

## XJ Wiper motor Relay control system

### Notes:

The relays used can all be the switch type (5 pin) and need to be rated at 20 > amps

**Each relay is clearly marked** as to which pin is which.

Pins 85 and 86 are the coils

30/51 is the switch input

Pin 87 is the output when hot (energised)

Pin 87a is the output when cold (at rest)

**All termination** should be done with a roll over crimper tool and not the type that crushes the connector. They should all be terminated with slip insulators and 6.35mm female spade connectors.

**Bulkhead connector:** this is the 8 pin plug that fits the receptor under the wiper grille

**Disconnect the Battery.**

### Method:

1. At the plug connector that drops onto the bulkhead connector you will need to do the following:
2. Cut the Yellow wire and extended both ends to reach the location chosen to mount the replays. Splice the Yellow wire from the bulkhead plug end to have two ends
3. Repeat for the White and Brown wires.
4. Run Six heavy gauge Black wires from the relay location back to a suitable earth point..
5. Connect one of the six black wires to a relay post 85 and repeat for the other three relays
6. Connect the two remaining black leads to pin 87a on two of the relays. Label these as relay 1 and 2
7. Connect some heavy gauge Brown wire to the terminal connection on the bulkhead and run this to a length that reaches the relay location splice in a fuse holder on route.
8. At the relay location take your new Brown +12v feed and splice in three wires.
9. Connect one of these Brown wires to Pin 87 of relay 1
10. Connect another one of these brown wires to pin 87 of relay 2
11. Connect the third to Pin 30/51 of a relay and label that one relay 3

12. Connect one of your two bulkhead connector side yellow wires to pin 86 of relay 3
13. Connect the other bulkhead connector side yellow wire to pin 86 of the remaining relay and label it relay 4
14. Connect the Motor end of the Yellow wire to pin 87 of relay 3
15. Connect the bulkhead plug end of the cut brown wire to pin 86 of relay 2
16. Connect the other end of the brown that goes to the motor connector to Pin 87a of relay 4
17. Connect the bulkhead connector end of the white wire to pin 86 of relay 1
18. Connect the motor end of the white wire to pin 30/51 of relay 1
19. Using a piece of blue wire connect one end to pin 30/51 of relay 4 and connect the other end to pin 30/51 of relay 2
20. Fit a suitable fuse in the fuse holder and reconnect the battery.

## Lucas Wiper motor connections

Bulkhead connector viewed as if standing on engine facing windscreen;

Colour	Post	Post	Colour
	o	o	
W/LG	o	o	Ground
B/LG	O	O	O/LG
K/LG	O	O	

Ignition to ACC

Switch at fast wipe – W/LG post = 12 v+

Switch at slow wipe – B/LG post = 12 v+

Switch in Intermittent and off - K/LG post = 12 v+

Ignition to Off

Continuity between O LG and B LG posts in intermittent/flick and off modes only.

Ground pin to ground

Wiper Motor connector

Colour	Pin	Pin	Colour
	O	O	
Yellow	O	O	Green
Brown	o	o	Red
White	o	o	

Also see [http://www.skjagtech.co.uk/html/xjs\\_schmatics.htm](http://www.skjagtech.co.uk/html/xjs_schmatics.htm) and download the schematics.pdf

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<http://www.skjagtech.co.uk>

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