

## **Digital HDTV Over-the-Air Antennas**

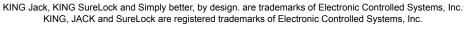




**NOTE:** Depending on the model, KING Jack antennas may or may not have a KING SureLock™ Signal Meter installed in the interior enclosure. Variations to operation and troubleshooting because of this are called out where necessary.

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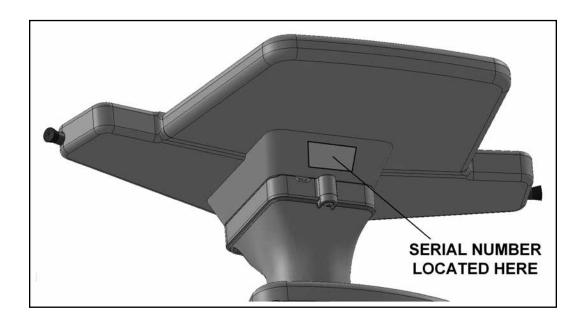
# The KING Service Department is dedicated to providing its dealers and customers with the highest possible level of satisfaction and service.

The KING Service Department stays up to date with the latest information to assist you in keeping troubleshooting and repair time to a minimum.

When calling our service department, a KING technician will issue a Customer ID Number (or Case Number) and then clearly define the proper course of action to follow. If any work is to be performed or parts replaced, a Service Order Number will also be issued. Additionally, the KING technician will create a call log to aid in properly documenting the warranty claim.

#### **IMPORTANT!**

For warranty reimbursement, you must call KING for a Service Order Number BEFORE performing any work: (952) 922-6889.



#### Section 2 WARRANTY INFORMATION

KING Jack Antennas are covered by a **TWO YEAR PARTS AND ONE YEAR LABOR** limited warranty from the date of original purchase. This warranty does not cover installation and external wiring, or refurbished units. This warranty also does not apply where:

- The product has been abused, misused, improperly installed or improperly maintained.
- Repairs have been made or attempted by others that are not certified by KING to do such repairs.
- Repairs are required because of normal wear and tear.
- Alterations have been made to the product.
- The antenna head, base mount or interior enclosure has been opened without authorization.
- Damage has been caused by power washing.
- Circumstances beyond the control of KING cause the product to no longer operate correctly.
- Customer is not the original owner.

#### **PROCESSING A WARRANTY CLAIM**

#### IMPORTANT! Only KING certified dealers are authorized to perform warranty evaluations and repairs.

- 1) Technician must first determine if the unit is under warranty by verifying original owner and date of original purchase. Dealer must provide one of the following when submitting a warranty claim:
  - · copy of original purchase receipt, or
  - if unit was installed by an OEM, verification of in-service date
- 2) Technician must call KING to get a Service Order Number (952) 922-6889. Technician must not proceed without a Service Order Number.
  - A KING technician will issue a Service Order Number and advise technician on how to proceed.
- 3) After repairs are completed, the following must be sent to KING:
  - Defective Part if requested by KING (Warranty Labor Claim will not be processed until part is returned.)
  - Warranty Consideration Form
  - Copy of Work Order
  - Proof of Purchase

#### **KEY POINTS**

- 1) For units in service longer than one year, the customer is responsible for labor time.
- 2) Installation parts (for example coax cables) are not covered.
- 3) Replacement parts are sent directly from KING. **DO NOT USE NEW PRODUCT FOR WARRANTY REPLACEMENT WITHOUT WRITTEN AUTHORIZATION FROM KING.**
- 4) Technician must call KING before performing any work for which warranty labor reimbursement will be submitted to KING. A KING technician will issue a Service Order Number and specify the allotted time for the repair. If repairs will take longer than the allotted time, and the servicing dealer wishes to receive proper reimbursement, the technician must receive prior authorization to exceed the allotted time.
- 5) Warranty claims must include: proof of purchase, Warranty Consideration Form with Service Order Number, and copy of work order with labor time which matches that allotted by KING.
- 6) KING shall reimburse the servicing dealer for warranty work at their published labor rates.
- 7) If returning defective part, include paperwork with part. Clearly mark the Service Order Number on outside of box.



