Tire & Wheel Inspection

Training and Certification

Goal

Use this guide to teach employees to perform each of the three inspection processes safely and correctly. Complete the training process and then use the certification checklist to verify that they perform all key steps.

Trainer Instructions

1. Print out a copy of the participant guide for the trainee.
2. Have the trainee complete the online module, one part at a time.
3. Use the hands-on demonstration and discussions below to reinforce what was taught in the module.
4. When completed, have the trainee log into DTU, take the assessment, and print out their certificate.

IMPORTANT: Use the certification checklist to verify that the employee has met all requirements for certification.

Introduction to Inspection

From the online module menu, have the trainee view each slide under the Introduction to Inspection tab.

Tabs include:

- The Value of Inspections
- Inspection Tools
- What Do We Inspect?
- See Something / Say Something

Discussion

After each slide is complete, use the discussion points below to reinforce what was covered in the module.

Topic	Set-up	Instructions
Value of Inspections	Discussion	Share your experiences of when you kept the customer safe.
Inspection Tools	Accessory pouch	Pull out each tool from the accessory pouch and make sure the trainee is equipped with the right tools.
What Do We Inspect?	Discussion	Recap the areas of tires and wheels that we inspect.
See Something / Say Something	Discussion	Talk to the trainee about how important their job is and how Integrity relates to being a Trusted Expert.

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Part 1 - Tire Conditions

From the online module menu, have the trainee view each slide under the Part 1 - Tire Conditions tab.

Tabs include:

- Tread Depth
- Wear Conditions
- Alignment Issues
- Tread Conditions
- Shoulder & Sidewall
- DOT Inspection
- Bead Conditions
- Innerliner Conditions

Demonstration & Discussion

From the scrap tire pile, select tires with various types of conditions that represent what was viewed in the online module.

Topic	Set-up	Instructions
Tread Depth	Demonstration	Using a tread depth gauge, instruct the trainee on how to measure tread depth and have them report out on what they found.
	Discussion	This information is important because it is used to make recommendations. Remember that we recommend replacement at 4/32" and do not service at 2/32" or less.
Wear Conditions	Demonstration	Using various tires from the scrap tire pile, point out examples of conditions shown in the online module.
Alignment Issues	Discussion	Explain that we are in no way alignment experts and can only recommend that the customer have their alignment checked.
Tread Conditions	Demonstration	Using various tires from the scrap tire pile, point out examples of conditions shown in the online module.
	Discussion	While performing tread inspections, be careful not to reach around the back of a tire. If the tire has exposed cords it could cut your hand badly.
Shoulder & Sidewall	Demonstration	Using various tires from the scrap tire pile, point out examples of conditions shown in the online module.
	Discussion	If you discover a heat ring, you cannot take any chances. Even if it looks cosmetic you do not know the full extent of the damage unless you cut the tire apart.
DOT Inspection	Discussion	On older tires, you will not be able to see the DOT date on both sidewalls. Remember, we recommend replacement of tires at 6 years and will not service tires at 10 years of age and older.
Bead Conditions	Demonstration	Using various tires from the scrap tire pile, point out examples of conditions shown in the online module.
	Discussion	If you discover mounting damage, do not mount the tire. It can result in a bead failure during inflation.
Innerliner Conditions	Demonstration	Using various tires from the scrap tire pile, point out examples of conditions shown in the online module.
	Discussion	If you suspect a puncture or nail, use a rag to avoid cutting or scraping your hand.

Part 2 - Wheels & Accessories

From the online module menu, have the trainee view each slide under the Part 2 - Wheels & Accessories tab.

Tabs include:

- Wheel Inspection
- Valve Stem Inspection
- TPMS Sensor Inspection

Demonstration & Discussion

From the scrap pile, use wheels that are lying around to inspect. (Steel is preferred) Also look for old TPMS sensors and parts that are showing corrosion and damage.

