

AR5 v.2 Disassembly Instructions

**Note: Units are STATIC SENSITIVE. Observe care when installing/servicing.
Retain original packaging for returns/service.**

Test mode

Set address wheels to "00"

Power up

Unit will cycle

To stop test, set wheels to any address

Unit will sit in last state

Reset address to "00" for three seconds to stop test and then re-address.

A. Yoke Section

1. CPU removal
 - a. Open door.
 - b. Remove only visible screw.
 - c. Pull off cover.
 - d. Disconnect motor harnesses
 - i. Blue, Amber, Magenta, Option, Tilt.
 - e. Remove remaining three screws.
 - f. Pull out CPU and remove remaining connectors
 - i. Pan. Power, Data.
 - g. Test Points
 - i. C23 +5VDC
 - ii. C24 +15VDC
2. Tilt motor belt replacement
 - a. Requires unsoldering or pin removal of igniter board wires.
3. Tilt motor replacement
 - a. Slip drive belt off pulley
 - b. Pry retainer off post at motor
 - c. Pull out motor assembly.
 - d. On re-assembly, press motor against spring clip to move shaft closer to pulley to allow drive belt to be installed more easily.
4. Tilt tube assembly replacement
 - a. Remove belt and disconnect all wires.
 - b. Carefully compress opposing fingers while gently prying pulley up.
 - c. Maintain pressure against pulley while compressing other 2 fingers
 - d. Pulley should come off.
 - e. Separate pulley flange, bearing sleeve and bearing assemblies.
 - f. Please note that tilt tube and axle side body are one piece. Breaking tube will require complete re-assembly of tilt tube with new part.
 - i. Cardboard collars must be installed for transporting unit for same reason

B. Tilt Tube Section

1. Remove lens cap
2. Open rear of tilt tube and remove lamp
 - a. Slide clip over carefully
 - b. Pull socket straight out

- c. Check socket and reflector part of socket for breakage
- d. Point out interlock
- 3. Tilt Tube disassembly
 - a. Place unit on side
 - b. Remove 4 screws
 - c. Flip unit over so yoke is on table.
 - c. Pull Body Cover off.
 - d. Remove door to rear enclosure
- 4. Color bulkhead removal
 - a. Order of bulkheads BAMOption.
 - b. Light blocker sleeve is for white units only.
 - c. Flip linear actuator out of clip on color bulkhead.
 - d. Close filters to prevent damage.
 - e. Lift bulkhead off pins
 - i. Check gears for heat damage. Blue filter is the most common filter with this damage
 - f. V.1 and V.2 bulkheads are different.V.2 may fit in a V.1
- 5. Linear Actuator removal
 - a. Disconnect appropriate connector from CPU
 - b. Route wire harness through yoke.
 - c. Apply pressure to locking tabs on motor and pull out motor using shaft.
 - d. Actuators are not the same. Wire length and shaft are different depending on position. Use direct replacement.
- 6. Igniter board removal
 - a. Unsolder 2 wires to igniter board. Alternately, use pin removal tool to remove pins from connector and route through yoke.
 - b. Igniter boards on V.1 have surface mount capacitors that may go bad.
 - c. V.2 igniter boards go into V.1s. V.1s no longer sold.
- C. Upper Enclosure**
- 1. 3 ways to wire
 - a. Top entry
 - b. Side entry
 - c. Connectorized
 - b. Remove exposed 4 screws that attach mounting plate to luminaire
 - c. Will hang from hook.
- 2. Data Connections
 - a. Check that data ground is not attached to case.
 - b. Data comm board
 - 1. To remove must disconnect harnesses
- 3. APS (Arc Power Supply)
 - a. Power for lamp.
 - b. Connected to the board below.
 - c. Pull 3 connectors
 - d. Remove 4 screws from heat sink
 - e. Remove 2 screws from APS PCB
 - f. Remove 1 screw from PFS PCB
 - g. Pull out from unit.

- h. Pot adjusts 110/220 input voltage.
 - i. Fuses is for input power
 - 1. If fuse blows, does not draw down caps in the PFS (lets get zapped)
 - j. LED is for lamp strike timeout or power fault
 - k. Heat sink gets HOT!
 - 1. Make sure there is good mechanical connections to chassis
 - 2. Limiting resistor gets very hot.
 - 4. PFS (Power Factor Supply)
 - a. Connects to APS with 2 connectors
 - b. Different for 110 and 220.
 - b. Motor and processor power
 - c. Fuse
 - 1. Input power
 - d. Pot
 - 1. High bus voltage
 - 5. Pan Motor
 - a. Same as tilt motor.
- D. Get it back together!**
- E. Test!**
- F. Common problems**
- 1. APS goes out
 - a. Can take PFS with it.
 - 2. Old igniter boards on V.1.