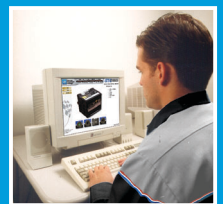


GM Training Certification

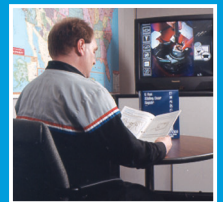
what to expect

GM Master Technician Certification Assessment Preparation Guide

Becoming a GM Master Technician



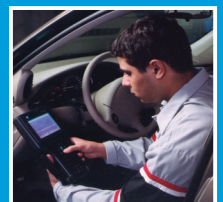
Before the Certification Assessment Day



On the Assessment Day



The Exercise Process



Congratulations, Mr. Goodwrench technician:

Your enthusiasm for training helps to shape the Goodwrench brand's essential qualities of expertise, technical know-how, confidence/trust, integrity, and pride. Now you are entering the final lap toward the GM Service Technical College (STC) Master Technician Certification (MTC). As part of a nationwide force of GM expert service technicians, you have the opportunity to reach a new plateau in personal training achievement. By obtaining Master Technician Certification, you will be able to continue providing customer confidence in the Goodwrench "Fix it Right . . . The First Time" tradition.

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Becoming GM Master Technician-Certified

In each of the 12 Certification Areas, the Certification Assessment is the final step in the GMSTC curriculum* for obtaining GM Master Technician Certification. These performance-based Certification Assessments contain hands-on exercises that are designed to challenge and assess your ability to apply your diagnostic and troubleshooting skills.

This booklet will prepare you for the Certification Assessment by explaining just what happens on the assessment day, how to prepare before you get there, and what happens following the assessment.



Heating, Ventilation & Air Conditioning

Engine Performance

Steering & Suspension



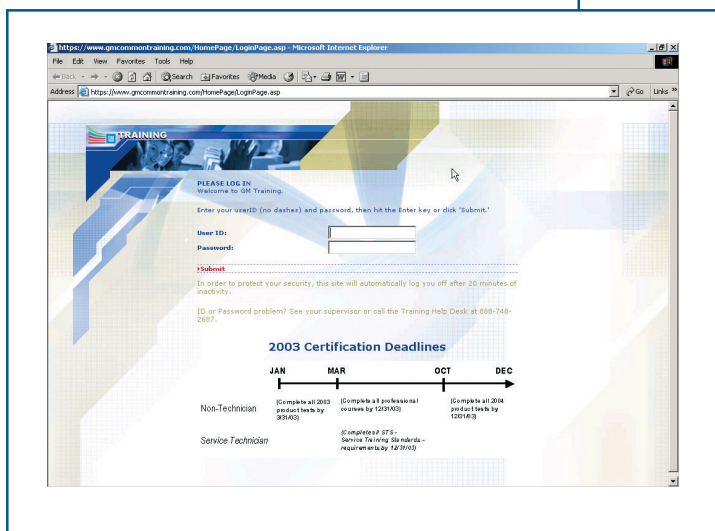
*Upon successful completion of the MTC Assessment and ASE certification, service technicians will receive a certificate and a patch.

Certification Assessment is the final step in the GM STC curriculum toward becoming GM Master Technician Certified. This certification is awarded in each of the following areas:

- Electrical/Electronics Systems
- Gasoline Engine Performance
- Diesel Engine Performance
- Engine Repair
- Heating, Ventilation and Air Conditioning
- Brakes
- Steering and Suspension
- Manual Drivetrain and Axle
- Automatic Transmission/Transaxle
- Body Structural Repair*
- Mechanical/Electrical Body Repair
- Paint and Refinish*

The Certification Assessment in each of these areas is a comprehensive, hands-on set of exercises to demonstrate your knowledge and skill. Because the structure of a Certification Assessment closely resembles that of a Hands-On course component, GM strongly recommends that a Hands-On course component be taken before a Certification Assessment. Check out the GM Training Website (GM TW) at www.gmtraining.com for information about these course components.

