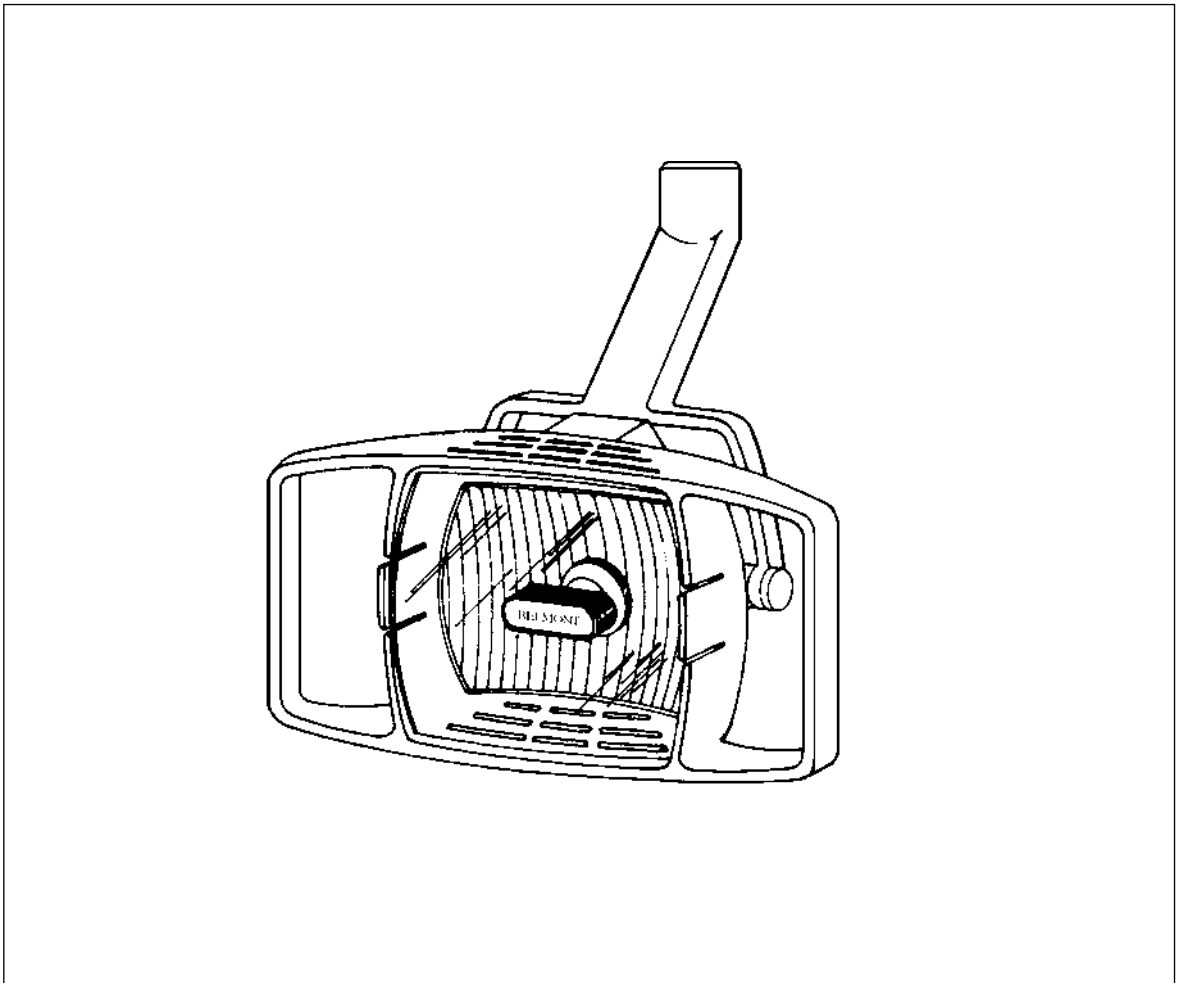


# X-CALIBUR

**HLC**

CEILING MOUNTED DENTAL LIGHT



INSTALLATION and OPERATING  
INSTRUCTIONS

**Belmont**

Rev.3

## HLC CEILING MOUNTED LIGHT

### PRE-INSTALLATION REQUIREMENTS:

To insure a safe and proper installation of HLC ceiling mounted light, certain guidelines concerning building construction must be observed.

