

# AntennaTek, Inc.

## WORM & GEAR REPLACEMENT INSTRUCTIONS MOD 250, 350 & 500 (CURRENT ANTENNAS)

Part Numbers: 019610 & 019612

12/12/02

1. Remove elevation handle, spring, washer and rotation handle, located in the ceiling inside your vehicle (use a #2 Phillips screw driver to loosen the set screw on the elev. handle.)
2. Remove the hex plug from gear housing, located on top of the roof of your vehicle (use a 1" socket).
3. Remove capnut and pin from upper arm. Remove worm gear and shaft assembly. Cut new elev. shaft assembly the same length as the old one.
4. Install new elev. shaft assembly. Push the elev. shaft assembly until reaches the bottom of the hole in the gear housing and the "O" ring is compressed inside the hole.
5. Reinstall the hex plug and insure that it is tightened all the way. The hex plug holds the elev. shaft assembly in the proper place.
6. Install new worm gear, pin and capnut.

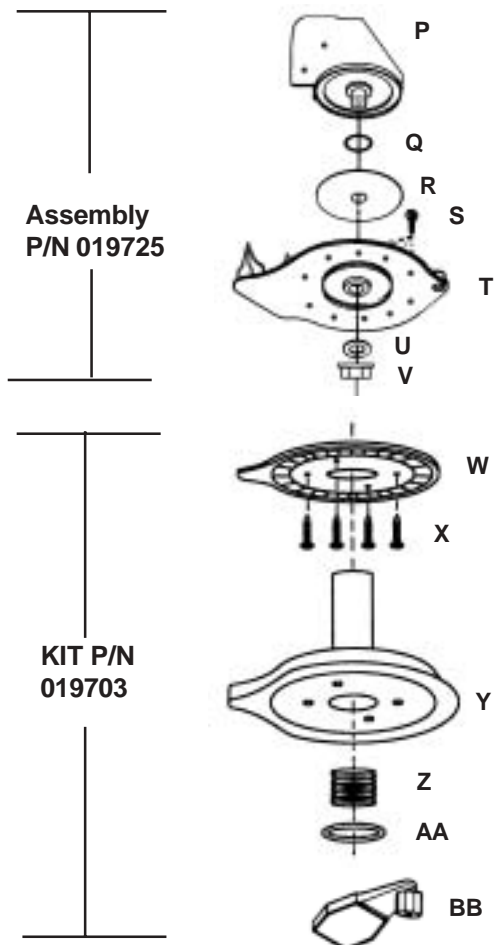
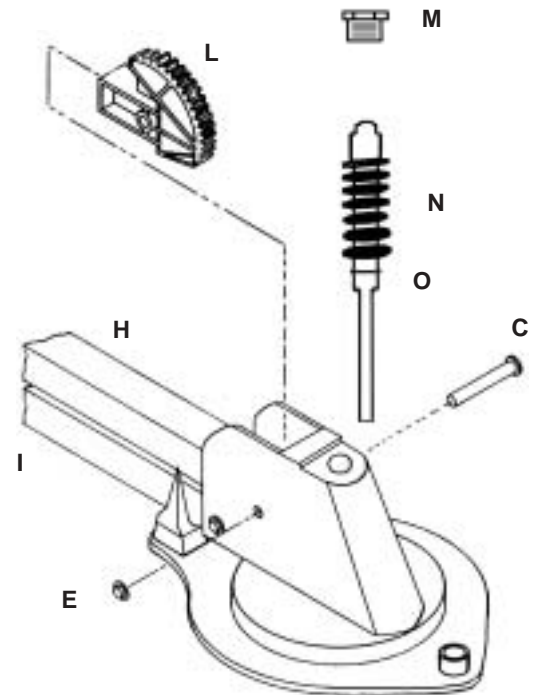
**OPERATION:** Your antenna will function as follows:

**RAISING ANTENNA:** Rotate elev. handle clockwise. When the antenna reaches its raised position, resistance will be felt in the handle, this indicates the antenna is fully extended. **DO NOT APPLY EXCESSIVE FORCE**

**LOWERING ANTENNA:** Insure that the pointers on the ceiling plate and the rotation handle are aligned. Rotate elev. handle counterclockwise until you hear the antenna touch the roof (resistance will be felt in the handle).

