



Carolina's Educational Collision Conference

May 18th & 19th 2019 at Cabarrus Arena Concord, NC
Presented by NACAR and SCACAR



Protecting the Collision Repair Shop's Interest in the Ever Changing Repair Environment

Presented by:

Keith Manich, ATI Collision Director

The Changing Role of the Repairer

- The complexity of the rapidly changing repair processes require that repairers perform “repair due diligence” prior to writing their repair plan

Definition of *due diligence*

1 *law* : the care that a reasonable person exercises to avoid harm to other persons or their property; failed to exercise due diligence in trying to prevent the accident a. the care that a prudent person might be expected to exercise in the examination and evaluation of risks affecting a business transaction

- This allows for all required repair operations to be properly identified in the repair plan and a formulation of a strategy to ensure that they are paid for in their entirety by third party payers.

The Changing Role of the Repairer

- Creating the repair file that clearly defines the repair requirements and potential outcomes of not properly addressing them is a newly added administrative function that is unavoidable.
- If not completed, it could potentially lead to unacceptable risks for the repairer.
- The information in this presentation will provide a framework for documenting, discussing, and presenting facts about the repairability needs of the vehicle.
- This is a process that can be used when presenting facts to all interested parties that may be involved at differing levels in the repair and claim processes.

Why is this important?

Traceability for the repair shop owner. The repairer must be able to document all of the processes that were completed on the vehicle, why they were done and that they were charged for and completed properly.

In the event an issue arises from the repairs, the repairer needs to be able to clearly communicate what was completed and why. This process will reduce unwanted risk. It also serves as validation of repair process completion.

Key Take Aways

The information that will be covered will include but not be limited to:

- Identification of information that will be necessary to validate the repair procedures required to repair vehicles to OEM required specifications
- Assembling the documentation for the purpose of providing a complete repair plan, information for parties interested in the proper repair of the vehicle, and the third party payer when applicable
- Improving product knowledge of the insurance policy and what is and isn't covered in the repairers state
- Basic negotiation steps required to prepare documentation for potential discussions and negotiations

Repair Complexity

- Increasing repair complexities are requiring that the repair planner to identify and document all applicable repair procedures to establish the “rules for the repair”
- These rules are OEM identified repair procedures that if not completed properly will compromise the integrity of the repair including but not limited to structural, mechanical, safety, electronic and electrical systems. Additionally the fit, finish and longevity of the repair if not using quality paint, materials and parts
- The quality control process then ensures that the repairs have been completed properly using repair quality checklists

Store name and contact information

Authorization for Repair and Direction of Pay

Customer Name _____
 Vehicle _____
 Insurance Company _____
 Preferred Contact Method: Text ___ Email ___ Phone ___ (check one)

Repair Authorization

I DO HEREBY give my consent to repairs to be made to my vehicle to (Insert shop name here) (the shop, Insert Name Here) and/or their subcontractors or designees, as set forth in the repair order or "Estimate of Repair" dated _____ in the initial amount of \$_____. I acknowledge receiving a written estimate of work to be done on my vehicle; I authorize the work to be done and for (Insert shop name here) to use parts, processes and materials that will be necessary to complete the repairs in accordance with the OEM repair specification. I authorize the shop to operate the vehicle for purposes of testing, performing calibration procedures and inspecting prior to delivery at my risk. The shop will not be held responsible for loss or damage to the vehicle or for articles left in the vehicle in case of fire, theft or accident or any other cause beyond the shops control. I understand that I am responsible for all charges, deductible amounts and or any balance due if not covered by the insurance company or other liable parties including me personally at the time of vehicle pick/up.

ALL CHARGES MUST BE PAID IN FULL WHEN THE VEHICLE IS COMPLETED AND READY FOR PICK/UP AND DELIVERY. Payment is to be made in full for the entire amount in full by insurance check, bank check, and cash or by credit card. We accept VISA, MASTERCARD, AMERICAN EXPRESS or DISCOVER CARD. (Personal checks are only accepted with PRIOR APPROVAL).

I also understand that:

- Charges not covered by the insurance company are my responsibility, including but not limited to the following: Towing, deductibles, Betterments, or for additional work authorized by me.
- An express mechanics' lien is hereby acknowledged to secure the cost of repairs to my vehicle in the event of non-payment by me

Direction to Pay

The undersigned grants limited power of attorney to (insert shop name here) for purposes of endorsing insurance checks in the event of co-pay insurance checks and/or drafts are issued to the shop for repair of the above identified vehicle (this document page 1)

INITIALS _____ Date _____

Scan Code Diagnostics and Release of Information

I also understand that there will be scan code diagnostic procedures performed that are required by the vehicle manufacturer for purposes of identifying diagnostic codes in the vehicle's computer system. These are a **required step** in the repair process. My insurer may or may not recognize these as necessary. Due to this fact, this authorization recognizes the need and requirements for the shop perform them on my behalf. It may be necessary for me to pay for the scanning portion of the repair invoice and then submit that portion of the bill directly to my insurer for reimbursement. I recognize the fact that not completing the repair scans could result in serious injury or worse for occupants in my vehicle. Additionally, I authorize the release of the scan data to

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**Multi-level
Repair Authorization Form
5 Initial locations and
1 Signature**

Store name and contact information

It is requested by them as part of their need to document their claim file. I will contain all data that has been recorded by the vehicle systems. I will stamp the time and date stamped in most cases and will show when the damage occurred and prior damage which may not be covered by the insurer.

INITIALS _____ Date _____

Authorization to Order Parts

I authorize the repair of my vehicle understanding that if I choose to not repair at another facility that I will be responsible for a 30% restocking fee to the shop from which they were purchased. This is to ensure that the time to handle, and accounts receivable are covered.

INITIALS _____ Date _____

In the Event the Insurer Denies Payment

There may be some repair operations that your insurer may not pay for that are necessary for the complete repairs on your vehicle. They will be identified on a case by case basis. If your insurance company denies payment for or recognition of the required procedure, you the vehicle owner will be responsible for any differences in the cost of repair. These are to be paid prior to the vehicle being delivered after the repairs have been completed.

INITIALS _____ Date _____

Authorization to Order Parts

With the exception of parts that are required to be returned to the vehicles' manufacturer or part distributor for purposes of warranty or as a core charge, I would like to have the damaged parts returned to me following the repairs;

Yes ___ No ___ INITIALS _____ Date _____

Customer's Rights

I understand that:

- I may request an estimate on the cost of repairs that exceed \$ _____ in the State of (insert State name) and;
- I may not be charged any amount over ten percent (10%) of the written estimate without written or oral consent;
- I am entitled to the return of any replaced parts except when parts are required to be returned to the manufacturer under a warranty agreement or a core charge; and
- I may not be charged for repairs not originally authorized without written oral or written consent

Signature _____ Date _____
 Printed Name _____

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Repair Position Concerns

- Identify how to use that identified data in the repair plan including but not limited to the repair position statements
 - Identify the types of information that is available and the relevance of that data in repair planning
 - Other positions taken by the OEM and the need to use it versus what insurers or TPPs specify
 - Mitigation strategies based on threats from insurers for repairers who don't fall in lock step to the DRP repairers who will change the repair plan to suit the insurer

✓ OEM

~~TPP
Insurer~~

Repair Position Concerns

- Taking a stand on proper repairs
 - Information is the highest priority item for the repairer to establish
 - Repairers must push back on attempts by third party payers not to pay what is owed relative to using and conducting proper repair processes
 - “Well ABC Auto Body down the street doesn’t charge for that”. This needs to be countered with the fact that the repairer being told that, shouldn’t care what ABC charges for. It’s the repairer’s responsibility to identify what needs to be repaired and the proper method that needs to be followed

✓ OEM

~~TPPP Insurer~~

Repair Position Concerns

□ Threats and intimidation

- Must be met with providing the vehicle needs as determined by the OEMs with the vehicle owner, your customer
- Share the information and provide them with the documentation
- If it's a denial that the insurer or TPP is communicating, let them communicate it to the customer, not to you. Your job is to repair vehicles properly, not to help settle the insurer or TPP claims
- Don't let the bully win!

[Image: familyfriendpoems.com](http://familyfriendpoems.com)

Bullying is unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time. Both kids who are bullied and who bully others may have serious, lasting problems



Repair Position Statements

- What criteria is to be used in determining the repair procedures for the vehicle
 - OEM or OEM endorsed repair procedures only
- Electronics and safety systems (position statements)
 - Pre-scanning identifies the baseline required by the OEM using the scanner. It compares what the systems should read to the current system condition. **There should be no compromise on establishing this variance from the OEM baseline**
- These steps **Must Be** identified by the repair planner during disassembly



Repair Complexity

Scanning must be completed



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Boyd Group scan experiment finds 81% vehicles had DTC — often without dash light

By John Huetter on March 25, 2019
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An 822-vehicle study by Gerber Collision's parent company last year overwhelmingly demonstrated the need for diagnostic scanning and supports the company's decision to adopt this capability.

