

BRAUN

Model No.14959

GALAXY 300

CO-AX INSTALLATION INSTRUCTIONS

ALL CHANNEL RV ANTENNA FOR B/W & COLOR TV

CAUTION: DURING INSTALLATION AND USE OF THE ANTENNA, MAKE SURE LEGS AND HEAD CANNOT ACCIDENTALLY COME INTO CONTACT WITH ANY POWER LINE.

CONTACT WITH POWER LINES COULD RESULT IN SERIOUS INJURY OR DEATH.

WARNING: DO NOT TRAVEL WITH ANTENNA IN RAISED POSITION.

CHECK CONTENTS OF CARTON

QUANTITY	DESCRIPTION	PART NO.
1	Base and leg assy.	14958
1	Travel support	11698
1	Lead-in plate	10579
2	Lead-in gaskets	10580
1	Crank Handle	10739
1	Ceiling Plate	10302
3	Rivets	80334
1	Co-ax Cable (15')	12651-15
1	Weather Boot	12697

2	Cable Ties	14957
1	Hex. key	80600
18	Screws 6 x 3/4	81000
3	Screws 4 x 3/8	81007
3	Screws 6 x 3/8	81001
2	Screws 10 x 3/4	81008
1	Wall Jack	15246
1	Antenna Head	15770

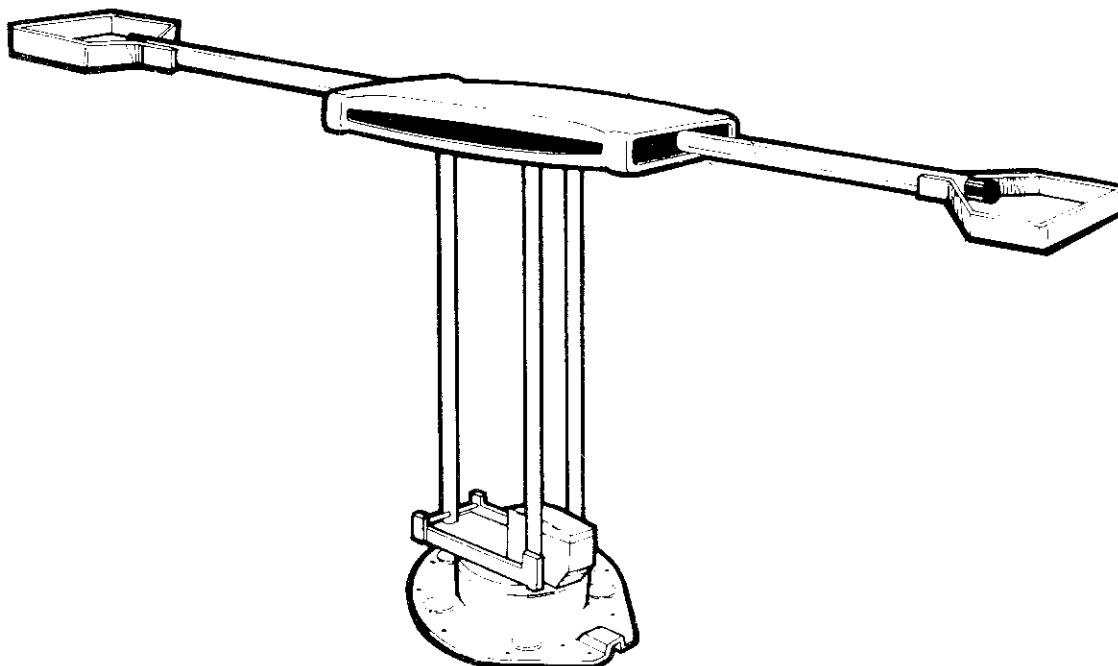
TOOLS REQUIRED

Electric hand drill
Long drill (1/2" drill)
1/8" Drill, 3/32 Drill,
5/32 Drill
Screwdrivers
(Phillips & straight)
Hacksaw
Caulking compound

"Pop" rivet gun & 1/8" pop rivets may be used instead of screws to secure base to roof if roof material is strong enough.

Note that the overall length of the Galaxy antenna in the lowered position is 60"

Carefully follow the installation instructions in the following pages.



