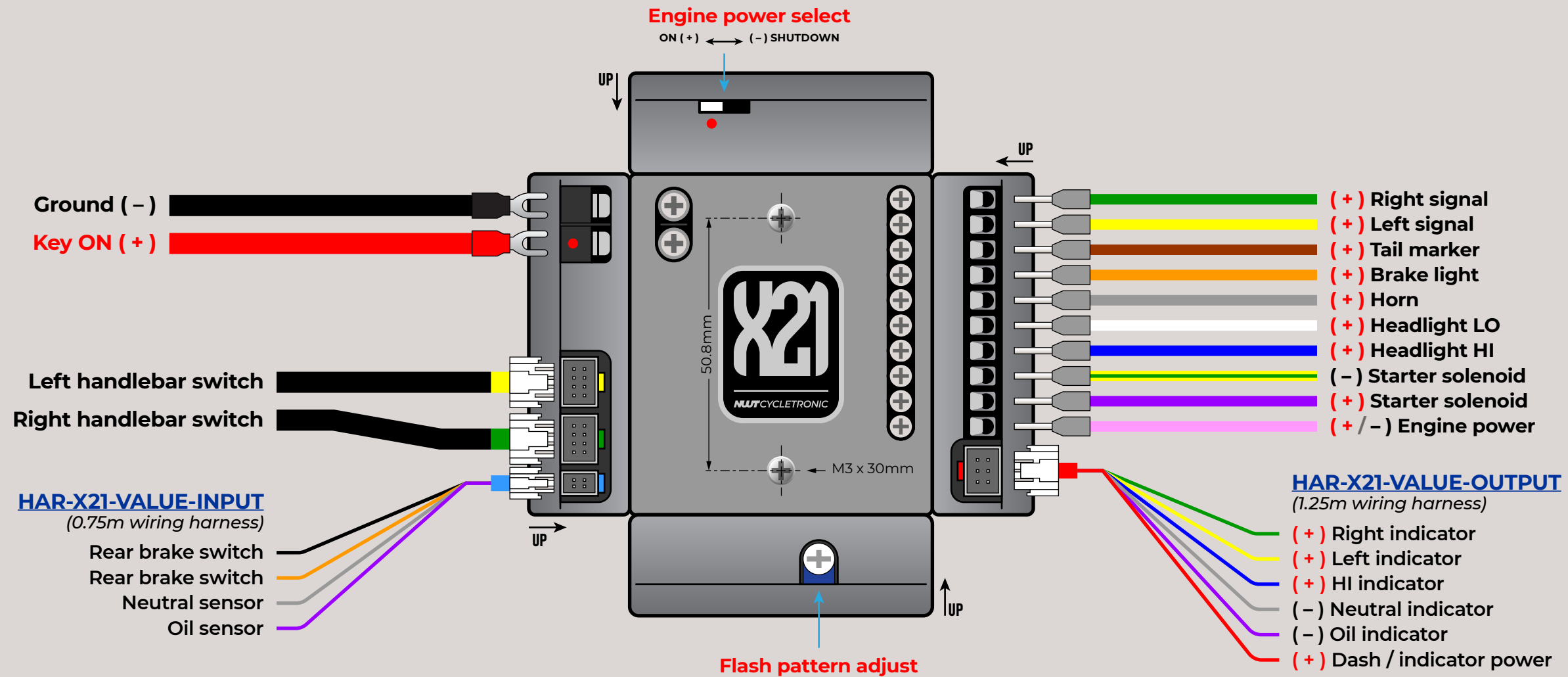


X21 VALUE

Control Hub

BOX DIMENSION: L = 70mm, W = 62mm, H = 21mm



Read installation thoroughly before starting.

- [] Section A Component checklist
- [] Section B Component mounting
- [] Section C Power / charging / starting
- [] Section D Engine power / spark coil
- [] Section E Lights / horn
- [] Section F Switches / dash lights
- [] Section G System check
- [] Section H Finalizing

“ Take pictures and document your progress.

It comes in handy if or when you need help.
Share your project with us and inspire others.

Most importantly, **HAVE FUN!**

It's a hobby, remember?

We're here for you all the way.

- Battery (**MANDATORY**)
- Rectifier/regulator (**MANDATORY**)
- Starter solenoid/relay **electric start bikes only**
- Spark control module (CDI / TCI / points breaker)
- Spark plug coil(s)
- Key switch
- Gauge(s)
- Dash indicators
- Headlight
- Signal lights
- Horn
- Taillight
- Plate light **optional**
- Brake switch (front / rear)
- Neutral sensor switch
- Additional sensors/switches (oil / clutch)
- 8awg or LARGER wires (battery / solenoid / starter motor)
- 16awg wires (key switch)
- 18awg wires (horn / headlight / etc.)
- 20awg or SMALLER wires (LED lights)
- Various size RING terminals
- Various connectors or solder with shrink tube
- Zip ties
- Tape / cable wraps / split loom
- Single FUSE HOLDER **for non protected starter solenoids / key switches**



Need parts? Parts suggestions?

