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PETERBILT TRUCKS

Troubleshooting Guide For
Multiband Antenna System

Troubleshooting Part Numbers and Models

VERIFYING PETERBILT TRUCK MODEL AND MULTIBAND ANTENNA SYSTEM

<u>Truck Model</u>	<u>Antenna System Type</u>	<u>RAMI Whip P/N</u>	<u>RAMI Multiplexer P/N</u>
387 Model	Dual Whip System	MASC3AP3-42	MASC4AP3
379 & 357 Models With Cab Mount Exhaust	Dual Whip System	MASC3AP4-48	MASC4AP4 W/Bracket
379 & 357 Models With Cab Mount Exhaust	Single Whip System	MASC3AP4S-48	MASC4AP4S W/Bracket
385 & 357 Models With Out Cab Mount Exhaust	Dual Whip System	MASC3AP5-48	MASC4AP5 W/Bracket
385 & 357 Models With Out Cab Mount Exhaust	Single Whip System	MASC3AP5S-48	MASC4AP5S W/Bracket
379 Model	Dual Whip System	MASC3AP4-48	MASC4AP6
379 Model	Single Whip System	MASC3AP4S-48	MASC4AP6S
379 Model	Dual Whip System	MASC3AP5-48	MASC4AP7
379 Model	Single Whip System	MASC3AP5S-48	MASC4AP7S

Whip lengths available: 30", 36", 42" & 48"

Not all whip lengths are available for all Antenna Systems.

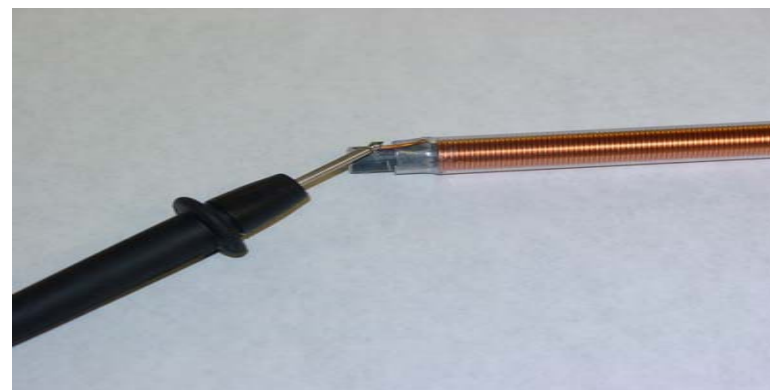
Contact R.A. Miller Industries for details.

Troubleshooting Whip

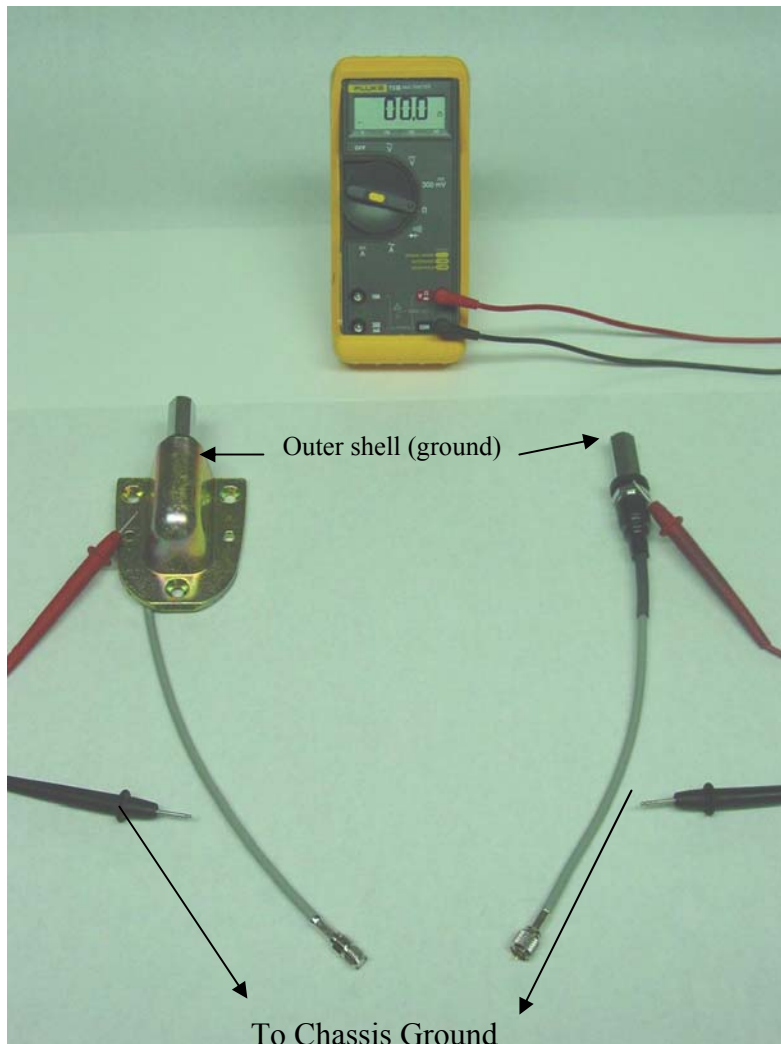
Whip Antenna:

