

2021-2022

Technical Skills Assessment

Small Engine Repair/Power Sports

Results by Standard

	Legend (%)	
0-50%	51-75%	76-100%

Assessment: Small Engine Repair/Power Sports	% Correct	% Correct	% Correct	% Correct
Number tested: 62	17-18	18-19	20-21	21-22
1) CONTENT STANDARD 1.0: BASIC SAFETY	88.49%	89.58%	87.86%	83.81%
1) Performance Standard 1.1: Workplace Safety	88.49%	88.19%	87.86%	83.81%
1.1.1. Describe general shop safety rules and procedures.	90.48%	88.19%	92.86%	81.43%
1.1.2. Utilize safe procedures for handling of tools and equipment.	84.13%	80.56%	74.29%	74.29%
1.1.6. Identify the location and use of eye wash stations.	78.57%	70.83%	82.86%	74.29%
1.1.8. Comply with the required use of safety glasses, ear protection, gloves and shoes during lab/shop activities.	95.24%	100.00%	97.14%	94.29%
1.1.10. Secure hair and jewelry for lab/shop activities.	92.86%	97.92%	94.29%	94.29%
2) CONTENT STANDARD 2.0: TOOLS	72.62%	76.56%	77.86%	71.43%
1) Performance Standard 2.1: Basic Tools	72.62%	76.56%	77.86%	71.43%
2.1.1 Identify basic tools.	68.25%	70.83%	78.10%	68.10%
2.1.2 Identify basic tool usage.	76.19%	75.00%	71.43%	67.62%
2.1.3 Demonstrate common tools knowledge.	73.81%	87.50%	87.14%	82.14%
3) CONTENT STANDARD 3.0: FASTENERS	70.24%	80.21%	81.43%	82.50%
1) Performance Standard 3.1: Proper use of fasteners	70.24%	80.21%	81.43%	82.50%
3.1.7. Demonstrate proper torque methods.	70.24%	80.21%	81.43%	82.50%
4) CONTENT STANDARD 4.0: MEASUREMENT	14.29%	58.33%	34.29%	40.00%
1) Performance Standard 4.1: Precision Measuring Instruments	14.29%	58.33%	34.29%	40.00%
4.1.5. Demonstrate precision measuring.	14.29%	58.33%	34.29%	40.00%
5) CONTENT STANDARD 5.0: BASIC ELECTRICAL	53.97%	58.33%	53.33%	56.43%
1) Performance Standard 5.1: Basic Electrical Theory and System	53.97%	58.33%	53.33%	56.43%
5.1.3. Understand basic electrical theory.	41.27%	47.22%	44.76%	43.33%
5.1.5. Demonstrate proper use of a multimeter.	66.67%	69.44%	61.90%	69.52%
6) CONTENT STANDARD 6.0: ENGINE DESIGN AND THEORY	61.53%	68.03%	66.70%	59.78%
1) Performance Standard 6.1: Basic Engine Principles and Design	73.81%	81.25%	76.43%	71.07%

Assessment Small Engine Repair/Power Sports % Correct (% Correct Number tested: 62 % Correct (17.18 % Correct (% Correct Number tested: 62) % Correct (17.18 % Correct (% Correct Number tested: 62) % Correct (% Correct Number tested: 62.2) % Correct (%	6.1.3. Explain theory of operation.	80.95%	72.92%	74.29%	72.86%
6.1.4. Identify engine components and their function. 66.67% 89.58% 78.57% 69.29% 2) Performance Standard 6.2: Operation of a 2 stroke Engine 58.39% 57.81% 61.43% 54.44% 54.64% 54.64% 62.2 Define 2 stroke engine operations. 40.48% 33.33% 37.14% 30.714% 30.814% 30.95% 53.814% 50.95% 53.814% 63.21, Define 4 stroke engine eperations. 60.32% 68.06% 67.62% 50.95% 50.56% 63.32, Define 4 stroke engine components. 55.66% 63.33, Identify 4 stroke engine eperations. 55.66% 63.32, Define 4 stroke engine eperations. 55.05% 45.714 33.33% <td>Assessment: Small Engine Repair/Power Sports</td> <td>% Correct</td> <td>% Correct</td> <td>% Correct</td> <td>% Correct</td>	Assessment: Small Engine Repair/Power Sports	% Correct	% Correct	% Correct	% Correct
2) Performance Standard 6.2: Operation of a 2 stroke Engine 58.93% 57.81% 61.43% 54.64% 62.2. Define 2 stroke engine operations. 40.48% 33.33% 37.14% 30.71% 62.5. Diagnose, troubleshoot, and repair a 2 stroke engine. 52.38% 56.94% 60.95% 53.81% 63.5. Diagnose, troubleshoot, and repair a 2 stroke Engine 64.97% 75.00% 70.61% 63.57% 63.1. Define 4 stroke engine terms. 92.86% 97.92% 42.29% 42.29% 63.2. Define 4 stroke engine operations. 60.32% 68.06% 67.62% 50.95% 63.3. Identify 4 stroke engine components. 55.56% 76.39% 70.48% 62.38% 63.4. Demonstrate knowledge of 4 stroke engine operation. 49.21% 62.50% 45.71% 43.33% 63.4. Demonstrate knowledge of 4 stroke engine engine operation. 