

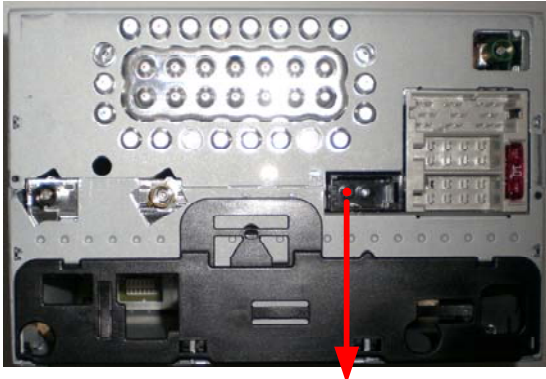


Guide for System Installation Specialists

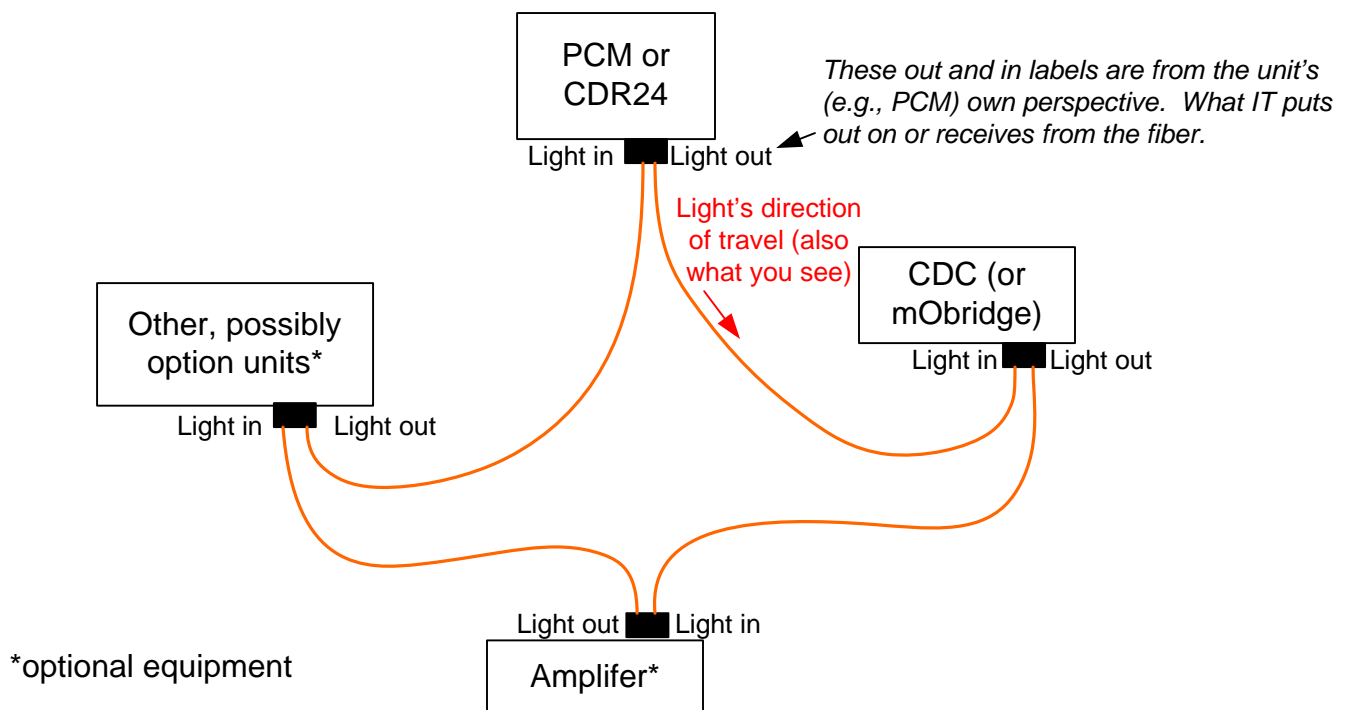
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Application:

