

# Vehicle Collision Experts (VECO Experts)



Your Partner in Collision Repair to  
Get it right the first time!



# Collision Repair 2019 and in to the Future

- ▶ Appraisals of the future
  - ▶ vehicle complexity, technical expertise
- ▶ Car of the future
  - ▶ active safety/passive safety
  - ▶ mixed materials
  - ▶ powertrain complexity
  - ▶ autonomy
- ▶ Crash of the future
  - ▶ frequency, personal injury, severity, liability
- ▶ Driver of the future
  - ▶ driver out of loop, skill level under manual driving, interaction with ADAS, liability
- ▶ Repair of the future
  - ▶ severity, cost and time, ADAS repair and resetting, new and mixed materials handling of EV and Hydrogen etc

# 10 Steps for Quality Collision Repair



“Get it right the first time”

# Quick Check In



# Questions:

- How many of you think Collision Repair is getting harder (than it was 20 years ago?)
- How many of you support legislation for having OEM procedures be a law?

# Thoughts:

1. Collision repair has NEVER been easier.  
(It has changed and gotten easier)

2. Careful what you wish for in legislation.

# Proper OEM Repairs - Required

1. Safety items (Seat Belts Tests drives Airbags)
2. Weld Tests (often times many tests and different welders)
3. Corrosion protection
4. ADAS resets
5. Electronic Resets
6. Battery disconnect
7. Bolt Torque
8. Scanning
9. OEM information and research
10. Pre measuring vehicle

# VECO Experts 10 Step Repair Process

1. Vehicle Scanning
2. Procedure at time of estimate
3. Procedures to technician (including sublet)
4. Procedures followed
5. Proper welds and attachment (Rivets, bonding etc)
6. Proper corrosion protection
7. Proper use of QC sheet
8. Proper refinish
9. Proper use of intake SOP
10. Proper vehicle protection





Would you agree that if you did all 10 of these steps on every vehicle, every time that the repair outcome would be highly predictable and very high quality?



It is that simple!  
So why does it appear so hard  
to be predictable?



I used to say:

“Quality is a process, not a final destination.”

I have changed that to be -

“Culture and process is quality.”

(It takes a quality culture and a quality process to produce quality repairs)



## 2 - OEM information at time of the estimate

1. Must pull on every job every time
2. Estimate must be written with OEM Data
3. Even bumper cover scratches will require OEM data (Many OEMs have limitations on bumper repairs - Nissan, Audi, BMW, GM etc.)
4. Must pull all information not just cut location - Including electronic resets, glass replacement for sublet vendor special issues, steel content etc.



# Getting OEM Information

1. Always start with I-CAR RTS
2. Alldata, Mitchell and free sites are good for estimates but not always for repairs
3. Mitchell is very good for GM as they have a partnership where all new information is automatically updated with estimating system - hopefully other OEMs will follow
4. OEM 1 Stop [www.oem1stop.com](http://www.oem1stop.com)
5. The OEM's information is the easiest to get because it has hyperlinks to other information and is also the latest information
6. Information costs money, and is money well spent to deliver on time, create expectations with customer and “get it right the first time!”



Scenario - 2017 Nissan Sentra comes to your shop with or without an insurance estimate (photo or otherwise) vehicle has scratches on the left rear side of the bumper cover. What is your call?





Quick Search By Vehicle

OEM Information

Collision Repair News

OEM Calibration Requirements Search

OEM Partial Part Replacement Search

OEM Restraints System Part Replacement Search

OEM Hybrid And Electric Vehicle Disable Search

OEM Glass Replacement

I-CAR Best Practices

I-CAR 360 **NEW**

Ask I-CAR



# Nissan

Collision Repair Information Available: [www.nissan-techinfo.com](http://www.nissan-techinfo.com)



Nissan Collision Repair Website



Nissan Vehicle Website



Nissan/I-CAR News



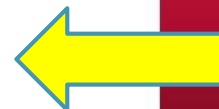
Get Nissan Certified



Nissan Calibration Requirements



Nissan Position Statements



Nissan Partial Part Replacement



Nissan's Collision For Consumers Website



Nissan Restraints System Part Replacement



Nissan Videos



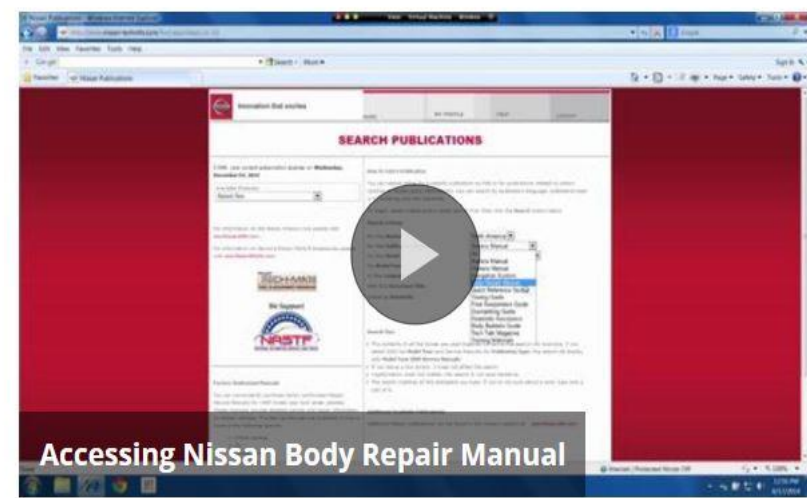
Nissan Hybrid And Electric Vehicle Disable



Nissan ADAS



Nissan Glass Replacement



# www.oem1stop.com



Home

Position Statements

**CRASH REPAIR INFO**  For Consumer Collision Information  
HELPING YOU THROUGH THE COLLISION REPAIR PROCESS



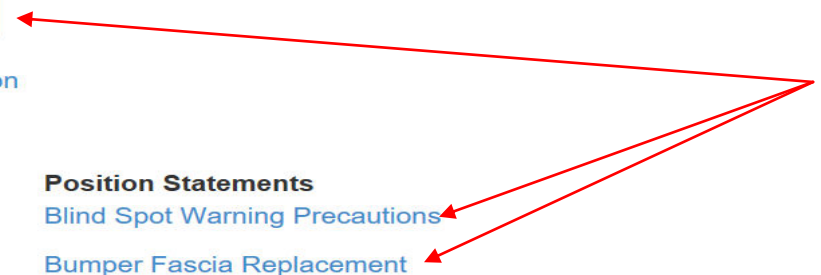
Collision

Mechanical

Hybrid/Electric

**Position Statements**

- Blind Spot Warning Precautions
- Bumper Fascia Replacement
- Calibration of Around View Monitor
- Glass Replacement
- Non-OEM Parts
- Pre- and Post-Repair System Scanning
- Power Window Servicing
- Radar Calibration
- Salvage Airbags
- Salvage Parts
- Seat Belt Replacement
- Steering Angle Sensor Reset





# Nissan clearly says, “no aftermarket and no repair”



**NISSAN**  
**Collision Position Statement-**  
**Bumper Fascia Replacement with Sonar**  
Reference: NPSB-16-596  
Date: June, 20 2016

**TO: COLLISION REPAIR INDUSTRY**

**POSITION STATEMENT: Bumper Fascia Replacement with Sonar**

FRANKLIN, TN– As Nissan Safety Shield Technologies are incorporated into more of our vehicles, we want to bring to your attention important information about how these systems function, and how to properly handle repairs regarding this technology.

Many electronic sonar sensors in front and rear bumper fascia are considered to be part of this Nissan Safety Shield Technology. These sensors are engineered to be in very exact positions within the bumper fascia, and if not properly installed, may not function as originally intended. For this reason, Nissan North America **DOES NOT** approve of the use of aftermarket, reconditioned, or recycled bumper fascia.

In contrast with original Genuine Nissan bumper fascia, aftermarket bumper fascia may:

1. In some cases, non-OEM fascia come with no pre-drilled holes for the sensors, relying on the shop technician to cut the holes using a rough template. This may lead to instances where the non-OEM bumper does not match the original Genuine Nissan bumper holes.
2. In some cases, build specifications are slightly different on aftermarket bumper fascia than on Genuine Nissan fascia, which may also cause issues with sensor alignment or performance.

In addition, reconditioned fascia, which was once damaged, may also be out of specification to the original undamaged Nissan bumper fascia, which may cause sensor alignment issues. There is currently no industry standard process for knowing the history/quality of recycled bumper fascia, so this is also not recommended to be used on Nissan vehicles. We ask that the general repair industry adhere to these recommendations.

For additional information, please see service manual section “SN”.

**Parts Warranty**

Nissan North America’s New Vehicle Limited Warranty, and Limited Warranty on replacement parts do not apply to any parts other than Genuine Nissan original equipment parts.

For additional collision information: <http://collision.nissanusa.com>.



**NISSAN**  
**Collision Position Statement-**  
**Blind Spot Warning (BSW) Precautions**  
Reference: NPSB/16-725  
Date: February 21, 2017

**TO: COLLISION REPAIR INDUSTRY**

**POSITION STATEMENT: Blind Spot Warning (BSW) Precautions**

FRANKLIN, TN– Nissan North America, Inc. (Nissan) continues to be very concerned with the proper repair of our vehicles after a collision situation, especially as it pertains to safety related systems. With this in mind, Nissan would like to address a very important component of our Safety Shield Technologies, called Blind Spot Warning (BSW), and one of the specific repair considerations that relates to this system.

BSW was introduced to some Nissan vehicles as early as 2011. On vehicles equipped with this technology, the side radars, which are responsible for triggering the BSW, sit behind the rear bumper cover at both corners. For this reason, in a rear end collision scenario, Nissan **DOES NOT** support any repair, body filler application, or paint work on the rear bumper cover in the general area of the side radars. Nissan’s service manuals clearly state: “Do not attach a sticker (including transparent material), install an accessory or paint work near the side radar”.

