

Automotive and Diesel Technology

Lab Safety Guidelines

Part A: Safety Training

All new students shall receive safety training prior to performing lab activities. The training shall include:

- a. S/P2 Pollution Prevention including relevant EPA regulations,
- b. S/P2 Safety Training including relevant OSHA regulations,
- c. Training on the safe use and operation on all the vehicle lifts located in the automotive lab facilities,
- d. College emergency procedures,
- e. location and use of emergency equipment, and
- f. location of the MSDS binder

Part B: Reporting Medical Emergencies

A Medical Emergency includes any serious injury or illness that requires immediate medical attention. If a major medical emergency/illness occurs with any student, employee or visitor:

- **Call 911** for paramedics and ambulance service and if possible, contact PBSC Security

The call shall be made from:

- the phone in an instructor's or staff member's office,
 - the red Emergency Phone box mounted on the wall outside the instructors office or,
 - the blue emergency phone located on the outside North wall of the ETB building,
 - a cell phone only if none of the above is available
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- STAY, or have someone else stay, with the patient until help arrives.
 - DO NOT move the patient; keep the patient still and comfortable.
 - PROTECT victim from injury by removing any persistent threat to the victim.

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- PROVIDE first aid until help arrives if you have appropriate training and equipment and it is safe to do so.
- SEND someone outside to escort emergency responders to the appropriate location, if possible.
- STAY out of the way unless assistance is requested once help arrives.
- Inform Emergency Responders of the following information:
 - Building or location where aid is needed.
 - Specific location within the building.
 - Type of problem, individual's condition.
 - Medical history, if known.
 - Sequence of events.

If a minor injury/illness occurs with any student, employee, or visitor:

- Assess the need for medical attention. If immediate medical attention or medical transport is required, then follow the procedures outlined above.
- **All incidents on campus involving Students, Visitors and Employees must be reported to Security.**

Part C: Fire Emergencies

In case of fire, activate the fire alarm and/or follow the procedure for reporting an emergency as described in Part B of this policy. All persons shall immediately evacuate the fire area.

Employees and students may use fire extinguishers on small fires. Basic training in the use of fire extinguishers shall be available periodically.

In the event of a fire alarm, employees and students shall proceed to a parking lot location designated as a "Safe Assembly Area" and await further instructions.

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Part D: First Aid and Emergency Assistance

Instructors may provide basic first aid limited by the contents of the first aid kit.

For a serious injury, 911 and Campus Security (868 – 3600) may be contacted on the telephones located in the instructor offices. Additionally, Campus Security may be contacted using the red Emergency Phone located in the lab/shop.

Part E: Personal Protective Equipment

All persons entering the lab shall be required to wear safety glasses. Safety signs have been posted at all lab entrances to alert visitors, instructors and students that safety glasses are required.

Eye wash/emergency shower stations are located in the lab facilities.

All instructors are required to include the safety glass policy in their course syllabus.

Ear protection equipment shall be available and, shall be provided as needed.

Safety shoes with slip-resistant soles are recommended.

No open toe shoes are allowed in the automotive labs.

Long pants are required at all times.

Face Shields must be worn when using the following equipment: grinder, wire brushes, hydraulic press, and when servicing the high voltage system on a Hybrid Vehicle.

Class “0” Rubber insulating gloves when working on Hybrid Vehicles (see below Part I).

Part F: Laboratory Safety Systems

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Students and staff shall attach an exhaust tube and turn on the exhaust switch before starting any vehicle in the lab. Prior to removing the vehicle from the lab, the exhaust tube shall be removed from the vehicle.

Exhaust fan systems are installed in the lab and can be turned on at any time to refresh the lab air.

Part G: No Smoking Regulations

Safety related "No Smoking" regulations must be strictly enforced. "No Smoking" signs are placed in areas where smoking would be a violation of existing fire codes and where it would result in a clear and present danger due to the presence of flammable gases, liquids or vapors and/or other combustible materials.

- Smoking is prohibited throughout the campus except in the Parking Lots.
- Smoking Policy Violation Citations will be issued to those smoking outside the designated areas.
- Violators will be required to attend an online Smoking Awareness course.

Part H: Hot Work

All hot work, welding, flame cutting, etc., may be performed by students, only if an instructor is present to supervise the activities. **One** student shall be assigned fire watch duty for all hot work activities. The fire watch shall familiarize himself with the location of the nearest fire alarm station prior to the commencement of hot work. The fire watch shall have the sole responsibility of standing by the hot work activities with a fire extinguisher, i.e. he shall not be performing any other activities.

Part I: Hybrid Vehicle (HV) Safety:

- No students are allowed to work on a Hybrid Powered Vehicle (HV) without the approval and supervision of an automotive instructor.
- Only students who have passed a Hybrid Vehicle safety exam will be allowed to work on a HV.

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- Never service a high-voltage component if you have a pacemaker or a major heart condition (for guidance please consult with your physician).
- Always test the presence of voltage before touching a high-voltage component (Use a Cat III-Certified Millimeter and Leads rated at 1000VAC).
- Never leave the key in the ignition.
- Students or instructors are not allowed to wear any jewelry (watches, rings or chains) when servicing the high voltage system on a HV (i.e. High voltage motor).
- Students and instructors must wear rubber-soled shoes when servicing the high voltage system on a HV.
- Students and instructors must wear safety glasses and a face shield when servicing the high voltage system on a HV.

Class “0” Rubber Insulating Gloves:

Class “0” high voltage gloves must be worn when working on or depowering the high voltage system in a HPV. These gloves are rated for up to 1000 volts and should be tested for leakage before and after each use. To test the insulating gloves for leaks simply trap air in the glove and roll the glove up starting at the cuff to compress the air in the glove. Watch and listen for leaks. In the event a high voltage component is being serviced, leather over gloves should be worn over the rubber insulating gloves to protect the delicate rubber of the insulating glove. **The gloves must be re-certified every 6 months after the gloves are placed in service or 12 months after the initial purchase if the gloves are not used.** High voltage gloves must be kept dry at all times. In the event the gloves become moist with perspiration, specific high voltage glove powder should be used to ease glove application and removal. Talcum powder should not be used due to its potential for electrical conductivity.

High voltage gloves should never be folded or stored lying down. Always store these gloves in their original, non-conductive, storage bag. Place the gloves in the bag open end

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down and hang the bag in a safe place. The non-conductive bag should be equipped with ventilation holes on the bottom and a storage hook on the top or back.

High voltage gloves do not need to be worn when performing general maintenance services.

For more information on HV safety please refer to this website:

https://techinfo.toyota.com/techInfoPortal/appmanager/t3/ti;TISESSIONID=T6LJMY6Qct3yCXh1vqrhnfWXtngFGfLdBgXMhNKbqkdPGT7phB10!-1124246201?_pageLabel=ti_erg&_nfpb=true

Part I: Health and Safety Reference Materials

The Department shall have a material safety data sheet in the lab/shop for each hazardous material which they use or have in inventory. The data sheets shall be maintained in a binder and in a location accessible to staff and students.

The College's complete Chemical Hygiene Plan can be found in the Automotive Service Technician Policies and Procedures Manual, and online at:

<http://www.palmbeachstate.edu/safety>

Part J: Publication of Safety Policies and Procedures

These policies and procedures will be posted in a conspicuous location in the lab/shop.

The College's complete Safety Manual can be found in the Automotive Service Technician Policies and Procedures Manual and online at:

<http://www.palmbeachstate.edu/safety>