Porsche
2003 ~ 2008,
All models, All option configurations

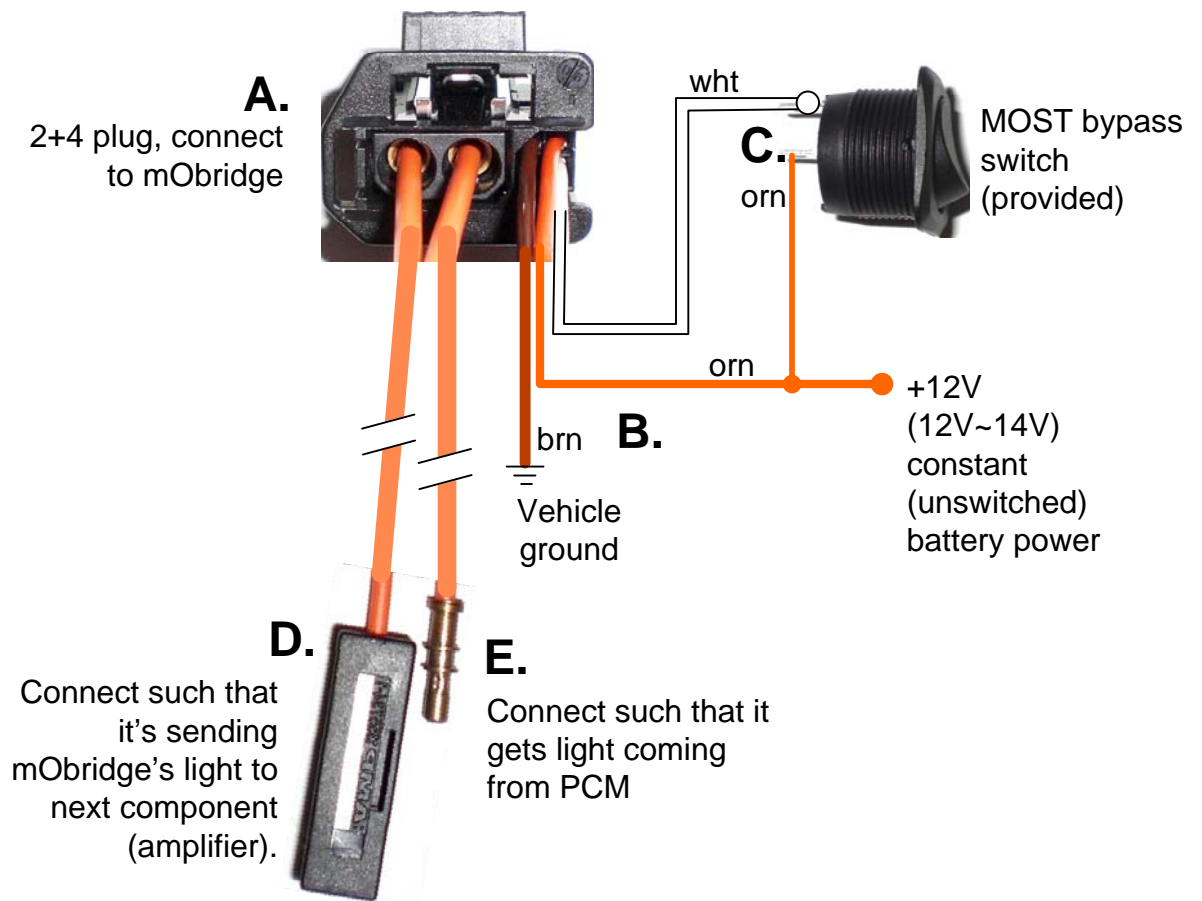
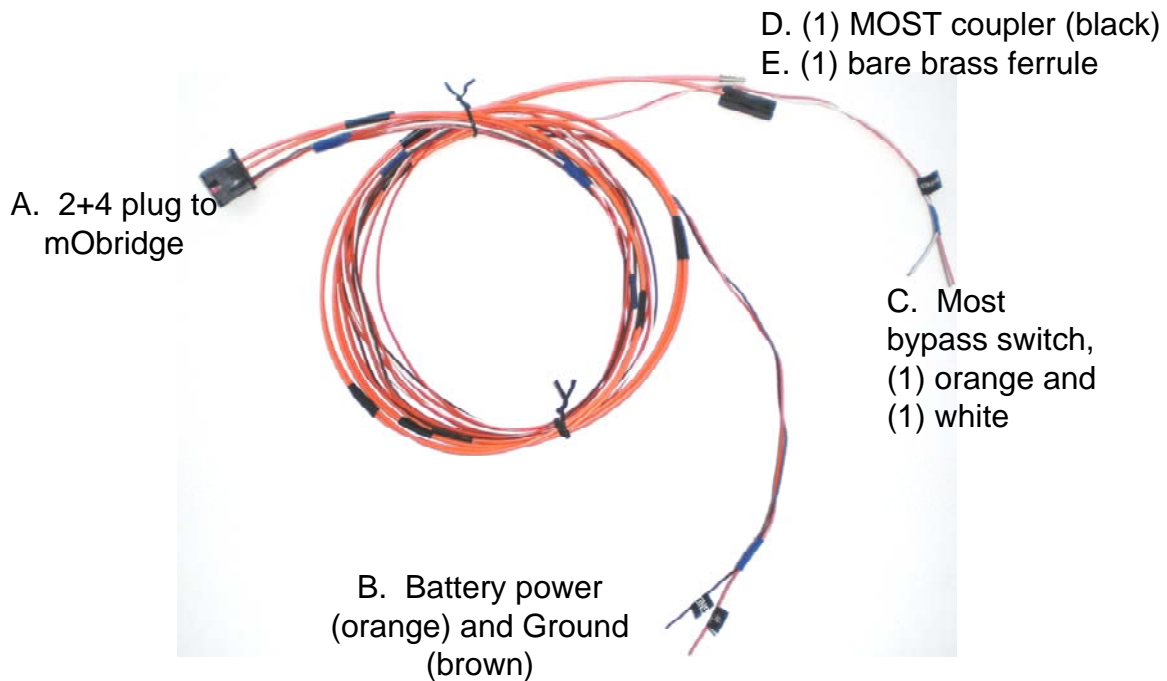


Light from the PCM or CDR24 will be seen on this side when first turning ignition on and powering up the PCM or CDR24.

