



**Skilled
Trades**
Ontario

**Métiers
spécialisés**
Ontario

Apprenticeship
Training Standard
Logbook

**Motive Power
Machinist**

410K

2003

Apprenticeship Training Standard

The Apprenticeship Training Standard or herein after referred to as “Logbook” is a document issued to Apprentices who sign a Registered Training Agreement in the Province of Ontario as an official record of training. It is to be used by the Apprentice and Sponsor/trainer to guide the process of skills development in a particular trade.

Training As An Apprentice

- ✓ Ensure you, your sponsor, and your witness sign a Training Agreement with the Ministry of Labour, Immigration, Training and Skills Development. Once it is registered, you will receive a copy of the registered Training Agreement for your records.
- ✓ Notify the local Service Delivery Office **immediately** if any changes to contact information or training agreement, especially if you change sponsors.
- ✓ Review the Logbook regularly with your trainer and sponsor to discuss your progress, ask questions, seek feedback and have the trainer **sign-off on competencies**
- ✓ Keep an accurate record of the hours you work.
- ✓ Attend classroom training when it is offered.
- ✓ Apply for the financial incentives for which you are eligible.



Completing Your Logbook

- ✓ **Complete the Sponsor Record Form** – A form must be completed for each Sponsor/Trainer used during your apprenticeship.
- ✓ **Confirm Skill Sign-off is Complete**
 - **You and your trainer** sign-off each required skill to confirm that you have demonstrated competency in that skill.
 - Shaded boxes in your Logbook mean the skills are optional and do not have to be confirmed by your trainer or sponsor. However, you are encouraged to complete them as part of your training.
- ✓ **Confirm Skill Set Sign-off is Complete**
 - After you and your trainer have signed-off all the required skills in a skill set, your sponsor signs the signature box on the form in **Appendix C – “Skill Set Completion for Sponsors”** to confirm your completion of all competencies within each skill set.

This document is the property of the apprentice named inside and represents the official record of your training. For information about completing your apprenticeship, see inside of back cover.



Apprentice Name: _____

Address: _____

Phone Number: _____

Email Address: _____

Trade: _____

Training Agreement # (for Compulsory and Non-Compulsory trades):

STO Account No. (for Compulsory trades only):

This document is the property of the Apprentice named herein and represents the official record of their training.

If you have questions about the use of this Logbook or about your Apprenticeship program, contact your local Service Delivery Office (see Appendix D in this book) or the Employment Ontario hotline at: 1-800-387-5656.

Apprenticeship Pathway to a Certificate of Qualification

Phase 1: Registration

Submit Application for Apprenticeship Training through the on-line portal or to local Service Delivery Office

For on-line portal, please follow instructions for registration. You will need to create a *My Ontario* account to access online services.

Training agreement signed and registered by both apprentice and sponsor

Access your Apprenticeship Training Standard Logbook**
skilledtradesontario.ca/about-trades/trades-information

** This is the official record of your training progress. You are responsible for keeping it up-to-date.

Complete on-the-job training

Demonstrate and receive sign-off on the competencies/skills in your Apprenticeship Training Standard Logbook

Complete in-school training

Attend and complete the in-class training set out in the Curriculum Training Standard

Apprentices eligible to apply for apprenticeship incentive grants (Red Seal trades) and loans.

Review and finalize your logbook with your sponsor

Submit proof of apprenticeship completion
via email, in-person or digital portal

Your Apprenticeship Training Standard Logbook details completion requirements. Submit the following:

- completed Apprenticeship Training Standard Logbook with signatures
- proof of hours

Certificate of Apprenticeship is issued

Trades without examination

CofA is the final step of the program

Trades with examination
(compulsory and non-compulsory trades)*

Provisional Certificate of Qualification issued for a 12 month term

To prepare for the CofQ examination download the Provincial and/or Red Seal Exam preparation guides.

Make payment for your Certificate of Qualification examination

Call to make a payment
(647-847-3000 or 1-855-299-0028)

Schedule a date to write your Examination

To schedule your examination, contact your local Service Delivery Office.

Pass Certificate of Qualification examination

Apprentices eligible to apply for Apprenticeship Completion Grant (Red Seal trades) or Apprentice Completion Bonus (non-Red Seal)

Certificate of Qualification is issued

Upon completion, Sponsors may be eligible for Apprenticeship grants, incentives, bonuses or tax credits

Phase 2: Apprenticeship

Phase 3: Certification

* For a list of trades subject to a certification examination, visit: skilledtradesontario.ca

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Please Note: This Standard has been revised to reflect the visual identity of Skilled Trades Ontario (STO) which replaced the Ontario College of Trades on January 1, 2022. The content of this Standard may refer to the former organization; however, all trade specific information or content remains relevant and accurate based on the original date of publishing.

Please refer to STO's website: skilledtradesontario.ca for the most accurate and up to date information. For information about BOSTA and its regulations, please visit [Building Opportunities in the Skilled Trades Act, 2021 \(BOSTA\)](#).

Any updates to this publication are available on-line; to download this document in PDF format, please follow the link: [Skilled Trades Ontario.ca](https://skilledtradesontario.ca).

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Maintained with transfer to Skilled Trades Ontario 2003 (V100)

Foreword: Purpose, Terms and Conditions of the registered Training Agreement

Purpose:

- Prior to starting official apprenticeship activities, the apprentice, sponsor and a witness are required to sign a Training Agreement.
- The Training Agreement that you have signed is an important legal document that outlines your responsibilities as an apprentice and the responsibilities of your sponsor.
- Once registered, this training agreement (or contract) marks the start of your formal agreement between the apprentice, the sponsor and the Ministry.
- For compulsory trades, the apprenticeship registration document must be accessible when working.

The Apprentice agrees:

- **To inform the local Service Delivery Office of any change to your contact information or change in sponsor within 7 days;**
- To follow the Sponsor's and Trainer's lawful instructions and make every effort to acquire the skills identified in the Logbook for the Trade which is part of the apprenticeship program established by Skilled Trades Ontario for the trade;
- To obtain written verification from the Sponsor and the Trainer(s) that the requirements in the Logbook for the trade have been met.
- When you receive an "Offer of Classroom Training", confirm your attendance by following the instructions in the offer. Failure to do so may result in losing your opportunity to attend school which delays the completion of your apprenticeship.

The Sponsor agrees:

- To ensure that the Apprentice is provided with the training required as part of the apprenticeship program established by Skilled Trades Ontario for this trade;
- To review the progress of training with the Apprentice, and with the Trainer(s) where the Sponsor and the Trainer are not the same party.
- Release your apprentice from work to attend in-school training without penalty to the apprentice.
- To maintain the journeyperson/apprentice ratio for your trade, if applicable.
- To monitor their apprentice(s) progress
- To ensure that the Trainer(s) verifies, in writing, when each skill identified in the Logbook for the trade has been successfully completed by the Apprentice;
- To contact the Ministry should any changes in your capacity to train, your contact information, or your apprentice's status in the program change.

Trade Specific Resources and Links

| Trade Specific Resource | Link |
|--|--|
| Red Seal Program | red-seal.ca |
| Apprenticeship in Ontario | ontario.ca/page/apprenticeship-ontario |
| Employment Ontario | employmentontario.ca |
| Service Canada | servicecanada.gc.ca |
| <i>Building Opportunities in the Skilled Trades Act, 2021</i> | Building Opportunities in the Skilled Trades Act, 2021, S.O. 2021, c. 28 - Bill 288 (ontario.ca) |
| Ministry of Labour, Immigration, Training and Skills Development | Ministry of Labour, Immigration, Training and Skills Development ontario.ca |
| Exam Preparation Guide | Exam Resources – Skilled Trades Ontario |
| Skills Zone (Ontario Skills Passport) | http://www.skillszone.ca/ |

**Please note, all website addresses are current at time of printing*

Methodology-Standard Development

A standard is developed with a broad group of trade representatives who form the initial working group. This includes subject matter experts/ tradespeople/ instructors and employers from a cross section of the sector/industry, with varying years of work experience in the field. The working group reviews, develops and recommends revision to the content of the standard. Their role also involves harmonizing and updating other supporting content for the product.

An essential part of the standard development is the validation process. This is the opportunity to have a broader representation of the sector provide feedback on the content of draft standard. This process is conducted in various ways and may include sending out a survey or the draft document (or both) directly to the sector. The comments received are reviewed by the working group and revisions are made as required based on a consensus model.

Introduction to the Logbook

This “on-the job” Logbook is the training standard for Motive Power Machinist 410K and was developed by Skilled Trades Ontario in consultation with representatives from industry. It identifies all the skills associated with and required to learn the trade.

The Logbook is divided into skill sets, which are further divided into skills. These skill sets and skills are written in statements that describe what the Apprentice must perform and to what standard, in order to be considered competent in that skill.

The successful performance of these skills is tracked in the Logbook. Once achieved, this skills’ sign-off, along with the completion of in-school program requirements or equivalent, is how the apprenticeship program is completed and apprentices receive a Certificate of Apprenticeship.

The Sponsor/trainer and Apprentice are required to sign-off and date each skill after the Apprentice has demonstrated proficiency in these skills. However, if a skill is shaded, it is optional and does not need to be signed-off, though it has been defined as a part of the scope of practice for the trade.

All practices described in this standard must be performed by the apprentice according to the specific criteria identified. In general, the standard of performance for this trade is to be performed according to all applicable jurisdictional codes and standards and all health and safety standards must be respected and observed.

All skills within the Apprenticeship Training Standard are to be performed, as applicable, according to and in compliance with the following:

- Occupational Health and Safety Legislation and Regulations;
- Other applicable legislation, regulation, codes and standards;
- Industry best practices;
- Company policies and procedures.

The information presented in this standard is, to the best of our knowledge, current at time of printing and is intended for general application. Please refer to the Skilled Trades Ontario website for the most accurate and up-to-date information: skilledtradesontario.ca

Roles and Responsibilities

Under the [Building Opportunities in the Skilled Trades Act, 2021 \(BOSTA\)](#)

Skilled Trades Ontario (STO) is responsible for:

- Establishing and maintaining qualifications;
- Establishing Apprenticeship Programs and other training programs including training Standards, curriculum standards and certifying examinations;
- Issuing certificates for the purposes of this Act such as Certificates of Qualification;
- Maintaining a Public Registry for compulsory trades skilledtradesontario.ca/public-register/;
- Determining whether the experience and qualifications obtained by applicants for a certificate of qualification who do not complete an apprenticeship are equivalent to those received through completing an apprenticeship (Trade Equivalency Assessments)
- Promoting the skilled trades and conducting research.
- Conducting research and evaluate whether a trade should be prescribed as a trade for the purposes of this Act and to make recommendations on these matters to the Minister.

