

Are you ready to become a Journeyman Automotive Mechanic?

With this kit, you have in hand all the elements needed to achieve that goal, without the stress generated by a qualification exam.

Keep your goal in mind, i.e. your success, which requires a journeyman's certificate allowing better working conditions and more challenging tasks.

- **In the theoretical component**, you will be assessed on your knowledge and understanding of a car's various systems.
- **In the practical component**, you must demonstrate your know-how and ability in using the tools, the materials and the equipment properly.

Read through **all the handouts** included in your study kit to assist in preparing for your exam: they are central for your success. Proceed step by step and, above all, **do not procrastinate.**



Clicking the kit icon on the home page of your regional CPA's Web site will give you access to the documents needed for preparing your professional qualification exam as a Journeyman Automotive mechanic.

Your CPA's qualification team is there to help and to guide you through this process.

Ready? It's the beginning of a rewarding milestone by which you will prepare to become a competent journeyman. You will have a more interesting career and better working conditions.

Good luck!

BEHIND THE PROFESSIONNAL QUALIFICATION EXAM

The professional qualification exam is a tool that aims to certify your knowledge and that your knowhow live up to the standards qualifying a journeyman. The exam is the same throughout the province of Quebec. Moreover, the qualification certificate obtained is recognized in other Canadian provinces and even in France.

This qualification confirms that you have acquired the knowledge and skills needed to work in compliance with the rules governing the mechanic trade, more especially those relating to the public safety.

The professional qualification exam in automotive mechanics boost awareness of your skills in the industry because:

- ➔ for the company, it acknowledges the competence of their personnel;
- ➔ for the mechanic, it recognizes his or her skills and improves his or her working conditions;
- ➔ for the customer, it is a credential of trust.

**PREPARATION STAGES
FOR THE PROFESSIONAL QUALIFICATION EXAM
OF THE JOURNEYMAN AUTOMOTIVE MECHANIC**

**THEORY AND PRACTICE
A FOUR-STAGE PROCESS**

**STAGE A
GETTING INFORMED**

- A.1 – Theoretical component format
- A.2 – Questions models
- A.3 – Practical component format
- A.4 – Instructions models

**STAGE B
PRACTICING**

- B.1 – Identifying points for revision
- B.2 – Revision

**STAGE C
MANAGING STRESS**

- C.1 – How to behave during the exam

**STAGE D
GETTING RESULTS**

- D.1 – Successful theoretical component
- D.2 – Successful practical component

A-1

THEORETICAL COMPONENT FORMAT

- Each exam is unique, and composed of 115 multiple choice questions randomly taken from a database.

- Subjects addressed:
 - Brakes
 - Engines
 - Steering
 - Suspension
 - Transmissions
 - Electricity

- Average length: 90 minutes

- Maximum length: 150 minutes

- Passing grade: 710 / 970 points.

- This exam is computer based.

A successful
theoretical
component gives
access to the
practical
component of the
exam

PROCEDURE

- You will be given access to a computer by the exam proctor.

- After validating your name, click on START: it will give you access to the theoretical exam.

- If you encounter any problem with the program or the computer, put your hand up and discreetly ask the proctor for help.

- With this program, you may answer the questions in any order, and go back at will to revise your answers.



On arrival, you must hand over your cell phone, lighter, digital tablet or any other electronic device. These items will be returned at the end of the exam.

QUESTIONS MODELS

- 1- Situation scenarios where several persons interact.

Warning!
There is just one correct answer.

- 2- Sentence completions with a four item multiple choice.

1-EXAMPLE:

Technician A contends that the voltage produced by a magnetic wheel speed sensor decreases with the speed of the wheel.

Technician B contends that a Hall effect wheel speed sensor produces a similar voltage.

Who is right?

- Technician B only
- Both technicians are right
- Technician A only
- No one is right

2-EXAMPLE:

When checking universal joints on a drive shaft, the technician must ensure that there is no play between the joints and their brackets. He must also ensure that they can move ...

- laterally
- linearly
- freely in all directions
- in line with the shaft

QUESTIONS MODELS (continued)

3- A statement followed by a “true or false” answer.

Read each statement carefully to determine which one is false.

4- Questions where you must identify parts or symbols in a picture.

REMINDER

How to find the exam preparation kit on the CPA Web site?

Easy, click the icon for the kit on the home screen:



3-EXAMPLE:

Which one of the following statements, is false?

