



Release of Updated Training Standard Log Book

Trade Name and Code	282E Powered Lift Truck Technician
Implementation Date of New Standard	October 28, 2016
Implementation Plan	<ul style="list-style-type: none">▪ Apprentices who began their apprenticeship on the former 2002 Training Standard can complete their program using that standard. Apprentices who begin their apprenticeship on or after October 28, 2016 must complete their program using this version of the 282E training standard.▪ On or after October 28, 2016, any apprentice who loses his or her training standard must be trained to and completed with the new standard even if they began their apprenticeship with the 2002 version.
Impact on Curriculum Standards or Related Trades	<ul style="list-style-type: none">• N/A
Training Standard Access	<p>As of October 28, 2016:</p> <ul style="list-style-type: none">• The new Log Book will be available on the Ontario College of Trades website at collegeoftrades.ca/training-standards.▪ The College will mail a printed Log Book to each apprentice who becomes a new member of their Apprentices Class in the Powered Lift Truck Technician trade when they are mailed their Apprentice's Statement of Membership card.▪ If the Apprentice wants a copy of the Log Book before receiving the printed copy in the mail, the apprentice can download/print a copy from the College's website.

<p>Skill(s) or Skill Set(s) Amalgamated and/or Amended</p>	<p>The former Skill Set 5862 Electrical Systems – (Internal Combustion) - Starting and Charging:</p> <ul style="list-style-type: none"> ▪ Name changed to: Starting, Charging and Electrical Systems ▪ Code changed to: 5863 ▪ Rationale: Internal combustion was only removed from the Skill Set name and integrated into the skill section. The Working Group determined it was not necessary in the Skill Set name <p>The former Skill Sets 5864 Fuel Systems and 5865 Engine Management Systems:</p> <ul style="list-style-type: none"> ▪ Combined these two Skill Sets into one Skill Set ▪ Name changed to: Engine Management, Fuel and Emission Control Systems ▪ Code changed to: 5865 ▪ Rationale: The Working Group decided that due to overlapping skills, these areas should be combined. Also, changes were made as there are advancements in technology covering fuel and Engine Management systems in internal combustion trucks. Emissions have been added since it is a significant Environmental issue. <p>The former Skill Sets 5866 Clutches and Transmissions and 5867 Drive Axle and Final Drive Assemblies and 5874 Drive Unit – Electric Vehicles:</p> <ul style="list-style-type: none"> ▪ Combined these three Skill Sets into one Skill Set ▪ Name changed to: Transmission, Drive Axle and Final Drive Systems and Components ▪ Code changed to: 5866 ▪ Rationale: These components are interrelated and due to overlapping skills, the Working Group decided it is more efficient and logical to group these within one skill set. <p>The former Skill Sets 5868 Steering Systems and 5871 Suspension Systems and 5880 Pneumatic Tires and Wheels and 5881 Solid Tires and Wheels:</p> <ul style="list-style-type: none"> ▪ Combined these four Skill Sets into one Skill Set ▪ Name changed to: Steering and Suspension Systems and Tires and Wheels ▪ Code changed to: 5867 ▪ Rationale: These components are interrelated and due to overlapping skills, the Working Group decided it is more efficient and logical to group these within one skill set. <p>The former Skill Sets 5869 Braking Systems and 5870 Air Supply and Auxiliary Air Systems:</p> <ul style="list-style-type: none"> ▪ Combined these two Skill Sets into one Skill Set ▪ Name changed to: Braking Systems ▪ Code changed to: 5868 ▪ Rationale: These components are interrelated and due to overlapping skills, the Working Group decided it is more efficient and logical to group these within one skill set.
---	---

Optional Skills Become Mandatory	N/A
Mandatory Skills Become Optional	N/A
Skill Sets or Skills added (NEW)	<p>Within Skill Set 5865 Engine Management, Fuel and Emission Control Systems:</p> <ul style="list-style-type: none"> ▪ Electronically-controlled diesel common rail systems ▪ Rationale: Powered Lift Truck Techs now work on Electronically-controlled diesel common rail systems and therefore these skills need to be added for apprentices to be prepared for the industry. <p>Within Skill Set 5865 Engine Management, Fuel and Emission Control Systems:</p> <ul style="list-style-type: none"> ▪ Emission control systems ▪ Rationale: Advancements in technology covering fuel and Engine Management systems required more skills in emissions work as this continues to be a major environmental issue. <p>Within Skill Set 5868 Braking Systems:</p> <ul style="list-style-type: none"> ▪ Electro-magnetic braking systems ▪ Rationale: Advancements in technology in braking systems requires that apprentices be trained on electro-magnetic braking systems skills to be prepared to work in this industry. <p>Within Skill Set 5873 Frame, Overhead Guards and Cab Systems:</p> <ul style="list-style-type: none"> ▪ Overhead guards ▪ Rationale: Advancements in technology requires that apprentices be trained on overhead guards and this was missing from the existing standard but it is important to include it in the skills that apprentices need to be trained on. <p>NOTE: The Working Group requested that all applicable legislation and/or regulations (i.e. jurisdictions having authority) are listed in this Apprenticeship Training Standard:</p> <ul style="list-style-type: none"> ▪ Occupational Health and Safety Act (OHSA) – Reg 851 - 45-67 and 71 ▪ Underwriter’s Laboratories of Canada (UL) – UL-558 and UL-583 ▪ Canadian Standards Association (CSA) – Standard B335-15 “Safety Standards for Lift Trucks” ▪ Technical Standards & Safety Authority (TSSA) – Technical Standards and Safety Act, 2000 , Ontario Regulation 215/01 Fuel Industry Certifications S.13, 27-28 An Internal Combustion Alternate Fuel Technician-Industrial Equipment = “ICE-IE Certificate” ▪ Ontario Ministry of Labour - Guideline for the Safe Operation and Maintenance of Powered Lift Trucks ▪ American National Standards Institute (ANSI)/The Industrial Truck Standards Development Foundation (ITSDF) - ANSI/ITSDF B56.1 “Safety Standard for Low Lift and High Lift Trucks” ▪ International Organization for Standardization (ISO) - 53.060: Industrial Truck