Ministry of Labour, Immigration, Training and Skills Development (MLITSD)

is responsible for:

- Classifying trades as compulsory trades;
- Prescribing scopes of practice for trades;
- Approving which persons may provide in-class training for apprenticeship programs (TDAs);
- Registering Training Agreements;
- Providing those who successfully complete an apprenticeship program with a certificate of apprenticeship (CofA);
- Administering examinations, including certifying examinations;
- Promoting the skilled trades and conducting research;
- Exercising such other powers and perform such other duties and functions as are provided for in this Act or the regulations.

For any matter related to your registered Training Agreement or completing your apprenticeship, you must contact your local Service Delivery Office.

Roles and Responsibilities of the Apprentice

An Apprentice is an individual who has entered into a registered Training Agreement (refer to Foreword: *“Purpose, Terms and Conditions of TA” page 1*) with a Sponsor to receive training in a trade as part of an apprenticeship program established by Skilled Trades Ontario. As an Apprentice, you have certain roles and responsibilities to follow throughout your apprenticeship training:

1. As an Apprentice, you signed the Training Agreement and have entered into a contract with the Ministry of Labour, Immigration, Training and Skills Development and your Sponsor.
2. If you are registered as an Apprentice in a compulsory trade, your name will automatically appear in the Skilled Trades Ontario Public Register.
3. You are responsible for informing the staff at your local Service Delivery Office regarding changes to the following:
 - Your Sponsor’s address;
 - Your name and address; and/or,
 - Your Sponsor, including starting employment with a new Sponsor
4. As an Apprentice, you are responsible for completing skills or skill sets in this Logbook (as detailed in the *“Eligibility for Apprenticeship Program Completion”* section of this document) and ensuring that they are dated and signed by both you and your Trainer.
5. Once you have demonstrated competency in all the mandatory skills and received a sign off on each skill by your sponsor/trainer, you must have the Skill Set Completion Form completed and signed by your current Sponsor.
6. Submit your Logbook to your local Service Delivery Office.
7. Present your Apprentice Completion Form (Please refer to Appendix B), along with your authorized Logbook to your local Service Delivery Office.

Roles and Responsibilities of Sponsors and Trainers

Sponsors are responsible for ensuring all terms are met as per the registered Training Agreement. They are named on the registered Training Agreement as the entity responsible for ensuring Apprentices receive the training required as part of an apprenticeship program. As a signatory to this agreement, they are designated as the 'Signing Authority' for the Apprentice's Skill Set Completion Form and are required to attest to successful achievement by signing the appropriate box at the completion of each skill set. Some sponsors may also act as the Trainer.

A **Trainer** is an individual who oversees the performance of a task and sets the workplace expectations and practices for the Apprentice.

In compulsory trades, a Trainer must hold a valid Certificate of Qualification and be registered with Skilled Trades Ontario.

In non-compulsory trades, a Trainer is an individual who holds one of the following:

- A Certificate of Qualification;
- A Certificate of Apprenticeship in the trade; or,
- Has completed both the workplace-based training (competencies and/or hours as applicable) and classroom training components of the trade's apprenticeship program; or,
- Has workplace experience equivalent to the apprenticeship program) and has the skills outlined in the Logbook.

Competency means being able to perform to the required standard (please refer to *"Introduction to the Logbook"*). Trainers/Sponsors and Apprentices are required to sign-off and date the skills in the Logbook following each successful acquisition. The Logbook forms a record of this achievement.

The Trainer must provide their signature based on their assessment and professional judgment that the apprentice is competent in the skills described above. The Trainer's signature is not a general warranty or guarantee of the apprentice's future conduct.

Sponsors participating in this training program will be designated as the Signing Authority and are required to attest to successful achievement by signing the appropriate box included at the end of each skill set.

Health and Safety

Safe working procedures and conditions, accident prevention and the preservation of health are of primary importance for apprenticeship programs in Ontario. These responsibilities are shared and require the joint efforts of government, sponsors, employers, supervisors, workers, apprentices and the public to achieve the goal of making Ontario's workplaces safe and healthy.

The [Occupational Health and Safety Act](#) (OHSA) provides us with the legal framework and the tools to do this. It sets out the rights and duties of all parties in the workplace, placing ultimate responsibility on the employer for the health and safety of workers (in this case apprentices) by ensuring procedures, controls, and training are established for dealing with workplace hazards. Therefore, it is imperative that all parties become aware of circumstances that may lead to injury, illness or harm. Safe learning experiences and environments can be created by controlling the variables and behaviours that may contribute to or cause an accident injury or illness.

A sponsor who is not the employer is reminded that the employer has legal responsibilities respecting health and safety over the apprentice who is their worker. The sponsor should encourage safe work habits and adherence to the employer's occupational health and safety requirements for the workplace.

It is generally recognized that a positive attitude about safety in partnership with health and safety competency contributes to an accident-free environment. Everyone will benefit as a result of a healthy attitude towards the prevention of accidents.

Workers and apprentices can be exposed to a multitude of hazards and, therefore, should be familiar with the Occupational Health and Safety Act and regulations.

The Internal Responsibility System:

One of the primary purposes of the Occupational Health and Safety Act (OHSA) is to facilitate a strong Internal Responsibility System (IRS) in the workplace. To this end, the OHSA lays out the duties of employers, supervisors, workers, apprentices, constructors and workplace owners.

Workplace parties' compliance with their respective statutory duties is essential to the establishment of a strong IRS in the workplace.

Simply put, the IRS means that everyone in the workplace has a role to play in keeping workplaces safe and healthy. Workers and apprentices in the workplace who see a health and safety problem such as a hazard or contravention of the OHSA in the workplace have a statutory duty to report the situation to the employer or a supervisor. Employers and supervisors are, in turn, required to address those situations and acquaint workers with any hazard in the work that they do.

The IRS helps support a safe and healthy workplace. In addition to the workplace parties' compliance with their legal duties, the IRS is further supported by well-defined health and safety policies and programs, including the design, control, monitoring and supervision of the work being performed.

Roles and Responsibilities under the Occupational Health and Safety Act

Employer's Responsibilities include but are not limited to the following:

- Instruct, inform and supervise workers and apprentices to protect their health and safety.
- Appoint competent persons as supervisors.
- Inform a worker, apprentice, or a person in authority, about any hazard in the workplace and train them in the handling, storage, use, disposal and transport of any equipment, substances, tools, material, etc.
- Take every precaution reasonable in the circumstances for the protection of a worker/apprentice.
- In workplaces in which more than five workers are regularly employed, prepare and post a written occupational health and safety policy and set up and maintain a program to implement it.
- Prepare and post policies with respect to workplace violence and workplace harassment and develop programs supporting workplace harassment and workplace violence policies.
- Ensure knowledge of applicable legislative, regulatory, codes and standards so requirements to be followed are clear to all workers/apprentices.

Trainer/Supervisor Responsibilities include but are not limited to the following:

- Ensure that a worker or apprentice works in compliance with the Act and regulations.
- Ensure that any equipment, protective device or clothing required by the employer is used or worn by the worker or apprentice.
- Advise a worker/apprentice of any potential or actual health or safety dangers known by the supervisor.
- Take every precaution reasonable in the circumstances for the protection of workers.

Worker/Apprentice Responsibilities include but are not limited to the following:

- Work in compliance with the Act and regulations.
- Use or wear any equipment, protective devices or clothing required by the employer.
- Report to the employer or supervisor any known missing or defective equipment or protective device that may endanger the worker or another worker.
- Report any hazard or contravention of the Act or regulations to the employer or supervisor.
- Not remove or make ineffective any protective device required by the employer or by the regulations.
- Not use or operate any equipment or work in a way that may endanger any worker.

The Three Rights of Workers/Apprentices

The OHSA gives workers and apprentices three important rights:

1. The right to know about hazards in their work and get information, supervision and instruction to protect their health and safety on the job.
2. The right to participate in identifying and solving workplace health and safety problems either through a health and safety representative or a worker member of a joint health and safety committee.
3. The right to refuse work that they believe is dangerous to their health and safety or that of any other worker in the workplace.

Ministry of Labour, Immigration, Training and Skills Development

The Ministry of Labour, Immigration, Training and Skills Development conducts periodic inspections of workplaces to ensure that safety acts and regulations are being followed. Please direct any questions to the Occupational Health and Safety Contact Centre at 1-877-202-0008.

Apprenticeship Program Summary/Guidelines

Scope of Practice

The Scope of Practice for the trade of Motive Power Machinist is set out in section 89 of Ontario Regulation 875/21 under BOSTA and reads as follows:

89. The scope of practice for the trade of motive power machinist includes reconditioning and rebuilding internal combustion engines and associated components, power trains, brake system components and suspension system components.

*While the Logbook draws on the scope of practice regulation (Section 89 of Ontario Regulation 875/21 under BOSTA). The Logbook does not purport to add to or modify the scope of practice as provided in regulation. *

Program Guidelines

On-the-Job Training Duration

Industry has identified 5340 hours as the benchmark necessary for any Apprentice to become competent in the skills required. There may be circumstances in which the duration varies from this guideline.

In-Class Training Duration

Industry has identified 720 hours of in-school training as the duration necessary for an Apprentice to complete the in-school curriculum for this program.

Total Training Hours

6060 hours

Journeyperson to Apprentice Ratio

Industry Recommended Ratios:

While some of the trades regulated under BOSTA are subject to Journeyperson to Apprentice ratios set out in regulation, this trade is not one of them. Instead, **industry has recommended a Journeyperson to Apprentice ratio guideline of 1 Journeyperson (or individual who is deemed equivalent to a journeyperson) to 1 Apprentice** as the ratio necessary for an Apprentice to be properly trained on the job in this program.

Program Requirements

Compulsory and Non-compulsory Classification

Regulations under the *Building Opportunities in the Skilled Trades Act, 2021*, classify each trade as either “compulsory” or non-compulsory.” This trade is non-compulsory.

It is the responsibility of an Apprentice to maintain a training record in the form of a Logbook. The Sponsor and Trainer are required to sign-off when competencies in the trade are achieved.

