

1-12 IDENTICAL Length 333mm Super Detailed Fuel Injection Engine Steerable Front Wheels Width—143mm Semi Pneumatic Rubber Like Tires Height—70mm Realistic Driver's Figure





HONDA F-I

(Essential Specifications of the Honda RA273)

: 2,509 mm Wheel base

: 1,662 mm (front); 1,370 mm (rear) Tread : Honda RA273 VI2 DOHC Engine

2992 55 Capacity

Maximum power: 400 HP/10 500 rpm

Clutch : Honda multiple disc clutch Transmission : 5-speed forward and 1-speed

backward, made by Honda Tyre Goodyear

Body/Chassis: Light-metal full-monocoque

Body weight : 650 kg

Honda F-1

It was 24th October, 1965. The weather was fine. In the Rodriguez Circuit on the outskirts of Mexico City, a machine was running at full speed with its snow-white body glittering under the blazing sun of the southern country. The V 12 cylinder engine was giving forth a metallic In this Mexican Grand Prix, the last of the 1.5-litre F-1 races which had been held since 1961, the Honda F-1 driven by Richie Ginther which came to the top on the 1st lap was leading the Brabham of Dan Gurney running second with a margin of more than 300 m. On the 56th lap, Ginther set a lap record of 1'56', leaving all the other machines far behind. On the 57th lap, Gurney made a better record of 1'55.48" and reduced the margin little by little. Ginther, however, kept running at a stable pace with composure. Now it was certain that Ginther would win the race unless an unforeseen accident happened. Turning the last corner on the final lap, he finished first with a margin of about 150 m over Gurney who held the second place. It was in the German Grand Prix held in the middle of the 1964 season that Honda took part in a F-1 race for the first time as a Japanese manufacturer. The first Honda machine RA271 failed to win a prize at all, but the power generated by its horizontal V 12-cylinder engine was larger than that of any other F-1 machines participated in the Grand Prix. Engaging Ginther as a new driver in addition to Ronnie Bucknum who drove the Honda F-1 in 1964, Honda entered the improved RA272 machine for F-1 races again in 1965. The machine, however, did not obtain satisfactory results except the sixth prize in the Belgian Grand Prix until the Maxican Grand Prix, the very last 1.5-litre race. The victory in this race would have been worth more than anything else in the world for Honda. This was the Honda's first victory in 11 races which it joined in two years. If 1.5-litre F-1 races had been held also in 1966, there would have been the strongest possibility of Honda winning the championship considering the large power of the 230 HP/12,000 rpm engine and the chassis improved year by year.

The Honda 3-litre F-1 RA273 in 1966

The day of 1.5 litre F-1 was over with the victory of the Honda RA272. Under the new 3-litre F-1 regulations providing that the displacement should be 3,000 cc or less and the

weight should be 500 kg or more, new F-1 races were initiated in 1966.

In July 1966, the new Honda 3-litre F-1 RA273 was completed in accordance with the new regulations. The suspension system was of very conventional construction, the front being a combination of upper I-wishbone, lower I-arm, leading arm and coil damper unit, and the rear being a combination of upper I-arm, lower inverted A arm, upper & lower trailing arms extending from the front and coil/damper unit in addition to torsion bar stabilizer. The body was of lightalloy full-monocoque construction. extended to the rear, between which the 90°V 12-cylinder DOHC 2.922 cc engine was mounted. The body weight was reduced by, for instance, using synthetic resin film in the fuel tank but was still more than 700 kg, which was far over the regulated minimum weight of 500 kg. The engine output was over 400 HP/10,500 rpm, which was larger than that of any other F-1 machines. The Honda RA273, which was the heaviest and most powerful of all F-1 machines, made its debut in the Italian Grand Prix on 4th September with Ginther as the driver. The Monza Circuit of Italy, which has few curves and is counted as one of the high-speed circuits of Europe, was advantageous to the powerful Honda. The RA273 driven by Ginther made a good start from the seventh starting position and rose to the second place on the 13th lap. It seemed as if Ginther would soon outstrip the Ferrari of Scarfiotti running at the top. On the 18th lap the Honda ran through the straight at a speed of more than 250 km/h and entered the Curva Grande (large curve), when the tyre of the left rear wheel suddenly began burning. The machine got beyond control and crashed into a tree. Ginther suffered only a broken collarbone and escaped death by a miracle. Although the RA273 lost its first race because of this unforeseen accident, it proved to have high potentiality. Honda, however, fared badly in subsequent races. In place of the No.1 vehicle of the RA273 which became unrepairable, No.2 and No.3 vehicles were immediately constructed. In the U.S. Grand Prix, Ginther and Bucknum drove the vehicles but were both forced to retire. Also in the subsequent Mexican Grand Prix. Honda did not gain satisfactory results. Ginther being in the fourth place and Bucknum in the seventh place.

