Injectronics

Remanufactured Automotive Electronics Components

PRODUCT SERVICE INFORMATION

Document number: P0029

For further technical information regarding testing, repairs or to search for New or Remanufactured Automotive electronic products, please visit www.injectronics.com.au, call our office on (+613) 8792 6999, or email sales@injectronics.com.au

Vehicle: Ford BA

Subject: Installation instructions & BCM matching

Company name: _____ Contact name: _____ Phone: _____

Important Notes:

1. Ford BA PCM's (Power train control modules) must be correctly customized to the vehicle to ensure correct operation. This programming procedure must be carried out by Injectronics or a Ford dealership with a genuine scan tool.

2. If original PCM failed for ignition related faults (eg: cylinder miss) Injectronics recommend replacement of all ignition coils prior to installation of the change over PCM.

If installation is being performed at a Ford dealership, the following actions must be carried out:

- Programmable Module installation operation performed (copied VIN, tyre size, axle ratio, ABS type, etc from original PCM to replacement PCM.
- Parameter reset performed to match security settings to allow the car to start and run.
- Interior command center reset/calibration to remove radio security code error messages.

Customers who have an appropriate security matching scan tool only (eg: Hanatech)

The replacement PCM should have already had had the programmable vehicle options programmed by Injectronics. These settings are as follows.

- **Cruise control:**
  - □ Present
  - □ Absent
- **Anti-lock braking system:**
  - □ No ABS
  - □ ABS Only
  - □ Traction Control and ABS
- **Axle gear ratio:**
  - □ 3.23
  - □ 3.45
  - □ 3.46
- **Original fitment tyre size**
  - □ 215/65R16C 106/104T (770)
  - □ 225/60R16 98V (783)
  - □ 215/60R16 95V (798)
  - □ 225/50R17 (805)
  - □ 245/40ZR18 93 (809)
  - □ 225/50ZR17 94W (810)
  - □ 215/55R16 93V (819)
  - □ 235/45ZR17 93W (825)
  - □ R155/70R17 110M (830)
  - □ 225/55R16 (842)

ABU XXX no: _____ Part Number: 3R23 _____

Vin number: _____

When the customer receives replacement PCM, the following must be performed:

- A security parameter reset (security matching procedure to allow the car to start & run)
- Interior command center reset /calibration remove radio code security error messages. Note this can only be typically performed using a genuine ford scan tool at a dealership.
- The VIN data in the PCM can only be transferred from the original PCM into the replacement PCM if the technicians at Injectronics have access to the customers original PCM. Otherwise the VIN must be corrected using a genuine Ford Scan tool. Note: that the vehicle will start and run even if the VIN is incorrect.

Return of Injectronics exchange units:

If the replacement PCM does not fix the problem on the vehicle, the original PCM may be re-installed, a parameter reset operation performed again, and if the interior command center has not been aligned to the PCM, then it will continue working as it did originally. The Injectronics remanufactured unit can then be returned to Injectronics for a retest fee.

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Ford BA PCM Installation Instructions

Ford BA PCM's (power train control modules) must be correctly programmed to suit the vehicles specific variants to ensure correct operation. This programming procedure must be carried out:

1. Using a genuine Ford IDS scan tool (Ford dealership)
2. Or alternatively by Injectronics before delivery to customer

Important Note:

If you require a pre-programed PCM, without having to send the original PCM to Injectronics, you will need to fill out the form overleaf and email / fax it to Injectronics on (03) 8795 7205 or sales@im-group.com.au

VIN#, tyre size, axle ratio, cruise/speed control and ABS settings from original PCM can then be programmed to the replacement PCM prior to delivery.

It is extremely important that the PCM hardware and software numbers from the PCM external sticker (eg. ABU242 and 3R2312A650AAA) are listed on the sheet.

If PCM programming has been carried out by Injectronics prior to installation

If Injectronics has pre-programmed the exchange PCM, upon installation the following actions must be carried out with a Ford IDS scantool, or a capable generic scantool such as a G-Scan, Hanatech, Ultrascan:

1. A parameter reset performed to match security settings to allow the car to start and run.
2. An interior command centre reset/calibration to remove radio security code error messages.

If PCM programming is carried out using a Ford IDS Scantool

If Injectronics has not pre-programmed the exchange PCM, upon installation the following actions must be carried out:

1. A programming module installation using Ford IDS will copy and transfer software and variant coding (VIN#, tyre size, axle ratio, cruise/speed control settings from original PCM programmed to the replacement PCM)
2. A parameter reset performed to match security settings to allow the car to start and run.
3. An interior command centre reset/calibration to remove radio security code error messages.

