

## MAX GY6 Ruckus Wire Harness Features:

- ~ Made for GY6 motor with stock or aftermarket controls
- ~ More complete than any harness on the market because it comes with not only all of the essential connectors but also pre installed fuses, relays, and universal rectifier.
- ~ Length to accomodate ANY scooter
- ~ Wires are clearly labeled to make install a breeze
- ~ 5 feet of braided wire loom included, its more flexible and way better looking than that split plastic conduit on the other guys stuff
- ~ Each harness is manufactured and tested to OEM automotive standards.

NOT "plug and play" (but neither is any "P&P" harness as soon as you change the lights or controls or length)

Every harness our brand or others will need to be cut and tucked differently for each scooters build and accessories for the cleanest possible look. You should cut & solder to eliminate as many plugs as possible to maximize reliability no matter which harness you choose its worth the few minutes difference now so you don't have to troubleshoot later.

Listed below are every connection and the connection type.

### Battery box side:

Comes with 5 wire 11 pole rectifier 3 pin and 4 pin plug connection already done for you  
11 pole is backwards compatible for all stators.

CDI plugs (buy our rev limit and timing programmable CDI - a MAX exclusive! for \$60)

Kill switch solder/crimp

Key switch solder/crimp

"4 into 2" Ignition relay is included and integrated into the harness for you!

Battery ring terminal connections with boots

Fuse Holders equipped with blade and round fuses

starter relay 90\* ring terminal with cover

starter relay plug

start button solder/crimp

flasher relay is included and installed on harness for you with spade commector

brake switch solder/crimp

stock left controls solder/crimp

horn spade connector

front lights solder/crimp

### Engine side:

6 wire stator solder/crimp ground, , 2 bullet connectors, and 4 pin plug

Autochoke 2 pin plug

tail lights solder/crimp

coil spade connectors with coil boot  
starter wire - nut and screw provided for bolt on  
motor to frame ground with dual ring terminals

What you need to do the job and get to riding:

Wire stripper/cutter

Electrical tape

Zip ties

Barrel connectors and a crimper (not recommended) OR

Solder, Soldering iron, heat shrink wrap, heat gun (recommended)

GY6 150cc long case motor that comes with with CDI, Carb, Starter, Starter Relay, Coil, coil wire, sparkplug

If you are missing any of those items, buy from <http://www.shop.theruckshop.com>.

You need fuel delivery by [mikuni pump](#) and battery, gas etc. to start it up when finished

Lights & Horn

Stock ruckus key switch

Stock or aftermarket left controls

\*Optional - If you want to eliminate the stock right controls - use momentary switches for start & kill fitted into the battery box holes where the indicator lights used to be

\*make sure there is a ground connection between your front and rear frames!!

We Will make an install video if time permits, but this is super easy - each individual wire is labeled for you so you can get it done quick!

\* NOOB UPDATE! - SAVE YOURSELF SOME TIME READING BELOW MY SUMMARY OF COMMONLY ASKED QUESTIONS, TIPS, TRICKS AND FACTS:

1. You will remove the stock harness and its brain (the big metal thing with fins on it that most of the wires go into)
2. You can take all the stuff connected to the stock wire harness off of the neck like the ECU, "1076" black box, "20w68ohm TG-28" silver bracket.
3. You can keep the stock high beam and gas lights there to fill the holes if you run the OEM right controls, but they will no longer operate.
4. If you run the OEM right controls, please note that the RUN/KILL switch's operation is reversed. This is due the difference in Honda and GY6 controls.
5. You can fill the holes where the High beam and Gas lights used to be with momentary start and kill switches if you use an aftermarket throttle without built in switches.
6. If you have a hydraulic brake lever, you will need a hydraulic brake switch to connect it to the harness and activate the tail lights and starter relay.
7. If you have a T-Motorsports GY6, Its got a DC electrical system, so you will need an 8 or 11 pole AC stator to work with the rectifier on this harness.

