

# Model Curriculum

## Auto Body Repair Technician/Denter

### Level 3

**SECTOR:** AUTOMOTIVE  
**SUB-SECTOR:** AUTOMOTIVE VEHICLE SERVICE  
**OCCUPATION:** TECHNICAL SERVICE & REPAIR  
**REF ID:** ASC/Q 1410  
**NSQF LEVEL:** 3



## Certificate

### CURRICULUM COMPLIANCE TO QUALIFICATION PACK - NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

**AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL**

for

**MODEL CURRICULUM**

Complying to National Occupational Standards of  
Job Role/Qualification Pack "**Auto Body Repair Technician/Denter**" QP No: "**ASC/Q1410 Level 3**"

Date of Issuance: June 10th, 2013

Valid up to: June 10th, 2015\*

\*Valid up to the next review date of the Qualification Pack

  
**Authorised Signatory**  
(Automotive Skills Development Council)

## TABLE OF CONTENTS

1. <u>Curriculum</u>	01
2. <u>Trainer Prerequisites</u>	06
3. <u>Annexure: Assessment Criteria</u>	07

# Auto Body Repair Technician / Denter Level 3

## CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Auto Body Repair Technician/ Denter”, in the “Automotive” Sector/Industry and aims at building the following key competencies amongst the learner

<b>Program Name</b>	<b>Auto Body Repair Technician / Denter Level 3</b>		
<b>Qualification Pack Name &amp; Reference ID.</b>	ASC/Q1410, V1.1		
<b>Version No.</b>	1.1	<b>Version Update Date</b>	21-02-2017
<b>Pre-requisites to Training</b>	Minimum Educational Qualifications : Class X		
<b>Training Outcomes</b>	<p><b>After completing this programme, participants will be able to:</b></p> <ul style="list-style-type: none"> <li> <b>Assist Senior Technician in Assessing the damage &amp; carrying out repair and replacement of vehicle body and chasses components</b>   Assess damage to vehicle, Proper use of tools and equipment, Install replacements parts, Install vehicle component seals, Assist senior body technician in performing repair work. Assist in removal of damaged section of vehicle using metal-cutting guns, brushes &amp; mallets </li> <li> <b>Plan and organise work to meet expected outcomes:</b>  Appropriate use of resources (both material/equipment and manpower) within budget , Maintaining set quality standards, Treating confidential information as per the organisation’s guidelines, Work area cleanliness </li> <li> <b>Work effectively in a team:</b>  Interact and communicate effectively with colleagues including members in the own group as well as in the others, Identify barriers to effective team work, Understand and manage conflict, Follow the organisation’s policies and procedures for working with colleagues </li> <li> <b>Maintain a healthy, safe and secure working environment:</b>  Different types of breaches in health, safety and security, Identify job-site hazards and apply good housekeeping practices, Organisation’s emergency procedures for accidents, Fires or any other natural calamity </li> </ul>		

