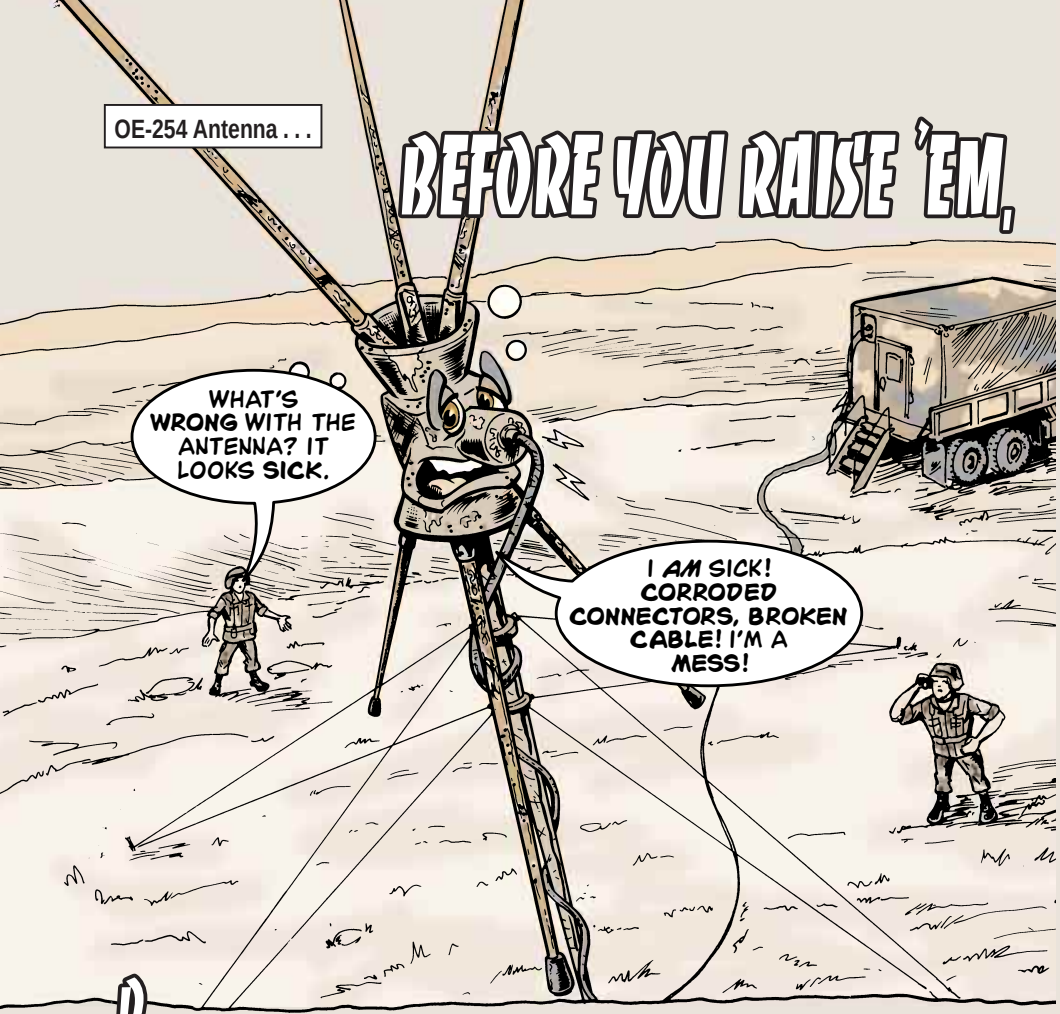
BEFORE YOU RAISE 'EM, YOU BETTER MAINTAIN 'EM



Did you hear the one about how important preventive maintenance is to the OE-254 antenna?

