It's Objective, learning outcomes, Modules, assessments and material list

#### NAME OF THE COURSE: AUTO COMPONENT ASSEMBLY & WIRE FITTER TECHNICIAN

# Submitted By: MPR MEMORIAL FOUNDATION Submitted to: Bihar Skill Development Mission, Labour Resources Department, GoB Submitted By: MPR MEMORIAL FOUNDATION Session: 2025-26 to 2026-27

# Course Name: AUTO COMPONENT ASSEMBLY & WIRE FITTER TECHNICIAN

- Course Id- MPR/ACAWFT/1
- Candidate Eligibility: 8th Pass/10th Pass/12th Pass / Graduate /ITI and Diploma Holder
- Age Minimum 18 years
- Course Duration: 330(In hours)

# CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

# Name and address of submitting body: MPR MEMORIAL FOUNDATION

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#### BIHAR SKILL DEVELOPMENT MISSION -MPR MEMORIAL FOUNDATION

Name and contact details of individual dealing with the submission.

Name : DEEPAK SAJWAN

**Position in the organization** : Managing Director

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# List of documents submitted in support of the Qualifications File

1. Curriculum Document

#### **SUMMARY**

Qualification Title	Certificate in AUTO COMPONENT ASSEMBLY & WIRE FITTER TECHNICIAN	
Sector	Automobile	
Qualification Code	MPR/ACAWFT/1	

Nature and purpose of the qualification	Nature  330 hours Certificate Course in AUTO COMPONENT ASSEMBLY & WIRE FITTER			
	TECHNICIAN			
	Purpose			
Body/bodies which will award the	AUTO COMPONENT ASSEMBLY & WIRE FITTER TECHNICIAN: –  The Certificate Course in AUTO COMPONENT ASSEMBLY & WIRE FITTER TECHNICIAN in the Automobile sector aims to provide individuals with the skills and knowledge needed to work effectively on assembly lines. It covers technical skills, safety practices, quality control, teamwork, problem-solving, efficiency, and communication. The course prepares individuals for entry-level positions in Automobile Sector  MPR MEMORIAL FOUNDATION			
qualification.				
Occupation(s) to which the qualification gives access	Automobile Manufacturing			
Minimum Age required	18 Years			
Entry requirements and/or recommendations	8 <sup>th</sup> Pass /10 <sup>th</sup> Pass /12 <sup>th</sup> Pass /Graduate /ITI and Diploma Holder			

# 1. OBJECTIVE OF THE COURSE: -

To prepare individuals for successful careers in automobile sector by providing them with the practical skills, knowledge, and competencies needed to excel in this field.

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#### 2. **LEARNING OUTCOMES: -**

- Learn how to safely and effectively operate machinery and equipment commonly used in assembly line production, such as conveyor belts, robotic arms, and packaging machines.
- Adhere to standard operating procedures to ensure consistency, efficiency, and quality in the manufacturing process.
- Gain skills in inspecting and checking products for defects or irregularities, ensuring that only high-quality products reach the market.
- Troubleshoot common issues that may arise during production, such as equipment malfunctions or supply shortages, and implement solutions to minimize downtime.
- Participate in initiatives aimed at improving efficiency, reducing waste, and optimizing processes on the Auto assembly line.

#### 3. MODULE- 336 Hours (CERTFICATE PROGRAM IN AUTO COMPONENT ASSEMBLY & WIRE FITTER TECHNICIAN)

S.No	Particular / Topic	Hours	Equipment Required
1	Maintain a safe and healthy working environment		
	Relevant standards, procedures and policies related to Health, Safety and Environment		
1.1	followed in the company.		
1.2	Basic knowledge of Safety procedures (firefighting, first aid) within the organization.	Total Hrs- 10 Practical Hrs-7 Theory Hrs- 3	
1.3	Knowledge of various types of PPEs and their usage.		Laptop, white board, marker, projector, Safety kits, Fire
1.4	Basic knowledge of risks/hazards associated with each occupation in the organization.		
	How to safely operate various tools and machines and risks associated with the tools/		
1.5	equipment.		
	Knowledge of personal hygiene and how an individual an contribute towards creating a highly		extinguisher, First
1.6	safe and clean working environment.		aid Kit.
2	Maintain 5S at the work premises		
	Ensure segregation of waste in hazardous/ non-hazardous waste as per the sorting work	Total Hrs- 14	Laptop, white
2.1	instructions.	Practical Hrs-8 Theory Hrs - 6	board, marker, projector, Different types of display
2.2	Basic knowledge of 5S procedures.		
2.3	Knowledge of TQM process		
	Hoses, cabling & wires are clean, in good condition and clamped to avoid any mishap or mix		charts related to
2.4	up.		course.

