Notes / Comments

1) The factory wire sizes are shown in parenthesis under the wire color designation.

2) Relay #1 - Main Control

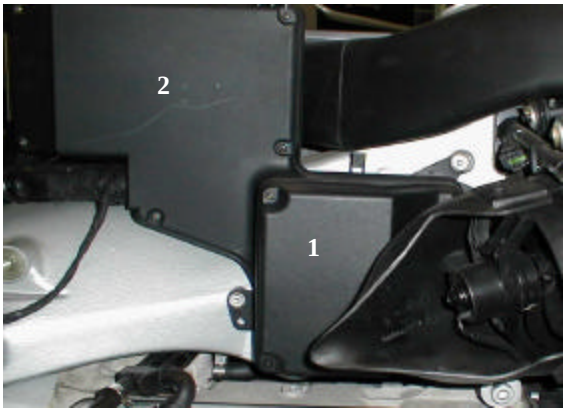
The Euro switch's current source is via a 1.5mm wire from the Load Relief Relay. In the 1st "on" position (Pos1), the Euro switch supplies current for the Instrumentation and Running Lights only through one set of contacts and 0.75mm wiring. In the 2nd "on" position (Pos2), the switch provides current for all the loads present in Pos1 plus the Main Headlight Low Beam plus the Optical Horn (High Beam when flashed). As designed, Pos2 of the Euro switch utilizes two sets of contacts in order to handle the additional loads. One set parallels the Pos1 contacts and the second set supplies the 1.0mm circuit feeding the Headlight and Optical Horn. Utilizing Pos1 as the "all lights on" position would require all the loads carried by individual .75mm and 1.0mm circuits to be carried by a single set of contacts and a single .75mm wire. Although this approach would probably work for some time, I considered this arrangement marginal at best for the standard factory lighting loads and certainly inadequate for any possible lighting upgrades (Running or Headlamp). With the addition of Main Control Relay #1, Pos1 of the Euro switch only has to handle the additional current required to pull in the relay contacts.

3) Relay #2 - Aux Lights Control

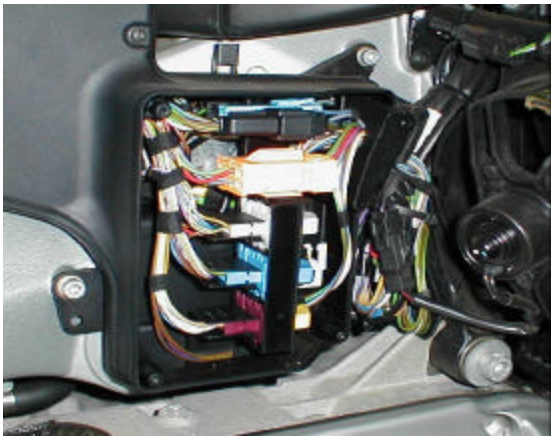
This relay is activated by either Pos2 of the Euro switch or by the Hi beam switch. The 1amp rectifier diode serves to prevent the Hi beam from being turned on by Pos2 of the Euro switch, while still allowing the Hi beam signal to turn on the relay. The relay contacts provide an independent 15a fused current source for the auxiliary lights. The diode was simply added in-line with the wire, which tapped off of the high beam drive at the rear of the headlamp assembly. The relay was mounted just under the left mounting point for the instrument pod.

4) Relay selection

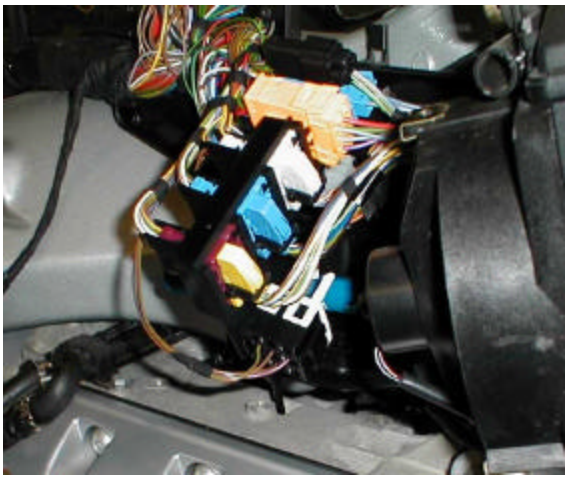
Both relays are heavy duty Bosch automotive type with a contact rating of 30a. In the unlikely event of both relays failing, the Running lights would still be available. If only Relay#1 were to fail, the Running lights and the Aux lights would be available.