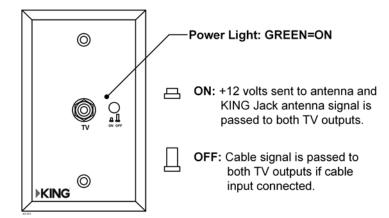
#### Section 3 KING JACK OPERATION WITH SURELOCK SIGNAL METER

#### **OPERATION**

The wall mount Power Injector will switch between cable feed and over-the-air signals from the KING Jack antenna.

To use the Power Injector, simply turn the unit on with the ON/OFF button. When on (button depressed), the power light will turn green indicating +12 volts to the antenna, and the over-the-air signal from the KING Jack antenna will be fed to the two TV outputs.

When off, the cable TV signal will be fed to the two TV outputs if wired for cable TV input.

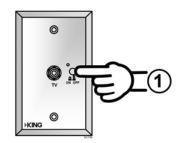


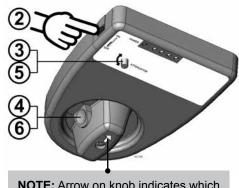
#### **POSITIONING THE ANTENNA**

- Turn on Power Injector (power is now supplied to the KING Jack antenna).
   (Make sure TV is also on.)
- 2. Turn on KING SureLock Signal Meter with switch on side of rotational knob enclosure.
- 3. Rotate attenuator dial fully clockwise.

**NOTE:** In step 4, LED lights will illuminate from left (next to power) to right. All LED lights may not illuminate depending on signal strength.

- 4. Depress button on rotational knob and rotate antenna until maximum number of LED lights illuminate on signal meter.
- 5. Rotate attenuator dial counter clockwise until last illuminated LED light flickers.
- 6. Rotate antenna to illuminate last flickering LED light.
- 7. Repeat steps 5 and 6 to pinpoint signal reception.
- 8. Follow instructions for TV or converter box to scan for available channels.





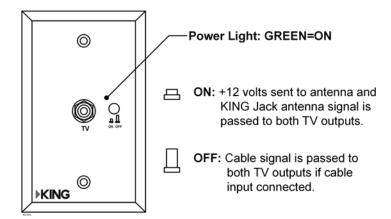
**NOTE:** Arrow on knob indicates which direction antenna is pointing.

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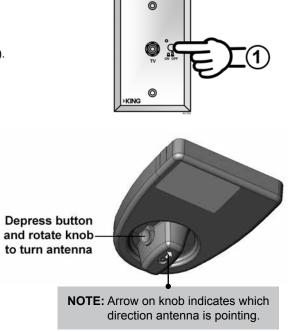


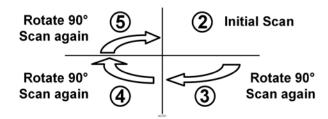
#### **POSITIONING THE ANTENNA**

Turn on Power Injector (power is now supplied to the KING Jack antenna).
 (Make sure TV is also on.)

**NOTE:** In steps 2-5, keep track of in which direction you received the most channels when each scan is complete.

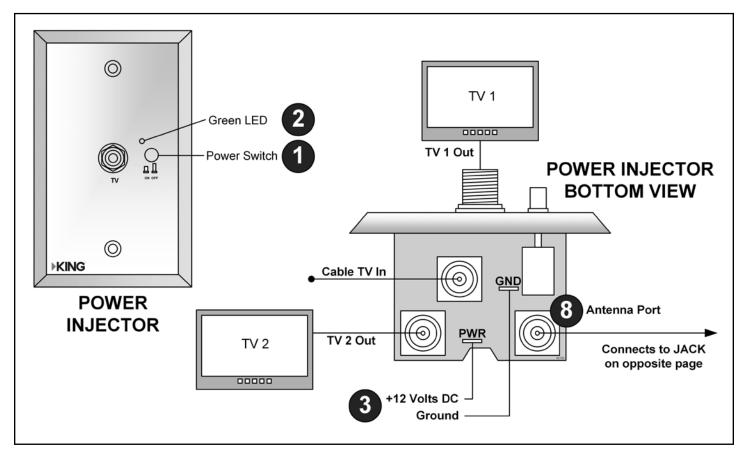
- Perform an initial channel scan per the digital TV or digital TV converter box manufacturer's instructions.
- Depress button on rotational knob and rotate antenna 90 degrees. Scan again.
- 4. Depress button on rotational knob and rotate antenna 90 degrees. Scan again.
- 5. Depress button on rotational knob and rotate antenna 90 degrees. Scan again.
- 6. Reposition the KING Jack antenna to where you received the most channels. Choose one of those channels on the TV.
- 7. Now monitor the signal strength screen and fine tune the KING Jack until the highest signal strength is achieved.
- 8. Perform one final scan.



