VEHICLE BODY REPAIRING AND PAINTING

NTQF Level -II

Learning Guide -31

Unit of Competence:-Perform Under Coat Application

Module Title: - Performing Under Coat Application

LG Code: **EIS VRP2 M10 LO1-31**

TTLM Code: **EIS VRP2 TTLM0919v1**

LO 1: Prepare for work

Instruction Sheet	Learning Guide #-31

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Using work instructions
- Reading and interpreting Job specifications
- Workplace Health and Safety (WHS)requirements
- Selecting and inspecting materials
- Identifying and checking hand, power tooling and safety equipment
- Determining Procedures to minimize waste material
- Identifying procedures to maximizing energy efficiency

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, **you will be able to –**

- Use work instructions to determine job requirements, including method and material type.
- Read and interpret Job specifications.
- Observe ***Workplace Health and Safety (WHS)*** requirements throughout the work.
- Select and inspect ***Materials*** for quality.
- Identify and check Hand, power tooling and safety equipment for operation.
- Determine procedures to minimise waste material.
- Identify procedures for maximizing energy efficiency while completing the job.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 20.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” **in page -5.**
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).

6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.

Information Sheet-1	Using work instructions

Work instructions

A Work Instruction is a document that provides specific instructions to carry out an Activity. It is also a document describing specific activities and tasks within the organization. It contains the greatest amount of detail.

Work instruction is a step by step guide to perform a single instruction which contains more detail than a Procedure and is only created if detailed step-by-step instructions are needed.

Difference between Work Instructions and Procedures

Another way of looking at Work Instructions v Procedures is that:
Procedures describe:

- What is the activity is
- Who performs it
- When it is performed

Work instructions describe:

- How the activity is performed.

Purpose of Work Instructions

'A work instruction is a tool provided to help someone to do a job correctly. This simple statement implies that the purpose of the work instruction is quality and that the target user is the worker. Unfortunately, in many workplaces, today's work instructions have little connection with this fundamental focus. Factories have encumbered work instructions with content that has been added to satisfy auditors, lawyers, engineers, accountants and yes, even quality managers. We've piled on so much extraneous material that we've lost sight of the intended purpose of work instructions.'

Steps to Writing Work Instructions

Follow these steps to write your next set of Work Instructions.

1. Know exactly how to perform the task.
2. Plan how to write steps in the correct order.
3. Write the steps in logical order.
4. Start each instruction with a verb.
5. Write each step as a single action.
6. Include warnings as pre-steps.
7. Review and edit instructions carefully.
8. Write in the positive voice.
9. Avoid opinions, preferences, or choices.

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List steps to write work instruction (4)

2. Define work instruction (2)

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 5 points**

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-2	Reading and interpreting Job specifications

Definition: Job Specification

A job specification defines the knowledge, skills and abilities that are required to perform a job in an organization. Job specification covers aspects like education, work-experience, managerial experience etc. which can help accomplish the goals related to the job. Job specification helps in the recruitment & selection process, evaluating the performance of employees and in their appraisal & promotion. job specification and job description help in giving an overview of the job in terms of its title, position, roles, responsibilities, education, experience, workplace etc.

Components of Job Specification

- **Educational Qualification**
- **Experience:**
- **Skills & Knowledge**
- **Personality traits and characteristics**

Job Specification Example

Here is a sample job specification, which is prepared for a marketing manager in a telecom company.

Education	Must be an engineer and MBA in marketing for a reputed MBA institute
Work experience	Must have prior work experience in marketing & sales (preferably telecom or FMCG)
Skills & Knowledge	a. Must be a good communicator and must be able to lead a team. b. Prior experience in handling ATL-BTL activities and managing promotional events. c. Must be able to handle social media like Facebook, Twitter and help build online brand d. Experience in managing PR and media e. Strong analytical skills and problem solving skills f. Must understand business, come up with innovative products and launch them

Personality Traits & Characteristics	1. Must be presentable and a good orator 2. Should be calm in complex situations and show leadership skills in managing multiple teams 3. Should be emotionally strong and should give timely deliverables

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Explain job specification (4)

2. List four components of job specification (4 pts)

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 6 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-3	Workplace Health and Safety (WHS) requirements

3.1. Protective clothing and equipment

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Safety glasses must be worn at all times in work areas.

Long and loose hair must be contained.

Hearing protection may be required.

Sturdy footwear must be worn at all times in work areas.

