

THE E.R.A. 427



The Ultimate American Roadster

IN THE 1960'S, WHEN A BIG AMERICAN ENGINE was mated with a light British chassis, it created a revolution in performance sports cars. Many of these amalgamations even earned places in the winners' circles of International races. Their fame has made many of them collector's items, some worth more than one million dollars! Now E.R.A. brings you an affordable alternative – that matches or exceeds that classic style and performance in every way: **THE E.R.A. 427**

THE E.R.A. 427SC is available in two basic styles: The standard Street/Competition version has rectangular tail-lights, competition instrument layout and jack pads. The optional street version street-style dashboard with glovebox, grill splitter and chrome bumpers. If desired, either model can be changed to suit your taste with various options, as many owners of the original cars have done.

THE E.R.A. 427SC is the best of both worlds: A visually faithful reproduction where you can see. Improved over the original design where you can't. The chassis is strengthened and stiffened to reduce body shake - an important factor in an open car. The special E.R.A.-designed suspension works with the stiffer chassis to produce a combination of excellent handling and quality ride not found in other reproductions.

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Congratulations to SAAC 2000 winners, **Joe Speziale** (#385 427SC) and **Bruce Clark** (#2040 ERA GT), and **Jeff Burgy's** 289 in 2001!

Era Replica Automobiles, 608-612 E. Main St., New Britain, CT 06051
Tel: (860)224-0253 Fax: (860)827-1055 E-Mail: eracars@sbcglobal.net
Lots more information is posted on our great website: <http://www.erareplicas.com>



ALSO AVAILABLE:

Assembly manual for the **427SC**, **289FIA** or **ERA GT**: \$60 each in *hardcopy*, \$35 on *CD*, *ppd*, and \$30 *downloaded*.

Text-only versions of the **manual** are available free on the WWW at
<http://www.erareplicas.com/download.htm>.

Customer-built E.R.A. cars have won the
"BEST COBRA REPLICA" competition at the annual Shelby-American meet in
FIFTEEN OF THE LAST EIGHTEEN YEARS!

KIT CAR MANUFACTURERS were polled by Peterson's Kit Car Magazine. "Other than your own car, who makes the best Cobra replica, and why?"

The most frequent answer:
E.R.A. – OVERALL QUALITY

LISTEN!

"In every test we put it through Roy Allen's 427 E.R.A. showed its tail to the - everybody genuflect! - Ferrari F40 (price \$395,120.)"

E.R.A. TEST RESULTS:

"0-60 MPH" - 1st @ 3.3

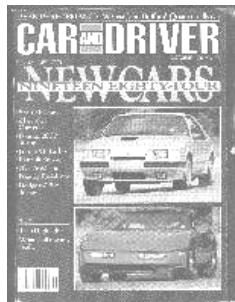
seconds, "roadholding, 200ft skid pad, g" - 1st

@ 1.05g, "braking 70-0" - 2nd @ 176ft,

"maneuverability, 1000ft slalom - 2nd @ 66.8mph.

The E.R.A. was the only car tested with a big block engine, giving away about 200 pounds to the competition. The only car that beat the E.R.A. in the slalom was a custom, single purpose auto-crosser with super-quick steering and 17" diameter wheels, 2" bigger and 3" wider than the E.R.A. Its extremely low profile tires had a competitive advantage over the more conventional (and original) tires on the E.R.A. The E.R.A. was a customer built street car, with no modification to the standard kit other than slightly stiffer springs.

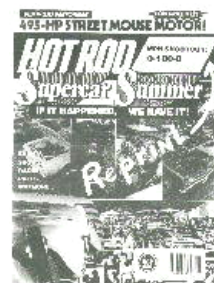
Car and Driver magazine, Dec., 1991 (Comparison test between an E.R.A. and three of our competitors)



"At the end of the day, Stacey Pendergast had himself four trophies. He had won the Class A plaque in the autocross: he had the Class A (bracket) honors; he had the Top Dog Drag Strip trophy, and by combining his second in the autocross with his first-place time in the drag strip, he had a total of three points to give him the Top Dog Overall award.

The fact that the A bracket winner, runner up and semifinalist (Bob Newman) were all driving E.R.A. Cobras speaks very highly of those cars."

Kit Car Illustrated, Dec., 1991 annual "Run & Gun" competition Fifty six cars entered this event. While many companies sent specially prepared vehicles, (and in some cases hired professional drivers) E.R.A. lets our customers show how good an E.R.A. is. They rarely disappoint us!



"...the king of the hill in this test was Bill Thornton's E.R.A. replica Cobra. This bruiser managed 100 MPH in second gear, while scorching the entire trip from 0-100-0 in only 12.07 seconds! Excellent braking power helped the Cobra win this contest."

Hot Rod magazine, Nov. 1987
"MPH Shootout 0-100-0"

"You should be very proud of the performance of your Cobra replica. An average of 0.97G on full skid depth Comp T/A 50 series tires is truly an accomplishment for a streetable vehicle".

BF Goodrich tire testing, June 1984, quoting from a letter accompanying test results

On the same skid pad the then new Corvette with 16" wheels and the latest Goodyear Gatorbacks recorded a high of only 0.90G.



"Its all around performance also impressed us. Toss in the completeness of the kit and the fact that this is the most exacting duplicate of a 427 Cobra, and you have found what we suspect to be the best choice for a serious replica Cobra builder."

Motor Trend magazine, January 1983, in which they compare the E.R.A., Contemporary, Butler and Aurora Cobra replicas.

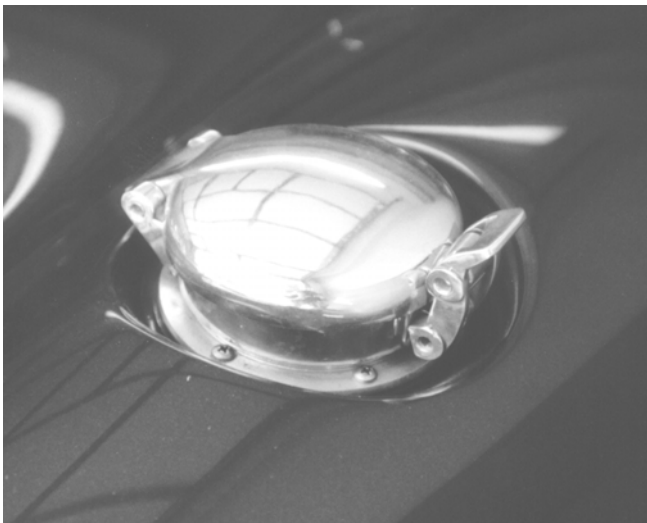
LOOK!

The E.R.A. 427SC is a **visual clone** of the original sixties roadster. Every detail is duplicated, from the competition jack pads (or optional chrome bumpers) to the exposed roll bar.



Our body shape is indistinguishable from the original, and the relationship of the tires to the body is correct, unlike many other "replicas."

We think the car that we duplicated is the **best looking** of the lot. Some original competition cars had slightly more sharply defined rear fender flares. If you wish, we can change our standard flare to that shape.



Authentic **exterior hardware** is standard. The windshield is chrome plated brass. The fuel filler is polished aluminum, with a spring loaded latch system and an internal safety cap.

Even the proper exterior **side and dash mirrors** are included.



Because the original cars were hand formed, the AC factory made many variations of the basic shape. Even bodies off the same buck varied slightly from car to car – and certainly from side-to-side.

The **doors** are **fully upholstered** and have a storage pocket like the original car did. Our hinges are **extra heavy duty** and have a replica of the **original** fiberglass cover.



The door **handles and latch mechanisms** are reproductions of the original Silent-Travel® design. The door-mounted latch is attached to a steel inner framework, while the stationary striker is mounted to the chassis.

We even include the stainless steel side curtain and top frame **receptacles**. *Also included* are all gaskets and the aluminum door moldings, as original.

To complete the look, duplicates of the original shift lever, emergency brake handle – and even an ash tray – are available from E.R.A.



The **fresh air grills** and original style grommets for the **aluminum bumper tubes** are not only included, they are installed!



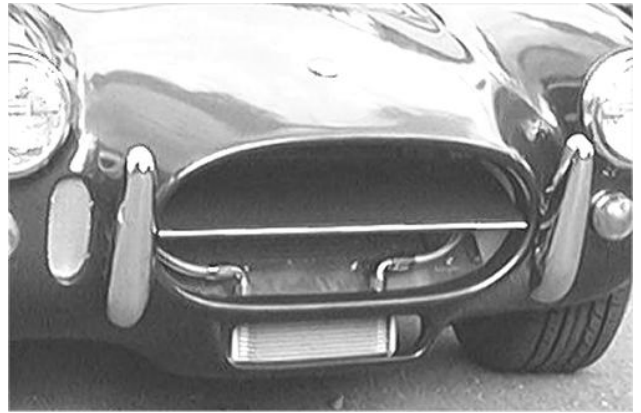
The optional **chrome plated steel bumpers (below)** are mounted so that loads are sent directly to the main chassis rails. They actually work much better than the original ones. For those duplicating the original race car, jack pads can be substituted for bumpers at no extra cost.



A close look above shows more subtle differences between the street 427SC (top) and the competition version: The splitter in the radiator opening was used only on the street cars. The oil cooler shown at the

bottom was used on all the comp cars and added to many of the street ones. Even the front parking lights were different – having more to do with vintage (all real comp cars were at the beginning of the production run) than requirements for racing.

The grill splitter, used in the **street** version of the original car is optional.



Tail lights also differed from the early to the late versions of the 427SC.

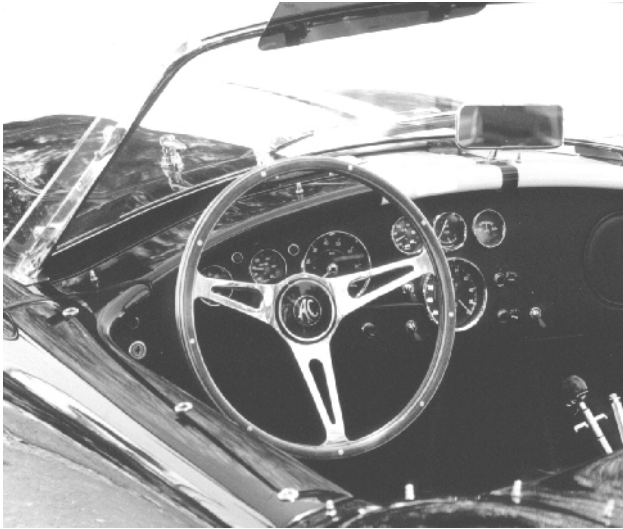


Early cars used single rectangular lenses (ERA standard), while the later cars used one round light (optional) and a round reflector below.

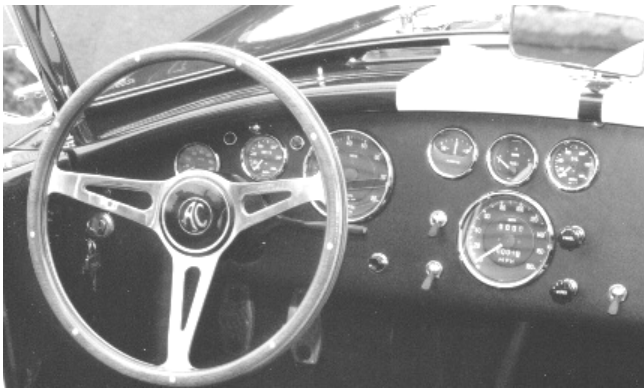


With the chromed overriders, the front and rear **bumper hoops** are optional. If you are going to drive your car daily, the extra protection is useful.

COCKPIT



Stewart Warner® instruments are standard. Smith's instruments (shown above and below) are optional.



The standard **dash** layout (no glovebox) duplicates the original comp car. The oil pressure, water temperature and tachometer are directly in front of the driver, with the speedometer in the center. Speedometers are available in clockwise and counter-clockwise styles. If you wish, we can add the **glovebox** to this gage configuration.



The optional **street version** (above) has the steering column flanked by the speedometer and tachometer, with the small instruments in the center. A **fully finished glovebox** is located at the right side.

The **interior** is complete with nylon carpeting, vinyl door pockets and seats, **all visually correct**. Leather seats and trim are optional. Black is standard, other colors (a tan seat is shown below) are available on special order. E.R.A. also offers reproduction seatbelts and shoulder harnesses that duplicate the original car's, and of course the mounting points are built right into the chassis at strategic points.



E.R.A. offers a **steering wheel** and upper **column** that are identical to the original, complete with the proper center cap.

We even include **tubes** that extend from the **tunnel to the dashboard**, like the original car.

E.R.A. is unique in offering as standard ducted **fresh air to both footboxes**. All the necessary ducting, valves and control cables are included – and installed on every kit, standard.

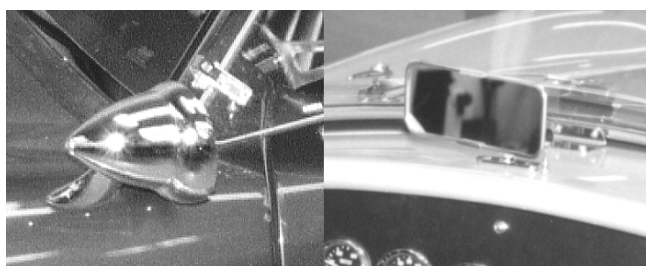


We include the chrome trim ring and boot just like the original, and when the optional linkage is installed, it is correctly located on the **removable aluminum tunnel**.

A replica of the original modified Ford **shift handle** is optional, with variations to fit Ford®, Hurst® or Long® linkage. Since the linkage is moved toward the back of the Top-loader transmission, E.R.A. offers the complete modified **linkage** also.



Original style **mirrors**, both fender and dash, are supplied with the kit.



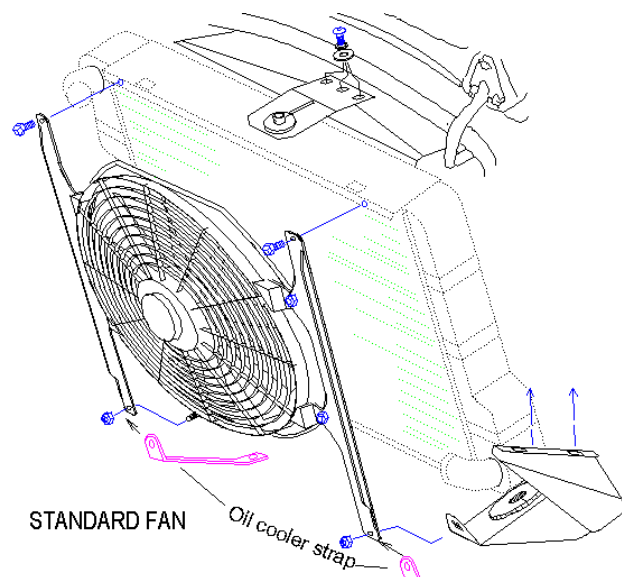
E.R.A. even drills the holes in the front and rear cowl and supplies the male Lift-a-Dot® fasteners for the optional tonneau and soft top.



Our roll bar is visually as original (exposed behind the seats) and fully functional. It is mounted to the main frame rails through pinned sleeves, so that it can be removed or even retroactively installed. Exposed in the passenger compartment and mounted directly to the main chassis rails, it can be painted or chromed.



Our custom **radiator** (with standard **electric fan**) is one of the largest in the business and fully shrouded in aluminum, and mounted on pins in an aluminum cradle. Even the top mount and filler are made to duplicate the original look.



The aluminum radiator is built to our specifications by Griffin®, with double 1.25" rows, and rated for 500 bhp. At any speed over 20 mph, your car's temperature will be in total control. Provisions for mounting the optional oil coolers are integrated into the design too. The standard fan will cool mild big-block engines in temperate climates. For those with harsher environments, a larger rear fan is available, as are double front fans like used by the original roadster. A thermostatic control (and override switch) is standard, as is the power relay.



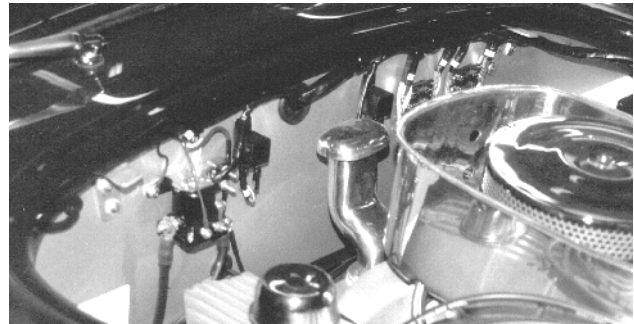
For the ultimate in authenticity, you should use **Pin Drive wheels**. All pieces are available from E.R.A.: Our custom E.R.A. hubs have the original 6 pin pattern so you may use the original Halibrand magnesium wheels, Trigo or Vintage Wheel aluminum reproductions, or 17" *modular* wheels from PS Engineering shown below.



