The Classic ROLLS-ROYCE



Kit No. 8203



1/24 Scale 1931 Phantom II Convertible

The 1931 Rolls-Royce Phantom II Henley Convertible is one of the great classic cars of all time. The very name Rolls-Royce is one of the most respected in automobiles dating back to the famed Silver Ghost chassis, first built in 1906. Rolls-Royce was the result of the Hon. Charles S. Rolls, a sportsman and racing driver of international fame, convincing Mr. F. Henry Royce, an established automotive engineer, that a car of their combined experience and ideals would be unexcelled in design and construction.

Mr. Royce, who became the designer, builder, and Engineer-in-Chief of the Rolls-Royce, with the aid of a brilliant staff, has achieved that goal. From the very beginning, the Rolls-Royce was a "cost-no-object" automobile. Other cars were built to sell at a price. The Rolls-Royce was built with one thought in mind, to make "The Best Car in the World," regardless of cost.

In 1920, Rolls-Royce came to America and established a complete factory in Springfield, Massachusetts. In order to carry out the spirit of the English organization, a group of fifty-three supervisors were brought from England. Along with their families, they brought blueprints and actual samples of every part of the Rolls-Royce in each stage of construction for comparison. The Rolls-Royce was built from the radiator to the rear axle in the Springfield works. At this time the Silver Ghost chassis was still in production. The Rolls-Royce built at Springfield was identical to that built at Derby in England. Their parts were completely interchangeable except for the steering which in England was right hand drive. In 1925 the Phantom I chassis went into production. It was produced until late 1929 when the Phantom II chassis was started. At this point we would like to explain that Rolls-Royce specialized in making only the chassis. The coachwork had to be obtained separately.

However, the increasing demands of customers and the desire by Rolls-Royce to see coachwork only of correspondingly high quality used, it was deemed necessary not only to supervise, but to build and finish complete Motor Carriages. In America, in 1926, Brewster & Com-

pany, leading American carriage builders since 1810, was acquired to build coachwork exclusively on the Rolls-Royce chassis.

The Phantom II chassis, which was a direct descendant of the Phantom I and the Silver Ghost, incorporated ideas in the 20's that we think of as modern today.

The engine was a seven main bearing, overhead valve, 468 cubic inch six cylinder type, producing a very conservative R.A.C. rated, 43.3 h.p. This was capable of powering this 5,490 lb. car to speeds up to 90 m.p.h. The engine was fitted with dual ignition systems. One, the present day battery and coil system and the other, by magneto. While both systems were independent of each other, perfect synchronization between them was attained to insure correct timing at all speeds. Dual carburetors were used, one of which was for starting and slow running only. The starting carburetor was fitted with a tap in the main oil supply line and would feed oil to the cylinder walls upon starting. This eliminated the risk of damage should the car be driven before oil circulation had a chance to become thoroughly established. An unusually complete system of lubrication of the whole engine and accessory drives uses oil under three separate pressures. The engine was fitted with a self-cleaning oil filter. The filter was designed so that it would scrape itself clean of the dirt collected on the filtering surfaces, and deposit the residue in the base of the filter casing. This mechanism was interconnected with the clutch pedal so that it would require no special action by the driver. In the construction of the engine, each cylinder was lapped in by special dummy pistons so that the walls were perfectly smooth when the actual pistons were installed. The temperature of the engine was maintained through the use of thermostatically operated radiator shutters. That famous Rolls-Royce radiator has never been changed to this day.

The frame was built of heat-treated nickel steel alloy, braced with tubular cross members, and underbraced with tie-rods which were heat-treated nickel steel forgings. The frame was fastened together, not with rivets, but with special heat-treated nickel steel tapered bolts, each one

fitted in a reamed tapered hole. This frame was the result of a "bumping machine" which tested frames to the extent that it "crowded ten years into a day". These tests showed that rivets, the common method of fastening frames, were not adequate. It proved that in bolting parts together, many small bolts were stronger than a few large ones. This chassis also featured "centralized lubrication" a system whereby all working parts requiring lubrication were lubricated by the pull of a knob from the drivers seat.