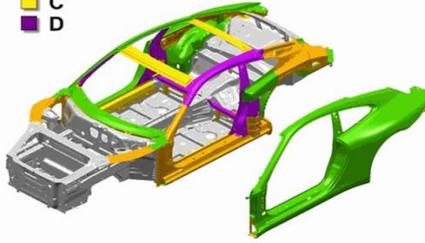
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Repair Complexity

Identifying the proper repair procedures

- Structural versus non-structural
- Heat applications and the need to identify the heat parameters that must be used
- Adhesives
- Welding
- Calibration processes

Significant numbers of repair issues must be clearly defined for the technician, repair planner, customer and TPP



| Level | Material | Proof stress (1) | Tensile strength (2) | Use Characteristics |
|-------------------------------|----------|---------------------------|---------------------------|---|
| A - Sheet steel | DX54 | 100-220 N/mm ² | 260-350 N/mm ² | Can be MIG welded |
| | DX58 | 120-180 N/mm ² | 260-350 N/mm ² | Can be MIG welded |
| | DX57 | 120-170 N/mm ² | 260-350 N/mm ² | Can be MIG welded |
| B - High-strength steel | H080LAD | 260-330 N/mm ² | 350-430 N/mm ² | Part replacement as per Workshop Manual |
| | H040LAD | 340-420 N/mm ² | 410-510 N/mm ² | Part replacement as per Workshop Manual |
| | H040LAD | 420-520 N/mm ² | 470-590 N/mm ² | Part replacement as per Workshop Manual |
| C - Very-high-strength steel | HCT600X | 340-420 N/mm ² | > 690 N/mm ² | Part replacement as per Workshop Manual |
| | HCT700X | 470-600 N/mm ² | > 780 N/mm ² | Part replacement as per Workshop Manual |
| D - Ultra-high-strength steel | D20485 | > 950 N/mm ² | > 1400 N/mm ² | Part replacement is not permitted |

| DEG DATABASE ENHANCEMENT GATEWAY | CCC | | Mitchell | | Audatex | |
|--|----------|--------------|----------|--------------|----------|--------------|
| | Included | Not Included | Included | Not Included | Included | Not Included |
| Removal of seam sealer | x | | x | | x | |
| Apply Seam Sealer (Water Tight Seal) | x | | x | | | x |
| Replicate Seam Sealer OEM Appearance | | x | | x | | x |
| Mask for seam sealer application | | x | | x | | x |
| Apply primer prior to seam sealer | | x | | x | | x |
| Remove undercoat/ tar/ grease/chip guards | | x | | x | | x |
| Structural adhesive removal | x | | x | | x | |
| Clean up glass adhesive | | x | x | | | x |
| Cavity Wax removal | | x | | x | | x |
| Cavity Wax install | | x | | x | | x |
| Weld Thru Primer Application | | x | | | x | |
| Expanding Foam/ 2k Foam remove and install | | x | | x | | x |
| Ecoat removal on replacement panel install | x | | x | | | x |
| Feather Prime and Block Welded Panel | | | | | | |
| Replacement | | x | | x | | x |
| Feather prime and block repaired panels | | x | | x | | x |
| Mask for Primer application | | x | | x | | x |
| Material Cost | | x | | x | | x |

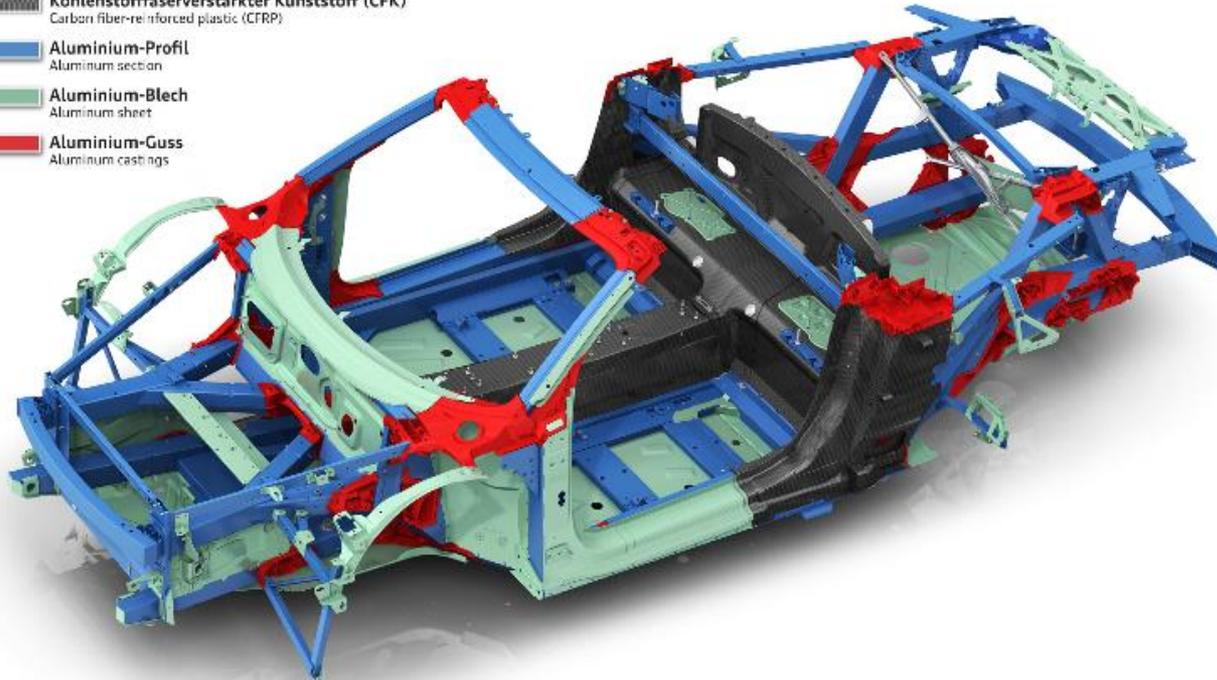
Repair Complexity

Audi R8 Spyder V10

Audi Space Frame in Multimaterialbauweise
Audi space frame in multimaterial construction
03/16



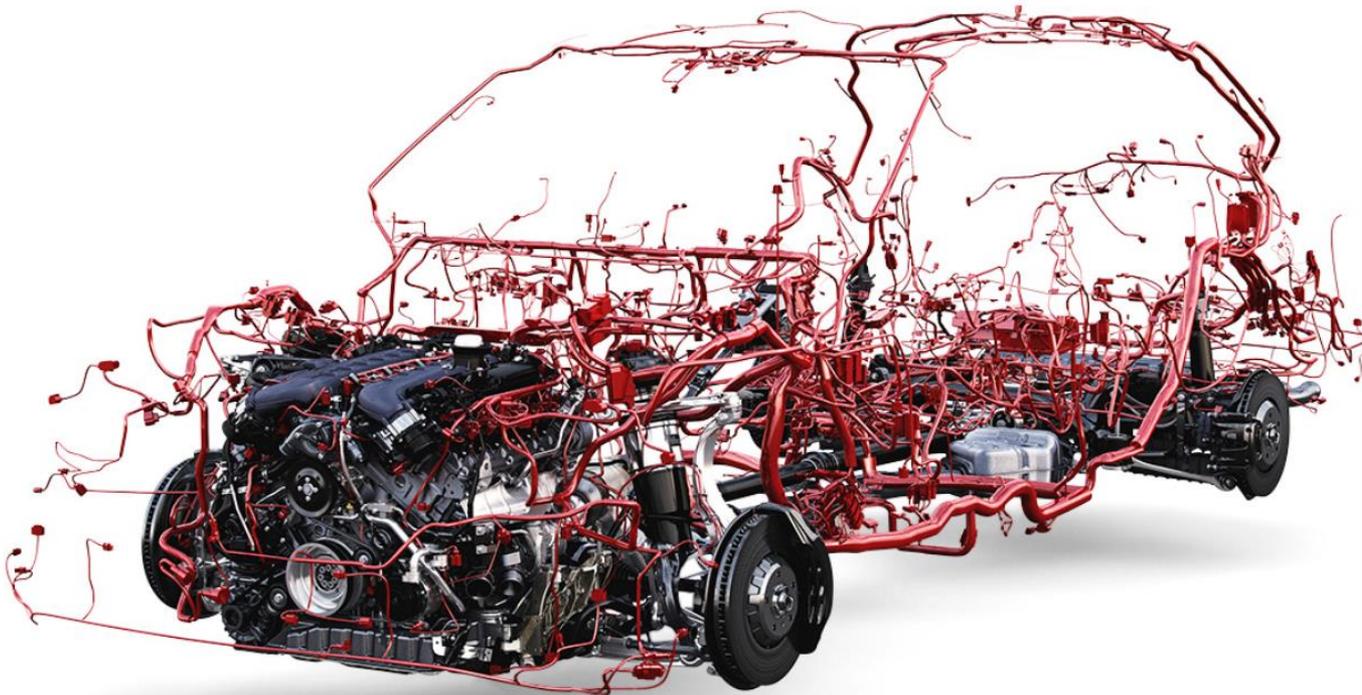
-  **Kohlenstofffaserverstärkter Kunststoff (CFK)**
Carbon fiber-reinforced plastic (CFRP)
-  **Aluminium-Profil**
Aluminum section
-  **Aluminium-Blech**
Aluminum sheet
-  **Aluminium-Guss**
Aluminum castings



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Repair Complexity

“25 Miles of Wiring”



Position Statement

Subject: Pre- and Post- Scanning of Collision Vehicles

Subaru of America, Inc., October 2018 - With each new model, Subaru makes advancements in technology that assist in the operation and safety of our vehicles. These advancements incorporate different sensors, cameras, control units, as well as other components, to assist with the functionality of the vehicle. They are a critical part of vehicle operation and the safety features in each Subaru vehicle.