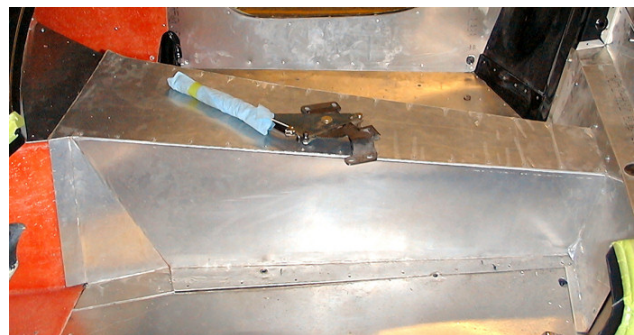
Five-pin wheels and adapters are also available. The five-pin wheels duplicate the outer look exactly but are driven by special round lug nuts. The five-pin wheels carry a few extra pounds per wheel because of the adapter and heavier wheel.



The windwings and sunvisors are top quality and installed on the windshield at the factory.



The engine compartment firewall is aluminum, with the holes for the firewall components pre-punched. The fuse boxes, relays and wiring harness are included. Each wire is color-coded, and all the wiring connections are labeled for easy installation. Every ERA looks as good as this one, no matter who puts it together.

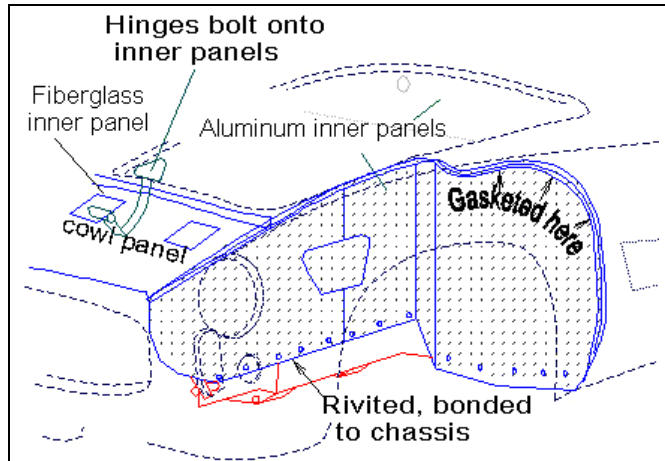


Aluminum tunnel

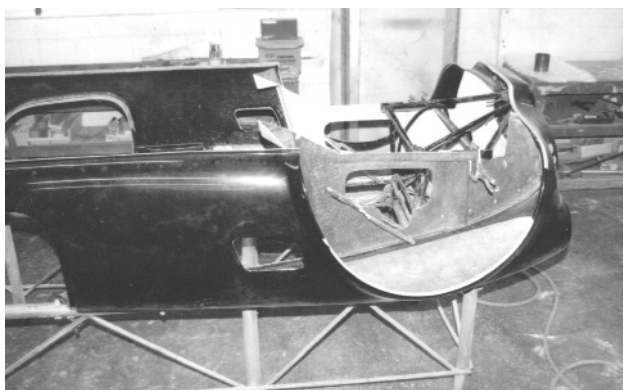
BODY CONSTRUCTION

The integration of our body, interior panels and supporting frame creates a structure that is superior to other kits. On the road, the E.R.A. 427SC is rock-solid, without rattles, drumming, or shakes.

Other manufacturers bond the inner panels, hinge and latch supports directly to the backside of the outer body. On the E.R.A. 427SC, the outer body is just that - the outer shell of the car. It carries **no supporting loads**.



The factory installed inner cowl panels bond only to the hidden **return lips** of the outer body at the top of the radiator opening, the front, side and rear edges of the hood, the dashboard and rear cowl area and the front and rear edges of the trunk. The **aluminum splash panels** are riveted to the fiberglass inner panels, tubes bonded to the body lips, and the chassis.



Bulb-type rubber gaskets are used to seal between the wheelhouse panels and the outer skin to keep the elements out.

This special technique **eliminates print-through, waviness and stress cracks** on the outer body surface. We want an E.R.A. body to look as good after years of use as it does

when it's new. To the best of our knowledge, no E.R.A. body has developed a single stress crack, **even after 20 years on the road**.

We use **Coremat™** in all four wheelwells to prevent stones thrown by the tires from damaging the outside body or paint.

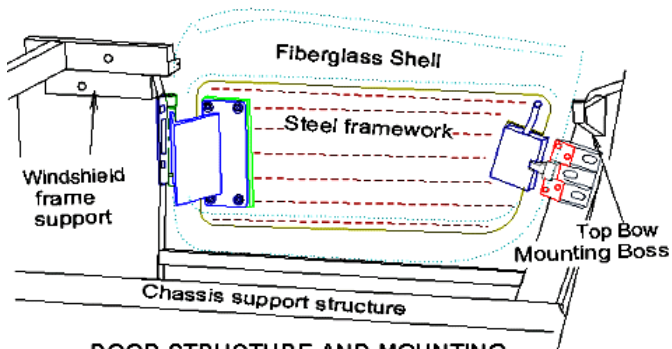
The body panels are fastened to the chassis by **bonding and riveting**. This special technique results in a solid, rattle free **semi-unitized structure**. Removal of the engine and transmission is still very easy. This car is designed to be serviced without removal of the body.



The hood and trunk lid are two piece: An outer skin and a finished inner panel carrying the hinges and latches. The hinges of the hood and trunk lids are attached to the **inner panels only**, with nut plates for attachments bonded in.



The doors have a steel frame supporting the fiberglass inner and outer shells. The **steel framework** supports the heavy duty hinge and latch mechanisms, with the fiberglass shells remaining stress free.

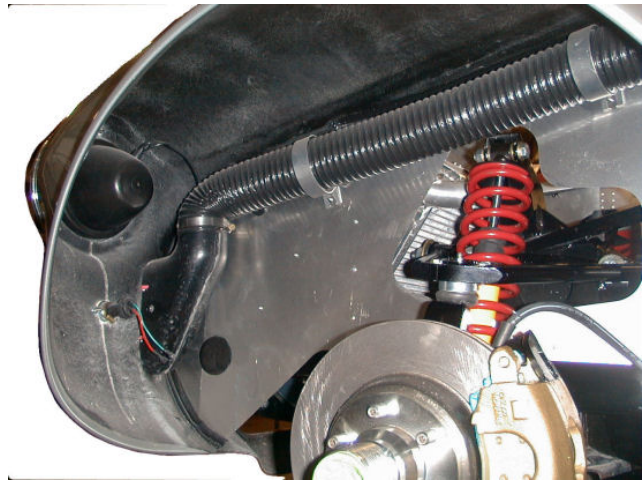


DOOR STRUCTURE AND MOUNTING

Doors are hinged and latched directly on the steel chassis, eliminating sagging and mis-alignment.

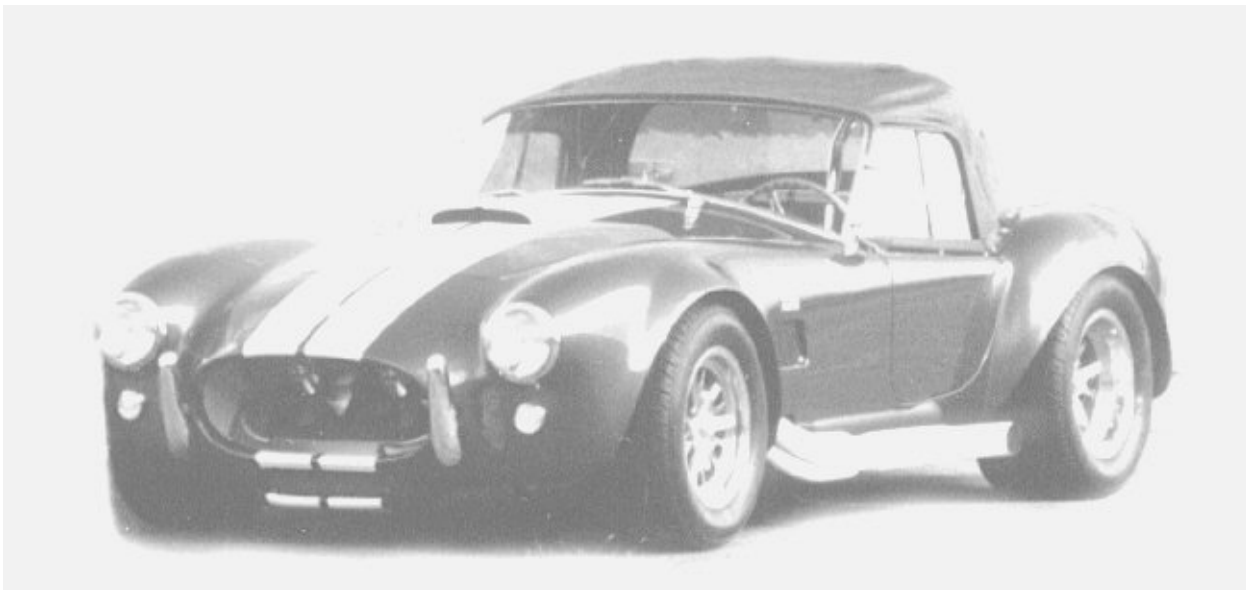
Our Fiberglass footboxes are two inches longer than the original car for more leg room than any standard wheelbase replica. They attach directly to the tubular steel frame extensions, as original. The rear bulkhead (with removable access panels) and side interior panels are aluminum and attached to the frame as original.

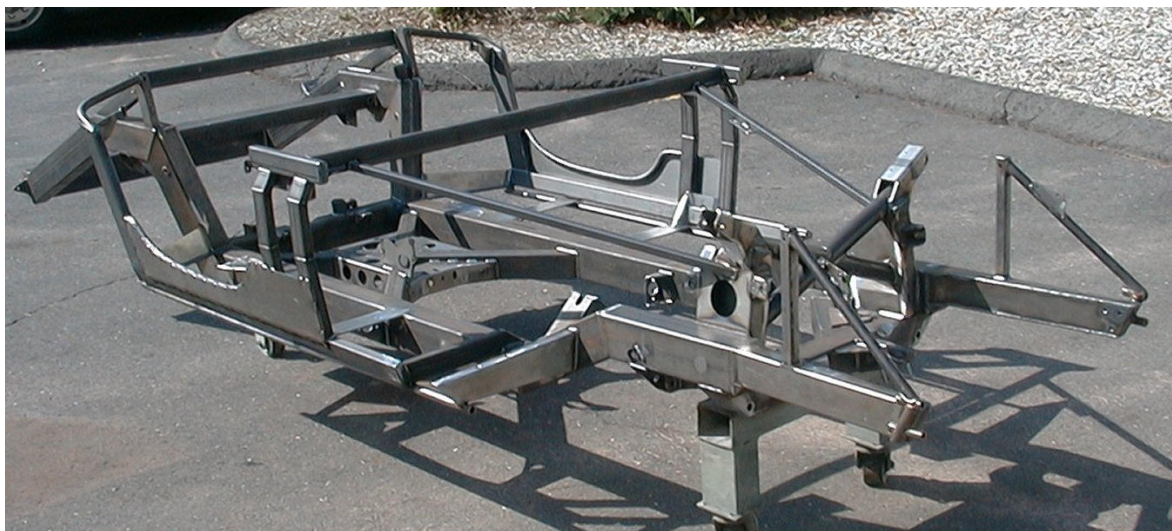
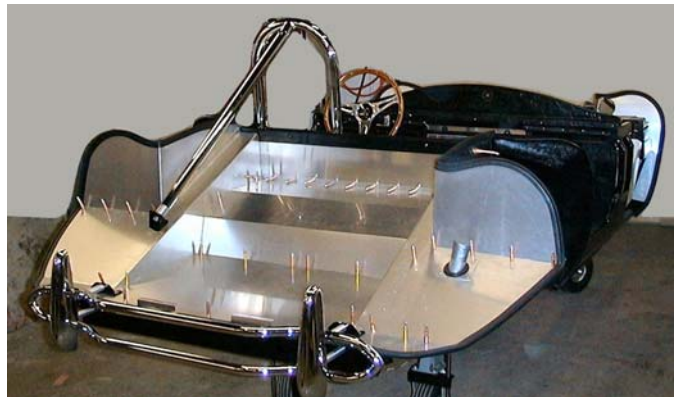
For the street, the original brake cooling ducts are converted to driver and passenger fresh air vents. All hoses, valves and controls are included.



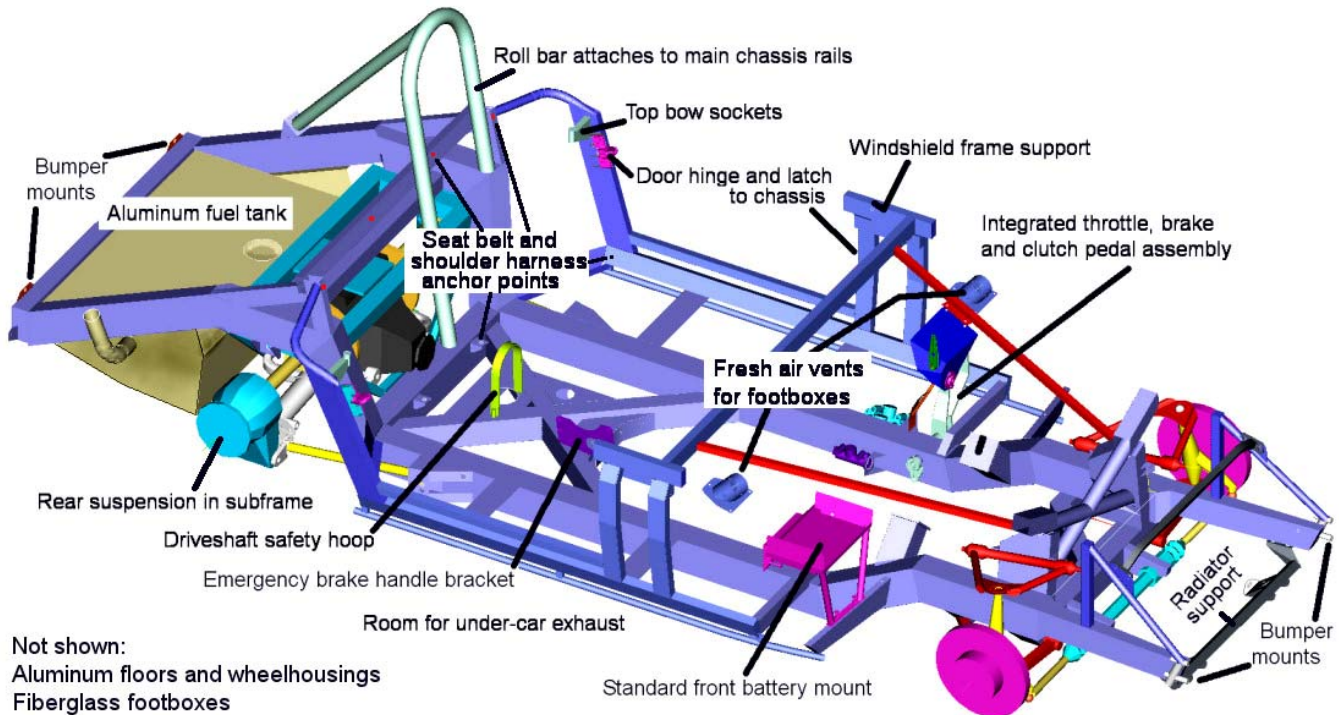
E.R.A. uses **aluminum floor and rear bulkhead panels** that attach directly to the chassis like the original sixties classic. The **tunnel is removable** for servicing the transmission and clutch, fastening to the floor as the original did.

We also use an aluminum **engine firewall panel**, pre-punched for all the fuses, relays and grommets. Anodized aluminum front wheelwell covers are optional.





THE E.R.A. 427SC CHASSIS



THE E.R.A 427SC CHASSIS was designed from the ground up to handle the power that most E.R.A. owners expect. The original Shelby Cobra's **narrow ladder frame** was its **weak link**.

