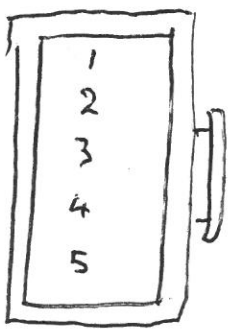
Rob

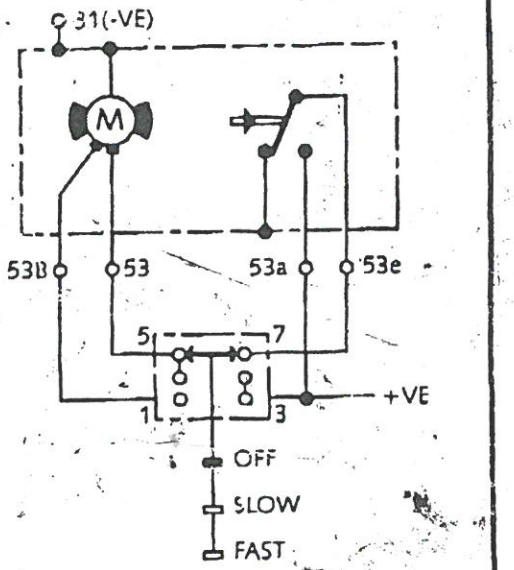
Wires from boom		Wires from plug
Brown and green	—	Blue
Red and green	—	Green
Blue and green	—	White
Green	—	Red
Black	—	Black

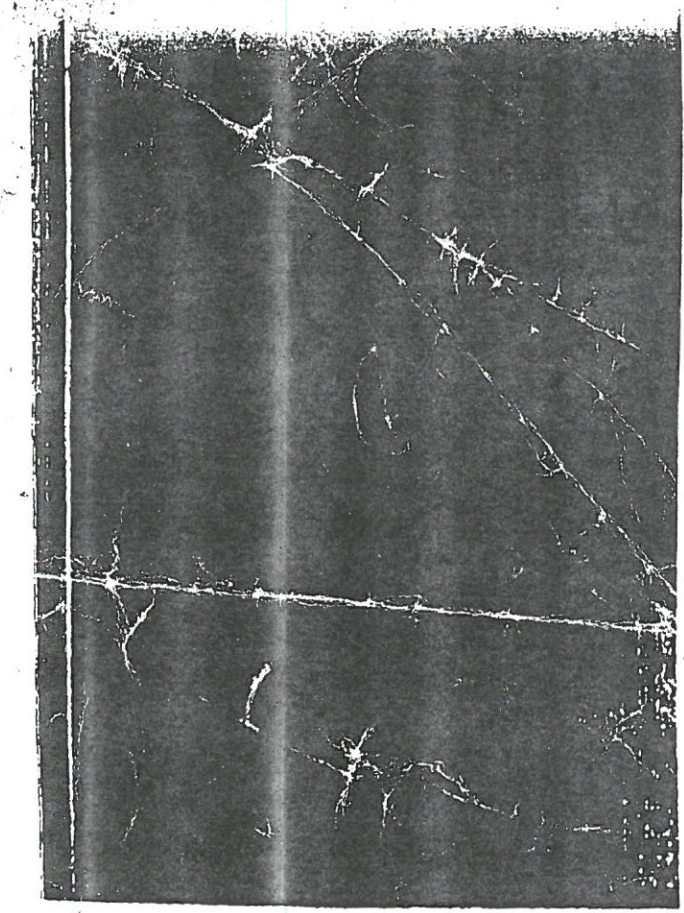


Blue green
green
Brown green
Black
Red green

Will then do you

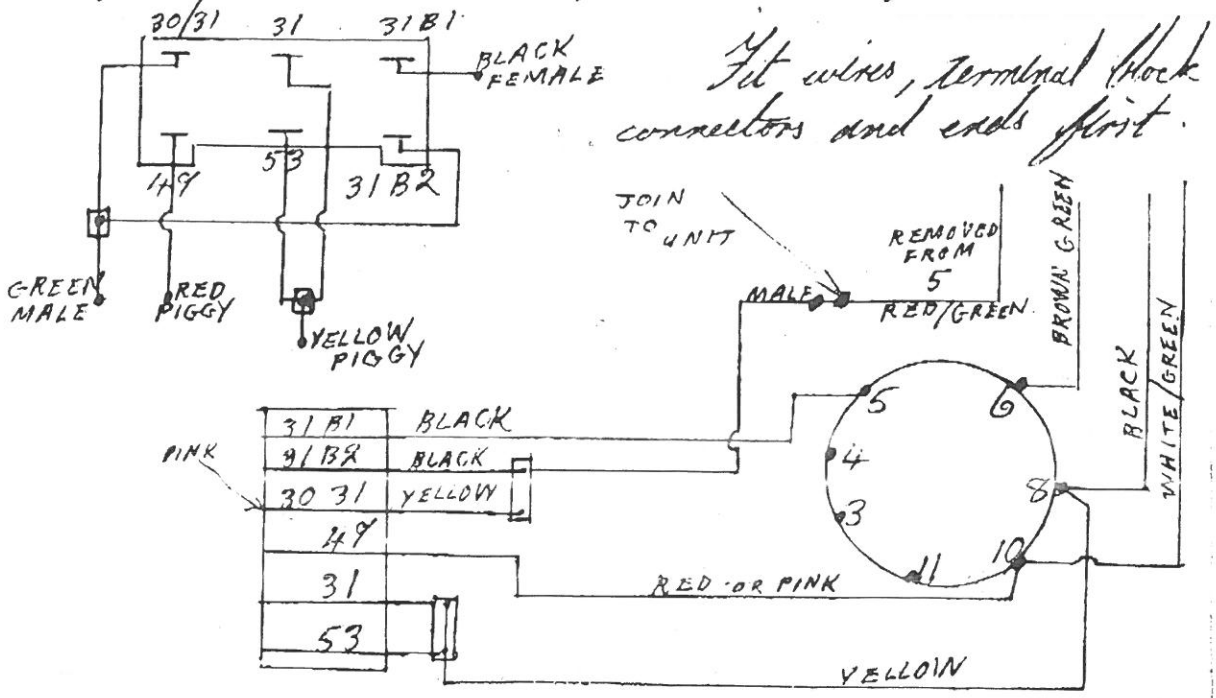
Jeff


31(-VE)
M
53B
53
53a
53e
5
7
1
3
+VE
OFF
SLOW
FAST



Wiper Power unit Hella

Mount unit with 2 pop rivetts thro' original bracket on fixed part of card board under dash panel near to radio. Make cable tidy support and pop rivett on to keep unit in position



Fit wires, terminal block connectors and ends first.

Some units have 2 W49, the long wire 49 cut short loop at 49 end NOT 30/31 end.

WATER TEMP TRANSMITTER

THREAD $\frac{1}{8}$" 27 T.P.I. NAT PIPE TAPER

ISSPRO
DEDICATED TO EXCELLENCE

100

2515 N.E. Riverside Way, Portland, OR 97211
Telephone: (503) 288-4488
Toll Free: 800/888-8065

ISSPRO 3 3/8" DIA. PROGRAMMABLE SPEEDOMETER

Air Core Version

GENERAL INFORMATION:

Operating Voltage: 11 - 30 VDC: NOTE - Instrument comes equipped with a 12V lamp. Replace lamp with one of proper voltage when installing instrument on 24V systems.
24V Lamp Part # is 656

Input: Magnetic sensor or AC generator

Transient Protection: +100 V, -400 V

Reverse Voltage Protected

CALIBRATION:

The ISSPRO Programmable Speedometer is calibrated (programmed) by setting a combination of eight switches found in the rear of the instrument. The odometer and pointer are electronically linked together and both are calibrated when the switches are properly set. Program before installing. Models are available with and without odometers.

CALIBRATION PROCEDURE:

Calculate the "calibration number" from the appropriate formula below. (A minimum calibration number of 9531 is required to be within calibration range). Refer to the "CALIBRATION SWITCH SETTING" table with this number. Locate the row in which the calibration number is between the limits, then set the switches marked with an "X" to the "on" position (up).

EXAMPLE: Calibration number = 29644: From the table 29644 lies between 29439 and 29742, therefore, switches 4,7 and 8 will be set to "on".

(1) Front wheel mounted tone wheel:

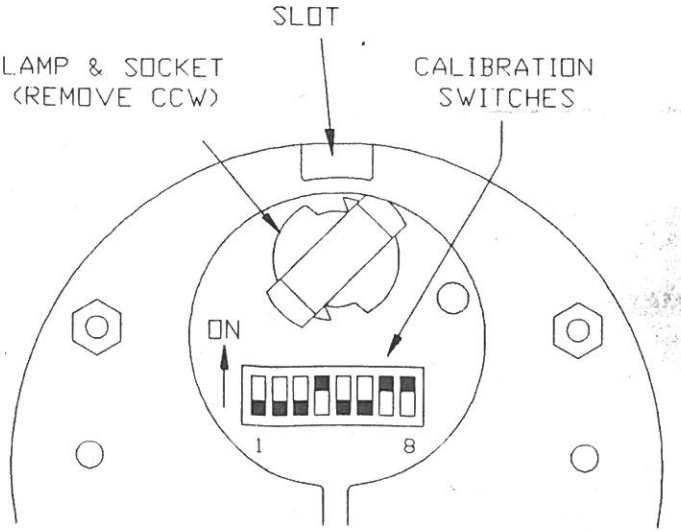
CALIBRATION NUMBER = # SLOTS IN TONE WHEEL X TIRE REVS PER MILE

(2) Tail Shaft mounted magnetic sensor:

CALIBRATION NUMBER = TIRE REVS PER MILE X DIFFERENTIAL RATIO X 16

(3) Sender driven from transmission cable drive:

CALIBRATION NUMBER = CABLE TURNS PER MILE X # PULSES PER SENDER TURN



REAR VIEW OF SPEEDOMETER

If the # of cable turns per mile is not known, follow this procedure: Obtain a ratio tester and a correct drive tang for your transmission. With a steel tape measure, mark off 1/10th mile (528 ft.) in as straight a line as possible. Mark start and stop lines with chalk or paint. Position the vehicle so that one of the wheels aligns with the start mark. Disconnect the speedometer cable at the transmission and install the ratio tester in its place. Secure the cables and reset the ratio tester. Drive the vehicle to the stop point positioning the selected wheel on the stop mark. The reading displayed on the ratio tester is the number of cable turns per mile if using an Engler "SAC-10". If using an SS White ratio tester (P/N 312-12175Y), multiply the reading by 10 to obtain the cable turns per mile.

FREQUENTLY USED SENDERS	# PULSES PER TURN
DATCON 4-D-C 71267	8 *
DIXSON SG201A, SG201A1, SG202	2 *
ENGLER 870-0588	15
ISSPRO R8970, R8940	30
KIENZLE-ARGO 8-161-237008	8 *
MOTOROLA 4-100 (7SG100), 4-111 (7SG100B)	30
ROCKWELL 240R02-001	30
SUN Model CP7643	6 *
SYNCHRO-START Minigen	30
TELEFLEX 9604276	8 *
VDO (Old Style Engler) ISSPRO 300092	4 *
ZEMCO 4710	8 *
ZEMCO 6314	5 *

*NOTE: These senders do not produce the minimum required # of pulses to be in calibration range when driven at 1000 turns per mile. It may be necessary to change your sender to one that generates more pulses per rev such as an ISSPRO R8970.

INSTALLATION: Mount the speedo in the dash panel and connect the wires as described below:

Make all of your connections to the Black plug supplied and then plug it in to the speedometer's white connector.

RED - Connect to ignition switched power source.
BLACK - Connect to ground along with one of the sensor wires.
GREEN - Connect to dash lamp power.
WHITE - Connect to other sensor wire.

INSTALLATION HINTS:

1) Bring both sensor wires back to the speedo connector. Don't connect the sensor ground wire to a point which is physically different than the speedometer ground.

