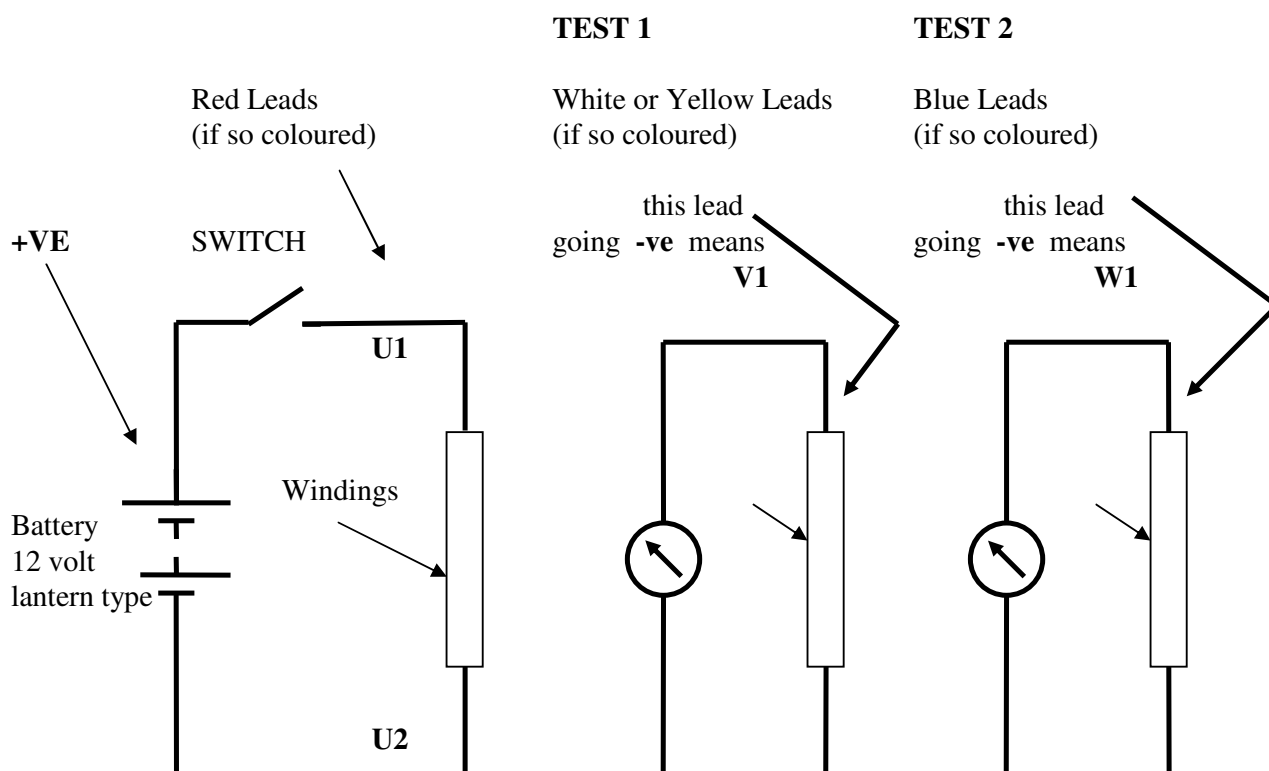


TECHNICAL NOTE

TESTING FOR MOTOR LEAD POLARITY IN 6-LEAD MOTORS

The purpose of this test is to identify which leads correspond to the start and finish of each of the windings in a six lead motor where there is no other information available or where the identification is to be verified. The test will not necessarily identify the actual “starts” or “finishes” of each of the windings but it does allow the leads to be marked properly for purposes of star-delta starting connections. Equipment required is an analog DC voltmeter and a 12 volt battery.

Connection diagram for test:



At the start of the test the lead number U1 is assigned to either of the two leads of any winding as a reference point and is to go +ve when the switch is closed. Its other lead is marked “U2”

Connect the battery, analog voltmeter and switch, observing carefully their polarities. Two tests are required, one for each of the windings not connected to the battery and switch.

On closing the switch observe the movement of the analog meter “kick” when it is across one of the other two windings. The lead in each of the two other windings whose first kick on closing the switch goes NEGATIVE corresponds to the V1 or W1 lead and can be considered the start of that winding.

Having identified the V1 and W1 leads, the other ends are to be marked V2 and W2.

Peter Brett

21st March 1996

SIX LEAD MOTOR TEST TO DETERMINE POLARITY

	TEST A			TEST B			TEST C		
	U1/U2	V1/V2	W1/W2	U1/U2	V1/V2	W1/W2	U1/U2	V1/V2	W1/W2
KICK ON CLOSING SWITCH	BATTERY				BATTERY				BATTERY
KICK ON OPENING SWITCH	BATTERY				BATTERY				BATTERY

DATE OF TEST

TESTERS:

PETER BRETT
5th April 1995