

# TECHNICAL SERVICE BULLETIN

NO. 73-C-3



# Austin MG

SUBJECT:

Preliminary Information  
1974 Vehicle Seat Belt  
Interlock System

MODELS:

MGB, MGB GT, MG MIDGET  
AUSTIN MARINA

NOTE: There is a time delay feature incorporated into the seat belt interlock system. This feature will allow the starter to be operated under any seat belt conditions (fastened or unfastened) after the driver's seat has been vacated. Therefore, it is necessary to have the engine shut off and the driver's seat vacated for three minutes prior to performing the following test procedure.

## OPERATIONAL TEST PROCEDURE OF PEKTRON SEAT BELT INTERLOCK SYSTEM

1. Sit on driver's seat with belt unlatched, door closed and transmission in neutral.
2. Turn ignition switch to start position. Starter should not operate, seat belt warning light and buzzer should operate.
3. With ignition switch in "on" position (Pos.II), put transmission in any gear. Seat belt warning light and buzzer should operate.
4. Latch driver's seat belt, put transmission in neutral, press firmly on passenger's seat cushion. Starter should not operate and warning buzzer and light should operate until the key is released.
5. With driver's belt still latched, transmission in neutral, operate the starter switch, starter should operate, seat belt warning light and buzzer should not operate.
6. With transmission in any gear, press passenger's seat cushion. Warning light and buzzer should operate.



# MG Austin



## PEKTRON SEAT BELT INTERLOCK SYSTEM

The Pektron seat belt interlock system is designed to act as a seat belt warning and prevent engine start if the sit-buckle-start sequence is not followed. It will also give a visual and audible warning if the transmission is placed in a forward gear, and the driver or passenger do not have their seat belts fastened.

### START PREVENTION

The engine starting system will not operate if either:

- a) The seated driver does not have the driver's seat belt in use.
- b) The seated passenger does not have the passenger's seat belt in use.

The engine starting system will operate **ONLY** if the following conditions have been met:

- a) The driver must sit and subsequently buckle his or her seat belt.
- b) A passenger must sit and subsequently buckle his or her seat belt.
- c) The stopped engine may be restarted without restriction from the seat belt interlock provided the driver has not left the driver's seat or in the event of an engine stall, the ignition switch has not been switched to OFF.

The seat belt interlock system will not affect the vehicle operation when the engine is running because it is part of the starting circuit only and does not influence engine ignition. The start system will operate if both front seats are vacated. Operation of the starting system is dependent on the seat belt



module. Removal of the module from the system will prevent operation of the starting system.

## TESTING GUIDE FOR PEKTRON SEAT BELT INTERLOCK

### CONTROL UNIT

The seat belt interlock system is made up of a control unit and associated switches. In the event of a malfunction, it will first be necessary to determine if the fault lies in the automobile wiring and switches or within the control unit. The simplest method of determining a malfunction in the control unit is by substitution with a new one.

IMPORTANT -- Check switches and wiring first to avoid damaging a new control unit if circuit faults are present.

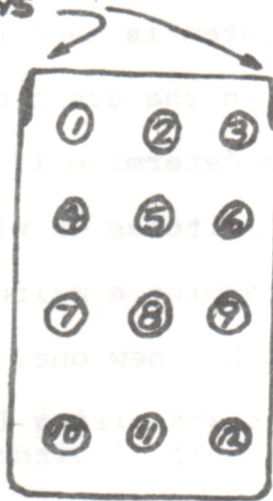
### Test Equipment for Switches and Wiring

1. 12 volt 2.2 watt lamp with flying leads 6" long fitted with insulated 3 mm sockets for connection to the pins of the plug in the vehicle harness which connects with the control unit. (The specified lamp rating should not be exceeded to prevent overloading of the switches.)
2. A six inch piece of insulated wire with bare ends.

