#### LIGHT CONTROL SYSTEM



#### Light Control System

55-810-00

- System incl. light control, remote intensity control, transformer, transformer cord and installation kit
- NOTE! Handpiece tubing must be ordered separately (See list below)
- This system operates a bright white light with a small lamp in the handpiece connector
- Halogen Lamp 3.5 V 720 MA
- Power Transformer 120 VAC 60Hz 17 W Output 12 VAC 830 MA
- Light control ouput 3.0 to 4.5 VDC
- The light can be activated by either foot control or automatic handpiece holder pilot air with the flick of a switch
- Operates up to two handpieces
- Time delay feature built-in (twelve second time delay when installed in foot control activation mode)
- · Adjustable intensity control can be remote mounted
- Compact size 1 1/16 high X 4 3/8 long X 2 3/4 wide



Note: Conventional tubing used on both straight and coiled tubing assemblies listed below

### ORDER SEPARATELY HANDPIECE ILLUMINATION TUBING WITH LAMP

Black Coiled	55-055-00
Black Straight	<i>55-015-00</i>
Gray Coiled	<i>55-455-00</i>
Gray Straight	<i>55-415-00</i>
Surf Coiled	<i>55-355-00</i>
Surf Straight	<i>55-315-00</i>
Sterling Coiled	<i>55-555-00</i>
Sterling Straight	<i>55-515-00</i>
Surf 6 Coiled	<i>55-655-00</i>
Surf 6 Straight	<i>55-615-00</i>

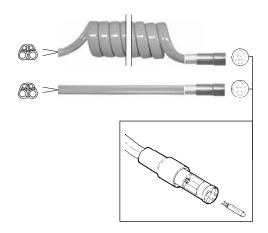
#### REPLACEMENT PARTS

Light Control Only	55-811-00
Halogen Lamp	16-056-00
Remote Intensity Control	<i>55-812-00</i>
Transformer	<i>55-813-00</i>
Transformer Cord Assembly	<i>55-814-00</i>
Installation Kit	<i>55-</i> 815-00

# FIBER OPTICS

#### CHAPMAN-HUFFMAN, INC.

### HANDPIECE ILLUMINATION SYSTEM - LAMP STYLE W/ CONVENTIONAL ASEPSIS TUBING





Note: Conventional tubing used on handpiece tubing assemblies listed

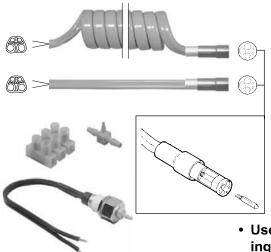
LAMP SYSTEM WITH COILED OR STRAIGHT CONVENTIONAL HANDPIECE TUBING

TUBING TYPE	<u>120 VOLT</u>
Black Coiled	55-050-00
Black Straight	55-010-00
Gray Coiled	55-450-00
Gray Straight	55-410-00
Surf Coiled	55-350-00
Surf Straight	55-310-00
Sterling Coiled	55-550-00
Sterling Straight	<i>55-510-00</i>

#### (7 Ft. tubing standard, 12 Ft. special available)

- This Handpiece Illumination System Kit is easily installed to any handpiece control.
- System is activated from handpiece drive air line back pressure. Handpiece connector will adapt to all standard (5 hole MIDWEST) pattern fiber optic handpieces. Halogen lamp provides intense white light for intra-oral use.
- ISO standard metal fiber optic handpiece terminal
   5 hole MIDWEST pattern with stainless steel nut
- Conventional asepsis style lightweight, flexible 7 ft. handpiece tubing (12 ft. special available)
- Halogen lamp 3.5V, 720MA
- Power transformer 120VAC, output 3.7 VAC, 720MA
- · Air electric switch
- · Installation hardware and instructions

#### HANDPIECE ILLUMINATION TUBING KIT



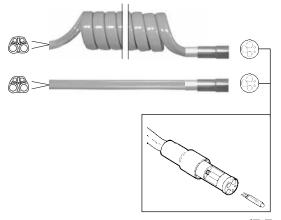
Black Coiled	<i>55-057-00</i>
Black Straight	<i>55-017-00</i>
Gray Coiled	<i>55-457-00</i>
Gray Straight	55-417-00
Surf Coiled	<i>55-357-00</i>
Surf Straight	<i>55-317-00</i>
Sterling Coiled	<i>55-557-00</i>
Sterling Straight	<i>55-517-00</i>

