

# OWNER'S MANUAL/INSTALLATION INSTRUCTIONS

# WINEGARD® RV ANTENNA

## All Models

MADE IN U.S.A.

**STEP 1:** Choose location for antenna that will allow it to rest in travel position with antenna pointing toward rear of vehicle and raise and rotate without interfering with other roof-mounted equipment. Make sure inside ceiling area is clear where ceiling plate will mount.

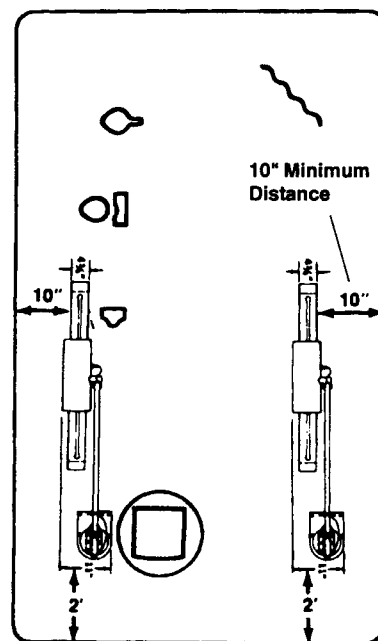
**NOTE:** Figure 1 shows minimum distance mount should be located from edge of vehicle roof. We recommend you check with your dealer or the manufacturer to see what provisions have been made in the roof for mounting the antenna. A reinforced area in the roof as well as pre-wired download may be available. For sloped/round roofs, use Winegard Model RW-1000, roof wedge, to level installation.

**STEP 2:** Locate template and drill 1-3/4" hole through roof and ceiling of vehicle. Take care to avoid damage to wiring which may run between roof and ceiling.

**STEP 3:** Drill 1/2" hole for cable entry through roof of vehicle only. DO NOT DRILL THROUGH CEILING. Route download cable through ceiling and wall to power supply location.

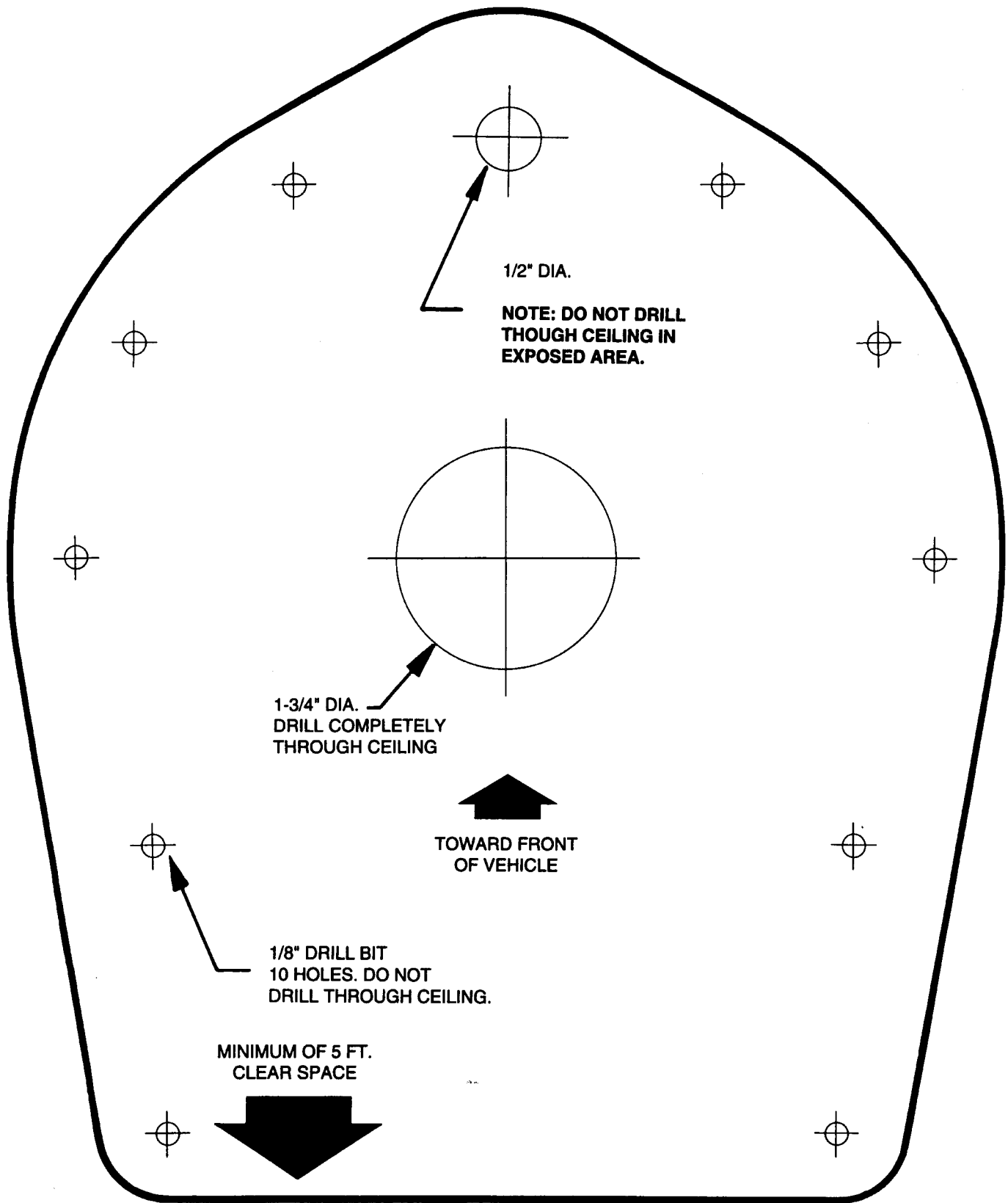
**STEP 4:** The mount is designed to fit roofs from 1" to 4-3/4" thick. As supplied, the mount will fit a roof 4-3/4" thick. If roof is less than 4-3/4" thick, cut elevating shaft and directional handle to size, per table below. If roof is more than 4-3/4" thick (max. 6"), a directional handle extension is needed. Order Model EK-1036, Directional Handle Extension.