The coachwork of this Henley Convertible was executed by Brewster & Co. of New York and features such unusual touches as a side opening rumble seat, solid Philippine mahogany running boards, and a firewall and body made of cast aluminum. Rolls-Royce scorned plating by

electrolysis, which was cheaper and deemed inadequate, so all the bright metal parts were either solid nickel or close plated, a process in which a sheet of nickel .006" thick was soldered to the parts. The total cost of this automobile at its time of manufacture was approximately \$19,000, depending on appointments. Overall length was 222" on a 150" wheelbase.

We have mentioned only a few of the amazing features of this truly great automobile to show why we here at Monogram chose this to be the next in our fine series of classic cars. This 1/24" scale kit was designed from photographs and measurements of an actual Rolls-Royce Phantom II Henley Convertible still in perfect operating condition. Assembled carefully, closely following the instructions, you will have a perfect replica of this great classic.

"ROLLS-ROYCE" is a U.S. registered trademark of Rolls-Royce, Ltd.

IMPORTANT! READ THIS BEFORE YOU BEGIN

Read through the instructions and study the assembly photos and exploded drawings to become familiar with all parts of the model. Once you have done this, begin assembly with step one.

Each plastic part is identified by a number on the part or on a tab alongside of the part. In the assembly instructions and photos the part number will be preceded by the letters B, S, P, or C to indicate whether the part is B-BLACK, S-SILVER, P-PLATED, or C-CLEAR plastic. Do not detach parts from the trees until you are ready to use them.

After cutting off the required part, trim away any excess bits of plastic that are not part of the usable piece. Use a sharp knife, such as a modeling knife, available a your hobby counter. Check the fit of each piece before you cement it in place. Use only cement specified for use with styrene plastic.

IMPORTANT! SCRAPE METAL PLATING AWAY FROM ALL PLATED

PARTS IN AREAS THAT WILL BE CEMENTED. PLATING MUST BE SCRAPED AWAY TO EXPOSE THE PLASTIC UNDERNEATH. CEMENT WILL NOT HOLD TO THE PLATED SURFACES.

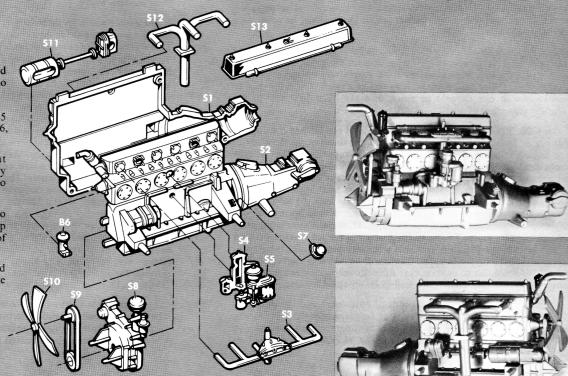
Do not use too much cement to join parts. All plastic cements contain solvents that dissolve the plastic forming a weld between the parts. Too much cement can soften and distort the plastic, spoiling your model's appearance. The tip of a toothpick is helpful in applying cement to small or confined areas.

The colored, clear and chrome plated parts assemble into a very colorful model. If you desire to do additional detail painting or to change the color of your model, refer to instructions "Painting your Model" before assembling.

Keep in mind the importance of not rushing the assembly. Haste usually results in a poorly assembled model.

