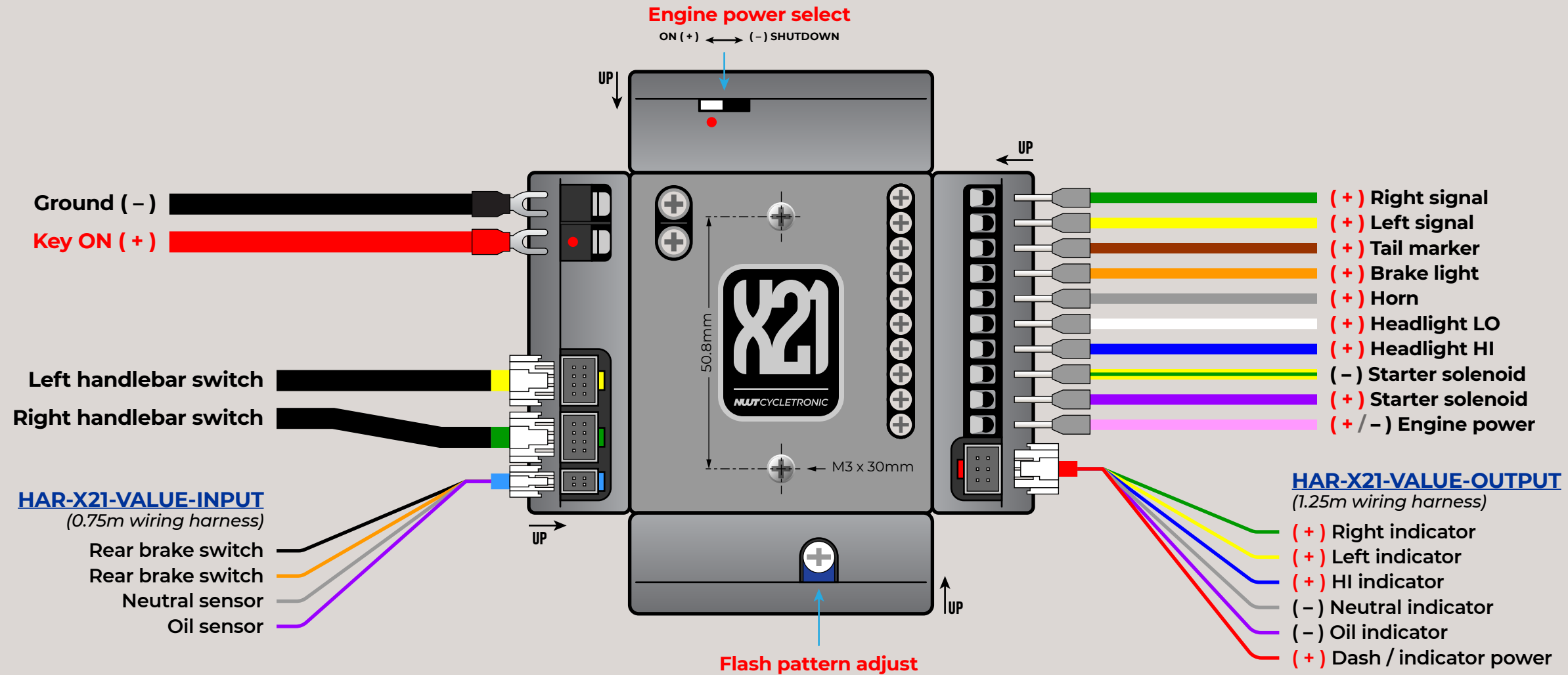


# X21 VALUE

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:

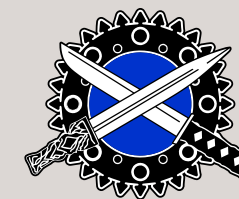


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#### NEED ASSISTANCE?

