

A close-up photograph showing a person's hands. One hand is wearing a black nitrile glove and is holding a handheld electronic device (likely a TPMS tool) against a tire. The other hand is bare and is pointing towards the device. The tire has a prominent tread pattern. The background is dark and out of focus.

SERVICING TPMS



SERVICING TPMS

CLASS PREPARATION

Welcome to Servicing TPMS! TPMS is a foundational safety feature on a vehicle. It includes sensors that are attached to each wheel that read the air pressure of each tire. This pressure is then transmitted to the onboard computer, where the goal is to detect the loss of air pressure and alert the driver.

As with any system on a vehicle, a variety of issues can arise in which the system becomes inoperable. This requires advanced diagnostics to be performed.

In this course, we will introduce you to different services and terminologies that we use in our service bays. We'll also learn how to operate the Bartec Tech400 Pro TPMS scan tool. In the end, each participant will be able to troubleshoot, program new sensors, relearn a system, and change air pressure baseline pressures.

MATERIALS

This course will require several tools and accessories. These include:

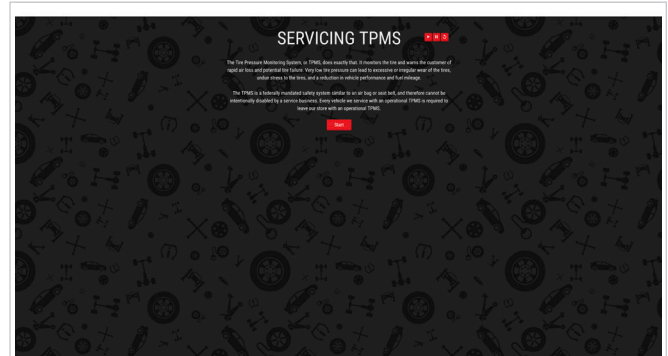
- Bartec Tech400 Pro: charged and loaded with the latest software updates
- Universal and multi-application sensors
- POS Fitment Guide in the background
- A workorder with special notes at the bottom



CLASS PREPARATION *(continued)*

BEFORE CLASS

1. Log onto the KC and access the DTU Academy page via the DTU menu.
2. Open the Servicing TPMS online presentation.
3. Download and print the Participant Reference Guide for the number of learners enrolled in the course.
4. Download and print the Facilitator Guide.
5. Based on the number of participants, set up the different styles of sensors to hand out and pass around.



TIME

There are six sections within this course. They are:

Section Name	Duration
Terminology	5 minutes
How the TPMS Works	5 minutes
The Bartec Tech400 Pro	5 minutes
Replacing Sensors	5 minutes
Relearn	5 minutes
Resetting the Baseline	4 minutes



SERVICING TPMS

CLASS PREPARATION *(continued)*

END OF COURSE

There will be a final assessment for this course. At the end of the Resetting the Baseline section, send participants the link so they can individually take the Servicing TPMS Assessment. It should take approximately five minutes to complete. Then go into DTU > LMS and mark the participant complete for the Servicing TPMS course.

INTRODUCTION

Learning Objective

Welcome the participants and pull from their own experiences with TPMS.

Discussion

- Listen to the audio.
- Ask the learners about their own experiences with the TPMS light on the dash.
- Discuss the importance of keeping the system operational.



ONLINE MODULE

SECTION 1 - TERMINOLOGY

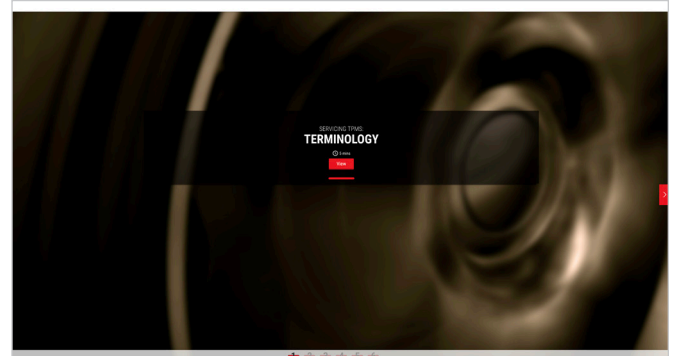
5 Minutes



Activity

Have each participant explain each of the following terms using their Participant Guides:

- Relearn
- Scan
- Program
- Troubleshoot
- Resetting the Baseline
- OBD



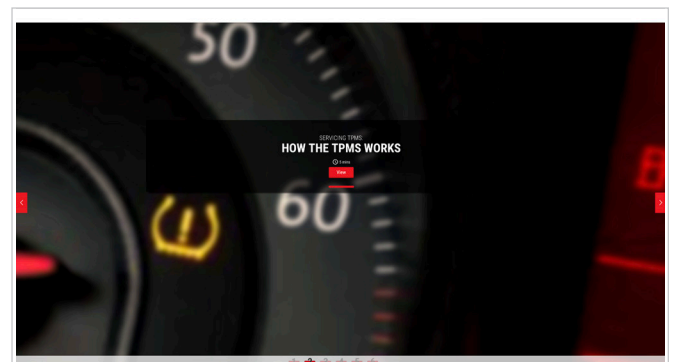
SECTION 2 - HOW THE TPMS WORKS

5 Minutes



Discussion

- The difference between direct and indirect.
- What operational means.
- What inoperable means: flashing TPMS light.





