IRIDEON

Service Manual

AR5™ interior wash luminaire

Version 2 Basic 3/9/97

FOREWORD

Revision History

V.2 Basic September 1997

Contents

Chapter 1. Repair Procedures

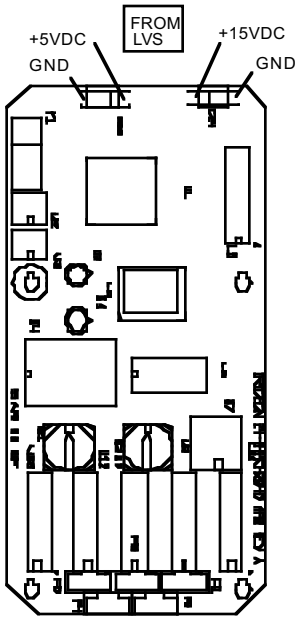
Chapter 2. Illustrated Parts Breakdown

Chapter 1 Repair Procedures

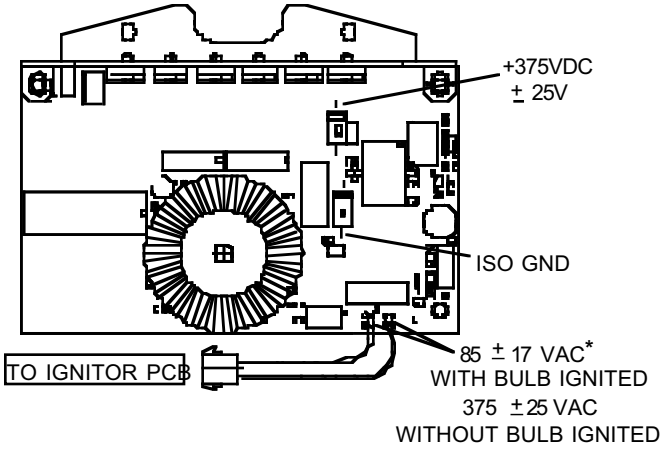
1.1 Circuit Board Voltage Test Points

The following test points are provided as an aid in troubleshooting. Voltage values are typical and unless otherwise indicated could vary ± 10% without indicating an actual voltage problem.

1.1.1 Controller PCB

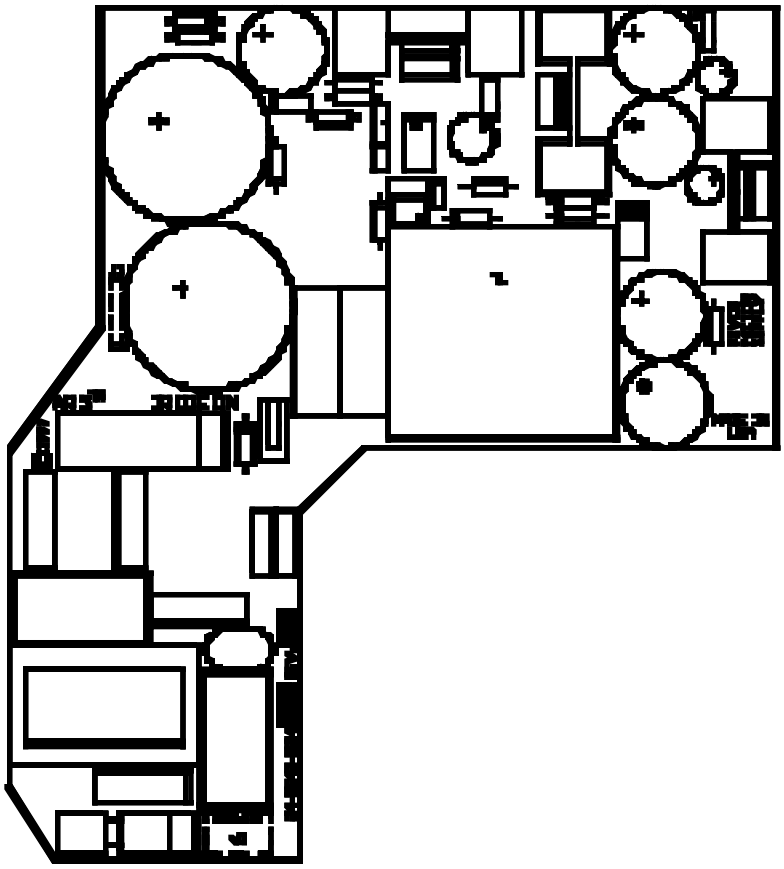


1.1.2 APS PCB



* MUST BE MEASURED WITH TRMS METER NOT REFERENCED TO EARTH GROUND.

1.1.3 Power Factor Supply (PFS)



This board sits upside down beneath the APS while in the luminaire and therefore has no available test points. Voltages may be measured on the APS PCB.

Note: See Appendix B for *AR5* luminaire wiring diagram.

1.2 Disconnecting the Luminaire

WARNING: Remove power to luminaire at main breaker prior to performing maintenance.

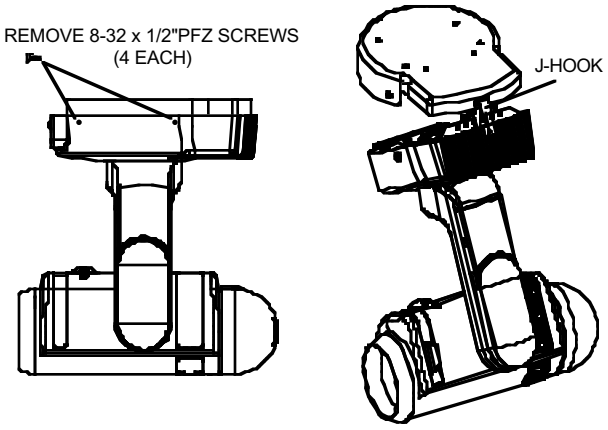
Tools: Screwdriver, phillips, #2

Screwdriver, small slot

To remove the *AR5* luminaire from its installed position:

1.2.1 For J-Box Ceiling Mount Version

Step 1. Using #2 phillips screwdriver, remove four 8-32 x 1/2”PFZ screws from upper enclosure and allow luminaire to rest on J-hook at finned section of upper enclosure.



Step 2. With luminaire resting on J-hook, use small screwdriver to disconnect AC wiring from terminal block.

Step 3. Disconnect Data wiring by unplugging two piece data terminal strip.

Step 4. Leaving mounting plate in place, lift luminaire off J-hook.

1.2.2 For Conduit Side Entry Mounting Version

The conduit side entry version is provided with pig-tail wiring (AC, Data in, and Data Thru). This wiring must be disconnected at the J-box providing service to the luminaire, not at the luminaire itself.

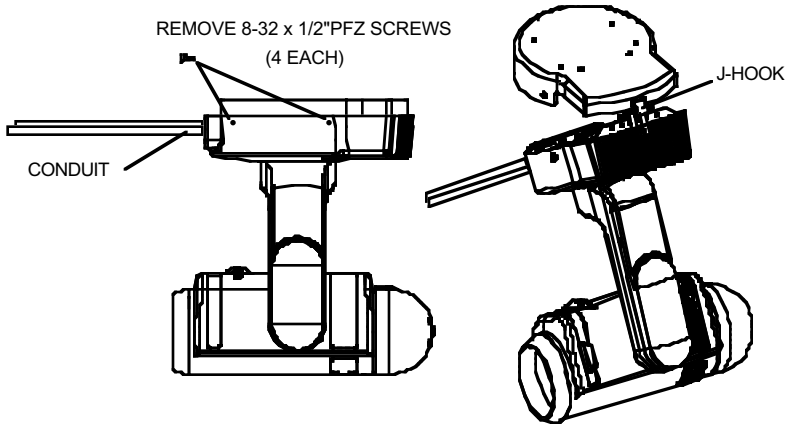
Step 1. Disconnect AC wiring to luminaire at J-box.

Step 2. Disconnect Data In and Data Thru wiring at J-box.

Note: If remaining luminaires are required to operate while this unit is being serviced, Data In and Data Thru wiring must be connected together to provide continued data flow.

Step 3. Loosen conduit from J-box.

Step 4. Using #2 phillips screwdriver, remove four 8-32 x 1/2”PFZ screws from upper enclosure and allow luminaire to rest on J-hook at finned section of upper enclosure.



Step 5. Leaving mounting plate in place, lift luminaire off J-hook. Luminaire with pigtail wiring and conduit is now free to be repaired.

Step 6. Conduit may be disconnected from luminaire at this time. Do not attempt to disconnect pigtail wiring as it forms an integral part of an internal wiring harness.

1.2.3 For Portable Mount Version

Step 1. Disconnect AC power cable.

Step 2. Disconnect Data In and Data Thru cables.

Note: If remaining luminaires are required to operate while this unit is being serviced, Data In and Data Thru cables must be connected together to provide continued data flow.

Step 3. If luminaire is secured by C-clamps, loosen thumbscrews and remove luminaire for repair.

1.3 AR5 Head Replacement Procedures

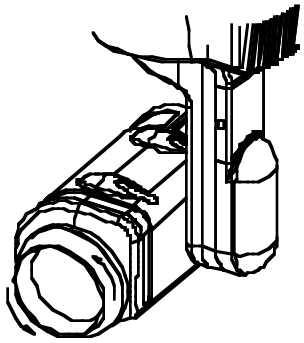
1.3.1 Opening the AR5 Head

Tools: Screwdriver, #2 phillips

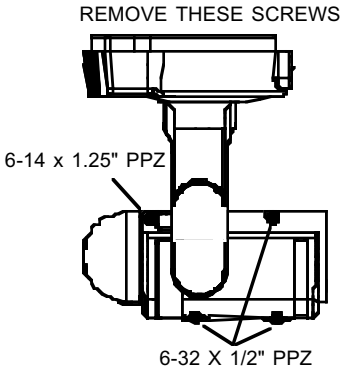
To gain access to subassemblies housed in the head of the *AR5* luminaire:

Step 1. Remove Luminaire from installed position and place on flat work surface.

Step 2. Unscrew front ring and lens. Remove and set aside.



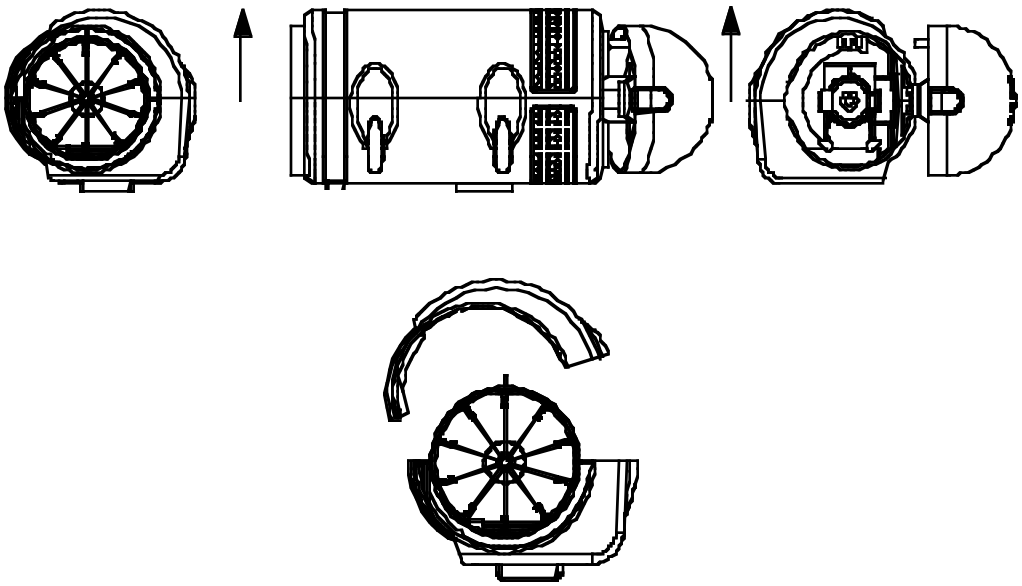
Step 3. Lay luminaire on side with upper enclosure on side and head retaining screws upward. Remove four head retaining screws.



Step 4. Open and remove door to rear enclosure.

Step 5. Flip luminaire over so yoke arm rests along work surface.

Step 6. Gently lift Body Cover from Axle Side Body.



Step 7. Remove upper portion of head housing and set aside.

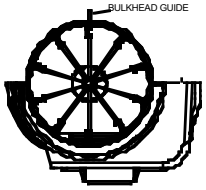
Step 8. Remove door to rear enclosure and set aside.

1.3.2 Closing the AR5 Head

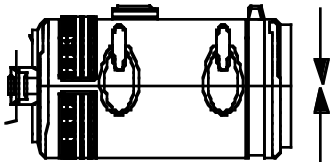
Tools: Screwdriver, #2 phillips

To rejoin the two halves of the luminaires head cover:

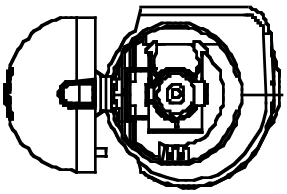
Step 1. Ensure reflector and all bulkheads are properly installed and aligned. Verify linear actuators are securely installed in bulkheads and RTV has been applied to linear actuator at bulkhead retaining clip (refer to maintenance paragraph titled **Replacing a Filter Bulkhead**).



Step 2. Place Body Cover over Axle Side Body and turn luminaire head over exposing screw holes.

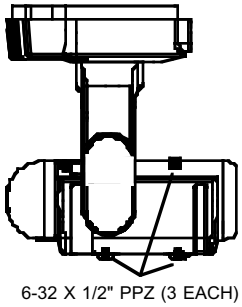


Step 3. Place rear enclosure door in position and insert 6-14 x 1.125" screw as door hinge pin. Secure with #2 Phillips.



Note: Do not overtighten screw or door will not operate properly.

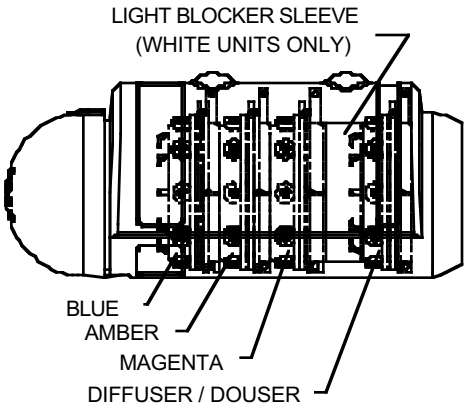
Step 4. Replace three remaining head screws (6-32 x 1/2" PPZ) to secure cover halves together.



1.3.3 Replacing Filter Bulkhead (or Color Changing Mechanism)

To remove a filter bulkhead or color changing mechanism, the AR5 head must first be opened to expose the bulkheads. Refer to maintenance paragraph titled **"Opening the AR5 Head"** for this procedure.

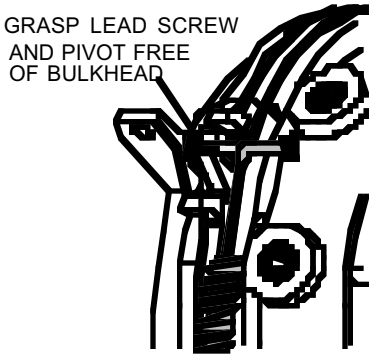
Color filter bulkheads are arranged in a specific sequence. The blue filters are always closest to the bulb, followed by the amber filters and the magenta filters are next. The diffuser/douser bulkhead, if included, is furthest from the bulb and closest to the lens. On white luminaires, any bulkhead location not filled by selected options will contain an empty bulkhead to block light. Additionally, white luminaires contain a light blocker between the diffuser/douser location and the color bulkheads. It is recommended that you always start at the lens end and, working toward the bulb, remove all bulkheads until you get to the one to be replaced.



Tools: needle nose pliers

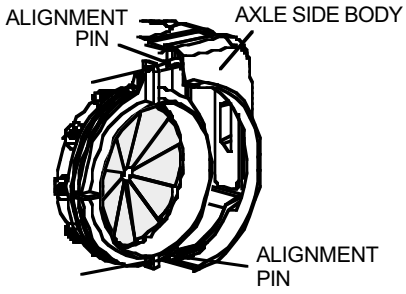
Step 1. Using needle nose pliers, remove RTV from linear actuator and bulkhead mating point, if present.

Step 2. Using needle nose pliers, grasp lead screw portion of linear actuator around point where it mates with bulkhead. Pivot lead screw away from and free of bulkhead.



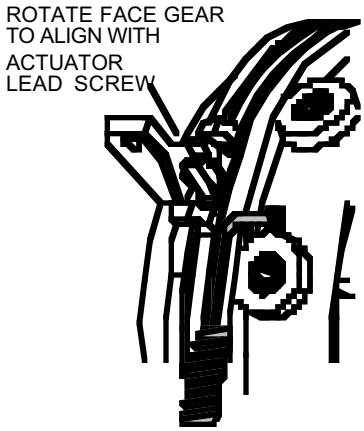
Step 3. With linear actuator disengaged, rotate bulkhead face gear to close filters. This will protect filters and allow removal.

Step 4. Lift bulkhead off of alignment pins on axle side body.



Step 5. Replace appropriate filter bulkhead.

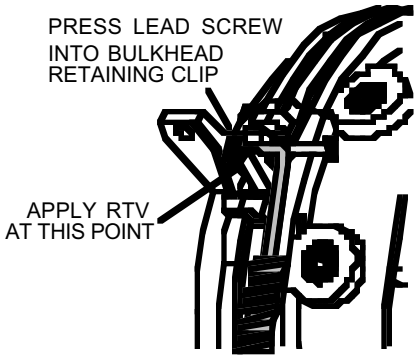
Step 6. Rotate bulkhead face gear to allow alignment of linear actuator lead screw with bulkhead retaining clip.



Step 7. Press linear actuator lead screw into the bulkhead retaining clip.

Step 8. Repeat for all remaining bulkheads.

Step 9. Apply RTV to linear actuator at bulkhead retaining clip.



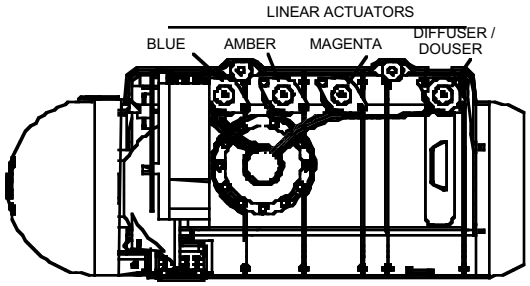
To reassemble head, refer to maintenance paragraph titled **Closing the AR5 Head**.

1.3.4 Replacing Head Assembly Linear Actuator Motor

- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled "**Disconnecting the luminaire**".
- Open the luminaire head if not already open. Refer to maintenance paragraph titled "**Opening the AR5 Head**".
- Remove filter bulkheads if not already removed. Refer to maintenance paragraph titled "**Replacing a Filter Bulkhead (or Color Changing Mechanism)**".

To remove and replace a linear actuator motor from the head assembly after filter bulkheads have been removed:

Step 1. Identify which linear actuator requires replacement. Color filter bulkheads, which are controlled by actuators, are arranged in a specific sequence. The blue filter is always closest to bulb, followed by amber filter and magenta filter is next. Diffuser/douser bulkhead, if included, is furthest from bulb and closest to lens.

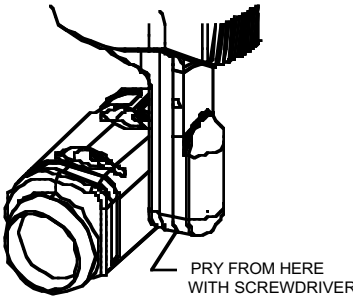


Step 2. Remove wires from cable clips that may bundle linear actuator motor wires together and prevent actuator from being removed.

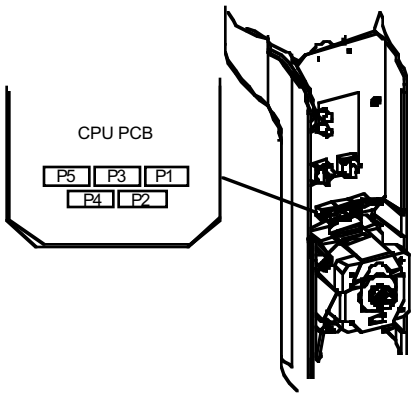
Step 3. Open yoke cover door.

Step 4. Using a phillips screwdriver, remove exposed 3/8" #6 Type F screw located next to yellow and green LEDs.

Step 5. Using a small slotted screwdriver, if necessary, remove yoke cover by prying loose from yoke itself.


PRY FROM HERE
WITH SCREWDRIVER

Step 6. Observe five connectors at one end of CPU PCB. Each cable corresponds to a specific filter actuator or motor. It is extremely important that each cable be reconnected to its proper receptacle after board replacement to ensure correct operation. It is possible that one or more connectors may be unused based on chosen capabilities of luminaire. Before disconnecting cables ensure each is numbered and/or color coded in a way that corresponds to its proper connector receptacle. Color coded heat shrink tubing marks filter actuators cable showing which bulkhead is controlled by each. Heat shrink colors are blue (blue filter), yellow (amber filter), red (magenta filter), black (diffuser/douser).