Skills for Success Summary

Skills for Success are needed in a quickly changing world for work, learning and life. They are foundational for building other skills and important for effective social interaction. Everyone benefits from having these skills as they help individuals get a job, progress at their current job and change jobs. They also help individuals become active members of their community and succeed in learning.

Through extensive research and consultations, the Government of Canada launched the new Skills for Success model renewing the previous Essential Skills framework to better reflect the needs of the current and future labour market.

The occupational specific Essential Skills profiles are available online. These will be updated over time to align with the new Skills for Success model found here: [Skills for Success model](#)

Standard of Performance

In general, the standard of performance for the trade of Motive Power Machinist are to be performed, as applicable, according to and in compliance with the following:

Industry Safety Standards which are based upon:

- Occupational Health and Safety Legislation and Regulations;
- Jurisdictional legislation and regulations, codes and standards (municipal bylaws etc.)
- Company policies and procedures
- All applicable manufacturers specifications and engineering specifications

Other Suggested or Required Certification(s) and Training

While an apprentice receives health, safety and occupational specific training and/or certification in a variety of fields during their apprenticeship, it is important to be aware that other occupational health and safety training and certification renewal or updating may also be required during their career before performing new types of work.

Training the Apprentice - Tips for Apprentices, Sponsors and Trainers

Tips for Apprentices

Remember, it takes time to learn. The following is a list of additional tips and tools to help make the most of your apprenticeship training:

- Practice safe work procedures early to create good habits;
- Use your Logbook as a journal to keep track of the skills you have achieved;
- Review your training plan with your Training Consultant, Trainer, or Sponsor;
- Discuss your training needs with your Trainer and/or Sponsor;
- Listen to the suggestions of your Trainer;
- Ask your Trainer questions if you are unsure of any skill you need to perform or any tools or equipment you need to use to perform your duties;
- Show enthusiasm and develop good work habits; and,
- Upon demonstration of competency, ensure that you and your Trainer sign-off the individual skills.

To get the most from this mentoring experience, request exposure to the full scope of the trade; meet regularly with your Sponsor/Trainer to discuss your progress, ask questions and seek feedback.

Tips for Sponsors

- Select Trainers with good communication skills and who work well with others;
- Ensure that the Apprentice always works under the direction of or has access to a qualified Trainer;
- Encourage Trainers to take upgrading courses (e.g. Train the Trainer, Mentor, Coach, etc.);
- Set out clear expectations and involve both the Apprentice and Trainer in developing the training plan
- Encourage safe work habits;
- Allow time for the Trainer to train and demonstrate skills to the Apprentice;
- Provide opportunities and time for the Apprentice to learn the trade;
- Ensure that the Apprentice receives the varied on-the-job trade training experience outlined in this document;
- Recognize good performance;
- Observe frequently;
- Provide constructive feedback and conduct regular performance reviews involving the Apprentice and Trainer;
- Use the Logbook as a monitoring tool and a part of regular performance evaluations; and,
- Complete the Skill Set Completion Form once the Apprentice has demonstrated competency in the skills.

- The detailed content listed for each skill is not intended to represent an inclusive list; rather, it is included to illustrate the intended direction for the skill acquisition.

Tips for Trainers

Trainers are responsible for ensuring the Apprentice is developing the skills outlined in this document. Here is a list of tips and tools to help Trainers in their supervision of Apprentices:

- Demonstrate model safe work habits;
- Provide opportunities and time for the Apprentice to learn the trade;
- Treat Apprentices fairly and with respect;
- Review the Logbook with the Apprentice and develop a training plan;
- Set out clear expectations and recognize good performance;
- Expose Apprentices to the full scope of the trade by providing training on the skills outlined in this document;
- Encourage and respond to all questions;
- Be patient;
- Explain, show and demonstrate the skill;
- **Meet regularly with the Apprentice to discuss the apprentice's progress**
- Provide continuous feedback;
- Sign-off skills when your Apprentice demonstrates competency, and,
- Use the Logbook as a guide to evaluate competence in each skill area. By using the Logbook, Trainers will be able to guide the process to and assist Apprentices to develop skills outlined in this document.

The best mentoring experience is when an Apprentice is given as much training/exposure to the full scope of the trade as possible. If this is not possible, help them to determine other ways this may be possible.

Notice of Collection of Personal Information

1. At any time during your apprenticeship training, you may be required to show this Logbook to the local Service Delivery Office. You will be required to submit the signed Apprenticeship Completion form to the Service Delivery Office in order to complete your program. The Service Delivery Office will use your personal information to administer and finance Ontario's apprenticeship training system, including confirming your completion and issuing your Certificate of Apprenticeship.
2. The Service Delivery Office will disclose information about your program completion and your Certificate of Apprenticeship to Skilled Trades Ontario, as it is necessary for Skilled Trades Ontario to carry out its responsibilities.
3. Your personal information is collected, used and disclosed by the Ministry of Labour, Immigration, Training and Skills Development under the authority of the *Building Opportunities in the Skilled Trades Act, 2021 (BOSTA)*.
4. Questions about the collection, use and disclosure of your personal information by the Ministry may be addressed to the:

Manager, Employment Ontario Contact Centre
Ministry of Labour, Immigration, Training and Skills Development
33 Bloor St. E, 2nd floor, Toronto, Ontario M7A 2S3
Toll-free: 1-800-387-5656; Toronto: 416-326-5656
TTY: 1-866-533-6339 or 416-325-4084

List of Trainers

| Trainer's Name (Please Print) | Trainer's Signature | Date of start with Trainer (day/month/year) |
|----------------------------------|---------------------|---|
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U5800.0 Occupational Health & Safety Procedures**General Performance Objective**

Comply with occupational health and safety procedures by: identifying and taking corrective action against potential workplace health and safety hazards; handling, storing and disposing of hazardous materials; wearing and maintaining personal protective equipment; complying with workplace-related legislation; interpreting and applying service-related information; practicing good housekeeping in the workplace; complying with Workplace Hazardous Materials Information System (WHMIS) guidelines; according to the *Occupational Health and Safety Act*, government regulations, company policy and manufacturer's recommendations.

Performance Objectives**Skills**

5800.01 Identify and take corrective action against potential workplace health and safety hazards including: excessive exhaust and/or explosive fumes, dust, sound levels, electrical and mechanical hazards (i.e. damaged or faulty air lines and/or inadequate ventilation); so that the potential for personal injury, damage to equipment, vehicles, and the environment are minimized; according to government regulations and company policy.

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5800.02 Handle, store and dispose of hazardous workplace materials including: cleaning solvents, new and used lubricants and fluids, coolants, brake fluids, dust, battery acid, refrigerants and gases; using personal protective equipment and specified handling and storage equipment; so that individuals are protected from injury, the environment from contamination and safety procedures are followed; according to government regulations, manufacturers recommendations and company policy.

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5800.03 **Wear and maintain personal protective equipment** including: eye, ear, hand, respiratory, body, and foot protection; ensuring that correct fit and optimum protection is provided to the wearer for the specific task performed; according to government regulations, manufacturer's recommendations and company policy.

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5800.04 **Comply with workplace-related legislation** including: *Occupational Health and Safety Act, Motive Vehicle Repair Act, Highway Traffic Act* and the *Environmental Protection Act*; by identifying the personal and legal liabilities of technicians, and vehicle owners, when performing and/or conducting work estimates and repairing and/or replacing components; according to government regulations.

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5800.05 Interpret and apply service-related information including: service bulletins, manuals and parts catalogues by: locating and identifying vehicle or engine identification number, accessing microfiche and computerized service information systems, so that service/repair is performed; according to company policy and/or manufacturer's recommendations.

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5800.06 Practice good housekeeping in the workplace by: applying fire hazard prevention methods, including: maintaining a clean and orderly work area; identifying, removing and disposing of potential fire hazards; cleaning up grease, oil spills and/or fluids; ensuring work area is free of obstructions; and safely storing tools and shop equipment to minimize accident or injury to self and others; according to government regulations and company policy.

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5800.07 Comply with Workplace Hazardous Materials Information System (WHMIS) guidelines including: reading and interpreting labels and Material Safety Data Sheets (MSDS), ensuring receipt of training in WHMIS regulations and practices; according to the *Occupational Health and Safety Act*.

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U5801.0 Disassemble Engine**General Performance Objective**

Disassemble engine by: draining fluids from engine assembly; marking mating parts; removing pans, covers and components; removing cylinder heads and components; removing piston and rod assemblies; removing crankshaft and bearings; removing cylinder liners; removing camshaft and bearings; removing cylinder liners; removing core and oil gallery plugs and components; dismantling cylinder head and components; and cleaning engine and components; according to manufacturer's recommendations, specifications, company policy and safety requirements.

Performance Objectives**Skills**

5801.01 Drain fluids from engine assembly by: opening drain plugs; checking for abnormal odours, contamination, discoloration, leaks and/or cracks; using hand and power tools, recycling containers, lifting, rigging and blocking devices; according to company policy, specifications and safety requirements.

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5801.02 Mark mating parts by: tagging, stamping, recording and listing accessories; using hand tools, tags, recording systems, lifting, rigging and blocking devices; according to company policy, specifications and safety requirements.

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5801.03 Remove pans, covers and components including: fasteners; by removing fasteners and gaskets; checking for visible damage; using hand and power tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, company policy and safety requirements.