Have a chat with one of our affiliates:

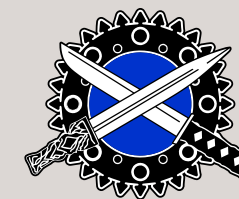


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NEED ASSISTANCE?

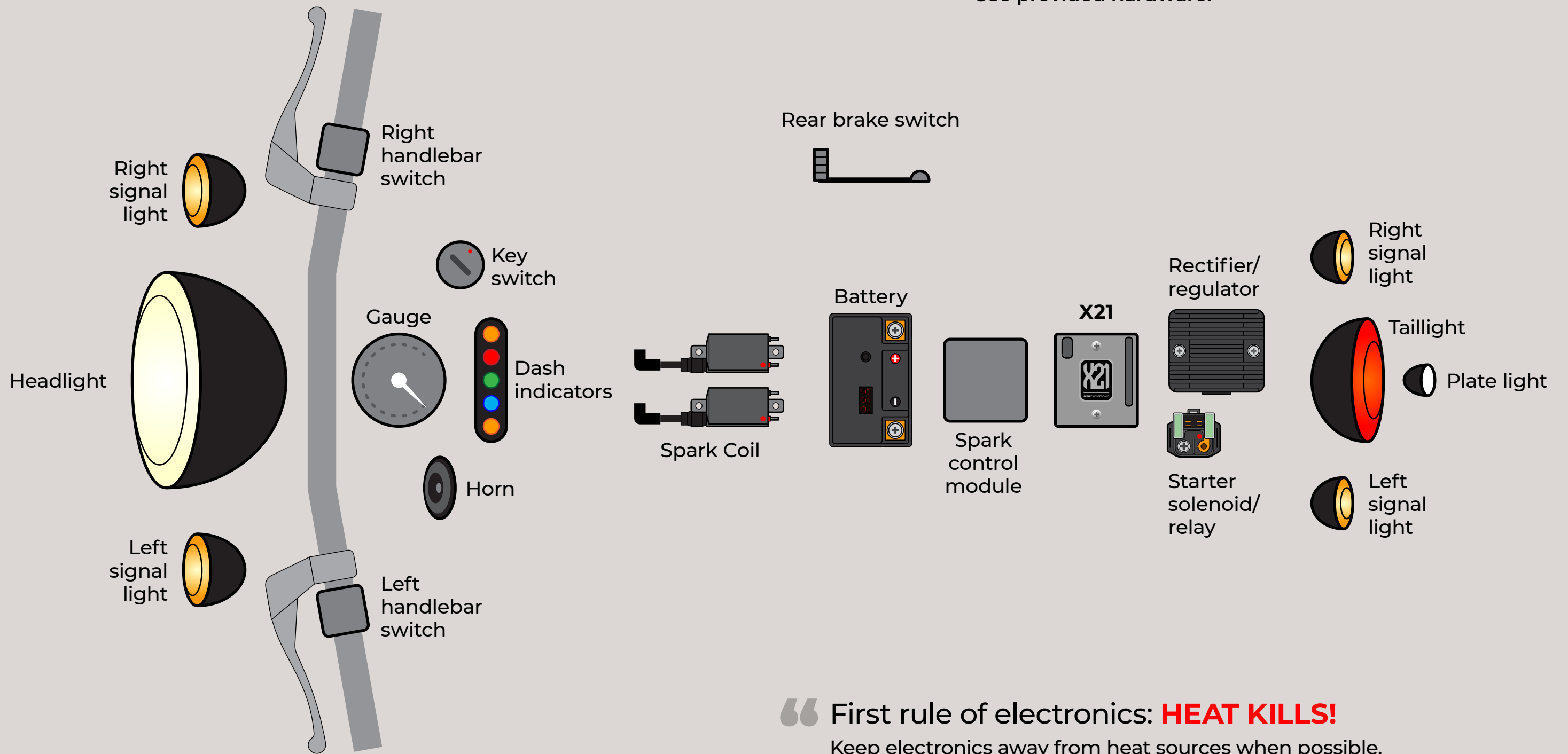
Email make, model, year of bike to
techservice@nwtcycletronic.com

