



# **IMPORTANT**

## **INSTALLATION PROCEDURE**

Follow the attached  
procedures before  
**INSTALLATION!**

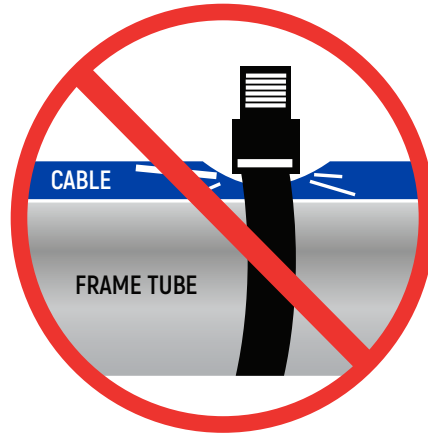
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**Need help? Call (888) 541-7223**

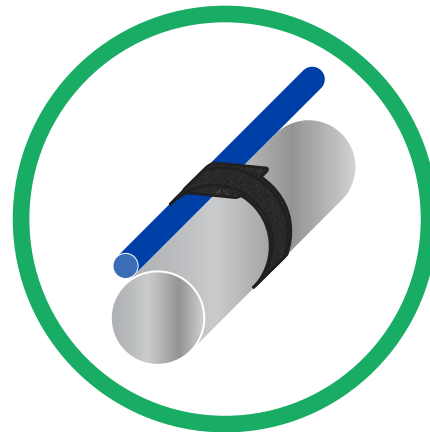
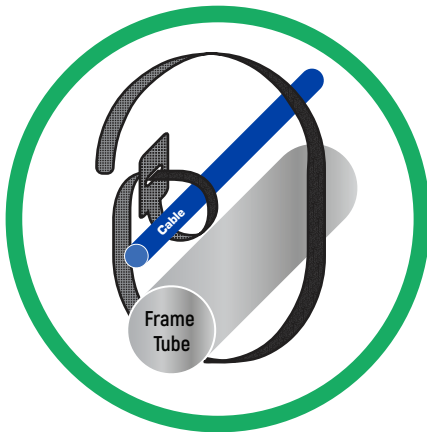
## Secure cable using hook and loop Cable Wrap P.N. R-WRAP

- Cable Wraps are a self-adhering hook and loop wrap that safely secures cables.



**NO**

Zip Ties are discouraged. If used, overtightening will DAMAGE intercom and PTT cables and cause a loss of performance.



**YES**

- 1) Create a loop with the Cable Wrap and secure to cable.

- 2) Use full length of Cable Wrap and wrap around roll cage.

If any visible cable damage is found, **replace the cable immediately.**

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# ANTENNA MOUNTING LOCATION

TECH BULLETIN: **AML.1.1**

## Ideal placement for maximum radio range:

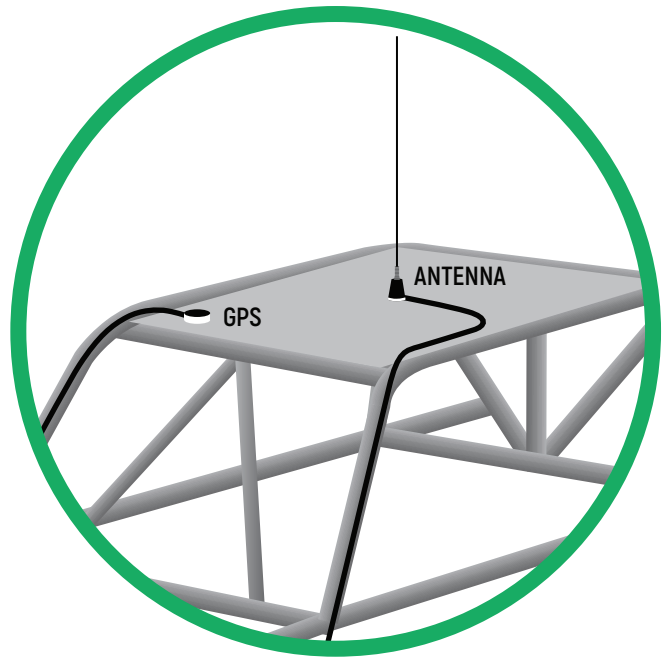
- as high as possible
- in the center of a metal roof

## Obstructions block your signal!

- light bars
- racks
- air scoops
- etc.
- GPS antennas



**NO**



**YES**



**NO**

### NEVER COIL OR BUNDLE EXCESS ANTENNA CABLE

If cable is too long, have it shortened by a qualified technician or route it so excess length is used up.

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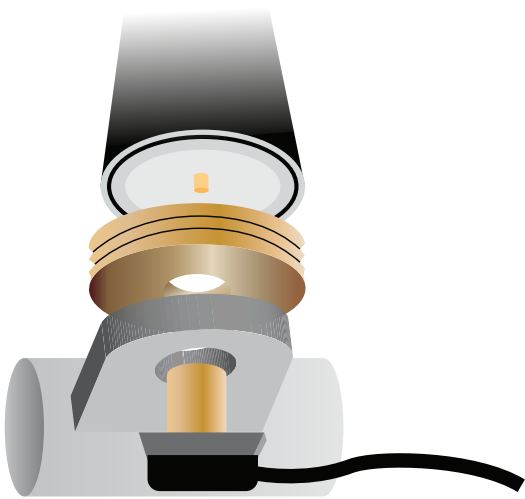