2) **WHEN POWER IS APPLIED THE NEEDLE SHOULD GO TO THE ZERO POSITION. IF IT DOESN'T, THERE MAY BE A BAD CONNECTION IN THE "HOT" (RED WIRE) OR GROUND WIRE CIRCUIT. CHECK POWER TO THE METER BY MEASURING WITH A VOLTMETER AT THE PLUG (METER LEADS ON THE PINS THAT ATTACH TO THE RED AND BLACK WIRES). IF THERE IS POWER AT THE PLUG, THE PROBLEM IS IN THE GAUGE.**

3) Low voltage (below 10.5 volts) will cause inaccurate reading. If inaccuracy is suspected, measure voltage with vehicle operating and meter connected. This can be done by connecting a voltmeter to power source (i.e. fuse block, etc.) and/or by piercing the red and black wire insullation with the meter leads.

4) If speedo reads zero, then "jumps" to normal reading after a certain speed adjust the sensor in closer to gear (generators cannot be adjusted).

The following calibration chart is for use with units that apply to direction sheet # IS073 (3 3/8" Programmable Speedometer Air Core Version.) If you have another application call ISSPRO for the appropriate calibration chart.

AIR CORE SPEEDOMETERS - MPH
CALIBRATION SWITCH SETTING

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CALIBRATION NUMBER	SWITCHES SET "ON" 1	2	3	4	5	6	7	8
67784 - 69378	X	X	X	X	X	X	X	X
66226 - 67783		X	X	X	X	X	X	X
64739 - 66225	X		X	X	X	X	X	X
63314 - 64738			X	X	X	X	X	X
61950 - 63313	X	X		X	X	X	X	X
60646 - 61949		X		X	X	X	X	X
59397 - 60645	X			X	X	X	X	X
58195 - 59396				X	X	X	X	X
57040 - 58194	X	X	X		X	X	X	X
55934 - 57039		X	X		X	X	X	X
54869 - 55933	X		X		X	X	X	X
53842 - 54868			X		X	X	X	X
52852 - 53841	X	X			X	X	X	X
51901 - 52851		X			X	X	X	X
50983 - 51900	X				X	X	X	X
50054 - 50982					X	X	X	X
49157 - 50053	X	X	X	X		X	X	X
48333 - 49156		X	X	X		X	X	X
47536 - 48332	X		X	X		X	X	X
46763 - 47535			X	X		X	X	X
46015 - 46762	X	X		X		X	X	X
45292 - 46014		X		X		X	X	X
44591 - 45291	X			X		X	X	X
43911 - 44590				X		X	X	X
43250 - 43910	X	X	X			X	X	X
42611 - 43249		X	X			X	X	X
41990 - 42610	X		X			X	X	X
41386 - 41989			X			X	X	X
40799 - 41385	X	X				X	X	X
40230 - 40798		X				X	X	X
39676 - 40229	X					X	X	X
39099 - 39675						X	X	X
38537 - 39098	X	X	X	X	X		X	X
38029 - 38536		X	X	X	X		X	X
37534 - 38028	X		X	X	X		X	X
37050 - 37533			X	X	X		X	X
36579 - 37049	X	X		X	X		X	X
36121 - 36578		X		X	X		X	X
35674 - 36120	X			X	X		X	X
35237 - 35673				X	X		X	X
34810 - 35236	X	X	X		X		X	X
34395 - 34809		X	X		X		X	X
33989 - 34394	X		X		X		X	X
33592 - 33988			X		X		X	X
33205 - 33591	X	X			X		X	X
32827 - 33204		X			X		X	X
32457 - 32826	X				X		X	X
32078 - 32456					X		X	X
31707 - 32077	X	X	X	X			X	X
31363 - 31706		X	X	X			X	X
31025 - 31362	X		X	X			X	X
30694 - 31024			X	X			X	X
30370 - 30693	X	X		X			X	X
30053 - 30369		X		X			X	X
29743 - 30052	X			X			X	X
29439 - 29742				X			X	X
29140 - 29438	X	X	X				X	X
28849 - 29139		X	X				X	X
28563 - 28848	X		X				X	X
28282 - 28562			X				X	X
28007 - 28281	X	X					X	X
27737 - 28006		X					X	X
27473 - 27736	X						X	X
27147 - 27472							X	X

CALIBRATION NUMBER	SWITCHES SET "ON" 1	2	3	4	5	6	7	8
26827 - 27146	X	X	X	X	X	X		X
26580 - 26826		X	X	X	X	X		X
26337 - 26579	X		X	X	X	X		X
26098 - 26336			X	X	X	X		X
25863 - 26097	X	X		X	X	X		X
25633 - 25862		X		X	X	X		X
25408 - 25632	X			X	X	X		X
25185 - 25407				X	X	X		X
24966 - 25184	X	X	X		X	X		X
24752 - 24965		X	X		X	X		X
24541 - 24751	X		X		X	X		X
24334 - 24540			X		X	X		X
24130 - 24333	X	X			X	X		X
23929 - 24129		X			X	X		X
23732 - 23928	X				X	X		X
23529 - 23731					X	X		X
23329 - 23528	X	X	X	X		X		X
23142 - 23328		X	X	X		X		X
22958 - 23141	X		X	X		X		X
22776 - 22957			X	X		X		X
22597 - 22775	X	X		X		X		X
22421 - 22596		X		X		X		X
22248 - 22420	X			X		X		X
22077 - 22247				X		X		X
21909 - 22076	X	X	X			X		X
21744 - 21908		X	X			X		X
21581 - 21743	X		X			X		X
21421 - 21580			X			X		X
21262 - 21420	X	X				X		X
21107 - 21261		X				X		X
20953 - 21106	X					X		X
20791 - 20952						X		X
20631 - 20790	X	X	X	X	X			X
20485 - 20630		X	X	X	X			X
20340 - 20484	X		X	X	X			X
20197 - 20339			X	X	X			X
20056 - 20196	X	X		X	X			X
19918 - 20055		X		X	X			X
19781 - 19917	X			X	X			X
19646 - 19780				X	X			X
19513 - 19645	X	X	X		X			X
19382 - 19512		X	X		X			X
19252 - 19381	X		X		X			X
19124 - 19251			X		X			X
18998 - 19123	X	X			X			X
18874 - 18997		X			X			X
18751 - 18873	X				X			X
18624 - 18750					X			X
18498 - 18623	X	X	X	X				X
18380 - 18497		X	X	X				X
18264 - 18379	X		X	X				X
18149 - 18263			X	X				X
18035 - 18148	X	X		X				X
17923 - 18034		X		X				X
17812 - 17922	X			X				X
17702 - 17811				X				X
17594 - 17701	X	X	X					X
17487 - 17593		X	X					X
17382 - 17486	X		X					X
17278 - 17381			X					X
17174 - 17277	X	X						X
17073 - 17173		X						X
16972 - 17072	X							X
16847 - 16971								X

AIR CORE SPEEDOMETERS - MPH
CALIBRATION SWITCH SETTING

103

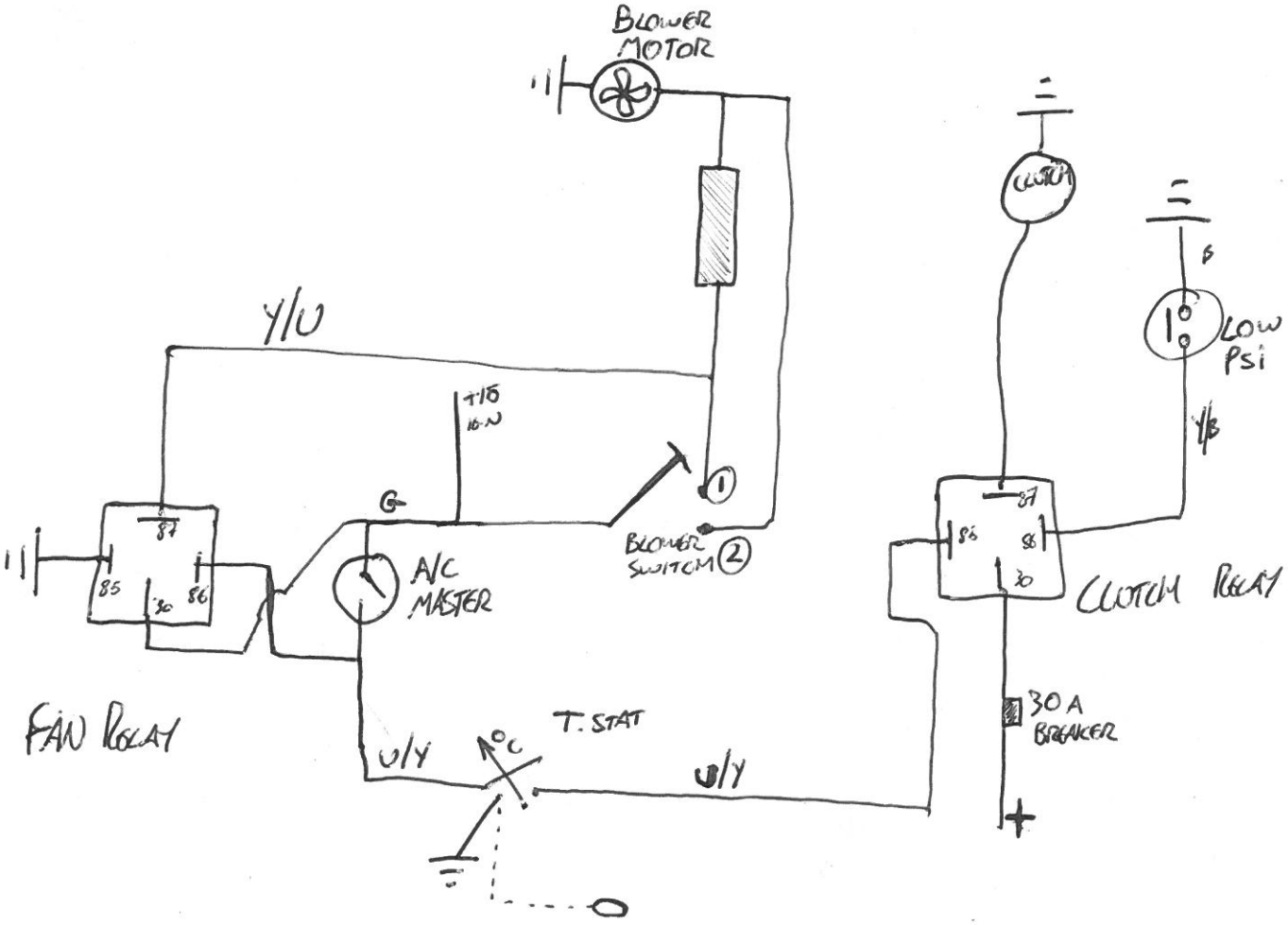
CALIBRATION NUMBER	SWITCHES SET "ON" 1	2	3	4	5	6	7	8
16724 - 16846	X	X	X	X	X	X	X	
16627 - 16723		X	X	X	X	X	X	
16532 - 16626	X		X	X	X	X	X	
16437 - 16531			X	X	X	X	X	
16344 - 16436	X	X		X	X	X	X	
16252 - 16343		X		X	X	X	X	
16161 - 16251	X			X	X	X	X	
16070 - 16160				X	X	X	X	
15981 - 16069	X	X	X		X	X	X	
15893 - 15980		X	X		X	X	X	
15806 - 15892	X		X		X	X	X	
15720 - 15805			X		X	X	X	
15634 - 15719	X	X			X	X	X	
15550 - 15633		X			X	X	X	
15466 - 15549	X				X	X	X	
15380 - 15465					X	X	X	
15294 - 15379	X	X	X	X		X	X	
15213 - 15293		X	X	X		X	X	
15134 - 15212	X		X	X		X	X	
15054 - 15133			X	X		X	X	
14976 - 15053	X	X		X		X	X	
14899 - 14975		X		X		X	X	
14822 - 14898	X			X		X	X	
14746 - 14821				X		X	X	
14671 - 14745	X	X	X			X	X	
14597 - 14670		X	X			X	X	
14523 - 14596	X		X			X	X	
14450 - 14522			X			X	X	
14378 - 14449	X	X				X	X	
14307 - 14377		X				X	X	
14236 - 14306	X					X	X	
14161 - 14235						X	X	
14087 - 14160	X	X	X	X	X		X	
14018 - 14086		X	X	X	X		X	
13950 - 14017	X		X	X	X		X	
13883 - 13949			X	X	X		X	
13816 - 13882	X	X		X	X		X	
13750 - 13815		X		X	X		X	
13685 - 13749	X			X	X		X	
13620 - 13684				X	X		X	
13556 - 13619	X	X	X		X		X	
13493 - 13555		X	X		X		X	
13430 - 13492	X		X		X		X	
13367 - 13429			X		X		X	
13306 - 13366	X	X			X		X	
13244 - 13305		X			X		X	
13184 - 13243	X				X		X	
13121 - 13183					X		X	
13059 - 13120	X	X	X	X			X	
13000 - 13058		X	X	X			X	
12941 - 12999	X		X	X			X	
12883 - 12940			X	X			X	
12826 - 12882	X	X		X			X	
12769 - 12825		X		X			X	
12713 - 12768	X			X			X	
12657 - 12712				X			X	
12601 - 12656	X	X	X				X	
12547 - 12600		X	X				X	
12492 - 12546	X		X				X	
12438 - 12491			X				X	
12385 - 12437	X	X					X	
12332 - 12384		X					X	
12279 - 12331	X						X	
12214 - 12278							X	