TEST PROCEDURES FOR SWITCHES AND WIRING

The following checks should be made with reference to pin identification numbers as shown in the sketch below:

**INDEXING KEYS**





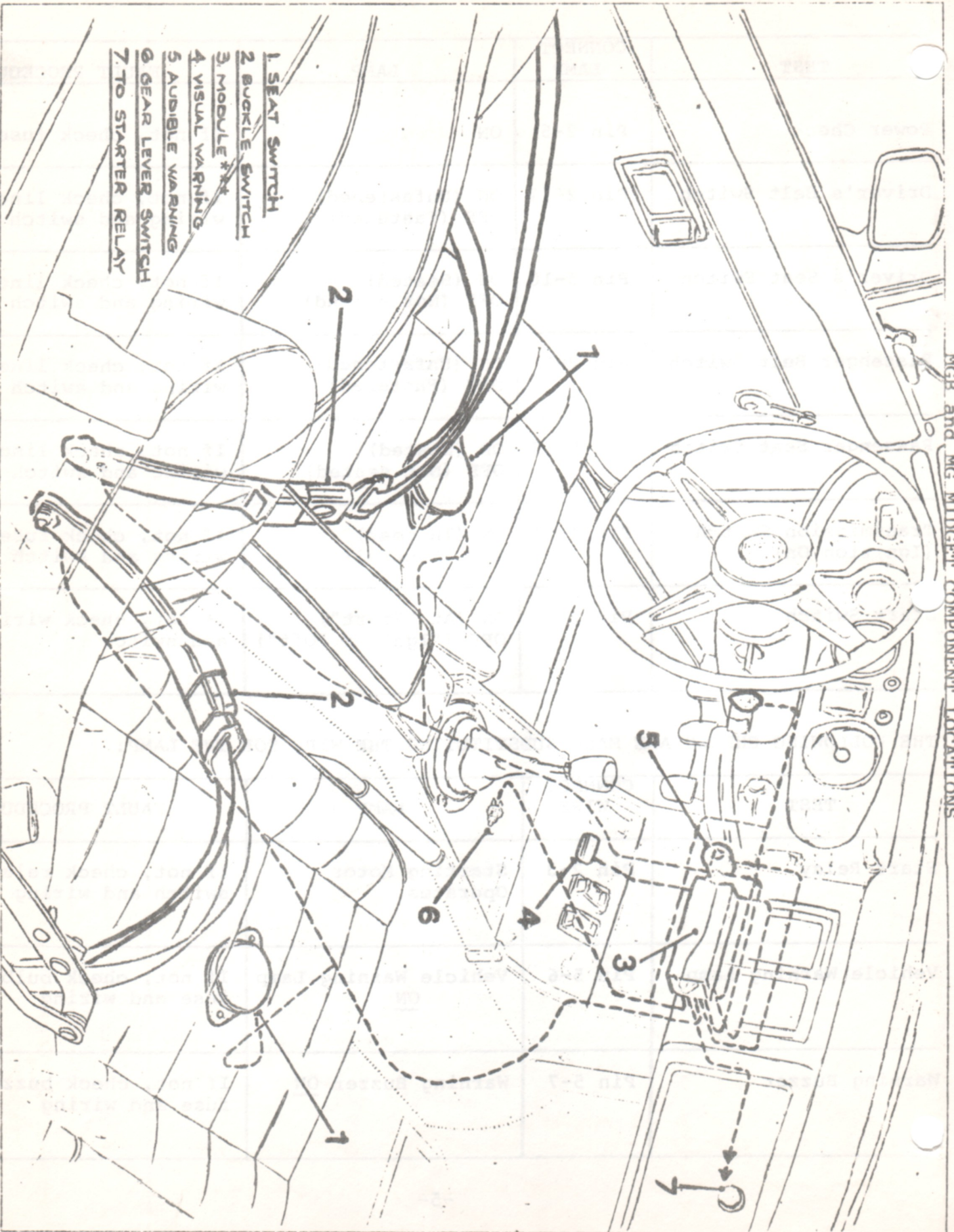
TEST PROCEDURES

TEST	CONNECT LAMP	LAMP	FAULT PROCEDURE
Power Check	Pin 2-5	ON	If not, check fuse
Driver's Belt Switch	Pin 2-11	ON (Unfastened) OFF (Fastened)	If not, check line-fuse wiring and switch
Driver's Seat Switch	Pin 5-10	ON (Seated) OFF (Not seated)	If not, check line-fuse wiring and switch
Passenger Belt Switch	Pin 2-9	ON (Unfastened) OFF (Fastened)	If not, check line-fuse wiring and switch
Passenger Seat Switch	Pin 5-12	ON (Seated) OFF (Not seated)	If not, check line-fuse wiring and switch
Transmission Switch (Ignition On)	Pin 4-5	ON (In gear) OFF (Neutral)	If not, check fuse wiring and switch