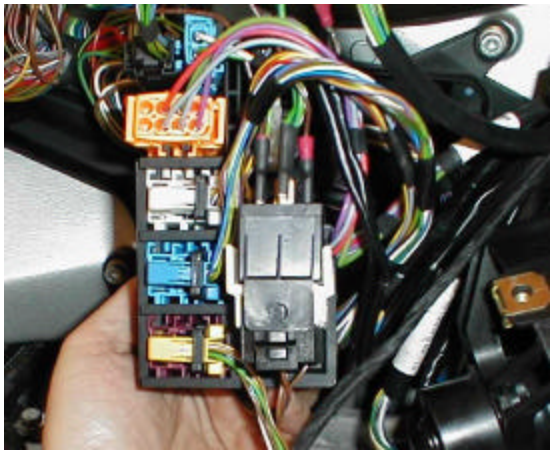
View from right side of bike with tank removed.
1 - Connector box cover
2 - Relay box cover



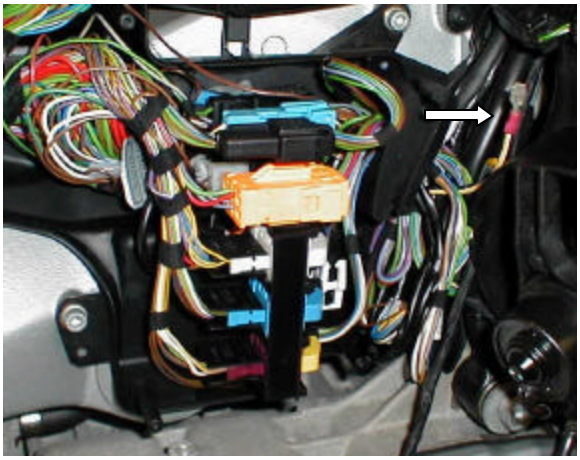
View of connector box with cover removed. Relay #1 will be mounted in this compartment.



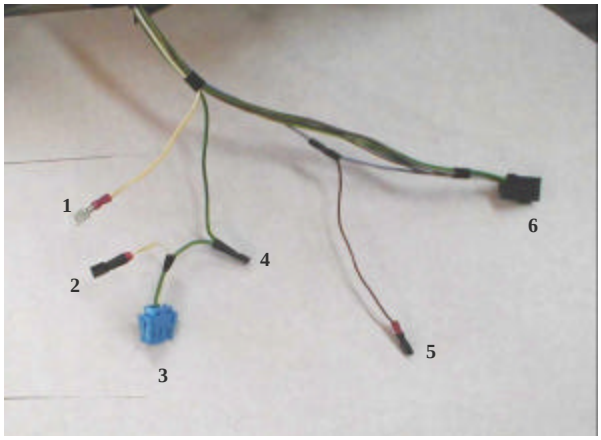
View of connector holder pulled away from housing.



View showing Relay #1 resting "upside down" at lower right of connector holder. When holder is replaced, the relay is nested in place.

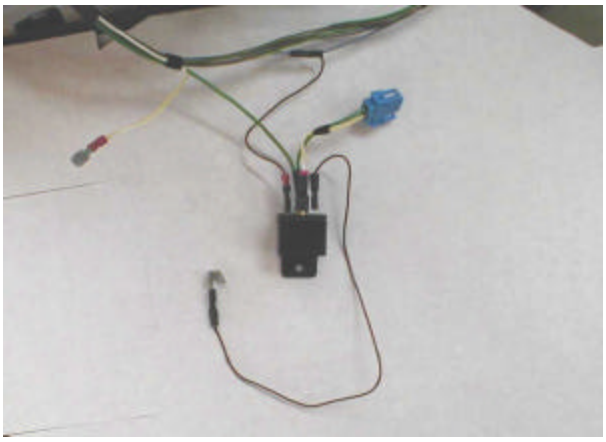


View showing connector holder reseated into housing. Note the white/yellow wire with the in-line spade lug. This wire is the Pos2 output from the Euro switch and serves as one of the two Relay #2 coil drives. (see harness mods below)



View showing modifications made to the connector end of the Euro switch harness.