**Warning !!! Lowering the antenna without aligning the pointers, may damage the antenna.**

SYMB	DESCRIPTION	P/N
C	Pin	065565
E	Cap Nut	030260
H	Upper Arm	065601
I	Lower Arm	065602
L	Worm Gear	065645
M	Hex Plug	065614
N	Elev. Shaft ASM	065641
O	Small O-Ring	065568
P	Alum. Gear Housing	065610
Q	Large O-Ring	065569
R	Disc Washer	065561C
T	Alum. Base Plate	065551C



Assembly  
P/N 019725

KIT P/N  
019703

# AntennaTek, Inc.

## GEAR HOUSING REPLACEMENT INSTRUCTIONS MOD 250, 350 & 500 (CURRENT ANTENNAS)

Part Numbers: 019610 & 019612

12/12/02

1. With the antenna in travel position, remove elevation handle, spring, washer and rotation handle, located in the ceiling inside your vehicle (use a #2 Phillips screwdriver to loosen the set screw on the elev. handle.)
2. Remove the hex plug from gear housing, located on top of the roof of your vehicle (use a 1" socket).
3. Remove capnut and pins to remove the upper and lower arms from gear housing. Remove worm gear and shaft assembly. If you are also installing new shaft assembly, cut the new shaft the same length as the old one.
4. Using a 15/16" deep socket remove the center lock nut and washer located on the ceiling of your vehicle. Remove the gear housing from the roof of your vehicle. Place the new gear housing on top of the base plate. Make sure that the large "O" ring and disk washer are in place. From inside the vehicle install the washer and center lock nut using the 15/16" deep socket. The gear housing should be able to turn freely on top of the base plate. Do not leave the gear housing loose, this will not compress the "O" ring and will result in water leaks. If you tighten the center lock nut too much, you will not be able to rotate the antenna.
5. Reinstall the hex plug and insure that it is tightened all the way. The hex plug holds the elevation shaft assembly in the proper place.
6. Insert the shaft assembly in to gear housing and secure in place with hex plug. Re-install the lower arm using the pin you removed earlier and a new push nut. Install new worm gear and upper arm.

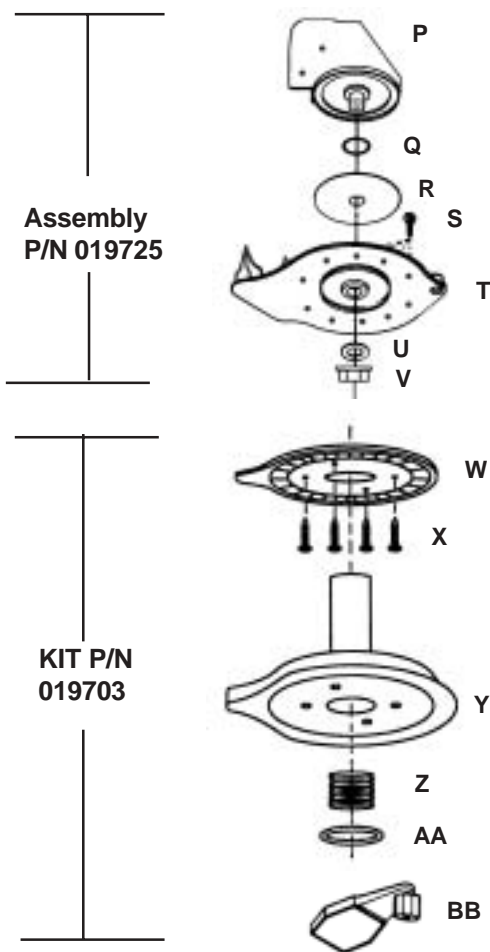
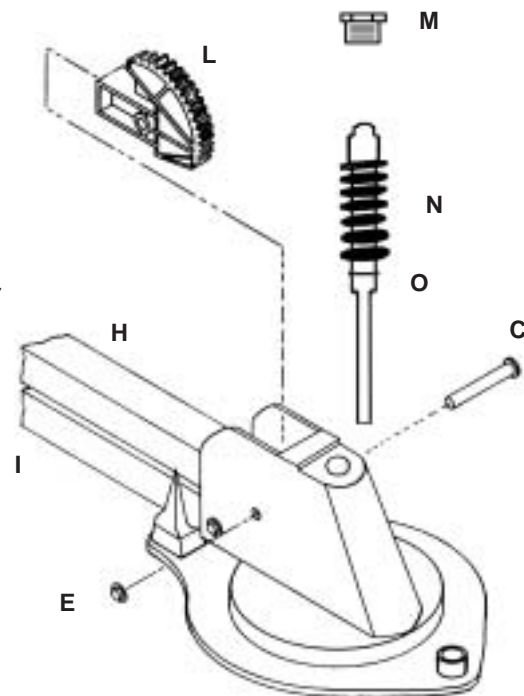
### OPERATION: Your antenna will function as follows:

**RAISING ANTENNA:** Rotate elev. handle clockwise. When the antenna reaches its raised position, resistance will be felt in the handle, this indicates the antenna is fully extended. **DO NOT APPLY EXCESSIVE FORCE**

**LOWERING ANTENNA:** Insure that the pointers on the ceiling plate and the rotation handle are aligned. Rotate elev. handle counterclockwise until you hear the antenna touch the roof (resistance will be felt in the handle).