3	Understand processes and equipment requirement for assembly operation of automobile components		
3.1	Understand the right assembling methodology and process (Bolting, tightening, riveting, fastening, adhesive clamping, crimping etc.)	Total Hrs- 30	Laptop, white
3.2	Understand the various assembling process parameters like cycle time, pressure, torque etc.	Practical	board, marker, projector, Tools of different types related to course
3.3	Understand the type of nut runners and torqueing equipment required to be used for the assembling process.	Hrs-20 Theory Hrs -	
3.4	Clearly understanding the does and don'ts of the manufacturing process as defined in SOPs/Work Instructions or defined by supervisors.	10	like drilling, welding, Spanner
3.5	Impact of various physical parameters like torqueing and tightening on the properties of final output product like durability, surface finish, part movement, aesthetics etc.		and screw driver tools.
4	Prepare the assembling machine, auxiliaries and work pieces for the assembly		
4.1	Different types of assembling and wiring processes.		
4.2	Arranging the tools equipment and material for assembly operations.	Total Hrs- 26	Laptop, white
4.3	Ensure that the required material is procured from the store before starting the assembling process availability of greases, lubricant oil, adhesives, marking equipment, ID stickers/ labels.	Practical Hrs-18 Theory Hrs -	board, marker, projector, AC & DC volt meters, Digital
4.4	Different types of bolting guns/riveting guns used in the assembly process.	08	multimeters, Digital
4.5	Impact of various processes like bolting, torqueing, fitting, greasing, hammering, sealing, clamping on the final component/vehicle performance.		Electric double phase meter.
5	Perform the mechanical assembly operation of the components		
5.1	Body Assembly/Sub Assembly and wiring		
5.2	Arranging the parts to be assembled in the correct position		
5.3	Understand the assembly operations from the assembly drawing/ blue print work instructions/ sops supplied on the assembly line.	Total Hrs- 26 Practical	
5.4	Ensure right amount of torque application for tightening the bolted components.	Hrs-18 Theory Hrs -	
5.5	Ensure all pneumatic and hydraulic components in the vehicles and the relevant auto components are installed using the correct methodology as indicated in the work instructions/ sops/ control plans.		Laptop, white
5.6	Different types of assembling processes and component storage process (Kitting).		board, marker,
5.7	Numbering/ identification nomenclature for the various assemblies and tightening equipment.		projector, Auto carry oven.

6	Perform the electrical components/aggregates assembly operation		
6.1	Ensure wire cutting as per the required length specified in the work order.		
6.2	Check the wire dimensions using micrometers. rectify any deviations by changing the machine setting.		
6.3	Select the correct terminals/ connectors/ clips and attach the terminals to the correct wires.		
6.4	Install components, units, wires and subassemblies using screws, fasteners or through joining process like high frequency welding or soldering as per the dimensions mentioned in the work instructions/ sop manual.	Total Hrs- 38 Practical	
6.5	Ensure proper installation of rubber glands/rubber seals to provide insulation/ prevention of moisture seepage.	Hrs-30 Theory Hrs -	
6.6	Ensure proper routing of the wires and the cables as indicated in the work instructions, circuit drawing/ work instructions/ sops provided at each station.	08	
6.7	Remove loops and entanglements and do the tapping operation to ensure hassle free electrical connections.		Laptop, white
6.8	Ensure proper placement of the electronic components on the blank pcb as per the circuit diagram.		board, marker, projector, Three
6.9	Solder the components using manual soldering rod/ automatic solder by applying the specified current and temperature and the flux, as specified in the work instructions.		point DC starter, Insulator.
7	On the Job		
7.1	Hand on training in real work place (Samvardhana Motherson International Ltd)	186	
7.2	Working in different departments	190	
7.3	Working on different assembly lines		

**4. Trainer Qualification & Experience:** ITI (Electrical /Electronics /Fitter) with 3 years of Industry/Teaching experience OR Diploma in Engineering (Electrical /Electronics /Mechanical) with 2 years of Industry/Teaching experience OR B.Tech. Engineering (Electrical /Electronics/Mechanical) with minimum 1 year of Industry/Teaching experience.

# 5. ASSESSMENT / EXAMINATION

**Final Assessment** – Will conduct assessment after completion of course, assessment will be evaluated as per following norms:

<b>Total training Hrs</b>	Theory	Practical	OJT
330	43	101	186