

X3.P

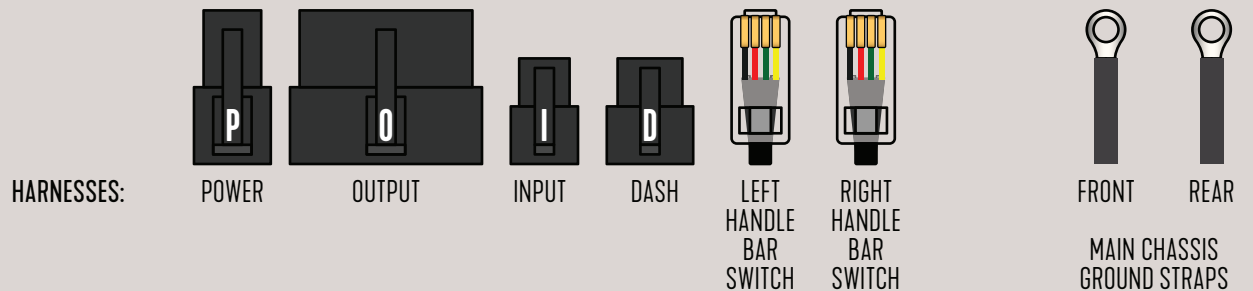
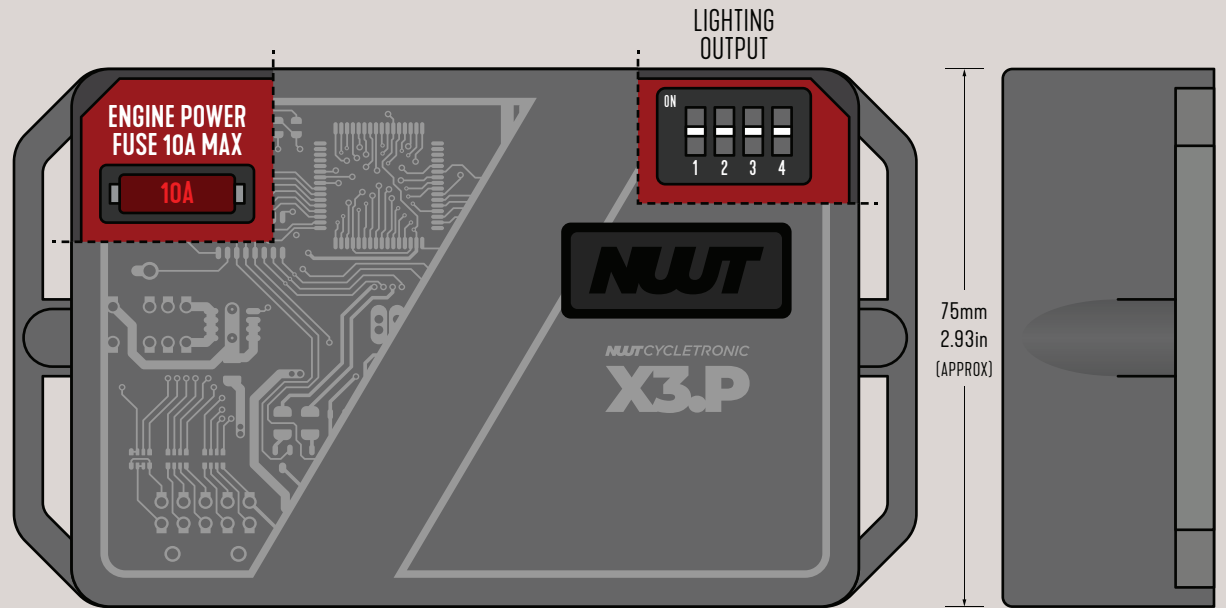
Control Hub PUSH BUTTON SWITCH