CALIBRATION NUMBER	SWITCHES SET "ON" 1	2	3	4	5	6	7	8
12149 - 12213	X	X	X	X	X	X		
12098 - 12148		X	X	X	X	X		
12047 - 12097	X		X	X	X	X		
11997 - 12046			X	X	X	X		
11947 - 11996	X	X		X	X	X		
11898 - 11946		X		X	X	X		
11849 - 11897	X			X	X	X		
11800 - 11848				X	X	X		
11752 - 11799	X	X	X		X	X		
11704 - 11751		X	X		X	X		
11657 - 11703	X		X		X	X		
11610 - 11656			X		X	X		
11563 - 11609	X	X			X	X		
11517 - 11562		X			X	X		
11471 - 11516	X				X	X		
11424 - 11470					X	X		
11376 - 11423	X	X	X	X		X		
11332 - 11375		X	X	X		X		
11287 - 11331	X		X	X		X		
11243 - 11286			X	X		X		
11199 - 11242	X	X		X		X		
11156 - 11198		X		X		X		
11113 - 11155	X			X		X		
11070 - 11112				X		X		
11028 - 11069	X	X	X			X		
10986 - 11027		X	X			X		
10944 - 10985	X		X			X		
10903 - 10943			X			Y		
10861 - 10902	X	X				X		
10821 - 10860		X				X		
10780 - 10820	X					X		
10737 - 10779						X		
10694 - 10736	X	X	X	X	X			
10655 - 10693		X	X	X	X			
10616 - 10654	X		X	X	X			
10577 - 10615			X	X	X			
10538 - 10576	X	X		X	X			
10499 - 10537		X		X	X			
10461 - 10498	X			X	X			
10423 - 10460				X	X			
10386 - 10422	X	X	X		X			
10349 - 10385		X	X		X			
10312 - 10348	X		X		X			
10275 - 10311			X		X			
10238 - 10274	X	X			X			
10202 - 10237		X			X			
10166 - 10201	X				X			
10128 - 10165					X			
10091 - 10127	X	X	X	X				
10056 - 10090		X	X	X				
10021 - 10055	X		X	X				
9986 - 10020			X	X				
9952 - 9985	X	X		X				
9918 - 9951		X		X				
9884 - 9917	X			X				
9850 - 9883				X				
9816 - 9849	X	X	X					
9783 - 9815		X	X					
9750 - 9782	X		X					
9717 - 9749			X					
9684 - 9716	X	X						
9652 - 9683		X						
9620 - 9651	X							
9531 - 9619								

GREEN - FEED TO BLOW RELAY 30
GREEN/RED - A/C MASTER FEED 85
GREEN/YELLOW - SPEED 1 87
BLUE/YELLOW - T'STAT TO CLUTCH RELAY 85
BLUE - CLUTCH FROM RELAY 87
YELLOW/BLACK - LOW PSI SWITCH
BLACK - LOW PSI SWITCH EARTH

7122: 2 x RELAY HOLDERS RB3
2 x RELAYS
12 x METERS 14/0.30

AIRCON + BLOWER INTEGRATION

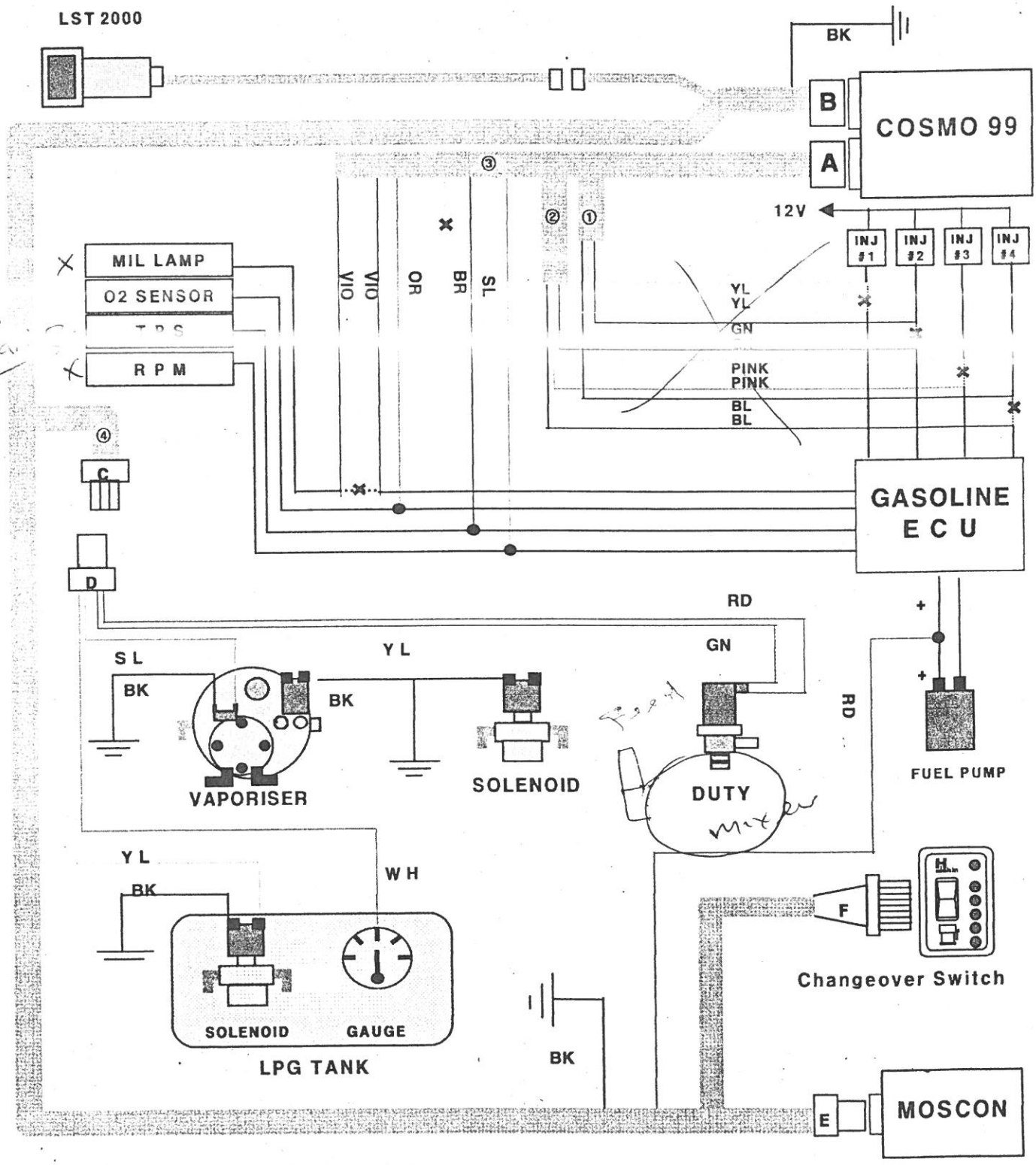


0101000355

III. Supplement

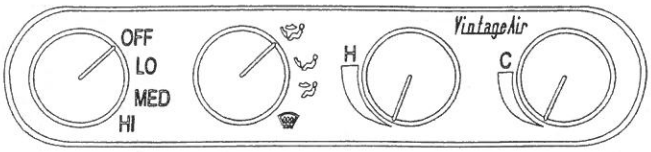
1. Overall Harness Layout(Excluding Injector Simulator)

COSMO 99 SYSTEM WIRING



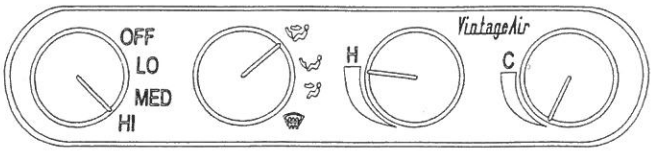
491200-RUA STREAMLINE 4 KNOB CONTROL PANEL OPERATION

FAN SPEED CAN BE OPERATED IN ANY MODE POSITION.



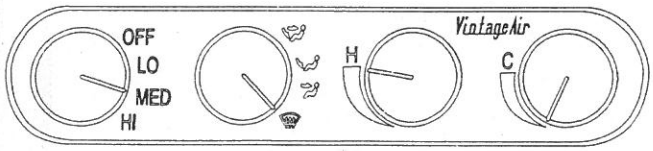
SYSTEM OFF

TURNING THE FAN SPEED KNOB TO **OFF** WILL SHUT DOWN THE SYSTEM IN ANY MODE.



VENT HEAT MODE

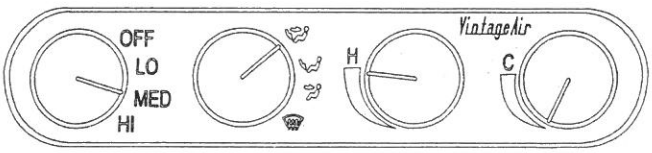
SELECT FAN SPEED. SET MODE SWITCH TO DASH, AND TURN THE HEAT KNOB TO THE RIGHT FOR HEAT MODE. ***HOT***



DEFROST MODE

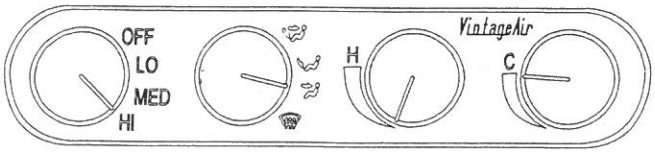
(OPTIONAL, FOR DEFROST ONLY!)

SELECT FAN SPEED. SET MODE SWITCH TO DEFROST. TURN THE COLD AIR KNOB SLIGHTLY CLOCKWISE, TO ENGAGE THE COMPRESSOR. TURN KNOB TO THE RIGHT TO OPEN HOT WATER VALVE TO PROVIDE HEATED DEFROST AIR. ***DEHUMIDIFIED DEFROST WILL BE DIRECTED TO THE WINDSHIELD.***



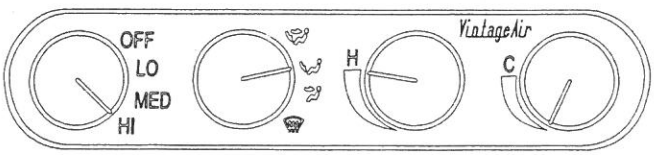
BI-LEVEL HEAT MODE

SELECT FAN SPEED. SET MODE SWITCH TO BI, FOR BI LEVEL, AND TURN THE HEAT KNOB TO THE RIGHT FOR HEAT. ***HOT AIR WILL EXIT THE DASH VENTS & FLOOR.***



A/C MODE

TURN COLD AIR KNOB CLOCKWISE FOR COLD AIR, AND ADJUST MODE LEVER TO VENT OR BI-LEVEL. ***COLD AIR WILL FLOW OUT VENTS. NOTE:*** DUCT TEMPERATURE CAN BE RAISED BY ***SLIGHTLY TURNING*** HEAT KNOB TO THE RIGHT TO OPEN HOT WATER VALVE. HOT WATER VALVE MUST BE CLOSED (FULL LEFT) FOR COLDEST A/C SETTING.



