

Appendix E

Euro Standard Identification Procedure

To find the Euro Standard you will need a copy of the V5 complete with emission values. If this is not available then you may have some success with a V5 without the emission values or with a copy of the V5 slip. If this is also not available then you may be able to collect the required information from the driver and use the car spec sites. Alternatively contact the manufacturers for an EC Certificate of Conformity.

Two sources would be sufficient to confirm the Euro Standard. This would usually be from the emission values on the V5 form and the direct.gov site. If one or both of these methods does not determine the Euro standard then look up the vehicle on the other car spec sites so that there are two unambiguous sources confirming it.

In some instances it may say the Euro standard on the V5 form under 'version' and this should be sufficient.

If you have tried all these methods and still are not sufficiently sure you have the correct Euro Standard then you may have to contact the manufacturer with the VIN number.

The password to unlock the Euro Standards spreadsheet is: 'XXXXXXXX' (redacted)

Identification of the Euro standard from the emission values on the V5

You will need a V5 form complete with emission values for this.

The vehicles are divided up into six classes: C1P, C1D, C2P, C2D, C3P and C3D. These are classes that I have created so you will find no reference to them elsewhere. The emission values that each vehicle must be beneath to achieve a certain Euro Standard for each class are in tables; 2 through 7, below.

I have given two procedures to identify the class the vehicle is in; the first procedure is more complex but will apply to all of the vehicles. The second applies only to the vehicles that this method will definitely work for.

**Procedure 1. For identifying the class the vehicle is in
Table 1.**

Fuel	Category	For Euro 3 and 4 Maximum permissible mass (on V5) (kg)	For Euro 5 and 6 'Specific social needs vehicle'* (Only one of these two needs to be 'Yes':)		'Mass in service' ** (kg)	Class
			Wheelchair accessible	7 or more seats (inc. driver) and 'mass in service'** over 1975kg		
Petrol	M1	< 2500	N/A	N/A	Any	C1P
		> 2500	N/A	N/A	1280 < RM < 1735	C2P
	N1	N/A	N/A	N/A	> 1735	C3P
					1280 < RM < 1735	C2P
Diesel	M1	< 2500	No	No	Any	C1D
		> 2500	Yes	Yes	1280 < RM < 1735	C2D
	N1	N/A	N/A	N/A	> 1735	C3D
					1280 < RM < 1735	C2D
					> 1735	C3D

* For the explanation of: 'Vehicles designed to fulfil specific social needs' go to EU regulation 715/2007/EC (P 5). EU directive 70/156/EEC (consolidated) (P 56 and P 62) will also be useful for a definition and examples of 'Special purpose vehicles'.

** 'Mass in service' has been converted from the official mass used in the regulations: 'Reference mass'. To do this I have subtracted 25kg from all values given in the regulation so that they align with 'mass in service' values. For the official values and a definition of 'reference mass' go to regulation: 715/2007/EC. The definition is on page 5 of the PDF version.

Procedure 2. For identifying the class the vehicle is in

For simplicity it may be best to use the V5 emission values method only to identify the Euro Standard if the vehicle applies with each of these five criteria:

1. Diesel,
2. Category M1,
3. Has a maximum permissible mass less than 2500kg,
4. Not a wheelchair accessible vehicle,
5. Has less than seven seats (inc. driver) **and** has a 'mass in service' below 1975kg.

In this case the vehicles will all be in C1P if petrol and C1D if diesel and all emission values mentioned on the V5 must be below those in the tables below for Euro 5 to achieve it.

Further information

It is also worth noting; some vehicles may have the emissions of a Euro 5 vehicle but be officially classed as Euro 4. These vehicles have been type approved before the regulation came out that contains the emission values vehicles must achieve to be Euro 5 and 6. If a vehicle is Euro 5 on emissions and registered before around 2009 it may well be one of these and you should confirm the Euro Standard by another method.

Tables of emission values for each Euro Standard and class of vehicle

Table 2. C1D

Euro Standard	CO	HC	NOx	HC+NOx	Particulates
3	0.64	-	0.50	0.560	0.050
4	0.50	-	0.25	0.300	0.025
5	0.500	-	0.180	0.230	0.005
6	0.500	-	0.080	0.170	0.005

Table 3. C1P

Euro Standard	CO	HC	NOx	HC+NOx	Particulates
3	2.3	0.20	0.15	-	-
4	1.0	0.10	0.08	-	-
5	1.000	0.100	0.060	-	***0.005
6	1.000	0.100	0.060	-	***0.005

Table 4. C2D

Euro Standard	CO	HC	NOx	HC+NOx	Particulates
3	0.80	-	0.65	0.72	0.07
4	0.63	-	0.33	0.39	0.04
5	0.63	-	0.235	0.295	0.005
6	0.63	-	0.105	0.195	0.005

Table 5. C2P

Euro Standard	CO	HC	NOx	HC+NOx	Particulates
3	4.17	0.25	0.18	-	-
4	1.81	0.13	0.10	-	-
5	1.81	0.13	0.075	-	***0.005
6	1.81	0.13	0.075	-	***0.005

Table 6. C3D

Euro Standard	CO	HC	NOx	HC+NOx	Particulates
3	0.95	-	0.78	0.86	0.10
4	0.74	-	0.39	0.46	0.06
5	0.74	-	0.280	0.35	0.005
6	0.74	-	0.125	0.215	0.005

Table 7. C3P

Euro Standard	CO	HC	NOx	HC+NOx	Particulates
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3	5.22	0.29	0.21	-	-
4	2.27	0.16	0.11	-	-
5	2.27	0.16	0.082	-	***0.005
6	2.27	0.16	0.082	-	***0.005

***Only applies to direct injection engines, you can often tell these apart because the 'type' (on V5) will include something like DI/GDI/ FSI. But generally for Euro 5/6 petrol vehicles you will need to confirm the Euro Standard with another source (usually petrol vehicles won't give a value for particulates on the V5).