The damaged bumper cover should be instead replaced with a new bumper cover. In addition, since non-OEM bumper covers may vary in materials, build specifications, and fitment, and have not been tested by Nissan as far as compatibility with the BSW system, Nissan recommends replacing the bumper cover with a new Genuine Nissan bumper cover.

Failure to adhere to these guidelines may cause the BSW system to not function properly, potentially causing serious safety concerns for our owners.

Please reference service manual section “DAS” for additional detailed information.

**Parts Warranty**

Nissan North America’s New Vehicle Limited Warranty, and Limited Warranty on replacement parts do not apply to any parts other than Genuine Nissan original equipment parts.

Nissan North America will not be responsible for any subsequent repair costs associated with a vehicle and/or part failure caused by the use of parts other than Genuine Nissan replacement parts.

For additional collision information: <http://collision.nissanusa.com>.

# 3- Information Given to the Person Doing the Repairs

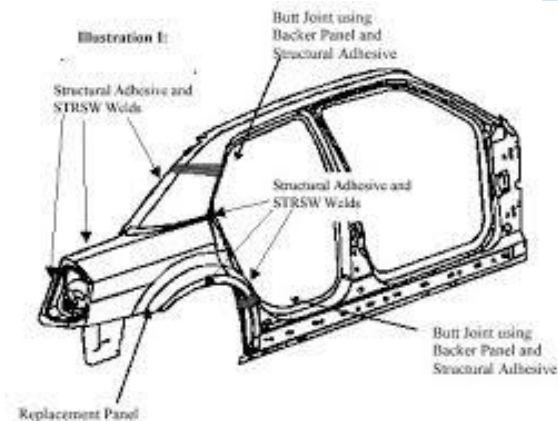
- All information given to technician, sublet vendor or otherwise when they receive the job. (Recommend an SOP for documentation)

# 4- Information / Process Followed

1. It is hard to believe that repairs that have all the information present are still not done correctly
2. Technician has to read or understand what must be done
3. Weld counts, locations, type, product usage etc.
4. Not just OEM information - all processes followed per SOP (plastic filler, weld tests etc.)
5. Must be verified with QC system



Topic D. Test Weld Destructive Testing  
*Destructive Testing*



# 6- Proper Corrosion Protection

1. Weld through primer - or not depending on the OEM
2. Never copper weld-through primer - zinc Only
3. NO self-etching primer in body department (paint dept only)
4. Use of epoxy where appropriate (under urethane glass, under body filler (some OEMs) and under seam sealer
5. Seam sealer on parts (even new ones that did not come with it)
6. Seam seal all welded seams - whether they were seam sealed or not from the factory
7. Cavity wax - most shops need one can per week per technician





- Toyota 2012 - 2017 Camry Collision Repair Manual
- [-] Vehicle Exterior
  - + BODY DIMENSIONS
  - + BODY WELD POINT
  - + FOREWORD / CAUTION / SECTION
  - [-] INTRODUCTION
    - + ABOUT THIS VEHICLE
    - + HOW TO USE THIS MANUAL
    - + WHEN REMOVING, INSTALLING, REPAIRING
    - [-] WORK NOTICES AND PRECAUTIONS
      - WHEN REPAIRING THE VEHICLE BODY
      - PRECAUTIONS FOR REPAIRING BODY
      - PRECAUTIONS FOR WELDING; 20
      - ANTI-RUST TREATMENT AFTER REPAIR
      - PRECAUTIONS FOR SRS AIRBAG SERVICE
      - NOTICE ABOUT VEHICLE CONDITION
  - + PAINTING / COATING

always apply the body sealer to the body panel seams and hems of the doors, hood, etc.

**NOTICE:**

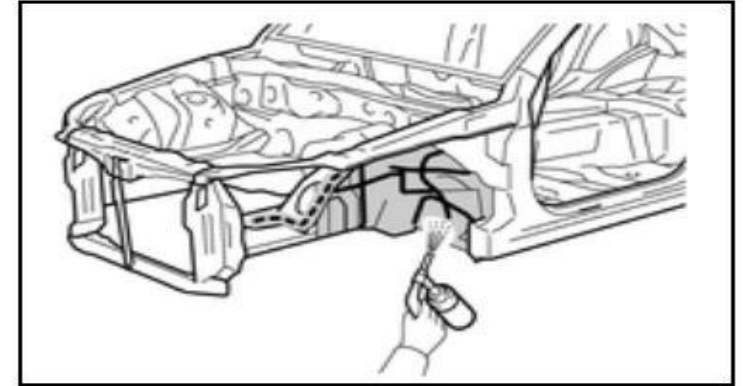
Apply body sealer neatly to parts that require a high quality appearance.



## 2. UNDERCOAT APPLICATION

**PURPOSE:**

To prevent corrosion and protect the body from gravel, always apply a sufficient undercoating to the areas indicated.



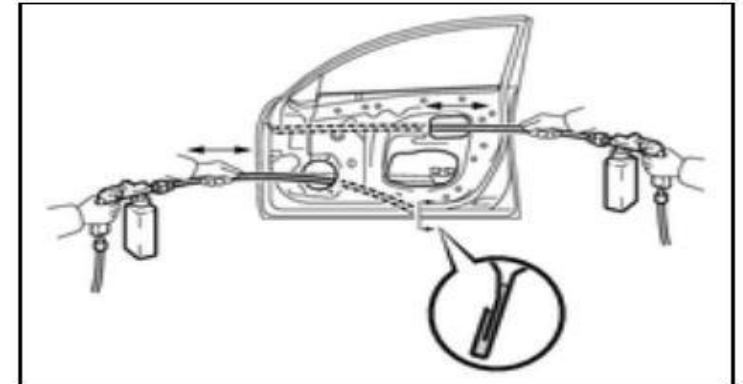
## 3. VEHICLE BODY ANTI-RUST AGENT APPLICATION

**PURPOSE:**

The purpose is to protect areas from rust which are difficult to paint such as the backside of the box-shaped cross section frame parts.

**METHOD:**

Apply anti-rust agent through the service



## CRIB # 181 WELDING SPECIFICATIONS & SUBSTITUTIONS

### FOR THE COLLISION REPAIR PROFESSIONAL

#### WELDING SPECIFICATIONS & SUBSTITUTIONS

MODELS: ALL TOYOTA, LEXUS, and SCION  
SECTION: Body Component Replacement  
DATE: DECEMBER 2011

Welding specifications for body components are published in model-specific Collision Damage Repair Manuals for all Toyota, Lexus, and Scion vehicles. Welded component installation may require a combination of welding methods including:

- STRSW (Squeeze-Type Resistant Spot Welds)
- GMAW/MIG (Gas Metal Arc/Metal Inert Gas - Welding)
- Arc Brazing (Brazing)

The STRSW method best replicates factory attachment methods, and when performed correctly, offers the following advantages over GMAW/MIG plug welding:

- Equipment is readily available in most markets
- Comparable to factory welding methods and appearance
- Does not produce ultra violet radiation
- Reduces heat effect zones and corrosive hot spots
- Reduces the emission of metal grinding particles when finishing
- Reduces the emission of stray sparks
- Reduces airborne contamination from burnt coatings

**STRSW may be substituted for GMAW/MIG plug welds, however, STRSW substitutions should match factory weld size, strength and appearance.**

Appearance alone does not validate the strength of a weld. Weld strength must be validated by tuning the welder and performing destructive testing. Tuning the welder and destructive tests must be performed on metal of the same thickness and composition as that of the component being replaced.

# COLLISION REPAIR INFORMATION

## FOR THE COLLISION REPAIR PROFESSIONAL

TITLE: CORROSION PREVENTION FOR COLLISION REPAIR  
SECTION: EXTERIOR BULLETIN # 186  
MODELS: ALL TOYOTA, LEXUS, and SCION MODELS  
DATE: SEPTEMBER 2013 PAGE 1 OF 2

### Corrosion Prevention for Collision Repair

- Adherence to established Corrosion Prevention processes is very important during collision repairs. For example, insufficient application of corrosion preventative compounds (i.e. anti-chipping coatings, seam sealer, anti-rust agents, etc.) may contribute to the development of rust, reduction in vehicle value and other customer satisfaction concerns. In certain cases, the development and progression of rust may also affect vehicle operational components. This bulletin is intended to raise awareness and reduce the occurrence of corrosion resulting from collision repairs.

### Bolt-On Component Replacement and Corrosion Prevention:

- Anti-Chipping Primer applied under top coats to the leading edge of hoods and fenders, Anti-Chipping PVC and Urethane coatings also applied under top coats to lower panel exposures, Seam Sealer applied to panel flange seams; and Anti-Rust Agent (Cavity Wax) applied to interior portions of hoods doors and hatches are all specified for bolt-on body components in model-specific Repair Manuals for Collision Damage.

### Weld-On Component Replacement and Corrosion Prevention:

- Zinc-Rich Weld-Through Primer applied to the mating flanges of weld sites prior to welding is designed to coat bare metal at Squeeze-Type Resistant Spot Weld (STRSW) locations thereby reducing the potential of corrosive hot-spots (accelerated rusting) at the weld flanges.
- Gas Metal Arc/Metal Inert Gas (GMAW/MIG) Welding temperatures burn and vaporize Zinc-Rich Weld-Through Primer at plug and continuous weld locations and cause the granular structure of the steel to expand. These circumstances can lead to corrosive hot-spots if left untreated. Therefore, it is recommended to substitute factory-type STRSW for GMAW/MIG where applicable as outlined in CRIB #181 Welding Specifications and Substitutions.
- Frame Component Repair and Replacement does not require Zinc-Rich Weld-Through Primer however, does require cleaning of the Heat Affect Zone (HAZ) inside and out and application of corrosion prevention coatings after the repair or component replacement. Repaired and welded frame areas require application of a two-component DTM (Direct To Metal) or Epoxy Primer and single-stage topcoats to match the OE frame finish.