Connector / Function Table

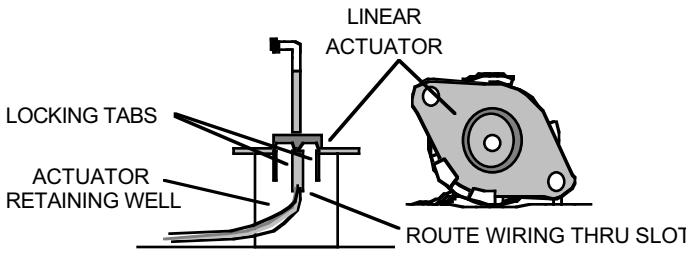
Conn. / Heatshrink	With color filters only	Color with Douser or Diffuser	Douser and Diffuser only
P1 / Blue	Blue Filter	Blue Filter	
P2 / Yellow	Amber Filter	Amber Filter	
P3 / Red	Magenta Filter	Magenta Filter	Diffuser
P4 / Black		Douser or Diffuser	Douser
P5 / none	Tilt Motor	Tilt Motor	Tilt Motor

Step 7. Unplug connector for linear actuator to be replaced.

Step 8. Using fingers of one hand, apply pressure to locking tabs on actuator retaining well. With other hand, grasp actuator shaft and pull actuator straight out of retaining well. Wires should now easily pull through yoke arm into head and free actuator.

Note: All linear actuators are not the same. Wire lengths are different and in some cases the lead screw may have an offset bend to allow proper alignment with the filter bulkhead. Each bulkhead actuator has its own part number and is provided with a small length of color coded heat shrink tubing to uniquely identify one from the other. When installing a new linear actuator, always use a direct replacement.

Step 9. Insert new actuator into retaining well taking care to route wires between two actuator locking tabs molded into well.



Step 10. Route new actuator cable assembly along path of other actuator cables and through tilt tube into yoke arm.

Step 11. Plug replacement actuator into appropriate connector on CPU board per illustration and table above.

Step 12. Secure motor wires to cable clips on tilt tube.

Step 13. Reinstall filter bulkheads and light blockers, if any.

Step 14. Close head. Refer to maintenance paragraph titled "**Closing the AR5 Head**".

Step 15. Reattach yoke cover by snapping into place.

Step 16. Thread 3/8" #6 Type F screw through yoke cover and PCB and into yoke arm.

Note: In addition to securing the yoke cover in place, the 3/8"#6 screw is required to ensure proper grounding of the circuitry in the CPU PCB.

Step 17. After luminaire has been reinstalled and power applied, observe initial calibration or perform luminaire self test to ensure linear actuators and filter bulkheads operate properly.

1.3.5 Bulb Replacement

WARNING: Interlock switches in the luminaire head are designed to remove high voltage from the bulb when the head's door is opened. Other voltages will remain present, however. Power to the luminaire should be turned off prior to maintenance being performed.

The base of the arc bulb is of a bayonet type. It is inserted by aligning raised knobs or pins on the bulb base with notches on the bulb socket. The bulb is held in place by sliding a large metal clip across the reflector mount opening, engaging the bulb. Removal is the reverse of this procedure.

To remove the bulb:

Step 1. Open door at rear of luminaire head.

Step 2. Twist bulb socket counter clockwise and remove from bulb.

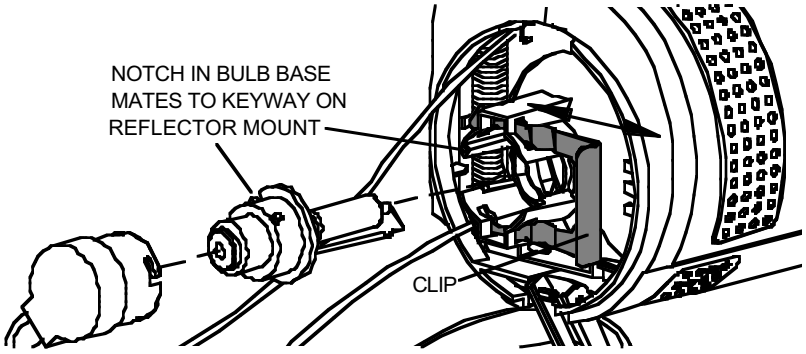
Step 3. Grasp large metal clip and pull to side, releasing bulb from reflector mount.

Note: The clip is not intended to pull completely free from the reflector mount.

Step 4. Remove bulb.

Step 5. Insert new bulb by aligning notch on bulb base with keyway in reflector mount. Reverse above procedure to secure bulb and socket in luminaire reflector mount.

CAUTION: Do not touch the glass portion of the bulb with bare hands. This will leave skin oils, which will damage the bulb when it reaches full operating temperature.



1.3.6 Replacing AR5 Reflector Assembly and/or Ignitor Board

- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled "**Disconnecting the luminaire**".
- Open the luminaire head if not already open. Refer to maintenance paragraph titled "**Opening the AR5 Head**".
- Remove filter bulkheads if not already removed. Refer to maintenance paragraph titled "**Replacing a Filter Bulkhead (or Color Changing Mechanism)**".
- Remove the bulb if not already removed. Refer to maintenance paragraph titled **"Bulb Replacement"**.

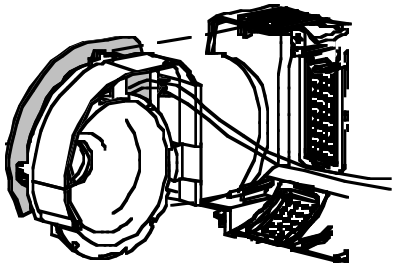
To remove and replace the reflector assembly and/or Ignitor board from the head after filter bulkheads have been removed:

Tools: diagonal cutters

soldering iron

Step 1. Using diagonal cutters, clip cable ties, if any that bundle ignitor board wiring to linear actuator wiring.

Step 2. Slide reflector assembly and ignitor board out of retaining slot and mounting pin, freeing both from axle side body. (Ignitor wiring will still prevent ignitor board and reflector assembly from being completely separated from axle side body.)

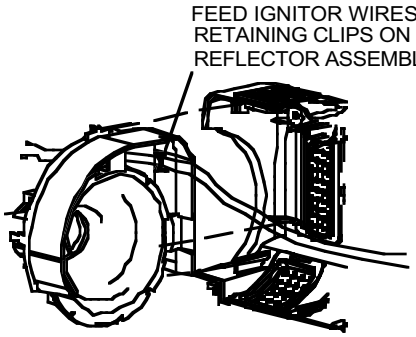


Step 3. Using soldering iron, disconnect two wires to ignitor board. This procedure is considered easier than disconnecting ignitor wiring in upper enclosure as that requires extracting pins from connector and routing them through yoke and axle side body for both removal and reinstallation.

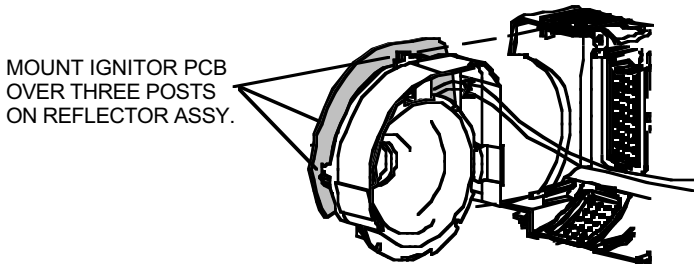
Note: Both wires may be covered with black heat shrink tubing. Take notice that the neutral wire (blue) is connected to TP2 (farthest from the end of the PCB).

Step 4. Separate reflector assembly from ignitor board and replace whichever is required. In some models, reflector assembly mounting posts have been heat staked to retain ignitor PCB. Using a soldering iron, mounting posts can be reformed to allow removal and replacement of PCB.

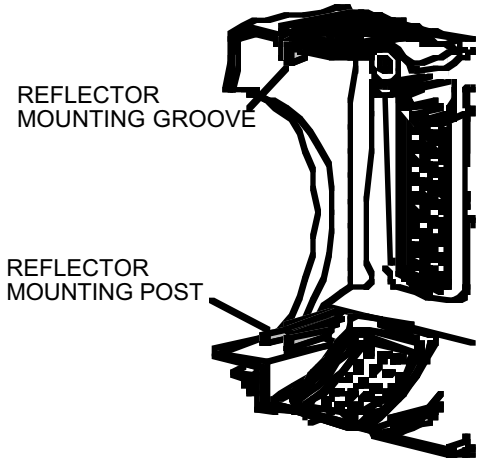
Step 5. Feed ignitor wires through retaining clips in squared corner of reflector and reconnect to ignitor board with soldering iron.



Step 6. Mount ignitor board on reflector assembly by placing three small holes in PCB over posts on reflector.



Step 7. Slide reflector assembly and ignitor PCB onto reflector mounting post and into grooves on axle side body next to air vent.



Step 8. Replace any cable ties removed in earlier steps.

Step 9. Reinstall filter bulkheads (color changing mechanisms).

Step 10. Close head. Refer to maintenance paragraph titled **"Closing the AR5 Head"**.

Step 11. Reinstall bulb.

Step 12. Reinstall luminaire.

1.4 Upper Enclosure Replacement Procedures

WARNING: Remove power to luminaire at main breaker prior to performing maintenance.

1.4.1 Replacement of Arc Power Supply (APS) PCB and/or Power Factor Supply (PFS) PCB

WARNING: Remove power to luminaire at main breaker prior to performing maintenance.

The APS PCB located in the upper enclosure provides voltage to the Ignitor board for "striking" or illuminating the arc bulb. The PFS PCB located beneath the APS in the upper enclosure produces operating voltages for the luminaire's internal electronics.

Caution: The PFS is available in 100-120VAC and 200-277VAC versions. Ensure correct PCB is used when replacing this item.

To gain access to the PCBs, the luminaire must be taken from its mounted position. Remove the exposed screws on the upper enclosure that secure the luminaire to the mounting plate. When the screws are removed, the luminaire may be lowered and the cabling disconnected.

To remove and replace the APS and/or PFS PCB:

Step 1. Locate and unplug J2 on APS PCB (2 pin connector on blue and brown pigtail).

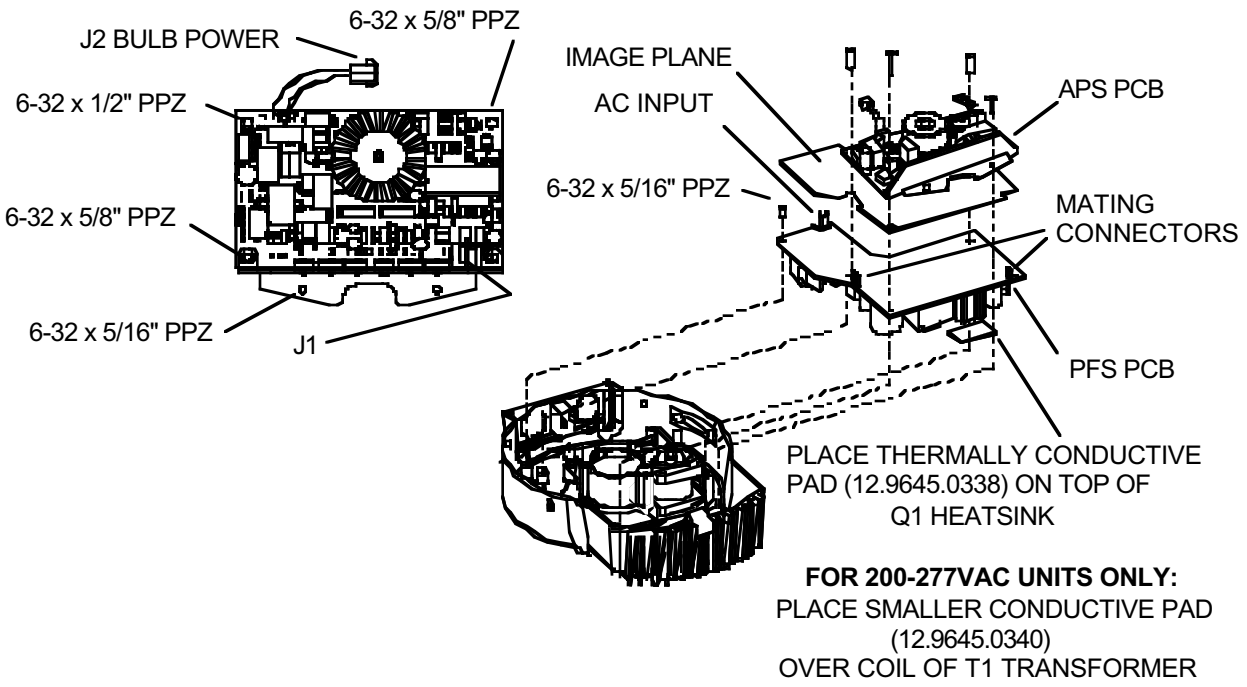
Step 2. Locate and unplug J1 on APS PCB (4 pin connector next to heat sink).

Step 3. Locate and unplug 2-pin AC power connector on corner of PFS PCB (J1).

Step 4. Remove two 6-32 x 5/16" PPZ screws from APS heat sink.

Step 5. Remove three 6-32 x 5/8" and one 6-32 x 1/2" screws from APS PCB.

Step 6. Remove single 6-32 x 5/16" screw from corner of PFS PCB next to AC power connector (J1).



Step 7. Remove both PFS and APS circuit boards together from upper enclosure.

Step 8. The two boards are held together by two board-to-board connectors. Separate two circuit boards by gently pulling apart.

Step 9. Replace defective board (APS or PFS) and rejoin two boards with image plane between them.

Step 10. When replacing 100VAC or 220VAC version PFS, a thermally conductive pad must be placed on top edge of Q1 heatsink to ensure proper heat transfer from PCB to upper enclosure. For 220-277VAC versions, a smaller pad must be placed over top of T1 transformer coil.

Step 11. Replace six mounting screws in APS PCB and heat sink. The three longer screws are used in rear mounting holes of PCB near heatsink and to secure cable saddle to front outer PCB edge.

Step 12. Replace single 5/16" screw in PFS PCB.

Step 13. Reconnect J1 and J2 on APS board.

Step 14. Reconnect J1 on PFS board.

Step 15. Remount and connect luminaire.

Step 16. Restore power.

1.4.2 Removal and Replacement of Pan Motor

- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled **"Disconnecting the luminaire"**.

To remove and replace the pan motor in the upper enclosure of the *AR5* luminaire:

Tools: Screwdriver, slot

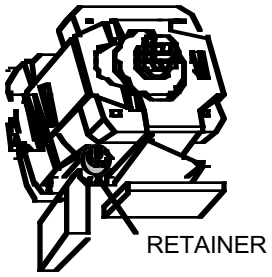
5/16" nutdriver

Parts: new Pan motor assembly

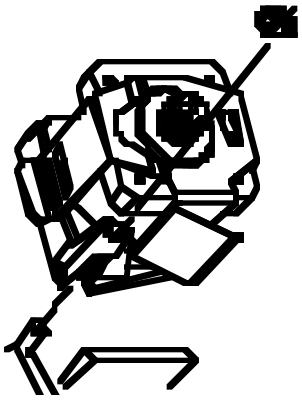
new Retainer

Step 1. Slip drive belt off pan motor driven pulley.

Step 2. Pry retainer off post in upper enclosure.



Step 3. Grasp motor assembly and pull from mounting post.



Step 4. Install new motor assembly by placing over mounting post.

Step 5. Press new retainer onto mounting post over motor mount securing motor assembly in place. Press into place with 5/16 nutdriver or socket.

1.4.3 Pan Tube Assembly Replacement

- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled **"Disconnecting the luminaire"**.
- Remove the Yoke Cover. Refer to maintenance paragraph titled **"Removing the Yoke Cover"**.
- Remove CPU PCB. Refer to maintenance paragraph titled **"Replacement of CPU PCB"**.
- (Optional) Remove APS PCB and Low Voltage Supply (LVS). Refer to maintenance paragraphs titled **"Replacement of Arc Power Supply (APS) PCB"** and **"Replacement of Low Voltage Supply (LVS) PCB"**.

To remove and replace all or part of the pan tube assembly in the *AR5* upper enclosure:

Tools: Screwdriver, slot

Screwdriver, phillips

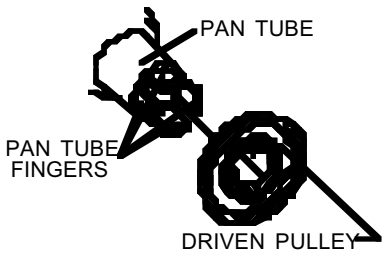
AMP pin extraction tool (P/N 305183)

Slip-joint pliers

Step 1. Remove drive belt from pan motor pulley.

Step 2. Using phillips screwdriver remove ground wire exiting pan tube and connecting to threaded boss in upper enclosure.

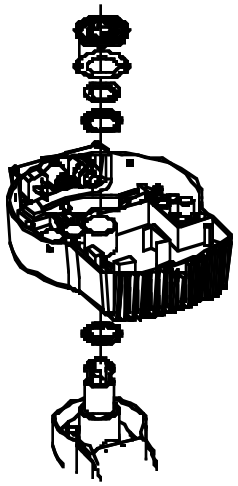
Step 3. Pan tube is mated to driven pulley by four "fingers" that extent through driven pulley and expand to overlap inner rim of pulley center. Locate four fingers belonging to pan tube (The pan tube fingers are wider than the raised sections of the driven pulley itself).



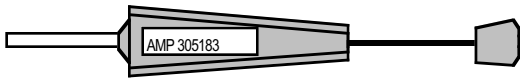
Using slip-joint pliers, compress two opposing fingers while sliding a screwdriver under driven pulley flange to lift pulley and create pressure against pan tube.

Note: Take care not to compress the pan tube fingers too tightly or create excessive pressure as fingers will break off requiring pan tube replacement.

Step 4. With screwdriver creating pressure against pulley and pan tube, use slip-joint pliers to compress remaining two pan tube fingers. This action should result in driven pulley being released from grasp of pan tube fingers, allowing separation of driven pulley, driven pulley flange, bearing sleeve, and bearing assemblies.

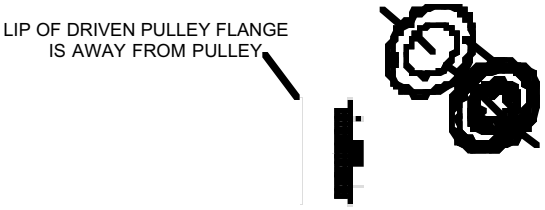


Step 5. Disassemble only those portions necessary to replace desired pieces. If pan tube itself requires replacement, use AMP pin extraction tool to remove pins from APS 2 position MNLOK plug housing allowing ignitor wires to pass through pan tube. Refer to wiring diagram to verify proper pin reinsertion (APS PCB to Ignitor PCB).



AMP EXTRACTION TOOL

Step 6. Reassemble pan tube assembly by reversing above steps. Driven pulley flange forms a side wall to pulley and has a small lip along outer edge. The turn of the lip is outward and away from pulley.



Note: Illustrations above show proper assembly sequence. Do not forget to route required cables through pan tube and pulley assembly pieces

including belt prior to reassembly. (Ignitor wires and ground from yoke arm to upper enclosure. Pan motor, data input, and DC input from upper enclosure to CPU PCB in yoke arm. A paper clip may be helpful to hook cables in pan tube and lead into yoke arm.)

Step 7. Reinstall pins in MNLOK 2 position plug housing. Refer to wiring diagram to verify proper pin reinsertion (APS PCB to Ignitor PCB).

Step 8. Reinstall PCBs and reconnect cabling per PCB replacement paragraphs. Reconnect ground wire to threaded boss in upper enclosure.

1.5 AR5 Yoke Arm Cover Replacement Procedures

1.5.1 Removing the Yoke Cover

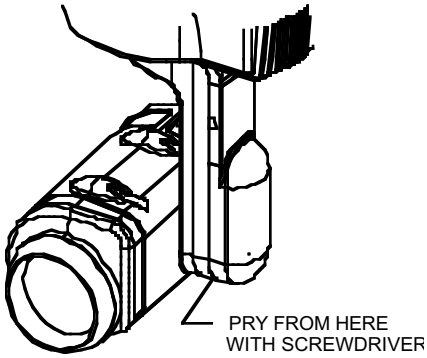
Tools: Screwdriver, phillips

Screwdriver, small slot

Step 1. Open the yoke cover door.

Step 2. Using a phillips screwdriver, remove exposed 3/8" #6 Type F screw located next to yellow and green LEDs.

Step 3. Using a small slotted screwdriver, remove yoke cover by prying loose from yoke itself.



1.5.2 Replacing the Yoke Cover

Tools: Screwdriver, phillips

Step 1. Reattach yoke cover by snapping into place.

Step 2. Thread 3/8" #6 Type F screw through yoke cover and PCB and into yoke arm.

Note: In addition to securing the yoke cover in place, the 3/8"#6 screw is required to ensure proper grounding of the circuitry in the CPU PCB.