COMPONENT CHECKLIST

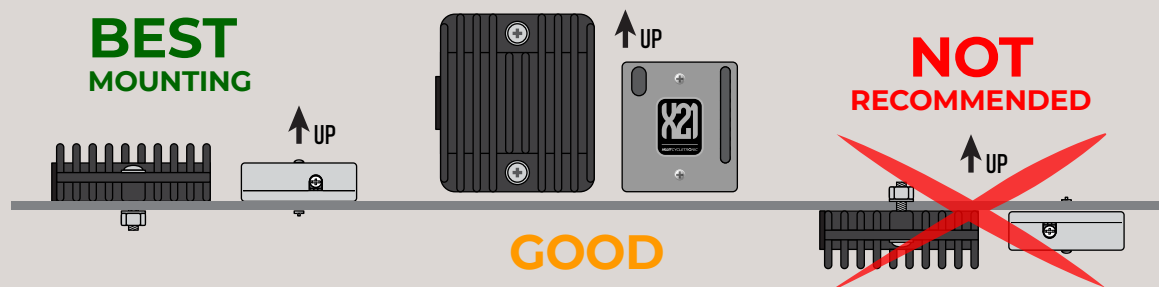
MOUNT ALL COMPONENTS onto desired location.

DO NOT route wires/cables at this time.

DO NOT enlarge or alter the X21 mounting holes.
Use provided hardware.



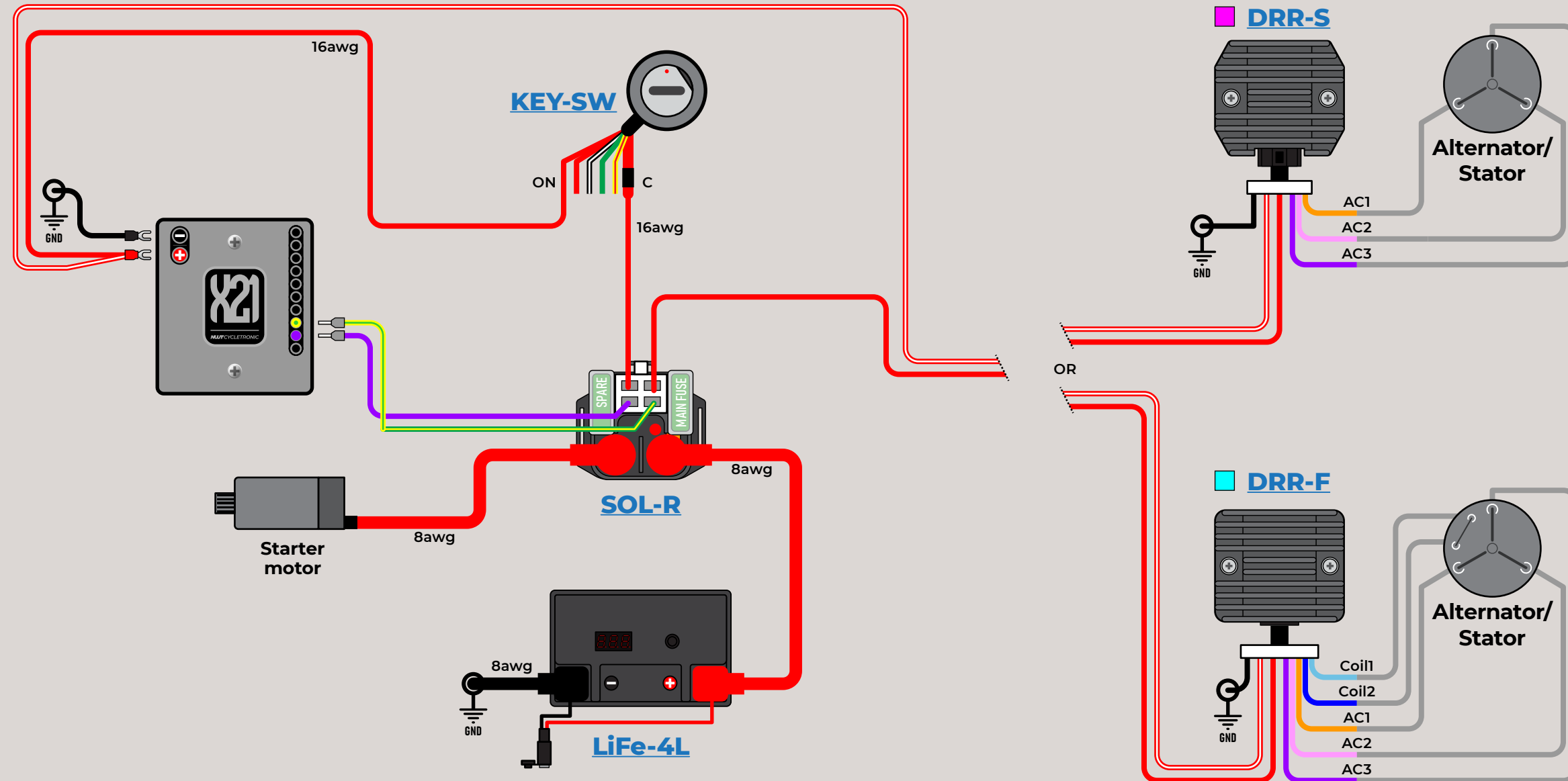
“ First rule of electronics: **HEAT KILLS!**
Keep electronics away from heat sources when possible.