### BUILDING REQUIREMENTS:

After determining desired location of light in reference to chair position (see illustration), some alterations (framing, reinforcing), may be required and should be discussed with your local contractor or builder. Major structural modifications are not required, however the mounting bolts used and area of ceiling mounted to should be able to withstand a 250lb. pull-out per bolt. (This is needed to provide ample protection from side impact loads.)

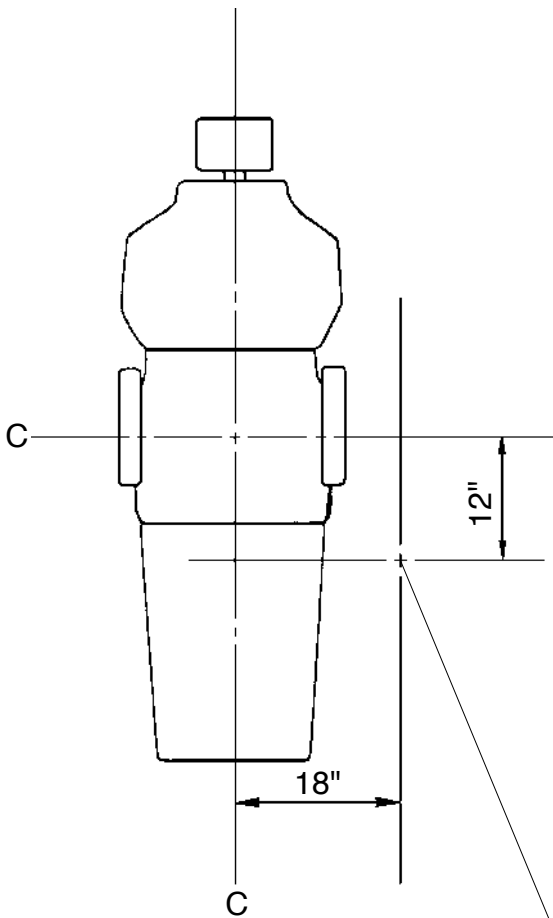
### ELECTRICAL REQUIREMENTS:

Standard 3-wire Romex or conduit w/junction box mounted per local code.

Power required: 0.53 amp at 115 VAC.

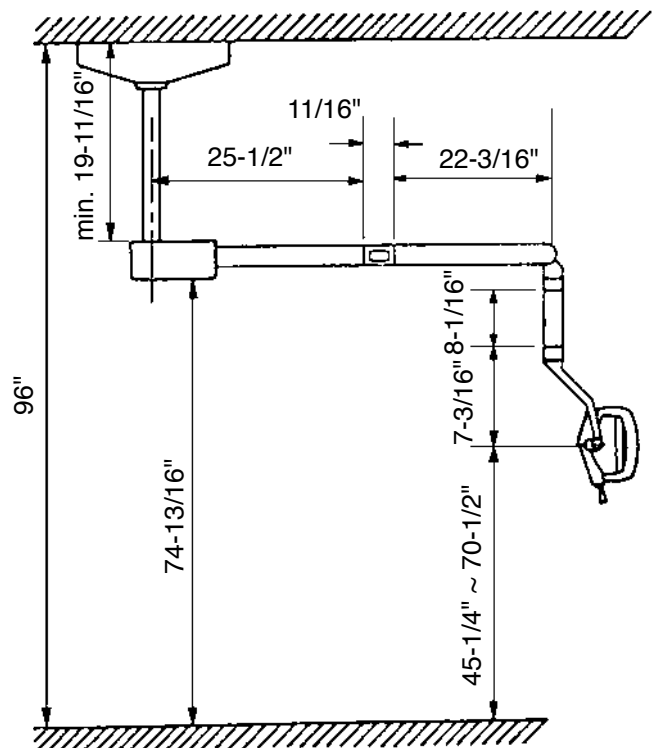
A full-size mounting template, dimensions, and suggested methods of installation are as follows:

This installation must be done by a licensed electrician only, in accordance with the National Electrical Code(in the USA) or Canadian Electrical Code(in Canada), and local electrical codes as applicable.