(7 Ft. tubing standard, 12 Ft. special available)

- Used to add extra handpiece Illumination Tubing Assembly to the Chapman-Huffman Handpiece Illumination Lamp Style System
- ISO standard metal fiber optic handpiece terminal (5 hole MIDWEST) pattern with stainless steel nut
- Conventional asepsis style lightweight, flexible 7 ft. handpiece tubing (12 ft. special available)
- Halogen lamp 3.5V, 720MA
- Air electric switch
- Installation hardware and instructions

# Note: Conventional tubing used on handpiece tubing assemblies listed

#### HANDPIECE ILLUMINATION REPLACEMENT TUBING WITH LAMP



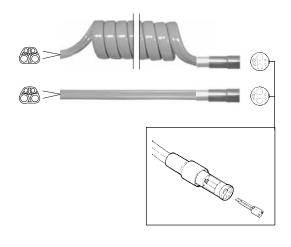
Black Coiled	<i>55-055-00</i>
Black Straight	<i>55-015-00</i>
Gray Coiled	<i>55-455-00</i>
Gray Straight	<i>55-415-00</i>
Surf Coiled	<i>55-355-00</i>
Surf Straight	<i>55-315-00</i>
Sterling Coiled	<i>55-555-00</i>
Sterling Straight	55-515-00
Surf 6 Coiled	<i>55-655-00</i>
Surf 6 Straight	<i>55-615-00</i>
-	

#### (7 Ft. tubing standard, 12 Ft. special available)

- Conventional tubing as pictured with separate drive air, water, chip air & exhaust, extruded in one tubing
- Replaces tubing assembly in Chapman-Huffman's Handpiece Illumination system Lamp Style & others
- ISO Standard metal fiber optic Handpiece terminal (5 hole MIDWEST) pattern with stainless steel nut.
- Conventional asepsis style lightweight flexible 7 ft. handpiece tubing (12 ft. special available)
- Halogen Lamp 3.5V, 720MA, may be used with AC or DC voltage

# FIBER OPTICS

#### HANDPIECE ILLUMINATION REPLACEMENT TUBING W/ ISO TYPE C ADAPTER



Black Coiled Black Straight	55-056-00 55-016-00
Gray Coiled	55-456-00
Gray Straight	55-416-00
Surf Coiled	55-356-00
Surf Straight	55-316-00
Sterling Coiled	55-556-00
Sterling Straight	55-516-00
Surf 6 Coiled	55-656-00
Surf 6 Straight	55-616-00

#### (7 Ft. tubing standard, 12 Ft. special available)

- Conventional tubing as pictured with separate drive air, water, chip air and exhaust, extruded in one tubing
- Replaces 7 ft. tubing assembly in systems requiring ISO-C adapter (12 ft. special available)
- ISO-C standard metal fiber optic handpiece terminal with stainless steel nut
- Adapts BIEN-AIR, KAVO, W&H, MIDWEST XGT and other handpieces

#### **SWIVEL COUPLER**

20-079-00



#### Replacement Bulb Only

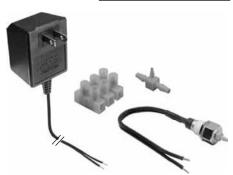
16-061-00

- KAVO style handpiece Coupler
- 6-Pin, Bulb in Coupler Style Swivel
- Bulb included with Coupler
- Fits Chapman-Huffman 6-Pin tubing and others
- KAVO Cross ref. # 465LRN/553-1550

#### **EURO HANDPIECE ILLUMINATION SYSTEM - LAMP STYLE**



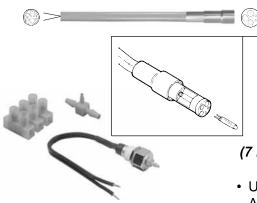
LAMP SYSTEM STRAIGHT	
TUBING TYPE	<u>120 VOLT</u>
Black Straight	<i>55-001-00</i>
Gray Straight	<i>55-400-00</i>
Surf Straight	<i>55-300-00</i>
Surf 6 Straight	55-600-00



#### (7 Ft. tubing standard, 12 Ft. special available)

- This Handpiece Illumination System Kit is easily installed to any handpiece control.
- System is activated from handpiece drive air line back pressure. Handpiece connector will adapt to all standard 5 hole MIDWEST pattern fiber optic handpieces. Halogen lamp provides intense white light for intra-oral use.
- ISO standard metal fiber optic handpiece terminal (5 hole MIDWEST) pattern with stainless steel nut
- Euro asepsis style lightweight, flexible 7 ft. handpiece tubing (12 ft. special available)
- Halogen lamp 3.5V, 720MA
- Power transformer 120 VAC output 3.7 VAC, 720 MA
- Air electric switch
- · Installation hardware and instructions