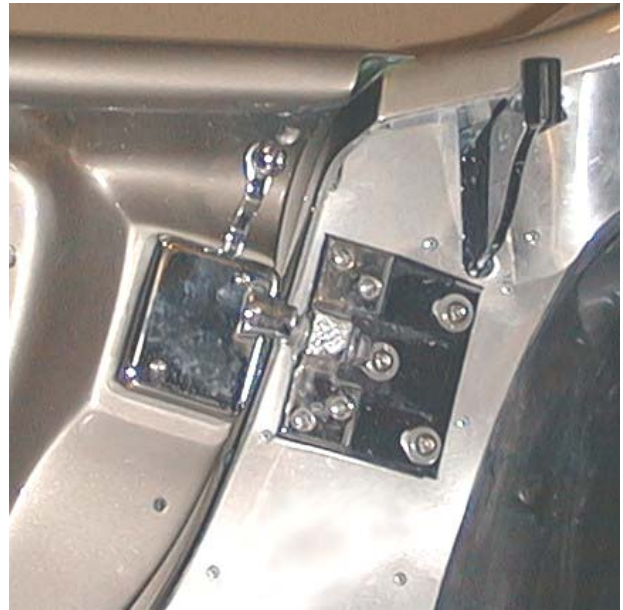
It made **no sense** for us to have modern suspension and attach it to a flexible and antiquated chassis. We have **departed from the original layout** because it was **not good enough** for us, or you.

The chassis is designed to accept Ford small block and FE engines without modifications. We also have jigs to fit the Ford 429/460 and Chevrolet small and big block engines. Because we use a bolt-in adapter, most Ford, Tremec and Richmond Gear transmissions will fit without modifications, too.

While our basic chassis design has been changed from the original, we have tried to keep the visual aspect correct. In the engine compartment, we have retained the round-tube "X" that reinforces the front suspension. Also, we have kept the exposed roll bar behind the seats.

Everything on this chassis is designed in: Brake pedal system. Seat belts and shoulder harnesses. Door hinges and latch mounts. Drive shaft safety strap. Windshield mounting system. That way, you don't have to worry about fiberglass flexing, sheet metal stresses, or having to re-engineer some peripheral bracket. It's all there. If

you're interested in learning the details of how and why we chose this overall layout, see the next page.



Door Latch and Striker

When we designed the E.R.A. frame, we knew that it must:

Accurately **maintain** the position of the suspension mounting points, even under high loading from several directions. Flex will cause unwanted camber and toe changes. **Also**, the suspension pieces should be designed to minimize deflection when transferring loads from the tires to the chassis.

Minimize chassis twist between the front and rear suspension. Any movement will disturb the designed-in weight transfer of the springs under cornering forces. This can result in unpredictable handling, especially on uneven roads.

Support the body and components so that shakes and rattles are minimized.

Protect the passengers and fuel storage areas from harm. It should progressively collapse under front impact, so that crash loads to the occupants are reduced.

Be dead **reliable**. Generally, if a conventional frame is stiff enough, the basic structure will be very strong. However, suspension pickup points are prone to fatigue failure where the brackets are incorrectly attached to the tube. Our chassis minimizes the local stresses, and is reinforced at bolt holes where necessary. We have never had a structural failure in the chassis, even after the chassis has been bent in an accident.

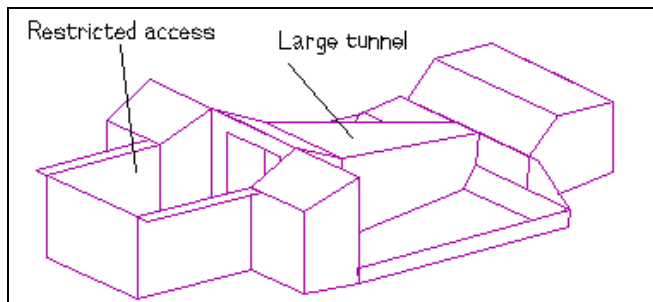
When you examine other chassis, look for places like cantilevered brackets or unreinforced bolt holes. Also check out the welding quality. Welds should be relatively flat and smooth.

The **strength and stiffness** of any structure is the result of the interaction of all its elements. The best chassis design has individual parts that act together to make something that is **greater than the sum of its parts**.

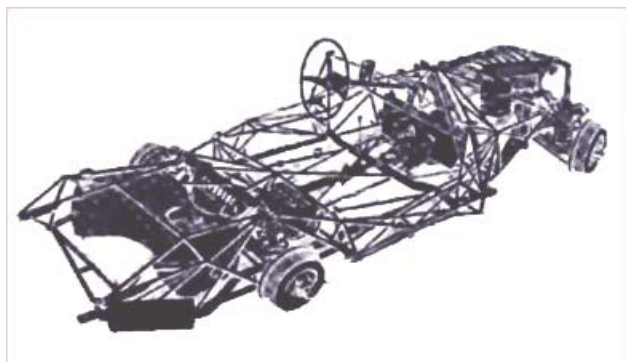
A classic roadster chassis is one of the most difficult to design. The main frame rails must be completely beneath the floor. The rocker panels are too small to carry major loads.

We explored all the Design Alternatives:

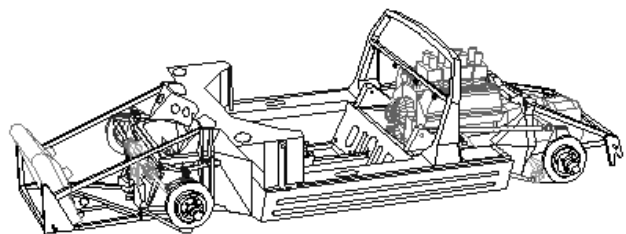
Backbone: The tunnel becomes a primary load bearing member. This is a potentially fine design, but because the E.R.A. 427SC was designed around the original Ford FE engine, the bulk of a structural tunnel was unacceptable. The backbone would also make it impossible to maintain the look of the original interior and engine compartment, and also would create servicing difficulties.



Space frame: A true space frame has small tubes that are in tension or compression only - no bending or twisting loads. It is nearly impossible to build an efficient space frame around a low-rocker body. The rockers are simply too shallow, and the tunnel shaped incorrectly to make a reasonable structure. Remember the 300SLR Mercedes? It had rockers 10 inches tall and 10 inches wide. The chassis used hundreds of separate tubes. It was difficult to build and a nightmare to fix. [The "space frame" chassis that is presently built for another roadster replica simply uses smaller tubes, many carrying bending and torsional loads.

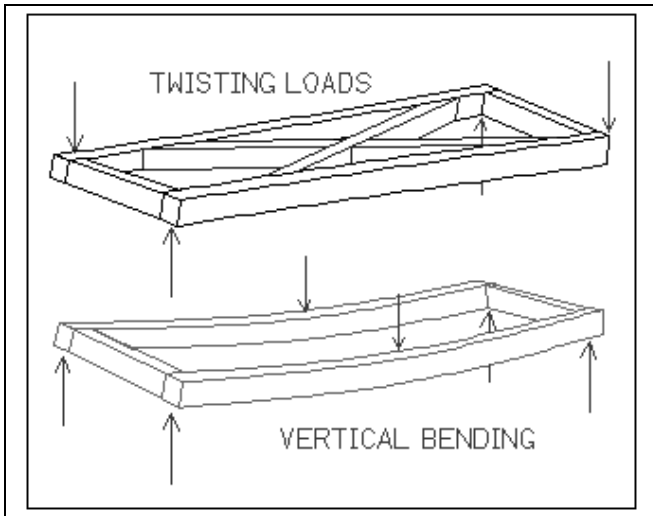


Monocoque: An airplane (with a stressed outside skin) is close to a true monocoque. In the automotive world, it's time to compromise again. Generally, the interior panels are stressed, but the outside has an aerodynamic facade of 'glass or aluminum.



The original GT40 - and our ERA GT - have a monocoque chassis. The heaviest (steel) main panel on our ERA GT is only .045" thick, and most are only .032"! Reinforcements are required at the suspension points where there are local high loads. With the rockers 10" high x 9" wide, the net result is an incredibly stiff structure. But you can't build a good replica like this.

Round vs. Rectangular frame rails: We chose to use rectangular tubing in our chassis for several reasons: Under pure vertical bending stresses, 4" x 3" rectangular tubing is about **37% stiffer** than an equal thickness 4" round tube. This is especially important because a roadster doesn't have a roof to stiffen the passenger compartment. We also have a well braced "**X**" member, acting as an additional longitudinal beam reinforcement and as two transverse members.



Torsional Stiffness: Even though an individual rectangular tube is about 2% less stiff in torsion than the equivalent round tube, we must **consider the chassis design as a whole**. For each transverse tie-in we create a system that becomes more like a single large tube spanning the whole width of the chassis- the ultimate in efficiency. We have placed **7 transverse members** along our main rails in such a way that the chassis has much more torsional stiffness than the tubes taken individually.

The **stiffness** of an ideal unitized structure is proportional to the **square** of the distance of the components from the centerline. Double the distance and you have four times the overall stiffness. While practical automotive considerations eliminate an ideal connection between the rails, widely spaced tubes that are tied together will work more efficiently than the same tubes on a narrower base. The original Cobras' rails were only 20 inches apart. Ours are spaced at 27 inches on center through the middle of the chassis, one of the widest spacing in the industry. And we still are one of the few in the industry that have left room for an under-car exhaust outside the rails.

A tubular **steel sub-structure** is welded directly to the main rails and extends completely around the passenger compartment. This structure provides not only the mounting areas for the body support panels, door hinges, latches and dashboard, but also some passenger protection. Stress cracks in the body, cowl shake, squeaks and rattles are eliminated. Because the inner panels of body rivet and bond to the chassis, we have

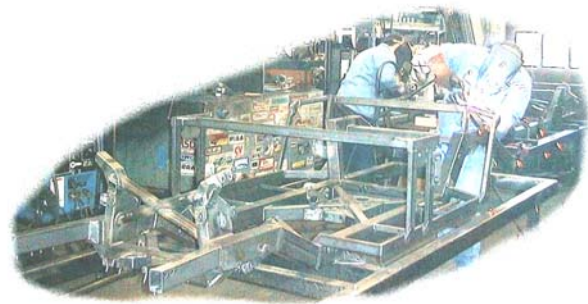
created a **semi-unitized structure** that extends from the front of the engine compartment through the rocker panels and along the rear of the passenger compartment. **Assembling the car with this degree of integration may take a little longer, but you end up with a much stiffer overall structure.**

Our suspension pickup points feed loads **directly into the chassis**, minimizing bending moments. Where there are practical limitations, large sections and/or reinforcements are designed in.

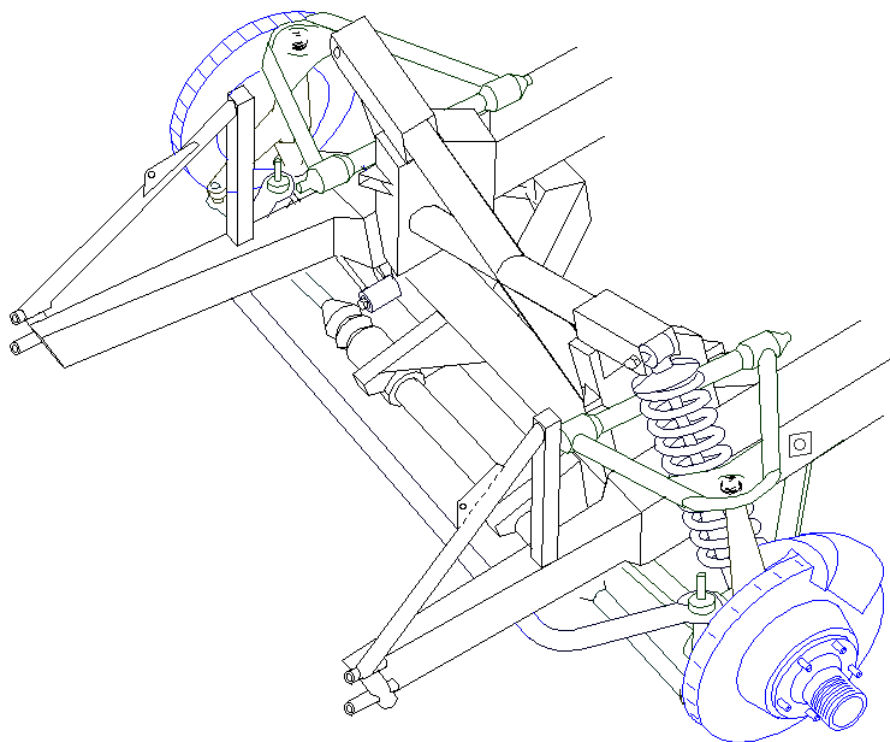
The chassis allows the suspension to take full advantage of today's advanced tire technology.

Crash Protection: Our chassis has **two stages** of impact dissipation.

- The optional **bumpers** will collapse progressively until the bracket contacts the front of bumperette.
- The kickups in the front section of the chassis are designed to **distort progressively** up and back under severe impact.



FRONT SUSPENSION



The **E.R.A. 427SC independent front suspension** uses our own custom made tubular control arms in a non - parallel, unequal length configuration specifically designed to be a complement to the rear suspension. Good **camber** gain and **anti-dive** are designed into the geometry. Wheel travel is very generous.

The direct **rack and pinion** steering gear has 2.7 (Subaru) or 3.1 (ERA) turns, lock to lock, with a 34 foot turning circle.. Effort, even without power assist is fairly light, and the steering has plenty of feel.

"Bump steer" is the toe-in change that the front or rear tire takes as it travels up or down. With poor bump steering characteristics, a car will dart from side to side over bumpy roads and have potentially dangerous transient reactions. Through careful design of the E.R.A. 427SC geometry, bump steer is near zero over the full range of the wheel travel.

Front coil-over shocks are mounted to the **chassis "X"** brace just like the original Cobra. We recommend our custom made **Spax** units with external adjustments for both damping and height, but you can use any damper with appropriate specifications.

Modified GM uprights, new upper control arm cross-shafts, ball-joints, bushings and fasteners are included. They are ready to accept standard GM vented discs (11" x 1" wide) or optional 12"-13" x 1.25" rotors with Sierra

(JFZ) or Wilwood calipers. All variations can be fit with **pin drive wheels**.

The optional E.R.A. **steering column** and **wood steering wheel** are visual duplicates of the original parts. The rack and pinion steering gear gives the precision you expect in a sports car. Custom fabricated **tie rods** and **lower steering column** are also supplied with the kit.

A large **anti-sway bar** is optional.

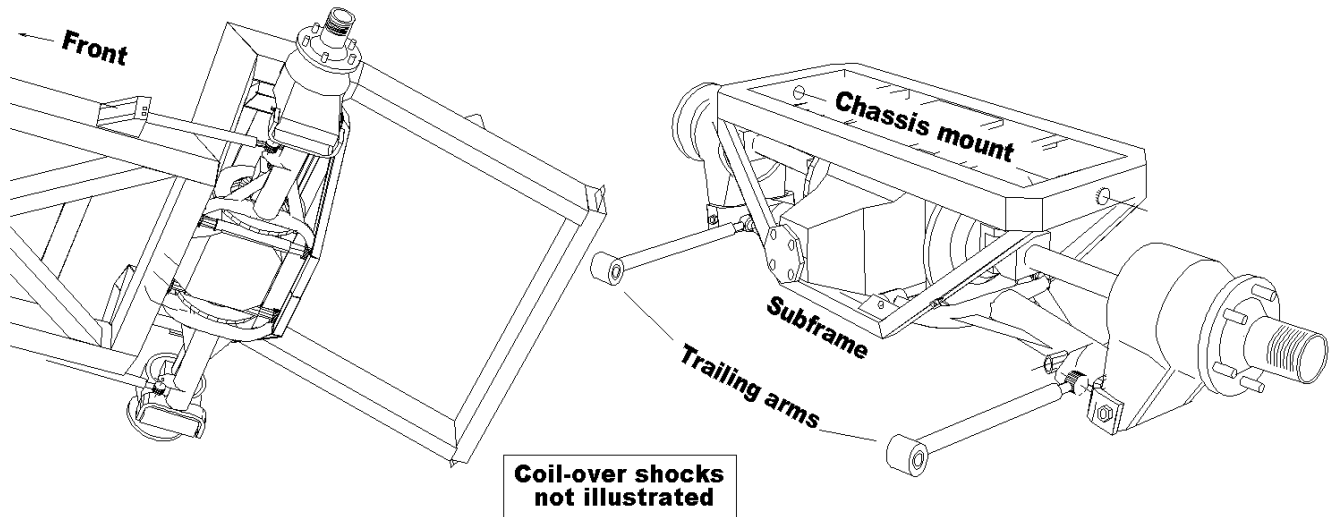


Bump-Steering the custom ERA upright

INDEPENDENT REAR SUSPENSION

A solid rear axle can make things very difficult in a short wheelbase, high performance roadster. The length of the original Ford top-loader transmission makes the drive shaft so short that wheel travel of the rear axle would have to be limited, resulting in the bad choice of the shocks bottoming out or resorting to unacceptably stiff spring rates. Result: unpredictable handling. The **E.R.A. IRS**, both in modified Jaguar and special E.R.A. design is

based on the Jaguar/Dana 44 differential, basically the same unit that was used in the original Shelby 427 Cobra. All E.R.A. made assemblies have a **Powerlok®** differential with gear ratios available from 2.66:1 to 4.11:1. The subframe with all the suspension is a simple **bolt-in**, and may be installed or removed very quickly. Our own heim-jointed **trailing arms** are included to locate the rear axles. **Anti-squat geometry** is designed in.