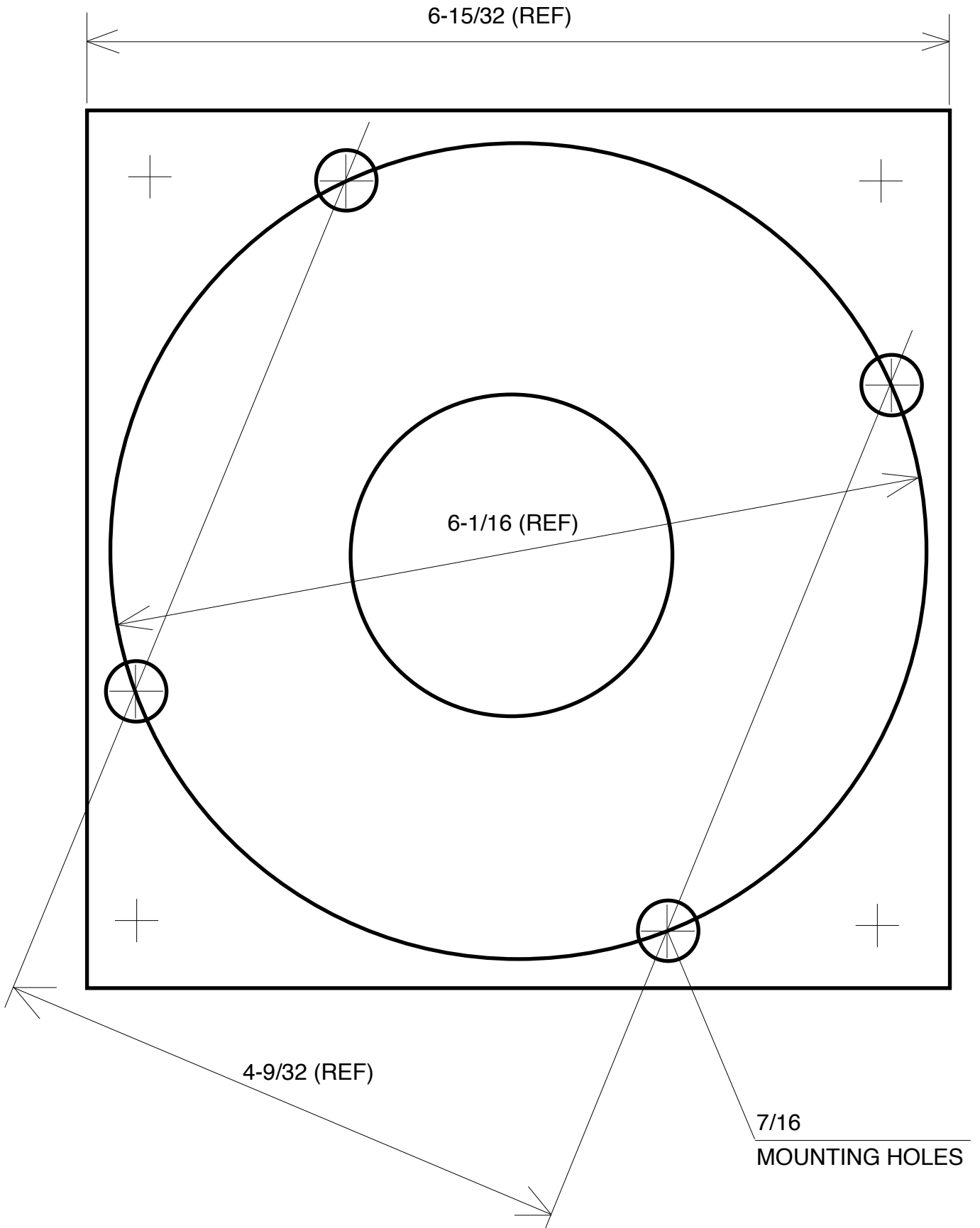


LOCATION OF LIGHT MOUNT (CEILING)  
IN REFERENCE TO CHAIR POSITION

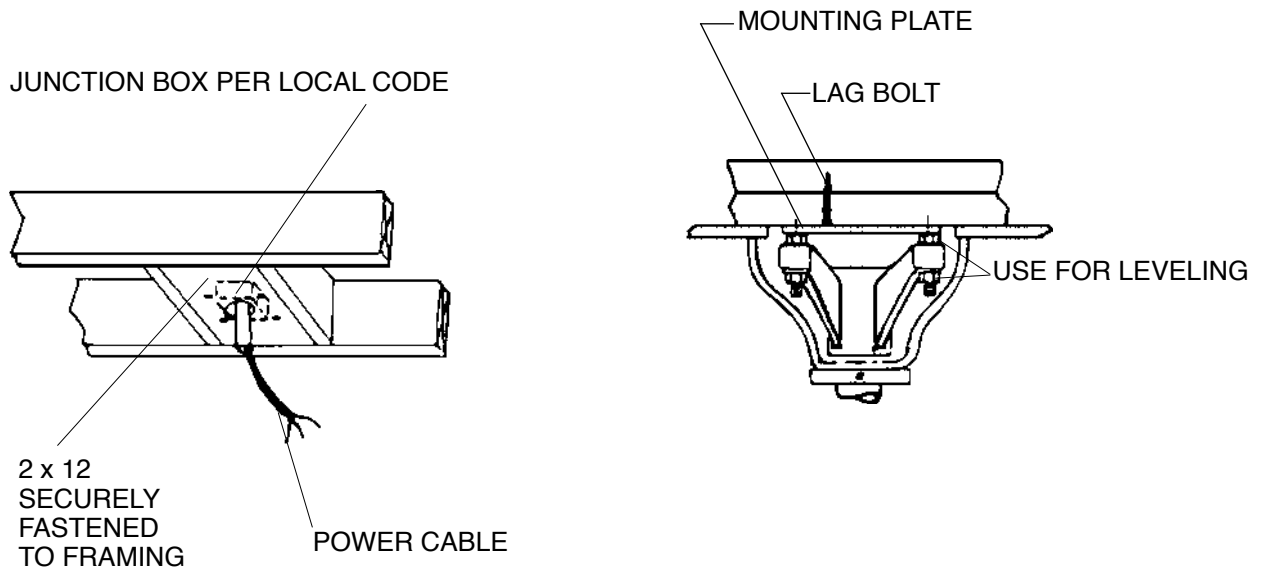
### DIMENSIONS



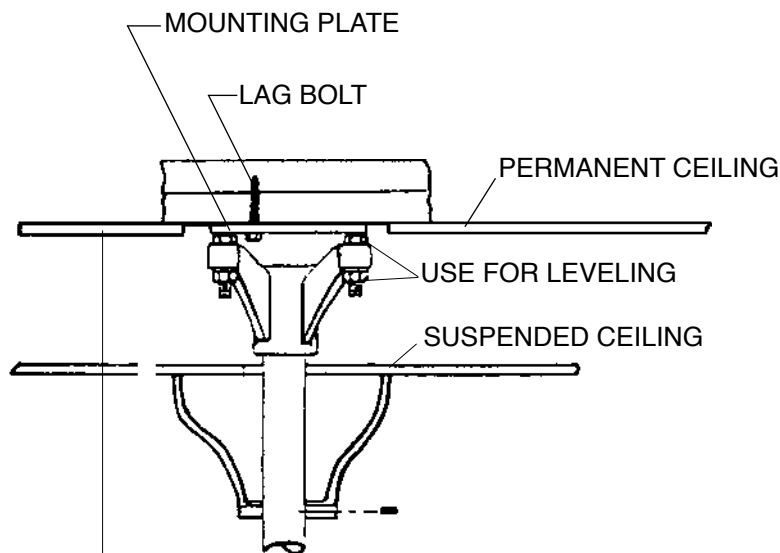
