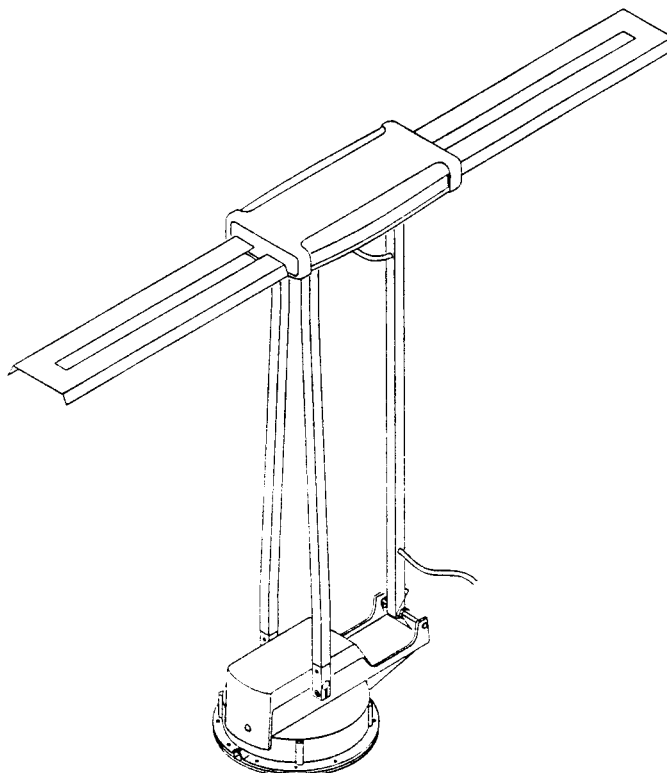


# CONCORD ELECTRIC

## SERIES 90 RV TV Antenna

Installation and Operating Instructions - Service and Parts Information



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### CONTENTS OF CARTON

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
20862	1	ANTENNA ASSEMBLY CREAM (7' LEAD)	20935	1	ULTRA GAIN AMPLIFIER
19543	1	ANTENNA ASSEMBLY CREAM (15' LEAD)	16011	1	COAX CABLE ASSEMBLY (15')
22135	1	ANTENNA ASSEMBLY GREY (7' LEAD)	20837	1	CONTROL CABLE ASSEMBLY
20816	1	ANTENNA ASSEMBLY GREY (15' LEAD)	19204	1	HARDWARE PACKAGE
19198	1	CONTROL PANEL	14189	1	CABLE SPLITTER ASSEMBLY

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### TOOLS NEEDED

- Electric hand drill
- Screwdrivers (Phillips and straight)
- Wire strippers and crimper
- Caulking compound (similar to 3M Drip Check Sealer # 8543)
- Drill bits 1/8", 3/32", 5/32"
- Hole saw 1 3/4"
- Coax crimp tool

NOTE: "Pop" rivet gun and 1/8" pop rivets may be used to secure mounting plate to roof if roof material is suitable.

# BRAUND

 MANUFACTURING COMPANY

DIVISION OF BARKER MFG. CO. / 730 E. MICHIGAN AVE. / P.O. BOX 460 / BATTLE CREEK MI 49016-0460 / (616) 965-2371

# ! WARNING

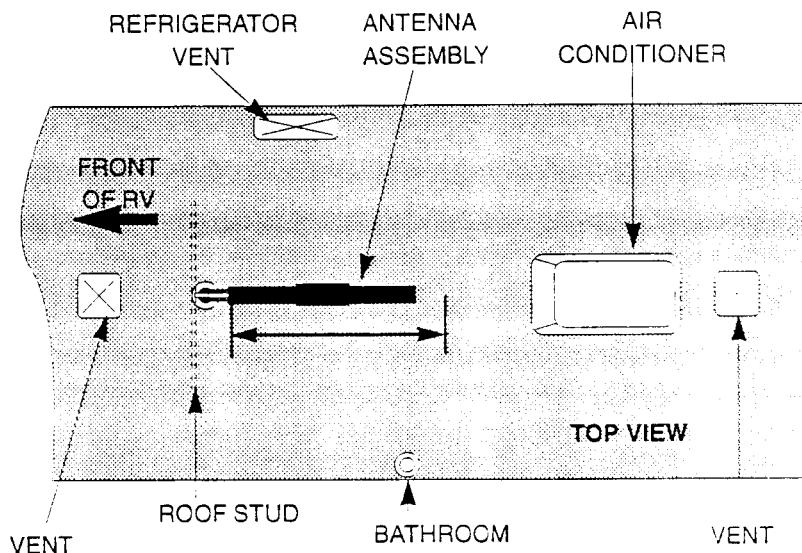
- Read and understand Installation Instructions.
- RV Unit must be in safe parked condition.