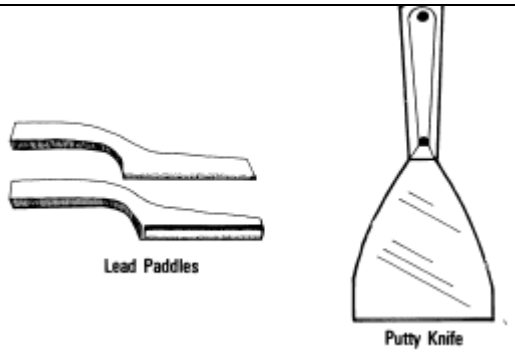
Closefitting/protective clothing must be worn.

Rings and jewellery must not be worn.

Safety equipment	Should be worn	
Safety shoes	Garage area	
	Parts area	
	Storeroom area	
	Paint shop	
	Machine area	
Gloves	Cleaners	
	Acids	
	Paint and rust removers	
	Grinding	
	Handling sharp edges	
Eye protection	Cleaning parts	
	Welding	
	Handling acids and batteries	
	Working beneath vehicles	
	Grinding, polishing, or sanding	
	Doing any machine work	
	Using paint and rust remover	
Respirators	Painting	
	Grinding or power sanding	
	Any area contaminated with harmful dusts, fogs, fumes, mists, gases, and sprays	

3.2. Use of tools and equipment

Spray gun; Is painting tool using compressed air from a nozzle to atomize a liquid into a controlled pattern.	
Sanding and polishing machines; Is a power tool used to smooth surfaces by abrasion with sandpaper. Polishing machine/ buffing machine are used to polish soft metals including copper and brass as well as plastics such as Perspex.	
Body files; Is mainly used to bring in a smooth finish and to bring out the highs and lows of metal finishing.	
Flexi-cut File Holder Adjustable file holder will bend any 350mm body file to fit concave, • Adjustable file holder for body files. • Bends body files to fit concave flat or convex panels. • Made from aluminium and plated steel.	
Spot Weld Drill Applies correct, consistent pressure ensuring accurate spot weld from first to last.	

Body filling and shaping tools ➢ Lead paddles ➢ Putty knife or plastic squeeze	
Body spoons used to ➢ In place of dollies ➢ As pry tools to lift low spots ➢ To spring hammer ridges and creases	
Air compressor Is a machine that uses an electric motor or gas engine to power a device that sucks in successive volumes of air from atmosphere, compresses (squeezes) each volume of air in a confined place to increase its pressure by making the volume smaller, and then transfers high-pressure air to a receiver tank.	
Air regulator with water trap Is used to control the speed and precision of the flow of liquids and air, whereas the filter cleans the air that travels from compressor.	

3.3. **Handling of material**

Material handling is the combination of art and science of:

- Moving
- Storing
- Protecting
- Controlling the material

Material handling means providing the

- Right amount

- Of the right material
- In the right condition
- At the right place
- In the right position
- In the right sequence
- In the right time
- For the right price
- By the right method

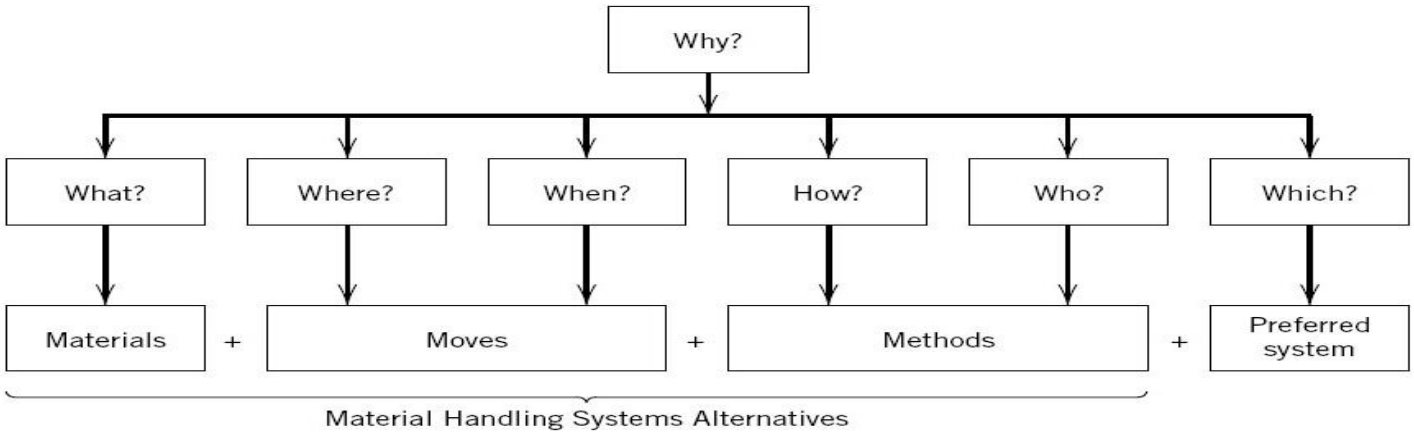
Goals of Material Handling

- In a typical manufacturing facility:
- 25% of the work-force is used in material handling
- 55% of the factory floor is reserved for it
- 87% of the production time!
- It may represent 15% to 70% of the total cost generated in the company