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5801.04 Remove cylinder heads and components including: fasteners, rockers, push rods and valve train components; by removing fasteners, pressing, pulling or driving; visually inspecting for damage; using hand and power tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5801.05 Remove piston and rod assemblies and components including: fasteners, bearings, rings, retainers, and piston pin; marking mating components; by removing fasteners, pressing pulling or driving; using hand, power and specialty tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5801.06 Remove crankshaft and bearings including: end plate, timing cover, timing components, flywheel, dynamic balancer and main bearing caps or cradle; visually inspecting, checking for breaks, end play and discoloration; using hand and power tools, pullers, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5801.07 Remove camshaft and bearings by: pressing, pulling and pushing; visually inspecting, checking for, wear, and distortion; using pullers, hand and specialized tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5801.08 Remove cylinder liners by: pressing, pulling, boring, and shrinking; using pullers, presses, hand and boring tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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- 5801.09 Remove core and oil gallery plugs and components** including: bearings and cooling nozzles by: pressing, drilling, pushing and heating; using hand and power tools, and/or heating equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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- 5801.10 Dismantle cylinder head and components** including: valves, springs, retainers, locks, camshaft, pulley, gears, seals, lifters, fasteners, followers and rockers; by unfastening and removing, visually inspecting, checking for, wear, corrosion and distortion; using pullers hand and specialized tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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- 5801.11 Clean engine and components** including: engine block, cylinder head, piston assemblies, connecting rods, bearings, liners, counter-balancers, crankshafts, flywheel assemblies, balance shafts, gear trains, camshafts and follower assemblies, harmonic balancers, pulleys, auxiliary drives, oil pans, oil pump and fasteners; by degreasing, blasting and visually inspecting; using cleaning tanks, special solutions, media blasting, pressure washing, steam cleaning and/or thermal cleaning, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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U5802.0 Recondition Flywheel**General Performance Objective**

Recondition flywheel by: inspecting the flywheel and ring gear; removing and installing dowel pins; removing and installing ring gear; removing and replacing pilot bushings/bearings; repairing the pilot bearing bore; resurfacing flywheel; resurfacing pressure plate; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

5802.01 Inspect flywheel and ring gear by: checking for wear, discoloration, distortion, and cracks; using hand and measuring tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5802.02 Remove and install dowel pins by: pushing, pulling and drilling; using hand and power tools, presses and pulling devices; according to manufacturer's recommendations, specifications and safety requirements.

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5802.03 Remove and install ring gear by: pressing, pulling and grinding; using grinders, presses, hand, heating and cutting tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5802.04 Remove and install pilot bushings/bearings by: pressing and pulling; using hand tools and special drivers, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5802.05 Repair pilot bearing bore by: boring, sleeving and metalizing; using hand and precision tools, lathes, metalizing equipment and milling machines; according to manufacturer's recommendations, specifications and safety requirements.

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5802.06 Resurface flywheel by: cutting grinding and measuring; using hand tools, cutters, grinders, lathes, milling machines, micrometers, dial indicators and depth gauges, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5802.07 Resurface pressure plate by: grinding, cutting and measuring; using hand tools, grinders, milling machines, lathes, dial indicators, depth gauges and micrometers, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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U5803.0 Recondition Brake Components**General Performance Objective**

Recondition brake components by: inspecting brake drums, rotors and components; repairing housing bore, resurfacing brake drums and rotors; rebuilding calipers, wheel cylinders, master cylinders and components; relining brake shoes and bands; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

- 5803.01 Inspect brake drums, rotors and components** including: hub; checking for wear, diameter of drum thickness of rotor and condition of bearings, races and seals; using drum and disc micrometers, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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- 5803.02 Repair housing bore** by: boring, sleeving and metalizing; using hand and boring tools, precision measuring devices and metalizing equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5803.03 Resurface brake drums and rotors by: grinding and turning; using brake drum and brake rotor lathes, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5803.04 Rebuild calipers, wheel cylinders, master cylinders and components including: seals, pistons and bleeder screws; by disassembling and replacing worn components and honing bores; using hand tools, lubricants, honing machines, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5803.05 Reline brake shoes and bands by: riveting, grinding and cleaning; using hand tools, brake riveters, brake shoe burnishers and media blast machines, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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U5804.0 Recondition Drive Train And Suspension**General Performance Objective**

Recondition drive train and suspension by: inspecting drive train and components; repairing spindle and components, repairing front axle eye; repairing axle shaft; removing and replacing axle bearing and front bearing assemblies; repairing constant velocity joints; repairing drive shaft; repairing drive shaft tube; repairing control arms and components; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

5804.01 Inspect drive train and components including: spindles, axles, universal joints, constant velocity joints, drive shaft, control arm, pump pulley; by degreasing, checking for wear, distortion and cracks; using hand and power tools, precision measuring instruments, crack detection and cleaning equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.02 Repair spindle and components including: bushings and king pins; by removing and replacing, fitting bushings, honing, reaming, and pressing; using hand tools, power tools, hydraulic presses, honing machines, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.03 Repair front axle eye by: boring, honing, turning, sleeving, straightening, pressing and measuring; using milling machines, radial arm drills, lathes, honing machines and hydraulic presses, precision measuring devices, hand and power tools, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.04 Repair axle shaft by: metalizing and grinding; using hand and power tools, precision measuring devices, metalizing equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.05 Remove and replace axle bearing and front bearing assemblies by: disassembling, pressing pulling and driving; using hand and power tools, hydraulic presses, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.06 Repair constant velocity joints by: disassembling, replacing worn components and reassembling; using hand tools, hydraulic presses, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.07 Repair drive shaft by: removing and replacing universal joints; using hand and power tools, hydraulic presses, precision measuring devices, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements

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5804.08 Repair drive shaft tube by: shortening, lengthening, straightening, balancing, metalizing, cutting and grinding; using hand and power tools, precision measuring devices, balancing equipment, cutting and welding equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5804.09 Repair control arms and components including: bushings; by removing and replacing, pressing or pulling; using hand and power tools, hydraulic presses, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications safety requirements.

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U5805.0 Recondition Crankshaft

General Performance Objective

Recondition crankshaft by: inspecting crankshaft; repairing crankshaft journals, thrust faces and seal surfaces; straightening crankshaft; stress relieving crankshaft; repairing keyway; repairing seal surface; chamfering oil hole; finishing crankshaft journals; balancing crankshaft rotating assembly and components; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives

Skills

5805.01 Inspect crankshaft by: degreasing, checking for fractures, journal dimensions, thrust and seal surface wear, alignment, hardness and distortion; using precision measuring devices, cleaning and crack detection equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5805.02 Repair crankshaft journals, thrust faces and seal surfaces by: metalizing, grinding, stress relieving, straightening and polishing; using hand and power tools, metalizing equipment, crankshaft grinders, precision measuring devices, straightening presses, stress relieving equipment, crankshaft polishers, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5805.03 Straighten crankshaft by: preheating, peening and pressing; using hand and peening tools, hydraulic presses, heating equipment, precision measuring devices, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5805.04 Stress relieve crankshaft by: sonic processing, peening, media blasting, freezing and heating; using hand and power tools, ultrasonic equipment, media blasters, heating and cooling devices; according to manufacturer's recommendations, specifications and safety requirements.

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5805.05 Repair keyway by: metalizing and milling; using hand and power tools, metalizing equipment, precision measuring devices and milling machines; according to manufacturer's recommendations, specifications and safety requirements.

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5805.06 Repair seal surface by: metalizing, grinding, polishing or installing repair sleeves; using hand and power tools, metalizing equipment, crankshaft grinders, polishers, pressing equipment and precision measuring devices; according to manufacturer's recommendations, specifications and safety requirements.

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5805.07 Chamfer oil hole by: grinding and counter boring; using high speed die grinders and hand tools; according to manufacturer's recommendations, specifications and safety requirements.

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5805.08 **Finish crankshaft journals** by: polishing; using hand and power tools, precision measuring devices and crankshaft polishers; according to manufacturer's recommendations, specifications and safety requirements.

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5805.09 **Balance crankshaft rotating assembly and components** including: connecting rods, pistons, pins, retainers, piston rings, rod bearings, flywheel, pilot bearing/bushing, crankshaft sprocket/gear, woodruff keys, oil slinger, harmonic balancer, pulleys and fasteners; by weight matching all like components, calculating bob weights and spin balancing the assembly; using hand and power tools, weigh scales, precision measuring equipment, and balancing equipment; according to manufacturer's recommendations, specifications and safety requirements.

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U5806.0 Recondition Connecting Rod**General Performance Objective**

Recondition connecting rod by: inspecting connecting rod; stress relieving connecting rod; resizing big end of connecting rod; repairing small end of connecting rod; straightening connecting rod; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

- 5806.01 Inspect connecting rod** by: degreasing and visually inspecting; checking for alignment, big and small end bore diameters, fractures and center to center distance; using hand and power tools, precision measuring devices and crack detection equipment; according to manufacturer's recommendations, specifications and safety requirements.

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- 5806.02 Stress relieve connecting rod** by: heating, cooling or peening; using hand and power tools, heating or cooling devices and media blasting equipment; according to manufacturer's recommendations, specifications and safety requirements.

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5806.03 Resize big end of connecting rod by: boring, honing and grinding; using hand and power tools, precision measuring devices, cap grinders, honing or boring machines; according to manufacturer's recommendations, specifications and safety requirements.

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5806.04 Repair small end of connecting rod by: rebushing, honing or boring; using hand and power tools, precision measuring devices, presses, honing or boring equipment and burnishing tools; according to manufacturer's recommendations, specifications and safety requirements.

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5806.05 Straighten connecting rod by: bending, boring or twisting, ensuring big and small ends are parallel; using hand and power tools, precision measuring equipment, boring equipment, rod alignment fixtures and presses; according to manufacturer's recommendations, specifications and safety requirements.

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U5807.0 Recondition Cylinder Head**General Performance Objective**

Recondition cylinder head by: inspecting cylinder head and components; repairing cylinder head crack; straightening cylinder head; repairing camshaft housing; repairing lifter bore; repairing damaged thread; repairing rocker stud; repairing valve guide; replacing valve seats; resurfacing valve seats; resurfacing cylinder head; removing and replacing injector tube; removing and replacing pre-combustion chamber; repair valve; assemble cylinder head and components; according to manufacturer's recommendation, specification and safety requirements.

Performance Objectives**Skills**

5807.01 Inspect cylinder head and components including: valves, springs, guides, rockers, valve seats, camshaft, lash adjusters, retainers, locks, spring seats, seals, injector tubes, pre-combustion chambers, core plugs, studs, cross heads, bridges, injectors and fasteners; by dismantling, degreasing, visually inspecting, testing and analysing performance and function to determine component replacement, machining and repairs; checking for wear, cracks, leaks, distortion, discoloration, alignment, corrosion, design improvements, and tolerances; using hand and power tools, precision measuring devices, pressure testers, cleaning and crack detection equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications, and safety requirements.

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5807.02 Repair cylinder head crack by: stitching, metalizing, and chemically treating to restore the casting to useable condition; using hand and power tools, precision measuring devices, metalizing equipment, crack detection and pressure testing equipment, lifting, rigging and blocking devices; according to company standards and safety requirements.