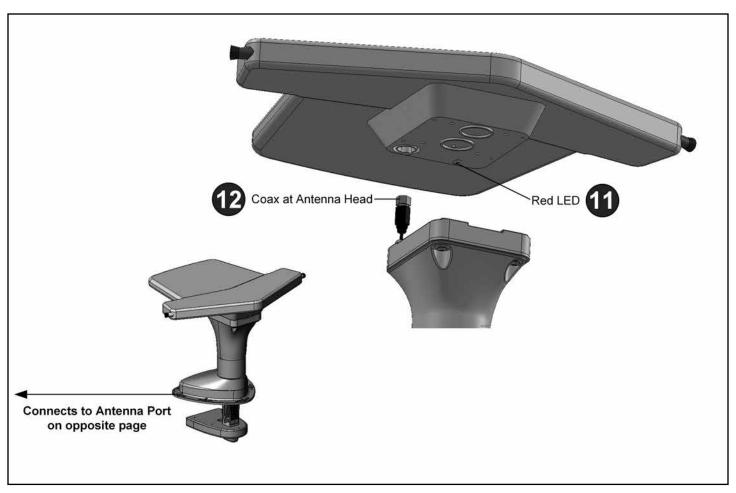


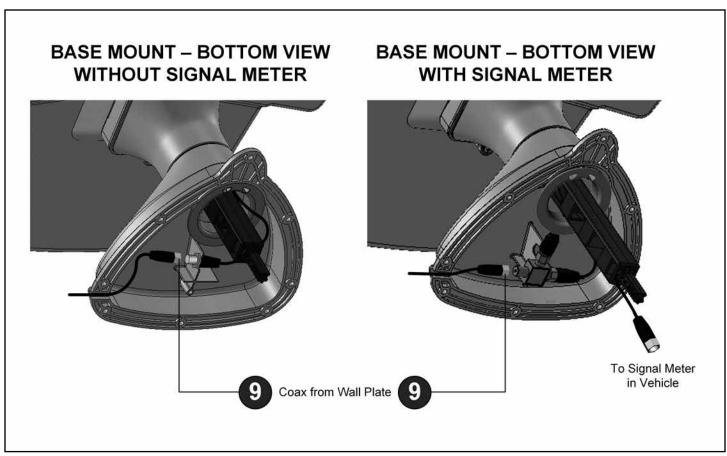


#### Section 5 TROUBLESHOOTING FLOWCHART REFERENCE DIAGRAMS

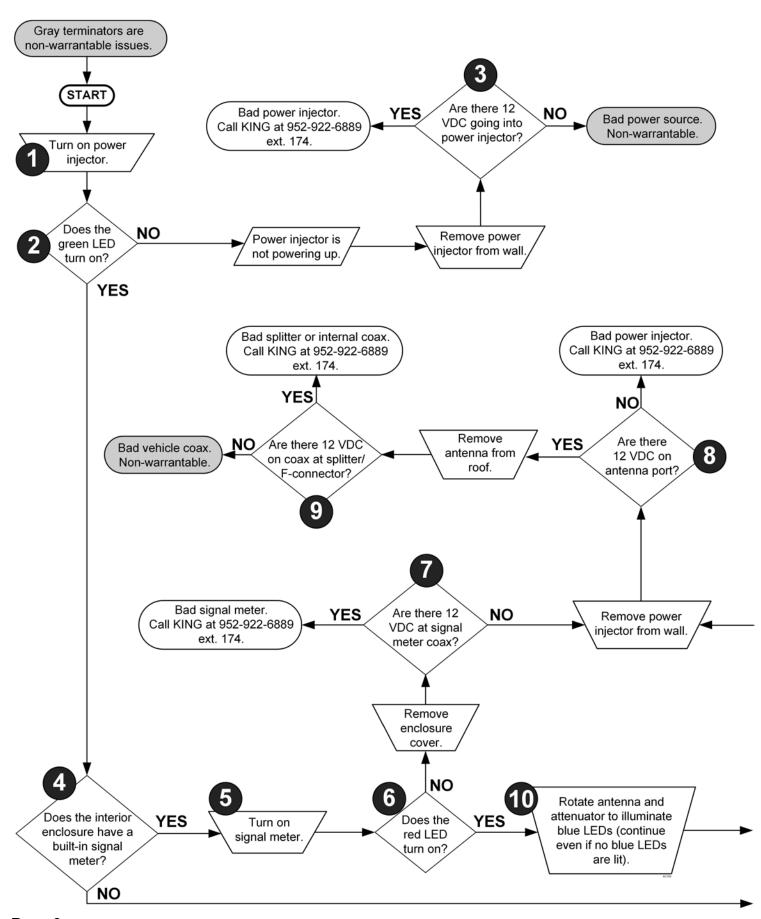








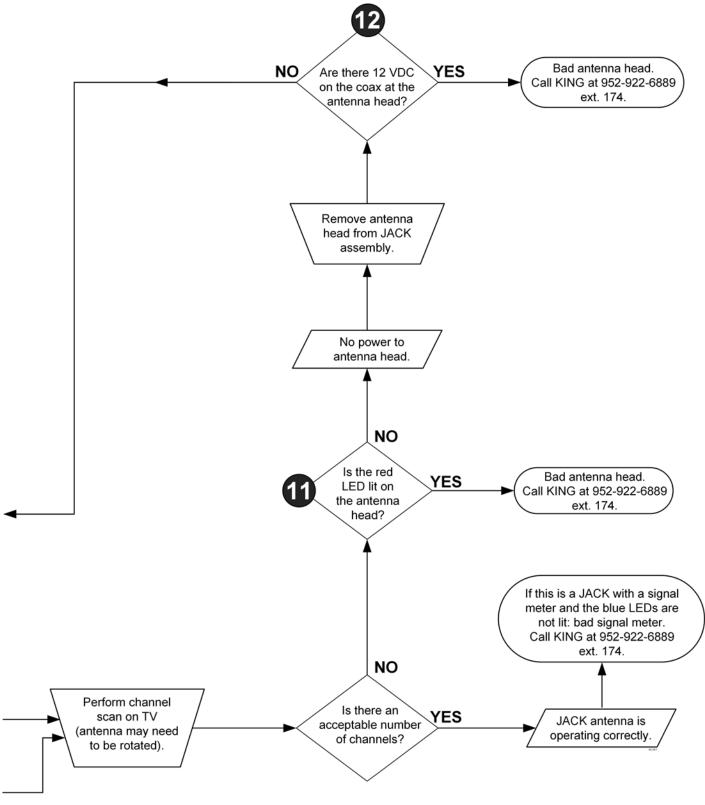
#### Section 6 TROUBLESHOOTING FLOWCHART



## See pages 6-7 for location of reference points 1 - 12







KING

#### Section 7 BLOCK TIMES

REPLACEMENT PROCEDURE	TIME IN MINUTES
Power Injector	30
Signal Meter	30
Antenna Head	30
KING JACK Assembly	60

NOTE: See sections 9-12 for detailed instructions.



You must call KING before performing any warranty work.

