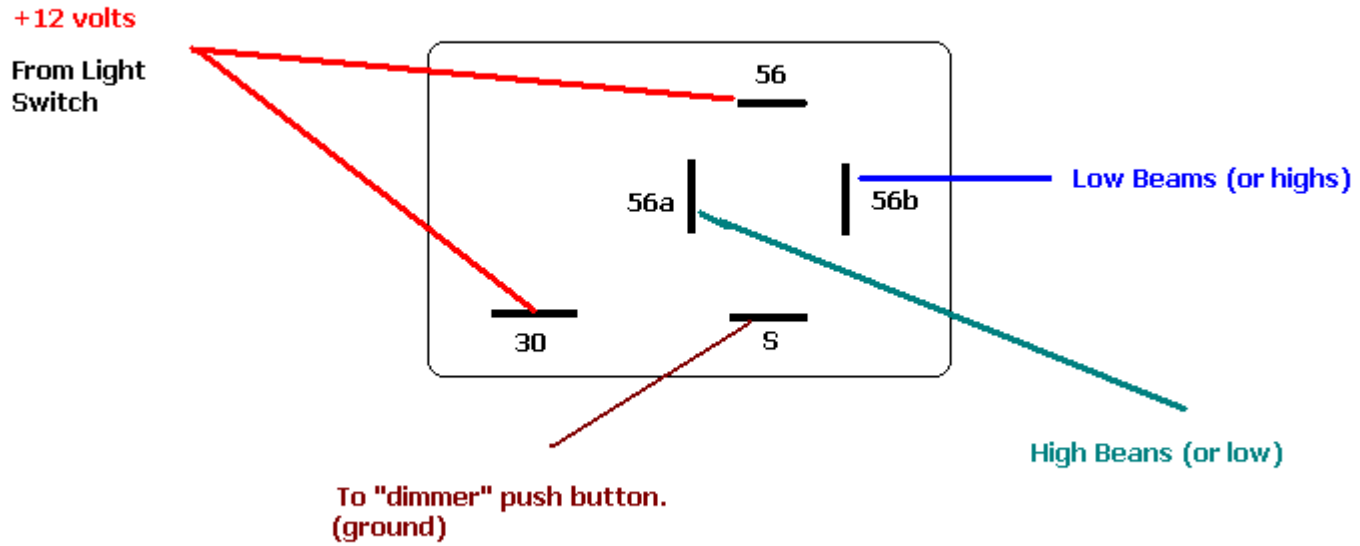


## Early VW Headlight Relay.

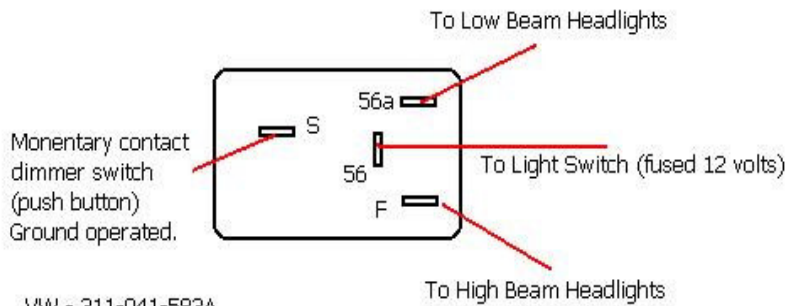
### DNI 0127 "DIMMER" RELAY



DLM 03-13-08

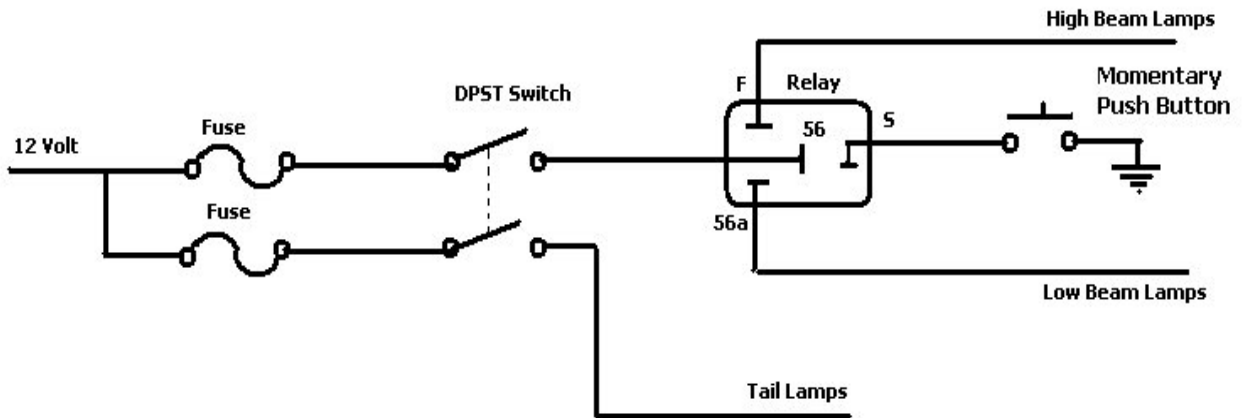
DNI 0127 relay - Replacement for  
VW 111-941-583