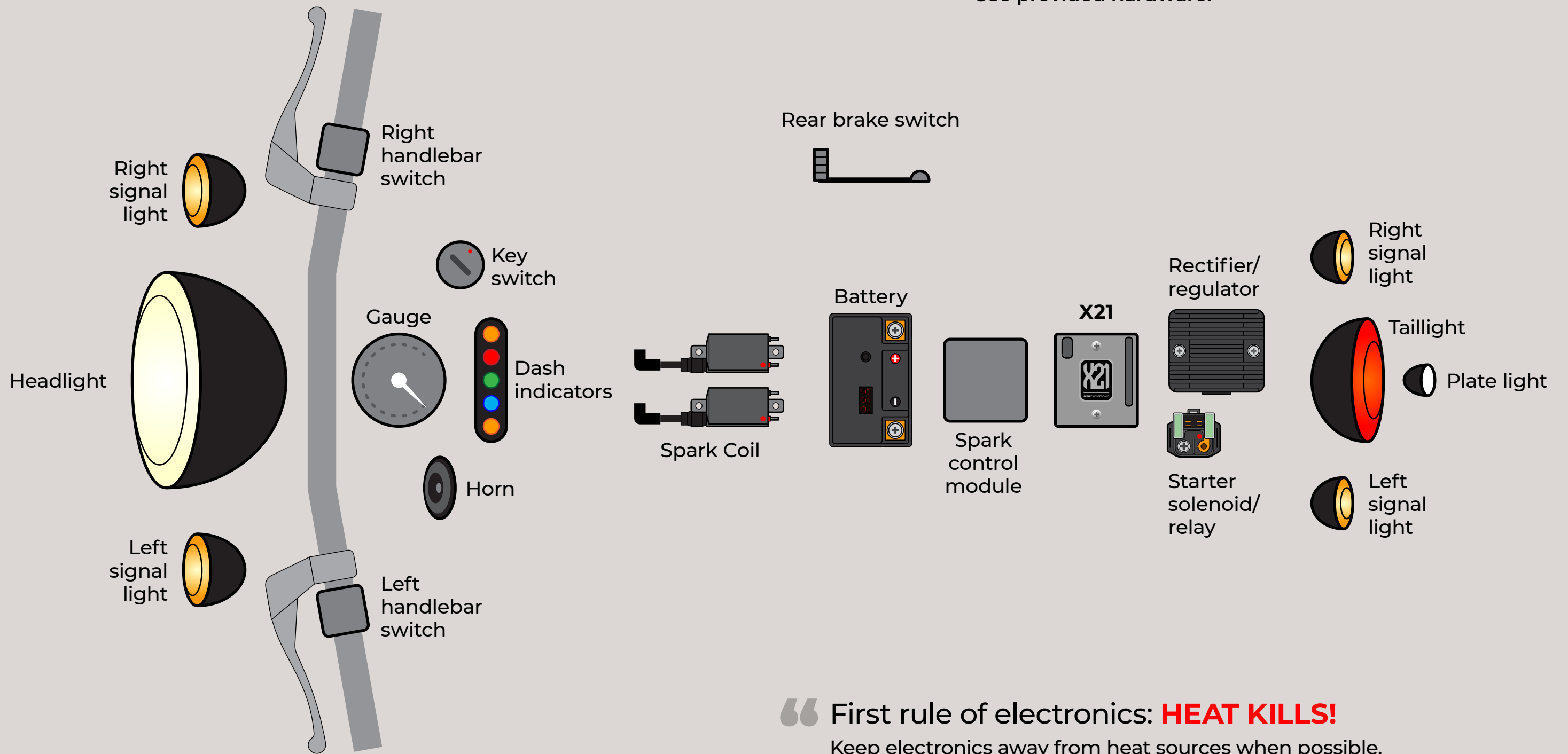
Email make, model, year of bike to  
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## COMPONENT CHECKLIST

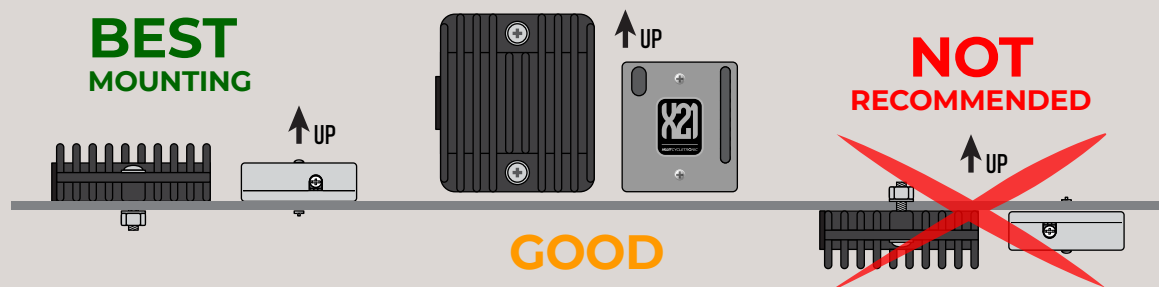
**MOUNT ALL COMPONENTS** onto desired location.

