



Lubecore Technical Announcement

ACCEPTABLE POWER SOURCES FOR LUBECORE ALS ELECTRICAL CONNECTIONS

It is important when installing Lubecore aftermarket accessories a **PROPER** power and ground source is located on the piece of equipment to ensure the safe operation and function of any Lubecore product. Improper power and ground connections can result in the failure of the product thus causing costly repairs or damage to the equipment. Please note that in some cases an improper wiring job can lead to a fire or damage to the machines computer/electronics system. If there has to be wires that have to be cut or spliced it is important that this is agreed upon with the manufacturer or dealer. Please note that when in doubt the most common and preferred place to find a “clean” power source is on the back of the key whether it be 12 or 24 V. Proper grounds can either be found on a ground stud or on a bracket near the key. Here are some common places in various equipment that are preferred power and ground sources.

TRANSPORT TRUCKS

Peterbilt

- On all models remove trim around gauge packages. Remove speedometer/tach cluster (4 Phillips) screws.
- Behind the cluster is a relay/expansion panel this is where the proper connection will be found.
- On the driver's side in the bottom left corner by the floor is the fuse panel. Remove the door on the back of the door/panel it will tell you the proper expansion jack that will be used to get proper power. I.e. expansion A5 slot F45. This means to power up expansion A5 you have to insert our fuse into fuse port F45 and you will have a clean power and ground on expansion port A5
- Determine which expansion port will provide an ignition source and battery source (on the back of fuse panel door)
- Insert fuse into the proper position in the fuse panel (back of fuse door)
- Make connections from (part# 13.047) harness ignition, battery and ground to marked wire on pigtail.
- Insert pig tail into proper expansion port. The unit is now properly wired

Peterbilt 579

- Remove the dash trim panel/kick panel underneath the steering wheel
- Remove the fuse panel located in the bottom corner on the drivers' side
- Underneath the physical fuse panel there will be a bundle of wires find the white 6 pin plug.
- Each wire on this plug will be clearly labelled accessory, battery, ignition etc.
- Place fuse in position M7 this will power up the ignition wire
- Located near the fuse panel against the firewall there will be a ground stud that can be used for your ground.

Mack

- On the top of the dash in the center is panel
- Remove the three screws that hold the panel in place (torx head)
- Inside is the fuse panel
- Alongside the front of the panel is a row of studs this is where a proper ignition, battery and ground can be found
- Each stud is clearly marked
- Use blue ring connectors (part# 13.017) to connect the wires.
- The unit is now properly wired.

Freightliner Cascadia/B-class

- Remove trim panels around dash clusters
- Remove heater controls/accessory buttons in the center portion of the dash
- Inside the dash on the firewall there are several banks of connectors clipped to the firewall
- One will be marked ignition (pink) one will be marked battery (red?) and the other will be marked ground (black)
- Unclip both from the fire wall
- Wire the (part# 13.047) harness into the expansion blocks fusing battery and ignition wires.
- On the wire ends use (part# 12.006) this connector will work in these blocks.
- Connect wires the unit is now properly powered
- Alternatively you can use a fuse box located in the engine compartment located on the firewall. This will provide the battery and ignition connection.
- F5 will provide the battery source and F8 will provide the Ignition source the wires will need to be fused.

Freightliner "Classic"

- Remove panel that houses key switch (4 Phillips screws)
- Battery and Ignition can be found on the back of the key
- Remove speedometer/tach cluster (4 Phillips screws)
- Behind cluster is a support brace with bolts in it they can be used as a ground. Also on the back of the gauges there are studs that can be used as a ground as well
- Use ring connectors, (part# 12.006) to make the connections on the (part# 13.047) harness
- Connect the wires the unit is now properly wired

Volvo

- Slide the cup holders out located in the center of the dash
- Remove the two screws located behind the cup holders (torx head)
- Lift panel up. This will give you access to the fuse panel.
- On the back of the fuse panel cover there is a diagram of the fuse panel
- Below the diagram there is a list of the fuse locations and their purpose. There is also a listing of the expansion ports and their designation battery, ignition or accessory.
- Locate the proper expansion ports that will provide ignition and battery.
- It will state eg.B1-5 - F61 this means to power up expansion port B1-5 place a fuse in spot F61

- Once you have inserted the fuse in the correct position test the expansion port for power the other position will be the ground.
- Wire (part# 13.047) harness with 3 male spade connections (part# 13.058) to the appropriate expansion positions.
- Connect accordingly the unit is now properly wired

