



CHROMOPHARE[®] D 300
Minor Surgical and Examination Light
Pre-Installation Guide



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Revision B: May 2000

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Introduction




For over 75 years BERCHTOLD has focused upon providing innovative products of the highest quality for surgery, including CHROMOPHARE® surgical lighting systems and TELETOM® power boom equipment management systems. Headquartered in Germany with a wholly owned U.S. subsidiary in Charleston, South Carolina, BERCHTOLD products are distributed worldwide. BERCHTOLD manufactures and distributes BERCHTOLD products throughout the U.S. via its own network of sales consultants, directly to the end user. BERCHTOLD'S experienced design team is a proven resource for hospital planning for today and for the future.

CHROMOPHARE® Examination Light

D 300 ... True, Surgical Lighting Characteristics and Quality in a smaller lighthead for clinical and examination purposes. Designed for emergency departments, PACU's, and physician's treatment rooms. Still unmatched are achievements in brightness, color, depth of field, and maneuverability.

- Brilliant Illuminance ... brightness up to 50,000 lux; "daylight" 4500° K color
- Optimum Light Intensity ... within a large depth of field
- Computer-Designed Polygon Reflector ... shadow-free; 95% reflected light
- High Color Temperature ... with excellent contour recognition
- Sealed Lamp Housing ... excellent hygienic standards
- Outstanding Maneuverability ... strong, ultra-light suspension for easy and secure positioning
- Bulb Exchange ... without tools or service technicians

