

# **Instructional Terminology**

## **Automotive Collision Repair 47.0603.00**



This **Instructional Terminology** defines entry-level industry terms identified by the program's Technical Standards, Measurement Criteria, and Instructional Framework. This resource is designed for use in classroom and laboratory environments to ensure students are introduced to the essential occupational terminology relevant to their program. It supports the consistent use of terms and definitions in curriculum, instruction, and assessment and corresponds with the Technical Standards endorsed in January 24, 2024.

### **A**

**Abrading** - The process of wearing down or scraping away a surface using friction

**Accessories** - Optional items added to the vehicle for comfort or performance, such as a GPS or heated seats

**Add-On Accessories** - Additional parts or features added to the vehicle after manufacture, often referred to as aftermarket accessories

**Adhesively bonded repair** - A repair technique that uses strong adhesives to join parts together instead of welding or mechanical fasteners

**Adhesives** - Special glues or bonding materials used to join parts together

**Adjacent panels** - Body panels next to the area being repaired or refinished

**Adjust** - To make small changes to the position or operation of a component to ensure proper function

**Advanced Driver Assistance Systems (ADAS)** - Electronic systems designed to help the driver in the driving process, such as adaptive cruise control or lane departure warnings

**Aim headlights** - Adjusting the angle and direction of the headlights according to factory specifications for proper visibility

**Air cap** - The cap at the front of the spray gun that shapes the pattern of the sprayed paint

**Air hoses** - Flexible tubes that carry compressed air from the air source to the spray gun

**Air intake components** - Parts of the system that allow air to flow into the engine for combustion

**Air lines** - The network of pipes or hoses that distribute compressed air throughout a paint shop

**Air source** - The origin of compressed air, typically an air compressor

**Airless welding** - A plastic welding method that doesn't require compressed air, often using an electric heating element

**Alternative fuel vehicle** - A vehicle that runs on fuel other than traditional gasoline or diesel

**Aluminum** - A lightweight metal used in vehicle construction to reduce weight and improve fuel efficiency

**Aluminum repair plan** - A specific strategy for repairing aluminum components, which differ from steel in their properties and repair techniques

**Apply suitable metal treatment** - The process of applying appropriate chemicals to bare metal to prevent corrosion and improve paint adhesion

**Appropriate cleaner** - Specific cleaning products designed to remove particular types of contaminants from vehicle surfaces

**Assembly plant** - The factory where the vehicle was built

## **B**

**Bag and tag** - The process of placing removed parts in a bag and labeling them for easy identification and reassembly

**Battery** - A device that stores electrical energy to power the vehicle's electrical systems

**Battery connection** - The points at which the battery is connected to the vehicle's electrical system, crucial for proper operation

**Blending** - The technique of merging new paint with the existing finish for a seamless appearance

**Block sanding** - Using a sanding block to ensure a flat, even surface

**Body filler** - A two-part, putty-like substance used to fill dents, dings, and irregularities in body panels

**Body-over-frame** - A vehicle construction method where the body is built separately and mounted on a frame

**Body panels** - The outer shell of a vehicle, including doors, fenders, hood, and trunk lid

**Body type** - The shape and structure of the vehicle, such as sedan, SUV, or coupe

**Build data** - Detailed specifications about how the vehicle was assembled

**Bumper covers** - The outer, usually plastic, shell of a bumper assembly

**Bumpers** - The front and rear protective structures designed to absorb impact in a collision

## **C**

**Carbon fiber** - A strong, lightweight material made of thin fibers of carbon

**Clean panels with appropriate cleaners** - Using specific cleaning products designed for use just before painting

**Coatings** - Protective or decorative layers applied to the surface of a vehicle

**Cold shrink** - A technique of shrinking stretched metal without the use of heat

**Collision damage** - Damage to a vehicle resulting from an accident or impact

**Component connections** - Electrical or mechanical linkages that allow various systems (such as wipers or horns) to function correctly