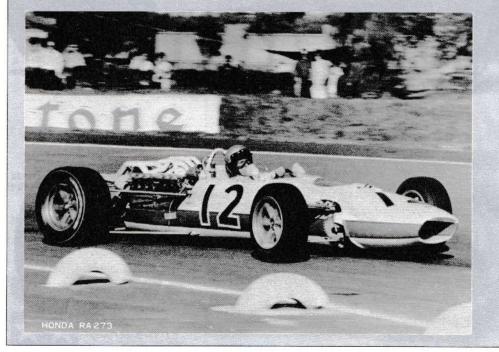
In 1967, John Surtees became the No.1 driver of

Honda to take the place of Ginther and the Honda machine was much improved. South African Grand Prix held on the first day of that year, Surtees, who started at the sixth starting position, finished third despite the bad condition of the gear box. Thus Honda made a good start in the new season. In the subsequent Monaco, Dutch and Belgian Grand Prix, Honda retired because of engine trouble. Honda barely managed to take the sixth place in the British Grand Prix and the fourth place in the German Grand Prix. It is true that the Honda engine was the most powerful of all F-I machine engines, but the vehicle itself was not lightened enough and weighed more than 650 kg. The appearance of light and powerful machines such as the Lotus

> and the Ford put Honda in a tough situation, With the cooperation of Lora Plant of Eric Bradley with whom Surtees was on terms of intimacy. Honda set to work with a view to manufacturing a new lighter machine. The engine was basically the same as the previous one but became lighter by about 20 kg. The weight of the chassis was also reduced by 80 kg. Thus was born the RA300 machine. Completed immediately before the Italian Grand Prix, the RA300 participated in the race without being put to regular tests and achieved a dramatic victory with a margin of only 2'm over the second. In 1968, the RA300 developed into the RA301. In the 1968 French Grand Prix, the epochmaking machine RA302 equipped with a natural air-cooled V8 engine made its debut. In this race held in a rain, however, the RA302 ran out of the course and caught fire. Jo Schlesser, driver, was burnt to death. This was a really tragic debut for the RA302.

R A 300

After entering the RA301 and the RA302 for the races of the 1968 season, Honda withdrew from F-1 races. Participating in F-1 races, which had been the "unknown world" for Honda, over a period of five years, Honda won the 1965 Mexican Grand Prix and the 1967 Italian Grand Prix. These results were never disappointing. Honda, however, attached no great importance to the race results and regarded races as the "running laboratory". By testing new mechanism devised one after another in races. Honda acquired extensive knowledge and experience which, in turn, were applied to production vehicles. It may safely be said that the knowledge and experience were the greatest results that Honda gained in F-1 races and meant the greatest victory for Honda





- *Before applying glue, construct each part and section to ensure that you are fitting the parts correctly.
- ★Before starting to build your kit, check all the parts.
- ★Where parts are shaded blue in these instructions, it means that they are to be glued together with plastic cement.
- This mark shows in which colour to be painted. You will probably find it easier to paint smaller parts whilst they are still on the sprue.

(Construction of Bulkhead)

First fix parts A7 and A10 with adhesive, and then fix part A8 onto A10. the holder of Reverse A Arm, so fix it with adhesive securely.

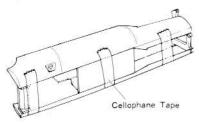
2(Construction of Master Cylinder)
Use a sufficient amount of adhesive when fixing L-shape Metal Holders B3 and B5.

(Fixing of Inner Panel of Body)

Fix E 2 to the pin of A1.

(Construction of Body)

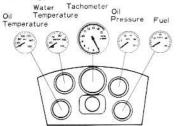
Body is large. Apply adhesive to both parts to be glued together and hold them together by means of rubber bands, tapes or the like



(Fixing Interior Parts of Body)

Be careful not to fix D6 or D7 with the front side back. The round side must face outward.

After applying the decal, fix Instrument Panel E23.