**Warning !!! Lowering the antenna without aligning the pointers may damage the antenna.**

SYMB	DESCRIPTION	P/N
C	Pin	065565
E	Cap Nut	030260
H	Upper Arm	065601
I	Lower Arm	065602
L	Worm Gear	065645
M	Hex Plug	065614
N	Elev. Shaft ASM	065641
O	Small O-Ring	065568
P	Alum. Gear Housing	065610
Q	Large O-Ring	065569
R	Disc Washer	065561C
T	Alum. Base Plate	065551C



Assembly  
P/N 019725

KIT P/N  
019703

# AntennaTek, Inc.

## BASE PLATE REPLACEMENT INSTRUCTIONS

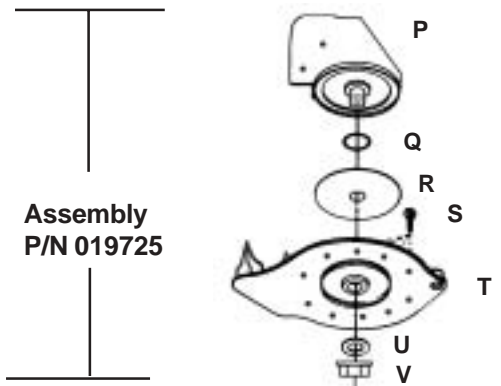
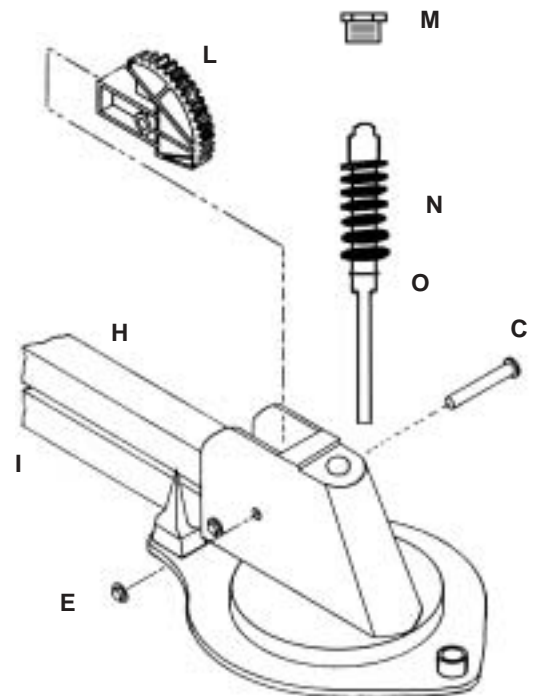
1. Remove elevation handle, spring, washer and rotation handle, located in the ceiling inside your vehicle (use a #2 Phillips screw driver to loosen the set screw on the elev. handle.)
2. Remove the hex plug from gear housing, located on top of the roof of your vehicle (use a 1" socket).
3. Remove capnut and pin from upper arm. Remove worm gear and shaft assembly. Cut new elev. shaft assembly the same length as the old one.
4. Install new elev. shaft assembly. Push the elev. shaft assembly until reaches the bottom of the hole in the gear housing and the "O" ring is compressed inside the hole.
5. Remove the base plate from the roof of the vehicle by removing the screws and sealant. Clean the roof area from any debris. Place a 1" plumber's putting tape on the bottom of the base plate, centering it on the holes. Do not leave any gaps. In addition, place the tape around the center hole and the hole for the coax cable. Center the base plate in the hole on the roof. If you are using a roof wedge to level the antenna, you should also place 1" plumber's tape on the bottom of the roof wedge. Using 10 (#10X1", longer if you installed the roof wedge) fully threaded screws, mount the base assembly to the roof. Use sealant to seal the screws and the edges of the base plate. Keep the sealant away from the gear housing. Excessive sealant will prevent the gear housing from rotating. Continues with part #4 on gear housing replacement.
6. Install new worm gear, pin and capnut.

