

## GENERAL REQUIREMENTS AND TOOL & EQUIPMENT LIST

The GM Canada Collision Repair Network (CRN) is a comprehensive certification program that takes into account the critical aspects of a collision repair. GM Canada’s rapid pace of evolving technology requires continuous improvement within the participating network to help promote safe and proper repair of all GM vehicles.

The pre-requisites listed here are required to join the GM Canada Collision Repair Network.

There are three levels of participation. All include Battery Electric Vehicle (BEV) certification.

- **Core Facilities:** Must meet all requirements below except those designated as Specialty or Fleet.
- **Fleet (BrightDrop) Facilities:** Must meet all requirements for both Core and Fleet facilities and permits the purchase of BrightDrop restricted structural parts.
- **Specialty Facilities:** Must meet all requirements for both Core and Specialty facilities and permits the purchase of structural parts on certain vehicles such as Chevrolet C8 Corvette, Cadillac CT6 and Cadillac Celestiq EV. Specialty designation is by invitation only.

### Overall GM Program Pre-Requisites

General Tooling/Customer Service/Training Requirements		
<input type="checkbox"/>	1	Be in business for a minimum of 5 years or possess verifiable credit rating and service history. <ul style="list-style-type: none"> <li>• Shops that have been in business for <i>less than</i> 5 years verify that they have and will maintain good credit standing with their suppliers. You may provide 2 vendor references and a bank reference, or a D&amp;B report or other acceptable proof of timely handling of your business payable obligation.</li> </ul>
<input type="checkbox"/>	2	Provide proof of General Garage Liability Insurance with a minimum of \$1M policy limits, including legal liability coverage for damages to customers' vehicles held in your care, custody or control.
<input type="checkbox"/>	3	Provide customers with a Limited Lifetime Warranty.
<input type="checkbox"/>	4	Subscribe to Mitchell Cloud Estimating and Integrated Repair Procedures, which includes access to GM Service Information (i.e., repair procedures) with the ability to provide documented proof of compliance.
<input type="checkbox"/>	5	Maintain I-CAR Gold Class, which includes a representative that meets requirements in the following areas: Estimator, Non-Structural, Steel Structural, Refinishing.  <b>Technician training shall be in accordance with the latest I-CAR requirements.</b>
<input type="checkbox"/>	6	Measure customer satisfaction through a third-party service provider. (Mitchell provides this service once active on the program).
<input type="checkbox"/>	7	Utilize a preferred rental car provider or provide complimentary customer transportation.
<input type="checkbox"/>	8	Maintain well-lit, clean customer parking.
<input type="checkbox"/>	9	Maintain professional/clean reception, waiting, and restroom areas.
<input type="checkbox"/>	10	Detail vehicle both inside and out before delivery to customer.
<input type="checkbox"/>	11	Paint booth / Paint forced curing system <ul style="list-style-type: none"> <li>• Meets the specifications of utilized GM-approved refinish system</li> </ul> No GM-specific length or width