(952) 922-6889



## Section 8 REPLACEMENT PARTS LIST

21631	Ceiling enclosure with signal meter
20954	Antenna Head (White)
21053	Antenna Head (Black)
20263B 10121-1 21038	Coax, splitter to antenna head (metered KING Jack) Coax, splitter to signal meter (metered KING Jack) Splitter (metered KING Jack)
21045	Coax w/F-connector, coach coax to antenna head (non-metered KING Jack)

**NOTE:** Power injector part numbers vary and are marked on back of power injector.

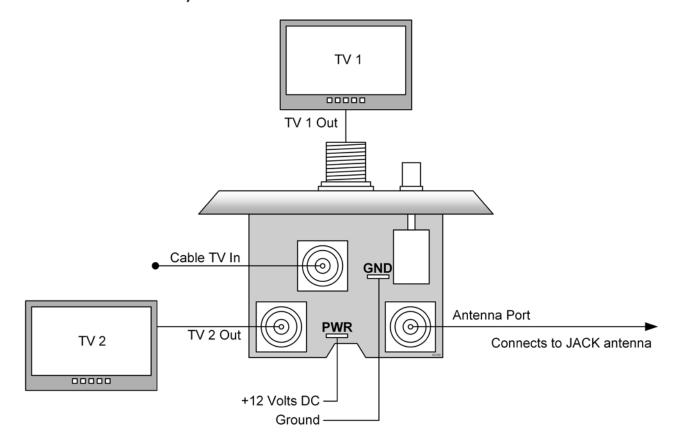


#### Section 9 REPLACE POWER INJECTOR

**NOTE:** Make sure power to power injector is turned off before proceeding.

1. Remove old power injector and replace with new power injector using diagram below to make correct connections.

POWER INJECTOR (Part number on back)



POWER INJECTOR BOTTOM VIEW

#### Section 10 REPLACE SIGNAL METER

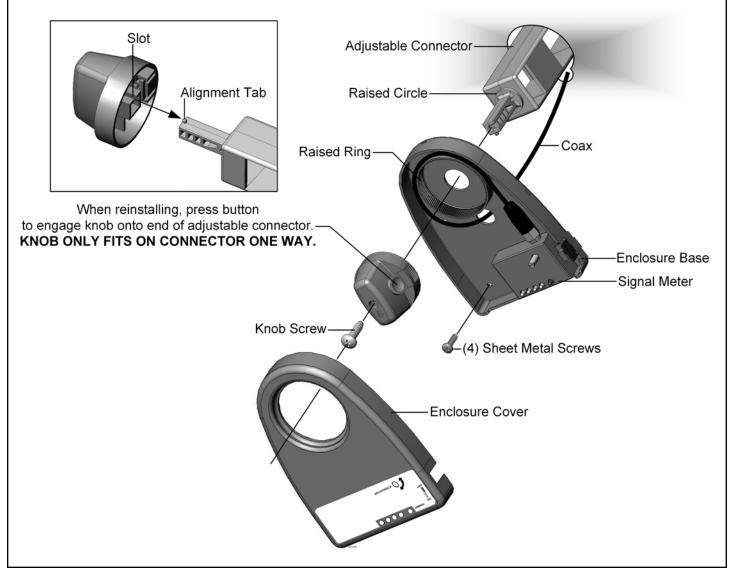
#### 1. REMOVE EXISTING METER

**NOTE:** Turn off power injector before proceeding.

- Snap off Enclosure Cover.
- Remove Screw and Knob.
- Disconnect Coax from Signal Meter.
- Remove (4) Screws attaching Enclosure to ceiling.

#### 2. INSTALL NEW METER

- Attach new Enclosure to ceiling with (4) Screws.
- Route Coax and connect to Meter.
- Press button on Knob and engage onto Adjustable Connector. Fasten with Screw. KNOB ONLY FITS ON CONNETOR ONE WAY SEE INSET BELOW.
- Snap on Enclosure Cover. BE CAREFUL NOT TO DAMAGE LEDS.