**OPERATION:** Your antenna will function as follows:  
**RAISING ANTENNA:** Rotate elev. handle clockwise. When the antenna reaches its raised position, resistance will be felt in the handle, this indicates the antenna is fully extended. **DO NOT APPLY EXCESSIVE FORCE**

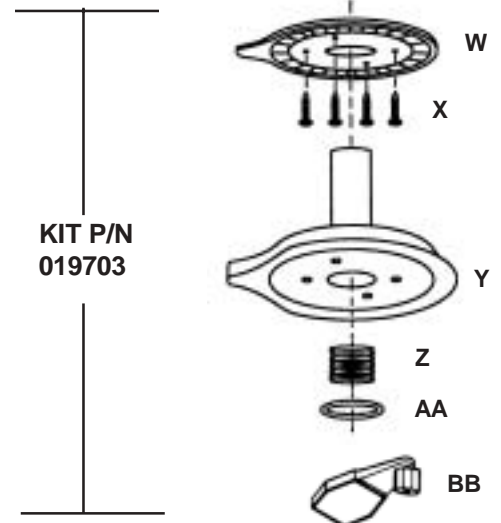
**LOWERING ANTENNA:** Insure that the pointers on the ceiling plate and the rotation handle are aligned. Rotate elev. handle counterclockwise until you hear the antenna touch the roof (resistance will be felt in the handle).

**Warning !!! Lowering the antenna without aligning the pointers may damage the antenna.**

SYMB	DESCRIPTION	P/N
C	Pin	065565
E	Cap Nut	030260
H	Upper Arm	065601
I	Lower Arm	065602
L	Worm Gear	065645
M	Hex Plug	065614
N	Elev. Shaft ASM	065641
O	Small O-Ring	065568
P	Alum. Gear Housing	065610
Q	Large O-Ring	065569
R	Disc Washer	065561C
T	Alum. Base Plate	065551C



Assembly  
P/N 019725



KIT P/N  
019703

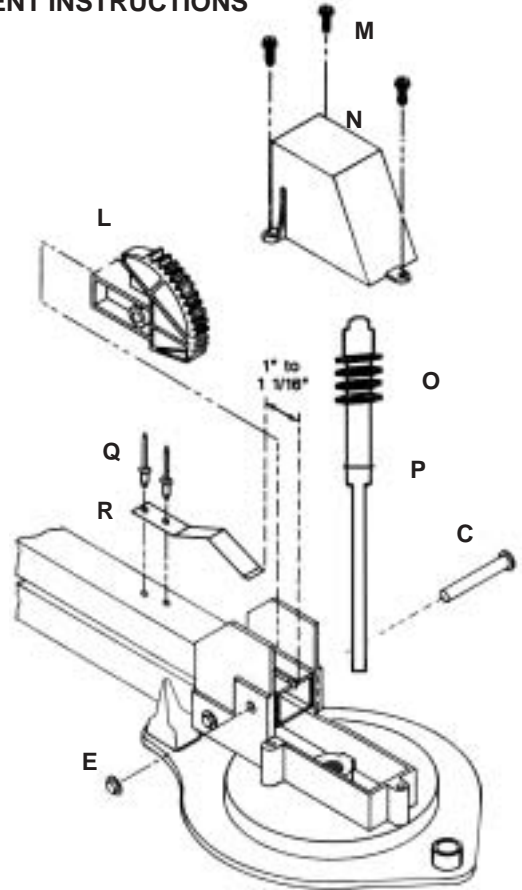
# AntennaTek, Inc.

## SIGNAL COMMANDER WORM & GEAR REPLACEMENT INSTRUCTIONS

Part Numbers: 019604 & 019605

**FOR MOD 200 & MOD 400 ONLY (Produced from 1992 to 2002)**

1. Remove elevation handle, spring, washer and rotation handle, located in the ceiling inside your vehicle.
2. Remove three cover screws and cover from gear housing, located on top of the roof of your vehicle.
3. Remove capnut and pin from upper arm. Remove old elev. shaft assembly and worm gear. Cut new elev. shaft assembly the same length as the old one.
4. Install new worm gear, pin and capnut.
5. Install new elev. shaft assembly. Turn the elev. shaft assembly clockwise until reaches the bottom of the hole in the gear housing and the "o" ring is compressed inside the hole.
6. Reinstall cover and cover screws. Insure that the cover is placed in the proper position and the screws are tighten all the way. The cover holds the elev. shaft assembly in the proper place.



