

# 100 Amp Alternator Instructions

PCM GT-40 (EFI)

1997 Ski Nautique Example

# Instructions

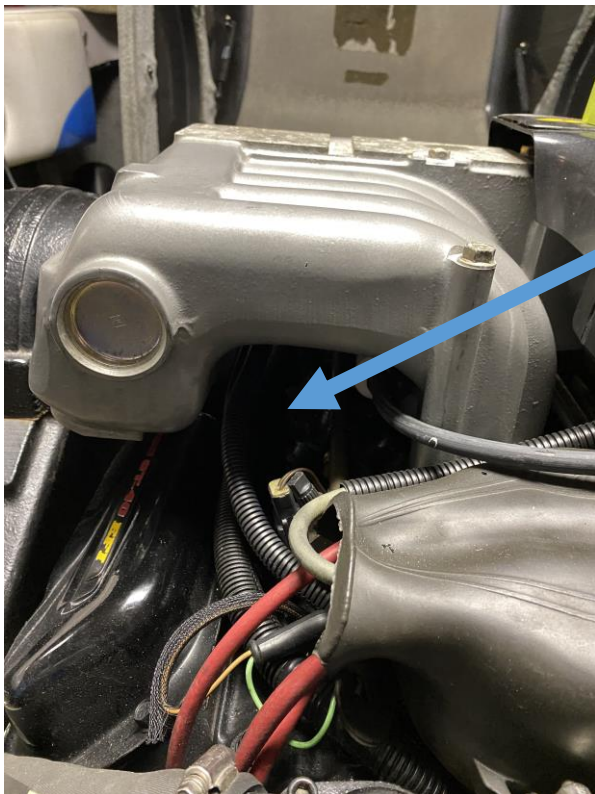
- Disconnect Battery
- Remove old alternator
  - Loosen slide support bracket on front left of the engine. Remove the belt from the alternator
  - Then remove 2 bolts on top and bottom of old alternator. Pull old unit out and flip over.
  - Disconnect Orange, Green & Black (ground) wires from old alternator. Then tie the orange & black together with electrical tape and/or zap strap. You don't need to cut them off. They are now inactive and can get pushed out of the way. Keep the green, you will need to connect that to the new green pigtail later.
- Switch out the belt pulleys: The black belt pulley on the new alternator is not compatible with your existing PCM alternator belt. So you have to install your old pulley on the new alternator. Remove the center bolts of each and switch pulleys out. The use of a pneumatic impact wrench is helpful for this especially on the new alternator. You may need to pick up a new washer to space the old pulley from the new alternator so it won't rub. Otherwise, it fits perfectly on the new alternator post.

# Instructions

- Remove the old orange wire from the 60 amp circuit breaker. It is located on the back side of the engine with other fuse connections. Once removed, wrap the end with electrical tape and leave it off the breaker post. This orange wire is now inactive on both ends.
- Install the new Red power cable: Connect it to the Red power wire on your starter on the bottom starboard side of the engine. The 100amp breaker should be at the starter end of the wire that gets connected there. Then fish this cable up and over the top of the engine, then neatly among the existing wires where the alternator gap is.
- Install the new ground wire: This is the new black cable. It connects to a bolt that is about 2" above the starter. This bolt is found on the back starboard side of the engine that is attached to the bell housing. It has other black wires on it. Unbolt that and connect it on top of the other wires and bolt it back in. Your ground is now connected and you can again fish that cable next to the new Red cable into the alternator gap.

# Instructions

- Connect the alternator wires:
    - Connect the black ground cable first to the smaller post on bottom side of the alternator. Use the small lock nut included to tighten it
    - Next install the red power cable to the larger bolt on the back of Alternator
    - Next install the red pigtail on top of the red power cable on that large bolt and then use the large locking nut included to tighten both wires to that terminal.
    - Then connect the green pig tail to the old green wire. Start by stripping the old green wire and butt splice this into the new pig tail and pinch them together. Apply heat to seal the connection.
    - Then plug that green/red pigtail into the plug space on the side of the new alternator
  - Mount the new alternator: This fits perfectly back into the existing alternator mount. Connect at bottom.
  - Re-connect alternator belt to the new pulley and adjust/tighten the support bracket that mounts to top of new alternator.
  - Tidy up wires. You can use a few zap straps to keep them together. Make sure they are not on any engine part that could melt them.
  - Reconnect battery, water source and start boat. Volt meter should now be at 14
- If you encounter any problems or have questions, please contact us