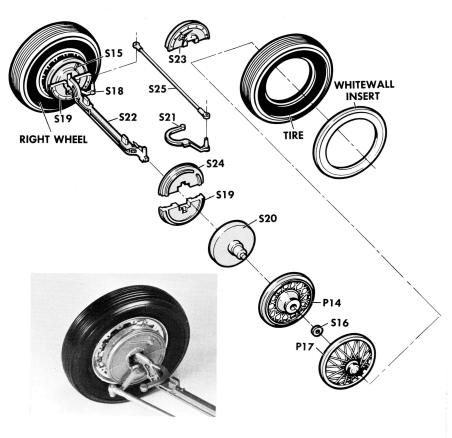
ENGINE

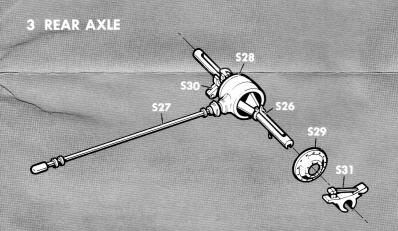
- Cement engine block halves S1 and S2 together. Add intake manifold S3 to left side of block.
- D. Cement carburetor halves S4 & S5 together. Cement carburetor, coil B6, and oil filler S7 to left side of engine.
- c. Cement pulley housing S8 to front of engine. Add pulley S9 to pulley housing and to engine. Add fan S10 to pin at top of pulley.
- D. Cement generator-magneto S11 to back face of pulley housing and to top of rear engine mount on right side of engine.
- Cement exhaust manifold \$12 and valve cover \$13 to engine. Compare assembly with photos.



2 FRONT AXLE

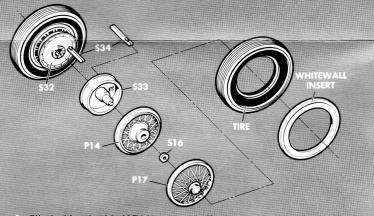
- A. Slip inside wheel half P14★ over spindle on right brake drum S15 (do not cement). Slip retainer S16 over end of spindle and carefully cement to spindle only. Do not get cement between retainer and wheel or wheel will not rotate.
- **B.** Cement outside wheel half P17★ to inside half using three small pins on inside half to align halves.
- **C.** Cement small tab on right steering arm S18 into hole in lower backing plate half S19 with arm coming out to the right, as shown.
- **D.** Cement lower backing plate half S19 to back side of right brake drum.
- **E.** Repeat above procedure for left wheel using parts S20, P14 \star , S16, P17 \star , S19, and S21.
- **F.** Slip end of axle S22 with small tab on end into back of left wheel (do not cement). See detail photo showing proper position of axle and steering arm. Cement left upper backing plate half S24 to back of brake drum trapping pins on end of axle with piece. Do not get cement on axle pins as this will prevent wheel from turning.
- **G.** Repeat above procedure for attaching right wheel to end of axle using backing plate half S23.
- **H.** Carefully press a tire onto each wheel with opening for white wall insert facing outward. Use forefingers to support back side of wheel while pressing with the thumbs. Be careful not to press on steering arm. Press (do not cement) whitewall insert into tires.
- **I.** Slip hole in each end of tie rod S25 over pin on steering arm on back of each front wheel (do not cement). Flare over pin at each end of tie rod with the heated blade of an old knife.





- Apply cement to small tab on rear axle S26. Hold differential S27 as shown, with plugs on differential housing facing down and insert rear axle into opening. Small tab on axle fits between ribs on large tab inside housing.
- Slip right and left axle cones S28 and S29 onto right and left ends of axle and cement to differential sides.
- C. Slip rear brake lever S30 onto right end of axle making sure small pin next to slot is facing towards differential housing. Slide the piece towards the housing past the long pin on axle. Now rotate the part so that small pin will fit between two pins on axle and apply cement. Next attach brake lever S31 onto other end in the same manner.

4 REAR WHEELS



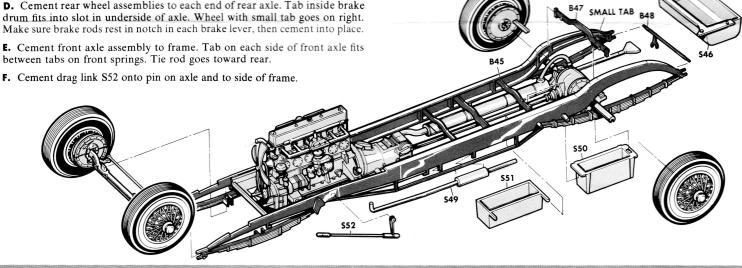
- A. Slip inside wheel half P14★ over spindle on right rear brake drum S32 (do not cement). Slip retainer S16 over spindle and carefully cement to spindle.
- Cement outside wheel half P17* using three small pins on inside half to align halves.
- C. Repeat above procedure for left rear wheel using parts P14*, S33, S16, and P17*.
- D. When cement has dried, carefully press on tires and press in white-wall inserts.
- Cement end of brake rod S34 with pin on it into slot in each rear brake drum.