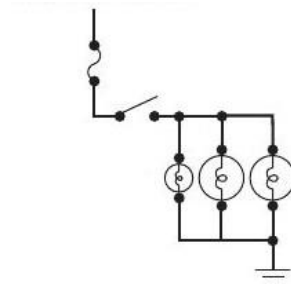
- The electric fan of the cooling system can be set in motion at any time.
- All vehicles are equipped with two electric fans to help control the engine temperature while running.
- The electric fan of the cooling system helps control the engine’s temperature while running.
- The electric fan of the cooling system is usually controlled by the powertrain control module (PCM).



4-EXAMPLE:

Identify the type of electrical circuit represented by the diagram below.

- Simple
- Series
- Parallel
- Mixed



PRACTICAL COMPONENT FORMAT

The exam is based on the Vocational Studies Diploma (DEP) in automotive mechanics.

- 4 modules: Brakes
 - Engine
 - Steering, suspension, transmissions
 - Electricity
- Average length: 130 minutes
- Passing grade: 640/1025 points

You will be assessed not only on the results, but also on the verification and repairs procedures, and on the actual usage and handling of instruments and tools.

PROCEDURE

All along the four modules of this exam, the examiner will ask you to complete tasks typical of a third-class (or Class C) journeyman.

- For some tasks, you may select your equipment. Choose the one you are most familiar with.
- Provide the most complete answer, while completing the steps of the procedure in the correct order, respecting the rules of health and safety for the task requested.
- The examiner will fill in your results on a digital tablet; they will be recorded on line in your personal file after the completion of each module.



- You must wear work clothes, including safety footwear and glasses.
- You can bring your own multimeter.
- This multimeter should be labelled “automotive”

WITH THE SUCCESSFUL COMPLETION OF THIS EXAM, YOU WILL OBTAIN A THIRD-CLASS (OR CLASS C) JOURNEYMAN AUTOMOTIVE MECHANIC CERTIFICATE

A-4

INSTRUCTIONS MODELS

Be accurate in executing the tasks requested.

In the practical component, the examiner will ask you to do many types of tasks, typical of those of a journeyman.



- Identify products and components
- Measure components
- Assemble mechanical components
- Install or retrieve a mechanical component
- Provide diagnosis
- Make adjustments
- Read from different measuring tools
- Choose and use tools and equipment
- Interpret data and values accurately.
- Give your view on the state of items that you have checked

All supervisors and examiners of the regions covered by the CPAs are first-class (or Class A) working experienced mechanics, gone through rigorous training in administering general mechanics exam uniformly across the province of Quebec.

WARNING!

Here are the points on which you may be assessed.

DO YOU KNOW?

	TRAINING COURSES	WORKING WITH A JOURNEYMAN OR A TUTOR	SELF TRAINING	INTERNET RESEARCH
<ul style="list-style-type: none"> • Select information on a given car model <ul style="list-style-type: none"> ❖ to check and maintain <ul style="list-style-type: none"> - suspension; - steering; - transmissions; - engines; - disc brakes; - drum brakes; - Anti-lock brake system. 				
<ul style="list-style-type: none"> • Interpret <ul style="list-style-type: none"> - manufacturers' recommendations 				
<ul style="list-style-type: none"> • Visually inspect the following systems: <ul style="list-style-type: none"> - Suspension - Steering - Brakes - Lubrication - Cooling - Powertrain 				
<ul style="list-style-type: none"> • Identify the points to check, according to the manufacturers' recommendations, <ul style="list-style-type: none"> ❖ on the following systems: <ul style="list-style-type: none"> - Suspension and steering - Powertrain - Brakes 				
<ul style="list-style-type: none"> • Validate <ul style="list-style-type: none"> - The results of your investigations about the manufacturers' specifications. 				