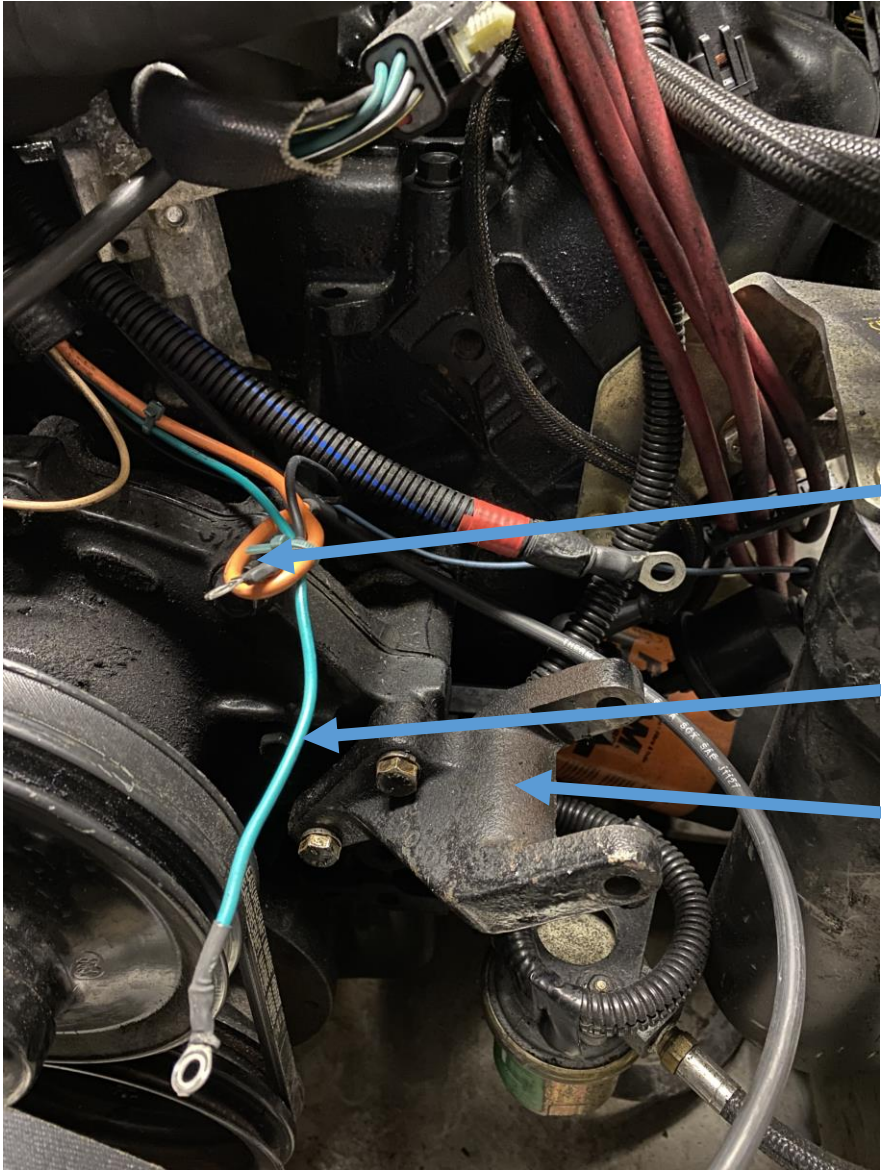
Fish Red and Black wires over engine from the back side through here with other wires



Fasten new red wire to Starter on lower starboard side



Connect new black wire to ground bolt on back side of engine on top of the bell housing



