



Scrambler Cycle

Cameron, WI
715-458-0894

www.scramblercycle.com

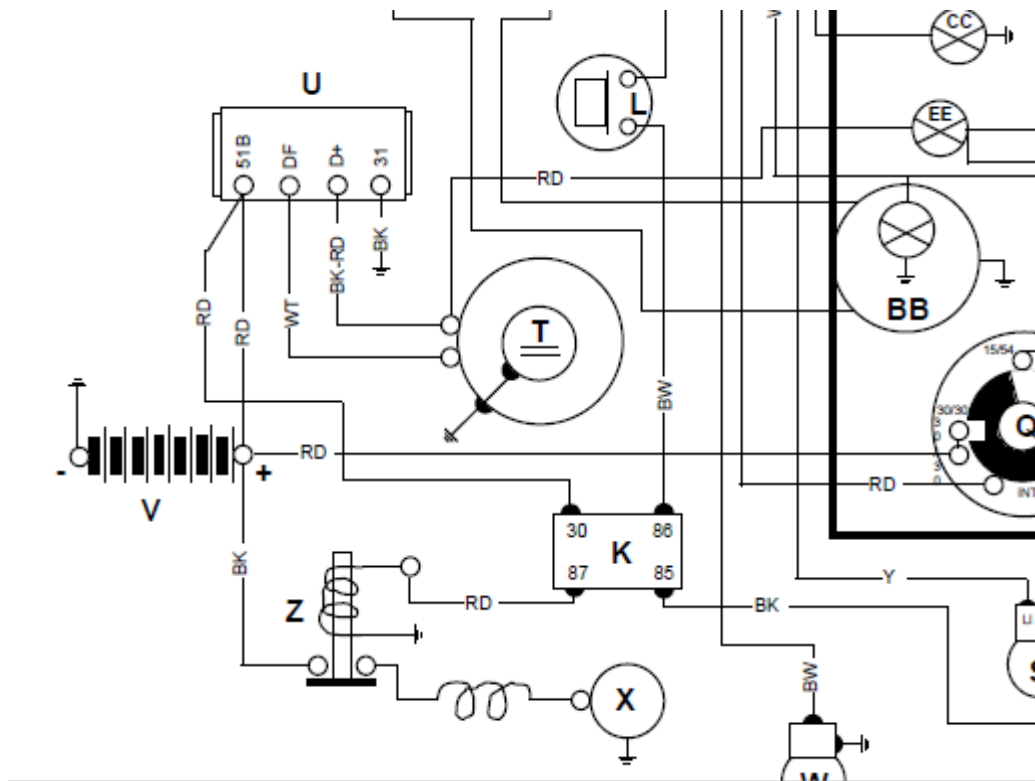


Alternator Conversion Kit Installation

Step One: Remove tank, seat and sidecovers. It may also be helpful to remove the battery.

Step Two: This step may vary depending on if your bikes wiring has changed over the years. It also depends on if you want to keep the wiring in place in the event you ever want to make the switch back to a generator for originality. Instead of removing as I state below all wires can just be taped off and tucked out of the way.

Using the diagram below as a guide, remove the wire between D+ on the Voltage Regulator and Generator. Remove the wire between DF on the Voltage Regulator and Generator. The red wire from the D+ post on the Generator is for the charging light. The red wires on the 51B terminal on the regulator must be spliced together or just make a direct connection from the battery to terminal 30 on the Starter Relay (K).



Step Three: The Voltage Regulator and its ground wire can be removed at this point or it can be left as it is.

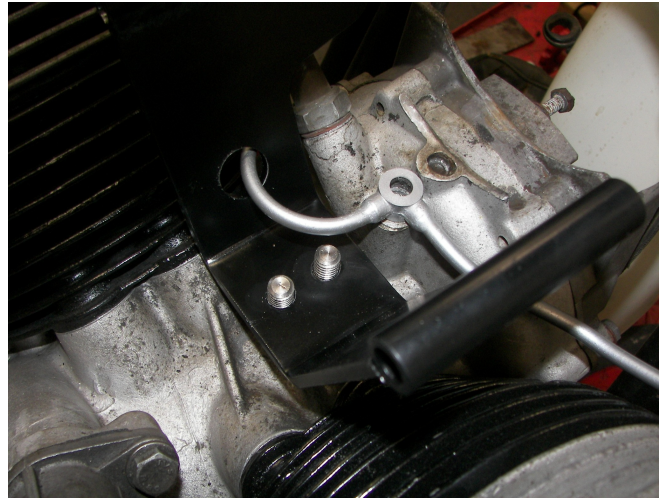
Step Four: Remove belt cover from front of engine. Remove generator from its bracket. Remove the bolts from the generator bracket on the top of the engine. This can be a crucial point. You may find that you have a bolt that is already broke off or you may shear one off yourself trying to get them out. All I can say is be patient, be careful and use some sort of penetrating spray to minimize the risk. A broken off bolt can be very hard to fix while the engine is in the frame.