INSTALLATION INSTRUCTIONS

Select a position on the RV roof that will allow the Galaxy to (a) lay horizontally at rest, (b) raise fully and rotate fully (approx. 360 degs.) without disturbing other roof top equipment such as vents, air conditioner etc.

The turning radius of the base unit is approx. 7 inches and clearance for the lead-in cable during rotation is required (see page 4 FIG. 7.)

It is recommended that the front edge (arrow) of the mounting plate (12660) overlaps a roof stud. Some roofs may require additional reinforcement. Do not drill through a roof stud for the drive shaft hole or the stud will be weakened.

Lead-in cable entry may be made through the refrigerator vent or through the roof above a closet using the lead-in plate (10579) and gaskets (10580) or the cable entry at the front end of the mounting plate (12660) (see pages 3 & 5.)

When selecting the position bear in mind that there may be wiring in the roof.

1. USING TEMPLATE ON PAGE 5:

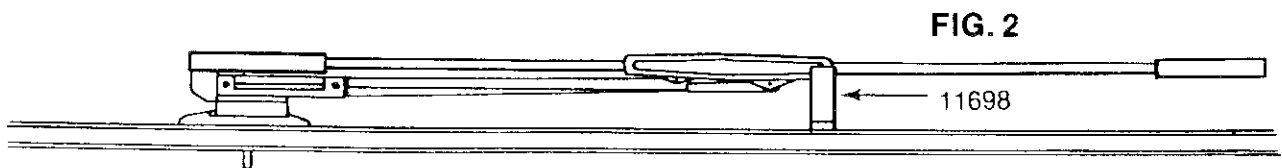
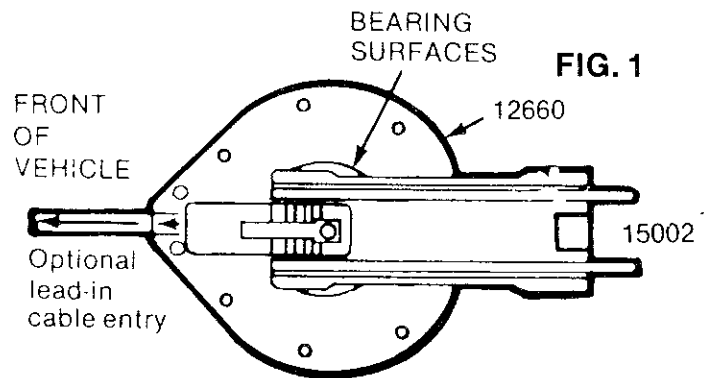
Drill 1/2" hole through roof and ceiling. KEEP DRILL VERTICAL.

Also drill lead-in cable hole if lead-in cable entry in mounting plate (12660) is to be used.

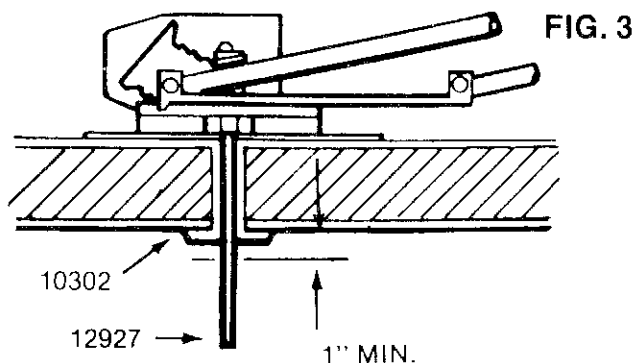
2. Crank your Galaxy to the down position and before proceeding, turn the mounting plate (12660) CLOCKWISE (looking from the top) TO THE STOP. THIS IS IMPORTANT! Compare with FIG. 1.

3. With crank handle removed place the drive shaft (12927) into roof hole so that the arrow on mounting plate is pointing toward front of RV as in FIG. 1.

4. Place travel support (11698) in or near position shown in FIG. 2. Drill 2 1/8" diameter holes in roof, caulk, and secure travel support with 2 No. 10 sheet metal screws.