Start Switch	Pin 1-5	ON (At "Start") OFF ("Ign" or "Off")	If not, check wiring and switch

THE FOLLOWING CHECKS ARE MADE SUBSTITUTING THE WIRE FOR THE LAMP:

TEST	CONNECT WIRE	LAMP	FAULT PROCEDURE
Start Relay	Pin 2-3	Starting Motor Operates	If not, check relay, switch and wiring
Vehicle Warning Lamp	Pin 5-6	Vehicle Warning Lamp <u>ON</u>	If not, check bulb fuse and wiring
Warning Buzzer	Pin 5-7	Warning Buzzer <u>ON</u>	If not, check buzzer fuse and wiring





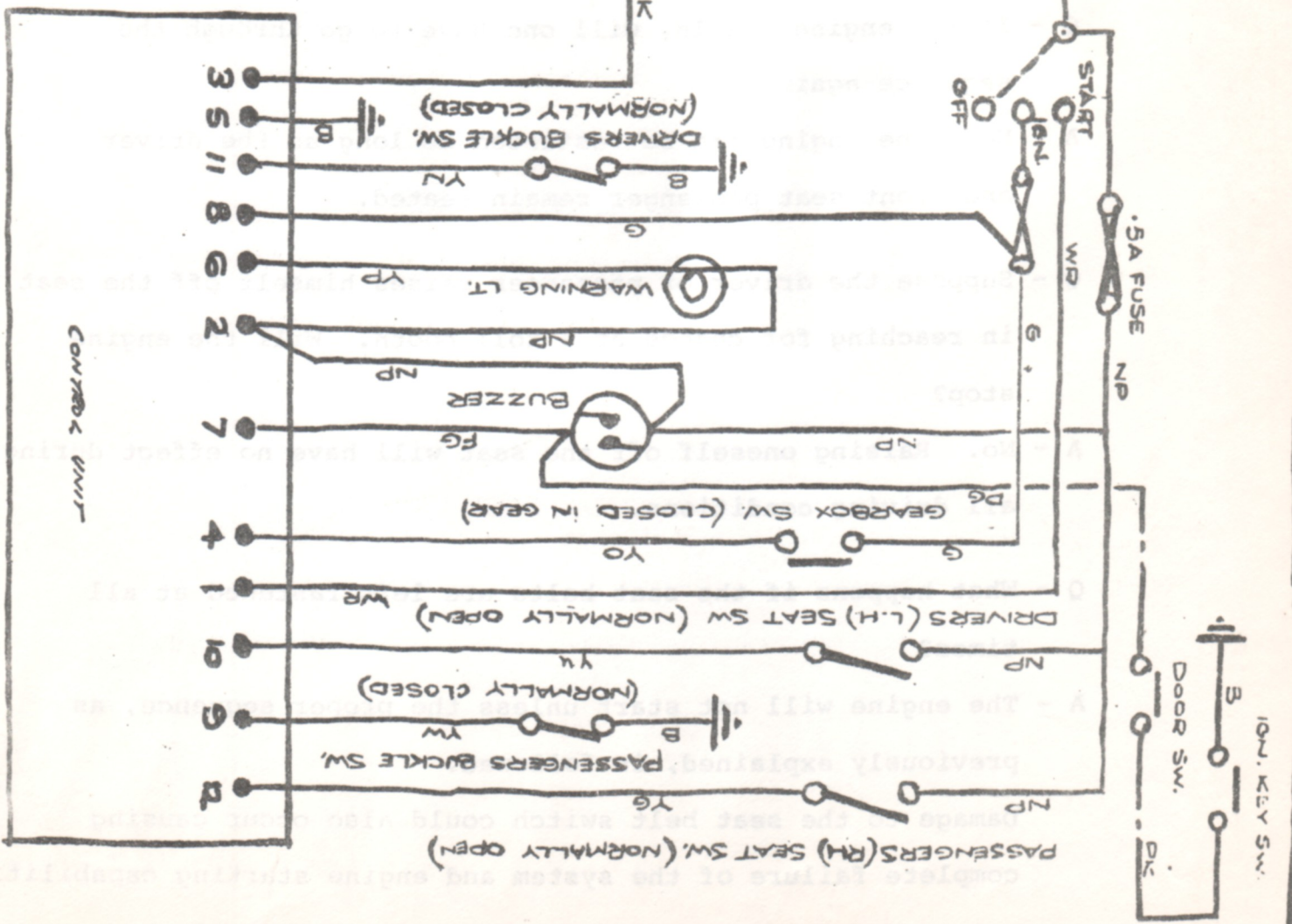
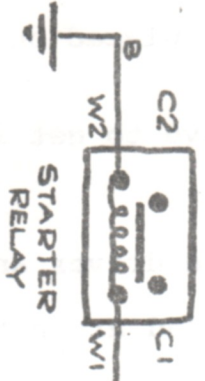
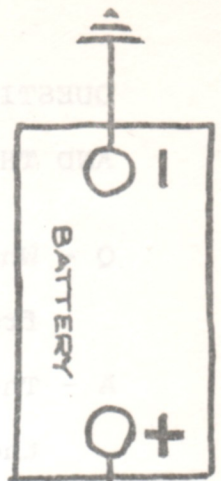
- 1. SEAT SWITCH
- 2. BUCKLE SWITCH
- 3. MODULE \*\*
- 4. VISUAL WARNING
- 5. AUDIBLE WARNING
- 6. GEAR LEVER SWITCH
- 7. TO STARTER RELAY