FEATURES

- Complete electrical control hub
- Atmel 8-bit AVR® RISC-based microcontroller
- Trench type MOSFET powered
- Solid State design for water-proof and shock-proof operation
- 4 layer PCB design utilizing SMD components
- PTC smart fuse protection with auto reset
- Optimized for LED lighting
- On board "fly-back" protection circuit
- AC/DC voltage runaway engine shutdown protection
- Charging system monitoring with fault audible notification
- Enhanced engine power protection with quick blow fuse
- Complete color-coded wiring harness
- No start ignition coil time-out power off
- Starter motor safety lock out with anti-grind
- Starter motor max crank time out
- Brake light flash pre-warning (Selectable)
- Automatic brake light HOLD (Selectable)
- Onboard digital flasher (Selectable)
- Intelligent directional switching signal light
- Signal light time out auto off
- DRL/Halo/Front Marker light output
with TYPE 2 switchback (Selectable)
- "PARK" position light feature (Hazard lights)
- Master light control (Headlight only)
- Sensor inputs
- Auxiliary sensor input/output
- Dash gauge outputs (Enhanced)
- Soft start headlight ON
- Engine run monitoring
- Multi-use internally protected power output
- Single wire PWM taillight output
- Sequential/self flashing signal light capable
- Handlebar switch size (7/8", 22mm)
- 1 year replacement warranty & tech service

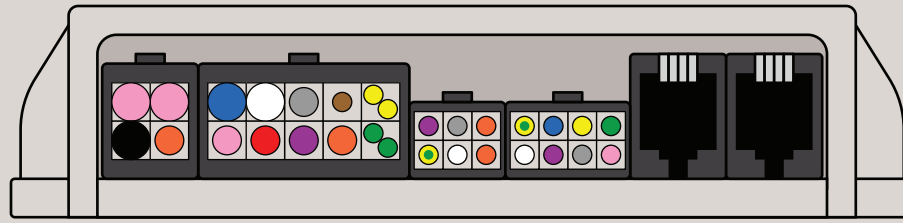
INCLUDES

- X3.P Control Hub
- Plug in wiring harness (Power, Output, Input, Das)
- Plug&Go handlebar switch set (Push button type)
- GND harness



X3.P

Pinouts



POWER OUTPUT INPUT DASH LEFT RIGHT



FRONT GND

- GND 16AWG, 0.5m (-) DASH/DRL/HEADLIGHT
- GND 18AWG, 0.5m (-) HORN
- GND 22AWG, 0.5m (-) LEFT TURN SIGNAL LIGHT
- GND 22AWG, 0.5m (-) RIGHT TURN SIGNAL LIGHT

POWER

- K+ 16AWG, 1.25m (+) KEY SWITCH POWER IN (LONG)
- GND 16AWG, 0.25m (-) CHASSIS GROUND IN
- S+ 16AWG, 0.25m (+) SPARE SWITCH POWER OUT (SHORT)
- P+ 18AWG, 1.25m (+) PARK LIGHT SWITCH IN

OUTPUT

- HI 16AWG, 1.25m (+) HEADLIGHT HIGH BEAM
- F+ 18AWG, 0.25m (+) PROTECTED POWER
- LO 16AWG, 1.25m (+) HEADLIGHT LOW BEAM
- ENGINE 18AWG, 0.75m (+) ENGINE IGNITION POWER
- HORN 18AWG, 0.75m (+) HORN
- STARTER 18AWG, 0.5m (+) STARTER SOLENOID / RELAY
- FRONT LIGHT 22AWG, 0.75m (+) DRL/HALO or FRONT MARKER
- TAILLIGHT 18AWG, 0.75m (+) TAILLIGHT
- LEFT TURN (2) 22AWG, 1.25m, 0.75m (+) LEFT TURN SIGNAL LIGHTS (FRONT & REAR)
- RIGHT TURN (2) 22AWG, 1.25m, 0.75m (+) RIGHT TURN SIGNAL LIGHTS (FRONT & REAR)

INPUT

- OIL 22AWG, 0.75m (-) OIL SWITCH
- RUN SENSE 22AWG, 0.75m (~) IGNITION COIL TRIGGER
- NEUTRAL 22AWG, 0.75m (-) NEUTRAL SWITCH
- AUX 22AWG, 0.75m (~) AUX SENSOR / SWITCH / INPUT
- BRAKE 22AWG, 0.75m (-) BRAKE SWITCH IN
- BRAKE 22AWG, 0.75m (-) BRAKE SWITCH OUT

REAR GND

- GND ... 18AWG, 0.5m ... (-) BRAKE/TAIL LIGHT
- GND ... 22AWG, 0.5m ... (-) RIGHT TURN SIGNAL LIGHT
- GND ... 22AWG, 0.5m ... (-) LEFT TURN SIGNAL LIGHT