# ANTENNA MOUNT GROUNDING

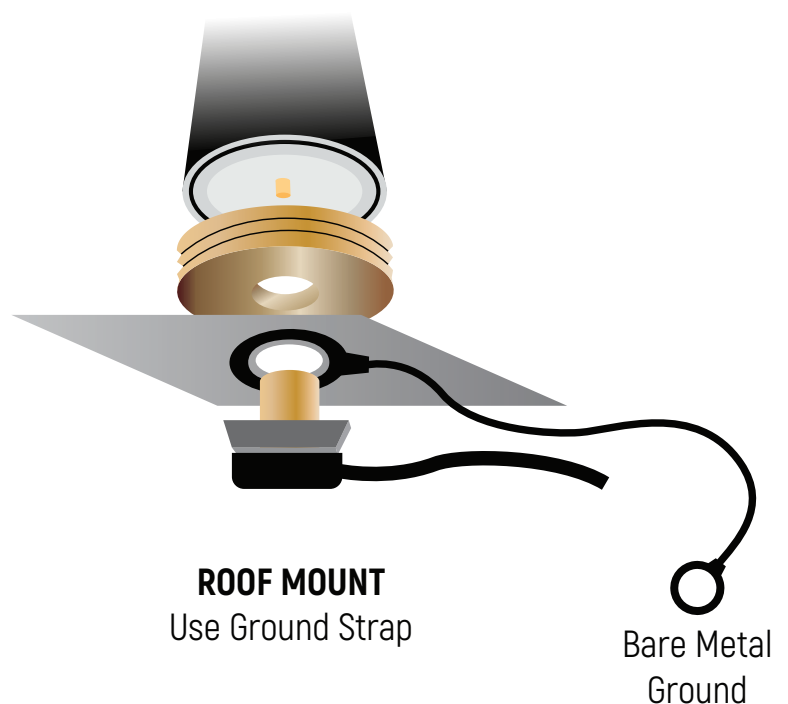
TECH BULLETIN: **AMG.1.0**

**Poor grounding decreases radio range and causes interference.**

- Ensure antenna mounting surface is:
  - bare metal (no powder coating or paint)
  - corrosion free
- If mounting to a roof panel, a ground strap (P.N. GS-KIT) should be added from the metal roof to the chassis of the vehicle



**BARE METAL TAB**  
No powdercoating



**ROOF MOUNT**  
Use Ground Strap

Bare Metal  
Ground

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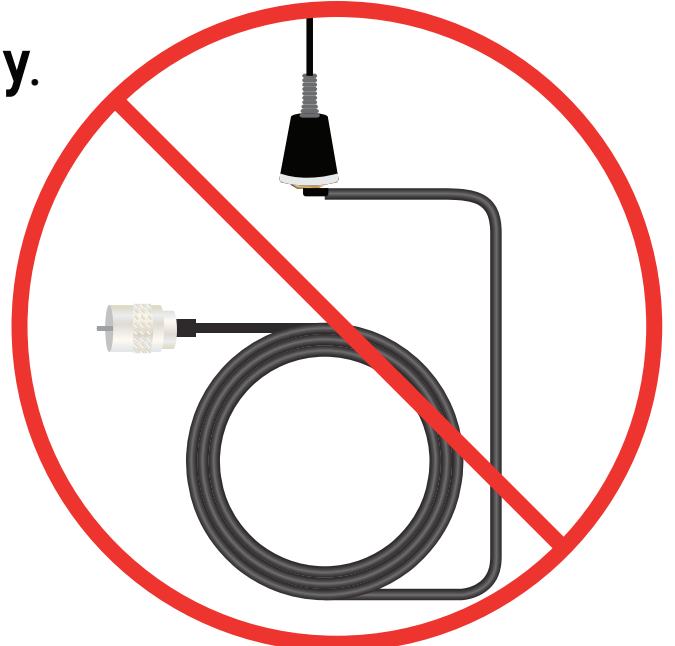


# ANTENNA CABLE ROUTING

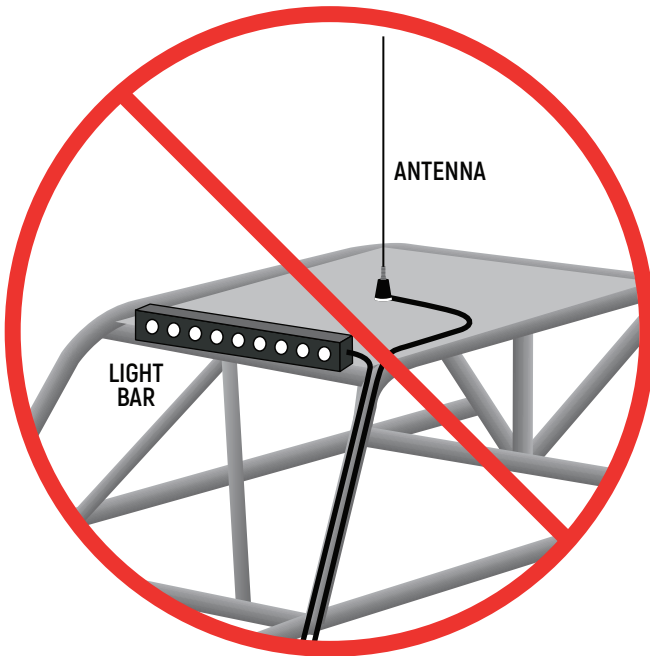
TECH BULLETIN: **ACR.1.0**

## Route antenna cable independently.

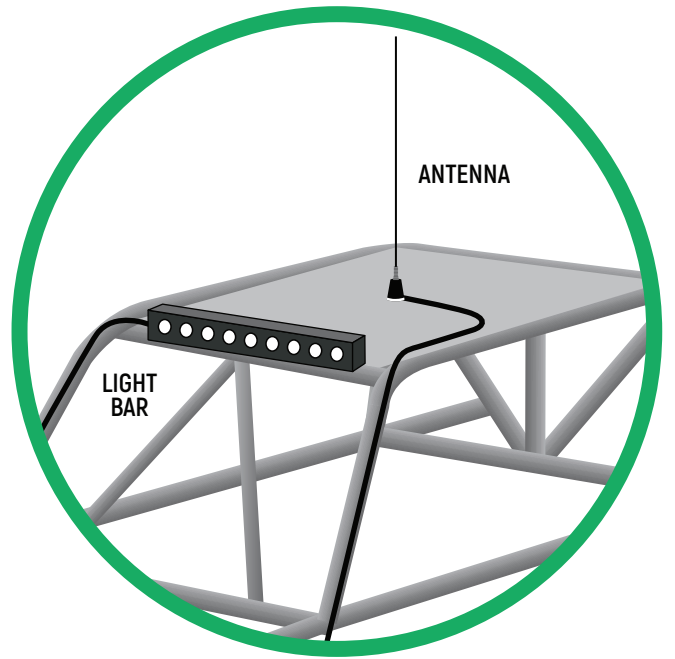
- **keep away from :**
  - power cables
  - ground cables
  - intercom cables
  - ignition cables / coils
  - engine electronics
  - all other cables
- **never coil or bundle excess antenna cable**  
If cable is too long, have it shortened by a qualified technician or route it so excess length is used up.