FLOOR HEAT MODE

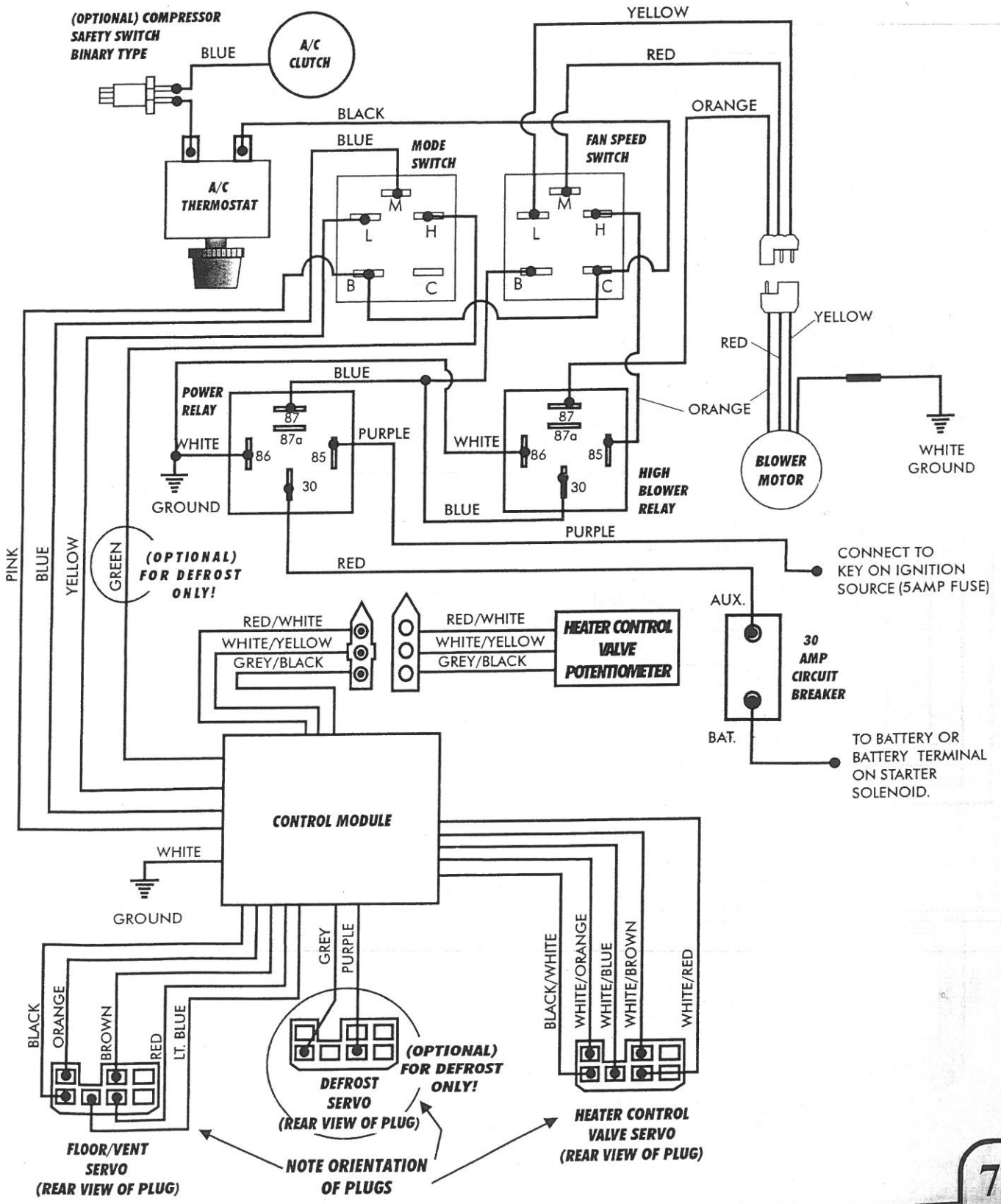
SELECT FAN SPEED. SET MODE LEVER TO FLOOR, AND TURN THE HEAT KNOB TO THE RIGHT FOR HEAT MODE. ***HOT AIR WILL EXIT THE FLOOR VENTS.***

200 MPH AIR CONDITIONING
SINCE Vintage Air 1976

STREAMLINE 4 KNOB CONTROL PANEL

WIRING DIAGRAM - GEN II COMPAC/SUPER UNITS

HEAT/COOL/DEFROST ***491200-RUA STREAMLINE 4 KNOB CONTROL PANEL***

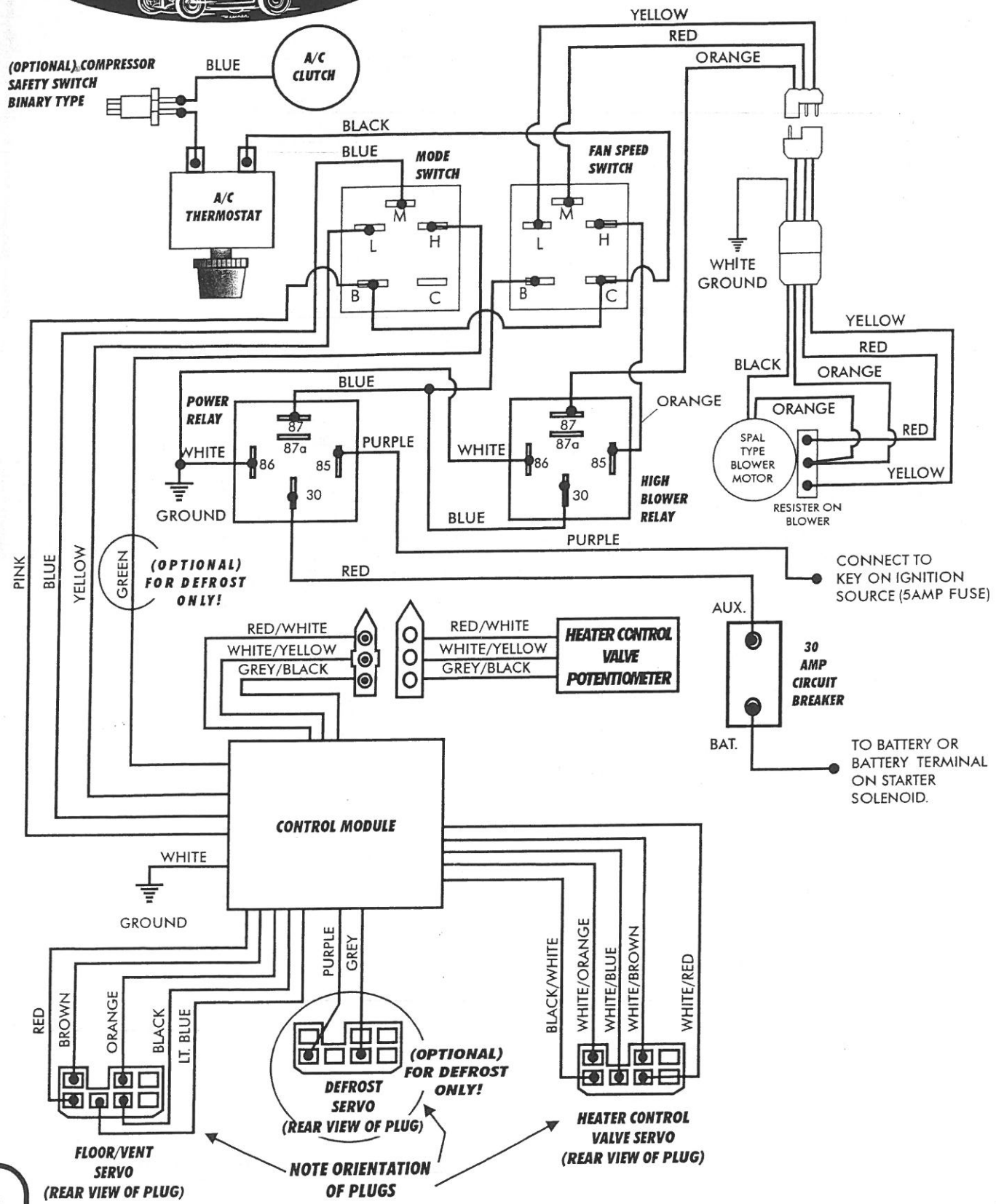


200 MPH AIR CONDITIONING
SINCE Vintage Air 1976

STREAMLINE 4 KNOB CONTROL PANEL

WIRING DIAGRAM - GEN II MINI UNITS

HEAT/COOL/DEFROST ***491200-RUA STREAMLINE 4 KNOB CONTROL PANEL***



NF AUTO DEVELOPMENT (01580) 891309

HEATING & AIR CONDITIONING PACKAGE INSTALLATION INSTRUCTIONS

The NF Auto Development Heat/AC package is suitable for both front and mid-engined applications. The hose sizes are identical for both but there are obvious differences in hose length and routing. For this reason hoses are not supplied with the kit but are readily available from specialist suppliers.
Likewise the size of the condensing radiator is totally dependent on the available space within the engine bay. We can supply one to suit your vehicle from a comprehensive range or you can source your own.

Here is a list of the package contents.

- 17,000 BTU compact under-dash Heat and Air Conditioning unit (Evaporator)
- Remote temperature and-fan speed controls on mounting panel with wiring harness
- Three swivel dash vents
- Convoluted ducting
- Heater control valve and operating cable
- Powder coated bulkhead-mounting drier
- Pair of refrigerant service ports
- Bulkhead connectors, all hose fittings, sealant, mounting brackets and instructions

MOUNTING THE EVAPORATOR

Mount the evaporator beneath the dash with the drain outlets at the bottom, the fan toward the front of the car and the vent outlets facing the passengers. Bolt through the two mounting plates supplied into the captive nuts on each side of the evaporator casing. First mount the evaporator in mid position, tilting downward toward the front of the car 10 to 15 degrees to ensure trouble-free drainage. You can later optimise the positioning when the hose and ducting routes are finalised. Connect the small bore pipes to the drain spigots and route them through the floor to drain onto the road.

MOUNTING THE DRIER

The drier supplied with the Heat/AC package can be mounted vertically anywhere forward of the front bulkhead, between the under-dash unit and the condensing radiator. Try and choose a cool spot if possible and keep the drier plugged until the last possible moment.

MOUNTING THE DASH VENTS AND ROUTING THE DUCT HOSE

The package is supplied with three swivel dash vents. These can be positioned one on each side of the dash and one at the base of the windscreen for de-mist. Cut and fit the large bore duct hose bearing in mind that air flow will be enhanced through a hose that is slightly stretched..

ROUTING HEATER HOSES

You can use the regular heater flow and return from your engine. Install the flow control valve in either line in a convenient position where the operating cable can be fed to the dashboard.

SAFETY NOTE: Whenever you terminate heater hoses within the cockpit of a car make sure to use top quality hose clips and re-tighten them after a few miles. Engine coolant under pressure can be hotter than 100°C - and it hurts!!

ROUTING A/C HOSES

NOTE: When connecting any of the refrigerant unions use two spanners to avoid damage to the component connectors. If you cannot reach the unions then remove the component and tighten on the bench.

It is important that all the hoses should be routed between components along the line of the least stress. Avoid tight turns close to components that will put strain on the outlets. For obvious reasons, avoid running a heater hose directly alongside a refrigerant hose - space them apart and insulate long runs. Bear in mind that refrigerant hose is very hard to bend in a small radius so plan your routes carefully ensuring that there are no kinks and a minimum of sharp bends.

Refer to the accompanying diagrams for hose routes and sizes. Measure approximate lengths of hose required and add a little to be on the safe side. Your local supplier will cut the lengths you require and will eventually crimp the unions for you when you have proved your installation.