This course encompasses 4 out of 4 National Occupational Standards (NOS) of “Auto Body Repair Technician / Denter” Qualification Pack issued by “Automotive Skills Development Council”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p><b>Assist in repair and replacement of vehicle body and chassis components</b></p> <p><b>Theory Duration</b> (hh:mm) 45:00</p> <p><b>Practical Duration</b> (hh:mm) 100:00</p> <p><b>Corresponding NOS Code</b> ASC/ N1419</p>	<ul style="list-style-type: none"> <li>Describe the procedure of repair and replacement of vehicle body and chassis components</li> <li>Assist the senior body technician to assess the overall damage to vehicle body and chassis components</li> <li>Follow supervisor's instructions as to which parts to restore or replace with respect to the auto body/ chassis components</li> <li>Identify, calibrate and use the appropriate tools and equipment for the body component/ chassis repair of the vehicle</li> <li>Detach upholstery, accessories, electrical window-and-seat-operating equipment, and trim to gain access to vehicle bodies and fenders</li> <li>Carry out cutting taping of plastic separating film to outside repair areas to avoid damaging surrounding surfaces during repair procedure, and remove tape and wash surfaces after repairs are complete</li> <li>Assist in performing repair and replacement of vehicle body and chassis components</li> <li>Ensure any malfunctions or repair requirements observed in vehicles (and beyond own scope of work) are reported to the concerned person</li> <li>Ensure any malfunctions observed in tools and equipment are reported to the concerned person</li> <li>Carry out cleaning of work areas, using air hoses, to remove damaged material and discarded fiberglass strips used in repair</li> </ul>	<p>Wrenches, Files, Combination plier, Spanner set, Wrench set, Portable drilling machine, Dent removal kit, Scratch removal kit, Torque wrench, Screw driver set, Allen keys, Ball peen hammer, Nose plier, Adjustable spanner, Adjustable hacksaw frame with blade, Vehicle masking tape, Welding equipment, Power grinders, Metal cutting guns, Air grinders, Hot-air welding guns, Air hoses, Pick hammers, Punches, Caulking guns, Adhesive brushes, Mallets, Clamps, Holding jigs, Drills, Drill bits, Bolts, Nuts, Washers, Air compressor, Lines, Air guns, Safety ventilation equipment, Pressure washers, Steam cleaners, Spray equipment, Jacks, Stands, Lifting equipment, Chipping hammer, Anvil, Steel rule, Steel tape, Micrometres, Vernier callipers, Dial gauges, Feeler gauge, T-squares, Flat edges, Dividers and Protractors, Polyester resins, Hardeners, De – waxing agents, Detergents, Degreaser, Special purpose agents, Respirator, Gloves, Safety Shoes, Shield face protector, ear plugs, Protective clothing, Fire Extinguisher, Vehicle Cover</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<p>procedures</p> <ul style="list-style-type: none"> <li>Ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded</li> <li>Carry out filling, grinding sand and smooth fill or repair surface using power tools and hand tools</li> <li>Assist in filling small dents that can be worked out with plastic or solder.</li> </ul>	
2	<p><b>Plan and organize work to meet expected outcomes</b> (hh:mm) 20:00</p> <p><b>Practical Duration</b> (hh:mm) 35:00</p> <p><b>Corresponding NOS Code</b> ASC/ N0001</p>	<ul style="list-style-type: none"> <li>Keep work area clean and tidy</li> <li>Deal confidential information as per the organization's guidelines</li> <li>Work in line with organization's policies and procedures</li> <li>Perform within the limits of job role</li> <li>Acquire guidance from appropriate people, where necessary</li> <li>Ensure work meets the agreed Norms</li> <li>Establish and agree on work requirements with appropriate people</li> <li>Manage time, materials and cost effectively</li> <li>Use resources in a responsible manner</li> </ul>	Safety gloves, Safety Goggles, Aprons, Safety shoes, Ear Plug, Fire Extinguisher, First Aid kit
3	<p><b>Work effectively in a team</b> <b>Theory</b> <b>Duration</b> (hh:mm) 15:00</p> <p><b>Practical Duration</b> (hh:mm) 30:00</p> <p><b>Corresponding NOS Code</b> ASC/ N0002</p>	<ul style="list-style-type: none"> <li>Explain different methods of communication</li> <li>Maintain clear communication with colleagues including face-to-face, telephonic as well as written skills</li> <li>Convey the information to colleagues in line with organizational requirements both through verbal as well as non-verbal means</li> <li>Carry out commitments made to colleagues</li> <li>Identify problems in working with colleagues and take the initiative to solve these problems</li> <li>Follow the organization's policies and procedures for</li> </ul>	Training Charts, Case Study- Audio/Video