FULL-SIZE MOUNTING TEMPLATE



In conventional ceilings with joist construction, a double 2 x 12 bridge block securely boxed in place is suitable for attachment of mounting plate with four 5/16" x 3" lag bolts.



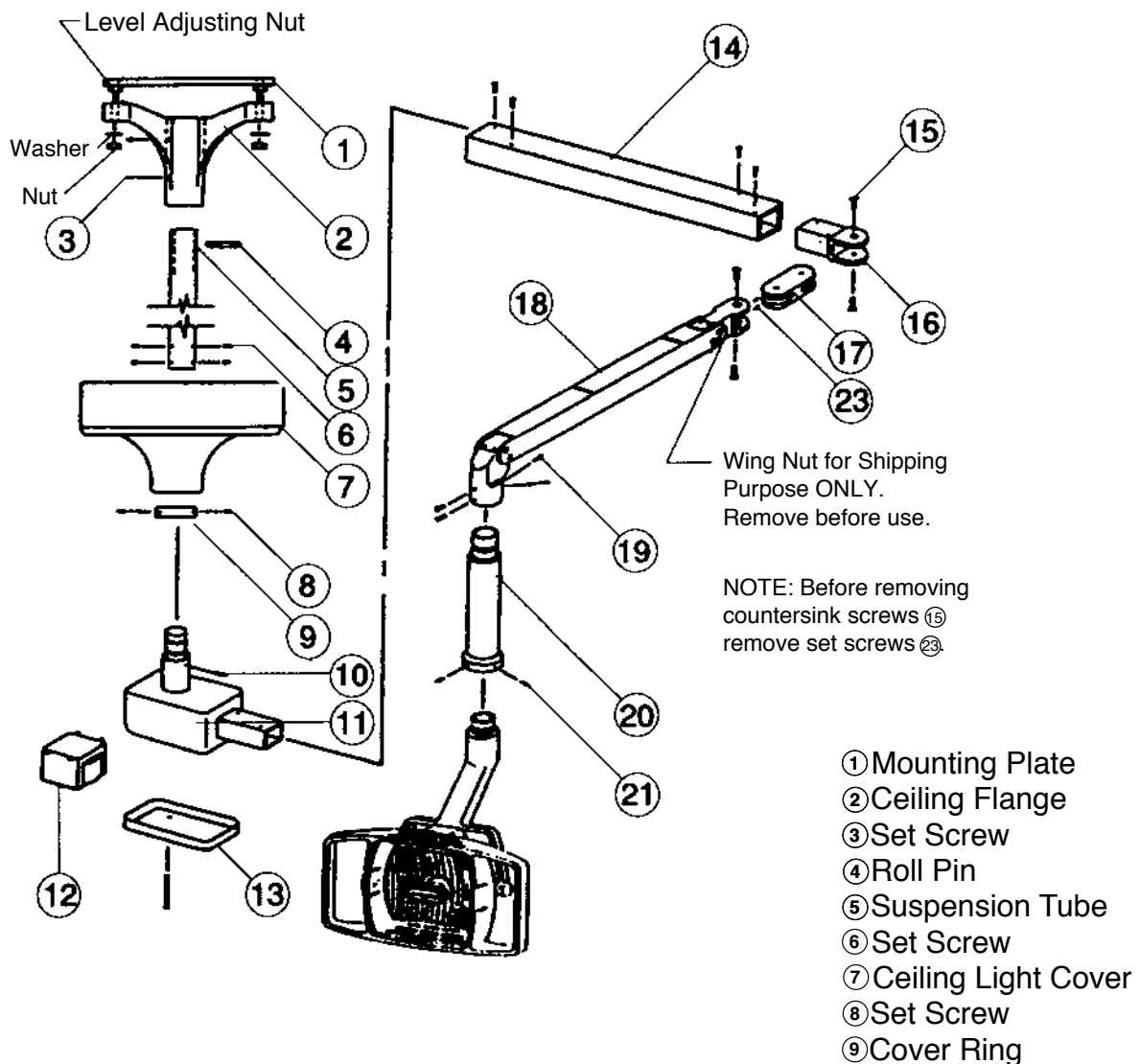
For suspended ceilings, appropriate rigid structure must be attached to ceiling framework. Required lamp height must be determined from permanent ceiling, not suspended ceiling.