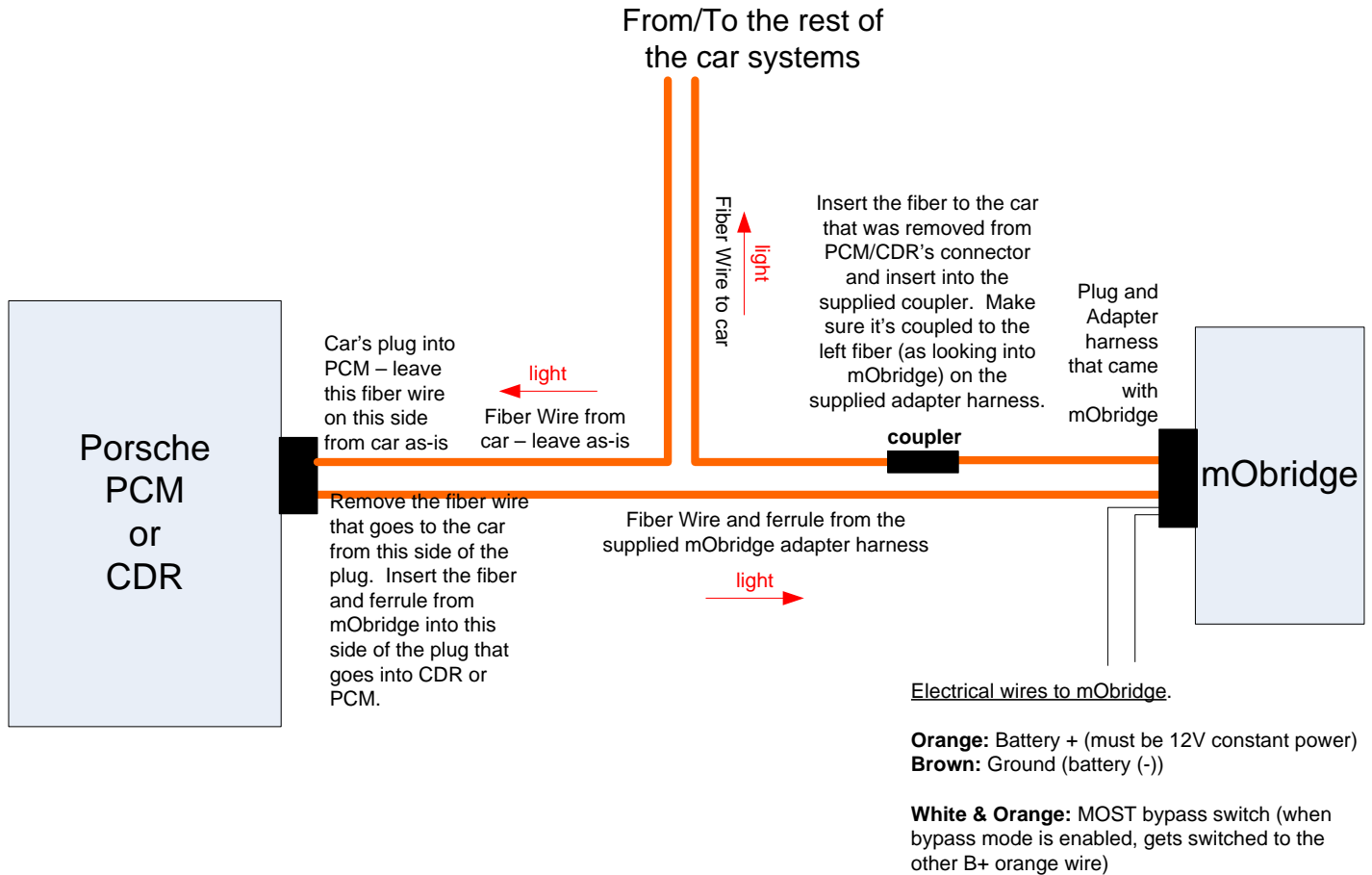


- mObridge must also have constant battery (B+ or, in European vehicles “terminal 30” power). It cannot be switched (cannot be Accessory, Ignition, or what is known as “terminal 15” or “klemme 15” power). See Next Page.
- Other units like PCM are more complex and obviously have other inputs and outputs that may or may not include switched power.
- In order to observe proper startup sequencing and timing, a MOST unit must at least have a constant power input, in general. mObridge has a single constant power input, a Ground (also known as “terminal 31”, or chassis ground)

mObridge PSHA-2010-CBL, standard Porsche adapter harness



Typical mObridge in-Cabin (under dash or in glove compartment) Vehicle Installation in Porsche.



It is recommended that the mObridge unit be mounted in an accessible area. This is to provide convenient access for software upgrades using mObridge's built-in SD cardslot (see publication: *Updating mObridge's Software*).

