



Turbo Charger Familiarization & Check Out Quiz

Pilot: _____

Date: _____

Aircraft N#: _____

To answer the following questions, you will need a Pilots Information Manual, Pilots Cockpit Reference Guide, and Sporty's Advanced Equipment DVD.

1. Describe the basic operation of a turbocharger _____

2. Explain turbo-boosting versus turbo-normalizing _____

3. What is a wastegate? _____
4. What is the difference between a manual and an automatic wastegate?

5. What precautions must be taken with a manual waste gate?

6. What kind of wastegate does this aircraft have? How is it operated?

7. Describe how the mixture should be operated (Leaned, Full Rich, FF=____, TIT=____, etc) during:
Taxi:
Runup:
Takeoff:
Climb:
Cruise:
Descent:
Landing:
8. In general, what order should the throttle, propeller control, and mixture be adjusted to increase power? _____

To Decrease? _____
9. What is Coking? How do we prevent it? _____

10. Is there a specific cool down time/ temp for this aircraft? _____
11. What is the critical altitude of a turbocharger? _____



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12. What is shock-cooling? _____
13. Describe how we can prevent shock-cooling _____

14. What is TIT? _____
What is CHT? _____
What are recommended maximum TIT/ CHT's for this aircraft? What are max per the POH?

15. What is MCP for this aircraft? _____
16. What is the maximum climb power and airspeed? _____
What is normal climb power and airspeed? _____
17. What is the recommended normal cruise MP, RPM, TIT, CHT, Fuel Flow and TAS?

18. Why is fuel planning more demanding on a turbocharged aircraft? _____

19. The higher altitude you fly a turbocharged airplane, the higher the engine temperature. Explain.

20. What would be the advantage of speed brakes on a turbocharged aircraft?

Instructor Review and Sign Off: _____
(Printed name and signature of reviewing Instructor) Date: _____