\*\*NOTE: MG MIDGET - Control unit is located on Bulkhead in Glove Box  
COMPONENT LOCATIONS



**COLOR KEY**

W	-	White
N	-	Brown
G	-	Green
Y	-	Yellow
B	-	Black
U	-	Blue
O	-	Orange
P	-	Purple
K	-	Pink
R	-	Red



WIRING DIAGRAM  
PECTRON SYSTEM  
AUSTIN/MG

CONTROL UNIT



QUESTIONS THAT MAY ARISE ABOUT THE SYSTEM --  
AND THE ANSWERS TO THEM

Q - What if one places a fairly heavy package on the passenger front seat?

A - The seat belt has to be fastened to start the engine or the package may be placed on the floor.

Q - Does the driver have to get in before the front seat passenger?

A - No. So long as the driver and passenger have observed the starting sequence and are both buckled in before the key is turned to start.

Q - If the engine stalls, will one have to go through the sequence again?

A - No. The engine can be restarted as long as the driver and front seat passenger remain seated.

Q - Suppose the driver or passenger raises himself off the seat in reaching for change at a toll booth. Will the engine stop?

A - No. Raising oneself off the seat will have no effect during all driving conditions.

Q - What happens if the seat belts are left fastened at all times?

A - The engine will not start unless the proper sequence, as previously explained, is followed.

Damage to the seat belt switch could also occur causing complete failure of the system and engine starting capabilities.



Q - Suppose something goes wrong with the system; how can I start the car?

A - The chance of something going wrong with the system is remote; but if it should happen, the engine can be started by reaching into the car to turn the key -- without putting any weight on the front seat. Be sure, of course, that the transmission gear selector is out of gear and the hand brake is applied.