

Installation

Purpose

This manual provides instructions for installing light kits K35370 and K94287 in electronic master dispensing units. The master/satellite light comes on when the handle on the satellite is raised to signal the customer the satellite unit is ready to dispense. For customers using only the master unit, the light alerts the customer if the satellite is being used.

The kits are one of three options that meets the Weights and Measures requirements. The other options, fence barricade and manual visible valve, are not provided by Gilbarco[®].

The kits are used in the following models:

Kit Number	Unit type
K35370	Super-Hi™ High Gallon master and satellite dispenser (single, dual*, and combo)
	Ultra-Hi™ High Gallon master and satellite dispenser (single, dual*, and combo)
	Highline™ High Gallon master and satellite dispenser (single, dual*, and combo)
K94287	Legacy [®]

*** For a dual unit, two K35370 kits are required. The light kits must be installed facing the appropriate satellite. All other units require one kit.**

Read NFPA 30A and NFPA 70



Before installing the equipment, the installer must read, understand and follow this manual, NFPA 30A and NFPA 70 and applicable federal, state and local codes and regulations. Failure to do so may adversely affect the safe use and operation of the equipment.

Read instructions for this and all related equipment. Do not allow untrained or unauthorized persons to service equipment. Call a Gilbarco Authorized Service Contractor (ASC) if you need help.

Related Documents



Refer to the following attached field engineering (FE) diagrams:

- FE-263 Light Kit Dispenser Wiring (Pre-1990 Units) Highline High Gallon Single and Dual; and Super-Hi Single Preset and Fillup Master/Satellite System
- FE-264 Light Kit Dispenser Wiring (1990 and later Units) Highline High Gallon, Super-Hi, and Ultra-Hi Single and Dual Single Preset and Fillup Master/Satellite System
- FE-332 Legacy High Gallon Master and Satellite Dispenser and Ultra-Hi Gallon Master and Satellite Dispenser

Refer to the following manuals for additional information:

- MDE-2531 Pump & Dispenser Start-Up & Service Manual
- MDE-2241 Ultra-Hi™ Master Satellite System Installation Manual
- MDE-2275 High Gallon Highline™ Installation Manual
- PT-1875 Legacy[®] Series Illustrated Parts Manual

Required Tools

The following tools are needed to perform this installation:

- air-powered drill (for Highlines without factory-made holes)
- drill bit, 11/16 inches (for Highlines without factory-made holes)
- nutdriver set
- pin extractor
- pliers
- screwdriver, Phillips
- wire strippers

Parts Lists

K35370 for Highline™ Master/Satellite

The following parts are in Kit K35370.

Part Description	Part Number	Qty.
cover light	N23102	1
decal, satellite	K93526	1
indicator light assembly	N23101-G1	1
installation instructions	MDE-2386	1
label, UL certification	K93663	1
O-ring	N16891-27	1
screw, #10-32-1/4" lg.	Q10060-58	2
screw, #10-32x3/8" lg.	Q10519-01	2
tube, heat shrink	Q10141-06	1
wire nut	K81105-20	4

K94287 for Legacy® Master/Satellite

The following parts are in Kit K94287.

Part Description	Part Number	Qty.
cover light	N23102	1
decal	K93526	1
indicator light assembly	N23101-G2	1
installation instructions	MDE-2386	1
O-ring	N16891-27	1
screw	K85736-15	1
wire nut	K81105-20	2

Safety



Alert Symbol

This is a standard alert symbol. When you see this symbol, along with the following signal words, be alert to the potential for personal injury.

Signal Words

These signal words alert you to important safety hazards.

 DANGER
The hazard or unsafe practice will result in severe injury or death.



 WARNING
The hazard or unsafe practice may result in severe injury or death.

 CAUTION
The hazard or unsafe practice could result in minor injury .



