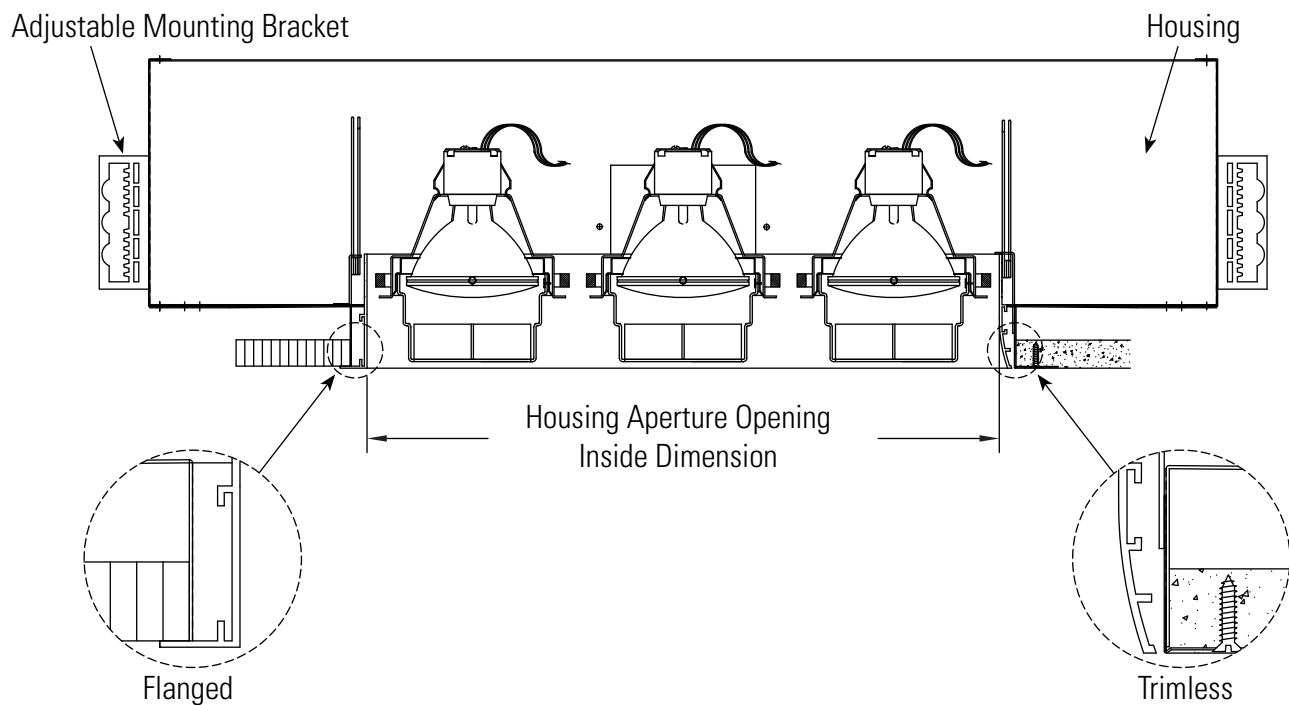


READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE PROCEEDING.  
RETAIN THESE INSTRUCTIONS FOR MAINTENANCE REFERENCE.

This fixture is intended for installation in accordance with the National Electrical Code and local regulations. To assure full compliance with local codes and regulations, check with your local electrical inspector before installation. To prevent electrical shock, turn off electricity at electrical panel before proceeding.

DO NOT INSTALL THIS SYSTEM IN A WET LOCATION.  
CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY REINFORCING CEILING TO SUPPORT FIXTURE WEIGHT.



**Warning for All Fixtures**

Use only aperture frames and accessories provided by Lightolier Inc. Use of other manufacturers' aperture frames and accessories voids the Underwriters Laboratories Listing and could constitute a fire hazard.

**Caution: Risk of Fire**

Use proper lamp wattages with corresponding ballast wattages. Check ballast module wattage label to confirm wattage.

**Caution: Risk of Burn**

Allow time for luminaire to cool before attempting to relamp or position.

