

<u>CUSTOMER WIRING INSTRUCTIONS TO SUIT : Universal Manual Trans</u>

Lay the C.A.E Engine loom in vehicle and plug in all the sensors. (The sensor plugs can only be connected one way). Mount the C.A.E Control Loom with the relays and circuit breakers under dash to steel frame or glove box. Making sure that the earth lug with 3 black wires is secured under the mounting bolt.

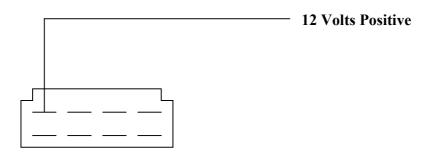
Using terminals and plugs supplied, adapt original harness to the new loom as per colour codes and numbers on the 8 & 4 pin female plugs that are listed below:

A) 8 Pin Female

All Plugs Viewed from the Front i.e. come in from the rear	1	2	3 4 	wires
1. Red	5 6mm	6	7 8 - Main Cabin Feed.	
2. Pink	3mm		- Ignition.	
3. Green	2mm		- Water Temp Gauge	
4. Brown\Blue	3mm		- Reverse Lights	
5. Brown\White	2mm		- Clutch Switch Input	
6. Brown	2mm		- Tacho Signal	
7. White	2mm		- Brake Switch	
8. Yellow	2mm		- A\C Request	

1) Battery Supply – 6MM Red

This is an auxiliary battery supply, (rated at 30 amps). It can be used for a number of things including power supply to the ignition switch.

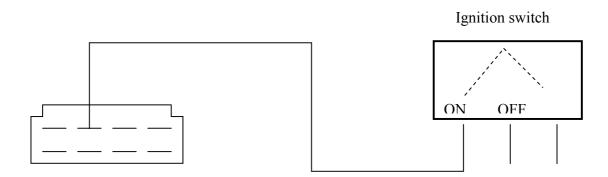


2) Ignition Supply – 3mm Pink

This is to be wired up to the Ignition switch. Making sure that there is 12 volts power when the key is in the ON position, and while the engine is being cranked.

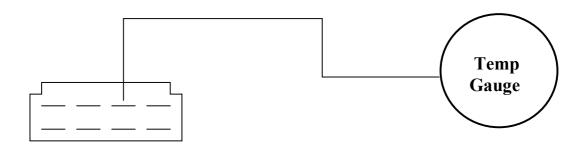
IF VEHICLE WAS ORIGINALLY FITTED WITH POINTS:

You will have to find the ignition bypass wire and discard it. (**Refer to NOTE 3 last page of instructions**



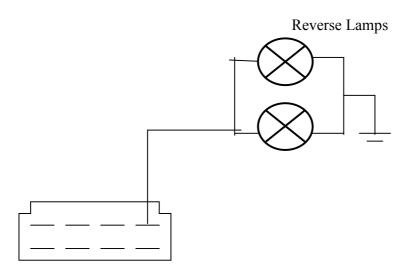
3) Temperature Gauge – 2mm Green.

This is to wired up to the Temperature gauge, if you are using the original temp gauge on the vehicle, you will have to change the temp sender to match.



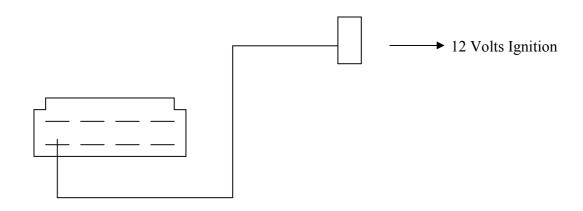
4) Reverse Lights – 3mm Grey

This is to wired up to the Reverse lamps,



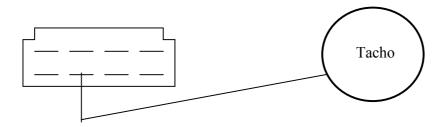
5) Clutch Switch – 2mm White\Brown

This is to be wired to Clutch Switch on Vehicles Pedal Box



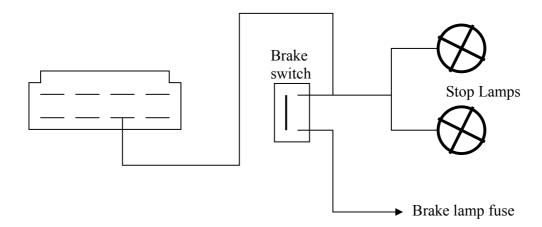
6) Tacho Signal – 2mm Brown

This is to wired up to the tacho signal, on the back of the tacho.