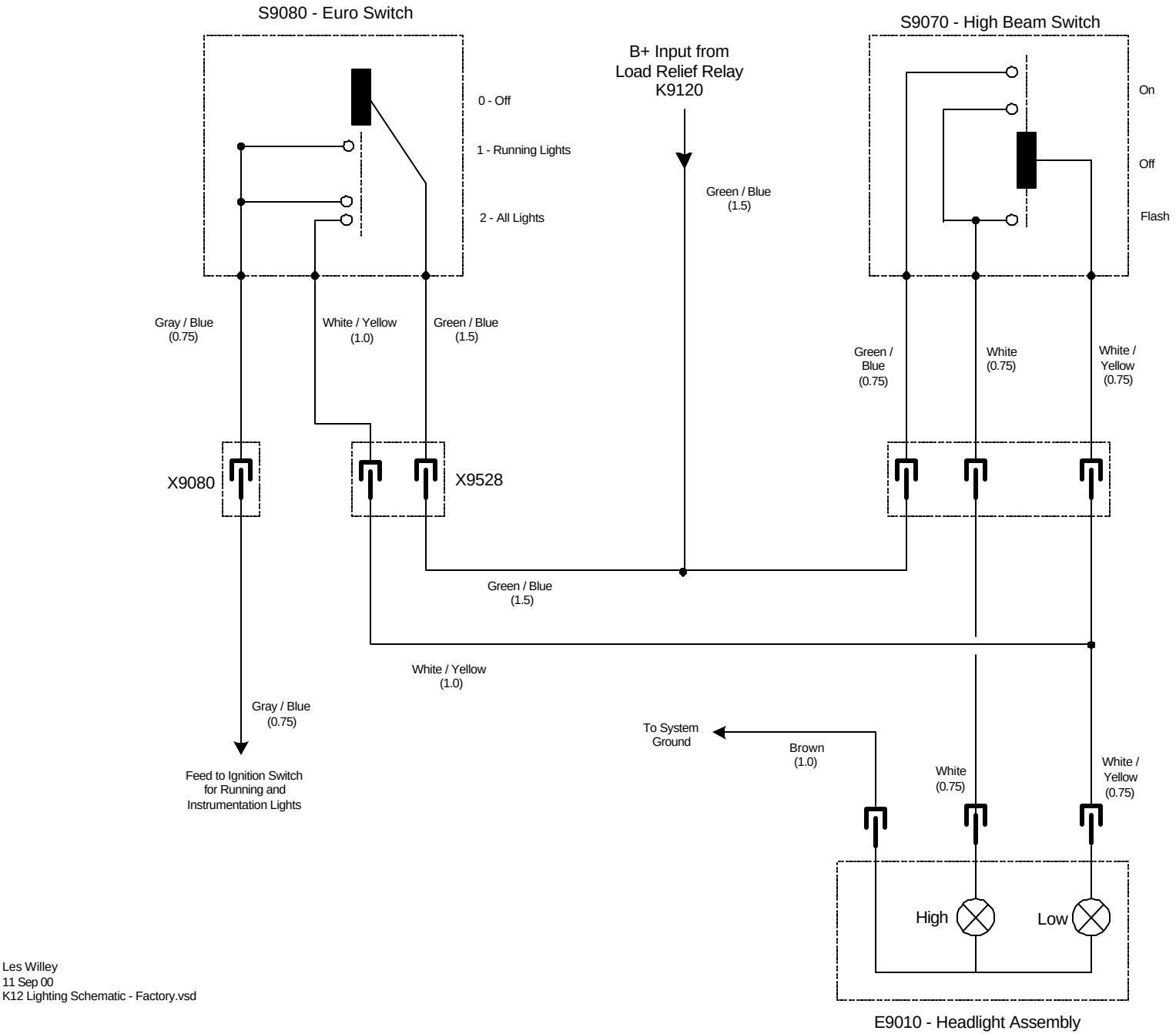
1 - white/yellow wire, harness end, Relay #2 coil feed referenced above.
2 - white/yellow, connector end, Relay#1
3 - Connector X9528
4 - Green/Blue - power feed from Load Relief Relay K9120
5 - Gray/Blue - Relay#1 coil drive from Pos 1 contacts of Euro switch
6 - Connector X9080



View with Relay 1 connected to modified harness. The brown wire is used for the relay coil ground and attaches to a ground lug already in place inside the factory relay box.