For other installation tips, such as in: Cayenne Rear (factory CDC location), or under the front hood (near amplifier or factory CDC location) of 997 or Boxster/Cayman, please email mObridge at: support@mobridge-usa.com

Important Tips for Connecting, Starting Up, Testing mObridge



Some important points to remember:

- 1. mObridge must be supplied with constant (fused) battery power (B+).** Again, mObridge must have constant B+ (battery) power to the orange power line. This is common to any units on the MOST optical network for proper timing and operation. It is essential that the B+ power source to mObridge is fused. Failure to fuse the power source to mObridge may result in damage to the unit in event of failure such as vehicle wiring shorts, and will result in voiding of the mObridge warranty.
- 2. mObridge sleeps with the car when Ignition OFF and stops charging iPod.** mObridge will “go to sleep” (dormant) along with the rest of the car when ignition is turned off, doors are closed, and there is no other activity in the vehicle (like other ECUs in the vehicle). mObridge will stop charging the iPod® shortly after the vehicle is turned off and goes to sleep.
- 3. Proper recovery of MOST system after power or optical interruption.** Whenever the MOST network has been operated on, disconnected, reconnected, or power removed or reconnected to mObridge, it is ESSENTIAL to turn the vehicle OFF, with no activity (no doors, electronic operation by the technician or user) for up to 10 minutes to allow the entire vehicle to settle. This will allow the MOST network to reinitialize freshly from Ignition ON, which is essential to ensure proper operation of the Porsche MOST bus network and ECUs, including mObridge.
- 4. Proper recovery of MOST system and mObridge operation after using bypass (switch) mode.** The same point as #3 applies for using mObridge’s supplied bypass switch. mObridge will silently pass all MOST network traffic through mObridge (as if mObridge were not even present, or “invisible”) when the bypass switch is in the ON (switch closed, bridging the orange and white bypass switch wires) position. However, when switching bypass mode OFF (mObridge again operable), it is essential to let the entire vehicle go to sleep in order for the entire system to reinitialize and properly include mObridge in its “community” again, restoring mObridge operation.
- 5. iPod with bad or very discharged battery.** As part of iPod’s normal operation (not mObridge), iPod will not communicate with less than 10% battery charge. If iPod’s battery capacity is less than 10%, upon startup of the car system and mObridge, the iPod may remain inoperable (or at least not communicating with mObridge) for as long as it takes to reach 10% state of charge. If the iPod is defective or has a bad or very weak battery, this could be indefinite. **It is important to note the condition and state of charge of an iPod when assessing the operation of the system.**

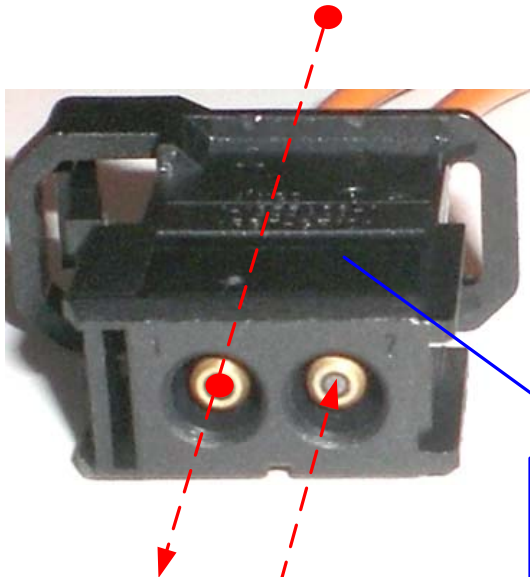
Blown-Up View of mObridge's Vehicle Optical and Electrical Connector



Looking at a 2-position or a 2+4 connector, you should observe light this way when ignition is turned on, or the system is operating normally and the plug is disconnected from an ECU on the MOST optical network.

Porsche PCM, CDR, CDC, etc viewpoint
(units with 2-position connector)

Light
(e.g., at CDC, coming from PCM. Or,
at PCM/CDR, coming from amplifier)

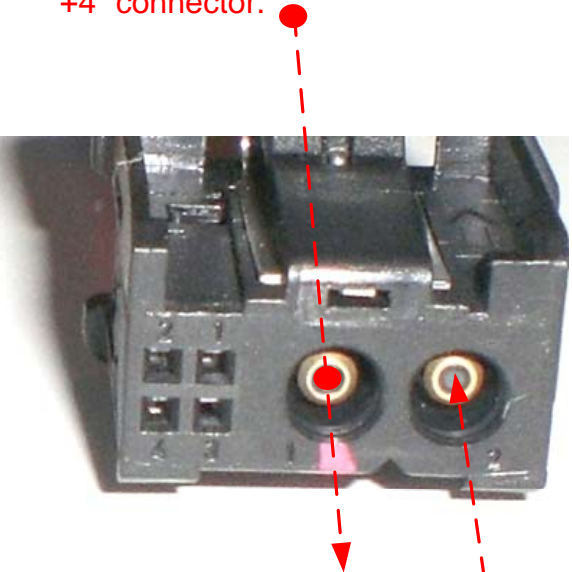


Light output from
this ECU (amplifier,
CDC, PCM, etc)

You'll also
see arrows
on the
connectors
indicating
direction of
light travel.

mObridge 2+4 viewpoint

Same thing at mObridge
connector, simply adds a
"+4" connector.



Light out from mObridge.
(You won't see it coming
out from mObridge's
connector with this plug
disconnected because
units must be powered for
their active optical
transceivers to even pass
light).