5. From inside the RV, center the drive shaft in the ceiling hole. Keeping shaft in center, fit the ceiling plate (10302) using three 4 x 3/8 screws (81007). See FIG. 3



6. Mark and cut drive shaft to dimension shown in FIG. 3 and remove burr with file. Fit handle and mark position of set screw, then "dimple" shaft with a 3/16" drill or file groove in shaft so set screw will "bite".

You are now ready to fit antenna to roof. If you intend using screws instead of "pop"- rivets, the 14 holes in the mounting plate must be enlarged using 5/32" drill.

7. Caulk underside of mounting plate flange thoroughly and carefully lower drive shaft into roof hole, guiding it into ceiling plate hole. Check positioning (FIG. 1 & STEP 2) and drill 2 of the 14 fixing holes (1/8" for "pop" rivets and 3/32" for screws). Secure to roof and continue with rest of the holes. Caulk should be visible all round flange of mounting plate. Caulk screw heads or top of "pop" rivets.
8. It is very important that the cable entry (FIG. 1) is thoroughly caulked especially if not used.
9. The crank handle (12611) may now be pushed fully home on to drive shaft and secured by tightening set screw hard with hex wrench. This completes the basic installation and we suggest the following procedures for testing raising, turning and lowering operations:

TESTING

1. Raise antenna by pulling crank down and turning it counter-clockwise (looking up to ceiling).
2. When antenna is fully raised TURN CRANK IN OPPOSITE DIRECTION AT LEAST HALF A TURN BEFORE PUSHING IT UP WHILE STILL TURNING SLIGHTLY. See Fig. 4. This will engage the rotate pin.
3. Hold crank as in Fig. 4 and turn it fully COUNTER-CLOCKWISE to the stop. Then return it CLOCKWISE to the stop. If the installation has been correct, the antenna will now be "in-line" and ready for lowering.
4. Pull crank down to disengage rotate pin, then turn crank CLOCKWISE (looking up at ceiling) until resistance is felt and you hear the antenna contact the travel support (11698).

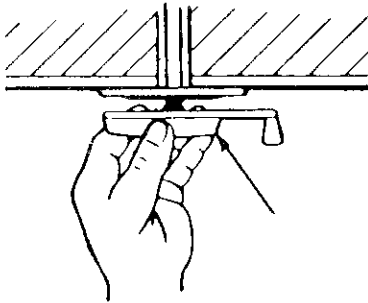


FIG. 4

Note: To operate a correctly installed antenna FORCE IS NOT REQUIRED. If unit does not work easily—check installation procedures and the information on pages 2 and 3.

This completes the mechanical installation and testing of your Galaxy. Lead wire preparation and connections are described next. Check your vehicle literature. Some RV manufacturers install TV lead wire during manufacture. It is ESSENTIAL that only 75 ohm co-ax cable as supplied with the Galaxy is used.

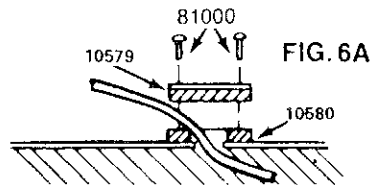


FIG. 6A

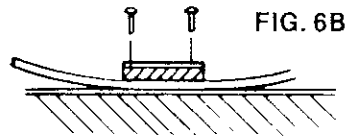


FIG. 6B

Fig. 6A shows 10579/10580 being used as a cable entry gland. Fig. 6B shows 10579/10580 being used as a cable clamp. Their position on the roof should be not less than 8" from the center of mounting plate (12660). Use plenty of caulking.