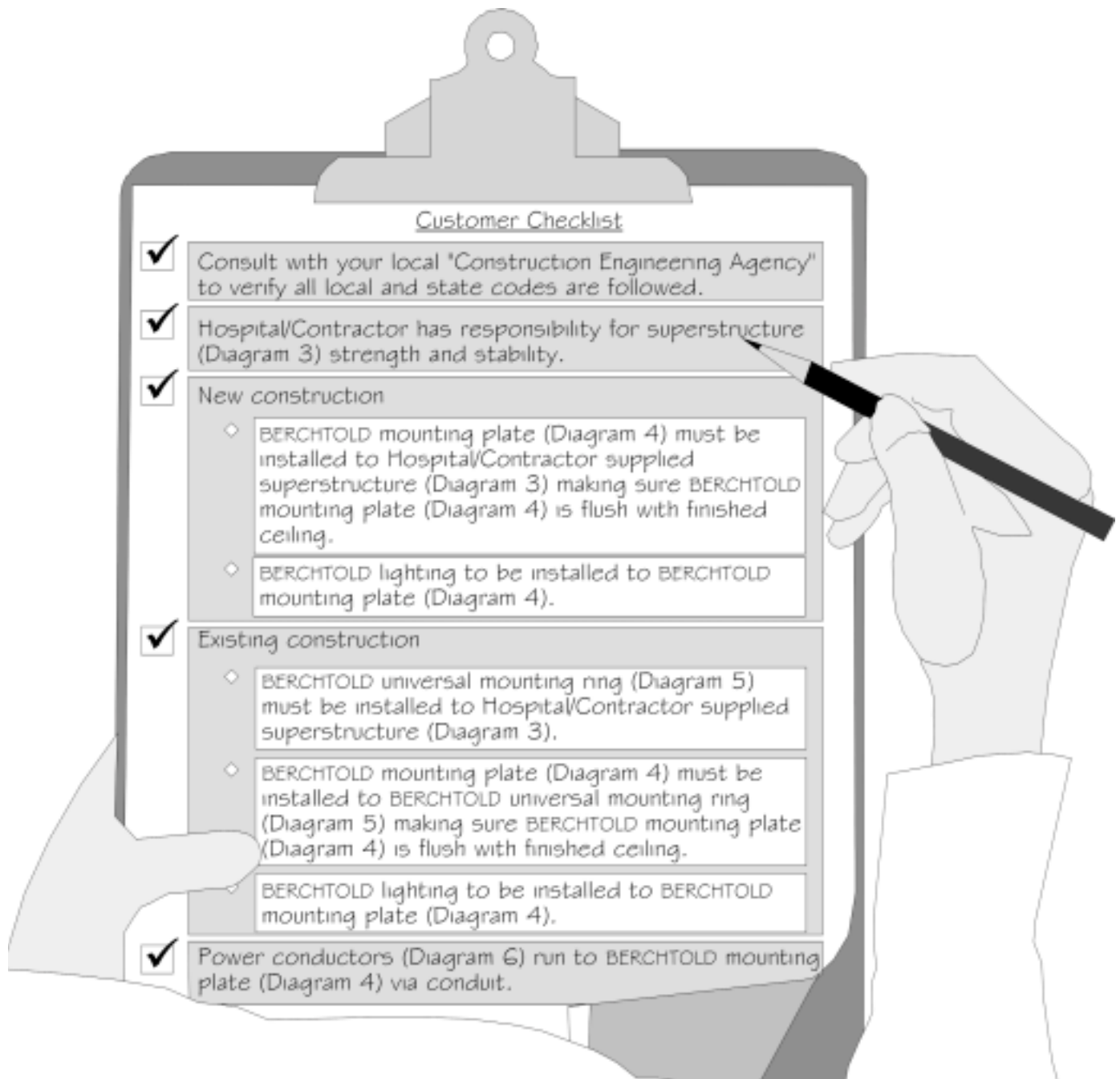
Technical Data Table

Description	D 300 Single Arm	D 300 Double Arm
General Data		
Reflector System	Polygon Reflector	
Color Temperature	4500 K	
Halogen Bulb (Order No.)	12 V/50 W (CZ 955-1204)	
Lifetime of Halogen Bulb	1000 hours	
Intensity Ec at 1 m (lux)	50,000	
Total Radiant Power at Max Intensity	200W/m ²	
Total Radiant Power/Intensity Ec(mW/m ² Lux)	4	
Color Rendering Index R _a	88	
Light Field Diameter	5-1/2" (14 cm)	
Electrical Data		
Primary AC Voltage of Transformer	100, 120, 127 Volts / 220, 230, 240 Volts	
Power Consumption	60 VA	
Transformer-Rated Capacity	60 VA 50/60 Hz	
Safety Category	1	
Protection Provided by Enclosure	IP 53	
Dimensions		
Diameter of Light Body	11-3/8" (29 cm)	
Diameter of Polygon Reflectors	9-1/2" (24 cm)	
Light Emission Surface (Glass Surface)	196-7/8 sq" (500 cm ²)	
Maximum Swivel Radius	37-1/2" (95 cm)	68-7/8" (175 cm)
Travel Distance of Light Body	51-3/8" (131 cm)	
Weight Including Transformer	22 lbs.	26 lbs.
Maximum Torque/Moment	17 ft. lbs.	45 ft. lbs.
Certificate	 Listed	