49.21% 62.50% 45.71% 43.33% 63.4. Diagnose, troubleshoot, and repair a 4 stroke engine 51.08% 51.08% 51.08% 51.08% 51.08% 63.4. Diagnose, troubleshoot, and repair a 4 stroke engine 51.08% 51.08% 51.08% 51.08% 63.4. Diagnose, troubleshoot, and repair a 4 stroke engine 51.08% 51.08% 52.78% 76.39% 70.48% 62.38% 64.4. Disassemble and evaluate a 4 stroke engine. 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 51.08% 64.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 64.6. Service, replace or repair damaged internal components. 47.62% 62.50% 68.57% 48.57% 65.5. Diagnose various engine problems. 51.09% 66.67% 60.09% 61.44% 54.86% 65.5. Diagnose various engine problems. 51.90% 66.67% 60.90% 61.43% 52.38% 60.51. Diagnose various engine problems. 61.90% 66.67% 60.90% 67.66% 60.90% 67.66% 60.90% 67.66% 60.90% 60	Number tested: 62	17-18	18-19	20-21	21-22
6.2.2. Define 2 stroke engine operations. 6.2.4. Demonstrate knowledge of 2 stroke engine operation. 6.2.5. Diagnose, troubleshoot, and repair a 2 stroke engine. 6.2.5. Diagnose, troubleshoot, and repair a 4 stroke Engine 6.3.1. Define 4 stroke engine terms. 6.3.2. Define 4 stroke engine operations. 6.3.3. Identify 4 stroke engine components. 6.3.3. Identify 4 stroke engine operations. 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 6.3.5. Diagnose, troubleshoot and repair a 4 stroke engine 6.4.4. Disassemble and evaluate a 4 stroke engine 6.4.5. Inspect internal components. 6.4.6. Service, replace or repair damaged internal components. 6.4.6. Service, replace or repair damaged internal components. 6.4.7. Reassemble a 4 stroke engine 6.5.1. Diagnose various engine problems. 6.5.1. Diagnose various engine problems. 6.5.1. Diagnose various engine problems. 6.6.7.1. Define types of fuel systems 6.7.3. Identify fuel systems. 6.7.3. Identify fuel systems. 6.7.4. Define types of fuel systems. 6.7.5. Service rule systems components. 6.6.7.4. Performance Standard 6.7: Fuel Systems 6.7.5. Service fuel systems components. 6.6.7.1. Define types of fuel systems. 6.7.1. Define types of fuel systems. 6.7.2. Service fuel systems components. 6.6.7.4. Performance Standard 6.7: Fuel Systems 6.7.5. Service fuel systems components. 6.6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 6.7.1. Define types of fuel systems. 6.7.2. Identify Governor types and their components. 7.7.4. Service fuel systems components. 7.7.4. Service fuel sys	6.1.4. Identify engine components and their function.	66.67%	89.58%	78.57%	69.29%
6.2.4. Demonstrate knowledge of 2 stroke engine operation. 6.2.5. Diagnose, troubleshoot, and repair a 2 stroke engine. 5.2.38% 56.94% 60.95% 53.81% 6.3.1. Define 4 stroke engine terms. 9.2.86% 97.92% 94.29% 84.29% 6.3.2. Define 4 stroke engine components. 6.3.3. Identify 4 stroke engine components. 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 4 performance Standard 6.4: Overhaul of a 4 stroke engine 4 performance Standard 6.4: Overhaul of a 4 stroke engine 4 performance Standard 6.4: Overhaul of a 4 stroke engine 5 1.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 6.4.5. Inspect internal components. 9.2.86% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 9.2.86% 54.17% 52.38% 51.43% 6.5.1. Diagnose various engine problems. 6.5.1. Diagnose various engine problems. 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Diagnose various engine problems. 6.5.4. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.4. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.5. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.1. Diagnose various engine problems. 6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6	2) Performance Standard 6.2: Operation of a 2 stroke Engine	58.93%	57.81%	61.43%	54.64%