Porsche PCM Rear View (CDR similar)



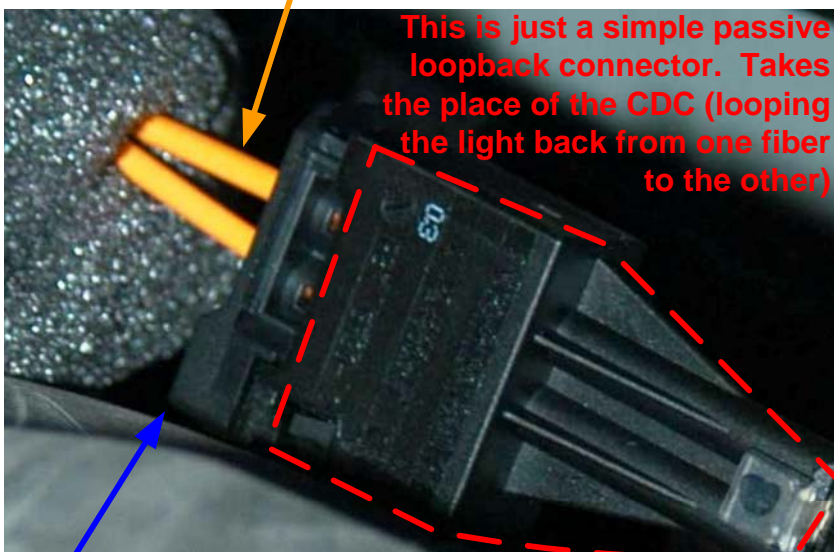
Miscellaneous Details for Assembly and Disassembly of MOST fiber and Connector Parts

Cayenne Rear Install, when no factory CDC was equipped

The two optical fibers typical at every component in the MOST bus optical ring. One for light coming in, one for light going out.

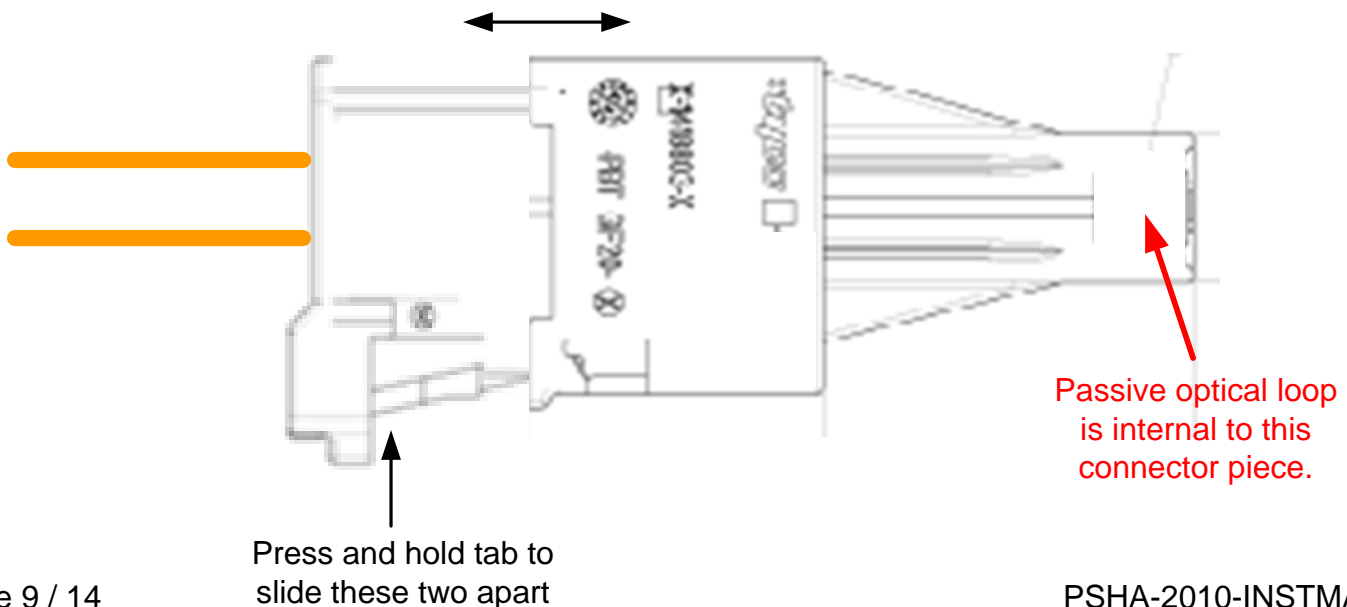
2. Observe light.

Looking at this connector and turning ignition ON (may require an assistant as in some cases the light will go OFF when the ring is detected disconnected for more than a few seconds), the one you see with **red light** is the **light coming IN**. The other one (not lit) is for light going **OUT** to next component, which in Cayenne is the audio amp.



