

The Gonzo Project

Gonzo DIY TCI

Yamaha XS650 Points Conversion



This is a DIY project.

Converting a non- TCI bike
requires Tools,Measuring
Grinding, Bending
Crimping, Drilling

And the most important thing

A Chance to screw something up

Really Good.

You Have been warned.

Eliminates the
Points, Condenser, Advance unit, Rods and Points Cam.

Both plugs are fired by one coil in a wasted spark
arrangement.

The big advantage of this system is the elimination of the
points, the mechanical advance unit and more precise timing
on the end of the crankshaft eliminating slack in the
camshaft chain affecting timing.

Five Wire connection
Uses stock TCI coil and Pickup

Much smaller than the stock TCI box
TCI box is cheap enough to keep a spare under the seat.

The electronics mount on the battery box, a much cooler
and less vibration prone area vs. the end of the camshaft.

Provides 20+ degrees Electronic advance

Crank Signaled No variations due to cam chain stretch or
steampunk advancer errors. Timing setting stays put.

Install Notes

Your Alternator is 40 years or older

Highly recommended to have your Rotor Rewound.
Refurbish the Stator
Refurbish the Brush Holders
Replace Brushes

Check your wiring from the alternator to your harness.
Replace any questionable wiring or connectors
This wiring lives in a harsh environment.

The ground wire from the Gonzo needs to go to a good
ground.

Check your voltage on the Red/White from the Kill Switch.

1970-79 Points Bikes

Install Notes

Be sure and hook up a timing light before cranking engine.

Ensure the timing mark on the rotor lines up on the F mark and once running ensure the max advance is less than 40 degrees

If the timing is off or the engine backfires try reversing the pickup leads

These boxes are inexpensive China imports and the long term durability will be determined as testing continues.

Tools

A good crimping tool is necessary to make the pigtail .
Hugh's Hand Built has a good one.



