

2000

COBRA R



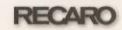
Owners Guide Supplement



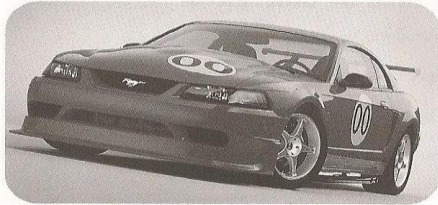
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CONGRATULATIONS on your purchase of the 2000 SVT Cobra R, the highest performance Mustang ever built. This vehicle was designed with the ultimate enthusiast in mind. From the front air splitter, high revving engine, purposeful interior, to the CART inspired rear wing, every aspect of the 2000 Mustang Cobra R is meant to serve a purpose on the track.

The 2000 Mustang Cobra R team would like to thank all of the suppliers that helped make this car a reality.

The above photo is the first prototype of the Cobra R revealed at the Mustang Club of America's 35th Anniversary Celebration for the Ford Mustang in Charlotte, N.C.

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SVT COBRA "R" SPECIFIC FEATURES:

- 5.4L DOHC 32V V-8 385 hp, 385 lb.-ft. torque
- McLeod aluminum flywheel
- Engine oil cooler
- High capacity engine cooling system
- Tremec T-56 6 speed manual transmission with B&M Ripper shifter
- Bassani X - Pipe
- Aluminum driveshaft
- Independent rear suspension with unique bushings**
- Eibach coil springs (800 lb./in. front, 750 lb./in. rear)**
- Bilstein monotube front struts and twin-tube rear shocks
- Unique front lower control arm bushings**
- Tuned rack and pinion steering
- Dual power steering coolers

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SVT COBRA "R" SPECIFIC FEATURES:

- Viscous limited slip differential
- Recaro sport bucket seats
- 18 x 9.5 inch cast aluminum 5 spoke wheels**
- Compound 265/40 ZR18 BFGoodrich g-Force^{ED} tires**
- Fuel Safe fuel cell with high volume fuel pump
- Borla side exit exhaust
- Four piston Brembo front brake aluminum calipers
- Composite hood**
- Functional wing and splitter**
- 180 mph speedometer
- Deletion of stereo, air conditioning, rear seat and traction control.

**developed specifically for Cobra R

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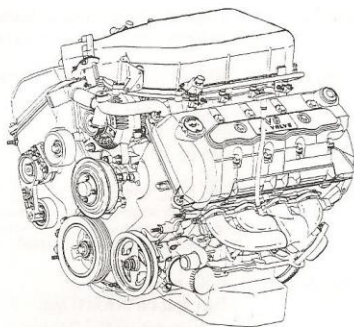
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ENGINE

Configuration	Longitudinally mounted, 90-degree V-8; cast iron block with aluminum heads.
Bore x Stroke	90.2 x 105.8 mm (3.55 x 4.17 in.)
Displacement	5,409 cc / 330 cid
Horsepower	385 hp @ 6,250 rpm
Torque	385 lb.-ft. @ 4,250 rpm <small>Horsepower and torque numbers are the mean of test results generated according to Society of Automotive Engineers Standard J1349.</small>
Max Engine Speed	6,500 rpm Fuel shut-off @ 6,800 rpm Ignition cut-off @ 7,000 rpm
Valvetrain	Double overhead camshafts, roller finger followers with hydraulic lash adjustment, four valves per cylinder.
Pistons	Forged aluminum
Connecting Rods	Carrillo steel H-Beam
Bearings	Federal Mogul
Ignition	Distributorless coil-on-plug
Throttle body	Single oval bore
Exhaust Manifolds	Stainless steel short-tube headers
Oil Pan	Canton racing products high volume windage tray
Pullies	March performance underdrive alternator and power steering pump

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FUEL REQUIREMENT

Due to the high performance nature of this vehicle, 93 or higher octane fuel is required.

ENGINE OIL RECOMMENDATIONS

When adding oil to maintain correct engine oil level, use SAE 15W-50 oil conforming to Ford specification WSS-M2C916-A or API Service Category SJ. If this oil isn't available, you can substitute SAE 20W-50 oil meeting the same requirements.

Do not use supplemental engine oil additives or other engine treatments. They are unnecessary and could lead to engine damage.

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DRIVETRAIN

Rear Axle	Visteon 8.8 inch with torque and speed sensing limited-slip differential. 3.55:1 final drive ratio		
Drive Shaft	Visteon aluminum 3.5 inch		
Halfshafts	GKN with 31-tooth splines, induction hardened.		
Transmission	Tremec T56 6-speed manual, speed sensing reverse lockout feature.		
Shifter	B&M Ripper shifter		
Gear Ratios	Gear	Ratio	Speed (mph)
	1st	2.97	47
	2nd	2.07	68
	3rd	1.43	98
	4th	1.00	141
	5th	.80	170 +*
	6th	.62	160 +*
	Rev.	3.28	

* limited by aerodynamics

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Intake and Exhaust

<i>Mass air</i>	80mm
<i>Exhaust</i>	Bassani X-Pipe to Borla side-exit exhaust with three Borla Mufflers.