General Tooling/Customer Service/Training Requirements Continued																
<input type="checkbox"/>	12	Paint mil thickness gauge capable of reading Ferrous (contains iron or steel), Nonferrous (does not contain iron or steel), and plastic substrate materials. <ul style="list-style-type: none"> <li>The Defelsko Positector 200b1 is the GM required tool for plastic substrates.</li> <li>For all other tools, the shop must adhere to OEM repair procedures for tool capabilities.</li> </ul>														
<input type="checkbox"/>	13	Paint System of Collision Center's Choice <ul style="list-style-type: none"> <li>Utilize a dedicated mixing room with exhaust system and spill containment compliant with federal, provincial and local regulations. Paint mixing rooms must comply with Provincial and Federal OSH and CEPA requirements.</li> <li>Utilize a General Motors approved refinishing system as outlined below Globally Approved Refinish Materials (For full details, please reference GMW 15406, which can be found in the <a href="http://www.genuinegmparts.com">www.genuinegmparts.com</a> website) and provide proof of current product training.</li> </ul> <table border="0"> <tr> <td>AkzoNobel Coatings, Inc.</td> <td>Nexa Autocolor</td> </tr> <tr> <td>Axalta Coating Systems</td> <td>Octoral</td> </tr> <tr> <td>BASF</td> <td>PPG</td> </tr> <tr> <td>Cromax</td> <td>Sherwin-Williams</td> </tr> <tr> <td>DeBeer</td> <td>Spies Hecker</td> </tr> <tr> <td>Martin-Senour</td> <td>Standox</td> </tr> <tr> <td>Valspar</td> <td></td> </tr> </table>	AkzoNobel Coatings, Inc.	Nexa Autocolor	Axalta Coating Systems	Octoral	BASF	PPG	Cromax	Sherwin-Williams	DeBeer	Spies Hecker	Martin-Senour	Standox	Valspar	
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Martin-Senour	Standox															
Valspar																
<input type="checkbox"/>	14	Measuring System 3D electronic measuring system or fixture bench system, +/- 1 mm accuracy for x, y and z, with current software subscription.														
<input type="checkbox"/>	15	Squeeze Type Resistance Spot Welding (STRSW) Equipment <ul style="list-style-type: none"> <li>220-volt, three phase</li> <li>Minimum 350 daN</li> <li>Minimum of 12000 amps</li> <li>Requires auto setting type SMART technology weld confirmation capabilities with GM-specific software (if applicable)</li> </ul> Search for GM approved 'Spot Welders' at: <a href="http://gmdesolutions.com/">http://gmdesolutions.com/</a>														
<input type="checkbox"/>	16	Shunting Clamp														
<input type="checkbox"/>	17	MIG/MAG Weld Equipment 208V-240V, 180 Amp output capability. MAG wire (ER70S-3 OR ER70S-6 is required. Wire diameter can range from .023" - .035".)														
<input type="checkbox"/>	18	MIG Brazing Welder 208V-240V, 180 Amp output capability. May use required steel or aluminum welder with proof of separate and dedicated conductor/torch assembly, drive rolls, and gas for silicon-bronze MIG-brazing. MIG wire (ER CuSi-A or CuSi-3 is required. Wire diameter can range from 0.8 mm to 0.9 or .030 to .035.)														
<input type="checkbox"/>	19	Aluminum MIG Welder 208V-240V Pulse MIG Welder, 200 Amp output capability. MIG pulse wire (*Wire must be 5554 alloy. *Can range from 0.9 mm to 1.2 mm or .035 to .047 diameter)														
<input type="checkbox"/>	20	Shielding Gases <ul style="list-style-type: none"> <li>Steel Welding - Argon/CO2 80/20% mix</li> <li>MIG Braze - Argon 100%</li> <li>Aluminum MIG - Argon 100%</li> </ul>														

