

# WINEGARD®

## ROADSTAR™

### RV AND VAN TV ANTENNA

#### MODELS RS-2000 & RS-3460

Made in U.S.A.

### INSTRUCTIONS

#### SPECIFICATIONS

<b>Bandpass</b>	
VHF/FM .....	54 to 216 MHz
UHF .....	470 to 810 MHz
<b>Amplifier Gain .....</b>	
VHF* .....	15.5 dB avg.
UHF .....	19.5 dB avg.
<b>Impedance .....</b>	75 ohm unbalanced
<b>Response .....</b>	25 dB per 6 MHz
<b>VSWR .....</b>	1.8:1 max.
<b>Power Required .....</b>	12 VDC at 85 ma
<b>Weatherproof Housing .....</b>	Weatherable UV stabilized copolymer

\*Has fixed FM trap to reduce interference.

#### DESCRIPTION

Winegard's RoadStar™ omnidirectional antenna provides excellent reception of VHF/UHF TV channels. The RoadStar compact modern styling is unobtrusive and blends well with the designs of recreational vehicles. The UV stabilized copolymer housing makes the antenna virtually impervious to weathering and color change.

The unique omnidirectional characteristics of model RS-2000 provide excellent reception in areas where stations are in different directions without the need for a complex rotor system. A built-in amplifier provides up to 6 times the received signal on VHF and 9 times the UHF signal insuring the best possible reception in color and black and white.

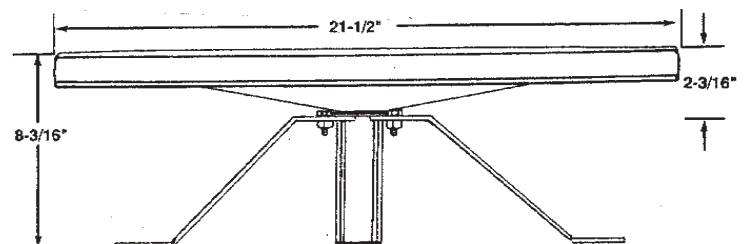
The RS-2000 package includes antenna, 12 VDC power supply with two-way splitter, 30' downlead cable, 6' TV set cord, hardware and mounting bracket.

#### PARTS LIST (RS-2000)

1	Amplified Antenna	
6	10-32 Hex Nut, Nylock	2160216
1	Power Supply with Hardware	2120143
1	30' Coaxial Cable	2753015
1	6' Coaxial Cable	2753752
3	Roof Mounting Brackets	3720303
6	#10 x 1" Thread Cutting Screws	2160178
1	Bolt, 1-14 x 1" Nylon	3200350
1	Mounting Plate	3710248
6	10-32 x 5/8" Bolt	2160173
6	Washer, #10 Aluminum	1140302

#### PARTS LIST (RS-3460)

1	Amplified Antenna	
6	10-32 Hex Nut, Nylock	2160216
3	Roof Mounting Brackets	3720303
6	#10 x 1" Thread Cutting Screws	2160178
1	Bolt, 1-14 x 1" Nylon	3200350
1	Mounting Plate	3710248
1	Coaxial Cable Boot	3200154
6	10-32 x 5/8" Bolt	2160173
6	Washer, #10 Aluminum	1140302



#### CLEANING ANTENNA HOUSING

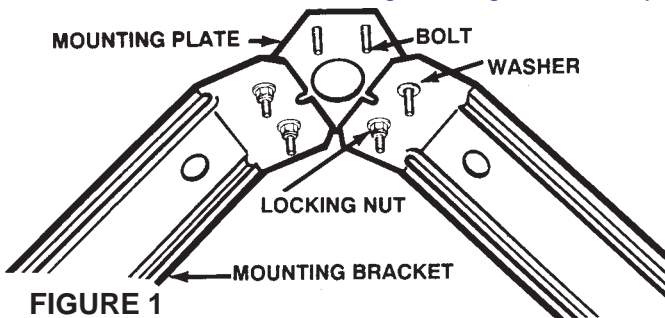
The surface of the antenna is a tough laminated ultraviolet shield. Clean only with mild soap and water. **Use no solvents, alcohol, or cleaning fluids.**

