



**COLLISION INDUSTRY**  
CONFERENCE

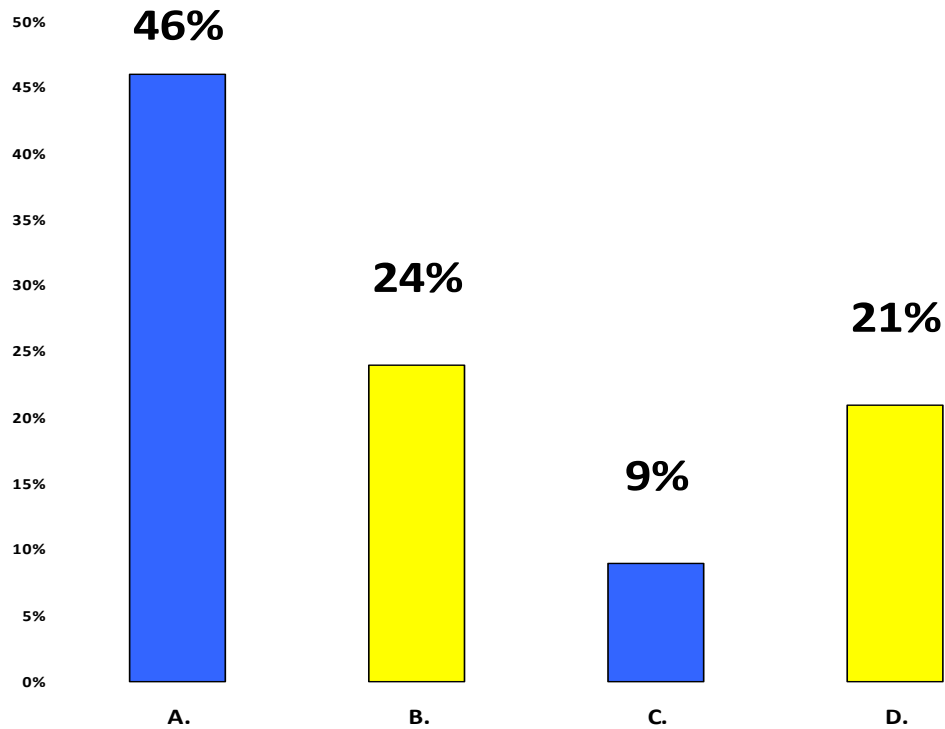
# Standard Operating Procedures— The How and Why

