

Mini Sportsman Engine Maintenance Check List

Valve Train:

- Check and/or adjust valve clearances every other event
- Intake valve lash adjusted to .006"
- Exhaust valve lash adjusted to .008"
- Valve springs replaced every four events
- Rocker arm cups checked for cracking when springs are replaced
- Torque rocker arms to 100 in/lbs

Oiling System:

- Oil and filter should be changed every 2 events with straight 30 weight synthetic or conventional motor oil
- Filter with no check valve is preferable
- Engine filled with 30 ounces of oil
- Oil filter filled with an additional 2 ounces before installation
- Crankcase breather/oil overflow tank checked and emptied regularly

Electrical System:

- Check to see that the alternator is charging the battery
- Check for at least 13 Volts at 2000 rpm
- Kill switch wire is secured and making good connection
- Replace sparkplugs every 10 events
- Use #NGK4091 or equivalent plugs gapped to .030"
- Apply a small amount of anti-seize to threads before inserting into aluminum head
- Inspect diode wire for damage

Clutch and Chain:

- If not already equipped, install an INEX-approved chain guard
- Lubricate the brass bushing in a 12-tooth clutch drum every race
- Inspect and lubricate needle bearing in 13 to 15 tooth clutches on a regular basis looking for signs of wear and/or excessive heat
- Keep chain lubricated at all times with chain lube
- With car at ride height and the rear axle square, adjust chain to where there is 1/2 inch of free play up and down
- Be sure that the clutch gear and axle sprocket are properly aligned
- Select a gear ratio (clutch and sprocket combination) that keeps the engine speed at or below the 5600 rpm rev limit.

Additional Information

- Check throttle cable to ensure safety and proper operation
- If not already equipped, install stock carburetors jets
- No. 1 Cylinder: 92
- -No. 2 Cylinder: 98
- Be sure that the air filter is clean and not saturated with oil
- Keep engine-mounting bolts tight as vibration tends to work them loose
- Check and torque cylinder head bolts to 165 in/lbs often (when engine is cool)
- Check for exhaust leakage at the header flange
- Check and tighten bolts to 125 in/lbs (when engine is cool)
- Torque engine side cover to 150 in/lbs (when engine is cool)