Lubricate all 'O' rings and fittings with refrigerant oil before final tightening.

Install your service ports in the correct size hose in a convenient position for charging the system

COMPRESSOR

It is likely that the engine you choose for your car will have been used in a version of the donor car fitted with air conditioning. This means that, even if your own donor had no A/C, the block is probably drilled to accept standard compressor mounting brackets and that standard pulleys and fan belts are available.

When the clutch of an A/C compressor switches in there is an immediate load on the engine. On smaller engines this can cause the engine revs to drop. To overcome this problem some engine management systems automatically increase the tickover speed by a couple of hundred revs whenever the compressor cuts in. Your engine circuit diagram (see the relevant 'Haynes' manual) will point you in the right direction.

WIRING

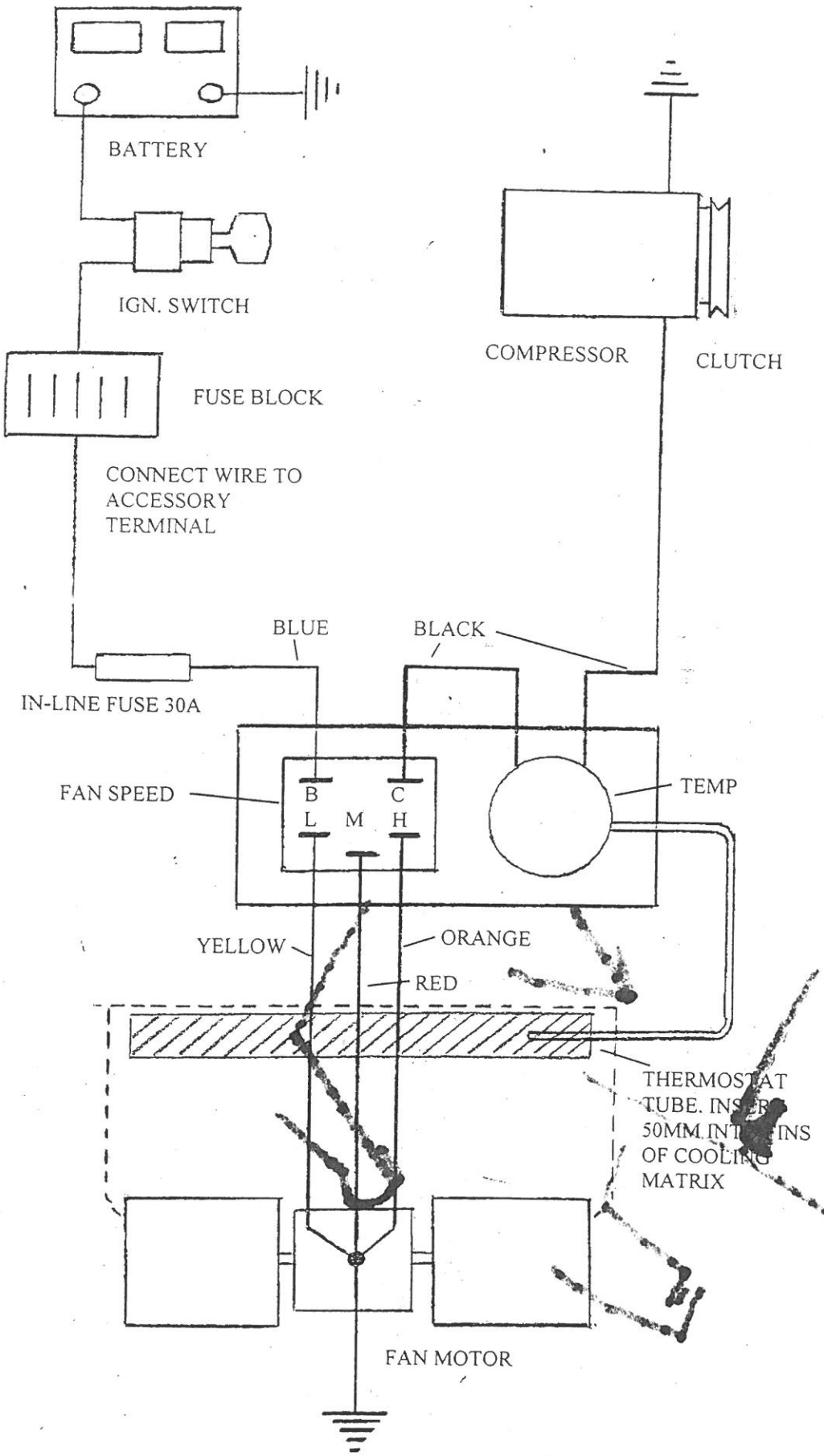
Insert the thermostat capillary tube through the hole in the top of the case approximately 70mm into the fins of the cooling coil.

Take a live feed from the accessory terminal on your fuse board through a 30 amp fuse or circuit breaker to the blower switch.

Take feed from thermostat to compressor clutch.

COMMISSIONING

We recommend that a qualified technician leak test, evacuate and charge your system.



TITLE HEAT / AC WIRING

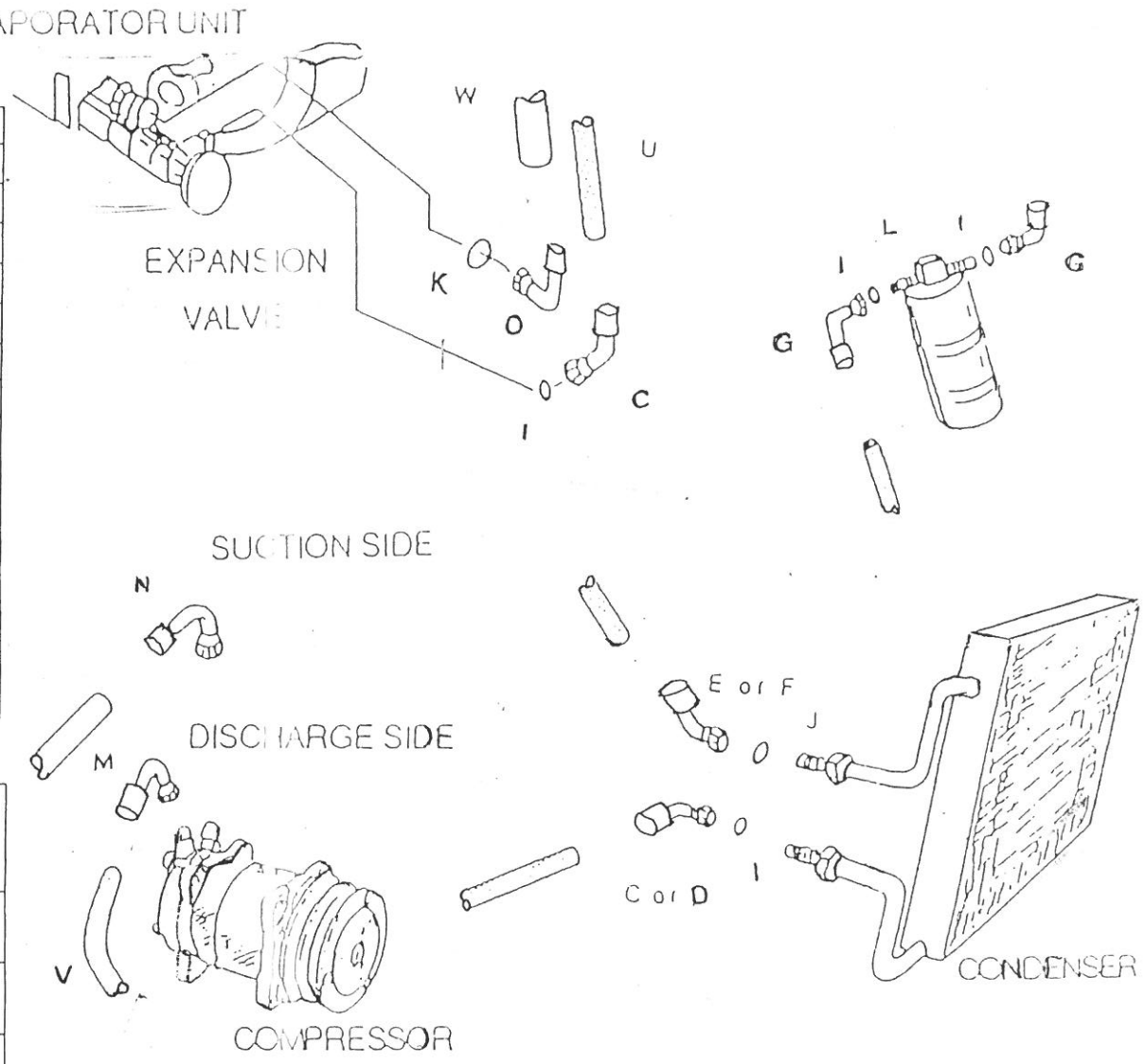
QTY/CAR	MATERIAL
FINISH	PART NO:
DRAWN NKF	DATE

ISSUE 1 2 3 4 5 6 7 8

N F Auto Development
Redlands, Lindridge Lane,
Staplehurst, Kent, TN12 0JJ
(01580) 891309

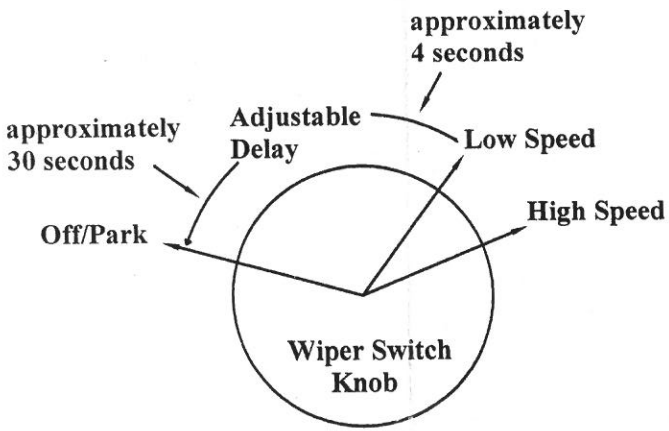
ITEM	QTY	DESCRIPTION
C	2	#6 45° FEMALE O RING
D	1	#6 45° FEMALE FLARE
E	1	#8 45° FEMALE O RING
F	1	#8 45° FEMALE FLARE
G	2	#6 90° FEMALE O RING
I	4	#6 O RING
J	1	#8 O RING
K	1	#10 O RING
L	1	DRIER
M	1	#8 135° FEMALE FLARE
N	1	#10 135° FEMALE FLARE
O	1	#10 90° FEMALE O RING
U		#6 REFRIGERANT HOSE
V		#8 REFRIGERANT HOSE
W		#10 REFRIGERANT HOSE

O.D. OF FITTING PIPE SAME AS I.D. OF HOSE	HOSE #	O.D. OF HOSE
5/16in	#6	3/4in (19mm)
13/32in	#8	29/32in (23mm)
1/2in	#10	1.0in (25.4mm)