General Tooling/Customer Service/Training Requirements Continued		
<input type="checkbox"/>	21	Designated equipment to perform test welds <ul style="list-style-type: none"> <li>Must have the capability to clamp test welds materials vertically and overhead</li> </ul>
<input type="checkbox"/>	22	Designated equipment to perform destructive weld tests <ul style="list-style-type: none"> <li>Tools for destructive testing of welds must include at least (1) a stationary vise and (2) vernier caliper or weld gauge</li> </ul>
<input type="checkbox"/>	23	Dent Removal Pulling System for Steel
<input type="checkbox"/>	24	Dent Removal Pulling System for Aluminum
<input type="checkbox"/>	25	Have a designated set of hand/specialized tools for aluminum to prevent cross contamination. <ul style="list-style-type: none"> <li>Must have hammers &amp; dollies, body files and mechanical locking pliers ("vise grips").</li> <li>4-5 different pairs of locking pliers are required as needed to perform component replacement</li> </ul> Dedicated, stored separately
<input type="checkbox"/>	26	Heat Monitoring System Temperature crayons, stickers, or non-contact thermometer
<input type="checkbox"/>	27	Crack and Dye, Penetrant Kit Penetrant/Cleaner/Developer
<input type="checkbox"/>	28	Utilize an immersion type, wet mix dust extraction system or pneumatic vacuum system dedicated to aluminum. The aluminum dust collection system must be designed for collecting combustible aluminum dust. Units containing electric motors will generally be wet mix while air powered/pneumatic versions may be dry units. Either type of system may also be centrally installed or portable.
<input type="checkbox"/>	29	Blind Structural Rivet Gun (BSR) Electric or pneumatic; capable of pulling 1/4" structural rivets, with a minimum pulling force of 17 kn/3822 lbs. or a blind/structural rivet tool attachment or adaptor for an SPR capable of 17 KN / 3822 LBS pulling Force.
<input type="checkbox"/>	30	Torque Wrench Capable of reading in newton meters and pound feet, accurate from 10nm to 272nm (7 lb./ft to 250 lb./ft) - annual calibration recommended
<input type="checkbox"/>	31	A/C Recovery / Recycle / Charging Station for R134a and R1234YF Compliant with all current regulations SAE J2210 OR J2788 compliance label required for R134a or SAE J2843 compliance label required for R1234yf
<input type="checkbox"/>	32	A/C Electronic Leak Detector SAE J1627 or J2791 standard for R134a. SAE J2913 standard for the R1234yf refrigerant
<input type="checkbox"/>	33	Battery Charger - 12v Smart Charger capable of monitoring and maintaining dedicated battery voltage.
<input type="checkbox"/>	34	Battery Load Tester Load testing and battery analyzing capability. Sublet scanning provider must have load testing and battery analyzing capability
<input type="checkbox"/>	35	Utilize one of the following GM Approved Scan/Calibration Options <ul style="list-style-type: none"> <li>GM MDI 2</li> <li>AirPro Diagnostics</li> <li>Mitchell Diagnostics MD-0E22</li> <li>asTech</li> </ul> For more information, see the Diagnostic Scan Tools Section.

General Tooling/Customer Service/Training Requirements Continued		
<input type="checkbox"/>	36	Fixture Bench/Frame Rack <ul style="list-style-type: none"> <li>Required minimum 9,200 lb. capacity</li> <li>See a list of GM-approved frame equipment for Specialty below.</li> </ul>
<input type="checkbox"/>	37	Frame and Unitized Body Mounting and Anchoring 4 holding points minimum for both unitized bodies (pinch weld) and full frame vehicles (vise style)
<input type="checkbox"/>	38	Two Post, Four Post or Scissor Surface Lift <ul style="list-style-type: none"> <li>Required minimum 10,000 lb. capacity</li> <li>Minimum 60-inch vertical lift with adequate access to vehicle's undercarriage</li> </ul>
<input type="checkbox"/>	39	Dedicated Aluminum Work Area Minimum area - curtained or clean room: 23'L x 12'W x 8'H
<input type="checkbox"/>	40	Coolant Pressure Tester
<input type="checkbox"/>	41	On-Vehicle Signage or Other Visual Identifiers to Warn that High Voltage is Present
<input type="checkbox"/>	42	Certified Class 0 insulated lineman's gloves <ul style="list-style-type: none"> <li>Unexpired and undamaged</li> </ul>
<input type="checkbox"/>	43	Electrical Safety Rescue Hook
<input type="checkbox"/>	44	Electric Charging Station (Level 2 Minimum)
<input type="checkbox"/>	45	Dedicated BEV Work Area <ul style="list-style-type: none"> <li>Size of at least: 23'L x 12'W x 8'H</li> </ul>
<input type="checkbox"/>	46	Countersink Cutter Kit (Specialty and Fleet Shops Only) <a href="https://gmdesolutions.com/item-detail.aspx?itemid=125340490&amp;type=equipment">https://gmdesolutions.com/item-detail.aspx?itemid=125340490&amp;type=equipment</a>

The additional items below are required unless the work is a sublet. **Proof of previous sublet may be required.**

Additional Required Equipment (Unless Sublet)		
<input type="checkbox"/>	1	Wheel Alignment Rack with Measuring System
<input type="checkbox"/>	2	Wheel Balancer
<input type="checkbox"/>	3	Tire Changer
<input type="checkbox"/>	4	Engine Cart
<input type="checkbox"/>	5	Engine Hoist

