

STAI
Guidelines
For
School Bus
Technician & Inspector
Competition

Entry Forms

Entry forms will be required for all competitors. After completion, the entry forms shall be forwarded to the STAI Competition Coordinator (see attached). Registration forms must be received no later than April 13, 2011. Entry fee will be (\$ 25.00) per contestant, which includes breakfast and lunch during the Competition. Sign-in on April 16th at 6:30am at Tippecanoe Transportation Facility Lafayette, Indiana.

Submit Registration forms to:

Dwayne Vandiver
Noblesville Schools
1775 Field Drive
Noblesville, Indiana
46060
Fax to: (317) 776-7790

Send Entry Fee to:

STAI RODEO
1547 N St. Street
PMB 203
Greenfield, In. 46140

Competition

The Technician/Inspector Competition shall include three (3)three (3) phases of competition:

1. Written Examinations - (approximately 33% 20of total score)
2. Driver Complaints - (approximately 33% 40of total score)
3. 3. Bus Inspection- (40% of total score)School Bus Inspection - (approximately 33% of total score)

The competitor's **total score** will be determined by combining the individual scores for each of the three (3) phases of competition. All necessary tools, diagnostic equipmentequipment will be provided during the competition. Individual competitors will be required to follow all safety procedures

and must bring with them individualized personal protective equipment (safety glasses, gloves, etceteras)

1. *Written Examinations*

Purpose: Technicians/Inspector must be knowledgeable in all areas of school bus maintenance and repair and demonstrate proficiency based on technical knowledge. This portion of the competition will test the technician's knowledge as well as their ability to read, comprehend, and respond.

Instructions: Each competitor shall be required to complete a written examination (prepared by ASE) consisting of fifty (50) questions. These questions will cover various technical topics to include electrical systems, brakes, engines, suspensions, drive trains, and body systems. All topics will be relative to actual school bus applications. Examination booklets will be handed out along with an answer sheet. Competitors will mark only on the answer sheets. The judge(s) will indicate when the examination shall begin and will maintain a stopwatch up to the allotted time. When time is called all activities must stop and no additional items may be marked on the answer sheet. If an individual completes the examination in less than the allotted time, they are to turn their paper over and sit quietly until the allotted time has expired. If at any time during the examinations one competitor attempts to converse with or assist another, those individuals will be disqualified from this phase of the competition.

Time: The maximum allowable time for completion of the examinations will be forty-five (45) minutes. The judge(s) will notify the competitors at the thirty-five (35) minute and forty (40) minute marks.

Total Score: Maximum of 50 points, with each correct answer being worth one point.

2. *Driver Complaints*

Purpose: Technicians/Inspector must be capable of diagnosing, troubleshooting, and repairing various mechanical components found on school buses. To do this proficiently requires substantial mechanical knowledge and the ability to utilize troubleshooting techniques and equipment. This portion of the competition will test the technician's hands on ability of working on components/systems.

Instructions: Competitors will be required to troubleshoot and identify mechanical deficiencies in various school buses.. The judge(s) will indicate when the troubleshooting shall begin and will maintain a stopwatch up to the point that the allotted time has expired. When time is called all activities must stop. The competitor will be required to respond orally identifying the defect in detail. Specific instructions/conditions regarding each diagnostic area will be provided immediately prior to the competition.

Time: The maximum allowable time for completion of diagnosis will be fifteen (15) minutes for each of the areas. The judge(s) will notify the competitors at the ten (10) minute and fourteen (14) minute marks.

Scores: Individual scores will be calculated for each diagnostic area. The maximum number of points to be awarded for correctly diagnosing/repairing a specific area will be one hundred (100) points. . If a specific area has more than one deficiency the one hundred (100) points will be pro-rated accordingly. There will be a ten (10) point demerit assessed for any instance of misuse of tools and/or equipment or for any instance of not utilizing proper safety equipment and/or procedures.

Total Score: The total scores from each of the diagnostic areas will be averaged to obtain the score for Diagnostic Troubleshooting.

Maximum Score: One Hundred (100) points

3. *School Bus Inspection*

Purpose: Technicians must be capable of visually inspecting school buses and all related components to identify early signs of component wear and deterioration. This inspection process is critical to insuring timely repair prior to failure. Working in this manner insures the continued safety of the students transported, eliminates vehicle down time, and reduces maintenance expenses. This portion of the competition will test the competitor's ability to inspect buses in a systematic and logical manner to insure that all defects are identified and duly noted for repairs.