**Components** - Individual parts that make up a vehicle's structure or systems

**Composite panels** - Panels made from two or more materials combined to improve strength or reduce weight

**Composites** - Materials made from two or more different substances to create a stronger, lightweight product

**Contaminants** - Substances that can interfere with paint adhesion or finish quality

**Contours** - The curved or shaped surface of a body panel

**Controls** - Switches and buttons used to operate power windows

**Corrosion protection** - Measures taken and materials applied to prevent rust and oxidation on metal parts

**Cosmetic repair** - A repair focused on restoring the appearance of a component rather than its structural integrity

**Customer information** - Personal details about the vehicle owner, such as name and contact details

## **D**

**Damage analysis** - The process of assessing the extent and nature of damage to a vehicle

**Damage repair** - The process of restoring a vehicle to its pre-accident condition

**Deck lid** - The panel that covers the trunk or cargo area of a vehicle, also known as a trunk lid

**Dent** - A depression in a body panel caused by impact

**Detailing** - The process of thoroughly cleaning and polishing a vehicle to improve its appearance

**Diagnose** - To identify the cause of a malfunction or problem in a vehicle system

**Diagnose finish** - The process of examining the existing paint finish to determine the appropriate repair strategy

**Direct damage** - Damage that occurs at the point of impact

**Doors** - The hinged or sliding panels that allow entry and exit from a vehicle

**Double-sided adhesively bonded repair** - A repair method where adhesive is applied to both sides of a joint or damaged area for stronger bonding

**Dry sanding** - Sanding without the use of water or lubricants

## **E**

**Ear protection** - Earplugs or earmuffs to protect hearing from loud equipment

**Electrical components** - Parts of the vehicle's electrical system, including wiring, sensors, lights, and electronic control units

**Engine type** - The kind of engine the vehicle uses (e.g., gas, diesel, or electric)

**Estimating Terminology** - The specific terms and language used in the process of estimating vehicle repair costs

**Exhaust system** - A system that removes the waste gases produced during engine combustion from the vehicle

**Extent of damage** - The degree or severity of damage to a vehicle

**Exterior composite panels** - Body panels made from a mixture of materials, often including fiberglass or carbon fiber, used for their strength and light weight

**Exterior trim** - Decorative elements on the outside of a vehicle

**Eye protection** - Goggles or safety glasses to protect eyes from chemicals and debris

## **F**

**Featheredge** - To thin or taper the edge of a repaired area to blend it smoothly with the surrounding surface

**Federal regulations** - Rules and guidelines set by the national government that apply to automotive painting and refinishing

**Fenders** - The body panels that surround the front wheel wells

**Filters** - Devices used to remove contaminants from the air or paint before it reaches the spray gun

**Final cleaning solution** - A product used to remove all traces of dirt, oil, and sanding residue before painting

**Finish sanding** - The final sanding process to smooth out the repaired area before painting

**Finish sanding techniques** - Advanced sanding methods used in the final stages of surface preparation

**Flexible plastic** - A type of plastic that can bend easily without breaking, often used in bumper covers or interior trim

**Fluid needle** - A component of the spray gun that controls the amount of paint released

**Foam door type masking** - Using foam tape to mask door openings

**Foam materials** - Lightweight materials used for insulation or to fill spaces in the vehicle body

**Fog/Driving lamps** - Additional lights on a vehicle used for improved visibility in poor weather conditions

**Force curing** - Accelerating the drying process of paint or primer using heat or special equipment

**Fuel intake system** - The components that manage the flow of fuel from the tank to the engine, ensuring proper combustion

## **G**

**Gain access** - The process of removing parts or panels to allow inspection of damaged areas

**Ghosting** - An effect where the outline of a repair becomes visible through the paint

**Glass components** - Parts of the vehicle made of glass, such as windows or windshields

**Gloves** - Hand protection against chemicals and other hazards

**Glue** - Pulling Dent Repair (GPDR) - A technique for removing dents by adhering a tool to the dent with glue and pulling it out