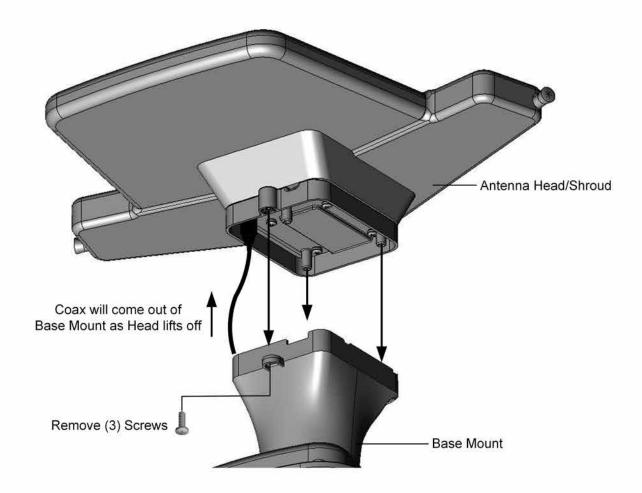


## Section 11 REPLACE ANTENNA HEAD

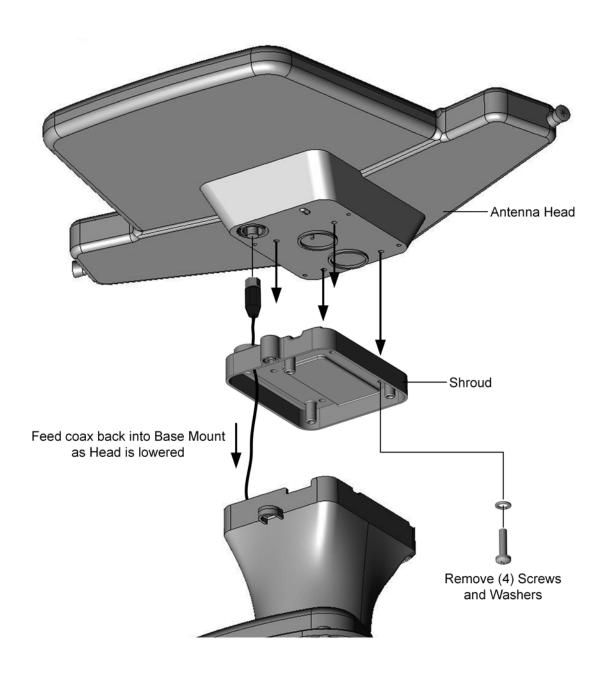
**NOTE:** Turn off power injector before proceeding.

1. Remove (3) Screws and carefully lift off Antenna Head/Shroud from Base Mount.

Coax will pull out of Base Mount as Head is lifted off.



- 2. Remove (4) Screws and Washers and remove Shroud.
- 3. Disconnect Coax.
- 4. Connect Coax to replacement Antenna Head. Reattach Shroud.
- 5. Feed Coax back inside Base Mount and reattach Antenna Head/Shroud to Base Mount.



#### Section 12 REPLACE KING JACK ASSEMBLY

#### 1. REMOVE EXISTING ANTENNA

**NOTE:** Turn off power injector before proceeding.

- **INSIDE** Snap off Enclosure Cover.
  - Remove Screw and Knob.
  - Disconnect Coax from Signal Meter if present.

#### **OUTSIDE** • Remove fasteners holding Antenna to roof.

- Remove Antenna and disconnect coax from Base Mount connection.
- Clean up old sealant to insure a good seal when installing new antenna.