	<ul style="list-style-type: none"> ▪ The Motive Vehicle Repairer Act ▪ The Mining Act ▪ Environmental Protection Act
Key terminology amendments	<ul style="list-style-type: none"> ▪ All instances of repair changed to repair/replace ▪ All instances of verify repair changed to verify repair/replacement ▪ All instances of batteries in the Skill Set 5863 Starting, Charging and Electrical Systems changed to starting batteries ▪ All instances of automatic transmissions changed to powershift transmissions ▪ All instances of suspension systems changed to active suspension systems ▪ Skill Set Heating, Ventilation and Air Conditioning Systems changed to 5874 Climate Control Systems <p>Rationale: Terminology was changed to align with changes in the industry as well as technological advancements in the Powered Lift Truck Industry. In some instances, content was changed to better align with the 421A Heavy Duty Equipment Technician products since Powered Lift Truck Technician trades shares some common core skills with Heavy Duty Equipment Technicians.</p>
Skill(s) or Skill Set(s) Removed	N/A
General Notes	<ul style="list-style-type: none"> ▪ This is a provincial trade (not Red Seal) that shares common in-school training with Heavy Duty Equipment Technician, Agricultural Equipment Technician and Truck and Coach Technician ▪ 22 Skill Sets reorganized into 15 Skill Sets ▪ Rationale: The Working Group determined that there were many opportunities for reordering, restructuring and regrouping the Skill Sets due to several inter-related skills. This creates a more efficient Training Standard and ensures optimal flow from one competency to the next for the apprentice. ▪ Major content changes made throughout document driven by industry changes including technological changes

Existing Skill Sets:	New Skill Sets:
<ol style="list-style-type: none"> 1. U5860.0 Occupational Health and Safety Procedures 2. U5861.0 Manufacturer’s Specification Plate 3. U5862.0 Electrical Systems – (Internal Combustion) - Starting and Charging 4. U5863.0 Engine Systems 5. U5864.0 Fuel Systems 6. U5865.0 Engine Management Systems 7. U5866.0 Clutches and Transmissions 8. U5867.0 Drive Axle and Final Drive Assemblies 9. U5868.0 Steering Systems 10. U5869.0 Braking Systems 11. U5870.0 Air Supply and Auxiliary Air Systems 12. U5871.0 Suspension Systems 13. U5872.0 Batteries 14. U5873.0 Electric Motor Systems 15. U5874.0 Drive Unit- Electric Vehicles 16. U5875.0 Control Systems - Electric Vehicles 17. U5876.0 Hydraulic System 18. U5877.0 Lifting Systems 19. U5878.0 Heating, Ventilation and Air-Conditioning Systems 20. U5879.0 Frame and Cab Systems 21. U5880.0 Pneumatic Tires and Wheels 22. U5881.0 Solid Tires and Wheels 	<ol style="list-style-type: none"> 1. U5860.0 Occupational Health and Safety Procedures 2. U5861.0 Manufacturer’s Specification Plate 3. U5862.0 Batteries 4. U5863.0 Starting, Charging and Electrical Systems 5. U5864.0 Engine Systems 6. U5865.0 Engine Management, Fuel and Emission Control Systems 7. U5866.0 Transmission, Drive Axle and Final Drive Systems and Components 8. U5867.0 Steering and Suspension Systems and Tires and Wheels 9. U5868.0 Braking Systems 10. U5869.0 Electric Motor Systems 11. U5870.0 Control Systems – Electric Vehicles 12. U5871.0 Hydraulic Systems 13. U5872.0 Lifting Systems 14. U5873.0 Frame, Overhead Guards and Cab Systems 15. U5874.0 Climate Control Systems