[8 coil stator link](#)

or

[11 coil stator link](#)

And you need a AC CDI, we sell a nice one here:

[CDI link](#) \* If you get the harness from us it comes with this no need to purchase.

If you have a T, it also lacks a starter relay so get one like this:

[starter relay link](#) \* If you get the harness from us it comes with this no need to purchase.

8. 11-pole stators are known to blow light bulbs so you could rewire the left AC control inputs to the DC input, see wiring details below. Or maybe you could just put a regulator in the 12vAC line, the following ones have been recommended by a couple of our customers while one customer just found it dimmed his lights:

[12v regulator](#)

or

[12v regulator](#)

9. Make sure there is a ground connection between your front and rear frames, especially if you powder coated one or both, run a ground wire, or sand the 2 bolt front to rear frame connection to bare metal and use dielectric grease to maintain your bare metal grounds. Make sure the engine to frame ground is also touching bare metal.

10. The OEM 35watt headlights are pretty weak for use with GY6 speeds, consider getting HID's if 11 pole stator is used.

11. LED turn signals won't work without a resistor or LED relay: 20 Watt 8 Ohm ceramic resistor \$8/pair [resistor link](#)

Some customers have suggested this as an alternative to resistors: "Variable load Electronic LED flasher" [link](#)

Pay attention to the voltage requirements of LED tail lights and your charging system output to make sure they are in sync.

12. Make sure the clear relay's exposed metal posts are taped up really good so they don't touch anything.

13. The battery has to be good.

11.5 to 12 volts when the scooter is off and 13.5-14 when the scooter is on is a healthy battery.

Below that would indicate a shorted cell and above that would indicate a bad open cell giving high resistance.

Since the battery is the only thing on a scooter that absorbs the voltage being put out by the simple charging system, if it is in bad condition as described above or disconnected while the bike is running (power wire breaks, or you pull the +/- terminal off, bad ground) the lights will see too much current and will blow.

[This is a cool simple item a customer suggested to monitor your voltage](#)

IN CASE YOUR LABEL FELL OFF OR YOU JUST DONT UNDERSTAND WHAT THE LABEL IS TELLING YOU, HERE IS EVERYTHING YOU NEED TO KNOW WIRE FOR WIRE:

Front side:

#. HARNESS wire Color > OEM PARTS wire color (Notes)

1. Light Blue > Y connection into BOTH Light Blue from OEM left controls AND Light Blue front signal light (+)
  2. Orange > Y connection into BOTH Orange from the OEM left controls AND Orange front signal light (+)
  3. Grey > Grey from the OEM left controls (signal + flasher input)
  4. Black > Black from the OEM left controls (DC + input)
  5. Black/Blue > Black/Brown from the OEM left controls (AC + input which is OK to power most lights with power from 6 and some 8 pole stators)  
(BUT if you have an 11p stator which has too much power to run typical headlights without blowing them, don't connect Black/Blue harness wire. Instead do a Y connection of the Black DC harness wire AND Black AND Black/Brown from the left controls so that the accessories are all DC powered, don't do the y connection here with a 6 pole or the battery will die from too much DC power draw) Alternatively 11p and AC headlights input could benefit from an AC voltage regulator as stated above in the tips/tricks.
  6. No harness connection! > Connect the Blue left hand control wire directly to the High Beam (+)
  7. No harness connection! > Connect the White left hand control wire directly to the Low Beam (+)
  8. No harness connection! > Connect the Light Green left hand control wire directly to the Horn (+)
  9. Green with female spade terminal > Horn ground (and you can use this for headlights and signals ground as well, or frame ground those separately)
  10. Green/Yellow > Y connection into BOTH Green/Yellow (left and right) brake lever switch wires (level pull outputs brake light and starter relay +)
  11. Black > Y connection into BOTH Black (left and right) brake lever switch wires (+ input to brakes)
  12. Yellow/Red > Yellow/Green from the OEM right hand control (- output to starter relay)
  13. Green > Green/Yellow from the OEM right hand control (- input)
  14. Black/White > Black/White from the OEM right hand control (- output to CDI)
  15. Green/Black > Black/Red from the OEM right hand control (- input)
  16. Red > OEM key switch MIDDLE terminal (battery + input)
  17. Black/White > OEM key switch LEFT terminal (+ to IGN Relay)
- ~ 90 degree black and red boots > bolt each one to the starter relay (does not matter which side is red or black. Tape this up good so it does not touch any thing.)
- ~ Black Rubber Boot > bolt down to negative battery terminal (Frame ground - make sure this touches the bare aluminum frame, you can bolt it down using a battery frame bolt)
- ~ Red Rubber Boot AND fused orange wire ring terminal > bolt down to positive battery terminal
- ~ Plug with Yellow/Red and Green/Yellow > plugs into starter relay 2 prong plug
- ~ Dual plugs 4 and 2 prong > Plugs directly into CDI
- ~ 4 and 3 prong large plugs > Its already plugged into rectifier