Instructions: Prior to the competition there will be ten (10) "must find" defects built into the bus to be inspected. The inspections will be completed using a standardized School Bus Inspection Form. All defects identified during the inspections must be legibly noted on this form. The judge(s) will indicate when the inspection shall begin and will maintain a stopwatch up to the point that the competitor calls "Time" or allotted time has expired. When time is called all activities must stop, additional items or comments may not be added to the inspection sheet. There will also be a ten (10) point demerit assessed for any instance of not utilizing proper safety equipment and/or procedures.

The inspection forms to be used will be made available to the competitors upon confirmation of registration. At the request of the competitor, competition officials will provide assistance to turn on lights, apply brakes, and/or turn the steering wheel.

Time: The maximum allowable time to complete the inspection will be fifteen (15) minutes. The judge(s) will notify the teams at the ten (10) minute and fourteen (14) minute marks.

Total Score: The “*must find*” items will be worth ten (10) points each, other defects noted are worth zero (0) points.

4. ***School Bus Inspection***

Purpose: Technician/Inspector must be capable of visually inspecting school buses and all related components to identify early signs of component wear, deterioration, improperly assembled and missing components. This inspection process is critical to insuring timely repair prior to failure. Working in this manner insures the continued safety of the students transported, eliminates vehicle down time, and reduces maintenance expenses. This portion of the competition will test the competitor’s ability to inspect buses in a systematic and logical manner to insure that all defects are identified and duly noted for repairs.

Instructions: Prior to the competition there will be a total of fifteen (15) “*must find*” defects identified on the buses to be inspected. Three buses will be used for the inspection process. One bus will be used for the inspection of the interior, one for the inspection of the exterior, and one for the inspection of the undercarriage. The inspections will be scored based on the Technicians accuracy in identifying the (15) “*must find*” defects. The judge(s) will indicate when the inspection shall begin and will maintain a stopwatch up to the point that the competitor calls “Time” or the allotted time has expired. When time is called all activities must stop. There will be a ten (10) point demerit assessed for any instance of not utilizing proper safety equipment and/or procedures. The diagnosis of identifying the defects is primarily through hands on and visual inspection methods. At the request of the competitor if needed, competition officials will provide assistance to turn on lights, apply brakes, and/or turn the steering wheel.

Time: The maximum allowable time to complete the inspection will be ten (10) minutes per section (interior, exterior, and undercarriage). The judge(s) will notify the competitors at the five (5) minute and eight (8) minute marks.

Total Score: The “*must find*” items (total 15) will be worth ten (10) points each, other defects noted are worth zero (0) points.

Maximum Score: one hundred fifty (150) points

4. ***Tie-Breaker***

Purpose: In the event of a tie score in the final standings for positions first, second or third; a tie-breaker will be implemented to determine the higher ranking.

Instructions: The tie-breaker shall be based on the total amount of time consumed in completing one (1) area of the Driver Complaint Buses. This “timed” portion of the competition will be identified prior to the competition and times will be recorded for each competitor as they complete the identified phase. The competitor with the lowest total time for those competitors with the tie score will be placed in the higher position in the final standings.

Summary of Possible Points per Event

EVENT	POINTS
Written Examination	5100 Points
Driver Complaints	5100 Points
School Bus Inspection	100 Points
Bus Inspection	5100 Points
<i>Total Score Possible</i>	<i>350 points</i>



First Place Winner: The first place winner will receive an all expense paid trip to the National School Bus Technicians Competition. To be announced at a later date.

School Bus Technician & Inspector Competition Entry Form

To Be Completed By Competitor

By verification of signature; I have read, understand, and accept all terms and conditions of this competition as stated on the reverse side of this entry form.

Competitor Name: _____

District Name: _____

Address: _____

City: _____ **State:** _____ **Zip Code** _____

Tee-Shirt Size: Adult: M ___ **L** ___ **XL** ___ **XXL** ___

Signature: _____ **Date:** _____

To Be Completed By Competitor's Supervisor

I hereby certify that the competitor named above is currently employed as a school bus maintenance and repair technician within the identified district.

Signature: _____ **Date:** _____

Job Title: _____ **Phone:** (_____) _____

Contact Number: _____ **Fax Number** _____

PLEASE SUBMIT ENTRY FEE (checks payable to S.T.A.I.) OF \$25.00 TO STAI 1547 N St. Street PMB 203 Greenfield , Indiana 46140

Entry forms are not valid unless all upper portions of this form are completed. All information, excluding signatures, must be typed or legibly printed.

To be completed by STAI Competition Coordinator

Date Entry Form Received: _____

Assigned Competitor Number: _____