Goals of material handling:

- Reduce unit costs of production
- Maintain or improve product quality, reduce damages, and provide for protection of materials
- Promote safety and improve working conditions
- Promote productivity
- Promote increased use of facilities
- Control inventory

Material handling system equation Materials + Moves + Methods = Preferred system

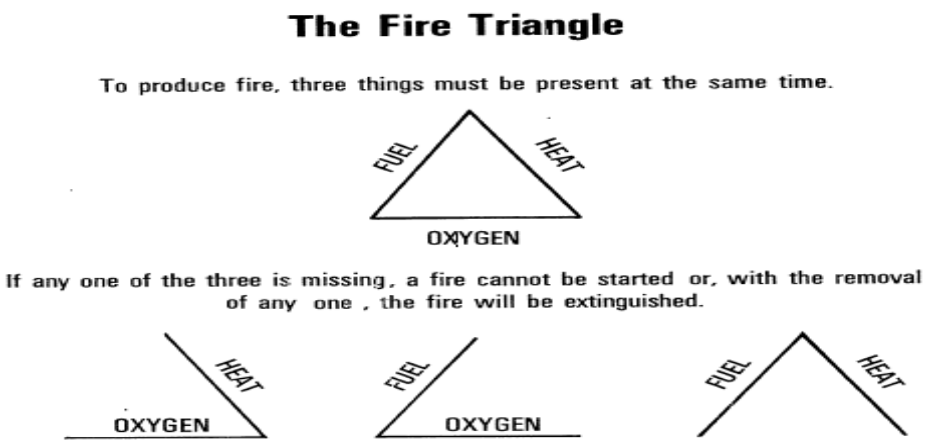


3.4. **Use of fire-fighting equipment**

Components of the fire triangle

- Fuel any combustible material
- Heat enough to raise the fuel to its ignition temperature
- Oxygen--Necessary to sustain combustion

(NOTE: To produce fire these three elements are necessary and must be present at the same time. If any one of the three is missing, a fire cannot be started or, with the removal of any of them, the fire will be extinguished.)



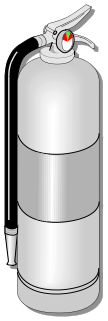
Classes of fires

- Class A Fires that occur in ordinary combustible materials such as wood, rags, and rubbish
- Class B Fires that occur with flammable liquids such as gasoline, oil, grease, paints, and thinners
- Class C Fires that occur in or near electrical equipment such as motors, switchboards, and electrical wiring
- Class D Fires that occur with combustible metals such as magnesium

A Trash Wood Paper • wood • paper • cloth • etc. 	**B Liquids Grease** • **gasoline** • **oil** • **grease** • **other solvents** 
C Electrical Equipment • computers • fax machine • Other energized electrical equip.	D COMBUSTIBLE • magnesium • sodium • potassium

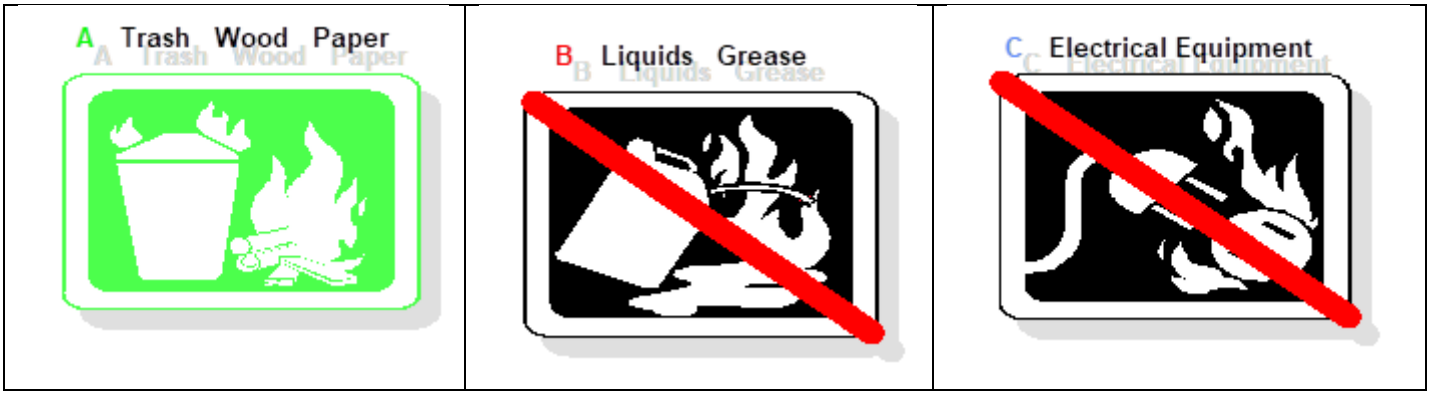
C 	• titanium • other flammable metals 
CLASS K FIRES • Recently recognized by NFPA 10 • Fires involving combustible oils, lards and fats in commercial cooking. 	