**PLEASE ROUTE THIS BULLETIN TO YOUR COLLISION REPAIR CENTER  
MANAGER AND COLLISION REPAIR TECHNICIANS**







Dedicated to  
Promoting Quality  
Collision Repair of  
Toyota, Lexus and  
Scion Vehicles

### A Wealth of Experience

Meet Toyota's Collision Repair & Refinish Trainers

Toyota's Innovative New Approach to Estimating  
Toyota Recommended Repair Procedures

Use Genuine Toyota and Lexus Parts  
For Safety, Vehicle Longevity and  
Customer Satisfaction



Eric Mendazo, Collision Repair & Refinish Training Administrator

When using weld-through primers, keep in mind that zinc-based primers are a more suitable material to use than copper-based primers.



→ DID YOU KNOW: To properly use weld-through primer, thoroughly clean surfaces with a suitable wax and grease remover.

## How to Fight Rust

### THE WINTER MONTHS CAN BE HARSH—PROPER CORROSION PROTECTION CAN HELP GUARD YOUR CLIENTS' VEHICLES.

Winter brine—the mixture of magnesium and calcium chloride used on the roads in colder climates—can be particularly damaging and harsh on a vehicle. Even if you don't live in a cold climate, inadequate use of corrosion protection measures can contribute to the development of rust. During collision repair, incorporating corrosion protection measures like using weld-through primer, epoxy primer, seam sealer and cavity wax is an important part of helping to protect against the elements and ensure the long life of the vehicle you are working on.

### WELD-THROUGH PRIMER

Weld-through primers are an important corrosion protection measure. When using weld-through primers, keep in mind that zinc-based primers are a more suitable material to use on Toyota, Lexus and Scion vehicles than copper-based primers. This is because these vehicles are manufactured using a zinc galvanizing process, and zinc primer bonds to the metal of the vehicles better. Zinc also seems more resistant to corrosion than other types of weld-through

primers, such as those made with copper.

To properly use weld-through primer, thoroughly clean surfaces with a suitable wax and grease remover. Then, coat any bare metal areas that are going to be joined together but won't be accessible after welding with weld-through primer.

### ADDITIONAL WELD-THROUGH PRIMER TIPS

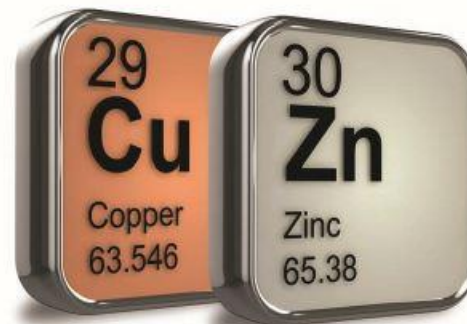
- Ensure there is a thin, even coating of weld-through primer and that it is not clumpy or overly thick in some areas.
- Allow the weld-through primer to completely dry before you begin the welding process. This gives the zinc the opportunity to properly bond to the material.
- Some weld-through primers aren't solvent resistant and can be washed away during the cleaning process as the vehicle is prepped for primer and paint coatings. Test products beforehand to make sure they are compatible.

### CORROSION PROTECTION TIPS

- Electro-deposition primer—also referred to as e-coat—is an excellent corrosion protection material and should be left intact whenever possible.
- Vehicle-specific seam sealer specifications are given in the Repair Manuals for Collision Damage.
- Clean the heat-affected zones around welds to remove burned or loose material and coat with epoxy primer and cavity wax if applicable.

For additional information about corrosion protection, see Collision Repair Information Bulletin (CRIB) #186, Corrosion Prevention for Collision Repair. 📄

When using weld-through primers, keep in mind that zinc-based primers are a more suitable material to use than copper-based primers.







- Rust?
- Copper weld-through primer?
- No cavity wax?















No seam sealer  
No cavity wax





BODY 2017 FORTE(YDm) **Reset**

Select Table

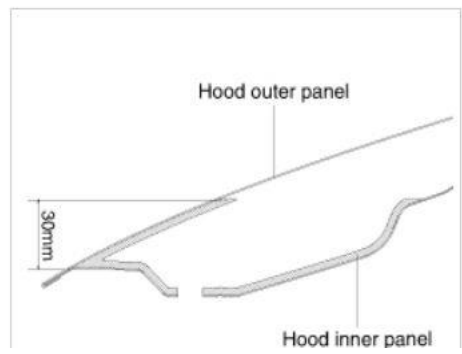
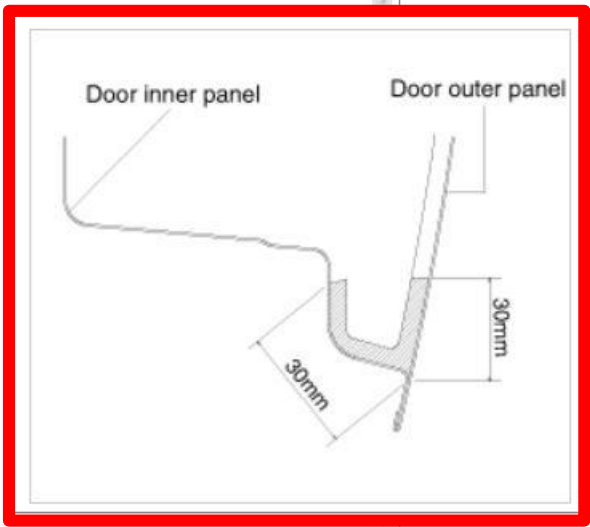
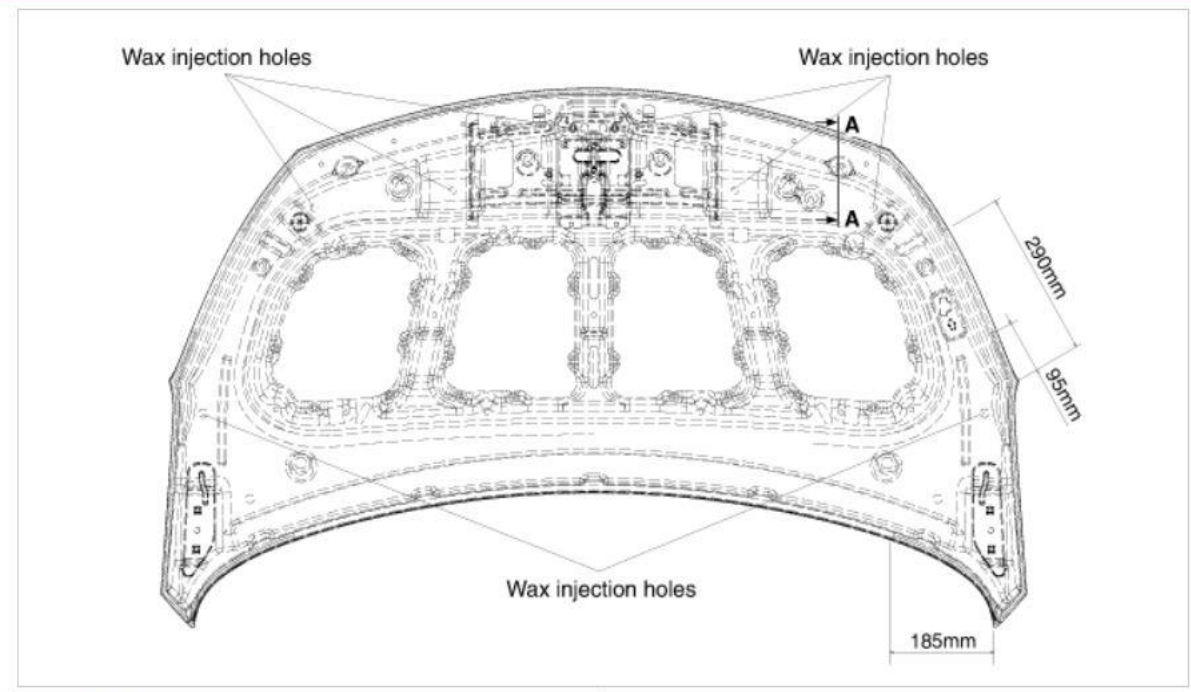
- Body Repair
  - Body Repair Manual
    - General Information
    - Body Construction
    - Body Dimensions
    - Body Panel Repair Procedure
    - Body Sealing Locations
    - Corrosion Protection
      - Antivibration Pad
      - Under Coating
      - Cavity Wax Injection
        - Body Repair
    - Body Modification Tools
    - Plastic Parts

FORTE(YDm) > 2017 > Body Repair > Body Repair Manual

In order to provide greater corrosion resistance, cavity wax injection has been performed for the lower areas of the vehicle, such as the side member, the side sill and the inside of other panels which are a hollow construction. When replacing these parts, be sure to apply cavity wax to the appropriate areas of the new parts.