**DO NOT** route wires/cables at this time.

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



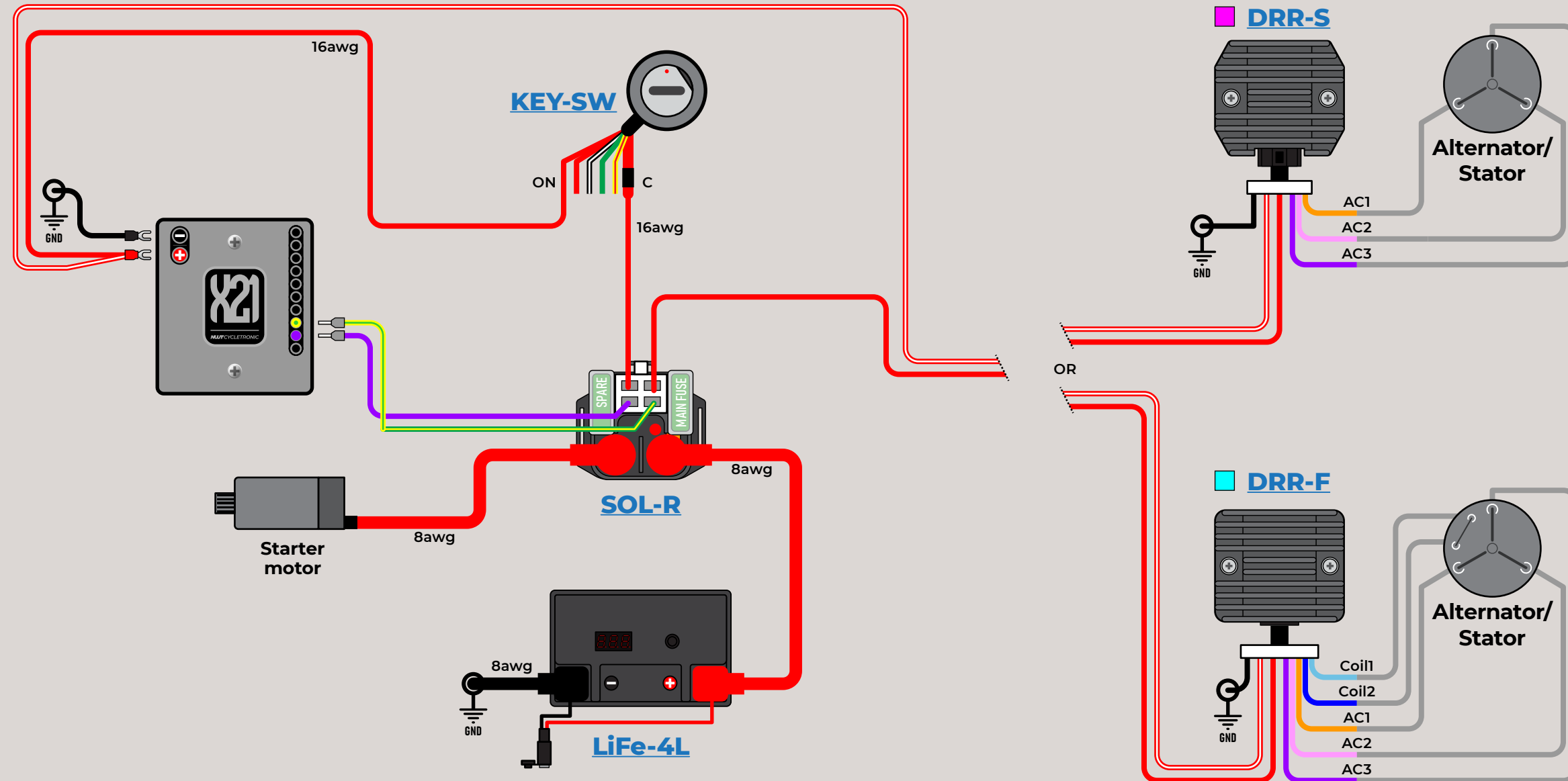
“ First rule of electronics: **HEAT KILLS!**  
Keep electronics away from heat sources when possible.



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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.