NEED ASSISTANCE?
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REMOVE FUSE from fuse holder before starting.
DO NOT install fuse until instructed.

Use recommended wire gauge size.
DO NOT over torque/tighten screw terminals.



My wire colors

My type [] [] _____

Alternator/stator

- Coil1 _____
- Coil2 _____
- AC1 _____
- AC2 _____
- AC3 _____

“Modernize your charging system with a digital type rectifier/regulator for a safer and more efficient charging source.”

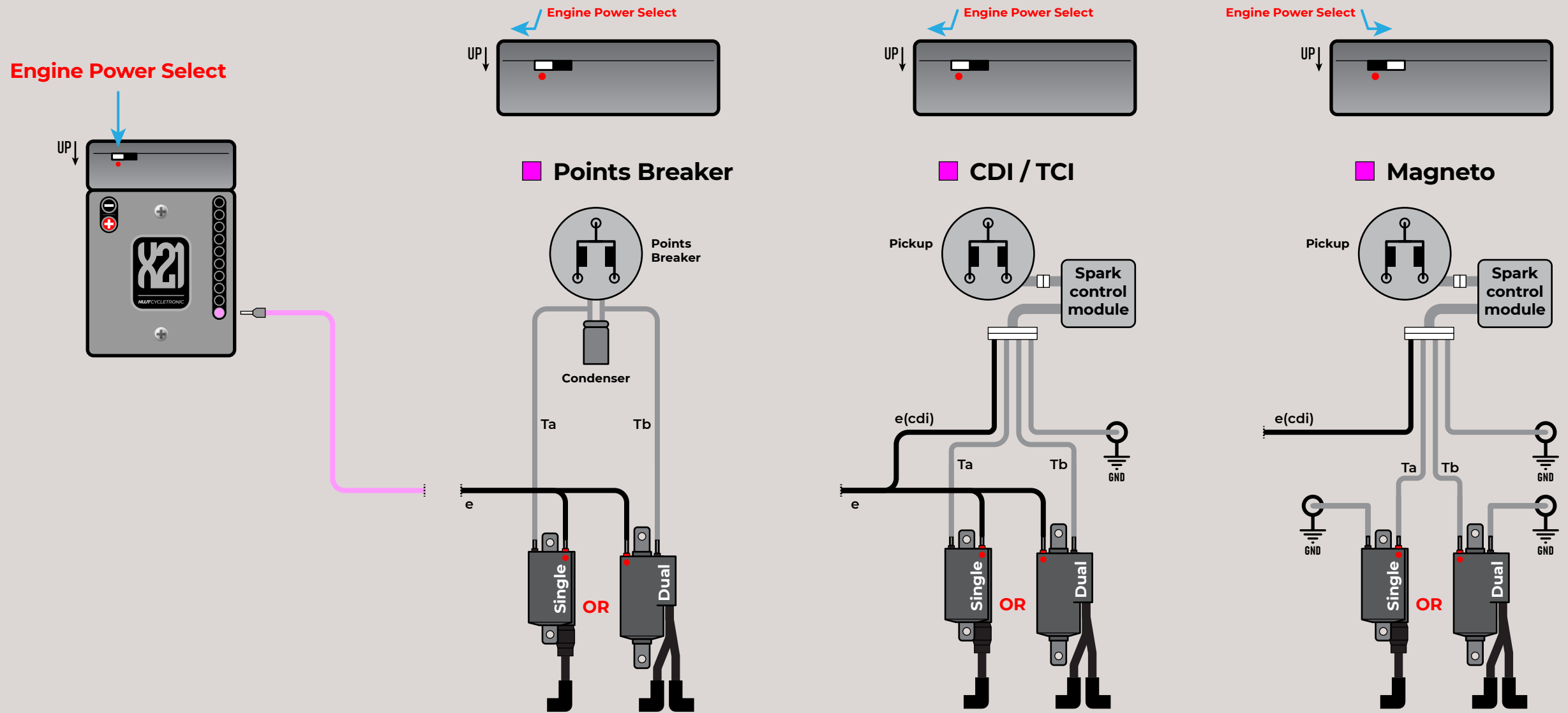
Need assistance with “My wire colors”?
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POWER / CHARGING / STARTING

DO NOT install fuse until instructed.

DO NOT over torque/tighten screw terminals.

Pay attention to "Engine Power Select" switch position.