1.5.3 Replacement of CPU PCB

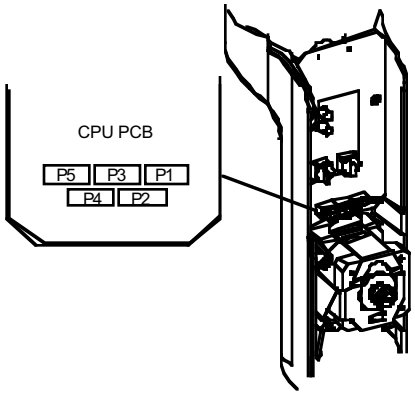
- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled **"Disconnecting the luminaire"**.
- Remove the Yoke Cover. Refer to maintenance paragraph titled **"Removing the Yoke Cover"**.

The Central Processing Unit (CPU) Printed Circuit Board housed in the yoke arm contains the luminaires microprocessor which converts communication control data into actual motor instruction.

To remove and replace the CPU PCB:

Tools: Screwdriver, phillips

Step 1. Observe five connectors at one end of CPU PCB. Each cable corresponds to a specific filter actuator or motor. It is extremely important that each cable be reconnected to its proper receptacle after board replacement to ensure correct operation. It is possible that one or more connectors may be unused based on chosen capabilities of your luminaire. Before disconnecting cables ensure that each is numbered and/or color coded in a way that corresponds to its proper connector receptacle.



Connector / Function Table

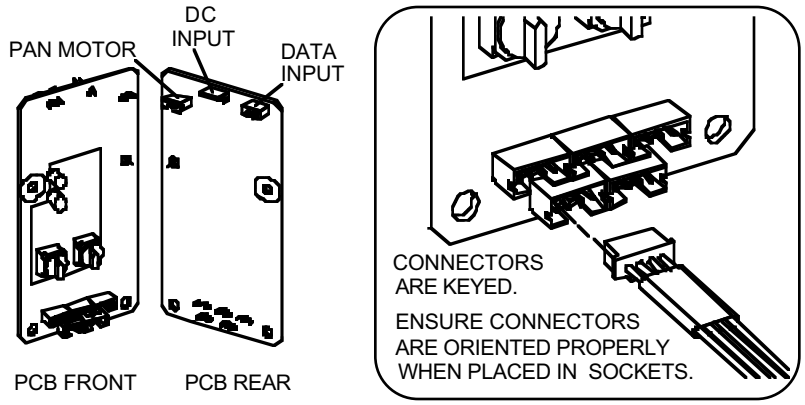
Conn. / Heatshrink	With color filters only	Color with Douser or Diffuser	Douser and Diffuser only
P1 / Blue	Blue Filter	Blue Filter	
P2 / Yellow	Amber Filter	Amber Filter	
P3 / Red	Magenta Filter	Magenta Filter	Diffuser
P4 / Black		Douser or Diffuser	Douser
P5 / none	Tilt Motor	Tilt Motor	Tilt Motor

Step 2. Unplug cables from CPU PCB.

Step 3. Using a Phillips screwdriver remove three 5/16" #6 Type F screws from PCB.

Step 4. Lift CPU PCB from yoke arm.

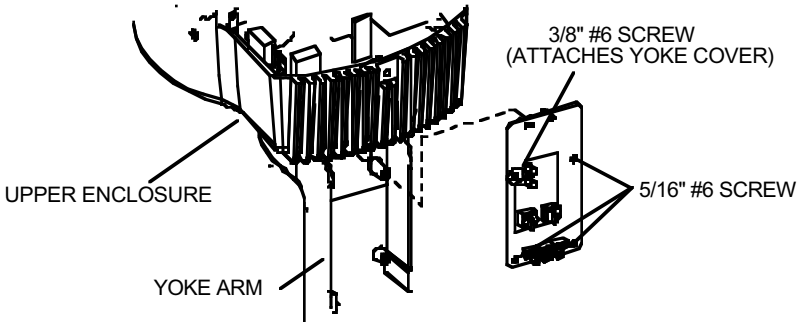
Step 5. Remove three additional cables located on back side of PCB. They are: Pan motor (P6), DC power input (P8), Data input (P7).



Step 6. Remove and replace CPU PCB.

Step 7. Replace cables to P6, P7, and P8 on backside of PCB.

Step 8. Thread three 5/16" #6 Type F screws through PCB and into Yoke Arm.



Step 9. Reconnect cables on front side of PCB taking care to ensure each is replaced in its original location.

Step 10. Replace Yoke Cover.
Refer to maintenance paragraph titled **"Replacing the Yoke Cover"**.

1.5.4 Removal and Replacement of Tilt Motor

- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled **"Disconnecting the luminaire"**.
- Remove the Yoke Cover. Refer to maintenance paragraph titled **"Removing the Yoke Cover"**.

To remove and replace the tilt motor in the yoke of the *AR5* luminaire:

Tools: Screwdriver, slot

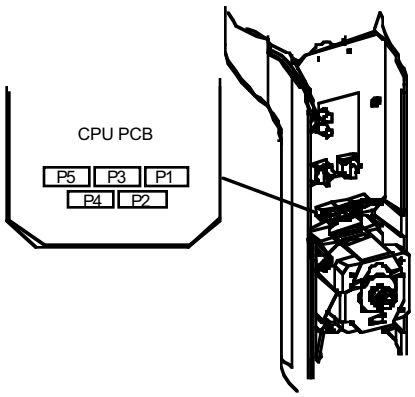
5/16" nutdriver

Parts: new Tilt motor assembly

new Retainer

Step 1. Slip drive belt off tilt motor driven pulley.

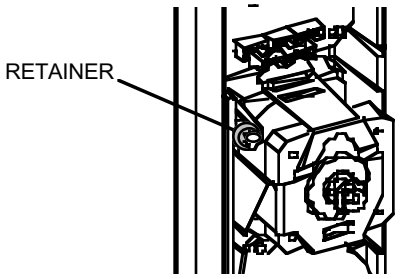
Step 2. Observe five connectors at one end of CPU PCB. Each cable corresponds to a specific filter actuator or motor. It is possible that one or more connectors may be unused based on chosen capabilities of your luminaire. Tilt motor connects to P5 on CPU PCB as shown below. Disconnect P5 and note connector is keyed by offset notches on sides.



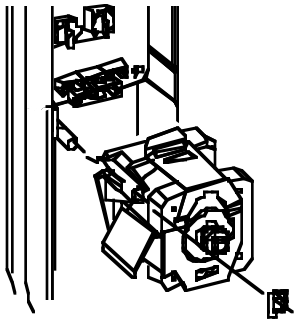
Connector / Function Table

Conn. / Heatshrink	With color filters only	Color with Douser or Diffuser	Douser and Diffuser only
P1 / Blue	Blue Filter	Blue Filter	
P2 / Yellow	Amber Filter	Amber Filter	
P3 / Red	Magenta Filter	Magenta Filter	Diffuser
P4 / Black		Douser or Diffuser	Douser
P5 / none	Tilt Motor	Tilt Motor	Tilt Motor

Step 3. Pry retainer off post in yoke arm.



Step 4. Grasp motor assembly and lift off mounting post.

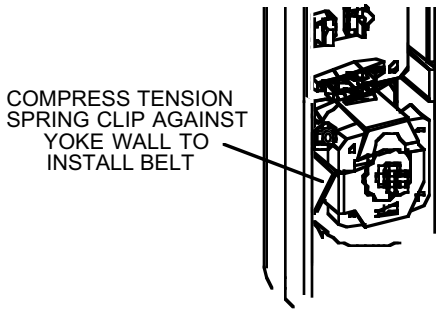


Step 5. Install new motor assembly by pushing onto mounting post.

Step 6. Press new retainer onto mounting post over motor mount to keep motor assembly in place. Press into place with 5/16 nutdriver or socket.

Step 7. Reconnect tilt motor to connector P5 of CPU PCB.

Step 8. Slip drive belt over drive pulley on tilt motor. Pressing side of motor to compress spring clip against yoke arm will shift drive shaft and gear toward driven pulley and allow drive belt to be installed more easily.



1.5.5 Tilt Tube Assembly Replacement

- Disconnect luminaire from mounted position, if mounted. Refer to maintenance paragraph titled **"Disconnecting the luminaire"**.
- Remove the Yoke Cover. Refer to maintenance paragraph titled **"Removing the Yoke Cover"**.
- Remove CPU PCB. Refer to maintenance paragraph titled **"Replacement of CPU PCB"**.

To remove and replace all or part of the tilt tube assembly in the *AR5* yoke:

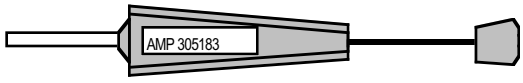
Tools: Screwdriver, slot

Screwdriver, phillips

AMP pin extraction tool (P/N 305183)

Slip-joint pliers

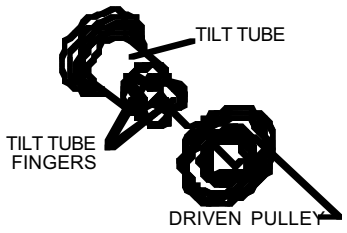
Step 1. Using phillips screwdriver, loosen APS PCB in upper enclosure enough to unplug MNLOK 2 position plug housing from J2. Once unplugged, remove pins from connector using AMP extraction tool and pull wires through upper enclosure and into Yoke Arm.



AMP EXTRACTION TOOL

Step 2. Remove drive belt from tilt motor pulley.

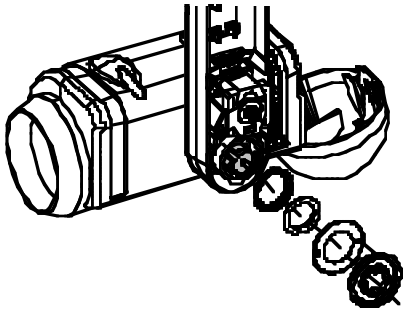
Step 3. Tilt tube is mated to driven pulley by four "fingers" that extend through driven pulley and expand to overlap inner rim of pulley center. Locate four fingers belonging to tilt tube (The tilt tube fingers are wider than the raised sections of the driven pulley itself).



Using slip-joint pliers, compress two opposing fingers while sliding a screwdriver under driven pulley flange to lift pulley and create pressure against tilt tube.

Note: Take care not to compress the tilt tube fingers too tightly or create excessive pressure as fingers will break off requiring axle side-body replacement.

Step 4. With screwdriver creating pressure against pulley and tilt tube, use slip-joint pliers to compress remaining two tilt tube fingers. This action should result in driven pulley being released from grasp of tilt tube fingers, allowing separation of driven pulley, driven pulley flange, bearing sleeve, and bearing assemblies.



Step 5. Disassemble only those portions necessary to replace desired pieces.

Step 6. Reassemble tilt tube assembly by reversing above steps. Driven pulley flange forms a side wall to pulley and has a small lip along outer edge. The turn of the lip is outward and away from pulley.

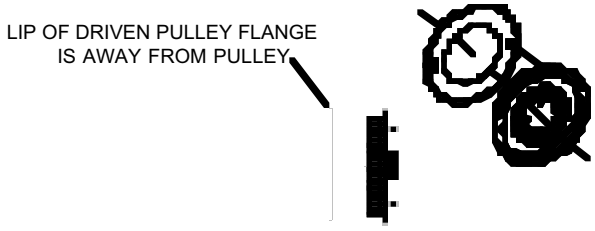
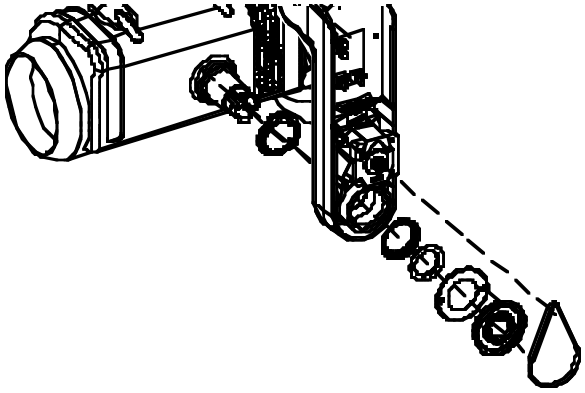


Illustration below shows proper assembly sequence. Do not forget to route required wiring through tilt tube and pulley assembly pieces.



Step 7. Route Ignitor wires back through Pan tube assembly and into upper enclosure.

Step 8. Reinstall pins into MNLOK 2 position plug housing and connect to J2 of APS PCB. Refer to wiring diagram to verify proper pin reinsertion (APS PCB to Ignitor PCB).

Step 9. Secure APS PCB in upper enclosure.

Step 10. Install CPU PCB in yoke arm.
Refer to maintenance paragraph titled **"Replacement of CPU PCB"**.

Step 11. Replace yoke arm cover.
Refer to maintenance paragraph titled **"Replacing the Yoke Cover"**.

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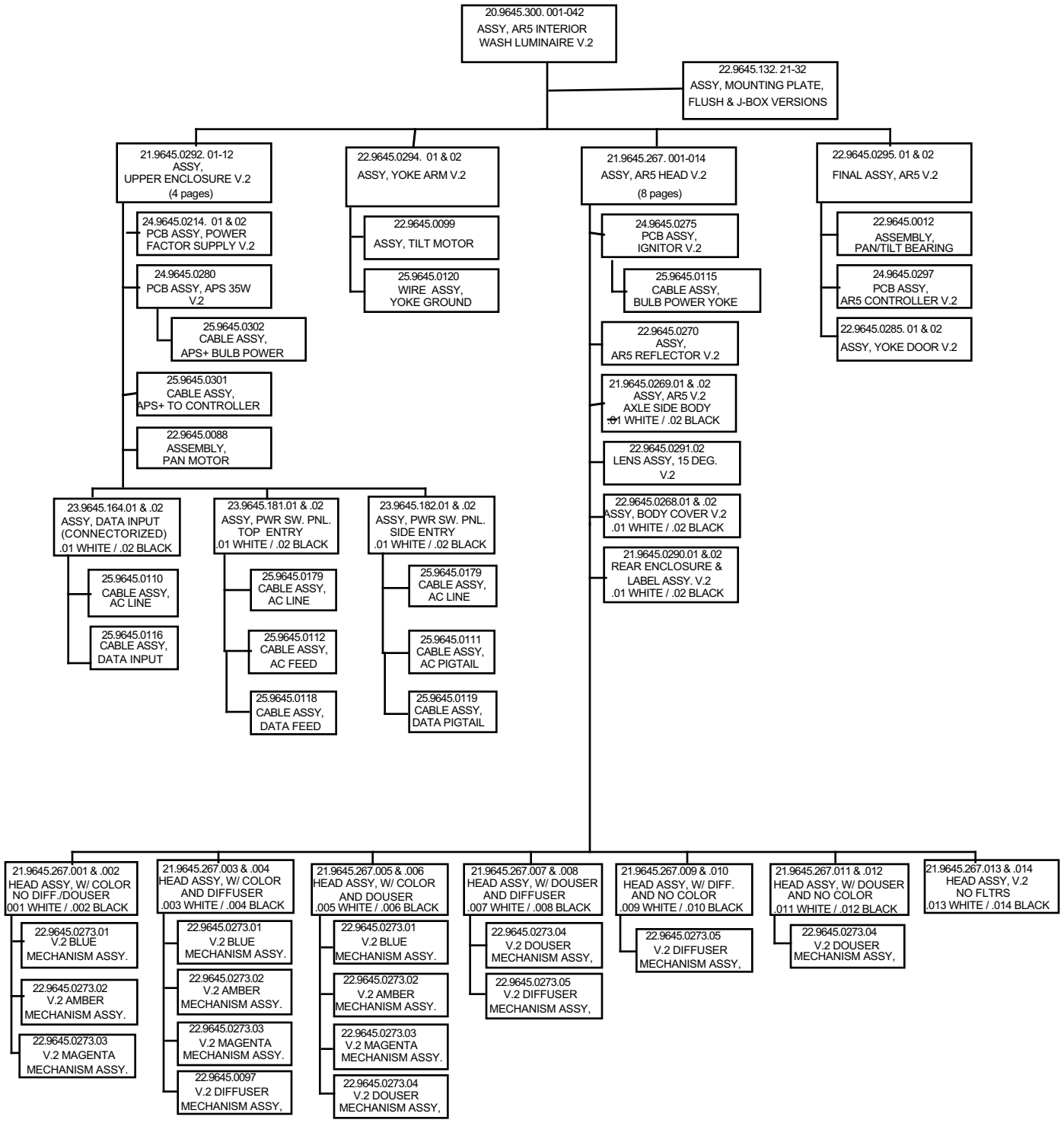
Chapter 2 Illustrated Parts Breakdown

2.1 Assembly Tree

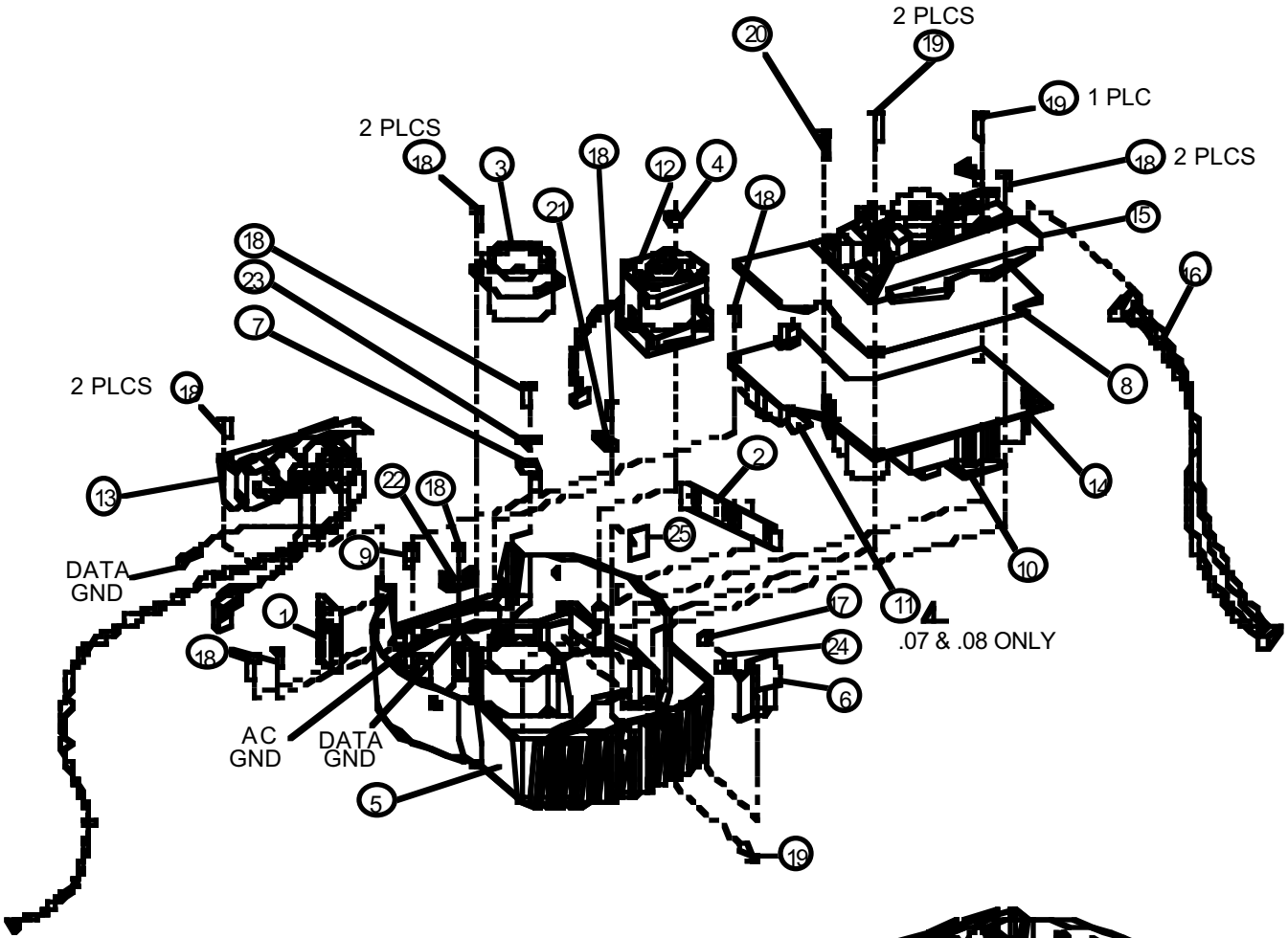


2.2 Upper Enclosure

2.2.1 Assembly, Upper Enclosure V.2 21.9645.0292.XX (connector versions)

	.01	.02	.07	.08			
ITEM	QTY	QTY	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	1	0	0	EA	04.9645.0152	LABEL, INPUT RATING, AR5, 100-120V
1	0	0	1	1	EA	04.9645.0153	LABEL, INPUT RATING, AR5, 200-277V
2	1	1	1	1	EA	04.9645.0155	LABEL, AR5, UL/CSA
3	1	1	1	1	EA	10.9645.0074	OUTER RACE, PAN/TILT
4	1	1	1	1	EA	10.9645.0103	RETAINER
5	1	0	1	0	EA	10.9645.0035.01	UPPER ENCLOSURE, WHITE
5	0	1	0	1	EA	10.9645.0035.02	UPPER ENCLOSURE, BLACK
6	1	0	1	0	EA	10.9645.0105.01	HOOK, AR5, WHITE
6	0	1	0	1	EA	10.9645.0105.02	HOOK, AR5, BLACK
7	1	1	1	1	EA	10.9645.0235	TOGGLE STOP
8	1	1	1	1	EA	10.9645.0303	IMAGE PLANE
9	1	1	1	1	EA	10.9645.0309	STANDOFF, .78L, 6-32, M-F, 1/4" HEX, SS
10	1	1	1	1	EA	12.9645.0338	PAD, THERMALLY CONDUCTIVE, 0.1" X 0.5" X 1.5"
11	0	0	1	1	EA	12.9645.0340	PAD, THERMALLY CONDUCTIVE, 0.1" X 0.50" X 0.60"
12	1	1	1	1	EA	22.9645.0089	ASSEMBLY, PAN MOTOR
13	1	0	1	0	EA	23.9645.164.01	ASSY, DATA INPUT WHITE
13	0	1	0	1	EA	23.9645.164.02	ASSY, DATA INPUT BLACK
14	1	1	0	0	EA	24.9645.0214.01	ASSY, PCB, 100-120VAC POWER FACTOR SUPPLY, V.2
14	0	0	1	1	EA	24.9645.0214.02	ASSY, PCB, 200-277VAC POWER FACTOR SUPPLY, V.2
15	1	1	1	1	EA	24.9645.0280	ASSEMBLY, APS+ PCB, V.2
16	1	1	1	1	EA	25.9645.0301	CABLE ASSY, APS+ TO CONTROLLER, V.2
17	1	1	1	1	EA	53.2002.0001	NUT, 6-32 KEP ZINC PLATED
18	12	12	12	12	EA	53.6522.0001	SCREW, 6-32 X 1/4 "PPZ
19	4	4	4	4	EA	53.6526.0001	SCREW, 6-32 X 5/8 " PPZ
20	1	1	1	1	EA	53.6613.0001	SCREW, 6-32 X 1/2 "PPZ
21	2	2	2	2	EA	55.2178.0001	SADDLE, TY-WRAP #6 SCREW
22	1	1	1	1	EA	55.2179.0002	SADDLE, TY-WRAP (VL-1)
23	1	1	1	1	EA	55.3301.0006	FLAT WASHER, #6
24	1	1	1	1	EA	55.6503.0003	WASHER, #8, SS, 3/ 4 OC
25	.0625	.0625	.0625	.0625	FT	55.6507.0003	WEATHER STRIP, 1/8" X 1" X 50' ADH. BACK (3/4" LENGTH)