Recommended Training		
<input type="checkbox"/>	1	ADAS Training
<input type="checkbox"/>	2	I-CAR Collision Repair of the 2021 General Motors (GM) Full-Frame Sport Utility Vehicle: 1 Hour Course - VT345E01
<input type="checkbox"/>	3	I-CAR Collision Repair of the 2020 GM Silverado and Sierra 2500 and 3500 HD: 1 Hour Course - VT330E01
<input type="checkbox"/>	4	I-CAR General Motors Company (GMC) Hummer Electric Vehicle (EV): 1 Hour Course - VT470E01
<input type="checkbox"/>	5	I-Car C8 1 Hour Course (Specialty shops only) - VT360E01

Not all scan tools or software read all DTC codes. Please refer to GM's Position Statement on scanning and tools that GM supports: <https://www.genuinegmparts.com/pdf/positionstatements/pre-post-scan-collision-vehicles.pdf>

If you sublet your scanning and calibration work out to a third party, please ensure that they follow the protocol below. <https://www.acdelcotds.com/subscriptions#>

Diagnostic Scan Tools	
GM MDI 2	Utilizes GDS2 and/or Tech2Win Runs GDS2 locally (on a computer on-site with the vehicle)
AirPro Diagnostics	Utilizes GDS2 and/or Tech2Win Runs GDS2 locally (on a computer on-site with the vehicle)
Mitchell Diagnostics MD-OE22	Runs GDS2 and/or Tech2Win Remotely Utilizing the Multiple Diagnostic Interface 2 (MDI-2).
asTech	Utilizes GDS2 and/or Tech2Win Runs GDS2 and/or Tech2Win remotely (on computer in asTech® data center)

Resources	
I-CAR	<a href="https://www.i-car.ca/">https://www.i-car.ca/</a>
General Motors Canada CRN Program	<a href="https://www.mitchell.com/solutions/auto-physical-damage/oem-network-solutions/gm-canada">https://www.mitchell.com/solutions/auto-physical-damage/oem-network-solutions/gm-canada</a>
Mitchell Cloud Estimating	<a href="https://www.mitchell.com/solutions/auto-physical-damage/estimating/cloud">https://www.mitchell.com/solutions/auto-physical-damage/estimating/cloud</a>

\*GM Canada reserves the right to modify, amend, suspend or alter the CRN Program, at any time at its sole business discretion.

### FLEET (BrightDrop)

GM Fleet requires compliance with all GM Core tool, equipment and training requirements.

Fleet (BrightDrop) Tooling Requirements		
<input type="checkbox"/>	1	Minimum 15,000 lb., 3-stage/Max Reach hoist and 74-inch Max Reach arms.
<input type="checkbox"/>	2	10-Foot Entry Garage door minimum height of 10 feet.
<input type="checkbox"/>	3	12,000 lb. Frame/Rack Fixture Bench Capable of accommodating a 19-foot wheelbase
<input type="checkbox"/>	4	Large Aluminum Work Area 30-feet long x 15-feet wide (450 square feet)
<input type="checkbox"/>	5	AGM Compatible 12V Charger and Tester
<input type="checkbox"/>	6	High-Voltage EV Charger Prefer Level 2 or greater
<input type="checkbox"/>	7	GM-Approved Self-Piercing Riveter <ul style="list-style-type: none"> <li>• Henrob</li> <li>• GM X-Press 800</li> <li>• ProSpot</li> </ul> with BrightDrop dies
<input type="checkbox"/>	8	GM Countersink Cutter Kit ( <a href="https://gmdesolutions.com/item-detail.aspx?itemid=125340490&amp;type=equipment">https://gmdesolutions.com/item-detail.aspx?itemid=125340490&amp;type=equipment</a> )

SPECIALTY (C8 and CT6 FRAME EQUIPMENT)

