unit Plan Outline CIP Code:_____ Name:_____

Year 1, MP 1 Goals/Unit Topics = 90 hours	Year 1, MP 1 ELA Standards	Year 1, MP 1 Math Standards
1. ORIENTATION A. 102 Occupations Certifications (5 hrs) B. 109 OSHA (7 hrs) C. 108 Work Habits (6.5 hrs) D. 103 Truck Classifications (6 hrs) E. 107 EPA (6.5 hrs) 2.SAFETY A. 105 Safety Procedures (8 hrs) B. 104 Online Information (4 hrs) 3.TOOLS A. 201 Basic Hand Tools (6 hrs) B. 201 Power Tools (6 hrs) C. 204 Precision Measuring Tools (8 hrs) D. 203 Drill & Use Threading Tools (6 hrs) E. 206 Set up & cut with oxy-aceytone torch (4 hrs) 4. FASTENERS A. 202 Identify Fasteners (6 hrs)	1. CC. 3. 6. 11-12. A, B, D, E, F, G. CC. 3.5. 11-12.. A, B, C, D, E, F, G H.I. CC.3.6.11-12.A Write arguments focused on discipline specific content. • Introduce precise, knowledgeable claim(s),establish the significance of the claim(s),distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s),counterclaims, reasons, and evidence. • Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases. • Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims. • Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing. • Provide a concluding statement or section that follows from or supports the argument presented. A. CC.3.5.11-12.A. Cite specific textual evidence to support analysis of	1. 2. A. B. 3. A. B. C. D. E. 4. A. B. C. 5. A. B.

B. 202 Identify Fittings (5 hrs)CC.3.5.11-12.B. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. C. 202 Identify Hardware (6 hrs)	science and technical texts, attending to important distinctions the B. CC.3.5.11-12.B. Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. C. CC.3.5.11-12.C. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. D. CC.3.5.11-12.D. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics E. CC.3.5.11-12.E. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. 2. CC. 3.6. 11-12. A, B, C, D, E, F, G.. CC 3 5.. 11-12. A, B, C, D, E, F, G, H, I.. .CC.3.6.11-12.B. * Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical	C. D. E.

	processes. • Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension. • Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic. • Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts. • Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers. • Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). A. CC.3.5.11-12.E. Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas. B. CC.3.5.11-12.F. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in	

	a text, identifying important issues that remain unresolved 3. CC. 3.6. 11-12. A, B, C, D, E, F, G. CC. 3.6. A, B, C, D, E, F, G, H, I. CC.3.6.11-12.C. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.CC.3.6.11-12.D. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience. A. CC.3.5.11-12.G. Integrate and evaluate multiple sources of information presented in diverse formats and media(e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. B. CC.3.5.11-12.H. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information C. CC.3.5.11-12.D. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics	

	D. CC.3.5.11-12.C. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. E. ditto 4. CC. 3.6. 11- 12,.A, B, C, D, E, F, G. CC. 3.5. 11-12, A, B, C, D, E, F, G, H, I.CC.3.6.11-12.E. Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. CC.3.6.11-12.F. Conduct short as well as more sustained research projects to answer a question (including a self generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject. CC.3.5.11-12.H. Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.CC.3.5.11-12.D.Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.CC.3.6.11-12.G. Gather relevant information from multiple	

	authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation. A. CC.3.5.11-12.I. Synthesize information from a range of sources(e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible B. CC.3.5.11-12.D. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. C. CC.3.5.11-12.D. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.	