Customer Responsibilities

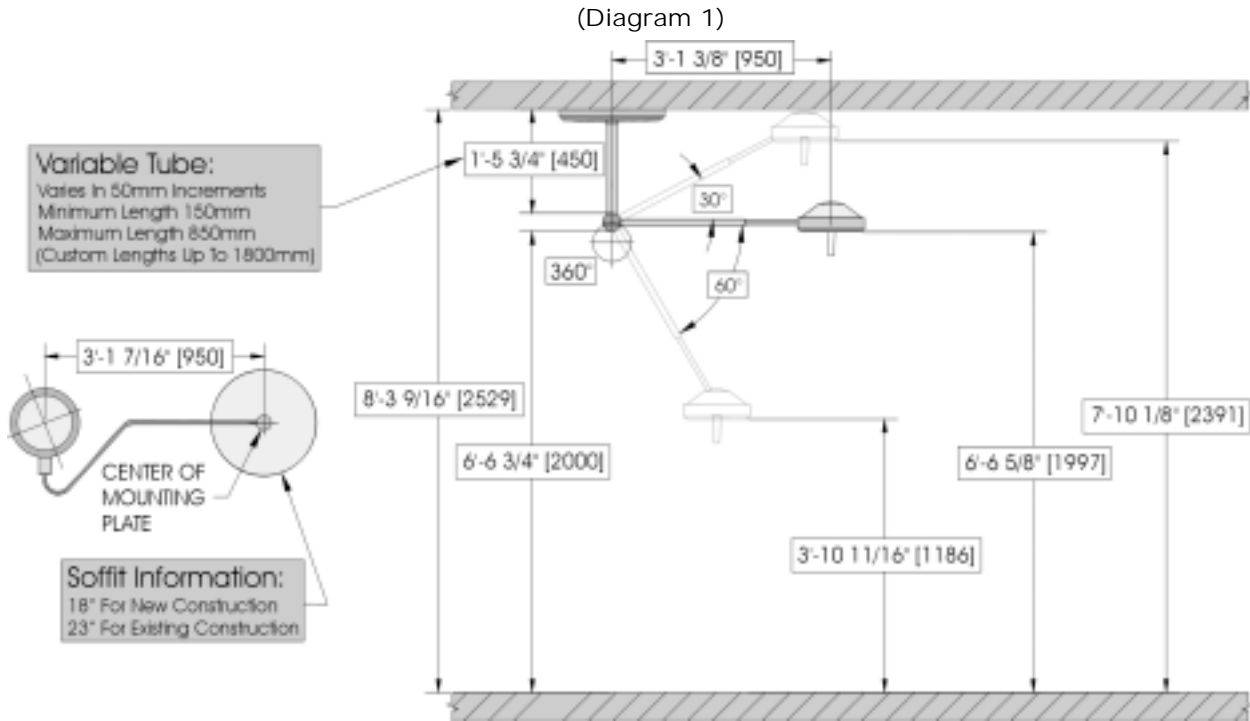
CHROMOPHARE[®] D 300 Examination Lights are intended to illuminate local areas of the patient's body for recognition and treatment of diseases. They can be used directly around the patient but no closer than 24" (61 cm) to the patient's body.

Customer Checklist (Following the checklist below will ensure proper preparation of installation site.)