In the event of a collision, these components could incur damage, which may trigger diagnostic trouble codes (DTC), but may not be evident via a warning light on the instrument cluster. It is imperative that these components be evaluated after a collision to ensure the vehicle is completely repaired. If these components are not evaluated, it could have a direct effect on vehicle operation and safety.

For Subaru vehicles from model year 2004 and forward involved in a collision, Subaru collision repair procedure requires that pre-repair scanning be performed. Pre-scanning will reveal DTCs for items that are not functioning properly in the vehicle. It allows a shop to identify any issues early in the estimate process, allowing a more complete estimate and encompassing repair process.

Additionally, Subaru collision repair procedure also requires that post-repair scanning be performed on these vehicles. Post scanning is critical in ensuring the malfunctioning items have been repaired and there are no remaining DTCs. It may also assist in assuring the appropriate calibrations and reinitializations have been performed.

To accurately determine whether DTCs are present in a vehicle, Subaru recommends the use of the Subaru SSMA4 diagnostic tool. Information regarding the purchase of the Subaru SSMA4 diagnostic software application and Denso DST-I interface device can be found in the Subaru Technical Information System (STIS) at <https://techinfo.subaru.com> > Information > Special Tool Information. If a Subaru SSMA4 diagnostic tool is not available, Subaru recommends the use of an asTech™ device. The asTech™ device performs a diagnostic scan remotely using a genuine Subaru scan tool. Information regarding the purchase of the asTech™ tool can be found at <https://asTech.com/>. Subaru does not recommend the use of a generic scanning device as we cannot guarantee the content or accuracy. Always refer to the applicable Subaru Service Manual or Technical Service Bulletin (TSB) for the most up to date repair procedures.

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Information Portals

- Illustrate the various locations which act as portals to the repair information
 - Identify the various source information portals
 - What are the differences with OEM direct information versus information found on the portals
 - What criteria is used to determine which is either appropriate or not

The screenshot displays the OEM1STOP TECHINFO SITE interface. At the top, there are navigation buttons for 'Home' and 'Position Statements'. Below this, there are several categorized sections for repair information: 'Clearcoat Blending', 'Clip Repairs', 'Wheel Reconditioning', and 'Vehicle Repair Scanning'. Each section contains logos of various automotive brands. A central banner features the 'MOPAR' logo and the 'TECH AUTHORITY' logo, along with contact information: '800-890-4038' and 'Cart: 0 ITEM(S) - \$0.00'. A search bar is visible with the text 'SEARCH' and a magnifying glass icon. Below the search bar, there is a navigation menu with options like 'Home', 'Online Subscriptions', 'Owner Manuals', 'Service Manuals', 'Diagnostics Manuals', 'Wiring Manuals', 'Body Repair Manuals', 'Technical Training', 'Training Materials', 'Collision/Paint/Sheet Me', 'Heritage', and 'Complete eCatalog'. The search results for 'Online Subscriptions' are displayed, showing three options: '1 DAY SUBSCRIPTION TO TECH AUTHORITY ONLINE' (USD \$26.95 per unit), '3 DAY SUBSCRIPTION TO TECH AUTHORITY ONLINE' (USD \$35.00 per unit), and '7 DAY SUBSCRIPTION TO TECH AUTHORITY ONLINE' (USD \$70.00 per unit). Each option includes a 'Preview TechAuthority On-line' link and an 'ADD TO CART' button.

Identifying the steps

Collision Position Statement
December 10, 2018

PRE- AND POST-DIAGNOSTIC SCANNING DURING A COLLISION REPAIR

Ford Motor Company vehicles contain many state-of-the-art features that provide occupant safety and enhance the driving experience. During collision repairs, it is critical the proper function of these systems and features be restored back to pre-accident condition and performance. Ford defines a collision as damage that exceeds minor outer body panel cosmetic distortion.

All Ford Motor Company vehicles from and including model year 2010 forward involved in a collision require a pre-repair diagnostic scan during the estimation phase of a collision repair to properly identify all required repairs. During the repair process, certain modules and other system components may require calibration or initialization to properly complete the repair. Additionally, the vehicle must have a post-repair diagnostic scan completed after the vehicle has been repaired to verify that new faults have not been introduced in the course of the repair and to verify that the vehicle has been fully repaired. The following points show why a diagnostic scan is crucial to the proper repair of the vehicle:

1. **Preliminary diagnostic scans provide a baseline to the condition of the systems on the vehicle, and what concerns may need to be addressed during the vehicle repair plan development.**
2. **Not every malfunction will illuminate a malfunction warning light (MIL) or message center warning.**
3. **A system may require a certain number of drive or function cycles in order to set a warning light or manifest a concern.**
4. **Low battery voltage may allow for numerous Diagnostic Trouble Codes (DTCs) to set.**

It is important to utilize Ford repair procedures for all collision repairs to ensure quality results. Ford also recommends the use of the Integrated Diagnostic System (IDS) or Ford Diagnosis and Repair System (FDRS) to perform all vehicle diagnostic testing, module programming, and system calibrations during collision repairs. Ford dealer-owned body shops can access service information, training and diagnostic scan tool support through the Professional Technician School at www.fordtechnicianschoolconnection.com and independent collision repairs can find information at www.motorsporttechnica.com.

Ford Motor Company vehicles are designed and built to provide optimum fit, function, safety and structural integrity. For this reason, Ford Motor Company does not approve the use of aftermarket, recycled, salvaged, or reconditioned parts. The quality, performance and safety of these parts cannot be verified and may result in substandard repairs, which can inhibit proper vehicle function and cause erroneous DTCs. Only by using Ford original equipment collision parts can you be assured of the part's fit, finish, quality and safety.

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| SERVICE CODE | DEFINITION | SERVICE CODE | DEFINITION |
|--------------|------------|---|------------|
| 111 | 11 or | System PASS | |
| 412 | 12 r | Cannot control rpm during Self-Test high rpm check | |
| 411 | 12 r | Cannot control rpm during Self-Test low rpm check | |
| 211 | 14 c | PIP circuit failure | |
| 511 | 15 o | EEC processor Read Only Memory (ROM) test failed | |
| 512 | 15 c | EEC processor Keep Alive Memory (KAM) test failed | |
| 213 | 18 r | SPOUT1 circuit open | |
| 212 | 18 c | Loss of IOM input to processor/SPOUT1 circuit grounded | |
| 513 | 19 o | Failure in EEC processor internal voltage | |
| 116 | 21 or | Engine Cooling Temperature (ECT) sensor out of Self-Test range | |
| 120 | 22 or | Manifold Absolute Pressure (MAP) sensor out of Self-Test range | |
| 121 | 23 or | Throttle Position (TP) sensor out of Self-Test range | |
| 114 | 24 r | Air Charge Temperature (ACT) sensor out of Self-Test range | |
| 225 | 23 r | Knock not sensed during Dynamic Response Test | |
| 836 | 26 r | Transmission Oil Temperature (TOT) sensor out of Self-Test range (E40C) | |
| 452 | 29 c | Insufficient input from the Vehicle Speed Sensor (VSS) | |
| 327 | 31 or | EVF circuit below minimum voltage | |
| 328 | 32 or | EVF voltage below closed limit | |
| 332 | 33 r | EGV valve opening not detected | |
| 334 | 34 or | EVF voltage above closed limit | |
| 337 | 35 or | EVF circuit above maximum voltage | |
| 172 | 41 r | HEGO sensor circuit indicates system lean | |
| 144 | 41 c | No HEGO switching detected | |
| 173 | 42 r | HEGO sensor circuit indicates system rich | |
| 211 | 44 r | Thermostat air system inoperative | |
| 312 | 45 r | Thermostactor air upstream during Self-Test | |
| 313 | 46 r | Thermostactor air not bypassed during Self-Test | |
| 633 | 47 o | 4 x 4 switch is closed (E40C) | |
| 617 | 49 c | 1-2 shift error (E40C) | |
| 116 | 51 or | ECT indicated -40°F/circuit open | |
| 519 | 52 o | Power Steering Pressure Switch (PSPS) circuit open | |
| 521 | 52 r | PSPS circuit did not change states | |
| 123 | 53 or | TP above maximum voltage | |
| 113 | 54 or | ACT indicated -40°F/circuit open | |
| 619 | 59 c | TOT indicated 200°F/circuit open (E40C) | |
| 618 | 59 c | 2-3 shift error (E40C) | |
| 117 | 61 or | ECT indicated 254°F/circuit grounded | |
| 628 | 62 c | Converter clutch error (E40C) | |
| 122 | 63 or | TP circuit below minimum voltage | |
| 112 | 64 or | ACT indicated 254°F/circuit grounded | |
| 636 | 65 c | Override Cancel Switch (OCS) not changing state (E40C) | |
| 636 | 66 c | TOT indicated 200°F/circuit grounded (E40C) | |
| 171c | 67 o | Neutral Drive Switch (NDS) circuit open; A/C ON (Manual) | |
| 174c | 67 o | No HEGO Switch, Adaptive Fuel at lean limit | |
| 174c | 67 o | Show HEGO switch time | |
| 171c | 67 o | Adaptive Fuel limit lean | |
| 181c | 67 o | Adaptive Fuel limit rich | |
| 654 | o | Manual Lever Position (MLP) Sensor not in Park position | |