- 1 Read all instructions before beginning.
- 2 Follow all of the following safety precautions.
 - Barricade the work area.
 - Do not allow vehicles or unauthorized people in work area.
 - Do not smoke or have open flames in work area.
 - Do not use power tools in work area.
 - Wear protective gear while performing this procedure.
- 3 Record all electronic and mechanical totals.
- 4 Isolate each pump at distribution box.
- 5 Turn off all power to unit, unit lights and submerged turbine pumps (STPs).
 - Turn off circuit breakers for unit being serviced.
 - Multiple disconnects may be required.
- 6 Some of the procedures in this manual involve removing and reconnecting components either at start-up or to isolate a problem. Turn power off before performing these procedures.

Danger may exist even when the power is turned off. Always remove power and discharge, and ground a circuit before touching components.
- 7 Do not be misled by the term “low voltage.” Potential voltage as low as 50 volts may cause death under adverse conditions, whenever possible, keep one hand away from equipment to reduce hazard of current flowing through your body.
- 8 High voltage of 120 volts alternating current (VAC) is used for operation of this equipment. Death on contact may result if you fail to observe safety precautions.
- 9 It is recommended someone who is capable of rendering first aid is present. Be familiar with cardiopulmonary resuscitation (CPR) methods if you are working with or near high voltages. This information may be obtained from the American Red Cross.

 WARNING

<p>You are working in a potentially dangerous environment of flammable fuels, vapors, and high voltage.</p> <p>Fire, explosion, or electrical shock and serious injury or death could result if safe service procedures are not followed.</p> <p>Remove all power to dispenser, including lights and power to associated STPs, before servicing. Avoid contacting large capacitors. Ground a circuit before touching components</p>

Removing and Preparing Column Cover

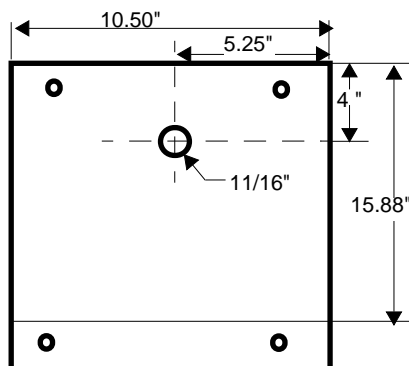
- 1 Remove mounting screws. Refer to illustrations on page 6.
 - For Highline™ units, unscrew four mounting screws on master unit column cover.
 - For Legacy® units, unscrew the mounting screws on bottom of master unit column cover.
- 2 Remove column cover.

Drilling Hole for Column Wires on Highline™ Models

Note: If hole plug is in sheet metal, go to “Locating Column Wires on Highline Models Built Before January 1990” on page 4. Models without a hole plug will require drilling.



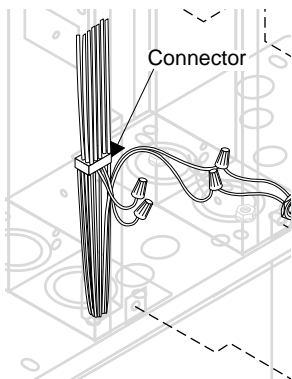
- 1 Drill 11/16 inch diameter hole in cover.
- 2 Deburr hole.



Locating Column Wires on Highline Models Built Before January 1990

- 1 Use the following table to locate the column wires according to model type.

Model Number	Flow Rate	Pump/Dispenser	Locate Column Wire
AC794 AC795	High	Master (Single)	Black wire A12 and Blue wire A8 at connector J7
		Master (Dual)	<p>Side A: Black wire A12 and Blue wire A8 at connector J7</p> <p>Side B: Black wire B12 and Blue wire B8 at connector J8.</p>
AC798	Super-Hi	Master (Single)	Black wire A12 and Blue wire A8 at connector J7



- 2 Cut the specified wires 2 inches below the connector (either J8 or J7).
- 3 Strip 5/8 inches off end of the loose wires.
- 4 Cap off wires hanging from connector with wire nut (K81105-20).

Locating Column Wires on Highline™ Models built after January 1990 and Legacy®

- 1 Use the following table to locate the column wires according to model type.