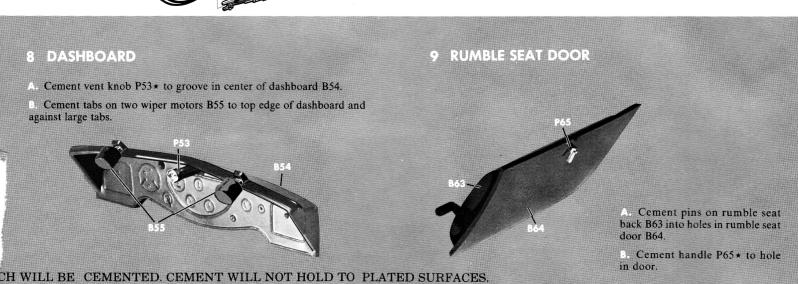
5 MUFFLER



- **A.** Cement muffler halves S35 and S36 together.
- **B.** Cement exhaust deflector P37★ to end of exhaust pipe S38.
- **c.** Cement exhaust pipe into large hole at rear of muffler. Cement rounded end of header pipe S39 into hole in front of muffler.

6 CHASSIS PART I A. Cement right frame rail B40 to pins on right side of engine. B. Cement right edge of engine pan S42 to frame rail under engine. Add left frame rail B41 to pins on left side of engine and to edge of engine pan. **C.** Slip ends of rear axle into space between frame rail and spring at rear of frame. Cement pin on drive shaft into hole in engine and pin on each side of axle between two small tabs on each spring. **D.** Cement frame crossmembers B43, B44, and B45 to sides of frame. **E.** Fit tailpipe on muffler over top of rear axle and cement hole in muffler to pin on B44. Cement end of header pipe to engine pan. **CHASSIS PART II** A. Cement gas tank S46 and crossmembers B47 and B48 between frame sides. Tailpipe cements to Y brace on rearmost crossmember. B. Remove five round tabs from crankcase vent S49. Cement part to hole in engine pan and between tabs on left frame rail. C. Cement battery box S50 and tool box S51 to left side of frame. Forward edge of battery box fits over tab on top of crossmember B45, while rear edge fits over tab on bottom of crossmember B47. Tabs on tool box fit in notches

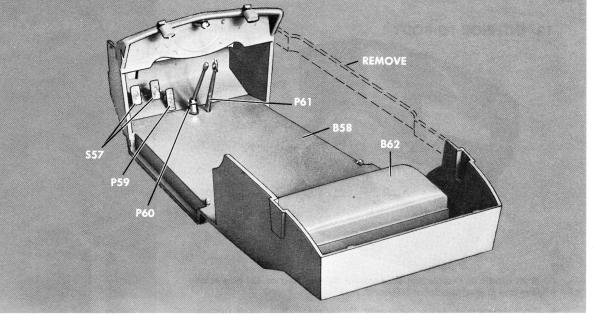




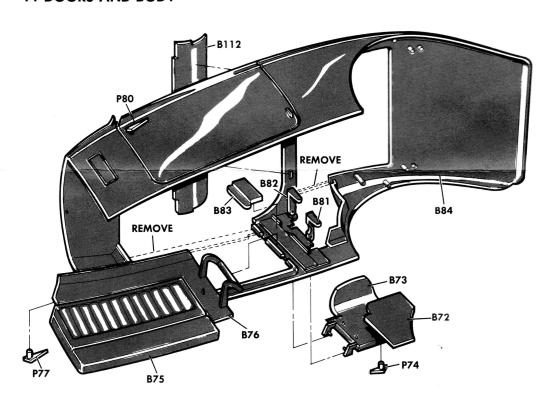
in frame side.

