Heavy Vehicle Engineering

Competitor Instruction Sheet – Task A – Vehicle Inspection

This task is intended to test your ability to carry out a safety inspection on a vehicle

1. Carry out a visual inspection on the vehicle as prescribed on the report sheet
2. Complete the safety inspection report recording any faults identified

Note; you are not required to rectify any faults found

You have **45 minutes** to complete this task

Cystadleuaeth Sgiliau Cymru | Skills Competition Wales

Cronfa Gymdeithasol Ewrop
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Competitor Instruction Sheet – Task B - Final Drive

Competitor Name_____

This task is intended to test your ability to reassemble and adjust a differential, the differential will be removed from the axle and on a bench.

The crown wheel, sun gears and planet gears are removed from the differential carrier.

Refit components and correctly adjust.

Calculate the final drive ratio.

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Competitor Instruction Sheet – Task C - Measure and report on the condition of an engine crankshaft

Competitor Name_____

The task is intended to test your ability to inspect and report on the condition of an engine crankshaft

Gather technical details from Engine Manufacturer

Measure and report on main bearings journals and big end bearing journals and compare with manufacturers Specifications

Measure and report on flatness of cylinder block and head mating surface and compare with manufacturers specifications

Give an overall report on the Engine crankshaft serviceability

Competitor Instruction Sheet – Task D - Electrical Systems

Competitor Name_____

This task is intended to test your ability to diagnose a non-start fault and notify the judge.

Report whether the vehicle charging system is operating correctly.

1. Check does vehicle start
2. Check battery voltage
3. Replace battery if required
4. Identify non start fault
5. Carry out charging tests

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Competitor Instruction Sheet – Task E - Vehicle Braking System

Competitor Name_____

This task is intended to test your ability to carry out a brake disc serviceability check.

The driver is complaining of shuddering through the steering wheel when braking.

1. Raise vehicle and remove near side front wheel
2. Dismantle and inspect the front brake assembly and report on the serviceability of the brake pads and disc.
3. Record your measurements on the attached report sheet
4. Assemble the brake components fitting new brake pads
5. Re-fit road wheel and torque to manufacturers specification