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5807.03 Straighten cylinder head by: heating, clamping and pressing; using hand and power tools, precision measuring devices, heating equipment, presses and straightening fixtures, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5807.04 Repair camshaft housing by: metalizing, sleeving, boring and honing; using hand and power tools, metalizing equipment, precision measuring devices, boring and honing equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5807.05 Repair lifter bore by: resizing, sleeving; using hand and power tools, precision measuring devices, reamers, presses, boring and honing equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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5807.06 Repair damaged thread by: removing bolts, chasing thread, oversizing, installing thread insert and metalizing; using hand and power tools, precision measuring devices, reamers, drill bits, taps, dies, adhesives, lubricants and metalizing equipment; according to manufacturer's recommendations, specifications and safety requirements.

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5807.07 Repair rocker stud by: removing stud, inspecting and repairing bore and installing replacement stud; using hand and power tools, precision measuring devices, pullers, thread repair sleeves, reamers, presses, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5807.08 Repair valve guide by: knurilizing, reaming, installing guides or liners and machining for positive type valve seals; using hand and power tools, precision measuring devices, heating and cooling devices, reamers, drills, lubricants adhesives, boring fixtures, hones and broaches; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5807.09 Replace valve seats by: pulling, pushing, counterboring, cutting, shrinking, heating and chilling; using hand and power tools, precision measuring devices, seat pullers, presses, boring and threading equipment, heating and cooling equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5807.10 Resurface valve seats by: grinding, cutting and lapping; using hand and power tools, precision measuring devices, seat grinders, cutting equipment, lapping equipment and lubricants; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

- 5807.11 Resurface cylinder head** by: measuring, grinding, cutting or sanding to remove distortion from mating surfaces; using hand and power tools, precision measuring devices, belt sanders, grinding and milling equipment, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

- 5807.12 Remove and replace injector tube** by: pulling, pushing, threading, cutting, heating and chilling, swedging, reaming and pressure testing; using hand and power tools, precision measuring devices, milling equipment, reamers, honing equipment, pressing devices, lubricants, adhesives, pressure testers, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

- 5807.13 Remove and replace pre-combustion chamber** by: pulling, pressing, lapping, threading, counterboring and measuring; using hand and power tools, precision measuring devices, pullers, pressing and counterboring equipment, lubricants, adhesives, surface grinders, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5807.14 Repair valve by: measuring for wear, grinding the angular face, tip or stem; using hand and power tools, precision measuring devices, valve refacers, centerless grinders, and lubricants; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5807.15 Assemble cylinder head and components including: valves, springs, retainers, locks, bearings, seals, shims, lash adjusters, camshafts, valve lifters, core plugs, followers, rockers, bridges and cross heads, prechambers and fasteners; by cleaning components, adjusting valve height, adjusting spring tension, adjusting valve lash, adjusting valve recession or protrusion; analysing performance and function; using hand and power tools, precision measuring devices, vacuum testers, cleaning solutions and equipment, lubricants, adhesives, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

U5808.0 Recondition Valve Train**General Performance Objective**

Recondition valve train by: inspecting valve train and components; repairing camshaft lobe or journal; repairing rocker arm; repairing rocker arm shaft; reconditioning camshaft follower; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

5808.01 Inspect valve train and components including: camshaft, followers, rockers, rocker shafts, valve lifters, lash adjusters, bridges and crossheads, timing gears, fasteners, seals, push rods, chain guide and tensioners; by degreasing, media blasting; visually inspecting and analysing performance; checking for wear, fractures, distortion, alignment and contamination; using hand and power tools, precision measuring devices and cleaning equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

*** A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor.**

5808.02 Repair camshaft lobe or journal by: grinding, metalizing, parkorizing and polishing; checking for wear and distortion; using hand and power tools, precision measuring devices, crack detection and metalizing equipment, polishers, camshaft grinders, presses, lubricants and parkorizing equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5808.03 Repair rocker arm by: grinding, boring, metalizing, rebushing, burnishing, honing and reaming; using hand and power tools, precision measuring devices, grinders, metalizing equipment, honing and boring equipment, reamers, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5808.04 Repair rocker arm shaft by: metalizing, grinding, polishing and measuring; using hand and power tools, precision measuring devices, grinders, metalizing equipment, polisher, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5808.05 Recondition camshaft follower by: grinding, polishing, lapping, removing and replacing rollers, resizing and measuring; using hand and power tools, precision measuring devices, grinders, polishers, lathe, presses, reamers, lapping and honing equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

U5809.0 Recondition Engine Block**General Performance Objective**

Recondition engine block by: inspecting engine block and components; repairing engine block crack; repairing lifter bore; repairing bearing housings; repairing cylinder bore; repairing cylinder block deck surface; repairing lower seal surface; repairing counterbore; installing camshaft bearings; resizing semi-finished bearings; installing core and oil gallery plugs; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

5809.01 Inspect engine block and components including: cylinders and fasteners; by degreasing, visually inspecting, testing and analysing performance and function; checking for wear, cracks, fractures, distortion, discoloration, alignment, missing components, thread condition and porosity; using hand and power tools, precision measuring devices, crack detection equipment, pressure testing and cleaning equipment; according to manufacturer's recommendations, specifications and safety requirements

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

*** A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor.**

5809.02 Repair engine block crack by: metalizing, sleeving and stitching; using hand and power tools, precision measuring devices, resurfacing equipment, metalizing equipment, lubricants, adhesives, boring equipment, lifting, rigging and blocking equipment; according to company policy, specifications and safety requirements

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5809.03 Repair lifter bore by: resizing and sleeving; using hand and power tools, precision measuring devices, reamers, presses, honing and boring equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5809.04 Repair bearing housings by: metalizing, honing, boring or sleeving; using hand and power tools, precision measuring devices, alignment-honing equipment, alignment-boring equipment, lathes, metalizing and milling equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5809.05 Repair cylinder bore by: sleeving, boring, honing or ridge reaming; using hand and power tools, precision measuring devices, boring and honing equipment, lathes, heating and cooling equipment, hydraulic presses, lubricants, adhesives, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5809.06 Repair cylinder block deck surface by: measuring, grinding, milling, metalizing and stitching; using hand and power tools, precision measuring devices, resurfacing equipment, metalizing and pressure testing equipment, lubricants, adhesives, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5809.07 Repair lower seal surface by: boring, sleeving, metalizing and honing; using hand and power tools, precision measuring devices, boring or honing equipment, metalizing equipment, lathes, hydraulic presses, heating and cooling equipment, lubricants, adhesives, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5809.08 Repair counterbore by: boring, sleeving and metalizing; using hand and power tools, precision measuring devices, boring equipment, hydraulic presses, heating and cooling equipment, metalizing equipment, lubricants, adhesives, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5809.09 Install camshaft bearings by: pushing and pulling; using hand and power tools, precision measuring devices, bearing installation tools, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5809.10 Resize semi-finished bearings by: boring; using hand and power tools, precision measuring devices, boring equipment, lifting rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5809.11 **Install core and oil gallery plugs** by: pressing and threading; using hand and power tools, precision measuring devices, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

U5810.0 Recondition Engine Related Components

General Performance Objective

Recondition engine related components by: removing and replacing pump pullies; inspecting oil pump; reconditioning oil pump; inspecting balance shaft assemblies and components; reconditioning balance shaft assemblies and components; inspecting water pump; reconditioning water pump; inspecting piston assembly and components; reconditioning piston and components; inspecting gear assemblies; reconditioning gears and components; inspecting manifold; repairing manifold; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives

Skills

5810.01 **Remove and replace pump pullies** by: pressing or pulling; using hand tools and hydraulic presses; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

*** A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor.**

5810.02 **Inspect oil pump** by: cleaning, visually inspecting and measuring; checking for wear, distortion, contamination and porosity; using hand and power tools, precision measuring devices and cleaning equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5810.03 **Recondition oil pump** by: resurfacing body and cover, replacing bushings, pressing, pulling, honing, reaming, assembling and testing; using replacement parts, hand and power tools, precision measuring devices, resurfacing, pressing, reaming, honing and pressure testing equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5810.04 **Inspect balance shaft assemblies and components** including: shafts, bearings, gears, bushings and fasteners; by degreasing, visually inspecting, testing and measuring performance; checking for wear, distortion, fractures and function; using hand and power tools, precision measuring devices and crack detection and cleaning equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5810.05 Recondition balance shaft assemblies and components including: shafts, bearings, gears, bushings and fasteners; by resizing shafts, removing, replacing and sizing bushings and assembling components; using hand and power tools, precision measuring devices, metalizing equipment, grinding, polishing, boring and honing equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5810.06 Inspect water pump by: cleaning and visually inspecting; checking for wear, distortion, porosity and function; using hand and power tools, precision measuring devices, press equipment and cleaning equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5810.07 Recondition water pump by: pushing, pressing, heating and cooling, machining, lubricating, assembling and testing the water pump; using hand and power tools, precision measuring devices, pressing equipment, heating and cooling equipment, lubricants, coated abrasives, adhesives and vacuum tester; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5810.08 Inspect piston assembly and components including: pin and retainers; by cleaning, visually inspecting and measuring; checking for wear, distortion and fractures; using hand and power tools, precision measuring devices and cleaning equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5810.09 Recondition piston and components including: ring grooves and piston pin boss; by machining, honing or bushing and knurlizing; using hand and power tools, precision measuring devices, ring groove cutters, lathes, honing and boring equipment, lubricants and piston knurlizers; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5810.10 Inspect gear assemblies and components including: pins and bushings; by degreasing, visually inspecting, analysing performance and function; checking for wear, fractures and distortion; using hand and power tools, precision measuring devices, cleaning equipment and crack detecting equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5810.11 Recondition gears and components including bushings: by installing and sizing new bushing; using hand and power tools, precision measuring devices, pressing, honing and boring equipment, reamers, polishers, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5810.12 Inspect manifold by: degreasing or media blasting, visually inspecting and analysing performance; checking for distortion, fractures, corrosion and porosity; using hand and power tools, precision measuring devices, cleaning equipment, pressure testing and crack detection equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5810.13 Repair manifold by: metalizing, resurfacing and stitching; using hand and power tools, precision measuring devices, metalizing equipment, milling and grinding equipment, belt sanders and pressure testing equipment; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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U5811.0 Assemble Engine**General Performance Objective**

Assemble engine by: preparing engine block and components for assembly; installing liners and seals; installing crankshaft, camshaft and components; assembling connecting rod, piston, pin and rings; installing piston and rod in engine block; installing timing components; installing oil pump and components; installing cylinder head and components; installing valve train and components, installing pans, covers and components; testing engine assembly; according to manufacturer's recommendations, specifications and safety requirements.