Along with passing the GM Certification Assessment, service technicians must obtain appropriate ASE certification to



receive the distinctive GM Master Technician certificate and patch.

Note: Before you attend a Certification Assessment, it is recommended that you reference the GM Training Catalog at www.gmtraining.com, the annual GM STC Course Catalog for course objectives, and/or the Certification Area Performance Checklist. Many of these will be utilized in the Certification Assessment.

*The Body Structural Repair and Paint and Refinish certifications are not offered by GM STC, but are offered through GM approved suppliers.

The GM STC Curriculum Paths

The GM Master Technician Certification Assessments are based on content provided through the GM STC curriculum path.

Certification Assessment

is a practical, Hands-On evaluation of the knowledge and skills learned in the training courses. The setting is similar to a dealership environment.

Hands-On Training

is designed to allow the service technician to practice his/her diagnostic skills in a setting similar to the work environment.

Certification Assessment

Evaluation of the service technician's application of knowledge and skills

Hands-On

Practical application of the diagnostic process and how to repair the concern

IDL

How it works and the diagnosis process

WBT

Provide basic systems knowledge

Interactive Distance Learning (IDL)

reinforces the knowledge provided in the WBT and introduces the service technician to diagnostic skills necessary to repair the vehicle.

Web Based Training (WBT) course components provide the knowledge portion of the certification area.

NOTE: Videos provide information on emerging technologies, specific repair procedures, and updates based on feedback from various audiences.

GM STC Placement Assessment Program Performance Checklists



Course credit can be obtained by:

- Successfully completing a course
- Cross-credit from the GM STC curriculum
- The Placement Assessment program

The Placement Assessment program comprises web based assessments for the WBT and IDL course components of the curriculum. The web based placement assessments are **used to indicate whether a service technician possesses the necessary knowledge to place out of a WBT and/ or IDL course component(s).**

Along with Placement Assessment, which is for WBT & IDL course components, a Hands-On Performance Checklist may be completed. This checklist helps a manager assess whether a service technician possesses the necessary knowledge and diagnostic skills of the subject area.

These performance checklists are downloaded, printed and used by service technicians and their managers to indicate if a service technician has the necessary skills to place out of a Hands-On course component.

Certification Assessment Performance Checklist

The Certification Assessment Performance Checklist is a comprehensive tool that lists the knowledge, skills and performance criteria from a specific certification area in which the service technician must be proficient prior to participating in a Certification Assessment. The service manager and the service technician may **utilize this tool to evaluate the service technician's ability** to successfully complete the Certification Assessment for the area.

Sample Performance Checklist* for Powertrain Performance

Performance Checklist for GM Powertrain Performance
Course Component # 16044.10

This Performance Checklist is to be completed by both the Technician and the Service Manager. The purpose of the checklist is to enable both the Service Manager and the Technician to accurately assess the Technician's knowledge, skills and performance ability to determine if the Technician possesses the necessary skills to bypass the Hands-on component of this course. Accurate Assessment of the Technician is vital to their ability to successfully complete the Certificate Assessment for the area. Attending the Hands-on component of this course may increase the Technician's ability to pass the Certification Assessment.

Please circle the appropriate response that corresponds to the Technician's ability to perform the listed task.

Yes = Technician has performed this task successfully
No = Technician can not successfully perform this task

	Rating System	
	Yes	No
Ability to perform basic electrical circuit diagnosis with a digital multimeter and to make repairs to wiring and terminal		
Diagnose an electrical circuit fault	Yes	No
Install a wiring splice sleeve	Yes	No
Measure current flow in a circuit	Yes	No
Measure the resistance of a circuit or component	Yes	No
Replace a connector terminal	Yes	No
Ability to operate a scan tool		
Capture DTC information	Yes	No
View and clear stored DTCs	Yes	No
Make diagnostic data parameter snapshot	Yes	No
Perform a special function test	Yes	No
Ability to verify customer concerns, make quick checks, perform system diagnostic checks and perform a TSB search related to powertrain control systems		
Describe how to verify the customer concern	Yes	No
Describe how to make quick checks	Yes	No
Describe how to make a system diagnostic check	Yes	No
Perform a TSB search	Yes	No
Total Yes: _____		

*The number of questions varies by course. Actual Performance Checklist is several pages long.