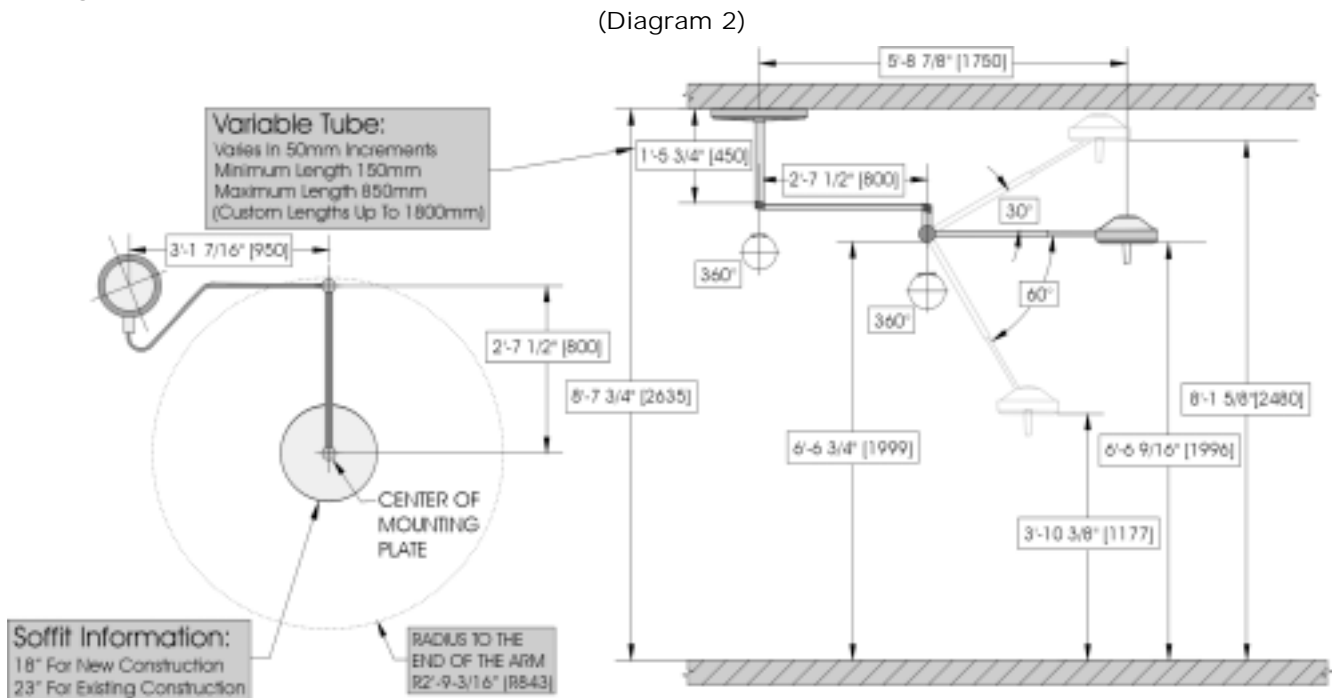


Plan and Elevation Views

Ceiling Mounted (Single Arm View)
Catalog No. CE-180-3075



Ceiling Mounted (Double Arm View)
Catalog No. CE-181-3075



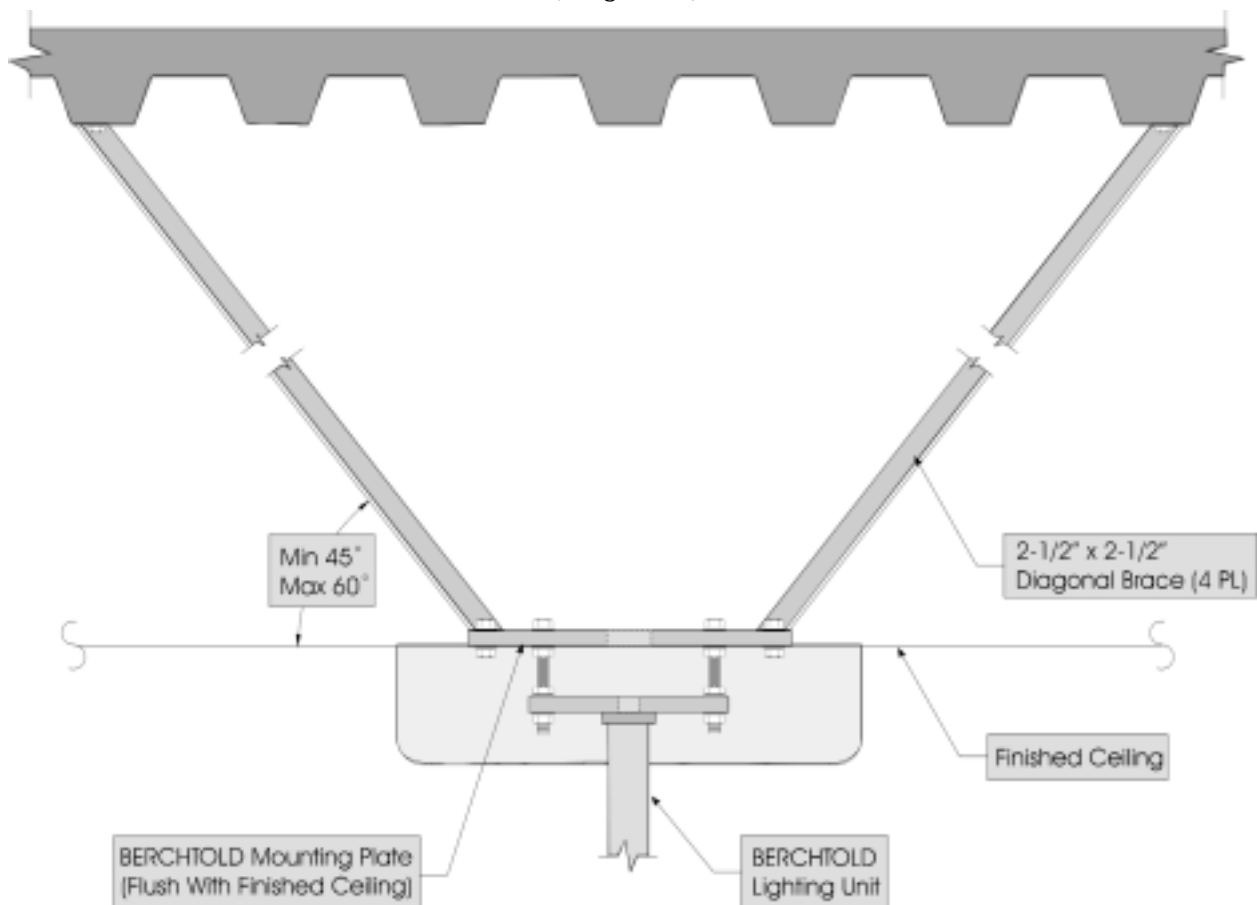
Superstructure Information

Ceiling Superstructure Instructions

- ❖ BERCHTOLD Corporation strongly recommends the purchaser consult a structural engineer before building superstructures.
- ❖ The superstructure information (Diagram 3) illustrates the recommended method for proper installation of CHROMOPHARE[®] D 300 Examination Lights.

Ceiling Superstructure

(Diagram 3)



Anchorage (Unistrut Structure)

D 300 Single Arm (Total Weight 22 lbs.)(Moment 17 ft. lbs.)
 D 300 Double Arm (Total Weight 26 lbs.)(Moment 45 ft. lbs.)

