

WORKSHOP A

SESSION TWO

Presentation 3

E-diagnosis test of OBD systems

Eva Morger

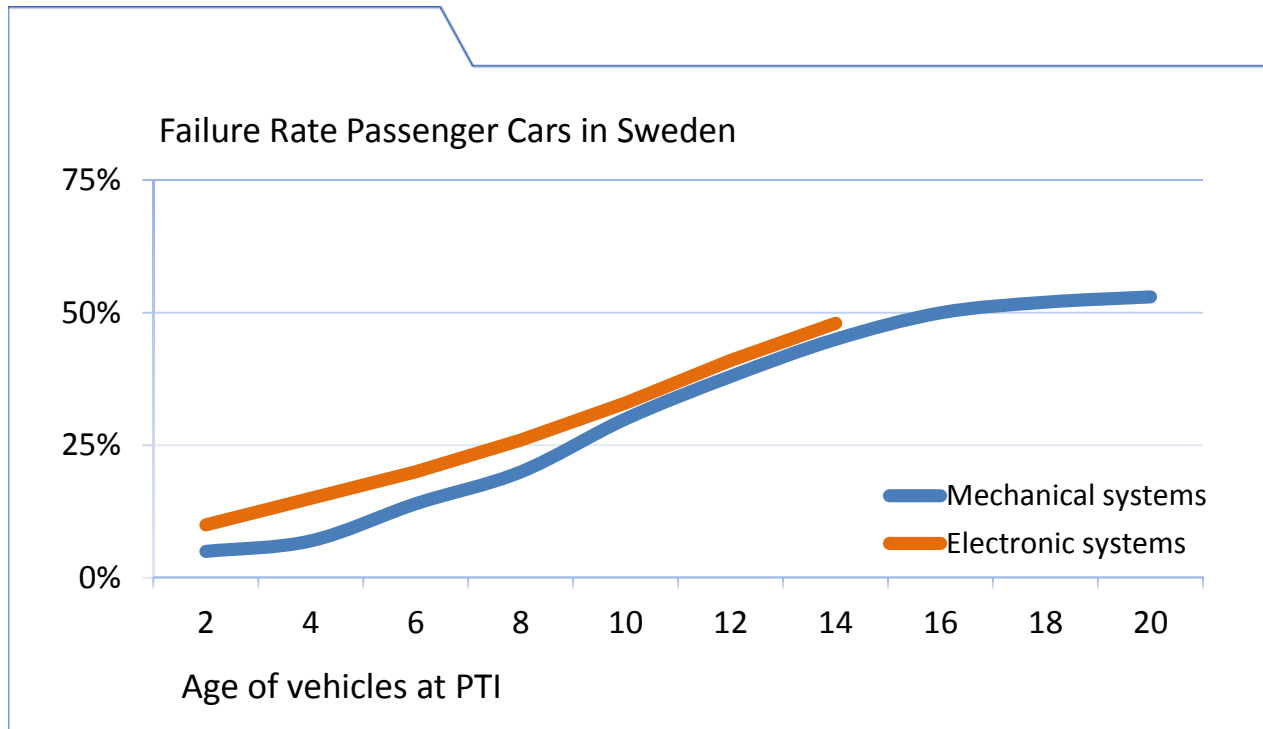
Bilprovningen, Sweden

“E-diagnosis”

On Demand Inspection using OBD Systems

Eva Morger, Quality & Environmental Manager,
Bilprovningen





- Performance of electronic systems are comparable to mechanical systems included in PTI.
 - Failure rates increase with vehicle age and the distance travelled.
- No agreed standards for on-board diagnostic systems (except for emission control)
 - Each manufacturer has developed its own failure threshold levels.
 - Problems are detected through self-diagnosis, when pre-defined thresholds are reached or exceeded.
- E-diagnosis detects problems according to manufacturer specific threshold levels.

”E-diagnosis”

- Introduced in November 2011
- Detects fault codes registered by the OBD system
- Focus on safety and environment, primarily the OBD systems for:
 - Engine control
 - Electronic gearbox
 - Brake system
 - Crash protection system
- Results includes 4WD, air bags, ABS, ESP.

Procedure

- Performed during the PTI process.
- Requires less than 5 minutes.
- The diagnosis device is connected to the car.
- The device identifies the model and age of the car.
- Registered fault codes are identified.
- The customer receives a report with all registered codes, to bring to the garage.

Customers

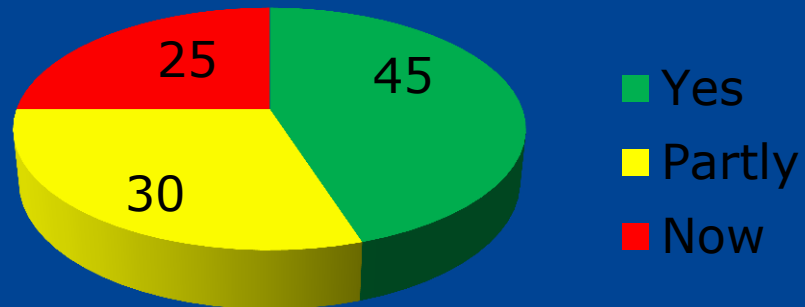
E-diagnosis help car owners benefit from:

- Increased safety for drivers, passengers, road users
- Decreased environmental impact
- Identified problems before guarantee expires
- Confidence when selling or buying a used car
- The report is delivered by an independent supplier - Bilprovningen - giving the report and car more value

Customer Survey

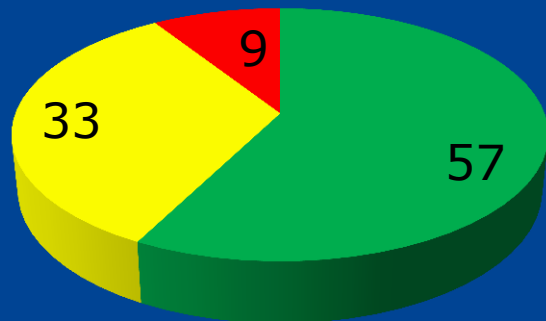
Answers from customers who bought E-diagnosis

Do you think the E-diagnosis was useful?



Customer Survey

Did the E-diagnosis reveal any fault codes?



■ No

■ Yes, but no need to visit a garage

■ Yes, need to visit a garage

Customer Survey

Why did you buy the Bilprovningen E-diagnosis?

Main reasons:

1. Convenient way to know if there is a problem
2. Was informed / offered by the staff
3. Curiosity
4. Safety
5. Cheap/ nice price

41 % will probably buy an E-diagnosis again at next PTI

Customer Survey

32 % will probably NOT buy an E-diagnosis at next PTI

What is the main reason NOT to buy an E-diagnosis?

1. Similar check is performed at ordinary service / other place
2. Too expensive
3. I have my own equipment
4. No need / No use (must visit a garage anyway)
5. The car is too old

Companies

- Companies selling used cars want us to provide E-diagnoses to give them early warnings and information about defects, for evaluation and marketing purposes
- Used by fleet owners and insurance companies as a complement to other inspections, when a leased car is returned or for insurance issues.

Results

- 61 000 E-diagnoses performed in 2012
- 42 % of tested cars showed one/several fault codes
- Engine control codes in 25 % of tested cars
- Brake Systems 18 %
- Crash Protection System 10 %
- Electronic Gear Box 2 %



Thank you for
your attention