Before the Certification Assessment Day

It is important that you adequately prepare for your GM MTC Assessment. Here are a few tips on preparing for this challenging event.

- Arrive the day before the assessment, if traveling.
- If you have never taken a Hands-On course component, it is recommended that you take one in the subject matter area, before you attend the Certification Assessment. The Certification Assessment is similar to a Hands-On course, but without the guidance from an instructor. Experiencing the Hands-On training offered today gives you a much better

idea of what to expect in Certification Assessment.

- Review any WBT courses you've already taken.
- Review any IDL materials you've received.
- Talk to your service manager about any area that could be improved, including Work Order documentation.
- Review the Service Information (SI) website, specifically for the Strategy Based Diagnostics (SBD) process.
- Find an expert at the dealership who can assist you in the certification area.
- Investigate and complete ASE certification in the subject matter area.

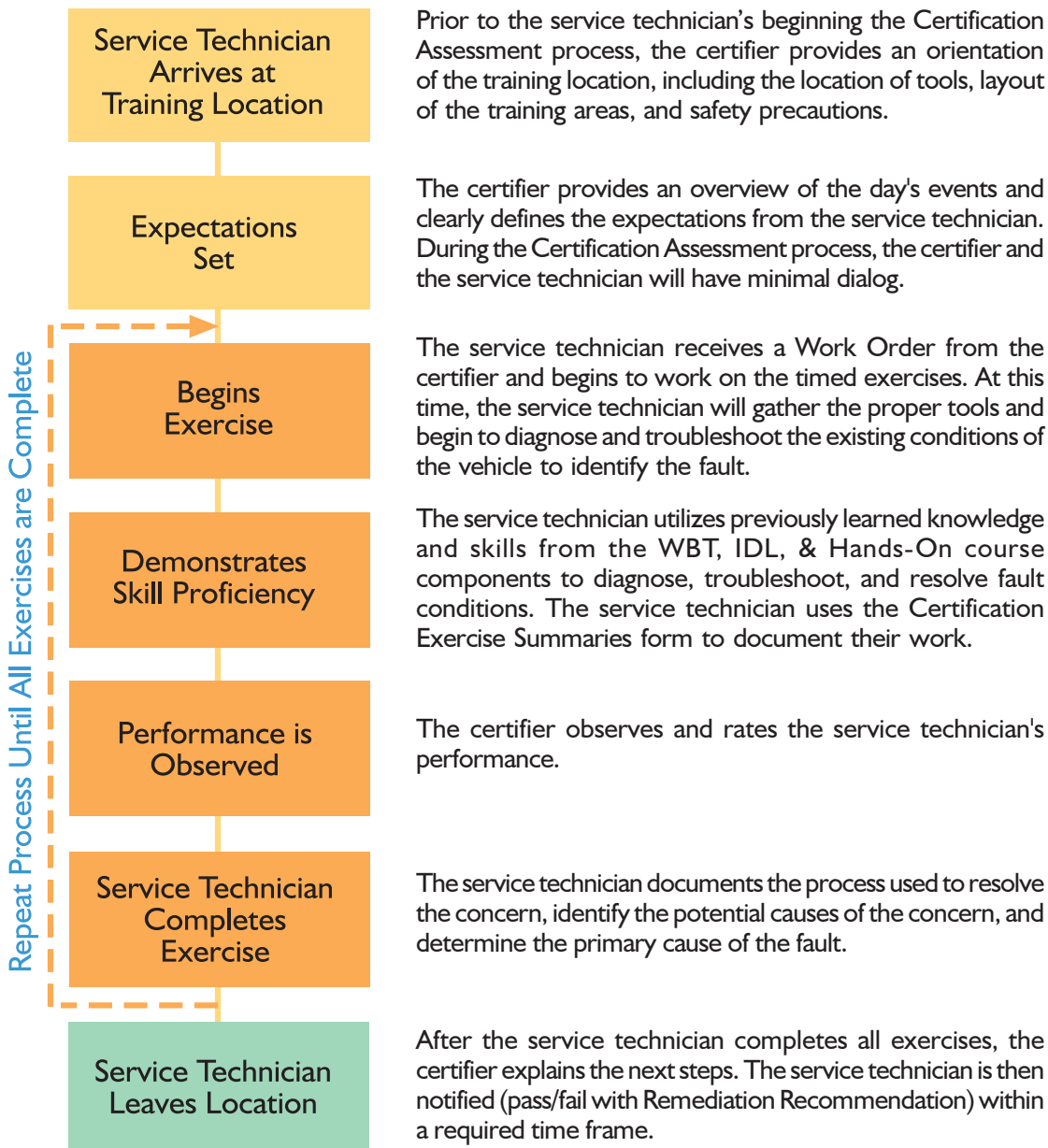
Certification Assessment Planning Chart

o 6 weeks before assessment	Check ASE for certification dates
o 4 weeks before assessment	Enroll in Certification Assessment using www.gmtraining.com
o 4 weeks before assessment	Review training material and other preparation items
o 4 weeks before assessment	If needed, make the necessary travel plans
o 2 weeks before assessment	Confirm enrollment in the Certification Assessment with the appropriate training location
o 2 days before assessment	Verify Certification Assessment and directions
o 1 day before assessment	If applicable, travel to the training location
o Assessment day	Arrive at the training location 30 minutes prior to the assessment start time
o Within 5 days after the assessment	Check the GM Training Website for results of the assessment and/or look for your results in the mail