Performance Objectives**Skills**

5811.01 Prepare engine block and components for assembly by: final washing; using cylinder and soft bristle brushes, wipers, pressure washers, detergents and rust inhibitors, lifting, rigging and blocking devices; according to company policy and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

*** A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor.**

5811.02 Install liners and seals by: pressing or pulling; using hand and power tools, precision measuring devices, presses, heating and cooling equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5811.03 Install crankshaft, camshaft and components including: main bearings, crankshaft seals and fasteners; by inserting and fastening and checking clearances; using hand and power tools, precision measuring devices, lubricants, adhesives, torque wrenches, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5811.04 Assemble connecting rod, piston, pin and rings by: pressing, pushing, heating, fastening and expanding; using hand and power tools, precision measuring devices, presses with special drivers, heating equipment, ring expanders and lubricants; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5811.05 Install piston and rod assembly in engine block by: inserting bearings, lubricating, compressing rings, pushing assembly into cylinder, installing bearing cap, torquing fasteners and checking clearances; using hand and power tools, precision measuring devices, torque wrenches, ring compressors, lubricants, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

5811.06 Install timing components by: bolting, pressing, lubricating, heating and cooling; using hand and power tools, precision measuring devices, presses, heating and cooling equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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5811.07 Install oil pump and components including: oil pump, pick-up screen, oil pump drive, drive retainer, gaskets and fasteners; by pre-lubricating, attaching pick-up screen, oil pump and drive to the block; using hand and power tools, precision measuring devices, welding equipment, lubricants and adhesives; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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5811.08 Install cylinder head and components including: alignment dowels, head gasket and fasteners; by aligning, pressing and torquing fasteners in sequence; using hand and power tools, precision measuring devices, torque wrenches, lubricants, adhesives, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

- 5811.09 Install valve train and components** including: valve lifters, push rods, rockers, pivots, bridges and fasteners; by torquing, lubricating and adjusting clearance; using hand and power tools, precision measuring devices, torque wrenches, lubricants, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

- 5811.10 Install pans, covers and components** including: gaskets, seals, adhesives and fasteners; by inserting fasteners and gaskets and checking torques; using hand and power tools, precision measuring devices, sealants, lifting, rigging and blocking devices; according to manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
| mm/dd/yy | Apprentice Print Name | Apprentice Signature |

- 5811.11 Test engine assembly** by: spin testing, vacuum or pressure testing and dynamometer testing; using engine run-in stand, dynamometers, vacuum or pressure testers, hand and power tools, precision measuring devices, lubricants, lifting, rigging and blocking devices; according to government regulations, manufacturer's recommendations, specifications and safety requirements.

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| mm/dd/yy | Trainer Print Name | *Trainer Signature |
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Definitions

Apprentice

- An individual who, pursuant to a registered Training Agreement, is receiving or is to receive training in a trade that is required as part of an apprenticeship program
- Holds a Training Agreement in either a compulsory or non-compulsory trade;
- Are subject to any ratios that have been set out in regulation and or recommended by industry for their trade(s);
- Remain as an Apprentice until they receive their Certificate of Apprenticeship

BOSTA

Building Opportunities in the Skilled Trades Act, 2021 (BOSTA)

Certificate of Apprenticeship (C of A)

A certificate issued to individuals who have demonstrated that they have completed an apprenticeship program in Ontario.

Certificate of Qualification (C of Q)

A certificate issued to an individual who has completed an apprenticeship or equivalent AND passed the Certificate of Qualification examination.

Competence

The ability of an individual to perform a skill, consistently without assistance, in the workplace as set out in the Logbook.

Competency Analysis Profile (CAP Chart)

A chart that identifies the training needs of an individual trade and details the skills/skill sets that must be demonstrated during an apprenticeship program.

Journey person

Journey person means an individual who holds a certificate of qualification (in a compulsory or non-compulsory trade) and/or an individual who practices as a journey person in a non-compulsory trade who does not hold a certificate of qualification and has equivalent experience in that trade.

Mandatory Skill

Status assigned to unshaded individual skills, skill sets or general performance objectives which must be signed-off for the Apprentice to complete their program.

Optional Skill

Status assigned to shaded individual skills, skills sets or general performance objectives for which sign-off is not required for the Apprentice to complete the program.

Provisional Certificates of Qualification

- A Provisional Certificate of Qualification is issued to an individual who has obtained a Certificate of Apprenticeship (in both compulsory and non-compulsory trades) in a program that has a Certificate of Qualification examination, to which the individual has not yet passed the Certificate of Qualification examination.
- A Provisional Certificate of Qualification shall have the prescribed term or, if no term is prescribed, a term of one year.
- In a compulsory trade, the Provisional Certificate of Qualification allows a person to continue working legally in the trade for up to 12 months while they work to pass the certifying exam.
- Individuals with a Provisional Certificate of Qualification are subject to any ratios that have been set out for their trade(s).

Ratios

For the purpose of an Apprenticeship program, a ratio is the maximum number of Journeypersons to Apprentices. The purpose of ratios is to provide consistent supervision, training and continuity of work.

Sign-off

Signature of the Sponsor of record, or an individual to whom that Sponsor has delegated signing authority, (e.g. Trainer) indicating an Apprentice's demonstration of competence.

Skill

Individual competency/task described in the Logbook.

Skill Sets

Group or selection of individual skills found in the Logbook.

Skill Set Completion for Sponsors

Listing for all skill sets and includes space for sign-off by Sponsor of record.

Sponsor

Means a person that has entered into a registered Training Agreement under which the person is required to ensure that an individual is provided with workplace-based training in a trade as part of an apprenticeship program.

Sponsor of Record

Refers to the Sponsor documented as being signatory to the registered Training Agreement or Contract of Apprenticeship. In order for a Sponsor to be considered for the training of Apprentices, they must identify that the workplace has qualified persons or the equivalent on site, and can identify that the workplace has the tools, equipment, materials, and processes which have been identified by the Industry representatives for the trade.

Trainer

An individual who oversees the performance of a task and sets the workplace expectations and practices for the Apprentice. For a compulsory trade, a qualified Trainer is an individual who holds a Certificate of Qualification. In a non-compulsory trade, a Trainer is an individual who either holds a CofQ, CofA, or is considered equivalent.

Ready to Write Your Exam?

Many of the skilled trades in Ontario have a final certification examination that you must pass to become certified in your trade. Passing the examination gives you the right to hold yourself out as a Journeyperson and receive a Certificate of Qualification in your trade.

There are two types of trade certification examinations in Ontario:

1. Provincial (Ontario) examinations - which lead to a Certificate of Qualification.
2. Red Seal examinations – which lead to a Certificate of Qualification with an Interprovincial Red Seal endorsement.

If a trade is designated as Red Seal in Ontario, you will be writing the Red Seal examination. To access the Red Seal preparation guide please visit: red-seal.ca

Ontario's Exam Preparation Guide

[Exam Resources – Skilled Trades Ontario](#)

Basic Examination Details for You to Know

- You will have **up to four hours to write your examination.**
- Accommodations must be requested and approved prior to scheduling your examination.
- You can leave the examination centre if you complete the examination in less than four hours.
- Exam questions are multiple choice with four options from which you must choose the correct answer. Your examination may have between 90 and 150 multiple choice questions.
- You need a mark of 70% to pass.

Scheduling Your Examination

The examination scheduling process is currently outlined in detail on the Skilled Trades Ontario website: [Exam Scheduling – Skilled Trades Ontario](#)

Remember these 3 basic steps:

1. Confirm your eligibility to write the examination with Skilled Trades Ontario.
2. Contact Client Services at Skilled Trades Ontario to pay your examination fee.
3. Contact the local Service Delivery Office to schedule your examination in their examination centre: <https://www.ontario.ca/page/employment-ontario-apprenticeship-offices>

Instructions for Recording a Change in Sponsor

1. Record your first sponsor's information in Sponsor Record #1 – this would be the sponsor who has signed your initial apprenticeship Training Agreement for this trade.
2. If you do change sponsors prior to completing this apprenticeship, please contact your local Service Delivery Office immediately to update your sponsor record.
3. Please make sure you record all the information regarding any additional sponsors of record towards your apprenticeship using the Sponsor Records on the following pages (if applicable).

You must fill out a Change of Sponsor Record each time you change your sponsor.

Sponsor Record #1

| Sponsor Information | | |
|----------------------|--|-----------------|
| Apprentice Name | | |
| Training Agreement # | | Date (mm/dd/yy) |
| Sponsor Name | | |
| Address | | |
| Telephone | | |
| E-mail Address | | |

| Summary of Training | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |
| Skill Sets Completed | |

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

Signature: _____ Date: (mm/dd/yy) _____

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

***If you need additional copies of the Sponsor Record, visit SkilledTradesOntario.ca and search Sponsor Record Form.**

Change of Sponsor Record #2

| Sponsor Information | | |
|----------------------|--|-----------------|
| Apprentice Name | | |
| Training Agreement # | | Date (mm/dd/yy) |
| Sponsor Name | | |
| Address | | |
| Telephone | | |
| E-mail Address | | |

| Summary of Training | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |
| Skill Sets Completed | |

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

Signature: _____ Date: (mm/dd/yy) _____

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

***If you need additional copies of the Sponsor Record, visit SkilledTradesOntario.ca and search Sponsor Record Form.**

Change of Sponsor Record #3

| Sponsor Information | | |
|----------------------|--|-----------------|
| Apprentice Name | | |
| Training Agreement # | | Date (mm/dd/yy) |
| Sponsor Name | | |
| Address | | |
| Telephone | | |
| E-mail Address | | |

| Summary of Training | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |
| Skill Sets Completed | |

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

Signature: _____ Date: (mm/dd/yy) _____

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

***If you need additional copies of the Sponsor Record, visit SkilledTradesOntario.ca and search Sponsor Record Form.**

Change of Sponsor Record #4

| Sponsor Information | | |
|----------------------|--|-----------------|
| Apprentice Name | | |
| Training Agreement # | | Date (mm/dd/yy) |
| Sponsor Name | | |
| Address | | |
| Telephone | | |
| E-mail Address | | |

| Summary of Training | |
|--|--|
| Employment Start Date | |
| Employment End Date | |
| Total hours of training & instruction between dates of employment. | |
| Skill Sets Completed | |

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

Signature: _____ Date: (mm/dd/yy) _____

The Sponsor is required to sign-off and date the skills after the Apprentice has proven competence in those skills. However, if a skill is shaded, it is optional and does not need to be signed-off.