My wire colors

My type _____

Points breaker / Pickup

Ta _____

Tb _____

Original Spark control module

Ta _____

Tb _____

e(cdi) _____

GND _____

Original coil(s)

Ta _____

Tb _____

e _____

“ Save some headache.

Inspect, clean and secure spark plug CAP.
Spark plug cables hard? Inspect for breaks.
DO NOT ASSUME, check!

Need assistance with "My wire colors"?
Email make, model, year of bike to
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ENGINE POWER / SPARK COIL

DO NOT install fuse until instructed.

DO NOT over torque/tighten screw terminals.

“ Your X21 does not need additional parts to run LED lights.

LED lights produce low heat to no heat and are energy efficient.

Aftermarket parts

Aftermarket or aftermarket replacement parts refer to vendor for wire colors.

OR include wiring diagrams/pictures in your email for assistance.

My wire colors

Front signal lights

marker _____
 turn _____
 GND _____

Rear signal lights

turn _____
 GND _____

Taillight

marker _____
 brake _____
 GND _____

Plate light

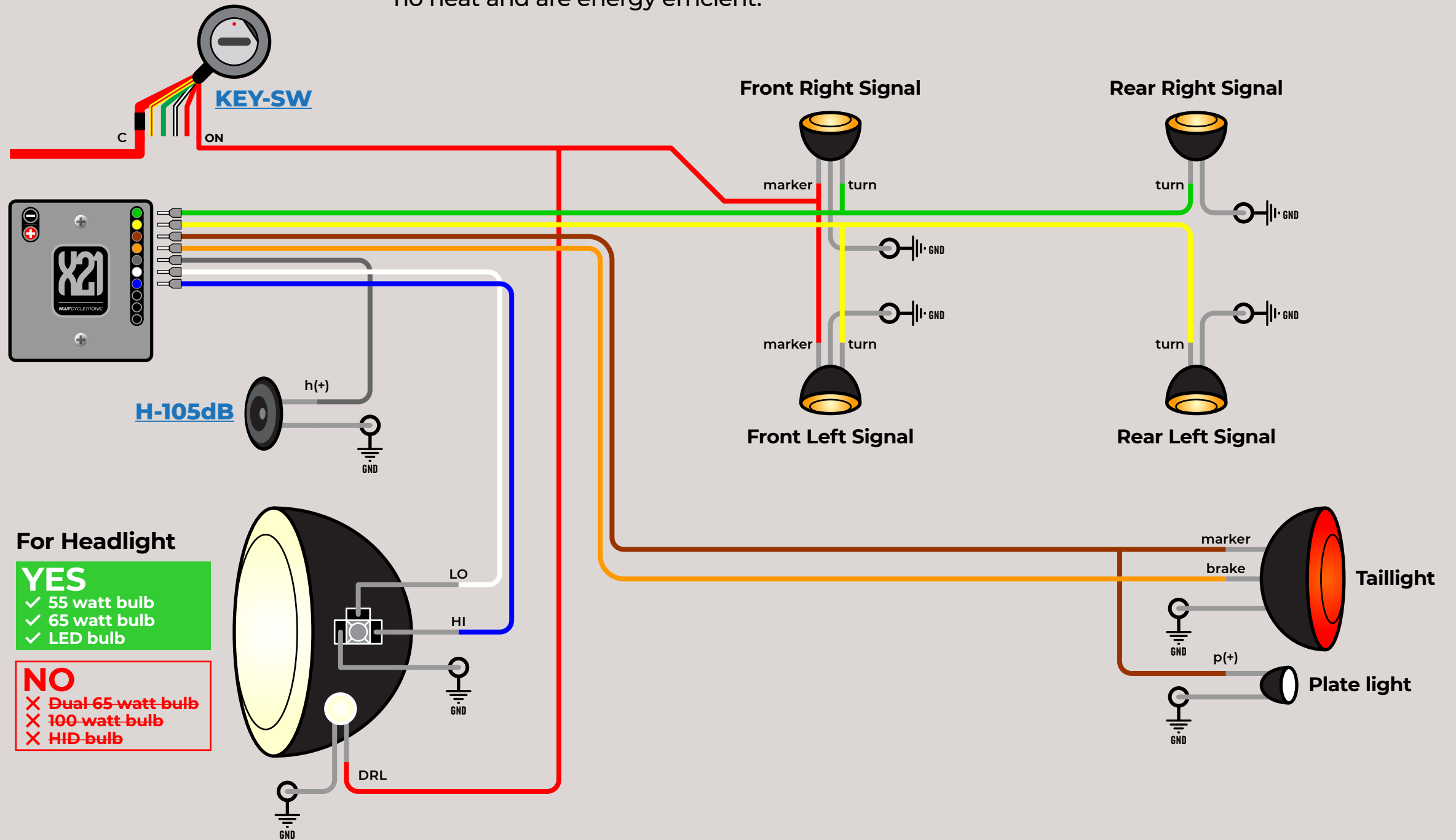
p(+) _____
 GND _____

Horn

h(+) _____
 GND _____

Headlight

DRL _____
 GND _____
 LO _____
 HI _____
 GND _____



For Headlight

- YES**
- ✓ 55 watt bulb
 - ✓ 65 watt bulb
 - ✓ LED bulb

- NO**
- ✗ Dual 65-watt bulb
 - ✗ 100-watt bulb
 - ✗ HID bulb

Need assistance with "My wire colors"?
 Email make, model, year of bike to
techservice@nwtcycletronic.com

DO NOT install fuse until instructed.