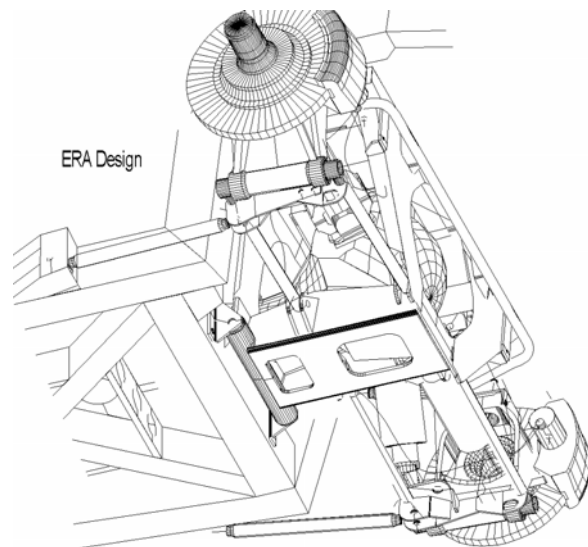
MODIFIED JAGUAR This IRS variation uses XJ-6 components, but modifies the configuration for **maximum performance**. Axles and control arms are modified for the correct track, and the components fit in our unique **SUBFRAME**. This subframe **isolates** the suspension and differential noise, vibration and harshness from the chassis and allows us to feed suspension loads into the chassis properly.

We stock **used XJ6** units and sell them at our cost, as is. For those not wishing to do their own rebuilding, we offer complete rebuilt units. If you build your own, we will modify the parts at no charge with the purchase of our subframe. An **anti-roll bar** is optional.

E.R.A. DESIGN (Optional) Like the Jag-based suspension shown above, all components are carried in a urethane-bushed subframe (aluminum instead of steel, though) to reduce road noise and vibration. It uses Jaguar stub axles and bearings, but all the other components are different, saving 50 pounds. Custom cast aluminum hub carriers mount PBR calipers clamping 11.75" vented rotors. A real, working emergency brake is designed into the caliper.

Suspension geometry is ideal for both street and track use, and the outboard rotors cool better than the Jaguar inboard brakes. The anti-sway bar is optional.

Conversion kits for your differential and brake components are also available.



DRIVE TRAIN AND BRAKES

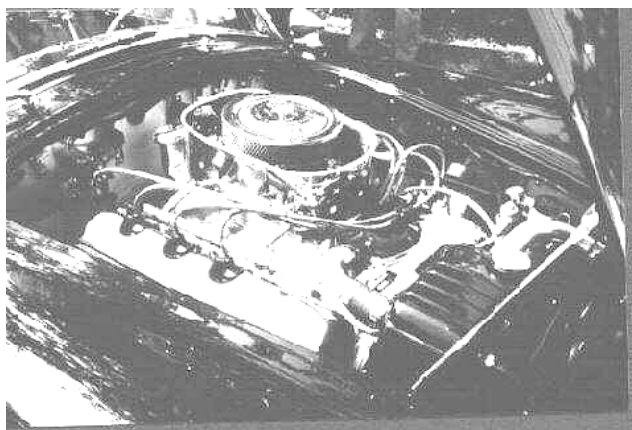


427 Side-Oiler

The original Shelby 427 used both the 427 Side-Oiler and the 428 Cobra-Jet engine during its production run. Ironically, the NASCAR 427 had only one 4bbl carburetor, while the street 428 had two.

Because the E.R.A. 427SC has a reputation for authenticity, we encourage you to use an original type engine. **The E.R.A. 427SC is designed specifically for the FE series blocks: the 390, 428 and the 427 center and side oiler engines.** In fact, over 90% of our 427SC's are FE-powered.

We can also fit many other choices: We have mounts and footboxes for 289/302/351 and 429/460 Fords, Chevrolet mouse and rat motors, and even the monster Ford 427 Cammer.



You may use the following transmissions: Ford Top-Loader, Richmond Gear (Doug Nash) 5 speed, or Tremec TKO boxes. With the small block, the Mustang 5 speed can also be installed. We also have mounts for the Ford C-6 automatic.

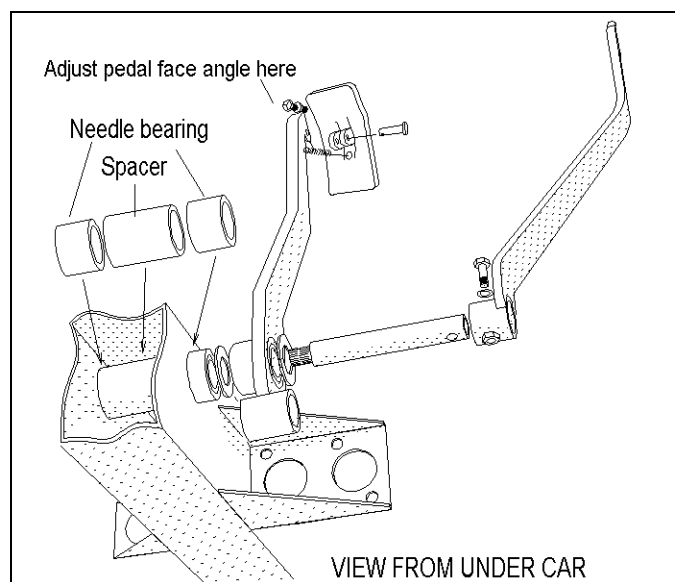
E.R.A. has developed **Hurst shift linkages** for all the big block **Ford** transmissions and a Long Shifter for the

Richmond Gear transmissions. The E.R.A. linkages and reproduction shift handles are optional. Of course, the handle is placed so that it **duplicates the original look** on the transmission tunnel.

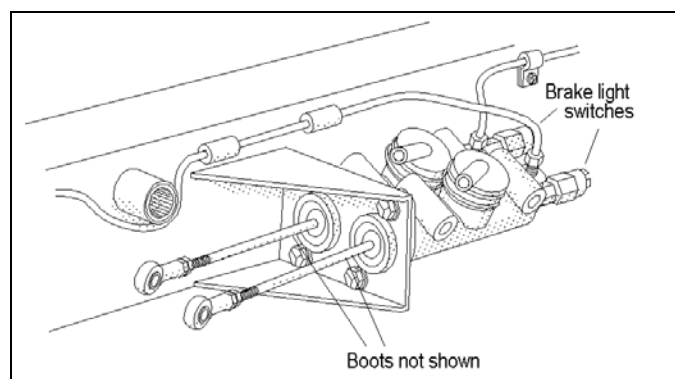
We also make a bent lever that mounts on the Tremecs, duplicating the original position and look.

BRAKES

The braking system is designed for maximum safety, efficiency and balance. 11" vented front rotors and 10.5" inboard rotors at the rear.



Dual Tilton master cylinders are connected by an adjustable balance bar. Floor pivoted pedals ride on needle bearings installed directly in the chassis.

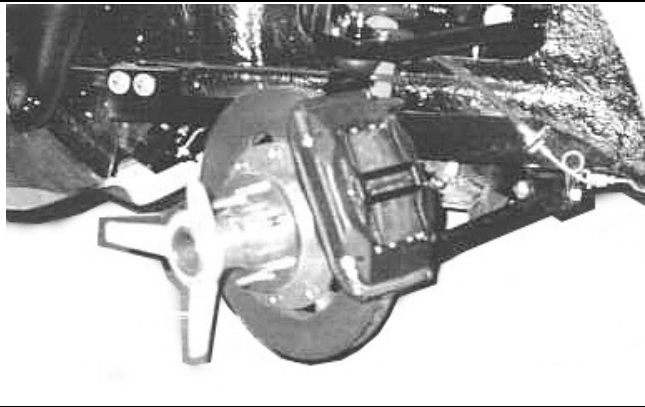


The **complete hydraulic clutch release system** is included in the kit, with all but the slave cylinder and connecting line **installed** on the chassis. Also included are a slave cylinder

bracket and the adjustable link to the throwout fork. You just bolt the pieces in.

All **brake and clutch lines** (including the flex hoses to the calipers) are installed. Also installed are the clutch pedal, master and slave cylinder; fuel tank, cap, filler pipe and lines.

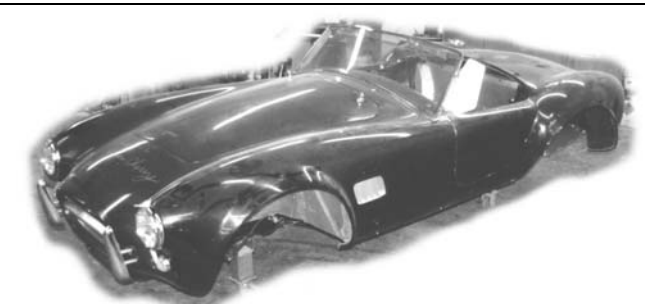
Special **brake** components are available for **racing** only. Twelve inch rotors with JFZ calipers for the front and the new ERA outboard-brake rear give excellent track performance.



The **bottom line** of all these components is **PERFORMANCE**. Many make claims, but E.R.A. delivers! In the 2000 Northeast Replica Challenge, ERA customers won every class that they entered, and a 427SC had **Fastest Time of the Day** too.

Read the independent tests enclosed. The cars tested were not unstretable "ringers," built especially for the tests. They were built by their owners.

THE KIT YOU CAN BUILD, EASILY



A standard ERA kit, ready for pickup

Real people with normal tools can build an E.R.A. 427SC kit in about 100 hours, excluding the paint and body preparation. *To demonstrate this ease of assembly, we put together a kit at a SAAC convention in California in 35 man-hours, excluding interior and paint.*

If you have any experience in normal automobile service, putting our kit together will be easy. Using our comprehensive assembly manual, even novices can do it.

You simply put the pieces together. *There is no fabrication necessary. Building the E.R.A. 427SC is like a building a production car in your home.*

Carefully chosen components are integrated into the total design. The mounting holes, caged nuts, brackets, adapters, etc. for these components are included in our kit already. This not only makes your job easier. **It makes the quality of all ERA cars higher.**

E.R.A. can do any or all of the assembly for you, through a turn-key car

If you ever sell your car, the advantage to this philosophy will become obvious. People have come to expect ERA's to have consistent quality, and they are willing to pay for it.

GETTING THE PARTS TOGETHER

Buying any replica involves a considerable commitment of money and time. Our goal is to **protect your investment**, as well as our reputation. **The result:** our *standard assembly* has almost every part either hinged, latched, or fit **before it leaves the E.R.A. factory.**

The customer can provide as much or as little of the drive train as he or she wishes: Big or small block Ford (or Chevy) engine, transmission, Jaguar rear suspension assembly, GM front hubs and brakes, Subaru rack and pinion, steering column, coil-over shock units, exhaust system, steering and road wheels and tires. With few exceptions, everything else necessary to complete a finished automobile is there, down to the wiring harness clips.

Everything we supply is the highest quality. Our windshield frame is superb chrome plated brass. The headlights and parking/signal lights are OEM quality, made in the UK. Our wiring harness has soldered ends, not just crimped on, and is clearly marked at each connection. We do the details right!

Because the drivetrain may vary, our standard kit doesn't have items like radiator hoses. However, part numbers are listed in the manual so that you can find the required pieces locally.

If you have difficulty finding any required parts, E.R.A. can supply them at competitive prices.



NO PAIN, ALL GAIN

The E.R.A. 427SC is not available in a stripped down version that will probably never be finished properly. Our "Standard Assembly" is the most comprehensive basic kit offered by anybody.

The reason for this is simple. We are proud of what we do. We took the time to design and manufacture the best replica available and we wanted it to stay that way.

Inconsistency dilutes the value of other kits no matter how well they were built by the customer. In fact, other marques have been falsely advertised and sold as E.R.A.'s because of this.

Our cars have achieved a reputation ensuring consistent demand and high market value because *all E.R.A.s* were of the same high quality, with the same detailing and standard of finish.

We think that the E.R.A. 427SC will be an investment that appreciates with time.

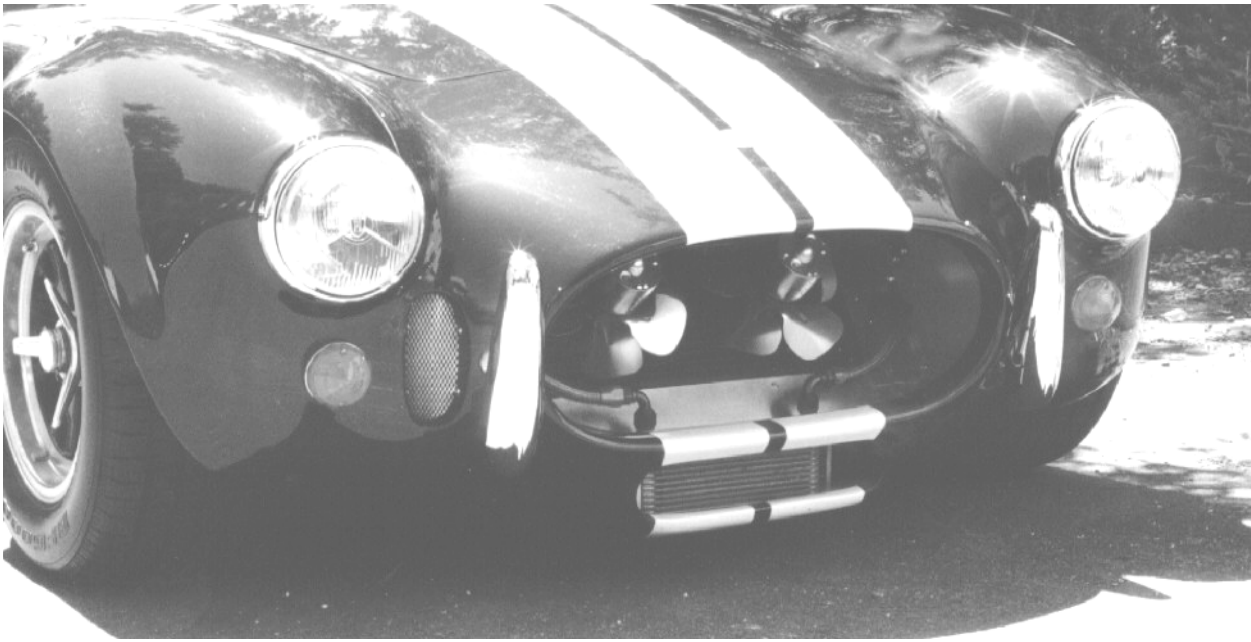
We keep in close contact with all our customers, and any problems are quickly resolved. **Good service is inseparable from a quality product.** We know that a satisfied customer is our best salesperson.

Although others may be initially cheaper to buy, they are not necessarily cheaper to build. All cars need the same basic parts. If they don't come with the kit you still have to purchase or fabricate them later. No other replica offers the **bottom line value of E.R.A..** When you consider the high resale value of E.R.A. products, the 427SC becomes a **great buy.**

Don't take our word for it. Look at all the others. Talk to people that have built E.R.A.s and other makes. E.R.A. 427SC owners have always been our strongest advocates, especially those that have also built other brands. They are the ones who really know the difference. We will be happy to put you in touch with E.R.A. owners in your area. Just give Peter a call.

DURING THE PAST 40 YEARS E.R.A. HAS EARNED A REPUTATION FOR THE HIGHEST QUALITY ENGINEERING AND WORKMANSHIP.

E.R.A. REPLICAS HAVE BECOME THE STANDARD BY WHICH OTHERS ARE JUDGED.



E.R.A. 427SC - STANDARD ASSEMBLY - (\$21,900)

*Study this list carefully, and compare with the rest! There is **no fabrication** or fitting involved when you build an ERA, only straightforward installation. As delivered, the basic kit looks like a real car, but with the suspension and interior in boxes.*

If you've built a kit car before, you know that the small details are the most time consuming (and frustrating) part of construction. Those details are where ERA shines. Please, compare our car with our competitors! We are confident that you will find that an E.R.A. replica is, at the bottom line, a bargain in ease of construction and quality of the final product.

