When did it all start? In the past 30 years the F1 chassis has evolved from a tube frame covered with fiberglass to relatively heavy but stiff, strong sheets of aluminum honeycomb-covered alloy sheeting or Nomex bonded to carbon fiber. Beginning in the mid 1970's, carbon fiber from the aircraft industry was used in significant portions of some cars, though constructors remained cautious about using the material in their chassis designs because they doubted it could provide sufficient impact strength or chassis stiffness (a prime concern since the car's handling is affected by how well the suspension members and chassis react together). By the 1980's, sufficient impact testing had been done to convince engineers that composite fiber was crashworthy. Design engineers sorted ways to build a chassis strong at its stress points, yet stiff enough to provide good handling. The Mc Laren MP4 designed by John Bernard was the first total F1 car with carbon fiber panels produced in the USA from Hercules Aerospace.

What are Composite Fiber materials? Safety and speed are two primary goals of every race car engineer. Carbon Fiber provides an extremely strong, lightweight, yet brittle energy absorbing material that holds up under the stresses of high-speed racing. The brittle characteristics of carbon fiber materials are what cause a car to explode into thousands of pieces upon impact. The energy from the impact is carried away from the car and driver's cockpit. Carbon Fiber is ideal for structures on the car such as: the nose box which must be deformable and able to absorb impact; the undertray which must be lightweight, rigid, easily removable and able to retain its integrity under abrasion from encounters with the race track's curbing: the bodywork which must withstand attacks from exhaust gases and intense heat from the engine; and the wings which must be strong enough to sustain aerodynamic loads up to 100 times their weight yet be rigid, adjustable, lightweight and easily removed by one mechanic. Kevlar is the same material used in bullet proof vests, with anti-tear qualities that help protect the driver and fuel cells from being punctured by flying debris during accidents. Carbon Kevlar is very strong and flexible, great for use on compound curved surfaces like brake ducts, air intake scoops and other chassis components.

Scale Motorsport's Carbon Fiber, Carbon Kevlar and Kevlar decals replicate the composite materials used in race cars since the early 1980's. We recommend following the instructions on the inside of this package for a perfect job every time! Every car is different - even cars on the same team have different set ups - so make sure to do thorough research as to how your car was built. No longer used just for F1, you will now find carbon fiber materials used in all types of racecars including Le Mans, GT, DTM, Rally, Pro Stock and Top Fuel dragsters. You can even see carbon fiber components in many modern day street cars!

Complete application instructions are inside this package and check out our web site for more application details. Ask your hobby dealer or mail order house for Scale Motorsport products, if they don't have any tell them to contact us directly.

Mission Statement
Scale Motorsport was created to enhance the enjoyment and satisfaction of building model cars by developing products and services designed to heighten the realism and creativity of modeling enthusiasts while educating them about the exciting world of the automobile.

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Not All Decals are Created Equal!
Scale Motorsport Composite Fiber Decals are printed with lacquer inks while other decals may be printed with enamel inks. We use lacquer inks because they produce a thinner, more flexible decal capable of molding easier to compound curved surfaces. Lacquer and enamel inks respond differently to softening solutions so it is important you choose a softening solution that is formulated for the type of decal you are using. If you are uncertain about the softening solution you have we recommend that you do a test before applying the decal.

1. Surface Preparation
Paint the surface to be decaled with a semi gloss black paint, this will provide the proper 'tooth' allowing for maximum decal adhesion.

2. Decal Preparation
Place the decal in luke warm water for 30 seconds to 60 seconds. Remove the decal with its backing paper from the water bath and place on a paper towel allowing the excess water to be wicked away.

3. Part Preparation
While the decal and its backing paper are sitting on the paper towel, generously coat the surface of the part to be decaled with your softening solution using a paint brush.