## Relay Circuit & Control



VW - 311-941-583A  
 12 Volt Dimmer Relay

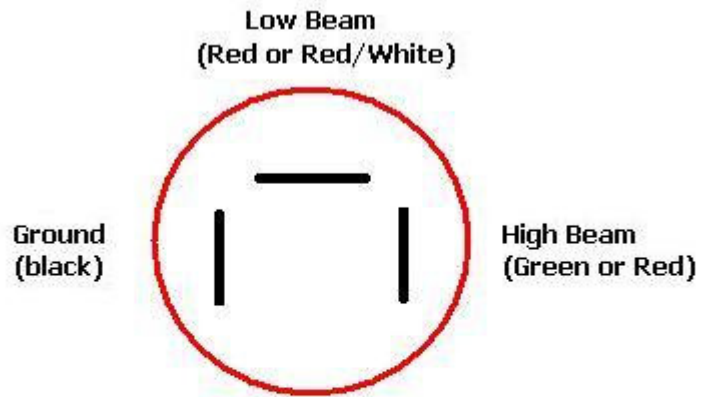
Great for those "one touch" head lamp dimmer circuit.



DIM - 10-17-2005

Headlight Switch With Relay Dimmer

## Head Light Socket Wiring

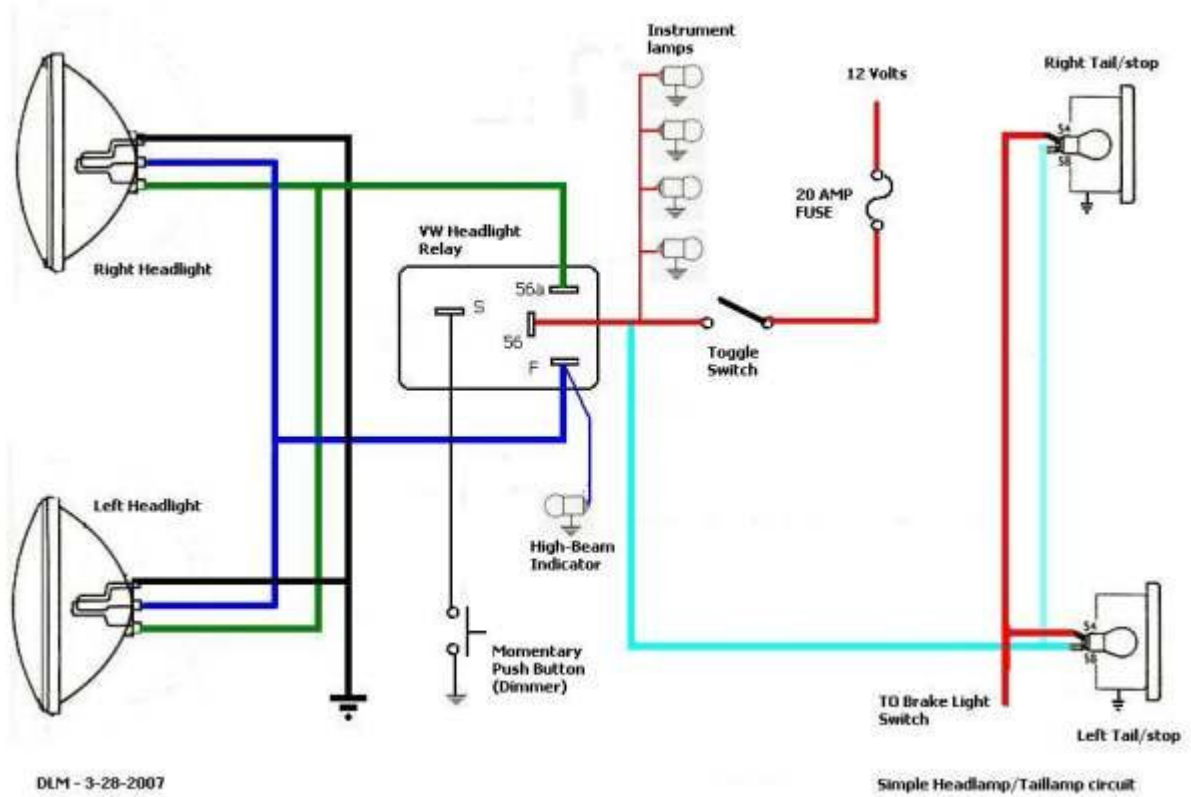


Looking at back of bulb it would wire like shown. Colors may vary.