Assembly, Upper Enclosure V.2
21.9645.0292.XX connector versions (continued)

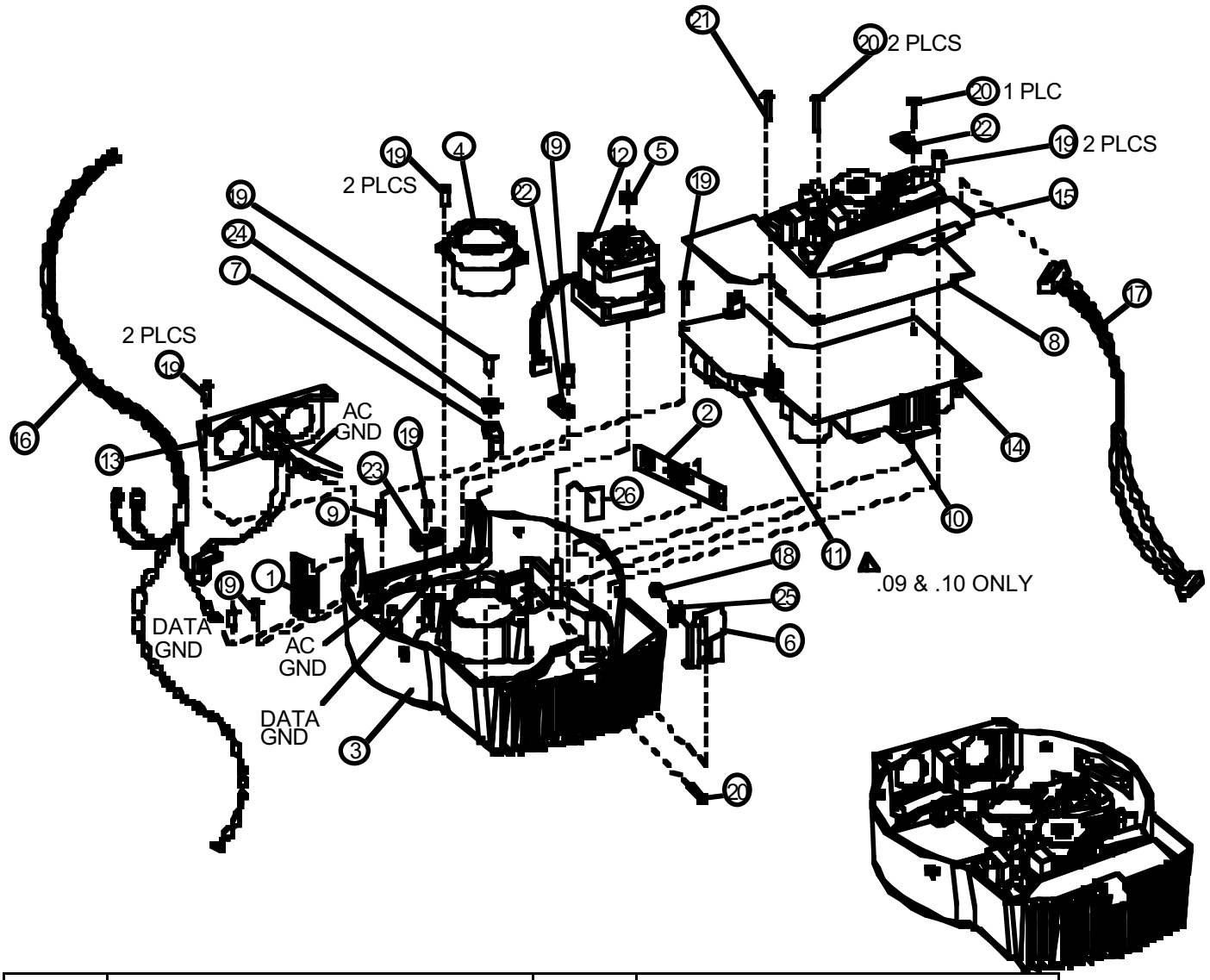


CONFIG	DESCRIPTION	CONFIG	DESCRIPTION
.01	AR5, 100-120VAC CONNECTORIZED VERSION, WHITE, V.2	.07	AR5, 200-277VAC CONNECTORIZED VERSION, WHITE, V.2
.02	AR5, 100-120VAC CONNECTORIZED VERSION, BLACK, V.2	.08	AR5, 200-277VAC CONNECTORIZED VERSION, BLACK, V.2

2.2.2 Assembly, Upper Enclosure V.2 21.9645.0292.XX (side entry versions)

	.03	.04	.09	.10			
ITEM	QTY	QTY	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	1	0	0	EA	04.9645.0152	LABEL, INPUT RATING, AR5, 100-120V
1	0	0	1	1	EA	04.9645.0153	LABEL, INPUT RATING, AR5, 200-277V
2	1	1	1	1	EA	04.9645.0155	LABEL, AR5, UL/CSA
3	1	0	1	0	EA	10.9645.0035.01	UPPER ENCLOSURE, WHITE
3	0	1	0	1	EA	10.9645.0035.02	UPPER ENCLOSURE, BLACK
4	1	1	1	1	EA	10.9645.0074	OUTER RACE, PAN/TILT
5	1	1	1	1	EA	10.9645.0103	RETAINER
6	1	0	1	0	EA	10.9645.0105.01	HOOK, AR5, WHITE
6	0	1	0	1	EA	10.9645.0105.02	HOOK, AR5, BLACK
7	1	1	1	1	EA	10.9645.0235	TOGGLE STOP
8	1	1	1	1	EA	10.9645.0303	IMAGE PLANE
9	1	1	1	1	EA	10.9645.0309	STANDOFF, .78L, 6-32, M-F, 1/4" HEX, SS
10	1	1	1	1	EA	12.9645.0338	PAD, THERMALLY CONDUCTIVE, 0.1" X 0.5" X 1.5"
11	0	0	1	1	EA	12.9645.0340	PAD, THERMALLY CONDUCTIVE, 0.1" X 0.50" X 0.60"
12	1	1	1	1	EA	22.9645.0089	ASSEMBLY, PAN MOTOR
13	1	0	1	0	EA	23.9645.182.01	ASSY, POWER SWITCH PANEL, SIDE ENTRY, WHITE
13	0	1	0	1	EA	23.9645.182.02	ASSY, POWER SWITCH PANEL, SIDE ENTRY, BLACK
14	1	1	0	0	EA	24.9645.0214.01	ASSY, PCB, 100-120VAC POWER FACTOR SUPPLY, V.2
14	0	0	1	1	EA	24.9645.0214.02	ASSY, PCB, 200-277VAC POWER FACTOR SUPPLY, V.2
15	1	1	1	1	EA	24.9645.0280	ASSEMBLY, APS+ PCB, V.2
16	1	1	1	1	EA	25.9645.0119	CABLE ASSY, DATA PIGTAIL
17	1	1	1	1	EA	25.9645.0301	CABLE ASSY, APS+ TO CONTROLLER, V.2
18	1	1	1	1	EA	53.2002.0001	NUT, 6-32 KEP ZINC PLATED
19	12	12	12	12	EA	53.6522.0001	SCREW, 6-32 X 1/4 "PPZ
20	4	4	4	4	EA	53.6526.0001	SCREW, 6-32 X 5/8 " PPZ
21	1	1	1	1	EA	53.6613.0001	SCREW, 6-32 X 1/2 "PPZ
22	2	2	2	2	EA	55.2178.0001	SADDLE, TY-WRAP #6 SCREW
23	1	1	1	1	EA	55.2179.0002	SADDLE, TY-WRAP (VL-1)
24	1	1	1	1	EA	55.3301.0006	FLAT WASHER, #6
25	1	1	1	1	EA	55.6503.0003	WASHER, #8, SS, 3/ 4 OC
26	.0625	.0625	.0625	.0625	FT	55.6507.0003	WEATHER STRIP, 1/8" X 1" X 50' ADH. BACK (3/4" LENGTH)

Assembly, Upper Enclosure V.2
21.9645.0292.XX side entry versions (continued)

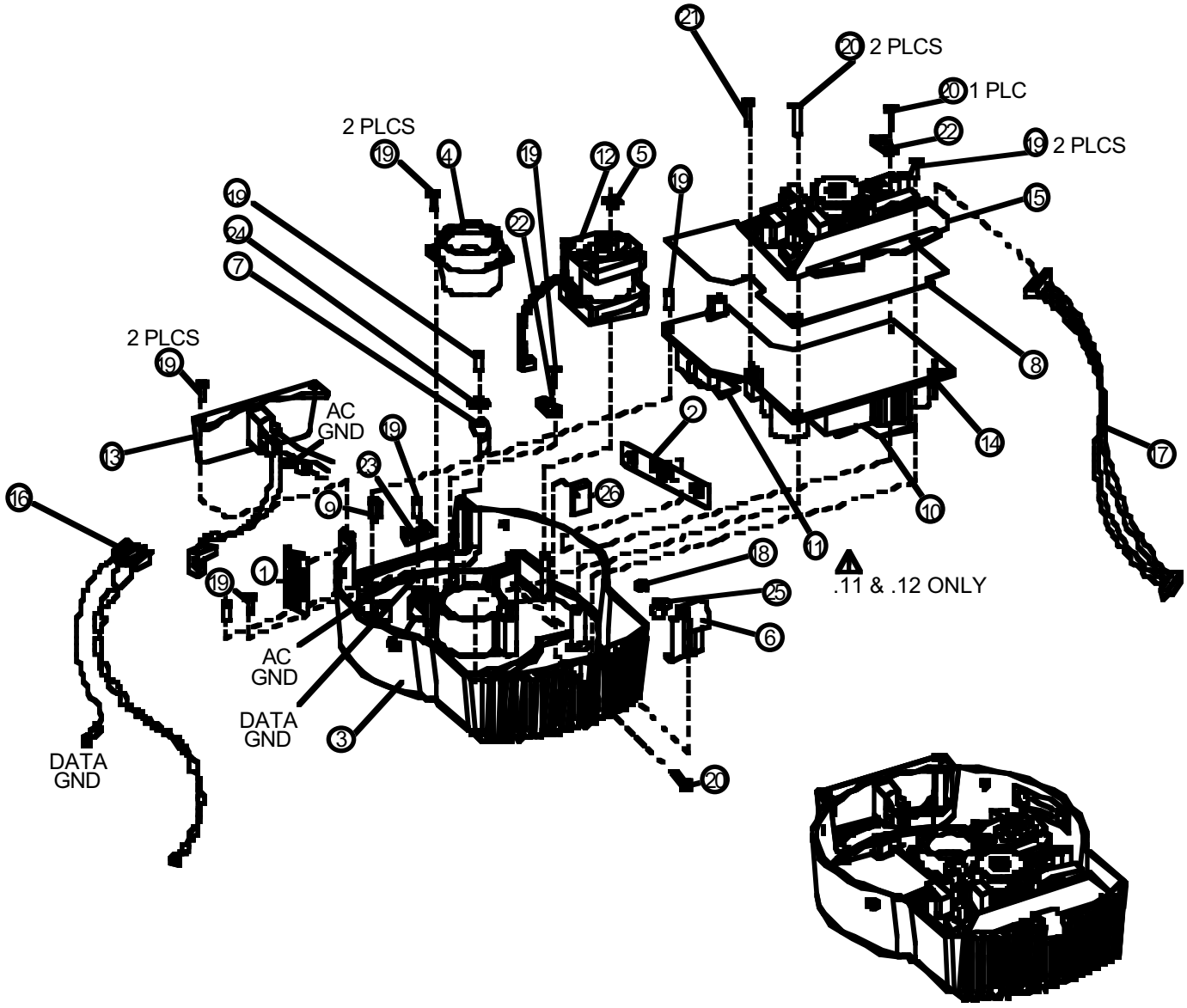


CONFIG	DESCRIPTION	CONFIG	DESCRIPTION
.03	AR5, 100-120VAC SIDE ENTRY VERSION, WHITE, V.2	.09	AR5, 200-277VAC SIDE ENTRY VERSION, WHITE, V.2
.04	AR5, 100-120VAC SIDE ENTRY VERSION, BLACK, V.2	.10	AR5, 200-277VAC SIDE ENTRY VERSION, BLACK, V.2

2.2.3 Assembly, Upper Enclosure V.2 21.9645.0292.XX (terminal strip top entry versions)

	.05	.0	.11	.12			
ITEM	QTY	QTY	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	1	0	0	EA	04.9645.0152	LABEL, INPUT RATING, AR5, 100-120V
1	0	0	1	1	EA	04.9645.0153	LABEL, INPUT RATING, AR5, 200-277V
2	1	1	1	1	EA	04.9645.0155	LABEL, AR5, UL/CSA
3	1	0	1	0	EA	10.9645.0035.01	UPPER ENCLOSURE, WHITE
3	0	1	0	1	EA	10.9645.0035.02	UPPER ENCLOSURE, BLACK
4	1	1	1	1	EA	10.9645.0074	OUTER RACE, PAN/TILT
5	1	1	1	1	EA	10.9645.0103	RETAINER
6	1	0	1	0	EA	10.9645.0105.01	HOOK, AR5, WHITE
6	0	1	0	1	EA	10.9645.0105.02	HOOK, AR5, BLACK
7	1	1	1	1	EA	10.9645.0235	TOGGLE STOP
8	1	1	1	1	EA	10.9645.0303	IMAGE PLANE
9	1	1	1	1	EA	10.9645.0309	STANDOFF, .78L, 6-32, M-F, 1/4" HEX, SS
10	1	1	1	1	EA	12.9645.0338	PAD, THERMALLY CONDUCTIVE, 0.1" X 0.5" X 1.5"
11	0	0	1	1	EA	12.9645.0340	PAD, THERMALLY CONDUCTIVE, 0.1" X 0.50" X 0.60"
12	1	1	1	1	EA	22.9645.0089	ASSEMBLY, PAN MOTOR
13	1	0	1	0	EA	23.9645.181.01	ASSY, POWER SWITCH PANEL, TOP ENTRY, WHITE
13	0	1	0	1	EA	23.9645.181.02	ASSY, POWER SWITCH PANEL, TOP ENTRY, BLACK
14	1	1	0	0	EA	24.9645.0214.01	ASSY, PCB, 100-120VAC POWER FACTOR SUPPLY, V.2
14	0	0	1	1	EA	24.9645.0214.02	ASSY, PCB, 200-277VAC POWER FACTOR SUPPLY, V.2
15	1	1	1	1	EA	24.9645.0280	ASSEMBLY, APS+ PCB, V.2
16	1	1	1	1	EA	25.9645.0118	CABLE ASSY, DATA FEED
17	1	1	1	1	EA	25.9645.0301	CABLE ASSY, APS+ TO CONTROLLER, V.2
18	1	1	1	1	EA	53.2002.0001	NUT, 6-32 KEP ZINC PLATED
19	12	12	12	12	EA	53.6522.0001	SCREW, 6-32 X 1/4 "PPZ
20	4	4	4	4	EA	53.6526.0001	SCREW, 6-32 X 5/8 " PPZ
21	1	1	1	1	EA	53.6613.0001	SCREW, 6-32 X 1/2 "PPZ
22	2	2	2	2	EA	55.2178.0001	SADDLE, TY-WRAP #6 SCREW
23	1	1	1	1	EA	55.2179.0002	SADDLE, TY-WRAP (VL-1)
24	1	1	1	1	EA	55.3301.0006	FLAT WASHER, #6
25	1	1	1	1	EA	55.6503.0003	WASHER, #8, SS, 3/ 4 OC
26	.0625	.0625	.0625	.0625	FT	55.6507.0003	WEATHER STRIP, 1/8" X 1" X 50' ADH. BACK (3/4" LENGTH)

Assembly, Upper Enclosure V.2
21.9645.0292.XX terminal strip top entry versions (continued)

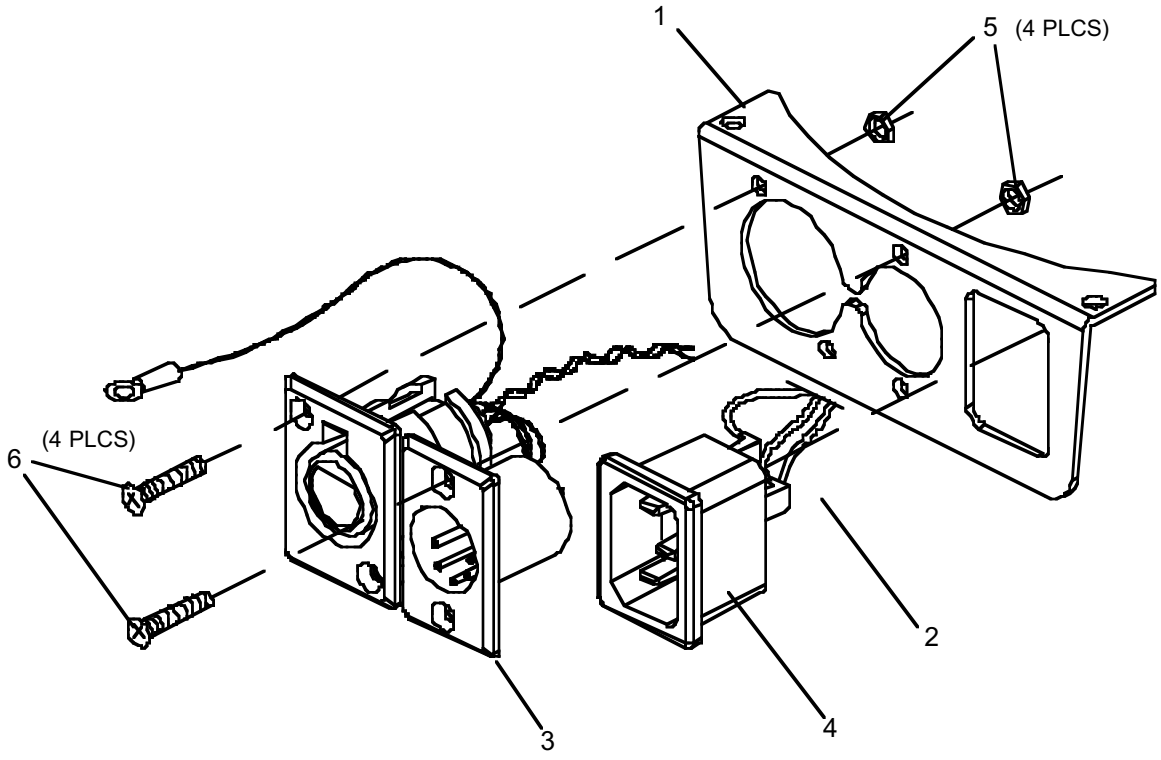


CONFIG	DESCRIPTION	CONFIG	DESCRIPTION
.05	AR5, 100-120VAC TOP ENTRY VERSION, WHITE, V.2	.11	AR5, 200-277VAC TOP ENTRY VERSION, WHITE, V.2
.06	AR5, 100-120VAC TOP ENTRY VERSION, BLACK, V.2	.12	AR5, 200-277VAC TOP ENTRY VERSION, BLACK, V.2

