

Installation of 2 Meter Mobile Radio into “Trucks”

Paul Morabito

K8PLM

Toyota Tacoma

- My Son's Vehicle
- Recently acquired Technician License (KF8BFO)
- Turned to me to help him scope and install (Permanent Installation)

Some Common Questions

- What is the Budget?
- Which Radio do we buy?
 - Size of radio
 - Where do you plan on installing in vehicle
 - How to use radio safely while driving
- Which Antenna?
 - How to mount Antenna?
- Where do we get Power from?
- How to get “cables” into cab of Vehicle
- Mounting the radio into the vehicle (Ergonomics, Space Concerns)
- Etc Etc Etc

Radio: Yaesu FTM 6000R Dual Band Radio



- 50 Watts VHF/UHF Dual Band
- Detachable Face
- Programmable interface
- 1100 memory Channels
- Receive range 108 to 999.95 Mhz
- Most Common features similar to other radio's
- Small size
- Good Audio speaker
- Simple to use
- ~\$300

Antenna

- Larsen 144-174 150B NMO antenna
 - VHF/UHF antenna
 - Very Good Reviews
 - ~ \$75
- GAIN: 5.1 dBi
 - WAVE: 5/8
 - V.S.W.R. LESS THAN 2.0
 - IMPEDANCE: 50 OHMS
 - POWER CAPACITY: 200W
 - LENGTH: ~ 51.5-Inches
 - CONNECTION: NMO



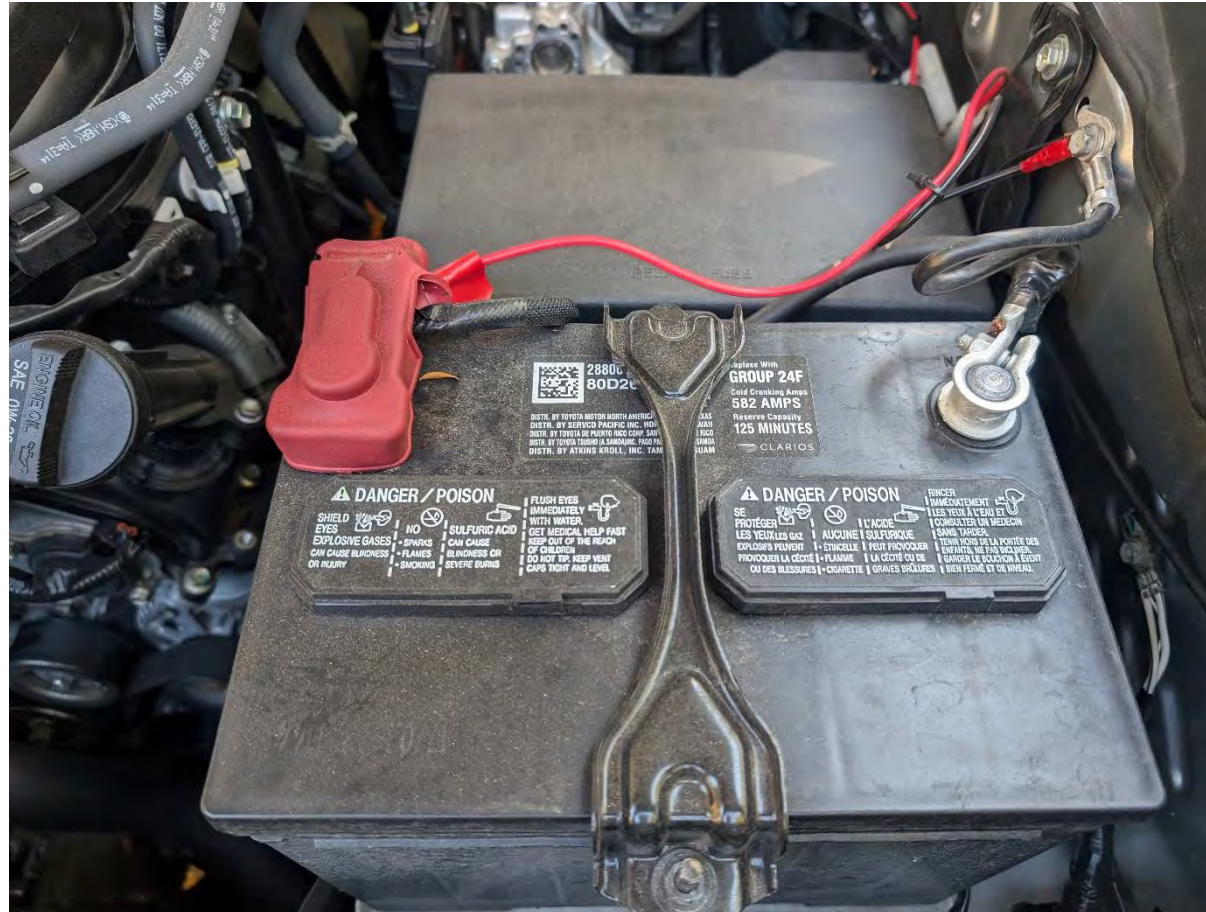
Mounting Antenna (Victory 4x4 mount)