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INDIANAPOLIS, IN

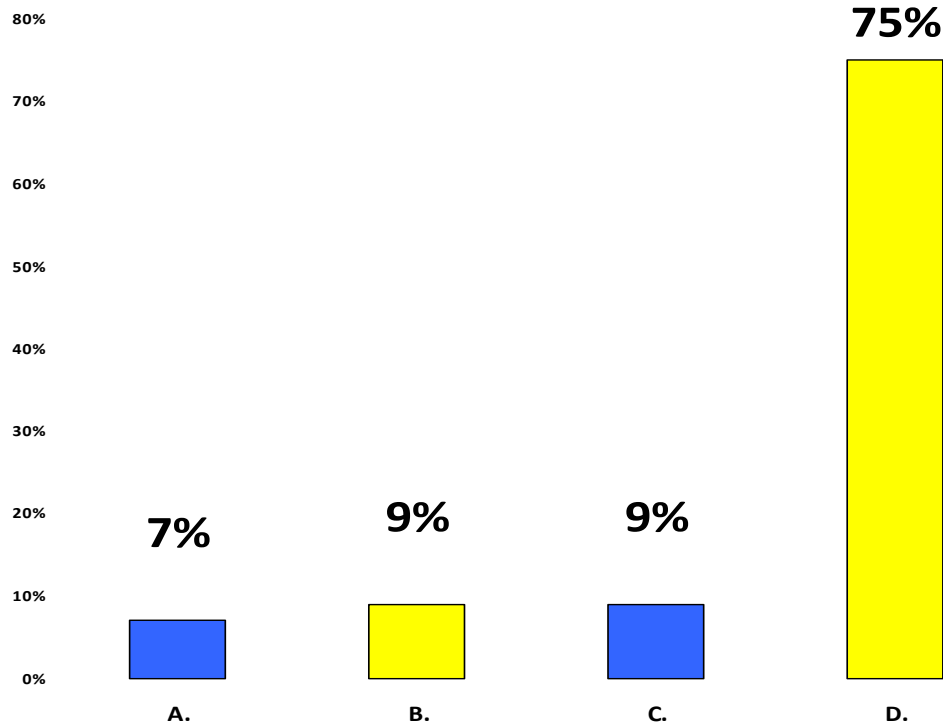
JULY 2019

# Question-What is the length of this I-CAR Test Rail?



- A. 61 CM
- B. 61 MM
- C. 61 Inches
- D. None of the Above

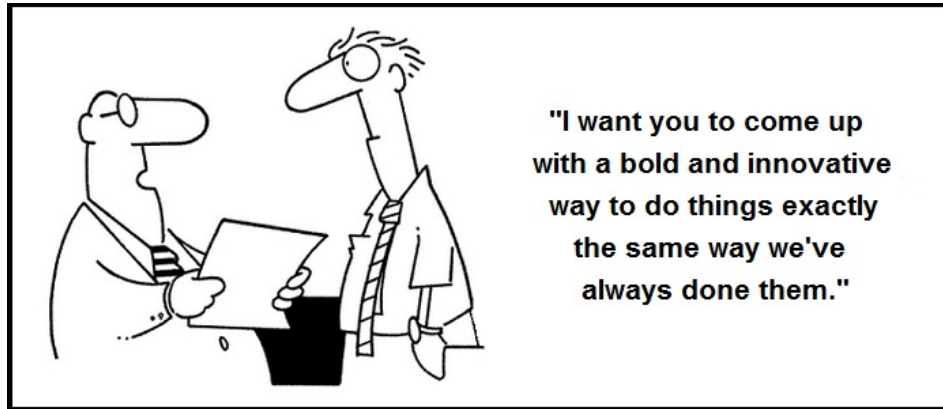
Question: How many times during the course of a year is a vehicle placed on a frame machine/bench and the repair process stops due to something lacking in the repair process?



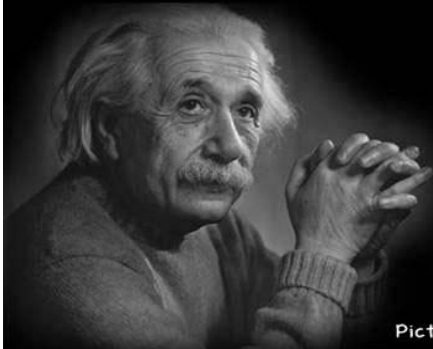
- A. Never
- B. 1-3 Times
- C. 4-5 Times
- D. More than 5

# Sound Familiar?????

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**Insanity: doing the  
same thing over and  
over again and  
expecting different  
results.**



**Albert Einstein**

PictureQuotes.com

# What are Standard Operating Procedures (SPOs)

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A *standard operating procedure* (SOP) is a set of step-by-step instructions compiled by a collision center to help workers carry out various routine *operations*. SOPs aim to achieve efficiency, quality output and uniformity of performance, while reducing miscommunication and failure to comply with generally accepted industry procedures.

# The Why and the What

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The main reason you **need** SOPs in your body shop, is for the benefit of communication. As improvements are made to processes, the **operating procedures** are updated, and each update requires new training. Updating SOPs when necessary provides a method to communicate the process changes to employees. Mar 9, 2016

Standard Operating Procedures (SOPs) are the **documented processes that a company has in place to ensure services and products are delivered consistently every time**. SOPs are often used to demonstrate compliance with the regulation or operational practices and to document how tasks must be completed at your organization.

# Writing a SOP

## **Writing procedures from the end user's perspective**

Always remember that SOPs should be written from a purely practical perspective from the point-of-view from those who will actually use them. Here are some simple yet important guidelines to keep in mind to write an end user-focused SOP.