Types of fire extinguishers

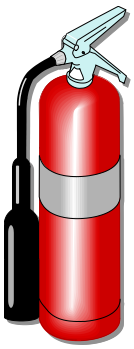


A. Pressurized water ;

- Class “A” fires only
- 2.5 gal. water *(up to 1 minute discharge time)*
- Has pressure gauge to allow visual capacity check
- 30-40 ft. maximum effective range
- Can be started and stopped as necessary
- Extinguishes by ***cooling*** burning material below the ignition point.

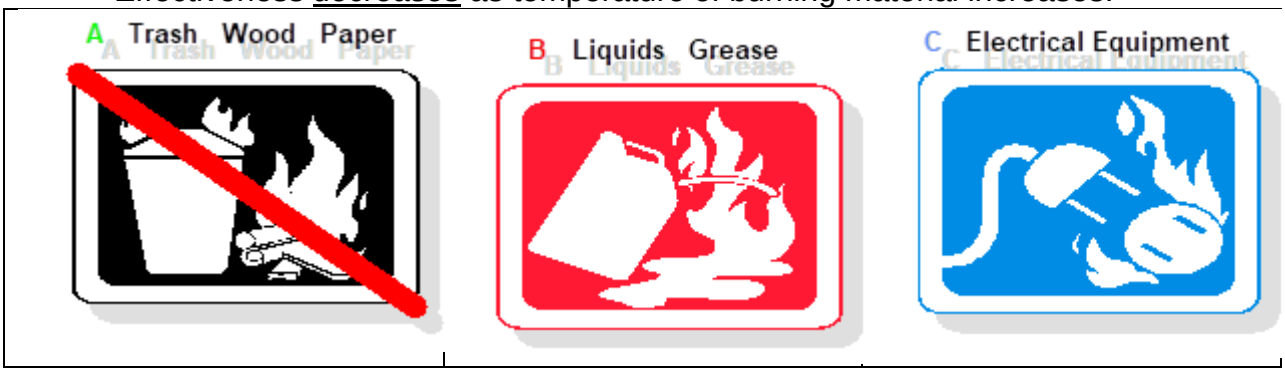


B. Soda acid Operates by turning extinguisher upside down; used on Class A fires



C. Carbon dioxide (CO)

- Class “B” or “C” fires
- 2.5-100 lb. of CO_2 *(8-30 seconds discharge time)*
- Has *NO* pressure gauge--capacity verified by weight
- 3-8 ft. maximum effective range
- Extinguishes by *smothering* burning materials
- Effectiveness *decreases* as temperature of burning material increases.