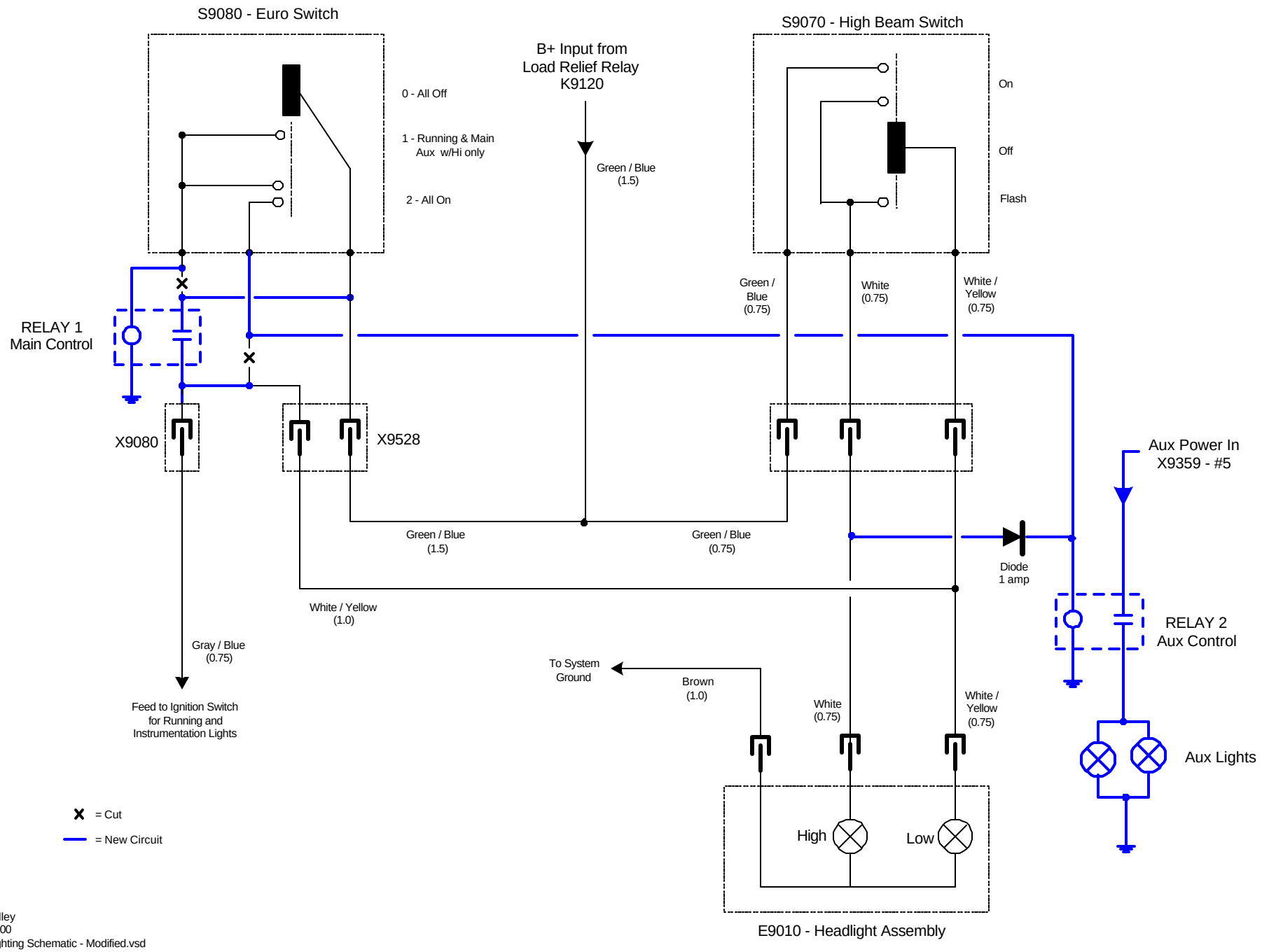
View showing Connector X9359. Cavity #5 (arrow) provides the power to Relay #2 contacts for the Aux lights. Although this picture shows a wire coming out of cavity #6, this is incorrect (don't ask). The green and brown wires are for the heated grips.