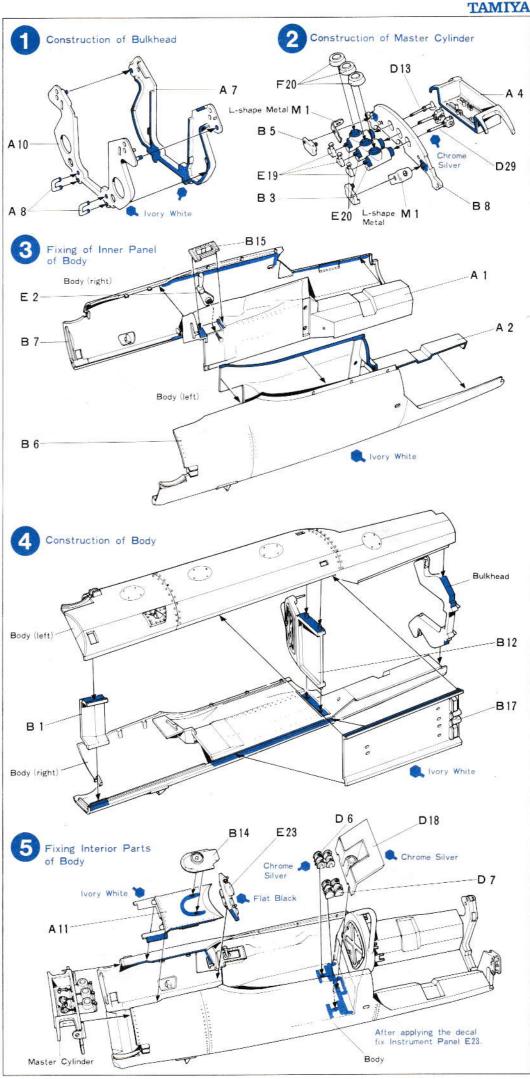


PAINTING

The body colour of the Honda F-I has been designed on the basis of the sun-flag, a red disk on a white ground. A glossy-red circle is drawn on the ivory-white body. For painting of small parts, see construction figures and part figures. Painting will enhance the beauty of mechanism and painting work will fully satisfy your appetite for creation.

(Timing of Painting)

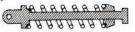
Parts to be finished in the same colour should be painted after they have been assembled as far as possible. This is a key to good painting. Prior to painting, remove adhesive pressed out and adjust seams by means of a file. Give delicate care even to small screws and your model will be finely finished.



(Construction of Shock Absorber)
Assemble two pairs each.

When assembling Rear Shock Absorber, first fix $E\ 8$ and $E\ 6$ with adhesive, and set a spring in it and then insert $F\ 14$ onto the spring.

Front



Rear

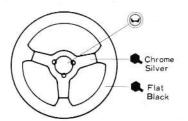


(Construction of Front Suspension)
When putting part H20 in, do not use glue.

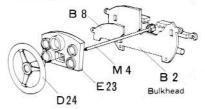
(Fixing of Front Suspension)

When fixing D28, D20 and D21 with adhesive, apply the glue onto only blue position.

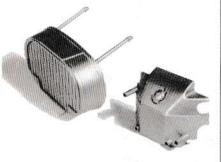
(Painting of Steering Wheel)



When fixing Steering Shaft M 4, see the figure below.



(Fixing of Radiator and Water Tank) Construct Radiator and Water Tank indivisually, and then fix them in place.



(Fixing of Water Pipe)

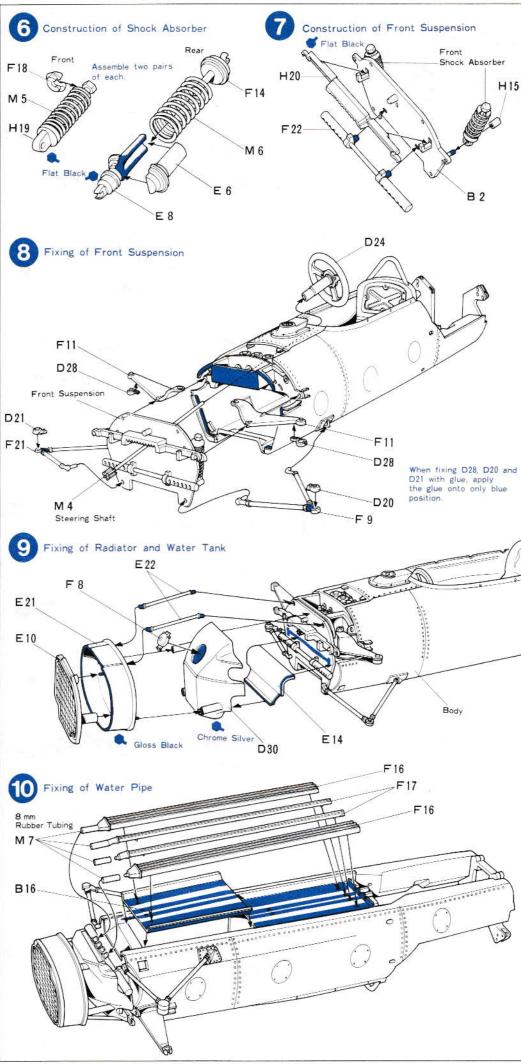
Fix Rubber Tubing to F16 and F17 first to make the next step easier.