- Be sure antenna can not touch any power lines.
- Ignition switch must be in "LOCK" position.

## INSTALLATION INSTRUCTIONS

### SELECTING A POSITION

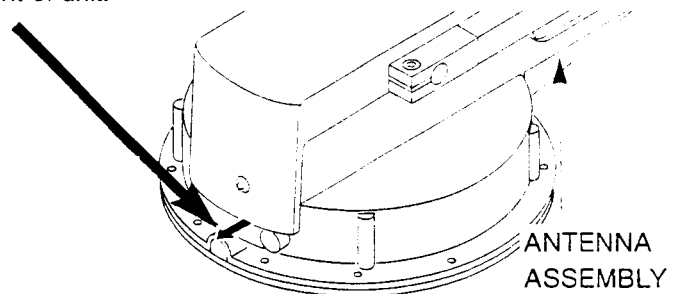
- Antenna must lay horizontally when down, and clear roof top equipment.
- Raised antenna must have clearance to rotate 360 degrees.
- Turning radius of antenna base is 8 inches.
- It is recommended that front edge of mounting plate overlap a roof stud. Some roofs may require additional reinforcement.



### PUTTING HOLES IN ROOF

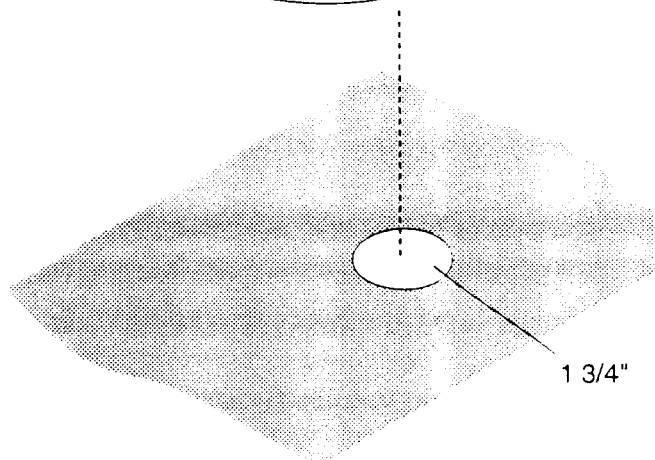
- Using template mark position on roof.
- Cut 1 3/4" hole through roof exterior only.
- If using lead-in plate, drill 1/2" hole in desired location for antenna cable.
- Be sure there isn't already wiring in the area.
- Put control cable assembly through hole in roof. Fasten and caulk at this time.
- There must be clearance for lead-in cable.

Must point toward front of unit.