*Note that almost all fasteners are included in the standard kit. **This will save you lots of time.***

BODY- MOUNTED ON CHASSIS AND COMPLETE WITH:

- + All inner panels (pre-drilled) aluminum), splash shields and trunk, *fit to chassis*
- + Aluminum side vent louvers, *installed*
- + *Aluminum engine compartment firewall, floors, rear bulkhead panels, with removable access panel, fit to chassis*
- + Doors, hood and trunk lid, hinged, *fit, installed* and latched with reproductions of the original hardware
- + Hood and trunk stay with brackets, *installed*
- + Hood scoop, rivet-on standard; bonded on optional
- + All holes for lights, bumpers, mirrors, top and tonneau snaps, emblems, etc. are *drilled or cut out*.
- + Removable transmission tunnel, *in place*
- + Separate left and right fiberglass foot boxes, *in place*
- + *Thermal insulation for above*
- + Windshield, *installed*
- + Steel jackpads, *powdercoated* (quick-jacks) with aluminum spacers, *installed*
- + Steel front and rear cowl surrounds built into the chassis, fully supporting the body shell and doors.
- + Drive shaft safety strap

BRAKING SYSTEM (All installed), includes:

- + Floor mounted brake and clutch pedal assemblies mounted directly on the main chassis rail with needle-bearing pivots and pivoting aluminum pedal faces.
- + Dual Tilton master cylinders w/balance bar enclosed in box below floor
- + Steel brake lines, junctions, front and rear, with insulators
- + Flex lines to the front calipers, and rear suspension
- + Brake fluid reservoir bracket, with filler lines
- + Brake light switch

CLUTCH SYSTEM, includes:

- + Pedal and all linkage, Tilton master cylinder, mounted on chassis, with filler tube
- + Slave cylinder, bracket, flex line and all fittings

COOLING SYSTEM, includes:

- + Radiator, oversized 2 x 1.25" aluminum core, w/bleeder, mounted in the chassis with rubber insulators and full aluminum shrouding
- + Thermostatically controlled electric fan with dash manual override switch, mounted on radiator
- + Aluminum connector tube in lower radiator hose with fan thermo-switch

DASHBOARD: An accurate reproduction of the original SC style, complete with the following *installed*:

- + Stewart Warner instruments including Tachometer, Speedometer, Oil Pressure, Oil Temperature, Water Temperature, Ammeter and Fuel Level Gages with appropriate senders
- + High beam, turn signal and brake system warning indicator lights
- + All toggle and rotary switches
- + Fresh air vent pull cables and knobs

Optional: Street style gage layout, glove box with fully finished and latched door

ELECTRICAL SYSTEM includes:

- + Custom modular wiring harness, color coded, tagged, and soldered
- + Fuse blocks, horn and fan relays, flasher
- + All grommets, clips, securing hardware, etc.
- + Headlights, parking lights, tail and license lights, installed
- + Dual horns with relay
- + Windshield wiper motor bracket with adapter tubes

FRESH AIR SYSTEM, installed, including:

- + Fresh air inlet ducts, with grills
- + Left and right control valves, with grills
- + All hoses, clamps, etc.

FUEL SYSTEM, installed, includes:

- + Tank, aluminum, 19 gallon, fully baffled
- + Filler, Monza type aluminum, with all hose fittings to tank
- + Steel fuel line from tank to engine
- + Complete carburetor throttle linkage

INTERIOR, includes:

- + Seats, quality naugahyde on fiberglass buckets, leather optional
- + Carpets, nylon cut pile, bound, with heel pads and snaps. Wilton Wool optional
- + Door pockets, emergency brake handle boot, shift lever boot and chrome trim ring
- + Door hinge covers and aluminum step mouldings
- + Dash support tubes
- + Left foot "Dead Pedal"

Optional: Trunk carpets, nylon cut pile, cut and bound

STEERING AND SUSPENSION, includes:

- + Front upper and lower control arms with ball joints and bushings and hardware
- + Front steering knuckles with bracket for GM caliper
- + Steering tie ends
- + Rear trailing arms with rod ends, appropriate for Jag or ERA design
- + Lower steering column with "U" joints

TRIM AND ATTACHMENTS, includes:

- + Interior and exterior rear view mirrors
- + Top and tonneau snaps, with holes drilled in body
- + Ferrules for top bows and side curtains
- + Weather stripping for doors, hood and trunk
- + Defroster vents on dash
- + All grommets and clamps for instrument cables, wiring, etc.

Also included is a detailed assembly manual that gives illustrated step by step instructions, with numbers and sources for all necessary other parts.

MAJOR COMPONENTS NOT IN THE BASIC KIT:

Engine: Ford 427 or 428 recommended, others possible
Transmission, Ford, Tremec, or Richmond Gear
Jaguar or ERA rear suspension unit
ERA steering gear
Upper steering column, hub and steering wheel
GM front rotors and calipers (bolt-on wheels only)
Front coil-over dampers
Wheels and tires
Handbrake handle and cable
Exhaust system (side pipes or undercar)

WHAT IS REQUIRED OF YOU, LABOR-WISE.....

Assembly of the kit, with the drive-train ready for installation will take about 100-120 hours, with body preparation and paint additional. Except for some straight-forward riveting and bonding of the body, all work is of the "wrench turning" variety. Most people can beat this conservative estimate! *At a SAAC convention in California, we assembled a standard kit, without interior and paint, in 35 man-hours.*

Our comprehensive assembly manual makes your work straightforward and enjoyable.

OPTIONS

If there is something you wish that is not on the list, please ask. We can supply just about anything that you need to complete your kit. We will also make every attempt to accommodate special requests. If you are not mechanically inclined, or are short of time, **E.R.A. can do anything to help make your assembly job easier.** Many people choose to have us create a "roller". We install the suspension and permanently bond the body on at the factory.

ASSEMBLY OPTIONS

POWDER-COATED CHASSIS OPTION: Includes bead-blasting and powder coating the entire chassis, door hinges, hood and trunk hinges, clutch, brake and gas pedals, drive shaft hoop, battery tray, fresh air control valves, dash supports, fuel filler tube, trunk striker and mount, and all bumper mounts. Additionally, the front upper and lower control arms, spindles, and lower steering column are epoxy-primed and urethane painted to match \$1000

PAINTED CHASSIS OPTION: As above, but the chassis coating is urethane on epoxy primer.. \$1000

Bond body, floors, etc. \$1300

Labor only to assemble rolling chassis..... \$1300

(Call to get a quote for your individual specifications)

FINAL ASSEMBLY AND TESTING OF CAR

Supplies and materials for turnkey \$400

Includes all suspension, engine, transmission installation, shakedown and test drive..... \$9,500

PARTS (MOSTLY INSTALLED)

Labor to assemble rolling chassis \$1,300

***NOTE THAT THE PRICES SHOWN ARE FOR ERA OWNERS, WHERE THE PARTS ARE SHIPPED WITH THE KIT. IF A PART IS AVAILABLE FOR RETAIL SALES, THE PRICE MAY BE SOMEWHAT HIGHER.**

FRONT SUSPENSION

Brake calipers, with hardware

Standard GM \$ 190

Competition: Includes 4 piston alloy calipers, 12.2" directionally vented rotors, custom hats, caliper brackets, hoses & hardware. Requires spindle modifications..... \$1500

Spindle modifications, add..... \$100

Coil-over dampers and springs, externally adjustable for damping and height, with hardware. Pair \$700

Rack and pinion steering gear, new, with modified inner tie rods, bushings and bolts..... \$600

Anti-sway bar, with all mounting hardware \$250

REAR SUSPENSION

Jaguar-based rear assembly, installed (Includes rebuilt differential, brake calipers, all new rotors, bearings, seals, double-adjustable dampers, springs)..... \$4500

Coil-over dampers, adjustable for damping and height. Set of four, assembled and ready for installation. (Included in rear suspension assemblies) \$1000

Anti-sway bar for above with all hardware..... \$250

Cage only, bushings, & adapter (Includes shortening half-shaft and control arms) \$500

Core, Jag rear..... \$950

ERA Rear Suspension with outboard brakes, installed..... 5200

Anti-sway bar (adjustable) with all hardware..... \$350

Subframe/Hubs/Control arm Kit to use with your differential and calipers Ask

STEERING PARTS

Rack and pinion steering gear, new See Front Suspension

Steering column, with signal switch and steering wheel hub — Custom ERA unit..... \$450

Quick release hub for E.R.A. steering column..... \$400

WHEELS AND RELATED

5-pin Aluminum wheels (7.5", 9.5" x 15") with adapters and wing nuts.....	\$ 2500
6-Pin- Hub system. Fits original-style Trigo and Vintage wheels. Kit includes one-piece hubs, pins, center caps, front bearings with seals, trued 11" vented rotors, <u>less wheels</u>	\$ 2800
Pin drive wheels and wing nuts, 6 pin, (Front 7.5" wide x 15", rear 9.5" wide x 15").....	\$1800
17" Bolt-on and pin-drive wheels available up to 12.5" wide	P.O.R.
Safety wire and pliers, for pin-drive wheels	\$60
Tires, 15", standard radial Set of 4, mounted and balanced	\$600

DRIVETRAIN, ETC.

Note that E.R.A. does not supply engines with any kit. We can recommend reliable builders, but you will deal directly with them for your engine.

ENGINES ACCESSORIES

Ford FE SERIES 427 OR 428 ENGINE – Contact us for further information	
Expansion tank for above, brass. Assembled and painted to fit ERA	\$500
Air cleaners:	
Large oval for single 4bbl	\$120
Cold air box ("turkey pan").....	\$ 250
S&H type 8-1/2" air cleaner	\$70
Custom 14"unit	\$100
K&N filter for S&H air cleaner housing	\$50
Engine bolt kit (all fasteners, including bell-housing)	\$80
Engine mount set, FE or Ford small block.....	\$100
Fan belt (most).....	\$18
Oil breather, FE intake rear, polished	\$100
Oil pan, FE engine, comp style with doors. With pickup.....	\$350
Oil pan, FE engine, w/o doors. With pickup.....	\$300
4 barrel single carburetor cold-air plenum ("Turkey pan").....	\$250

TRANSMISSIONS, ETC.

Bell housing, FE engine, bottom flange trimmed and painted	\$550
Top-Loader , big-spline close-ratio, rebuilt	\$1400
Top-Loader , small-spline wide-ratio, rebuilt	\$1200
Shift linkage kit, with rods, handle and knob	\$ 750
Mount, Ford TopLoader	\$40
Tremec TKO 600 transmission – A cost effective choice. Durable, and has an internal shift linkage. (Use with 3.31 or 3.54 differential ratio).....	\$2395
Shift handle and knob for Tremec, original style	\$200
Spacer, required for standard length input TKO.....	\$220
Mount, Tremec.....	\$40
Richmond Gear Street 5	\$1980
Shift linkage and handle for Richmond Gear 5 speed.....	\$850
Mount, Richmond Gear	\$35
Shift lever only with knob – specify which transmission	\$200
Call for pricing on special applications.	
Speedometer cable, Toploader, TKO	\$60
Speedometer gear and clip, TL/TKO	\$25

BRAKES

Calipers, rebuilt GM, with pads and hardware, pair	\$175
Brake rotor, GM brakes, pair	\$175
Brakes, front racing, with Coleman caliper (others on request) and 12.2" rotor, mounted on modified steering knuckle, S.S. DOT-approved hoses	\$1,400
Brake reservoir, BMW	\$60
Brake reservoir set, Girling-style, installed	\$400
See the Interior section (page 27) for emergency brake cables.	

CLUTCH

Clutch (Weber mostly), with pressure plate, driven disk and throw-out bearing, starting at	\$350
Fork, Clutch release, large-spline (corner modified)	\$95
Pivot bracket, Clutch fork	\$18
Fork, Clutch release, small or large spline (corner modified)	\$95
Clutch throwout bearing, small-spline Top-loader	\$70
Clutch throwout bearing (concentric-style), hydraulic, Tremec TKO	\$450

DRIVESHAFTS, ETC.

Shoulder bolts and locknuts for drive shaft	\$20
Drive shaft, Richmond Gear 5 speed, complete	\$330
Driveshaft, Ford T5	\$360
Drive shaft, Top Loader small spline, complete	\$360
Drive shaft, Top Loader large spline, complete	\$360
Driveshaft, Tremec TKO	\$365
Driveshaft, Tremec TKO, special short input shaft	\$365

EXHAUST SYSTEM

Side-pipe exhaust (FE engine) — Primary pipes, side pipes, brackets and gaskets, in bare steel ..	\$850
Primary pipes only with gaskets and hardware	\$350
Bare steel side pipes only, Pair	\$600
Stainless steel side pipes only, Pair	\$2350
Under-car exhaust (exits at rear bumpers), will fit only with Jag-based rear suspension	P.O.R.
Heat shields for primary pipes. Both sides	\$100
Ceramic coating (silver, white or black) for side pipes	\$300
Weld exhaust connecting tabs and hangers (standard steel pipes)	\$150
Weld exhaust connecting tabs and hangers (stainless steel pipes)	\$180

FUEL SYSTEM

Fuel line, (oversize) 1/2" OD	\$80
Fuel return line (tube only)	\$98
Fuel filter (in-line), with connecting hoses	\$19

COOLING

Special radiator with upper (steel) connecting tube and hoses.....	\$90
Heavy-duty radiator fan, mounted on rear of radiator (replaces standard fan), add	\$250
Dual front fans, mounted in front of radiator as original (supplements the rear-mounted fan)	\$300
Hose kit, small block Ford (two upper, two lower), with clamps	\$160
Upper radiator hose (standard radiator)	\$25
Lower radiator hoses, FE (water pump to connecting tube, con tube to radiator)	\$70
Oil cooler, 4" – Complete assembly, including cooler, hoses, fittings, shroud and block adapter ...	\$500
6" HD cooler, with parts above	\$650
(Parts available separately, inquire for cost)	
For remote oil filter system, add	\$350
Radiator cap.....	\$9
Thermostat and gasket	\$9
Wheel-well vents (screens and frames), pair installed	\$200

BODY AND TRIM

Brake and clutch pedal pads with AC face, replace ERA face – Pair	\$60
Bumpers, chromed steel (Replace standard jackpads), set of 4, installed	\$200
Nudge bars, chromed, front or rear, each	\$250
Chromed jack pads instead of bare steel	\$150
Tail lights, dual round. Used on later street cars (Replace standard rectangular lights) add	\$300
Grill opening "Splitter", with front trim. Installed	\$65
Headlights, Lucas Tripode clones, pair	\$150
Headlight stone guards, pair	\$30
Hood scoop, molded on (replaces smooth hood and separate scoop) add.....	\$150

Car covers, etc.

Outdoor – Water resistant finish	\$180
Indoor – Soft inner liner. Dust and sun protection only	\$180
Cable & lock kit	\$15
Storage bag	\$10
Hood handles, key-locking (pair)	\$100
License plate bracket, powder coated	\$35

INTERIOR MATERIALS AND TRIM

Ash tray.....	\$50
Door Sill Moldings (Pair).....	\$40
Floor mats, embroidered with ERA logo, pair.....	\$100
Leather (black) upgrade, including seats, door pockets and emergency brake boot (replaces vinyl)\$	600
Other colors in leather (requires a special-order hide).....	\$900
Seat belts and shoulder harnesses. For 2 seats, custom made for ERA.....	\$250
Seat tracks, per seat.....	\$100
Door pull straps, pair.....	\$25
Emergency brake handle, chromed, ratchet fly-off, with bracket	\$250
Cable for above, Jag-based rear	\$50
Cable assembly (3 cables) with balance mechanism, for ERA rear suspension.....	\$200
Fire extinguisher, engine compartment, with interior cable-pull, installed with two nozzles	\$500
Heater/Defroster with defroster ducting and dash switch, installed	\$390
Steering wheel	
15" wheel	\$200
16" wheel	P.O.R.
Steering wheel center cap	
"AC"	\$65
Cobra emblem	\$65
Trunk carpeting	\$240
<u>Dashboard</u>	
SC dash as original – no glove box: Standard	N.C.
SC dash with glove box, add	\$200
Street dash with glove box.....	\$200
Dash only: Add for leather (replaces vinyl).....	\$200
Smith gauges, set of 7 (with 4" speedometer and tachometer).....	\$600
Special fluted and marked knobs for wiper and dash light switch, each (replace plain ones)	\$30
Glovebox handle, reproduction of the original (replaces round knob).....	P.O.R.

Practically any other part required to complete your car is available.
Call for pricing of parts not listed.

Prices subject to change without notice.

