

5.0 Wiring

5.1 Loom

The Cat E1 wiring loom has been purpose made, you should tape off any terminals not required, i.e. electric fuel pump.

The central wiring loom has to be offered up and fitted at an early stage of the kit assembly; the main cable runs front to rear alongside the brake and fuel lines inside the central tunnel. Before finally tying in the loom, make sure that you have it positioned correctly. A good way of achieving this is to locate the fuse and relay boxes on the passenger side under dash alloy panel and run the wiring loom into the engine compartment and to the rear light area another important position is the alternator plug. Using "p" clips or similar drill the chassis and secure at approx 100 mm intervals. Once in position, temporarily tie the loose wiring tails up so that they are not damaged during the remainder of the kit build. The Tiger wiring loom is very easy to connect once you have identified all the connections, It pays to spend time tagging the terminals with the destination, this will make the final routing of the wiring loom ends easier. When identifying the wiring the legend is composed in such a way that the first colour mentioned is the main wire colour, whatever follows is the stripe, i.e.;

WG - white with green stripe.

PB - purple with black stripe.

RLG – red with light green stripe.

B - black

N - brown

R – red

U - blue

P – purple

W - white

G – green

LG - light green

Ignition coil	-	W +ive, WB -ive
Distributor	-	W = +supply WB = from coil –ive B= earth
Fuel shut-off valve	-	WG= supply
Choke switch	-	WG =supply
Temperature sender	–	UG
Oil pressure switch		WN
Oil pressure sender		WY
Starter motor	-	N = starter+ WR = solenoid R = starter+

Alternator-	Pre-wired		
Horn	PY	=	supply
	B	=	earth
Radiator fan	BR	=	supply
	B	=	earth
Radiator fan thermal Switch	-	N	= supply
		RLG	= radiator fan relay

It is advisable to fit a battery isolator/cut off switch under the dash board, if you have done so then the red lead from the battery goes to the switch, you must then run another red battery lead from the switch to the starter motor.

Left hand front lights	-	GR	=	indicator
		UR	=	dip beam
		UW	=	main beam
		R	=	side light
		B	=	earth
Left hand front fog	-	RU	=	supply
		B	=	earth
Right hand front light		UR	=	dip beam
		UW	=	main beam
		GW	=	indicator
		R	=	side light
		B	=	earth
Right hand front fog	-	RU	=	supply
		B	=	earth
Left hand rear lights	-	GR	=	left hand indicator
5 pin socket		GP	=	brake
		GN	=	reverse
		R	=	tail
		B	=	earth
Right hand rear lights	-	GP	=	brake
5 pin socket		GW	=	indicator
		GN	=	reverse
		R	=	tail
		B	=	earth
Number plate light	-	R	=	supply
		B	=	earth
Rear fog light	-	RU		
			B	
			RW	
			RU	
Washer motor	-	LGB	=	supply
Fuse box	-			pre-wired
Wiper motor	-			pre-wired
Reverse light switch	-	G	=	supply
		GN	=	to lights
Handbrake switch	-	BW		

Electric fuel pump	-	WP	=	supply / 2 pin socket
		B	=	earth / 2 pin socket
Fuel sender	-	GB	=	from gauge
		B	=	earth
Heater motor	-	GB	=	1 st speed
		GY	=	2 nd speed
		B	=	earth
Brake light switch	-	G	=	supply
		GP	=	to lights
Horn switch	-	PB	=	earthed through switch
Right hand indicator	-	GW	=	supply
Warning light		B	=	earth
Tachometer	-	RW or R	=	illumination
		B	=	earth
		G	=	+supply (voltage sensing tacho)Std tiger
		WB=	=	signal from coil (voltage sensing tacho)std tiger
		W	=	looped coil+supply # not std

if a current sensing tacho is used, this loop is cut and the tacho is then wired in series with the coil.

Main beam	-	UW	=	supply
Warning light		B	=	earth
Fuel gauge	-	Rw or R	=	supply
		B	=	earth
		G	=	+supply/b
		GB	=	fuel gauge sender unit / T
Charge warning light	-	G	=	supply
		NY	-	alternator field
Oil pressure gauge	-	RW or R	=	illumination
		B	=	earth
		G	=	+supply /b
		WY	=	oil pressure sender unit /T
Oil pressure	-	WN	=	oil switch
Warning light		G	=	supply
Water temperature Gauge	-	RW	=	illumination
		B	=	earth
		G	=	+supply /b
		UG	=	temperature sender unit /T
Handbrake warning light	-	BW	=	switch to earth
		G	=	supply

Speedo	-	B	RW	=	illumination earth
Left hand indicator Warning light	-	GR	=	supply	
		B	=	earth	
Ignition and start column switch	-	See drawing at rear of book			
Wash and wipe column switch	-	see drawing at rear of book			
Indicator and dip column switch	-	see drawing at rear of book			
Heater	-	RW			
		G			
		GB			
		GY			
		B			
Hazard	-	GY			
		GR			
		GW			
		B			
		R			
Lights	-	RB			
		U			
		N			
		B			
		RW			
Radiator fan relay	-	BR	=	pre-wired	
		B	=	pre-wired	
		RLG	=	pre-wired	
		BR	=	pre-wired	
Horn relay	-	P	=	pre-wired	
		PY	=	pre-wired	
		PB	=	pre-wired	
		P	=	pre-wired	
Ignition controlled indicator relay	-	W	=	pre-wired	
		LGN	=	pre-wired	
		B	=	pre-wired	
		LGN	=	pre-wired	
Flasher unit Electronic	-	P	=	pre-wired	
		B	=	pre-wired	
		GY+GN	=	pre-wired	
Solenoid isolator #	-	WR	=	supply	
		WR	=	send	

These two wires are used as a inhibitor switch if using an automatic gear box, this normally stops you starting the engine with the gear lever in any position other than neutral. You can use these wires to connect up your own switch maybe under dash for added security, if not, join the two wires together to complete the circuit.

When wiring the dashboard instruments, simply plug the connector ends into the connection points on the instruments. Multi plugs are used for switches. There are two main sections of the dash-wiring loom, one feeds the instruments and the other feeds the switches and auxiliaries.

There is a pre-wired Multi plug also to be found with the dash wiring loom –this is for a dim dip light system and not used at present --If you are fitting electronic ignition, refer to the supplier's fitting/wiring instructions or wire from drawing at rear of this book-we only use the earlier two types as listed at the back (standard ford)

5.2 Wiper and indicator stalks

The Sierra stalks are used for indicator and wipers; the side/headlamp switch stalk is not used, so cut this off flush with a junior hacksaw. The hazard switch can also be removed as a dash mounted Hazard switch replaces it -- the original switch is left in the off position and the red "tell tale" can be removed.

5.3 Dashboard and dials

Standard dials used in the Cat E1 kit are Speedo and fuel gauge, the tachometer, oil and water gauges can all be bought from Tiger if required. The warning lights are for indicators left and right, ignition, main beam, oil level and handbrake warning /low fluid When laying out the dash make sure that the indicator left and right warning lights are separated by the other lights and are clearly visible from the drivers seated position and not obscured by the steering wheel.

Dials, warning lights and switches can be positioned to your own preference, make sure that the Speedo and tachometer are visible from the driver's position. It pays to cut out paper patterns for the dials, lights and switches and attach them to the wooden dash backing board with blue tack. When you have finally decided on the dash layout you can mark and cut the wooden backing and mark the GRP dash face for cutting out.

When designing the dash layout bear in mind the wiring loom position and the length of the tails to the dials, switches and warning lights. It is not a good idea to extend these wires if it can be avoided.