**Caution: Risk of Burn and Electrical Shock**

Turn off power to Ballast Module before servicing. All PowerArc Modular Ballasts are equipped with a power switch. Depressing Dot on Switch is the "ON" position. (See IS:83B)

**Note:**

1. Low voltage fixtures may produce audible sound when used with dimmers, which maybe objectionable in acoustically critical areas.
2. For HID Fixtures - HID lamps require a warm-up period of 5-10 minutes to reach full output. Additionally, when these lamps are extinguished they must cool for 5-15 minutes before they will relight. Outage can be caused by momentary power failure, substantial voltage reduction or cycle changes.

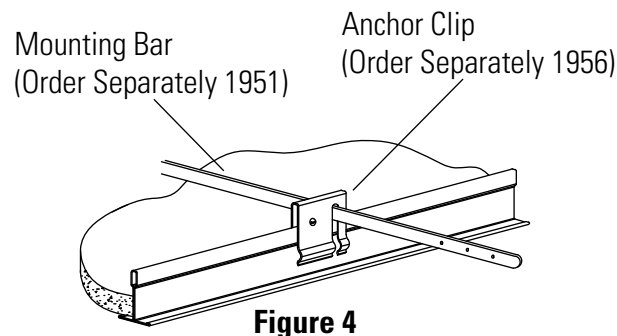
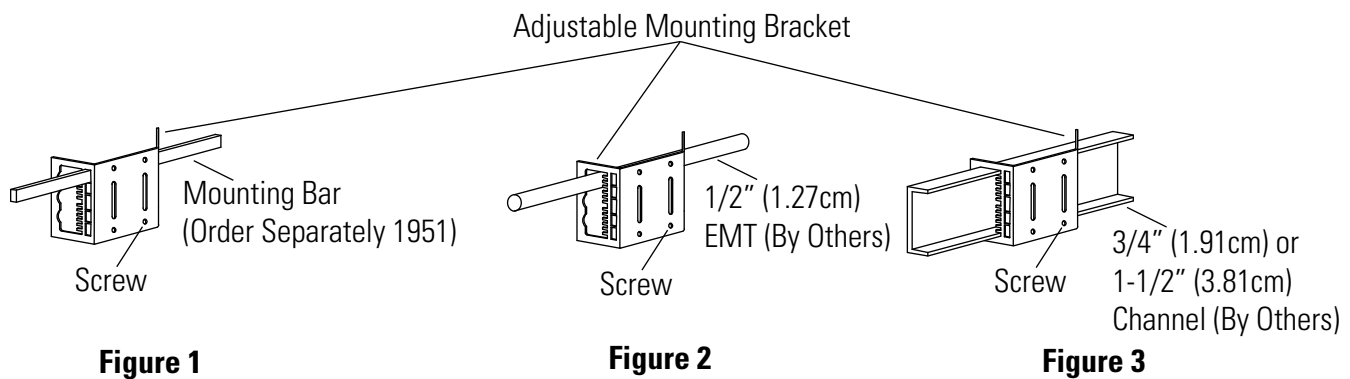
**Warning for MR16 Fixtures Only**

Lamp manufacturers require the glass lamp guard be in place before energizing lamp, and that great care must be taken that lamp is fully cooled before relamping. Avoid finger marks on inside of lamp for they may cause short lamp life and possible breakage.

## FRAME-IN AND WIRE

### Step 1. Install Housing using Adjustable Mounting Brackets

- A. Fixture must be secured to structural ceiling members. If no ceiling access available, fixtures must be installed before ceiling material.
- B. With Mounting Bar (Lightolier Cat. No. 1951) use rectangular slots. (Fig. 1)
- C. With 1/2" (1.27cm) EMT (by others). (Fig. 2)
- D. With 3/4" (1.91cm) or 1-1/2" (3.81cm) Channel (by others). (Fig. 3)
- E. For Suspended T-Bar Ceilings, use Lightolier Cat. No. 1956 to secure 1951 Mounting Bars to ceiling runners. (Fig. 4)
- F. To install with hanging wires (by others), consult installation from hanging wire manufacturer.