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		working with colleagues	
4	<p><b>Maintain a healthy, safe and secure working environment Theory</b> Duration (hh:mm) 20:00</p> <p><b>Practical Duration</b> (hh:mm) 35:00</p> <p><b>Corresponding NOS Code</b> ASC/ N0003</p>	<ul style="list-style-type: none"> <li>Describe hazard, including the different types of health and safety hazards in the workplace</li> <li>Explain the importance of maintaining high standards of health, safety and security</li> <li>Report any identified breaches in health, safety, and security policies and procedures to the designated person</li> <li>Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment</li> <li>Identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority</li> <li>Report any hazards outside the individual's authority to the relevant person in line with organizational procedures and warn other people who may be affected</li> <li>Follow the Safety, Health and Environment related practices</li> <li>Identify and recommend opportunities for improving health, safety, and security to the designated person</li> <li>Complete all health and safety records are updates and procedures well defined</li> </ul>	Safety gloves, Safety shoes, Goggles, Ear plugs, Apron, Fire extinguishers, First Aid kit, Safety signs, SOP Charts on safety norms and drills, Charts of Dos and Don'ts in work area
	<p><b>Total Duration</b></p> <p><b>Theory Duration</b> 100:00</p> <p><b>Practical Duration</b> 200:00</p>	<p><b>Unique Equipment Required:</b> Wrenches, Files, Combination plier, Spanner set, Wrench set, Portable drilling machine, Dent removal kit, Scratch removal kit, Torque wrench, Screw driver set, Allen keys, Ball peen hammer, Nose plier, Adjustable spanner, Adjustable hacksaw frame with blade, Vehicle masking tape, Welding equipment, Power grinders, Metal cutting guns, Air grinders, Hot-air welding guns, Air hoses, Pick hammers, Punches, Caulking guns, Adhesive brushes, Mallets, Clamps, Holding jigs, Drills, Drill bits, Bolts, Nuts, Washers, Air compressor, Lines, Air guns, Safety ventilation equipment, Pressure washers, Steam cleaners, Spray equipment, Jacks, Stands, Lifting equipment, Chipping hammer, Anvil, Steel rule, Steel tape, Micrometres, Vernier callipers, Dial gauges, Feeler gauge, T-squares, Flat edges, Dividers and Protractors, Polyester resins, Hardeners, De – waxing agents, Detergents, Degreaser, Special purpose agents, Respirator, Gloves, Safety Shoes, Shield face protector, ear plugs, Protective clothing, Fire</p>	

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		Extinguisher, Vehicle Cover, Safety signs, SOP Charts on safety norms and drills, Charts of Dos and Don'ts in work area	

**Grand Total Course Duration: 300Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by **Automotive Skills Development Council**)



## Trainer Prerequisites for Job role: “Auto Body Repair Technician Level 3” mapped to Qualification Pack: “ASC/Q 1410, Version 1.1”

Sr. No.	Area	Details
1	<b>Description</b>	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ASCQ/1410Version 1.1”.
2	<b>Personal Attributes</b>	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well- organized and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	<b>Minimum Educational Qualifications</b>	ITI/Diploma in mechanical engineering from a recognized institute
4a	<b>Domain Certification</b>	Certified for Job Role: “Auto Body Repair Technician Level 3” mapped toQP: “ASC/Q1410”. Minimum accepted score as per ASDC guidelines is 70%.
4b	<b>Platform Certification</b>	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “MEP/ Q0102”. Minimum accepted score as per MEPSC guidelines is 80%.
5	<b>Experience</b>	Minimum 3 years of experience in Automotive Service Industry and preferably of 2 years of experience in an auto body shop.

### Annexure: Assessment Criteria

<b>Assessment Criteria</b>	
<b>Job Role</b>	<b>Auto Body Repair Technician Level 3</b>
<b>Qualification Pack</b>	<b>ASC/Q1410Version 1.1</b>
<b>Sector Skill Council</b>	<b>Automotive Skills Development Council</b>

#### **Guidelines for Assessment:**

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on this criteria.
5. To pass the Qualification Pack, every trainee should score a minimum of 65% in every NOS.
6. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.

## Criteria for assessment of Trainees

JOB ROLE	Auto body Repair Technician L3
Qualification Pack	ASC/Q 1410
No. Of NOS	1 Role specific ,3 generic

NOS Title/ NOS Elements	NOS & Performance Criterion Description	Marks allocation	
		Viva	Practical
<b>ASC/N 1419</b>	<b>Assist in repair and replacement of vehicle body and chassis components</b>		
<b>Assist in repair &amp; replacement of vehicle body and chassis components</b>	To be competent, the user/individual on the job must be able to:		
	PC1. assist the senior body technician to assess the overall damage to vehicle body and chassis components		
	PC2. follow supervisor's instructions as to which parts to restore or replace with respect to the auto body/ chassis components	10	30
	PC3. select, calibrate and use the appropriate tools and equipment for the body component/ chassis repair of the vehicle		
	PC4. remove upholstery, accessories, electrical window-and-seat-operating equipment, and trim to gain access to vehicle bodies and fenders	5	30
	PC5. cut and tape plastic separating film to outside repair areas to avoid damaging surrounding surfaces during repair procedure, and remove tape and wash surfaces after repairs are complete		
	PC6. assist in performing repair work under supervision of senior body technician such as: <ul style="list-style-type: none"> <li>• body panel repair</li> <li>• minor structural damage</li> <li>• major welded panels</li> <li>• body components using lead wiping</li> <li>• major sectional repair</li> <li>• chassis/ frame and associated components</li> </ul>	10	20
	PC7. assist in removal and replacement related work under supervision of Senior Body Technician such as: <ul style="list-style-type: none"> <li>• vehicle body panels, panel sections and ancillary fittings</li> <li>• protector mouldings, transfers and decals</li> <li>• mechanical units/assemblies</li> <li>• electrical/electronic units/assemblies</li> </ul>	20	50
	PC8. install various vehicle component seals PC9. prepare surface and apply window tinting		

