

Heavy Equipment Technology (#49)

Drive-Train Systems	(4 of 6)
TASK	

Competitor number	Start time
Judge's name	Finish time

Competition Overview

Time limit: 2 hours

Equipment: Meritor drive axle

Number of tasks: 2

Task 1: Remove a drive-axle assembly from the axle housing. Value 50%

Task 2: Install another drive-axle assembly into the axle housing. Value 50%

General Instructions:

The judge has all the materials you will need.

If you are unsure about any procedure, you may ask your judge for clarification. Marks may be deducted if the judge decides you should know the procedure.

Before you start, you must go through the following Hazard Assessment with your judge so that you will be able to work safely.

Hazard Assessment:

This Hazard Assessment is to discuss the following **4 hazards** and the counteractive measures you must take.

Hazard 1: Heavy objects may fall off of the bench onto your feet.



- Insure all objects on the workbench will not be accidentally knocked off.
- Keep your work area neat.

Hazard 2: Touching lubricating fluids may irritate skin.



- Latex gloves and wiping cloths are available.
- **Hazard 3:** Sharp edges from the parts can cut skin.



- Keep hands clear of sharp edges.
- **Hazard 4:** Lifting heavy components can injure your back.



- A portable lifting crane will be available to lift heavy items.
- The judge will be available to help lift items if necessary.



If you do not quite understand or are unsure about the hazards, please ask your judge for assistance.

No marks will be deducted for asking about hazards.

I have read this hazard assessment and the judge has explained it to me.

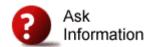
I understand the hazards and I will take precautions to avoid them.

Judge's name ______

Evaluation:

Number of marks possible: **18.0**

Skills evaluated				
	Task 1	Task		Total
		2		
a. Use of safety equipment & safe and clean workspace				
b. Use and interpretation of service manuals & schematic diagrams				
c. Logical order of repair				
d. Proper use of tools				
e. Precise adjustment of components				
f. Accurate measurements				
g. Superior Workmanship (Documentation)				
h. Identification of faults, codes, or components				



If you cannot proceed with a task, ask your judge for assistance.

Follow the manufacturer's procedures too safely, appropriately, and accurately:

1. Remove a drive-axle assembly from the axle housing.

2.	In point form; briefly record your findings or components that were out of specifications.			



If you cannot proceed with a task, ask your judge for assistance.

Follow the manufacturer's procedures too safely, appropriately, and accurately:

2. In point form; briefly record your findings or components that were out of specifications.

- 1. Install another drive-axle assembly into the axle housing.
- _____



If you cannot proceed with a task, ask your judge for assistance.

Congratulations!

You have completed the required tasks.
Once you have completed this topic you must clean up your workstation and return any tools/materials.
Use the space below for comments.
Return this competition form to your judge for evaluation.