SPECIFICATIONS

The E.R.A. 427SC is designed for high performance with safety. Generous wheel travel, both front and rear, and anti-dive/anti-squat geometry are built in. Combine good geometry with a rigid chassis and you get a combination of ride and handling seldom found in such a high performance automobile.

PERFORMANCE (typical 427):

0-60 mph **5 sec**

0-100 mph **11.5 sec**

Standing 1/4 mile **13 sec/110 mph**

Fuel consumption: 8-12 mpg

Track testing with unshaved BF Goodrich Comp TA's has given nearly 1G lateral acceleration and .95G braking performance. In December, 1991, Car and Driver measured **1.05G (lateral)** using Hoosier street tires. Optional Spax dampers are externally adjustable for both height and damping, allowing the builder to modify the E.R.A. 427SC's ride and handling characteristics to fit personal preference.

DIMENSIONS:

Weight [with iron Ford 427]2600 lb.

Weight distribution, f/r(%).....48/52

Wheelbase.....90"

Track, front/rear.....55"/57"

Length, overall.....156"

Width, maximum.....70"

Height, to top of windscreen.....47"

Ground clearance.....5"

Fuel capacity.....19.5 gal.

DRIVETRAIN:

Recommended Engine: Ford FE series 427/428

Other possibilities: Ford small block,
Chevrolet small or big block

Transmissions: Ford 4 spd. toploader
Richmond Gear or Tremec 5 speed
Ford C-6 Automatic

Differential: Salisbury, ratios from 2.73:1 to 4.56:1 with limited slip available,

BRAKES

F-11.0" /12"/13" Vented Disc

R-10.0" inboard or 12" outboard Disc

Hydraulics: Dual Tilton master cylinders
with adjustable balance bar.

CHASSIS:

HD 4"x3" (1/8" Wall) Steel rectangular main tubes with extensive transverse and diagonal reinforcement, accurately and neatly jig welded. The suspension and steering mounts have been designed in, not added as an afterthought. A tubular cage structure off the main rails support the floors, footboxes and the door hinges and latches.

Brackets for the emergency brake, exhaust system, roll bar, seatbelts, and many other small items are already installed. There is even a drive shaft safety strap built in. Bumpers are mounted directly to the main rails. The fuel tank is protected by the main chassis rails.

FRONT SUSPENSION: (See page 15)

Independent w/non-parallel, unequal length control arms, coil-over dampers. Optional anti-sway bar

REAR SUSPENSION: (See page 16)

Jaguar based: Independent, mounted in subframe, w/lower lateral link, half-shaft upper link, trailing arm, 2 coil-over dampers each side, optional anti-sway bar.

Optional: Independent, in aluminum subframe, with adjustable lateral links and trailing arms, outboard brakes.

STEERING:

Rack and pinion, 2.9 or 3.2 turns lock to lock, bump-steer designed to near zero.

WHEELS:

Pin drive or	Bolt-On
Front: 7.5" x 15"	7.0" x 15"
Rear: 9.5" x 15", 16"	8.5" or 10" x 15"

17" pin-drive and bolt-on wheels now available in various widths.

BODY CONSTRUCTION:

The E.R.A. **body and interior** is visually **identical** to the original 427 AC Cobra. All inner panels are jig fitted and accurately bonded at the factory. They are only bonded to return edges of the outer body, not the outer skin, to minimize print-through and distortion.

The body unit is supported by the tubular steel chassis substructure. Subsequent bonding and riveting of the aluminum inner panels to the chassis create a completely rigid and rattle free structure. Stress cracks and "print through" are prevented.

*The doors are steel w/fiberglass inner and outer shells. They hinge and latch on the steel chassis to prevent sagging and misalignment. **This body not only looks good when you take delivery, it will look good years down the road.***

PRICE OF STANDARD ASSEMBLY

\$21,900

Price subject to change

Questions? Call any time during business hours, Monday through Friday 8am-5pm
860-224-0253, or fax us at 860-827-1055

Visit our web site at <http://www.erareplicas.com!>

We've got even more information there.

TURN-KEY CARS FROM E.R.A.

We will build an **E.R.A. 427SC** to your specifications. Our "base" turn-key is listed below, options at the bottom. Many other variations are possible.

BASE VEHICLE SPECIFICATIONS

Base price: approximately \$57,000

Engine: Ford 428 CobraJet or 428 Super CobraJet engines is a reasonable compromise between power, streetability, and cost. Ford 427 Side Oiler engines are also available, but at added cost. We can also install any Ford small block or the 429/460 engine. All FE engines can have the correct equipment. i.e. Mid-riser cylinder heads, intake manifold and carburetor. Chevrolet engines are also available, but not recommended.

Paint: Single nonmetallic with no stripe, done in acrylic lacquer with clear finish coat. **Near Show Quality.** Stripes like the competition cars are available at extra cost.

Wheels: Halibrand look-alike bolt-on wheels(7.5"x15 front, 8.5" or 10"x15 rear). See below for optional pin-drive wheels.

Suspension and brakes: Included are custom front and rear anti-roll bars. Spax double adjustable dampers, two in the front, and four in the rear. Jaguar-based rear suspension, completely rebuilt in ERA subframe.

Exhaust system: Under car, dual pipes to the rear, OR side pipes, exiting in front of rear wheels, painted in black.

Interior: Quality vinyl upholstery, nylon pile rugs including trunk. Leather upholstery and wool carpeting available.

Transmission: Ford 4 speed toploader, wide ratio

Shifter: Hurst, with reversed lever, as original

Differential:(Jag-based suspension with rebuilt limited slip)
Ratios of 2.88:1, 3.07:1, 3.23:1, 3.54:1, 3.77:1 and others available

TURN-KEY OPTIONS

Special engines are made to your needs or specifications: Price varies

Pin Drive wheels (6 pin as original) with Trigo "Halibrand" reproduction castings, + \$3000
17" Wheels also available

Pin Drive wheels with 5 pin adapters on bolt-on hubs: +\$2000

Outboard-braked **Rear Suspension** - \$700
With anti-sway bar - \$850

Leather seats, emergency brake boot, etc.: + \$600

Soft top, in vinyl: + \$1500

Hard top - ask

Side curtains + \$850

Smiths or Autometer instruments replacing Stewart Warner
+ \$600

Tranmissions: Tremec TKO + \$350, TKO 600 +900, Richmond Gear 5 speed + \$1000

12" Front brakes with 4 piston calipers - \$1200

Supplemental **cooling fan(s)**, for extreme engines and/or weather conditions + \$150-\$350

Special reproduction fluted **interior knobs** + \$50

Exhaust **heat shielding** and extra venting + \$150

Oil cooler, 4" +\$400, 6" +\$550

Roll Bar, painted + \$400 Chrome + \$500

Chrome side pipes + \$600 Stainless + \$1000

Special colors and stripe patterns...prices quoted

Many other items available at special request.

ALL PRICES ARE SUBJECT TO CONFIRMATION

PLEASE CONTACT **PETER** AT:

860-224-0253 Fax 860-827-1055 9:00AM-5:00PM, Monday through Friday

Frequently Asked Questions

When I receive the standard kit, what will it look like?

It looks like a car without the suspension and interior! (See page 18) The standard kit is shipped with the body (including doors, trunk and hood) pre-fit and mounted to the chassis. All the lights are installed, and the windshield is mounted. The foot-boxes, floors and interior bulkheads are fit. The fuel tank with filler pipe and cap are also installed. The suspension, wiring and interior are packed in boxes.



Can I buy the kit in stages? The frame first, and then the body?

Sorry, no. We custom fit each body to the chassis to insure that everything will line up correctly. Frankly, we are much better at this than you could be, and we want to keep the final quality high. Besides, too many people have an unrealistic view of how much the project will cost and would end up with a permanent dust catcher/bad investment in their garage. Not our style. We like our kits to be finished! We will, however, do just about anything above our standard kit, so you can get exactly what you want..

DESIGN

What's so special about the E.R.A. 427SC?

The E.R.A. 427SC was designed from the beginning to look exactly like the original car, but without many of the original Shelby's shortcomings. We have strengthened the chassis, improved the body mounting and material, and thoroughly refined the suspension to make a better street car.

Why don't you use somebody else's front suspension?

There were no off-the-shelf suspensions that met all our design criteria for both the front and rear suspension. Instead, we selected components that could be integrated the way we wanted them to. We were able to match the roll centers with the line of the front and rear center of gravity.

The alternatives we didn't like were:

Mustang II, etc.: Lousy geometry, small brakes, solid rear axle, but cheap.

Jaguar (front): Lousy geometry, small brakes, expensive, but pretty.

What about the Corvette suspension?

Corvette ('84-on) suspension is lovely stuff, but presents several problems:

Pin drive wheels cannot be easily accommodated with the late model's integral wheel bearings. Our ERA GT must replace the Corvette uprights and bearings with completely custom pieces. Can you say "expensive"?

In the front, using the Corvette control arms requires an extremely short steering gear. We could use an aftermarket unit like Appleton or Sweet, but these are not meant to go tens-of-thousands of miles, and their straight cut gears allow too much feedback for the street.

In the back, the Corvette track is much too wide. The half-shafts and lower control arms have to be changed. That's no big deal, but... the cast aluminum differential cover, which also acts as the mounting bracket for the entire assembly, would have to be extensively modified or replaced too. There is also a strength issue with the differential. Only the LT-1 differential would be as strong as the Jag. It uses the same Dana 44 gear set.

There is also a problem fitting the later Corvette 12" brakes into 15" pin-drive wheels. They don't. On our GT, we use only 11.5" rotors on our custom hubs. (This is not so bad on a car with only 40% of the weight on the front.). Since you can't easily modify the hubs to move the caliper in, you're stuck with the earlier, smaller brake calipers that were used only a couple of years.

Thought you could get away using the stock shock and spring? Sorry! The leaf spring is too long. We could either make a new composite spring - an interesting proposition - or go to coil-overs. This requires making a new shock bracket on the hub carrier. More complication.

Why is the rear suspension in a subframe?

Using a subframe (for both the standard Jag-based and the ERA design) is unique to E.R.A. The subframe isolates the differential noise and vibration from the chassis. It also lets us use trailing arms to locate the lower control arms as originally designed. Without trailing arms, the lower control arms are put into bending modes that they were never designed for, allowing excessive toe change with power and braking forces. Our subframe also makes it easier to service the assembly. The rear suspension can be built as a unit outside the car for convenience, and installed into the chassis in less than an hour. Even our optional "track" suspension is in a subframe.

Is the Jag differential strong enough?

You bet! The Jaguar piece is a Salisbury made unit that uses Dana 44 gears. It was used (with a slightly different casting) in the original Shelby 427 Cobra. The few problems some people have encountered resulted from drag strip events while using high-traction slicks. And that particular weakness can be cured with available high-strength stub axle shafts available from Concours West. Remember! You can only exert so much traction in a car that weighs 2600 lbs., even with over 50% of the weight on the rear axle. We've looked at the much vaunted Ford 9". It doesn't offer any advantages - and it costs more.



How about the Ford 9" differential?

There are several reasons that the 9" isn't the best choice. The unit is not interchangeable with the Salisbury in our subframe and would require aftermarket calipers and a very Rube Goldberg emergency brake. Also, the pinion offset is about 1.5" lower than the Salisbury, making the driveshaft angle down excessively. Since the nine-inch wasn't designed for an IRS halfshaft, the conversions are quite expensive too.

Can't I use a solid rear axle?

Because of the engine placement, the drive-shaft would end up too short for adequate wheel travel. Some other solid-axle kits limit the total travel to under 2". While this might be OK for a race car, it is grossly inadequate for real streets (at least east of the Mississippi...). We have 6.5" of travel at both the front and rear. If you drive on less-than-perfect roads you will appreciate the "luxury" of an IRS. A good independent suspension (like ours, of course) will give you excellent handling with a reasonable ride. Remember, the original Cobra had it - for a good reason!

Why do you have an optional rear suspension?

Many of our customers spend most of their time on the track. While the inboard Jag brakes are perfectly adequate for hard street use, they don't cool well under track conditions. We took the time to re-design the whole assembly to move the brakes outboard and make them bigger. We also changed the geometry a bit. Extensive use of aluminum and an overall efficient design makes the unit about 50 lbs lighter too.

Why do you bond the body to the chassis?

The results are a stiffer overall structure, with no rattles, creaks or shakes. Our fiberglass bodies simply do not get stress cracks, even after many hard miles on the road. The process is a bit more work, but well worth it! Some claim that their body is "unstressed" because it is rubber mounted to the chassis. **Wrong!** The outside shell must still be supported with inner panels or some other structure. The method of that connection and the quality of the fiberglass is what determines whether stress cracks will appear.

Doesn't bonding the body to the chassis make it more difficult to work on?

Not really. Our car, with its removable tunnel, is designed to be very easy to service. In fact, every turn-key we do at the factory has the body bonded and painted before any of the mechanical bits are installed.

Why do you use separate aluminum floor, tunnel and bulkhead panels in the cockpit?

We have tried to duplicate the original "classic" construction techniques as much as possible, and avoid the dune buggy syndrome of a single interior shell. This is a bit more work to put together, but it saves weight and allows much more design flexibility. Our aluminum tunnel is removable for service, and we have an access panel behind the seats for rear (inboard only) brake service. Separate footboxes also allow us to create a stronger structure to support the cowl and door mounting hinges.

How much does your car weigh?

The 427SC weighs about 2600 lbs with an iron FE engine with some aluminum accessories. This is about 100 lbs more than an original car, put mostly into the stronger chassis. Some other kits claim much lower weights. What they don't tell you is that they are not using a big block where appropriate, the strength of their car is much lower, and they are missing a lot of pieces necessary for an authentic street car. When you feel how solid our car is, you won't regret the slight extra weight! Additionally, many other aluminum engine parts are available, potentially taking another 200 lbs from the car. We've measured an all-aluminum engine at 450 lbs complete – less than an iron small block.

Hey! What about the new Shelby 4000 series Cobra?

As far as being a "good car", it seems to us that the 4000 series tends to combine some of the worst characteristics of the original car and a kit. It retains the original chassis (except with heavier wall thickness), but puts a mediocre fiberglass body on top. While the wheel housings are aluminum, the interior panels are 'glass. Feedback from kit constructors indicates that it takes much more work to complete, too. For instance, the "carpet" simply consists of a roll of material. Not cut, not bound. While the body is mounted on the chassis, all the inner panels seem to be just floating there. A great deal of final assembly is expected of you.

Our car feels, looks and handles better. The 4000 series does have Shelby's name on it, though. Hopefully that's worth the extra \$20 thou' that you'll spend - or if you want to go further, you can get an aluminum body with the 4000. About another 20 grand...

Do you offer Right Hand Drive?

We don't have off-the shelf pieces to make an economical switch. It's fairly easy to switch the steering and brakes, but the foot boxes will have to be custom made. Figure in the thousand\$.

DRIVE-TRAIN

What engine do you recommend?

Most people don't know that only about the first 120 Shelybs (out of about 350 total) had 427 side-oiler engines. The balance had 428s. The side-oiler was a short stroke version of the FE, with an improved oiling system for high RPM NASCAR racing. Most Side-oilers had only a single 4bbl carburetor, although some were equipped with 2x4bbls. The later cars used 428 engines, mostly with 2x4bbl carburetors. All the FE series look the same from the top, except for the carburetion. Two good reference books are Big Block Ford Engines by Steve Christ, and Ford Performance by Pat Ganahl. They are both available from the Amazon.com and Barnes and Noble on-line book stores. Just search on the authors' names.

Horsepower was originally somewhat higher with the 427, but at the expense of diminished low speed torque. Because of the scarcity of very high octane gasoline (the 427 had 12.5:1 compression ratio), a current 427 rebuild is usually not much stronger at top RPM end than a well built 428. A SOHC (Single OverHead Cam) variation of the 427 was built by Ford, primarily as a drag engine. Huge ports allowed this engine to have more horsepower than any contemporary (circa 1967) engine, but at some costs. The new cylinder heads make this engine very wide, and not a very practical installation into a sub-compact-size replica - but of course, it has been done.

The 427 Center-Oiler is another alternative. This block retains the same bore and stroke of the side-oiler but retains the lubrication system of the 428. Found in a lot of boats, this engine as a core can be bought for much less than the side-oiler.



Dual Quad 428

The 390 is the most economical FE engine. With the right parts, it can put out nearly the horse-power of a good 428. We also have mounts for the 429/460 engine, but because of the increased engine width, we must cut into the footboxes, stealing some foot room.

We have designed the car around the Ford FE engine, i.e. 390/427/428, but you can use other engines. Just remember, though. E.R.A. 427SC's are famous for having the right mechanical parts. If the time should come where you want to sell your car, an odd engine will probably make your car worth less. It's designed around that engine.