**NO**



**NO**

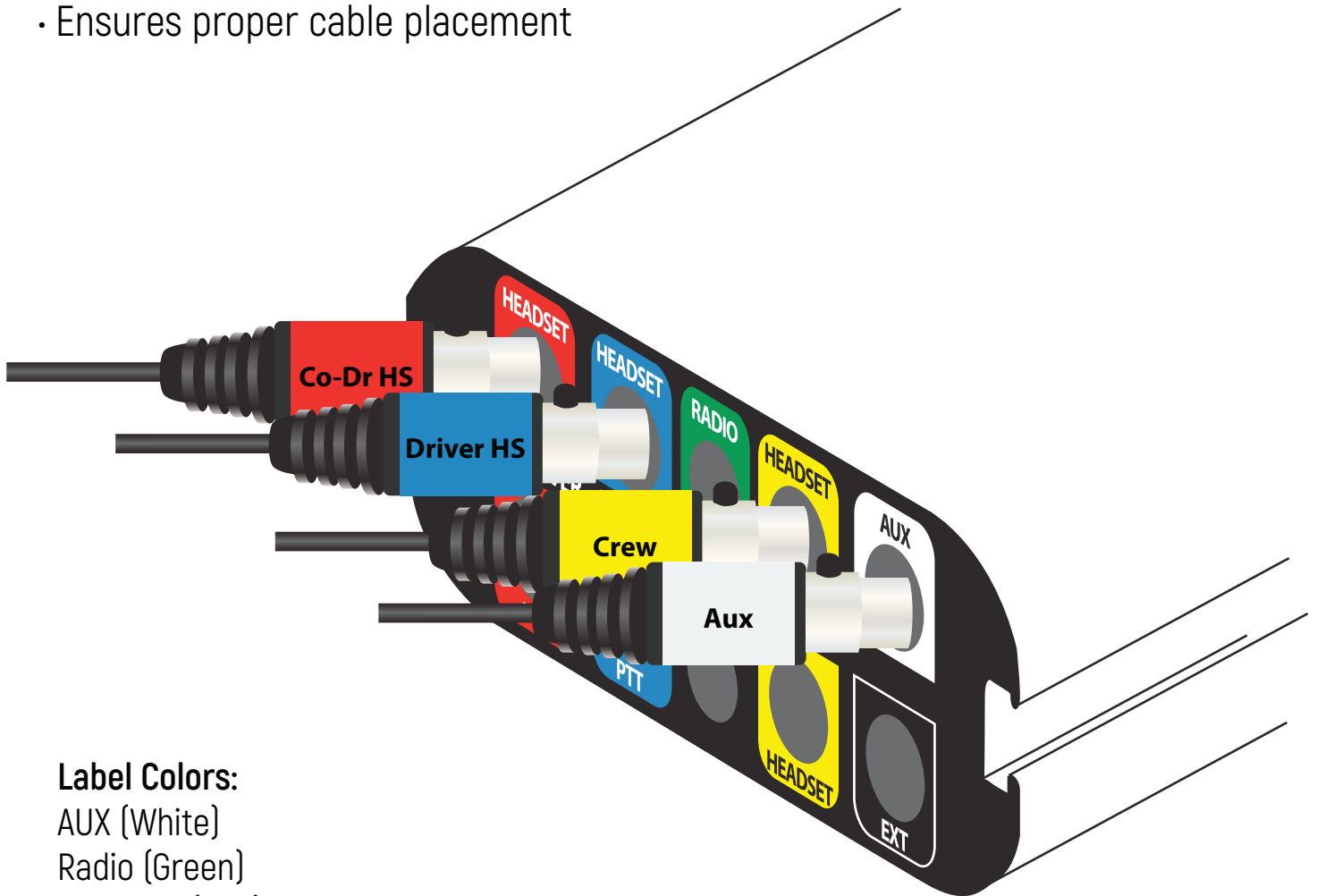


**YES**

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## Label all cable connections with label kit P.N. TAG-KIT-ICM

- Color coded labels
- Ensures ease of servicing
- Ensures proper cable placement



### Label Colors:

- AUX (White)
- Radio (Green)
- Co-Dr HS (Red)
- Co-Dr PTT (Red)
- Driver HS (Blue)
- Driver PTT (Blue)
- Crew (Yellow)
- Crew (Yellow)

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# WIRE DIRECT TO BATTERY

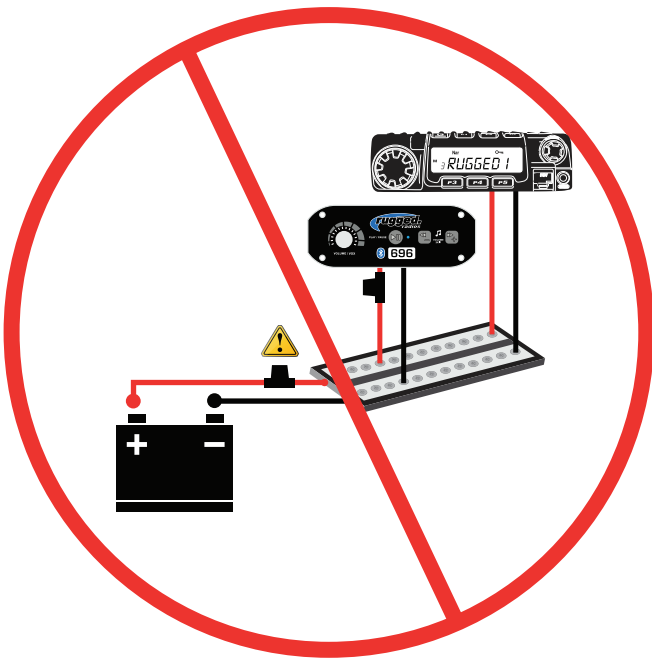
This greatly reduces the likelihood of buzzes and whines

TECH BULLETIN: **WTB.1.2**

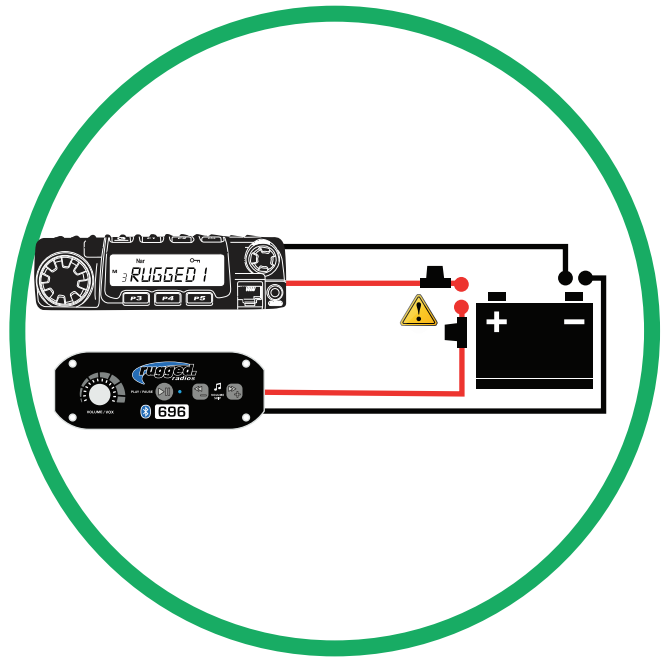
Radio and intercom power **MUST** be connected direct to battery.