Feedback

Hood



# 8- Proper Refinish

1. As appropriate for repair
2. Color match, texture
3. Chip coatings
4. Under hood color / interior colors
5. Use of substrates - epoxy under urethane set glass etc.
6. No acid or basecoat/clearcoat under urethane set glass



- 📖 Toyota 2012 - 2017 Camry Collision Repair Manual
- [-] 📖 Vehicle Exterior
  - + 📖 BODY DIMENSIONS
  - + 📖 BODY WELD POINT
  - + 📖 FOREWORD / CAUTION / SECTION
  - + 📖 INTRODUCTION
  - [-] 📖 PAINTING / COATING
    - [-] 📖 BODY PANEL ANTI-CHIPPING PAINT
      - 📄 APPLICATION AREAS; 2012 - 2017
    - + 📖 BODY PANEL ANTI-RUST AGENT MAT
    - + 📖 BODY PANEL SEALING
    - + 📖 BODY PANEL UNDERCOATING
    - + 📖 FORMED SEALING MATERIAL
    - + 📖 SILENCER SHEET

## APPLICATION AREAS

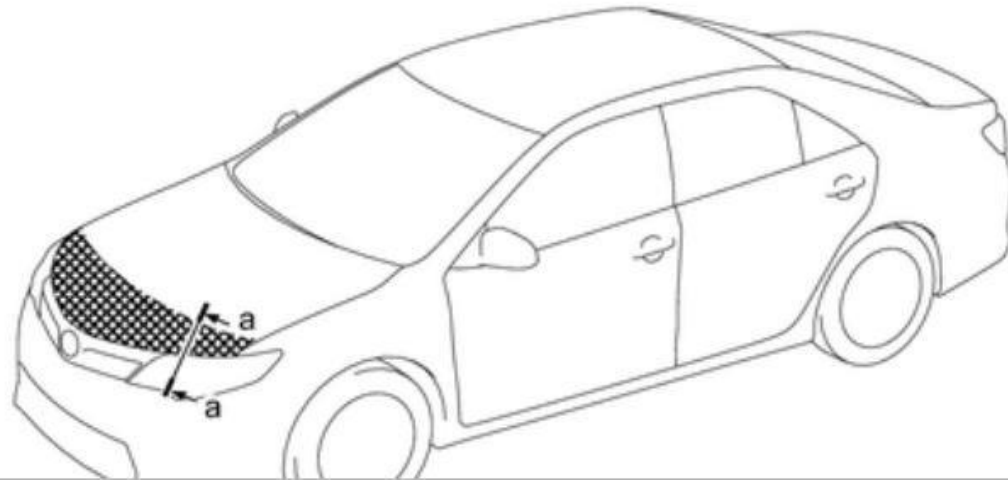
### **CAUTION:**

Work must be performed while wearing the appropriate protective gear and in a well-ventilated area.

1. To protect the body from damage due to gravel, apply the anti-chipping paint to the hood.

### **HINT:**

- Apply anti-chipping paint to the indicated areas first, before applying the top coat.
- If anti-chipping paint is unnecessarily applied to an area, apply degreasing agent to a clean cloth and clean the paint off immediately.



# VECO Experts 10 Step Repair Process

- 1- Vehicle Scanning
- 2- Procedure at time of estimate
- 3- Procedures to technician (including sublet)
- 4- Procedures followed
- 5- Proper welds and attachment (rivets, bonding etc.)
- 6- Proper corrosion protection
- 7- Proper use of QC sheet
- 8- Proper refinish
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# VECO Experts 10 Step Repair Process

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## Vehicle Collision Experts, L.L.C. Vehicle Inspection Form

Shop Name:  
Address:  
City, St, Zip:  
Phone #:  
Visit Date:

■ - YES  
■ - NOT DONE  
■ - PARTIAL

	Vehicle 1	Vehicle 2	Vehicle 3	Vehicle 4
		2014	2015	2009
	Nissan	Toyota	Chevrolet	Pontiac
	Altima	Prius	Malibu	G6
Body Technician	Pedro	Domingo	Cruz	Angel
Paint Technician		Christopher	Christopher	Christopher
Estimator	Tammy	Tammy	Joel	Tammy
Vehicle Stage	body	Body	body	paint
Vehicle Scanned	n	n	y	n
Procedure at time of estimate	n	n	y	
Structural procedures	n	n	y	
Procedures followed	n	n	y	
Proper welding		p	y	
Proper corrosion protection		p	p	
Proper use of QC sheet	p	p	p	p
Proper refinish				y
Proper use of intake S.O.P.	p	p	p	p
Proper vehicle protection	y	p	p	p
<b>Total Score for Vehicle</b>	<b>29</b>	<b>28</b>	<b>78</b>	<b>50</b>
<b>Average Score for Shop</b>	<b>46</b>			





# It is that simple!

“Culture and process is Quality”

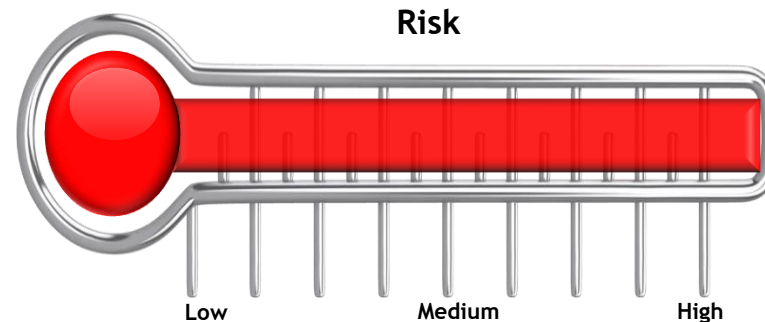
(It takes a quality culture and a quality process to produce quality repairs)



# What We See

## (Big Rocks)

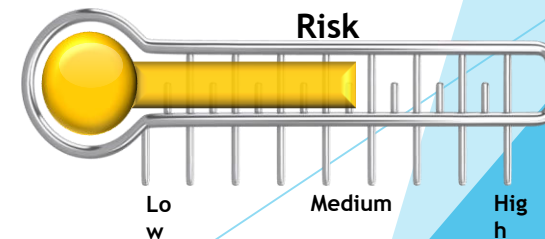
1. Not using QC Sheet/Process as designed
2. 200 amp welders not being used when appropriate
3. Not reviewing and following OEM procedures
4. Cavity wax not being used enough
5. Weld tests not being done prior to welding and being documented
6. Equipment not maintained or inoperable
7. Welder tips on STRSW not dressed and no new ones in shop



# What We See

## (medium Rocks)

1. Check in sheets not being done fully (radio codes etc. and listed as done on QC)
2. Incomplete frame measurements
3. Copper WTP instead of Zinc
4. Epoxy paint not present – or not being used correctly
5. Vehicle protection not complete (windows, lines, parts in car etc.)
6. Painting under urethane set glass
7. Self etch primer in body department
8. Electronic file not fully documented



< Back to Store



https://www.collisionhub.com/wp-content/uploads/2017/12/OEM\_clean-cropped\_350x225.png

# REPAIR UNIVERSITY – OEM EDITION

**\$0.00**

A **NEW** monthly series from **Collision Hub** for 2018 that will focus on accessing, interpreting and applying OE repair information in the estimating and repair process. Industry leading experts will show how to find and interpret information for repair and the equipment required along with OE participation requirements.

**Repair University LIVE OEM Edition** will be your go to source for getting

# Repair University LIVE

## Past Programs

*Click links below for individual programs*

Have you signed up for the 2018 Series?

Click the button to get your season pass for 2018.

Subscribe Now

### 2018 Programs

**March – What’s Wrong with Used Quarter Panels**

**February – Structural Anchoring and Pulling Strategies**

**January – Steering Suspension and Wheel Damage**



# Collision Hub Repair University Live



Blueprinting 101 From Repair University

16,726 views

53 likes, 1 comment, SHARE, and more options icons.



Collision Hub  
Published on Apr 17, 2018

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Special Offers From Mitchell on the products seen in this video

<http://go.mitchell.com/Q2-Collision-H>

Up next

AUTOPLAY



**Structural Anchoring And Pulling Strategies From I-CAR**  
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**Mobile Auto Bodywork & Paint Job (fixing a dent with a uni-s...**  
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**Repair University: Tips For Becoming A Better Estimator**  
Collision Hub  
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**What's Wrong With Used Quarter Panels ----- Repair Uni...**  
Collision Hub  
21K views



**KUSTOM PAINTING MADE EASY WITH MASTER PAINTER...**  
pharraway  
Recommended for you

# Canary in the Coal Mine



Mark Olson 206-227-7574

“Get it right the first time”



# Canary in the coal mine:

1. Comeback rate - comeback for anything
2. Internal comeback rate
3. Start stop rate - average
4. Supplement number record
5. SOPs - are they used
6. SOPs - do they work
7. Gross profit / net / expense percentage
8. Days to repair (Keys to Keys)
9. Cycle time or touch time
10. Safety





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# 3 Levels of Internal Comeback - Body to Paint

1. Soft: Painter just fixes it themselves. (materials and time)  
time lost at least 10-15 minutes
2. Medium: Painter goes and gets body technician. Time lost at least 20 minutes per technician + materials
3. Hard: Vehicle sent back to body dept. Time lost at least half hour and ½ day of cycle time + materials

- 200% efficient technician with a soft comeback will cost the shop \$25.00 per car in labor and about \$10.00 in material. Technician will lose ½ hour off paycheck.

- Research shows that 60-70% of vehicles have at least a soft comeback



# The 7 Wastes

**MUDA** is the Japanese word for WASTE.



An 8th waste is the wasted potential of people



**Overproduction** To produce sooner, faster or in greater quantities than customer demand.

**Over Processing**



Processing beyond the standard required by the customer.

**Inventory**



Raw material, work in progress or finished goods which is not having value added to it.

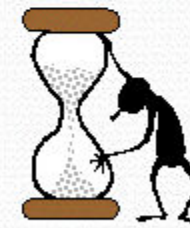
**Rework**

Non right first time. Repetition or correction of a process.



**Waiting**

People or parts that wait for a work cycle to be completed.



**Transportation**

Unnecessary movement of people or parts between processes.