Step Five: Remove the oil line connection bolts from each head and just in front of the bracket. Keep track of those connection washers or replace with new. Remove oil line and generator bracket.

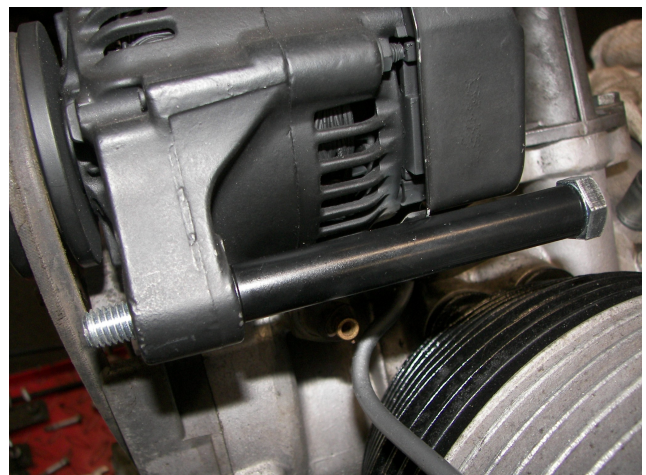
Step Six: Take the supplied M8 threaded studs and apply some of the supplied Loctite onto the threads of the longer threaded portion. Thread into the engine block. Repeat process for second stud.



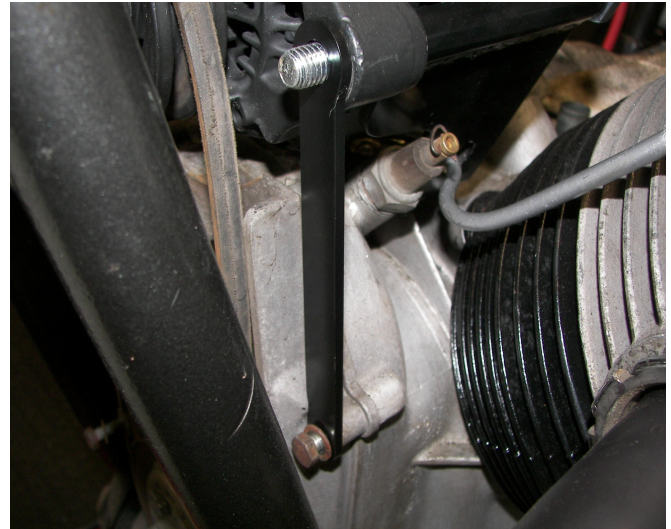
Step Seven: Insert the oil line through the supplied Alternator Bracket in the correct direction. Insert the M8 bolt and thick flat washer that eventually will support the alternator into the right side as the distributor may be in the way after the bracket is in place. Place the bracket and oil line on to the M8 studs that were just installed. Place the supplied serrated M8 washers over the studs. Place the M8 lock nuts onto the studs and tighten. This is an important connection that we do not want to come loose. It may be beneficial to mark these nuts in relation to the stud so it is easy to see if they are loosening. Replace oil connection bolts into the heads and just in front of the bracket and tighten to spec. Make sure sealing washers are used above and below each connection joint.



Step Eight: Place supplied Alternator into bracket. Belt can be placed over pulley at this point also. Using the bolt on the right side of the bracket thread into the Alternator mount ear, do not fully tighten. Place M10 bolt into left side of bracket from rear.



Step Nine: Take the separate brace and notice that one side has a slight relief near the smaller end. This relief area will go towards the engine. Remove the first bolt down on the left side of the timing cover. Place that bolt in the brace and replace into the the timing cover making sure that relief is towards the engine. Swing the brace up to the M10 bracket bolt. Fasten with M10 nut. On the right side there will be threads protruding from the alternator ear. Use the M8 locknut to further secure the alternator into place. After all bolts and nuts are in place they can be tightened.

