Screen & Inside stuff removed:
• screen supports not in
• antenna support not in
• phone mount removed
• all equipment and cables out

Suggested dismantling seq. – work top-down:
• [0. remove front screens, all internal equipment & cabling]
• 1.) remove full-width top assy
• 2.) remove full-width top rear assy
• 3.) remove full-width bot rear assy
• 4.) remove full-width bottom assy, separate sides

• Four (top, 2x rear and bot) assy pieces each split to two @middle for shipping
• Left/Right sides ship AS IS
Tools For Cage assy/disassy

All cage fasteners are metric hex, but all can be dealt with the tools that were shipped with the cage package
• you may not need all of them (some are for expected to be “permanent” parts, but there are lots of spares etc.)
• expect to need 2 or 3 of them during process

You will also need:
• a flat screwdriver to unscrew the mmwave radio (it could also be done w/ nut socket driver but did not find one of correct side during assy process)

You may also need:
• socket driver or wrench or some such to hold on to nuts on the cable feed-through plate inside the cage
• and whatever I do not remember ... used lots of tools to put it together, but there was taping etc. that should not need re-doing / affect disassembly

REMEMBER TO PACK THESE ON THE END
They are metric, and we do not have spares!
0a.) Remove Front Screens

Suggested dismantling seq. – work bottom-up:
• 1.) loosen ALL hex fasteners, no need to fully open them, the t-nuts on 20mm Al profile come out without removing them completely
• 2.) work one screen at the time, bottom to top
• NOTE: screen does not fit into transit cage – should be protected by wrapping & shipped separately (w/ rack ?)
0b.) Remove Loose equipment & cables

Suggested dismantling sequence:

• Disconnect all power cables
• Disconnect all USB cables
• Remove phone
• Remove phone mount support assy
• Disconnect PPS and 10Mhz SMA cable connections from mmwave radio (and Ethernet if it is connected)
• Disconnect QSFP optical cable from mmwave radio
• Disconnect power feed cable from mmwave radio
• Disconnect SMAs from each LTE antenna to feedthroughs – if not possible / too hard due to mmwave antenna, leave in place for later
• Loosen or remove the feedthrough seal plate to get cables out, don’t worry about the Cu foil tape in place, we have plenty of it to reseal!
0c.) Remove mmwave Radio

Suggested dismantling sequence:
• PRECONDITION: all cables from radio are disconnected as per 0b. Step – see previous slide
• CAUTION: Radio is Heavy – should have two people, one supporting and one un-screwing the radio supports
• Radio is supported by TWO metal clamps against radio support bar behind the radio. These are hard to get to, and will take time to fully open (it will not get out before those are fully opened – this will take some time/effort to undo)
• Better start loosening from the bottom support and then top support to be able to control the radio as it gets un-supported by clamps
• On assy I used the PSU brick underneath for additional support, may be good idea to do that as just-in case here again .. not good to have weight of radio on it, but it is better than having radio drop without catching it – it may also be ok to let radio slide to bottom after loosening supports 1st, and let bottom assy take the weight but I have NEVER done this before, so not sure what’s best!
• After radio is removed, remove any remaining feed-through related cables (from SMAs and/or feedthrough seal plate)
1. Remove top assy

Suggested dismantling seq. – work top-down:
• 1.) remove three 8mm hex bolts 1a-1c
• 2.) remove rear top support hand knobs 2a-2b
• 3.) remove front top support hand knobs 3a-3b; while supporting assy from front to avoid dropping it
• 4.) remove the top assy 1.
2. Remove back-top assy

Suggested dismantling seq. – work in-out:
• 1.) remove four 8mm hex bolts 1a-1d (inside)
• 2.) remove two rear-top assy support bolts 2a-2b
• 3.) remove two rear-top assy support bolts 3a-3b; while supporting assy to avoid dropping it
• 4.) remove the rear-top assy 2.
3. Remove back-bot assy

Suggested dismantling seq. – work in-out:

1.) remove three 8mm hex bolts 1a-1c (from outside / bottom of the cage – through bottom plate assy)
2.) remove two rear-bot assy support bolts 2a-2b
3.) remove two rear-bot assy support bolts 3a-3b
4.) remove the rear-bop assy 3.
4. Separate bottom assy & sides

Suggested dismantling seq. – work in-out:
• 1.) remove two top support hand knobs (from outside of right side panel)
• 2.) remove left side panel assy, leave bottom supported by ground by left side panel
• 2.) remove two top support hand knobs (from outside of left side panel, while supporting bottom assy)
• this should complete cage level disassembly – 4 pieces of top, top/rear, top/bot and bottom + 2 sides on hand
5. Disassemble four wide assys

To fit in shipping transit box, four assys need to be separated to eight smaller pieces:

• 1.) remove two two assy joint bolts 1a-1b
• 2.) separate left-right pieces
• 3.) repeat for each of the four double-wide assemblies (top, top-rear, bot-rear and bottom assys)
• this should complete disassembly and be ready for packing – 8 pieces of top, top/rear, top/bot and bottom + 2 sides on hand
• PACK *everything* - see next two slides for approximate look; if the HW does not fit into plastic box (I brought some extra HW to deal w/ screen so not sure, please pack to something to hold them...); add bubble wrap etc. to avoid movement of / damage to pieces during shipment as required
Pieces (almost) in shipping box

Disassembled frame in box
• Frame in 10 pieces
• 2x sides
• 8x top/back/bottom elements
• HW in box

Antenna mount and 2 front support bars on front

2nd foam was not shipped
Semi-Representative final goal

All-in, ~ as last ship ...

2nd foam was not shipped
• had no room for screen pieces
• screen will not fit in – ship w/ rack as discussed, wrap them!
• add some packing material to avoid movement of pieces during transit as required
Sides Only
Bottom is used as support/stand
Total height 1000mm
(=uncut 20mm profile length)

304x608 mm

Dia = 5mm

Profile – short: 304-40 = 264 mm
Profile – long: 608 mm