Highline High and Super-Hi Gallon (for models built after January 1990)

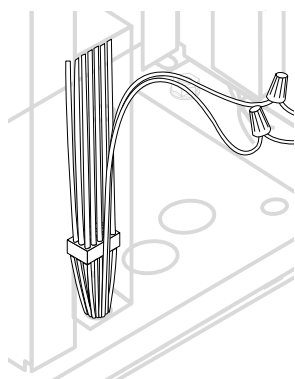
Model Number	Flow Rate	Pump/Dispenser	Locate Column Wire
AC794 AC795	High	Master (Single)	SP1 and SP2 (capped yellow wires)
		Master (Dual)	SP1, SP2, SP3 and SP4 (capped yellow wires)
AC798	Super-Hi	Master (Single)	SP1 and SP2 (capped yellow wires)

Highline™ with Preset and Fillup Options

Model Number	Flow Rate	Pump/Dispenser	Locate Column Wire
AC799	Ultra-Hi	Master (Single)	SP1 yellow wire connected to Pin 14 on J2 connector SP2 yellow wire connected to Pin 6 on J2 connector
		Master (Dual)	Side A: SP1 and SP2 (yellow wires) Side B: SP3 and SP4 (yellow wires)
AC794	High	Master/Satellite Combination	SP1 and SP2 (capped yellow wires)
AC795	Super-Hi		
AC799	Ultra-Hi		

Legacy Models

Model Number	Flow Rate	Pump/Dispenser	Locate Column Wire
JHB600 JHB800	Ultra-Hi	Master Dispenser	
JHC600 JHC800	Ultra-Hi or High	Satellite Dispenser	Side A: SP3 and SP4 (capped yellow wires)
JHD800	Ultra-Hi	Combo Master/ Satellite	Side B: SP1 and SP2 (capped yellow wires)
JHB300 JHB310 JHB400 JHB410	High	Master Dispenser	
JHD500 JHB510	High	Combo Master/ Satellite	

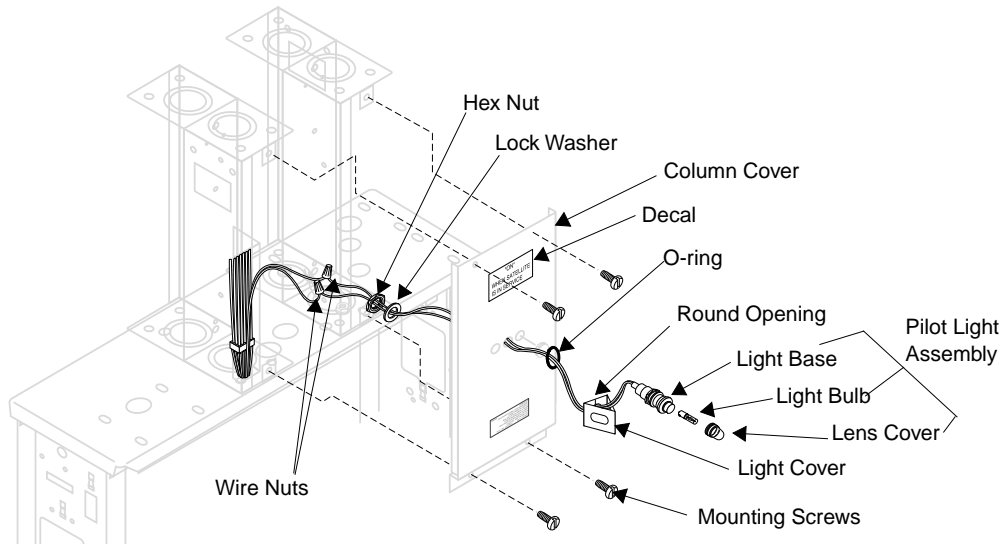


- 2 Prepare specified wires according to model:
- For dual B-Side models, remove specified wires from connector using pin extractor
 - For single or dual A-Side models, cut permacaps off of specified wires.
- 3 Strip 5/8 inches off end of the loose wires.