Drill Bit for Magnet

Tap for mounting hole
Drill Bit for
mounting hole

1970-79 PointsReplacement

The Parts

GN250 CDI (It's really a TCI)
RX135 Pickup
¼ inch Neo Magnet

Honda MP08 Style Coil
Plug Wire and 5K caps
Coil Mounting Adapter

6 Pin Female Connector

Make The Pigtail

Install The Gonzo

Install Magnet

Install pickup

Wiring

Set timing

***** Caution ***** Caution *****

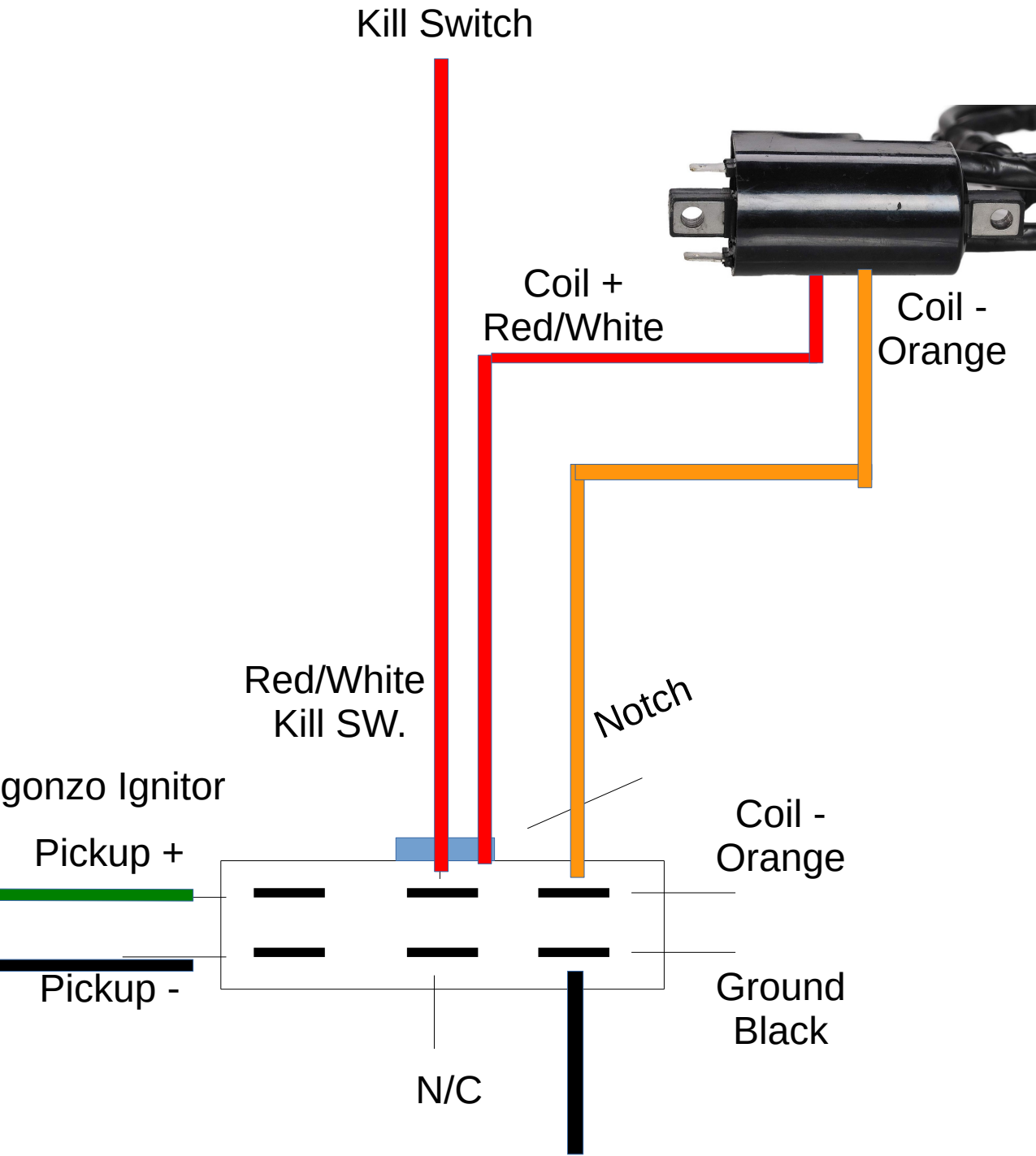
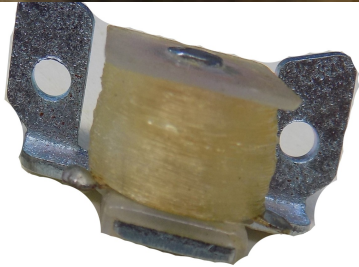
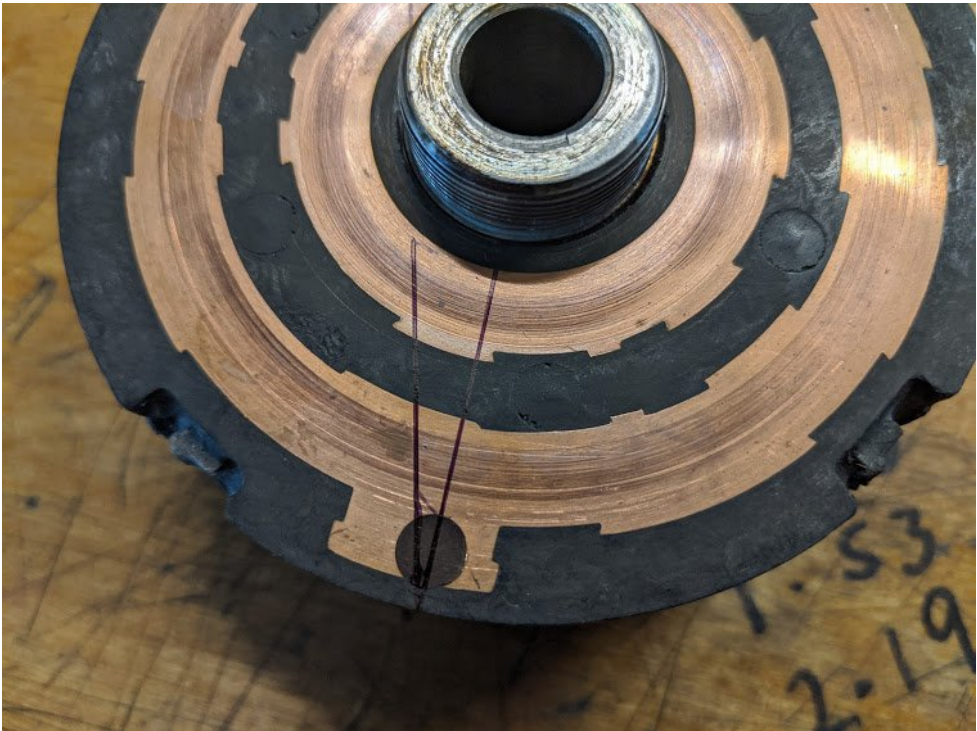
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1970-79 Points Bikes Wiring

Do not blame me for any fires, warp holes, hivoltage arcs and / or any number of other poor outcomes

