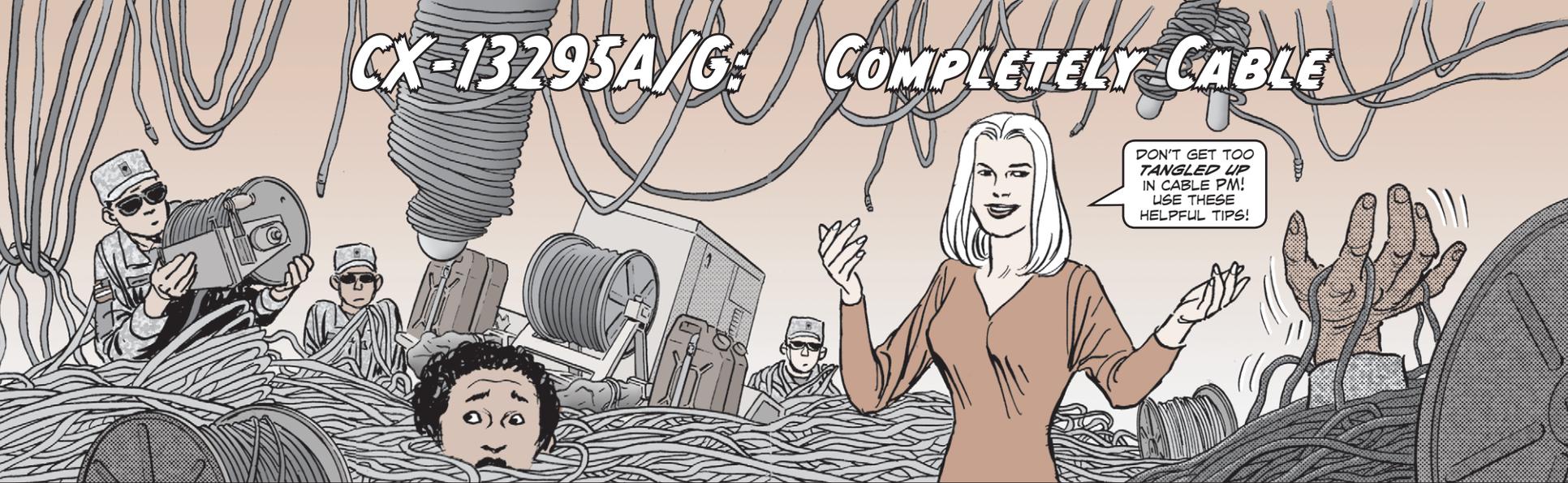


CX-13295A/G: COMPLETELY CABLE



Fiber optic cable assembly, CX-13295A/G, is a high-use, high-volume item in the Army communications arsenal. It must be maintained by the user to ensure peak performance at the most demanding times.

Here are some things you need to know about this cable assembly:

You've Gotta Have Parts

In the maintenance business, stock numbers are gold.

Here are some important stock numbers for the CX-13295 cable, its parts and associated items:

Item	NSN
CX-13295A/G (1 meter)	6020-01-315-9906
CX-13295A/G (300 meters)	6020-01-220-5435
CX-13295A/G (1000 meters)	6020-01-208-1147
Marline	4020-00-240-2185
MK-2495/G cable repair kit	6080-01-208-1817
RC-453B/G cable reel	8130-01-147-4858
RL-207 reeling machine	3895-00-892-4583
RL-31 reel unit	3895-00-252-6896
TS-4117/G test set	6625-01-189-8155

Here are some stock numbers just for Direct Support:

Item	NSN
Dust cap	5340-01-362-6138
Lanyard assembly	4010-01-378-3871
Machine screw	5305-00-770-2533
Thread locking compound	8030-01-014-5869
Crimping tool	5120-00-278-2423
TK-105/G tool kit	5180-01-460-9328
RC-435/G cable reel	8130-00-656-1090
TS-4335/G test set	6625-01-316-2753
TS-4336/G test set	6625-01-316-2752

Cleaning with Meaning

Next to abuse, dirt is the greatest enemy of optical cable. But it's an enemy that can be defeated with just a little cleaning effort on your part.



HERE ARE SOME OF THE *CLEANING SUPPLIES* YOU'LL NEED TO HAVE ON HAND...

Item	NSN
Cleaning cloth	7920-00-634-2408
Lint-free cloth	8305-00-267-3015
Isopropyl alcohol	6505-00-205-6513
Wood toothpicks	7350-00-838-3919
Foam swabs	7045-01-482-4037
Thread locking compound	8030-01-014-5869

Use the cleaning cloth to clean the outer surfaces of the cable, the connectors and the dust cover. Dampen the cleaning cloth with water for dirt and use the lint-free cloth dampened with isopropyl alcohol for grease, mildew or mold. Don't use any other solvents!

Remove stubborn dirt or mud by rinsing the cable in a container of clean water, but keep the connectors dry.

When the cable is clean, wipe it dry with the cleaning cloth.