### Step 2. Connect Supply Leads

White fixture lead to neutral (white) supply, black fixture lead to hot supply lead, bare fixture wire to supply ground. Use wire nuts for all connections (local hardware items).

### Step 3.

Place all electrical connections in J-Box attached to side of fixture.

### Step 4.

Attach J-Box Cover onto J-Box attached to side of fixture.

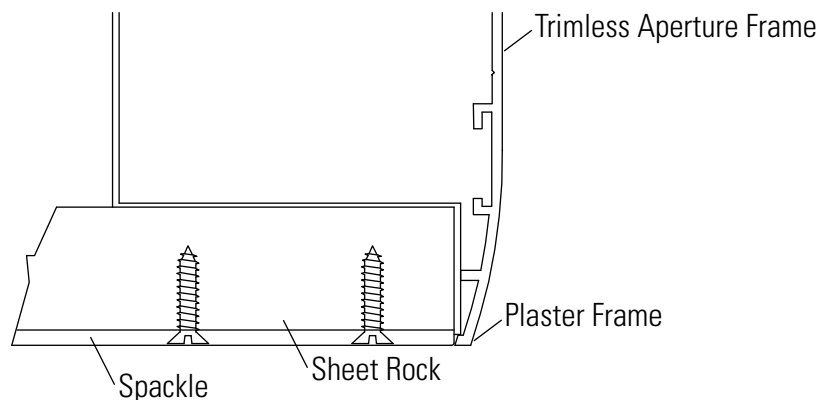
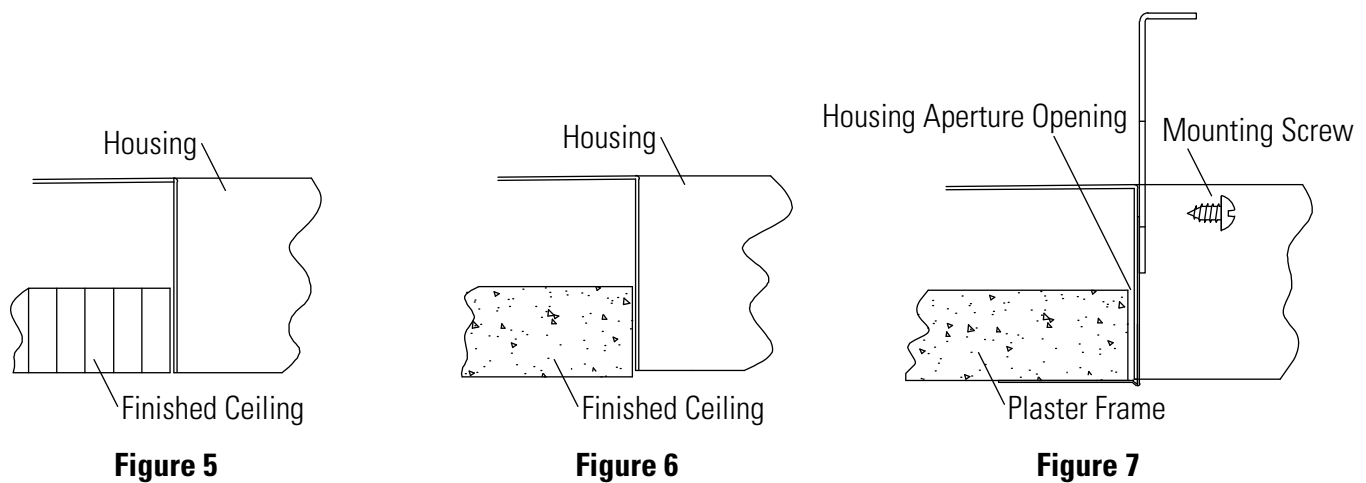
## ADJUST HOUSING

### Flanged Aperture Frame

Adjust Housing at Mounting Brackets so that bottom edge is flush with finished ceiling as shown. (Fig. 5)