Brand	Model	Reference No.
Car Bench International	Manta	CBIMANTA
Car Bench International	Manta XL 5.2 Meters	CBIMANTA
Car Bench International	Muraena*	CBIMURAENA
Car-O-Liner	BenchRack 4200*	NA-34573-KIT
Car-O-Liner	BenchRack 5000*	NA-34639-KIT
Car-O-Liner	BenchRack 5500*	NA-34640-KIT
Car-O-Liner	BenchRack 6300*	NA-33907-KIT
Car-O-Liner	Quick 42*	46642
Celette	Sevenne/Sevenne XL	SVN17.3212/SVN09XL.3112
Celette	Griffon/Griffon XL*	GR16F.38021.x/GXL08.5812.x
Celette	Rhone/Rhone XL*	RH18XLM.4221.x/RH18XLF.4211.x
Celette	Smart Rhone*	RH19S.3501N; RH19S.3501X; RH19S.3502N; RH19S.3502X; RH19S.3503N; RH19S.3503X
Chief	Excelerator	
Chief	EZ Liner, Standard, S21/S21M	
Chief	20' Impulse VHT	
Chief	18' or 20' E-VHT	
Chief	Goliath	
Chief	Fuzion	
Chief	Titan-360 21 series	
Spanesi	106 Bench* (6 crossmember package)	92OSABP701
Spanesi	106 EXT Bench* (7 crossmember package)	92OSABPA01

Anchoring and Fixtures		
Brand	Model	Reference No.
Car-O-Liner	EVO 1 Basic Anchoring System	35413
Car-O-Liner	EVO 2 Extended Anchoring System	35419
Car-O-Liner	EVO3 Universal Fixturing System	35719
Car-O-Liner	EVO 630mm Tower (2 Required)	35067
Car-O-Liner	B248 Anchoring Plate (4 Required)	30638
Car-O-Liner	B333 Fixture (4 Required)	30641
Car Bench International	PACDIMA08 8-Point System	Minimum 8 Required
Car Bench International	PACDIMA12 12-Point System	12-Point Optional
Car Bench International	C281 Side, Upper	
Celette	22 MZ Towers (with Pins)	MZ450.010
Celette	MZ Trolley	MZ450.907
Celette	MZ Plus Kit	MZ2500.000
Celette	Cameleon Premium	CAM02.162
Celette	Cameleon Side Body Kit	CAM04.032
Celette	Additional Straight Cross Member	955A908
Chief	C8 Complete Structural Holding System (Complete)	CK300036
Chief	1-Structural Holding Base w/Tool Board and Cart	CK300021
Chief	1-GM Base w/Tool Chest	CK300037
Chief	1-Corvette C8 w/ Tool Chest	CK300038
Global Jig	Evolution 5000, 5 Meter Evolution Bench: GJG630	Cadillac CT6 supplement fixture kit: GJSCT6
Global Jig	Super Rotax 5 Meter (includes 12-point universal fixturing kit) GLG350	12 Point Evolution Kit (Evolution Benches only): GJE812, GJ814
Global Jig	Super Rotax 6 Meter (includes 12-point universal fixturing kit) GLG350	McPherson Upper and Side Body Measuring System: GJD123
Global Jig	System Mobile 5 Meter (includes 12-point universal fixturing kit) GLG130, GJD101/1	Long Bolt Kit: GJD550
Global Jig	System Mobile 6 Meter (includes 12-point universal fixturing kit) GLG136	Large Diameter Bolt Kit: GJD248



Frame Equipment and Accessories		
Brand	Model	Description
Car Bench International	Manta	CT6 Fixture Set
Car Bench International	Manta XL 5.2 Meter	CT6 Side Fixtures
Car-O-Liner	BR4200	CT6 Fixture Kit
Celette	Griffen	Set of 6 Universal Crossmembers Aluminum
Celette	Griffen XL	Set of 22 Towers + Trolley + 2 Wedges
Celette	Rhone	Mz + Set of 34 Universal Pistons
Celette	Rhone XL	Universal Side Gantry
Celette	Sevenne	Mechanical Door Brace
Celette	Sevenne XL	CT6 Fixtures
Celette	Smart Rhone	CT6 Side Fixtures

Additional Equipment and Accessories		
Brand	Model	Description
Spanesi	106	Crossbar Length 1800 mm with #02 Sliding Supports
Spanesi	106 EXT	Platforms for Additional 6th Cross Bar
Spanesi	106 Series	Aluminum Bushing Kits
Spanesi	Pista	Kit of Specialized Screws for Jig Complete with Shelves
Chief		Structural Holding with the CT-6 attachments
Chief		CK300003