Do **NOT** connect intercom or radio power to fuse box or bus bar.

Failure to do so can cause electrical noise in the intercom and radio.



**NO**



**YES**



Always fuse the positive power wires as close as possible to the battery to avoid damaging wiring in case of short-circuit.

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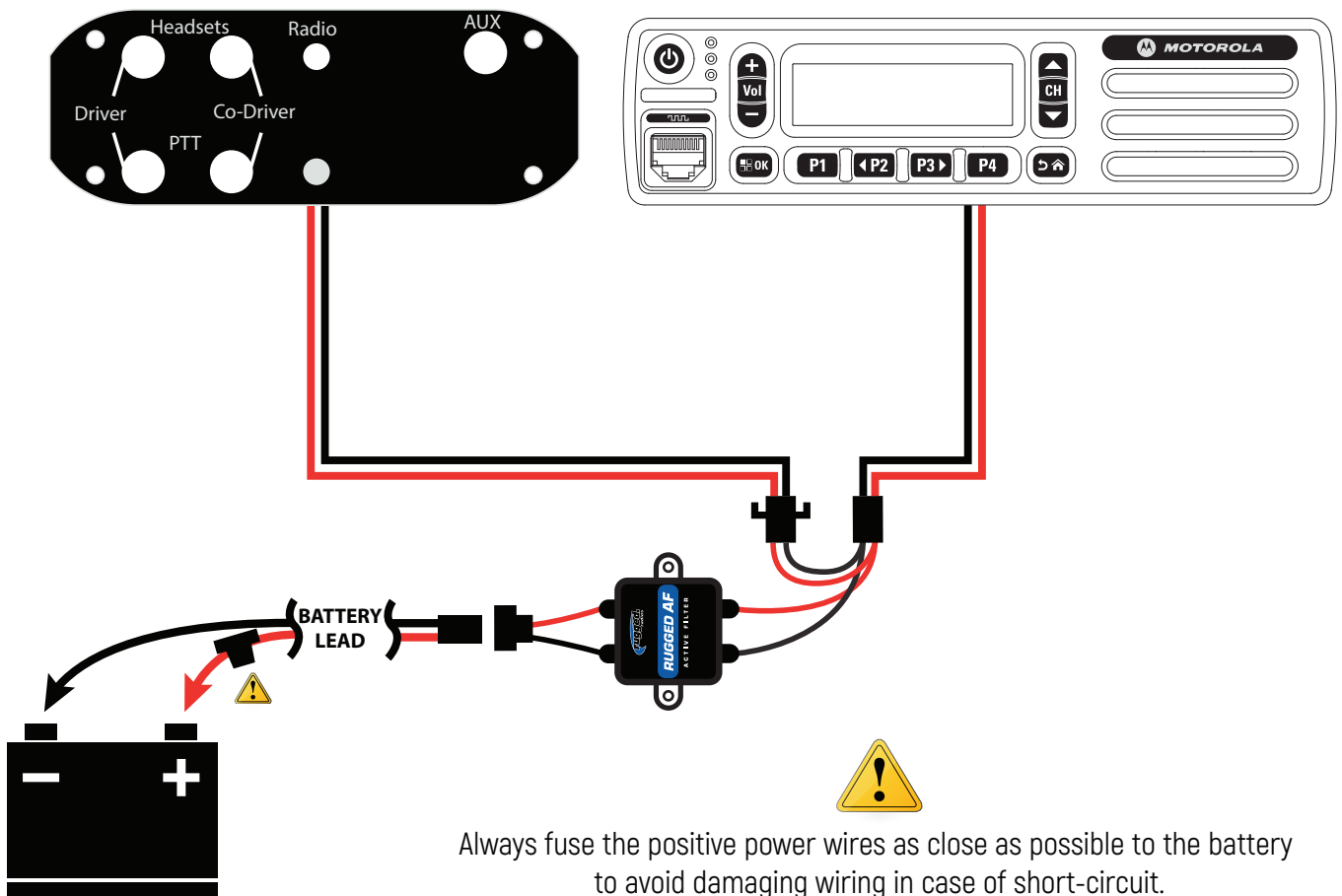
# POWER AND GROUND

TECH BULLETIN: GRD.1.2

**Power AND ground should be wired directly to the battery.**

- Do **NOT** ground to chassis
- Do **NOT** connect positive to battery switch

Install an ACTIVE-FILTER on all race vehicles (P.N. ACTIVE-FILTER).  
This will provide filtered power to your radio and intercom.



Always fuse the positive power wires as close as possible to the battery to avoid damaging wiring in case of short-circuit.

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## Run coax, power, and intercom cables separate from each other and not touching

Failure to separate cables can cause audio interference in intercom and radio.