- **Write concisely, clearly, and follow a step-by-step format**

Keep sentences as brief as possible and use simple, common terms. Never confuse the meaning of an instruction by using overly technical or jargon-filled terminology when a simpler, clearer word or phrase communicates the same idea.

- **Write in the active voice and present the main idea first**

Be mindful of what you write as well as *how you write it*. Simple action-oriented verbs such as "identify," "direct," "evaluate," and "review" get the point across without requiring interpretation. If at all possible, do not use the passive voice when structuring sentences as this has been shown to confuse and misdirect attention away from important ideas.

- **Stay away from ambiguity**

Always avoid using generalized terms that give no tangible meaning. Words like "periodic" "typical" "general" and "should" do not enforce any consistent direction or execution of a directive — the main goal of having an SOP in the first place.

- **Be careful around important terms**

The main terms here are "may," "must," and "should." Remember that using the word "may" gives personnel decision-making power and/or flexibility depending on the context. "Must," is always mandatory and "should" is by nature conditional.

- **Make smart use of formatting**

If your SOPs consist of long, dense paragraphs, chances are there's a better formatting scheme to follow. Bulleted items and lists are particularly effective for certain pieces of information as they focus attention and slow reader's pace



# Hints for creating effective SOP

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1. Describe the task in detail
2. Use of Pictures are helpful
3. Stress safety if necessary
4. Have some of the employees in drafting the SOP
5. Get a buy in of all your employees
6. Make sure intended employees understand them
7. Set up a system to monitor them
8. Name the SOP

# Example Using pictures for as a SOP



All parts that are to be Removed & Re-installed will be marked with the letters R&I with an arrow pointed to them.

All panels that are to be blended will be marked as Blend



All parts that are to be replaced will be marked with an X



All parts that are to be repaired will be circled & the word "repair" printed next to it.

# Let's make a SOP for Frame/Benching a Vehicle

- Obtain the estimate for the vehicle being repaired
- Obtain the OEM data for the specific vehicle
- • Gather all necessary tools needed for the repair
- Make sure all welded on parts are correct and available
- Verify vehicle data
- Input vehicle data into electronic measuring system (if used by shop)
- Obtain vehicle data for JIG type systems (if used by shop)
- Pull up data to show location of pinch weld clamps
- Remove parts for pinch weld clamps
- Put vehicle on frame rack or mount on a frame bench
- Install pinch weld clamps or other clamping systems
- Remove tires and wheels (mark location of each tire before storing)
- Disconnect battery if necessary
- Remove additional parts for access (note if supplement is necessary)
- Set up measuring system or Jigs
- Measure vehicle to determine extent of damage (measure entire underside of vehicle. Minimum of 8 points per side)

## Let's make a SOP for Frame/Benching a Vehicle (continued)

- Pull to correct Mash, Sway, Sag and/or Diamond
- Remove and Install all parts as specified in the estimate
- Re-measure vehicle
- Install tires and wheels
- Replace corrosion protection products as necessary at this junction of the repair
- Replace equipment to their proper storage area
- Repair corrosion protection to pinch weld areas
- Remove vehicle from the frame machine or bench