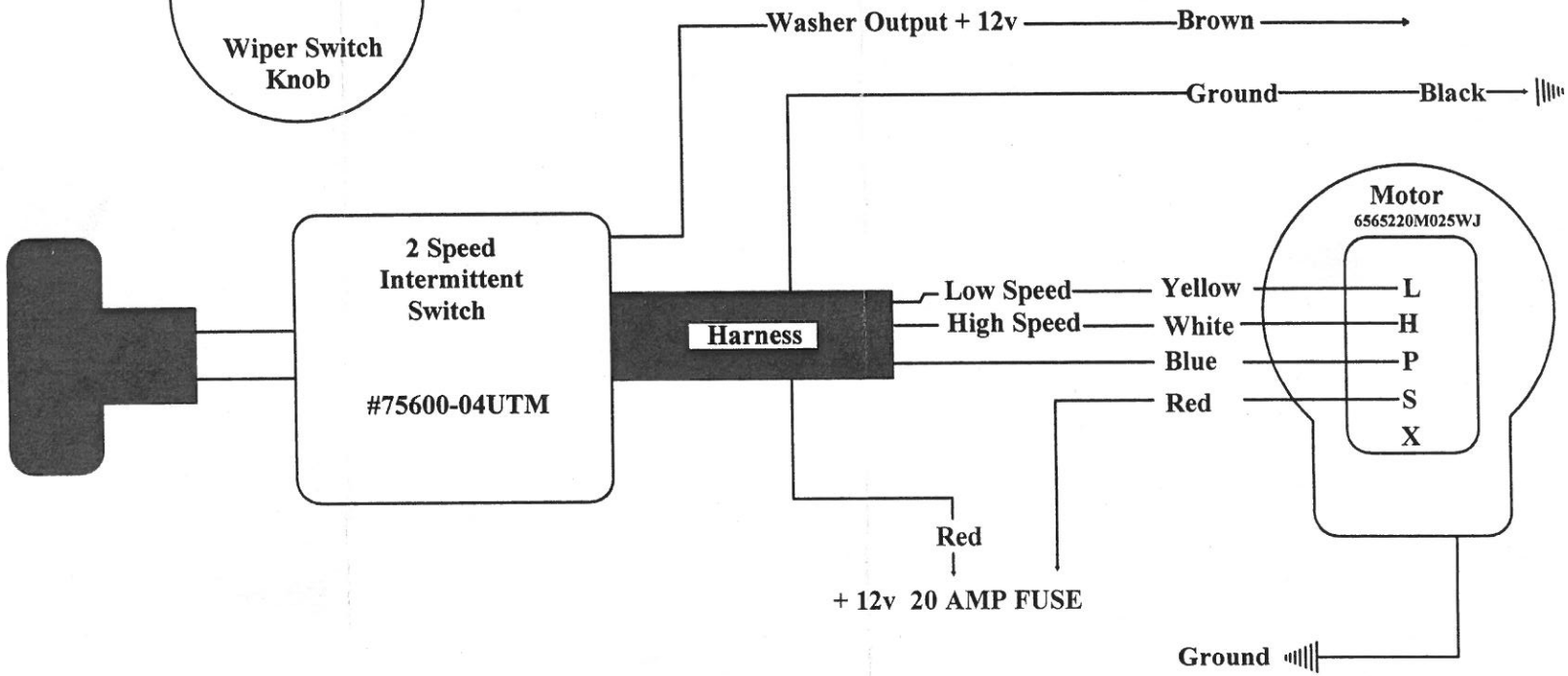
TITLE		QTY/CAR	MATERIAL
		FINISH	PART NO:
N F Auto Development	Redlands, Lindridge Lane, Staplehurst, Kent, TN12 OJJ (01580) 891309	DRAWN	DATE
		ISSUE 1 2 3 4 5 6 7 8	

Specialty Power Windows



2 Speed Intermittent Wiper Switch Kit
Part # 75600-04UTM Silver

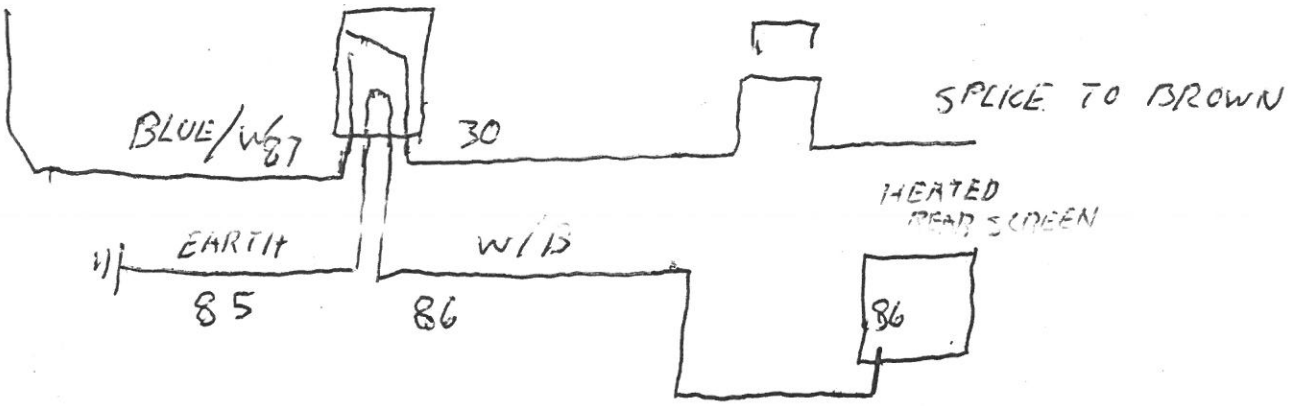
For use with MOTOR PN # 6565220M025WJ

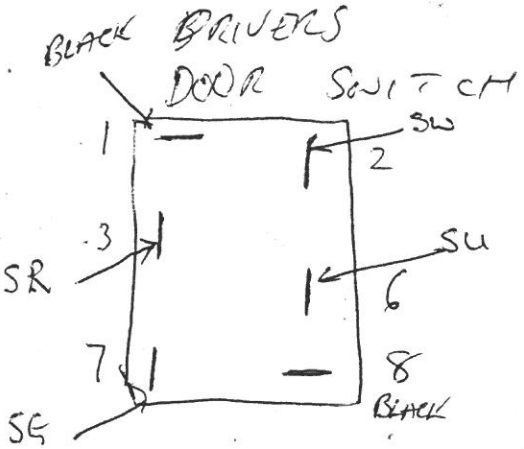


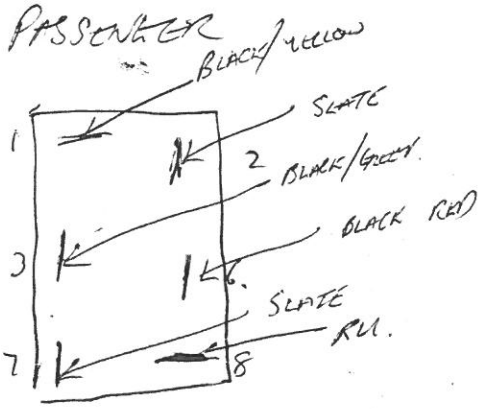
** DO NOT POWER WITH A BATTERY CHARGER**

BLENHIEM III MAIN ENGINE HARNESS MODIFICATIONS

CUT MAIN RED POWER CABLE IN HALF AND EXTEND BY AT LEAST A FOOT. USING THE RED CABLE WHICH IS NOT USED TO EXTEND IT WITH, THE ALTERNATOR LEAD IS LINKED TO THE FUSE LINK ALLOW AT LEAST 2 INCHES WHEN CUTTING FUSE LINK OFF.



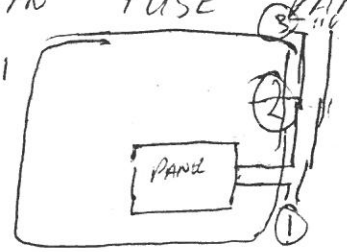




V

MAIN FUSE PANEL LOOSE WIRING

FIG 1



BOTTOM RIGHT EXITION WIRING

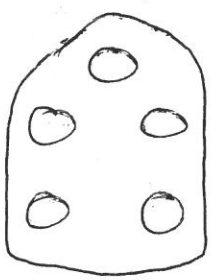
(1) TO EARTH BLUE/BLACK, BLUE/ORANGE 2x BLACK/LBLUE, BLACK/ORA BLACK, THEN 5x ORANGE (IGNITION FEED), BROWN/GREEN REV -ERSE LAMPS, YELLOW/GREEN, REVERSE LAMPS (FEED),

(2) BLUE/RED A/C RELAY 87

(3) SCI TRANSMIT BLK/LHT
SCI RECEIVE BLK/PINK
(SLEEP) CONTROL PINK
STOP LAMP LBLUE/GREEN
STOP LAMP BROWN
STOP LAMP YELLOW/RED
O/DRIVE (ON OFF) ORANGE
O/DRIVE OFF DRIVER BROWN/YELLO

MULTI PLUG WIRES FROM ENGINE 5 PIN

WHT/ORA SPEED O
BLK/PUR TACH O
BLUE/GRN WATER (Q)
PUR/ORA OILGAUGE (M)
GRN/WHT OIL LIGHT.



FRONT VIEW ENGINE PLUG

N.B DASH HARNES

NOT USED CUT OUT
LBLUE/BLK LGRN/ORA
PURPLE RED/YEL CHECK IT'S +
WHT/BLK

Loose Wires by fuse panel

GREEN (U.S.A) → RELAY BLOCK REMOVE ORA/RED

GREEN/BROWN (U.K) → BROWN VIOLET / GREEN BLACK (U.S.A) REVERSE ENGINE COOLING

GREEN/BLUE (U.K) → VIOLET/YELLOW (U.S.A) LOOSE WIRE FROM M.A.U.

BLACK/PURPLE (U.K) → BLACK YELLOW / PURPLE D. GRN

L. GREEN (U.K) → BROWN / L. GREEN (U.S.A) BACK UP LAMPS

L/GREEN/BLACK (USA) IGNITION

GREEN/SLATE
GREEN/YELLOW } TO HEATER FANS.

AIR CON

ORA/GRN → RED

WHT/YEL → GREEN

BLK → BLK

STEREO

BATT + PURPLE

ACC BROWN/WHITE

ILL RED/WHITE

MAIN LUME MODIFICATIONS

1/ RELOCATE 2 INLINE FUSE HOLDERS FOR EASY ACESS. OUTSIDE FUSE PANEL.

2/ 4 WIRES 2 RED/GREEN 2 BLACK ANGLED LUCAS STRIP BACK TO MAIN BRANCH REMOVE ONE OF EACH THEN REJOIN

3/ FIT BLADE FUSE TO BROWN AND 2 x ORANGE/RED

4/ MERGE WHITE/PURPLE TO BLACK ON NOTE 2

5/ SPARE RELAY REMOVE WHITE/RED AND WHITE/BROWN

6/ MOVE 2 WIRED COLOURED L. GRN/BLK AND BLK CUT OFF AND BRANCH AFTER JET BRANCH REJOIN

7/ ADD GREEN AND A BLACK TO FIG 6 THEN BRING BACK TO 10 WIRE BRANCH 3x RED/PINK, 2x RED/WHITE, PUR/ORA, PUR/RED, PUR/GREY, GRN, [illegible]