\* The handle and extension should be glued together after checking that you have the correct length. The handle will not work properly if it is not glued together! (PVC glue is recommended; for your safety, use according to manufacturer's directions.)



FRONT OF VEHICLE  
FIGURE 1

ROOF THICKNESS	ELEVATING SHAFT LENGTH	W/RW-1000	DIRECTIONAL HANDLE LENGTH	HANDLE LENGTH	EXTENSION LENGTH
6"	7 3/8"	7 7/8"	5 15/16"	3 11/16"	2 1/4"
5 3/4"	7 1/8"	7 5/8"	5 11/16"	3 7/16"	2 1/4"
5 1/2"	6 7/8"	7 3/8"	5 7/16"	3 3/16"	2 1/4"
5 1/4"	6 5/8"	7 1/8"	5 3/16"	2 15/16"	2 1/4"
5"	6 3/8"	6 7/8"	4 15/16"	2 11/16"	2 1/4"
4 3/4"	6 1/8"	6 5/8"	4 11/16"	2 7/16"	2 1/4"
4 1/2"	5 7/8"	6 3/8"	4 7/16"	4 7/16"	Not Used
4 1/4"	5 5/8"	6 1/8"	4 3/16"	4 3/16"	Not Used
4"	5 3/8"	5 7/8"	3 15/16"	3 15/16"	Not Used
3 3/4"	5 1/8"	5 5/8"	3 11/16"	3 11/16"	Not Used
3 1/2"	4 7/8"	5 3/8"	3 7/16"	3 7/16"	Not Used
3 1/4"	4 5/8"	5 1/8"	3 3/16"	3 3/16"	Not Used
3"	4 3/8"	4 7/8"	2 15/16"	2 15/16"	Not Used
2 3/4"	4 1/8"	4 5/8"	2 11/16"	2 11/16"	Not Used
2 1/2"	3 7/8"	4 3/8"	2 7/16"	2 7/16"	Not Used
2 1/4"	3 5/8"	4 1/8"	2 3/16"	2 3/16"	Not Used
2"	3 3/8"	3 7/8"	1 15/16"	1 15/16"	Not Used
1 3/4"	3 1/8"	3 5/8"	1 11/16"	1 11/16"	Not Used
1 1/2"	2 7/8"	3 3/8"	1 7/16"	1 7/16"	Not Used
1 1/4"	2 5/8"	3 1/8"	1 3/16"	1 3/16"	Not Used
1" min.	2 3/8"	2 7/8"	15/16"	15/16"	Not Used



