Now and Tomorrow **Excellence in Everything We Do** 

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**Essential Skills and Apprenticeship** 

# Essential Skills for Success as a Truck and Transport Mechanic

Truck and transport mechanics use Essential Skills to complete trade-related tasks. Use this fact sheet to:

- learn how Essential Skills are used on the job;
- find out the skills you need to succeed in your trade; and
- help prepare yourself for your career.



## Reading



- Read specifications for trucks on a computer database.
- Read service bulletins and flyers.
- Read Workplace Hazardous Materials Information System (WHMIS)
  labels and Material Safety Data Sheets (MSDS) to learn about the dangers
  of using certain products.
- Read health and safety materials, such as descriptions of personal protective equipment (PPE) and first aid information.
- Read installation and programming directions for electronic equipment.
- Read shop training manuals and written materials from the shop library to learn more about engines and electronics.

### **Document Use**



- Complete preventive maintenance checklists.
- Fill out customer scheduling information on an appointment board.
- Complete warranty registration forms.
- Refer to size tables for tires and differentials and conversion charts for calibrating speedometers.
- Interpret diagnostic graphs such as temperature graphs to see if sensors are within specifications.
- Read assembly diagrams to assemble specialized equipment such as transmissions.
- Interpret blueprints and schematic diagrams for systems such as wiring or air brakes.



- Read and follow electrical troubleshooting charts and diagrams.
- Interpret tachnographs which record speeds, revolutions per minute (rpm), and engine idling for diagnostic purposes.

# Numeracy



- Measure and weigh refrigerants.
- Compare the number of hours a truck was idle to the distance it ran to determine the amount of fuel burned.
- Measure current resistance, amperage draw, voltage drop, temperatures and rpms.
- Estimate the weight of a load.
- Estimate repair costs.
- Calculate the average fuel economy for a vehicle.
- Measure the thickness of a washer, the depth of a counterbore and the length of an axle.

## Writing



- Write notes to co-workers to provide updates on equipment.
- Write comments on preventative maintenance checklist forms.
- Complete estimates of all items that need to be replaced when a vehicle comes in.
- Write entries in work orders to show the cause of a malfunction and how it was corrected.
- Write reports on vehicle damage for insurance claims.

#### Oral Communication



- Communicate with stockroom personnel about parts.
- Contact other mechanics to find out what repairs were previously done to a vehicle and discuss how to carry out difficult repairs.
- Talk to the shop foreman to discuss scheduling and the length of various jobs.
- Communicate with truck company dispatchers about how long it will take before their trucks are back on the road.
- Talk to customers to discuss their vehicle and to provide important information on parts and warranties.
- Contact manufacturers to discuss problems with parts.

# Working with Others



- Typically work independently on tasks.
- Coordinate tasks that involve lifting with co-workers.
- Work as part of a team with other mechanics, service managers and parts and warehouse personnel.

## Thinking



- Choose the most appropriate tools for the job.
- Find mutually agreeable maintenance times with dispatchers.
- Itemize all the steps required to make repairs so that drivers will understand the length of the process.
- Decide what repairs are most important to be done when a driver has only limited time available.
- Decide when to call a customer about a repair or go ahead with the repair based on past experience with the customer and cost.
- Decide when to repair or replace suspension, tie rods or tires based on experience, safety considerations and company policies.
- Decide whether a load is safe to be brought into the shop.
- Sequence tasks in a logical order.
- Remember troubleshooting procedures and assembly and disassembly procedures.

# Computer Use



- Use databases to access customer information.
- Use computerized manuals and diagnostic systems that operate from handheld monitors or laptops which can be plugged directly into trucks.

# Continuous Learning



- Participate in training about new equipment and effective troubleshooting.
- Attend specialty courses on topics such as handling propane and using refrigerants.

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# For more information on the Interprovincial Standards Red Seal Program, visit

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