Pay attention to cable slack for steering head movement.

Aftermarket parts

Aftermarket or aftermarket replacement parts refer to vendor for wire colors.

OR include wiring diagrams/pictures in your email for assistance.

My wire colors

Gauge

backlight _____

b(-) _____

Left indicator

L(+) _____

L(-) _____

Neutral indicator

N(+) _____

N(-) _____

HI indicator

H(+) _____

H(-) _____

Oil indicator

O(+) _____

O(-) _____

Right indicator

R(+) _____

R(-) _____

Turn indicator

T(+) _____

T(-) _____

Rear brake switch

brake sw _____

brake sw _____

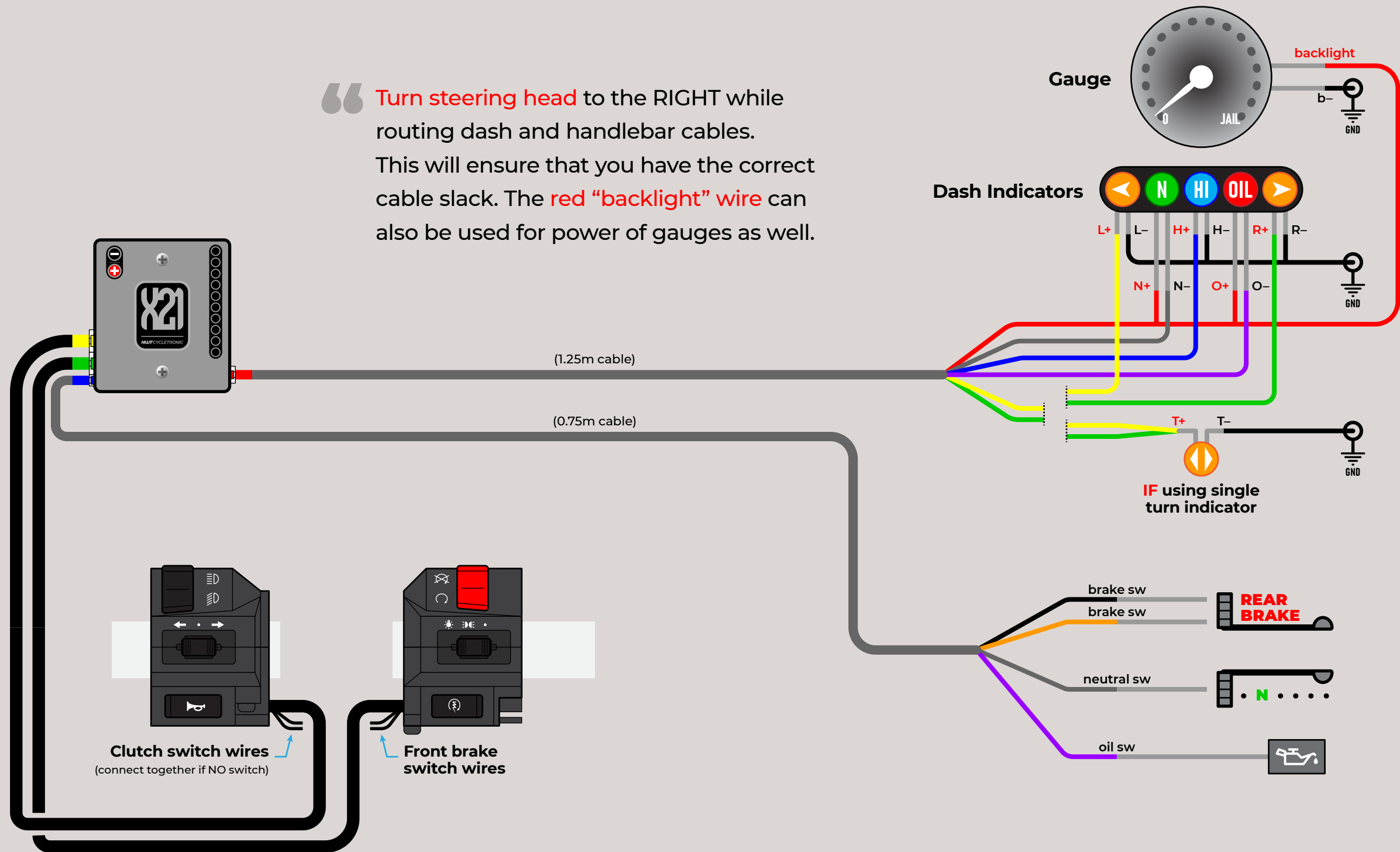
Neutral switch

neutral sw _____

Oil switch

oil sw _____

“ Turn steering head to the RIGHT while routing dash and handlebar cables. This will ensure that you have the correct cable slack. The red “backlight” wire can also be used for power of gauges as well.