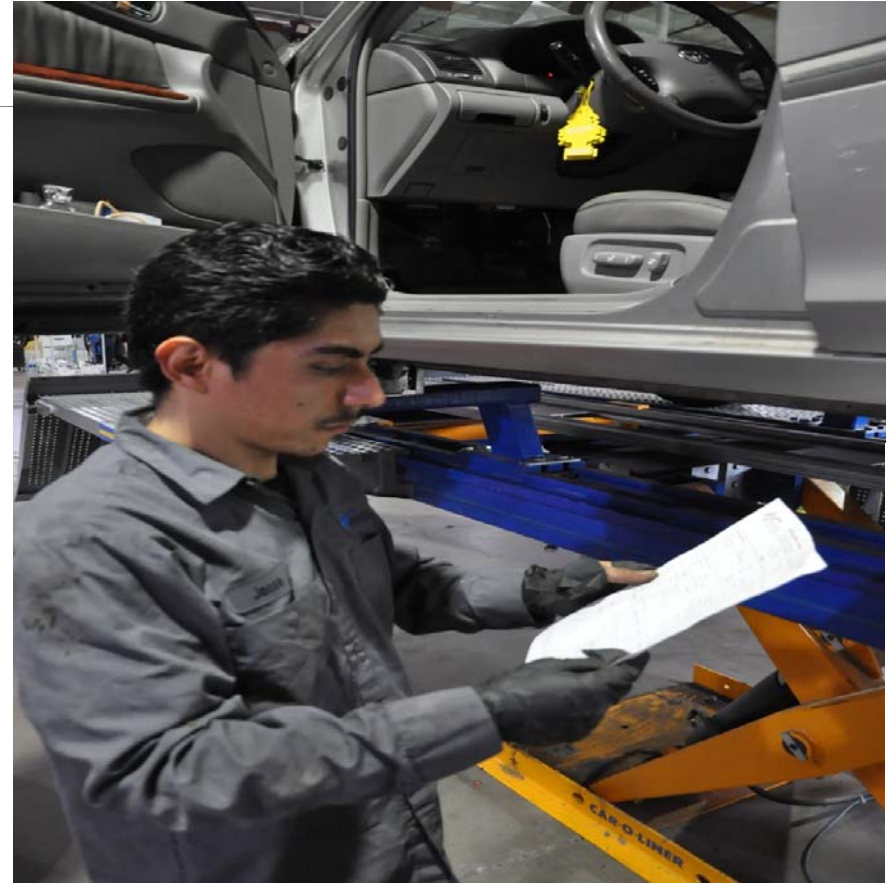


Move Vehicle on  
to frame bench

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# Verify VIN # and Review the Estimate



Gather all the necessary Tools and Parts

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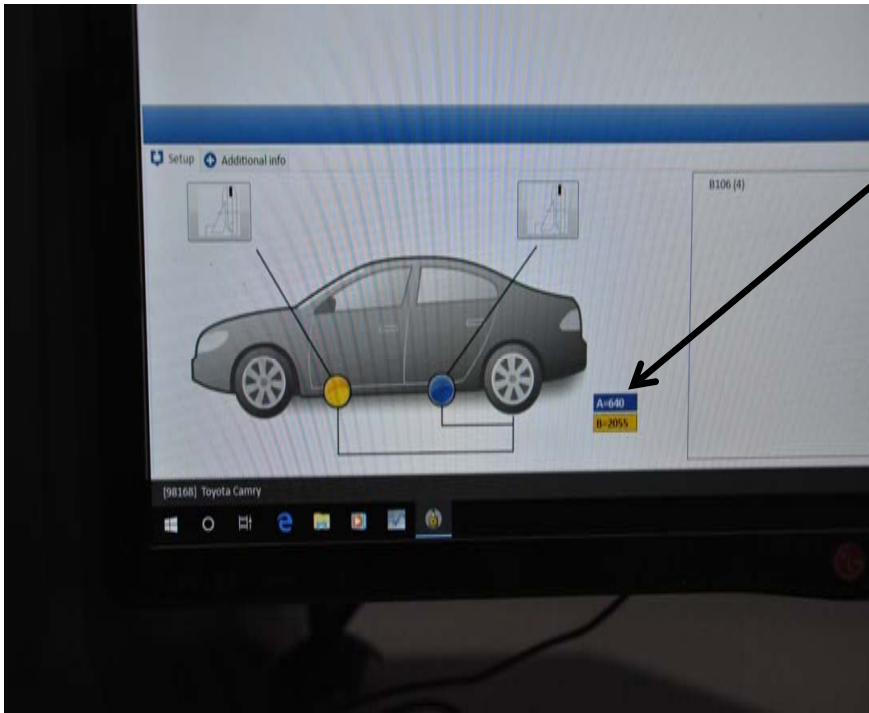
# Input vehicle data and review equipment data

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Determine Pinch weld clamp location & mark.