## ALL MODELS

**STEP 5:** Attach antenna head to lift tubes with two (2) steel pins as shown in Figure 2. Align holes in leveling bracket on back of antenna head with holes in lift tubes, insert pins and secure in place with (2) E-clips. **Use pliers and get a firm grip on E-clips.** Fit clips into groove on pins and snap into place.

**STEP 6:** Attach coax connector to jack on back of antenna head, slide weather boot into place over boot collar as shown in Figure 3.

**STEP 7:** Mount antenna and lift on roof in travel position. Apply a liberal amount of approved nonhardening sealing compound on bottom of base plate and roof area around hole. See Figure 4. Secure base plate with screws provided. Apply sealing compound over mounting screws. See Figure 4.

**STEP 8:** Lay ceiling plate on top of **directional handle** with pointers aligned and slide assembly over **rotating base shaft** in ceiling. Make pilot holes in ceiling. **Mount ceiling plate with directional handle in place** with screws provided. See Figure 5.

**STEP 9:** Assemble directional handle, spring, nylon bearing, directional handle decal and elevating crank as shown in exploded view in Figure 5. Remove backing from crank cover decal and press firmly inside directional handle. Slide all parts over elevating shaft and install elevating crank so set screw is on one of the six flat sides of elevating shaft before tightening screw.

**WARNING:** Once set screw touches shaft, tighten only 1/4 turn more. Set screw simply holds elevating crank on. **DO NOT OVERTIGHTEN!**

## NON-AMPLIFIED MODELS ONLY

**STEP 10:** Run download to TV set location and make connection to antenna terminals of TV set.

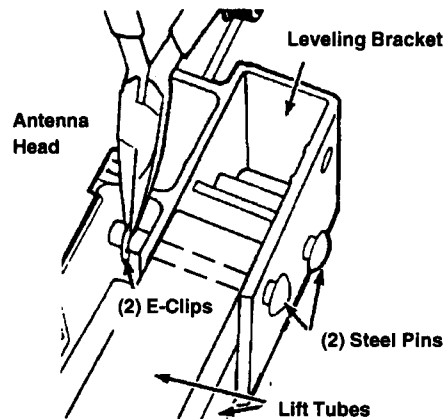


FIGURE 2

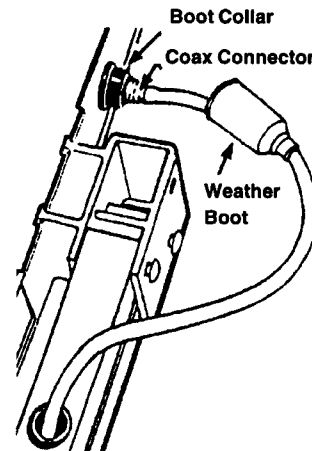


FIGURE 3

## NOTE:

Apply non-hardening sealing compound such as Butyl caulking between Base Plate and roof of vehicle.

## CAUTION:

Do not get sealing compound on bearing surface between base plate and Rotating Gear Housing. Do not paint top of Base Plate or around Rotating Gear Housing.