6.2.5. Diagnose, troubleshoot, and repair a 2 stroke engine. 3 Performance Standard 6.3: Operation of a 4 stroke Engine 6.3.1. Define 4 stroke engine terms. 9.2.66% 97.92% 94.29% 6.3.2. Define 4 stroke engine operations. 6.3.3. Identify 4 stroke engine components. 6.3.3. Identify 4 stroke engine components. 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 76.19% 81.94% 82.86% 6.3.4. Demonstrate knowledge of 4 stroke engine 76.19% 81.94% 82.86% 6.3.4. Demonstrate knowledge of 4 stroke engine 76.19% 81.94% 82.86% 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 76.19% 81.94% 82.86% 6.4.4. Disassemble and evaluate a 4 stroke engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Envice, replace or repair damaged internal components. 6.4.7. Reassemble a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.5.1. Diagnose various engine problems. 6.5.1. Diagnose various engine problems. 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 6.5.3. Performance Standard 6.5: Tuel Systems 6.6.7.1. Define types of fuel systems. 6.7.2. Define types of fuel systems. 6.7.3. Identify fuel system components. 6.7.4. Define types of fuel systems. 6.7.5. Service fuel systems components. 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 6.7.6. Diagnose, troubleshoot and repair fuel system and their components. 6.8.1. Identify governor theory, operation, and adjustments. 6.8.2. Identify governor theory, operation, and adjustments. 6.8.3. Identify different types of governor systems and their components. 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 6.8.3. Diagnose, troubleshoot, and repair governor malfunctions 6.8.3. Diagnos	6.2.2. Define 2 stroke engine operations.	40.48%	33.33%	37.14%	30.71%
3) Performance Standard 6.3: Operation of a 4 stroke Engine 6.3.1. Define 4 stroke engine terms. 92.86% 97,92% 94.29% 84.29% 6.3.2. Define 4 stroke engine operations. 6.3.3. Identify 4 stroke engine components. 55.56% 76.39% 70.48% 62.38% 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 49.21% 62.50% 45.71% 43.33% 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 49.Performance Standard 6.4: Overhaul of a 4 stroke engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.31% 6.4.5. Inspect internal components. 99.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 51.08% 60.00% 61.14% 54.36% 6.5.1. Diagnose various engine problems. 6.5.3. Performance Standard 6.5: Overhaul a 2 stroke Engine 51.08% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 6.5.3. Perform and evaluate failure analysis. 51.40% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 6.7.3. Identify fuel systems 6.7.4. Define types of fuel systems. 6.7.5. Service fuel systems components. 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 6.7.6. Diagnose, troubleshoot and repair fuel system and their components. 6.7.6. Diagnose, troubleshoot and repair fuel system and their components. 6.7.1. Define types of governor systems and their components. 6.7.2. Berformance Standard 6.8: Governor Systems and their components. 6.7.3. Identify different types of governor systems and their components. 6.7.4. Performance Standard 6.8: Governor Systems and their components. 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 6.8.3. Diagnose, troubleshoot, and	6.2.4. Demonstrate knowledge of 2 stroke engine operation.	77.78%	75.00%	78.10%	71.43%
6.3.1. Define 4 stroke engine terms. 92.86% 97.92% 94.29% 84.29% 6.3.2. Define 4 stroke engine operations. 60.32% 68.06% 67.62% 50.95% 6.3.3. Identify 4 stroke engine components. 55.56% 76.39% 70.48% 62.38% 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 49.21% 62.50% 45.71% 43.33% 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 76.19% 81.94% 82.86% 83.81% 4) Performance Standard 6.4: Overhaul of a 4 stroke Engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Inspect internal components. 47.629 62.50% 58.77% 48.57% 6.4.5. Service, replace or repair damaged internal components. 47.628 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.67% 60.67%<	6.2.5. Diagnose, troubleshoot, and repair a 2 stroke engine.	52.38%	56.94%	60.95%	53.81%