DETERMINE REQUIRED LAMP HEIGHT FROM PERMANENT CEILING, NOT SUSPENDED CEILING.

## INSTALLATION INSTRUCTIONS

- 1). Lead out power supply cable from ceiling where light is to be mounted.
- 2). Attach mounting plate ① to the ceiling
- 3). Insert suspension tube ⑤ to the ceiling flange ② and secure with roll pin ④ and set screws③.
- 4). Run power cable through ceiling flange and suspension tube ⑤ .
- 5). Insert four level adjusting nuts between mounting plate ① and ceiling flange ②, then fix the flange ② with four washers and nuts. (Be sure suspension tube ⑤ is perpendicular, if not, adjust with level adjusting nuts.)
- 6). Slide the ceiling light cover ⑦ on the suspension tube ⑤ up to the mounting plate, then slide cover ring ⑨ up to the cover ⑦ (flat surface of the ring ⑨ must be flush against cover ⑦) and tighten three set screws ⑧.
- 7). Connect three wires of power cable to wires from transformer of light. (Black - power, White - neutral, Green - ground.)
- 8). Insert suspension tube ⑤connector of light assembly to suspension tube and tighten four set screws ⑥.



## OPERATION & SERVICE INSTRUCTIONS

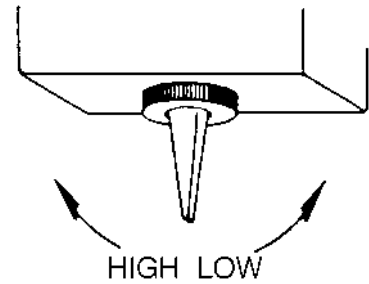
### DUAL INTENSITY ON/OFF SWITCH

1. High Beam; push toggle to left
2. Low Beam; push toggle to right

Switch is conveniently located in light head, enabling intensity to be changed from seated position.

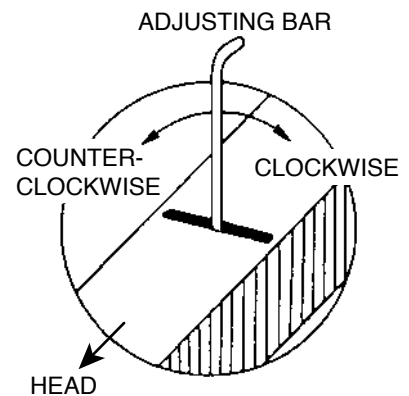
Low Intensity - for longer lamp life and examining facial surfaces.

High intensity - for color matching and examining lingual surfaces.



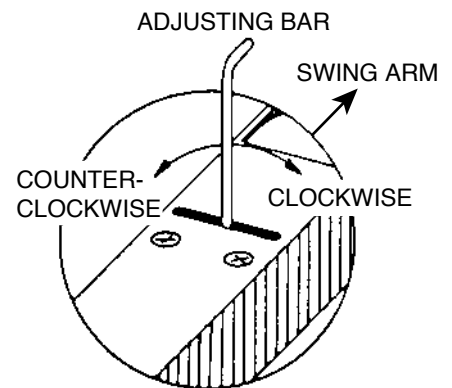
### BALANCE ARM ADJUSTMENT (Should drifting occur)

**IMPORTANT;** Use slot closest to head when making adjustment for drifting of balance arm. Insert adjusting bar into slot on top of balance arm, turn spring adjustment nut clockwise for more tension; counterclockwise for less tension.