All values are in g/km, the same as those on the V5.

All values for Euro 3 and 4 are from regulation 98/69/EC Annex 1, 5.3.1.4. All values for Euro 5 and 6 are from regulation 715/2007/EC Annex 1 table 1 and 2.

Identification of the Euro Standard using car spec websites

I would advise trying the method with whatever information you have since exactly what you will require varies between sites and vehicles. As a general guide the method should work with at least the following information: Registration date, make, model (specific), type of fuel, body type, cylinder capacity, CO₂ emissions and vehicle net power.

Direct gov: <http://carfueldata.direct.gov.uk/search-new-or-used-cars.aspx>

1. Go through the pages filling in the details of the vehicle.
2. If you do not know whether the vehicle is manual or automatic leave it blank.
3. When selecting from the 'model' dropdown, there are sometimes more than one possibility. For example from the V5 it is not clear whether a vehicle would be a 'Zafira' or a 'New Zafira'. In these cases you should check them all. Also the model names are sometimes slightly different from those on the V5, if unsure check all possibilities.
4. It is easiest to leave the 'description' dropdown blank, click next.
5. On the next page you should have a list of vehicles, compare all the vehicles against your vehicle for engine size in cc and CO₂ emissions, as well as key parts of the 'model description'. Be sure to continue checking the list after you have found a match to ensure you have found all potentials.
6. For these matching vehicles click on the link in the 'description' column.
7. If you have the information, compare the emission values on this page and also the noise level, to ensure you have found an exact match. If you do not have much information to compare and are not sure you have found the correct vehicle then use an additional source to confirm the Euro Standard. Sometimes more than one vehicle from the list will be an exact match. However in this case they will also have to be very similar variants of the same model and match for the important characteristics (engine size, weight, emissions etc.) so will be the same Euro Standard. Sometimes you will find an exact match except that one or two figures are slightly different. This is because to compile the database very similar variants of the same model are grouped together. If you are not sure you have found the correct vehicle then confirm with an additional source.

8. The Euro Standard is given on this page.

Something to watch out for is that this site assumes the production date to be the same as registration date and misses some vehicles off the list for the month/year you selected. If you find no matches then confirm the Euro Standard by an additional source. Alternatively you could look at the vehicles from neighbouring months by selecting a different month on the first page.

Parkers: <http://www.parkers.co.uk/>

1. From the 'find a car' box in the middle of the page select the manufacturer.
2. Select body type and registration year. For body type some manufactures have their own terms; for example VW sometimes use tourer to describe estate vehicles. Also the registration date of a vehicle on the V5 can vary by up to a couple of months from production date so if the vehicle is near a cut-off date you should investigate them both.
3. On the next page you should have a list of vehicles grouped by variant name. Be sure you have found the correct variant, for example you might be looking for a 'Ford Mondeo Titanium x', and look at 'titanium' vehicles but miss the 'titanium x' further down the page.
4. Within the variant name find all potential matches for engine size, power (you can convert the value in kw off the V5 to bhp or ps here: <http://www.statman.info/conversions/power.html>)
5. For these matches click on 'more info' and compare the CO₂ emissions, exact engine size and production dates (as mentioned above, use registration date as a general guide for production date) to find a match.
6. The Euro standard is on this page.

Help find me a: <http://www.helpfindmea.co.uk/>

This is the best site for the larger vehicles and vans.

1. Select either 'read car specifications' or 'read van specifications' from the 'specifications' box on the left of the page.
2. Fill in the dropdowns. For 'variant' you typically have to select the fuel type (if it doesn't mention a fuel in the dropdown that means petrol), year and body type.
3. For the 'your vehicle' box find all matching vehicles and for these click 'view spec'. The site does not remember the information you have submitted so you will have to re-enter it each time.
4. On the next page you can compare the information to that which you have on the V5. It varies how much information it gives (usually you can compare at least exact engine size, CO₂ and power; power conversion at: <http://www.statman.info/conversions/power.html>). It is important to check all potential vehicles and not to stop when you have found a match especially if there is little information to go on to check you have the right one.

Next green car: <http://www.nextgreencar.com/>

1. Fill in the information for 'select manufacturer' and 'select model' for the 'How green is your car' box on the left of the page.
2. On the next page it asks for the gear configuration, you may have to try all of the options if you do not have this information.
3. When you have completed filling in the information on this page you will be taken to the vehicle spec page. Here you should compare the emission values for CO₂, CO, PM (particulates) and HC+NO_x if available. If none of the values are available and you are not sure you have found the correct vehicle then you should confirm the Euro Standard by another source.
4. The Euro standard is on this page.

FordEtis: <http://www.etis.ford.com/vehicleRegSelector.do>

This of course only has information on ford vehicles. Also the accuracy of this information is not clear so do not rely solely on it.

1. Enter the registration or VIN number of the vehicle.
2. On the next page under emissions it will usually include something like "Stage IV emissions" or "E3". This should be the Euro Standard.

Estimation of the Euro Standard from the registration dates

This can only be used as a guide as manufacturers do not always comply with the regulations:

- Euro 5 first came into effect on 1st September 2009 but only for manufacturers starting to build new types of vehicles.
- Most vehicles for example: M1 vehicles not 'designed to fulfil specific social needs'* must be Euro 5 to be registered after the 1st Jan 2011. We do not have any vehicles in the database that do not apply with this.
- All other vehicles must be Euro 5 to be registered after the first January 2012. We have some vehicles in the database that do not apply with this.
- We do not have any vehicles in the database registered before March 2009, which are officially classed as Euro 5. We have some Euro 4 vehicles as late as March 2012.