6.3.2. Define 4 stroke engine operations. 60.32% 68.06% 67.62% 50.95% 6.3.3. Identify 4 stroke engine components. 55.56% 76.39% 70.48% 62.38% 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 49.21% 62.50% 45.71% 43.33% 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 76.19% 81.94% 82.86% 83.81% 4) Performance Standard 6.4: Overhaul of a 4 stroke Engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Isaspet internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.00% 57.86% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Euel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 56.25% 57.14% 6.7.5. Service fuel systems components. 56.67% 69.44% 66.67% 57.62% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubl	3) Performance Standard 6.3: Operation of a 4 stroke Engine	64.97%	75.89%	70.61%	63.57%
6.3.3. Identify 4 stroke engine components. 55.56% 76.39% 70.48% 62.38% 6.3.4. Demonstrate knowledge of 4 stroke engine operation. 49.21% 62.50% 45.71% 43.33% 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 76.19% 81.94% 82.86% 83.81% 4) Performance Standard 6.4: Overhaul of a 4 stroke Engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.629 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% <t< td=""><td>6.3.1. Define 4 stroke engine terms.</td><td>92.86%</td><td>97.92%</td><td>94.29%</td><td>84.29%</td></t<>	6.3.1. Define 4 stroke engine terms.	92.86%	97.92%	94.29%	84.29%
6.3.4. Demonstrate knowledge of 4 stroke engine operation. 49.21% 62.50% 45.71% 43.33% 6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 76.19% 81.94% 82.86% 83.81% 4) Performance Standard 6.4: Overhaul of a 4 stroke Engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.09% 54.86% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% <t< td=""><td>6.3.2. Define 4 stroke engine operations.</td><td>60.32%</td><td>68.06%</td><td>67.62%</td><td>50.95%</td></t<>	6.3.2. Define 4 stroke engine operations.	60.32%	68.06%	67.62%	50.95%
6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine 4) Performance Standard 6.4: Overhaul of a 4 stroke Engine 5.1.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 5) Performance Standard 6.7: Fuel Systems 6.5.1. Diagnose various engine problems. 6.5.3. Perform and evaluate failure analysis. 7) Performance Standard 6.7: Fuel Systems 6.7.1. Define types of fuel systems. 6.7.3. Identify fuel system components and their functions. 6.7.5. Service fuel systems components. 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 6.8.1. Identify different types of governor systems and their components. 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 68.57% 69.44% 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 52.38% 75.00% 68.57% 75.83% 75.00% 6.8.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 69.84% 69.44% 70.48% 52.38% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38%	6.3.3. Identify 4 stroke engine components.	55.56%	76.39%	70.48%	62.38%
4) Performance Standard 6.4: Overhaul of a 4 stroke Engine 51.08% 61.36% 58.70% 55.06% 6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 6.4.7. Reassemble a 5 stroke engine. 58.10% 60.00% 61.14% 58.57% 6.4.7. Reassemble a 4 stroke engine. 58.10% 60.00% 66.67% 44.29% 6.4.7. Reassemble a 4 stroke engine. 58.10% 60.00% 66.67% 44.29% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.90% 66.67% 6.5.1. Diagnose various engine problems. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 60.95% 56.67% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.2. Service fuel systems compo	6.3.4. Demonstrate knowledge of 4 stroke engine operation.	49.21%	62.50%	45.71%	43.33%
6.4.4. Disassemble and evaluate a 4 stroke engine. 76.19% 76.39% 80.95% 73.81% 6.4.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.095% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81%	6.3.5. Diagnose, troubleshoot, and repair a 4 stroke engine	76.19%	81.94%	82.86%	83.81%
6.4.5. Inspect internal components. 39.68% 54.17% 52.38% 51.43% 6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel systems components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% <td>4) Performance Standard 6.4: Overhaul of a 4 stroke Engine</td> <td>51.08%</td> <td>61.36%</td> <td>58.70%</td> <td>55.06%</td>	4) Performance Standard 6.4: Overhaul of a 4 stroke Engine	51.08%	61.36%	58.70%	55.06%
6.4.6. Service, replace or repair damaged internal components. 47.62% 62.50% 58.57% 48.57% 6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.08% 57.14	6.4.4. Disassemble and evaluate a 4 stroke engine.	76.19%	76.39%	80.95%	73.81%
