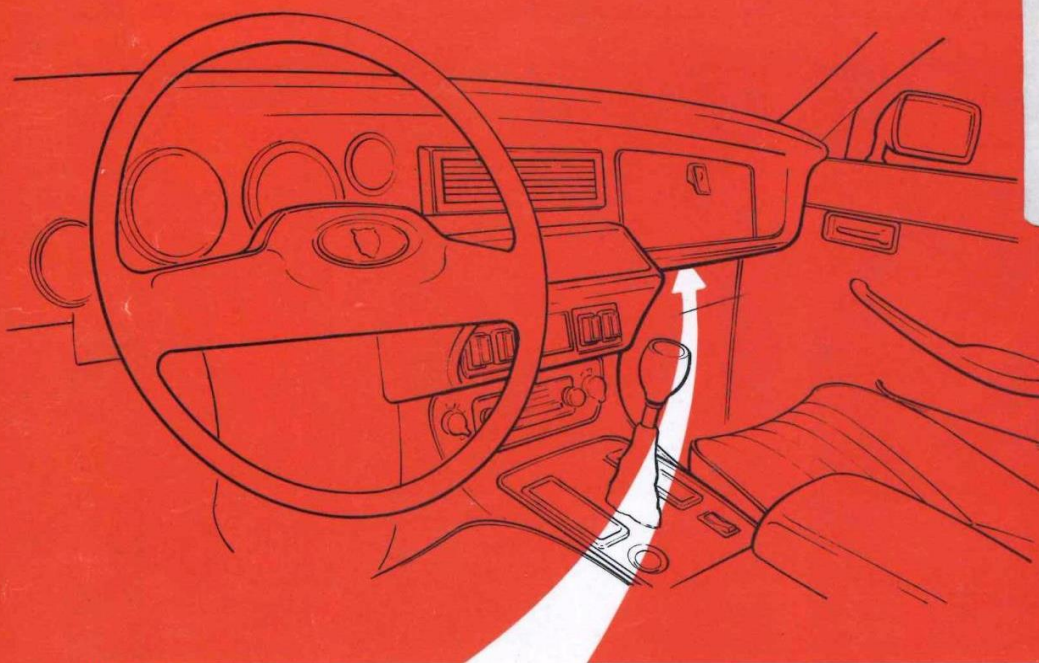


JAGUAR SPEED CONTROL

FAULT FINDING

using the Econocruise
Diagnostic Tester



CONNECTING UP THE TESTER

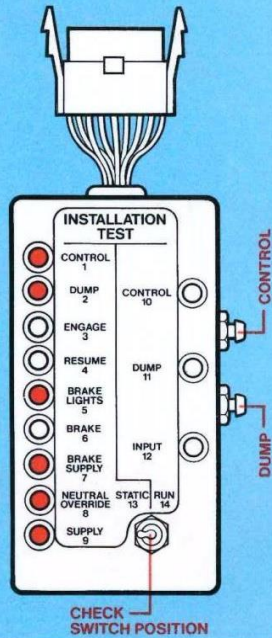
- 1** DISCONNECT THE ECONOCRUISE CONTROL UNIT FROM THE CAR LOOM, FROM UNDER PASSENGERS SIDE OF DASH.
- 2** PLUG TESTER LOOM INTO BOTH CAR LOOM AND ECONOCRUISE CONTROL UNIT.
- 3** NOW FOLLOW ALL THE RELEVANT TEST PROCEDURES AS INSTRUCTED ON INSIDE OF LEAFLET.

TEST 1

Continuity and Supply

- 1 Switch tester to 'static'.
- 2 Select Neutral.
- 3 Switch on Ignition.
- 4 Switch speed control 'on'.

The lamps should light as per diagram.



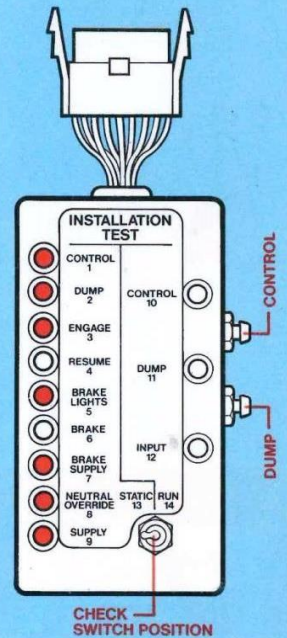
FAULT FINDER

- **NO 'CONTROL' LAMP**
Actuator or Yellow/Black wire open circuit.
- **NO 'DUMP' LAMP.**
Actuator or Yellow/White wire open circuit.
- **NO 'BRAKE LIGHTS' LAMP.**
Car brakelamps faulty or Green/Violet wire open circuit.
- **NO 'BRAKE SUPPLY' OR 'SUPPLY' LAMP.**
No power from on/off switch, check fuse and Yellow/Orange wire.
- **NO 'NEUTRAL OVERRIDE' LAMP** (See test 5).