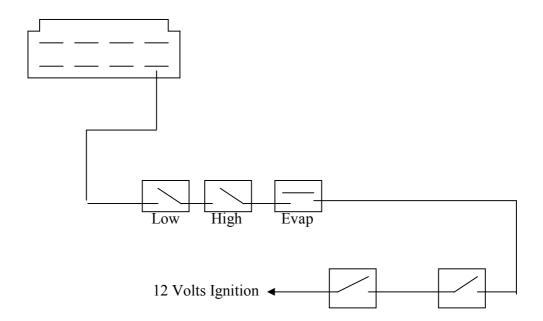
7) Brake Switch Input – 2mm White

This is to be wired to the output of the brake light switch.

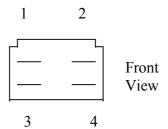


8) A/C Switch – 2mm Yellow

This is to be wired up to the A / C switch, through the blower fan. High & low pressure switches, and the E.V.A.P temp switch.



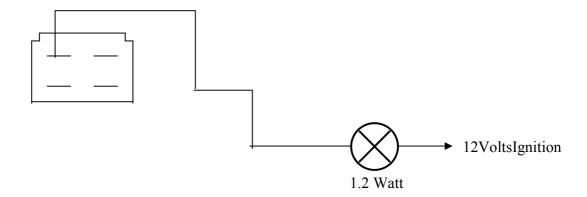
4 Pin female plug



1) White\Black
2) Violet
3) Blue
4) Viole\White
Alternator Lamp
Starter Motor Signal
Oil Gauge Signal
Speed sensor output.

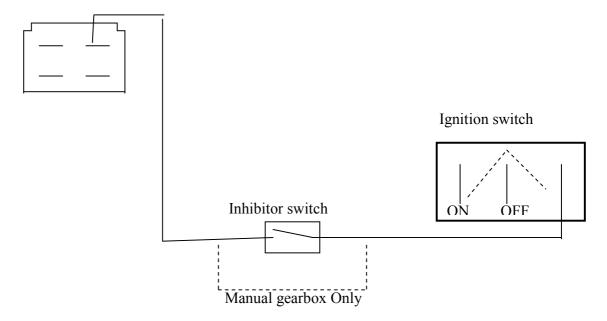
1. Alternator Lamp – 2mm White\Black

This is to be wired to alternator warning light.



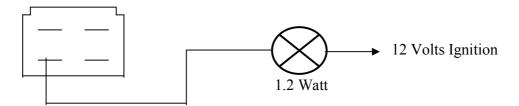
2) Starter motor Signal – 2mm Violet

This is to be wired to the start position on the ignition switch. If using an Automatic gearbox, wire this up through the inhibitor switch first.



Oil Gauge – 2mm Blue

This is to be wired to Oil gauge or Oil warning Lamp



4) Speedo Signal output – 2mm Violet\White

This is to wired up to the Speedo output signal, on the back of the Speedo.



(C) <u>SPECIAL NOTES</u>

- **(D)** Run the fuel pump wiring down to the fuel pump and connect as follows: (Red is positive Black is negative)
- **(E)** Run the thermo fan wiring down to the front of the radiator and with the 2 pin plug, wire in the fans. Check the direction of the cooling fans. If the fan runs backwards, reverse the wires in the 2 pin plug (red & black)
- **(F)** After final installation of the loom, check that all of the circuit breaker connection are tight.

Note 1: Thermo Fan Circuit.