KEY: r = New On, Error OR (NOC), c = Error, Backup (EB), o = Continues Memory

Service Information - Position Statement
Pre- and Post-Scan of Collision Vehicles
October 2016

General Motors takes the position that all vehicles being assessed for collision damage repairs must be tested for Diagnostic Trouble Codes (DTCs) during the repair estimation in order to identify the required repairs. Additionally, the vehicle must be retested after all repairs are complete in order to verify that the faults have been repaired and new faults have not been introduced during the course of repairs.

Even minor body damage or glass replacement may result in damage to one or more safety-related systems on the vehicle. Any action that results in loss of battery-supplied voltage and disconnection of electrical circuits requires that the vehicle is subsequently tested to ensure proper electrical function.

Many safety and security-related components, sensors and Electronic Control Units (ECUs) require calibration and/or learn when repaired. These systems must be repaired according to the corresponding GM repair procedures in Service Information (SI).

Technology Supported Diagnostic Aids

General Motors states that the method to correctly identify vehicle diagnostic trouble codes (DTCs) is by using the appropriate GM diagnostic software: **GS2** or **Tech2/TIS2Web**, each of which can scan a vehicle for all DTCs in one operation. GM diagnostic software is supported by one of the GM approved diagnostic scan tools (MCI or a 2534 device). GM does not recommend the use of other scan tools and cannot guarantee their accuracy. For a list of vehicle covered by these applications, refer to the GM technical document titled *Vehicles Supported by GS2 or Tech2/TIS2Web*.

GM is the factory source for all diagnostic and repair procedures, wiring diagrams and associated repair information.

GM Service Programming System (SPS) is the ECU programming application that provides calibration updates and guided learn procedures where required.

Any repairs performed without using Genuine GM parts and not following published GM collision repair procedures may result in erroneous DTCs and expose vehicle owners and occupants to unnecessary risk. GM collision repair information can be accessed for free on genparts.com or is available through a GMIS subscription.

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GM DIAGNOSTIC AND PROGRAMMING

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FOR MORE INFORMATION, CALL:
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TIS2Web

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GM OBD I DIAGNOSTIC CODES

| DTC | DESCRIPTION | DTC | DESCRIPTION |
|-----|---|-----|---|
| 13 | Oxygen Sensor (O2s) Circuit - open circuit | 42 | Igniter Control (IC) Bypass Error (310X VIN) |
| 14 | Engine Coolant Temperature (ECT) Sensor Circuit - high temperature | 43 | Knock Sensor (KS) circuit - spark control |
| 15 | Engine Coolant Temperature (ECT) Sensor Circuit - low temperature | 44 | Oxygen Sensor (O2s) Circuit - lean exhaust indicated |
| 19 | System Voltage High | 45 | Oxygen Sensor (O2s) Circuit - rich exhaust indicated |
| 17 | Camshaft Position Sensor Circuit Error | 46 | Power Steering Switch Circuit - Power Steering Switch Circuit |
| 19 | Intermittent TX Reference Signal | 51 | EPROM Error |
| 21 | Throttle Position (TP) Sensor Circuit - signal voltage high | 53 | Battery Voltage Error |
| 22 | Throttle Position (TP) Sensor Circuit - signal voltage low | 54 | Fuel Pump Circuit |
| 23 | Intake Air Temperature (IAT) Sensor Circuit - low temperature | 55 | Fuel Lean Monitor |
| 24 | Vehicle Speed Sensor (VSS) Circuit | 58 | Transaxle Fluid Temperature (TFT) Sensor - high temperature |
| 25 | Intake Air Temperature (IAT) Sensor Circuit - high temperature | 59 | Transaxle Fluid Temperature (TFT) Sensor - low temperature |
| 26 | Clutch - Driver (CDM) Circuit | 65 | Fuel Injector Circuit - lean current |
| 27 | Clutch - Driver Module (CDM) | 66 | A/C Refrigerant Pressure Sensor Circuit - low pressure |
| 28 | Clutch - Driver Module (CDM) | 67 | A/C Refrigerant Pressure Sensor Circuit - high pressure |
| 31 | PRNDL Error | 72 | Loss of Serial Data |
| 31 | Turbo Wastegate Overboost - 2.0L VIN | 72 | Vehicle Speed Sensor (VSS) Circuit - signal error (310X VIN) |
| 32 | Exhaust Gas Recirculation (EGR) Valve | 75 | Digital EGR #1 Solenoid Error |
| 33 | Manifold Absolute Pressure (MAP) Sensor Circuit - signal voltage high | 76 | Digital EGR #2 Solenoid Error |
| 33 | Mass Air Flow Sensor Circuit - high frequency | 77 | Digital EGR #2 Solenoid Error |
| 34 | Manifold Absolute Pressure (MAP) Sensor Circuit - signal voltage low | 79 | Transaxle Fluid Overtemp |
| 34 | Mass Air Flow Sensor Circuit - low frequency | 83 | Transaxle Component Error |
| 35 | Valve Seated Error | 83 | Igniter Control (IC) Signal Error |
| 36 | Ignition Control (IC) Signal Circuit Error | 85 | EPROM Error - faulty or incorrect calibration |
| 37 | TCC Brake Switch Error | 86 | Analog/Digital Error |
| 38 | Brake Switch Circuit | 87 | EEPROM Error |
| 39 | Torque Converter Clutch Circuit | 90 | TCC Error |
| 41 | TX Reference Circuit | 86 | Trans System Voltage Low |
| 41 | Ignition Control (IC) Timing Circuit Error (310X VIN) | 98 | Inhibit PCM Program |
| 42 | Knock Sensor (KS) circuit - spark timing | 99 | Inhibit PCM Program |

Identifying the steps

The screenshot shows the OEMISTOP TECHINFO SITE. It features a blue header with the site name and navigation links for Home and Position Statements. Below the header, there are links for CRASH REPAIR INFO and NHTSA NHTSA Vehicle Recall Check. A central navigation menu includes buttons for Collision, Mechanical, Hybrid/Electric, and Vehicle Diagnostic Software. To the right, there are sections for Position Statements, Instruction Sheets, and Collision Newsletters, each with a list of items and their corresponding target volumes.

The screenshot shows the FORD SERVICE INFO website. The header includes the Ford logo and navigation links for Home, Service Info, Training, Key Code, Reprogramming, Diagnostic Tool Support, Free Resources, My Subscriptions, and My Account. The main content area is titled "Free Resources" and lists several categories: Body Repair Manuals, OBDII Theory & Operation, Owner Information, Instruction Sheets, Paper/CD Manuals, Quick Guides, and Tools & Equipment. The footer contains copyright information for 2019 Ford Motor Company and various legal links.

The screenshot shows the FORD SERVICE INFO website's "Instruction Sheets" section. It features a search form with dropdown menus for "Select Your Year" and "Select Your Model", and a text input field for "Enter Your VIN". There are "Find My Vehicle" and "Reset" buttons. The footer includes copyright information for 2019 Ford Motor Company and various legal links.