RIGHT HANDLEBAR SWITCH

LEFT HANDLEBAR SWITCH

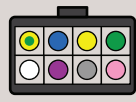
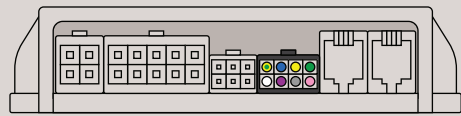
DASH

- D+ 22AWG, 1.25m (+) GAUGE POWER
- RIGHT TURN 22AWG, 1.25m (+) RIGHT TURN INDICATOR
- NEUTRAL 22AWG, 1.25m (-) NEUTRAL INDICATOR
- LEFT TURN 22AWG, 1.25m (+) LEFT TURN INDICATOR
- OIL 22AWG, 1.25m (-) OIL INDICATOR
- HI 22AWG, 1.25m (+) HIGH BEAM INDICATOR
- AUX 22AWG, 1.25m (~) AUX OUTPUT
- TACH 22AWG, 1.25m (~) TACH PULSE

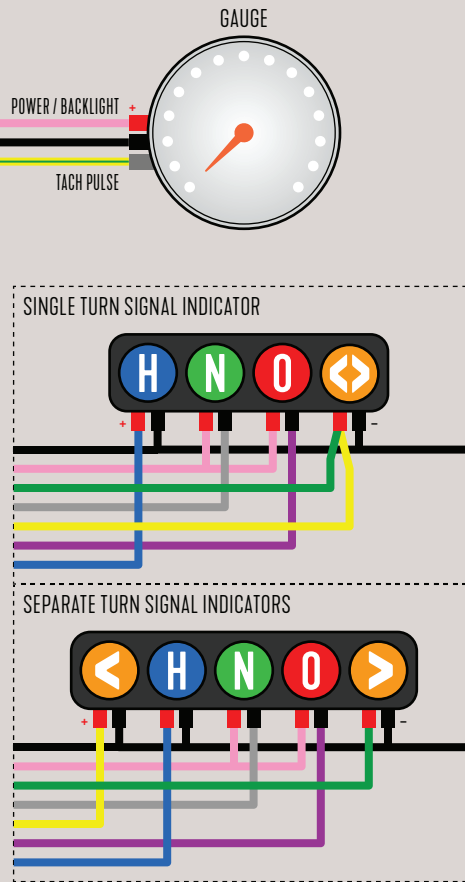
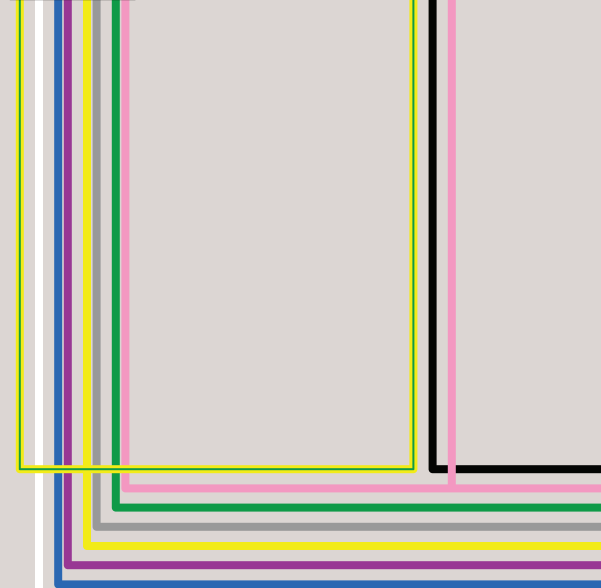
X3.P

Dash Harness

TURNING DUMMY TO SMART LIGHTS



DASH PLUG



FRONT GND STRAP
MOUNT ON MAIN FRAME/CHASSIS

16AWG DASH/DRL/HEADLIGHT
18AWG HORN
22AWG LEFT TURN SIGNAL LIGHT
22AWG RIGHT TURN SIGNAL LIGHT

AVOID EXTENDING GROUND WIRES
KEEP SHORT AS POSSIBLE.