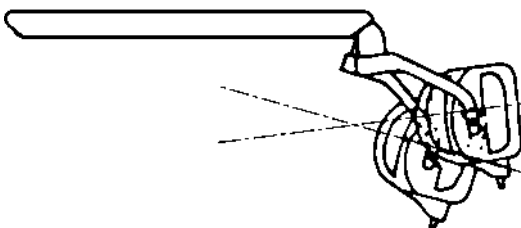


### HEAD ANGLE ADJUSTMENT

**IMPORTANT;** Use slot closest to swing arm (H-shaped casting bracket) when adjusting angle of head. Insert adjusting bar into slot on top of balance arm, turn head angle adjustment nut clockwise for downward angle; counterclockwise for upward angle.



Adjusting bar is supplied in envelope with Allen Wrenches.



Upward angle when turning head angle adjustment nut counterclockwise.

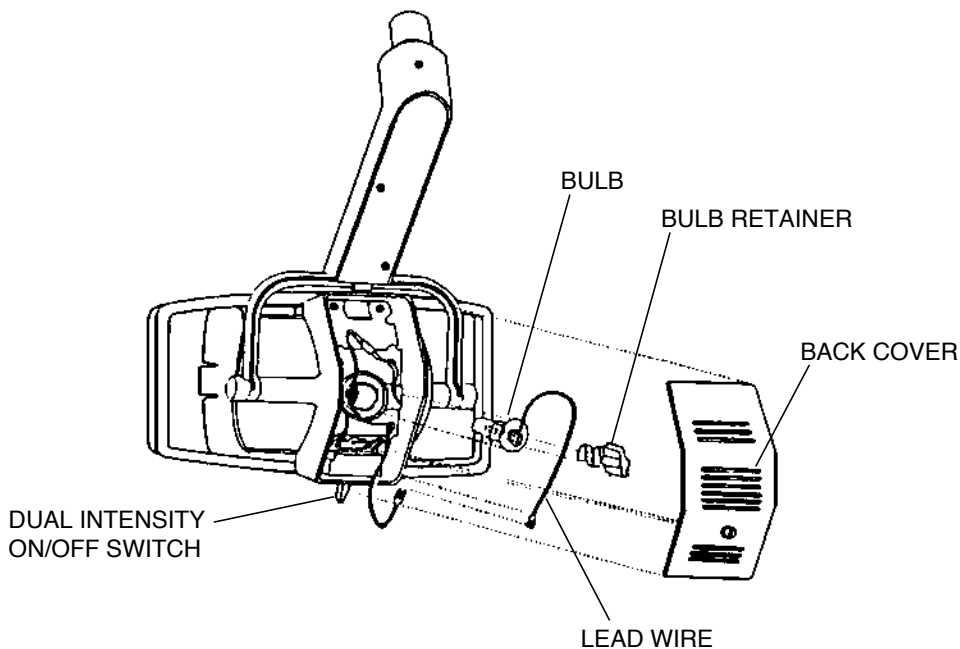
Downward angle when turning head angle adjustment nut clockwise.

## OPERATION & SERVICE INSTRUCTIONS

### BULB CHANGING

1. To install replacement bulb (BELMONT H-3), turn unit off and remove back cover.
2. Push in and turn counterclockwise knob of bulb retainer to remove bulb retainer.
3. Remove bulb by grasping lead wire and pull bulb from housing. Disconnect lead wire when bulb is completely removed.
4. Clean new replacement bulb surface with alcohol, attach lead wire and insert new bulb into housing.
5. After new bulb is seated in housing, insert and lock bulb retainer into position.

**IMPORTANT;** Do not touch glass with bare hand. Light bulb surface must be clean. Oil or body moisture will affect light intensity and bulb life. If glass surface is touched, clean with alcohol.



