

# Reprogramming the Ford Puma key

## Security System

The Puma security system (Ford Safeguard (FD.II.5)) fulfills all requirements of the Thatcham II standard. If your insurer asks you questions about the alarm or immobiliser you can probably answer them by saying "factory-fitted Thatcham II". For more details on what 'Thatcham II' means here, see <http://www.thatcham.org/> and click on the 'security' link.

The whole system — alarm, immobiliser, remote-locking, double-locks, and peripheral alarm — considered all together is usually called a PATS: a Passive Anti-Theft System. An active (rather than passive) system would, presumably, handcuff up the burglar and drive him to the nearest police-station.

### Security system self-diagnostics

If your 'door open' light comes on for no apparent reason or your alarm keeps sounding for no apparent reason, you may have a faulty pin-switch in one of the doors, the boot, or the bonnet. The alarm self-diagnostic can be selected by depressing any alarm pin-switch 6 times in quick succession. Once this is done the alarm will bleep once. Opening the boot, doors or bonnet will sound the horn once if that detector is okay and twice if there's a fault with it. If nothing is opened or closed for twenty seconds the security system will quit diagnostic mode and return to normal.

### Remote keys

Early Pumas use an infra-red system for communication between the key and the car. Later Pumas use a wireless system for communication between the key and the car. You can tell which you have by looking at the key (the one with the remote buttons on): if this key has something on which looks like a tiny light-bulb, then it uses the infra-red system. If there's nothing on the key which looks like a light-bulb, it uses the wireless system. The infra-red system requires the key to be in line-of-sight of the infra-red detector in the car. If you have trouble getting your infra-red key to work, make sure you're pointing it directly at the rear-view mirror inside the car (which is where the infra-red detector is) when pressing the buttons. The later system does not have this problem: radio waves are non-directional.

Both systems use a battery. If the battery inside your key runs down, or is taken-out to be replaced, the key will lose its place in the sequence and your car will no longer recognise the key and the key will have to be reprogrammed before it can be used again. To do this you will need to be able to get into your car, so make sure you have another (working) key available before taking the battery out of your normal key. (Or you could just leave the driver's door unlocked while replacing the battery. But it's better to have the spare key handy in case something goes wrong.)

Instructions for telling the car's immobiliser to recognise your electronic key are in your manual.

Instructions for telling the car's remote-locking system to recognise your electronic key follow.

### **how to re-program your *infra-red* transmitter key after changing the batteries**

1. Turn the key to position I in the ignition
2. Wait until the LED by the clock comes on and stays on
3. Turn the key back to position 0 and remove it from the ignition
4. Point the key at the sensor near interior light and hold down the '>' button
5. With the '>' button held down press the '<<' button 5 times
6. Release all the buttons on the key
7. The LED by the clock and the LED on the key should be flashing
8. Insert the key into ignition and turn it to position I

### **how to re-program your *wireless* transmitter key after changing the batteries**

1. Insert the key into the ignition
2. Turn to position II and back to position I.
3. Repeat the above 4 times.
4. Now press the 'Lock' button on the key and keep it pressed.
5. The lights on buzzer will sound for about a second, followed by the rear fog light switch illuminating.
6. When the light goes out, remove the key.

If all of this fails, almost all Ford service centers have special equipment which allows them to bypass your security system and program your key for you and will do this for you if you can prove that the vehicle is yours.

## **Engine-Management**

Everything I know about engine-management can be found elsewhere on the web better-written than I could write. If you want to know what's so special about 'Zetec' or how fuel-injection works, take a look at this very detailed page on electronic engine-management systems:

<http://members.aol.com/dvandrews/ems.htm>

## **Obligatory disclaimer**

I am not a mechanic, authorised by Ford, or trained in any of the above.  
If anything I've written about this harms anyone or damages your property I cannot be held responsible.