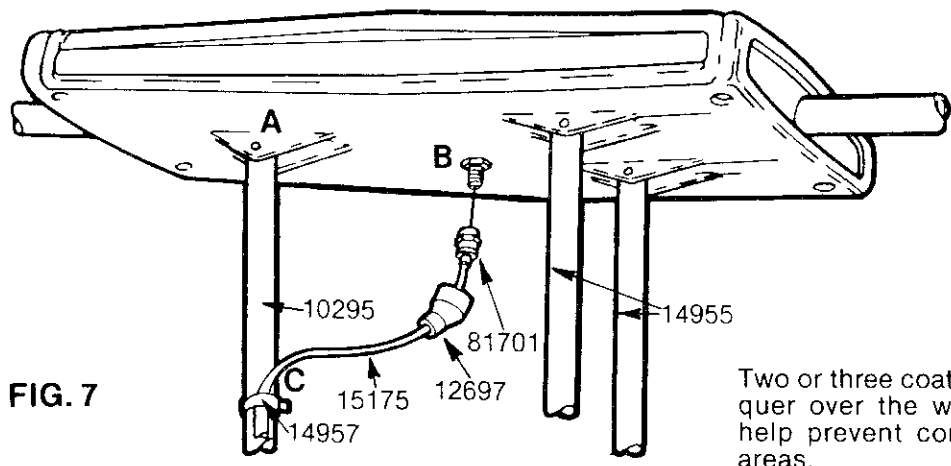
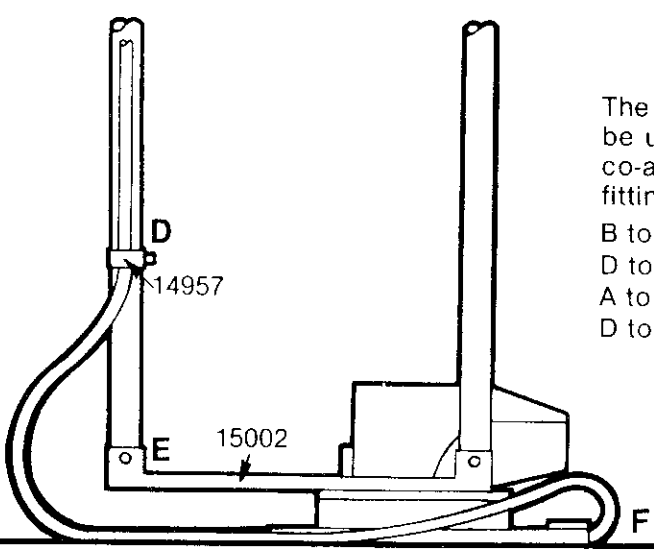


FIG. 7

Two or three coats of a clear spray lacquer over the wire connections will help prevent corrosion in sea coast areas.



The following measurements should be used when running the 75 ohm co-ax cable between the antenna fitting and the roof entry (F):

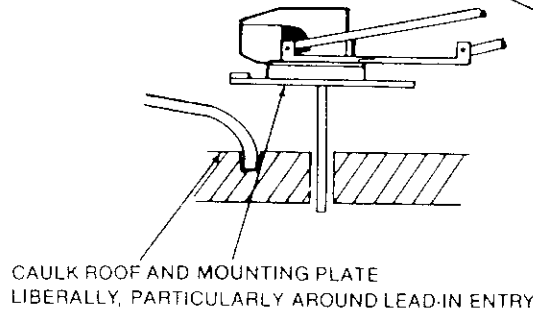
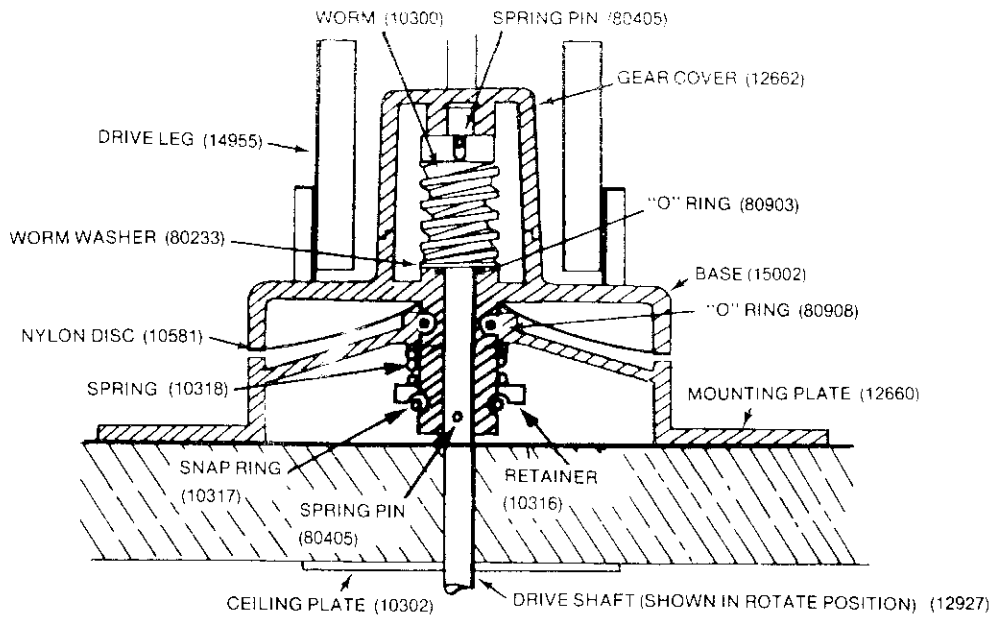
- B to C.....15"
- D to E.....6½"
- A to C.....8"
- D to F.....25"