8/ ADD GREEN/BLACK FOR FUEL PUMP TO FUEL PUMP RELAY

9/ ADD GREEN/YELLOW FOR BOOT PROTECTION SWITCH TO FUSE PANEL

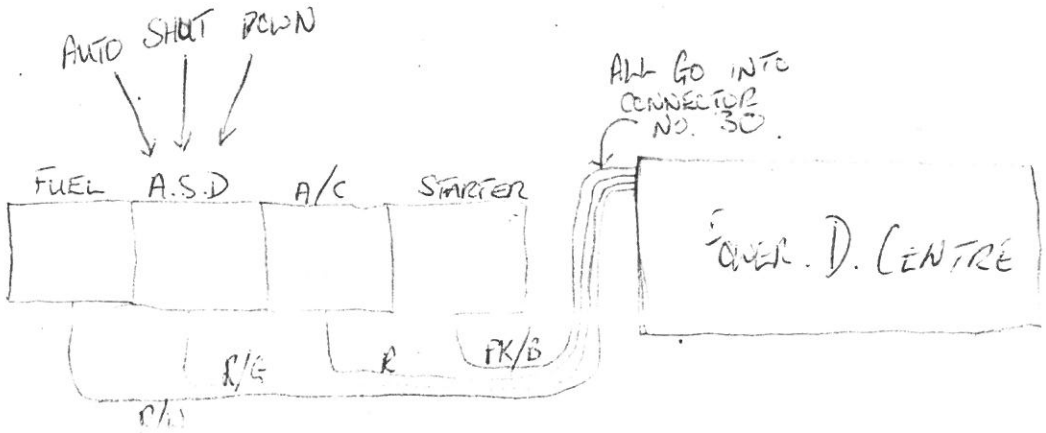
10/ ADD BLUE WIRE TO PURPLE/WHITE AND EXTEND TO STEREO LUME

BLENHEIM

FROM JUNE 98

AS FITTED BY ~~JAG~~

FROM POWER DISTRIBUTION CENTRE TO THE 4 RELAYS WHICH FOLLOWS IN THE FOLLOWING ORDER



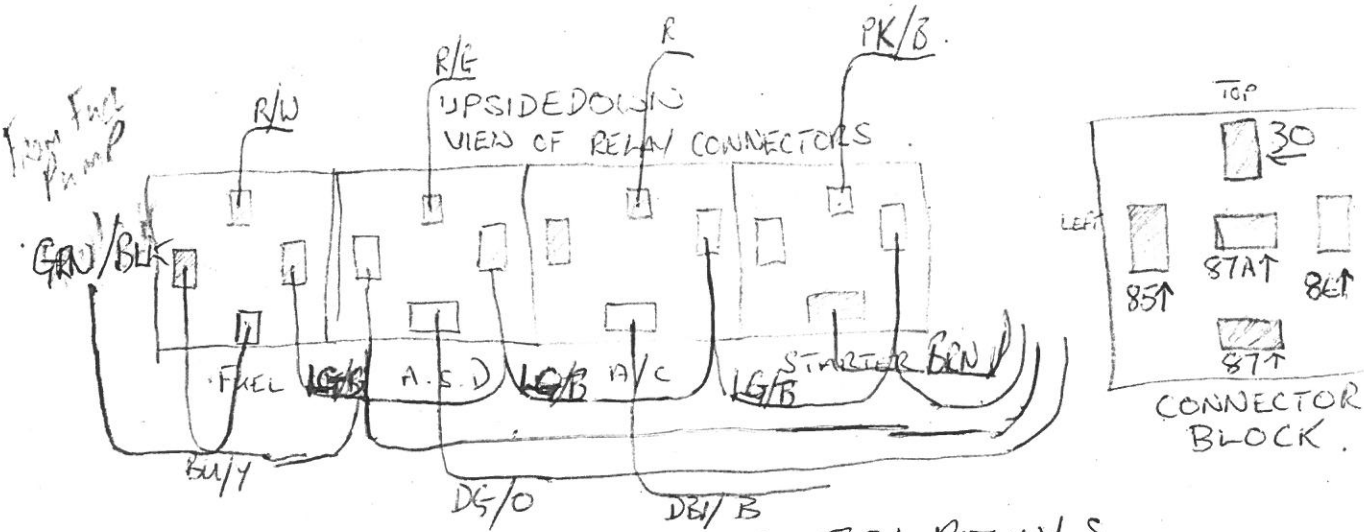
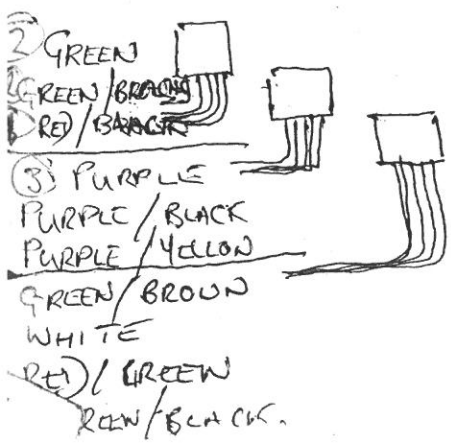
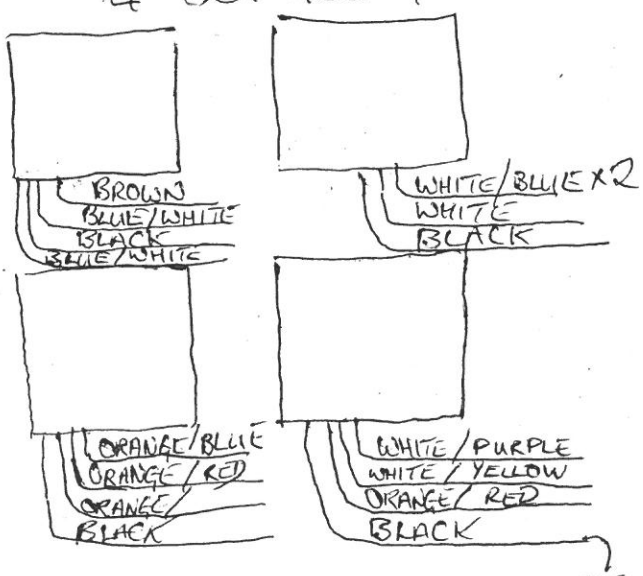


PLATE BY SERVO'S

3 501 RELAYS.



4 501 RELAYS



REAR LIGHT FITTINGS

LEFT

A/ RED / BLACK

B/ GREEN / PURPLE

C/ BLACK

D/ GREEN / RED

RIGHT

A/ GREEN / WHITE

B/ BLACK

C/ GREEN / PURPLE

D/ RED / ORANGE

BOOT LAMPS

COLOUR GREEN / BROWN REVERSE

RED / YELLOW REAR FOG

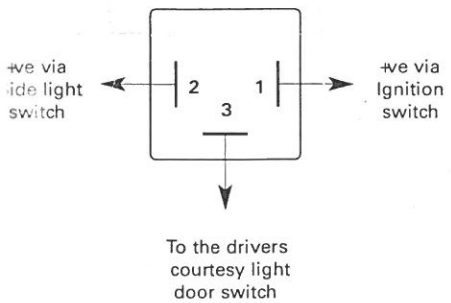
BLACK EARTH

DURITE

'LIGHTS ON' WARNING BUZZER
12 Volt Negative Earth
Part No. 0-562-00

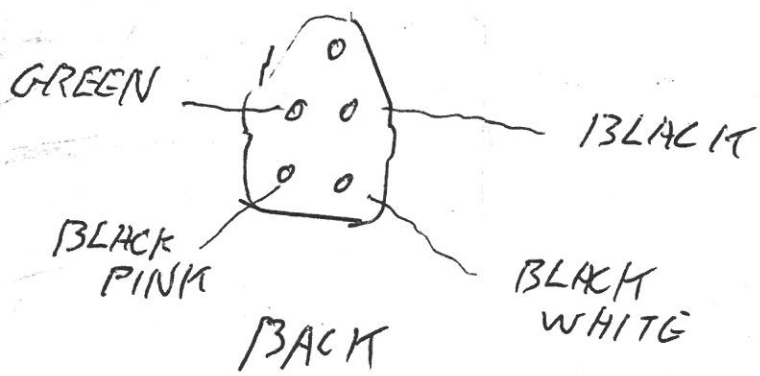
or use on 12 volt negative earth systems providing two tone warning alarm if the drivers door is pened when the vehicle lights are on and the ignion is switched off.

UNDERSIDE VIEW

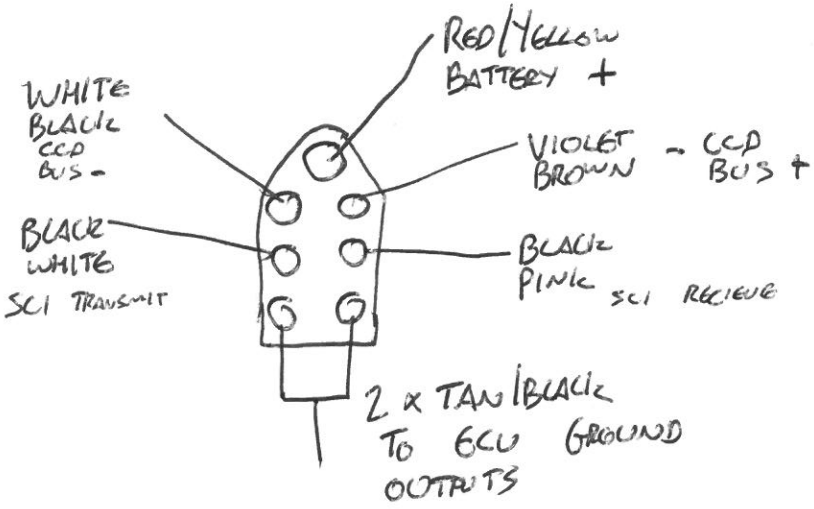


Gordon Equipments Limited

FEMALE



7 PIN DIAGNOSTIC TO OBD II

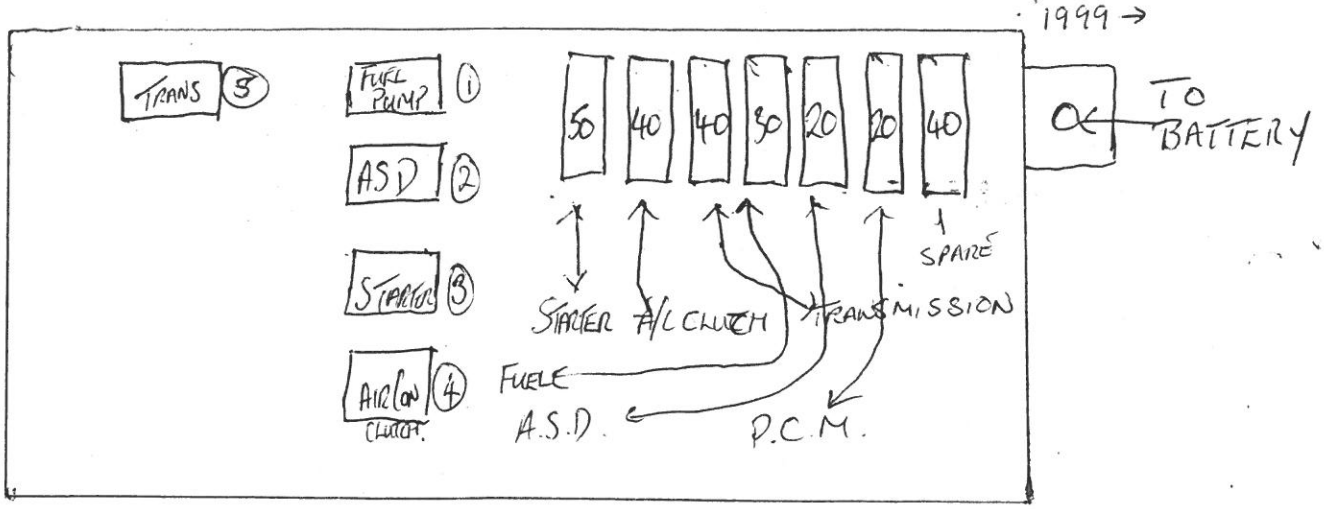


VIEW FROM REAR
OF 7 PIN MALE PLUG.

