

BASIC FARM TIRE SERVICE (FTS)

Basic Farm Tire Service (FTS) is a 200-level minimum skills training and certificate program that outlines and explains the guidelines for servicing farm, agricultural and construction tire and wheel assemblies. It includes the step-by-step procedures for demounting, mounting and inflating single, dual and 3-piece assemblies in addition to service truck operation and liquid ballast installation/removal.

Following is a list of the 11 Modules and Appendix that make up the **Basic Farm Tire Service (FTS)** Program:

Module 1 – Introduction

This module covers the necessary Personal Protective Equipment (PPE) for servicing farm, agricultural and construction tires. It also addresses the primary hazards for technicians who service these assemblies so they understand the risks.

Module 2 – Tires

This module outlines the construction, nomenclature, sizing, service description, speed rating, and load capacity molded on the sidewall of farm, agricultural and construction tires. Inflation pressure, lead/lag, weight distribution and power hop are also discussed so technicians have a better understanding of how these tires have an impact on the performance of modern farm and construction machinery.

Module 3 – Rims, Wheels, and Valves

This module describes the different types of rims and wheels used on agricultural and construction equipment. It covers the nomenclature stamped on the rim in addition to the different types of discs, bolt holes, bolt circles and valves that are typically found in the field.

Module 4 – Service Truck Operation and Maintenance

This module covers every aspect of service truck, especially the operation, inspection and maintenance of the crane and compressor. Technicians will also learn the steps for conducting a proper pre-trip inspection and receive valuable information regarding driver safety when operating on city streets and highways.



Module 5 – Lifting the Machine

This module addresses the proper procedures for lifting different types of farm and construction equipment. Emphasis is placed on using the correct lifting points and utilizing cribbing or jack stands to support the weight of the machine during service.

Module 6 – Hydraulic Tool Operation and Maintenance

This module describes the different types of hydraulic tools that are used to service farm, agricultural and construction tires. Technicians will learn how to operate and maintain the tools as well as the hydraulic pump that provides the power.

Module 7 – Single Piece Demount, Mount & Inflate on Machine

This module outlines the step-by-step procedures for demounting, mounting and inflating a single piece tubeless tire while it is still installed on the machine. Also known as a “vertical demount and mount,” technicians will learn how to service these assemblies safely and efficiently without damaging the tire or rim.

Module 8 – Single Piece Demount, Mount & Inflate off Machine

This module outlines the step-by-step procedures for demounting, mounting and inflating a single piece tubeless tire when it is loose and off the machine. The step-by-step procedures for demounting, mounting and inflating a tube-type assembly are also covered in this module.

Module 9 – Dual Demount, Mount & Inflate

This module describes the step-by-step procedures for demounting, mounting and inflating a single piece tubeless tire in a dual application. After covering the procedures for servicing the outer dual while it is still installed on the machine, this module also address the removal and installation procedures of the outer assembly so the inner dual can be serviced.

Module 10 – 3-Piece Demount, Mount & Inflate on Machine

This module covers the step-by-step procedures for demounting, mounting and inflating a tubeless tire on a 3-piece rim while it is still on the machine. Technicians will also be instructed in the steps to properly inspect the rim components to help ensure they can be safely installed before the tire is inflated.

Module 11 – Install and Remove Liquid Ballast

This module addresses the guidelines for installing and removing liquid ballast. It covers the basic procedures for using calcium chloride as ballast material and addresses the safety guidelines that should be followed.

Appendix

The Appendix includes valuable information that technicians can use in the field on a regular basis. The Load Index Chart ensures technicians know how much weight a tire can carry based on the two or three digit load index molded on the sidewall. The Size Comparison Chart shows the various metric equivalents to conventional size tires and provides comparable sizes for applications in need of narrow or flotation fitments. The Calcium Chart provides the correct amounts of water and calcium chloride for conventional and metric size tires. And the Tire and Rim Association charts provide the proper inflation pressures with corresponding load capacities, rim widths and other information for conventional and metric size tires.