**Winegard Company**  
**3000 Kirkwood St., Burlington, IA 52601-2000**

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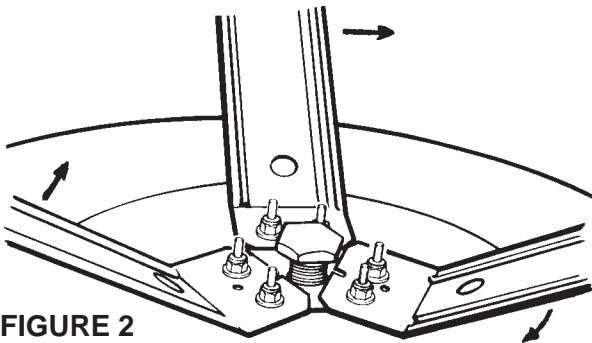
## ANTENNA MOUNTING INSTRUCTIONS

**STEP 1.** Assemble mounting brackets onto mounting plate. Insert 10-32 x 5/8" bolts through mounting plate and mounting brackets. See Figure 1. Attach #10 x 9/16 x 1/6 washers and 10-32 locking nuts. Tighten securely.



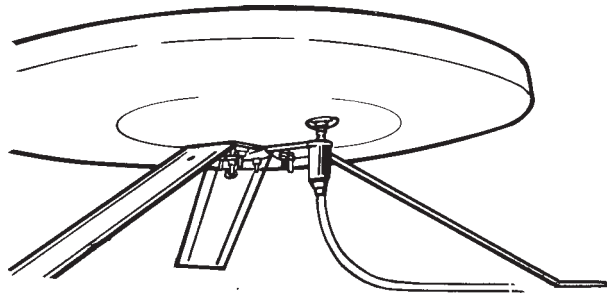
**FIGURE 1**

**STEP 2.** Place assembled mount on bottom of antenna housing and thread in 1" nylon bolt. Spin the assembled mount to tighten securely.



**FIGURE 2**

**STEP 3.** Attach end of coaxial download cable with boot to jack on bottom of antenna and slide boot up over boot collar. See Figure 3.



**FIGURE 3**

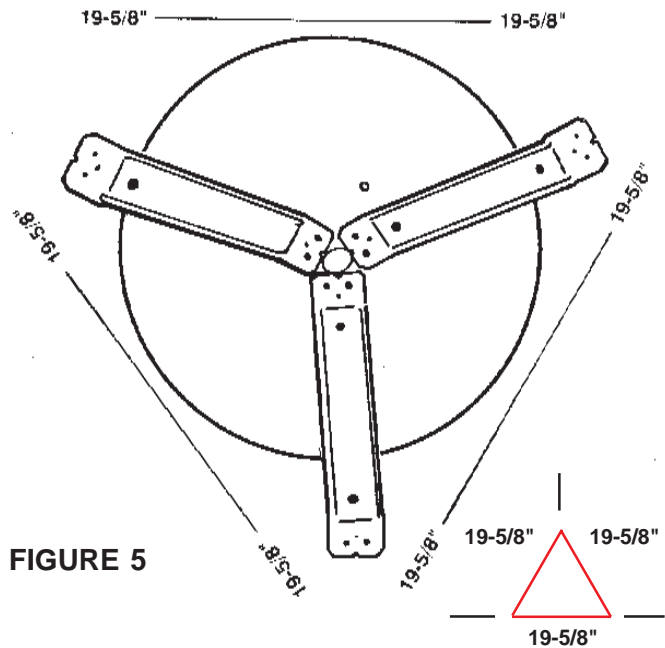
**STEP 4.** Select location for antenna on roof of vehicle. Try to position antenna about 24" from edge of vehicle roof, convenient to download entry point and as far away as possible from roof mounted equipment such as air conditioners or roof vents. See Figure 4.

**Note:** Locating antenna close to air conditioning unit or roof vents over 8" high may cause poor picture quality and snow.