Topic	Set-up	Instructions
Wheel Inspection	Demonstration	Using a scrap wheel, point out the various areas of the wheel to inspect.
Valve Stem Inspection	Demonstration	Using a flashlight, inspect a valve stem on a wheel that is mounted onto a vehicle.
	Discuss	Although valve stems are changed out every time a tire is dismounted, you should still inspect valve stems when the tire and wheel assembly is on the vehicle.
TPMS Sensor Inspection	Demonstration	Inspect a TPMS sensor that is installed onto a wheel mounted onto a vehicle. Also check for scrap sensors lying around so you can point out examples of corrosion and damage.

Part 3 - Types of Inspections

From the online module menu, have the trainee view each slide under the Part 3 - Types of Inspections tab.

Tabs include:

- On-the-Vehicle
- Off-the-Vehicle
- Off-the-Wheel
- Inspection Job Aids

Demonstration & Discussion

Begin the training process by correctly demonstrating and having the trainee observe.

1. Using the last page of this document, have the trainee read each step of the On-the-Vehicle Inspection section aloud.
2. After the trainee reads a step, demonstrate it.
3. At the end of the inspection, ask the trainee the following questions to reinforce their understanding.

On-the-Vehicle Inspection

Ask	Answer
What is the first thing you look for and why?	The DOT Date. We recommend replacement of tires older than 6 years and do not service tires older than 10.
While inspecting the tread, what are some things you look for?	Look for low tread depth, separations, alignment wear and foreign objects.
While inspecting the shoulder and sidewall, what are some things you look for?	Look for ozone cracks, impact breaks and run flat damage.
What are some other things you look for when inspecting a tire and wheel assembly on the vehicle?	▪ Valve stem for cracks ▪ Face and rim flange for damage ▪ Fasteners for rounded off lug nuts

Off-the-Vehicle Inspection

Repeat the demonstration process of reading, demonstrating and asking questions.

Ask	Answer
What is the first thing you look for and why?	The DOT date. We recommend replacement of tires older than 6 years and do not service tires older than 10.
While inspecting the tread, what should you do if you discover the tread is below 4/32" in depth?	Notify your supervisor immediately.
After inspecting both sidewall and shoulder areas, what do you inspect next?	You should inspect the face of the wheel, the rim flange and lug seat.
Why do we inspect the mounting surface of the wheel?	It is the part of the wheel that comes in contact with the hub and must stay clear of dirt and corrosion.
When TPMS is installed, what are two things that you look for first?	Look for a plastic cap and a nickel-plated valve core.

Off-the-Wheel Inspection

Repeat the demonstration process of reading, demonstrating and asking questions.

Ask	Answer
When inspecting the bead, what do you look for?	Look for chafes, tears, kinks and breaks.
Why do you inspect the innerliner?	Some conditions may be invisible from the outside, but can be clearly seen from the innerliner.
Why do you inspect the valve hole and bead seat area of the wheel?	To make sure that air does not leak out from around the valve or bead of the tire.

Certified Coaching & Practice

Now reverse the roles and watch the trainee demonstrate their skills as you read the steps.

1. Using the last page of this document, read each step aloud for each of the tire inspection processes.
2. After you read a step, have the trainee perform it.
3. Coach the trainee to make sure they perform each task safely and correctly.
4. Trainee assists a service team in tasks which they are certified to perform.
5. Trainee participates in inspecting tires and wheels throughout the service.

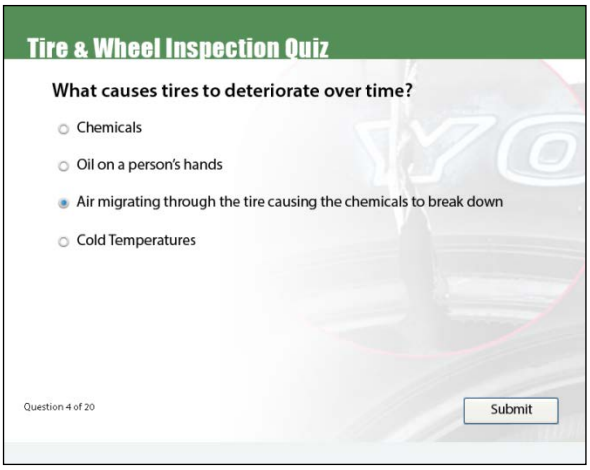
Trusted Expert Tip **–** Before certification, expose the trainee to various tire conditions using tires with green tags from the adjustment pile.