**Glue pulling** - A technique for removing dents using specially designed glue and pulling tools

**Guide coat** - A light mist of contrasting color applied over a primer to highlight surface imperfections during sanding

**Guides** - Components that direct the movement of windows or sunroofs along a specific path

## **H**

**Hammer and dolly techniques** - Methods of shaping metal using a hammer and a dolly (a shaped metal block)

**Hand tools** - Non-powered tools used in body repair, such as files, sandpaper, or wrenches

**Handles** - Parts used to manually open, close, or adjust windows or sunroofs

**Hardware** - Small metal parts used in assembly, such as screws, nuts, and bolts used in assembling and mounting vehicle parts

**Hatch** - A door-like opening in the rear of some vehicles, usually opening upwards

**Hazardous materials** - Substances that can harm human health or the environment

**Hazardous operations** - Tasks that pose potential risks to health, safety, or the environment

**Headlamp assembly** - The housing unit containing the headlight, responsible for illuminating the road ahead

**Heat shrink** - A technique of using heat to shrink stretched metal back to its original shape

**High strength steel** - Steel alloyed to provide greater strength than regular steel

**Hinges** - Mechanical bearings that allow a door or panel to swing open and closed

**Hood** - The hinged cover over the engine compartment of a motor vehicle

**Hood hinges** - The mechanical components that allow the hood to open and close

**Hood latch** - The locking mechanism that secures the hood when closed

**Horn** - An audible warning device installed in vehicles for safety

**Hybrid vehicle** - A vehicle that uses both a conventional internal combustion engine and an electric motor for propulsion

## **I**

**Impact absorbers** - Components designed to absorb and dissipate energy during a collision

**Impact energy absorbing components** - Parts of the vehicle designed to absorb energy during a collision to reduce damage, often called "crush zones"

**Indirect damage** - Secondary damage that occurs as a result of the initial impact, often in areas away from the point of impact

**Inertia damage** - Damage caused by the sudden stopping or change in direction of a vehicle during a collision

**Interior trim** - Decorative elements inside a vehicle

**Interpret PDS sheets** - The ability to read and understand Paint Data Sheets, which provide crucial information about paint products and their application

**Inventory** - A complete list of items, such as parts or tools, used in the repair process

**ISO numbers** - Standardized codes used to identify different types of plastic

## **J**

## **K**

## **L**

**Labels/Decals** - Informational or decorative stickers applied to various parts of a vehicle

**Latches** - Mechanisms that secure doors, hoods, or other panels in a closed position

**Liftgate** - Similar to a hatch, but typically referring to the rear door on an SUV or minivan

**Local regulations** - Rules and guidelines set by city or county governments that apply to automotive painting and refinishing

**Low Voltage System** - Electrical systems in a vehicle that operate at a lower voltage (typically 12 volts) to power components such as lighting, the horn, and wipers

**Lug nuts** - The fasteners used to secure a vehicle's wheel to the hub

## **M**

**Magnesium** - A light, strong metal sometimes used in vehicle construction for certain components

**Make** - The manufacturer or brand of the vehicle

**Manufacturer guidelines** - Specific instructions provided by the vehicle manufacturer for repair procedures

**Manufacturer repair procedures** - Specific guidelines provided by the vehicle manufacturer for repairing their vehicles

**Manufacturers glass setting guidelines** - Specific instructions provided by vehicle manufacturers for refinishing areas around fixed glass