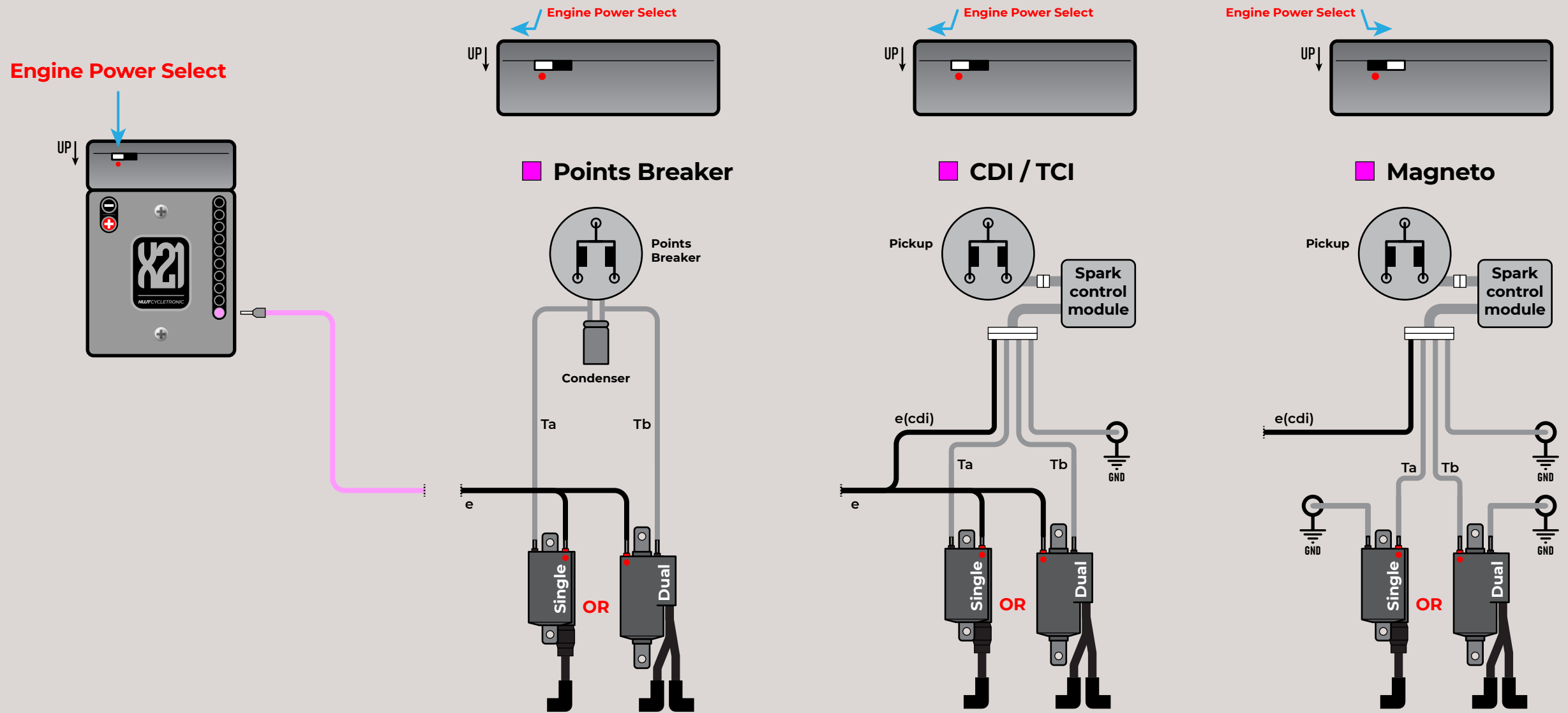
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**POWER / CHARGING / STARTING**

**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!

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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**