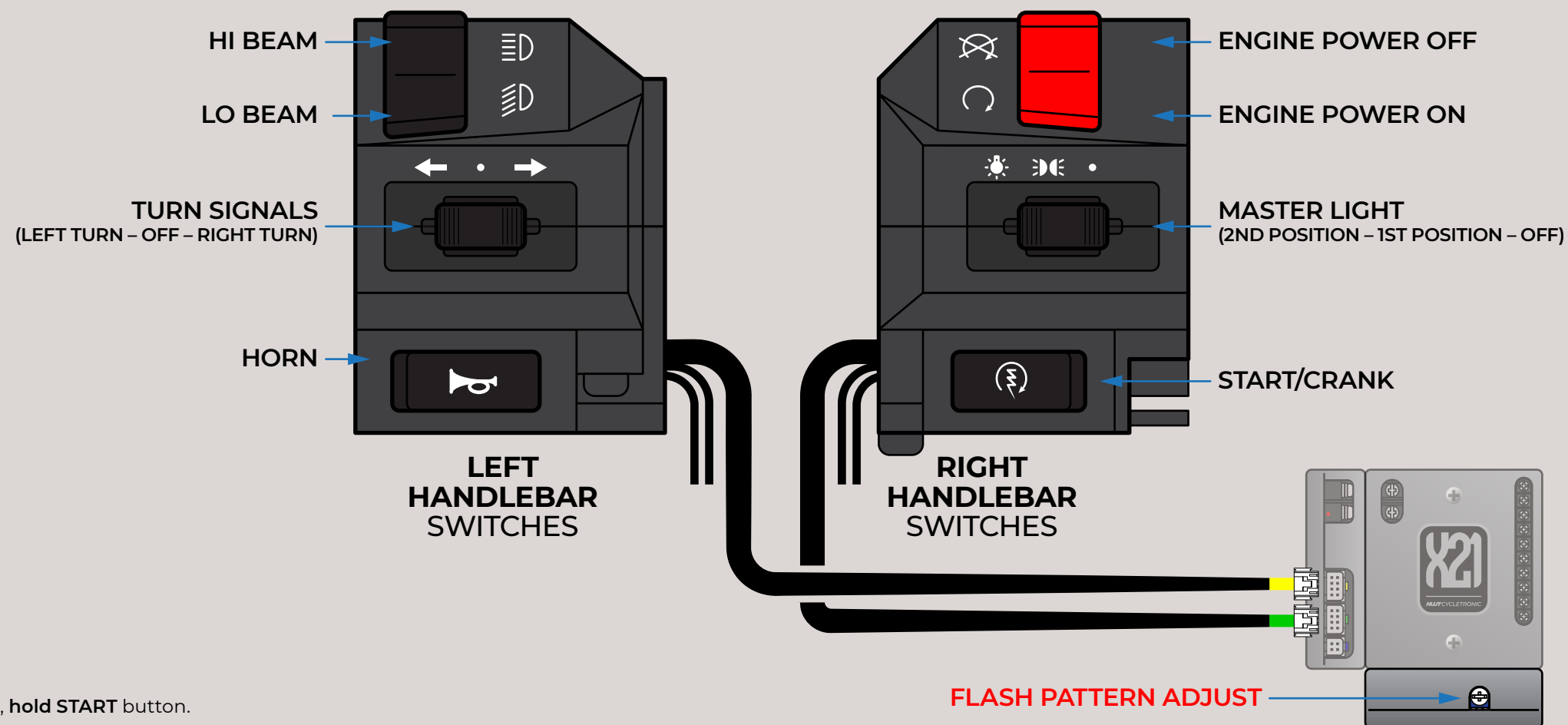
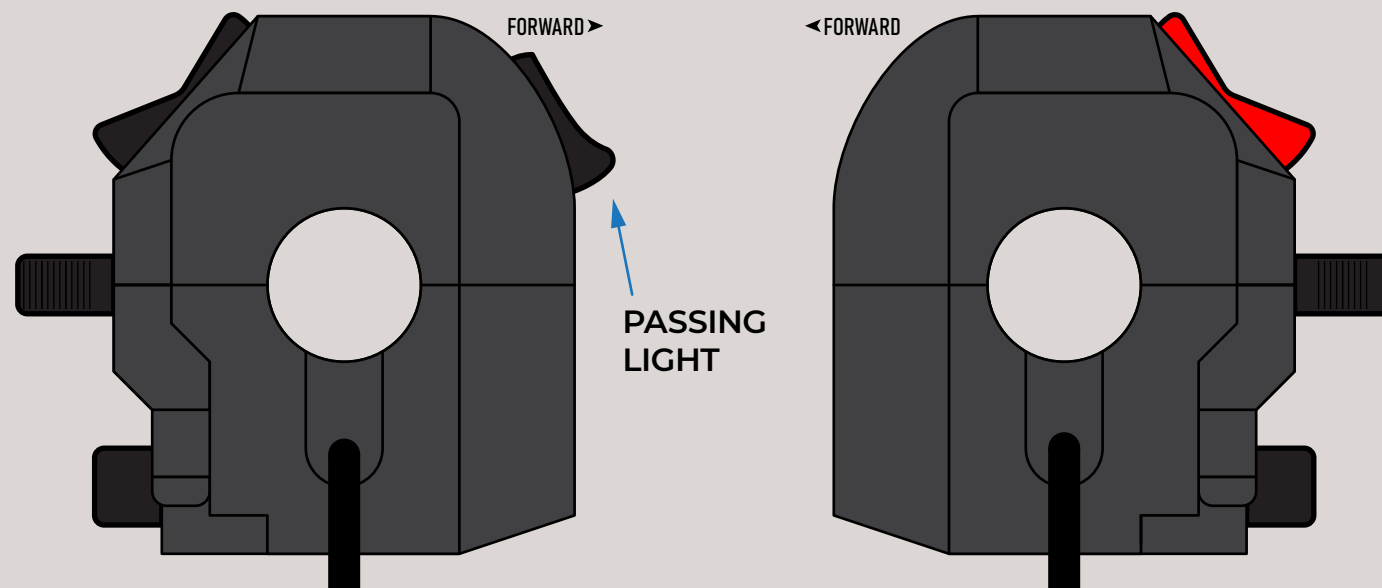