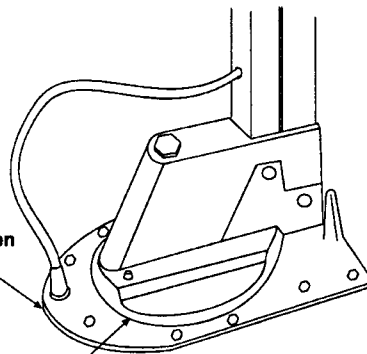


FIGURE 4

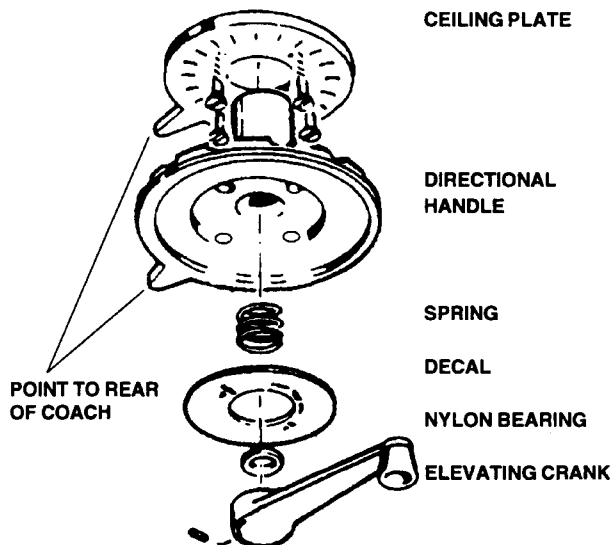


FIGURE 5

### AMPLIFIED MODELS ONLY

**STEP 10:** Select location for wall plate. Run two coax cables (three if set 2 jack is going to be used) (RG-59 type) between locations and install connectors on each end. **Mark cables so "cable input", "TV output" "Set 2" may be identified.** Antenna downlead and +12 VDC will also be needed at inside wall plate/power supply location.

**STEP 11:** The wall plate/power supply assembly may be flush mounted in most standard electrical boxes. To flush mount cut a hole in wall to fit the box. Run 2 #12 wires between wall plate/power supply and +12 VDC source and route downlead cable to this location.

**CAUTION**  
**THE POWER SUPPLY SHOULD BE TURNED OFF WHEN CONNECTING CABLES/WIRES TO POWER SUPPLY. SEE FIGURE 10.**

**STEP 12:** Make 12 volt connection to wall plate/power supply Figure 6. Install terminals on wires from +12 VDC source as shown in Figure 7. Crimp terminals with Craftsman type 4 crimping tool or equivalent. See Figure 8. Push wires onto tabs on terminal board as shown in Figure 6. If in doubt as to the polarity of the wires, connect them temporarily to tabs on circuit board and move switch on front of outlet to left, if light comes on polarity is correct. See Figure 10.

**STEP 13:** Install connectors on downlead, set 2 and cable input cables as shown on page 6. Attach downlead cable to jack on wallplate/power supply marked antenna as shown in Figure 9. Attach cable going to set 2 outlet to jack on power supply marked SET 2. Attach cable coming from cable input to jack on power supply marked CABLE.

**STEP 14:** Mount power supply in wall with screws provided and attach TV set cable to jack on front of power supply/wallplate. Move switch on front of outlet to the left and check that light is on. See Figure 10.

### CHECKING OPERATION OF POWER SUPPLY

1. Tune TV receiver to nearest station and rotate antenna for best picture and sound.
2. Turn off switch on power supply. Picture on TV should be considerably degraded with power off.
3. **This unit is equipped with a polyswitch**, (current limiting device), which will shut down +12 VDC if there is a direct short between antenna and power supply. Red indicator light will not light. Once short is eliminated, device will reset itself.

### ADDING OPTIONAL AMPLIFIED WALLPLATE TO NON-AMPLIFIED RV/TV INSTALLATION

The RA-7596 solid state TV signal amplifier works with any non-amplified RV/TV antenna. Improves picture quality. Uses +12 VDC. Has on/off switch, indicator light, set 2 output, cable input and +12 VDC receptacle.