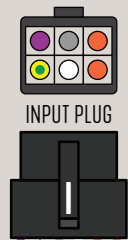
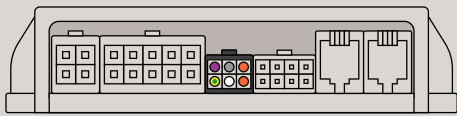
TURN HANDLEBAR LEFT AND RIGHT, LOCK TO LOCK, WHEN ROUTING DASH CABLES TO ENSURE YOU HAVE PROPER CABLE SLACK.

AUX

X3.P

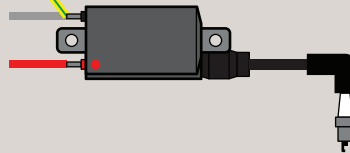
Input Harness

RUN SENSE / NEUTRAL / OIL / R-BRAKE

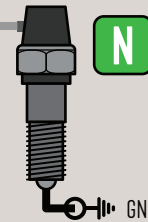


INPUT PLUG

SPARK COIL
RUN SENSE

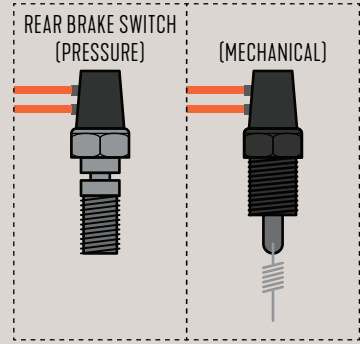


NEUTRAL
SWITCH

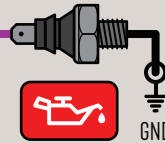


N

GND



OIL PRESSURE
SWITCH



GND

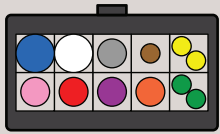
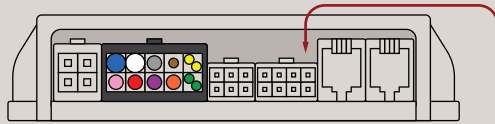
AUX SENSOR / SWITCH / INPUT

CHECK SWITCHES FOR PROPER FUNCTIONALITY
CLEAN/REBUILD/REPLACE WHEN NECESSARY

X3.P

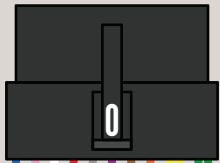
Output Harness

LIGHTING / HORN

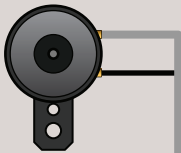


LIGHTING OUTPUT SETTINGS INSIDE

OUTPUT PLUG



HRNX.105



DIGITAL FLASHER OPTION



↑ REGULAR TURN SIGNALS OR
↓ SELF-FLASHING / SEQUENTIAL (FLOWING)

REGULAR SINGLE ELEMENT



REGULAR DUAL ELEMENT



SELF-FLASHING / SEQUENTIAL (FLOWING)

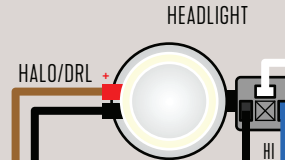


FRONT LIGHTING OPTION A



HALO/DRL ONLY
NO MARKERS

↑ 2 UP

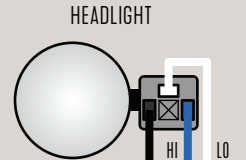


FRONT LIGHTING OPTION B



NO HALO/DRL MARKERS ONLY

↓ 2 DOWN



Output Harness:
POWER / STARTING / CHARGING PAGE

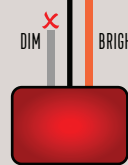
Output Harness:
ENGINE POWER / SPARK COILS PAGE

TAILLIGHT FEATURES



3 | 4
BRAKE FLASH PRE WARNING | AUTOMATIC BRAKE HOLD

↑ ON
↓ OFF



TAILLIGHT

LEFT TURN

LICENSE PLATE/TAG

RIGHT TURN

FRONT GND STRAP

MOUNT ON MAIN FRAME/CHASSIS

16AWG DASH/DRL/HEADLIGHT

18AWG HORN

22AWG LEFT TURN SIGNAL LIGHT

22AWG RIGHT TURN SIGNAL LIGHT

AVOID EXTENDING GROUND WIRES
KEEP SHORT AS POSSIBLE.