**Manufacturers recommendations** - Guidelines provided by the vehicle manufacturer for repair procedures

**Masking** - Covering areas that should not be painted

**Material type(s)** - The different materials used in vehicle construction, such as steel, aluminum, or plastic

**Mechanical components** - Moving parts of the vehicle, such as the engine, transmission, or steering system

**Metal finishing** - The process of restoring damaged metal to its original shape and smoothness

**Metal treatment** - Chemical solutions applied to bare metal to prevent corrosion and improve paint adhesion

**Mild steel** - A type of steel with medium carbon content, offering a balance of strength and ductility

**Minor imperfection correction** - The process of addressing small flaws in the surface before painting

**Mix undercoats** - The process of combining primer components according to manufacturer specifications

**Mixing procedures** - The proper methods for combining body filler with hardener

**Model** - The specific version or design of the vehicle

**Modifications** - Changes made to the vehicle after its manufacture, such as upgraded wheels or a new exhaust system

**Moldings** - Strips of material used to cover joints or for decoration on a vehicle

## N

**Nation of origin** - The country where the vehicle was manufactured

**National Institute for Occupational Safety and Health (NIOSH)** - A federal agency that conducts research and makes recommendations for preventing work-related injuries and illnesses

**Nitrogen welding** - A plastic welding technique that uses heated nitrogen gas to join plastic parts

**Non-structural analysis** - Examination of vehicle damage that doesn't affect the core structure or safety of the vehicle

**Non-structural components** - Parts of the vehicle that do not contribute to its structural integrity, such as body panels or trim

**Nozzle** - The opening at the front of the spray gun through which the paint is sprayed

## O

**Occupational Safety and Health Administration (OSHA)** - A federal agency that sets and enforces workplace safety standards

**Occupational Safety and Health Administration (OSHA) Regulation 1910.134** - The standard that governs respiratory protection in the workplace

**Off-vehicle repair** - Repairs conducted on components that have been removed from the vehicle

**One-time use fasteners** - Bolts, clips, or other fasteners designed to be used only once and replaced after removal

**Original Equipment Manufacturer (OEM)** - The company that originally manufactured vehicle parts

**Original Equipment Manufacturer (OEM) appearance** - The look of the original equipment as provided by the manufacturer

**Over catalyzing** - Adding too much hardener to body filler, causing it to cure too quickly

**Overall visual inspection** - A comprehensive visual examination of the entire vehicle to identify all visible damage

**Overhaul** - To completely disassemble, inspect, repair or replace parts, and reassemble a component

## **P**

**Paint code** - A code that identifies the specific color of a vehicle

**Paint finish** - The outermost layer of paint on a vehicle

**Paint manufacturers procedures** - Specific guidelines provided by paint manufacturers for using their products

**Paint technical data sheet** - A document that provides specific instructions for mixing and applying paint products

**Panel** - A section of the vehicle's body, such as a door, fender, or hood

**Panel alignment** - The process of ensuring that body panels are correctly positioned relative to each other

**Parts nomenclature** - The specific names and labels used to identify vehicle parts

**Pattern control valve** - A valve that adjusts the shape and size of the spray pattern

**Personal Protective Equipment (PPE)** - Safety gear worn to minimize exposure to hazards in the workplace

**Personal safety equipment** - Protective gear worn to minimize exposure to hazards in the workplace

**Pin holing** - Small holes that appear in body filler during the curing process

**Plastic** - A synthetic material used in various parts of a vehicle, such as bumpers or interior components

**Plastic repair** - Techniques used to fix damaged plastic components

**Plastic welding** - A repair technique that uses heat to melt and fuse plastic parts together

**Point(s) of impact** - The specific location(s) where a collision occurred on a vehicle

**Power mechanisms** - Electric motors and associated components that power the movement of windows

**Power-operated roof panel** - A section of the vehicle's roof that can be opened electronically, also known as a sunroof or moonroof

**Power sunroof** - A sunroof that opens and closes using an electric motor rather than manual operation

**Power tools** - Electric or pneumatic tools used in body repair, such as sanders or grinders

**Prepare panels for blending** - The process of readying adjacent panels to achieve a seamless transition between new and existing paint

**Pre-repair inspection** - A thorough examination of a vehicle before beginning repairs to assess damage and plan the repair process