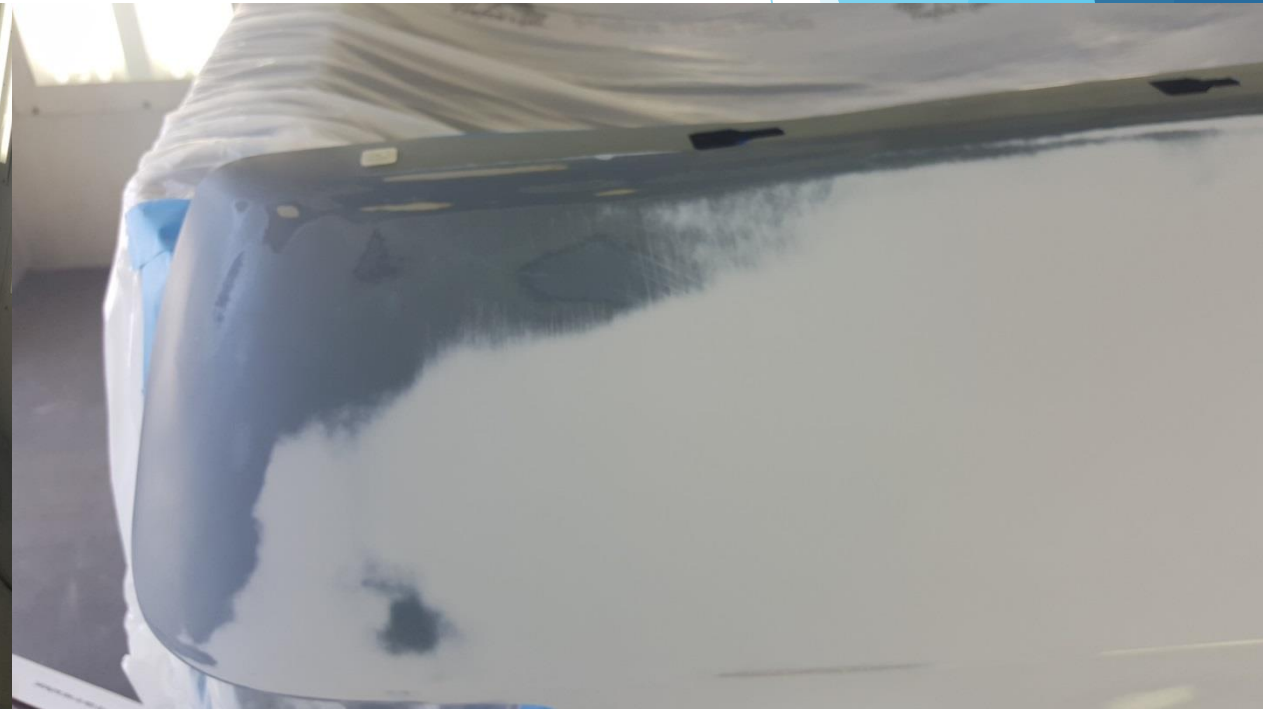
**Motion**

Unnecessary movement of people, parts or machines within a process.

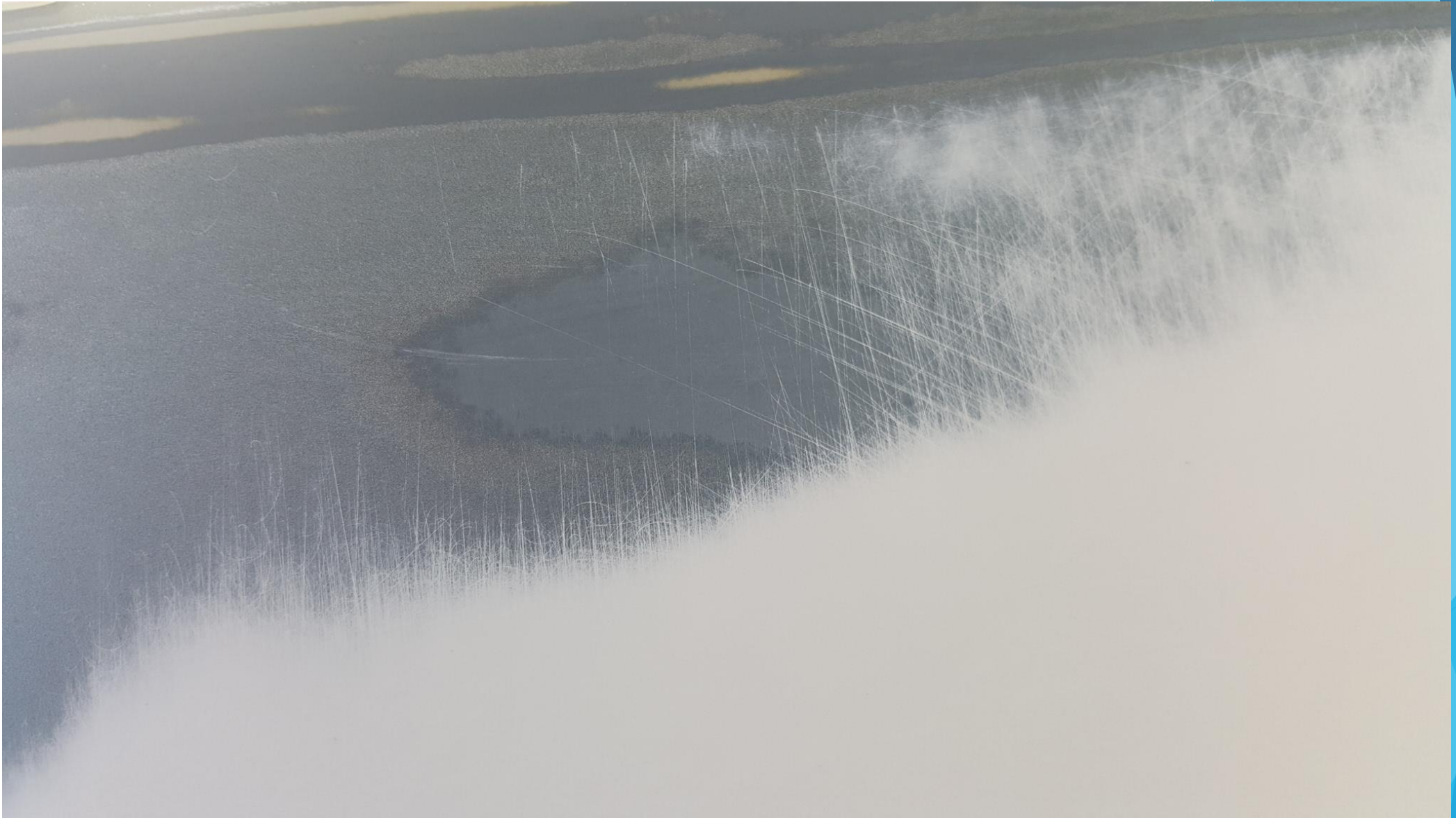




# Honda Ridgeline







# The Bullet Proof File

Presented by  
**Mark Olson**



Your Partner in Collision Repair to  
Get it right the first time!



You are going to get shot at.  
Can your shop withstand it?  
Are your files bullet proof?



# Remember this car?





# Scenario - that will happen at some point

Imagine that you get that dreaded phone call/letter, get served or customer comes in that informing you there is an issue with a vehicle. Even worse, someone has been injured or killed. What you say and do next can have a big impact on your outcome.

1. Pull your file before you try an answer anything from memory.
2. Take detailed notes of the complaints that they have - and listen and take notes, there will be time for you to talk. If you are served, seek council. **Seeking council is good advice on anything major.**
3. Get the issue to a person of power (one that can make the financial decision).
4. If you can resolve easily with re-repair - do so. Even if you think you are OK, most calls we get from shops that try to deny small things, cause customers to hire experts that will find things. When this happens, there is a 99% that buying the vehicle is the best option.



# Forms - do you have them?

New User Registration: Sign Up | Login

RESOURCE CENTER

REGISTER FOR A COURSE

About MVP | Contact Us

HOME

EXPLORE OUR PROGRAMS

LEAN FOR COLLISION

BUSINESS COURSES

CONFERENCES

MARKET YOUR SHOP

TOOLS & SERVICES

ABOUT MVP



**Charley Hutton  
Talks MVP**  
See what Charley is  
saying about  
the Value of MVP

## EXPLORE OUR PROGRAMS

Lean For Collision

Business Courses

Conferences

Market Your Shop

Tools & Services



## Market Your Shop

*Proven Approach for Growing Your Business*

In this rapidly changing world, new marketing technologies and the popularity of social media are impacting how consumers find and select whom they do business with. These technologies are transforming the way customers access information and form opinions. Today's collision center can no longer rely solely on traditional marketing techniques. Staying competitive will require a re-engineered sales and marketing strategy that takes advantage of the latest strategies, tools, and systems.

Back  
a Level

Get More Details  
Market Your Shop

Continue Explore  
Our Programs



### LEAN FOR COLLISION

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[White Belt Training](#)

[Commercial Truck Green Belt Training](#)

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[Resource Center](#)



body shop forms



Sign in

All Images Shopping Maps News More Settings Tools

SafeSearch

- customer information
- printable
- checklist
- intake
- authorization
- vehicle inspection
- template
- quality control
- pre rental
- detail
- insurance



# Authorization Form

- Customer is your client not insurance company
- May be part of check in form or stand alone
- Must comply with your state laws
- Are you scanning? - May need release to scan
- May need release to share information with insurance co.
- Check state laws on signature (wet or phone authorization?).
- Is person who drops off car authorized to sign (kids spouse etc.)
- Contact about additional.
- Vary from state to state
- Test drive waiver?
- Vehicle insurance - or garage keepers