On the Assessment Day

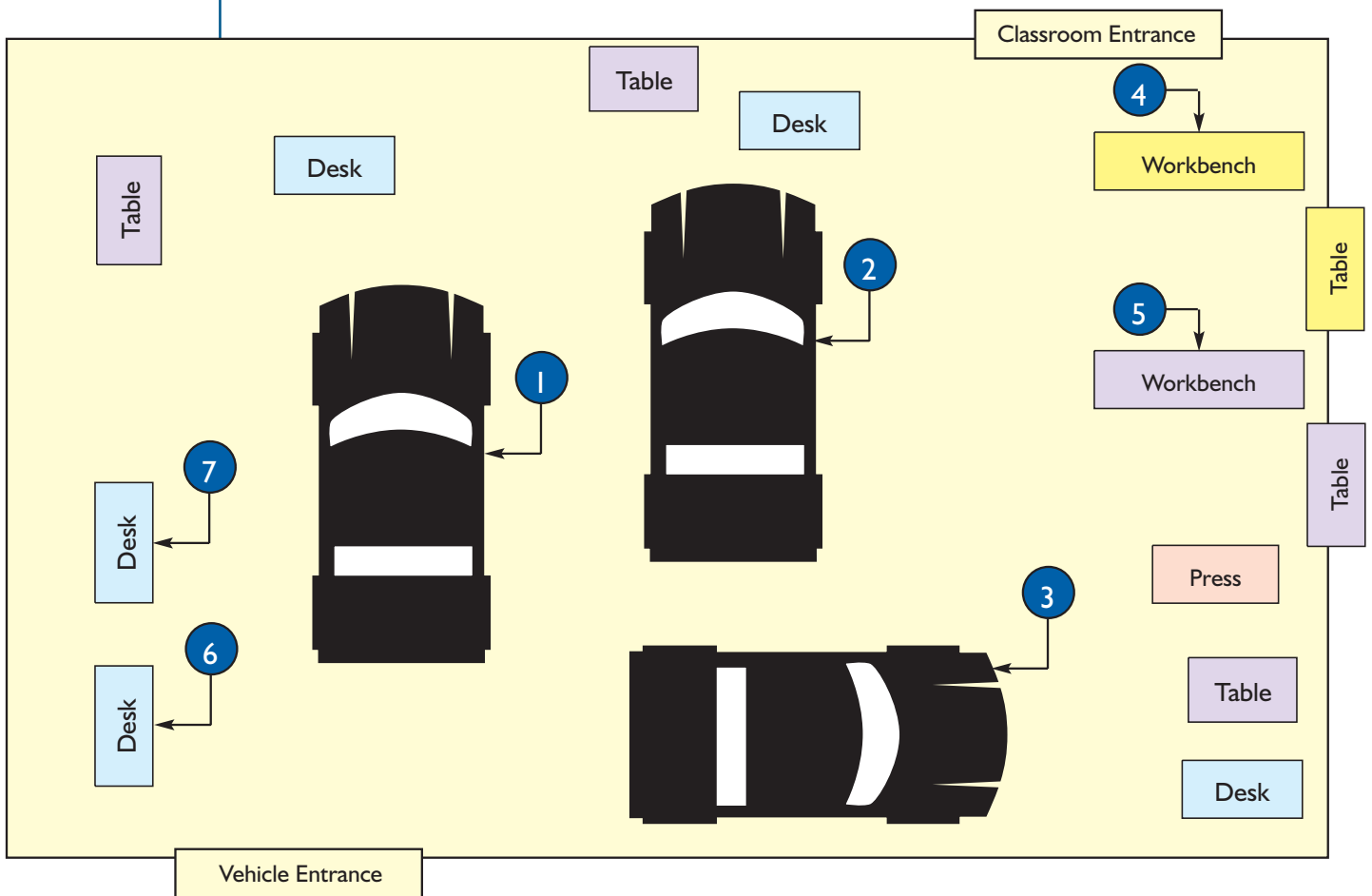


The enrolled service technicians will meet at the training location for the Certification Assessment. Here's a flowchart and explanation of what will take place:



Typical Assessment Room Layout

The assessment room may differ depending on the certification area. However, here's a typical layout used for Certification Assessment. All tools and equipment necessary will be available at the training location.



Note: The numbers 1-7 represent exercise areas.

Building Your Training Foundation

Your experience and the GM training you've taken make up the foundation for preparing you for the Certification Assessment. The different components of the training give you the skills necessary to "Fix It Right . . . The First Time!"