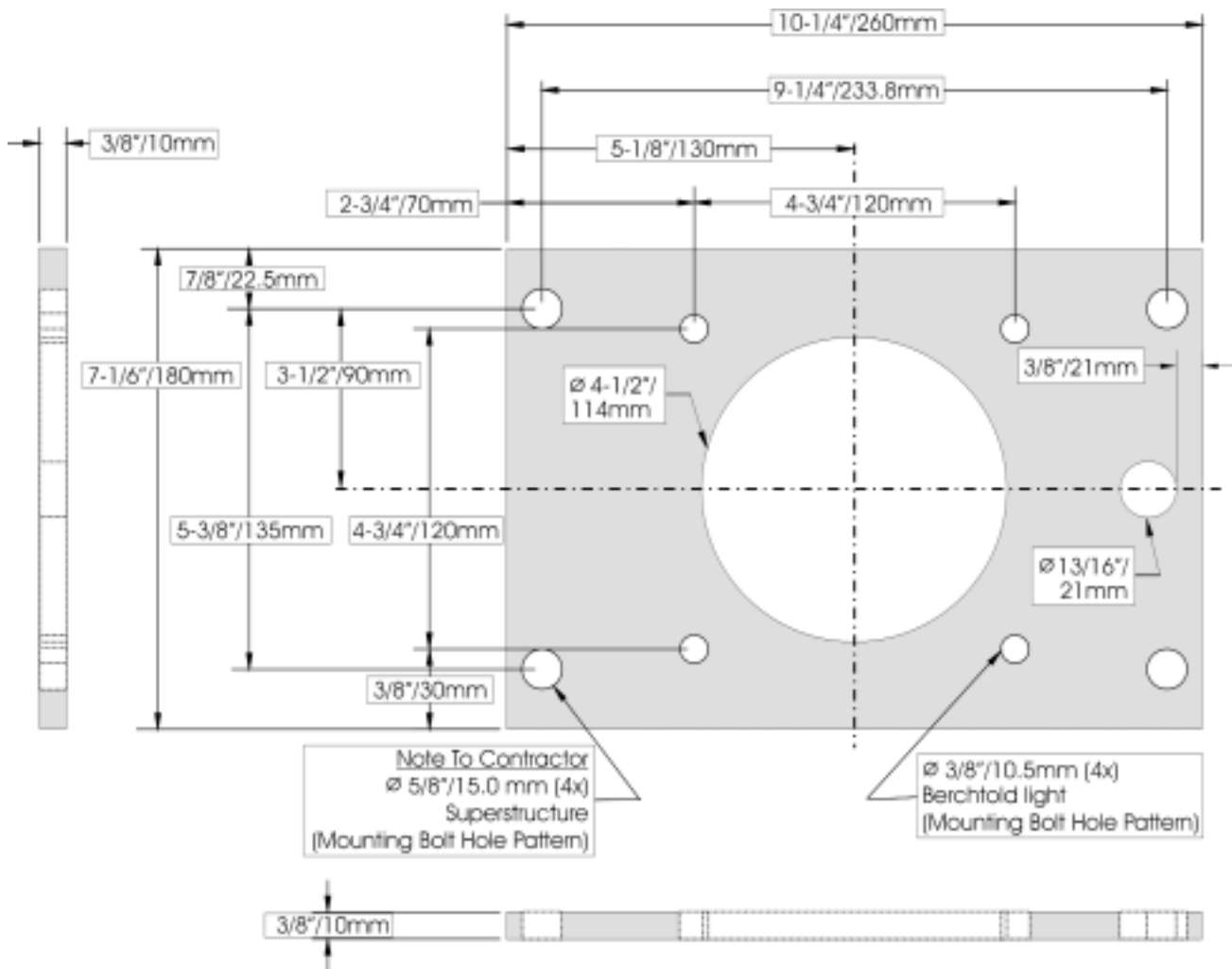
Suggested Superstructure (Check with your local construction engineering agency to meet local/state codes.)