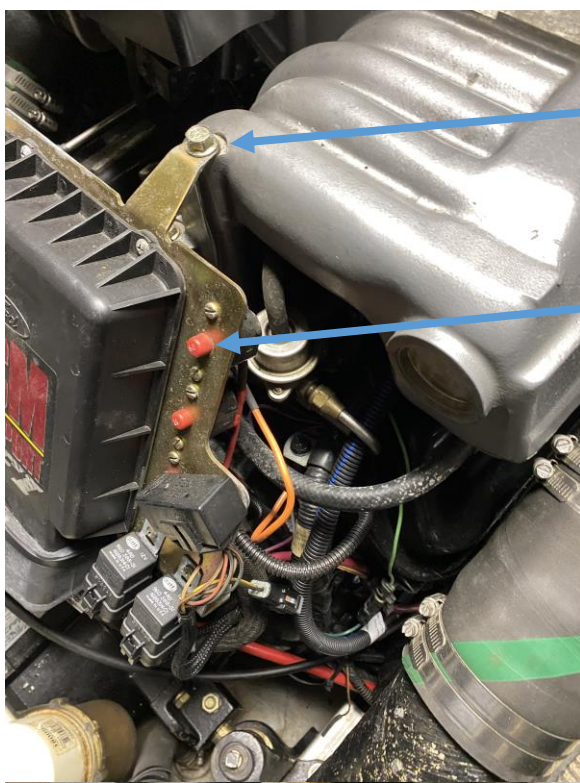
Alternator cavity with old unit removed. New Red and Ground Fished in.

Old wires removed and tied together.

Old Green left exposed to splice into new Green pigtail.

Alternator mounting bracket bolts to bottom of unit





Loosening this bolt is helpful to access the back panel

60 amp breaker is here.



Disconnect Orange Wire From 60amp breaker on back and tape up



Cutting old green wire

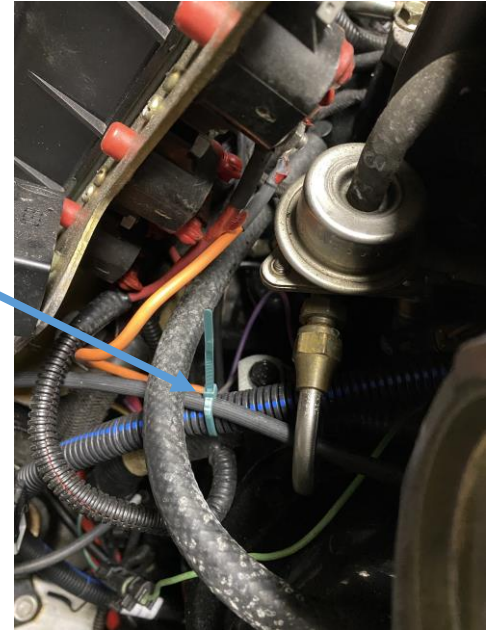
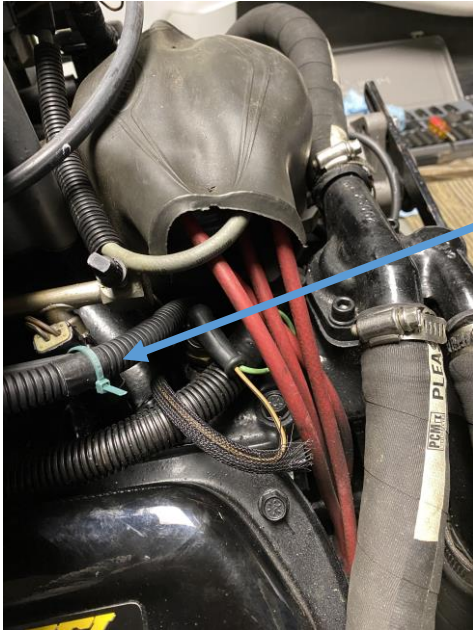
Butt Splice old green wire to  
new green pig tail