Need assistance with “My wire colors”?
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SWITCHES / DASH LIGHTS

“ Spark coil heats up and gets HOT when engine is not running.
Leave **ENGINE** switch to **OFF** unless starting engine.

1. Do a visual once over on the wiring job.
2. **Have ALL switches and Key in OFF position & gear in NEUTRAL position.**
3. Install MAIN Power fuse.
4. Turn **KEY SWITCH** to **ON** position.
= X21 LED will blink 3 times and then ON solid
= signal lights will blink 2 times
This indicates the system is ready.
= NEUTRAL and OIL indicator lights ON
= front marker lights ON (if installed)
= plate light ON (if installed)
5. Turn **MASTER LIGHT** switch to **1ST POSITION**.
= taillight marker ON
6. Check **FRONT** and **REAR** brake switch.
= bright brake light ON
7. Turn **MASTER LIGHT** switch to **2ND POSITION**.
= taillight marker ON
= headlight LO “soft start” ON (light will gradually come to full brightness)
8. Turn **HI BEAM** switch to **ON**.
= HI beam ON and HI indicator ON, LO beam OFF
Turn **HI BEAM** switch to **OFF**.
= HI beam OFF and HI indicator OFF, LO beam ON
Push **PASSING LIGHT** switch.
= HI beam ON and HI indicator ON while push
HI beam always available regardless of MASTER LIGHT switch position.
9. Push **HORN** switch.
= horn ON while push
10. Push **ENGINE** switch to **ON**.
= engine ON
While NEUTRAL indicator ON or CLUTCH pulled (if clutch switch is installed), **hold START** button.
= engine **CRANKING** and headlight OFF during
= engine ON and headlight ON (if MASTER LIGHT switch is set to ON)
If engine not ready to run, install spark plug to Spark Coil, then spark plug body to ground, check for spark.
START button **ONLY** available if ENGINE switch is ON and gear in NEUTRAL or CLUTCH pulled.
11. Turn **ALL** switches OFF



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SYSTEM CHECK (VALUE-S)

Finalizing system installation

1. **Remove MAIN Power fuse.**
2. Organize wires and cables.
3. Cut and shorten excess wiring.
4. Bundle, wrap or tape to protect wiring.
5. **Turn steering head to the RIGHT while routing dash and handlebar cables.**

This will ensure that you have the correct cable slack.

6. Secure bundle with zip ties.
7. Secure and tighten all nuts, bolts, screws, duct tape, twist wires and whatever the fuck else you used to mount your shit down.
8. Thoroughly inspect all connection points.
9. **REPEAT Section G.**

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