It is important that the cable ties (14957) are positioned at the locations shown above.

MAINTENANCE

1. All moving pivot points should be lubricated twice a year with a spray lubricant such as WD40.
2. Once a year, remove the 2 screws holding the gear cover (12662) and add a good grade of grease such as our "Superlube" to the gears (10294 & 10300). Replace the cover carefully & make sure it is seated fully before tightening the screws (81033).

Complete your warranty card and ask for our accessory catalog.



FRONT OF
VEHICLE

1/2" dia. drive shaft hole

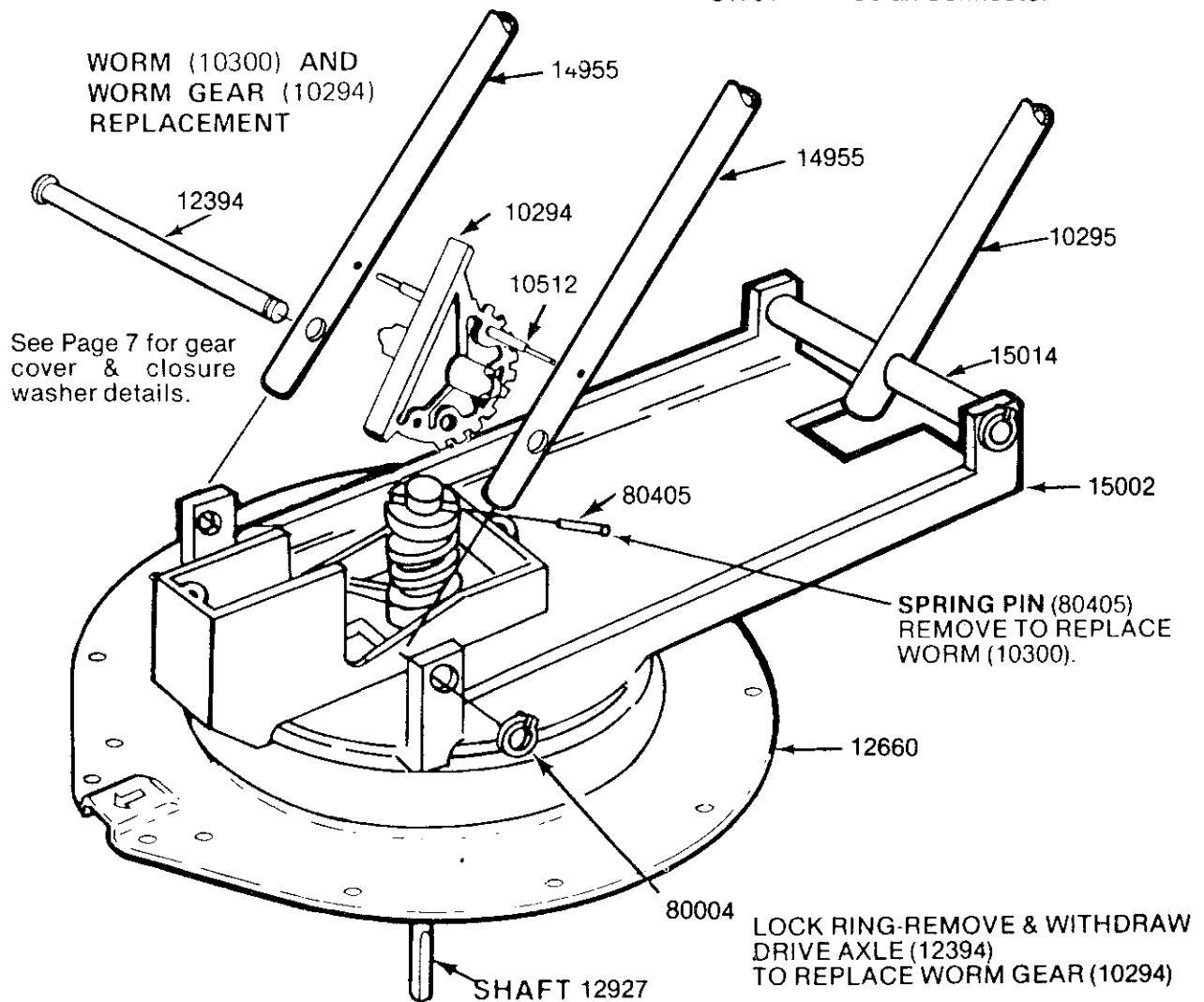
NOTE!