YOUR NEW GENERATION CONTROL HUB DOES NOT NEED ANY ADDITIONAL PARTS TO RUN LED LIGHTS. THEY PRODUCE LOW TO NO HEAT AND ARE ENERGY EFFICIENT.

REAR GND STRAP

MOUNT ON MAIN FRAME/CHASSIS

18AWG TAIL LIGHT

22AWG LEFT TURN SIGNAL LIGHT

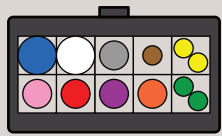
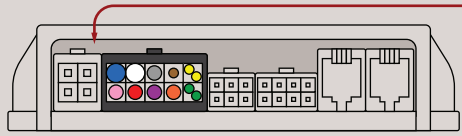
22AWG RIGHT TURN SIGNAL LIGHT

DO NOT EXTEND OR LENGTHEN GND WIRES
KEEP SHORT AS POSSIBLE.

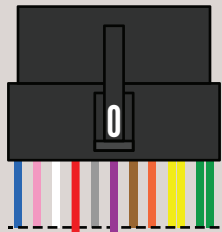
X3.P

Output Harness

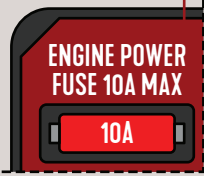
ENGINE POWER / SPARK COILS



OUTPUT PLUG



Output Harness:
LIGHTING / HORN PAGE

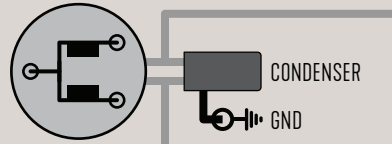


ENGINE POWER
FUSE 10A MAX

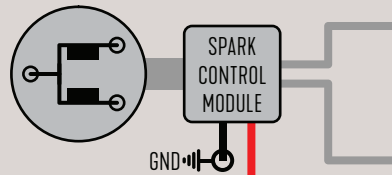
10A

Output Harness:
POWER / STARTING / CHARGING PAGE

POINTS BREAKER

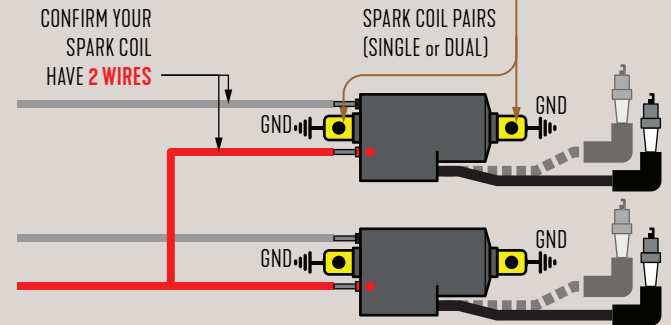


CDI (CAPACITOR DISCHARGE IGNITER) / TCI (TRANSISTOR CONTROLLED IGNITER)



CONFIRM YOUR
SPARK COIL
HAVE 2 WIRES

IT IS ABSOLUTELY CRITICAL
THE COIL **CENTER CORES**
ARE GROUNDED SOLID,
DIRECT METAL TO METAL
ON THE MAIN CHASSIS.

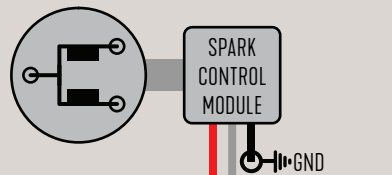


DO NOT ASSUME, CHECK!
INSPECT, CLEAN AND SECURE SPARK PLUG CAP.
HARD SPARK PLUG CABLES? INSPECT FOR BREAKS.
EVEN BRAND NEW PARTS CAN BE DEFECTIVE.

