

MAINTAIN 'EM TO STAND TALL



Preventive maintenance on the OE-254 antenna is a must to keep the antenna standing tall. Here are a few things you should know to do PM right.

AS-3166 Feedcone Assembly

The feedcone is the heart of your antenna. Start your "heart" PM by giving it a little shake. The magnetic core in feedcones can break loose. If you hear a rattle, that's probably what has happened to yours. Turn it in and get another feedcone.

Give it a little shake

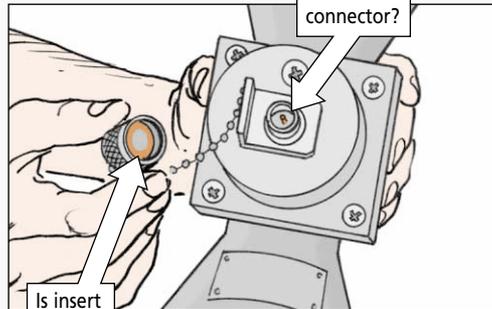


Once it passes the shake test, give the RF connector a close look. Wind whipping the RF cable can bend the copper receptacle pin out. A splayed receptacle won't make good contact with the cable pin.

If the receptacle is splayed, a pair of needle-nose pliers will squeeze it back together. GENTLY is the word when using the pliers. The receptacle is easily broken.

Look inside the RF connector cap, NSN 5935-01-184-7376. The rubber insert should be there. If it isn't, replace the cap.

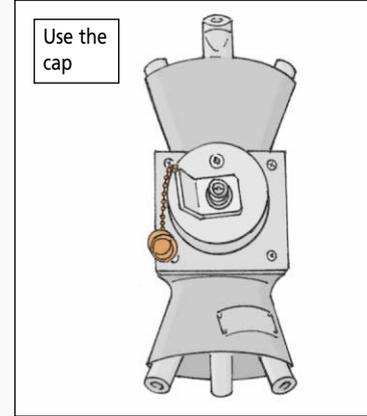
Is insert there?



How's the connector?

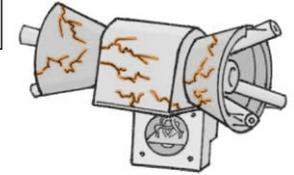
Use the cap any time the feedcone is not connected to the RF cable. Too many caps dangle down and flop around. All it takes is a few seconds to screw the cap on the connector, but it could save hours of maintenance.

Use the cap



Now turn the feedcone over and look at the opposite side. This is a prime area for stress cracks.

Look for cracks



IF YOUR FEEDCONES ARE CRACKING, PUT THE WORD OUT TO YOUR UNIT ON HOW TO REINFORCE THE FEED- CONE WITH NYLON CORD, NSN 4020-00-262-2019.

WORD



Feedcone Fix

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

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

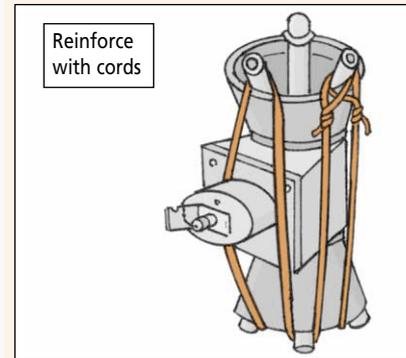
Weave the cord up, down and around until you get back to where you started.

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

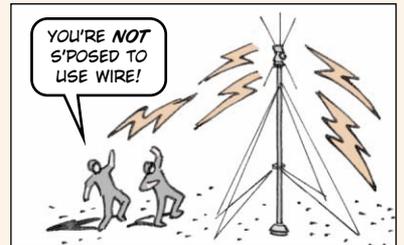
Trim any extra cord and melt the edges to prevent fraying.

Do not use wire to do this job! You may short out the antenna and damage its transmitter or reduce its output.

Reinforce with cords



YOU'RE NOT S'POSED TO USE WIRE!



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. Once the swabs are no longer available, (they're AAC Y), use local purchase sources.

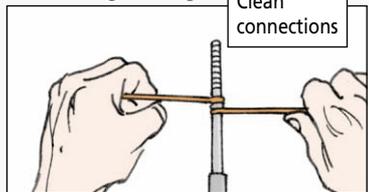


Finally, treat the feedcone like the fragile piece of equipment it is. Make the feedcones one of the last things you store. Stencil the OE-254 storage bag to warn folks not to toss things on top of it.

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

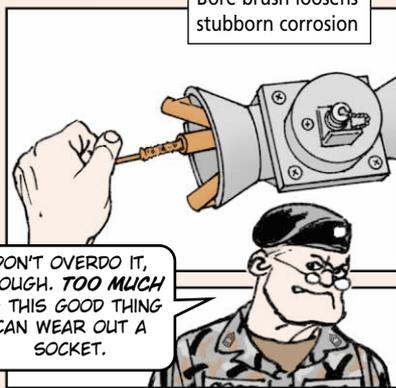
You must keep the antenna elements free from corrosion. To do that, use water displacing compound, NSN 6850-00-142-9409, and silicone, NSN 6850-00-880-7616.

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



For stubborn corrosion, try using a small-arms bore brush, NSN 1005-00-903-1296. Use 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.

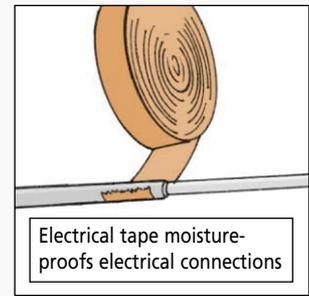


DON'T OVERDO IT, THOUGH. TOO MUCH OF THIS GOOD THING CAN WEAR OUT A SOCKET.

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, when the antenna is erected, the elements are attached hand-tight. Elements that have been muscled together get damaged when they're muscled apart.

Also, a wrapped layer of electrical tape, NSN 5970-00-419-4291, around each connection will help keep moisture out and corrosion away.



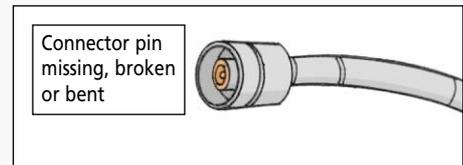
Electrical tape moisture-proofs electrical connections

CG-1889 RF Cable

Take your RF cable in hand and look it over from end to end.

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

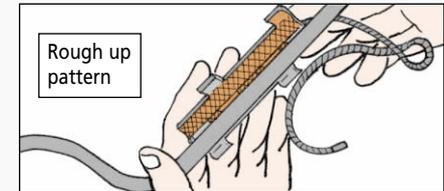
Make sure the pin is not bent or broken. You can straighten a bent pin with needle-nosed pliers, but do it carefully or you'll be turning the cable in with a broken pin.



Connector pin missing, broken or bent

A bent or broken pin is often the result of too much strain on the cable. To prevent this, every time the antenna is raised, use the strain relief clamp, NSN 5975-00-563-0229. 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 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.

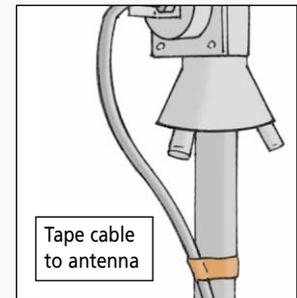


Rough up pattern



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 to give slack and keep the pressure off the cable.



Tape cable to antenna