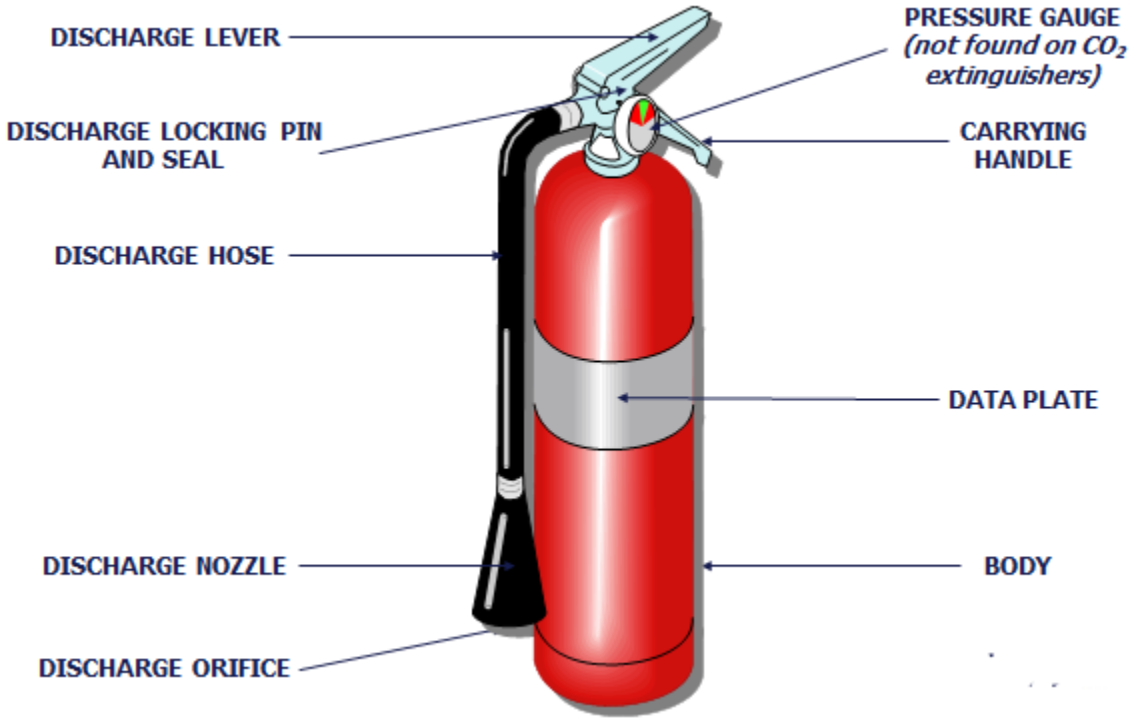


D. Multipurpose or dry chemical—

- Class “A”, “B”, or “C” fires
- 2.5-20 lb. dry chemical *(ammonium phosphate) 8-25 seconds discharge time)*
- Has pressure gauge to allow visual capacity check
- 5-20 ft. maximum effective range
- Extinguishes by *smothering* burning materials.

(NOTE: On Class D fires, dry sand is as effective as any dry chemical other than Purple X. The cost of the Purple X chemical places it out of reach of most shops.)

E. Foam Operates by turning extinguisher upside down; used on Class A and B fires



Figure; Point out different components of portable fire extinguisher.
Point out that co_2 extinguisher is unique in that it does not have pressure gauge.

3.5. **First aid equipment**

- First aid equipment should be supplied at set points throughout the workshop, and staff should be encouraged to attend first aid classes. The Health and Safety at Work Act requires that where more than 50 personnel are employed, one qualified first aid person must be appointed.

Table 1. Sample First-aid Kit Contents

a. Absorbent compress, 4x8 inches
b. 16 adhesive bandages, 1x3 inches
c. 1 adhesive tape, 5 yards long
d. 10 antiseptic single-use packages, 0.5 g. application
e. 6 burn treatment single-use packages, 0.5 g. application
f. 1 eye covering (for two eyes)
g. 1 eye wash, 1 fluid ounce
h. 4 sterile pads, 3x3 inches
i. 2 pair of medical exam gloves *
j. 1 triangular bandage, 39x39x55 inches

WARNING: Always use medical exam gloves when exposed to blood or other body fluids to help to prevent the spread of blood borne pathogen

3.6. **Hazard control including control of hazardous materials and toxic substances.**

3.6.1. Hazardous material and toxic substances.

"Any substance which may pose an unreasonable risk to health and safety of operating or emergency personnel, the public, and/or the environment if not properly controlled during handling, storage, manufacture, processing, packaging, use, disposal, or transportation."

3.6.2. **Hazard control**

- DO manage waste fillers properly. Some of these materials may be a hazardous waste. For example, components of the fillers may be hazardous waste if the catalyst has not been added or if the filler has not hardened and is in a liquid or semi-liquid state.
- DO manage wastes carefully when stripping paint from older vehicles. Older paints can contain lead and other heavy metals that are hazardous.
- DON'T use power tools to strip paint from older cars.

Use the Job Hazard Analysis application to create hazard assessments.

Self-Check -1	Written Test

Directions: Answer all the questions listed below.