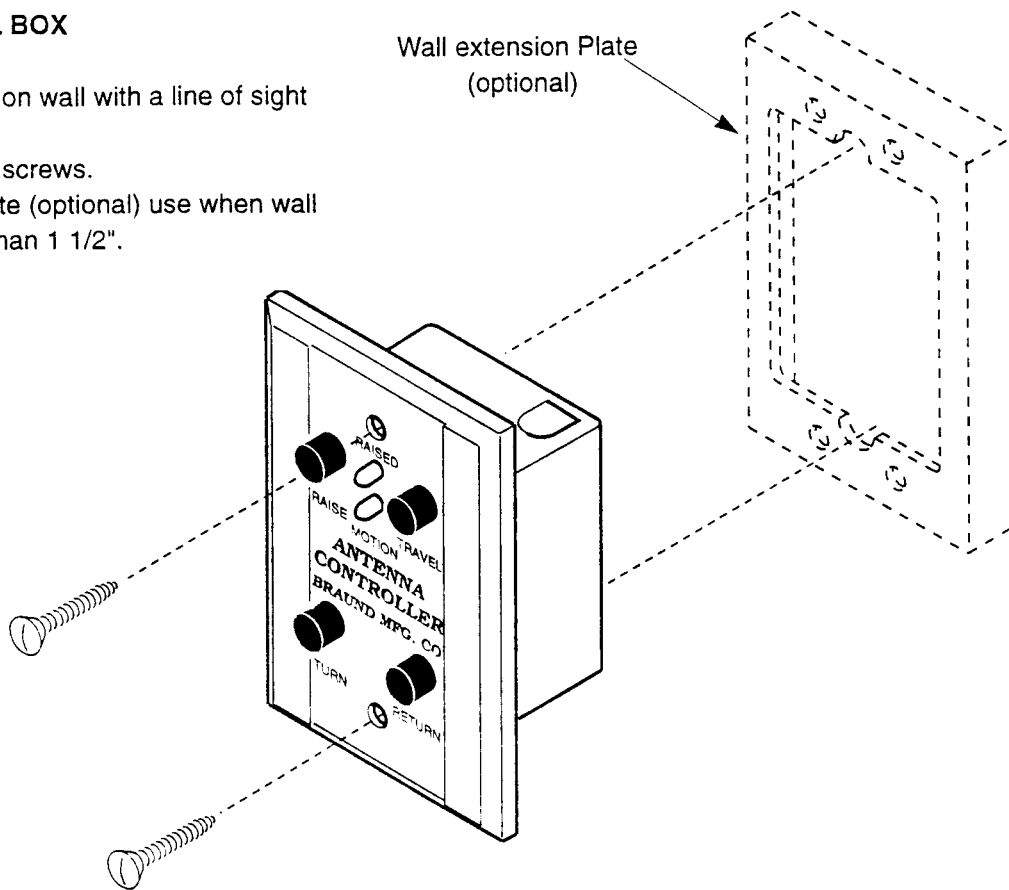
### FASTEN ANTENNA TO ROOF

- If rivets are used to fasten Antenna to roof, the 12 mounting holes must be enlarged using 5/32" drill.
- Caulk under edge of mounting plate.
- Check position and drill 2 opposite mounting holes (5/32" for rivets - 3/32" for screws).
- Secure Antenna to roof with 2 screws or rivets.
- Drill remaining mounting screw or rivet holes and install remaining screws or rivets.
- Caulk around edge of mounting plate and screw or rivet heads.



## MOUNT CONTROL BOX

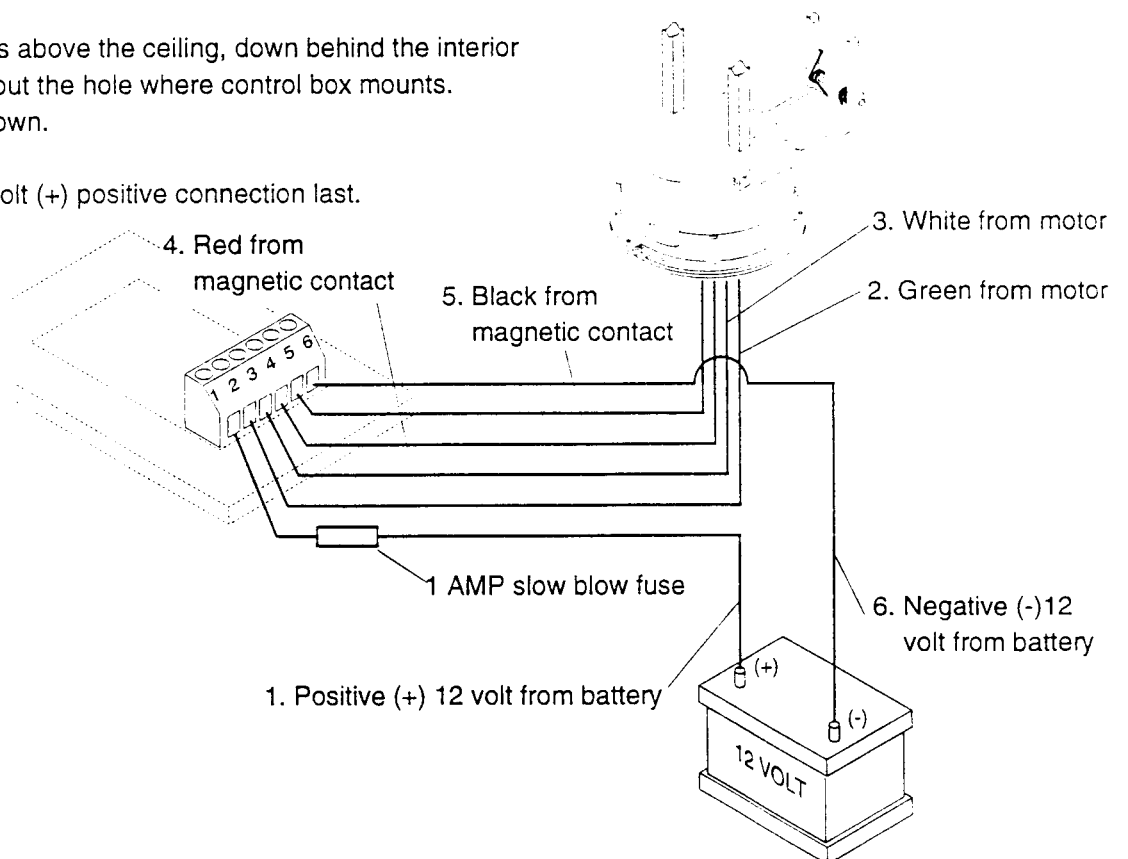
- Mount control box on wall with a line of sight view of TV.
- Mount to wall with screws.
- Wall extension plate (optional) use when wall clearance is less than 1 1/2".



