

## UMSS Traditional Series – B Engine

To the signee of this form;

The engine you are certifying is being certified for use in a UMSS Traditional Sprint Car. The UMSS has created a sealed engine program that allows the signee of this form to certify and seal an engine for use in a UMSS Traditional Sprint Car. By filling out and signing this form, you, as the signee of this form, are certifying the engine complies with the specifications outlined in this checklist. If an engine you have certified and sealed is later found to be illegal, any driver using the engine you certified will face fines and a suspension as published in the UMSS rule book.

Please contact David L. Anderson at [anderson@sherbtl.net](mailto:anderson@sherbtl.net) if you have any questions on the engine certifying process.

David L. Anderson  
UMSS Tech



## UMSS B Engine Certification Checklist v. 1.0

### SIGNEE INFORMATION

Name:	
Address:	
Telephone number:	

### CHECKLIST

<input type="checkbox"/>	<b>Cubic Inches</b> <ul style="list-style-type: none"><li>UMSS legal engines<ul style="list-style-type: none"><li>Chevrolet 305, 307, 327, 350 - .060" max overbore</li><li>Ford 302, 351 - .060" max overbore</li><li>Chrysler – 318, 360 - .040" max overbore</li><li>Chrysler – 340 - .060" max overbore</li></ul></li></ul>	Bore _____ Stroke _____
<input type="checkbox"/>	<b>Compression Ratio</b> <ul style="list-style-type: none"><li>Maximum compression ratio allowed is 9.5:1</li></ul>	Compression ratio _____
<input type="checkbox"/>	<b>Block</b> <ul style="list-style-type: none"><li>Factory stock, passenger car/truck 2 or 4 bolt iron blocks only</li><li>2 bolt blocks cannot be converted to a 4 bolt block</li><li>Splayed caps are not allowed</li><li>No lightening allowed. All stock mounts must remain</li></ul>	Block casting number _____
<input type="checkbox"/>	<b>Crankshaft</b> <ul style="list-style-type: none"><li>The crankshaft must match the block. Interchanging of crankshafts or connecting rods is not allowed</li><li>Lightening, knife edging, or polishing of the crankshaft throws is not allowed</li><li>The crankshaft flange may be machined to fit the rear motor plate and torque ball housing</li><li>Crankshaft balancing is allowed</li><li>The only legal crankshafts are as follows;<ul style="list-style-type: none"><li>Stock GM, Ford, or Chry production crankshafts</li><li>Chev 350 – Scat 9-10442</li><li>Chev 350 – Eagle 103503480</li><li>Chev 350 – Eagle 10350480CM</li><li>Chev 350 – Eagle 103523480</li><li>Ford 351 – Scat 9-351-3500-5955-2311</li><li>Chry 340 – Scat 9-340-3580-6123</li><li>Chry 360 – Scat 9-360-3580-6123</li></ul></li></ul>	Crankshaft casting number _____