Verify that each whip antenna has a good connection/solder joint at the ferrule end of the antenna. Remove the antenna cap and make a small cut in the heat shrink if required to expose the wire. Do not allow the wire to come out of the slot and uncoil. Using an ohmmeter, check for dc continuity from the antenna ferrule to the tip of the coiled wire at the opposite end of the antenna. While checking for continuity, flex/twist the ferrule end to check for intermittent breaks at the solder joint.

NOTE: The wire is coated with an insulating material. Before performing a continuity check, lightly sand the coiled wire end to expose a small “uncoated” portion near the tip of the antenna.



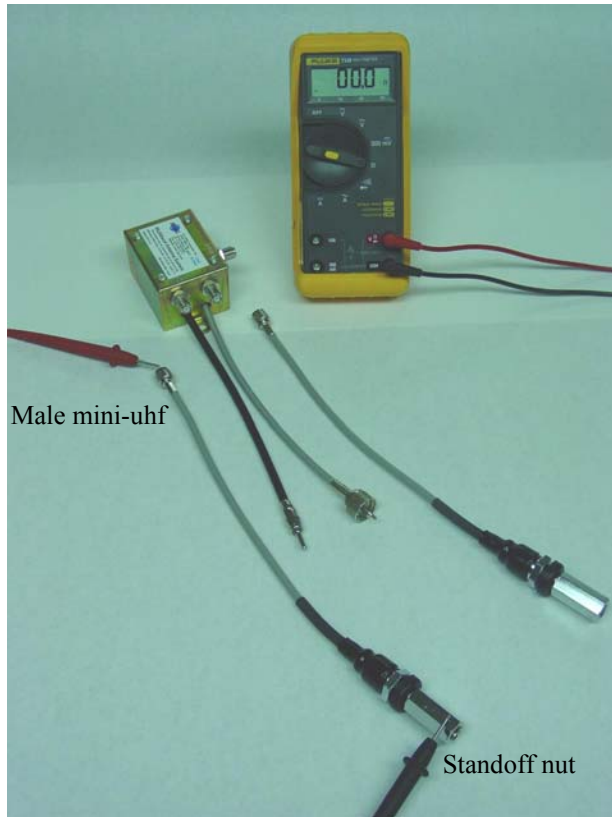
Bracket To Chassis Ground - 387 and All Other Models



With the cables disconnected at the kick panels on a 387 or disconnected at the multiplexer box on all other models Verify that the bracket assembly outer shell (ground) has dc continuity to chassis ground (less than 5 ohms). Test both sides.