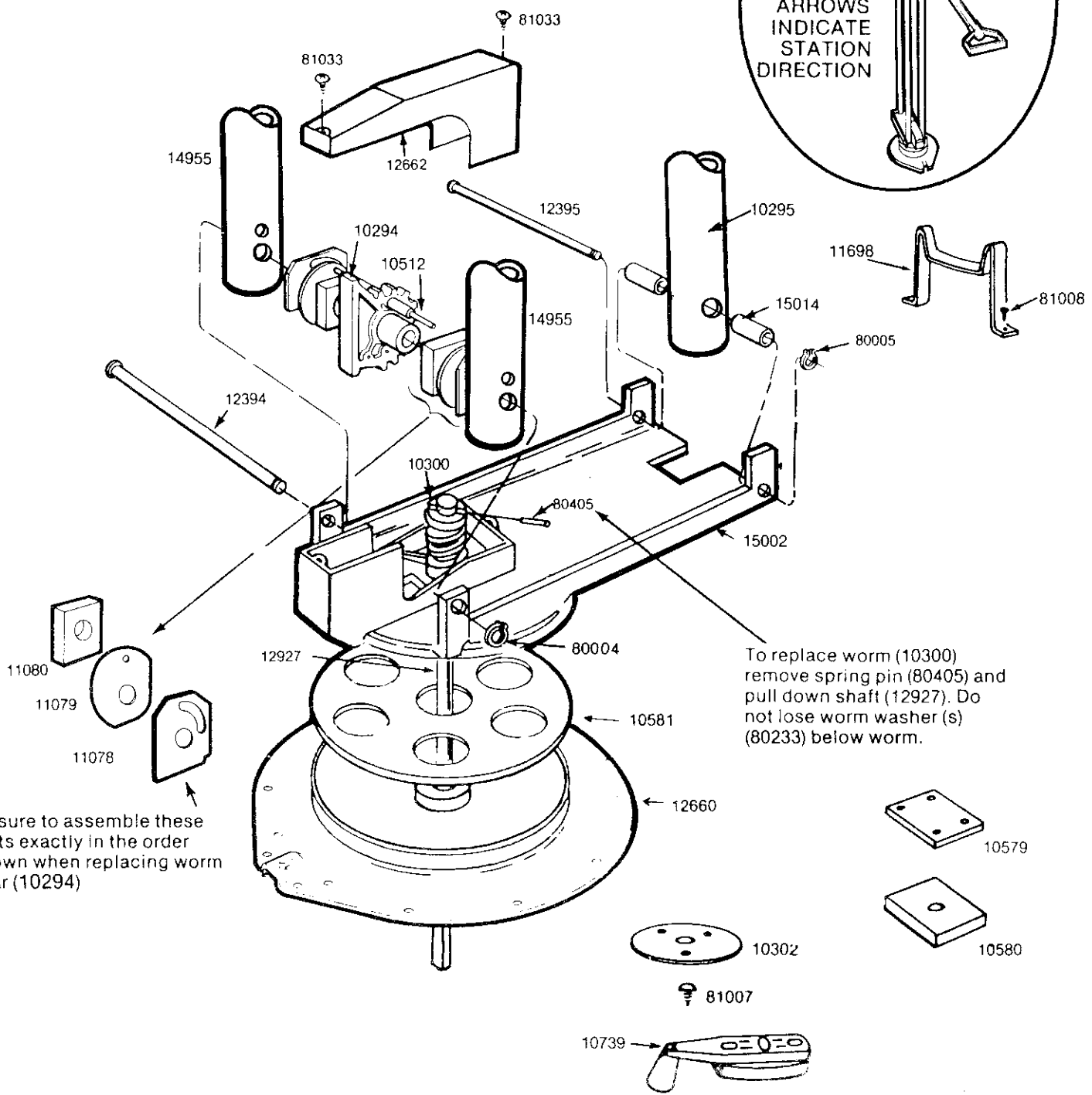
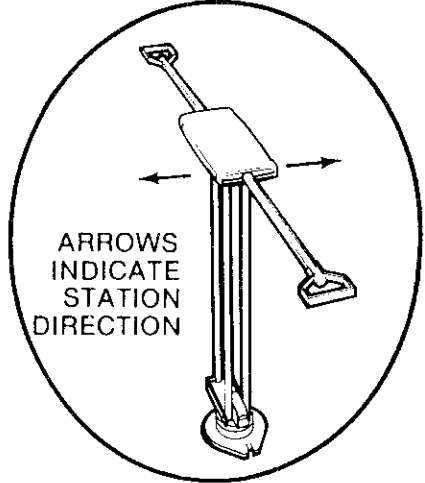