Rear Lights:

1. Light Blue > Light Blue Right Rear Signal (flasher +)
2. Orange > Orange Left rear Signal (flasher +)
3. Grey > Tail light (key switched +)
4. Green/Yellow > Brake light (brake lever +)
5. Green > Ground for all the lights (common -)

GY6 Motor:

(with 11 pole stator)

1. Black and Yellow wires together > Yellow GY6 stator wire (AC + power)
2. Pink > Yellow GY6 stator wire (AC + power)
3. Yellow/White > Yellow GY6 stator wire (AC + Power)

(with 8 pole stator)

1. Yellow and Black wires together > 8 pole stator yellow (AC+Power)
2. Pink > 8 pole stator white (AC+Power)
3. Yellow/White > Dont connect this at all, because its only used on 11 pole stators.

(6 Pole stator may have one yellow only, hook it to the harness yellow-black and dont connect Pink or Yel/white)

4. Blue/Yellow > Blue/White GY6 (timing wire)

5. Black/Red > Black/Red (Hi Voltage ignition wire)

(All of the above wires are in plugs, but if the plugs/pins dont match your stator, cut the plug off and wire together properly (beware of DC stators as stated in tips/tricks)

6. Green/Black > Green (Stator Ground)

~ Red 2 Pin Plug > Autochoke (if you dont use auto choke because they are horrible, you can cut this out and tape it off)

About Black in the MAX harness stator plug (Item #1 below) at the stator plug (coupled to the yellow) is a power feed for the autochoke. If you dont run auto choke, you can remove the choke plug and its black power wire & ground all together.

~ Large Black Boot > Coil spade terminals

~ Black rubber Boot > Bolt heavy red wire to the starter terminal

~ Motor to frame ground wire > not connected to harness! (ships connected to above wire and you need to disconnect that and bolt one side to the motor bare metal and the other side to rear frame bare metal)

If you want to use Stage-6 brand aftermarket left controls:

Stage 6 Control color> Hooks up to this > For purpose:

Brown > Black MAX Harness wire> 12vDC + input

Yellow > Hooks up to the horn > Horn 12vdc+

Purple > Black/Blue MAX harness > 12vAC input (or you can use DC input here instead if your setup requires it)

Green > White wire on headlight > Low beam AC+

Gray > Blue wire on headlight > High Beam AC+

Red > Y connection: Orange MAX Harness wire and Front right signal +

Black > Y connection: Light Blue harness wire and Front left signal +

Orange > Grey flasher relay wire on MAX harness > flasher switch + input

Make the Fuel light work!

(advice from member "wonder bread" on expanding the functionality of this harness)

"I bought the MAX USA harness and love it because of its ease of installation, quality construction, and clear labeling. It does not have a fuel light feature but you can follow these steps to make the fuel light work:

Connect Fuel Sending Unit (tank float) signal (blue/white) to led Drive unit (blue/white) and to resistor (20w 68 Ohm) blue/white.

Connect LED drive unit and Resistor Black to 12v DC accessory power

Connect ground green/black on sending unit and module plug to ground"