Kenworth

- Remove trim panel around gauge cluster
- Remove speedometer/tach cluster (4 Phillips screws)
- Behind cluster to the left of the speedo/tach cluster is a bundle of wires this is where the ignition and battery source will be found, the ground source will be here as well.
- There will be a white wire marked spare ground with three female bullet connectors attached to it this is the ground source.
- In the bundle of wires there will be several wires marked spare ign. A,B, and C
- Remove fuse panel door located in the bottom left corner on the driver's side by the floor
- On the back of the door is an explanation of the fuse box
- You will need two ATO fuses for this fuse panel
- Locate the fuse location for the selected battery and ignition wire that will be used.
- Insert fuses into proper location the corresponding wire is now powered up
- Using blue butt connectors (part# 13.057) connect wires to proper battery and ignition wires that have been powered up.
- Using a male bullet connector (part# 13.076) connect the ground wire to the Kenworth plug.
- The unit is now properly wired

International

- On the passenger side of the unit is a panel that can be clipped off
- Behind this panel is the fuse panel
- Spot F7-G is the proper location to get an ignition source from.
- Remove orange "lock" clip in the top of the bank of fuses
- Attach connector (no p/n yet - just received from International)
- Connect into F7-G slot.
- Secure lock back into place
- Insert fuse
- Attach ring connector (part# 12.006) to ground wire.
- Using self-tapping screw drill into dash support located under fuse panel
- The machine is properly wired

*Please note the F7-G spot sometimes may not be available if this is the case check the back of the cover to find an appropriate space for a power source.

Western Star

- In the center of the dash is the key switch at the very bottom of the panel. The back of the key will be your ignition source
- If you look under the dash below the key you can clearly see studs on the key switch
- Locate the ignition terminal and hook up your wire to the proper stud fuse the wire accordingly.

- Your ground will be located on your stud for the interior light beside the key switch, sometimes this will not be a good enough ground you will have to test it
- If the ground is not sufficient there is a ground stud located on the driver's side firewall almost directly under the steering column
- The truck is now properly wired
- ALTERNATE power source is located in the fuse panel
- The fuse panel can be accessed from the passenger side of the truck
- Beside the glove compartment is a panel with four torx screws holding it in place
- Remove the panel
- On the right side there are fuses the bottom two rows of fuses are empty you will be able to find power here.
- On the left side is more fuses and relays there is a relay that is attached to the frame of the dash enclosure with a small bolt. This can act as a proper ground source as well.

Spartan, Thibault, E-ONE and other pumper/aerial style fire trucks

- On the top of the dash in the center is a panel with two latches. Flip these up to open them.
- Once the panel is opened it will reveal all the internal wiring for the cab including the fuse panels
- There will be a bundle of wires that will be all spare connection points
- You will need to find one that's marked spare IGN (pink), spare BAT (red) and another one marked common ground (black)
- You will not have to insert any fuses these wires will already be live
- Using butt connectors (part# 13.057) wire up the (part# 13.047) harness accordingly to the proper wires making sure to use the in-line fuse provided for a fused power source
- ***Please note that all fire trucks are individually custom wired so the bundle of wires with the proper power and ground sources may not be in the same place in each truck, they will however be within that wiring in the center of the dash

OFF-ROAD/HEAVY EQUIPMENT

CATERPILLAR-ALL MODELS

- Locate fuse panel, behind seat on the right or left (generally left-loaders and right excavators and other equip)
- Remove fuse panel (4 torx bolts)
- On the back of the fuse panel is a stud (purple wire) is attached this is the ignition source.
- There should be a second wire connected to the back of the fuse panel that will be the battery source.
- Around the fuse panel will be an appropriate bolt or a proper ground stud to be used for ground
- Using these tips the proper connections will be made and the machine will be wired correctly

JOHN DEERE LOADERS

- On the right side of the unit open the door. On the bottom side of the joystick console there is a door secure by four Philips screws.
- Remove the panel
- Behind panel is all the wiring for the console.

- On the back wall of the compartment to the left is a solenoid.
- Test the solenoid to find ignition and battery.
- To the left of that there will be a ground stud
- Wire up the harness with the proper connectors and fuses
- The unit will now be wired correctly

JOHN DEERE EXCAVATORS

- On the back driver's side of the unit there is a service door to access the engine
- The batteries are located here above the batteries there is a panel that is covered
- Remove the panel, behind the panel is a solenoid
- You will find a proper power source battery and ignition on the solenoid
- One of the bolts that are present can be used as a proper ground.
- Once these connections are made the unit is wired correctly

VOLVO LOADERS

- I would like some feedback on these do we need to use a relay to do this properly?

VOLVO EXCAVATORS

- Above the toolbox/battery box on the passenger side of the unit there is a panel with four bolts holding it in place
- Remove the bolts behind this panel are the starter solenoids a clean 24 V ignition and battery source can be found here.

KOMATSU LOADERS

- To the right of the driver's seat is the panel that houses the key switch
- Remove the panel
- The back of the key is studded
- You should be able to get battery and ignition from here.
- Inside the same compartment you will be able to find a body bolt or stud to use for ground.
- Once the proper connections have been made the machine will be wired correctly

CASE LOADERS

- Refer to John Deere Loaders.