2.2.4 Assembly, Input Panel, V.2 23.9645.164.XX (connector version)

	.01	.02			
ITEM	**QTY**	**QTY**	**USMR**	**PART NUMBER**	**DESCRIPTION**
1	1	-	EA	10.9645.0092.01	BRACKET, I/O, IEC & XLR, WHITE
1	-	1	EA	10.9645.0092.02	BRACKET, I/O, IEC & XLR, BLACK
2	1	1	EA	25.9645.0110	CABLE ASSY, AC LINE
3	1	1	EA	25.9645.0116	CABLE ASSY, DATA INPUT
4	1	1	EA	52.6600.0003	RECEPT, IEC 320 POWER INLET 8301312
5	4	4	EA	53.2003.0001	NUT, 4-40, KEP ZINC PLATED
6	4	4	EA	53.5534.0312	SCREW, 4-40 X 5/16” PFZ

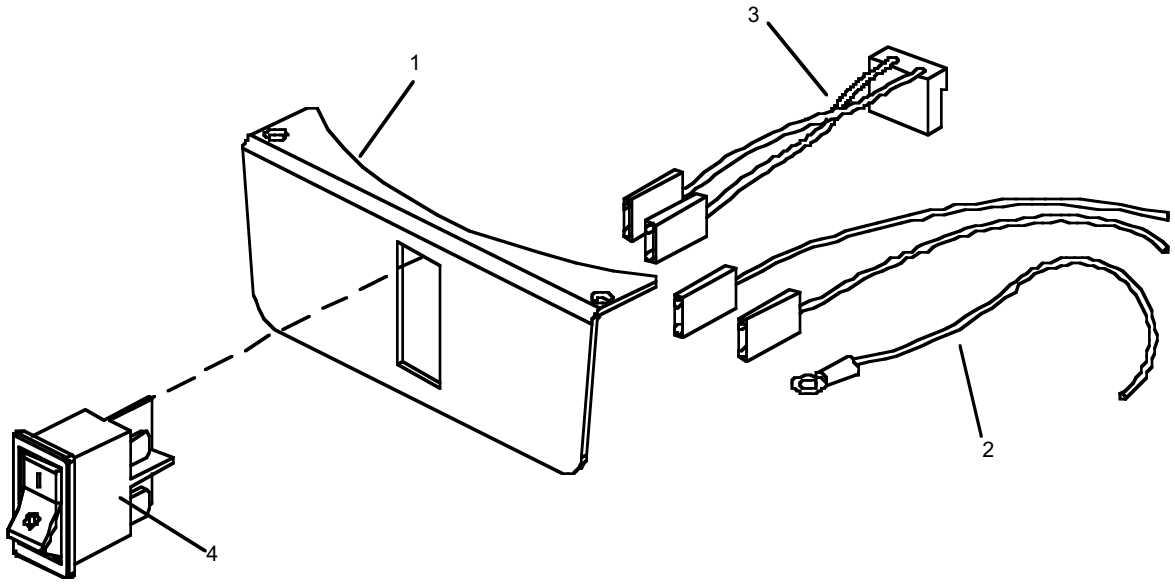
PART NUMBER	DESCRIPTION
23.9645.164.01	ASSY, INPUT PNL, CONNECTOR, WHITE
23.9645.164.02	ASSY, INPUT PNL, CONNECTOR , BLACK



2.2.5 Assy, Switch Panel, V.2, Top Entry 23.9645.181.XX

	.01	.02			
ITEM	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	-	EA	10.9645.0312.01	BRACKET, I/O, POWER SWITCH, WHITE
1	-	1	EA	10.9645.0312.02	BRACKET, I/O, POWER SWITCH, BLACK
2	1	1	EA	25.9645.0112	CABLE ASSY, AC FEED
3	1	1	EA	25.9645.0179	CABLE ASSY, AC LINE
4	1	-	EA	74.1050.0001	SWITCH, DPST, 277VAC, WHITE HOUSING
4	-	1	EA	74.1050.0002	SWITCH, DPST, 277VAC, BLACK HOUSING

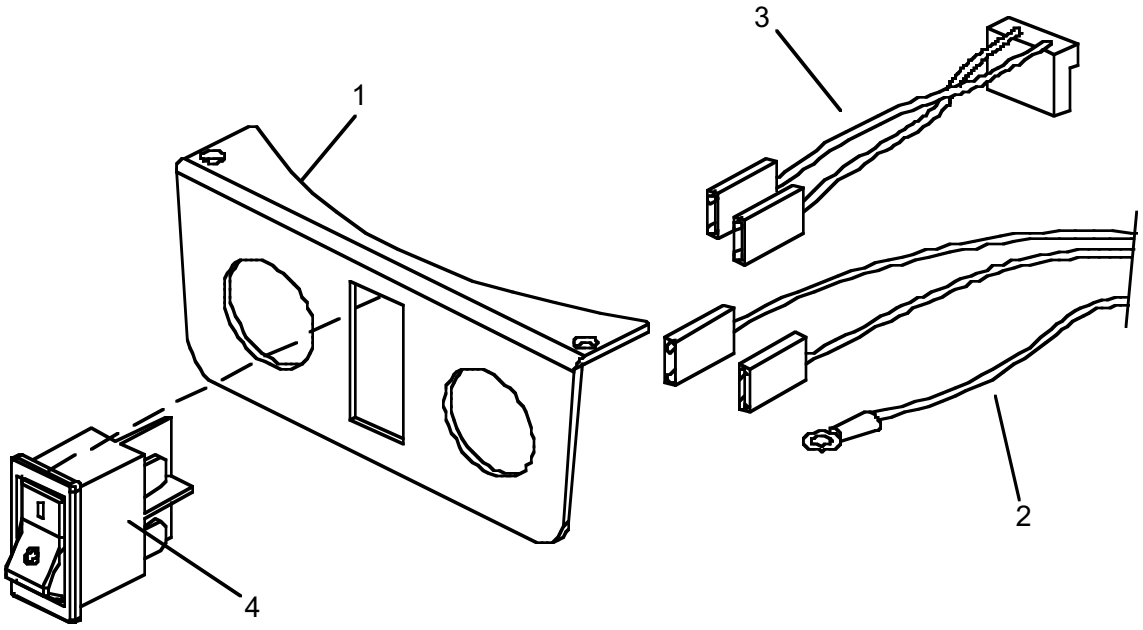
PART NUMBER	DESCRIPTION
23.9645.181.01	ASSY, SWITCH PANEL, TOP ENTRY, WHT
23.9645.181.02	ASSY, SWITCH PANEL, TOP ENTRY, BLK



2.2.6 Assy, Switch Panel, V.2, Side Entry 23.9645.182.XX

	.01	.02			
ITEM	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	-	EA	10.9645.0313.01	BRACKET, I/O, POWER SWITCH, WHITE
1	-	1	EA	10.9645.0313.02	BRACKET, I/O, POWER SWITCH, BLACK
2	1	1	EA	25.9645.0111	CABLE ASSY, AC PIGTAIL
3	1	1	EA	25.9645.0179	CABLE ASSY, AC LINE
4	1	-	EA	74.1050.0001	SWITCH, DPST, 277VAC, WHITE HOUSING
4	-	1	EA	74.1050.0002	SWITCH, DPST, 277VAC, BLACK HOUSING

PART NUMBER	DESCRIPTION
23.9645.182.01	ASSY, SWITCH PANEL, SIDE ENTRY, WHITE
23.9645.182.02	ASSY, SWITCH PANEL, SIDE ENTRY, BLACK

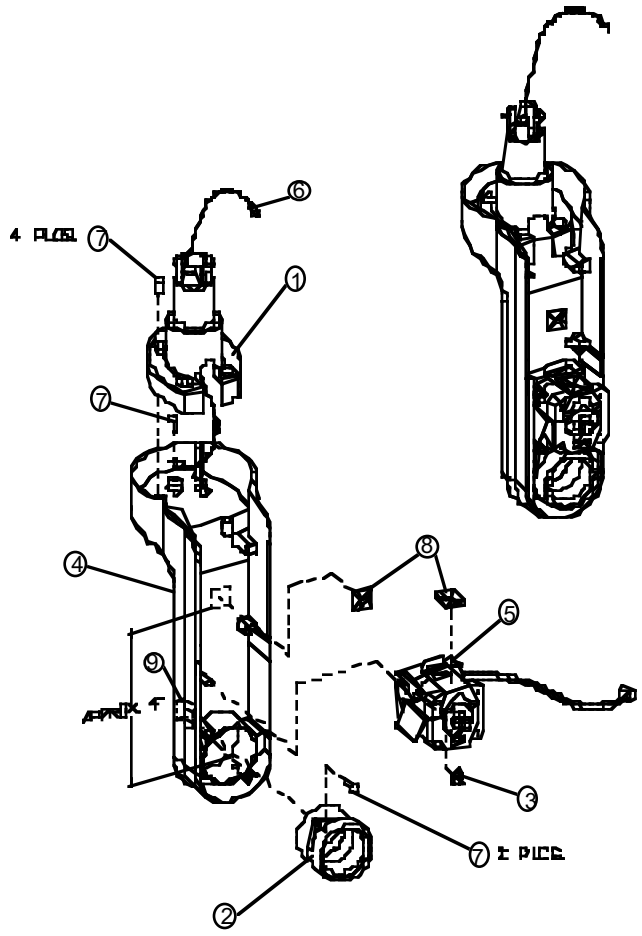


2.3 Yoke

2.3.1 Assy, AR5 Yoke Arm V.2 22.9645.0294.XX

	.01	.02			
ITEM	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	1	EA	10.9645.0030	AR5 PAN TUBE
2	1	1	EA	10.9645.0074	OUTER RACE, PAN/TILT
3	1	1	EA	10.9645.0103	AR5 RETAINER
4	1	-	EA	10.9645.0236.01	YOKE ARM, V.2, WHITE
4	-	1	EA	10.9645.0236.02	YOKE ARM, V.2, BLACK
5	1	1	EA	22.9645.0099	ASSEMBLY, TILT MOTOR
6	1	1	EA	25.9645.0120	YOKE GROUND WIRE ASSEMBLY
7	7	7	EA	53.6522.0001	SCREW, 6-32 X 1/4"PPZ
8	2	2	EA	55.2179.0003	SADDLE, CABLE, ADHESIVE BACKED
9	.0625	.0625	FT	55.6507.0003	WEATHER STRIP, 1/8" X 1" X 50' ADHBACK

PART NUMBER	DESCRIPTION
22.9645.0294.01	ASEMBLY, AR5 YOKE ARM, V.2, WHITE
22.9645.0294.02	ASEMBLY, AR5 YOKE ARM, V.2, BLACK



2.4 Head Assembly

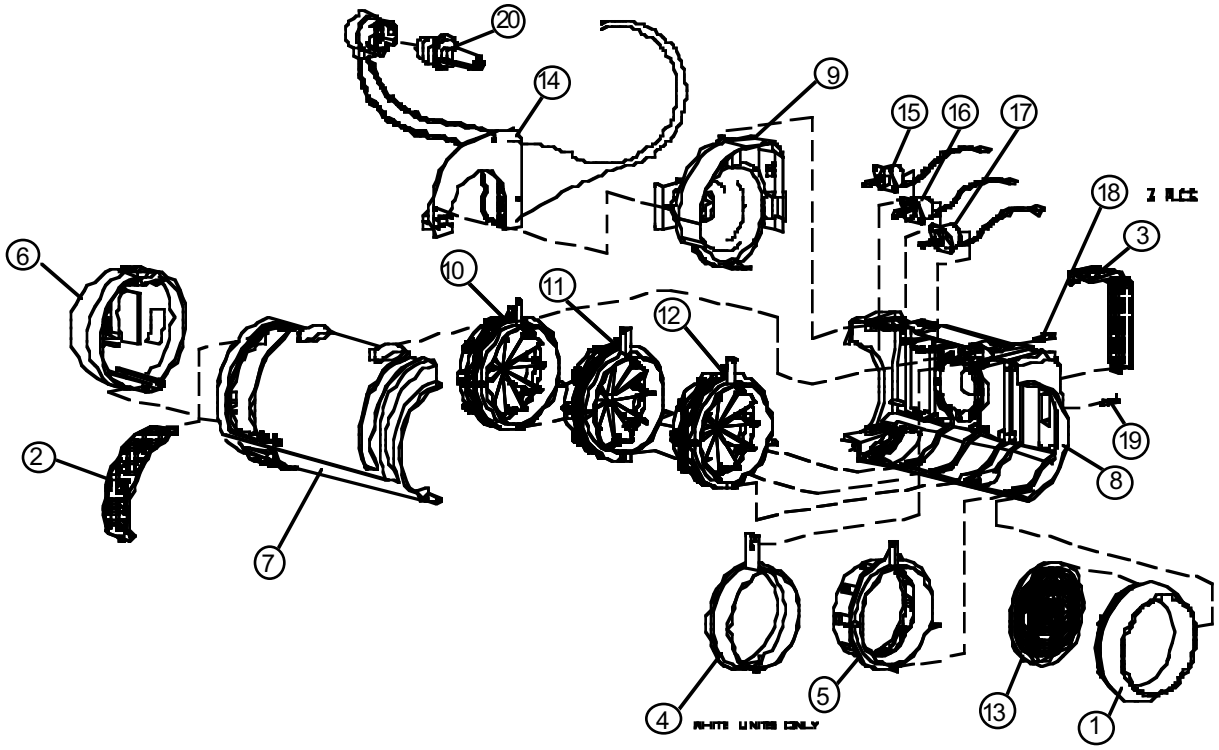
2.4.1 Head Assembly, AR5 V.2, Color Bulkheads, No Diffuser or Douser

21.9645.267.**001** (WHITE) and 21.9645.267.**002** (BLACK)

Color changing bulkheads and no diffuser or douser. Empty bulkhead used as light blocker in white unit only.

	.001	.002			
ITEM	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	1	-	EA	10.9645.0271	COLOR BULKHEAD, AR5, V.2
6	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
6	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
7	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
7	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
8	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
8	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
9	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
10	1	1	EA	22.9645.0273.01	ASSY, FILTER MECHANISM, BLUE V.2
11	1	1	EA	22.9645.0273.02	ASSY, FILTER MECHANISM, AMBER V.2
12	1	1	EA	22.9645.0273.03	ASSY, FILTER MECHANISM, MAGENTA V.2
13	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
14	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
15	1	1	EA	44.9645.0021.01	MOTOR ASSY, AR5 BLUE LINEAR ACTUATOR
16	1	1	EA	44.9645.0021.02	MOTOR ASSY, AR5 AMBER LINEAR ACTUATOR
17	1	1	EA	44.9645.0021.03	MOTOR ASSY, MAGENTA LINEAR ACTUATOR
18	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2" PPZ PLASTIC THD ROLLING
19	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125"PPZ, PLASK #1, PLASTIC THD ROLLING
20	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, Color Bulkheads, No Diffuser or Douser (Continued)



CONFIG	DESCRIPTION
.001	HEAD ASSEMBLY, AR5-V.2, COLOR BULKHEADS, NO DIFFUSER OR DOUSER, WHITE
.002	HEAD ASSEMBLY, AR5-V.2, COLOR BULKHEADS, NO DIFFUSER OR DOUSER, BLACK

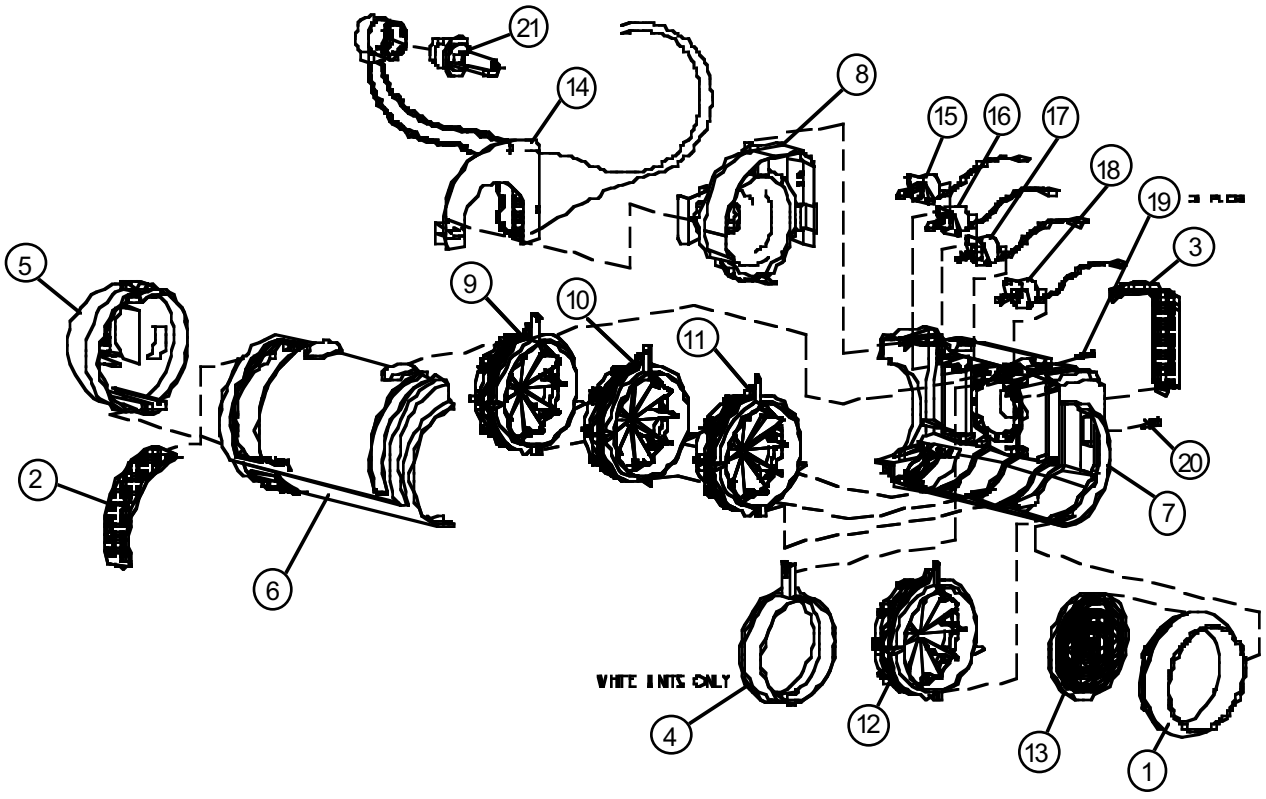
2.4.2 Head Assembly, AR5 V.2, Color Bulkheads & Diffuser

21.9645.267.**003** (WHITE) and 21.9645.267.**004** (BLACK)

With color changing bulkheads and diffuser. Light shield sleeve is used as light blocker in white unit only.