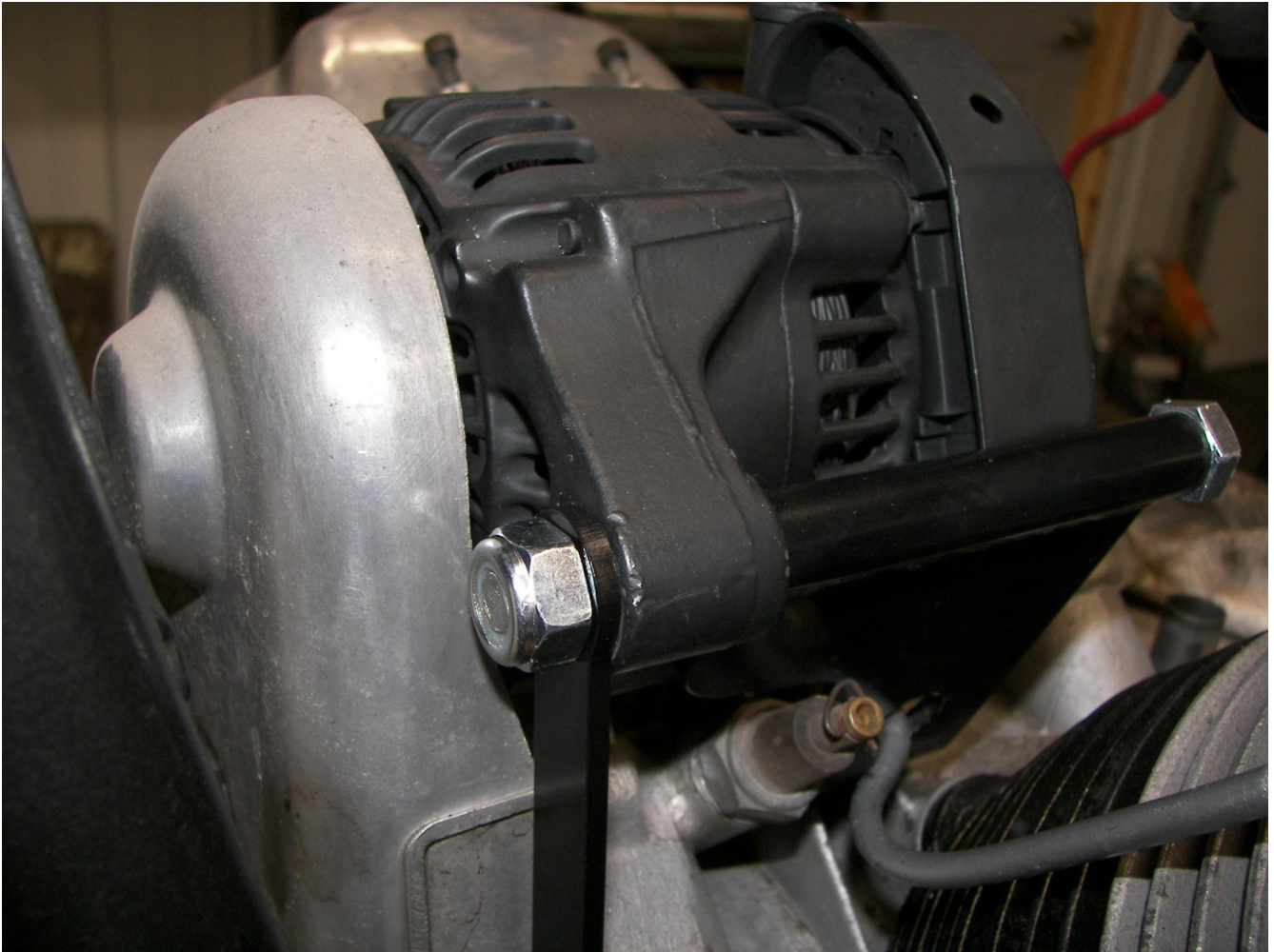


Step Eleven: Wiring from the alternator to the battery has not been supplied because of the variety of battery connections and how you may want to route your wiring. Obtain a length of 12 AWG wire long enough to go from the battery to the alternator connection. Install connectors on each end that will work for the type of battery that you are using and install this wire between alternator battery post marked "B:" and positive terminal of your battery. Make sure your connections are good. Using standard 1/4" female spade terminal and a ring or spade connector depending on your spark coil, make a connection from the + side of the coil to the vertical spade connector on the alternator. Details shown below. If you also wish to connect the generator light make a connection from the original ring connector that fit on the generator to the horizontal spade connector on the alternator. If you wish to leave your original harness un-cut you can use a short length of wire that has a female 1/4" spade on one end and a ring connector on the other. Then connect the two rings together with a screw and nut and shrink wrap or tape over the connection. It may also be helpful to use 1/4" connectors that have a plastic covering or use heat shrink to ensure that the connections do not make contact with each other.



Step Twelve: Check the tightness of your belt and adjust just as you did when there was a generator. Add or remove spacers between the pulley halves to increase or reduce its width. Its better to have the belt just a bit loose than to tight. A belt that is to tight will wear the belt and bearings prematurely. Replace belt cover.

That's about it. Replace the tank and seat. Before putting the sidecovers on you can check the charging system. Start the bike up and with a multimeter set on VDC you should have something over 14 volts. Replace the sidecovers and go for a ride.



If you have ANY questions or problems with the installation PLEASE give me a call 715-458-0894 or drop me an email to kevin@scramblercycle.com.

The Alternator Bracket and Brace is covered by a 1 year warranty from the date of purchase against breakage. The alternator is also covered by a 1 year warranty against defect.

Scrambler Cycle LLC will not be held liable for the consequences in the event of a bracket or alternator failure or from the installation of this kit. As an example, if for some odd reason your alternator quits at 2am in the middle of a hurricane on the way home from your girlfriend's house and you have to call a tow truck to get you home. Sorry, but I'm not coming to pick you up.