00000 US Highway 19 North  
 Clearwater, Florida 33761  
 Phone (000) 000-0000 Fax (000) 000-0000

State of Florida  
 Registration # MV-00000

CUSTOMER		HAT#	REPEAT REPAIR <input type="checkbox"/> YES <input type="checkbox"/> NO	DATE
ADDRESS		MILEAGE IN / OUT	LABOR RATE	
CITY		STATE	ZIP	JOB LINE NO.'S
HOME PHONE		BUSINESS PHONE		APPOINTMENT <input type="checkbox"/> YES <input type="checkbox"/> NO
E-MAIL ADDRESS		METHOD OF PAYMENT		RETAIN PARTS <input type="checkbox"/> YES <input type="checkbox"/> NO
MAKE		MODEL	YEAR	<input type="checkbox"/> CASH <input type="checkbox"/> C.C.
LICENSE		STATE	EXT. COLOR	INT. COLOR
COLOR CODE		DSO	TRIM CODE	PROD. DATE
AXLE		TRANS.		
TIME IN		PROMISE TIME	PRE-APPROVED AMOUNT	
ADD'L PERSON WHO MAY AUTHORIZE WORK				
NAME		PHONE		
VEHICLE IDENTIFICATION NUMBER				
<b>CUSTOMER CONCERNS</b>				
<p style="text-align: right; margin-right: 50px;"><b>TERMS: STRICTLY CASH UNLESS PRIOR ARRANGEMENTS MADE</b></p> <p><small>*I hereby authorize the repair work hereinafter set forth to be done along with the necessary material and agree that you are not responsible for loss or damage to vehicle or articles left in vehicle in case of fire, theft, or any other cause beyond your control or for any delays caused by unavailability of parts or delays in parts shipments by the supplier or transporter. I hereby grant you and/or your employees permission to operate the vehicle herein described on streets, highways or elsewhere for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on below vehicle to secure the amount of repairs thereto. In the event sums are due and owing to the seller/dealer are not paid and this matter is forwarded to our attorney for collection. customer agrees to pay cost of collection including attorney fees.</small></p> <p><b>X</b></p> <p>PLEASE READ CAREFULLY, CHECK ONE OF THE STATEMENTS BELOW, AND SIGN: I UNDERSTAND THAT UNDER STATE LAW, I AM ENTITLED TO A WRITTEN ESTIMATE, IF MY FINAL BILL WILL EXCEED \$100.00.</p> <p>_____ I REQUEST A WRITTEN ESTIMATE.</p> <p>_____ I DO NOT REQUEST A WRITTEN ESTIMATE AS LONG AS THE REPAIR COSTS DO NOT EXCEED \$_____. THE SHOP MAY NOT EXCEED THIS AMOUNT WITHOUT MY WRITTEN OR ORAL APPROVAL.</p> <p>_____ I DO NOT REQUEST A WRITTEN ESTIMATE.</p> <p>Signed: _____ Date: _____</p> <p><small>NOTE: You will be notified upon completion of any diagnostic work necessary to estimate the cost of repair, or if the actual charges exceed the written estimate including any additional charges, by \$10 or 10% whichever is greater, not to exceed \$50. If you are so notified, you may orally or in writing authorize, modify or cancel the order for repair.</small></p> <p><small>CANCELLATION OF REPAIRS: In the event the customer cancels the repair work, the vehicle shall be reassembled in a condition reasonably similar as when received unless the customer waives assembly or the reassembled vehicle would be unsafe. The repair shop may charge for the cost of teardown, the cost of parts and labor to replace items destroyed by teardown and the cost to reassemble the vehicle.</small></p> <p><small>LIMITED WARRANTY: The only warranties applying to the parts installed in accordance with this estimate and/or repair order are those that may be offered by the manufacturer. The seller hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose, and neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of products or service sold under the terms of this estimate and/or repair order. Parts and labor are guaranteed for 12 months or 12,000 miles, whichever comes first. Seller does not guarantee that the work performed in accordance with this estimate and/or repair order will correct any problem specified on the description of the complaint.</small></p>				
<p><b>STORAGE CHARGES:</b> No storage charges shall accrue or be due and payable for a period of 3 working days from the date you are notified that the work on your vehicle has been completed. After that date, the daily charge for storage of your vehicle will be \$15.00.</p>				
<p style="text-align: right;"><small>Miscellaneous Shop Supplies and Hazardous Waste Disposal Charges:</small></p> <p><small>*This charge represents costs and profits to the motor vehicle repair facility for miscellaneous shop supplies or waste disposal. [s. 559.904(4)]. The state of Florida requires a \$1.00 fee to be collected for each new tire sold in the state [s. 403.718], and a \$1.50 fee to be collected for each new or remanufactured battery sold in the state [s. 403.718(5)].</small></p>				



# Scanning Authorization Form Sample

## Pre and Post-Repair Diagnostic Scan Work Authorization Form

This diagnostic work authorization form grants [repair shop] permission to perform a pre and post-repair diagnostic scan on your vehicle as part of the repair process. By accepting this procedure, you acknowledge the terms and conditions listed below. If you choose to decline this procedure, you acknowledge the repair shop will not be held liable for problems with the vehicle that cannot be detected without proper diagnostic scans.

### Definition:

Pre-Repair diagnostic scan - this is a complete health check of your vehicle and provides the repair shop (and insurance company, if applicable) a complete report on the number of computer modules on board, as well as any diagnostic trouble codes (DTC's) that could indicate pre-accident and/or accident related damage. This essential step eliminates unnecessary delays waiting for parts and/or additional insurance authorizations, and identifies issues with the vehicle that could be missed without a pre-repair diagnostic scan.

Post-Repair diagnostic scan - this step ensures that all systems on your vehicle are in proper working order prior to delivery. It is important to note that the majority of DTC's do not result in a malfunction indicator lamp (dashboard light). Failure to perform a post-repair scan by trained professionals with factory scan tools significantly increases the risk that your vehicle may be returned with malfunctioning, or inoperable, safety and convenience systems. A post-repair diagnostic scan is the single best way to ensure that your vehicle is returned to pre-incident condition.

### Data privacy:

In the process of performing a diagnostic scan, [repair shop] will collect important historical vehicle data, including in some cases, the date, time and mileage of when a DTC was created. This information is helpful in understanding if a problem is accident related or pre-existing. It is possible this information will be shared with your insurance company. Your acceptance of this procedure grants [repair shop] permission to share this information with others, including your insurance company. No personally identifiable information is collected during the pre or post-repair scan.

### Disclaimers:

□ Diagnosing vehicles has limitations. In some cases, modified vehicles may give false DTC's. [repair shop] and its employees cannot be responsible for omission or errors caused by the information provided, or not provided, by the customer. □ All work performed by [repair shop] will be in accordance with Original Equipment Manufacturer (OEM) specifications and defaults. This includes, but is not limited to, any repairs, calibrations, integrations, programming and set points as indicated by the OEM by way of their designated sources of such information. [repair shop] is not responsible for any damage that results from, or to, aftermarket parts, or modifications from OEM factory specifications. □ Variations between vehicles, according to the make model and trim level, may limit the information captured during a pre or post-repair diagnostic scan. □ Depending on the condition of the vehicle, and the extent of the damage, and other factors outside the control of [repair center], a factory scan tool may not see every system on the vehicle being scanned. □ [repair shop] is not responsible for any changes made to the vehicle after the vehicle leaves the shop.

While [repair shop] recommends a pre and post-repair scan on every vehicle, it is especially important to perform these functions on newer, highly optioned, heavily damaged vehicles. Failure to do so significantly increases the risk to the vehicle owner and occupants.


< Signature Page to Follow >

Yes \_\_\_ (initial) I accept having a pre and post-repair diagnostic scan performed on my vehicle, even if my insurance coverage does not pay for these procedures. In some instances, insurance coverage may not be determined until after the diagnostic scans are performed.

No \_\_\_ (initial) I decline having a pre and post-repair diagnostic scan on my vehicle, though they were recommended by [repair shop] and the need for them was explained to me. I understand [repair shop] will not be held liable for any hidden damage that could not be detected during the repair process as a result of not having performed a pre-repair scan. I also understand certain systems may not function correctly, or at all, following the repair, and it would be impossible to detect issues with those systems without a post-repair diagnostic scan. I release [repair shop] from all liability for any pre-accident issues, hidden damage or post repair malfunctions that would have been discovered, had I consented to having pre and post-repair diagnostic scans performed.



# Vehicle Check in Form (Intake)



**Your Company Name**  
123 Company Lane New York, NY 12345  
Tel. (123) 456-7890  
Fax. (123) 456-7890

Date \_\_\_\_\_  
 Truck No. \_\_\_\_\_  
 Trip No. \_\_\_\_\_

Section A (Must be completed by the customer or releasee of the vehicle)  
 Customer hereby requests the broker to make arrangement for the transport of the following described vehicle from Origin to Destination with carrier selected by Broker and subject to the terms and conditions on back of this form.

ORIGIN

 Consignor: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Tel. (Home): \_\_\_\_\_  
 Tel. (Work): \_\_\_\_\_  
 Cell: \_\_\_\_\_



DESTINATION



 Consignor: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Tel. (Home): \_\_\_\_\_  
 Tel. (Work): \_\_\_\_\_  
 Cell: \_\_\_\_\_

Section B Bill \_\_\_\_\_ C.O.D. \_\_\_\_\_  
Check, cash or check or money order only

Car  SUV  Van

Year: \_\_\_\_\_ Make: \_\_\_\_\_ Model: \_\_\_\_\_ Color: \_\_\_\_\_ VIN: \_\_\_\_\_

B - BENT  
 BB - BUFFER BURNED  
 BR - BROKEN  
 C - CUT  
 CR - CRACKED  
 D - DENTED  
 F - FADED  
 FF - FOREIGN FLUID  
 G - GOUGED  
 L - LOOSE  
 M - MISSING  
 P - PITTED  
 PC - PUNCTURE CHIP  
 R - RUBBED  
 RU - RUST  
 S - SCRATCHED  
 SL - SOILED  
 ST - STAINED  
 T - TORN

During transport, vehicles and vehicle equipment may cease to properly through no fault of the transporter, the transporter will be responsible for damage directly caused by the driver, the transporter WILL NOT be responsible for damage NOT caused by Driver, is NOT responsible for any luggage left in the car.

I agree with the Driver's assessment of the condition of this vehicle \_\_\_\_\_ Initial  
 I agree with the terms and conditions on the back of this page \_\_\_\_\_ Initial

Driver cannot make proper inspection:  
 Night Time Pick-up \_\_\_\_\_ Initial  
 Snow \_\_\_\_\_ Initial  
 Not DOT \_\_\_\_\_ Initial

CUSTOMER'S SIGNATURE UPON DELIVERY

 The Customer/Consignor hereby acknowledges and represents that he or she has received this Vehicle in the same conditions as it had previously been delivered to transporters except as noted above, and hereby releases the Broker and Transporter from any claims for damage to the Vehicle. Will not honor claims made after driver's Signature.