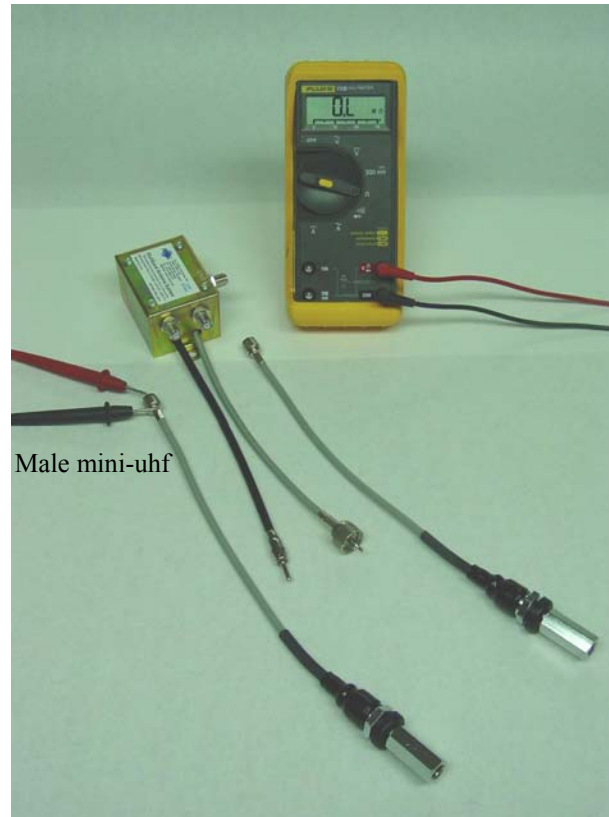
Troubleshooting Cable Assemblies (All models except 387)

Center to Center



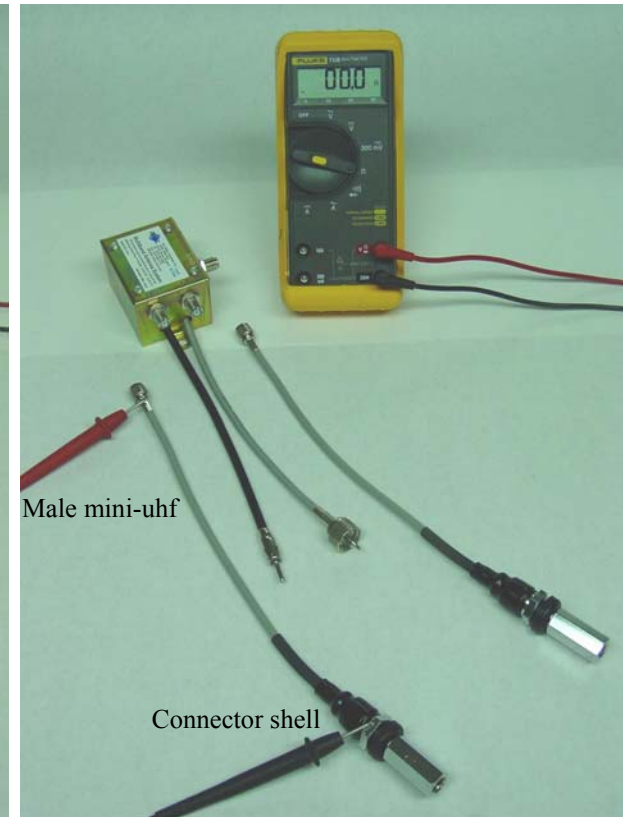
With cables disconnected from the multiplexer box Test from the center pin of the male mini-uhf connector to the standoff nut – dc continuity (test both sides)

Center to Outer



With cables disconnected from the multiplexer box Test from the center pin of the male mini-uhf connector to the outer shell of the male mini-uhf connector – no dc continuity (test both sides)

Outer to Outer



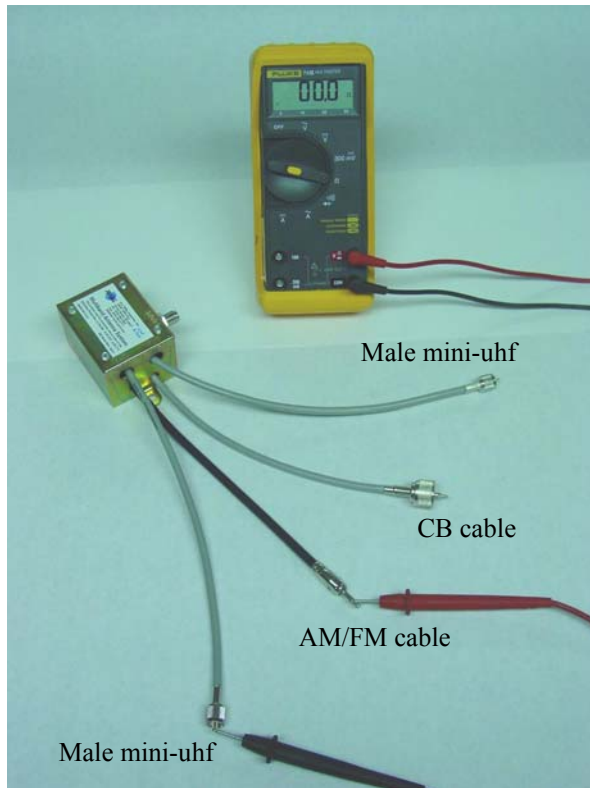
With cables disconnected from the multiplexer box Test from the outer shell of the male mini-uhf connector to the connector shell (ground portion) of the bracket mount – dc continuity (test both sides)