### CLEANING

Use soft cloth or cotton only. Soak with alcohol. Clean both sides of lens. Inside surface of reflector can be cleaned with a soft damp or dry cloth. Back side of the reflector should be wiped gently with a soft cloth. Extreme care should be taken not to scratch surface or mar appearance of painted surfaces. Exterior cleaning is all that should be necessary until after many months of use.

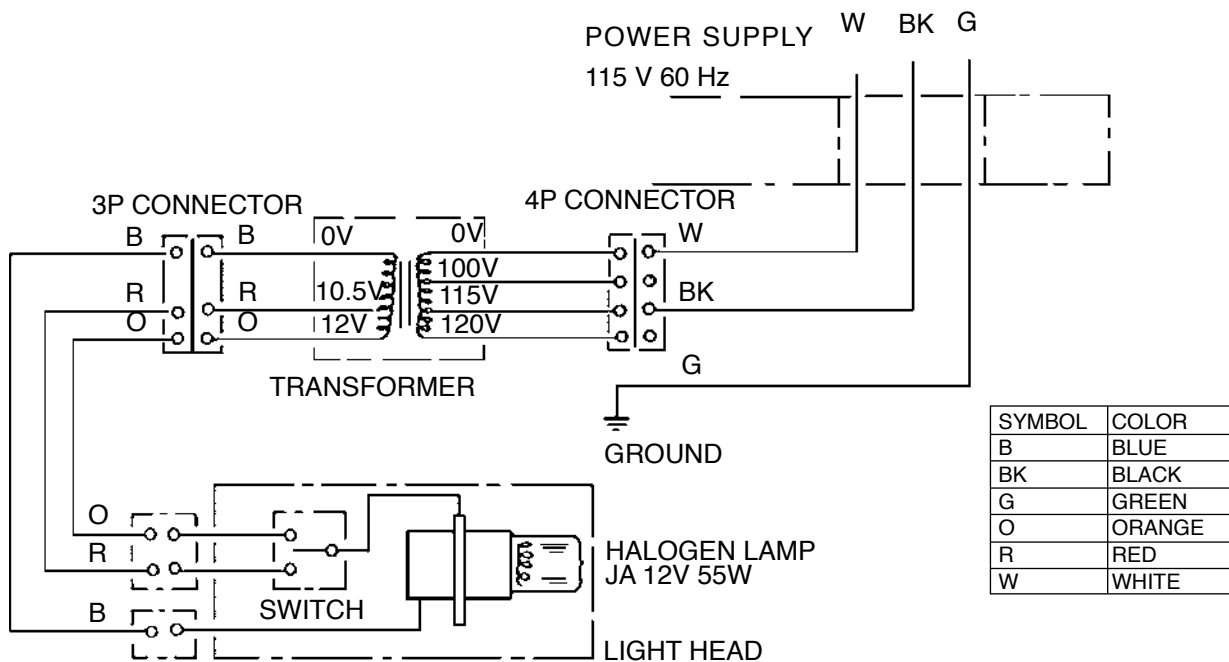
### LUBRICATION

A drop of oil once a year at pivot points will provide ample lubrication.

**SPECIFICATIONS:**

- Input voltage.....115V, 60Hz, 0.53A
- Output voltage.....12V high, 10.5V low
- Power output.....55w high, 50w low
- Type bulb..... Tungsten halogen, Type JA 12V - 55w
- Focal Distance..... 28" (725mm)
- Light output..... 2600 fc - High, 1400 fc - low
- color temperature.....3800°Kelvin
- Light pattern..... 3" x 7" at 28" focal distance  
(75 x 180 at 725 mm)

**WIRING DIAGRAM**



BELMONT EQUIPMENT CORPORATION  
 101 Belmont Drive, Somerset, N.J. 08873, U.S.A.  
 (732)469-5000, Toll Free (800) 223-1192  
 2076 S. Sheridan Way, Mississauga, Ont., Canada  
 (905) 822-2755