The screenshot shows the HELMINC website, which is described as "The #1 Source For OEM Owner & Service Manuals". The header includes the Helminc logo and navigation links for Customer Service, View Cart, Check Order Status, and Cart Items. The main content area features a search form with dropdown menus for "Select a Make", "Select a Model", "Select a Year", and "Select a Document Type". Below the search form, there is a grid of logos for various automotive brands including Acura, Honda, Nissan, Ford, Mercury, Powertrain, Buick, Chevrolet, GMC, GM, Infiniti, Chrysler, Pontiac, Saab, Saturn, Lexus, Acura, Toyota, and Hyundai. The footer includes social media links for Facebook and Twitter, and a "Join Now" button.

The Insurance Policy

- Although it is a separate and distinct contract that the customer owns with the insurance company, it is important for the repairer to know what some of the terms and definitions mean
- This information may be used against the repairer even though the repairer has absolutely no obligation to work with the insurer
 - Actual Cash Value
 - Limits of liability
 - Duties In the event of a loss

Personal Auto Policy

Agreement

In return for pre-payment of the premium and subject to all the terms of this policy, we agree with you as follows:

Definitions

The terms defined below appear in **bold type** throughout this policy.

1. Throughout this policy, "**you**" and "**your**" refer to:
 - a. The person(s) named on the Declarations page, and
 - b. His or her spouse if a resident of the same household.
2. "**We**", "**us**" and "**our**" mean the Company as named on the Declarations page.
3. For purposes of this policy, a private passenger type auto shall be considered to be owned by a person if leased:
 - a. under a written agreement to that person, and
 - b. for a continuous period of at least 6 months.
4. "**Actual cash value**" means the amount which it would cost to repair or replace damaged property with material of like kind and quality, less allowance for physical deterioration and depreciation.

The Insurance Policy

- Leased vehicles - What does the lease contract specify for the use of alternative parts? The leased vehicle is considered to be an owned vehicle in this example

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The Insurance Policy

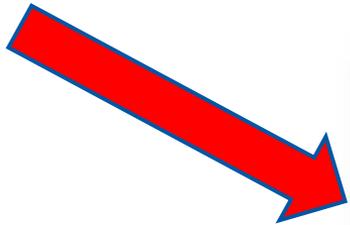
- What is covered?
- What is excluded?
- What is the limit of the coverage?

| | |
|---|---|
| Part A - Liability Coverage | 1 |
| Insuring Agreement | 1 |
| Supplementary Payments | 1 |
| Exclusions | 1 |
| Limit of Liability | 2 |
| Out of State Coverage | 2 |
| Financial Responsibility Required | 2 |
| Other Insurance | 2 |



The Insurance Policy

- The insuring agreement identifies what the insurance policy covers unless specifically excluded



Part D - Coverage For Damage To Your Auto

Insuring Agreement

We will pay for direct and accidental loss to **your covered auto**, including its equipment, minus any applicable deductible shown on the Declarations page, provided the Declarations page indicates **Collision** and Comprehensive Coverages are in effect.

1. "**Collision**" means the upset of, or **collision** with another object by, **your covered auto**. We will pay for loss caused by **collision** only if the Declarations page indicates that **Collision** Coverage is provided. However, all other losses are considered Comprehensive losses and include, but are not limited to:

- | | |
|---------------------------------|-------------------------------------|
| a. missiles or falling objects, | f. hail, water or flood, |
| b. fire, | g. malicious mischief or vandalism, |
| c. theft or larceny, | h. riot or civil commotion, |
| d. explosion or earthquake, | i. contact with bird or animal, and |
| e. windstorm, | j. breakage of glass. |

If breakage of glass is caused by a **collision**, you may elect to have it considered a loss caused by **collision**.

If there is a loss to a **non-owned auto**, we will provide the broadest coverage applicable to **your covered auto** shown on the Declarations page.

The Insurance Policy

□ Exclusions

Exclusions

We will not pay for:

1. loss to **your covered auto** which occurs while it is used to carry persons or property for a fee. This Exclusion does not apply to a share the expense car pool;
2. damage due and confined to:
 - a. wear and tear,
 - b. freezing,
 - c. mechanical or electrical breakdown or failure, or
 - d. road damage to tires.

This Exclusion does not apply if the damage results from the total theft of **your covered auto**;
3. loss due to or as a consequence of:
 - a. radioactive contamination,
 - b. discharge of any nuclear weapon (even if accidental),
 - c. war (declared or undeclared),
 - d. civil war,
 - e. insurrection, or
 - f. rebellion or revolution;
4. loss to tapes, records or other devices for use with equipment designed for the reproduction of sound unless listed on the Declarations page;
5. loss to a canopy, camper body or **trailer** not shown on the Declarations page;
6. loss to:
 - a. TV antennas,
 - b. awnings or cabanas, or
 - c. equipment designed to create additional living facilities;
7. loss to any of the following or their accessories:
 - a. citizens band radio,
 - b. two-way mobile radio,
 - c. telephone,
 - d. scanning monitor receiver (including radar detectors).

This exclusion does not apply if the equipment is permanently installed in the opening of the dash or console of the auto. This opening must be normally used by the auto manufacturer for the installation of a radio;

8. loss to any **custom furnishings or equipment** in or upon any vehicle. "Custom furnishings or equipment" means equipment, devices, accessories, enhancements and changes, other than those that are installed by the vehicle manufacturer, which alter the appearance or performance of a vehicle. This includes but is not limited to any electronic equipment, antennas, and other devices used exclusively to send or receive audio, visual, or data signals, or play back recorded media, other than those that are installed by the vehicle manufacturer, which are permanently installed in **your covered auto** or **non-owned vehicle** using bolts or brackets, including slide-out brackets.

This exclusion does not apply to equipment permanently installed in the opening of the dash or console of the vehicle. This opening must be normally used by the vehicle manufacturer for the installation of a radio;

9. Exclusions 4, 6, 7 and 8 do not apply to equipment listed on the Declarations page;
10. loss to any **non-owned auto** or any vehicle used as a temporary substitute for a vehicle you own, when used by **you** or any **family member** without a reasonable belief that **you** or that **family member** are entitled to do so;
11. loss to any **non-owned auto** being maintained or used by any person while employed or otherwise engaged in the business of:
 - a. selling,
 - b. repairing,
 - c. servicing,
 - d. storing, or
 - e. parkingvehicles designed for use on public highways. This includes road testing and delivery;

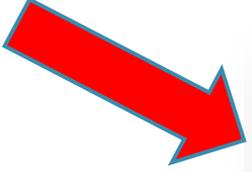
The Insurance Policy

□ Exclusions

12. loss to any non-owned auto being maintained or used by any person while employed or otherwise engaged in any business not described in Exclusion 11. This Exclusion (12.) does not apply to the maintenance or use by you or any family member of a non-owned auto which is a private passenger auto or trailer;
13. loss to any vehicle due to:
 - a. taking by any governmental authority,
 - b. conversion, embezzlement or secretion by any person who has the vehicle due to any lien, rental or sales agreement;
14. loss due to the ownership, maintenance or use of any motorized vehicle in or in preparation for any competitive speed test, race or contest;
15. loss intentionally caused by an insured person, whether caused directly, indirectly or at the direction of an insured person;
16. any reduction in the value of your covered auto or any non-owned auto after it has been repaired as compared to its value before it was damaged; or
17. loss to any all-terrain vehicle (ATV) or recreational off-road vehicle or their parts, equipment and accessories.

The insurance Policy

□ Limits of Liability



Limit of Liability

Our limit of liability for loss will be the least of the:

1. actual cash value of the stolen or damaged property,
2. amount necessary to repair or replace the property, or
3. any applicable Limit of Liability or Stated Amount vehicle coverage elected by you.

However, the most we will pay for loss to any non-owned auto which is a trailer is \$500.

Payment of Loss

We may pay for loss in money or repair or replace the damaged or stolen property.

We may, at our expense, return any stolen property to:

1. you, or
2. the address shown in this policy.

We may keep all or part of the property at an agreed or appraised value.

The Insurance Policy

- Actual Cash Value – The amount which it will cost to repair or replace damaged property with material of like kind and quality less allowance for physical deterioration and depreciation

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2. "We", "us" and "our" mean the Company as named on the Declarations page.
3. For purposes of this policy, a private passenger type auto shall be considered to be owned by a person if leased:
 - a. under a written agreement to that person, and
 - b. for a continuous period of at least 6 months.
4. **"Actual cash value"** means the amount which it would cost to repair or replace damaged property with material of like kind and quality, less allowance for physical deterioration and depreciation.