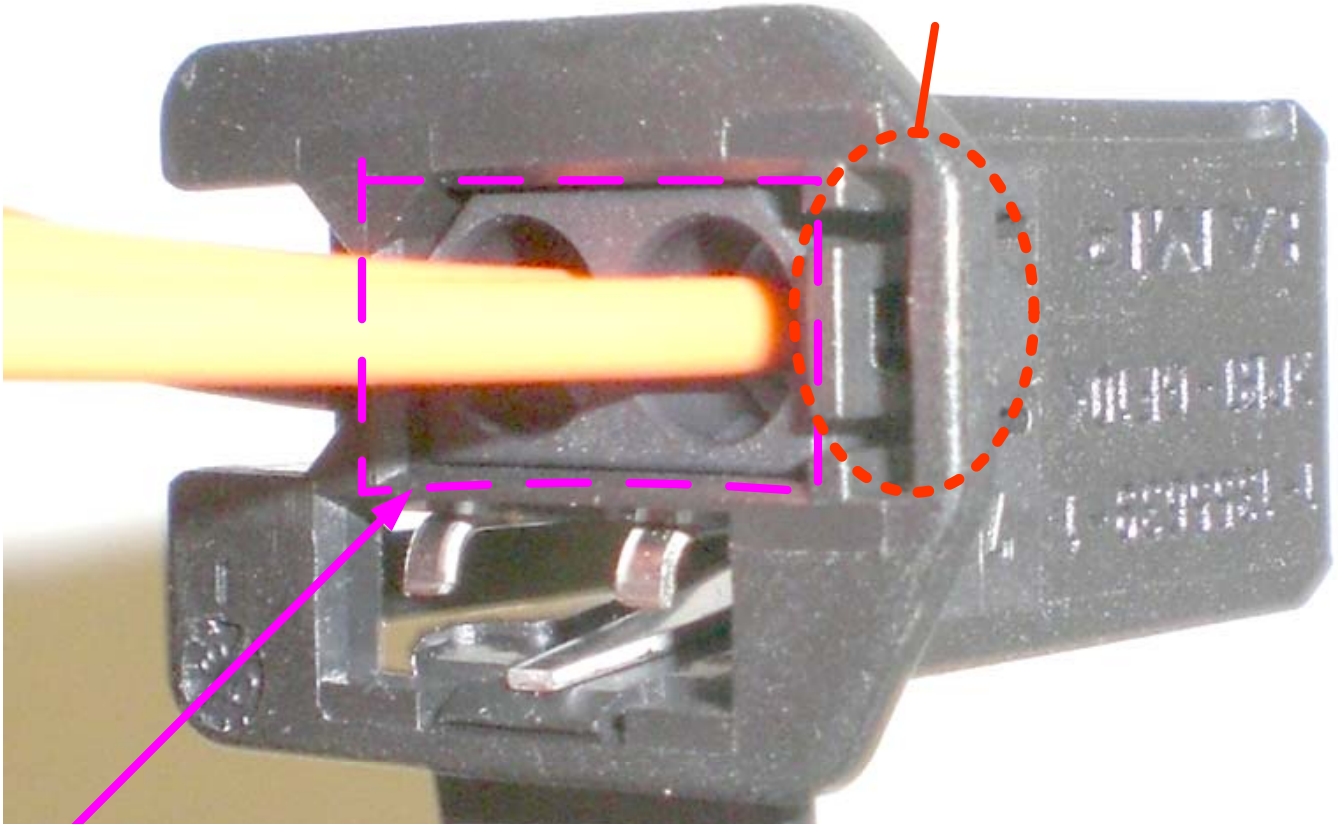
1. Press and hold this tab here to slide these two apart.

The side you'll be dealing with is the one with the two orange optical fibers in it. Never bend the optical fibers at acute angles or it may damage the fiber such that it would no longer pass light and therefore require further repair or replacement.



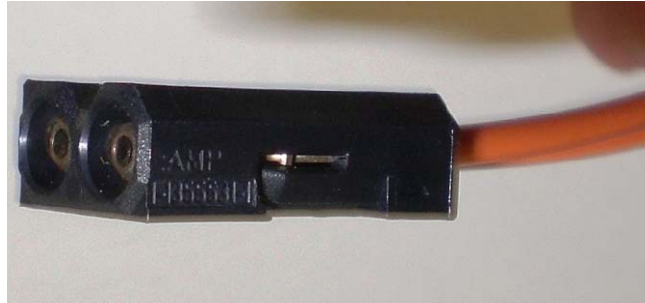
Miscellaneous Details for Assembly and Disassembly of MOST fiber and Connector Parts

Lift **gently** with on this small tab with a small pick or screwdriver and the insert will slide right out. Take care not to bend the tab.

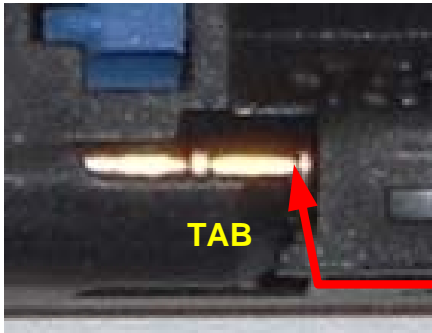


This is actually an insert that holds the 2 fibers. It's the same insert part whether the 2-position CDC-type connector or the 2+4 connector.

Miscellaneous Details for Assembly and Disassembly of MOST fiber and Connector Parts

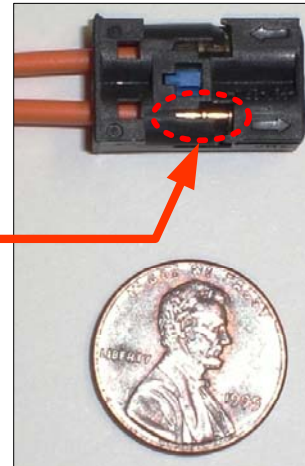


2-position fiber insert as removed from Porsche CDC 2-position type shell or 2+4 shell common with mObridge, BMW, and others.
AMP/Tyco Part no. 1-1355531-1.