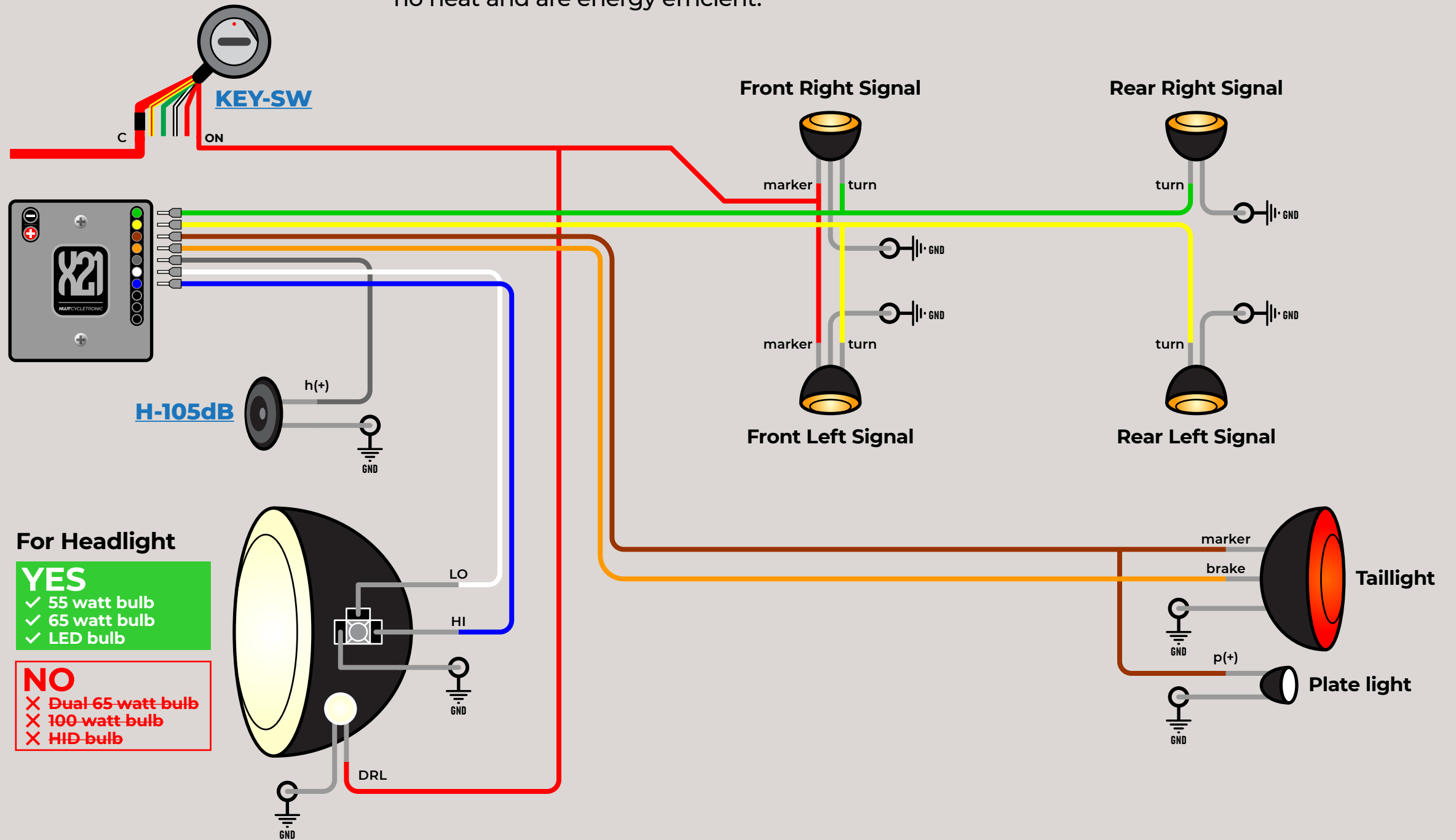
p(+) \_\_\_\_\_  
 GND \_\_\_\_\_

**Horn**

h(+) \_\_\_\_\_  
 GND \_\_\_\_\_

**Headlight**

DRL \_\_\_\_\_  
 GND \_\_\_\_\_  
 LO \_\_\_\_\_  
 HI \_\_\_\_\_  
 GND \_\_\_\_\_



Need assistance with "My wire colors"?  
 Email make, model, year of bike to  
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**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 \_\_\_\_\_