# Install Pinch weld clamps

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# Mark Tires and remove from vehicle

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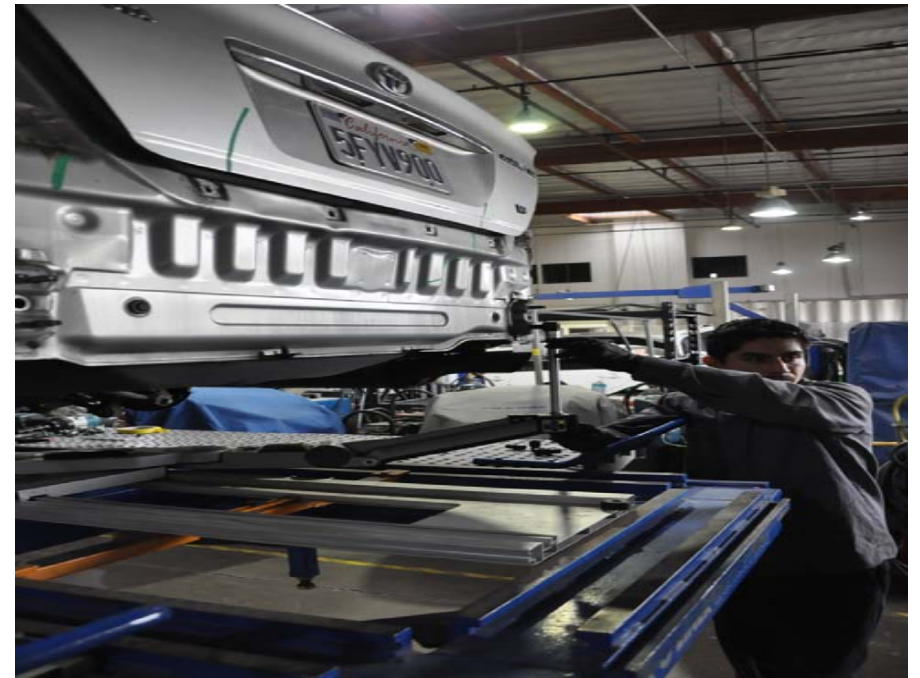