**Pre-repair procedure** - Steps taken before beginning the actual repair work

**Primer** - A preparatory coating put on materials before painting

**Primer sealer** - A type of primer that seals the surface and provides a uniform base for the paint

**Primer U** - A type of primer that fills minor imperfections in the surface

**Production date** - The date when the vehicle was manufactured

**Proper repair** - A repair that restores the vehicle to its pre-accident condition and function

**Protect adjacent panels** - The act of covering or masking nearby panels to prevent overspray or damage during the refinishing process

## **Q**

**Quality control** - A system of maintaining standards in manufactured products by testing a sample of the output against the specification

## **R**

**Recess/Back masking** - A technique of masking that protects recessed areas or the back side of panels

**Recharge battery** - The process of restoring electrical energy to a vehicle's battery

**Refinishing waste products** - Any leftover materials or byproducts from the painting and refinishing process that require proper disposal

**Regulators** - Devices that control the pressure of air or fluid in the spray gun system

**Reinforcement** - Structural components designed to strengthen a part of the vehicle

**Reinstall** - To put a removed component back into its original position

**Remove dust** - The crucial step of eliminating all dust particles from the surface before painting

**Repair methods** - The various techniques and procedures used to fix damaged vehicle components

**Repair plan** - A detailed strategy outlining the steps and procedures needed to repair a vehicle

**Repair procedures** - Step-by-step methods for fixing damaged or malfunctioning parts

**Repair techniques** - Methods used to fix damaged vehicle parts, including glass

**Repairable plastics** - Plastic components of a vehicle that can be fixed rather than replaced

**Reparability** - The extent to which a damaged component can be repaired rather than replaced

**Respiratory protection system** - Equipment designed to protect the wearer from inhaling hazardous substances

**Restraint system** - Safety devices in a vehicle, such as seat belts and airbags

**Retainer** - A component that holds another part in place, often used in window assemblies

**Right to Know Law** - Legislation that requires employers to inform employees about the hazardous substances in their workplace

**Rigid plastic** - A type of plastic that is stiff and inflexible, often used in body panels or interior components

**Rivets** - Metal fasteners used to join two pieces of material together, commonly used in vehicle construction

**Run channels** - Grooves or tracks in which car window glass slides up and down

## **S**

**Safety** - Practices and precautions taken to prevent injury while working on vehicle components

**Safety Data Sheet (SDS)** - A document that provides information on the properties of potentially hazardous chemicals

**Safety systems** - Equipment in the vehicle designed to protect occupants, such as airbags or antilock brakes



**Safety systems damage** - Damage to components that are part of or near the vehicle's safety systems, which may affect their operation

**Sanding** - The process of smoothing a surface using abrasive materials

**Sandpaper** - Abrasive paper used for smoothing surfaces

**Sealers** - Materials used to fill gaps and prevent water intrusion in vehicle bodies

**Seam sealer** - A material used to seal the joints between body panels to prevent water intrusion and corrosion

**Semi-rigid plastic** - A plastic material that has some flexibility but still maintains its shape under normal conditions

**Service procedures** - Routine maintenance and repair actions performed on vehicle components

**Shape and reform** - The process of returning a damaged plastic part to its original form using heat and pressure

**Single-sided adhesively bonded cosmetic repair** - A repair technique where adhesive is applied to one side of a damaged area, typically for surface-level damage

**Single (one time) use components** - Parts that are designed to be used only once and must be replaced after removal or deployment, such as certain bolts or airbags

**Sliding doors** - Doors that open horizontally on tracks, commonly found on minivans

**Solvent-based cleaners** - Cleaning solutions that use chemical solvents as the primary cleaning agent

**Sound deadeners** - Materials used to reduce noise transmission in a vehicle

**Spray environment** - The area where painting takes place, usually a spray booth designed to control overspray and maintain air quality

**Spray gun** - A tool that uses compressed air to spray paint onto a surface

**Spray gun setup** - The process of selecting and adjusting the appropriate components (fluid needle, nozzle, and cap) for the specific paint product being used