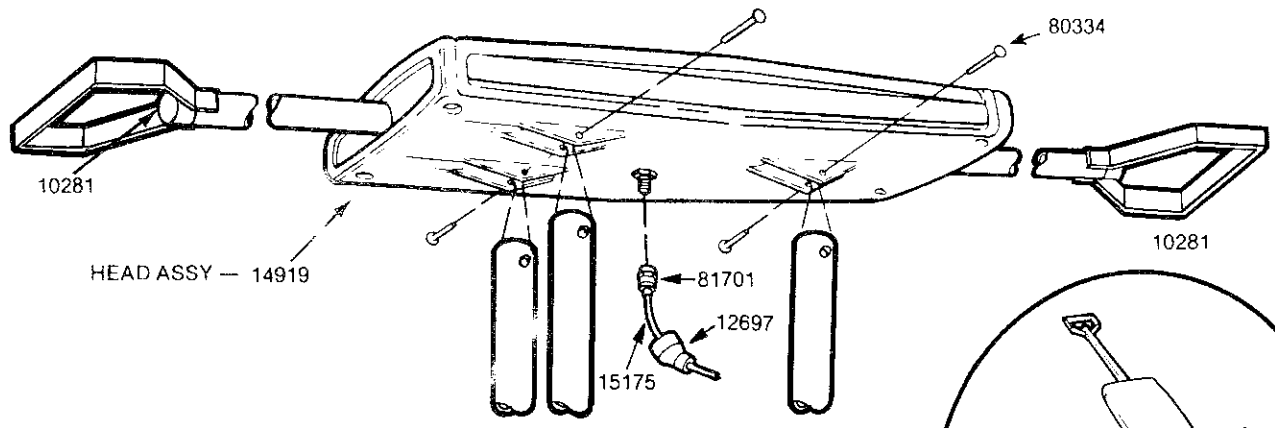
1/2" dia. hole-only
if lead wire is brought
in through base plate
entry