10 INTERIOR

- Remove straps from interior B58 and trim edges.
- Cement pin on brake and clutch pedals S57 into two holes in floor of interior B58. Cement pin on accelerator P59* to raised pad on floor.
- Cement shift lever P60* and handbrake P61* into slots on floor.
- Cement dashboard assembly to sides of interior at front.
- Cement rumble seat B62 to floor at rear of interior with pins on floor against inside rear edge of seat.



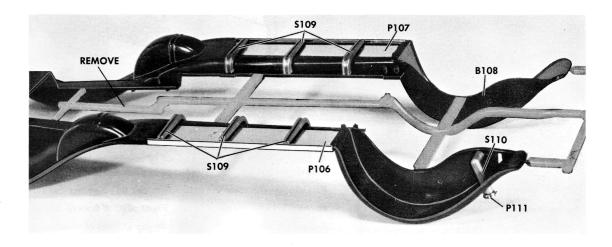
11 DOORS AND BODY



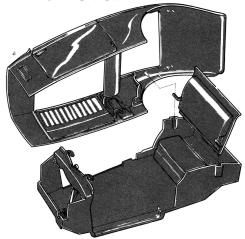
- **A.** Cement panel B72 to rear door B73. Add door handle P74 \star .
- **B.** Cement panel B75 to right door B76. Add door handle P77*.
- **C.** Repeat above procedure for left door using parts B78, B79, and P80*.
- **D.** Carefully cut away hood and three support straps from door areas on body B84.
- **E.** Using small pieces of tape, tape rear door into position in body, applying tape to the outside. Slip arm on bottom hinge arm B81 through opening in body at bottom hinge and slip hole in arm over pin on hinge, cement pin on hinge arm to inside of body.
- **F.** Repeat procedure for upper hinge arm B82 leaving tape in place until cement dries overnight.
- **G.** Tape right door into position on body and cement hinge plate B83 over hinge bar to body.
- **H.** Repeat procedure for installing left door using remaining hinge plate B83.
- **I.** Cement curved edge of seat well B112 back against front of tabs up under portion of body that runs across the car behind the seat area. Forward edge of seat well should be placed near top of door hinges.

12 FENDERS

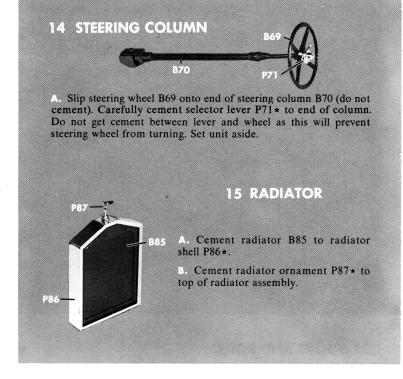
- A. Cut away connector straps shown in light gray in photo. Cement right and left running boards P106★ and P107★ to fender assembly B108.
- **B.** Cement holes in braces S109 over pins on running boards and end of braces to fender assembly.
- **C.** Cement filler pipe S110 to inside right rear fender.
- **D.** Remove round tab from gas cap P111* and cement to end of filler pipe with hinge detail towards rear.



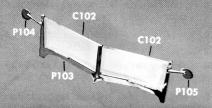
13 INTERIOR TO BODY



- **A.** With handle on rumble seat door toward front of interior, lay pins at side of door into groove in sides of interior at rear.
- **B.** Slip body assembly down over interior. Pins at rear of body locate rear edge of interior. Make sure rumble seat door will open. Cement body and interior together at rear and at door sills.