Exercises

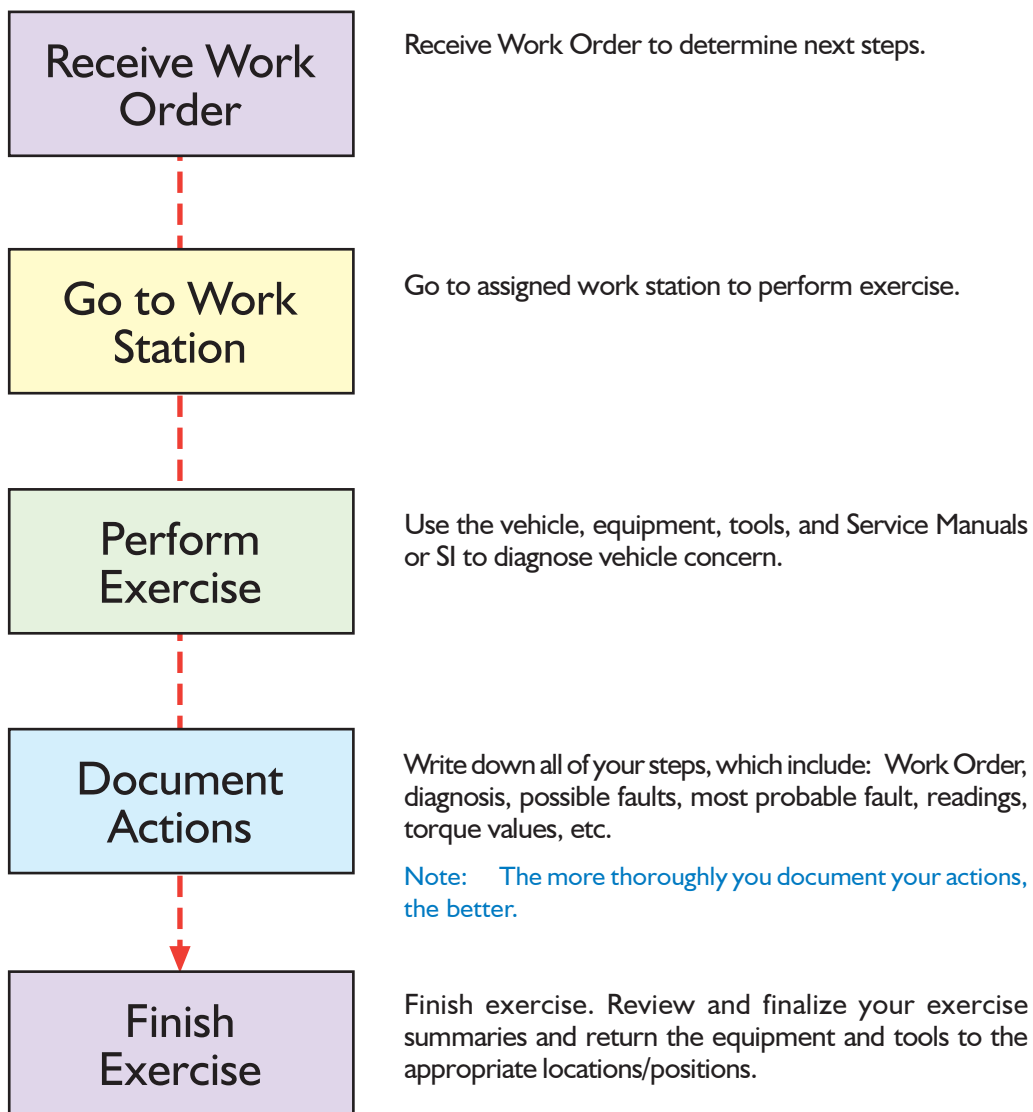
The exercises that you will perform have been developed based upon the critical elements in all the courses across each of the certification areas. Each exercise has been designed to assess your ability to diagnose and apply your skills on a simulated real-life customer concern utilizing vehicles, tools and equipment in a typical dealership.

Each exercise has been carefully designed and validated with Master Technicians, subject matter experts and lead instructors. In addition, all the exercises have been piloted with a population of service technicians across the country to ensure that each of the assessments is valid and is at an appropriate level of application.

Also, all exercises and their associated performance criteria have been mapped back to the course objectives at the component level. Therefore, training remediation can be quickly identified and provided to the service technician, if needed.

The Exercise Process

For each exercise, the service technicians will be expected to do the following:



The Work Order



After providing a thorough orientation, the certifier will start the exercises by passing out a Work Order that has been filled in with a customer concern. Here's an example:

Work Order

WORK ORDER
REPRINT
PAGE 1

Dealer Name: _____
 Dealer Address: _____
 Dealer City, State, Zip: _____
 Dealer Phone Number: _____

TECHNICIAN NAME John Smith

SOCIAL SECURITY NUMBER 123-45-6789

HOME: _____ BUS: _____ SERVICE ADVISOR: _____

REG. NO. F-180428

COLOR	YEAR	MAKE/MODEL	VIN	LICENSE	MILEAGE INPUT	YAG
	2000	GMC Envoy				

DEL. DATE	PROD. DATE	WARR. EXP.	PROMISED	PO. NO.	RATE	PAYMENT

INV. DATE	R.O. OPENED	READY	OPTIONS

LINE	OP CODE	TECH TYPE	DESCRIPTIONS/INSTRUCTIONS
			Measure the cylinder head for warpage. Install the cylinder head, then remove it.

Service Technician's Notes:

Certification Exercise Summaries

Here are two examples of completed Certification Exercise Summaries. The first would be assessed with a higher score, the second with a lower score. These examples show how important it is to thoroughly and accurately document your activities and results. Documenting your actions will assist the certifier's evaluation of your performance throughout the day.

Certification Exercise Summaries

Summary of Certification Exercise I-A

Name: _____ SSN: _____

Directions: Complete the summary information for each of the following items, based on your previous work related to the work order.

