TECHNICAL INFORMATION

DUNCAN RACING INTERNAIONAL INC.

4-STROKE BREAK-IN PROCEDURE

After your engine has been completely installed in the chassis. Be sure all fluids have been filled (oil, coolant etc.). Before starting a freshly rebuilt engine it is strongly recommended to make sure that the carburetor has been thoroughly cleaned and fuel tank has been flushed clean. Fresh fuel should always be used. Air box should be cleaned and a new or freshly serviced air filter should be installed. Once the above steps have been completed, you should be ready to start your engine and follow the engine break-in instructions below.

CAUTION: Make sure the jetting in your carburetor has been adjusted for you current engine build/rebuild. You cannot assume jetting will not change after a motor build/rebuild. In almost all cases a fresh engine will require richer carburetor setting.

Call DR with any questions on this subject. Failure to set carburetor correct will cause sever engine damage to your engine

IMPORTANT RECOMMENDATION (4-Stroke): Upon initial start up of a fresh engine, make sure that the engine is getting oil to the top end (valve train). Most OEM service manuals will cover the necessary procedure to check this for your specific model machine.

PART I (3-Idle periods, 3-Cool down periods)

IDLE: Start engine and let idle with a fan blowing on the front of the engine, to simulate Tiding type conditions without a load on the engine. Let engine idle for exactly 10 minutes. COOL DOWN: Shut engine off after 10 minutes of running and let machine cool down for a minimum of 30 minutes. Let fan continue to blow on engine.

IDLE: Repeat first step COOL DOWN: Repeat second step.

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PART II (6-Riding periods, 6-Cool down periods)

RIDE: Ride machine for 10 minutes. Make sure to vary your RPM range. Ride machine at 50% of your normal riding pace. Be careful not to put any unnecessary strain on the motor during break-in. COOL DOWN: After 10 minutes of riding, shut machine off and let machine cool down for a minimum of 30 minutes.

RIDE: Repeat initial riding period. But ride for 10 minutes at 60% of your normal pace. COOL DOWN: Shut machine off and let machine cool down for a minimum of 30 minutes. RIDE: Repeat initial riding period. But ride for 10 minutes at 70% of your normal pace. COOL DOWN: Shut machine off and let machine cool down for a minimum of 30 minutes.

RIDE: Repeat initial riding period. But ride for 10 minutes at 80% of your normal pace. COOL DOWN: Shut machine off and let machine cool down for a minimum of 30 minutes.

RIDE: Repeat initial riding period. But ride for 10 minutes at 90% of your normal pace. COOL DOWN: Shut machine off and let machine cool down for a minimum of 30 minutes.

RIDE: Repeat initial riding period. But ride for 10 minutes at 100% of your normal pace. COOL DOWN: Shut machine off and let machine cool down for a minimum of 30 minutes.

Break-in should now be complete. Confirm that carburetion settings are correct and give your machine a complete safety check before continuing your riding.

TIPS FOR A SMOOTHER BREAK-IN

- Do not use paddle tires. Stay away from deep sand dunes, mud etc. Until break-in is complete.
- Check that all fluid levels are correct.
- Check carburetion jetting periodically during break-in.
- Check all engine mount and chassis bolts are secure during cool down periods.
- Check all oil or coolant lines are secure and free from leaks.
- Make sure exhaust system remains secure. Snug at cylinder head with engine warm.
- Valve clearance should be checked after approximately 5 hours of initial running time.
- Re-adjust cam chain tension when applicable.
- Keep drive chain in adjustment.