#### EURO HANDPIECE ILLUMINATION TUBING KIT



Black Straight	55-007-00
Gray Straight	55-407-00
Surf Straight	55-307-00
Surf 6 Staight	55-607-00

#### (7 Ft. tubing standard, 12 Ft. special available)

- Used to add extra handpiece Illumination Tubing Assembly to the Chapman-Huffman Euro Illumination Lamp Style System
- ISO standard metal fiber optic handpiece terminal.
   (5 hole MIDWEST) pattern with stainless steel nut
- Euro asepsis style lightweight, flexible 7 ft. handpiece tubing (12 ft. special available)
- Halogen lamp 3.5V, 720MA
- Air electric switch
- Installation hardware and instructions



 Black Straight
 55-005-00

 Gray Straight
 55-405-00

 Surf Straight
 55-305-00

 Surf 6 Straight
 55-605-00

(7 Ft. tubing standard, 12 Ft. special available)

- Used to replace tubing assembly in Chapman-Huffman's Handpiece Illumination System - Lamp Style and others
- ISO standard metal fiber optic handpiece terminal (5 hole MIDWEST) pattern with stainless steel nut
- Euro asepsis style lightweight, flexible 7 ft. handpiece tubing (12 ft. special available)
- Halogen lamp 3.5V, 720MA
- · Lamp may be used with AC or DC voltage

### EURO HANDPIECE ILLUMINATION REPLACEMENT TUBING WITH ISO TYPE C ADAPTER



 Black Straight
 55-006-00

 Gray Straight
 55-406-00

 Surf Straight
 55-306-00

 Surf 6 Straight
 55-606-00

(7 Ft. tubing standard, 12 Ft. special available)

- Used to replace tubing assembly in systems requiring ISO-C adapter
- Euro style 7 ft. tubing (12 ft. special available)
- ISO-C standard metal fiber optic handpiece terminal with stainless steel nut
- Adapts BIEN-AIR, KAVO, W&H, MIDWEST XGT and other handpieces

#### **HALOGEN LAMP**



16-056-00

016-75-00

- Use in Chapman-Huffman handpiece Illumination System - Lamp Style
- Lamp specifications:
  3.5 V, 720 MA Body Dia, .160" (4.07mm)
  Overall Length .856" (21.74mm) Pin Length .170" (4.32mm) Pin Dia, .020" (.51mm)
  May be used with AC or DC voltage

#### ISO TYPE C ADAPTER



800-225-4621

 Easily converts Chapman-Huffman handpiece illumination tubing connectors from American ISO standard to European ISO-C standard. Adapts to BIEN-AIR, KAVO, W&H, MIDWEST XGT and other handpieces

FIBER OPTICS

#### **SWIVEL COUPLER**



#### Replacement Bulb Only

20-079-00 16-061-00

- · KAVO style handpiece Coupler
- 6-Pin. Bulb in Coupler Style Swivel
- · Bulb included with Coupler
- Fits Chapman-Huffman 6-Pin tubing and others
- KAVO Cross ref. # 465LRN/553-1550

#### **TRANSFORMER**



#### 120 Volt

016-84-00

- Replaces transformers used in Chapman-Huffman Handpiece Illumination System - Lamp Style
- Output 3.7 VAC @ 720MA (When installed in Chapman-Huffman system with lamp lit)

#### HANDPIECE ILLUMINATION SYSTEM INSTALLATION KIT



95-326-00

- Power transformer 120 VAC, Output 3.7 VAC, 720 MA
- · Air Electric Switch
- · Installation hardware and instructions
- With this kit, and ordering separately any 55 Series Handpiece Illumination replacement tubing with ISO Type C adapter, you can make your own Handpiece Illumination System with conventional tubing or Euro style tubing.