You have been warned

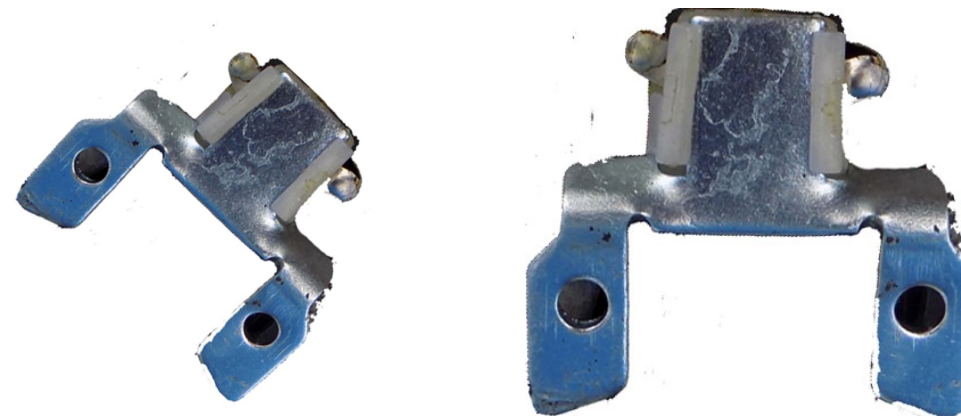
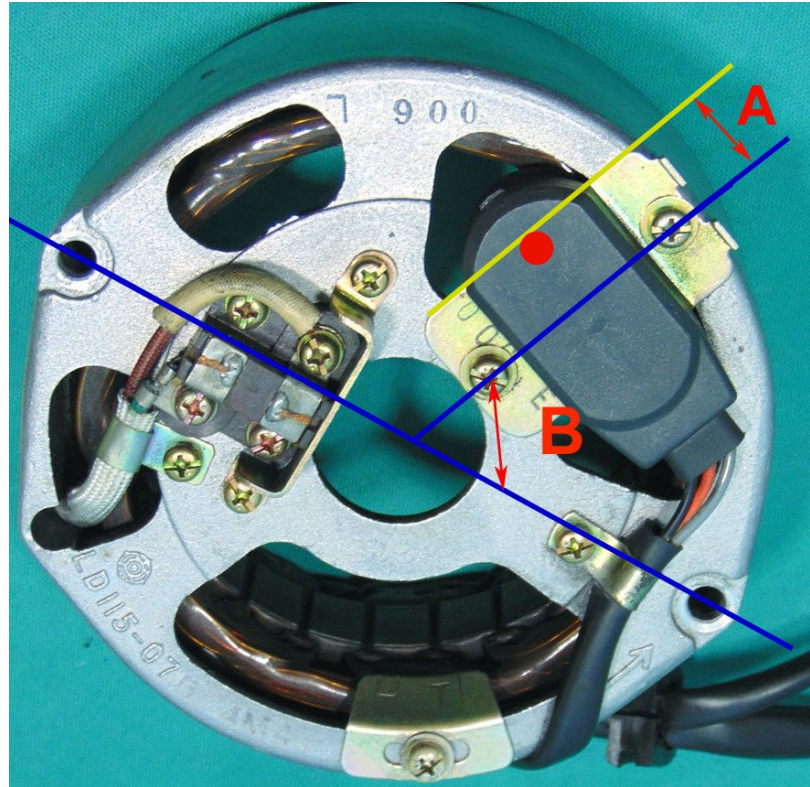
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1970-79 Points to TCI Box Conversion

Design Notes

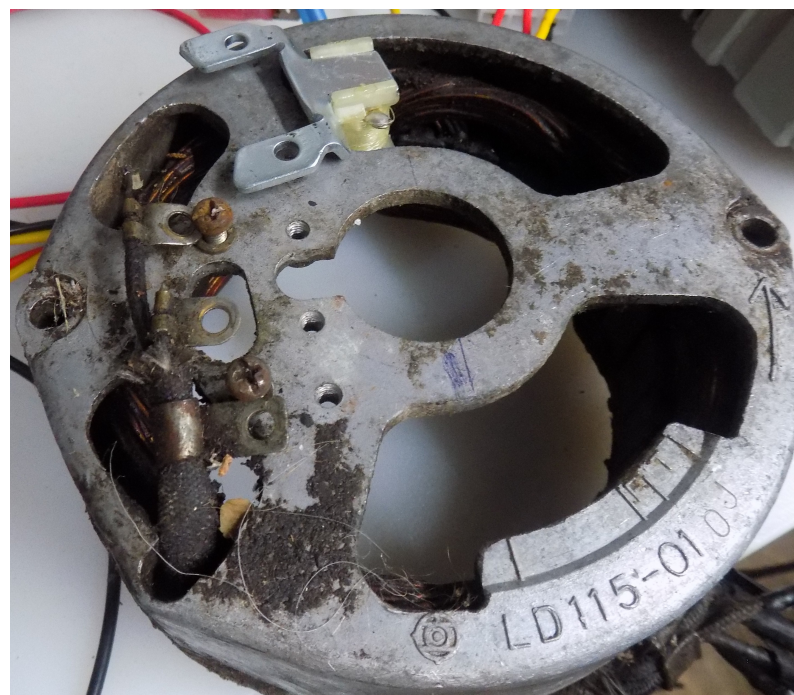
Still in development
Subject to change as testing continues



Modification required

Modification of Pickup

The pickup legs must be gently bent to make the mount flat,
I did it in a vise one leg at a time



Rotor Modification

6mm or 3mm Magnet
¼ drill or 1/8 Drill

Jim's Easy Peasy 1970-79 Points Rotor Magnet

Still in development
Subject to change as testing continues

Locating spot to drill rotor for
magnet

So I rested the ruler against it and lined one end up on the timing mark.



And here's where the other end wound up....



.... and drew a line from the edge back to the center



1970-79 Points to TCI Box Conversion

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Coil Mounting