I. Matching (4pts)

Column A		Column B
_____1.	Class A Fires	A. Gasoline
_____2.	Class B Fires	B. Motors
_____3.	Class C Fires	C. Wood
_____4.	Class D Fires	D. Magnesium

II. **Choose the correct answer from given alternatives** (3pts)

1. Fire extinguisher marked with an A is used on:

A. Oil fires
B. Electrical fires
C. Paper material fires
D. None of the above

2. Fire extinguishers marked with a B can be used on:

A. Paper, trash
B. Oil or Grease
C. Electrical
D. None of the above

3. How else you can kill a grease fire?

A. Smother
B. Baking Soda
C. A&B

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 4 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-4	Selecting and inspecting materials

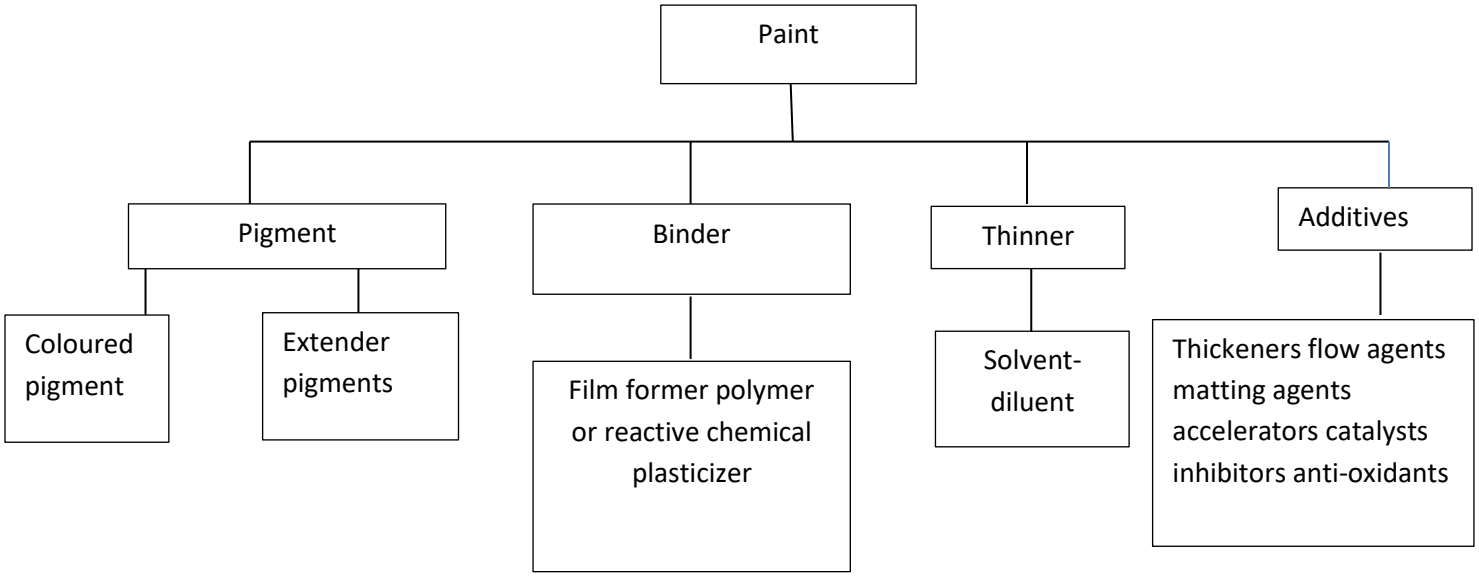
Introduction

- Collision repair materials include various fillers, primers, sealers, adhesives, sandpapers, etc.
- When consumers look at a vehicle's paint job they often see a shiny bright color
- Hidden technology under the surface of the paint
- Professional collision repair and refinishing technician understands the chemistry and skill needed to do high-quality repairs

Refinishing Materials

- Car body is protected and beautified by a complete finishing system
- Refinishing materials is a general term for the products used to repaint the vehicle
- New paints last longer but require skill and safety measures
- The substrate is the steel, aluminum, plastic and composite materials used in vehicle construction
- Paint beautifies the body and protects the metal from rust

Basic composition of paint



4.1. Oil based paints

- Oil-based paints the drying of an oil paint depends on the ability of certain drying oils to dry by a reaction that involves atmospheric oxygen, a process which is confined to relatively thin films.
- Oil- or alkyd-based paints are made by reacting organic acids with alcohols such as glycerol.
- If an alkali such as calcium hydroxide contacts an oil-based film, there is a tendency to revert to glycerol with the production of the corresponding salt, which in this case is a soapy material - hence the name ‘saponification’.
- This leads to the breakdown of films and formation of a scum.
- Hence, oil-containing paints should not be used on alkaline substrates such as asbestos cement, concretes, plasters or renders based on Portland cements, especially when new or if there is a risk of dampness.
- Alkali-resistant primers, such as PVA (polyvinyl acetate) emulsion paints, should be applied.