The Insurance Policy

- **Actual Cash Value** – The amount which it will cost to repair or replace damaged property with material of like kind and quality less allowance for physical deterioration and depreciation
- The determination as to the prior condition of the part, the degree of physical deterioration or the amount to be depreciated must be identified and communicated to the policy owner by the insurance representative
- This should NEVER be the responsibility of the repairer since they have NO responsibility to the insurance policy
- The sample policy makes no reference to the replacement of OEM parts with counterfeit parts produced to mimic the OEM

The Insurance Policy

□ Appraisal and Arbitration



Appraisal

1. if you and we fail to agree on the amount of loss, either party may make written demand for an appraisal;
2. each party will select an appraiser and notify the other party of each appraiser's identity within 20 days after the demand is received;
3. the appraisers will select a competent and impartial umpire;
4. if the appraisers are unable to agree upon an umpire within 15 days after receiving notice of the identity of the appraisers (Item 2. above), you or we can ask a judge of a court of record in the county where your residence is located to select an umpire;
5. the appraisers shall then appraise the loss and submit to us written reports stating separately the loss to each item;
6. if the appraisers' reports are in agreement, we will pay the agreed upon amount;
7. if the appraisers cannot agree, they will submit reports to the umpire, and we will pay the amount agreed upon by any two; and
8. each party will pay the appraiser it has chosen and will pay an equal share of the expenses for the umpire and all other expenses of the appraisal.

The Insurance Policy

- Additional duties for coverage for damage to your auto

Additional Duties For Coverage For Damage To Your Auto

A person seeking Coverage for Damage To Your Auto must also:

1. take reasonable steps after loss to protect your covered auto and its equipment from further loss. We will pay reasonable expenses incurred to do this;
2. promptly notify the police if your covered auto is stolen; and
3. permit us to inspect and appraise the damaged property before its repair or disposal.

Negotiation Strategies

- Developing negotiation strategies that combine the OEM information with general repair
 - How the repair information needs to be used to ensure the proper repair of the vehicle
 - Completing the diagnostic procedures
 - Identifying the requirements for the repair
 - Developing repair judgment times if no time is identified in the information provider estimating platform
 - Document the requirements electronically for the file
 - Communicate repair requirements to the technician
 - As needed, share the information with the insurer or other TPP for payment relative to vehicle needs

Negotiation Strategies cont'd

- ❑ Documentation and identifying when negotiating is essential in “selling” the repair plan
- ❑ The repair planner may still hear a “no” relative to recognition of what **MUST BE** performed even when identified in OEM documentation
- ❑ This can come from an insurer not wanting to set a precedent that they pay for particular operations or that they just refuse because “nobody else charges for that”
- ❑ It’s about repairing vehicles correctly not about feelings
- ❑ Leveraging the customer and their influence on the insurer as the owner of the policy may be necessary but sometimes difficult to initiate

** Learning negotiation skills both basic and then advanced will help this process significantly. This includes communicating using both verbal and with non-verbal including body language and posture.*

Explaining the Vehicle's Needs

- Information can be used to better explain the need to have all required operations recognized as essential to the proper repair of the vehicle. It's very much like a doctor going in to do surgery without an X-ray or CAT scan. They wouldn't risk the patient. Repairers have the same responsibility.
 - Identifying “**critical**” non-negotiable repair items is key to the repair planner's success on behalf of the shop
 - Developing examples of prior catastrophic failures of repairs that weren't completed in accordance with OEM procedures or by demand influenced by the direction of insurance personnel
 - Proper documentation (no charge items)

Explaining the Vehicle's Needs Cont'd

- ▣ Proper documentation (no charge items) when in DRP relationships
 - It's imperative that all operations are listed on the repair plan
 - There can be implications relative to safety, the longevity of the repair and liability that can be associated with operations that aren't listed
 - The insurer/TPP may not want something documented because it sets a precedent – concessions for paint and materials are a great example. They will give a concession but want to make sure that their threshold still appears on their estimate. That's fine, but there should be good notes about what the concession is for in the repair plan and final invoice. This protects the shop especially if the item is a repair critical application.

Developing a Work File

- Create repair work “files” which detail all repair process steps, the repair plan, documentation of contacts and conversations
 - What is essential repair plan documentation once identified must be contained in the file to make sure that the shops liability potential is diminished
 - Creating the documentation package
 - List ALL conversations
 - Create electronic “tracks” for everything that has been done or said
 - Use consistent and repeatable processes so that it becomes habit
 - Have the discipline to ensure that the processes are followed

Using Effective Word Tracks

- Develop word tracks which support the repairer in attempts to have all documented repair procedures properly reimbursed by third party payers
 - ▣ They should be created to identify the “risk” that is created not fixing something correctly according to the OEM requirements
 - ▣ Using words like “critical” and “potential risk” or “catastrophic failure potential” are key to the repair planner’s success
 - ▣ Identifying the number of times that the situation occurred with the same insurer/TPP is also important. It helps show intent or a pattern of behavior which can be measured by outside entities such as an insurance commissioner

Using Effective Word Tracks Cont'd

- ▣ Design templates that provide word tracks for different repair scenarios so that the shop personnel can be calibrated on positions that they will take on various situations
 - Featheredge, Block and Prime
 - Welded panel repair
 - Corrosion protection
 - Clearcoat Top and Tail
 - Structural pre-measuring to establish crash pulse route
 - Structural set up
 - Pull mapping

Using Effective Word Tracks Cont'd

- Develop letters, deficiency notices and positions that will be taken for specific repair opportunities and situations
- These reports identify the opportunities in the insurer estimate and are custom tailored to the specific deficiencies or omissions

| | |
|---|---|
| <p>Deficient Damage Analysis Report</p> <p>To whom it may concern (or insert name and insurer when known)</p> <p>Please be advised that we: (pick and use the most appropriate or create a statement that best fits your circumstance)</p> <ol style="list-style-type: none">1. Created a damage analysis report also known as an estimate which was subsequently reduced in scope and pricing by your company – representative's name2. Reviewed a damage estimate prepared by your company – adjuster name assigned to the claim) and after further review of the operations have identified that the estimate of damages is insufficient to repair the vehicle to pre-loss condition, appearance and safety.3. Discussed a damage estimate with your staff adjuster/appraiser name and were unable to reach agreement as they neglected to identify completely all damages that need to be corrected4. Have been contacted by a TPA – Third Party Administrator representing your company who has decided by reviewing a series of photographs and without actually viewing the vehicle in person that our charges, operations or procedural repair requirements aren't appropriate for whatever reason. <p>As highly trained collision repair experts, we have determined that the needs of the vehicle have been carefully identified using industry standards of repair and original equipment manufacturer required procedures. Your damage estimate is deficient in one or more areas which will be outlined in this Deficient Damage Analysis Report or DDAR. Furthermore, the safety, longevity and warranty that are all necessary in restoring the vehicle and the customer to pre-loss condition for the consumer will be compromised if your recommended repair estimate is followed, leaving the consumer's vehicle in a condition less than it was prior to the loss.</p> <p>It is our responsibility as repair professionals to restore the structural, safety system, mechanical, and cosmetic visual appearance and functionality of the vehicle. This includes items that are mandated for performance by the Federal Motor Vehicle Safety Standards known as FMVSS, such as glass, lighting, braking, fuel system, safety system i.e. airbags, seatbelts and other mechanical, electrical and electronic systems. As repair experts, we have documentation and experience with the required procedures that must be followed to restore these systems. Additionally with a critical eye for detail which is necessary to restore the fit, flush gap and paint luster and color match of parts, components and systems we repair. Our damage analysis report also known as a "repair plan" allows for all of these to be identified and the proper method of repair to be performed within the times we specify, replacement as warranted and adjustment and/or recalibration as required. Your damage estimate is deficient in doing so.</p> | <p>With that being identified as a problem with your estimate, please review the following areas that we have determined to be deficient through our expert analysis and provide written proof that there is either no need to perform what has been identified or your decision to decline to pay for the necessary repair operations. Our supporting documentation including original equipment manufacturer (OEM) repair data, OEM repair requirements and OEM position statements as well as supporting documentation from information providers and OEM recognized material providers, part manufacturers and vendors is available for your review.</p> <p>This documentation is used in the formulation of our comprehensive and complete repair plan identified for the damages. Also included are the specific areas retrieved from your estimating system provider P page logic which have been either intentionally or accidentally omitted in the initial estimate you provided to our representative. These include all of the "not included operations" which are often overlooked in an effort to reduce the cost of repairs. However, many of which have to be performed to return the vehicle to pre-loss condition.</p> <p>Industry organizations have gone to exhaustive research to be sure that these are in fact necessary and that information has also been identified and included.</p> <p>Identify by line each of the items including shortage in labor times clearly identified numerically and with detail</p> <p>We will be providing a copy of this Deficient Damage Analysis Report to our customer which will allow them to have an educated discussion with you about the repair processes and how you improperly formulated the degree to which their vehicle was damaged and the associated costs. We are open to discussion about the times that we have identified but certainly not about required repair procedures. Lack of recognition and proper repair of these areas could compromise the vehicle damageability and performance in future losses. As repair professionals we will not do that and don't expect that you would want that either.</p> <p>We would welcome further dialog with you about the deficiencies identified in your damage and payment assessments for this vehicle _____ and can be reached at:</p> <p>Respectfully,</p> <p>_____</p> |
|---|---|

