



## NEW JEEP, TO INSTALL OR NOT TO INSTALL AMATEUR RADIOS

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This Usually Works With Willem 😊

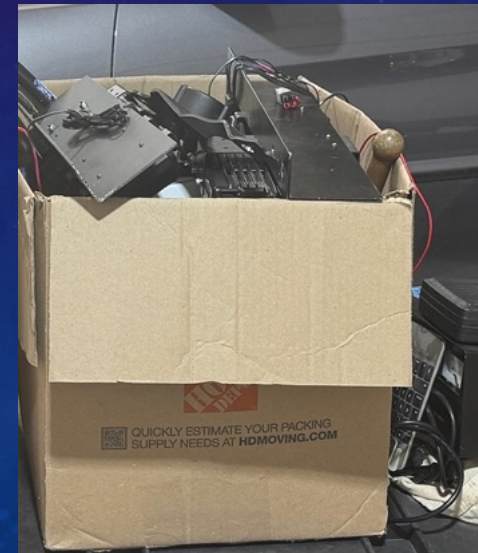


# What Am I going to Talk About Today?

- Out with the Old Into the New
- Into The New or Not? Considerations
- Which Equipment
- Where to Mount All this Stuff
- Some Lessons Learned so Far



# Out With the Old, Into the New



- Kenwood D710 Dual Band
- Motorola UHF XPR 5550e
- Motorola P25 900 mHz XTL 2500
- Never got around to install HF



# Into The New or Not? Considerations



- Easiest option is to just use a handheld and go about my day
- Don't mind drilling holes, it is for me to enjoy
- Prefer not to totally take dash apart
- Air bags in many new places
- Heating vents under the seats
- Want it to look good
- Don't want to have to remember to turn radios off / on
- Don't want to worry about depleting main cranking battery
- Don't want Jeep down for days torn apart
- Wanted to do be able to break install into steps so I could see some progress

# The Radio Toys



- Yaesu FT-891 (HF)
  - MAT Y-200 Antenna Tuner
  - Masters Communications DRA-100 (sound card)
  - Heil BM 17 Headset
  - Begali Adventure CW Key
- Kenwood D710
- Kenwood VM-8000



# Antenna Choices



- Jeep JL Cowl Antenna Bracket (American Adventure Lab)
- Breedlove Ball Mount
- Diamond NR73BNMO 1/2 wave antenna
- Yaesu ATAS 100 Antenna (had one that was never used)

# Radio and Toy Power 😊



- Havis Charge Guard
- Genesis Offroad Gen 3 Dual Battery Kit
- Victron Orion XS 12V/50A Smart Battery charger / Power Supply



# Future Networking



- Pepwave BT1 Pro LTE/5G Modem
- Starlink Mini - (will try to borrow when needed 😊)
- Starlink Mini Flat Roof Mount (had it power coated)
- Mikrotik RB962 Router and dual band access point
- Starlink Mini PoE DC conversion Kit – (MobileMustHave.com)



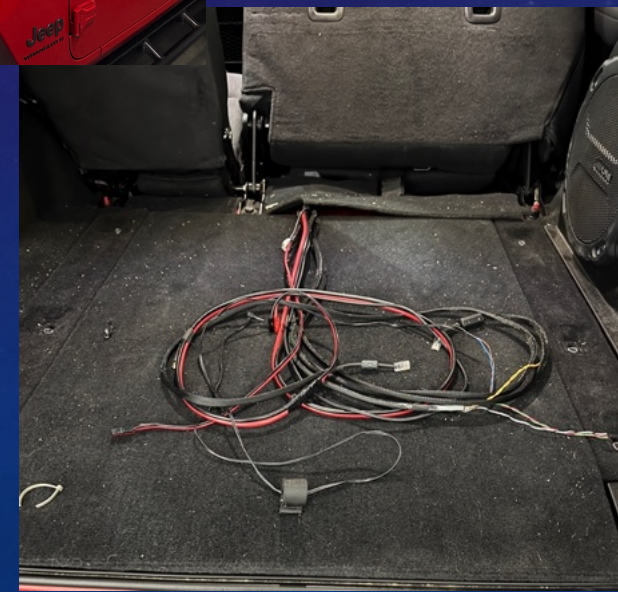
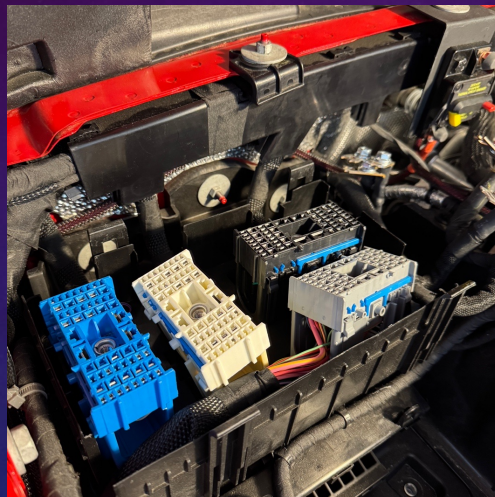
# Where to Mount All this Stuff