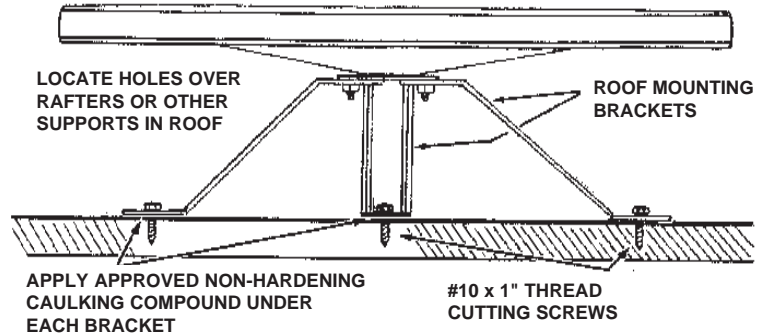


**FIGURE 4**

**NOTE:** Holes for mounting brackets are at corners of 19-5/8" triangle. We recommend you make a template from 19-5/8" triangular piece of cardboard. Try to locate holes on roof rafters on other solid members inside roof. See Figure 5.



**FIGURE 5**



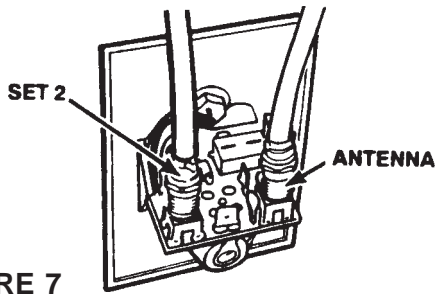
**FIGURE 6**

**STEP 5.** Drill six 1/8" pilot holes as shown in Figure 6. Apply non-hardening silicone caulking compound around holes under each bracket. Attach antenna to roof with #10 x 1" thread cutting screws.

**STEP 6.** The power supply/wall outlet 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 outlet and 12 VDC source and route download cable to this location. Install cable between set 2 outlet and power supply SET 2 jack at this time. See Figure 7.

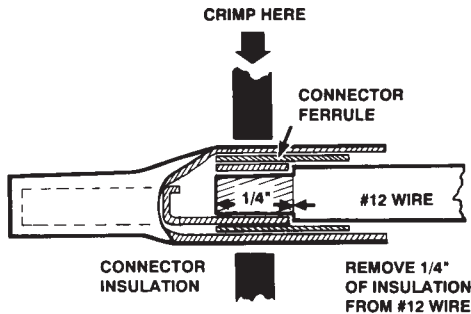
**WARNING: DO NOT CONNECT 12 VDC SOURCE TO POWER SUPPLY AT THIS TIME. POWER SUPPLY MAY SHORT, IF 12 VDC SOURCE IS CONNECTED.**

**STEP 7.** Install connectors on download and set 2 cable as shown on page 4. Attach antenna download cable to jack on power supply marked "ANT". See Figure 7.

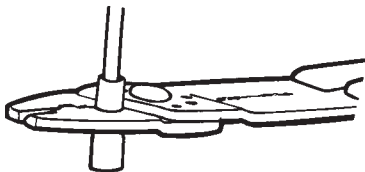


**FIGURE 7**

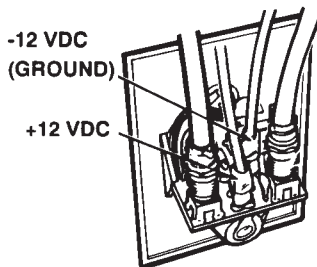
**STEP 8.** Install terminals on wires from 12 VDC source as shown in Fig. 8. Crimp terminals with Craftsman type 4 crimping tool in Fig. 9 or equivalent. Push wires onto tabs on terminal board as shown in Figure 10. If in doubt as to the polarity of the wires, connect them temporarily to tabs on circuit board in Fig. 10 and move switch on front of outlet to left, (in Fig. 11) if light comes on polarity is correct.