Troubleshooting 387 Multiplexer Box

*Testing continuity through the CB cable is no longer possible as the internal components do not provide a D.C. path. To verify continuity through the whip antenna cables, checks are made to the AM/FM Motorola connector.

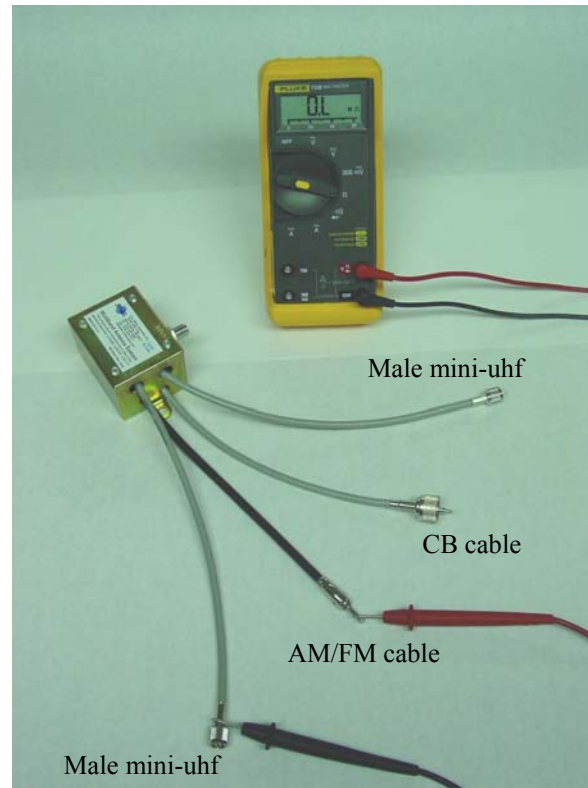
*387 Model must have a ground strap from the multiplexer box to the ground terminal on a radio.

Center to Center



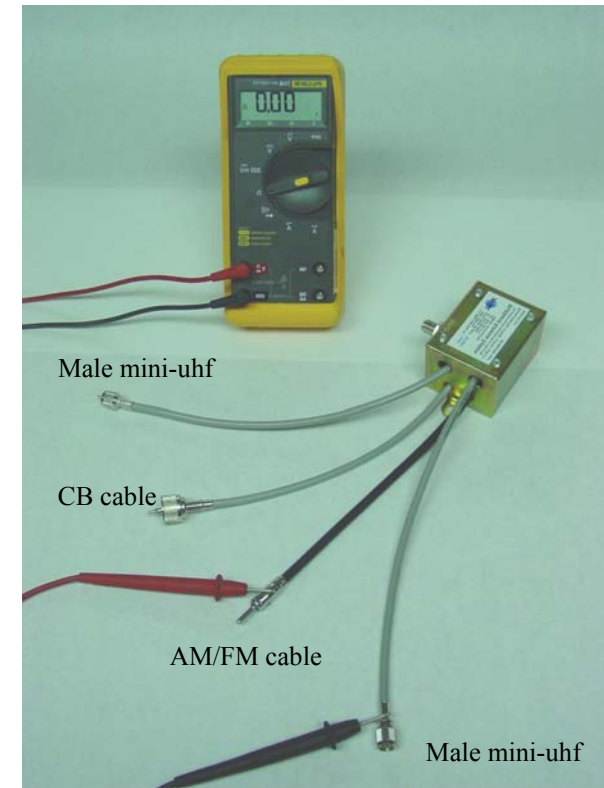
With cables disconnected at the kick panels Test from the AM/FM cable center conductor to the center pin of the male mini-uHF connector – dc continuity (test both sides)