Quiz Assessment

After completing all three sections of the online module and demonstrations from the trainee, have the trainee log into DTU and complete the assessment.

- This assessment contains **20** questions with randomized answers.
- Make sure the trainee has had time to review the online module and take notes in their participant's guide.
- Because this is an open-book assessment, a score of 100% will be required to pass.

After receiving a passing grade, have the trainee print out their certificate of completion.



Certification

Use the following checklist to certify employees.

Introduction to Inspections	
Completed **Introduction to Inspections** in the online module.	θ
Completed discussions with trainer.	θ
Part 1 – Tire Conditions	
Completed **Part 1** in the online module.	θ
Completed hands-on demonstration and discussions with trainer.	θ
Part 2 – Wheels & Accessories	
Completed **Part 2** in the online module.	θ
Completed through hands-on demonstration and discussions with trainer.	θ
Part 3 – Types of Inspections	
Completed **Part 3** in the online module.	θ
Completed hands-on demonstration and discussions with trainer.	θ
Completed the quiz assessment and scored **100%**.	θ

**Upon successful completion of the certification process,
have your employee log into DTU and complete the acknowledgement.**

Process Steps

On-the-Vehicle Inspection (Performed before an air check)

1. **DOT date -** If the date is visible, document on the VTV If not visible, employee will document they are not visible on the air check handout.
   Important note about tire age: Replacement is recommended if a tire is older than six years. Do not service any tire 10 years or more past the date of manufacture and notify your supervisor if the tire meets either of these conditions.
2. **Tread -** Inform your supervisor if tread depth is at 4/32nds or below. Also look for separations, alignment wear, or foreign objects.
   Note: Do not service a tire with 2/32nds tread or below.
3. **Outer shoulder -** Look for foreign objects, cracks, or separations.
4. **Outer sidewall -** Look for foreign objects, ozone cracking, cuts, impact breaks, and run flat damage.

Off-the-Vehicle Inspection (Performed after assembly is removed)

1. **DOT date** - If the date is visible, document on the VTV. If it is not visible, it is safer to obtain the DOT when the assembly is off the vehicle.
   Important note about tire age: Replacement is recommended if a tire is older than six years. Do not service any tire 10 years or more past the date of manufacture and notify your supervisor if the tire meets either of these conditions. The Service Coordinator is responsible for ensuring the DOT's have been collected on VTV pad.
2. **Tread -** Inform your supervisor if tread depth is at 4/32nds or below. Also, look for separations, alignment wear, or foreign objects
   Note: Do not service a tire with 2/32nds tread or below.
3. **Outer shoulder and sidewall -** Inspect for foreign objects, cracks and separations
4. **Inner shoulder and sidewall -** Inspect for foreign objects, ozone cracking, cuts, impact breaks, run flat damage, and separations
5. **Wheel inspection -** Inspect the face, rim flange, and lug seat of the wheel for scuffs, cracks, or other signs of damage
   - Mounting surface - Check and remove any dirt or corrosion.
   - Valve stem - Check for corrosion, cracks, and damage. Make sure there is a valve cap.
   - TPMS - Make sure that the cap is plastic and the valve core is nickel-plated.

Off-the-Wheel Inspection (Performed while mounting a tire and during flat repairs)

1. **Bead -** Look for chafes, tears, kinks, and breaks.
2. **Innerliner -** Inspect for abrasions, cracks, separations, run flat damage, and prior repairs.
3. **Valve hole of wheel -** Check for dirt and corrosion.
4. **Bead seat area of wheel -** Check for dirt and corrosion.

Measuring Tread Depth

Tread depth is measured:

- Inside
- Center
- Outside of the tread at full depth grooves (grooves with tread depth indicators)

The lowest measurement is the tire's tread depth.

The lowest tread depth for each tire MUST be documented on:

- The VTV pad
- POS during invoicing