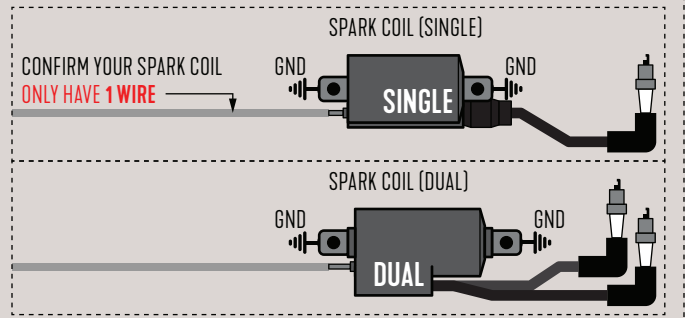
MAGNETO



REMOVE PRE
INSTALLED
FUSE



CONFIRM YOUR SPARK COIL
ONLY HAVE 1 WIRE

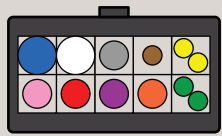
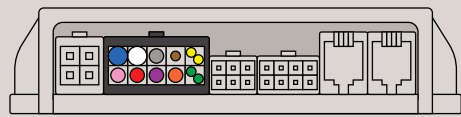


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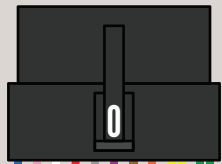
Output Harness

POWER / STARTING / CHARGING

MODERNIZE YOUR CHARGING SYSTEM
WITH A **DIGITAL TYPE** RECTIFIER+REGULATOR
FOR SAFER AND MORE EFFICIENT CHARGING SOURCE



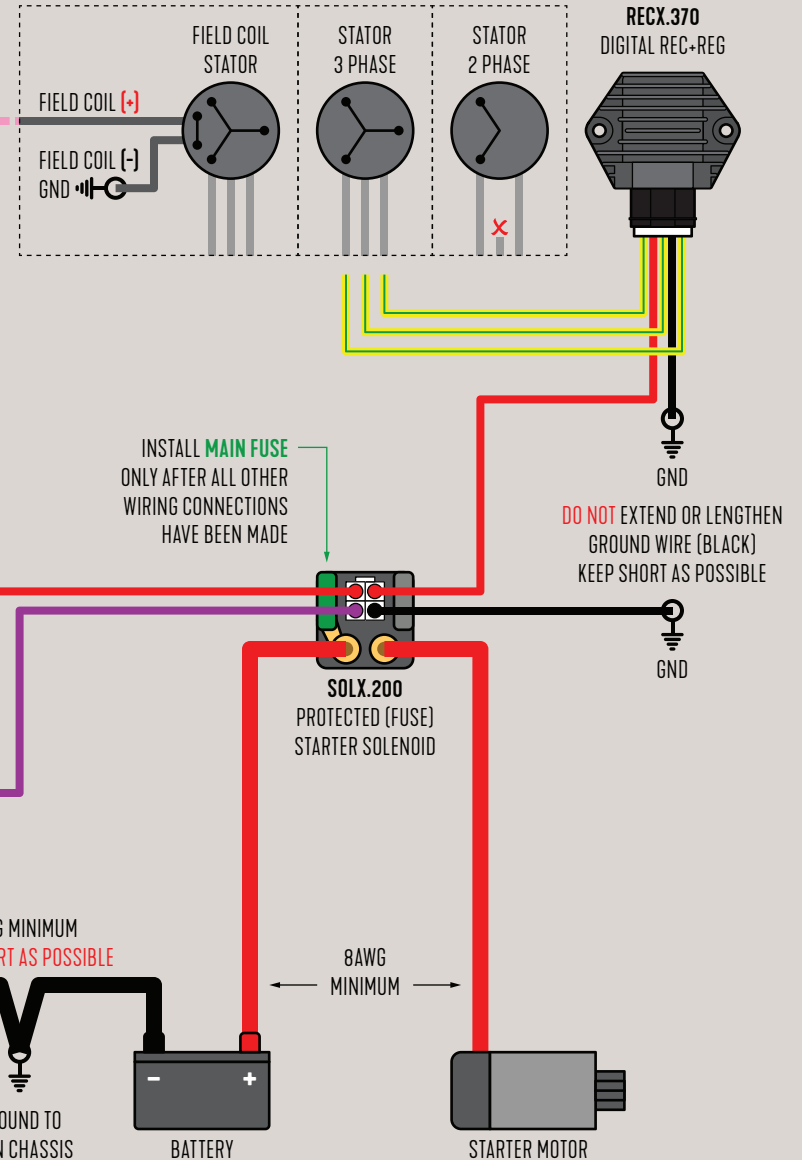
OUTPUT PLUG



Output Harness:
LIGHTING / HORN PAGE

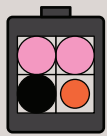
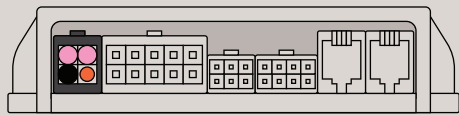
Output Harness:
ENGINE POWER / SPARK COILS PAGE