If you have your heart set on using a small block Ford, we recommend that you think about getting the 289FIA version that we offer.

Isn't the FE really heavy?

Not really. A basic 428, with iron heads and other accessories will weigh slightly over 600 lbs. Substitute aluminum heads and water pump and the weight approximates a 351W. We've measured all aluminum engines based on the Pond block at 450 lbs, less than an iron 289.

What about the 429/460?

Now that Ford Motorsport is offering very economical 429s, ERA is going to do the detail development to support this engine, including special foot boxes, wiring harness and primary exhaust pipes to fit the standard side pipes. We still don't encourage you to use this engine, but you asked for it! We do not support the hemi version of the 429.

What about a Chevy?

Nooooo! Seriously, we do have mounts for the Chevy, but we strongly discourage it. We have only done a few (out of more than 500 cars), and a couple of those have been converted back!

How do I find an engine builder?

Ask around your local Shelby or Ford club for someone local, or select from our own list of preferred (local to ERA) builders.

What's the best transmission to use?

With all Ford engines, you can use the original Top-Loader 4 speed, the Richmond Gear or Tremec 600 5 speed. The 4 speed is normally combined with a 3.54:1 or 3.31:1 differential ratio. The 5 speed has a direct drive 5th and works best with a 2.88:1 or 3.07:1 ratio for a better top gear cruising RPM. A Tremec 600 has a couple different 5th gear ratios and can be mated to a 3.31 or 3.54 rear gear.

If you are using a Ford small block, both the above transmissions can be fit, plus the T-5 and Tremec.

The "best" transmission for you depends on what you're going to do with the car. For everyday driving, the Top-loader wide-ratio or Tremec are the best choices. Both offer a good starting gear, and the Tremec has an overdrive 5th gear for comfortable highway cruising. The close-ratio Top-loader and Richmond Gear 5 speed are more performance oriented, with gear spacing that keeps the engine's rpm's within a narrower range.

What about the shift handle and linkage?

The shift handle was angled forward in the original Shelby 427. It looked odd, but it actually works very well. For those who don't want to make the pieces themselves, E.R.A. offers a reproduction handle and linkage for both the Top-Loader and the Richmond Gear 5 speed, and handles that bolt onto the Tremec and T-5.

What kind of clutch should I use?

Because the car is very light, a standard-pressure clutch is fine. Any slip will come (accidentally, of course) from the tires.

What are pin-drive wheels?

The original Shelby Cobra wheels used a single wing nut that secured each cast magnesium wheel. The power was transferred from the hub to the wheel by six pins. The 289FIAs used a casting unique to the race cars. PS Engineering is now duplicating the original design in aluminum, with offsets that fit the E.R.A. cars.

The original 427 street cars used a Sunburst pattern and were 7" wide front and back. They are not replicated by any manufacturer, but some are available used. The competition cars used an early GT40 design, 7 1/2" wide front, 9 1/2" rear. Our 427SC pin-drive wheels duplicate the GT40 design, but cast in aluminum. For day-to-day use on the street, magnesium corrodes quickly and requires a great deal of maintenance.

If you want 17" pin-drive wheels, they are available from PS Engineering. **Also available** are new 5 pin wheels. Externally, they are identical to the GT40 design, but they are mounted on adapters and driven by 5 pins that double as lug nuts. They are about \$1000 cheaper than the original 6 pin system that we sell.



What are the other wheel alternatives?

For the 427SC, there are many bolt-on wheels that have the "Halibrand" look at reasonable prices. Check out Team III wheels and others. Offset specifications are available from ERA for various width and diameter wheels.

What size tires do you recommend?

For the 427SC, we like to use 235/60-15 in the front, 295/50-15 in the rear. These sizes duplicate the original cars' outside diameters. This makes the car look "right". Tire selection is somewhat limited, but the car is so light that almost any tire makes the car feel as if it's *on rails*. If you use 17" wheels, 275-40 and 335-35 tires will fit on the recommended rims without rubbing.

What kind of brakes do you use?

In the front we use 11" diameter x 1" wide vented rotors with floating calipers. These were originally mounted on the front of much heavier cars and are more than adequate for street use. 12.1" and 12.8" rotors with Sierra or Wilwood calipers (page 18) are optional.

In the rear 10.5" diameter x 1/2" thick rotors are mounted inboard to reduce unsprung weight. 10.5" vented rotors are optional, as are 12" rotors with Wilwood calipers. If you get our optional rear suspension, the standard brakes are 12" OD x .81"T vented (outboard) rotors.

Our pedals are mounted directly on the chassis, below floor level, like the original, with aluminum pivoting faces. Like the original Cobra, we don't use a booster in the system. The pedal pressure is moderate but very positive.

What about the exhaust system?

We offer both an under-car exhaust and competition side pipes in many variations. The under-car system shown at the right (on a 289FIA) duplicates the look of the original street car and is quiet under cruising conditions. Ground clearance is about 4" under the tri-flow mufflers. The twin tail pipes exit at the rear of the car next to the bumpers or jack pads. You'll lose a bit of horsepower, though.

There are plain steel side pipes that can be sprayed with a VHT type paint, ceramic coated, or chromed. The VHT paint duplicates the look of the original race cars, but requires frequent refinishing. The ceramic coating (we have ours done by Airborn Coatings) is very tough, and will last the life of the muffler: Usually about 5 years. Chrome is tough too, but will blue over time on the sections that get very hot. Stainless steel with yellow a bit, like the chrome, but will last forever, essentially, because it uses baffles, not fiberglass to do the muffling. The stainless pipes do seem to be louder, however.



Is my car going to overheat?

Our standard 2 x 1.25" aluminum core radiator is oversized for practically any engine, including 500 cubic inch monsters. In traffic our standard electric fan will cool most mild big block engines (depending on your climate), and we offer several fan options to cool just about anything else.

You put the battery up front?

Our standard car mounts the battery on top of the passenger's footbox, in approximately the same place as an original street car. Optionally, you can move the battery back into the trunk for more rear weight bias. We offer a hidden-battery option that mounts it behind a panel in the trunk – which also gives you a relatively secure volume to store things.

Note the wiper motor support and fresh air vent valve in this unfinished kit.



PERFORMANCE

How does the car go?

Depending on the engine, 0-60 MPH times will be from 4 to 6 seconds.

How does it stop?

Very well, thanks. The brake system is non-power and requires more push than you might be used to, but the car stops from 60 MPH in about 135 ft. The brake balance is adjustable for personal tuning. A car with stock brakes did 0-100mph-0 in 12.07 seconds. You do the math!

How does the car ride?

Surprisingly well. Spring rates, while not exactly boulevard cruisers, are quite reasonable for such a high performance car. The fact that chassis flex is so low enhances the feeling of total control. Everyone comes back from their first ride saying "This is a really nice car!"

How does the 427SC compare to a modern sports car?

You're more in direct communication with the road. Without power steering, you feel much more - and it takes more effort to do things. "Bite-wise", the car will stack up quite well to its equivalent new car. Fitted with new rubber, the 427SC will do over .95G with street suspension. And it doesn't bounce from bump to bump - there's plenty of suspension travel. This is a car bred for Connecticut, where potholes are the ubiquitous companions to our favorite back roads.

How about fuel economy and reliability?

You have to ask??? Seriously, the more "stock" the engine is, the better the mpg. You could get 14-18 mpg out of a low horsepower 390, but with 550 bhp, you'll probably get 8 mpg. If you want the best reliability, stick with a stock engine. Unless you throw a lot of money at an engine, higher horsepower will always result in higher maintenance.

COMFORT

Do you have any interior ventilation?

We have standard footbox vents on both the drivers and passenger's side, controlled by separate dash knobs. Few other kits even offer ventilation.

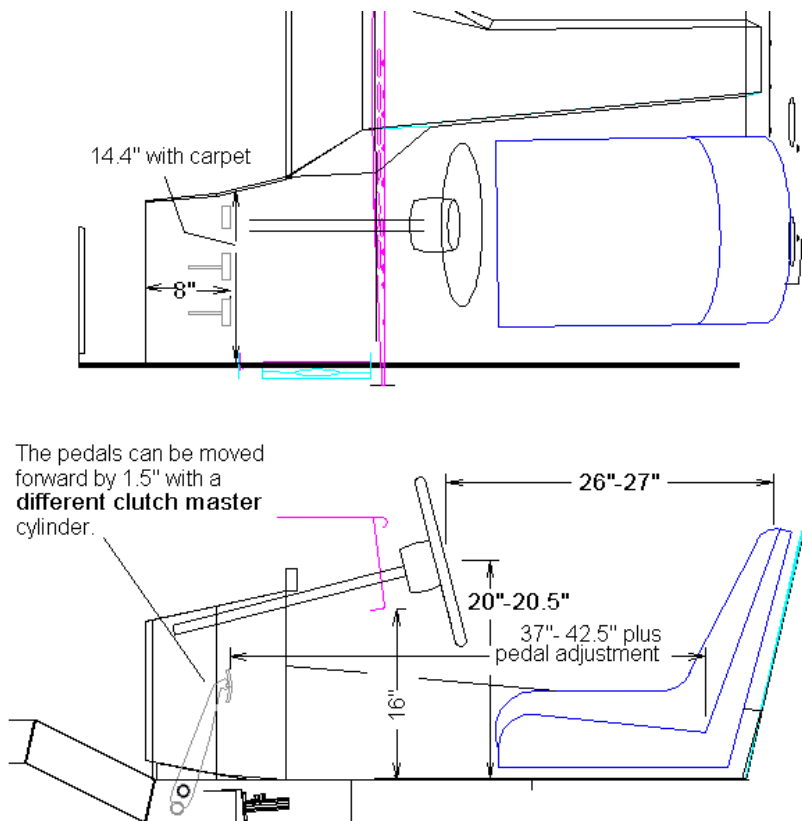
I'm LARGE. Will I fit in your car?

Our cars have more room than any other standard wheelbase replica and will accommodate people up to 6'3". We have increased the length of the foot-boxes about 2" over the original car and also have pedals that are adjustable. For the most long-legged, we can substitute a larger clutch master cylinder to gain an additional 1.5" at the expense of more pedal pressure.

For those with long torsos, we can adjust the amount of padding in the seat bottom to get you a bit closer to the floor.

The steering column is also adjustable up and down with spacers.

Compare these dimensions with your kit of choice!



Do you have a top?

Of course! See page 10. The optional top is a duplicate of the original, fastening to the windshield and the lift-a-dot fasteners on the rear cowl. It uses a removable bow for support over the driver. When not in use, the whole thing can be folded and stored in the trunk. Some modifications are necessary if you have a roll bar. Side curtains are also available.

How's the trunk?

Fully finished with carpeting and large enough for a weekend trip (as long as you don't change clothes too often!).

How about a hard top?

We don't make our own hard top, but any one that fits an original will probably fit.

Can a put a radio in?

Yes, either on the tunnel or hidden in the (street dash) glovebox. Speaker cavities are built into the footboxes and there is room in back of the seats.

CHOICES

Why do you offer two different dashboards? (See page Error! Bookmark not defined.)

The original 427SC and 289/FIA race cars had special configurations, with the speedometer mounted toward the right side of the dash, and the competition versions didn't have a glove box. The street cars had the tachometer to the left of the steering column and used a glove box in front of the passenger. E.R.A. offers both layouts (see page Error! Bookmark not defined.), and will install a glove box in a competition dash if you want one.

What about the tail-lights on the 427SC?

The original 427SC race cars had single rectangular lights like the earlier 289. The street cars had round lights and separate reflectors. Our standard kit has the round lights. The rectangular ones are an option.

I've seen cars with different types of hood scoops. Which do you have?

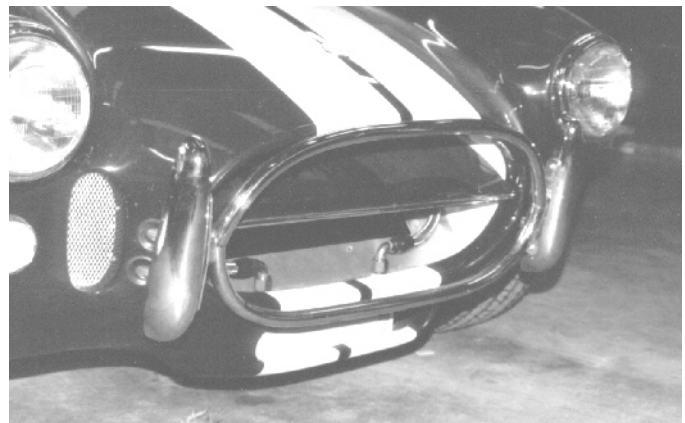
The standard E.R.A. 427SC kit comes with a plain hood (no scoop) and a separate scoop (see page Error! Bookmark not defined.) that can be riveted on - to duplicate the look of the original race car. The original street car didn't use a scoop at all, but many were fitted with one afterward. For looks, some of the original scoops were faired in, but it never was on a stock car race version. A hood with integral scoop is an option on the 427SC.

Why do your 427SC fender flares look different from some of the cars I've seen?

The original Shelbys were all hand formed aluminum, and there was a great deal of variation from car to car. Even from side to side on the same car! As our standard flare, we chose what we thought was the most attractive variation. We will, however, change the rear flare to a more pronounced one if you wish (extra cost).

What's that curved panel I see in some of the radiator openings?

The original street cars used an air splitter, supposedly to redirect air into the radiator. It was not used on the competition cars.



Can I get the chassis powder coated?

Yes. A special chemical and impact resistant coating is baked on. Very durable, and looks good too.

CONSTRUCTING THE KIT

What do I have to fabricate?

Every basic bit that you can't buy off-the-shelf is included in the kit. You don't have to make anything.

What is the most difficult part of building the kit?

Probably building the rear suspension assembly. It entails lots of shimmed bearing packs, seals and caliper/emergency brake rebuilding. Even with the experience of doing hundreds of assemblies, we still spend about 15 hours on each one.

If you still want to do it, we can help a bit with parts and advice, but you should still get a good manual. Alternately, you can purchase an assembly from us or Concours West, a Jaguar rear-end specialist.

Speaking of manuals, what's yours like?

From [Club Cobra...](#)

Quote:

Originally Posted by **Jon Miller**

The best single purchase I made during the construction of my Everett-Morrison was the manual from ERA....😊

*Thanks,
Jon*

Yep, me too - when I built my Unique.

Phil

About 140 pages of detail, including exactly what you need, how to prepare the used stuff, and how to assemble it all on the kit. Lots of illustrations. I used some of them in the illustrations. The text portion of the manual is also posted on our web site in Word97 .doc. The wiring instructions come separately - another 16 pages, so you don't have to drag the whole book around when wiring the car.

I've never done any wiring! I know nothing about electricity!

You don't have to be an expert to wire the car. Our wiring instructions have lots of pictures and every connection is explained. Wires are both color coded and labeled.

What if I don't want to do some of the kit building stuff?

We will do anything you want to help you complete your kit. Each one is custom made to your specifications.

Do I have to buy the trim and hardware?

All hardware, with the exception of the blind rivets, comes with the kit. This includes the nuts, bolts, grommets, clamps and screws. And most of it is already installed on the kit. Some of the exterior badges are optional, to keep us legal.

What if I can't find a part?

Since E.R.A. builds so many turnkey cars, we stock just about everything you will need to finish your kit. Some people have us supply every single part to complete the car.

Do you sell parts to the retail aftermarket?

Not currently. We only service ERA cars and customers' needs. You can try the following companies:

- Ken's Specialty Auto (315-793-0639)
- Finish Line (888-436-9113 or 954-436-9101 - FL and Int'l)
- Cobra Restorers (770-427-0070)
- Brooklands (305-776-2748)
- Nisonger (914-381-1952)
- Shell Valley (800-356-9198)

Does your body need painting?

Yes. Some companies sell their car in "finished" gel-coat, claiming they don't require paint. But gel-coat will never look as good as a clear-coated paint job, and you have fewer color and finish choices. Repairing gel-coat is much more difficult, also.

How difficult is it to paint the car?

Preparation for paint is straight-forward and doesn't require any fiberglass work. The seams where the mold pieces meet must be filled with standard body filler, but the basic body shape doesn't require anything more than a skim-coat of polyester or epoxy filler to facilitate blocking. E.R.A. doesn't do painting in-house, but we do have a very reliable sub-contractor (Tony's Auto Builders - 413-586-6557) that charges \$4500 to \$5200 for a near-show-quality job. Connecticut Custom Car (860-253-9553) does a show quality job that will stop traffic for a bit more. If you want either one to paint your kit, you will deal directly with them for payments and other details. We don't make any money on this sublet. Dealing directly may also reduce your tax on a turnkey car.