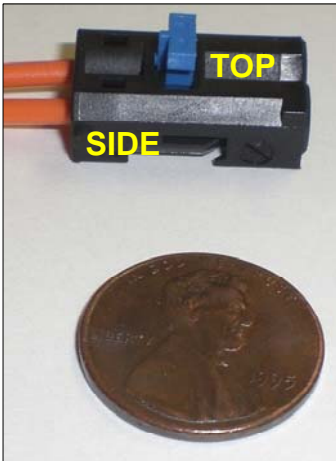


After pushing blue latch out, these small tabs hold the fiber in place pry very gently to remove the fiber. Actually on the end of each fiber is a ferrule, in this case brass which you can see faintly.

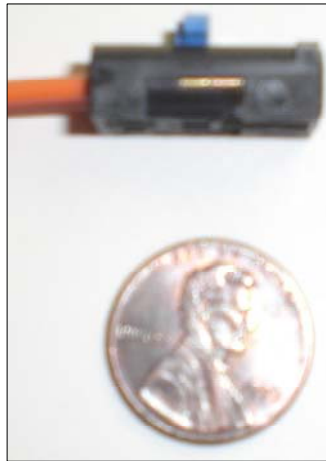
Bottom – first push out blue latch



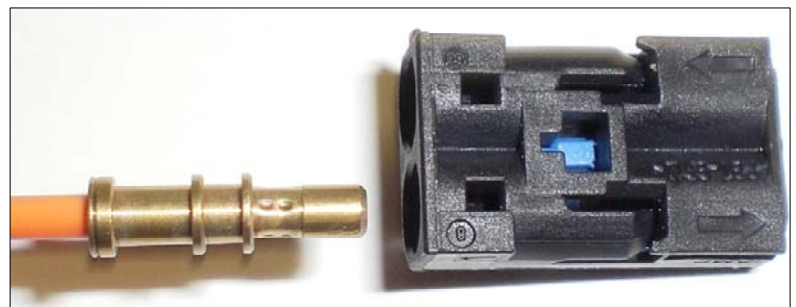
Top perspective



Side



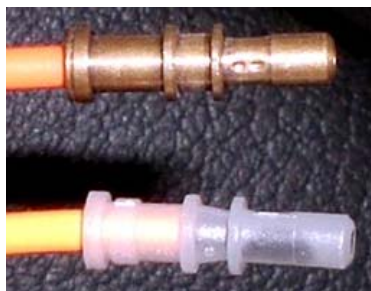
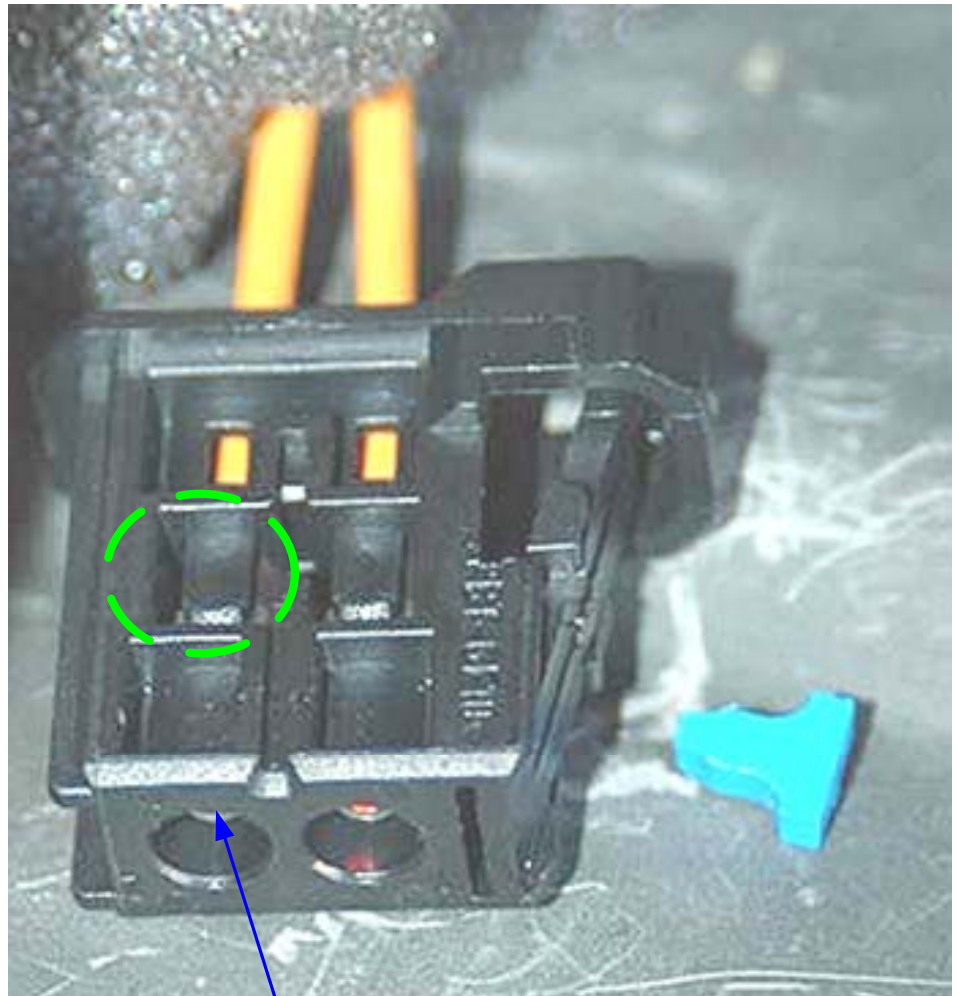
Fiber with ferrule removed



Appendix. 2-position plug, integral (no insert) type.