TEST 2

Engage/Set – Function Check.

- 1 Press 'set' button on car stalk switch.
The lamp should light as per diagram.



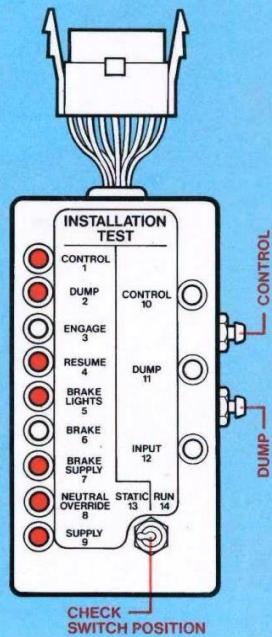
FAULT FINDER

- **NO 'ENGAGE' LAMP**
Set switch faulty or Black/Pink wire open circuit.

TEST 3

Resume Switch – Function Check.

- 1 Press 'resume' on speed control switch.
Lamps should light as per diagram.



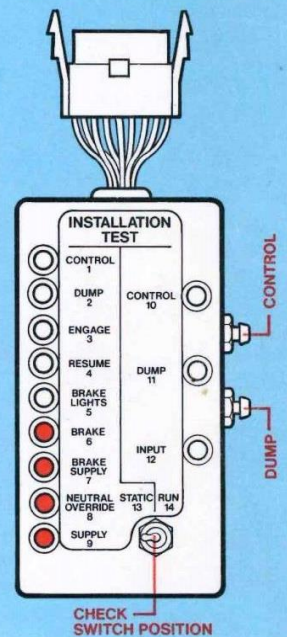
FAULT FINDER

- **NO 'RESUME' LAMP**
Resume switch faulty or Black/White wire open circuit.

TEST 4

Dual Brake Switch Function and Sequence Check.

- 1 Depress brake pedal firmly.
Lamps should light as per diagram.
- 2 Depress brake pedal lightly
brake comes 'on', brake lights go out, (from action of brake lamp switch).
- 3 Continue pressure on brake – control and dump lights go out together. (action of secondary switch).
It is important that primary brake switch (stop light switch) functions before secondary safety switch.



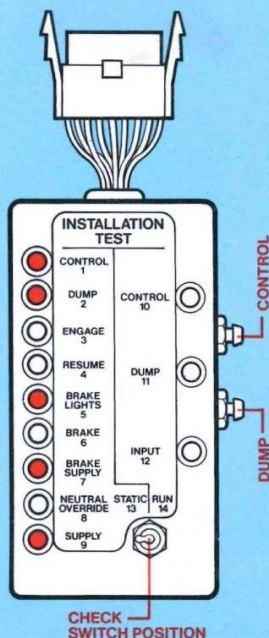
FAULT FINDER

- **NO 'BRAKE' LAMP.**
Check that car brake lamp function, if 'Yes' check Green/Violet wire open circuit.
- **CONTROL AND DUMP NOT 'OUT'.**
Secondary brake switch faulty.
- **DUMP 'ON' CONTROL 'OFF'.**
Secondary brake switch shorting to earth.

TEST 5

Speed Control Function in 'D' only.

- 1 Select Drive 'D'
Lamps should light as per diagram.
- 2 Select all other gears.
Lamps should be as per diagram 1.
- 3 Return selector to 'N'.



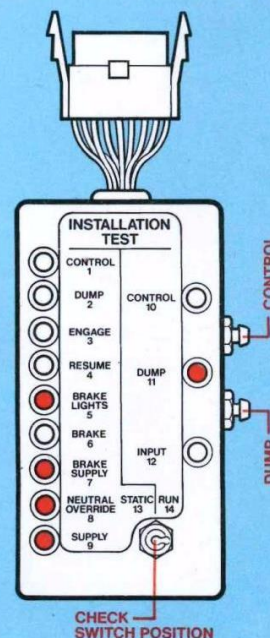
FAULT FINDER

- **NEUTRAL OVERRIDE LAMP NOT 'OUT' IN DRIVE 'D'.**
Check micro-switch on gear selector. Also Yellow/Violet wire for open circuit.