4.2. Water based paints

- Water-base/waterborne paints use water to carry the pigment
    - Help satisfy stricter emissions regulations
    - Serve as an excellent barrier coat
- Water-miscible advantage, although, on drying, coalescence of polymer particles occurs, resulting in a coherent film with moderate resistance to water.
    - The film is, not continuous, so that the substrate can, if necessary, dry out through the film.

4.3. Synthetic paints

These are mixtures of drying oils and synthetic resins. The most obvious limitation of a paint based solely on a drying oil is slow drying. To improve this property and to give tougher films and improve the gloss, a resin is added to the oil and they are cooked together for a period so that they chemically combine. The varnishes produced can be divided into two main classes based on their oil to resin content: long oil and short oil.

4.4. Undercoats

An undercoat is a coat of paint that is applied before the final layer of paint. It may also be referred to as the primer coat. An under coat is a layer of paint that is used to prepare a surface before the topcoat is applied.

Rust-Oleum Automotive 1 qt. ...
homedepot.com

Rubberized Undercoat - East...
eastwood.com

Automotive Primers Auto Bod...
rustoleum.com

Rust-Oleum Automotive 15 o...
homedepot.com

4.5. Lacquers

Lacquer paints are illegal in pollution-controlled areas, but it is easy to spray, gives a smooth surface and provides a glossy finish to vehicles, it is not so much expensive and any fresher use easily. Urethane

4.6. Enamels

- Enamel finishes are catalyzed – use a hardener
- Once applied these materials dry in two-stages
    - Some solvents used to thin or reduce material must evaporate
    - Chemical reaction occurs within the material and causes it to harden or "cure"

- Catalyzed enamels cure with a gloss that does not require polishing
- Two-stage paints consist of two distinct layers of paint: basecoat and clear coat
- Basecoat-clear coat enamel is the most common system used to repaint cars and trucks
    - Layer of color is applied over the prime coat of primer or sealer
    - Coat of clear is sprayed over the color basecoat
    - Originally a glossy, thermo-setting paint Now any paint which dries glossy

4.7. Paint thinners, paint reducers and retarders

- In order for paint pigments and binders to cure and harden into a unified solid substance, the liquid parts of each paint mixture must evaporate.
- Those agents used to turn solid pigments and binders into liquids for spray-ability are generically grouped and referred to as solvents.

- Thinners, reducers, and retarders all fall into the category of **solvents**.
- The chemical makeup of various solvents, although similar in design and purpose, varies according to the type of pigments and binders used in particular paint products.
- Lacquer thinners are designed to work with lacquer-based products.
- **Enamels** require solvents containing different chemical blend, which are called enamel reducers.
- **Lacquer thinner** is not compatible with enamel products, and reducers are not generally compatible with lacquers.
- For all intents and purposes, the word thinner is associated with lacquer and the term reducer applies to enamels and urethanes.
- **A retarder** is either a thinner or a reducer with an extra-slow evaporation rime.
- Retarders are used for paint jobs that are sprayed during exceptionally hot weather, typically above 95 degrees Fahrenheit. Their function is to evaporate much more slowly than other thinners or reducers so paint does not dry too fast-which may cause checking, crazing, cracking, or other problems.
- All of these paint solvent materials are designed for use under certain climatic conditions. They are related according to slow, medium, and fast evaporation abilities.
- In addition to **temperature factors**, you may need to use a specific solvent to compensate for very heavy or very light humidity. In essence, fast-evaporating solvents are used during paint work in cool temperatures, and slow ones employed during hot weather. But using a fast solvent on a cool and very humid day could cause blushing; a condition in which moisture is trapped in paint after the fast solvent has evaporated. In that case, a medium thinner or reducer is needed to allow moisture time to evaporate along with solvent so that the resulting paint film dries completely and evenly. Paint products are designed to be sprayed under climatic conditions of 70 degrees Fahrenheit and 30 percent humidity. These are perfect conditions under which laboratory tests are conducted. You would have to paint cars in a controlled spray booth equipped with a dehumidifier and heater to achieve these perfect conditions all the time.

- Thinners, reducers, and retarders all essentially do the same thing; however, it is extremely important that they be used with the correct product. Typical/y, thinners are used with lacquer-based products, while reducers are used with enamel- or urethane-based products.
- **Using the correct product** for the shop temperature is also very important. If, for instance, a reducer designed for hot weather (slows down the drying process) were used in 8 cooler temperature shop, the paint would not cure properly. On the other hand, if a cool temperature reducer (designed to speed drying times) was used in a warmer shop, the paint would blush, fade, or experience other problems.