Suspension

<i>Front</i>	Modified MacPherson strut with gas-charged, monotube Bilstein shock. 800 lb./in. Eibach spring on lower arm, 28mm tubular stabilizer bar.
<i>Rear</i>	Dual A-arm independent, gas charged Bilstein twin-tube shock absorber. 750 lb./in. Eibach coil spring, 26mm tubular stabilizer bar. High durometer bushings on suspension mounts.

Wheels and Tires

Front/Rear 265/40ZR-18 BFGoodrich g-Force^{XD} 97Y Ultra High Performance tire

Front tire pressure:	34psi
Rear tire pressure:	32psi

To optimize tread life, the tires should be heat cycled prior to competition.

Wheels Cobra "R" specific 18 x 9.5 in. cast aluminum 5 spoke wheels with Cobra "R" center ornament.

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BRAKES

<i>Front</i>	13.0 in. (330mm) vented Brembo disc, Brembo 4-piston aluminum caliper, Galpher 3214FF brake pads, Multimatic carbon fiber heat shields.
<i>Rear</i>	11.6 in. vented disc, single-piston caliper, Akebono NS181 brake pads.

REAR AXLE

GerodiscTM viscous limited slip differential with torque and speed sensitivity. 31-tooth spline induction hardened axle shafts.

STEERING

15.0:1 ratio rack and pinion power steering, for a high performance steering feel.

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COMPETITION RECOMMENDATIONS

Drag Racing

- Remove front air splitter.
- Remove spare tire, jack equipment, and tire iron.
- Inflate front tires to maximum sidewall pressure.

Autocross

- Remove spare tire, jack equipment and tire iron.

Competition Road Racing

- Install approved roll cage.
- Install brake duct hoses.
- Install front air splitter.
- Remove spare tire, jack equipment, and tire iron.
- Install heat shields around rear knuckle bushings.
- Install rear differential cooler.

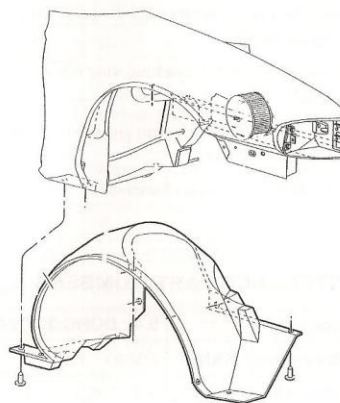
NOTE:

Permanent damage to the rear differential will result if the vehicle is road raced without installing a differential cooler.

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INSTRUCTIONS FOR SERVICING K&N AIR FILTER



ATTENTION! The Cobra R is equipped with a cleanable, reusable K&N air filter element (K&N service part number P/N E-3640.) **DO NOT DISCARD!**

To service the Cobra R Air Filter, which is located between the passenger side front apron splash shield and passenger side inner fender (shown above):

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INSTRUCTIONS FOR SERVICING K&N AIR FILTER

1. Remove splitter if installed.
2. Remove the front fasteners from the passenger side front splash shield.
3. Remove air cleaner lid attaching wing nut and air cleaner lid.
4. Remove K&N air filter element and service according to K&N specifications.
5. Installation is the reverse of removal.

MAINTENANCE PART NUMBERS

Component:	5.4L DOHC 32V V-8
Air Filter element: K&N #	E3640
Fuel Filter: Motorcraft #	FG - 986B
Battery: Motorcraft #	BXT - 59
Oil Filter: Motorcraft #	FL820S
Spark plugs: Motorcraft #	AGSF-12-FM1

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REFILL CAPACITIES

Fluid	Ford Part Name	Capacity
Brake	High Performance DOT 3	Fill to line
Engine Oil (includes filter change)	NA	8.5 qts.
Engine Coolant	Premium Engine Coolant WSE-9744-A	3.75 gal. (15 qts.)
Power Steering	Motorcraft WSA - M2C195 - A	Fill between MIN and MAX lines
Fuel Cell	NA	21 gal. dry cap.
Transmission	Motorcraft DEXRON III	3.1L (6.6 pints)
Windshield	Ultra-Clear Windshield washer concentrate	3.8L (4 qts.)
Rear Axle	M2C192A	2.6 pints
Friction Modifier	M2C118A	2.0 oz.

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MAINTENANCE RECORD

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