## WIRE BOX

- Inside RV, route wires above the ceiling, down behind the interior skin of the wall, and out the hole where control box mounts.
- Connect wires as shown.

NOTE: Make the 12 volt (+) positive connection last.



## CONNECTING COAX CABLE

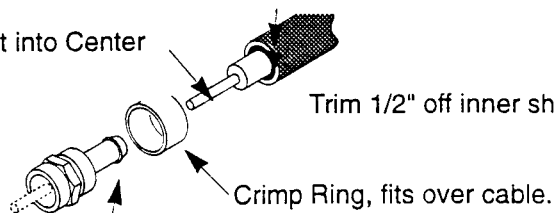
- Check vehicle literature, RV may have TV lead wires already installed.
- Raise Antenna all the way up.
- A minimum of 6 feet of cable is needed from antenna head to roof entry.
- Put Coax Cable through weather boot and connect to antenna head. A Coax crimp tool must be used.
- When making Coax Cable connections, center wire must not bend.
- Use cable clips and screws to secure cable to roof.

### PREPARING COAX CABLE

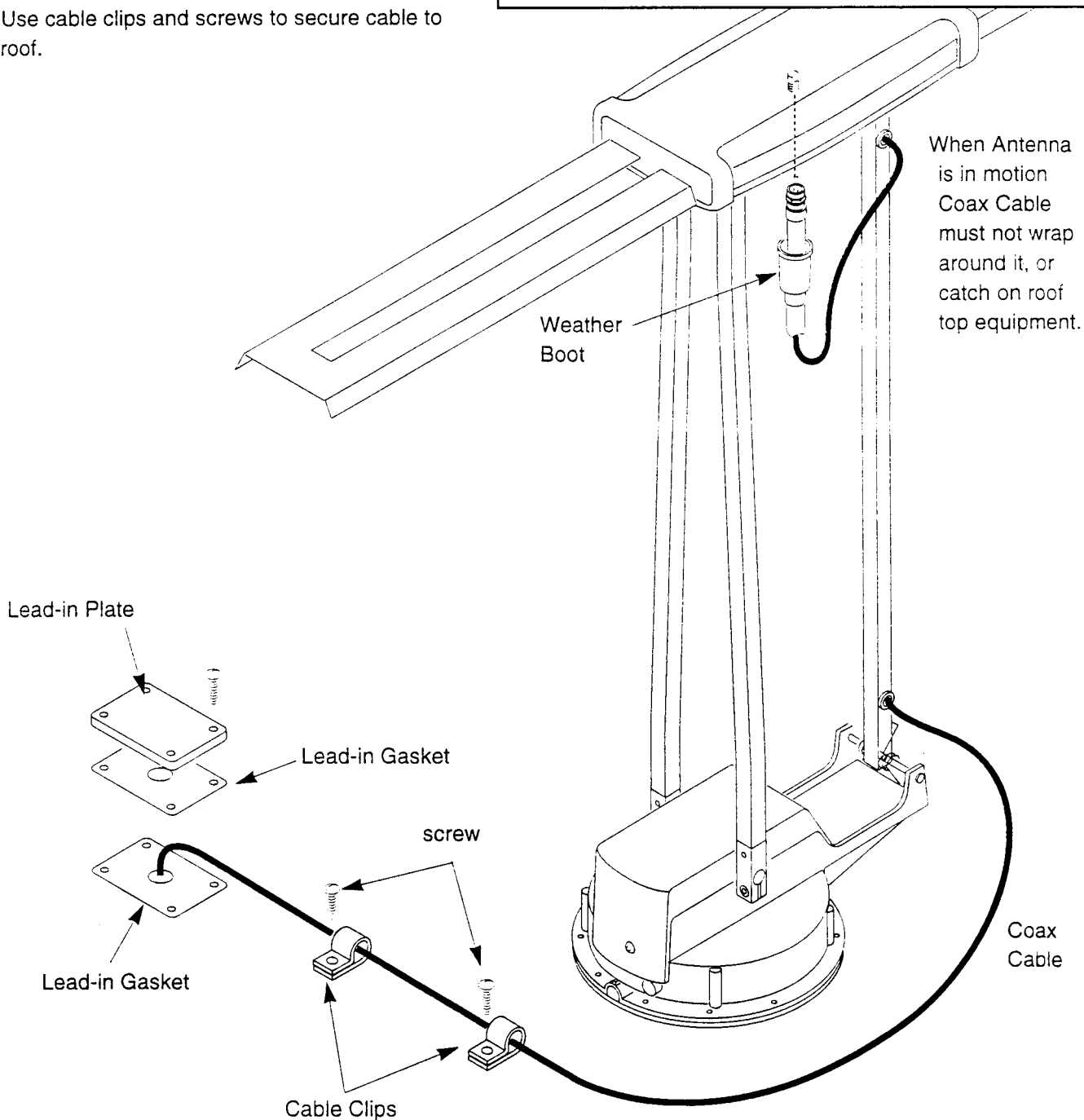
Do not cut into Center Wire

Trim 5/8" off outer sheath only.

Trim 1/2" off inner sheath.



Slip Coax fitting onto cable. Center wire position, shown as dotted lines.



# OPERATION

## 1. RAISE

Press Raise button. Green light is on when antenna is in motion. Red light is on when antenna is raised. Be sure nothing obstructs antenna movement.

## 2. TURN

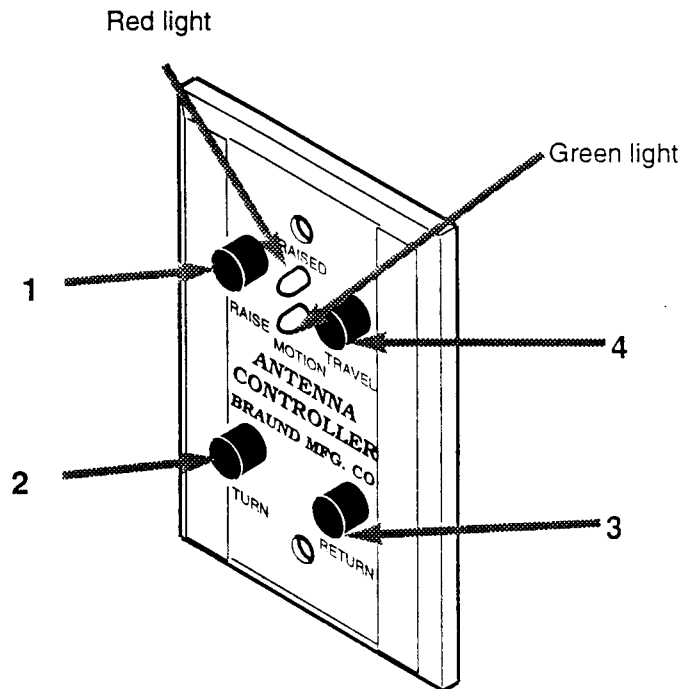
Press turn button to improve reception. Green light is on when antenna is in motion. Be sure nothing obstructs antenna movement.

## 3. RETURN

Press return button to improve reception. Green light is on when antenna is in motion. Be sure nothing obstructs antenna movement.

## 4. TRAVEL

To put antenna in travel position press travel button. Green light is on when antenna is in motion. Be sure nothing obstructs antenna movement.



### Do not move unit, until antenna is down

- A blow to the Antenna may strip the Delrin bevel gear.

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# TROUBLESHOOTING

## DIFFICULT TO RAISE OR TRAVEL

- Check that gears are not stripped.
- Check control panel fuse.
- Check that nothing obstructs Antenna movement.
- Check that Antenna is not catching on roof top equipment.

## DIFFICULT TO TURN OR RETURN

- Check that bearing surfaces of base and mounting plate are well lubricated and free of caulking material.
- Check that cable is not too short.
- Check that cable is not too long and catching on roof equipment.
- Check that Antenna is not installed too close to roof equipment.

## RECEPTION

**IMPORTANT:** Be sure set is working properly.

- Coax Cable must be trimmed and installed properly.
- When using more than one TV outlet jack it is **ESSENTIAL** to use a splitter to stop reduction in picture reception.
- Your location, may severely limit the picture reception (hills, power lines, etc.).