	.003	.004			
ITEM	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
5	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
6	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
6	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
7	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
7	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
8	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
9	1	1	EA	22.9645.0273.01	ASSY, FILTER MECHANISM, BLUE V.2
10	1	1	EA	22.9645.0273.02	ASSY, FILTER MECHANISM, AMBER V.2
11	1	1	EA	22.9645.0273.03	ASSY, FILTER MECHANISM, MAGENTA V.2
12	1	1	EA	22.9645.0273.05	DIFFUSER MECHANISM ASSY, V.2
13	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
14	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
15	1	1	EA	44.9645.0021.01	MOTOR ASSY, AR5 BLUE LINEAR ACTUATOR
16	1	1	EA	44.9645.0021.02	MOTOR ASSY, AR5 AMBER LINEAR ACTUATOR
17	1	1	EA	44.9645.0021.03	MOTOR ASSY, MAGENTA LINEAR ACTUATOR
18	1	1	EA	44.9645.0021.04	MOTOR ASSY, DIF/DOUS LINEAR ACTUATOR
19	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2” PPZ PLASTIC THD ROLLING
20	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125”PPZ, PLASK #1, PLASTIC THD ROLLING
21	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, Color Bulkheads & Diffuser (Continued)



CONFIG	DESCRIPTION
.003	HEAD ASSEMBLY, AR5-V.2, COLOR BULKHEADS & DIFFUSER, WHITE
.004	HEAD ASSEMBLY, AR5-V.2, COLOR BULKHEADS & DIFFUSER, BLACK

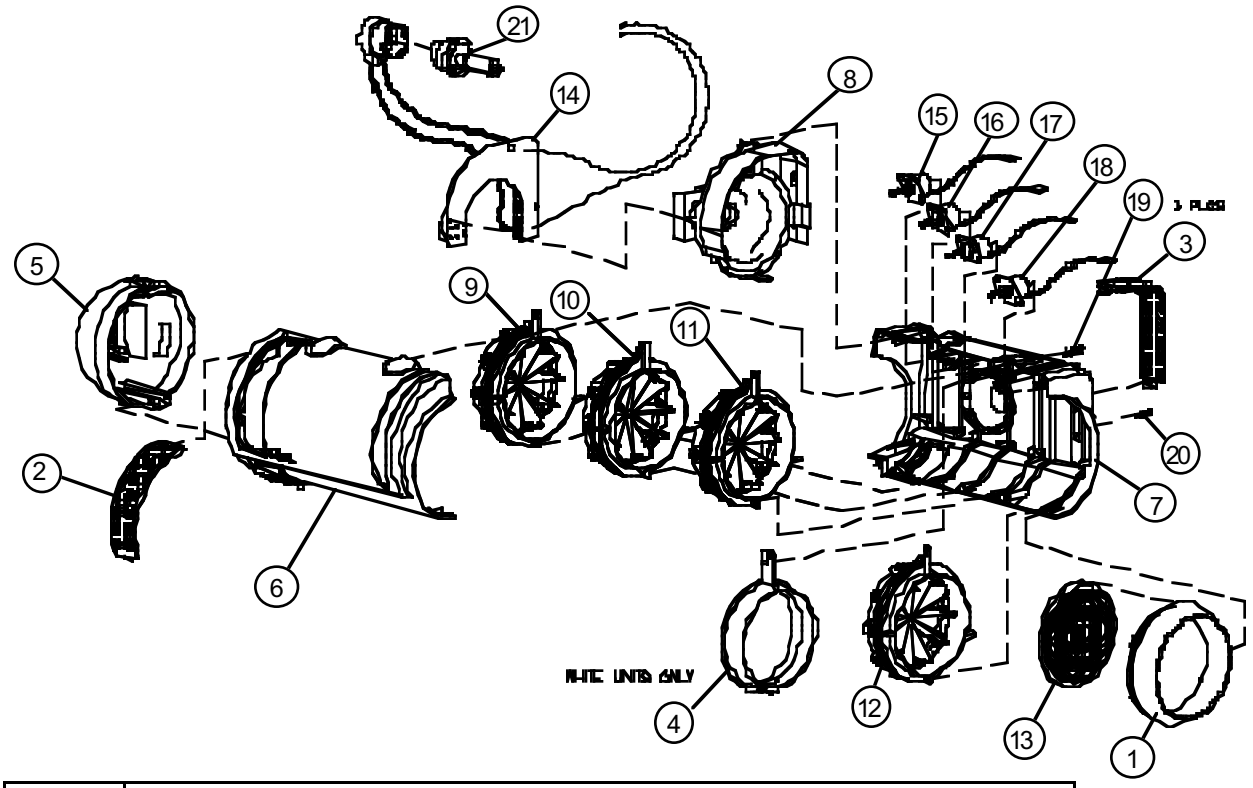
2.4.3 Head Assembly, AR5 V.2, Douser with Color Bulkheads

21.9645.267.**005** (WHITE) and 21.9645.267.**006** (BLACK)

With douser and color changing bulkheads. Light shield sleeve used as light blocker in white unit only.

	.005	.006			
ITEM	**QTY**	**QTY**	**USMR**	**PART NUMBER**	**DESCRIPTION**
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
5	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
6	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
6	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
7	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
7	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
8	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
9	1	1	EA	22.9645.0273.01	ASSY, FILTER MECHANISM, BLUE V.2
10	1	1	EA	22.9645.0273.02	ASSY, FILTER MECHANISM, AMBER V.2
11	1	1	EA	22.9645.0273.03	ASSY, FILTER MECHANISM, MAGENTA V.2
12	1	1	EA	22.9645.0273.04	DOUSER MECHANISM ASSY, V.2
13	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
14	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
15	1	1	EA	44.9645.0021.01	MOTOR ASSY, AR5 BLUE LINEAR ACTUATOR
16	1	1	EA	44.9645.0021.02	MOTOR ASSY, AR5 AMBER LINEAR ACTUATOR
17	1	1	EA	44.9645.0021.03	MOTOR ASSY, MAGENTA LINEAR ACTUATOR
18	1	1	EA	44.9645.0021.04	MOTOR ASSY, DIF/DOUS LINEAR ACTUATOR
19	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2" PPZ PLASTIC THD ROLLING
20	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125"PPZ, PLASK #1, PLASTIC THD ROLLING
21	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, Douser & Color Bulkheads (Continued)



CONFIG	DESCRIPTION
.005	HEAD ASSEMBLY, AR5-V.2, COLOR BULKHEADS & DOUSER, WHITE
.006	HEAD ASSEMBLY, AR5-V.2, COLOR BULKHEADS & DOUSER, BLACK

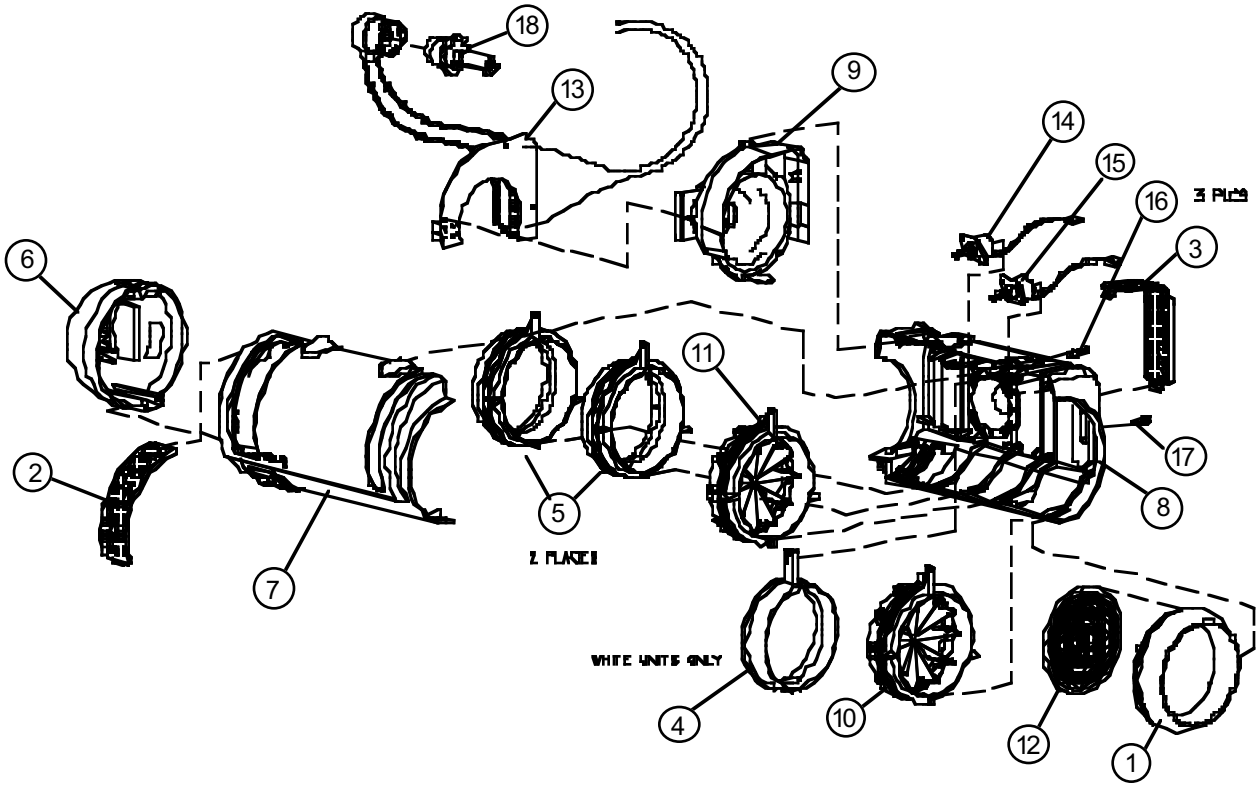
2.4.4 Head Assembly, AR5 V.2, No Color- Diffuser and Douser only

21.9645.267.**007** (White) and 21.9645.267.**008** (Black)

No color changing bulkheads with diffuser and douser. Empty bulkheads and light shield sleeve used as light blocker in white unit only.

	.007	.008			
ITEM	**QTY**	**QTY**	**USMR**	**PART NUMBER**	**DESCRIPTION**
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	2	-	EA	10.9645.0271	COLOR BULKHEAD, AR5, V.2
6	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
6	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
7	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
7	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
8	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
8	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
9	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
10	1	1	EA	22.9645.0273.04	DOUSER MECHANISM ASSY, V.2
11	1	1	EA	22.9645.0273.05	DIFFUSER MECHANISM ASSY, V.2
12	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
13	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
14	1	1	EA	44.9645.0021.03	MOTOR ASSY, MAGENTA LINEAR ACTUATOR
15	1	1	EA	44.9645.0021.04	MOTOR ASSY, DIF/DOUS LINEAR ACTUATOR
16	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2" PPZ PLASTIC THD ROLLING
17	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125"PPZ, PLASK #1, PLASTIC THD ROLLING
18	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, No Color- Diffuser and Douser (Continued)



CONFIG	DESCRIPTION
.007	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, DIFFUSER & DOUSER ONLY, WHITE
.008	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, DIFFUSER & DOUSER ONLY, BLACK

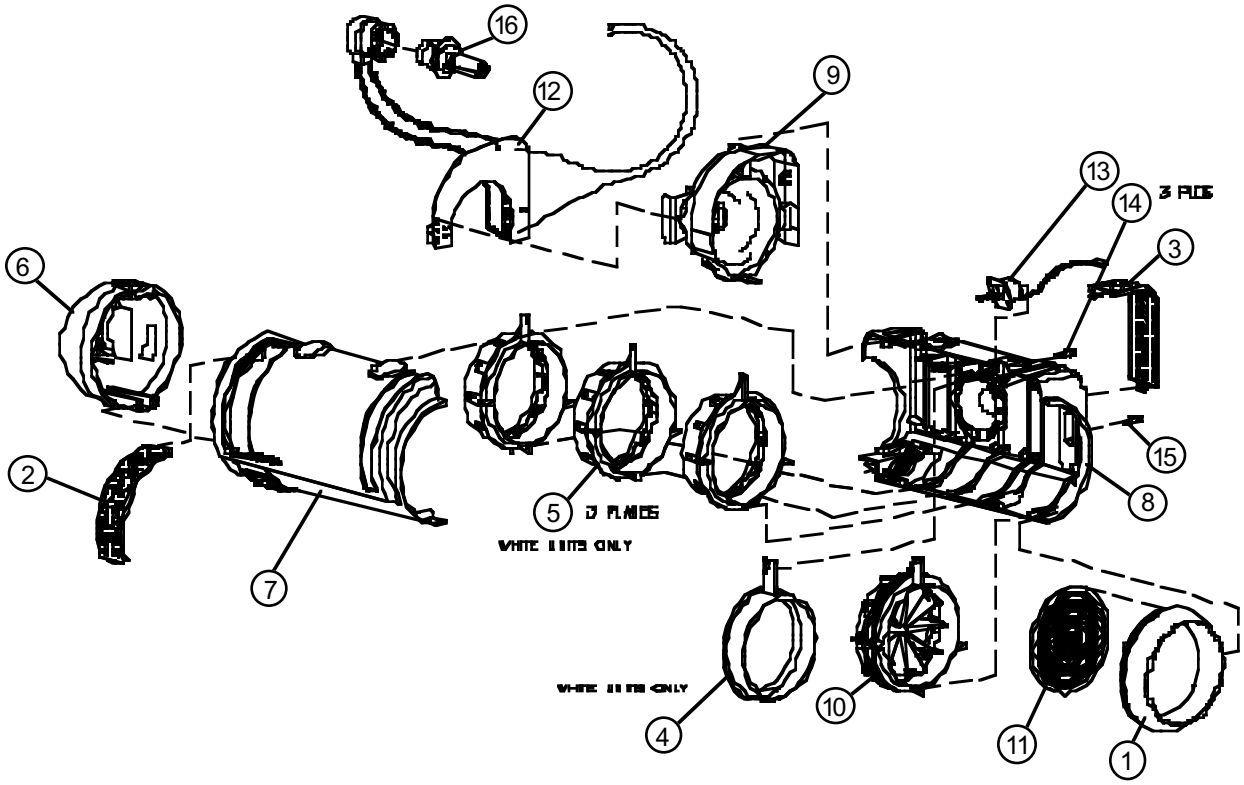
2.4.5 Head Assembly, AR5 V.2, Diffuser and no Color Bulkheads

21.9645.267.**009** (White) and 21.9645.267.**010** (Black)

With diffuser and no color changing bulkheads. Light shield sleeve and empty bulkheads used as light blocker in white unit only.

	.009	.010			
ITEM	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	3	-	EA	10.9645.0271	COLOR BULKHEAD, AR5, V.2
6	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
6	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
7	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
7	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
8	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
8	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
9	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
10	-	-	EA	22.9645.0273.05	DIFFUSER MECHANISM ASSY, V.2
11	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
12	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
13	-	-	EA	44.9645.0021.04	MOTOR ASSY, DIF/DOUS LINEAR ACTUATOR
14	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2" PPZ PLASTIC THD ROLLING
15	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125"PPZ, PLASK #1, PLASTIC THD ROLLING
16	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, Diffuser and no Color Bulkheads (Continued)



CONFIG	DESCRIPTION
.009	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, DIFFUSER ONLY, WHITE
.010	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, DIFFUSER ONLY, BLACK

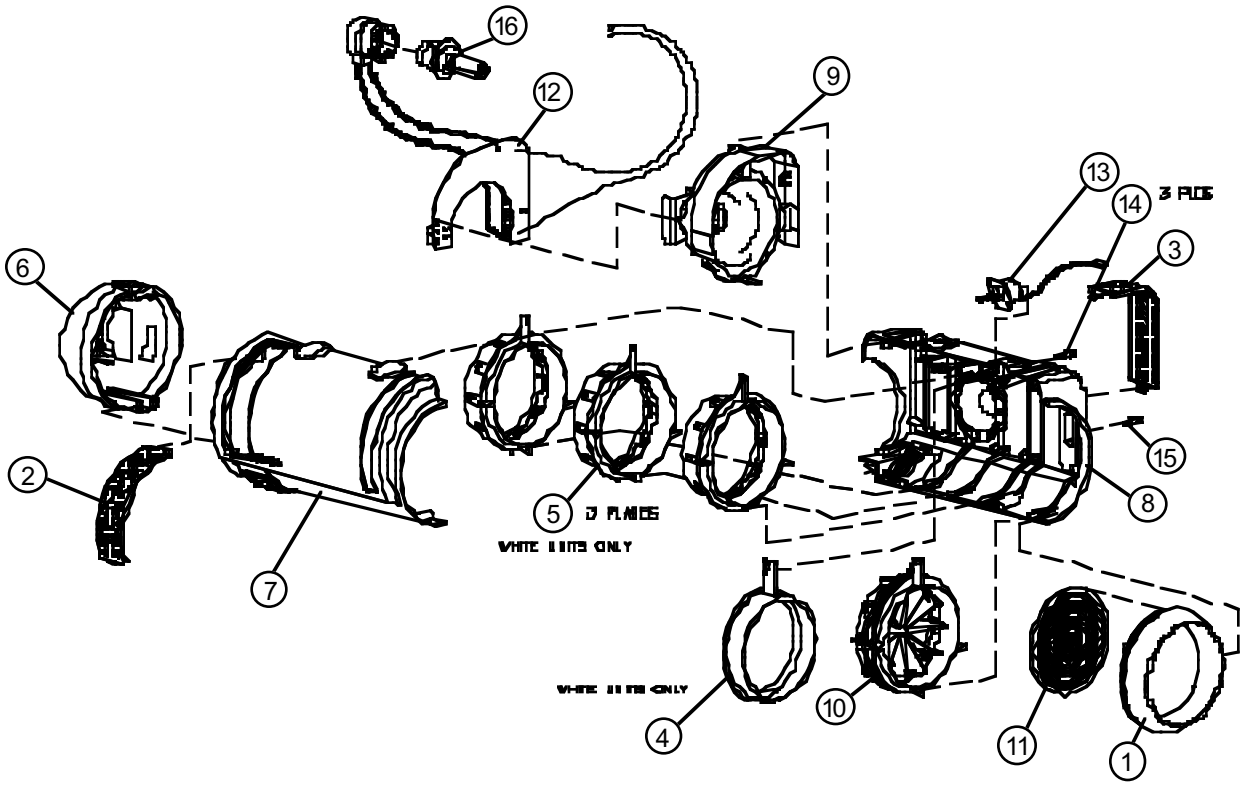
2.4.6 Head Assembly, AR5 V.2, Douser and no Color Bulkheads

21.9645.267.**011** (White) and 21.9645.267.**012** (Black)

With douser and no color changing bulkheads. Light shield sleeve and empty bulkheads used as light blocker in white unit only.

	.011	.012			
ITEM	**QTY**	**QTY**	**USMR**	**PART NUMBER**	**DESCRIPTION**
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	3	-	EA	10.9645.0271	COLOR BULKHEAD, AR5, V.2
6	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
6	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
7	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
7	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
8	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
8	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
9	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
10	-	-	EA	22.9645.0273.04	DOUSER MECHANISM ASSY, V.2
11	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
12	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
13	-	-	EA	44.9645.0021.04	MOTOR ASSY, DIF/DOUS LINEAR ACTUATOR
14	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2" PPZ PLASTIC THD ROLLING
15	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125"PPZ, PLASK #1, PLASTIC THD ROLLING
16	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, Douser and no Color Bulkheads (Continued)



CONFIG	DESCRIPTION
.011	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, DOUSER ONLY, WHITE
.012	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, DOUSER ONLY, BLACK

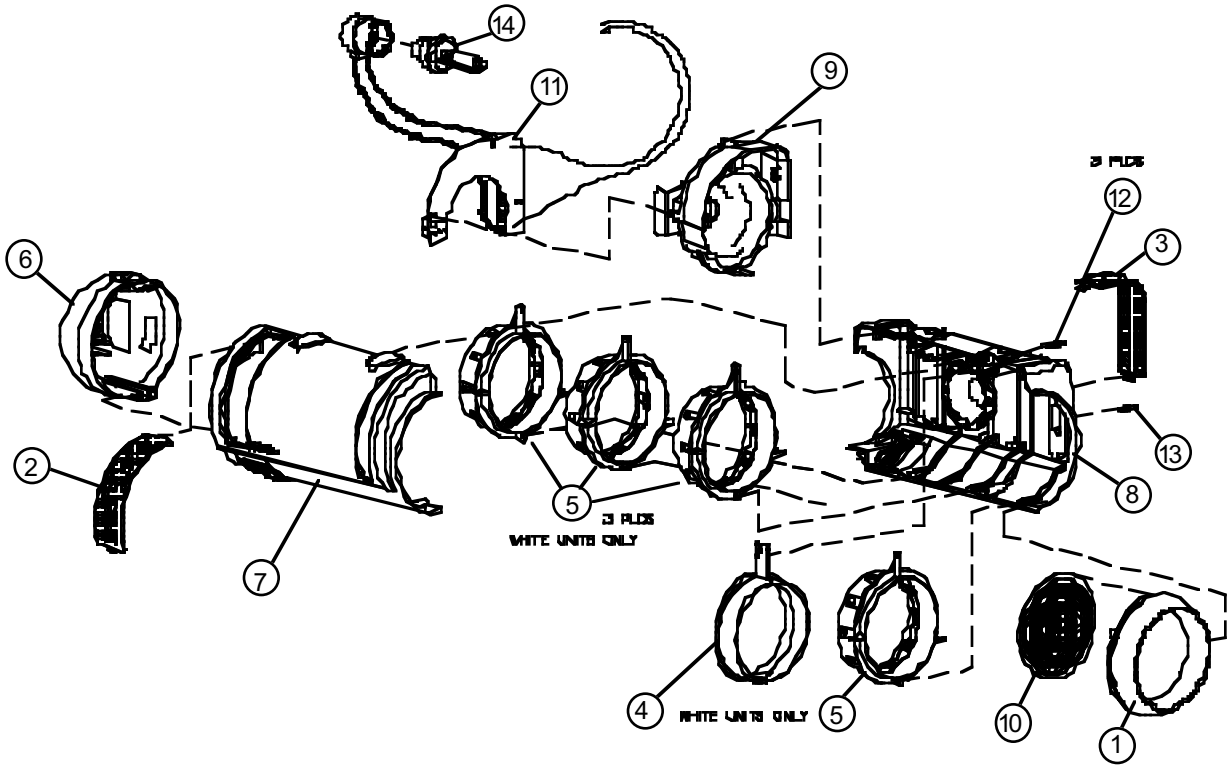
2.4.7 Head Assembly, AR5 V.2, No Color and no Diffuser or Douser

21.9645.267.**013** (White) and 21.9645.267.**014** (Black)

With no color bulkheads and no diffuser or douser. Empty bulkheads and light shield sleeve used as light blockers in white unit only.