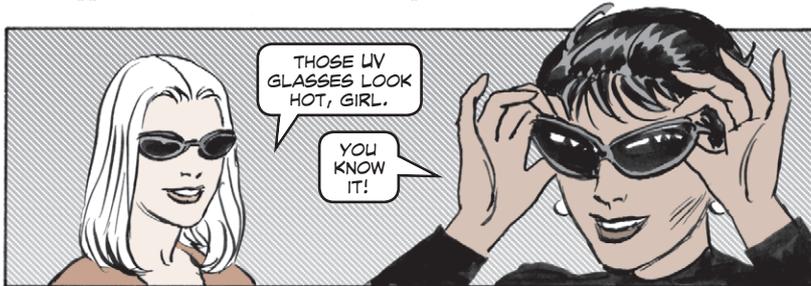
Use the lint-free cloth dampened with alcohol to clean the surfaces of plugs. Use the foam-tipped applicator with alcohol to gently clean around hard-to-reach areas.

Additional cleaning and preservation using compressed air, grease and locking compound can be done at direct support.

Take Safety to Heart

“It ain’t heavy” is not a phrase that applies to cables and their reels. CX-13295/G cable on an RC-435/U reel is a two-person lift. It weighs around 50 pounds. CX-13295/G cable on an RC-453B/G reel is a four-person lift. It’s more than 100 pounds. Try to lift either by yourself and it’s hello sick call.

Fiber optical cables emit a few things that can damage your eyes, such as high- and low-level infrared signals and optical radiation. When you’re disconnecting optical connectors, don’t look directly into the optic cables and avoid exposure to the optic beam. When working with this cable, it’s best to wear industrial-UV spectacles. There are more than 100 industrial spectacles in the defense inventory under the 4240 supply class. Find the ones with UV protection that work best for you.



The Art of Connecting

To protect yourself and the cable and to ensure the best possible communications, connect fiber optic cable assemblies correctly. Follow these steps:

1. Hold the fiber optic connector of one cable section in one hand and grasp the dust cover sleeve nut with the other hand. Turn the dust cover sleeve nut counterclockwise to unscrew and release the dust cover. Set this connector aside and repeat the action with the other cable section.
2. Now back the sleeve nut on one of the connectors all the way to the rear by turning it clockwise. Only one sleeve nut is needed to couple the two connectors.
3. Hold the two fiber optic connectors so that the faces are aligned. Gently—force is not needed—push the two connectors together and screw the sleeve nut of the one connector onto the other connector until it is tight.
4. To lower loss of light between the two connectors, the two cable assemblies must be accurately aligned with the minimum possible gap between the connectors. The unused sleeve nut may be screwed forward as a jam nut to lock the two connectors in place.
5. Now, connect the two dust covers by backing one dust cover sleeve nut all the way to the rear flange on the dust cover, aligning the two faces and turning the sleeve nut to tighten them together.
6. Don’t forget to maintain slack in the cable to relieve pressure from the connection. Use the marline to make the slack.

When it’s time to disconnect, pull the connectors straight apart. Don’t twist ‘em, rock ‘em, or jiggle them or you’ll damage a connector insert.

PM, of Course

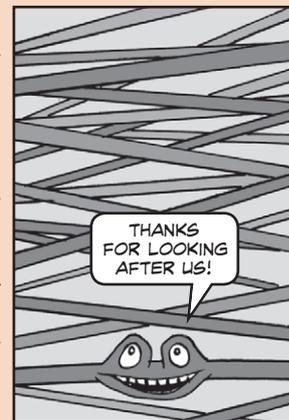
Putting a sharp, but protected eye, on your cable is the preventive maintenance you can do at the unit level.

Look at the connectors for excessive oil, grease or dirt. Check them for cracks, corrosion or other damage. See if there is any damage to the main body or the sleeve nut.

Other areas to check are the alignment bosses, the sleeve retainer, and the bi-conic plug. Look for loose or missing screws or locking sleeves. Check the wear and tear on gaskets and bellows seals.

Make sure you have all the dust covers and lanyards in place and that none are damaged. The bend limiter needs to be in good shape and well seated.

Last, but not least, give the entire cable outer jacket a once over and try to spot potential trouble areas before they bring down communications.



You Can’t Beat a Good Book

TECHNICAL MANUALS FOR ITEMS LIKE CABLE—WHICH SEEM TO BE EASY TO USE AND EASY TO MAINTAIN—ARE OFTEN **NOT READ**, AND SOMETIMES ARE NOT AROUND TO BE READ.

HERE ARE THE MANUALS NEEDED IN YOUR UNIT AND DIRECT SUPPORT SHOP FOR THE HANDLING AND MAINTENANCE OF THE CX-13295A/G CABLE ASSEMBLY...



- TM 11-6020-200-10, *Operator's Manual, Fiber Optic Cable Assembly, CX-13295A/G*
- TM 11-6020-200-23&P, *Direct Support Maintenance Manual (Including Repair Parts and Special Tools List), Fiber Optic Cable Assembly, CX-13295A/G*
- TM 11-5985-202-13, *Operator, Organization, and Direct Support Maintenance Manual: Reel Units RL-31*
- TM 11-3895-209-14, *Operator's, Organizational, Direct Support, and General Support Maintenance Manual: Reeling Machines, Cable, Engine Driven RL-207/G*
- TM 11-6625-3227-13&P, *Operator's, Unit, and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List): Optical Communications Test Set TS-4117/G*
- TM 11-6625-3252-12&P, *Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List): Optical Fiber Test Set TS-4335/G*
- TM 11-6625-3253-12&P, *Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List): Fiber Optic Cable Test Set TS-4336/G.*