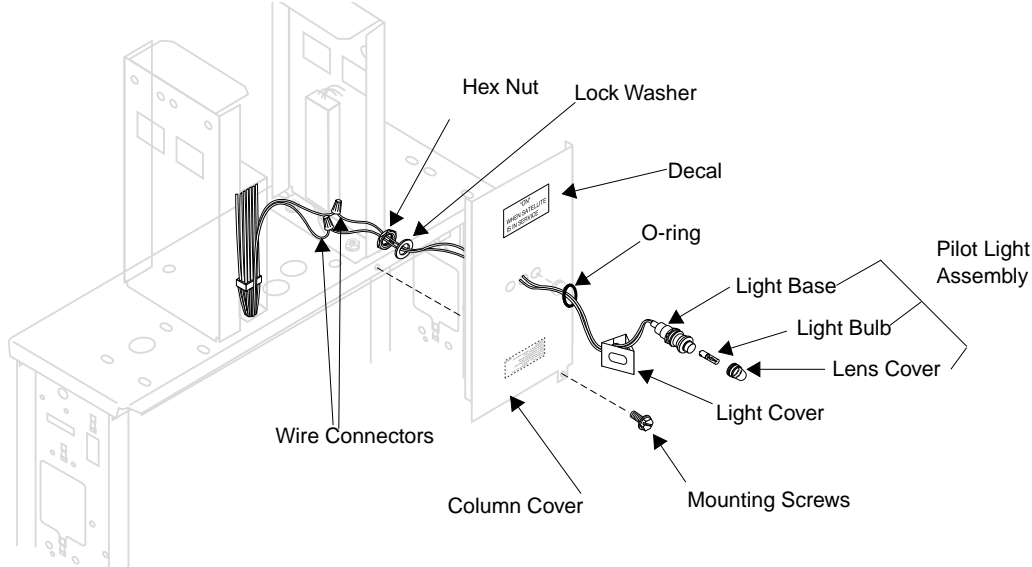
Installing Light

Highline™ Series)

Note: Illustration shows spare wire connection for models built after 1990. See “Locating Column Wires on Highline Models Built Before January 1990” on page 4 for illustration of wire connections on models built before 1990. Rest of assembly illustration is same in all Highline models.



Legacy® Series



- 1 Unscrew and remove lens cover and light bulb from pilot light.
- 2 Feed light wires and light base through circular hole in light cover.
- 3 Route light wires through O-ring. Slide O-ring behind light cover.
- 4 Remove hole plug (newer Highlines and Legacy will have hole plug).
- 5 Route light wires through hole in column cover.

- 6 Route light wires through lock washer and hex nut.
Note: Check O-ring for correct placement when tightening hex nut.
- 7 Tighten hex nut to secure light base.
- 8 Connect column wires using attached wire diagrams according to model.
*Note: Use K81105-20 wire nuts provided with kit.
In all cases Side A of the master pump controls Satellite 1, and Side B of the master pump controls Satellite 2.*
- 9 Replace light bulb in light base.
- 10 Screw lens cover into light base.

Reinstalling Column Cover

- 1 Attach column cover with provided screws:
For Highline
 - Two Q10060-58 screws (#10 x 1-1/4 inch) on the top.
 - Two Q10519-01 screws (#10 x 3/8 inch) on the bottom.**For Legacy**
 - One K85736-15 screw on bottom.
- 2 Attach decal to column cover above light.

Connecting Wires in Junction Box

Note: The National Electrical Code requires the sealing compound around wires at junction box entrances are not to be disturbed.

- 1 Remove junction box cover.
- 2 Wire junction box as shown in appropriate wiring diagrams. Locate light wires and connect as shown on wiring diagrams.
Note: Changes to valve wiring are required.
- 3 Re-install junction box cover.
- 4 Wire between master junction box and satellite junction box as shown on attached wiring diagrams.
Note: In some applications, it may be necessary to add an additional 18 gauge wire between the master and satellite. This is necessary where an existing master/satellite has been wired for simultaneous operation.

Returning Unit to Operation

- 1 Restore power to dispensing unit being serviced.
- 2 Check for proper operation of model and light.

