



Diesel Technology (MD/HD Truck)

Event Specifications

FRESNO CITY COLLEGE EVENT CONTACT

For any specific event questions, please contact:

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SCOPE OF CONTEST

This event will take place at the Fresno City College West Fresno - Advanced Transportation Center (ACT 500) located at 600 E. Church Ave. Fresno, CA 93706 with a start time of 8:30 am. The awards presentation will take place at the Fresno City College main campus in the gymnasium at 12:00 PM.

Teachers – Please bring something for your students to write on (clipboard, binder, etc.).

This competition will consist of two parts: written and manual. The written test will cover questions that relate to construction, theory and operation of various components and systems of the Medium-Duty/Heavy-Duty Truck in Diesel Technology. The manual portion will consist of various service and diagnosis skills. Safety rules and the wearing of safety equipment in the shop will be enforced. Any violation can result in the disqualification of the contestant.

NUMBER OF COMPETITORS

Individual event, limited to (60) competitors. *Fresno ROP reserves the right to modify enrollment due to limited spaces available.*

RULES AND PROCEDURES

The competition will consist of two parts--the written exam and the "hands-on" portion, which may include competencies in, but not necessarily limited to, the following areas:

1. Written Exam (ASE type questions) Mandatory required test area
2. Use of precision measuring equipment (micrometer, dial indicator, etc.)
3. Air Brakes/IMMR (Inspection, Maintenance, & Minor Repair)—inspection and evaluation
4. Air Brakes/IMMR (Inspection, Maintenance, & Minor Repair)—diagnosis
5. Research and locate MD/HD Truck specifications on computer (electronic service information)
6. Identify the different components of the MD/HD Diesel Aftertreatment (Volvo/Mack/PACCAR)

7. Identify the different components of a Diesel Engine/Emission Control system (Volvo/Mack/PACCAR)
8. Basic electric circuit (use of multi-testers)

JUDGING CRITERIA

1. Time limit may be assigned to each competency area.
2. The contestant's total score will be calculated based on scores for each competency area.
3. In case of a tie score, the highest score on the written test will determine the winner.
4. Points will be awarded for both written test and hands-on skills activities. Accuracy, workmanship, and professionalism will be considered. The judging criteria and total points for each section of the competition will be explained by the judge(s) at the beginning of the competition.

EQUIPMENT AND MATERIALS

1. Supplied by the contestant:
 - a. Protective eyewear (safety glasses or goggles)
 - b. Leather work boots (steel/composite toe recommended)
 - c. Appropriate, clean shop clothing
 - d. Something to write on (clipboard, binder etc.)

***NOTE: Contestants who do not have the proper safety equipment will not be allowed to participate in the competition.**

2. Supplied by the Career Skills Challenge:
 - a. All necessary tools and equipment for the contest
 - b. All necessary information and furnishings for the judge(s)

DRESS CODE

1. Safety glasses or goggles must be worn in shop areas.
2. Wear appropriate clothing. Clothes must fit the body, no saggy and or baggy clothes will be allowed.
3. Students must wear closed toed work boots (steel/composite toe recommended).
4. Students with long hair must keep hair in a ponytail or under a cap.
5. Long sleeve shirts must be kept buttoned at the sleeve or rolled/pushed up.

CAREER SKILLS CHALLENGE

DIESEL TECHNOLOGY

(MD/HD TRUCK)

SCORE SHEET

Student Assigned Number: _____

	Possible Points	Points Scored	Additional Comments
Written Exam	100		
Use of precision measuring equipment (micrometer, dial indicator, etc.)	100		
Air Brakes/IMMR—inspection and evaluation	100		
Air Brakes/IMMR—diagnosis	100		
Research and locate MD/HD Truck specifications on computer (electronic service information)	100		
Identify the different components of the MD/HD Diesel Aftertreatment (Volvo/Mack/PACCAR)	100		
Identify the different components of a Diesel Engine/Emission Control system (Volvo/Mack/PACCAR)	100		
Basic electric circuit (use of multi-testers)	100		

TOTALS

Please distribute evaluation copies to:

Contestant

Event Manager

White

Yellow