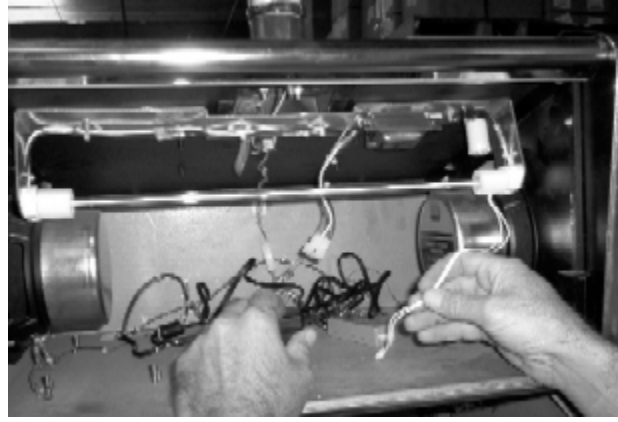
80-0414-20 CCFL Power Supply. Eliminates the need for splicing the +12 volts into the CCFL power harness. One power supply will run up to 3 CCFL Kits, requiring only one power supply per machine.

95-2686-00 CCFL Power Extension Kit with Pigtail and IDC Splices. Allows the installer to use existing +12VDC power from the machine. A connector plugs into the kit and the other end is spliced into existing +12VDC wires using two IDC splices, supplied.

95-0640-00 CCFL Power Extension Harness. For connecting two CCFL kits to one power supply 80-0414-20 or 95-2686-00 Power Extension Kit.

96-0644-00. CCFL Power Harness for IGT S2000 and WMS Bluebird. This is a “Y” connector that allows the installer to get the +12 volt power from existing connectors on IGT S2000 upright and WMS Bluebird upright or slant machines. On the S2000, this connects to the Coin Lamp connector and on the Bluebird it connects to the cabinet fan connector.





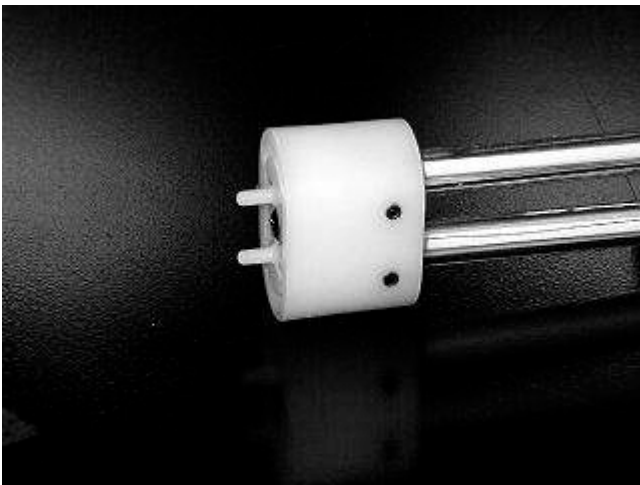
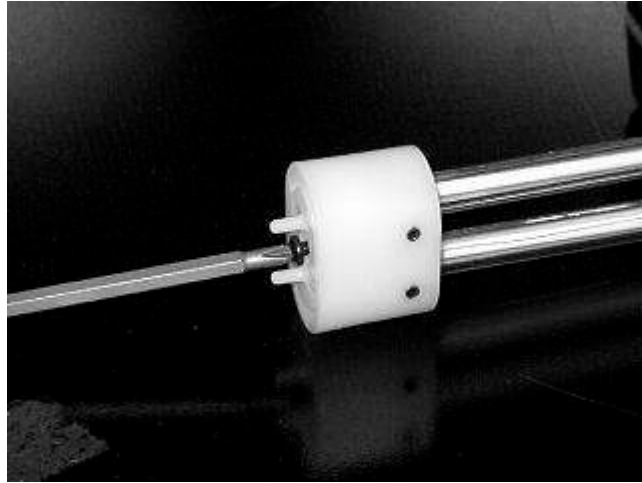
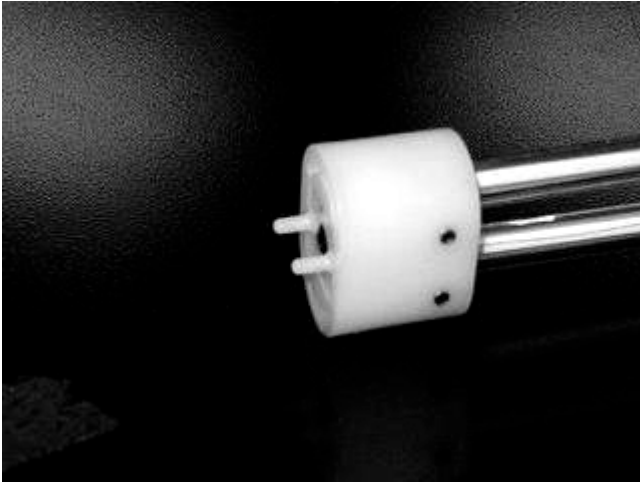
IGT S2000 COIN LAMP CONNECTION

Configuring the CCFL lamp for vertical or horizontal sockets.

The CCFL retrofit lamp assemblies have a reflector strip painted on one side of them. Be sure to mount the lamp so that the reflector strip faces the opposite of what you want to illuminate.

Some lamp sockets in the cabinet are oriented horizontally, like some top header lamp sockets. Some are oriented vertically, like belly glass sockets. In order to make sure that the reflector strip is oriented the right way, you may need to rotate the lamp. That is done like this:

If you need to rotate the CCFL lamp so that it is pointed the correct way, loosen the screw on the lampholder ends, rotate the square rotation disk and replace the screw.



Number	Replacement Parts - Item Description
50-0347-00	HARNES 12VDC FOR CCFL KIT
50-0348-90	CCFL ELEMENT ONLY FOR F15
50-0446-90	CCFL ELEMENT ONLY FOR F14
50-0349-00	CCFL INVERTER FOR TWO F15 TUBES
50-0448-00	CCFL INVERTER FOR TWO F14 TUBES
50-0449-00	CCFL INVERTER FOR ONE F14 TUBE
50-0450-00	CCFL INVERTER FOR ONE F15 TUBE
50-0467-00	LAMP ASSY ONLY CCFL 2 F15 WITH LAMPHOLDER
50-0467-10	LAMP ASSY ONLY CCFL 1 F15 WITH LAMPHOLDER
50-0467-20	LAMP ASSY ONLY CCFL 2 F14 WITH LAMPHOLDER
50-0467-30	LAMP ASSY ONLY CCFL 1 F14 WITH LAMPHOLDER
95-2517-00	LAMPHOLDER FOR SINGLE CCFL LAMP
95-2517-20	LAMPHOLDER FOR DUAL CCFL LAMPS
95-2653-00	ROTATION DISK FOR CCFL LAMP HOLDER
43-0152-00	SCREW SET, 6-32X.25 LG. CUP PT
43-1156-00	SCREW 6-32 X 3/16 PAN HD BLACK OXIDE

CCFL Replacement Parts / Accessories

Part Number	Description
80-0414-20	12VDC Desktop Power Supply, UL Listed
50-0348-90UL	Replacement F15T8 Dual Element
50-0446-90UL	Replacement F14T8 Dual Element
96-0640-00	Power Harness Extension
50-0349-00UL	Replacement F15T8 Inverter for Two Elements, UL Listed
50-0448-00UL	Replacement F14T8 Inverter for Two Elements, UL Listed
50-0449-00UL	Replacement F14T8 Inverter for One Element, UL Listed