Customer's Signature (Releasee) \_\_\_\_\_ Date \_\_\_\_\_

Customer's Signature \_\_\_\_\_ Date \_\_\_\_\_

## VEHICLE CHECK IN REPORT

Name _____		Date _____	Written By _____	
Address _____		City _____	State, Zip _____	Received _____ AM PM
Business Phone _____		Home Phone _____		Promised By _____ AM PM
Email _____		Cell Phone _____		Ins. Co. _____
Fuel _____ F 3/4 1/2 1/4	Year _____	Make _____	Model _____	Ins. Phone _____
Odometer In _____		Odometer Out _____	VIN _____	Claim No. _____
				Adjuster _____

EXTERIOR CONDITION


O=Operational	D=Damaged	✓=No Visible Damage	N/A=Not Applicable
R=Repairs Needed	M=Item(s) Missing		

INTERIOR CONDITION	EQUIPMENT
LF LR RF RR	Radio Code _____
Door Panels _____	Radio / Antenna _____
Seats _____	Phone / Antenna _____
Console _____	C. B. / Antenna _____
Dash Board _____	Horn _____
Headliner _____	Sun Roof _____
Carpet _____	Power Windows _____
Floormats (# of _____)	Power Locks _____
Radio _____	Climate Control _____
Mirrors _____	Exterior Lights _____
Interior Lights _____	Cell Phone _____
	Alarm System _____
	Alarm Code _____
	PAINT CONDITION
	Fade _____
	Color Match Off _____
	Excess Scratches _____
	Checking _____
	Overspray _____
	Hail Damage _____
	Acid Rain _____

Notes: \_\_\_\_\_

We have recorded any damage on your vehicle that is unrelated to the authorized repairs. By having yourself and our representative review these areas together, we can both be assured of the best possible service. We have indicated each area of damage or blemish along with other miscellaneous items, please feel free to assist us while we fill out this form.

Inspected By _____	Date _____
Customer Signature _____	Date _____

Item # 605 White: Customer Copy Canary: Repair Order File MADE IN U.S.A. 

# Adjuster/Customer/Inspector Sign in

1. All adjusters/customers/inspectors need to sign in with a form that is a legal release of liability for injury, video recording, photographic recording and audio recording.
2. Name, company, representing, vehicle, time in, time out.
3. All must comply with Personal Protection Equipment (Respirators, dust masks, eye protection, skin and hearing)



# Running Log of notes

- 1- All conversations with customer
- 2- All conversation with adjusters
- 3- All conversations with parts vendors etc.

Can be done in a log fashion with management system for can be done in a simple word format then saved to electronic file.

Each entry must include date and time, and preferably the person making the entry.





# Internal notes

- All communications should be electronic or in writing
- All supplemental requests from tech to office
- All responses to tech on supplement (approved / not approved) supplement form is fine
- Parts arrival and backorder notes
- Anything written needs to be in the file



# Photos

## Minimum Stages

1. Intake photo entire car and interior
2. Photos of vehicle damage
3. After teardown and supplemental damage
4. Measuring system on vehicle
5. Measurements Initial and after each pull (of screen)
6. Hook ups
7. Test welds and destructive testing with RO number
8. Section and cut locations
9. Welding done and ready for paint - before primer
10. In paint before primer
11. In paint with primer masked before refinish
12. Initial spray out panel and all tints that were sprayed out with RO number
13. Painted before unmasked
14. Back in body
15. Final vehicle complete ready for delivery (entire vehicle)



# Tools and documentation aids



## 104 Roof Welds Missing



Arrows Mark Welded Roof Points  
On Original Honda Fit



Arrows Mark Glued Roof Separation  
On Accident Vehicle



# OEM Information

- Must be actual OEM information, not from supplier or general
- Can be Mitchell, Alldata, C1 - and OEM is best for repair
- Must be pulled at time of estimate and estimate written with information
- Must include all operations not just cut areas (resets, checks etc...)
- Signed off and reviewed as appropriate (Manager / Production manager / Etc.)
- Photograph put in file or scanned with signatures after job completion
- Must be followed and verified



# Product Documentation

- Anything specified by the OEM should be documented (photograph)
- Urethanes for windshields have expiration dates
- Adhesives have expiration dates
- Put a copy of paint mixing label in file (scan or photograph)



**EXPIRATION DATE**  
**July 7, 2018**



# Quality Control Forms /Systems

1. Do not make too complicated (keep it simple)
2. Can be Stage check
3. Can be peer review
4. We recommend doing by stage or grouping
5. Many variations to the process, have to customize for your shop.

**Biggest issue is not using system as designed,  
and the form is pencil whipped**



# Handwriting Check



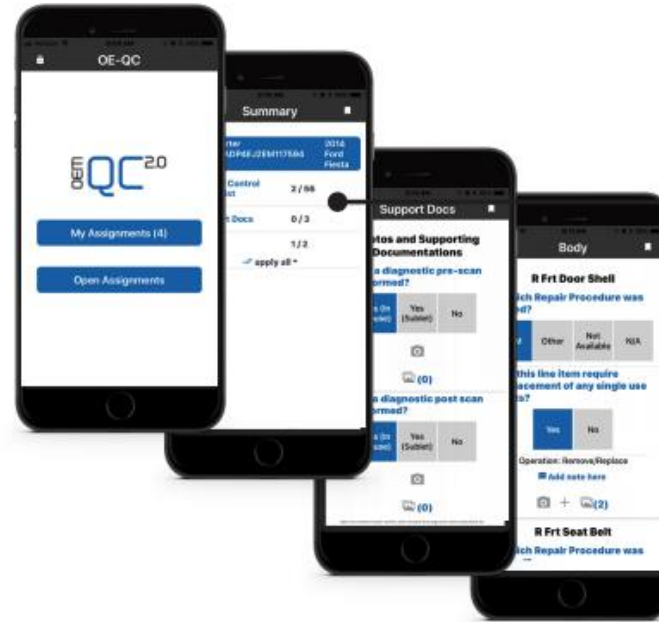
# Repair Documentation

By leveraging the Assured Performance Repair Documentation System you CAN:

- ✓ **Ensure** technicians are in fact following OEM Repair Procedures through photos and documentation providing proof of compliance
- ✓ **Confirm** technicians are pre-scanning and post scanning every vehicle with the ability to store valuable diagnostics
- ✓ **Audit** submissions by repair, line item, or labor category and approve or reassign based on the results
- ✓ **Document** and Print a data driven Certificate of Authenticity for technicians that used OEM Repair Procedures on 100% of the applicable line items during the repair

## ✓ REPORTING

Alerts, analysis graphs, charts and reports are automatically generated to help management integrate and have prominently displayed to help drive total quality assurance throughout the Certified business.



## ✓ TECHNICIANS USE THE SMART APP

- The technician finds their list of "jobs" waiting inside of their Smart App.
- The technician selects the "job" and follows a process of tap, tap, tap on their Smart Device to document how they repaired the vehicle and the OEM Repair Procedure they followed. Taking electronic images is as easy as taking a "selfie" or any pic!

# Repair Documentation

QUALITY CONTROL CHECKLIST SUMMARY		Checklist Completed:	52 / 52
BODY / STRUCTURAL / MECHANICAL		Checklist Completed:	13 / 13
PAINT / REFINISH		Checklist Completed:	13 / 13
BUILDUP/REASSEMBLY		Checklist Completed:	11 / 11
DETAIL/FINAL INSPECTION		Checklist Completed:	15 / 15
All Workorder Lines Completed	Test Paint	July 18, 2017 10:57:48	
No Visible Dirt Nibs or Tape Lines	Test Paint	July 18, 2017 10:57:48	
Interior Lamps Operational	Test Paint	July 18, 2017 10:57:48	
Vents Free of Dust & Glass	Test Paint	July 18, 2017 10:57:48	
Seatbelts Operational	Test Paint	July 18, 2017 10:57:48	

## Review Details Include

- ✓ Technician Documentation
- ✓ Additional Documents Uploaded
- ✓ Quality Control Checklist
- ✓ Ability to Review & Approve
- ✓ Ability to Reject or Reassign
- ✓ Technician Fingerprint
- ✓ Activity Timestamp
- ✓ Category Summary
- ✓ Repair Procedure Summaries
- ✓ Line Item Photos/Notes
- ✓ Line Item Reassignment

REVIEW- R.O. # 64532

Click summary to expand detail

**SUPPORTING DOCUMENTATION SUMMARY**    Techs: 3    Photos Uploaded: 6    Documents Uploaded:

Photos and Supporting Documentation:

VIN Photo:     Supporting Documents: 

Pre-Repair Photos:     Post-Repair Photos: 

Was a diagnostic pre-scan performed?    Tech: Haywood    Answer: YES    Diagnostic information    Was a diagnostic post scan performed?    Tech: Jablome    Answer: YES

**MECHANICAL CATEGORY SUMMARY**    Repair Procedure Used: OEM: 10/10    None Available: 00/10    None Applicable: 00/10

**BODY CATEGORY SUMMARY**    Repair Procedure Used: OEM: 10/10    None Available: 00/10    None Applicable: 00/10

**QUALITY CONTROL CHECKLIST SUMMARY**    Checklists Completed: 9 / 15

BODY CATEGORY SUMMARY		Category Photos:	Repair Procedure Used:	OEM: Other:	2	None Available: Not Applicable:	0	0
<b>Line Description</b>	<b>Operation</b>	<b>Procedure Used</b>	<b>Single Use Parts</b>	<b>Line Indicator</b>	<b>Photos</b>	<b>Notes</b>	<b>Technician</b>	<b>Reassign</b>
Hood Panel	Remove/Replace	OEM	No	Estimate			Test Body	
R Fender Panel	Remove/Replace	OEM	No	Supplement 2			Test Body	

# VECO Experts 10 Step Repair Process

1. Vehicle Scanning
2. Procedure at time of estimate
3. Structural procedures
4. Procedures followed
5. Proper welds
6. Proper corrosion protection
7. Proper use of QC sheet
8. Proper refinish
9. Proper use of intake SOP
10. Proper vehicle protection



# Discounts and Documentation

No matter how you fixed the car, it must be documented that way. If you use a price matching program, the final repair order that the customer receives and that you have in your final file must say it is OEM. If there are customary charges that you charge customers, and choose to not charge it for what ever reason, simply put in a zero or n/c or something indicating you did it and did not charge for it. This goes for ALL not included items such as test drives, seat belt and safety checks, vehicle washing etc.





