

2021 MICHIGAN SKILLSUSA CHAMPIONSHIPS

TASK & MATERIALS LIST

SKILL OR LEADERSHIP AREA: Diesel Equipment Technology

CONTEST LOCATIONS:

AIS Construction Equipment Grand Rapids Branch

600 44th St SW

Grand Rapids, MI, US

Contest Chairperson: Ralph Hansen - rhansen@aisequip.com

Contest Judge: TBD

AIS Construction Equipment Saginaw Branch

4600 AIS Drive

Bridgeport, MI 48722

Contest Chairperson: Ralph Hansen - rhansen@aisequip.com

Contest Judge: TBD

AIS Construction Equipment Richmond Branch

65809 Gratiot Avenue

Lenox, MI 48050

Contest Chairperson: Ralph Hansen - rhansen@aisequip.com

Contest Judge: TBD

RESUME:

Each student must email a one-page resume by **March 15, 2021** to Ralph Hansen rhansen@aisequip.com with their Contestant Registration Form. This is the only time that resumes can be submitted. Failure to do so will result in a 10-point penalty.

TASKS TO BE PERFORMED:

The following is a list of task areas, which will be utilized for evaluation in the Diesel Equipment Technology Contest

1. Electrical:

Electrical fundamentals, circuit testing, and diagnosis of malfunctioning circuits utilizing schematic wiring diagrams and industry accepted testing equipment. Procedures in wiring repair. Areas of emphasis will include battery and charging systems, starting systems, and engine control systems.

2. Shop Practices:

Areas which may be covered include welding, electric arc and/or oxyacetylene. Pipe, tubing, and hose fitting identification, repairs, and assembly practices. Fastener identification and repair practices. Electrical wiring maintenance and repair. Selection, identification, and safe usage of hand and power tools.

3. Engine Fundamentals:

This section will include use of measuring instruments required for the assembly and adjustment of diesel engine components. Metric as well as standard measurements may be required. A written test on component identification and diesel engine operation may also be used for evaluation.

4. Measurement:

Each contestant will be required to perform measurements using Dial Calipers, 1/10,000in Micrometer, Metric Micrometer, Dial Indicator and perform measurement conversion calculations.

5. Leadership Test SKILLS:

All contestants will take a 15-question test on Leadership, Employability and SKILLS Knowledge. This test will be used as a tie-breaker should two or more students have the same score on the Technical Skills Contests.

STUDENT MUST SUPPLY:

* ALL CONTESTANTS WILL BE REQUIRED TO HAVE AND UTILIZE SAFETY GLASSES, WORK SHOES, CALCULATOR AND APPROPRIATE WORK CLOTHING.

TECHNICAL COMMITTEE WILL SUPPLY:

All tools, manuals, and equipment will be supplied by the technical committee.

CLOTHING REQUIREMENT (if different from National contest): To be followed precisely

Work clothing including but not limited to light-blue long sleeve shirt, dark-blue long pants (NO JEANS), leather shoes and safety glasses with side shields. No school logo, school name, contestant name or any other identifying marks of any kind on clothing. If you do have them, they must be covered up so that no part of the identification is visible.

Revised 01/22/2021

2021 SKILLS Diesel Equipment Technology Contestant Registration Form

General Information:

STUDENT NAME: Last _____ First: _____ M.I. _____

STREET ADDRESS: _____

CITY/STATE/ZIP: _____

TELEPHONE: H: _____ C: _____ W: _____

E-MAIL: _____

EMERGENCY CONTACT: _____

RELATIONSHIP: _____ TELEPHONE #: _____

Educational Background:

HIGH SCHOOL or CAREER CENTER ATTENDING: _____

SKILLS REGION NUMBER: _____

PROGRAM ENROLLED IN: _____

CITY: _____ STATE: _____

**** PLEASE ATTACH A COPY OF YOUR RESUME TO THIS REGISTRATION FORM ****

****SUBMIT TO RALPH HANSEN AT: RHANSEN@AISEQUIP.COM BY March 15, 2021****