SERVICING TPMS

ONLINE MODULE *(continued)*

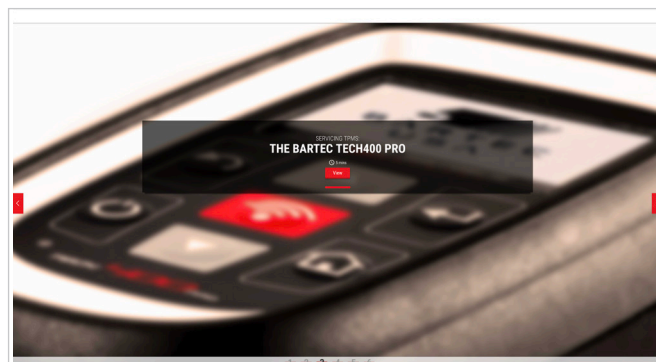
SECTION 3 - THE BARTEC TECH400 PRO

5 Minutes



Demonstrations

1. On the Bartec Tech400 Pro, demonstrate how to navigate the menu screens:
 - Vehicle YMM
 - OBD Diagnostics
 - Test Sensors (use a dry erase board, if needed)
2. How to access the fitment guide notes.



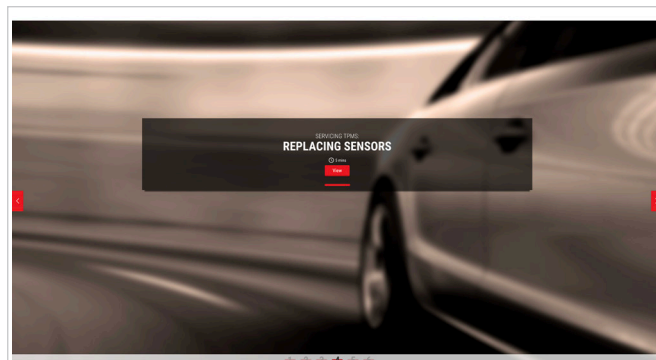
SECTION 4 - REPLACING SENSORS

5 Minutes



Discussion

- The importance of proper sensor frequency.
- Direct Fit – No extra steps
- Multi-application – Broadcasts multiple communication types at same time, locks in with scanner; can be unlocked using the scanner
- Programmable – Can be used to copy (clone); can be programmed in front of the scanner



Demonstration

- Where to find the frequency on (POS) Twinquiry TPMS screen.



ONLINE MODULE *(continued)*

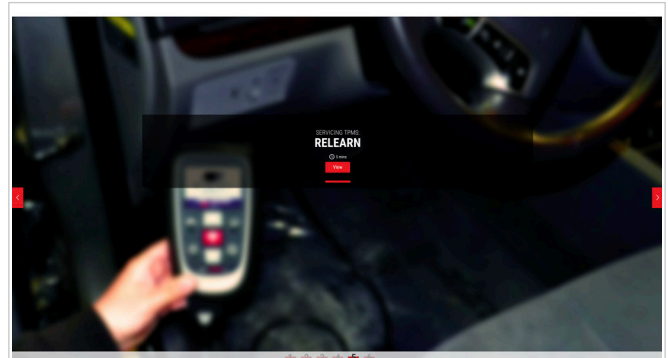
SECTION 5 - RELEARN

5 Minutes



Discussion

1. Different types of Relearn:
 - Drive Relearn – Drive the vehicle for a period of time
 - Stationary Relearn – Scanner provides instructions then you scan each sensor
 - OBD Relearn – Performed completely on scan tool, connected to OBD
2. Never relearn before troubleshooting.



Demonstration

- Show where the special notes appear on a workorder.
- POS Fitment Guide Notes

SECTION 6 - RESETTING THE BASELINE

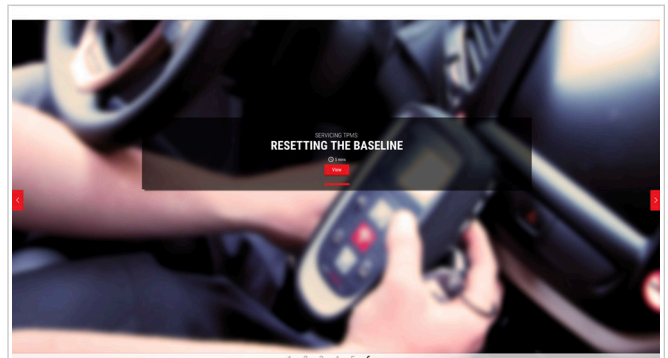
5 Minutes



Discussion

Discuss these two scenarios and when they would take place:

- Indirect – When you change tread depth, tire size or air pressure
- Direct – When you change tire type, size, or change placard pressure





SERVICING TPMS

ONLINE MODULE *(continued)*

SECTION 6 - RESETTNG THE BASELINE *(continued)*

Demonstration

Bartec Menu Options:

- Placard Pressure Change
- Vehicle OBD
- Follow Instructions

FINAL ASSESSMENT

5 Minutes



Send participants the assessment link so they can individually take the Servicing TPMS Assessment. It should take approximately five minutes to complete. Then go into DTU > LMS and mark the participant complete for the Servicing TPMS course.

REGIONAL TRAINING ACADEMY