### Trimless Aperture Frame

- Adjust Housing so bottom edge is flush with or above Finished Ceiling. (Fig. 6)
- Insert Plaster Frame into Housing Aperture Opening and secure with (6) mounting screws while pushing Plaster Frame against ceiling. (Fig. 7)
- Screw Plaster Frame to ceiling and spackle to edge of plaster frame. (Fig. 8)



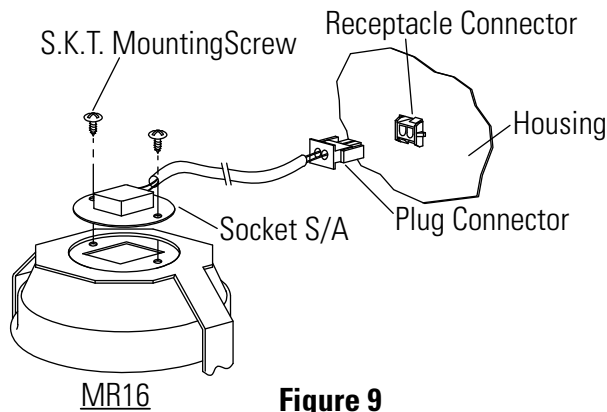
**Figure 8**

## INSTALL APERTURE FRAME

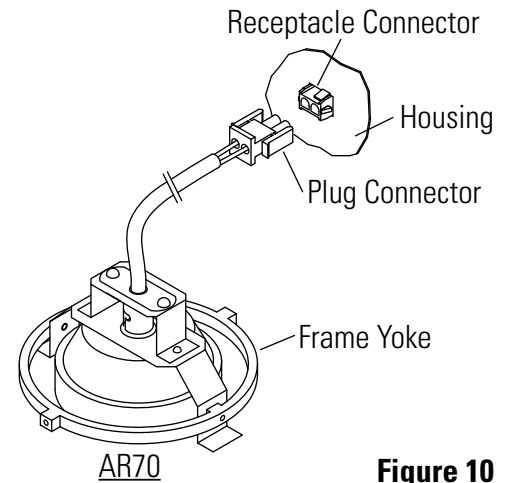
### Step 1. Aperture Frame Installation

#### A. MR16, AR70 and AR111

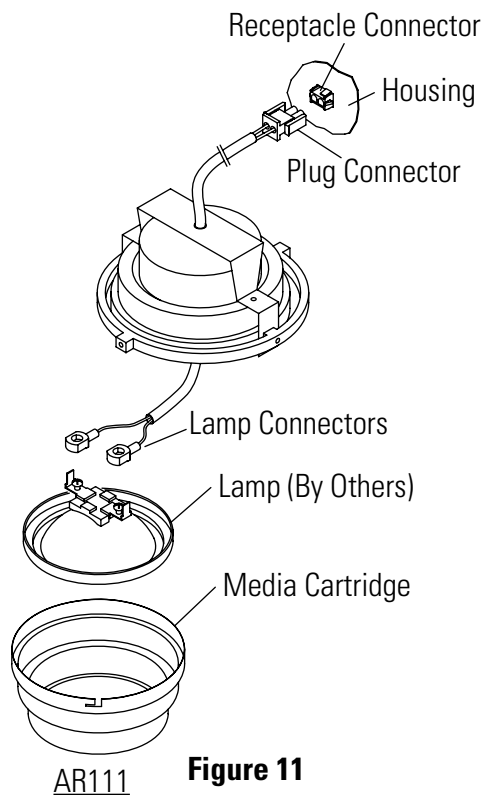
- Insert Plug Connectors from sockets into receptacles on inside wall of housing.
- Connectors are polarized and therefore may only be inserted in one direction.
- Make sure connectors snap firmly into space. (Fig. 9-11)



