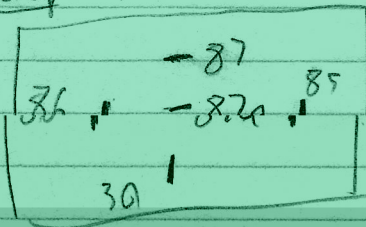# RD400 Wiring

LIGHTS/ARDUINO

(Inputs) 4-core [1] → BLK: Gnd, WHT: High Beam PB (active low to GND), RED: RT, YEL: LT
(Outputs) 4-core [2] → BIK: H2V, WHT: High Beam (-), RED: RT(-), YEL: LT(-)

Brake: Black to battery (-), Red to handle, yellow to +12
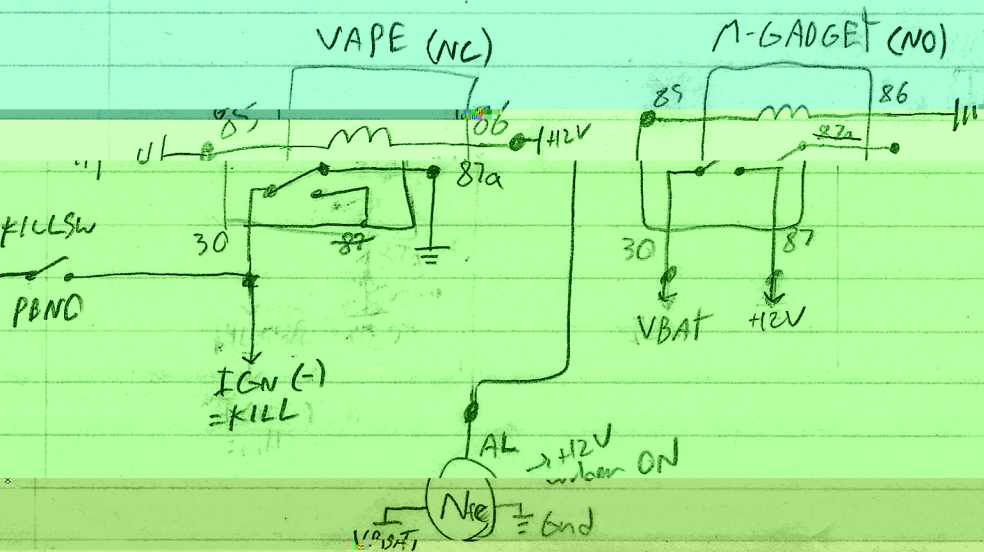
Rear

Relay

85/86 → coil
30 → COMMON
87 → NO contact
87a → NC contact

30 / Blue → Ground to ignition coils (Black / Blue)
86/87 / Brown → Battery Ground
85 / Black → Power switch +12V (sinking)

Stator
Black pair → 50 VAC to RR
Red/Yel/Wht → coils, same colors

VAPE (NC)   M-GADGET (NO)

KILLSW
PBNO
30   87
IGN (-)
= KILL

30   87
VBAT   +12V

AL → +12V
when ON
Nte = Gnd
VBAT

Option A: (simplest)
1 killswitch, 1 relay
relay → lights
killswitch → coils

Option B:
1 kill PBNC, 2 relays

Groupe Cluster

Indicator Schematic → to IND   3906

Red → Vbat +12V (clock)
Brown → Key +12V power
Black → GND
Orange → L Turn (-)
Blue → R Turn (-)
Yellow → HB Ind (-)
White → Neutral Ind (-)
Gray → Oil Ind (+/-)

2N3906 PNP

R2 6.8kΩ   to control signal $I = 1.6mA$
$I = 2.5mA$ R1 4.7k

E B C

R1 Pullup on Base
R2 R_{BASE}, $I_{EB} = 1.65mA$

+12V key power

Bars

SWITCH +

C1 ⊕ ⊖ C2
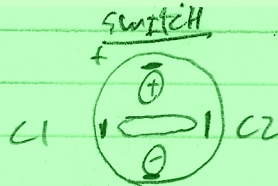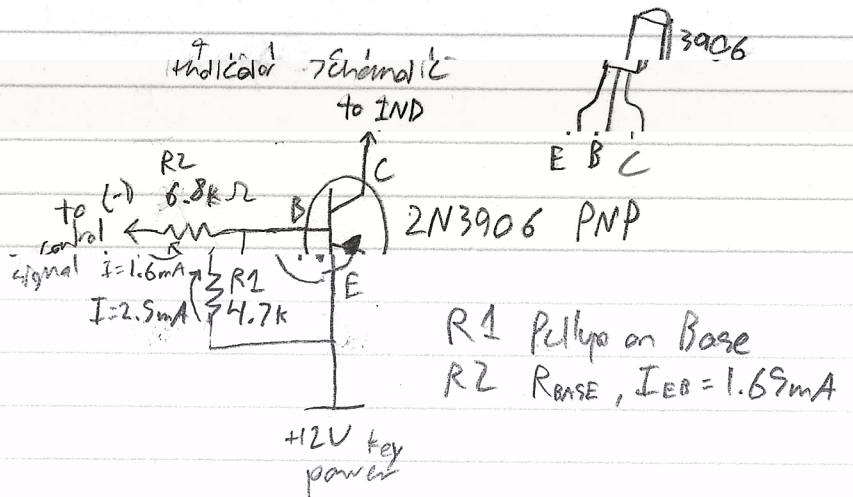
LED(?)	"	-	"	"	SWITCH PIN	1	2	3	4	
	①	②	③	④	+	+12V	+12V (right)	+12V (L)	+12V	SW
	TS/L	HORN	HB?	TS/R	-	LT Turn	Spare LED	HORN	RT Turn	LEF
Active	LOW	LOW	LOW	LOW	C1	GND (center R)	+12V	GND	GND	SW
tch Active	LOW	HIGH	LOW	LOW	C2	LT SW	Horn SW.	HB SW	RT SW	

Arduino Box

→ Brights In
→ Left turn In
→ Right Turn In

→ +12V
→ GND
→ Brights
→ Right Turn

4-core wires:

1	2
Black = GND	Black = +12V
White = Brights In	White = Brights Out
Red = Right Turn In	

→ ALL IC is Active Low!!

Horn

Horn

Pull on

+12V

Handlebar Horn