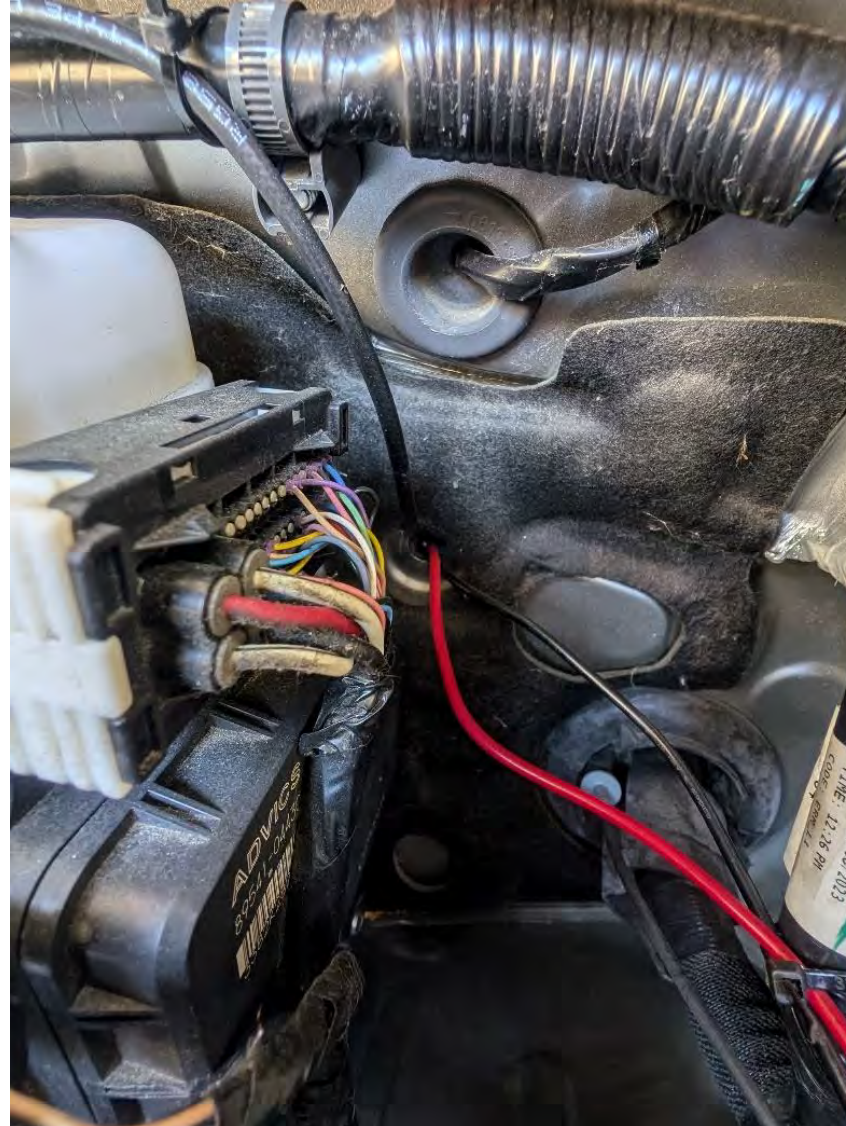
“Go to Web and search options and vendor available accessories”



Power – Went to Battery (Simple Firewall access into vehicle with Power)



Wires through Firewall



Again check with Manufacturer or go online for Firewall options

Mounting Radio inside Vehicle



Overall

- Very pleased with Radio and installation (a lot of planning paid off)
- Easy to use
- SWR
 - ~1.2 for 2 Meters
 - ~2.3 for 70 cm
- Programming Groups used strategically
- Suspect some directionality where antenna is mounted on vehicle
- Wiring was a lot less complicated than anticipated

Ford F-150

- Just bought my first truck in my Life
- Used to pull camper
- Loved my son's installation thought I would buy same radio
- My Installation is "Portable" – want to transfer between two vehicles

Portable Installation

- Radio Placed in Tray
- Power via Cigarette lighter (Radio only needs 7 amps)
- Antenna is Magnetic mount – Hustler MX-22
- Coax ran through window using a “Jack Robinson Special Widget”

Magnetic Mount????

- First Time I wanted to use my radio the Magnetic Mount slide right off the truck ---- forgot its an ALUMINUM TRUCK!!!!!!



Larson Electronics
Mounting Plate



Removal of Back Cab Light



Final Installation of Mounting Plate

