## 4 Clearing codes without a fault code reader (FCR)

### Preferred method

1 Turn the ignition key to the "ACC" position.
2 Remove the 60-amp BTN fuse and the 30-amp EGi fuse. The fusebox is located in the engine compartment.
3 Wait for 20 seconds and then refit the fuses. All stored fault codes should now be cleared.

### Alternative method

4 Disconnect the battery negative terminal for at least 20 seconds.
5 Fully depress the brake pedal for at least 5 seconds and then release it.
6 Reconnect the battery negative terminal.
**Note:** *The first drawback to this method is that battery disconnection will re-initialise all ECM adaptive values. Re-learning the appropriate adaptive values requires starting the engine from cold, and driving at various engine speeds for approximately 20 minutes. The second drawback is that the radio security codes, clock setting and other stored values will be initialised, and these must be re-entered once the battery has been reconnected. Where possible, use the preferred method described above, or clear the codes using a fault code reader.*

## 5 Self-Diagnosis with a fault code reader (FCR)

**Note:** *During the course of certain test procedures, it is possible for additional fault codes to be generated. Care must be taken that any codes generated during test routines do not mislead diagnosis.*

### All Mazda models

1 Connect an FCR to the SD connector. Use the FCR for the following purposes, in strict compliance with the FCR manufacturer's instructions:

*a) Retrieving fault codes.*
*b) Clearing fault codes.*
*c) Checking switches.*
*d) Making adjustments to timing and idle speed.*

2 Codes must always be cleared after component testing, or after repairs involving the removal of an EMS component.

## 6 Guide to test procedures

1 Use an FCR to interrogate the ECM for fault codes, or (where possible) gather codes manually, as described in Sections 3 or 5.

### Codes stored

2 If one or more fault codes are gathered, refer to the fault code tables at the end of this Chapter to determine their meaning.
3 If several codes are gathered, look for a common factor such as a defective earth return or supply.
4 Refer to the component test procedures in Chapter 4, where you will find a means of testing the majority of components and circuits found in the modern EMS.
5 Once the fault has been repaired, clear the codes and run the engine under various conditions to determine if the problem has cleared.
6 Check the ECM for fault codes once more. Repeat the above procedures where codes are still being stored.
7 Refer to Chapter 3 for more information on how to effectively test the EMS.

### No codes stored

8 Where a running problem is experienced, but no codes are stored, the fault is outside of the parameters designed into the SD system. Refer to Chapter 3 for more information on how to effectively test the engine management system.
9 If the problem points to a specific component, refer to the test procedures in Chapter 4, where you will find a means of testing the majority of components and circuits found in the modern EMS.