Developing a Long-Term Position

- Create an overall reusable long-term position on requiring third party payers to properly pay for necessary repairs
 - Designing a sustainable set of business practices that will reinforce the need to be adequately reimbursed for repair processes required for the proper repair of the vehicle

| Collision Repair Facility SOP | |
|-------------------------------|--|
| Repair Plan Processing | |
| 1 | <p>Complete proper vehicle identification, photos and identification of customer request</p> <ol style="list-style-type: none"> Obtain VIN from final plan Complete repair photos Identify correct year and production date Identify ALL options Obtain quotes for repair information for vehicle, exterior, trim, and parts using repair order and parts catalog Identify any equipment that have been removed Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 2 | <p>Identify any disassembly requirements with the tech responsible for disassembly</p> <ol style="list-style-type: none"> Be marked completely Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 3 | <p>Overight and direction on the disassembly process</p> <p>Identify what parts on the damaged vehicle are needed</p> <ol style="list-style-type: none"> Be marked completely Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 4 | <p>Refer to BATE CODES as the parts are being measured and determined to stock need.</p> <ol style="list-style-type: none"> Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 5 | <p>If refinishing is required be sure to add:</p> <ol style="list-style-type: none"> Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 6 | <p>Be sure that all required "add to" items are documented.</p> <ol style="list-style-type: none"> Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 7 | <p>Print any reference materials referenced in developing the repair plan for material and price usage</p> <ol style="list-style-type: none"> Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |
| 8 | <p>Identify all pricing processes and complete appropriate notes as requested for the damage that is observed.</p> <ol style="list-style-type: none"> Identify what parts on the damaged vehicle are needed Be sure to identify clip, bolts and other hardware for the repair |

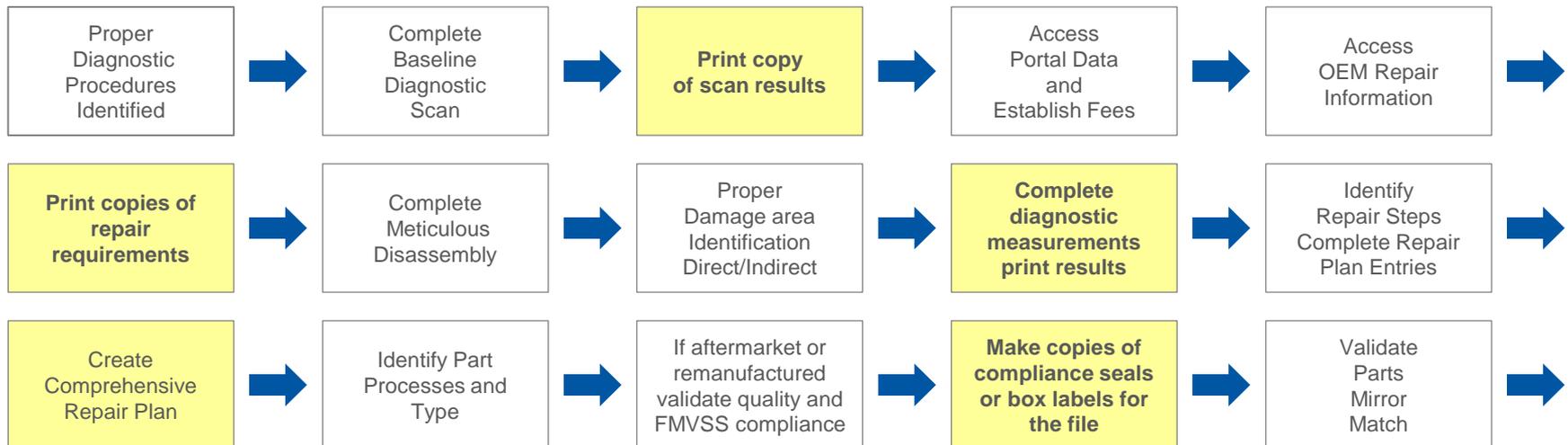
| Collision Repair Facility SOP | |
|-------------------------------|---|
| 9 | <p>Structural realignment</p> <ol style="list-style-type: none"> Complete all manufacturer required steps Print and copy the frame, column, corners and step file Obtain all measurements that are seen through initial visual inspection Print pre-alignment program prior to beginning the realign process |
| 10 | <p>Multi-directional pulling</p> <ol style="list-style-type: none"> Be sure that each pull is documented Be sure that each measurement is taken at each individual pull and that each is verified through the measurement Print timing and pull program measurements should be documented |
| 11 | <p>Be sure to document peripheral damage caused by clamping and make sure that the repair of these items is changed on the repair plan.</p> <ol style="list-style-type: none"> Print timing and pull program measurements should be documented Be sure that each measurement is taken at each individual pull and that each is verified through the measurement Print timing and pull program measurements should be documented |
| 12 | <p>Creating the repair plan</p> <ol style="list-style-type: none"> Complete repair plan to necessary Print timing and pull program measurements should be documented Be sure that each measurement is taken at each individual pull and that each is verified through the measurement Print timing and pull program measurements should be documented |
| 13 | <p>No Delivery From the Dealer</p> <p>Delivery should always be made by repair center staff</p> <ol style="list-style-type: none"> Complete repair plan to necessary Print timing and pull program measurements should be documented Be sure that each measurement is taken at each individual pull and that each is verified through the measurement Print timing and pull program measurements should be documented |

| ATI Collision Division | |
|---|---|
| Negotiation Preparation | |
| Preparing for any potential negotiation scenario | |
| 1 | <p>Identify the topic(s) that will be discussed and what your position(s) need to be.</p> <p>Prepare a list of issues that will be discussed and identify if there have been prior instances where they have been identified and what the result was.</p> |
| 2 | <p>Identify the person(s) that you will be discussing the issues with.</p> <p>Is this a person that you normally have communications with? If not, some additional preparation steps might include finding out if any others in your organization have had interactions with this person and what the result was.</p> |
| 3 | <p>Complete your "fact gathering" so that you have all necessary information that backs up your position.</p> <p>What information will support your position and where will it come from? OEM research, ALLDATA. Be sure that it is documentation that you can copy for presentation to the opponent.</p> |
| 4 | <p>Identify any documents that have been previously used or industry links to information that is new.</p> <p>If you have used documents previously is it still accessible? If it is electronic, do you have a storage location where it can be kept for future use? If not, create a portal for the information.</p> |
| 5 | <p>Create a file folder for each manufacturer so that needed negotiation back up documentation is "at the ready" when needed.</p> <p>Keeping a file location for each manufacturer is a great way to prepare for the negotiable negotiation scenario. All documents should be copied and placed in the file for future use. It is also a good idea to categorize the information i.e. scanning, safety systems, airbag, recalls etc.</p> |
| 6 | <p>Build self-confidence by practicing the delivery of the information with coworkers or if none are available in front of a mirror.</p> <p>You must believe that you are capable of winning the negotiation. Negotiation, repetition, repetition or as other words, be consistent and repeatable to your delivery. Practice makes perfect.</p> |

| | |
|---|---|
| 7 | <p>Prepare for the delivery of the information</p> <ol style="list-style-type: none"> Is the item that you will be discussing needed? Is there documentation that supports your request? Can the vehicle be repaired properly without completing the item in question? What is the price associated with the operation? Has the customer been notified that there is an item that the insurer is calling into question? What are the potential counter points that the opponent might bring up and how will you address them? <p>Identify the topic that will be discussed</p> <p>Gather all supporting documentation that is specific to the vehicle in question highlighting and passages in the information that are appropriate for the discussion</p> <p>Identify if the operator(s) are required for proper vehicle repairs</p> <p>Identify what the total cost for the operation will be</p> <p>If there have been prior difficulties with the person(s) that you will negotiating with, be sure that the customer has all of the information that you have gathered and discuss the potential conflict with them prior to the meeting. That way they know that there are issues PRIOR to the insurer calling them.</p> <p>Don't forget that you must consider the oppositions counterpoints at least times to them but always decide on the merits of making a decision that is best for the customer.</p> |
| 8 | <p>Follow up making sure that all things that are requested are completed.</p> <p>Be sure to verify that technicians have completed any items that you have open time negotiating for. In the event that there is a negotiation on a great repair request, you don't want to lose credibility by not having what was negotiated and completed. That will hurt ALL future negotiations with this opponent</p> |
| 9 | <p>Be sure to provide a complete final bill with all information relative to the repairs and especially any contentious items that have been negotiated.</p> <p>A complete record is protection for all parties</p> |

Developing a Long-Term Position Cont'd

- Designing a sustainable set of business practices that will reinforce the need to be adequately reimbursed for repair processes required for the proper repair of the vehicle
- Sample process flow. The yellowed boxes are where a copy is made for the file.