#### HANDPIECE ADD ON INSTALLATION KIT



95-310-00
this kit and ordering congretally any 55 Series

 With this kit and ordering separately any 55 Series Handpiece Illumination Replacement Tubing, with ISO-C type adapter, or lamp style replacement tubing, you can make your own Handpiece Illumination Tubing Kit, with conventional tubing or Euro style tubing

#### AIR ACTUATED ELECTRIC SWITCH ASSEMBLY



#### Normally Open

12-725-00

- 120V, 5 amp switch
- Requires 10 PSI for activation
- 1/16" barb fitting
- 18 AWG wire, 6"
- · Mounting hardware 15/32-32 thread with nut

#### TERMINAL STRIP ASSEMBLY



#### 95-002-00

- 3 pole terminal strip accepts 20-14 AWG wire with screw clamp connections
- Used for Chapman-Huffman Illumination System wire connections
- · Includes mounting tape and mounting screw

#### KAVO KL700 ELECTROTORQUE PLUS STYLE TUBING ASSEMBLY



55-730-00

- Fits KAVO KL701 Brushless Electric Motor
- Features water flow control at connector
- Very light gray in color
- Supplied without 5-position green electrical connector or ferrite bead.
- KAVO cross ref. # 1001.9081

#### 5-POSITION ELECTRICAL CONNECTOR





 Fits KAVO KL700 ELECTROTORQUE PLUS Tubing

#### FERRITE BEAD





016-59-00

016-58-00

- Suppression filter used to reduce electrical noise
- Used on KAVO KL700 ELECTROTORQUE PLUS Tubing

#### REPLACEMENT TUBING LAMP MODULE STYLE WITH LONG NUT



Gray

55-715-00

- Straight replacement tubing ISO B lamp module style (internal) for the following: MIDWEST old style light-pak system KINETIC # 1211 ISO -B Light source straight tubings
- HENRY SCHEIN MASTERLIGHT ISO-B (5 hole) tubing
- Long stainless steel handpiece nut to accept lamp module
- Includes lamp module assembly 5-hole 16-070-00 (sold on pg. 17) 3.5V 720MA
- Standard length 5 ft.

#### FIBER OPTIC ILLUMINATOR AND TRANSFORMER

60-535-00

16-411-00



# REPLACEMENT COMPONENTS Fiber Optic Illuminator 60-540-00 Illuminator Transformer 60-545-00 Connecting Cable Assembly 60-546-00

More compact size for additional applications

Lamp Replacement

- Connections for one, two, or three fiber optic handpiece tubings
- Designed to mount to new or existing dental units
- Fiber Optic Illuminator mounts near the unit head to provide illumination through a fiber optic tubing assembly with a fiber optic bundle (tubing assembly not included)
- A switch on the Illuminator selects between medium and high intensity
- The fiber optic Illuminator can be set for auto holder or foot control activation, at time of installation
- Includes 120 VAC transformer with power cord
- Connecting cable supplies low voltage electrical power to the Illuminator from the transformer
- Installation hardware packet and instruction booklet included
- Illuminator Dimensions 2" high X 3" wide X 6 1/4" long
- Transformer Dimensions 2 7/8" high X 3 3/8" wide X 3 1/2" long
- White finish

#### LIGHT SOCKET ASSEMBLY

60-542-00



Light socket fits Chapman-Huffman 60-540-00,
 Fiber Optic Illuminator



2 HP Foot Control Activated 60-575-00

3 HP Foot Control Activated 60-580-00

- · Foot control activated
- Connections for two or three handpieces
- · High intensity adjustable white light
- Uses standard bulb (16-410-00)
- Compact size
- Dimensions: 7 1/2" X 3 1/2" X 4 1/2"
- Weighs 3 pounds
- Fan cooled
- · White housing

#### LIGHT SOURCE AUTO HOLDER ACTIVATED



2 HP Auto Holder Activated 60-585-00

3 HP Auto Holder Activated 60-590-00

- Auto holder activated (when fiber optic handpiece is picked up from auto pilot valve holder, light source will turn on automatically)
- Connections for two or three handpieces
- · High intensity adjustable white light
- Uses standard bulb (16-410-00)
- Compact size
- Dimensions: 7 1/2" X 3 1/2" X 4 1/2"
- · Weighs 3 pounds
- Fan cooled
- White housing

#### SWIVEL COUPLER

20-077-00



- This coupler works on the four Fiber Optic Handpiece Tubings on the next page (pg. 79)
- KAVO style handpiece Coupler
- 5 hole Fiber Optic Standard Swivel
- Used with a fiber optic tubing having a fiber optic bundle to convey light to the Coupler & Handpiece
- KAVO Cross ref. # 1390/553-1390