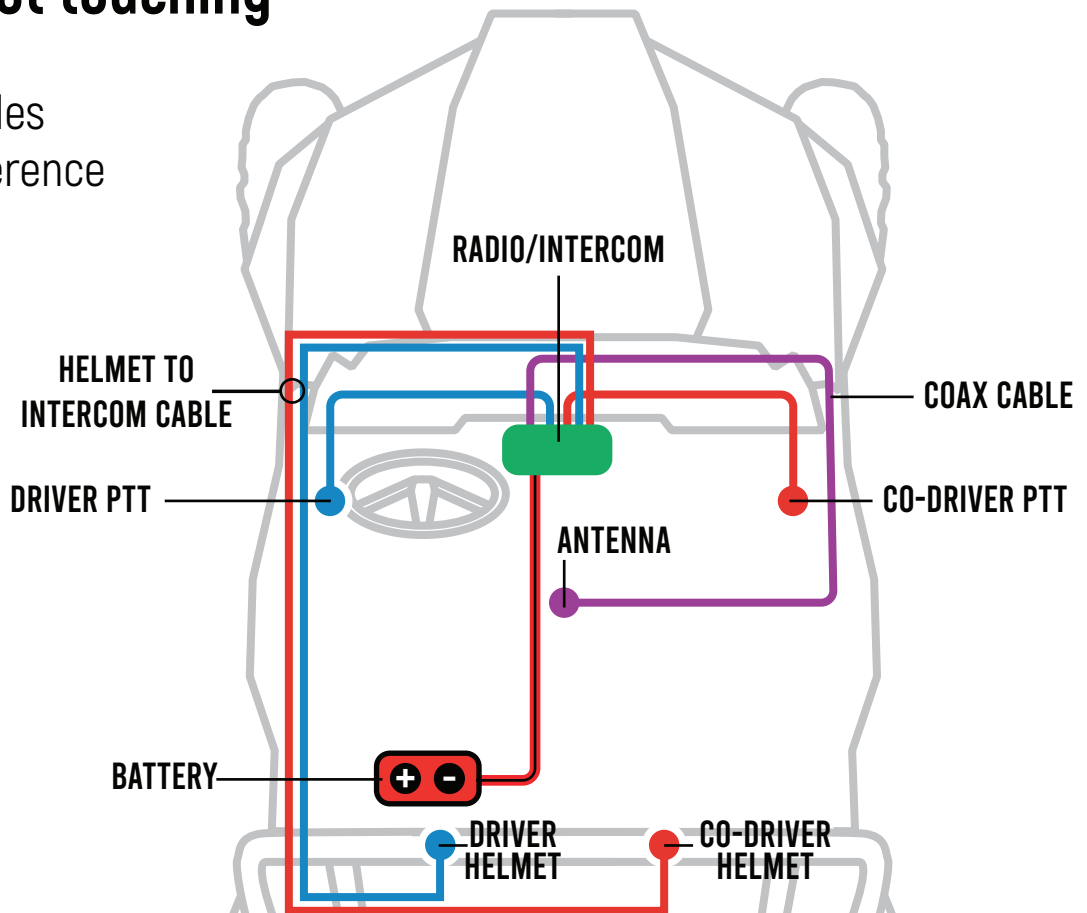


Diagram is a reference.  
Your layout may vary.

- Route all cables so they are not pinched between panels, smashed, kinked, etc.. Do not overtighten zip ties.
- ANY physical damage can cause interference, noise, intermittent functionality. If any visible damage is found, replace the cable immediately.

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# PTT/HEADSET CONNECTIONS

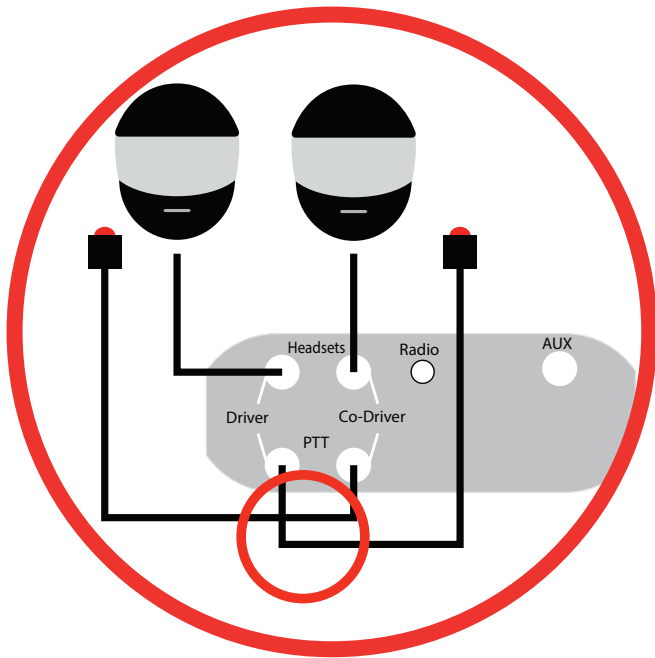
TECH BULLETIN: **CONN.1.1**

## Helmet and Push-to-Talk connections are seat specific.

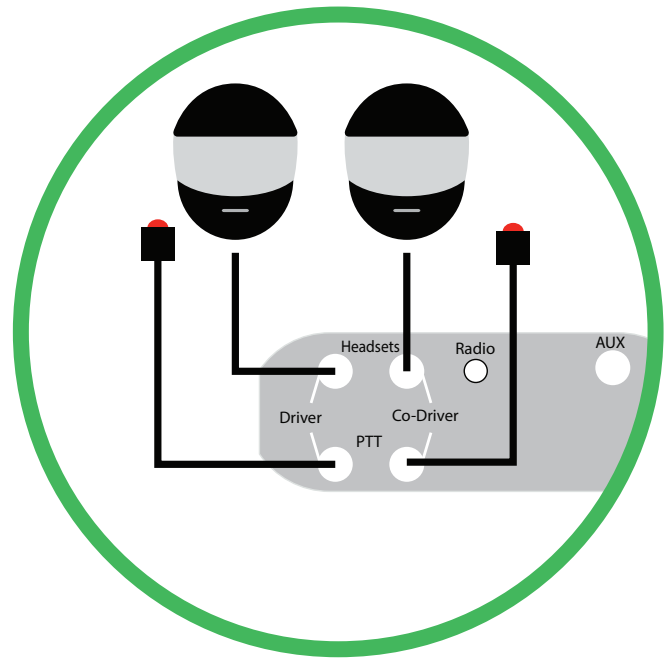
Driver and co-driver ports are specifically indicated on intercom.

- **Driver** PTT will only open driver's mic.
- **Co-Driver** PTT will only open co-driver's mic.

**Failure to connect properly will cause no voice during radio transmit.**



**NO**



**YES**

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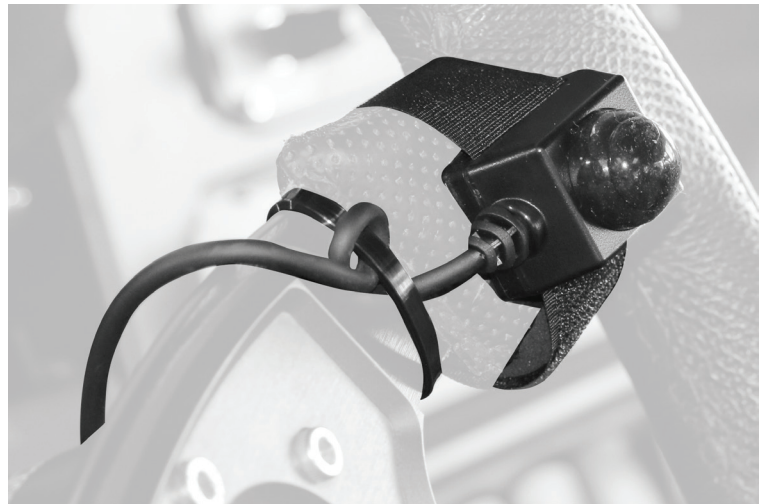


# STRAIN RELIEF PTT

TECH BULLETIN: **PTT.1.0**

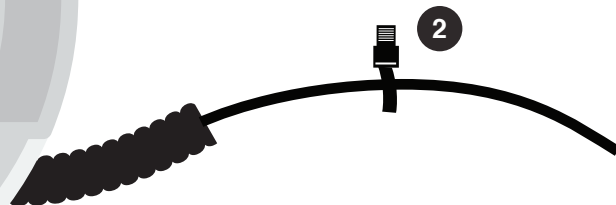
**PTT cables must be strain-relieved (especially if steering wheel-mounted) with zip-ties so they are not pulled apart.**

- Run a zip tie through the coil and around the steering wheel spoke and tighten firmly.
- Verify a snug installation by tugging on the loop and verify that the PTT housing does not move.
- Provide slack to allow the coil cords enough stretch so it won't bind when turning the the steering wheel.