TEST 6

Static Check on Actuator Dump Valve.

- 1 Switch tester to 'run'.
- 2 Depress 'dump' switch.
An audible tick should come from the actuator.
The lamps should light as per diagram.



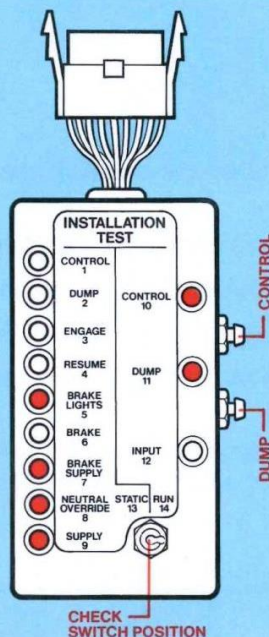
FAULT FINDER

- **NO AUDIBLE TICK**
Faulty actuator if test 1 OK.

TEST 7

Static Check on Actuator Control Valve.

- 1 With dump switch held in, depress control switch. An audible tick should come from the actuator.
The lamps should light as per diagram.



FAULT FINDER

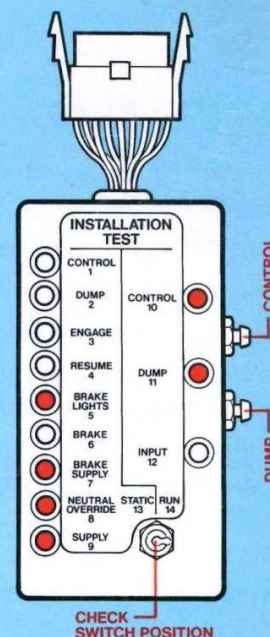
- **NO AUDIBLE TICK.**
Faulty actuator if test 1 OK.

TEST 8

Stationary Check on Actuator Function.

Automatically checks – Vacuum and throttle linkage.

- 1 Start engine.
- 2 Depress dump switch, the engine should remain at tickover.
- 3 Hold dump switch in, depress control switch, engine should increase in revs.
Lamps should light as per diagram.
- 4 Release dump switch, engine should return to tick over.
- 5 Release control switch.



FAULT FINDER

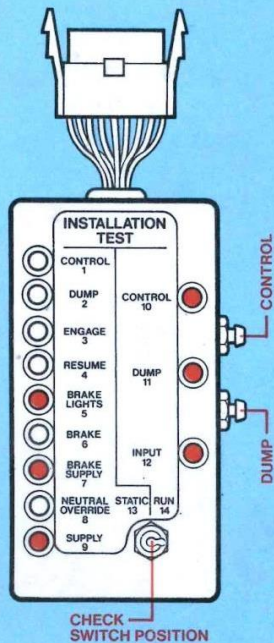
- **ENGINE REVS WITH DUMP ONLY**
Faulty actuator.
- **ENGINE WILL NOT REV WITH DUMP AND CONTROL.**
 - (a) **Actuator deflates**
Check throttle, hook up.
 - (b) **Actuator does not deflate**
Check vacuum connections if OK then faulty actuator.
- **ENGINE CONTINUES TO REV WITH DUMP OFF.**
Faulty actuator.

TEST 9

Speed Input Signal Check.

- 1 Engage drive 'D', move slowly forward, input lamp should flicker.
- 2 Drive up to speed >30 m.p.h. Depress set for 1 second, vehicle should maintain speed.

Lamps should light as per diagram. (Control lamp flickering).



FAULT FINDER

● NO INPUT LIGHT

(a) Magnetic Pick-up System

Check pick-up continuity for approximately 80 ohms. The pick-up-magnet gap should be 6 mm.

(b) Electronic Speedometer Pick-up

Check continuity of Yellow wire from speed pick-up to control unit.

● NO 'CONTROL' OR 'DUMP' LAMP.

All other test OK. Faulty E.C.U.

HINTS & TIPS

1. The vacuum actuator is a high reliability item, therefore double check the electrical, mechanical and vacuum connection before replacing.
2. Remove any free play in excess of 1 mm from the throttle hook-up using the cable clamp on the actuator bracket.
3. If the system only works at higher speeds, then the pick-up magnet gap is too large, on systems using magnetic pick-up.
4. Check the brake lamp switch is not set too fine, as this can cause the Cruise Control System to drop out.
5. Before changing a control unit check that the sockets in the car harness are not over expanded causing poor contact. Close up if necessary.
6. If after replacing a control unit it fails after working for a short while, then check the yellow/white and yellow/black wire to the actuator for damage causing short circuits. Also make sure the secondary brake switch operates after the brake lamp switch.

