



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

COMPETENCY BASED CURRICULUM

MECHANIC TRACTOR

(Duration: One Year)

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4



SECTOR – AUTOMOTIVE



Directorate General of Training

MECHANIC TRACTOR

(Engineering Trade)

(Revised in 2019)

Version: 1.2

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4

Developed By

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Directorate General of Training
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1. COURSE INFORMATION

During the one-year duration a candidate is trained on subjects Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Calculation Science and Employability Skill related to job role. In addition to this a candidate is entrusted to make/do project work and extra-curricular activities to build up confidence. The practical skills are imparted in simple to complex manner & simultaneously theory subject is taught in the same fashion to apply cognitive knowledge while executing task. The broad components covered in this course are as below:-

The learner is trained on various skills like, make choices to carry out marking of the components for basic fitting operations in the work shop; perform precision measurements on the components and compare parameters with specifications used in automotive work shop practices; use different types of tools and work shop equipment in the work shop; use different types of fastening and locking devices in a vehicle; perform basic fitting operations used in the work shop practices and inspection of dimensions etc. The trainee will learn to produce sheet metal components using various sheet metal operations; inspect the auto component using Nondestructive testing methods; manufacture components with different types of welding processes in the given job; identify the hydraulic and pneumatic components in a vehicle; construct electrical circuits and test its parameters by using electrical measuring instruments and perform basic electrical testing in a vehicle.

The learner also learns to demonstrate Major Assemblies of Tractor; overhaul Diesel Engine of Tractor; perform servicing of Cooling and Lubrication system of Tractor; service Intake and Exhaust System of Tractor; service Fuel Feed System of Tractor; overhaul Clutch and Gearbox of Tractor in a workshop; overhaul Differential and PTO Unit of Tractor in the workshop; overhaul Steering System of Tractor in the workshop. He/she will practice repair works of Wheels and Tyres of Tractor in the Workshop; overhauling of Brake system of Tractor in the workshop; overhauling of Major Assemblies of Power Tiller; overhauling of Implements of Tractor; overhauling of Charging and Starting System of Tractor and carryout Field Operation.

Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.

5.1 LEARNING OUTCOMES (TRADE SPECIFIC)

1. Make choices to carry out marking of the components for basic fitting operations in the workshop following safety precautions.
2. Perform precision measurements on the components and compare parameters with specifications used in automotive workshop practices.
3. Use different types of fastening and locking devices in a vehicle.
4. Use cutting tools in the workshop, following safety precautions while grinding.
5. Use different types of tools and workshop equipment in the workshop.
6. Perform basic fitting operations used in the workshop practices and inspection of dimensions.
7. Produce sheet metal components using various sheet metal operations.
8. Construct electrical circuits and test its parameters by using electrical measuring instruments.
9. Perform basic electrical testing in a vehicle.
10. Perform battery testing and charging operations.
11. Construct basic electronic circuits and testing.
12. Manufacture components with different types of welding processes in the given job.
13. Inspect the auto component using Non-destructive testing methods.
14. Identify the hydraulic and pneumatic components in a vehicle.
15. Demonstrate Major Assemblies of Tractor.
16. Overhaul Diesel Engine of Tractor.
17. Perform servicing of Cooling and Lubrication system of Tractor in a workshop.
18. Service Intake and Exhaust System of Tractor in a workshop.
19. Service Fuel Feed System of Tractor in a workshop.
20. Overhaul Clutch and Gearbox of Tractor in a workshop.
21. Overhaul Differential and PTO Unit of Tractor in the workshop.
22. Overhaul Steering System of Tractor in the workshop.
23. Carryout Repair of Wheels and Tyres of Tractor in the Workshop.
24. Overhaul Brake system of Tractor in the workshop.
25. Overhaul Major Assemblies of Power Tiller and carryout Field Operation.
26. Overhaul Implements of Tractor.
27. Overhaul Charging and Starting System of Tractor.