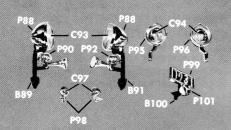


16 WINDSHIELD



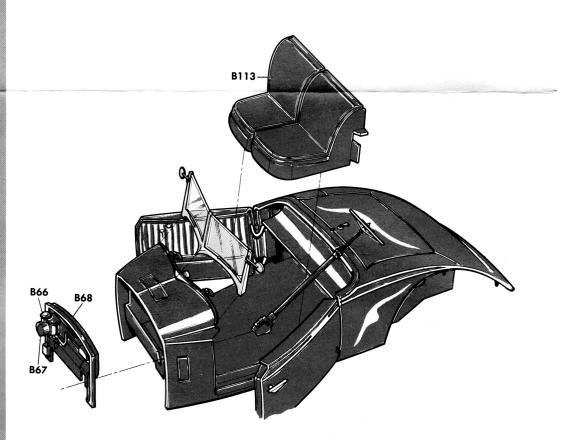
- Remove round tabs from windshield halves C102 and cement to windshield frame P103 *.
- Add right and left side view mirrors P104* and P105* to frame. Pins on mirrors fit into small holes in frame.

18 LIGHTS



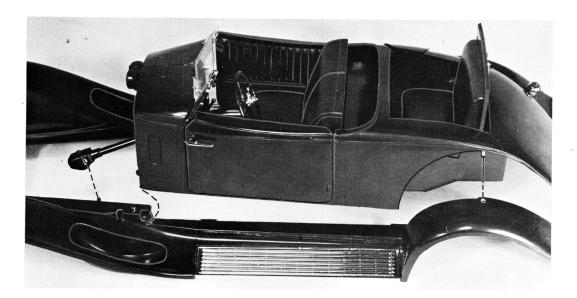
- Cement headlight P88* to right headlight bracket B89. Cement small tab on horn P90* to long tab on headlight bracket. Add lens C93 to headlight. Lines on face of lens on the outside.
- Repeat procedure for left headlight using parts P88*, B91, P92*, and C93.
- C. Cement lenses C94 to right and left road lamps P95* and P96*. Lines on face of lenses on the outside.
- Cement lenses C97 to fender lamps P98*. Lines on face of lenses on the outside.
- Cement license plate P99★ to long pin on stoplight bracket B100. Remove two tabs from stoplight P101★ and cement to end of bracket.

17 MAIN BODY



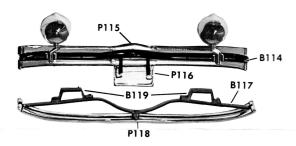
- **A.** Remove tape from doors and open them to see inside. Lay steering column into slot near brake and clutch pedal in interior.
- **B.** Cement front seat B113 to floor of interior making sure edges of seat sides are back against pins on floor. Close doors and tape in place again.
- C. Cement lube reservoir halves B66 and B67 together and then to firewall B68.
- **D.** Add firewall to front of body. Front edge of firewall should be flush with body.
- **E.** Cement windshield assembly★ to gap at front of dashboard.
 - ★ SCRAPE OFF CHROME PLATING FROM ALL PLATED PARTS IN AREAS WH

19 BODY TO FENDERS

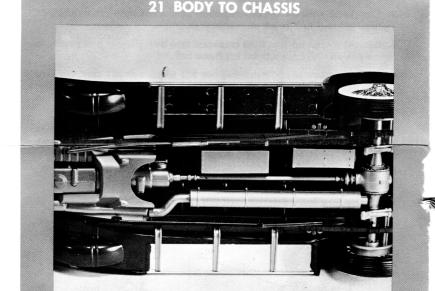


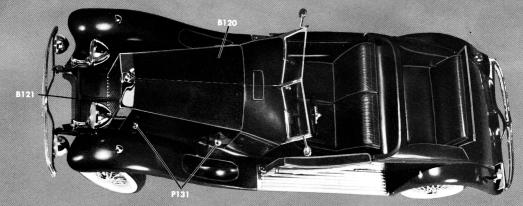
- **A.** Slip body assembly onto fender assembly. Pins at rear of body fit into holes in top of rear fender. Cement into position. Hold parts together tightly with fingers until cement sets.
- **B.** Cement hole in steering gear box on steering column to pin on fenders.

