



## 2024 Career and Technical Education Instructors School

### Power Distributors Trainer

# TUESDAY

- 8:00 a.m. Welcome & Introductions**  
Session Objectives - Agenda Review  
Introduction to Briggs & Stratton and Power Distributors  
Tools and Safety
- 8:45 a.m. Tools and Safety**
- 9:15 a.m. Lab #1 - Run Engine**  
Instruction - Demonstrate - Test Run
- 10:00 a.m. Break**
- 10:15 a.m. Curriculum, Power Portal, & Engine Decoding**  
Accessing the Power Portal  
Educational Resources - "I want to teach"  
Power Channel  
Setting up Teacher & Students Accounts  
Testing and Master Service Technician Info  
Briggs & Stratton 8-9 Week Course Curriculum  
Engine Identification  
**Lab #2 - QR Codes and Parts Look-Up**
- 11:15 AM 4-Stroke Theory (Chapter 3 – Engine Operation)**  
Engine Configuration  
Engine Identification - Decoding Engine ID Numbers  
4 - Stroke Theory - (video)  
Engine Power Ratings - HP vs. Torque  
Engine Part Nomenclature  
**Lab #3 - Hands-On Parts ID Exercise**

# ***TUESDAY - Continued***

- 12:00 - 12:45**     ***LUNCH***
- 12:45 p.m.**     **Lab # 4 - Remove Carburetor**  
Review - Instruction - Demonstrate  
Remove and Reinstall Carburetor from Engine
- 1:30 p.m.**     **Carburetor Theory and Fuel Systems (Chapter 5)**  
Carburetor Operation Principles  
Internal Carburetor Design  
Carburetor Service Procedures  
Fuel  
**Lab # 5- Reid Vapor Pressure Demonstration**  
RVP - Demo live or video embedded in presentation  
**Lab # 6 - Gasohol Testing**  
**Lab # 7- Boiling Water in a Vacuum, Vapor Lock**
- 2:30 p.m.**     ***Break***
- 2:45 p.m.**     **Lab # 8 - Carburetors Internal Design**  
Clear Carburetor Teardown  
Nikki Carburetors  
130G32 Carburetors
- 3:45 p.m.**     **Review of the Day**
- 4:00**     **Adjourn**

# WEDNESDAY

- 8:00 a.m. Review of Tuesday's Lessons
- 8:15 a.m. Lab # 9 - Carburetors - continued  
Carburetor Teardown (classroom - carb kits)  
Nikki Carburetors & 130G32 Carburetor Teardown
- 9:00 a.m. **Lab #10 - Clear Carburetor Demo**  
**Lab #11 - Review Carburetor Call-Out Sheets**
- 9:30 a.m. Governor Systems (Chapter 6)  
Discussion of different systems
- 10:00 a.m. *Break*
- 10:15 a.m. Lab #12 - Governor Systems  
Disassembly/reassembly of governor system  
Discuss and demonstrate governor adjustment
- 10:45 a.m. Lab #13 - Governor Systems  
Static Governor Adjustment
- 11:30 a.m. **Compression System (Chapter 4)**  
Pistons, Rings, Valves, Crankcase Vacuum
- 12:00 - 12:45 **LUNCH**
- 12:45 p.m. Compression System (Chapter 4)
- 2:00 p.m. Lab #14- Compression System – Head Removal  
Disassembly/reassembly of cylinder head
- 2:30 p.m. Lab #15 - Practice Valve Adjustment Procedure  
Lab #16 - Compression Test
- 3:00 p.m. *Break*
- 3:15 p.m. Electrical & Ignition Systems
- 3:45 p.m. Review of the Day
- 4:00 p.m. Adjourn

# **THURSDAY**

- 8:00 a.m. **Review of Wednesday Lessons**
- 8:15 a.m. **Lab # 17 - Lab - Spark Tester**  
**Lab # 18 - Ignition Systems**  
Disassembly of flywheel and ignition system
- 9:00 a.m. **Cooling and Lubrication Systems (Chapter 8)**  
Oils - Service Bulletin SB736 & API Engine Oil Guide
- 9:30 a.m. **Lab # 19 - Oil Viscosity Flow**
- 10:00 a.m. ***Break***
- 11:15 a.m. **Lab #20 – Crankcase Disassembly**  
Disassembly of engine
- 12:00 - 12:45 ***LUNCH***
- 12:45 p.m. **Torque Module**  
Torque: Force x Distance, Clamp Force,  
Bolt Stretch, and Torque Wrenches
- 1:00 p.m. **Lab #21 – Hands-on Torque Wrench Use**
- 1:45 p.m. ***Break***
- 2:00 p.m. **Lab #22 Final Engine Assembly and Inspection**  
Valve Adjustment & Static Governor Adjustment
- 3:00 p.m. **Lab #23 – Final Engine Test Run**  
Review "Rules for Running"  
Perform startup and shutdown procedures
- 3:45 p.m. **Final Comments - Certificate Presentation**
- 4:00 p.m. **Adjourn**