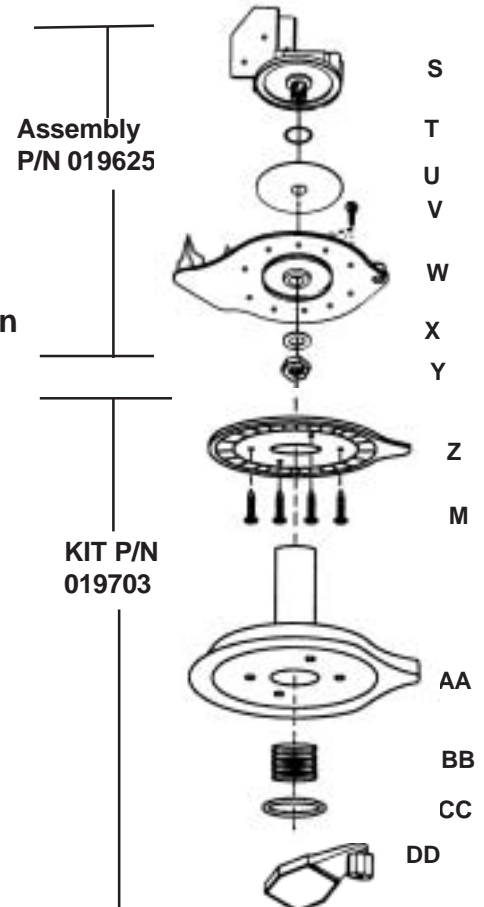
**OPERATION:** Your antenna will function as follows:

**RAISING ANTENNA:** Rotate elev. handle clockwise. When the antenna reaches its raised position, the handle will continue to turn and the clicking sound indicates the antenna is fully extended.

**LOWERING ANTENNA:** Insure that the pointers on the ceiling plate and the rotation handle are aligned, this indicates that your antenna is in the travel position. Rotate elev. handle counterclockwise until you hear the antenna touch the roof (resistance will be felt in the handle).

**Warning !!! Lowering the antenna in a position other than travel, may damage the antenna.**

SYMB	DESCRIPTION	P/N
C	Pin	065565
E	Cap Nut	030260
H	Upper Arm	065601
I	Lower Arm	065602
L	Worm Gear	065558
M	#8 Hex Head Screw	030275
N	Cover	065552
O	Elev. Shaft asm	065663
P	Small O-Ring	065568
Q	Pop Rivet	030351
R	Return Spring	076501



# Installation Instructions

Step 1: The power supply is designed for installation in any standard electrical box. To mount the power supply cut a hole in the wall and install the electrical box. Place the power supply switch in the "OFF" position. Run two wires # 14 AWG from a 12 Volt DC power source in the vehicle to the rear of the power supply.

Assure that the 12 Volt DC power source current is limited to 7.5A at 12Volt DC.

**Warning: Use of this power supply with any product other than AntennaTek Amplified RV antenna could result in fire or other damage.**

Crimp the quick disconnects onto the wires and push wires onto tabs on the circuit board (see power supply illustration for correct polarity). Place switch in the "ON" position and notice the red LED illuminate. This indicates correct polarity. Place switch in the "OFF" position to avoid any short circuits while making cable connections

Step 2: Connect the coaxial cable from the antenna to the connector marked "Antenna" on the rear of the power supply.

**Warning:**  
**Use of this power supply with any product other than AntennaTek amplified RV antenna could result in fire or other damage.**



**Warning:**  
**Do not connect high current devices to 12 Volt receptacle.**  
**Maximum current rating of this receptacle is: 7.5 Amps at 12 Volt DC.**

Step 3: To connect the second power supply available as an optional accessory for the models 350 and 500, run two # 14 AWG wires from a 7.5A limited 12 Volt DC power source and connect to the rear of the power supply. Insulate the DC connections with wire nuts and insulating tape.

**CAUTION:**     *The red wire is positive (+)*  
                      *The white wire is negative (-)*

Attach a coax cable from the rear of the second power supply to the connector marked 2nd TV in the rear of the primary power supply.

Step 4: The cable TV kit is available as an accessory for the model 400. Using the cable plate as a template, mark the center hole and four screw holes. Drill the center hole using a 1/2" bit. Attach one end of a coax cable to the center connector on the rear of the primary power supply; the other end of the coax to the connector in the rear of the cable plate.

Caulk the cable plate using non-hardening sealing compound and attach using four #8x3/4" long round head screws.

Step 5: Place the power supply(s) inside the electrical box(s) and mount flash with 2 # 6x3/4" flat head screws. Attach the coaxial cable(s) to the front of the power supply(s) and connect to the television set(s). Place Switch in the ON position.