Center to Outer



With cables disconnected at the kick panels Test from the AM/FM cable center conductor to the outer shell of the male mini-uHF connector – no dc continuity (test both sides)

Outer to Outer



With cables disconnected at the kick panels Test from the outer shell of the AM/FM cable connector to the outer shell of the male mini-uHF connector – dc continuity (test both sides)

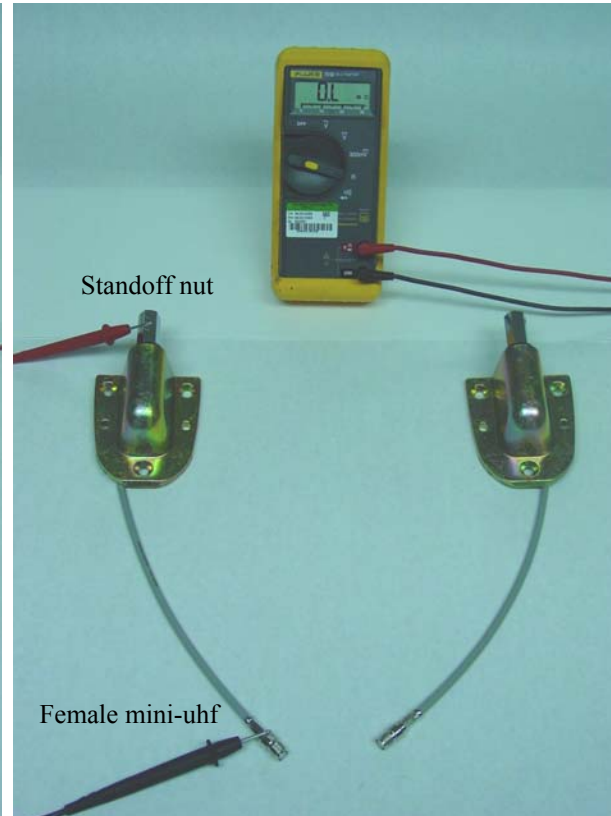
Troubleshooting 387 Bracket Assembly

Center to Center



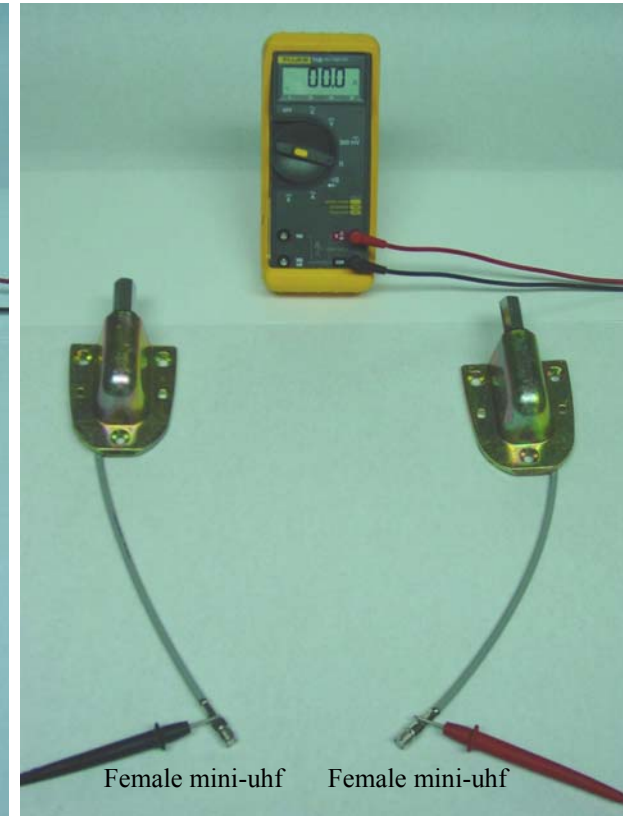
With cables disconnected at the kick panels Test from the center pin of the female mini-uhf connector to the standoff nut – dc continuity (test both bracket assemblies)

Center to Outer



With cables disconnected at the kick panels Test from the outer shell of the female mini-uhf connector to the standoff nut – no dc continuity (test both bracket assemblies)

Outer to Outer



With cables disconnected at the kick panels Test from the outer shell of the female mini-uhf connector of one bracket to the outer shell of the female mini-uhf connector of the second bracket – dc continuity