# Set up Measuring Equipment

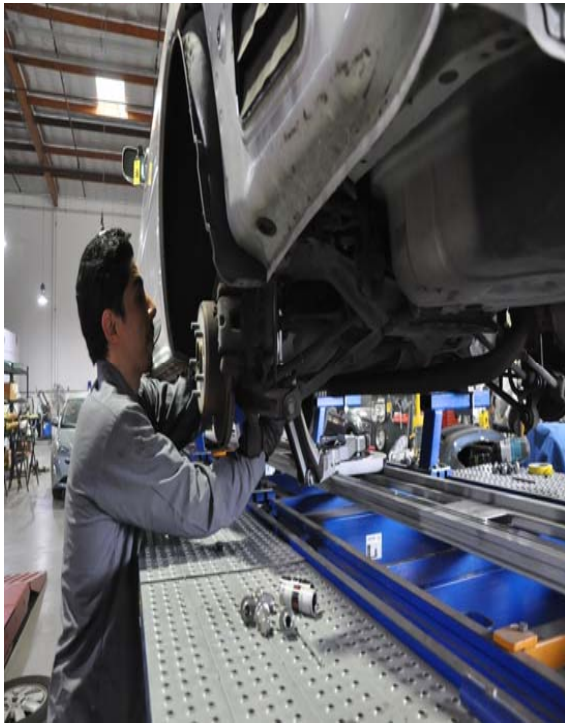


# Center Measuring System and measure entire length of vehicle

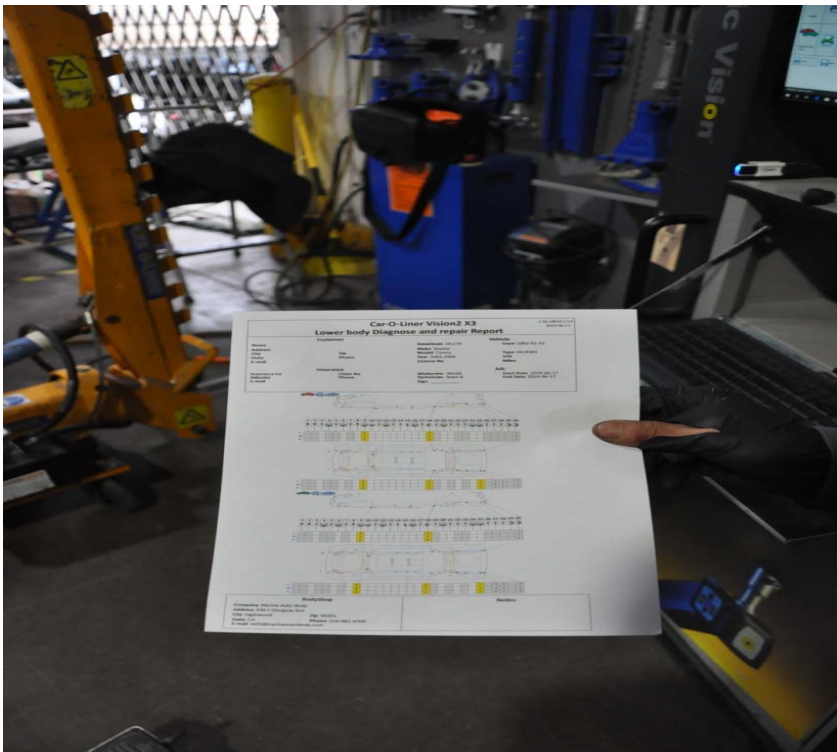
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# Finish measuring to determine vehicle misalignment



Print out Misaligned vehicle data sheet and move pulling arm to frame machine.



Install rail pulling fixture and pull vehicle to correct specifications.

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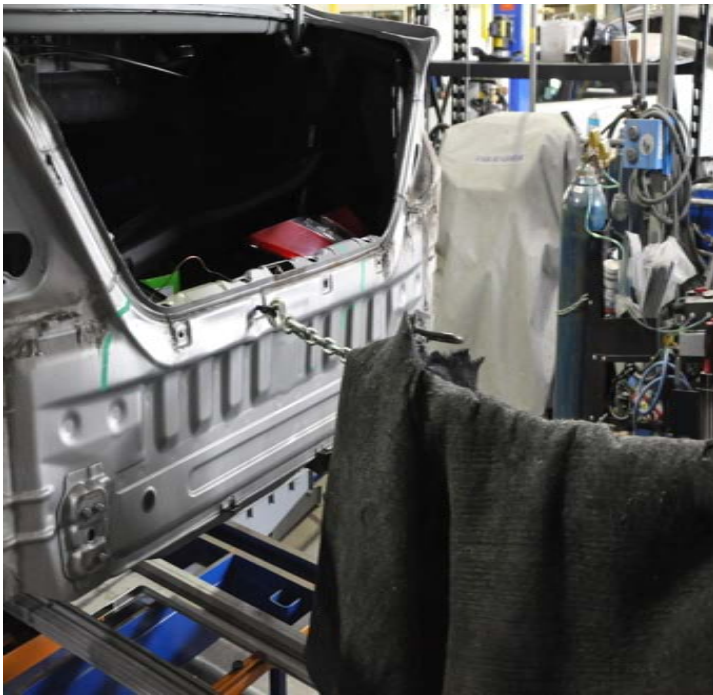


Measure gaps to determine amount and print out final corrected dimension vehicle.