DO YOU KNOW?	TRAINING COURSES	WORKING WITH A JOURNEYMAN OR A TUTOR	SELF TRAINING	INTERNET RESEARCH
<ul style="list-style-type: none"> • Explain <ul style="list-style-type: none"> ❖ The operation and the characteristics of <ul style="list-style-type: none"> - the powertrain; - Semiconductors; - the charging system; - the starting system; - various engine parts: cylinder block, crankshaft, cylinder head, etc. - the fuel injection system 				
<ul style="list-style-type: none"> • Verify and analyze <ul style="list-style-type: none"> - the brake system components; - the lubrication system; - the cooling system; - the suspension and steering systems; - the fuel injection system. 				
<ul style="list-style-type: none"> • Determine <ul style="list-style-type: none"> ❖ the state of the systems in a car <ul style="list-style-type: none"> - in good condition; - that needs repairs. 				
<p style="text-align: center;">Electricity</p> <ul style="list-style-type: none"> • Understand its nature and its properties • Apply the electricity principals to a car • Discover its sources • Recognize the various electrical circuits 				
<ul style="list-style-type: none"> • Interpret <ul style="list-style-type: none"> - electrical schematics and diagrams. 				
<ul style="list-style-type: none"> • Select, consult et interpret <ul style="list-style-type: none"> - the technical information about electrical and electronic circuits. 				
<ul style="list-style-type: none"> • Locate <ul style="list-style-type: none"> - Sensors and actuators. 				

B-2

REVISION

Take action

Choose the type of training that you need.

Should the preparatory courses be the best way to revise the key points in the practical component?

Should you choose to deepen your knowledge by yourself?

To get informed on training courses and manuals available, consult the Web site

www.carbure.ca

or call your CPA

Some CPA's training manuals are especially designed for the preparation of the professional qualification exam. The topics are as follows:

- Transmissions, steering and suspension
- Engines
- Brakes
- Electricity

Do you think that a journeyman or a tutor's advice and follow up would be valuable? You can ask your employer or a journeyman you know to help you through this process.



For the concepts with which you are less familiar, you can complete your training by consulting specialized Web sites.



FOR INFORMATION ON TRAINING MANUALS
See next page

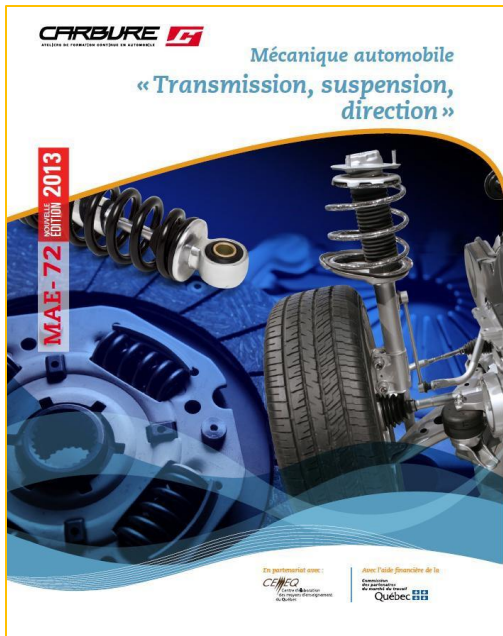
Preparation manuals for the final apprenticeship exam