List the actions that you took during your work:

1. *Consulted Service Information (SI)*
2. *Checked cylinder head for warp as indicated in service information using feeler gauge and straight edge*
3. *Installed cylinder head gasket as indicated in service information*
4. *Fitted cylinder head*
5. *Tightened cylinder head bolts in sequence as indicated in service information*
6. *Tightened cylinder head bolts as follows:*
 - First pass 22 lb/ft*
 - Second pass 90 degrees*
 - Final pass excluding medium length bolts front and rear 90 degrees*
 - Final pass medium length bolts front and rear 50 degrees*
 - Cylinder head side bolts 50 degrees*

This is a confidential document. Do not remove it from the test location.

Higher score example – Documentation describes in depth how the service technician performed the work.

Certification Exercise Summaries

Summary of Certification Exercise I-A

Name: _____ SSN: _____

Directions: Complete the summary information for each of the following items, based on your previous work related to the work order.

List the actions that you took during your work:

1. *Checked cylinder head for warpage*
2. *Fitted cylinder head gasket*
3. *Fitted cylinder head and tightened cylinder head bolts*

This is a confidential document. Do not remove it from the test location.

Lower score example – Documentation does not describe the full depth of the service technician's work.

Observation/Scoring Sheet

Your performance will be evaluated and scored based upon the certifier's observation of your performance and the accuracy and level of documentation on the Certification Exercise Summaries. To successfully complete the Certification Assessments, you must obtain a total score of 80% or better across the exercises. During the assessments the certifier will utilize the Observation/Scoring Sheet to evaluate your performance. Each form will contain a list of performance criteria per exercise. The certifier will evaluate your performance using those criteria.

Observation/Scoring Sheet		Exercise #											
Name: _____		SSN: _____											
Sites Observed	Possible Pts.	Actual Pts.	A	B	C	D	Comments						
XYZ – Service (Workbench)													
1. Correctly Installed – ABC	1												
2. Correctly Installed – DEF	1												
3. Correctly Set – GHI	3												
4. Correctly Tightened All Bolts to Specifications	1												
5. Correctly Removed – DEF	1												
6. Correctly Removed – ABC	1												
Tool Usage and Safety													
7. Demonstrated a Logical Repair Process	1												
8. Correct Use of Service Tools	1												
9. Correct Use of Service Manual to Determine													
• Correct Specifications	1												
• Correct Overhaul Procedure	1												
Total Points	12												
Comments _____		Mechanical Engine Diagnosis/Measurement											
A = Performed the skill B = Did not perform the skill C = Used an alternative method to the one described (specify in comments column) D = Did not observe the skill being demonstrated		<table border="1"> <thead> <tr> <th colspan="2">Related Course Section</th> </tr> <tr> <th>Component</th> <th>Course Name</th> </tr> </thead> <tbody> <tr> <td>Steps: 1-6 3</td> <td>W, D, HO HO Mechanical Engine Diagnosis/Measurement</td> </tr> </tbody> </table>						Related Course Section		Component	Course Name	Steps: 1-6 3	W, D, HO HO Mechanical Engine Diagnosis/Measurement
Related Course Section													
Component	Course Name												
Steps: 1-6 3	W, D, HO HO Mechanical Engine Diagnosis/Measurement												

A Word about the Certifiers

Each assessment certifier is Master Technician Certified and has received extensive training in conducting performance based assessments. This training included content on:

- The Certification Assessment process
- Scoring only on observable behaviors
- Interviewing techniques
- A thorough review of all the Certification Assessment exercises

This extensive training program was implemented along with an innovative scoring methodology to ensure there is consistency in scoring across all of the certifiers in the Certification Assessment locations.

The Results



At the completion of the assessment, the certifier will collect all of the Work Orders, instruction sheets, and Certification Exercise Summaries. Within 24 hours, the certifier will complete the scoring process using your write-ups on the Certification Exercise Summaries. The certifier will then post your results on the GM Training Website within 5 days of the assessment. If your score is greater than or equal to 80%, your training record will be updated to reflect that you have successfully passed the GM MTC Assessment for the designated area.