ROOF DRILLING TEMPLATE

Part No.	Description
10294	Worm Gear
10300	Worm
10302	Ceiling Plate
10316	Retainer
10317	Snap Ring
10318	Spring
14957	Cable Ties
15246	Wall Jack
10512	Drive Pin
10579	Lead-in Plate
10580	Lead-in Gasket
10581	Nylon Disc
11078	Side Closure
11079	Rotating Closure
11080	Spacer
10281	End Cap
14955	Drive Leg
10295	Idler Leg
14954	Clamp
12611	Crank Handle Assembly
12394	Drive Axle

Part No.	Description
12395	Idler Axle
12660	Base Plate
12662	Cover
11698	Travel Support
12927	Drive Shaft
15002	Base
80004	Lock Ring (5/16)
80005	Lock Ring (1/4)
80233	Worm Washer
80334	Rivet
80405	Spring Pin
80600	Hex Key (3/32)
80903	"O" Ring (5/16)
80908	"O" Ring (3/4)
81000	Screw (6 x 3/4 for 12660)
81001	Screw (6 x 3/8 for 10323)
81007	Screw (4 x 3/8 C'SK P.H. for 10302)
81008	Screw (10 x 3/4 P.H. for 12746)
81033	Screw (8 x 1/2 for
82306	Spacer
12651	Co-ax Cable
15175	Co-ax Cable Assembly
12697	Weather Boot
81701	Co-ax Connector





To replace worm (10300) remove spring pin (80405) and pull down shaft (12927). Do not lose worm washer (s) (80233) below worm.

Be sure to assemble these parts exactly in the order shown when replacing worm gear (10294)

PROBLEMS & REMEDIES

DIFFICULT TO PUSH HANDLE UP & DOWN

(a) After raising the antenna always "back-off" the crank handle in the opposite direction about half a turn before pushing up to the rotate position.

(b) It is very important that there is no sideways pressure on the shaft when the ceiling plate (10302) is fitted. To check this raise antenna as in Step 1, Page 3, remove the ceiling plate and refit crank handle - the shaft should move up and down with little effort. Before refitting ceiling plate, enlarge the ceiling hole so that the plate will fit flush to ceiling without putting any stress on the shaft. Also check that glass fiber insulation is not fouling the shaft.

(c) The shaft may have been cut too short during installation thus preventing up and down movement. The only remedy is to replace the shaft. Remove pin (80405) which passes through the slot in top of worm (10300). Shaft (12927) may then be withdrawn downward after removing the ceiling plate (10302). The new shaft should be checked for "burrs" and coated with silicone grease before fitting. Use a twisting motion when inserting the new shaft to avoid damage to the "O" ring (80903) positioned just below the worm (10300).

DIFFICULT TO ROTATE

(a) The most common cause is excessive caulking around the base and mounting plate causing binding. In extreme cases it will be impossible to turn the antenna usually resulting in breakage of the crank handle (12611). Check that the bearing surfaces of the base (12929) and mounting plate (12660) are clear of caulking or sealing material.

(b) If the cable has been routed incorrectly (see FIG. 7, page 4) it may prevent full rotation, or if too long the loop may catch on some other roof top device such as a vent.

(c) The antenna may have been installed too close to a vent or air conditioner with insufficient clearance for the base to rotate fully.

ANTENNA WILL NOT RAISE

(a) Usually caused by a stripped worm gear (10294) and/or worm (10300). Gears are usually damaged by (1) trying to raise the antenna by turning the crank in the wrong direction. (2) With the antenna raised a heavy blow on the antenna head from a tree limb will strip either or both gears. For this reason we do advise against driving with the antenna in a raised position. A new worm gear (10294) is easily replaced after removing the gear cover (12662) and withdrawing the drive axle (12394). The worm (10300) may be replaced by removing pin (80405) at top of worm and then partly withdrawing the shaft (12927) downwards until it is clear of the worm. Damaged worm may then be removed and replaced - caution - do not lose the worm washer (80233) which is positioned just below the worm.

All of the above work may be carried out without removing the unit from the vehicle. However, any damage to the base (12929) or plate (12660) will require removal from the roof. Details of damage repairs may be obtained by request from our customer service dept. at address below.

RECEPTION

Due to the various locations used by recreational vehicles, reception will not be so consistent as at a fixed location because of the large variation in the terrain encountered throughout the country. In general, TV/FM signals (particularly UHF) travel roughly in a straight line so hills or mountains etc. between your vehicle and the transmitting station may severely reduce the amount of signal reaching your antenna.

NOTE

Fringe area reception may be improved by adding a booster amplifier send for details on our model 13878 or 13879 "Power Plus" booster amplifier.



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