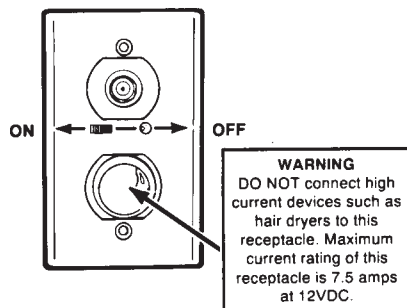
**FIGURE 8**



**FIGURE 9**



**FIGURE 10**



**FIGURE 11**

**STEP 9.** Mount power supply in wall with screws provided and attach TV coax cable to jack on front. Connect TV coax cable to TV set. Move switch on front of outlet to the left and check that light is on.

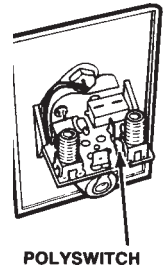
### CHECKING POWER SUPPLY OPERATION

(Power Supply not supplied with RS-3460)

1. Tune TV receiver to nearest station.

2. Turn off switch on power supply. Picture on TV receiver 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 in the cable between antenna and power supply. Red indicator light will not light. Once short is eliminated, device will reset itself.



### CONSUMER TWO YEAR WARRANTY

Winegard Company warrants this Winegard product against any defects in materials or workmanship within **two years** from date of purchase. No warranty claim will be honored unless at the time the claim is made, you present proof of purchase to an authorized Winegard dealer (if unknown, please contact Winegard Company, 3000 Kirkwood Street, Burlington, IA 52601-2000, Telephone 319-754-0600).

Winegard Company (at its option) will either repair or replace the defective product at no charge to you. This warranty covers parts, but does not cover any costs incurred in removal, shipping or reinstallation of the product. This limited warranty does not apply if the product is damaged, deteriorates, malfunctions or fails from: misuse, improper installation, abuse, neglect, accident, tampering, modification of the product as originally manufactured by Winegard, usage not in accordance with product instructions or acts of nature such as damage caused by wind, lightning, ice or corrosive environments such as salt spray and acid rain.

The **two year** warranty is provided on the condition that the equipment is properly delivered with all handling and freight charges prepaid to your Winegard dealer for return to our factory for repair or replacement. Winegard dealers will arrange for the replacement or repair and return to you without charge the product which failed due to defective material or workmanship.

WINEGARD COMPANY WILL NOT ASSUME ANY LIABILITIES FOR ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, MADE BY ANY OTHER PERSON.

ALL OTHER WARRANTIES WHETHER EXPRESS, IMPLIED OR STATUTORY INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY ARE LIMITED TO THE **TWO YEAR** PERIOD OF THIS WARRANTY.

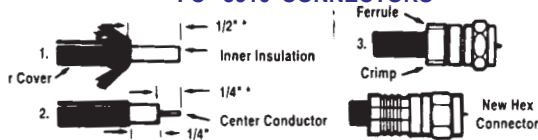
The foregoing shall be the sole and exclusive remedy of any person, whether in contract, tort or otherwise, and Winegard shall not be liable for incidental or consequential damage or commercial loss, or from any other loss or damage except as set forth above.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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

## INSTALLING COAX CABLE ON FC- 5910 CONNECTORS



**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 appropriate crimping tool. **Do Not crush cable out-of-round**. \*If installing in very hot weather, increase these dimensions 1/8".