Manufactured by
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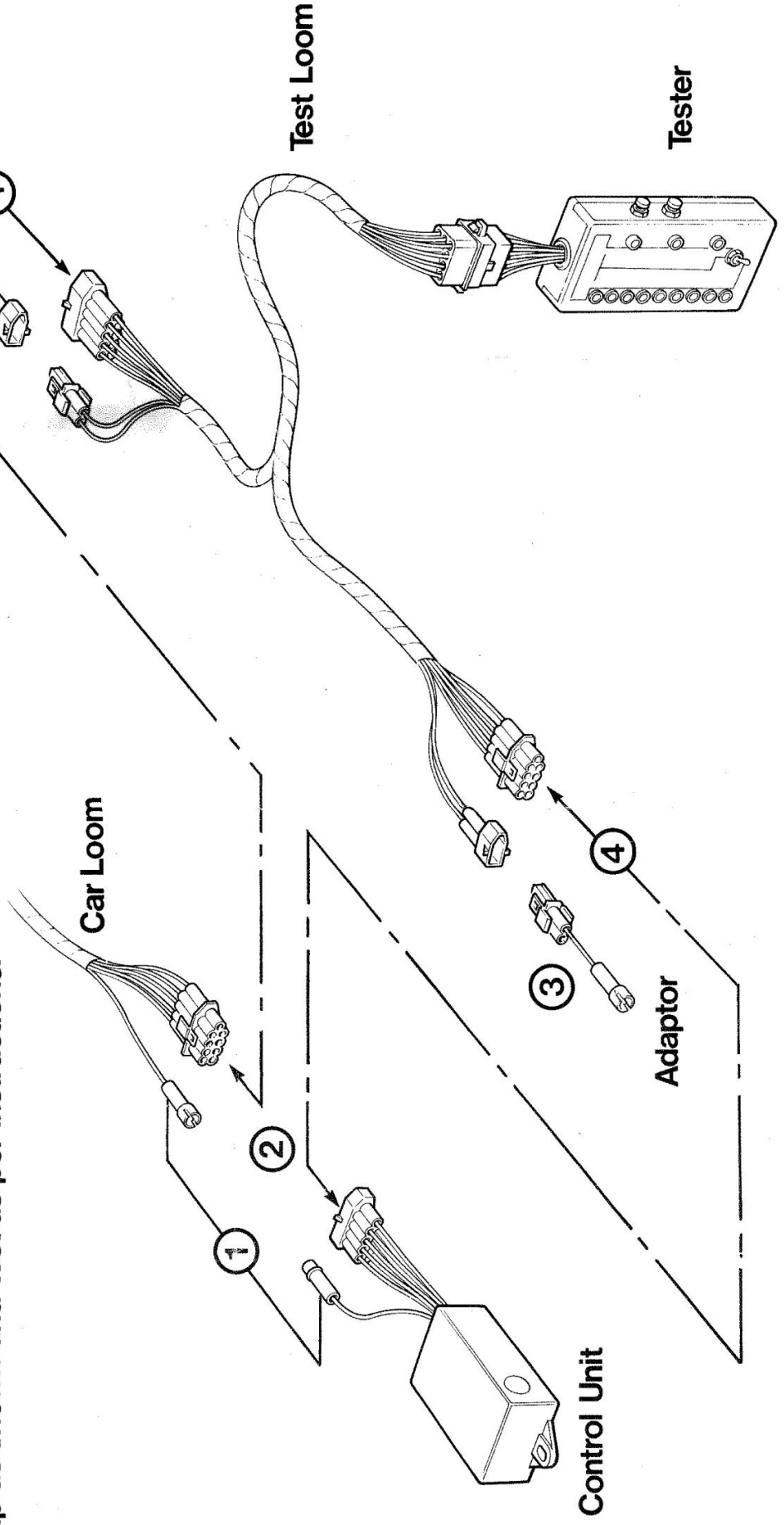
Econocruise is a registered trademark of Econocruise Ltd.

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JAGUAR SPEED CONTROL

Adaptation of Econocruiise Diagnostic Tester for use with Jaguar Series III Electronic Speedo.

- ① Locate control box and identify single wire connection.
- ② Part plugs.
- ③ Locate single wire speedo sensor adaptors (2 off).
- ④ Plug up as shown and test as per instructions.



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