



Industrial Mechanic (Millwright) Publishing Notes 2023-24

Millwright Quality Assurance

The Millwright Quality Assurance meetings were held in March and April of 2024, where instructors from various Alberta Millwright Programs came together to discuss feedback, comments, and corrections to the newly published First Period and Second Period ILMs. There were 62 different maintenance items to address, impacting 27 different ILMs across the two periods.

Due to the scope of these changes, and the time needed to make the corrections to the modules, ILM will not be publishing updated versions as part of this year's publishing release. ILM has procured the necessary resources to support the required content updates and will begin addressing the necessary changes over the next several months. As these updated modules will not be released until May 2025, the ILM office is planning to provide an errata sheet as an interim solution and resource for Programs.

The errata sheet is a new type of resource being piloted by ILM. It is a document, separate from the ILMs, listing the known errors within the modules and their associated corrections. The intent is to provide the errata sheet as a reference tool and resource to Programs to flag known issues within the ILMs until those content corrections can be addressed and republished in a new version of the ILM. We expect the Millwright errata sheet for Period 1 and Period 2 ILMs to be available for Fall 2024.

We would like to express our appreciation to those who reached out to provide feedback on the ILM content, and to the instructors who attended the Quality Assurance meeting to collaborate and advise on content updates. We are grateful for your ongoing support of our content quality assurance process.

We encourage your continued submission of ongoing feedback through the Comments page of the ILM website. For more information on the ILM Comments and QA Maintenance process, please visit our website:

- ILM Maintenance : <https://www.ilmlearning.ca/ilm-maintenance>
- Comments: <https://www.ilmlearning.ca/comments>



Millwright Third Period Development Project Complete

The Millwright third period content development project is complete. The outcomes, learning objectives and related content in the newly updated ILMs for third period are now aligned to the current Alberta curriculum guide. The updated module numbers and names are listed in the Updated Module List below.

Millwright Fourth Period Development Update

The content development project to update ILMs in Millwright Period 4, as well as modules in the Supplementary Math Package, is still in progress. The tentative timeline for completion of this remaining project work is December 2024, with the intent to publish the new material in May 2025.

While the Period 4 development project is in progress, the ILM office will maintain availability of some of the older Millwright ILM products that are still needed as an interim solution until all new modules are released. Due to the release of the new third period modules, some of these older, interim modules need to be renumbered to distinguish them from the new Period 3 modules. The content of these modules has not changed—we have only updated the module numbers to include “_2013”, as per the following table.

2020 Outline – Period 4 Package*			
OLD MODULE NUMBER	MODULE TITLE	NEW MODULE NUMBER	VERSION
160302i	Insulation	160302i_2013	24
160304a	Electrical Principles	160304a_2013	24
160304b	Practical Electricity	160304b_2013	24
160304c	Industrial Controls and Troubleshooting	160304c_2013	24
160304d	Programmable Logic Controls (PLC)	160304d_2013	24

***All other 4th Period modules have remained unchanged**



Updated Module List

MIL MODULES (23/24) 3rd PERIOD

NUMBER	NAME	SECTION	PAGES	VERSION
160301a-cA	Compressors: Gas Laws and Compressor Types	Compressors	68	25
160301a-cB	Compressors: Reciprocating Positive Displacement Compressor Components, Valves, and Pistons	Compressors	84	25
160301a-cC	Compressors: Reciprocating Compressor Cylinders, Rod Packing, and Distance Pieces	Compressors	72	25
160301a-cD	Compressors: Reciprocating Compressor Connecting Rods, Frames, and Crankshafts	Compressors	64	25
160301a-cE	Compressors: Reciprocating Compressor Systems	Compressors	80	25
160301a-cF	Compressors: Screw Compressors	Compressors	52	25
160301a-cG	Compressors: Vane Compressors	Compressors	48	25
160301a-cH	Compressors: Liquid Ring Compressors and Lobe Blowers	Compressors	68	25
160301a-cl	Compressors: Dynamic Compressors	Compressors	76	25
160302a-cA	Fluid Power Fundamentals	Fluid Power	84	25
160302a-cB	Fluid Power Fundamentals: Calculations	Fluid Power	60	25
160302b-cA	Hydraulic Components: Pressure, Directional, and Flow Control Valves	Fluid Power	68	25
160302b-cB	Hydraulic Components: Stack, Cartridge, and Electro-Hydraulic Valves	Fluid Power	48	25
160302b-cC	Hydraulic Components: Pumps	Fluid Power	68	25
160302b-cD	Hydraulic Components: Actuators and Accessories	Fluid Power	76	25
160302b-cE	Hydraulic Components: Fluids, Reservoirs, and Conductors	Fluid Power	64	25
160302b-cF	Hydraulic Components: Contamination Control, Maintenance, and Troubleshooting	Fluid Power	84	25



MIL MODULES (23/24) 3rd PERIOD

NUMBER	NAME	SECTION	PAGES	VERSION
160302d-e	Pneumatic Components and Systems	Fluid Power	88	25
160303a	Fans	Fans, Heat Exchangers, Industrial Refrigeration and Dryers	84	25
160303b	Heat Exchangers	Fans, Heat Exchangers, Industrial Refrigeration and Dryers	88	25
160303cA	Industrial Refrigeration: Part A	Fans, Heat Exchangers, Industrial Refrigeration and Dryers	56	25
160303cB	Industrial Refrigeration: Part B	Fans, Heat Exchangers, Industrial Refrigeration and Dryers	56	25
160303d	Gas and Air Dryers	Fans, Heat Exchangers, Industrial Refrigeration and Dryers	72	25
160304aA	Levelling: Part A	Levelling, Alignment and Pipe Strain	72	25
160304aB	Levelling: Part B	Levelling, Alignment and Pipe Strain	32	25
160304b	Laser Shaft Alignment	Levelling, Alignment and Pipe Strain	28	25
160304c	Bore Alignment	Levelling, Alignment and Pipe Strain	36	25
160304d	Pipe Strain	Levelling, Alignment and Pipe Strain	40	25