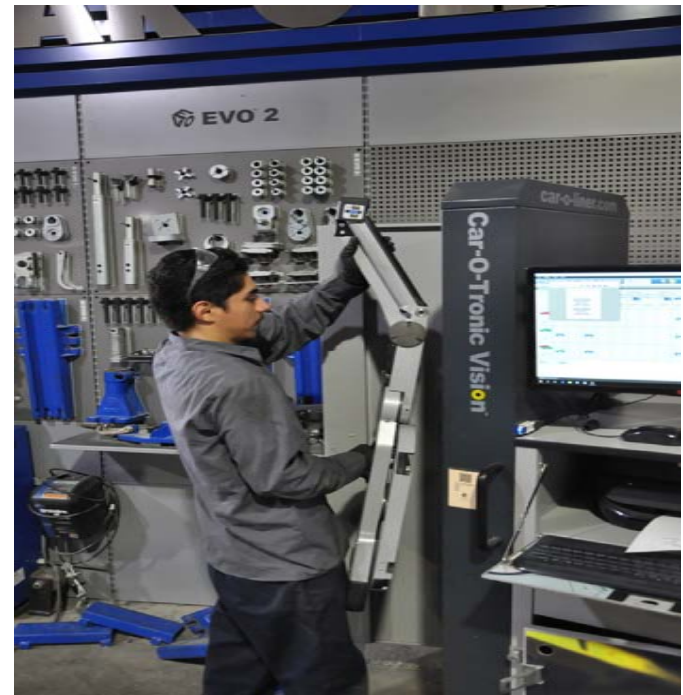
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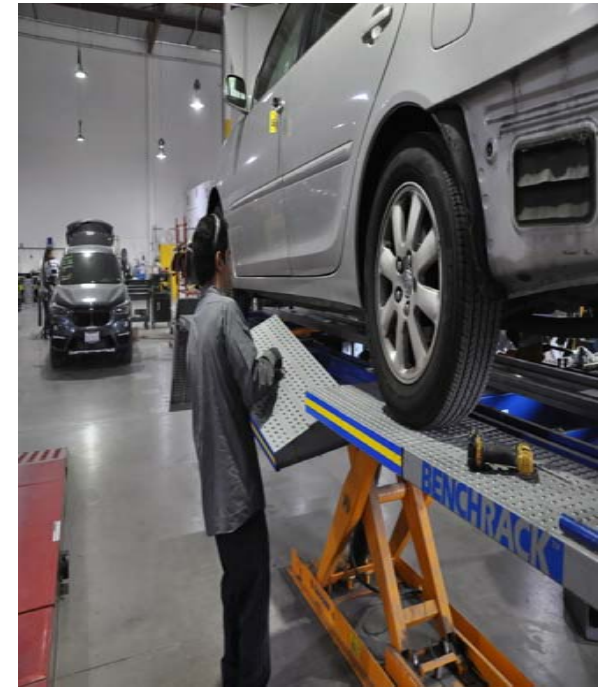
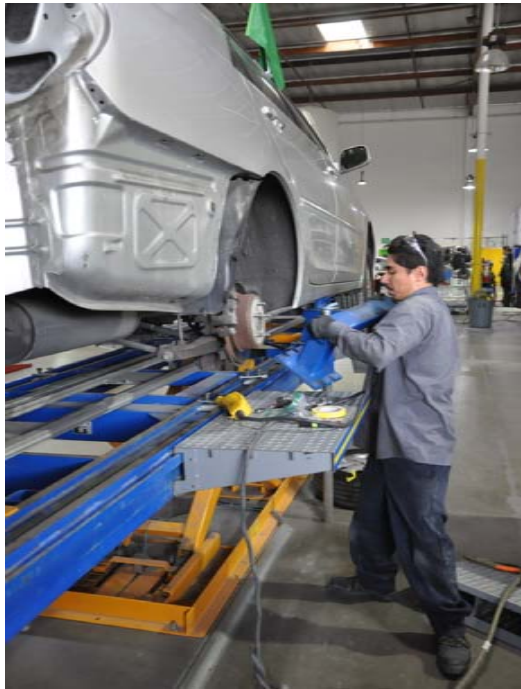
Pull rear body panel to original position and check the trunk to quarter opening gap.



Remove pinchweld claps and store measuring system.



# Reinstall tires and frame bench ramps.



Repair pinch welds and re-connect the battery.



Remove vehicle from frame bench.

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# Result for improving the frame repair process

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Cart has arms,  
clamps,  
"S" hook and  
additional chains at  
tech's finger tips