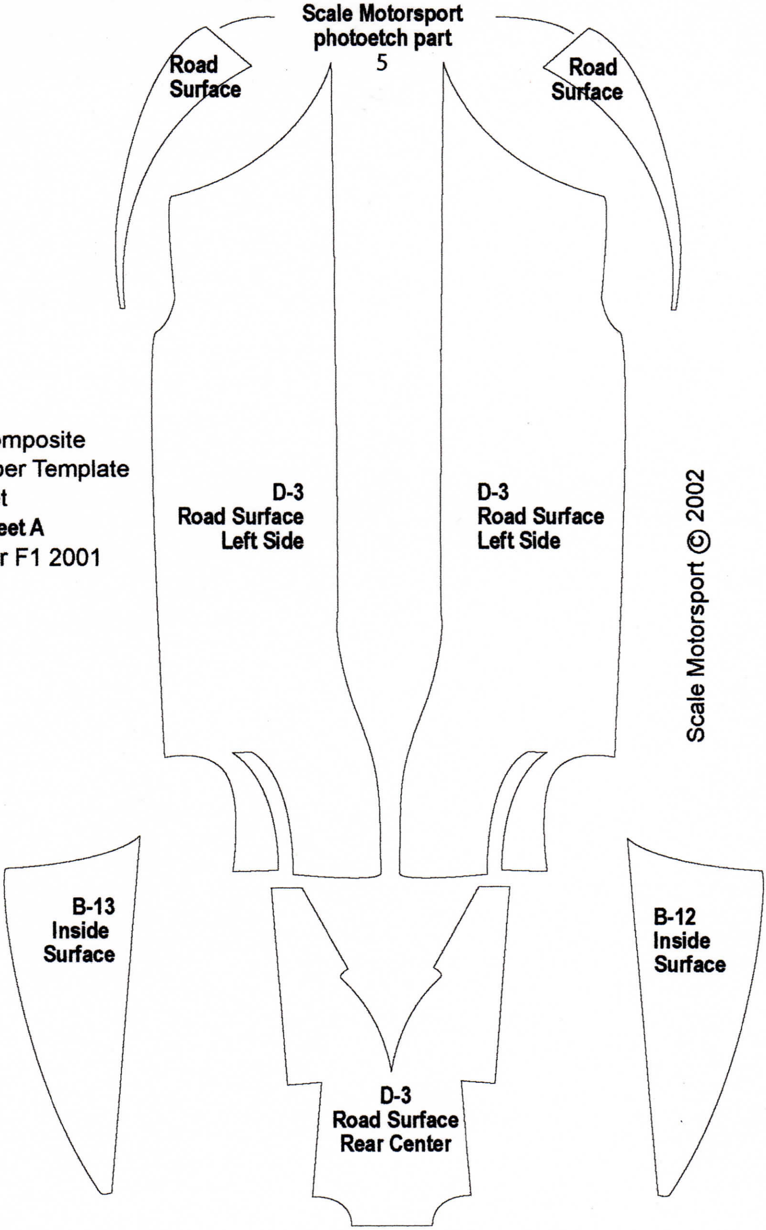
4. Decal Application
Separate the decal from its backing paper and position it onto your model part. After the decal is in position coat the top surface with the softening solution using the same paint brush. Do not allow large beads or puddles of softening solution to stand on the surface of the decal this will stain the decal's surface beyond repair. Next using your brush spread an even clean water wash over the entire decal working out any air bubbles that maybe trapped. After the top surface has been thoroughly washed with clean water brush over the entire decal surface with the edge of a paper towel wicking away any excess water. If you still have trapped air bubbles, you can work them out with your brush or poke them with a pin, or both.