#### STANDARD STRAIGHT 'WITH' TOUCH CONTROL WIRE - ASEPSIS TUBING



## TUBING SIZE PART NUMBER BY COLOR ALL WITH METAL CONNECTORS

5' tubing w/ 7' bundle	Surf	54-300-00
	Gray	<i>54-400-00</i>
7' tubing w/ 9' bundle	Black	<i>54-002-00</i>
	Surf	54-301-00
	Gray	54-401-00
10' tubing w/ 12' bundle	Black	54-003-00
	Surf	54-302-00
	Gray	54-402-00
12' tubing w/ 14' bundle	Black	54-004-00
	Surf	54-303-00
	Gray	54-403-00
	Surf 6	54-603-00

#### STANDARD COILED 'WITH' TOUCH CONTROL WIRE - ASEPSIS TUBING



7' tubing w/12' bundle	Black	54-051-00
7' tubing w/ 14' bundle	Black	54-052-00
	Surf	<i>54-352-00</i>
	Gray	<i>54-452-00</i>
	Surf 6	54-652-00

#### STANDARD STRAIGHT - ASEPSIS TUBING



Gray	53-400-00
Surf	53-301-00
Gray	53-401-00
Surf	53-302-00
Gray	53-402-00
Black	53-004-00
Surf	53-303-00
Gray	53-403-00
	Surf Gray Surf Gray Black Surf

#### STANDARD COILED - ASEPSIS TUBING



7' tubing w/ 14' bundle	Black	<i>53-052-00</i>
	Surf	53-352-00
	Gray	<i>53-452-00</i>

#### LAMP HOLDER SOCKET ASSEMBLY HIGH VOLTAGE

60-601-00



- Fits Chapman-Huffman Light Source 60-575-00, 60-580-00, 60-585-00 and 60-590-00 and others
- 120 volt high voltage rated
- 300 volt max
- Also fits other high voltage applicationsSocket is designed to the ANSI codes and international standards
- Lamp holders are UL and CSA approved

#### DIMMER CIRCUIT BOARD



- Fits Chapman-Huffman light sources 60-575-00, 60-580-00. 60-585-00 and 60-590-00
- 120 volt

#### **FAN MOTOR**



60-606-00

60-610-00

- Fits Chapman-Huffman light sources 60-575-00, 60-580-00, 60-585-00 and 60-590-00
- · Keeps light source cool
- 120 VAC

#### **FAN MOTOR IMPELLER**



60-607-00

- Fits Chapman-Huffman light sources 60-575-00, 60-580-00, 60-585-00 and 60-590-00
- · Black color

#### POTENTIOMETER WITH SWITCH





- Fits Chapman-Huffman light sources 60-575-00, 60-580-00, 60-585-00 and 60-590-00
- Light intensity adjustment component
- · 250K potentiometer with DPST switch
- Knob not included

#### THERMAL FUSE



- Fits Chapman-Huffman light sources 60-575-00, 60-580-00, 60-585-00 and 60-590-00
- Protects light source by opening circuit if unit over heats
- Reattach using Loctite 414
- Warning: Only replacing this fuse may not correct your light source problem, as this fuse opens when some other component has failed and made unit overheat

#### PLASTIC LIGHT SOURCE DOOR



• Fits fiber optic light source 60-575-00, 60-580-00, 60-585-00 and 60-590-00

#### DOOR LOCK ASSEMBLY



60-615-00

60-600-00

- Fits Chapman-Huffman light sources 60-575-00, 60-580-00, 60-585-00 and 60-590-00
- · Secures light source door to unit housing
- · White plastic construction

#### PLASTIC BARB FITTING



Black- Pkg. of 10 95-134-00 White - Pkg. of 10 95-135-00

- Fits Chapman-Huffman light sources 60-575-00, 60-580-00, 60-585-00 and 60-590-00
- 10-32 male thread X 1/16 barb, plastic construction

#### ILLUMINATOR AIR ELECTRIC SWITCH



Normally Open (Positive) 12-625-00 Normally Closed (Negative) 12-630-00

· Heavy duty air electric switch for the repair of fiber optic light source controls 60-575-00, 60-580-00, 60-585-00, and 60-590-00

#### HANDPIECE ILLUMINATION SYSTEM INSTANT ON KIT





- One kit required for each Fiber Optic Handpiece
- Converts foot control activated Illuminator to Auto Holder Activated Illuminator
- Incl. valve, fittings, tubing & installation instructions