Can I install the mechanical bits in a bare chassis without the body installed?

Yes, but we don't recommend it. With our turn-keys, we usually mount the body on the chassis first, then have the car painted. Finally, we install the drive-train. The engine, transmission and suspension install easily with the body already in place.

SHIPPING

How is the car shipped? How much will shipping cost?

If you are within 500 miles and have a tow vehicle, consider picking the kit up yourself with a trailer. If you can't do this, there are several reliable companies. We use mostly Intercity Lines (800-343-0802). Horseless Carriage has also been used by our customers (800-631-7796). Both ship inside a box trailer all over the country. The price depends on your location. To major cities on the west coast, the cost would be about \$2000. Trips to Florida run about \$1200. If you are off the major routes, it may cost a bit more. Other shippers may cost less, but your car might sit in a depot for a bit, waiting for a direct ride. Most shipping companies have a \$500 minimum charge. For short runs, we may be able to arrange transportation on a flatbed truck for about \$1.50/mile.

I'm from outside the U.S. Can I get one of your cars?

We do not use dealers so you must deal directly with ERA/US. The difficulty varies from country to country. Sometimes there's a stiff tariff. Many countries have strict "performance" and design standards for complete cars. ERA has not done any testing for compliance for any country, and you should assume that we will NOT meet their new-car standards.

Many countries will accept "parts" from outside. We have, on occasion, split up a kit into separate shipments to make it easier for importing. There are also several companies that can title a turn-key car here in the U.S. as a '66 vehicle, which sometimes make the turnkey process easier. See the inspection and inspection link immediately below.

WHEN THE CAR IS DONE...

How do I inspect and register my car?

Registration varies from state to state. Connecticut (our home state), is one of the more difficult, and requires that the car be trailered to a central inspection station. There, they check the lights, brakes and general construction of the vehicle, and also make sure that none of your components are stolen. It is especially important to keep your receipts! We supply a Certificate of Origin for the body and chassis.

What about emissions?

Emissions standards also vary from state to state, and even regions within states. Most states will require that your car meet the specifications for the year of your engine. Another reason to stick with an early engine. Side pipes with catalytic converters are available but we've never had to use them. It is usually possible to title the car as a pre-emissions vehicle as described in our REGISTRATION FAQ above.

What about insurance?

It's surprisingly easy. In some cases a "Composite vehicle" can be insured by adding it to your current insurance. There are also some companies that specialize in this kind of specialized car, like Heacock. The cost is pretty reasonable, with only some mileage restrictions.

What happens if I damage the car?

E.R.A. will sell you any repair part you need to fix it: Fender, hood, or even a complete body if necessary. We also can make pieces of the chassis and the proper dimensions for repair.

Can I race my car?

Many of our customers spend time on the track at club events, and there are now several regional series for Cobra replicas. Check out the Vintage Sports Car Drivers Association. They run some events open to replicas. In the Northeast, the COM Sports Car Club allows replicas to compete in full track events too.

SCCA has now certified replicas to run in the Solo II prepared class rather than the modified (completely open) class. We can now compete against the real thing legitimately!

We offer extra-large front and rear brakes and an optional rear suspension for track use. Our optional coil-over dampers are externally adjustable for height and stiffness, making at-the-track changes very easy.

WARRANTEE

How do you support your products?

We don't have a written warrantee, but we will replace anything defective within a reasonable period. After all, the amount of time that people take to complete their kits varies immensely. We have replaced pieces 5 years old.

If you insist on something written, you can write your own! We will agree to anything reasonable.

REFERENCES

Can I get names of people who have built your kits?

Of course. We can frequently find someone right in your area so that you can look at the "real thing" locally. Most owners are willing to talk at length about their experience. Some don't like to be bothered, though, so you must get names from our General Manager and customer liaison, Pete Portante (860-224-0253) at E.R.A. Sorry, you cannot get references through e-mail.

PAYMENTS AND DELIVERY

Why is your kit more expensive than most of the others?

The E.R.A. 427SC and 289/FIA kits come only in what others call a "Deluxe Stage". We don't offer a cheapo version of our cars. Frankly, we value our reputation too much to allow some people to butcher the concept and then claim that theirs is "an E.R.A.". We have included so much in our kit that, when completed, they all have the same high quality of design and materials. This fact is evident in the strong demand (and high prices) for our used cars. This car may actually turn out to be one of the most economical cars you've ever driven!

How can I get a quote?

Please call Peter at 860-224-0253. Sorry, but you can't get a quote over the internet.

How about backorders?

E.R.A. seldom delivers a kit with anything serious missing. Backorders are always shipped so that your construction process won't be disrupted.

How do I get the process started?

We require a \$5000 deposit to get you in line for a kit or complete car.

What about the rest of the payments.

You must send another \$5000 when we actually begin production of your kit. If you are getting a turn-key, timely payment for the engine and paint will go directly to the people doing the sublet work. Some extra payments for special parts may be required during turn-key production.

Other taxes - sales and registration taxes - are typically paid when you register your car. For Connecticut residents, we collect the sales tax when you pick up your kit. You will not be double taxed.

When the kit or turn-key is delivered (or picked up), the balance must be paid in cash or with a certified check unless previously arranged.

What if I want to cancel the kit after I've given you a deposit?

The deposit is 100% refundable up until the time we actually start building your kit.

Is financing available?

E.R.A. doesn't finance, but for a turn-key car there are companies that specialize. Look at the CobraCountry web site for possibilities, or in the back of Kit Car or Kit Car Illustrated. Two that have solicited us (but we cannot vouch for) are Gettysburg Financial, 954-786-2642 and JJ Best. Kits are more difficult to fund. You will have to use some other personal or business asset as collateral for a bank or personal loan.

How long will it take for me to get a kit?

Actual production time for a basic kit is about 2 weeks, but there is usually a waiting list, typically varying from 3 to 6 months. Occasionally, we might have an available spot in the queue from a cancellation, but this is unusual.

What if I want my car even later than your waiting time.

Your deposit will hold your car for up to 2 years at the original kit price estimate.

What is the time frame for a turn-key car?

Add about 8-10 weeks over the kit schedule for painting, wiring and mechanical parts installation.

Are there any unfinished kits available?

Rarely. Although some people sit on their kits for some time because of personal reasons, almost all are completed by the first owner. As an act of desperation, check the ads in Kit Car and Kit Car Illustrated, or in CobraCountry.com, CobraForum.com or ClubCobra.com.

What about used cars?

We generally don't deal in used cars unless it's a rare trade-in. CobraCountry.com and Dayan's House of Cobras frequently have ERA's, though, but don't expect any bargains. Resale value on ERA's is usually very high. The good part of that equation is that if you ever want to sell your car, you can get top money - without waiting forever.

How many 427SCs have you made.

We have shipped over 550 cars to date.

How big is E.R.A.?

We have a total of 16 full time people working in 4 buildings at our central location. We also have a separate R&D facility down the street. We do almost everything in house: chassis, body, small parts, rebuilding of rear suspension, upholstery, wiring harnesses and turnkey cars. We sublet the casting and machining, and most of our sheet metal is done on a CNC punch machine (by a vendor who happens to own both a 427SC and a GT).

What other things do you do?

Most of our energy is devoted to the kits, but we do supply some small reproduction parts to the rest of the kit car industry.

HOW WE DO THINGS AT E.R.A.

Where are the chassis made?

All chassis tubing components are cut and welded right at the factory. Most of the sheet metal components are sublet to a CNC punch/laser cutting shop where tolerances are less than +/- .010". All separate components are MIG or TIG welded right in our own jigs at the factory. When you visit us, look at the high quality of the welds. Our certified welders are good!

And the suspension?

Suspension components are done the same way. Arms are cut and jig welded right here. The GT arms are TIG welded. The 427/FIA arms are both MIG and TIG welded, depending upon application. Castings are done locally from AlMag or 356 heat treated aluminum. Some of the pieces are machined from billet.

How is the interior done?

Everything but the top and car covers is produced in house.

Do you do the fiberglass molding?

We manufacture everything but the main body shell of the 427SC and FIA in-house. We built all the molds from our own plugs. All door pieces, hood and trunk lid, and inner panels are hand laid at E.R.A. Mating of the inner panels to the outside skin is also done in-house. We don't use ordinary polyester resin, either. We spend a little extra money to get low-shrink tooling resin for better long term dimensional stability.

DEALER INFORMATION

E.R.A. doesn't have a formal dealer network. We do offer a small discount for multiple purchases within a limited time frame. Since our profit margin is small, this discount is not deep. However, since our car is so easy to build and has a very high resale value, many people have built multiple cars. Most have made reasonable money, but don't expect to get rich. Our fee for assembling a turnkey car is typically \$7000-\$9000.

Assembling the chassis and painting the body is straight-forward. Have us powder-coat the chassis and bond the body. It will save you a lot of time, and it isn't very expensive.

Rebuilding the rear suspension is fairly complicated. If you don't have Jaguar experience, expect the first one to be "a learning experience". Once you get everything figured out, expect to spend about 12-15 hours on a rebuild, plus parts. If it isn't a limited slip, add about \$600.

The most difficult part of building a turnkey is the engine. Many turnkey buyers insist on a 427 Side-oiler rather than the 428. 427 cores are very rare and are hoarded by many engine builders. If you don't have a cache of cores, don't count on getting one at a reasonable price. 428 cores are easier to come by and really make a better street engine. 289/302/351 engines are relatively cheap and easy to build, but most people who want a 427SC also want the correct engine. The 289/FIA is a great home for a small block.

We recommend that you build a single car to acquaint you with the building process before you commit to multiple cars. If you do decide to jump in with a multiple order, your deposit on each kit is fully refundable up until the time we start it. You can't lose money on a deposit.

Can I visit the factory?

You bet! [Click here](#) for directions to get to the Factory

ABOUT E.R.A.

How long has E.R.A. been in business?

E.R.A. began in 1968, doing restorations of Porsches, BMW's and several British cars. In the first year, we fixed a totalled 289 Cobra (bought for \$1500 at the time by our current general manager, Pete Portante) and a Fiberfab kit car, among other projects. In 1981, we started on our 427SC replica. By 1985, all our restoration work ceased. We were just too busy doing our 427SC. So far, we've delivered over 600 kits to 30+ states and a half-dozen countries.



A SHORT HISTORY OF E.R.A.

Era Replica Automobiles is an extension of *International Automobile Enterprises, Inc.* **I.A.E.** was founded in 1966 with a vision: *To develop the necessary skills, expertise and equipment to ultimately produce world class performance automobiles.*

Over 20 years ago, the **E.R.A. design concept** was put on paper: *To create new versions of the cars that we all dreamed about but couldn't afford.* We wanted to provide enthusiasts like us with cars as close to the originals as possible. Not only the appearance would have to be authentic, but the feel, sound and mechanical layout would also have to be like the original's, to bring you to back to another era. To give you that same exhilaration you would have gotten then, now. A driving *deja vu*, if you will.

Like many car enthusiasts, we started at the bottom, doing mechanical repair, welding and body restoration on our own cars. Within a short time, we graduated to servicing customer's Porsches, BMWs and other specialty cars. In 1968 we built our first kit car (Fiberfab!) on a VW chassis. This project involved extensive body restyling and chassis modifications. To do the body modifications properly, we built our own molds to make the new panels.

Our skills became well known locally, and we were hired to duplicate or modify lightweight fiberglass bodies by several prominent formula and sports car racers. We also branched into the manufacturing of spoilers, flares, and other replacement items for Porsches, BMW's and Datsun Z's.

Meanwhile, our Porsche restorations led us into the restoration parts business. Chassis and body panels were no longer available from Porsche. We made our own tooling, and purchased a press to manufacture these parts ourselves. At one time we supplied a major portion of all the Porsche 356 sheet metal sold world wide.

As our skills developed, it became plain that we were now capable of living out our original dream. **Making Our Own Car!**

The **Shelby Cobra 427** was at the top of the list of the cars we admired, so when the first replica appeared, we purchased one. The kit was incomplete and very difficult to put together. It was easy to imagine a person without professional fabrication skills and equipment finding himself with a permanent, unfinished project in his garage. *We knew we could do better.*

We carried out extensive research and development, insuring that every E.R.A. kit would be the most exacting and best engineered available anywhere, and that its performance would equal or exceed the original car's, right out of the box.

It took over three years of work to design, develop, and fabricate the prototype, including the molds, jigs, and fixtures necessary for producing the E.R.A. 427SC. It was worth it!

OTHER OFFERINGS FROM E.R.A.

289FIA

The original 289FIA was the most successful of all the racing Cobras. Our body faithfully follows the original shape, and includes standard aluminum engine bay and trunk panels. We have extensively modified our 427SC chassis for the new spare tire well and fuel tank.

Two variations are available:

Competition version with stripped interior.

\$19,900

Street version also available

289 SLABSIDE

With many street trim items standard. \$22,900

ERA GT MK I

This kit is similar to the **Ford GT40** of the late 1960's. We have duplicated the original monocoque chassis and race-car suspension very closely. Even underneath, only an expert could tell that this wasn't the real thing.

The ERA GT's standard body is a duplicate of the earlier race car. Optional is a modified version with the flares of the original LeMans winner, car #1075.

We were able to make the interior larger without compromising the chassis. For extra comfort, an E.R.A. developed air conditioning system is optional.

Included in the kit is the chassis, body, trim and the suspension. Of course the interior, electrical wiring, lighting and glass also comes with the kit. Like the 427SC, everything is pre-fit at the factory before delivery to you.

A small block Ford engine, ZF transaxle and various over-the-counter driveline pieces are required to complete the car.

Like the 427SC, the ERA GT is also available in any build stage up to and including turn-key form.

Kit price: \$54,900

ERA GT MK2

The MK2 uses a modified MK1 chassis that accepts the FE series Ford engine and T44 transaxle. Suspension is the same as the MK1 with some brake modifications.

The body is, of course, totally authentic.

E.R.A. has acquired tooling to reproduce the T44 four speed transaxle, and will offer it as an option. Same price as our MK I

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DIRECTIONS TO E.R.A.

Please visit our plant any time during business hours, or at other times by special appointment. This is where we manufacture our kits and turn-key cars. There is no showroom, but we almost always have cars in all stages of completion, plus our demo rolling chassis. **What you see here is what you get!**

*While our mailing address is East Main St., our entrance is around the corner: 24 Dewey Street.

We are about 10 miles southwest of Hartford, CT, just off route I-84. The best route from **New York City** is via Route I-84, see "From West of Hartford" below. We are about 2 hours from NYC. If you fly into **Bradley International Airport**, take Route 20 east to Route I-91 south. If you have a small plane, you can fly into Brainard Airport (Hartford) 860-247-4901.

From **East of Hartford**, take I-84 West, through Hartford about 7 miles. Take Exit 39A onto Route 9 south. Go 4 miles to Exit 28A, "Downtown New Britain". Left onto East Main Street. Go about .4 mile (3 blocks past the traffic light) and take a left onto Dewey Street. About 50 yards down on the left is our fenced-in compound, #24. There is no ERA sign. The main office is in the steel building in front.

From **West of Hartford**, take I-84 East toward Hartford. About 10 miles east of Waterbury, take exit 35 (left) onto Route 72 East toward New Britain. After 3 miles, take exit 9, "71 to Main Street". Take a left at the end of the exit, go to the next light and take a right onto East Main Street. Go about 1/2 mile (3 blocks past the second light) and take a left onto Dewey Street. About 50 yards down on the left is our fenced-in compound, #24. There is no ERA sign. The main office is in the steel building in front.

From **North of Hartford**, take Route I-91 south to Route I-84 in Hartford. Take I-84 West, about 7 miles. Take Exit 39A onto Route 9 south. Go 4 miles to Exit 28A, "Downtown New Britain". Left onto East Main Street. Go about .4 mile (3 blocks past the traffic light) and take a left onto Dewey Street. About 50 yards down on the left is our fenced-in compound, #24 Dewey St. There is no ERA sign. The main office is in the steel building in front.

From **South of Hartford**, take Route I-91 north to Exit 22N (Route 9 North.) Go about 5 miles into New Britain. (Route 9 may also be marked Route 72.) Take Exit 25 (Ellis Street.) At the end of the exit, go right. At the traffic light, take a left onto Stanley Street. Go to the second light (about .9 mile) and take a right onto East Main Street. Take the third left onto Dewey Street. About 50 yards down on the left is our fenced-in compound, #24. There is no ERA sign. The main office is in the steel building in front.

Drop in for a Tour!