K1200RS ORIGINAL LIGHTING WIRING



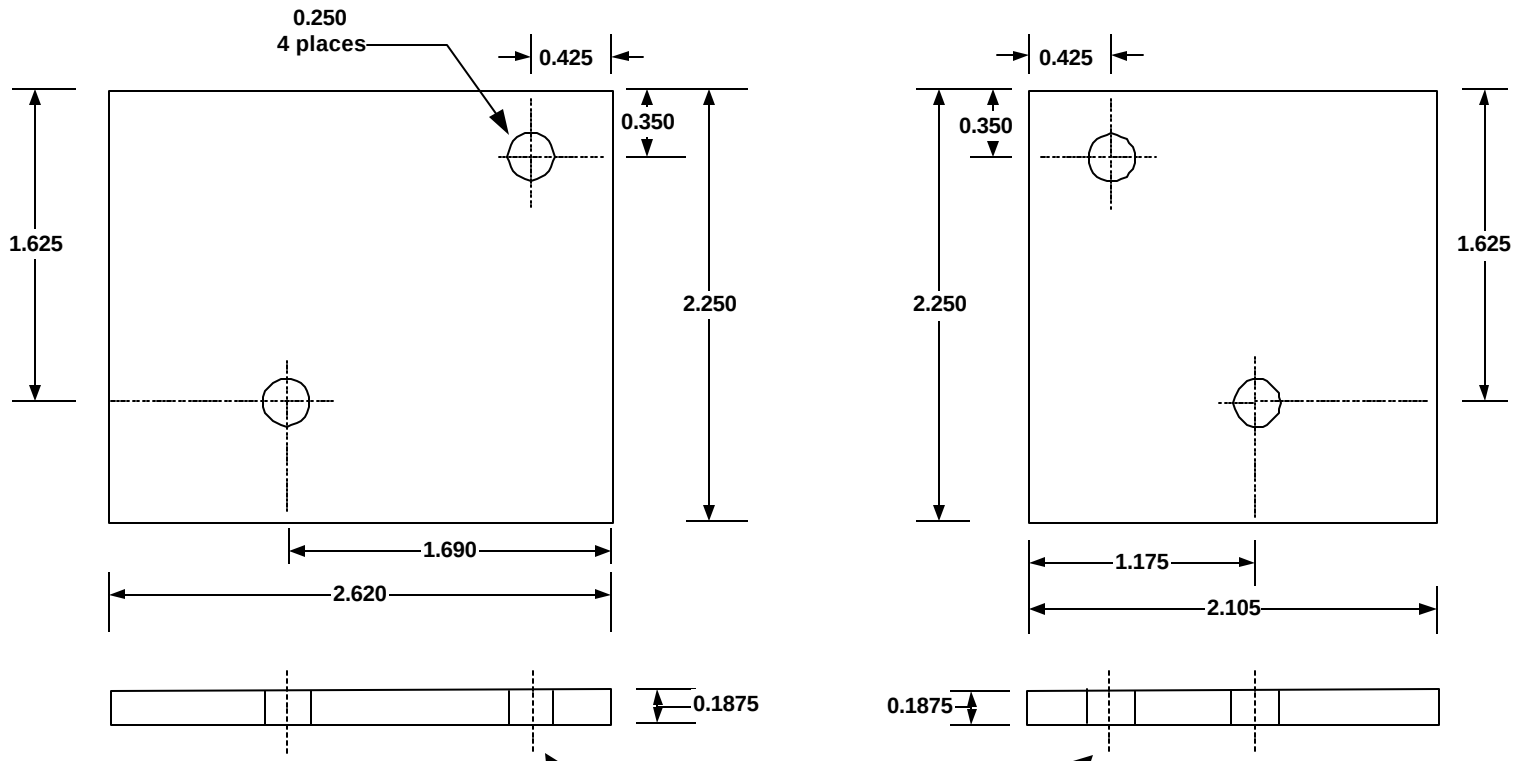
Les Willey
11 Sep 00
K12 Lighting Schematic - Factory.vsd

K1200RS LIGHTING SCHEMATIC - MODIFIED



Les Willey
11 Sep 00
K12 Lighting Schematic - Modified.vsd

K1200RS Oil Cooler Mounting Plates
PIAA 1100x Driving Lights



Left Side Plate
(as viewed from front)

Attach plates to oil cooler
via these holes

Right Plate
(as viewed from front)

Mount lights this side via
these holes

Front of Bike

Les Willey
PIAA_MOUNTING_ PLATES.VSD
02/13/99