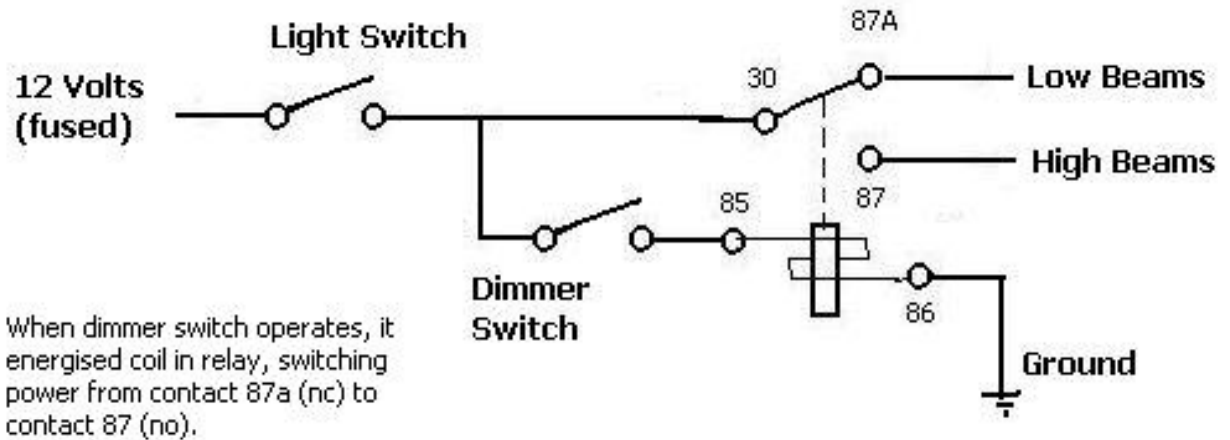
DLM 5-24-2007

Headlight Socket Wiring

# Simple Lighting Circuit.



## Another Relay – High/Low Dimmer Circuit.



Single Pole Double Throw relay- typical of automotive style.

DLM - 11-04-02

Simple Light Dimmer Circuit

## Wire Gauge – Amperage Load Chart.

Wire Gauge Chart											
Amp Capacity		Total Length of Wire in Circuit from Power Supply to Accessory									
12 Volt	6 Volt	10-ft	20-ft	30-ft	40-ft	50-ft	60-ft	70-ft	80-ft	90-ft	100-ft
1.0	0.5	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga
1.5	0.8	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga
2.0	1.0	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	18 ga	16 ga	16 ga	16 ga
3.0	1.5	18 ga	18 ga	18 ga	18 ga	18 ga	16 ga	16 ga	16 ga	14 ga	14 ga
4.0	2.0	18 ga	18 ga	18 ga	16 ga	16 ga	16 ga	14 ga	14 ga	14 ga	12 ga
5.0	2.5	18 ga	18 ga	18 ga	16 ga	14 ga	14 ga	14 ga	12 ga	12 ga	12 ga
6.0	3.0	18 ga	18 ga	16 ga	16 ga	14 ga	14 ga	12 ga	12 ga	12 ga	10 ga
7.0	3.5	18 ga	18 ga	16 ga	14 ga	14 ga	12 ga	12 ga	12 ga	12 ga	10 ga
8.0	4.0	18 ga	16 ga	16 ga	14 ga	12 ga	12 ga	12 ga	10 ga	10 ga	10 ga
10.0	5.0	18 ga	16 ga	14 ga	12 ga	12 ga	12 ga	10 ga	10 ga	10 ga	10 ga
11.0	5.5	18 ga	16 ga	14 ga	12 ga	12 ga	10 ga	10 ga	10 ga	10 ga	8 ga
12.0	6.0	18 ga	16 ga	14 ga	12 ga	12 ga	10 ga	10 ga	10 ga	8 ga	8 ga
15.0	7.5	18 ga	14 ga	12 ga	12 ga	10 ga	10 ga	10 ga	8 ga	8 ga	8 ga
18.0	9.0	16 ga	14 ga	12 ga	10 ga	10 ga	8 ga	8 ga	8 ga	8 ga	8 ga
20.0	10.0	16 ga	12 ga	12 ga	10 ga	10 ga	8 ga	8 ga	8 ga	8 ga	6 ga

Note: This chart is based on a 10% maximum voltage drop. For 5% voltage drop, use double the measured wire length. When mechanical strength is a factor, use next larger wire gauge.