Developing a Long-Term Position

1. **Create an electronic and paper master file** for the vehicle being repaired. This is a file that will accompany the repair order documentation. All printed copies that follow should be maintained in this file
2. Complete diagnostic scanning procedures and **print a copy of the initial results**. These serve as the baseline diagnostics that will be used in comparison to the post repair scan to validate successful repair of damaged systems and or parts.

Developing a Long-Term Position

3. Access the specific repair information for the damaged vehicle by VIN and identify the repair procedures identified by the OEM that address the areas, parts or systems to be repaired. **Print a copy of the OEM procedures and position statements.**
4. Complete a detailed comprehensive repair plan using the identified repair procedures required by the OEM. This should include the diagnostic measurements for structural damage and any criteria for repair or replacement. **Print a copy of the pre-structural realignment measurements.**

Developing a Long-Term Position Cont'd

5. Identify any part programs, part types and procedures. These should be very limited given the OEM position statements on the use of alternative parts. **Print a copy of any position statements relative to these parts for the file.**
6. If using alternative parts in accordance with any policy provisions provided by the insurer be sure they have documentation and are validated as meeting the FMVSS testing requirements post OEM manufacturing. This is critical on remanufactured parts. **Copy any seals or indicators of compliance for the file.**

(FMVSS 108
Example)



Standard No. 108: Lamps, Reflective Devices, and Associated Equipment

Scope and Purpose:

This standard specifies requirements for original and replacement lamps, reflective devices, and associated equipment. The purpose of this standard is to reduce traffic accidents and deaths and injuries resulting from traffic accidents, by providing adequate illumination of the roadway, and by enhancing the conspicuity of motor vehicles on the public roads so that their presence is perceived and their signals understood, both in daylight and in darkness or other conditions of reduced visibility.

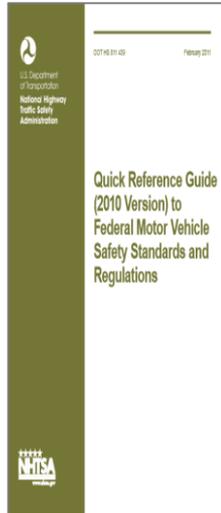
Application:

- (a) Passenger cars, multipurpose passenger vehicles, trucks, buses, trailers, (except pole trailers and trailer converter dollies), and motorcycles
- (b) Retroreflective sheeting and reflex reflectors
- (c) Replacement lamps, reflective devices, and associated equipment

<https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/fmvss-quickrefguide-hs811439.pdf>

Developing a Long-Term Position Cont'd

(FMVSS
108
Example)



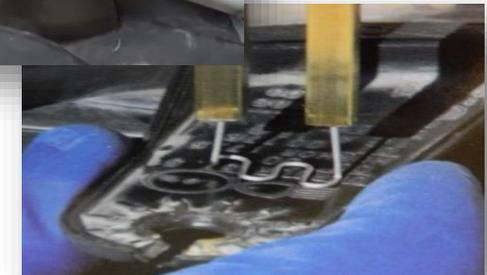
Standard No. 108: Lamps, Reflective Devices, and Associated Equipment

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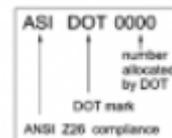
Application:

- (a) Passenger cars, multipurpose passenger vehicles, trucks, buses, trailers, (except pole trailers and trailer converter dollies), and motorcycles
- (b) Retroreflective sheeting and reflex reflectors
- (c) Replacement lamps, reflective devices, and associated equipment



<https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/fmvss-quickrefguide-hs811439.pdf>

- ❑ Repaired parts are required to meet the performance expectations of the new undamaged part (ask if they do)
- ❑ Repairs need to meet the original requirements of the FMVSS



Federal Motor Vehicle
Safety Standards
(FMVSS)

Developing a Long-Term Position Cont'd

7. Share the information with the “interested parties” in the claim process and set repair expectations. This includes repair requirements, validation measurements and scanning results that have validate the repair positions taken. The documentation that has been collected to this point, five pieces in total, should be shared to eliminate questions relative to repair methodology.
8. In the event that there is a difference of opinion or a contrary position taken relative to the proper repair sequence, parts or procedures the information identified in this presentation will support the repair facility efforts to clarify positions needed to repair the vehicle properly.

Developing a Long-Term Position Cont'd

9. When working with an insurer generated “estimate” it has to be recognized that these “estimates” are woefully inadequate to repair the vehicle properly. Creating a Deficient Damage Analysis Report or DAR will provide the differences in what is presented by the insurer and what will actually repair it properly (blue print or repair plan). **A copy of this letter should be generated, copied and shared with the vehicle owner and the insurer.**

Deficient Damage Analysis Report

To whom it may concern (or insert name and insurer when known)

Please be advised that we: (pick and use the most appropriate or create a statement that best fits your circumstance)

1. Created a damage analysis report also known as an estimate which was subsequently reduced in scope and pricing by your company – representative's name
2. Reviewed a damage estimate prepared by your company – adjuster name assigned to the claim) and after further review of the operations have identified that the estimate of damages is insufficient to repair the vehicle to pre-loss condition, appearance and safety.
3. Discussed a damage estimate with your staff adjuster/appraiser name and were unable to reach agreement as they neglected to identify completely all damages that need to be corrected
4. Have been contacted by a TPA – Third Party Administrator representing your company who has decided by reviewing a series of photographs and without actually viewing the vehicle in person that our charges, operations or procedural repair requirements aren't appropriate for whatever reason.

As highly trained collision repair experts, we have determined that the needs of the vehicle have been carefully identified using industry standards of repair and original equipment manufacturer required procedures. Your damage estimate is deficient in one or more areas which will be outlined in this Deficient Damage Analysis Report or DDAR. Furthermore, the safety, longevity and warranty that are all necessary in restoring the vehicle and the customer to pre-loss condition for the consumer will be compromised if your recommended repair estimate is followed, leaving the consumer's vehicle in a condition less than it was prior to the loss.

It is our responsibility as repair professionals to restore the structural, safety system, mechanical, and cosmetic visual appearance and functionality of the vehicle. This includes items that are mandated for performance by the Federal Motor Vehicle Safety Standards known as FMVSS, such as glass, lighting, braking, fuel system, safety system i.e. airbags, seatbelts and other mechanical, electrical and electronic systems. As repair experts, we have documentation and experience with the required procedures that must be followed to restore these systems. Additionally with a critical eye for detail which is necessary to restore the fit, flush gap and paint luster and color match of parts, components and systems we repair. Our damage analysis report also known as a “repair plan” allows for all of these to be identified and the proper method of repair to be performed within the times we specify, replacement as warranted and adjustment and/or recalibration as required. Your damage estimate is deficient in doing so.

With that being identified as a problem with your estimate, please review the following areas that we have determined to be deficient through our expert analysis and provide written proof

that there is either no need to perform what has been identified or your decision to decline to pay for the necessary repair operations. Our supporting documentation including original equipment manufacturer (OEM) repair data, OEM repair requirements and OEM position statements as well as supporting documentation from information providers and OEM recognized material providers, part manufacturers and vendors is available for your review.

This documentation is used in the formulation of our comprehensive and complete repair plan identified for the damages. Also included are the specific areas retrieved from your estimating system provider P page logic which have been either intentionally or accidentally omitted in the initial estimate you provided to our representative. These include all of the “not included operations” which are often overlooked in an effort to reduce the cost of repairs. However, many of which have to be performed to return the vehicle to pre-loss condition.

Industry organizations have gone to exhaustive research to be sure that these are in fact necessary and that information has also been identified and included.

Identify by line each of the items including shortage in labor times clearly identified numerically and with detail

We will be providing a copy of this Deficient Damage Analysis Report to our customer which will allow them to have an educated discussion with you about the repair processes and how you improperly formulated the degree to which their vehicle was damaged and the associated costs. We are open to discussion about the times that we have identified but certainly not about required repair procedures. Lack of recognition and proper repair of these areas could compromise the vehicle damageability and performance in future losses. As repair professionals we will not do that and don't expect that you would want that either.

We would welcome further dialog with you about the deficiencies identified in your damage and payment assessments for this vehicle _____ and can be reached at:

Respectfully,

Closing Statement

- The repair shop must be protected from adverse decisions made that can compromise repair integrity, safety, quality and that can create predatory pricing by TPP entities
- Information relative to the required repair procedures repair steps, parts, and other factors must now be collected and used by repairers to validate their positions
- Care must be taken so that the relevant information is researched, copied and placed with the repair file so that there are no questions as to the repair methodology required and executed by the repairer

Thank you!

Keith Manich
ATI Collision Director