Determining Type of Finish

- With solvent application method
    - Rub paint with a white cloth soaked in thinner
        - If it dissolves, it is an air-dried paint
- With heat application method
    - Wet sand with No. 2000 grit paper
    - Heat with an infrared lamp
        - If gloss dulls it is acrylic lacquer
- With an inspection method, check for repainting
    - If paint is original, use body color code id plate to determine type of paint

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What are the dry stages for enamel type of paint?(2pts)
   a.
   b.
2. Reducer name call for (1pts)
   a. Enamel
   b. Lacquer
   c. Thinner
   d. All
3. Reducer(1pts)
   1. slows down the drying process
   2. designed for hot weather
   3. designed for cold weather
   4. except “C”

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-1	Identifying and checking hand, power tooling and safety equipment

Body straightening tools

Pick hammer
Dinging hammer
Bumping hammer
Cross peen hammer
Shrinking hammer
Magnetic trim hammer
Egg dolly block
Bumping dolly
General purpose or railroad dolly
Loaf dolly block
Toe dolly block
Heel dolly block
Shrinking dolly
Comma or wedge dolly block
Backup and driving spoon
Spring hammering spoon
Body file blade
Straight file holder
Curved file holder
Flexible file holder
Reveal file holder and blades
Bumping or slapping file
Spoon dolly
Slide hammer
Caulking iron
Curved short pick
Curved long pick
Deep throat curved pick
Top rail pick tool
Straight finishing pick
Curved finishing pick
Hooked finishing pick
Body plastic shaping file
Body plastic finishing board file

Body filling and shaping tools

Lead paddles
Putty knife or plastic squeeze
Body specialty tools
Drip molding pliers

Door and window handle clip remover

Reveal molding clip tool
Windshield knife
Vacuum lifter
Molding clip pliers
Pop rivet gun
Locking strip tool
Door hinge wrench
Bumper bracket tool
Door hinge aligner
Body pull rod set

Eye protection equipment

Goggles
Safety shield
Safety glasses
Welding goggles
Arc welding helmet

Use of a bumping hammer

Roughing out damaged areas
Straightening heavier panels, bumpers, frame rails, and other areas

Finger movement when using the body hammer

Hold the hammer loosely
Close hand to strike blow
(NOTE: The hammer will strike the surface with sufficient force to straighten metal and will not stretch it.)

Finger-wrist movement when using the body hammer
(NOTE: Wrist movement comes at the end of finger movement before the hammer head strikes the metal to add accuracy and strength to the blow.)
Increase your arm angle with the surface so finger movement will end at a twenty or twenty-five degree angle
Add wrist movement to complete the hammer blow to the surface

Wes of dolly blocks
To back up or support damaged metal when it is being hammered back into shape
As a striking tool to drive metal into shape
As forming tools to form metal in construction of replacement panels or sections

POWER TOOLS AND EQUIPMENT

Hand operated power tools

Pneumatic grinder
Electric grinder
Pneumatic polisher
Pneumatic drill
Pneumatic hammer
Orbital sander
Pneumatic file
Pneumatic oscillating sander
Impact wrench
Metal shear
Bench grinderL.1/2" electric drillM.1/4" electric drill
Cable pull unit0.Electric polisher

Power equipment

Portable frame and body straightening unit
Stationary frame and body straightening rack
Channels mount frame and body straightening unit
Vacuum mount body pull post
Tie down with pull post body and frame straightening system
Mechanical body jack set
Hydraulic body jack set
Pneumatic hydraulic pump
Spread ram
Wedge ram
Drill press
Vacuum cleaner
Car wash and steam cleaning system
Service jack0.Oneend lift
Hand jack
Safety standR.AC/DC arc welder
MI G welder

Components of the hydraulic jack
Pump
Hose
Ram
Attachments
Basic operation of power tools

Portable grinder
Removes paint
Buffs and grinds metal
Grinds welds
Polisher-Polishes paint

Drill electric or pneumatic
Drills and bores
Cleans metal using wire brush attachment

Pneumatic hammer
Cuts spot welds
Removes panels
Chisels
Rivets

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List down at least 5 hand operated power tools.(5pts)

2. List down Body filling and shaping tools(3pts)

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

1.1 Determining Procedures to minimize waste material
1.2 Identifying procedures to maximizing energy efficiency

Operation Sheet 1	First aid equipment

1. Method of Fire Emergency Response

R

A

C

E

step.1. Rescue
step.2. Alarm
step.3. Contain
step.4. Extinguish

2. Method of Fighting the Fire

step.1. Pull the pin
step.2. Aim low at
step.3. the base of flames
step.4. Squeeze the handle
step.5. Sweep side to side

P

A

S

S