6.4.7. Reassemble a 4 stroke engine. 39.68% 52.78% 42.86% 44.29% 5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 7	6.4.5. Inspect internal components.	39.68%	54.17%	52.38%	51.43%
5) Performance Standard 6.5: Overhaul a 2 stroke Engine 58.10% 60.00% 61.14% 54.86% 6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% <t< td=""><td>6.4.6. Service, replace or repair damaged internal components.</td><td>47.62%</td><td>62.50%</td><td>58.57%</td><td>48.57%</td></t<>	6.4.6. Service, replace or repair damaged internal components.	47.62%	62.50%	58.57%	48.57%
6.5.1. Diagnose various engine problems. 61.90% 66.67% 60.95% 56.67% 6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44%<	6.4.7. Reassemble a 4 stroke engine.	39.68%	52.78%	42.86%	44.29%
6.5.3. Perform and evaluate failure analysis. 52.38% 50.00% 61.43% 52.14% 7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38% 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. <t< td=""><td>5) Performance Standard 6.5: Overhaul a 2 stroke Engine</td><td>58.10%</td><td>60.00%</td><td>61.14%</td><td>54.86%</td></t<>	5) Performance Standard 6.5: Overhaul a 2 stroke Engine	58.10%	60.00%	61.14%	54.86%
7) Performance Standard 6.7: Fuel Systems 64.29% 66.67% 66.00% 57.86% 6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 52.38% 75.00% 68.57% 60.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38% 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctio	6.5.1. Diagnose various engine problems.	61.90%	66.67%	60.95%	56.67%
6.7.1. Define types of fuel systems. 57.14% 56.25% 57.14% 44.29% 6.7.3. Identify fuel system components and their functions. 85.71% 83.33% 84.29% 77.86% 6.7.5. Service fuel systems components. 66.67% 69.44% 66.67% 57.62% 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 52.38% 59.72% 59.05% 53.81% 8) Performance Standard 6.8: Governor Systems 60.32% 73.61% 69.52% 65.71% 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 52.38% 75.00% 68.57% 60.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38% 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 66.67% 85.42% 82.86% 70.00%	6.5.3. Perform and evaluate failure analysis.	52.38%	50.00%	61.43%	52.14%
6.7.3. Identify fuel system components and their functions. 6.7.5. Service fuel systems components. 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 6.7.6. Diagnose, troubleshoot and repair governor systems 6.7.6. Diagnose, troubleshoot and repair governor systems and their components. 6.7.6. Diagnose, troubleshoot and repair governor systems and their components. 6.7.6. Diagnose, troubleshoot and dijustments. 6.7.7.4. To.83% 57.14% 67.14% 67.14% 67.14% 68.2. Identify governor theory, operation, and adjustments. 6.7.6. Diagnose, troubleshoot and repair governor malfunctions 6.8.1. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 68.57% 60.00% 9) Performance Standard 6.9: Ignition Systems 6.9.2. Identify components and functions of a basic ignition system. 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions.	7) Performance Standard 6.7: Fuel Systems	64.29%	66.67%	66.00%	57.86%
6.7.5. Service fuel systems components. 6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 6.7.6. Diagnose, troubleshoot and repair governor systems 6.7.6. Diagnose, troubleshoot and repair governor malfunctions 6.8.1. Identify governor theory, operation, and adjustments. 6.8.2. Identify governor theory, operation, and adjustments. 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 6.8.5. Diagnose, troubleshoot and repair governor malfunctions 6.9. Performance Standard 6.9: Ignition Systems 6.9. Diagnose, troubleshoot, and repair ignition system malfunctions. 6.9. Standard 6.9.	6.7.1. Define types of fuel systems.	57.14%	56.25%	57.14%	44.29%