Some vehicles (noticed particularly in Porsche Cayenne at CDC location) have this one-piece integral AMP/Tyco connector. The only difference from the 2-position connector shown previously is that there is no insert inside the housing. The fibers are secured by the housing itself, both a similar blue latch (which must be first pushed out) and also the tabs molded into the housing.

TABS.
Gently pry
up with pick
or tiny
screwdriver
to finally
release fiber.
Slide fiber
out gently.



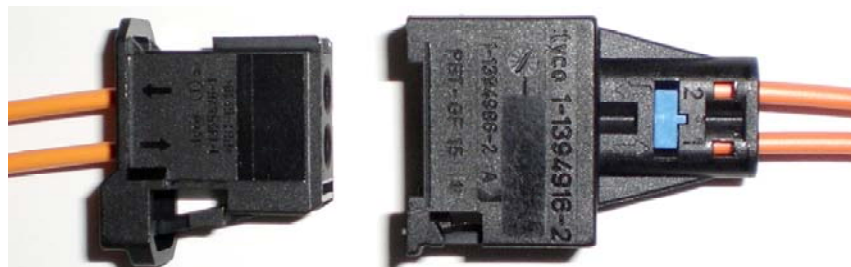
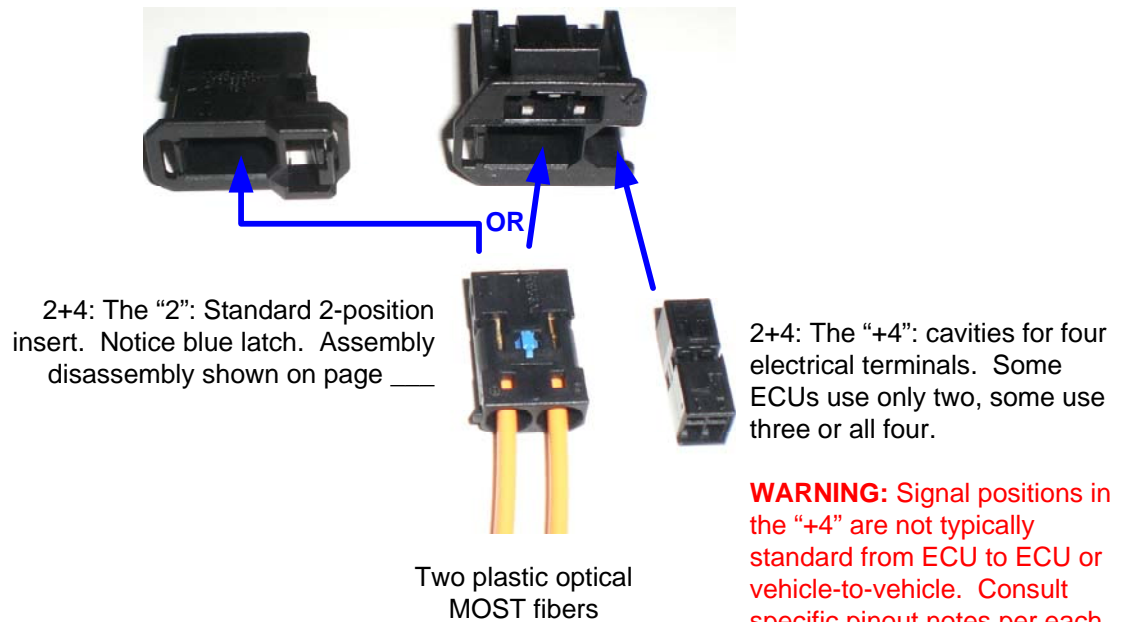
- This type of connector is typically found in Porsche and other applications and the ferrules on the end of the fibers will be more often clear plastic and, less often, black plastic.
- The clear plastic and brass ferrules are virtually interchangeable (they will snap in and out of the different connector types interchangeably).

Appendix: Miscellaneous MOST System Connector Identification and Assembly

Typical MOST Connectors into ECUs

Standard 2-position plug housing with insert
(similar part exists no insert, latching for
fibers integral to housing)

2+4 Plug. 2 fiber (on
insert) and 4 electrical.



Another view of **standard 2-position connector** (insert type) matched up to special female socket on the right. This or the integral type go into Porsche PCM and also CDC.

2-position female socket. This female socket, featured on special-order adapter harness such as mObridge Part No. PSHA-2010-CBL-B accepts the 2-position plugs. In certain installations (e.g., Porsche Cayenne at rear CDC location), the CDC (or substitute passive loop connector) can be removed and plugged in, to adapt to aftermarket units such as mObridge, which features a 2+4 connector as shown above.

The install location is key to selecting the right installation kit, that has all the right parts for your vehicle model, equipment, and install location.

Appendix:
Miscellaneous MOST System Connector Identification and Replacement
Parts Available from mObridge.