The GM Service Technical College will notify you by mail of your result. The notification information will include:

If you received a passing score (and have completed the appropriate ASE certification test):

- Letter
- Certificate
- Patch(es)

If you received a passing score (and have NOT completed the appropriate ASE certification test):

- Letter

Note: You will receive the full package once you have completed the ASE certification.

If you did not receive a passing score:

- Letter
- Areas in which you need additional training



September 1, 2005

John Doe
Faraway Chevrolet
1650 Research Drive
Troy, MI 48083

John Doe:

Congratulations, you have successfully completed the Steering and Suspension Certification Assessment. Having already achieved your ASE certification, you are now considered to be GM Master Technician Certified in this area. Enclosed, please find your GM Certified certificate and patch. Display them proudly – only a select few earn this recognition.

You have shown the competence and expertise to become certified by General Motors. We look forward to working with you in your continuing professional development.

Sincerely,

Timothy Murray
Director, Dealer Service Support
GM Service Operations

GM Master Technician Certification

One last step is needed to reach the highest level of certification. The service technician must also be ASE certified to achieve Master Technician Certification. This can be done before or after the Certification Assessment. Make sure to check with ASE as soon as possible, as their testing typically takes place only four times a year.

Heating, Ventilation & Air Conditioning

Engine Performance

Steering & Suspension

GM Service Technical College

GM Master Technician Certification
Certificate of ACHIEVEMENT

Mr. Goodwrench

has successfully completed all training requirements for GM Master Technician Certification in

Completion Date	Certification Area	Expiration Date
01/05/2002	Automatic Transmission/Transaxle	01/05/2007
03/05/2002	Steering & Suspension	03/05/2007
05/05/2002	Electrical/Electronics Systems	05/05/2007
08/05/2002	Heating, Ventilation and Air Conditioning (HVAC)	08/05/2007
10/05/2002	Brakes	10/05/2007
11/05/2003	Engine Performance	11/05/2008
02/05/2003	Diesel Engine Performance	02/05/2008
04/05/2002	Manual Drivetrain and Axle	04/05/2008
07/05/2002	Body Structural Repair	07/05/2008
08/05/2002	Mechanical/Electrical Body Repair	08/05/2008

This certificate is awarded by authority of the Service Technical College of General Motors on August 28, 2003

ASE
CERTIFIED

ASE
CERTIFIED

Director, Dealer Service Support



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION THROUGH



GM World Class Technician

Service technicians who achieve Master Technician Certification can also strive to achieve the status of GM World Class Technician. This status is available in two areas, Mechanical and Body. Service technicians can achieve GM World Class Technician status in the Mechanical area when they successfully achieve 8 of 9 GM Master Technician Certifications (MTC) along with their accompanying ASE certifications. For the Mechanical area, service technicians must complete either the Engine Performance or the Diesel Engine Performance categories along with the other seven mechanical-related certifications. Body technicians receive this status by successfully achieving three GM Master Technician Certifications (MTC) in the Body area along with their accompanying ASE certifications.

*The Body Structural Repair and Paint and Refinish certifications are not offered by GM STC, but are offered through GM approved suppliers.

A service technician who receives World Class Technician status receives an award package.

GM Master Technician Certification Assessment Appeals Process



In the event a service technician wishes to appeal an assessment result, he/she may do so within 90 days of the Certification Assessment by following the steps below:

1. The service manager and service technician contact the appropriate Regional Training Center (RTC).
2. The service manager and service technician discuss the matter with the RTC.
3. The RTC reviews the information and provides a recommendation.



WE SUPPORT
VOLUNTARY TECHNICIAN
CERTIFICATION
THROUGH



GM Service Technical College

For more information, contact:

Communications Manager

1650 Research Drive, Suite 200

Troy, MI 48083

Visit us at our website at www.gmstc.com
or www.gmtraining.com

To obtain a copy of a Certification
Assessment Performance Checklist or
additional copies of the Preparation Guide,
log onto www.gmtraining.com and enroll
in a Certification Assessment.