# Estimates and Repair Orders

- All lines on estimate reflect repair done to car
- Lines may be information only
- Lines may be listed and zero charge or listed as no charge
- If it is not listed then it did not happen (test drives, re torque, seat belt inspection, other required diagnostics)

The only difference between two repairs is what you choose to do for free - there is only one way to repair a vehicle.

Rex Dunn



# The Ultimate Goal

Imagine that something did go wrong with the repair and they called in someone like me, Mike Anderson, Kristen Felder or Larry Montanez. The first thing we would ask for is your file. AND, your file is all we should need to know everything that took place on that vehicle. Your file is your best defense in any legal situation. If your file is not complete, or has been pencil whipped, you will likely lose in a legal battle. This could cost you a lot of money, your business, your assets and at a minimum your mental health.



# Data Storage

- Do not use estimating systems as your only source to keep files.
- You must have separate storage for data that is yours and yours alone, not a 3<sup>rd</sup> party.
- If you change management systems or estimating systems, you may not have access to your data.
- If you sell your shop, most sales are asset sales, and you are responsible for all repairs done in the past. If you do not have access to the file, the car will be the only evidence.
- Some companies provide storage as part of the benefits of the program (Assured Performance Network).



# 3<sup>rd</sup> Party Agreements and Your Garage Keepers Insurance

- Every time you sign a 3<sup>rd</sup> party agreement, have your insurance company review the contract that you are signing. You may be signing a contract that your insurance company will not cover. Also a good idea to run any contract by your attorney.
- Since you are attending this presentation - you can have your insurance needs looked at by an industry professional that understands the unique needs of the collision repair industry shops. David Willet of Intrepid Insurance.







**intrepid**  
DIRECT INSURANCE

**Uniquely  
Connected  
To Garage  
Business**



an I-CAR® Sustaining Partner™  
employ ASE Master Certified Techs  
and TIA Certified Instructors

**David B Willett** CPCU, ALCM, CYB  
**GM Automotive Industry**  
Mobile: 816-266-0479  
CA Agency License # OK95913  
CA Producer License # OI21913  
[dwillett@intrepiddirect.com](mailto:dwillett@intrepiddirect.com)  
[www.intrepiddirect.com/auto-repair-garages/](http://www.intrepiddirect.com/auto-repair-garages/)

- Factory Direct - Saves You Money and Time.
- Comprehensive Coverages
- Garage Claims Experience
- We insure Customer Loaners, Towing, Rentals, Dealer Plates and more.



# Basic File Elements to Have Documented.

- All communications internal and external
- All repairs documented following OEM photos and documents
- Quality control forms, intake, pre-delivery & authorizations fully signed
- All blanks on forms filled out or N/A on them
- A check list of all file items to do a final quality check of file before closing file for storage
- All photos taken of all stages



# PPG Support

1. Mapping of the cars in your market
2. Work with PPG Rep on MVP Courses
3. Work with PPG Rep on best practices

PPG Representatives are a wealth of knowledge and information. If you simply ask them, they will help you. Nobody knows your market and shop profiles like your PPG Representatives.

# Thank You!



Mark Olson 206-227-7574

“Get it right the first time”







We protect and  
beautify the world™

# OEM Certification

Jennifer Jarzembowski  
National Business Development Manager OEM After Sales





## Vehicle Collision Experts, LLC

**VECO Experts is rooted in the highest ethical standards and committed to ensuring each vehicle is repaired to OEM specifications to ensure fit, finish, durability, value, and consumer safety.**

**Your partner in Collision Repair!**

### **What we do ...**

We are in shops all across the country, every month, providing on-site assessments, as well as repair inspections to ensure manufacture's process and materials are followed. The sole focus of the company is to partner with shops and other industry providers, for the ultimate benefit of the shop. VECO Experts also conducts in-shop technical training lessons for shop personnel, distributes monthly quality and equipment reports, and provides regular technical support.

### **How it works ...**

VECO Experts works with shops on quality, process, and culture, taking a holistic approach to identify and solve a shop's weak spot(s), one at a time. Shops that are struggling in certain areas gain control and elevate their operations, resulting in reduced cycle time, increased quality, and increased profits.

The process starts with an interview with the owner/manager using the "canary in the coalmine" philosophy to discover the weak spots in the operations. Then, a date is set to Kick-off the shop. The Kick-off consists of getting the staff together to get them all on the same page of the program. During the Kick-off, quality, equipment and operations are assessed to determine any gaps and we'll create a roadmap for the future of how to close the gaps. Each month, you will be visited by one of our technical partners to work with your staff on progress and new items that come up. You will also have an account manager that will call the owner/manager every month to work on the progress of items being worked on.

### **Services included are:**

- ✓ Monthly on-site visit with your Expert Technical Partner
- ✓ On-site and remote inspections / assessment of repairs and the manufactures recommended processes.
- ✓ Technical in-shop training lessons as appropriate – equipping shop personnel with the most up-to-date information on repair specifications and techniques
- ✓ Easy to read, in 3 minutes or less, monthly Shop Report at a Glance™
- ✓ Monthly Vehicle and Process Quality Report and Equipment Report
- ✓ Monthly call with account manager to review and evaluate operations
- ✓ Facebook page with up to the minute, important new technical information
- ✓ Second level Technical Support
- ✓ Local Seminars
- ✓ Access to Collision Hub University
- ✓ Discounts with vendors and programs
- ✓ Featured on our 'Shop Locator' on our website
- ✓ OEM Certification matching and recommendations

### **Why our customers say we are invaluable ...**

With all the changes in the industry happening so quickly, everything from materials being used to changes in procedures to follow for correct repairs; it is hard to keep up with it all. Having a third party come look at the repairs in process and look for 'training' opportunities is invaluable not to mention working on process' to increase quality and profits.

### **Who we are ...**

Vehicle Collision Experts, LLC (VECO Experts) was launched at SEMA in Nov 2016 by Mark Olson, the original co-founder of VeriFacts Automotive. With over 36 years of experience, Mark was a former tech, shop owner, insurance adjuster, I-car instructor and is also president of Future Forensics, an automotive damage investigations company he founded in 1997. The staff have similar qualifications, training and credentials.



Vehicle Collision Experts LLC

## Bullet Proof File

1. Intake photos – taken at the time of first contact (first time car comes on lot)
2. Intake form – when vehicle dropped off with photos and signed by customer
3. Log of all notes, texts, emails and communications
4. Log of all internal notes – parts ordering, adjuster communications, supplements
5. Signed authorization – test drive, scanning, information, costs
6. Photos – damage, damaged parts, repairs, spray out panels, each department, welds, weld tests anything else.
7. Invoices
8. Quality control sheet – filled out properly
9. Final quality control – signed by customer
10. All estimates and estimate changes
11. All supplement sheets
12. All things used for the repair – OEM information, glass urethane expiration dates, electronic reset and pre-scans

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**VECO Experts (Vehicle Collision Experts, LLC)**

1546 NW 56th St #545, Seattle WA 98107

888-362-2511 / 206-771-2111



Vehicle Collision Experts, LLC  
**Get it right the first time!**

## **10 Step Vehicle Quality Process**

1. Vehicle pre-scan and diagnostics
2. Proper vehicle check in
3. Review procedures at time of estimate (not just sectioning)
4. Structural procedures provided to technician during final repair plan meeting
5. Procedures followed, and verified
6. Proper welds, and verified
7. Proper corrosion protection, and verified
8. Proper use of QC sheet, in each process, as designed
9. Proper refinish, and verified
10. Proper vehicle protection (lines, electronics, interior, etc.)

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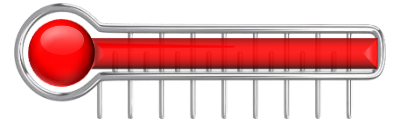
888-362-2511 / 206-771-2111



## What we see in most shops we go into the first time:

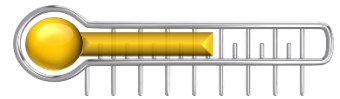
- 1- Not using QC sheet/process as designed
- 2- 200 amp welders not being used when appropriate per OEM (look at machine for rated amp output)
- 3- Not reviewing OEM procedures and following (more than just sectioning – calibration, scanning, etc.)
- 4- Cavity Wax not being used enough (each high production tech needs about a can a week)
- 5- Weld tests not being done prior to welding, and documented
- 6- Equipment not maintained or inoperable (look for dust on equipment)
- 7- Welder tips on STRSW not dressed and no new in shop
- 8- Check in sheets not being done fully (radio codes, etc. and listed as done on QC)
- 9- Incomplete frame measurements (3 section principle)

Big Rocks



- 
- 1- Copper WTP instead of Zinc. Zinc only on appropriate vehicle (none on Honda MAG or FCA)
  - 2- Epoxy primer not present – or being used correctly (check mixing bank for 2k epoxy)
  - 3- Vehicle protection not complete (windows, lines, parts in car, etc.)
  - 4- Painting under urethane set glass - no basecoat, clear coat – epoxy only
  - 5- Self etch primer in body department (not for use in body dept. Paint dept. only)
  - 6- Electronic file not fully documented (following the QC process – fully documented)

Medium Rocks



## Identify the gap:

- Walk through the shop and look – open interiors etc.
- Look at QC sheets for stage of proper completeness.
- Look for Repair procedures and compare dates.
- Look at welder tips on STRSW and also upper tray to see if they have backup.
- Look at closed file for in process photos, 8 point - 3 section measurements, completely filled out check in sheets and QC sheets.

***The only difference between two repairs is what you decide to do for free. There is only one way to fix a Vehicle. – Rex Dunn***

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