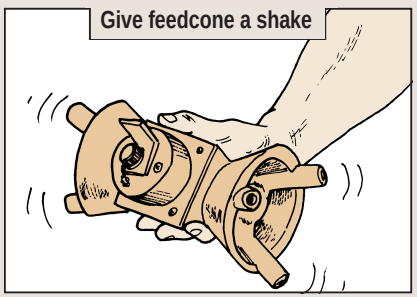
No?

Then read this article, copy it and stick a copy in each OE-254 kit.

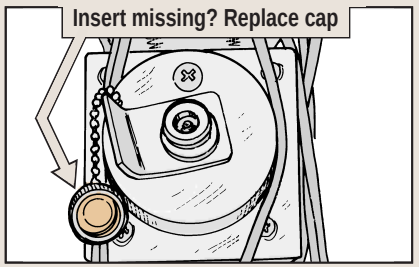
AS-3166 Feedcone Assembly

The feedcone is the heart of your antenna. Start your "heart" PM by giving it a little shake. If you hear a rattle, the magnetic core inside likely has broken loose. Turn it in and get another feedcone.

One way to help keep the feedcone on the job is to be careful raising and lowering the mast. See Para 2-9 of TM 11-5985-357-13 for details.



If the feedcone passes the shake test, look inside the RF connector cap. It should have a rubber insert. If it's missing, replace the cap.

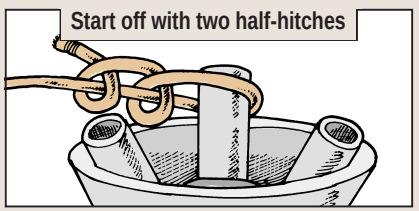


Use the cap any time the RF cable is not connected to the feedcone. Too many caps dangle down and flop around, not being used. All it takes is a few seconds to screw the cap on the connector, but it could save a feedcone connector from being ruined by corrosion.

Now turn the feedcone over and check it for stress cracks.

If your feedcones are cracking, put the word out to your unit on how to reinforce the feedcone with nylon cord, NSN 4020-00-262-2019:

1. Cut about three feet of cord. Tie one end to an upper cone antenna feed using two half-hitches. Cinch the knot tight.

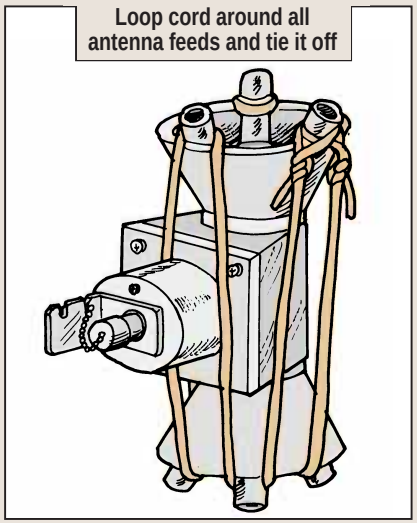


2. Loop the cord around an antenna feed on the lower cone. Then loop it around a feed on the upper cone.

3. Weave the cord up, down and around until you get back to where you started.

4. Pull it tight and tie it with two more half-hitches.

5. Trim any extra cord and melt the edges to prevent fraying.

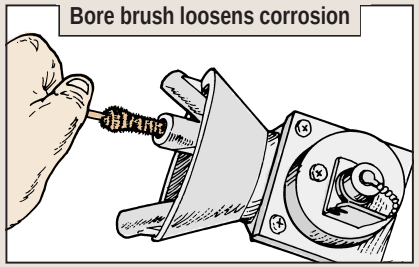


If you still find stress cracks, the problem could be the cord is working loose. Try substituting wire for the cord. The locking wire, NSN 9505-00-293-4208, used in your arms room will work.

Your six antenna feed sockets catch dirt and moisture that lead to corrosion. Keep them clean with isopropyl alcohol, NSN 6810-00-753-4993, and a foam swab, NSN 7045-01-154-1317.