# MAINTENANCE

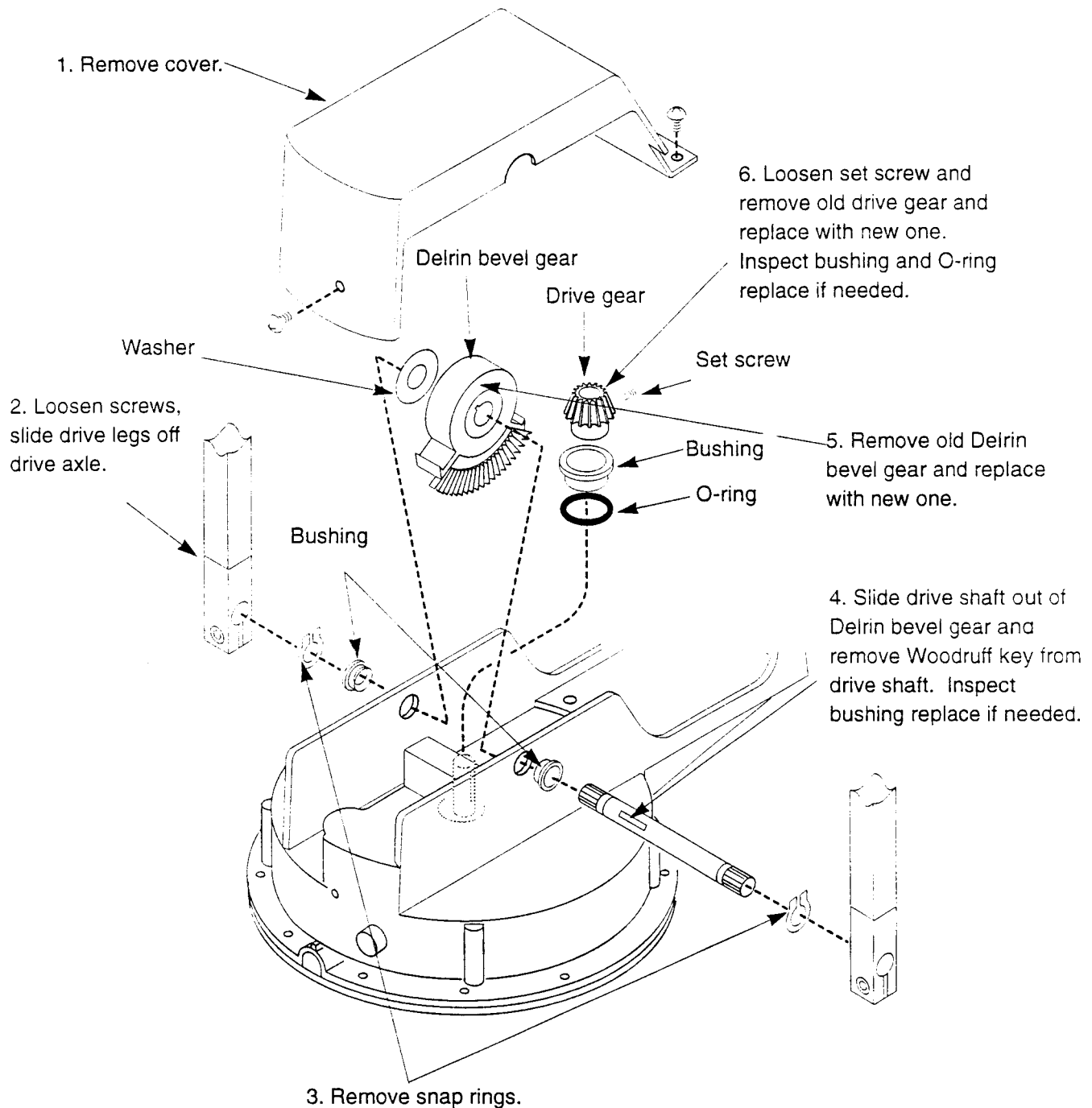
## LUBRICATE ANTENNA

Yearly, lubricate all moving parts on antenna with a spray silicone.