**Spray out pattern test** - A test performed by spraying paint onto a surface to check the spray pattern and make necessary adjustments

**Staining** - Discoloration of the paint caused by chemicals in the body filler

**State regulations** - Rules and guidelines set by individual states that apply to automotive painting and refinishing

**Stationary glass flange** - The area where fixed glass (such as a windshield) meets the vehicle body

**Steel types** - Different grades of steel used in vehicle construction, such as mild steel or high-strength steel

**Straighten** - To return a bent or damaged panel to its original shape

**Substrates** - The materials that make up a vehicle's body, including steel, aluminum, magnesium, plastic, and composites

**Suits** - Full-body protective clothing

**Sunroof** - A panel in the roof of a car that can be opened to allow light or fresh air into the vehicle

**Supplemental damage** - Additional damage discovered during a more thorough inspection, often hidden or not immediately apparent

**Supplemental Restraint System (SRS)** - Safety devices in a vehicle that supplement seatbelts, such as airbags

**Supplied air/fresh air make up** - A type of respiratory protection that provides clean air from an uncontaminated source

**Surface irregularities** - Imperfections or unevenness in the surface of a body panel

**Surface preparation** - The process of cleaning and treating a surface before repair to ensure proper adhesion or welding

**Suspension** - The system of springs, shock absorbers, and linkages that connect a vehicle to its wheels

**Suspension system** - A system of components, including springs, shock absorbers, and linkages that connect the vehicle to its wheels and helps absorb shocks from the road

## **T**

**Tab repair** - A repair technique where a small piece of material (the "tab") is bonded or welded to reinforce a damaged area

**Tailgate** - The rear access panel on trucks and some SUVs that can be lowered or opened for loading

**Torque specifications** - The recommended force for tightening bolts or nuts to avoid over-tightening or under-tightening, which can cause damage

**Torque wrench** - A tool used to apply a specific amount of force when tightening bolts, such as lug nuts, to manufacturer specifications

**Transmission** - The system that transmits power from the engine to the wheels, such as automatic or manual

**Trim** - Decorative elements added to the interior or exterior of a vehicle

**Trim level** - Different versions of a vehicle model, often indicating additional features or accessories

**Two-component finishing filler** - A body filler that requires a hardener to cure; used for filling minor imperfections

## **U**

**Ultra-high-strength steel** - Extremely strong steel used in critical structural components of vehicles

**Undercoating** - A protective layer applied to the underside of a vehicle to prevent damage from road debris and corrosion

**Unibody** - A construction method where the body and frame of the vehicle are a single unit

**Using guide coats** - The technique of applying a contrasting color over primer to highlight imperfections during sanding

## **V**

**Vehicle construction** - The overall structure of the vehicle, such as unibody or body-over-frame

**Vehicle Identification Number (VIN)** - A unique code that identifies a specific vehicle, including details about its origin, make, and model

**Vehicle joining/Attaching methods** - The methods used to connect parts of a vehicle together, such as welding, adhesives, or rivets

**Vehicle mileage** - The total distance the vehicle has traveled, usually measured in miles or kilometers

**Visual inspection** - A thorough examination of the vehicle using only the eyes to identify visible damage

**Volatile Organic Compounds (VOCs)** - Organic chemicals that have a high vapor pressure at ordinary room temperature, often found in paints and solvents

## **W**

**Wash** - The process of cleaning the entire vehicle with soap and water as part of the pre-repair procedure

**Water-based cleaners** - Cleaning solutions that use water as the primary solvent

**Weather-stripping** - Rubber seals that prevent water, air, and noise from entering the vehicle around windows and doors

**Welding** - A method of joining metal parts together by melting them at their joining points

**Weld-on pulling attachments** - Devices that are welded to a damaged panel to help pull out dents

**Window regulators** - Mechanisms that control the raising and lowering of car windows

**Wiper/Washer Systems** - Systems that clean the vehicle's windshield using wipers and washer fluid

**X**

**Y**

**Z**