



## COMPETITION SPECIFICATION SHEET 2/16/2005

Manufacturer: Mini USA  
 Model: Cooper S  
 Applicable Years: 2002 – 2005 with JCW Tuning Package

This specification sheet was developed by the U.S. Touring Car Championship and will be used both by the series technical administrator to establish technical compliance and by applicable series administrators to maintain performance parity and equal competition amongst the USTCC competitors. In addition to this CSS the technical administrator may also use, but is not limited to also using the following items to check compliance: Electronic Parts Catalogs, Technical Information Systems, and the FIA/ASN Homologation forms, or equivalent documentation.

The specifications within this form include all modifications that have been approved by USTCC specifically for the vehicle model(s) and year(s) listed on this page. The parts, specifications and assemblies used shall be those for the unmodified stock vehicle, those permitted within the NASA regulations and or within this CSS. If the stock parts, specifications, and/or assemblies exceed the performance potential of those approved within this form, then the parts, specifications, and/or assemblies used shall meet those listed within this form.

The Competition Specification Sheet is a permissive document. The exact configuration of any modification allowed within this CSS is subject to the approval of the technical administrator.

<b>1. GENERAL VEHICLE DESCRIPTION</b>	<b>2002/ 6-2004</b>	<b>7-2004/2005</b>
	207hp/180tq	207hp/180tq
Body Type (sedan, coupe, hatchback):	Sedan	
Engine location (front, mid, rear):	Front	
Drive Type (front, rear, AWD):	Front	
Wheelbase (cm)	246.6 cm	
Induction Type:	SuperCharged	
Minimum Weight:	2610lbs	2610lbs

### **2. ENGINE**

OEM Engine Code Designation:	W11B16A	
Number of Cylinders:	4	
Maximum Displacement (cc):	1598/ xxxx	stock / allowed
Rev limit req'd?:	no	
Compression ratio:	8.3:1 / xx:1	stock / allowed
Piston Stroke (mm):	77 / xxx	stock / allowed
Restrictors Req'd?:	no / xxmm	
Cylinder Block Part # (stock):	11 11 7 520 126	
Cylinder Block Bore (mm):	85.8 / xx.x	stock / allowed
Cylinder Head Part # (stock):	xxx	
Intake Valve Head Diameter (mm):	31.9 / xx.x	stock / allowed
Exhaust Valve Head Diameter (mm):	25.2 / xx.x	stock / allowed

Intake Port Dimensions at Manifold Face:	Height: xx.xmm Width: xx.xmm
Intake Port Work Allowed? (Yes/No)	xxx / xxmm depth from face
Exhaust Port Dimensions at Manifold Face:	Height: xx.xmm Width: xx.xmm
Connecting Rod Length (centerlines, mm):	xxx.x / xxx.x stock / allowed
Reciprocating Assembly (grams):	xxx / xxx stock / allowed
Aftermarket Rods Allowed?:	xxx
Aftermarket Pistons Allowed?:	xxx
Camshaft Rocker Arm Ratio:	x.x:1
Type of Cam Follower (roller, solid, etc.)	roller
Camshaft Max Lift at Cam Lobe:	0.xxx
Crankshaft Part Number (stock):	xxx
Crankshaft Mass (kg):	xx.x / xx.x stock / allowed
Flywheel Mass (kg):	xx.x / xx.x stock / allowed
Ring Gear Diameter (mm):	220 / xxx stock / allowed
Intake Manifold Part # (stock):	11 61 1 524 532
Int. Manifold Port Size @ Head Face:	Height: xx.xmm Width: xx.xmm (stock)
Allow Port Match to Head?	no Depth: n/a
Throttle Body Bore Diameter (mm):	58 / xx stock / allowed
# of Throttle Bodies:	x
Intermediate Port Matching Allowed?:	yes, no, N/A
Supercharger Part # :	11 65 1 476 790
Supercharger Make/Model	Eaton Model 45
Number of Turbo Compressors:	x
Compressor Inlet Diameter (mm):	xx.x / xx.x stock / allowed
Maximum Boost Pressure (psi):	14.5 JCW
Supercharger Intercooler Part # (stock):	11 65 1 515 368
Turbo Intercooler Dimensions (mm):	xxx X xxx
Engine Miscellaneous:	
Supercharger pully size must be as delivered by manufacturer	

### 3. DRIVETRAIN

Transmission Part # (stock)	xxx	
Number of Forward Speeds:	6	
Alternate Transmission Allowed?:	no	
Alternate Transmission Part #:	n/a	
Gear Ratios (stock / allowed):		
1 <sup>st</sup> :	11.425	12.789
2 <sup>nd</sup> :	7.181	7.793
3 <sup>rd</sup> :	5.397	5.651
4 <sup>th</sup> :	4.407	4.615
5 <sup>th</sup> :	3.656	3.828
6 <sup>th</sup> :	2.986	3.126
Final Drive Ratio (stock / allowed):	free	
Drive train Miscellaneous:		
Xxx		
Xxx		

### 4. SUSPENSION, CHASSIS, BODY

Front Suspension Type:	MacPherson
Rear Suspension Type:	Multilink
Suspension, Chassis, Body Miscellaneous:	