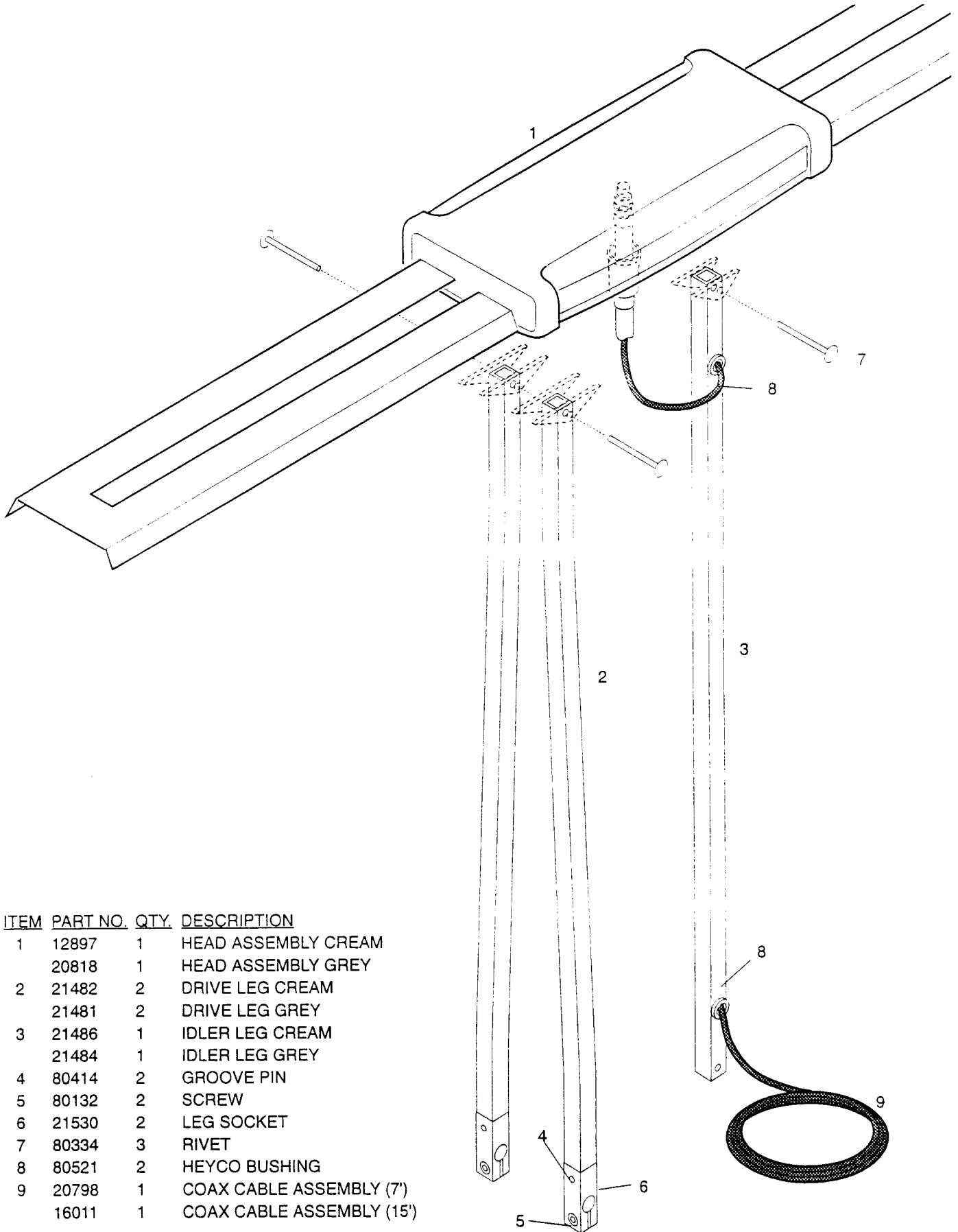
Grease gear train teeth with a Lithium base lubricant.

Put antenna in up position, and lubricate bearing surface with a lithium base lubricant.