PS MORE

For stubborn corrosion, try using a small arms bore brush, NSN 1005-00-903-1296. Use cleaning rod handle, NSN 1005-01-113-0321, for a better grip and more twisting force.



Just twist the bore brush down into the socket and turn it several times. The stiff fibers loosen corrosion and clean out the grooves.

Don't overdo it, though. Too much of this good thing can wear out a socket.

Finally, treat the feedcone like the fragile piece of equipment it is. Make the feedcones one of the last things you store. Stencil the OE-254 storage bag to warn folks not to toss things on top of the feedcone.

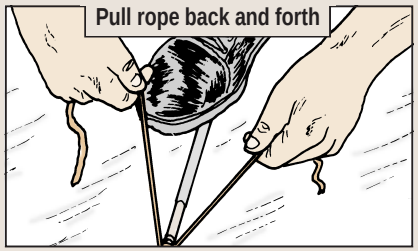
MS-116, MS-117, AB-24 Elements

Keep the antenna elements free from corrosion with water-displacing compound, NSN 6850-00-142-9409, and silicone, NSN 6850-00-880-7616.

First, though, clean the connecting area of each element with your antenna's guide rope.

Loop the rope around the element. Pull back and forth from both ends of the rope.

The friction created by the rope cleans the connecting area.



Don't use a scouring pad to do this cleaning! Scouring pads wear down the metal and strip the element.

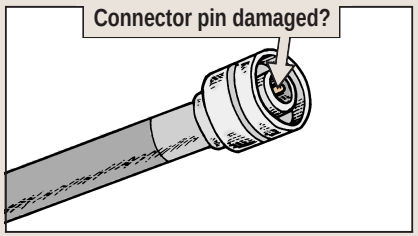
Once the contact areas are clean, spray them with water-displacing compound. Then give them a light coat of silicone compound.

Your element PM will be easier if the elements are attached hand tight. Elements that have been muscled together get damaged when they have to be muscled apart.

Wrap electrical tape, NSN 5970-00-419-4291, around each connection to keep moisture out and corrosion away.

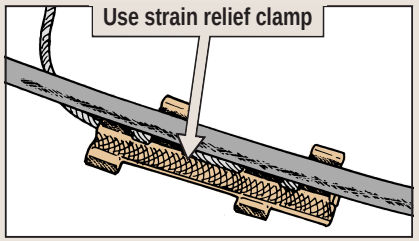
CG-1889 RF Cable

The connector that mates your CG-1889 RF cable to the feedcone might be your OE-254's number one problem area.

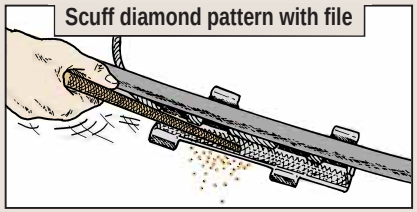


Make sure the pin is not bent or broken. You can straighten a bent pin with needle-nose pliers, but do it **gently** or you'll be turning the cable in with a broken pin.

A bent or broken pin is often the result of too much strain on the cable. To prevent this, use the strain relief clamp, NSN 5975-00-563-0229, every time the antenna is raised. Attach it to the upper guy plate of the mast like it says in Para 2-4 of TM 11-5895-357-13. Be careful not to bend the clamp when you use it. A bent clamp will not hold the cable.

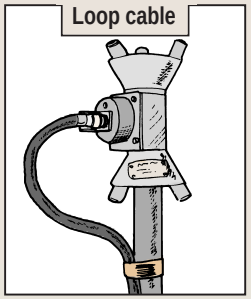


The diamond pattern inside the clamp does not quite do the holding job it was intended to do. Help it out by roughing it up a bit with a file. Just scuff it. If you overdo it, the clamp will cut into the cable.



Take more stress off the cable connector by using electrical tape.

Put a small bow or loop in the cable just below the feedcone. Tape the cable to the uppermost section of the mast.



Now tape the cable down the mast about every five feet.