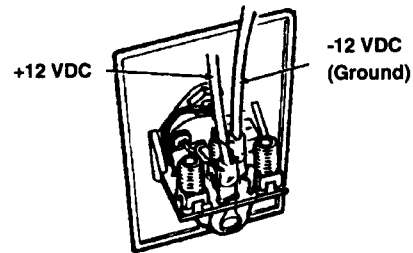


FIGURE 6

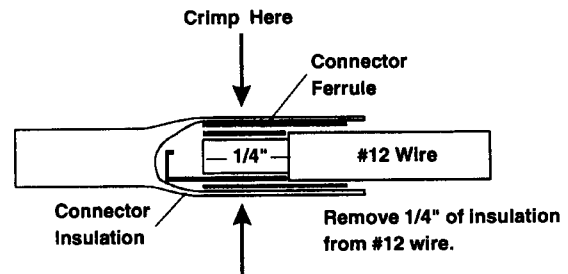


FIGURE 7

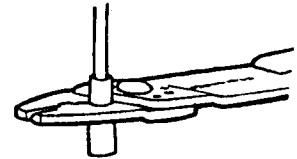


FIGURE 8

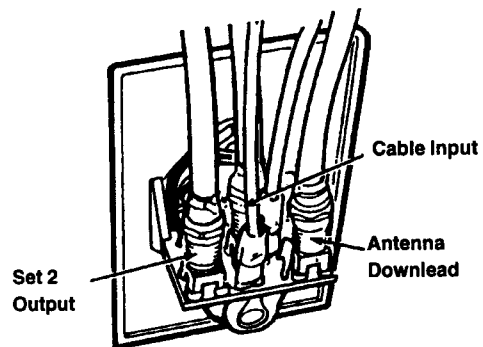


FIGURE 9

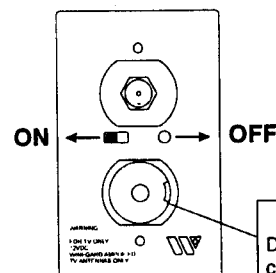
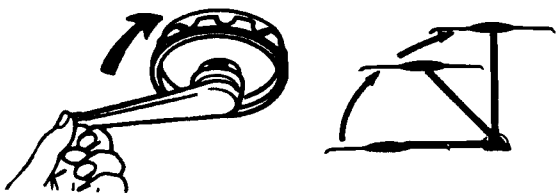


FIGURE 10

**WARNING**  
DO NOT connect high current devices such as hair dryers to this receptacle. Maximum current rating of this receptacle is 7.5 amps at 12 VDC.

## OPERATING AND MAINTENANCE INSTRUCTIONS FOR YOUR WINEGARD RV/TV ANTENNA

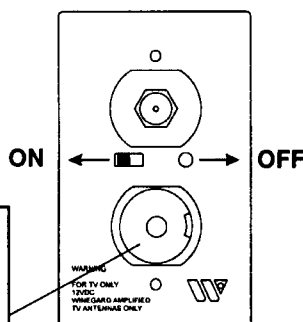
### RAISING ANTENNA TO OPERATING POSITION



Turn elevating crank (clockwise) in "UP" direction about 13 turns or until some resistance to turning is noted.

### AMPLIFIED MODELS ONLY

Turn power supply ON to use either front or rear TV outlet. Neither outlet will work unless power supply switch is ON.



#### WARNING

DO NOT connect high current devices such as hair dryers to this receptacle. Maximum current rating of this receptacle is 7.5 amps at 12 VDC.

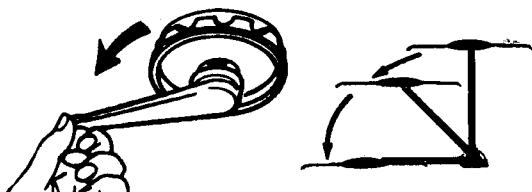
### ROTATING ANTENNA FOR BEST PICTURE



Make sure antenna is in "UP" position. Pull down on both hands until it disengages ceiling plate and rotate for best picture.

### LOWERING ANTENNA TO TRAVEL POSITION

Rotate antenna until pointer on directional handle aligns with pointer on ceiling plate. Turn elevating crank (counter clockwise) in "DOWN" direction about 13 turns or until resistance is noted. Antenna is now locked in travel position.