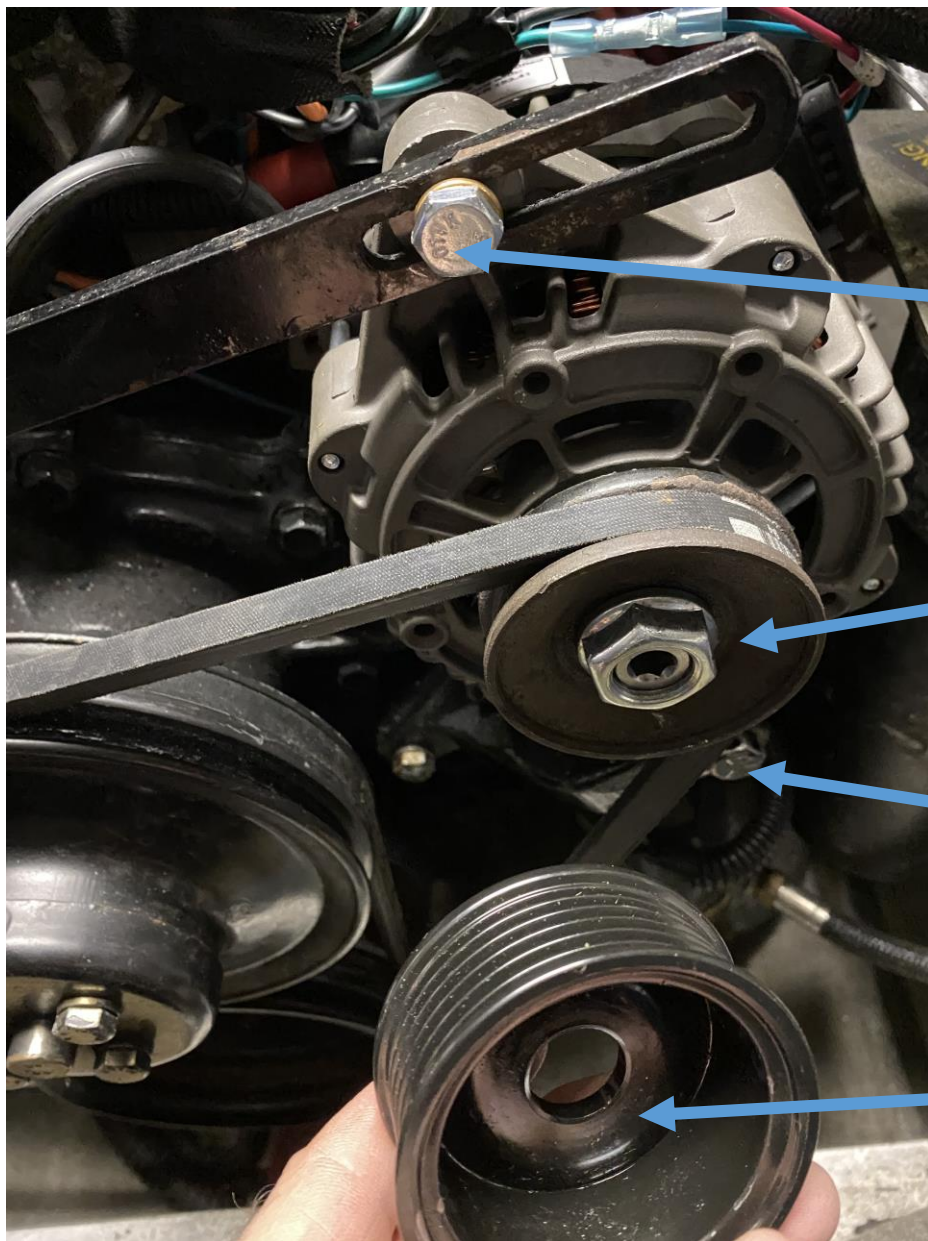


New wires all connected to new alternator. Big  
Red wire and small magenta pig tail to large  
terminal on top side; black ground wire to  
small terminal on lower side



Tidy up front and  
back with zap straps





tension adjuster  
mounted to top of  
alternator

Old pulley on new  
alternator

Bottom mount to  
main mounting  
bracket

Discard new pulley  
that comes with new  
alternator



When you start the engine, you should have lots of voltage ie. Reading 14