Original Circuit for;

Holden VT, VX, VU, VY Fans	Ford Fans.	
Yellow = High Speed Earth Switching	(1) Blue = High	
Black = Low Speed Earth Switching	(2) Blue = Low	
Green = Positive Feed from Fusible Link	(1) Black = Earth	
Red = Positive Feed from Fusible Link	(2) Black = Earth	

Note 2: If Engine does not start.

- a) Do you have fuel pressure?
- **b)** Do you have Hi Tension Spark?
- c) Do you have Injection Pulse?
- d) Check Pin 2 on Control loom Ignition feed with test light and with the Ignition switched on and with the Engine cranking over the test light should stay on at all times. If light fails to glow, go back to Note 1 and recheck ignition bypass.(see note 3 below)

Note 3: Ignition Switch By Pass

Holden HQ-VB & Torana

Points ignition Bypass Diagram

NOTE!!!!!

If This Process is not Carried out Correctly your Vehicle will fail to run

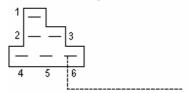


1. Violet Starter Motor Solenoid

2. Not Used

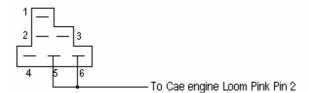
3 Red Battery +ve 4. Black Earth 5. Pink Ignition 1

6. Yellow-White Ignition 2 Resister Whire For Points Ignition



Yellow-White Resister wire That Orignally went to Coil +ve With Points ignition setup

This Wire needs to be cut and disregarded



Pin 5 Pink Ignition 1 and Pin 6 ignition 2 need to be looped together and a new wire to be ran out and connected to Cae Engine Loom as shown. This will enable the Cae loom to have a true ignition voltage and not have a voltage of \$volt caused by the resister wire

Holden EJ EH HR HD HK HG HT

Points Ignition Bypass Diagram

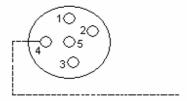
NOTE!!!!!

If This Process is not Carried out Correctly your Vehicle will fail to run



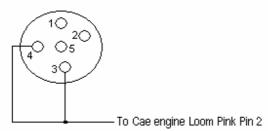
Red Batter +ve
 Brown Accessories
 Pink Ignition 1

White Ignition 2 Resister
 Starter Solenoid



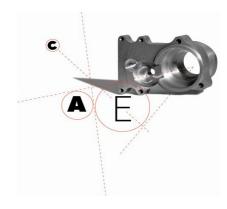
White Resister wire That Orignally went to Coil +ve With Points ignition setup

This Wire needs to be cut and disregarded



Pin 3 Pink Ignition 1 and Pin 4 ignition 2 need to be looped together and a new wire to be ran out and connected to Cae Engine Loom as shown. This will enable the Cae loom to have a true ignition voltage and not have a voltage of \$volt caused by the resister wire

Due to shortage of wire colours at times, there may be some wire colours that don't match. If this is the case follow the plug configuration.



PRECISION

ENGINEERED TO MOVE

ROAD, CASTLEMAINE, VIC 3450

T 03 5472 1442 F 03 5472 4111 C.A.E. PERFORMANCE PRODUCTS PTY LTD

7 MAIN

P.O. BOX 686, CASTLEMAINE, VIC 3450 ABN NO. 37 340 926 183

WWW.CAENTERPRISES.COM.AU

INFO@CAENTERPRISES.COM.AU

C.A.E. PERFORMANCE PRODUCTS PTY LTD LOOM WARRANTY

Manufacturer's Warranty:-

All Looms manufactured or modified by C.A.E. Performance Products Pty Ltd will be guaranteed against faulty workmanship for a period of twelve months.

The warranty is subject to the following conditions:-

- All claims must be made within the warranty period.
- Any loom manufactured or modified that has been found to have faulty workmanship or related faults due to the workmanship of C.A.E.
 Performance Products will be replaced or repaired free of charge.
- C.A.E Performance Products recommend that this product be fitted by qualified personnel.

- The warranty will not apply to a loom that has been installed incorrectly or has been subject to neglect, intentional or accidental damage, unauthorized repairs or modifications or used for the wrong application.
- The warranty does not cover installation or removal of wiring loom or freight costs.

The warranty will only apply to wiring looms used for normal road use.