- Spent a lot of time sitting in the Jeep trying to decide where I would like to mount the equipment
- I started installing pieces so I could see that progress was being made
- The biggest decision was where to mount all the radios
  - I fairly quickly decided I would build a box but would need some time to design it





# Power, Antennas and Lots of Wire





## Finally to Design and Build "The Radio Box"

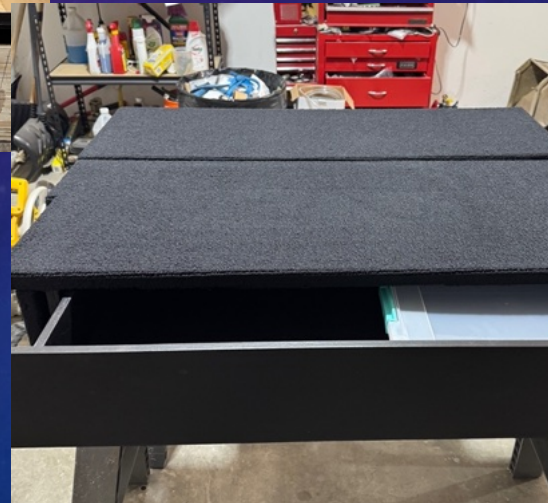




## Radio Box Build Continues

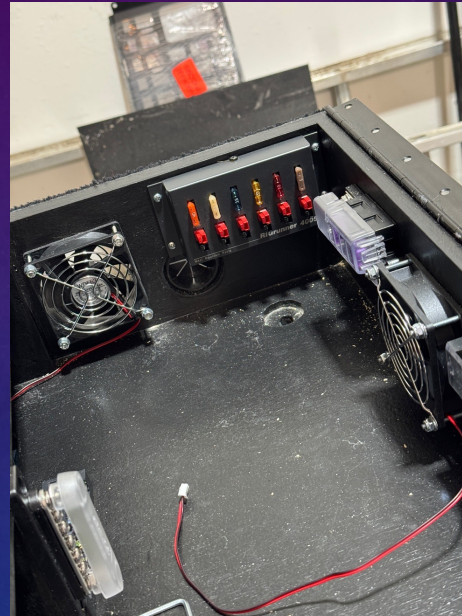


- Outer Dimensions are about 38 inches wide and 29 inches long and 7 inches tall
- Radio mounting is 35 x 11.5 x 5.25 inches





# Mounting the Equipment





## Some Lessons Learned so Far

- Measure once and cut twice and it is still too short
- Not all Home Depot Workers measure too accurately when cutting plywood
- Have a friend with a new saw that he is willing to use if you help assemble it
- Wood Routers aren't very forgiving and can remove more material than desired
- Plan many trips to Home Depot and ACE Hardware
- Plan on multiple Amazon packages daily
- Suspect Electricity bill will be very high with running the heater in the garage for this project
- Need remedial training with Carpeting and wood working
- The paint smell is pretty strong when painting brackets in the basement



Any Questions or Comments?