Mounting Plate Information

Ceiling Mounting Plate

Part No. 10-007-1598

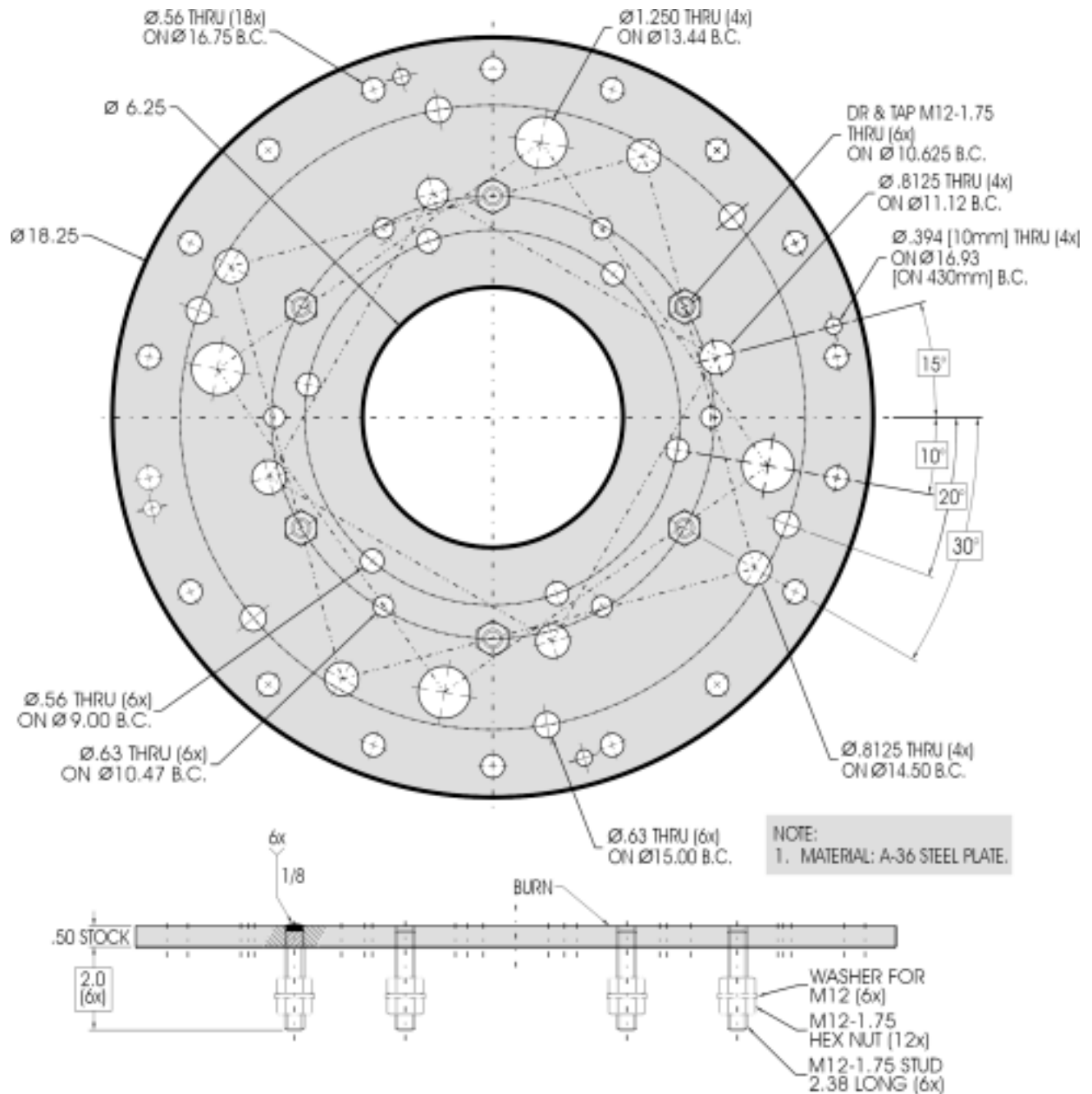
(Diagram 4)



Universal Mounting Ring Information

Ceiling Universal Mounting Ring
 (For Existing Construction Only)
 Part No. CB-509-4504

(Diagram 5)