<input type="checkbox"/>	<b>Connecting Rods</b> <ul style="list-style-type: none"> <li>• The connecting rod length must match the block. Interchanging of crankshafts or connecting rods is not allowed</li> <li>• No grinding or polishing of the rod beams</li> <li>• Balancing is allowed</li> <li>• 3/8" rod bolts max</li> <li>• Cap screws are allowed only on the Eagle rod. No cap screws allowed on any other rod</li> <li>• The only legal connecting rods are as follows; <ul style="list-style-type: none"> <li>○ Any stock steel GM, Ford, or Chry production rod</li> <li>○ Chev 5.7" powdered metal rods</li> <li>○ Chev – Scat OEM replacement I-beam (5.7")</li> <li>○ Chev – Eagle OEM I-beam ESPSIR5700BBLW</li> </ul> </li> </ul>	Rod casting number _____
<input type="checkbox"/>	<b>Camshaft</b> <ul style="list-style-type: none"> <li>• Hydraulic camshafts only</li> <li>• The camshaft may be drilled for a rear spud</li> </ul>	
<input type="checkbox"/>	<b>Camshaft lifters</b> <ul style="list-style-type: none"> <li>• Hydraulic lifters only</li> <li>• The lifters must match the block</li> <li>• The lifter must have a minimum of .100" travel</li> <li>• The lifter must rotate freely in the lifter bore</li> <li>• The lifters must be manufactured from magnetic material</li> </ul>	
<input type="checkbox"/>	<b>Timing set</b> <ul style="list-style-type: none"> <li>• Timing chains only</li> <li>• No timing belts or gears allowed</li> </ul>	
<input type="checkbox"/>	<b>Cylinder Head</b> <ul style="list-style-type: none"> <li>• Stock iron production heads only</li> <li>• No aftermarket cylinder heads allowed</li> <li>• Vortex, Bowtie, SVO, W-2, Magnum, Gen II, or angle plug heads are not allowed</li> <li>• Chevrolet 040, 041, 186, 187, 291, 370, 414, 432, 461, 461X, 462, 492, 1012532, 10208890, 10239906, 12554290, 14011083, or 14096217 cylinder heads are not allowed</li> <li>• 1987 – 1995 Chev swirl port heads are allowed</li> <li>• Ford 302 GTP are allowed on Ford 302 and 351 engines</li> <li>• Porting or polishing is not allowed</li> <li>• Angle milling is not allowed</li> <li>• Machining of any valve throat material 1/4" below the top of the valve seat is not allowed</li> <li>• Valve springs with an outside diameter larger than stock are not allowed</li> <li>• Tapered and beehive springs are not allowed</li> </ul>	Cylinder head casting number _____
<input type="checkbox"/>	<b>Rocker arm</b> <ul style="list-style-type: none"> <li>• Steel stock appearing stamped rocker arm only</li> <li>• Roller or roller tipped rocker arms are not allowed</li> <li>• Stud girdles are not allowed</li> </ul>	
<input type="checkbox"/>	<b>Intake manifold</b> <ul style="list-style-type: none"> <li>• Porting, polishing, or gasket matching is not allowed</li> <li>• Altering the intake manifold floor is not allowed</li> <li>• The only legal intake manifolds are as follows; <ul style="list-style-type: none"> <li>○ Chev – Weiand 7546, 7467, 7547-1</li> <li>○ Ford – Weiand 7515, 7516, 8023</li> <li>○ Chry – Weiand 7545</li> </ul> </li> </ul>	Intake manifold part number _____
<input type="checkbox"/>	<b>General rules;</b> <ul style="list-style-type: none"> <li>• Titanium parts are not allowed</li> <li>• If the rulebook does not state it is legal, it probably isn't</li> <li>• UMSS tech will determine what is, and what is not legal</li> </ul>	

<input type="checkbox"/>	<b>Sealing procedure</b> <ul style="list-style-type: none"> <li>• After the engine has been 100% certified, the intake manifold, driver's side cylinder head, and timing cover must be sealed with UMSS supplied seals</li> <li>• Seal serial numbers must be recorded</li> <li>• The intake manifold will be sealed with a UMSS seal using the front two bolts located on the driver's side of the intake manifold</li> <li>• The driver's side cylinder head will be sealed with a UMSS seal using the lower, 2<sup>nd</sup> and 3<sup>rd</sup> bolt from the front of the cylinder head</li> <li>• The timing cover will be sealed with a UMSS seal using two bolts located approximately at the top center position on the timing cover</li> <li>• Seals are to be installed in such a manner as to not loosen the sealed bolts over time</li> <li>• Seals are to be installed in such a manner as to not allow seal tampering</li> <li>• Contact David L. Anderson at anderson@sherbte.net if you have any questions on seal placement</li> </ul>	Intake seal serial number _____  Cyl head seal serial number _____  Timing cover seal serial number _____
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By signing this document, you, as the signee of this form, are certifying the engine you sealed complies with the specifications outlined in this checklist. You further agree that knowingly providing false information on this document will expose the driver competing with the engine you certify to fines and a suspension as published in the UMSS rule book. The UMSS appreciates your integrity.

Name and title (printed) \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Mail this form to;

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