***If you need additional copies of the Sponsor Record, visit SkilledTradesOntario.ca and search Sponsor Record Form.**

Appendix A — Instructions for Apprenticeship Program Completion

Once an Apprentice has completed all the classroom training and benchmark on-the-job hours specified for the trade and has acquired all the mandatory skills included in this Logbook.

The Apprentice and the Sponsor complete the Apprentice Completion Form and the Skill Set Completion for Sponsors Form located on the following pages.

1. They sign the forms and submit them to their local Service Delivery Office. To find the closest office, check the contact information at ontario.ca/page/employment-ontario-apprenticeship-offices or call the *Employment Ontario* toll free number at (1-800-387-5656).
2. For All Trades: All mandatory skills (or the combination indicated in the completion requirements for the trade) in the Logbook must be signed-off. The recommended hours are a benchmark. If the Sponsor is completing the Apprentice before the industry recommended training hours are done, staff may request further information regarding the Apprentice's on-the-job training. An example of a request would be a letter from the Sponsor confirming the Apprentice worked for some time in the trade before the initial Training Agreement was registered, thereby acquiring some skills beforehand.

If Apprentices are submitting the completion request form and supporting documentation to their local Service Delivery Office by mail, fax, or email (as a scanned document), they should not include their Logbook; if they are presenting this form in person at the local Service Delivery Office, they should bring their Logbook with them.

After staff verifies all the information in the completion request, they may contact either the Apprentice or the Sponsor for further information or documentation. Once the completion has been confirmed, the local Service Delivery Office will issue a Certificate of Apprenticeship to the Apprentice.

Skilled Trades Ontario will receive notification of this completion.

- If the Apprentice has completed a program in a **compulsory trade**, Skilled Trades Ontario will automatically register the Apprentice for a Provisional Certificate of Qualification to continue to work legally for one year while preparing for the certification examination.
- If an Apprentice completes their apprenticeship in a **non-compulsory trade** and there is a Certificate of Qualification exam, they must write and pass the exam to receive a Certificate of Qualification from Skilled Trades Ontario.

For permission to schedule an exam once completion is confirmed, the individual must first contact the Skilled Trades Ontario Client Services Department at 647-847-3000 or toll free at 1-855-299-0028 to pay the certification examination fee. Once you have paid your exam fee with Skilled Trades Ontario, book your exam by contacting your nearest Employment Ontario local Service Delivery Office.

Appendix B — Apprentice Completion Form

Please fill out both sides of this form, including the Skill Set Completion for Sponsors (see back of form). Once both sides are completed, submit the form to your local Service Delivery Office (find contact information at ontario.ca/page/employment-ontario-apprenticeship-offices or by calling Employment Ontario at (1-800-387-5656).

| Apprentice Information | |
|--------------------------------|--|
| Name (print) | |
| Client ID # Issued by Ministry | |
| Telephone Number(s) | |

| Sponsor Information | |
|--|--|
| Legal Name | |
| Address | |
| Telephone Number(s) | |
| Sponsor's Signing Authority (<i>print name</i>) | |
| E-mail Address | |

| Program Information | |
|--|---|
| Trade Name | |
| Number of hours required as per Training Agreement (<i>hours-based trades only</i>) | |
| Hours completed? (<i>documentation attached</i>) | Yes () No () Not applicable () |
| Classroom training completed or exempt? | Yes () No () Not applicable () |

I hereby confirm that the information submitted on both sides of this form is true and accurate.

X _____
Apprentice's Signature Date

X _____
Signature of Sponsor's Signing Authority Date

Appendix C — Skill Set Completion for Sponsors

You will find the skill set numbers and titles in the Logbook's Table of Contents. By signing off each skill set in the table below, you are providing final confirmation, as the Apprentice's Sponsor, that the Apprentice has demonstrated competency in all the mandatory skills included in the skill set.

| Skill Set # | Skill Set Title | Signing Authority Signature |
|-------------|---|-----------------------------|
| U5800.0 | Occupational Health and Safety Procedures | |
| U5801.0 | Disassemble Engine | |
| U5802.0 | Recondition Flywheel | |
| U5803.0 | Recondition Brake Components | |
| U5804.0 | Recondition Drive Train and Suspension | |
| U5805.0 | Recondition Crankshaft | |
| U5806.0 | Recondition Connecting Rod | |
| U5807.0 | Recondition Cylinder Head | |
| U5808.0 | Recondition Valve Train | |
| U5809.0 | Recondition Engine Block | |
| U5810.0 | Recondition Miscellaneous Engine Components | |
| U5811.0 | Assemble Engine | |

Ministry of Labour, Immigration, Training and Skills Development use only:

Sponsor verified as most recent sponsor of record: Yes () No ()

Documentation to support completion of hours attached: Yes () No ()

Completion of classroom training verified: Yes () No ()

Staff Name _____ Signature _____

Date _____

Appendix D — Local Service Delivery Offices in Ontario

For current office listings visit: ontario.ca/page/employment-Ontario-apprenticeship-offices

| Location | Contact | Location | Contact |
|---|---|---|---|
| Barrie 705-737-1431 | 55 Cedar Pointe Dr Unit 609, Barrie, ON L4N 5R7 | Marathon 807-346-1550 | 52 Peninsula Road, Suite 103 Marathon, Ontario, P0T 2E0 |
| Belleville 613-968-5558 1-800-953-6885 | 135 North Front St, Belleville, ON K8P 3B5 | Markham 905-513-2695 | 140 Allstate Parkway, Suite 505, Markham, Ontario L3R 5Y8 |
| Brantford 519-756-5197 | 505 Park Rd North Suite 201, Brantford, ON N3R 7K8 | North Bay 705-495-8515 1-800-236-0744 | 200 First Ave West, North Bay, ON P1B 3B9 |
| Chatham 519-354-2766 1-800-214-8284 | 870 Richmond St West 1st Floor, Chatham, ON N7M 5J5 | Ottawa 613-731-7100 1-877-221-1220 | Preston Square, 347 Preston Street, Suite 310, Ottawa, ON K1S 3H8 |
| Cornwall 613-938-9702 1-877-668-6604 | 132 Second St East Ste 202, Cornwall, ON K6H 1Y4 | Owen Sound 519-376-5790 1-800-838-9468 | 1450 1st Ave West, Suite 100, Owen Sound, ON N4K 6W2 |
| Dryden 807-456-2665 1-800-734-9572 | Provincial Government Building, 479 Government St, Dryden, ON P8N 3K9 | Peel 905-279-7333 1-800-736-5520 | The Emerald Centre, 10 Kingsbridge Garden Circle, Suite 404, Mississauga, ON L5R 3K6 |
| Durham 905-433-0595 1-800-461-4608 | 78 Richmond Street West, Oshawa, ON L1G 1E1 | Pembroke 613-735-3911 1-800-807-0227 | 615 Pembroke St East, Pembroke, ON K8A 3L7 |
| Elliot Lake 1-800-236-8817 | 50 Hillside Dr North, Elliot Lake, ON P5A 1X4 | Peterborough 705-745-1918 1-877-433-6555 | 901 Lansdowne St West, Peterborough, ON K9J 1Z5 |
| Fort Frances 807-274-8634 | 922 Scott St 2nd Flr, Fort Frances, ON P9A 1J4 | Sarnia 519-542-7705 1-800-363-8453 | 162 Lochiel Street, Suite 101, Sarnia, ON N7T 7W5 |
| Geraldton 807-854-1966 | 208 Beamish Avenue West Geraldton, Ontario P0T 1M0 | Sault Ste. Marie 705-945-6815 1-800-236-8817 | 477 Queen St East 4th Flr, Sault Ste Marie, ON P6A 1Z5 |
| Halton 905-842-5105 1-844-901-5105 | 700 Dorval Dr., Suite 201, Oakville, ON L6K 3V3 | St Catharines 905-704-2991 1-800-263-4475 | Garden City Tower, 301 St Paul St East, 10th Flr, St Catharines, ON L2R 7R4 |
| Hamilton 905-521-7764 1-800-668-4479 | Ellen Fairclough Bldg, 119 King St West 8th Flr, Hamilton, ON L8P 4Y7 | Sudbury 705-564-3030 1-800-603-5999 | 159 Cedar St Ste 506, Sudbury, ON P3E 6A5 |
| Kapuskasing 705-465-5785 705-235-1950 | Ontario Government Complex, 122 Government Rd West, Kapuskasing, ON P5N 2X8 | Thunder Bay 807-346-1550 1-800-439-5493 | 189 Red River Rd Suite 103, Thunder Bay, ON P7B 1A2 |
| Kenora 807-468-2879 1-800-734-9572 | 227 1/2 Second St South, Kenora, ON P9N 1G4 | Timmins 705-235-1950 1-877-275-5139 | Ontario Government Complex, 5520 Highway 101 East Wing B, South Porcupine, ON P0N 1H0 |
| Kingston 613-548-1151 1-866-973-4043 | Alliance Business Centre, 299 Concession St Ste 201, Kingston, ON K7K 2B9 | Toronto Centre 416-927-7366 1-800-387-5656 | 2 St Clair West, 11 th floor Toronto, ON M4A 1L5 |
| Kitchener 519-653-5758 1-866-877-0099 | 4275 King St East, Kitchener, ON N2P 2E9 | Toronto South 416-326-5800 | 625 Church St 1st Fl, Toronto, ON M7A 2B5 |
| London 519-675-7788 1-800-265-1050 | 1200 Commissioners Rd E, Unit 72, London, ON N5Z 4R3 | Windsor 519-973-1441 | Roundhouse Centre, 3155 Howard Ave 2nd Fl, Suite 200, Windsor, ON N8X 4Y8 |