Vehicle: Ford Falcon BA / AU2 / AU 3

Subject: Smart shield systems / PATS style systems

These instructions are intended as a guide only and the user accepts that their full knowledge and experience to work on the vehicles system is essential. Reference to genuine factory workshop information is recommended before commencing any work.

The Hanatech scan tools can be used to erase existing keys and program new keys. This procedure can be used if additional keys need to be programmed and two existing keys are available or if a replacement BEM is ever fitted to the vehicle.

Ensure battery is of good condition & battery charge rate is within spec. Low battery voltage can cause BCM to loose synchronisation with PCM.

Procedure:

1. Turn the ignition ON
2. Plug in the Hanatech scan tool and turn the power on.
3. Select 'Enhanced scan'
4. Select 'Australian'
5. Select 'Ford'
6. Select 'Diagnostics'
7. Select 'Falcon'
8. Select 'BA, AUII or AUIII' whichever is required.
9. Select 'Forte or Futura or XR' whichever is required
10. Select 'Body BEM AUII and AUIII or Engine PCM for BA. ***This is an important step***. Do not select Series 1
11. Select 'Security'
12. Now a disclaimer will appear and ask you to input the last 4 digits of your serial number from the back of the scan tool. Read this carefully and if you agree to it, press Yes.
13. Next a warning will appear telling you that you should have two keys available and that the battery is in good working order or you may encounter 'System Lockdown'. Press any key after you have read this warning and all is ok.
14. Now select 'BEM - Keycode Erase'
15. Turn key to the off position, remove the key and close all doors. Then press 'Enter'
16. Now a full page of instructions will appear. You will have to follow these instructions quite quickly.
17. Within 5 seconds - turn key On (the doors will cycle once)
18. Turn the key Off and remove from the ignition barrel
19. Within 5 seconds insert the 2nd key and turn the key to the On position (the door locks will cycle twice)
20. Turn the key Off and remove from the ignition barrel.
21. Repeat the above steps if a third or forth key is required.

    The BEM will now exit the key learn mode after 10 seconds, cycling the door locks once. Press the 'Enter' key.
22. Note: Sometimes it will take more than one attempt to complete this procedure

Warning: The overleaf procedure will automatically erase the PCM code stored in the BEM. Before the vehicle can be started the PCM code must be reprogrammed into the BEM using the Parameter Reset procedure as follows:

To reteach the BEM to the PCM a Parameter Reset must be performed using the Hanatech scanner

PCM - Parameter Reset Procedure:

1. Now select "Parameter Reset' on the menu
2. Turn ignition On and press 'Enter'
3. A message will appear 'Please wait this will take approximately 10 minutes' to complete
4. After 10 minutes, the door locks will cycle and the message 'Function Completed' will appear
5. Cycle the ignition off then start the vehicle

Note: A slight delay may be experience, the key may have to be in the start (crank) or On position for 1 to 3 seconds to allow for complete system validation before the engine will start. Important: Sometimes it will take more than one attempt to complete this procedure.

Keypad training:
If you have replaced the BEM or wish to add or replace lost keypads with new keypads, you need to train the key codes to the BEM.

Procedure:

1. Turn the ignition switch to the off position
2. Turn the ignition key to the ACCESSORIES position and within 5 seconds, operate the rear demister switch exactly 3 times (ON, OFF, ON)
3. After the 5 seconds is up, the door locks will change state to indicate the BEM has entered the learn mode. All existing keypad codes are immediately erased.
4. Press either of the buttons on the keypad. The door locks will change state twice to indicate the BEM has learnt the keypad.
5. Follow step 4 for each keypad. You can train up to 4 keypads. You must teach all of the keypads to the BEM before proceeding to step 6
6. When you have taught all of the keypads, turn the ignition switch to either RUN or OFF position to check the function of each keypad that has been trained

Note: If a keypad has been lost follow steps 1,2,3 and 6. This will erase the code of the lost keypad from the BEM and prevent unauthorised entry to your vehicle.

Vehicle: Ford BA

Subject: Unlocked / Factory reset mode

This ECM is supplied in an unlocked / factory reset mode and will require the use of a factory scan tool, or an appropriate aftermarket scan tool to program and synchronize this ECM to the vehicles immobilizer system. Please refer to the OE workshop manual for instructions.

Depending on your vehicles make and model, other programming that may be required can include correct software loading / Re-flashing and correct variant coding / programming.

Alternatively, if the required scan tools are not available, Injectronics may be able to program this ECM for you to suit your vehicle. Please contact Injectronics for programming options which may include transferring data from your original ECM to the exchange unit.

Note: If using this ECM on a trial basis and returning for a full credit it will require you to reset it back into an unlocked / factory reset mode to avoid any additional fees.