	.013	.014			
ITEM	**QTY**	**QTY**	**USMR**	**PART NUMBER**	**DESCRIPTION**
1	1	-	EA	10.9645.0026.01	FRONT RING, WHITE
1	-	1	EA	10.9645.0026.02	FRONT RING, BLACK
2	1	-	EA	10.9645.0083.01	LARGE VENT, COVER, WHITE
2	-	1	EA	10.9645.0083.02	LARGE VENT, COVER, BLACK
3	1	-	EA	10.9645.0084.01	LARGE VENT, AXLE SIDE, WHITE
3	-	1	EA	10.9645.0084.02	LARGE VENT, AXLE SIDE, BLACK
4	1	-	EA	10.9645.0224	TUBE, LIGHT, AR5 V.2
5	4	-	EA	10.9645.0271	COLOR BULKHEAD, AR5, V.2
6	1	-	EA	21.9645.0290.01	ASSY, REAR ENCLOSURE & LABEL, V.2, WHITE
6	-	1	EA	21.9645.0290.02	ASSY, REAR ENCLOSURE & LABEL, V.2, BLACK
7	1	-	EA	22.9645.0268.01	ASSY, BODY COVER, V.2, WHITE
7	-	1	EA	22.9645.0268.02	ASSY, BODY COVER, V.2, BLACK
8	1	-	EA	22.9645.0269.01	ASSY, AXLE SIDE BODY, V.2, WHITE
8	-	1	EA	22.9645.0269.02	ASSY, AXLE SIDE BODY, V.2, BLACK
9	1	1	EA	22.9645.0270	ASSY, REFLECTOR, V.2
10	1	1	EA	22.9645.0291.02	LENS ASSY, 15DEG, V.2
11	1	1	EA	24.9645.0275	ASSY, IGNITOR PCB, V.2
12	3	3	EA	53.6613.0006	SCREW, 6-32 X 1/2" PPZ PLASTIC THD ROLLING
13	1	1	EA	53.9645.0318	SCREW, 6-14 X 1.125"PPZ, PLASK #1, PLASTIC THD ROLLING
14	1	1	EA	71.2534.0035	LAMP, 35W

Head Assembly, AR5 V.2, No Color and no Diffuser or Douser (Continued)

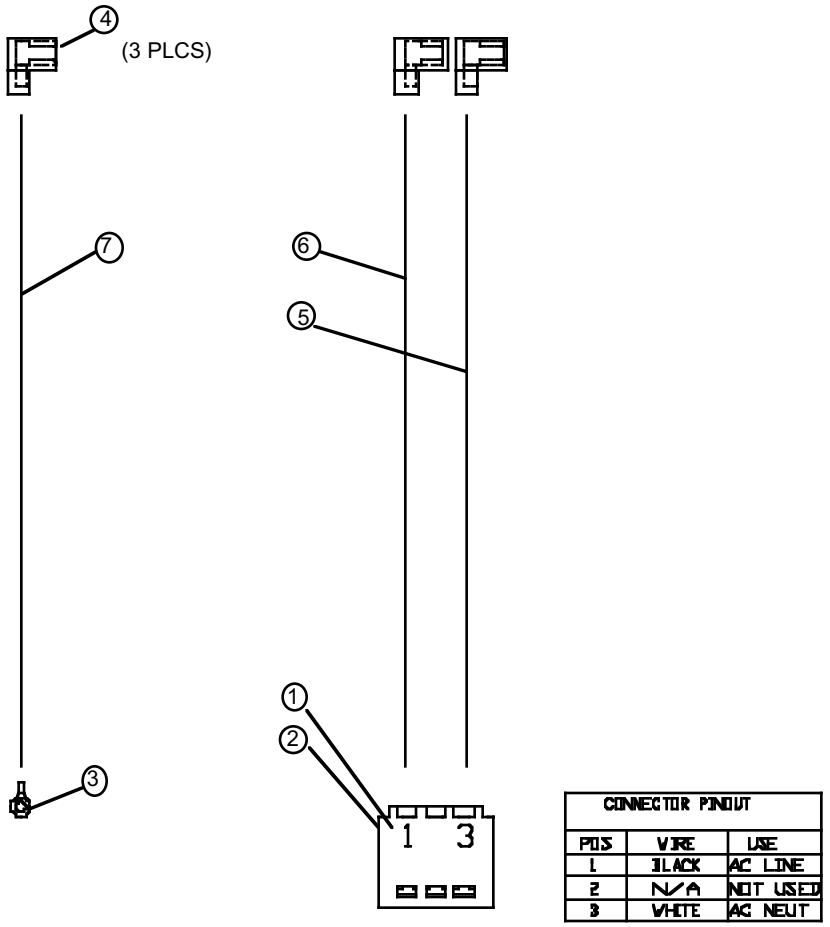


CONFIG	DESCRIPTION
.013	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, AND NO DIFFUSER OR DOUSER, WHITE
.014	HEAD ASSEMBLY, AR5-V.2, NO COLOR BULKHEADS, AND NO DIFFUSER OR DOUSER, BLACK

2.5 Cable Assemblies

2.5.1 Cable Assembly, AC Line, Connector Version 25.9645.0110

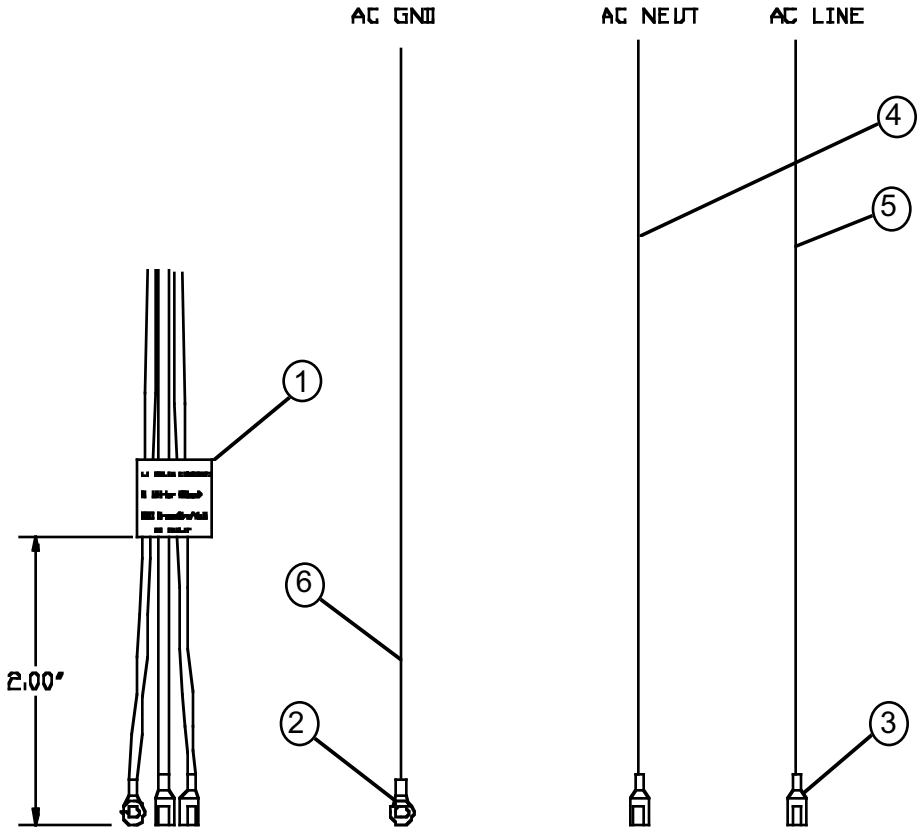
ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	52.6453.0003	COVER, MTA-156 3 POS STRAIN RELIEF
2	1	EA	52.6455.0003	CONN, MTA-156 3 POS 18 AWG BLK
3	1	EA	52.8231.0000	TERM, RING #6 RED 22-16AWG INSUL REEL
4	3	EA	52.8313.0001	RCPT, FASTON 1/4" 18-14AWG FLAG DBL CRP
5	.29	FT	73.3018.0009	WIRE, 18AWG 300V 80°C PVC WHT UL1061
6	.33	FT	73.3018.0010	WIRE, 18AWG 300V 80°C PVC BLK UL1061
7	.33	FT	73.3518.0504	WIRE, 18AWG 300V 105°C PVC GRN/YEL STRIPE UL1569



SM5-V.2
18-Sep-97

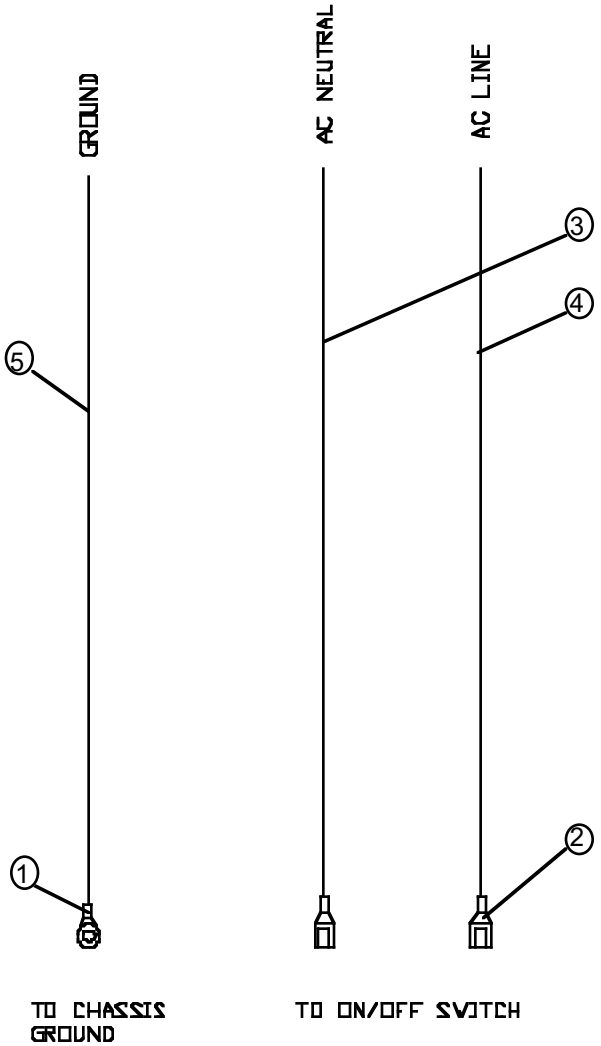
2.5.2 Cable Assembly, AC Pigtail 25.9645.0111

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	04.9645.0161	LABEL, WIRING DIAGRAM AC IN - AR5
2	1	EA	52.8231.0000	TERM, RING #6 RED 22-16AWG INSUL REEL
3	2	EA	52.8324.0004	RECP, FASTON 0.187" 20-16AWG FULLY INSULATED
4	7	FT	73.3018.0009	WIRE, 18AWG 300V 80°C PVC WHT UL1061
5	7	FT	73.3018.0010	WIRE, 18AWG 300V 80°C PVC BLK UL1061
6	7	FT	73.3518.0504	WIRE, 18AWG 300V 105°C PVC GRN/YEL STRIPE UL1569



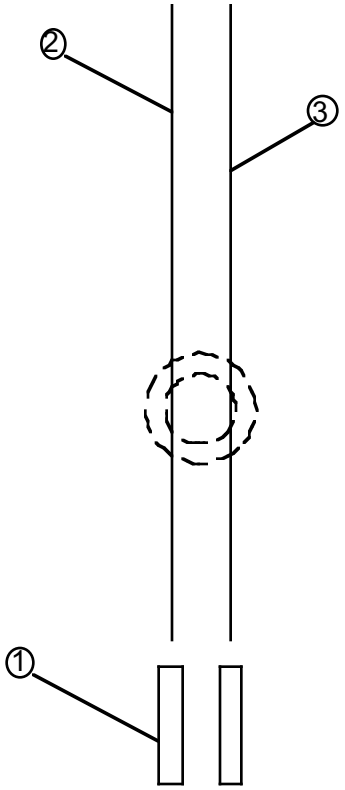
2.5.3 Cable Assembly, AC Feed 25.9645.0112

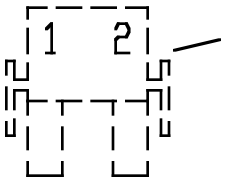
ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	52.8231.0000	TERM, RING #6 RED 22-16AWG UNSUL REEL
2	2	EA	52.8324.0004	RECP, FASTON 0.187" 20-16AWG FULLY INSULATED
3	.92	FT	73.3018.0009	WIRE, 18AWG 300V 80°C PVC WHT UL1061
4	.92	FT	73.3018.0010	WIRE, 18AWG 300V 80°C PVC BLK UL1061
5	.92	FT	73.3518.0504	WIRE, 18AWG 300V 105°C PVC GRN/YEL STRIPE UL1569



2.5.4 Cable Assembly, Bulb Power Yoke 25.9645.0115

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	2	EA	52.8317.0001	CONTACT, PIN 24 -18AWG TIN MATE-N-LOK
2	2.75	FT	73.6218.0001	WIRE, 18AWG 600V 200°C TFE BRN UL1199
3	2.75	FT	73.6218.0006	WIRE, 18AWG 600V 200°C TFE BLU UL1199



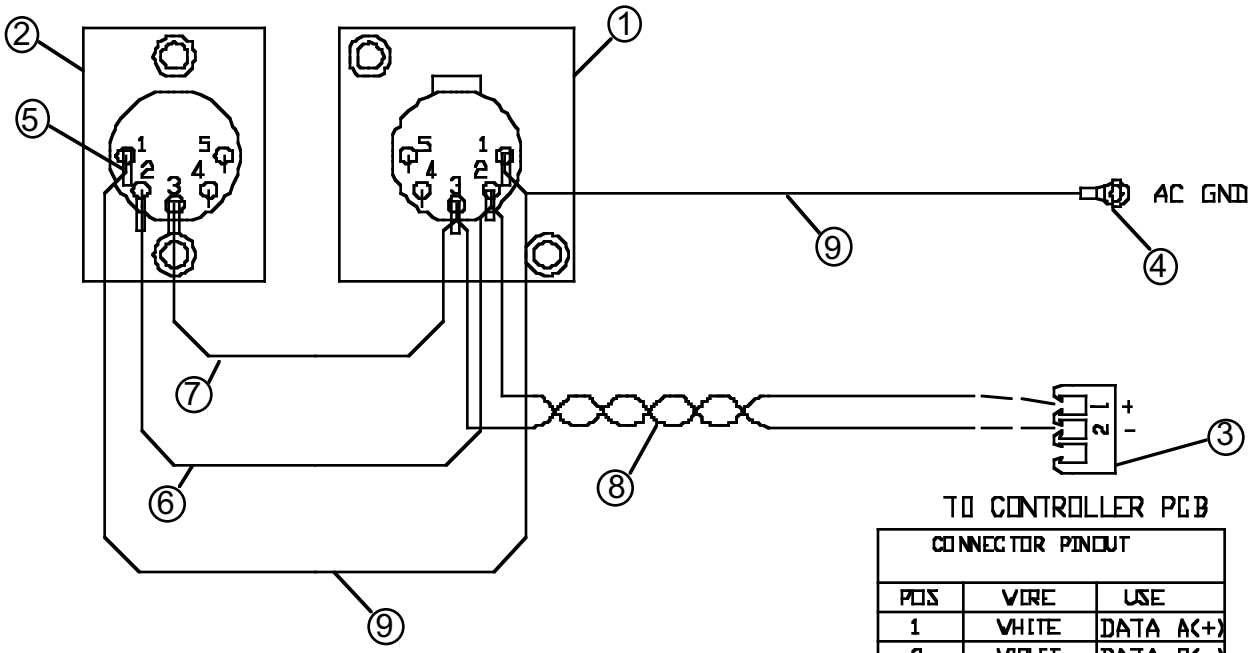


CONNECTOR PINOUT
(ITEM 15 OF 22.9645.122.XX)

POS	WIRE	USE
1	BROWN	BULB HI
2	BLUE	BULB LO

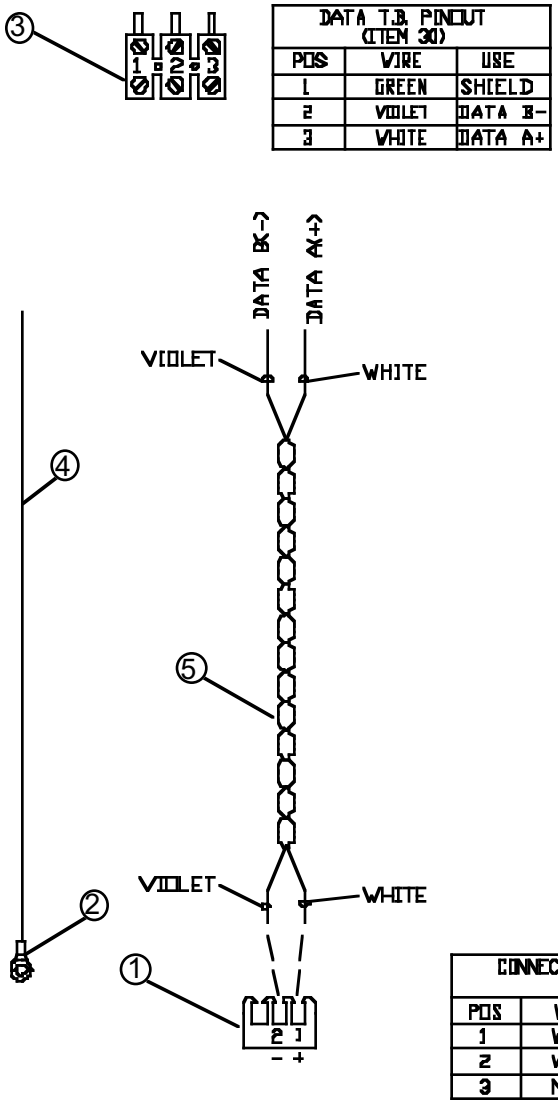
2.5.5 Cable Assembly, Data Input 25.9645.0116

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	52.6402.0003	RECEP, 5 POS, XLR, FEMALE, WALL MOUNT
2	1	EA	52.6402.0004	RECEP, 5 PIN, XLR, MALE, WALL MOUNT
3	1	EA	52.6460.0003	CONN, FEM PLUG 3POS 26AWG
4	1	EA	52.8231.0000	TERM, RING #6 RED 22-16AWG INSUL REEL
5	.25	FT	55.2198.0001	HEAT SHRINK 1/8” BLK
6	.16	FT	73.3522.0007	WIRE, 22AWG 300V 105°C PVC VIO UL1569
7	.16	FT	73.3522.0009	WIRE, 22AWG 300V 105°C PVC WHT UL1569
8	1.34	FT	73.3026.0709	WIRE, 26AWG TWPR 80°C PVC VIO/WHT UL1061
9	.5	FT	73.3522.0504	WIRE, 22AWG 300V 105°C PVC GRN/YEL STRIPE UL1569



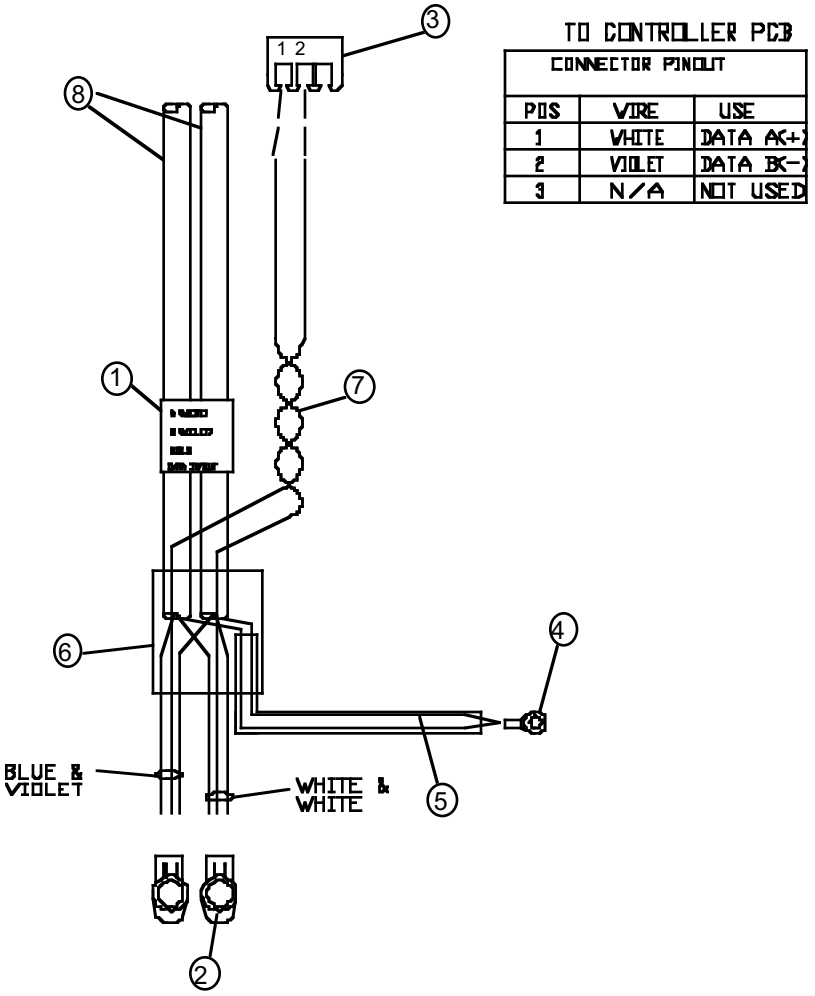
2.5.6 Cable Assembly, Data Feed 25.9645.0118