Competency Analysis Profile (CAP) Chart

| | | | | | |
|--|---|---|---|--|---|
| U5800.0 Occupational Health & Safety Procedures | 5800.01 Identify and take corrective action against potential workplace health and safety hazards | 5800.02 Handle, store and dispose of hazardous workplace materials | 5800.03 Wear and maintain personal protective equipment | 5800.04 Comply with workplace-related legislation | 5800.05 Interpret and apply service-related information |
| | 5800.06 Practice good housekeeping in the workplace | 5800.07 Comply with Workplace Hazardous Materials Information System (WHMIS) guidelines | | | |
| U5801.0 Disassemble Engine | 5801.01 Drain fluids from engine assembly | 5801.02 Mark mating parts | 5801.03 Remove pans, covers and components | 5801.04 Remove cylinder heads and components | 5801.05 Remove piston and rod assemblies and components |
| | 5801.06 Remove crankshaft and bearings | 5801.07 Remove camshaft and bearings | 5801.08 Remove cylinder liners | 5801.09 Remove core and oil gallery plugs and components | 5801.10 Dismantle cylinder head and components |
| | 5801.11 Clean engine and components | | | | |
| | | | | | |

Competency Analysis Profile: Motive Power Machinist 410K *(all unshaded skill sets must be completed)*

| | | | | | |
|---|--|--|---|---|--|
| U5802.0 Recondition Flywheel | 5802.01 Inspect flywheel and ring gear | 5802.02 Remove and install dowel pins | 5802.03 Remove and install ring gear | 5802.04 Remove and install pilot bushings/bearings | 5802.05 Repair pilot bearing bore |
| | 5802.06 Resurface flywheel | 5802.07 Resurface pressure plate | | | |
| U5803.0 Recondition Brake Components | 5803.01 Inspect brake drums, rotors and components | 5803.02 Repair housing bore | 5803.03 Resurface brake drums and rotors | 5803.04 Rebuild calipers, wheel cylinders, master cylinders and components | 5803.05 Reline brake shoes and bands |
| U5804.0 Recondition Drive Train and Suspension | 5804.01 Inspect drive train and components | 5804.02 Repair spindle and components | 5804.03 Repair front axle eye | 5804.04 Repair axle shaft | 5804.05 Remove and replace axle bearing and front bearing assemblies |
| | 5804.06 Repair constant velocity joints | 5804.07 Repair drive shaft | 5804.08 Repair drive shaft tube | 5804.09 Repair control arms and components | |

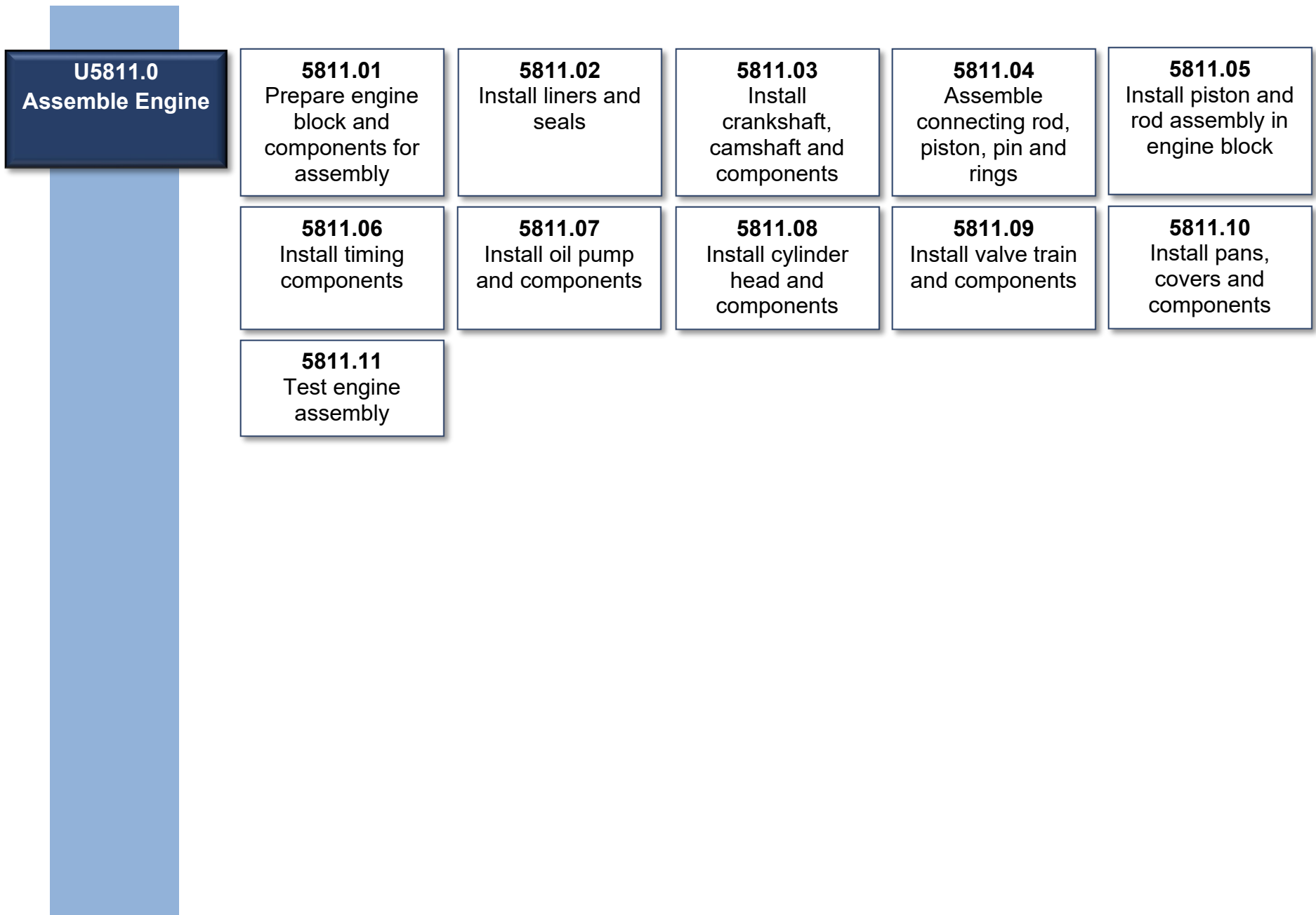
Competency Analysis Profile: Motive Power Machinist 410K *(all unshaded skill sets must be completed)*

| | | | | | |
|---|--|--|---|---|---|
| U5805.0 Recondition Crankshaft | 5805.01 Inspect crankshaft | 5805.02 Repair crankshaft journals | 5805.03 Straighten crankshaft | 5805.04 Stress relieve crankshaft | 5805.05 Repair keyway |
| | 5805.06 Repair seal surface | 5805.07 Chamfer oil hole | 5805.08 Finish crankshaft journals | 5805.09 Balance crankshaft rotating assembly and components | |
| U5806.0 Recondition Connecting Rod | 5806.01 Inspect connecting rod | 5806.02 Stress relieve connecting rod | 5806.03 Resize big end of connecting rod | 5806.04 Repair small end of connecting rod | 5806.05 Straighten connecting rod |
| U5807.0 Recondition Cylinder Head | 5807.01 Inspect cylinder head and components | 5807.02 Repair cylinder head crack | 5807.03 Straighten cylinder head | 5807.04 Repair camshaft housing | 5807.05 Repair lifter bore |
| | 5807.06 Repair damaged thread | 5807.07 Repair rocker stud | 5807.08 Repair valve guide | 5807.09 Replace valve seats | 5807.10 Resurface valve seats |
| | 5807.11 Resurface cylinder head | 5807.12 Remove and replace injector tube | 5807.13 Remove and replace pre-combustion chamber | 5807.14 Repair valve | 5807.15 Assemble cylinder head and components |

Competency Analysis Profile: Motive Power Machinist 410K *(all unshaded skill sets must be completed)*

| | | | | | |
|---|---|---|--|---|---|
| U5808.0 Recondition Valve Train | 5808.01 Inspect valve train and components | 5808.02 Repair camshaft lobe or journal | 5808.03 Repair rocker arm | 5808.04 Repair rocker arm shaft | 5808.05 Recondition camshaft follower |
| | 5809.01 Inspect engine block and components | 5809.02 Repair engine block crack | 5809.03 Repair lifter bore | 5809.04 Repair bearing housings | 5809.05 Repair cylinder bore |
| | 5809.06 Repair cylinder block deck surface | 5809.07 Repair lower seal surface | 5809.08 Repair counterbore | 5809.09 Install camshaft bearings | 5809.10 Resize semi-finished bearings |
| U5809.0 Recondition Engine Block | 5809.11 Install core and oil gallery plugs | | | | |
| | 5810.01 Remove and replace pump pulleys | 5810.02 Inspect oil pump | 5810.03 Recondition oil pump | 5810.04 Inspect balance shaft assemblies and components | 5810.05 Recondition balance shaft assemblies and components |
| | 5810.06 Inspect water pump | 5810.07 Recondition water pump | 5810.08 Inspect piston assembly and components | 5810.09 Recondition piston and components | 5810.10 Inspect gear assemblies and components |
| | 5810.11 Recondition gears and components | 5810.12 Inspect manifold | 5810.13 Repair manifold | | |
| | | | | | |

Competency Analysis Profile: Motive Power Machinist 410K *(all unshaded skill sets must be completed)*



[illegible]

Completing Your Apprenticeship Program

Once your sponsor agrees you are competent in the required skills, your hours are complete and you have completed all the levels of classroom training required for your trade:

- ✓ Follow the completion instructions on the Completion Form (Appendix A) in the Logbook.
- ✓ Answer any questions that MLITSD staff may have and provide any additional completion documentation that may be required.
- ✓ Once completion is confirmed, MLITSD will issue you a Certificate of Apprenticeship and notify Skilled Trades Ontario.

After Your Apprenticeship

If you are in a trade with a certification exam, Skilled Trades Ontario will receive notice of your completion.

For compulsory trades, you will be issued a Provisional Certificate of Qualification which will allow you to work legally for up to 12 months until you write and pass your examination.

For a non-compulsory trade, once you pass your examination, you will be issued a Certificate of Qualification for your trade.

Preparing For Your Exam

- **To pay for a Certificate of Qualification examination, contact Skilled Trades Ontario** Client Services Department at: 647-847-3000 or toll free at 1-855-299-0028
- **To schedule your exam:** Once you have paid, contact your local Service Delivery Office to book your exam.
- **Download Skilled Trades Ontario exam preparation guide at:** [Exam Resources – Skilled Trades Ontario](#) and/or view the exam preparation guide for Red Seal trades at: red-seal.ca



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