20 BUMPERS



- **A.** Cement front bumper brace B114 to front bumper P115★. Add license plate P116★ to two pins on bumper brace.
- **B.** Cement bracket on right and left road lamp to notch on each side of bumper brace.
- **C.** Cement rear bumper brace B117 to rear bumper P118*. Add bumper brace extensions B119 to each side of bumper brace. Holes in bumper brace extensions fit over small pins on bumper brace.



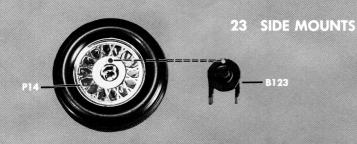


- A. Set chassis into body. Pins on chassis near forward end of rear springs fit between pair of pins on each side of fender assembly. Cement into position.
- B. Cement four hood latches P131* into four square holes in hood B120.
- C. Add radiator★ to front by cementing bottom of radiator to pan between fenders. While cement is still wet fit hood B120 into place and press radiator against front of hood for a good close fit.
- D. Remove four round tabs from crank brace B121 and cement into small hole in front of radiator and to notches between fenders. Small flat areas on
- end of larger rod fit down into notches in between fenders.
- Add right and left headlight assemblies. Check alignment from front and top to make sure headlights are straight.
- Add fender lamps to hole in top of each front fender.
- . Add stoplight assembly to slot in left rear fender.
- 11. Add front and rear bumper assemblies to chassis ends. Make sure rear bumper has curved center towards top.

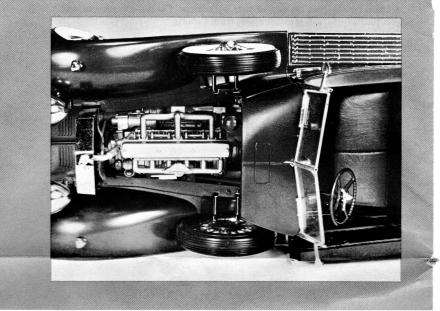
Your Rolls Royce may be finished with the top down and the boot in place or it may have the top up. Clear side windows C128 and C129 are included for those who wish a completely enclosed car without operating doors. For normal use with operating doors side windows may be discarded.

- **A.** Cement rear window C124 to opening in top B125 from the outside.
- **B.** Cement right and left top side pieces B126 and B127 to lower side edges of top.
- C. Cement top into place on body or . . .
- D. Cement boot B130 into place on body.





- A. Cement inside wheel half P14* to outside wheel half P122* using three small pins on inside half for alignment.
- L. Cement mount B123 into wheel. Pin on mount fits into small hole in inside wheel half.
- c. Carefully press tire onto wheel with opening for whitewall insert facing outward. Press whitewall insert into opening.
- Repeat procedure for opposite side mount.
- Cement side mounts in place on running boards.



PAINTING YOUR MODEL

Those who enjoy painting additional details or wish to change the body color should use a soft brush, about 1/4" wide for painting large areas. A small pointed brush is best for painting small details. Use only ENAMEL or PAINTS FOR STYRENE PLASTIC. Spray paints in cans are available in most hobby shops if you prefer a sprayed paint job.

It is best to paint some parts before the model is assembled. Allow paint to dry thoroughly and scrape paint away from areas which will be cemented. Cement does not hold well to paint. Suggested colors are listed. Other combinations can be used if desired.

BLACK — Front of horns - license background - rear edge of exhaust deflector - knob on shift lever - fan belt - radiator hose - magneto - windshield wiper blades - distributor top - wire looms - brake lever handle.

BROWN — Between cleats on running boards - upholstery, including rumble seat and back, front seat, and door panels.

SILVER — Rear and side window frames - snaps around top - spokes in steering wheel - handles on inside of door panels - instrument panel on dash.

RED — Top section of stoplight - emblems on bumpers and radiator.

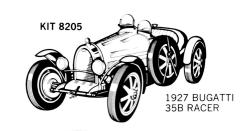
WHITE — Lower section of stoplight - spark plugs.

GREEN — Lower left section of stoplight.

AVAILABLE CLASSIC CAR KITS 1/24 SCALE







22 TOP