Year 1, MP 2 Goals/Unit Topics	Year 1, MP 2 ELA Standards	Year 1, MP 2 Math Standards
1.ENGINE ORIENTATION A. 601 Explain & Identify Parts (16.5 hrs) B. 601 Explain Engine Operation (12.5 hrs) C. 605 Replace Oil Seal (3 hrs) 2.ENGINE TEARDOWN A. 602 R & I Camshaft & Value Train (12 hrs) B. 603 R & I Piston & Liner (16 hrs) C. 604 R & I Crankshaft Bearings (10 hrs) D. 607 R & I Cylinder Head Gasket (14 hrs) E. 609 R & I Vibration Damper & Flywheel (6 hrs)	1. CC. 3.6. 11-12. A, B, C, D, E, F, G. CC. 3-5. 11-12. A, B, C, D, E, F, G. A. CC.3.5.11-12.D. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics B. CC.3.5.11-12.C. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. C. ditto 2.CC. 3.6. A, B, C, D, E, F, G. CC.3.5. 11-12. A, B, C, D, E, F, G, H, I. A. CC.3.5.11-12.D. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics B. CC.3.5.11-12.B. Determine the central ideas or conclusions of a	1. A. B. C. 2. A. B. C. D. E.

	text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms. text by paraphrasing them in simpler but still accurate terms. C. CC.3.5.11-12.C. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text. D. ditto E. ditto	

Year 1, MP 3 **Goals/Unit Topics**	**Year 1, MP 3** **ELA Standards**	**Year 1, MP 3** **Math Standards**
1.INTAKE SYSTEMS A. 701 Inspect Air Induction System (5 hrs) B. 703 R & I Charge Air Coolers (7 hrs) C. 808 R & I Fan Drives (6 hrs) 1. EXHAUST SYSTEMS	1. A. B. C. 2.	1. 1.Reading Instruments (Tape measure) and Fractions A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and

A. 702 R & I Exhaust Components (6.5 hrs) B. 704 R & I Turbocharger (7 hrs) C. After Treatment System (10 hrs) 2. COOLING SYSTEMS A. 801 Pulleys & Belts (5 hrs) B. 802 Hoses & Clamps (4 hrs) C. 803 Test & Replace Thermostat (7 hrs) D. 804 Drain, Flush & Refill Cooling System (7 hrs) E. 805 Test Coolant (10 hrs) F. 807 R & I Water Pump (5.5 hrs) G. 809 Pressure Test Cooling System (10 hrs)	A. B. C. D. E. F. G.	to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 2. Reading Instruments (Tape Measure- Wrenches) A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 3. Reading Instruments (Tape Measure - Wrenches) A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational

		numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 4. Fractions A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 5. Fractions

		A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 6. Decimals A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations

		and apply to complex numbers 7. Decimals A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 8. Geer Ratio A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to

		limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex numbers 9. Percentages A. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number.

Year 1, MP 4 **Goals/Unit Topics**	**Year 1, MP 4** **ELA Standards**	**Year 1, MP 4** **Math Standards**
1.LUBRICATION SYSTEM A. 608 R & I Oil Pump (7.5 hrs)	1. A.	1. Micrometer NUMBERS AND OPERATIONS

B. Identify Oil Flow (9 hrs) C. Understand Oil Types (7 hrs) 2. FUEL SYSTEMS A. 902 R & I Fuel Lines and Fittings (8 hrs) B. 902 R & I Fuel Cap (4 hrs) 3. PREVENTIVE MAINTENANCE A. 606 Perform Diesel Tune-up (10 hrs) B. 901 R & R Fuel Filters (4 hrs) C. 903 Bleed Fuel System (8 hrs) D. 905 Perform Fuel Supply/Return Test (8 hrs) E. 906 R & I Injector (4.5 hrs) F. 401 PM Intervals & Procedures (9 hrs) G. 402 PM Inspection (11 hrs)	B. C. 2. A. B. 3. A. B. C. D. E. F. G.	Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number. 2. Micrometer NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number.

		3. Micrometer NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number. 4. Percentage NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number.s

		5. Percentages NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number. 6. Hourly Rate NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

		Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number. 7. Flat Rate per job NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number. 8. Work Orders NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems.

		Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number. 9. Work Orders B. NUMBERS AND OPERATIONS Standard 2.1.HS.F.2 Apply properties of rational and irrational numbers to solve real world or mathematical problems. Standard 2.1.HS.F.4 Use units as a way to understand problems and to guide the solution of multistep problems. Standard 2.1.HS.F.5 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. Standard 2.1.HS.F.6 Extend the knowledge of arithmetic operations and apply to complex number.