## GEAR REPLACEMENT



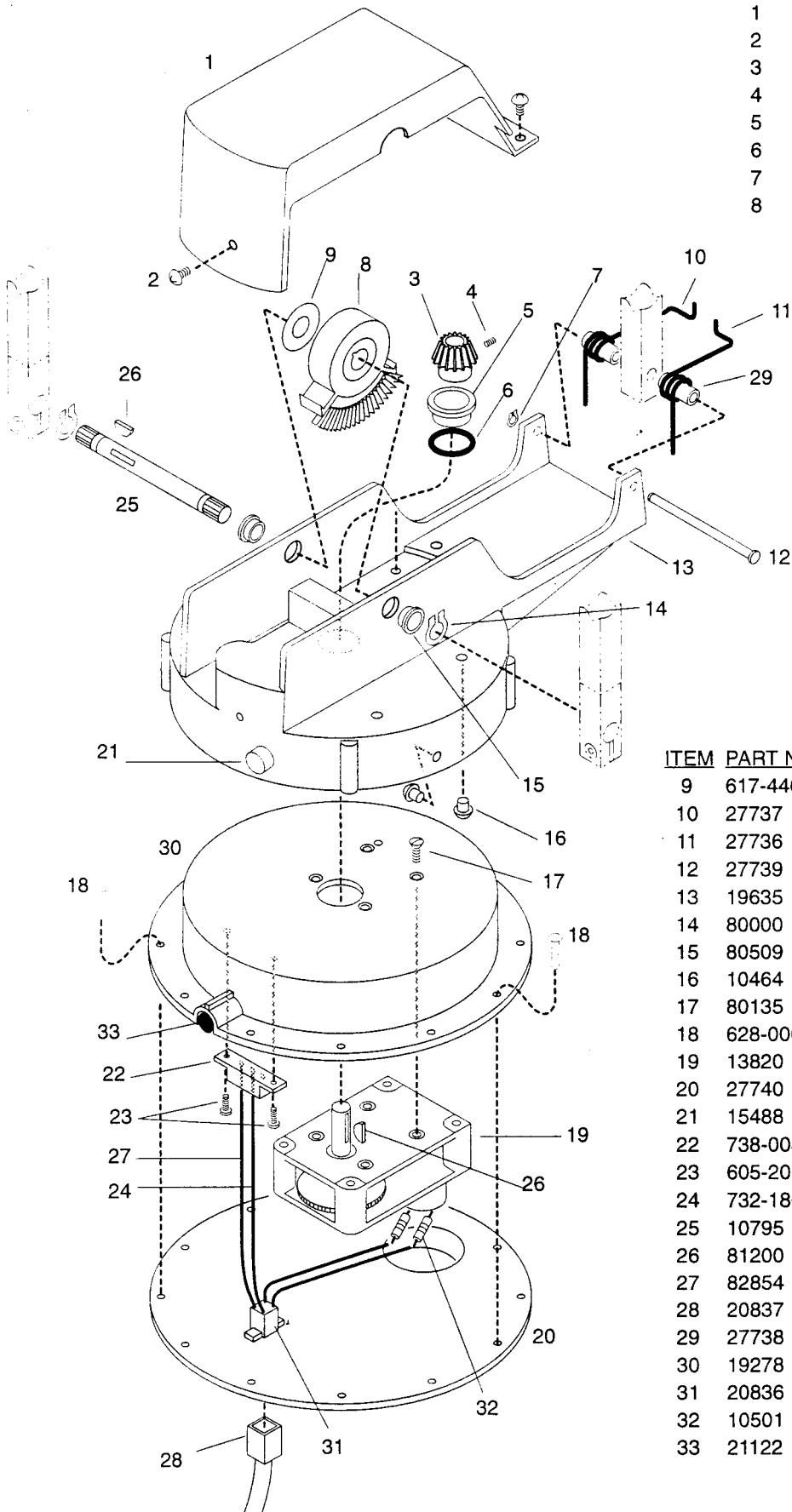
PARTS - CONCORD ELECTRIC, SERIES 90 ANTENNA 1 of 2



ITEM	PART NO.	QTY.	DESCRIPTION
1	12897	1	HEAD ASSEMBLY CREAM
	20818	1	HEAD ASSEMBLY GREY
2	21482	2	DRIVE LEG CREAM
	21481	2	DRIVE LEG GREY
3	21486	1	IDLER LEG CREAM
	21484	1	IDLER LEG GREY
4	80414	2	GROOVE PIN
5	80132	2	SCREW
6	21530	2	LEG SOCKET
7	80334	3	RIVET
8	80521	2	HEYCO BUSHING
9	20798	1	COAX CABLE ASSEMBLY (7')
	16011	1	COAX CABLE ASSEMBLY (15')

# PARTS - CONCORD ELECTRIC, SERIES 90 ANTENNA 2 of 2

ITEM	PART NO.	QTY.	DESCRIPTION
1	10823	1	WEATHER COVER
2	80142	3	COVER SCREW
3	10815	1	DRIVE GEAR
4	81106	1	SET SCREW
5	11291	1	BUSHING
6	80904	1	"O" RING
7	80005	1	SNAP RING
8	26492	1	BEVEL GEAR



ITEM	PART NO.	QTY.	DESCRIPTION
9	617-4402	1	WASHER
10	27737	1	TORSION SPRING R.H.
11	27736	1	TORSION SPRING L.H.
12	27739	1	IDLER AXLE
13	19635	1	COVER CASTING
14	80000	2	SNAP RING
15	80509	2	BUSHING
16	10464	9	STABILIZER BUTTON
17	80135	4	SCREW
18	628-0006	2	RIVET SEMI-TUBULAR
19	13820	1	MOTOR AND GEAR BOX
20	27740	1	MOUNTING PLATE
21	15488	1	HALL EFFECT MAGNET
22	738-0038	1	MAGNET CONTACT
23	605-2008	2	SCREW
24	732-1800	1	BLACK WIRE
25	10795	1	DRIVE SHAFT
26	81200	2	WOODRUFF KEY
27	82854	1	RED WIRE
28	20837	1	MOLEX RECEPTACLE ASS'Y
29	27738	2	SPOOL
30	19278	1	BASE CASTING
31	20836	1	MOLEX PLUG ASSEMBLY
32	10501	2	R.F. CHOKE
33	21122	1	HOLE PLUG