## STRAIN RELIEF LOCATIONS

- 1) Steering Wheel AND
- 2) Dash/Chassis/Alternate



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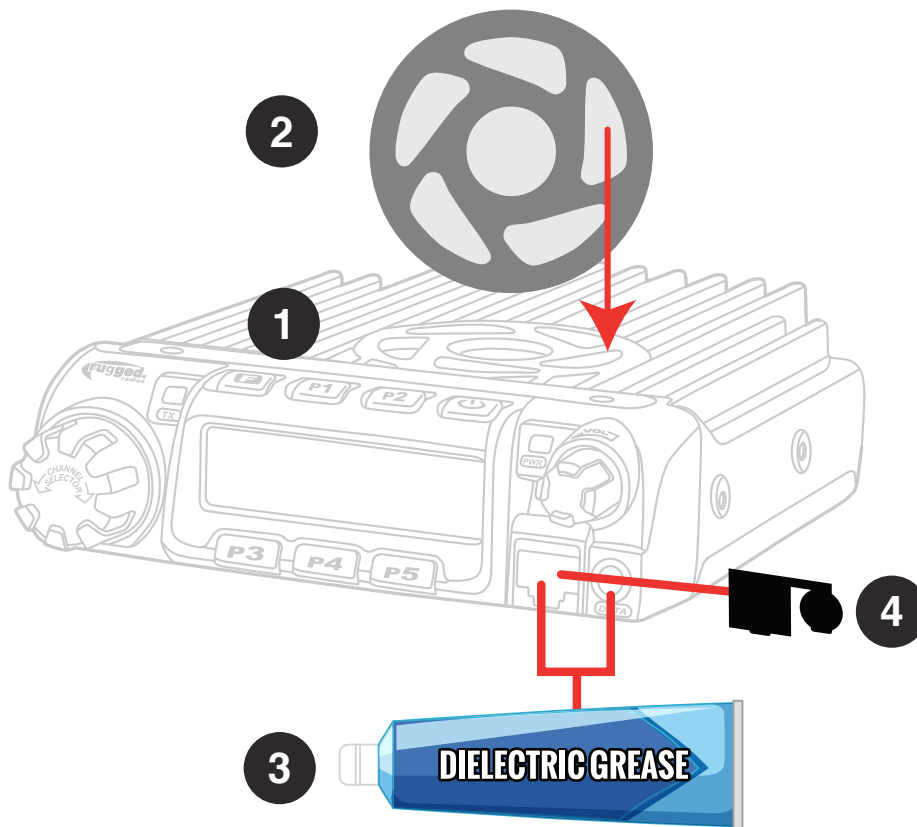
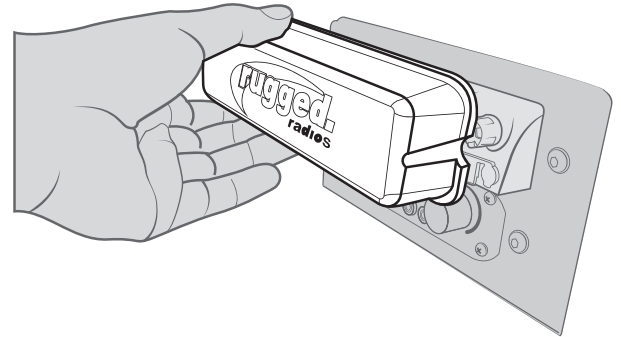


# RADIO WEATHER PROTECTION

TECH BULLETIN: **RWP.1.2**

## Mount radio in a location protected from water and moisture

- Always use a Radio Cover (P.N. RCM)



## Use P.N. SPK-SHIELD and dielectric grease

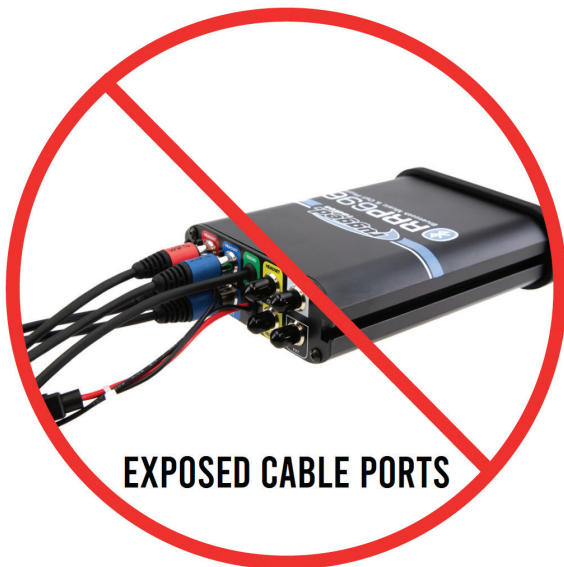
- 1 Clean speaker grill
- 2 Apply Speaker Shield decal
- 3 Fill mic and data ports with dielectric grease
- 4 Plug front and rear radio ports with P.N. PLUG-WP-RM60

All RM45 and RM60 radios purchased after April, 2020 already feature the SPK-SHIELD

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## Mount intercom in a location so rear connections are protected from water and moisture

- Use neoprene Baja Boot (P.N. BAJA-BOOT) in wet conditions to protect connections.