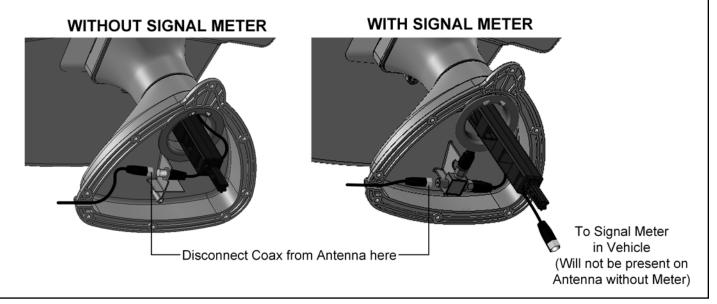
#### 2. INSTALL NEW ANTENNA

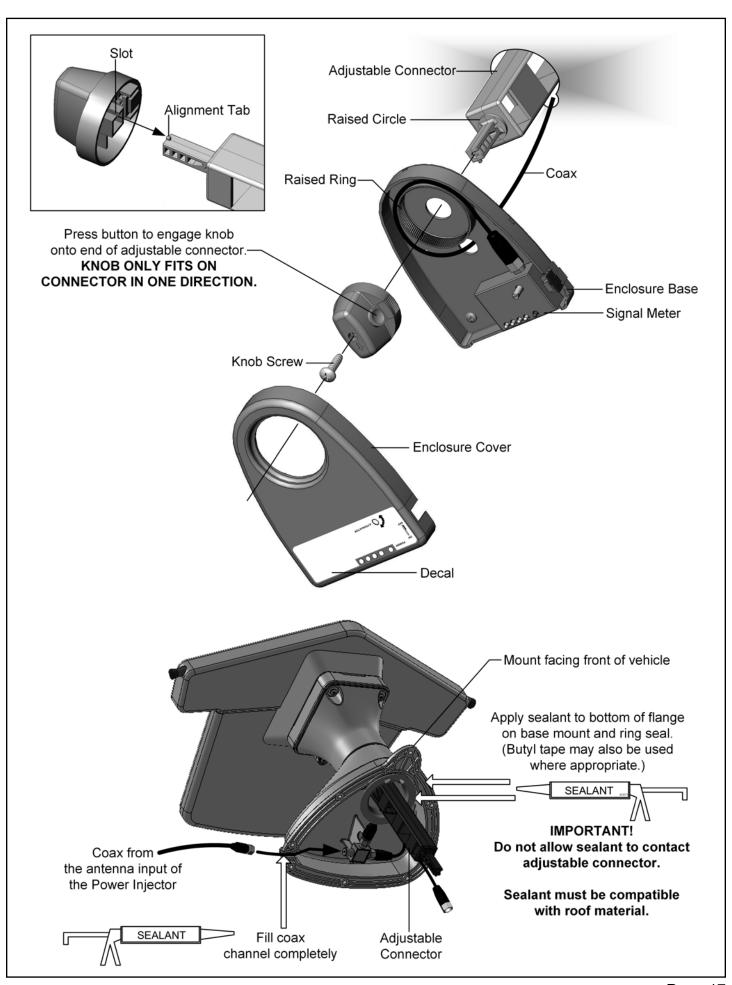
#### • Pull out Adjustable Connector to match approximate length of old Connector.

- Reconnect Coax inside Base Mount.
- Lower Antenna into place, feeding Adjustable Connector (and Meter Coax if present) through roof.
- Seal and fasten Antenna unit to roof. All holes, coax channel, Ring Seal and Base Mount perimeter must be sealed so they are watertight.

#### **INSIDE** • Route Coax and connect to Meter if present.

- Press button on Knob and engage onto Adjustable Connector. Fasten with Screw.
   KNOB ONLY FITS ON CONNETOR ONE WAY SEE INSET ON OPPOSITE PAGE.
- Snap Enclosure Cover in place. BE CAREFUL NOT TO DAMAGE LEDS.





## **WARRANTY CONSIDERATION FORM**

Service Center Name		Customer Name*			
Address		Unit Serial Number* / M	lodel Series		
		Date of Original Purch	ase or Installation*		
Phone No.		Make, Model and Year of Vehicle			
Name and Title of person working on unit		Customer I.D. Number			
Service Order Number* (RMA Number)			*REQUIRED		
Repair Date(s)	Total Labor Time (Hours)		Return Shipping Charges (Ground Only)		
	@ Hourly Rate of				
Description of Failure and Wo	rk Performed				
The following paperwork m	ust be sent to KING for	warranty reimbursem	ent consideration:		
1) Warranty Consideration	n Form with Service Orde	er Number			

- 2) Copy of Work Order
- 3) Proof of Purchase / Sales Receipt or Verification of In-Service Date

Note: If returning defective part, please include with paperwork. Warranty Labor Claim will not be processed until part is returned.





## **NOTES:**



## **NOTES:**

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