Power Harness
PAGE

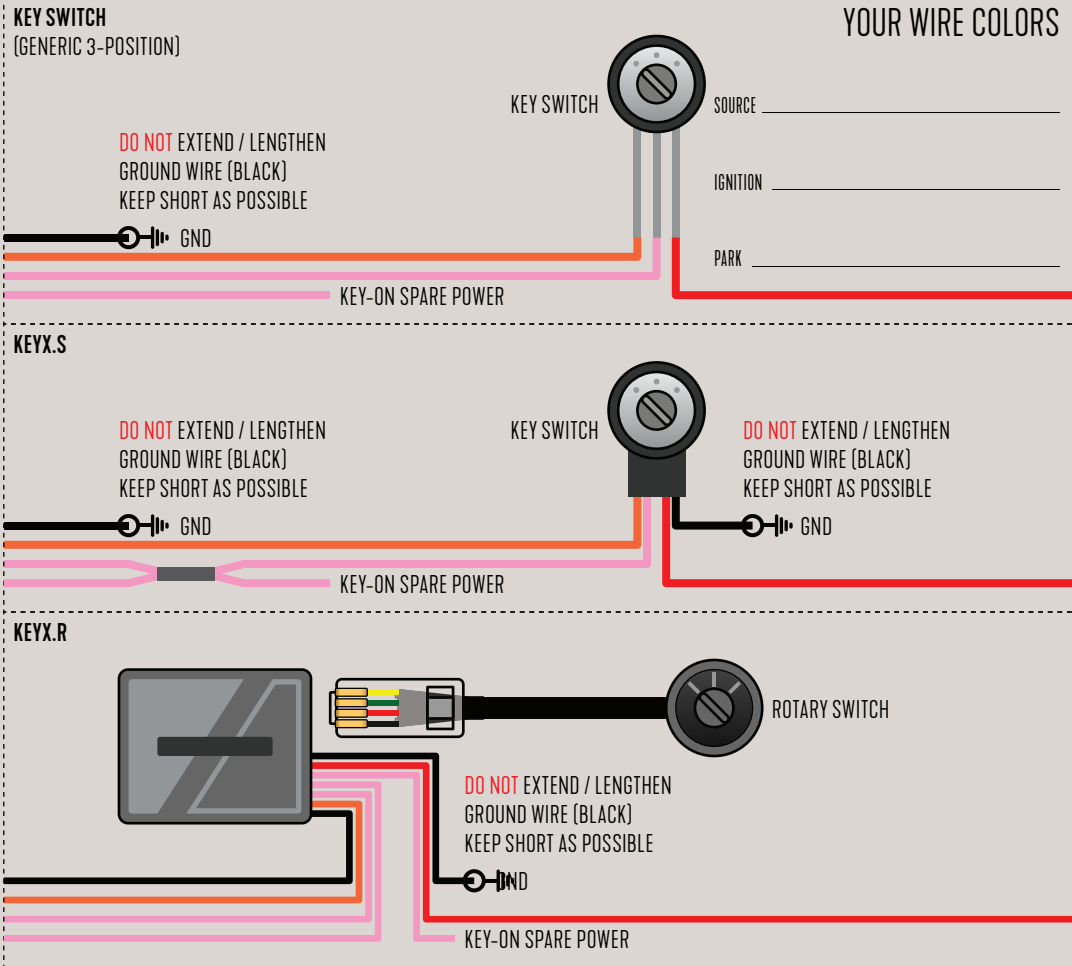


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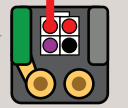
Power Harness KEY SWITCH



POWER PLUG



INSTALL MAIN FUSE ONLY AFTER ALL OTHER WIRING CONNECTIONS HAVE BEEN MADE



SOLX.200 PROTECTED (FUSE) STARTER SOLENOID