EXPOSED CABLE PORTS

**NO**

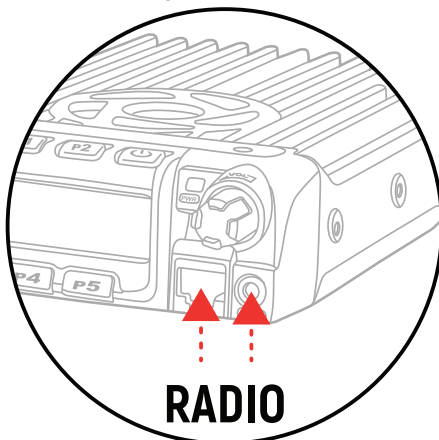


P.N. BAJA-BOOT-ICM

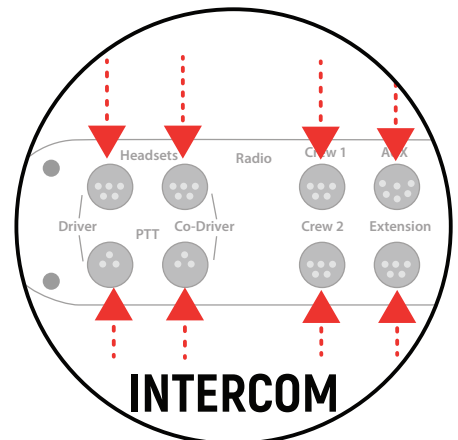
**YES**

## Use dielectric grease in radio and intercom ports.

- Dielectric grease seals out moisture to ensure good communication contacts.



**RADIO**



**INTERCOM**

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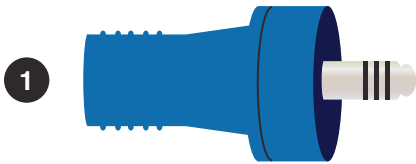


# CABLE PROTECTION

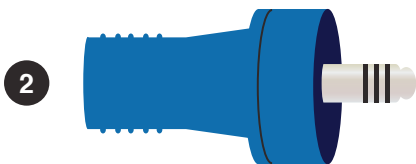
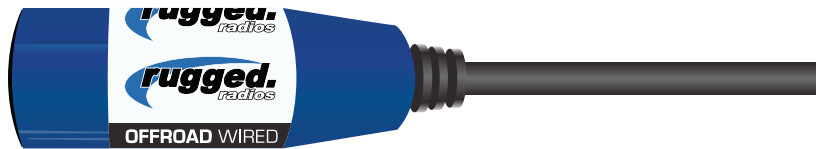
TECH BULLETIN: **PLUG.1.0**

**NOTE:** Moisture in connections can cause squealing and buzzing.

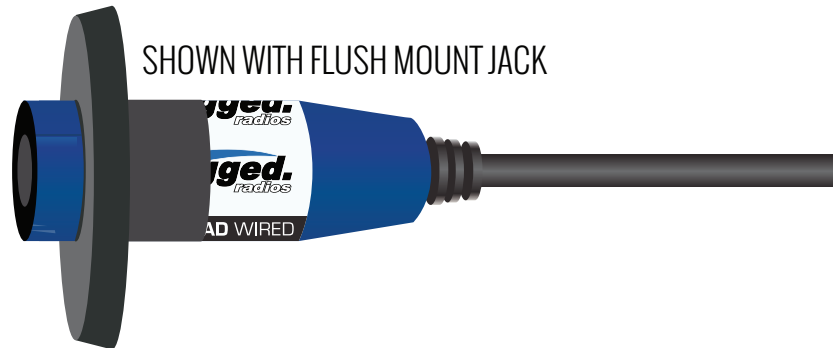
Use OFF PLUGS when cables are not in use to seal and protect connections against water intrusion.



**1**  
P.N. OFF-PLUG



**2**



SHOWN WITH FLUSH MOUNT JACK



**3**

P.N. OFF-PLUG-NW



SHOWN WITH FLUSH MOUNT JACK

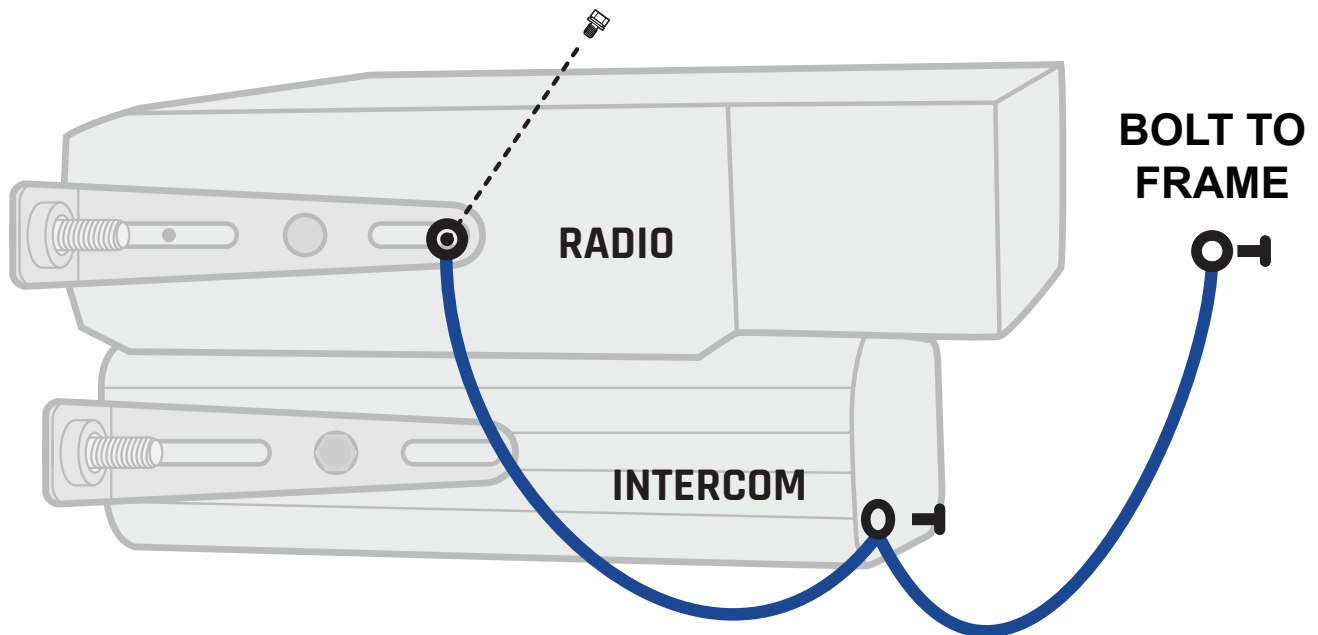
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# GROUNDING INTERCOM/RADIO

TECH BULLETIN: **GR.1.1**

Use P.N. GS-KIT to ground the intercom and radio to chassis.