Transmissions, suspension, steering

English version will be available at the end of 2015

Carbure Code: MAE-72

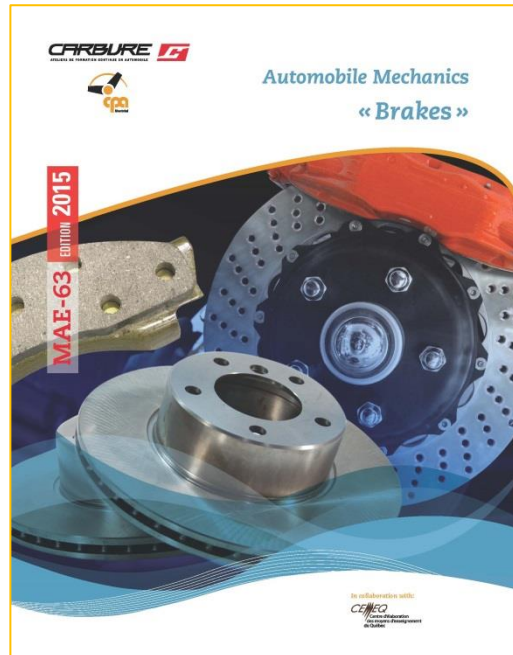
Length: 30 hours



Brakes

Carbure Code: MAE-63

Length: 21 hours

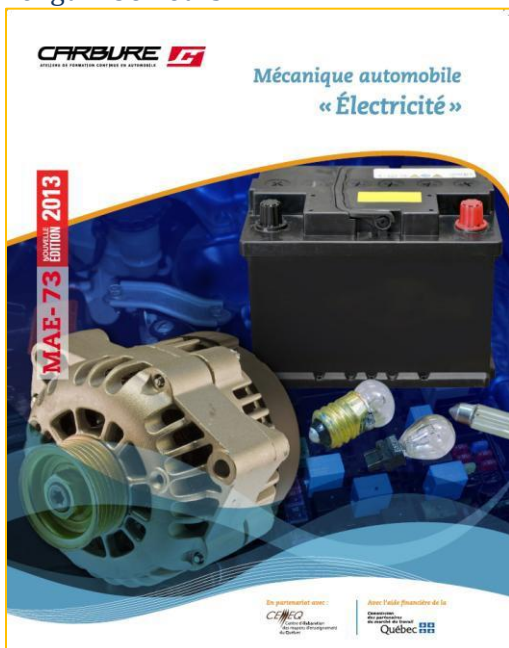


Electricity

English version will be available at the end of 2015

Carbure Code: MAE-73

Length: 36 hours

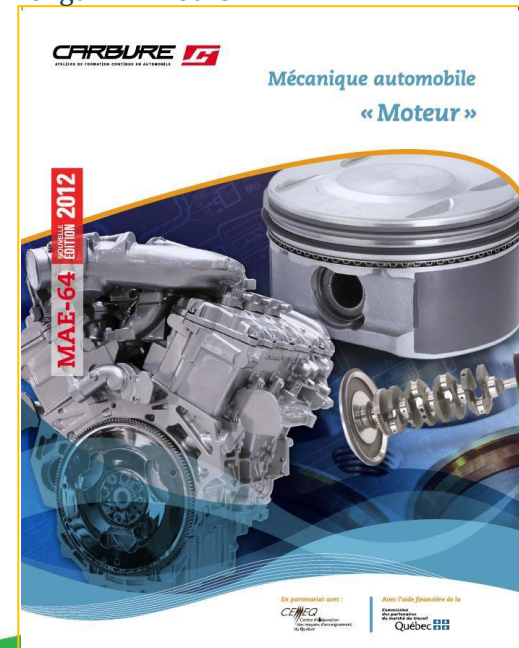


Engines

English version will be available in 2016

Carbure Code: MAE-64

Length: 24 hours



These manuals are still available for the final apprenticeship exam

Power Train



Brakes



Electricity



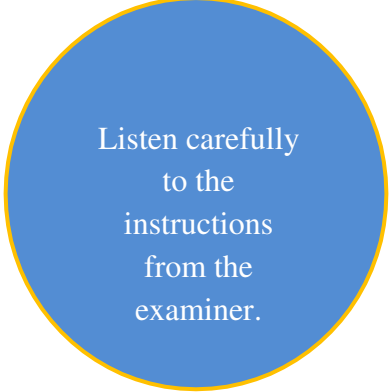
Engines





C-1

FOR THE PRACTICAL COMPONENT OF THE EXAM



Listen carefully
to the
instructions
from the
examiner.

- Be well prepared.
- Listen carefully to the instructions from the examiner.
- Don't get distracted by the environment.
- Before responding, mentally review, step by step, the proper thing to say or to do.
- Take the time to pick the right tools or equipment.
- Speak in a calm, quiet voice. You can pause and reflect for a moment before responding.
- There is no time-limit for the exam. Take your time.



SUCCESSFUL COMPLETION OF THEORETICAL COMPONENT



You have successfully completed the theoretical component of your journeyman automotive mechanic professional qualification exam.

You now have one year to make it to the practical component of the exam.

In this kit, you will find the elements needed to successfully complete the second component of the exam.



In the event of failure, your CPA qualification department will advise you, after analyzing your exam, the key points to be revised in order to have another theoretical exam scheduled and another chance to move to the practical component.

RESUMPTION ENTITLEMENT

1 ST failure	2 ND failure
Resumption after 6 months	Resumption after 6 months <i>This period is maintained for all subsequent failures.</i>



SUCCESSFUL COMPLETION OF THE PRACTICAL COMPONENT



You have successfully completed the theoretical and practical components of your journeyman automotive mechanic professional qualification exam.

You are now a journeyman automotive mechanic, third-class or class C.

You will receive your new card as a qualified journeyman by mail.



We wish you much success in your further career!

In the event of failure, your CPA qualification department will advise you, after analyzing your exam, what key points need to be revised in order to obtain your journeyman certificate.

RESUMPTION ENTITLEMENT

1 st failure	2 nd failure
Resumption after 6 months	Resumption of both components (theoretical and practical) after 6 months <i>This period is maintained for all subsequent failures.</i>