	<p>PC10. file, grind, sand and smooth fill or repair surfaces, using power tools and hand tools</p> <p>PC11. assist in clamping frames and sections to alignment machines that use hydraulic pressure to align damaged components</p> <p>PC12. assist in removal of damaged sections of vehicles using metal-cutting guns, air grinders and wrenches, and install replacement parts using wrenches or welding equipment</p> <p>PC13. assist in mixing polyester resins and hardeners to restore damaged areas</p> <p>PC14. assist in fitting and securing windows, vinyl roofs, and metal trim to vehicle bodies, using caulking guns, adhesive brushes, and mallets</p> <p>PC15. assist in filling small dents that cannot be worked out with plastic or solder</p> <p>PC16. assist in removal of small pits and dimples in body metal using pick hammers and punches</p> <p>PC17. ensure any malfunctions or repair requirements observed in vehicles (and beyond own scope of work) are reported to the concerned person</p> <p>PC18. ensure any malfunctions observed in tools and equipment are reported to the concerned person</p> <p>PC19. clean work areas, using air hoses, to remove damaged material and discarded fiber glass strips used in repair procedures</p> <p>PC20. ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)</p>	35	70
	<b>Subtotal</b>	<b>80</b>	<b>200</b>
<b>ASC/N 0001</b>	<b>Plan and organise work to meet expected outcomes</b>	<b>Viva</b>	<b>Practical</b>
<b>Work requirements including various activities within the given time and set quality standards</b>	<p>To be competent, the user/individual on the job must be able to:</p> <p>PC1. keep immediate work area clean and tidy</p> <p>PC2. treat confidential information as per the organisation's guidelines</p> <p>PC3. work in line with organisation's policies and procedures</p> <p>PC4. work within the limits of job role</p> <p>PC5. obtain guidance from appropriate people, where necessary</p> <p>PC6. ensure work meets the agreed requirements</p>	15	30
<b>Appropriate use of resources</b>	<p>PC7. establish and agree on work requirements with appropriate people</p> <p>PC8. manage time, materials and cost effectively</p> <p>PC9. use resources in a responsible manner</p>	10	20
	<b>Subtotal</b>	<b>25</b>	<b>50</b>

ASC/N 0002	Work effectively in a team	Viva	Practical
<b>Interact &amp; communicate effectively with colleagues including member in the own group as well as other groups</b>	To be competent, the user/individual on the job must be able to: PC1. maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written) PC2. work with colleagues to integrate work PC3. pass on information to colleagues in line with organisational requirements both through verbal as well as non-verbal means PC4. work in ways that show respect for colleagues PC5. carry out commitments made to colleagues PC6. let colleagues know in good time if cannot carry out commitments, explaining the reasons PC7. identify problems in working with colleagues and take the initiative to solve these problems PC8. follow the organisation's policies and procedures for working with colleagues	25	50
	<b>subtotal</b>	<b>25</b>	<b>50</b>
ASC/N 0003	Maintain a healthy, safe and secure working environment	Viva	Practical
<b>Resources needed to maintain a safe, secure working environment</b>	To be competent, the user/individual on the job must be able to: PC1. comply with organisation's current health, safety and security policies and procedures PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person PC3. Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires, earthquakes etc. PC4. identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority PC5. report any hazards outside the individual's authority to the relevant person in line with organisational procedures and warn other people who may be affected PC6. follow organisation's emergency procedures for accidents, fires or any other natural calamity PC7. identify and recommend opportunities for improving health, safety, and security to the designated person PC8. complete all health and safety records are updates and procedures well defined	40	50
	<b>Subtotal</b>	<b>40</b>	<b>50</b>
	<b>Total</b>	<b>170</b>	<b>350</b>