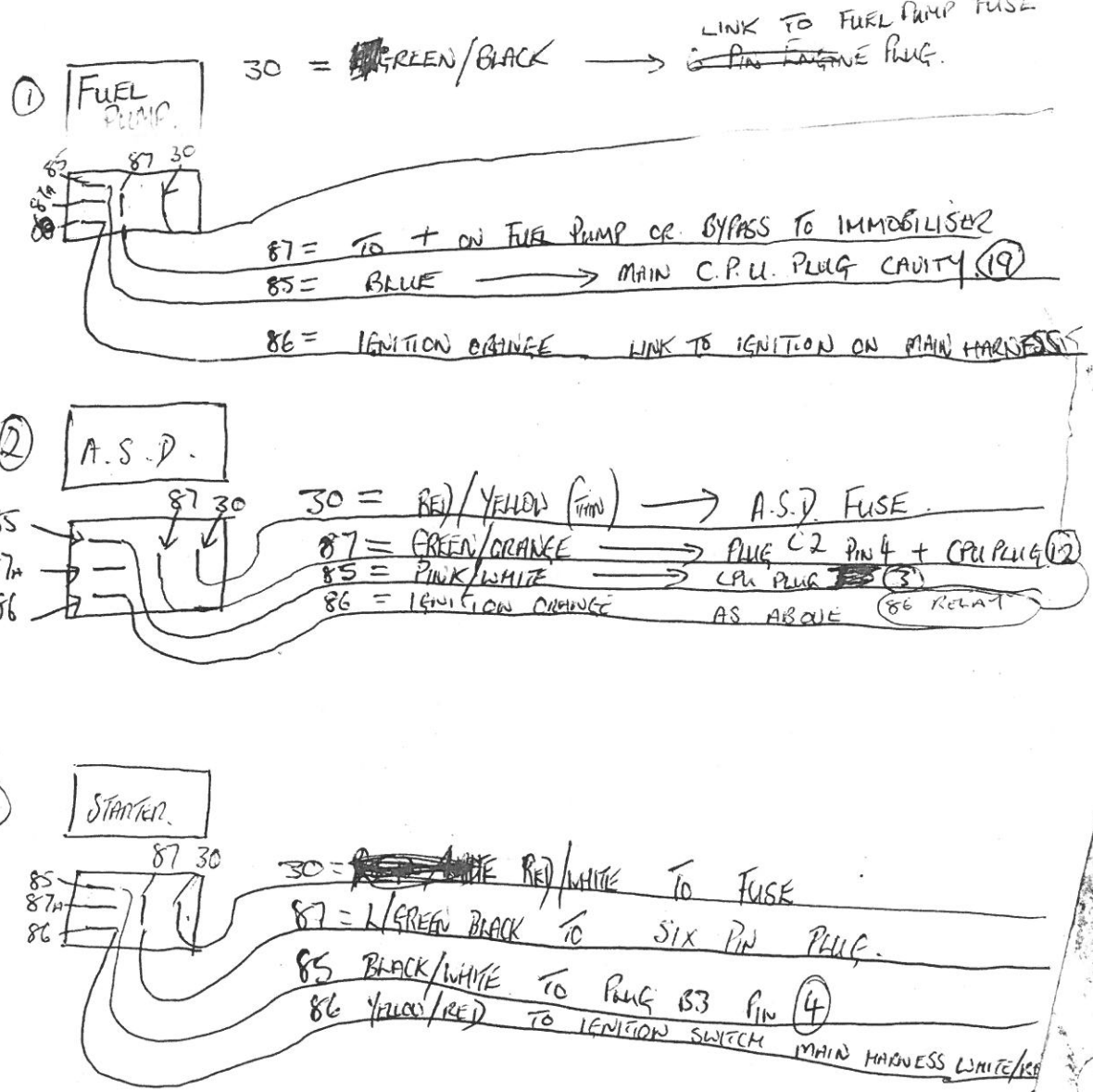
120

WIRING DIAGRAM OF U.S.A. FUSE PANEL

BLENHIEM III ONWARDS.
1999 →



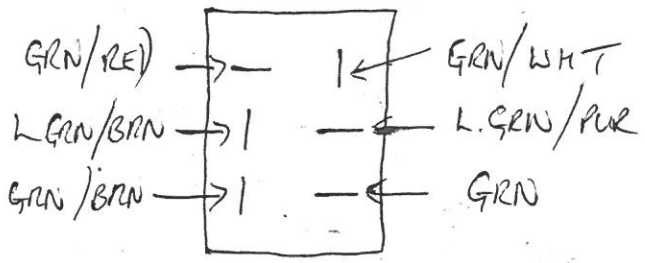
WIRING DIAGRAM OF RELAYS.



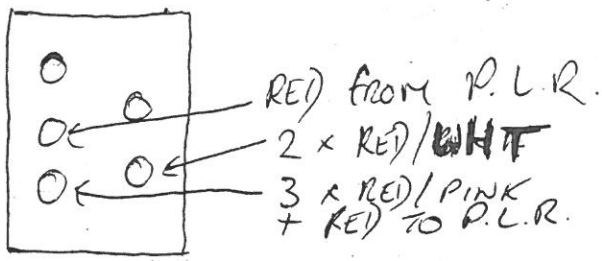
(6) YEL	→	~~IGNITION FEED~~ YELLOW/RED
(4) BLACK	→	EARTH
(5) WHITE/PINK	→	WHITE/PINK U.S.A. BROWN
(2) WHITE	→	GREEN/PURPLE
(1) PINK	→	GREEN/PINK
(3) BLUE/RED	→	P.BLUE/RED U.S.A. DBLUE (GREEN)

CRUISE CONTROL

BLUE	→	IGNITION FEED
YELLOW/RED	→	
BROWN/RED	→	
WHITE/GREEN	→	



HAZARD.



PANEL LIGHT.

OVERDRIVE SWITCH

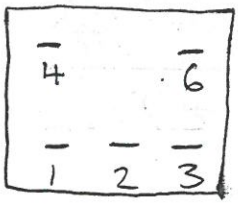
3	→	WHITE	IGNITION FEED)
2	→	ORN/WHT or ORN/YEL	AMERICAN
1	→	BLACK	EARTH
4	→	GRN/ORN or GRN/WHT.	AMERICAN.

SEE BACK OF PAGE FOR 5 PIN O/DRIVE SWITCH.

REAR GUARD	DEMIST
RED/ORN	GREEN
RED/GRN	WHT/BLK

C2

5 PIN



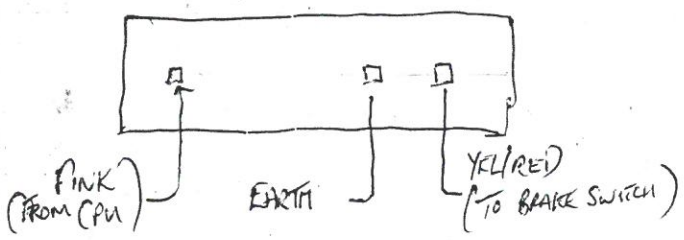
1 = EARTH
2 = GRN / WHT
3 = ORA / WHT
4 = SIDE LIGHTS
6 = IGNITION

BROWN/YELLOW
ORANGE.

NEW PETROL SENDER UNIT

K = WARNING LT WHT
M = GAUGE GRN / BLK.

CRUISE CONTROL SWITCH (BLENHEIM 3)



BRAKE LIGHT SWITCH BLENHEIM 4-5

(4)	BLACK	→	BLACK (EARTH)
(5)	WHITE/PINK	→	BROWN
(6)	YELLOW/RED	→	YELLOW/RED
(1)	PINK	→	GRN/PINK
(2)	WHITE	→	GRN/PURPLE
(3)	BLUE/RED	→	BLUE/GRN

SWITCH

LOOM

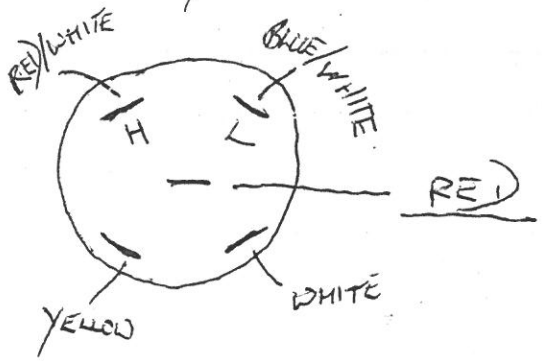
ALARM TYPE WITH IMMOBILISER

2x L. BLUE	→	INDICATORS	
RED/GREEN			
RED	→	BATTERY +	OUT
PURPLE	→	BOOT	OUT
20cm PURPLE	→	BONNET	OUT
BLUE	→	EARTH	OUT
BLACK	→	EARTH	OUT
GREEN	→	DOORS	OUT
RED/BLUE 20cm	→	SIREN RED/BLUE	IN
RED 20cm	→	SIREN RED	IN
BLACK 20cm	→	SIREN BLACK	IN
PINK	→	DONT CUT	IN
L/BLUE/YELLOW	→	PURPLE (CENRAL LOCKING)	OUT
L/BLUE/	→	EARTH	OUT
RED/ YELLOW	→	BEIGE	OUT
RED/ WHITE	→	EARTH	OUT
ORANGE	→	IGNITION +	OUT
BROWN	→	HORN	IN
PURPLE/ BLACK	→	BATTERY +	OUT
GREEN/ BLACK	→	EARTH	OUT
RED/ BROWN	→	GRN/PUR (BRAKE LIGHT SWITCH)	IN
L/BLUE	→	INDICATORS	IN
WHITE	→	L.C.D. RED-	IN

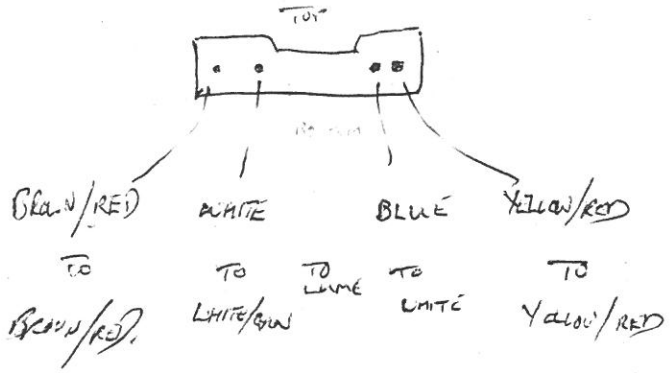
WIRES NOT USED

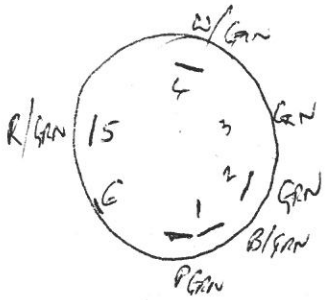
YELLOW	+	ALARM INPUT
L/BLUE/ BLACK		C/LOCKING
RED/ BLACK		C/LOCKING
PINK/BLACK		SUPPLY TO ACCESSORYS.

AIR CON ON/OFF SWITCH



BLENHIEM II CRUISE CONTROL SWITCH





FAULTS ON RO 10

DRIVERS DOOR WINDOW WONT GO UP

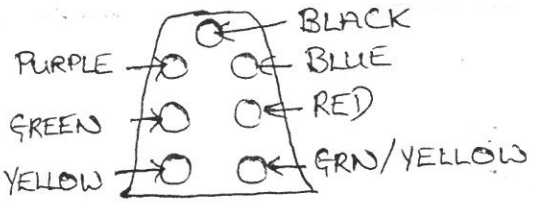
INDICATOR NOT WORKING.

SPEEDO ?

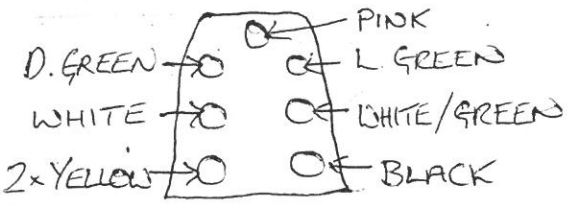
WIPERS BANGING ?

ELECTRIC MIRRORS

MIRROR SWITCH PLUG WIRING



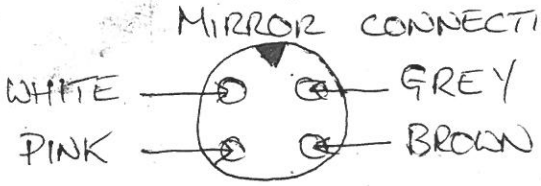
BRISTOL LUME



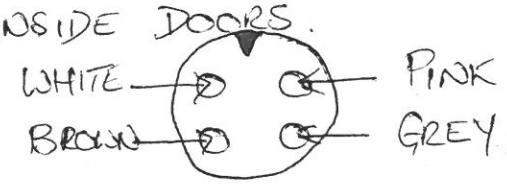
QUICK REFERENCE FOR THE ABOVE.

BLACK → PINK
PURPLE → D. GREEN
BLUE → L. GREEN
GREEN → WHITE
RED → WHITE/GREEN
YELLOW → 2 x YELLOW
GREEN/YELLOW → BLACK.

MIRROR CONNECTIONS INSIDE DOORS.



NEARSIDE



OFFSIDE

CORESPONDING PLUG

QUICK REFRENCE

NEARSIDE

WHITE → 2 x YELLOW
GREY → 1 x YELLOW
BROWN → WHITE/GREEN
PINK → L. GREEN

OFFSIDE

WHITE → 1 x YELLOW
PINK → ~~D. GREEN~~ WHITE
GREY → D. GREEN
BROWN → 2x YELLOW