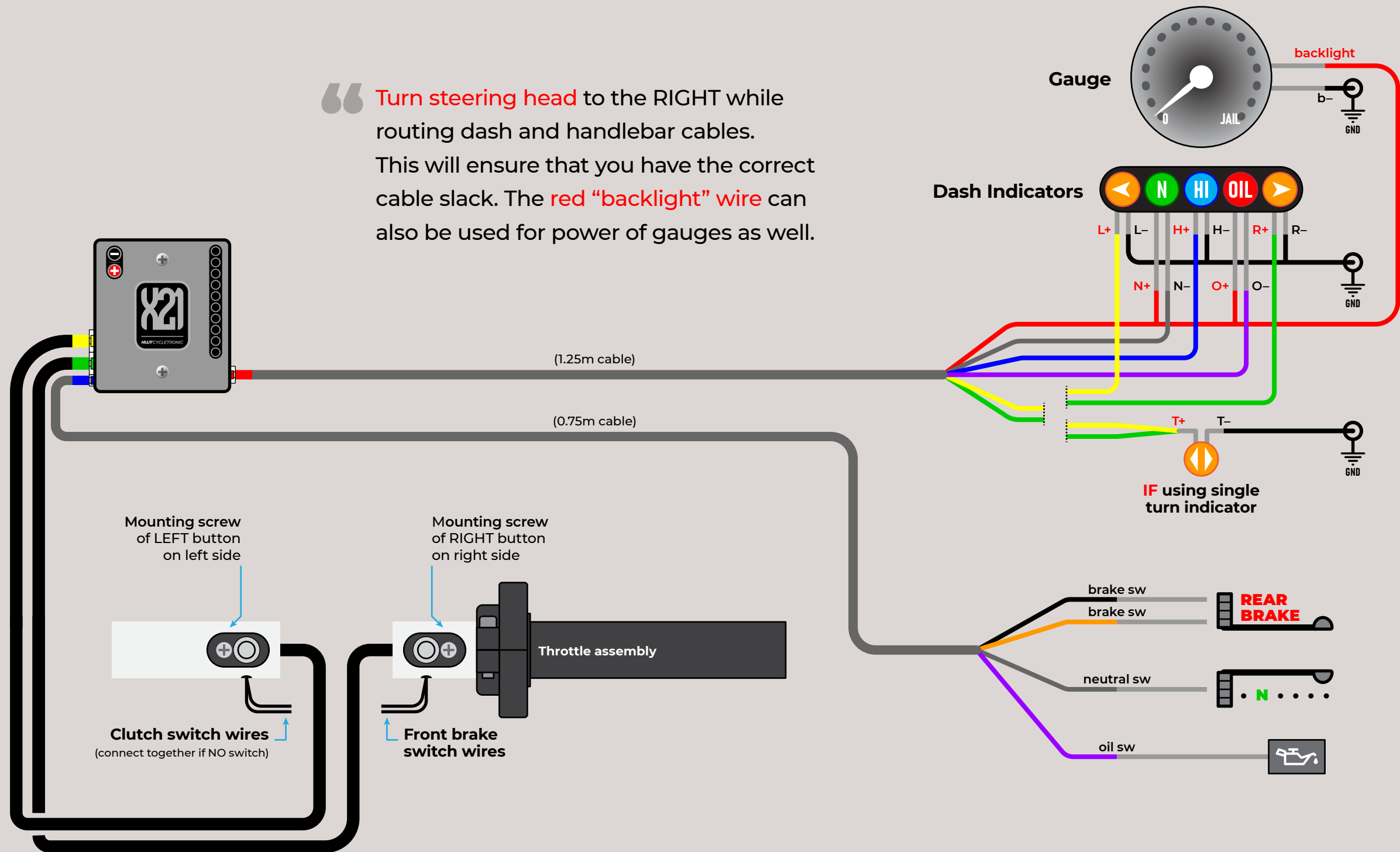
**Neutral switch**

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.