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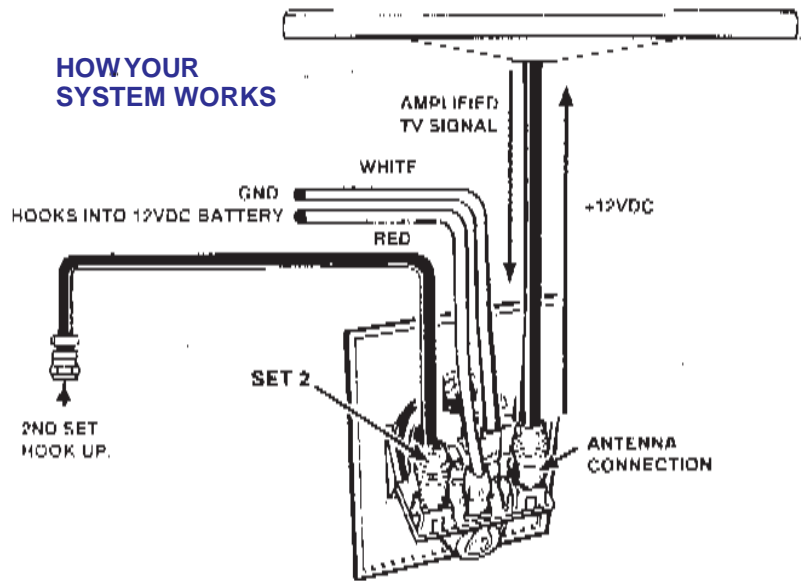
### WARNING

**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.

### HOW YOUR SYSTEM WORKS



### TO TEST SYTEM

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 there is NO difference, proceed to the next step.

### 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 the 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 at test point #2. If there is +12 VDC then there is a problem in the cable connecting the power supply to the antenna. Repair/ replace cable.

6. If +12 VDC is not present at test point #2, check that the red indicator 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 the power supply.

### TO TEST SYSTEM

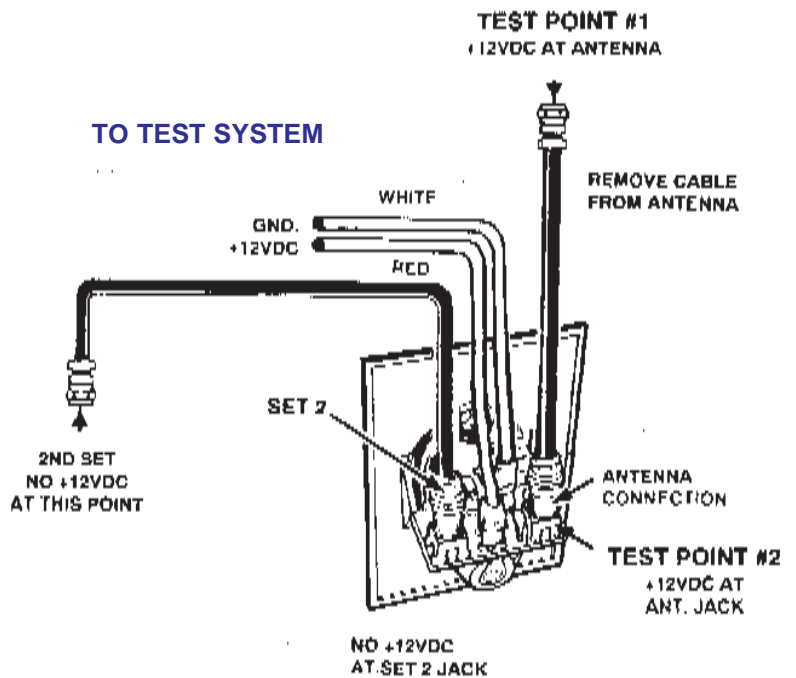
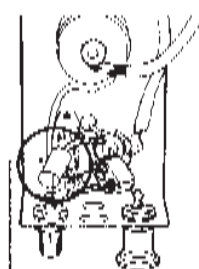


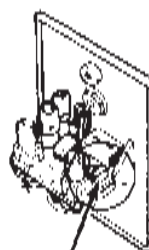
FIGURE 1



RF CHOKE

POWER SUPPLY IN METAL HOUSING

FIGURE 2



RF CHOKE

POWER SUPPLY NO POLYSWITCH

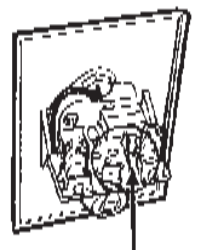
FIGURE 3



POLYSWITCH

POWER SUPPLY W/POLYSWITCH

FIGURE 4



POLYSWITCH

POWER SUPPLY W/POLYSWITCH