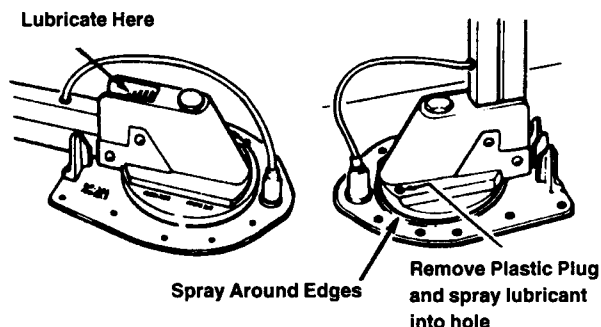


**IMPORTANT:** Under no conditions lower antenna in any position except travel position.

### LUBRICATION

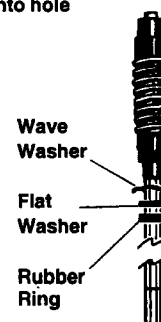
**STEP 1:** To lubricate the elevating gear, apply a liberal amount of silicone spray lubricant to the elevating gear with the lift in the down position (see illustration below), then run the lift up and down a few times to distribute the lubricant over gears.

**STEP 2:** Twice yearly or in the event that rotating the antenna becomes difficult, normal operation can be restored by lubricating the bearing surface between the rotating gear housing and the base plate. Any **silicone lubricant spray** may be used. Elevate antenna and remove set screw or plastic plug from rotating gear housing as shown. Spray lubricant into hole and around edges of gear housing. Rotate gear housing until lubricant coats bearing surfaces and antenna rotates freely.



### LUBRICATING RUBBER QUAD RING

Lubricate rubber quad ring on elevating shaft which is below worm gear with silicone spray lubricant at least twice yearly. This will keep quad ring from becoming brittle which could result in leaks down elevating shaft. Refer to page 8 for removing worm gear assembly. Item #6 on parts explosion.



### DO'S

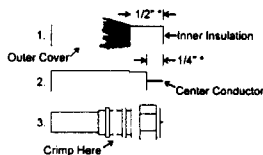
1. Do check parking location for obstructions before raising antenna.
2. Do carefully raise, lower and rotate - if difficult, check for cause.
3. Do rotate slowly when selecting station and check fine tuning on TV set to make sure it is properly adjusted.
4. Do lower antenna before moving vehicle.

### DON'T'S

1. Don't force elevating crank up or down, check for cause of trouble.
2. Don't rotate directional handle hard against stops.
3. Don't travel with lift in up position.
4. Don't leave lift part way up or down.
5. Don't apply sealing compound or paint over top of base plate or anywhere on lift.

# WHAT TO DO WHEN YOUR RV/TV ANTENNA IS NOT WORKING PROPERLY

## INSTALLING FC-5900 CONNECTORS ON COAX CABLE



**Step 1.** Strip outer cover back 1/2" from end of cable. Fray braid back as far as outer cover will allow.

**Step 2.** Trim braid close to outer cover and remove 1/4" of inner insulation **being careful not to nick center conductor.** Make sure no foil or braid can touch center conductor.

**Step 3.** Slide connector tip between braid and inner insulation (braid and foil, on foil shield cable) and push connector on cable as far as it will go. Crimp built-in ferrule with proper crimping tool. **Hex connector requires hex crimping tool.** Do Not crush cable out-of-round.

\* If installing in very hot weather, increase these dimensions 1/8".

### WARNING

**DO NOT INSTALL COUPLERS, SPLITTERS, ETC. BETWEEN THE POWER SUPPLY AND THE ANTENNA. INSTALLATION OF ANY ITEM ON THE DOWNLEAD MAY CAUSE A SHORT IN THE SYSTEM. THE DOWNLEAD SUPPLIES +12 VDC TO THE PREAMP IN THE ANTENNA.**

## HOW YOUR SYSTEM WORKS

Turning power supply on sends +12 VDC up cable to antenna. Voltage energizes transistors on amplifier in antenna head. TV signal comes back down cable to outlets.

## TO TEST SYSTEM

1. Make sure TV set is working properly.

2. Switch power supply ON and OFF to see if there is a difference in the picture quality while watching TV. If NO difference, use following steps.

### CAUTION

The power supply should be turned OFF when connecting/disconnecting cables to power supply and antenna, but should be turned ON when testing for voltage.