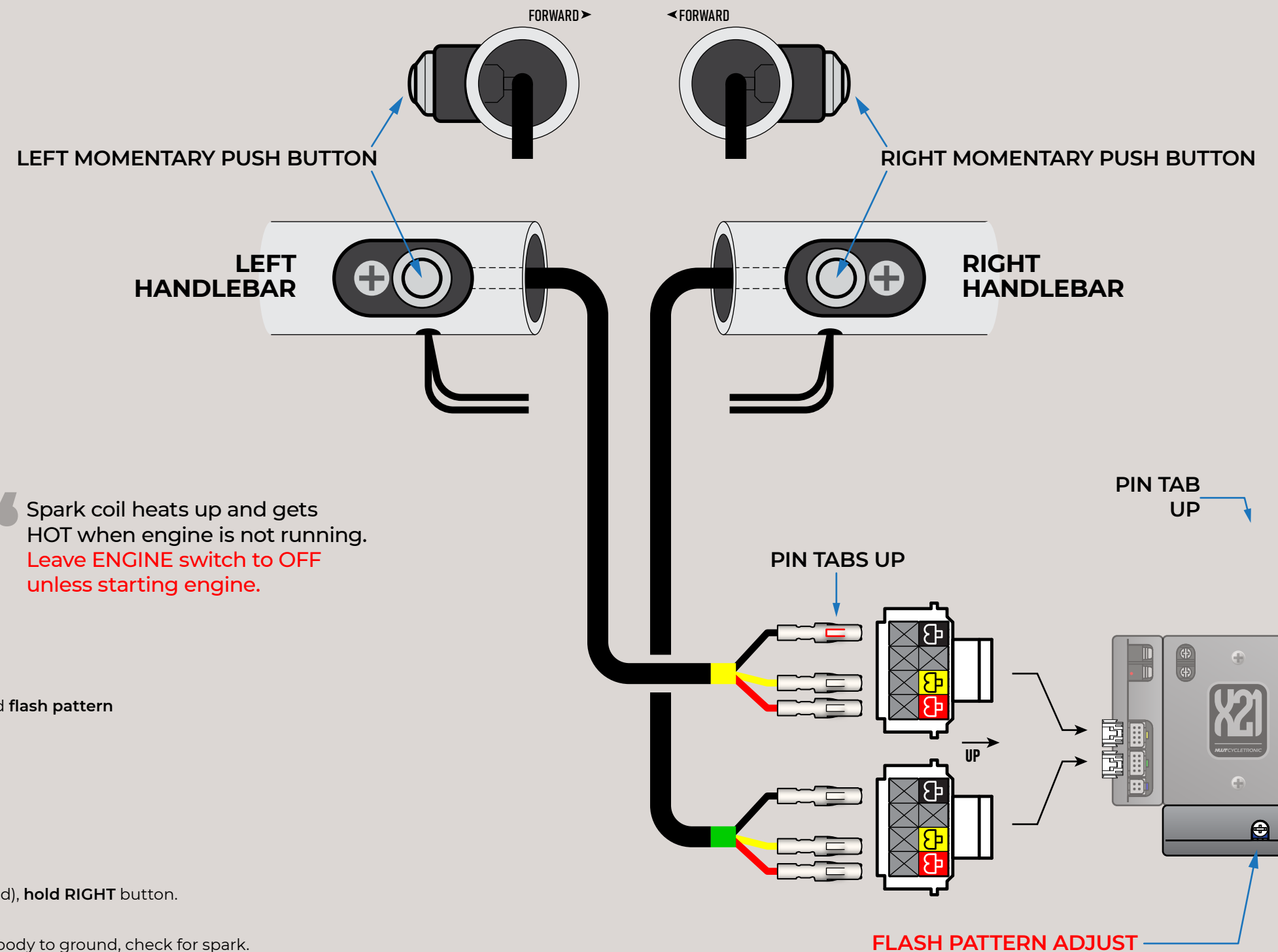


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SWITCHES / DASH LIGHTS



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)  
 = taillight marker ON  
 = headlight LO "soft start" ON (light will gradually come to full brightness)
5. Check **FRONT** and **REAR** brake switch.  
 = bright brake light ON
6. **Tap LEFT** button **2 times**.  
 = HI beam ON and HI indicator ON, LO beam OFF  
 While HI beam is ON, **tap LEFT** button again **2 times**.  
 = HI beam OFF and HI indicator OFF, LO beam ON
7. **Tap LEFT** button **3 times**.  
 = headlight OFF  
**Tap LEFT** button again **3 times**.  
 = headlight ON  
 HI beam always available.
8. **Hold LEFT** button.  
 = horn ON while hold
9. **Tap LEFT** button and **RIGHT** button **1 time**.  
 = ALL signal lights ON and turn indicators ON  
 Slowly rotate **FLASH PATTERN ADJUST** dial in either direction to set desired **flash pattern**  
**Tap LEFT** button and **RIGHT** button again **1 time**.  
 = ALL signal lights OFF and turn indicators OFF  
 Check LEFT turn, check RIGHT turn (**1 tap ON, 1 tap OFF**)  
 = signal lights ON and turn indicator ON to button pushed
10. **Tap RIGHT** button **2 times**  
 = engine ON  
 While NEUTRAL indicator is ON or CLUTCH pulled (if clutch switch is installed), **hold RIGHT** button.  
 = engine **CRANKING** and headlight OFF during  
**If engine not ready to run**, install spark plug to Spark Coil, then spark plug body to ground, check for spark.  
 While engine is ON, **tap RIGHT** button **2 times**.  
 = engine OFF  
**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-M)**

## 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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