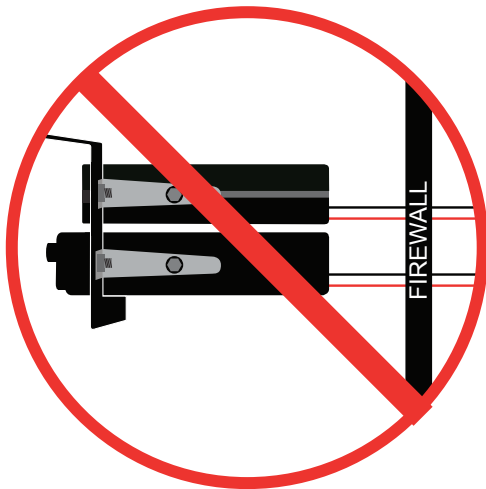


Use an existing mounting hole on the radio and ground location on rear of intercom

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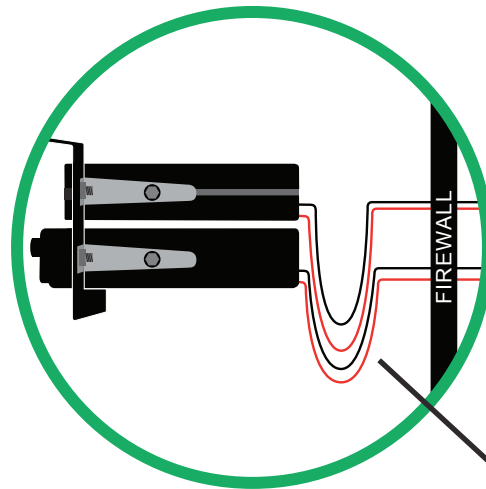
**Both radio and intercom should be mounted so all cables and connections can be easily accessed for servicing.**

- Cables should be long enough so the radio and intercom can be pulled away from their mounting locations without disconnecting (AKA: Service Loop).



**NO**

CABLES ARE DRAWN TIGHT AND THERE'S NO CABLE SLACK TO ALLOW SERVICING.

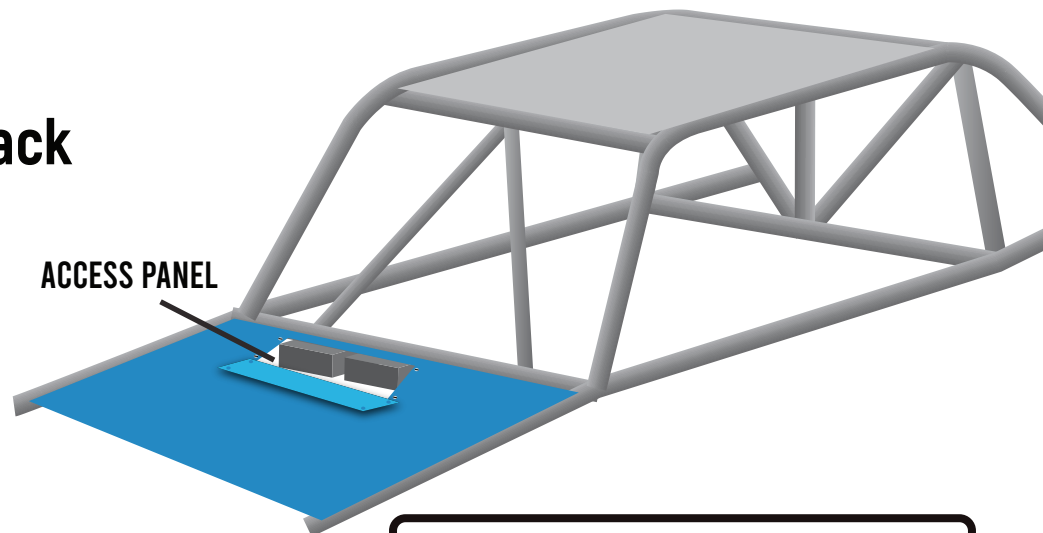


**YES**

ALL CABLES HAVE SUFFICIENT SLACK TO ALLOW SERVICING.

**Ensure access to back of radio/intercom**

- Access panel
- Room under dash



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# LOCK YOUR RADIO

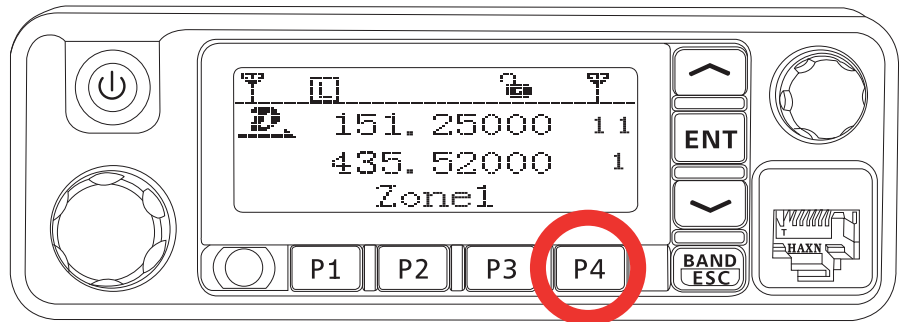
TECH BULLETIN: **LOCK.1.1**

## Radio should be locked at all times.

- Do this to prevent accidental changes.
- Volume can still be set in locked setting.
- Only unlock to change channel or settings.

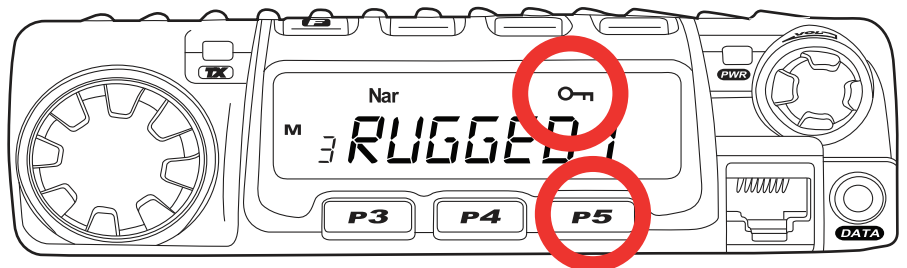
### RDM

- To lock/unlock, press and hold **P4** until display reads "Keypad Locked" or "Keypad Unlocked".



### RM60

- To lock/unlock, press and hold **P5** until lock icon appears.



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**SAVE THIS GUIDE  
FOR FUTURE REFERENCE**



**Need help? Call (888) 541-7223**

VERSION 06042021

P.N. INSTALLATION-GUIDE