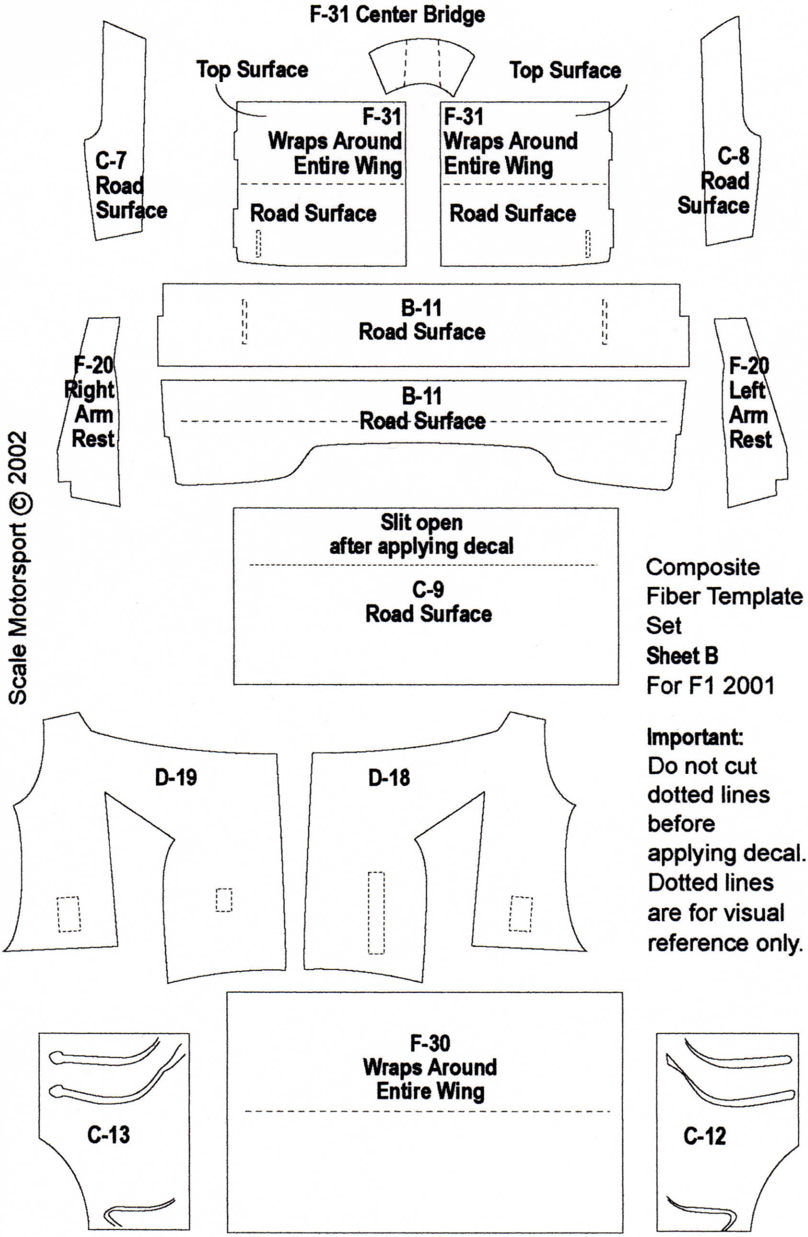
5. Curing Procedure
A low watt hair dryer can be used right away to speed up decal molding but remember even though the surface of the decal dries quickly there will still be moisture trapped underneath the decal, this moisture will take several days to completely dissipate. Do not clear coat any decals until you are absolutely sure all moisture underneath has completely evaporated. To speed up moisture evaporation and give the decal the appearance of actually being molded you can place the part in a food dehydrator for 48 hours.

6. Clear Coating
Make sure the surface underneath the decal is completely dry this can take four to five days or 48 hours if the part is placed in a food dehydrator. We recommend using a lacquer based clear coat making sure to spray a series of 'light mist coats' within 15 minutes of each other. We don't recommend using enamel based clear coats enamels will yellow the decal over time. The most important point to remember is to make sure all the moisture has evaporated from under the decal!

Video Demonstration
Check out our web site www.scalemotorsport.com for a complete video demonstration packed with interesting tips and techniques!

Composite
Fiber Template
Set
Sheet A
For F1 2001





Composite
Fiber Template
Set
Sheet B
For F1 2001

Important:
Do not cut
dotted lines
before
applying decal.
Dotted lines
are for visual
reference only.