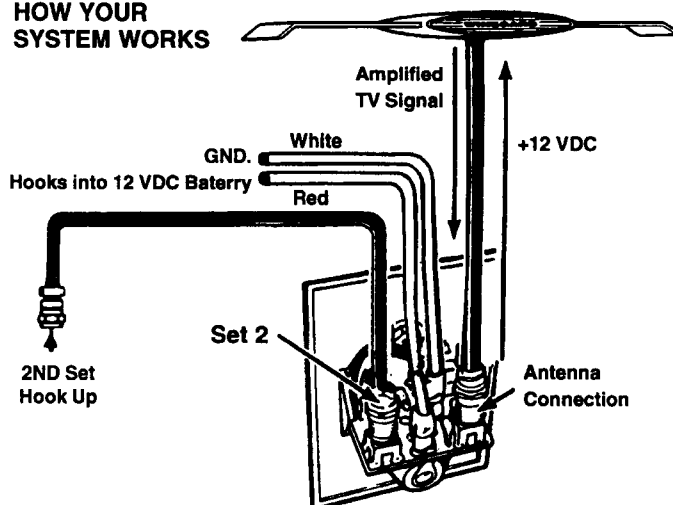
3. Disconnect cable from antenna and check for +12 VDC at Test Point #1. If there is +12 VDC, the power supply is OK and the antenna needs to be replaced.  
4. If there is NO +12 VDC at Test Point #1 reconnect cable to antenna. Remove power supply from wall and visually inspect for burnt/broken parts. If there are ANY broken or burnt parts replace power supply.  
5. Disconnect cable from antenna jack on power supply. Check for +12 VDC. If +12 VDC is present, there is a problem in the cable connecting the power supply to the antenna. Repair/replace cable.

### NOTE

If power supply has a polyswitch, see Figure 2 or 3, the power supply will reset itself after short in the cable is removed.

6. If +12 VDC is not present at Test Point #2, check that the red indicator light is ON. If not, check the polarity of the red/white wires and check the +12 VDC source. If there is still no +12 VDC replace power supply.

## HOW YOUR SYSTEM WORKS



## TO TEST SYSTEM

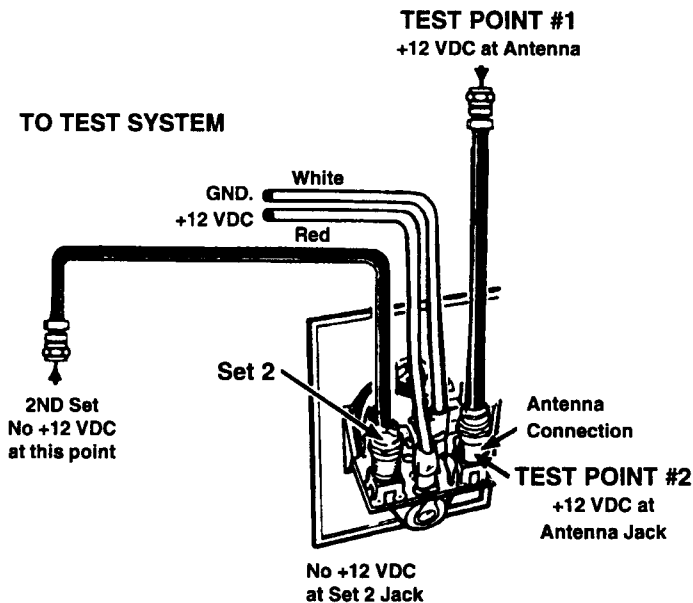
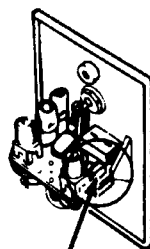


FIGURE 1



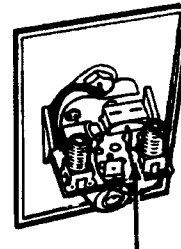
RF Choke  
Power Supply  
No Polyswitch

FIGURE 2



Polyswitch  
Power Supply  
With Polyswitch

FIGURE 3



Polyswitch  
Power Supply  
With Polyswitch