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	52.6460.0003	CONN, FEM PLUG 3POS 26AWG
2	1	EA	52.8231.0000	TERM, RING #6 RED 22-16AWG INSUL REEL
3	1	EA	52.8409.0002	TERMINAL STRIP, DATA MALE
4	15	IN	73.3022.0005	WIRE, 22AWG 300V 80°C PVC GRN UL1007
5	1.25	FT	73.3026.0709	WIRE, 26AWG TWPR 80°C PVC VIO/WHT UL1061



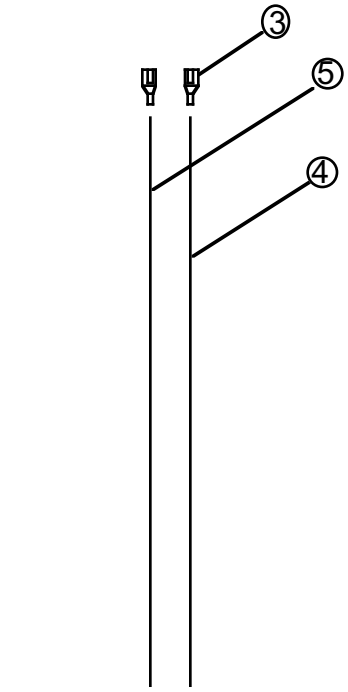
2.5.7 Cable Assembly, Data Pigtail 25.9645.0119

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	04.9645.0159	LABEL, WIRING DIAGRAM DATA - AR5
2	2	EA	52.6436.1903	CONN, IDC SNAP 3POS 19-26AWG
3	1	EA	52.6460.0003	CONN, FEM PLUG 3POS 26AWG
4	1	EA	52.8231.0000	TERM, RING #6 RED 22-16AWG INSUL REEL
5	.24	FT	55.2198.0001	HEAT SHRINK 1/8" BLK
6	.12	FT	55.6695.0001	HEAT SHRINK, ADHESIVE WALL, 1/2 "
7	1	FT	73.3026.0709	WIRE, 26AWG TWPR 80°C PVC VIO/WHT UL1061
8	14	FT	73.9841.0906	CABLE, 24AWG 30V 80°C TWST PAIR WHT BLU



2.5.8 Cable Assembly, AC Line (Top & Side Entry Version) 25.9645.0179

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	52.6453.0003	COVER, MTA-156 3POS STRAIN RELIEF
2	1	EA	52.6455.0003	CONN, MTA-156 3POS 18AWG BLK
3	2	EA	52.8324.0004	RECP, FASTON, 0.187" 20-16AWG FULLY INSULATED
4	.29	FT	73.3018.0009	WIRE, 18AWG 300V 80C PVC WHT UL1061
5	.33	FT	73.3018.0010	WIRE, 18AWG 300V 80C PVC BLK UL1061

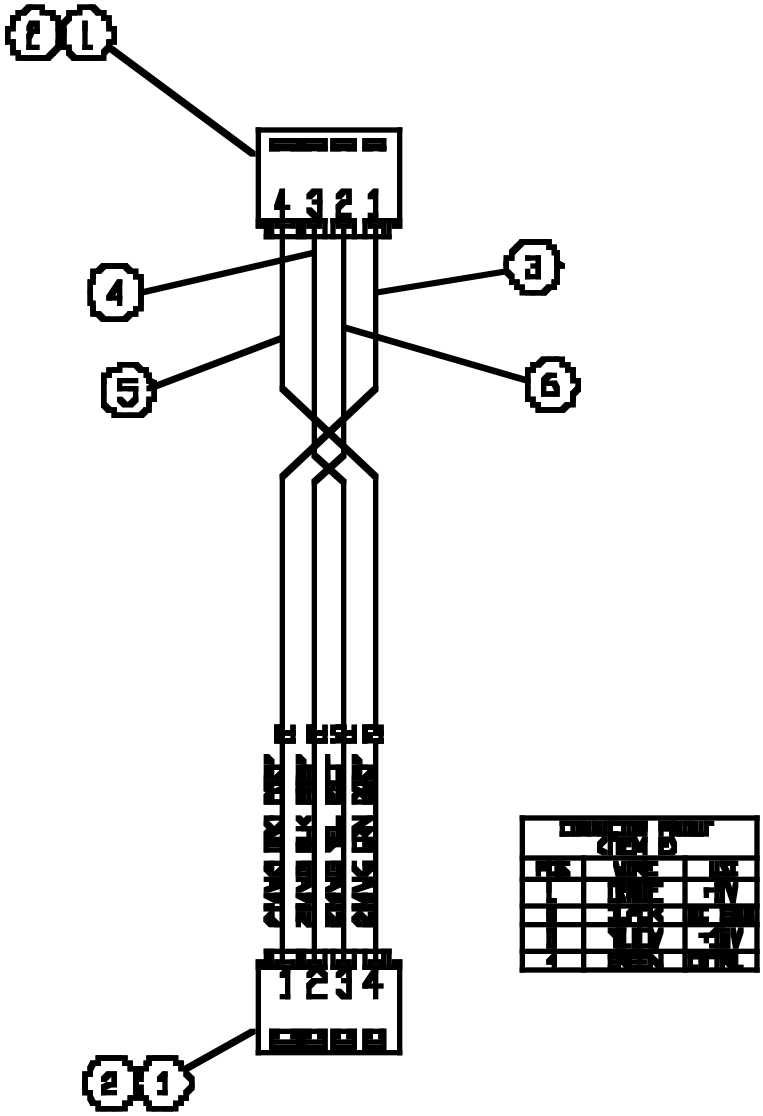


CONNECTOR PINOUT

POS	WIRE	USE
1	BLACK	AC LINE
2	N/A	NOT USED
3	WHITE	AC NEUT

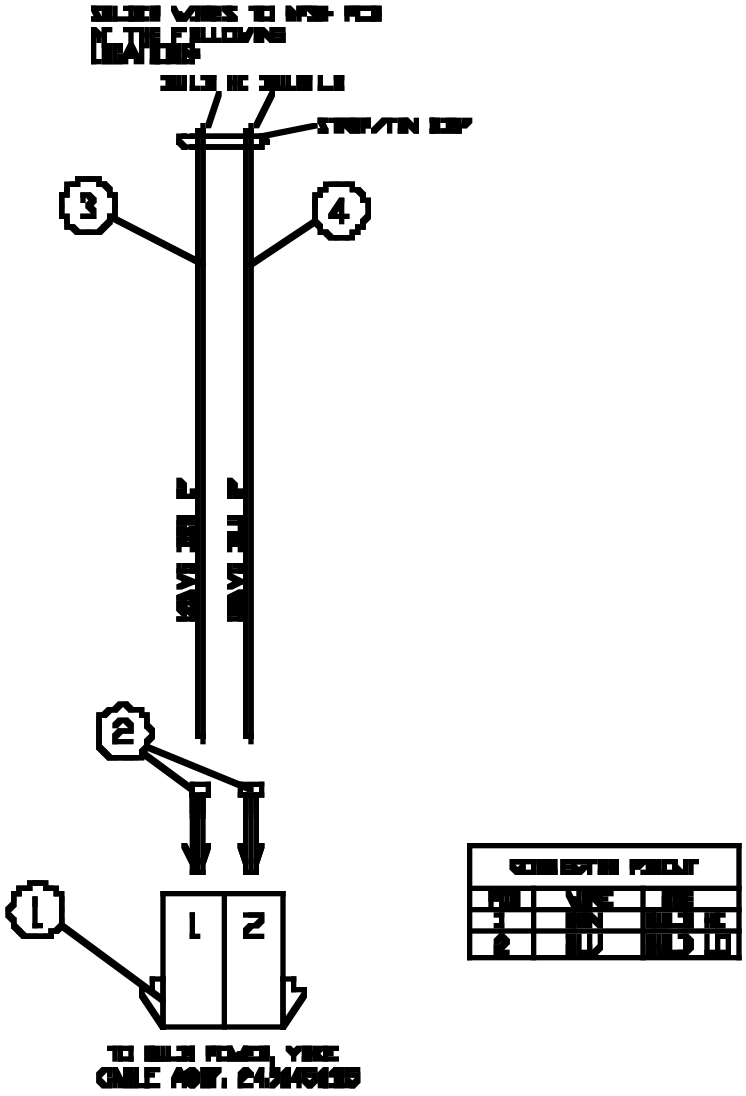
2.5.9 Cable Assembly, APS+ to Controller, V.2 25.9645.0301

ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	2	EA	52.6424.0004	COVER, STRAIN RELIEF 4/ POSITION MTA
2	2	EA	52.6454.0004	CONN, MTA-100 IDC 4 POSTION 22AWG
3	1.67	FT	73.2522.0003	WIRE, 22AWG 250V 200C TFE ORG UL1371
4	1.67	FT	73.2522.0004	WIRE, 22AWG 250V 200C TFE YEL UL1371
5	1.67	FT	73.2522.0005	WIRE, 22AWG 250V 200C TFE GRN UL1371
6	1.67	FT	73.2522.0010	WIRE, 22AWG 250V 200C TFE BLK UL1371



2.5.10 Cable Assembly, APS+ Bulb Power, V.2 25.9645.0302

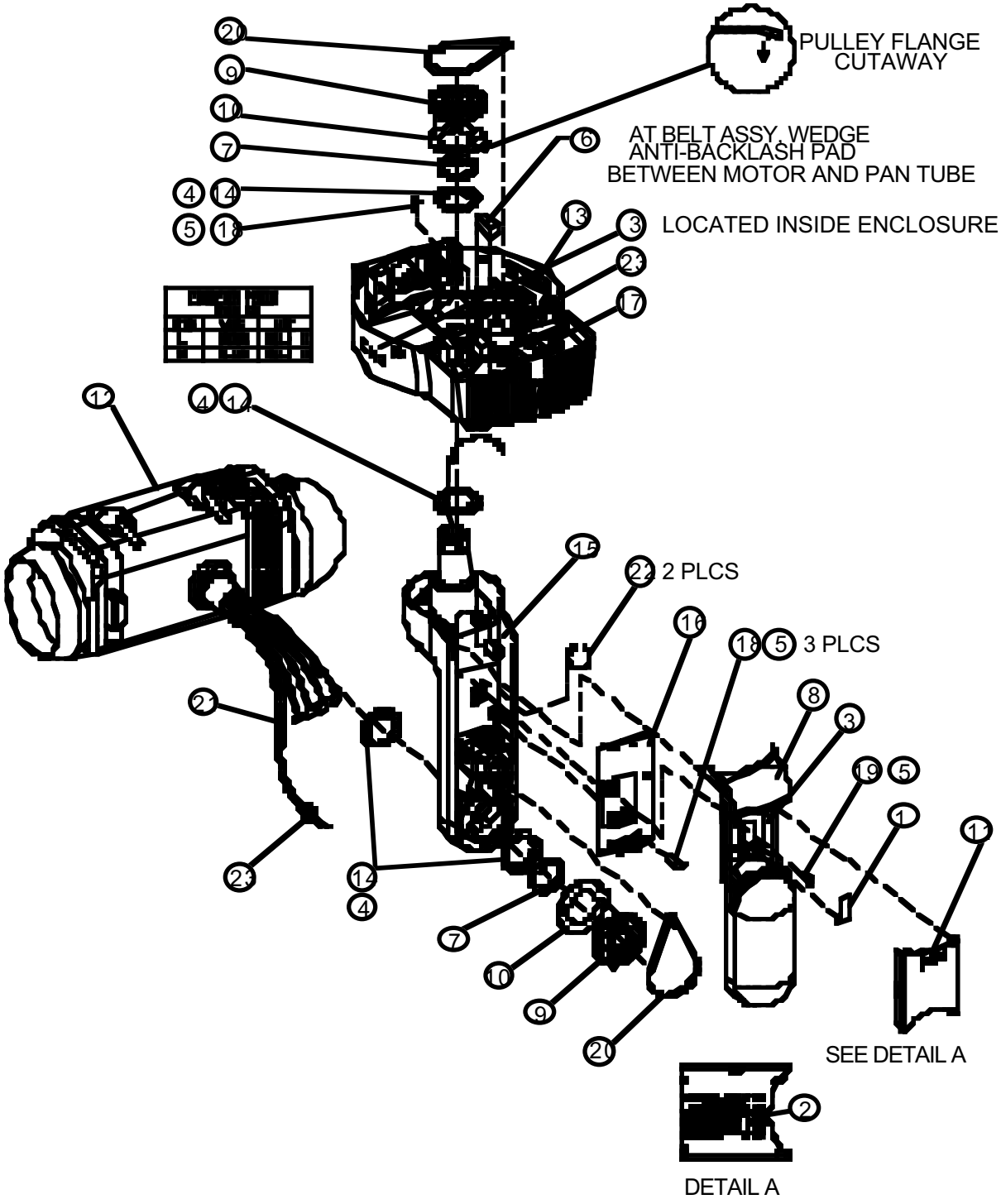
ITEM	QTY.	USMR	PART NO.	DESCRIPTION
1	1	EA	52.6230.0002	CONN, 2 CIR CAP (RCPT) 350
2	2	EA	52.8317.0051	CONTACT, SOCKET 24-18 AWG TIN MATE-N-LOC
3	.25	FT	73.6218.0001	WIRE, 18AWG 600V 200C TFE BRN UL1199
4	.25	FT	73.6218.0006	WIRE, 18AWG 600V 200C TFE BLU UL1199



2.6 Final Assembly stage, AR5 V.2 Luminaire 22.9645.0295.XX

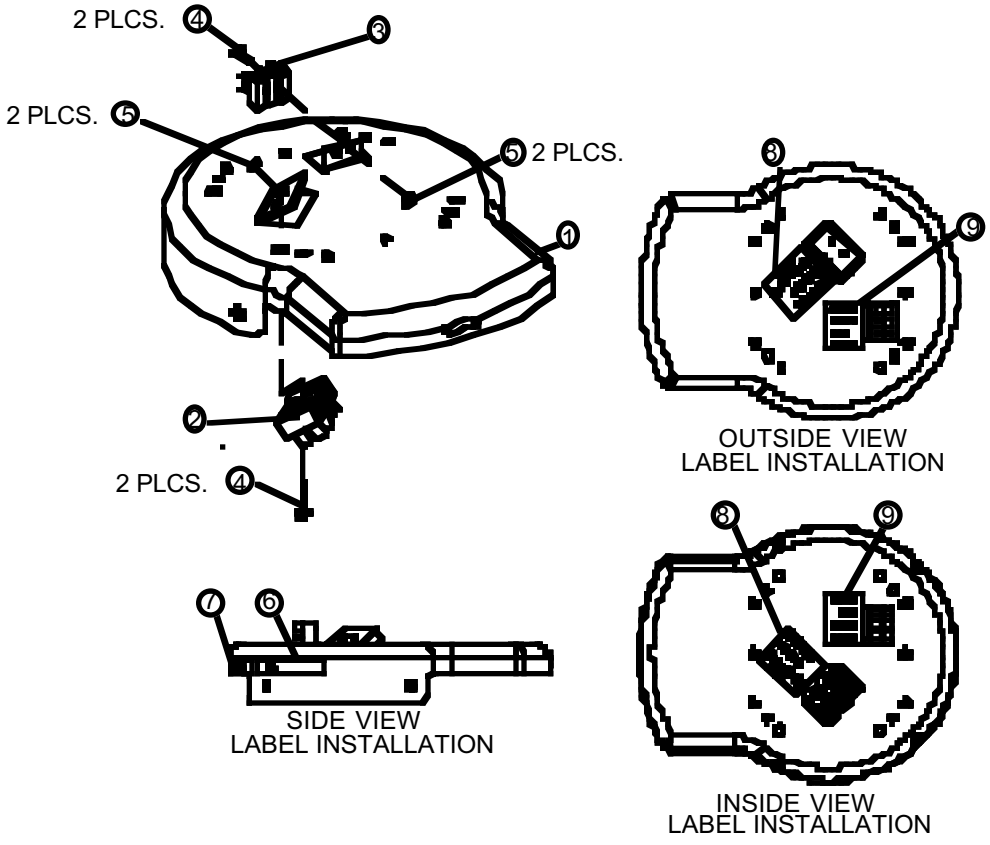
	.01	.02			
ITEM	**QTY**	**QTY**	**USMR**	**PART NUMBER**	**DESCRIPTION**
1	1	1	EA	04.9645.0158	LABEL, LED'S, AR5
2	1	1	EA	04.9645.0319	LABEL, AR5 IEC MARKINGS
3	2	2	EA	04.9645.0339	LABEL, AR5, SERIAL NUMBER
4	AR	AR	EA	06.1009.0001	LUBE, DUPONT KRYTOX GTL226
5	AR	AR	EA	06.6001.0001	LOCTITE, #242, REMOVABLE
6	1	1	EA	10.9620.0293	PAD, ANTI-BACKLASH, PTA
7	2	2	EA	10.9645.0073	BEARING SLEEVE
8	1	-	EA	10.9645.0078.01	YOKE COVER, WHITE
8	-	1	EA	10.9645.0078.02	YOKE COVER, BLACK
9	2	2	EA	10.9645.0237	DRIVEN PULLEY, V.2
10	2	2	EA	10.9645.0238	FLANGE, DRIVEN PULLEY, V.2
11	1	-	EA	10.9645.0285.01	ASSY, YOKE DOOR, V.2, WHITE
11	-	1	EA	10.9645.0285.02	ASSY, YOKE DOOR, V.2, BLACK
12	REF	REF	EA	21.9645.0267.XX X	ASSEMBLY, AR5 HEAD, V.2
13	REF	REF	EA	21.9645.0292.XX X	ASSEMBLY, UPPER ENCLOSURE, V.2
14	4	4	EA	22.9645.0012	ASSEMBLY, PAN/TILT BEARING
15	REF	REF	EA	22.9645.0294.XX	ASSEMBLY, YOKE ARM, V.2
16	1	1	EA	24.9645.0297	AR5 CONTROLLER PCB ASSY, V.2
17	1	1	EA	52.6346.0001	CONN, MNLOK 2POS
18	4	4	EA	53.6522.0001	SCREW, 6-32 X _ PPZ
19	1	1	EA	53.6525.0001	SCREW, 6-32 X 5/16 PPZ
20	2	2	EA	54.2013.0001	DRIVE BELT
21	4.5	4.5	IN	55.2180.0002	SPIRAL WRAP, 3/8"
22	5	5	EA	55.6592.0001	CABLE TIE, MEDIUM
23	2	2	EA	67.4009.0001	FERRITE, EMI BEAD, 0,375 ID

Final Assembly, AR5 (Continued)



2.7 Mounting Plate Assembly 22.9645.132.XX

	.21	.22	.31	.32			
ITEM	QTY	QTY	QTY	QTY	USMR	PART NUMBER	DESCRIPTION
1	1	0	0	0	EA	10.9645.0036.03	MOUNT PLATE, FLUSH,WHITE
1	0	1	0	0	EA	10.9645.0036.04	MOUNT PLATE, FLUSH, BLACK
1	0	0	1	0	EA	10.9645.0036.01	MOUNT PLATE, J-BOX, WHITE
1	0	0	0	1	EA	10.9645.0036.02	MOUNT PLATE, J-BOX, BLACK
2	0	0	1	1	EA	52.8322.0003	TERM. STRIP, 3POLE-DATA
3	0	0	1	1	EA	52.8409.0001	TERM. STRIP, 3POLE - FEMALE
4	0	0	4	4	EA	53.6616.0001	SCREW, 6-32 X 3/4"PPZ
5	0	0	4	4	EA	53.2002.0001	NUT, 6-32 KEP ZINC PLATE
6	1	1	1	1	EA	04.9645.0155	LABEL, AR5 UL/CSA
7	1	1	1	1	EA	04.9645.0156	LABEL, AR5 CAUTION
8	0	0	2	2	EA	04.9645.0161	LABEL, WIRING DIAGRAM AC IN
9	0	0	2	2	EA	04.9645.0159	LABEL, WIRING DIAGRAM DATA



CONFIG	DESCRIPTION	CONFIG	DESCRIPTION
.21	AR5, ASSY, MOUNTING PLATE, FLUSH, WHITE	.31	AR5, ASSY, MOUNTING PLATE, J-BOX VERSION, WHITE
.22	AR5, ASSY, MOUNTING PLATE, FLUSH, BLACK	.32	AR5, ASSY, MOUNTING PLATE, J-BOX VERSION, BLACK

AR5™ Interior Wash Luminaire

Reporting Errors and Recommending Improvements

You can improve this manual. If you find any mistakes, or if you know of a way to improve procedures, please let us know. Send your letter to:

IRIDEON, Inc.

201 Regal Row

Dallas, TX. 75247 USA.
attn: Service Manager

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Patent and Trademark Notice

NOTICE