Pre-Wiring Information

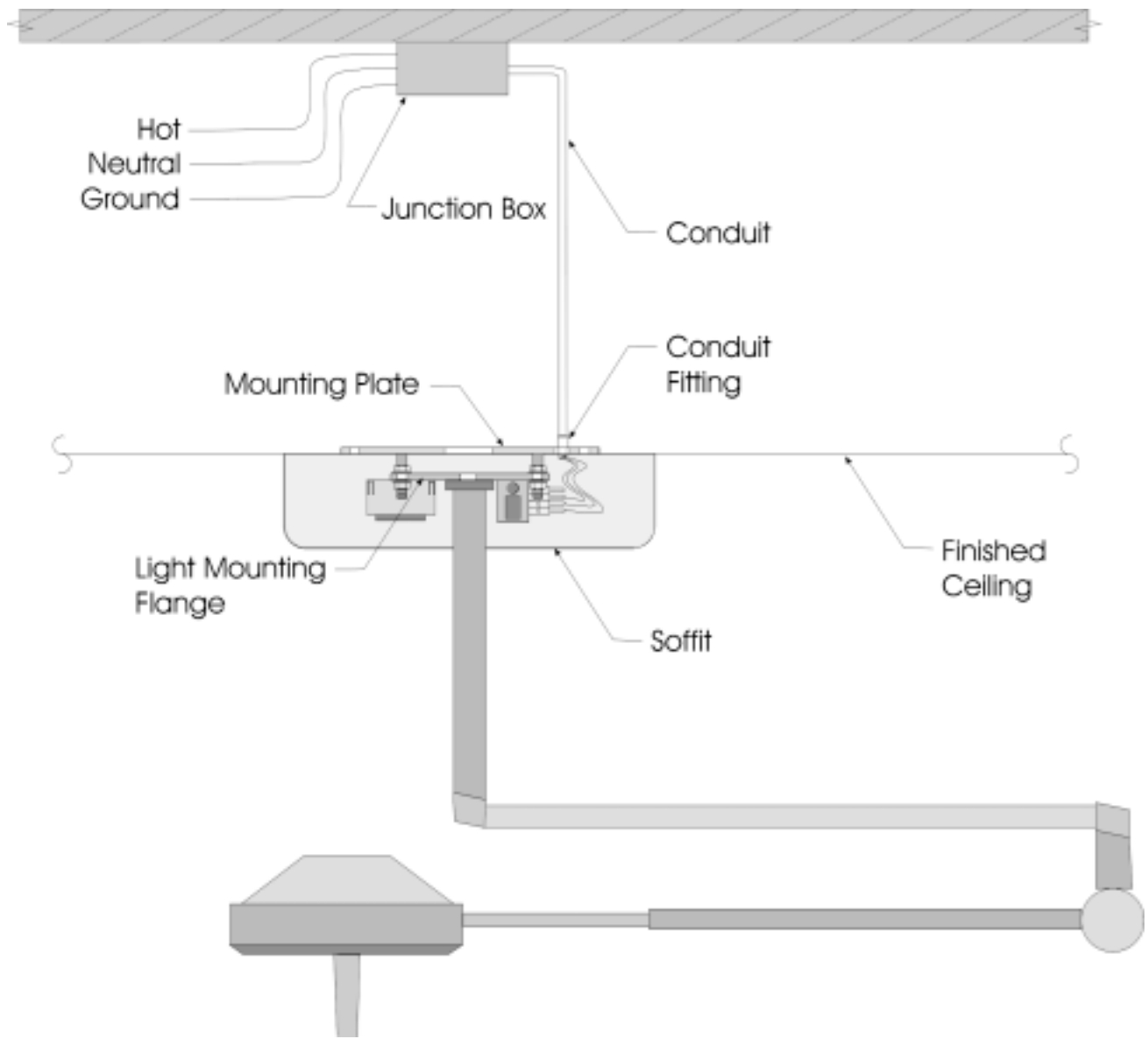
Ceiling Pre-Wiring Instructions

- ❖ Hospital has responsibility for providing required wiring to BERCHTOLD lighting.
- ❖ Wiring for lighting should fall below finished ceiling with an excess of 12 inches in length.
- ❖ BERCHTOLD lighting requires a dedicated 120-volt supply.
 - Lighting supply should be 3-wire consisting of:
 - (1) Hot
 - (1) Neutral
 - (1) Ground
- ❖ Wiring should be a minimum of 14AWG, 600V to meet UL standards.
- ❖ See wiring illustration for additional information (Diagram 6).

Pre-Wiring Information

Ceiling Pre-Wiring

(Diagram 6)



CHROMOPHARE[®] D 300 Minor Surgical and Examination Light
Pre-Installation Guide No. 70-000-0001

Revision A: 3/00 General Release
Revision B: 5/00 Refer to ECO#00-051

References:

CHROMOPHARE[®] D 300 Minor Surgical and Examination Light
Assembly and Operating Instructions

CHROMOPHARE[®] D 300 Minor Surgical and Examination Light
Service Manual

INNOVATIONS
BROUGHT TO LIGHT



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