6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions. 8) Performance Standard 6.8: Governor Systems 6.8.1. Identify different types of governor systems and their components. 6.8.2. Identify governor theory, operation, and adjustments. 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 71.43% 75.00% 82.86% 70.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 69.84% 69.44% 70.48% 52.38% 70.00% 69.84% 69.44% 70.48% 52.38% 70.00%	6.7.3. Identify fuel system components and their functions.	85.71%	83.33%	84.29%	77.86%
8) Performance Standard 6.8: Governor Systems 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 52.38% 75.00% 68.57% 60.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38% 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 66.67% 85.42% 82.86% 70.00%	6.7.5. Service fuel systems components.	66.67%	69.44%	66.67%	57.62%
8) Performance Standard 6.8: Governor Systems 6.8.1. Identify different types of governor systems and their components. 57.14% 70.83% 57.14% 67.14% 6.8.2. Identify governor theory, operation, and adjustments. 71.43% 75.00% 82.86% 70.00% 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 52.38% 75.00% 68.57% 60.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 75.83% 75.43% 59.43% 6.9.2. Identify components and functions of a basic ignition system. 69.84% 69.44% 70.48% 52.38% 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 66.67% 85.42% 82.86% 70.00%	6.7.6. Diagnose, troubleshoot and repair fuel system malfunctions.	52.38%	59.72%	59.05%	53.81%
6.8.1. Identify different types of governor systems and their components. 6.8.2. Identify governor theory, operation, and adjustments. 6.8.3. Diagnose, troubleshoot and repair governor malfunctions 71.43% 75.00% 82.86% 70.00% 9) Performance Standard 6.9: Ignition Systems 68.57% 69.84% 69.44% 70.48% 52.38% 69.44% 70.48% 52.38% 69.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 66.67% 85.42% 82.86% 70.00%		60.32%	73.61%	69.52%	65.71%
6.8.3. Diagnose, troubleshoot and repair governor malfunctions 9) Performance Standard 6.9: Ignition Systems 6.9.2. Identify components and functions of a basic ignition system. 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 52.38% 75.00% 68.57% 60.00% 68.57% 75.83% 75.43% 59.43% 69.44% 70.48% 52.38% 69.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions.		57.14%	70.83%	57.14%	67.14%
9) Performance Standard 6.9: Ignition Systems 6.9.2. Identify components and functions of a basic ignition system. 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 68.57% 75.83% 75.43% 69.84% 69.84% 69.84% 69.84% 82.86% 70.00%	6.8.2. Identify governor theory, operation, and adjustments.	71.43%	75.00%	82.86%	70.00%
9) Performance Standard 6.9: Ignition Systems 6.9.2. Identify components and functions of a basic ignition system. 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 68.57% 75.83% 75.43% 69.84% 69.84% 69.84% 69.84% 82.86% 70.00%			75.00%		60.00%
6.9.2. Identify components and functions of a basic ignition system. 6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 69.84% 69.44% 70.48% 52.38% 69.9.3 85.42% 82.86% 70.00%					
6.9.3. Diagnose, troubleshoot, and repair ignition system malfunctions. 66.67% 85.42% 82.86% 70.00%	· · · · · · · · · · · · · · · · · · ·				
	10) Performance Standard 6.10: Charging Systems	80.95%	79.17%	81.43%	

6.10.2. Identify components and functions of a basic charging system.	80.95%	79.17%	81.43%	82.14%
Assessment: Small Engine Repair/Power Sports	% Correct	% Correct	% Correct	% Correct
Number tested: 62	17-18	18-19	20-21	21-22
11) Performance Standard 6.11: Starting Systems	40.48%	52.08%	61.43%	48.57%
6.11.3. Diagnose, troubleshoot, and repair starting system malfunctions.	40.48%	52.08%	61.43%	48.57%
7) CONTENT STANDARD 7.0: MAINTENANCE	85.71%	93.06%	91.43%	84.76%
1) Performance Standard 7.1: Basic Maintenance	85.71%	93.06%	91.43%	84.76%
7.1.2. Research owner's manuals, service schedules, and manufacturer's data to perform proper periodic maintenance.	85.71%	93.06%	91.43%	84.76%
8) CONTENT STANDARD 8.0: PARTS AND SERVICE MANAGEMENT	85.71%	87.50%	91.43%	82.86%
1) Performance Standard 8.1: Parts and Service Operation	85.71%	87.50%	91.43%	82.86%
8.1.2. Identify how to look up parts.	85.71%	87.50%	91.43%	82.86%