**Figure 9**



**Figure 10**



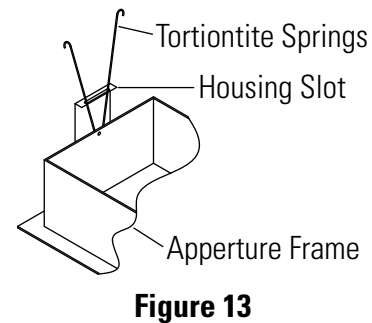
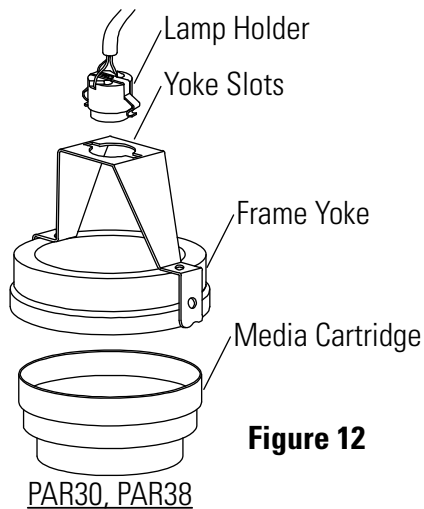
**Figure 11**

## INSTALL APERTURE FRAME (CONT'D)

- B. PAR30/PAR38
- Insert Lamp Holder into holes in Frame Yokes
  - Make sure socket springs engage slots in yoke. (Fig. 12)

### Step 2.

- Hook tortiontite Springs into slots of housing.
- Push Aperture Frame upward. (Fig. 13)



## INSTALL LAMP AND ACCESSORIES

*Note: Only PAR30 short neck will fit PAR30 incandescent series*

**Step 1.** Remove Media Cartridge with counter-clockwise motion.

### Step 2. Install Lamp

- A. Any combination of two accessories may be used to install into media cartridge and secure with spring.
- B. For MR16 type, one accessory must be glass.
- C. Install Media Cartridge onto Adjustable Ring.

Cat. No.	Aperture Housing Opening		Electrical Ratings
	Length	Width	Input Amps
PA1M16	5" (12.70cm)	5" (12.70cm)	.75
PA2M16	10" (25.40cm)	5" (12.70cm)	1.5
PA3M16	15" (38.10cm)	5" (12.70cm)	2.25
PA4M16	20" (50.80cm)	5" (12.70cm)	3
PA1A70	5" (12.70cm)	5" (12.70cm)	.5
PA2A70	10" (25.40cm)	5" (12.70cm)	1
PA3A70	15" (38.10cm)	5" (12.70cm)	1.5
PA4A70	20" (50.80cm)	5" (12.70cm)	2
PA1A11	7" (17.78cm)	7" (17.78cm)	.75
PA2A11	14" (35.56cm)	7" (17.78cm)	1.5
PA3A11	21" (53.34cm)	7" (17.78cm)	2.25
PA4A11	28" (71.12cm)	7" (17.78cm)	3
PA1P30/H30	6" (15.24cm)	6" (15.24cm)	.37
PA2P30/H30	12" (30.48cm)	6" (15.24cm)	.75
PA3P30/H30	18" (45.72cm)	6" (15.24cm)	1.15
PA4P30/H30	24" (60.96cm)	6" (15.24cm)	1.5
PA1P38/H38	7" (17.78cm)	7" (17.78cm)	.67
PA2P38/H38	14" (35.56cm)	7" (17.78cm)	1.34
PA3P38/H38	21" (53.34cm)	7" (17.78cm)	2.01
PA4P38/H38	28" (71.12cm)	7" (17.78cm)	2.68

CAUTION: Turn power off before lamping fixture. Wait until fixture is cool before touching.

## ADJUSTING AND LOCKING OF AIMING ANGLE

Insert 7/64" allen key into cap screw and turn counter-clockwise to unlock head and gimbel ring assembly. Aim beam angle of lamp towards desired direction and turn cap screw clockwise to lock.



Head and gimbel ring assembly

### Widthwise Locking

Insert allen key into opening of lever and gently move allen key in a counter-clockwise arc to unlock lengthwise aiming direction.

Aim beam angle towards desired direction and gently move lever in clockwise direction to lock aiming angle.



Locking Pin

### Lengthwise Locking