PAINTING

(Spray Painting)

The body may be spray painted.

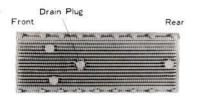




①(Construction of Cam Shaft Cover) Be careful of the direction of D42 when fixing it to D44. See the figure carefully.

(Construction of Engine)

Oil Pan D 38 must be fixed in such a way that the hexagon drain bolt at the bottom is on the front side. Be careful to fix D27 front-side back.

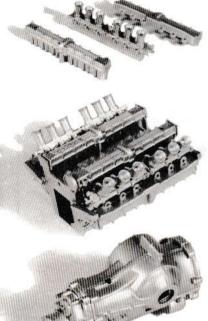


(Fixing of Transmission)

When fixing the part H13, do not use glue. It is only inserted.

(Fixing of Engine Parts)

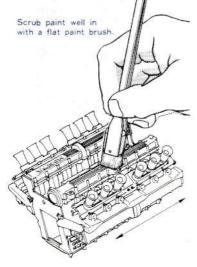
Put parts together for trial without using adhesive to make sure that they are properly assembled, and then glue them together.

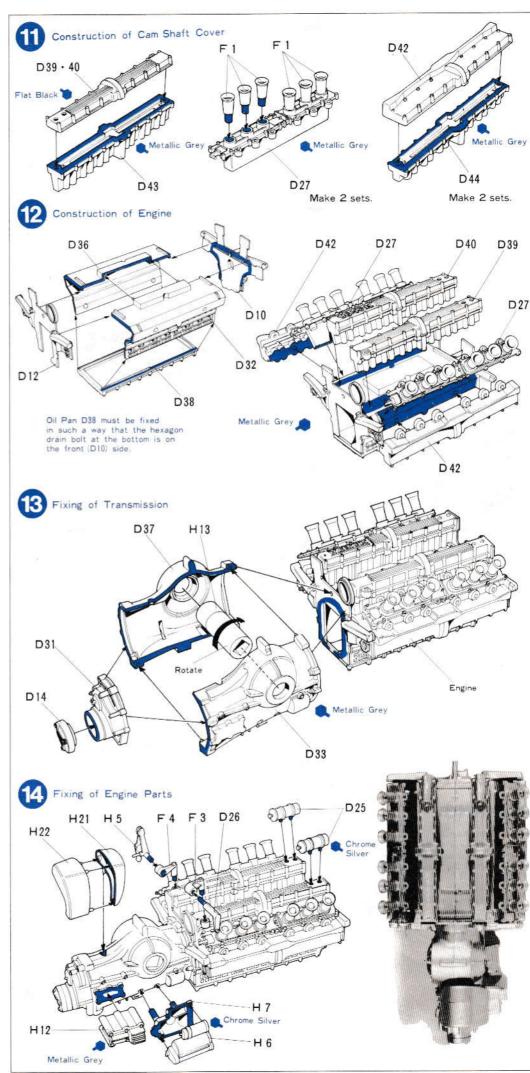


PAINTING

(Painting the Engine)

Apply flat metallic grey paint to the engine with a flat brush and scrub the paint well in to the plastic.





(Construction of Distributor)

Cut Black Wire into two 75 mm,

two 70 mm,

two 65 mm,

two 55 mm two 45 mm pieces.

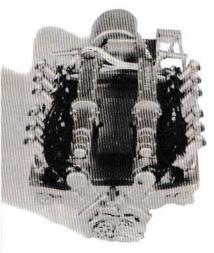
Pass 75 mm, 65 mm, 55 mm and 45 mm pieces through E4 and tie them securely with thread as shown in the figure.

(Construction of Fuel Injection Pump)

Cut White Wire into six 180 mm pieces. Fix four of them at the center and two at 110 mm and 70 mm.

(Fixing of Wires)

Fix Black Wires to the holes of D27 and White Wires to the holes of D42. Each wire should be cut to a proper length to the hole before it is inserted.



(Construction of Exhaust Pipe)

Exhaust Pipes are similar to each other in shape. Check the numbers before gluing them.

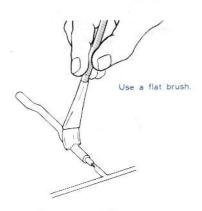
(Fixing of Extensions)

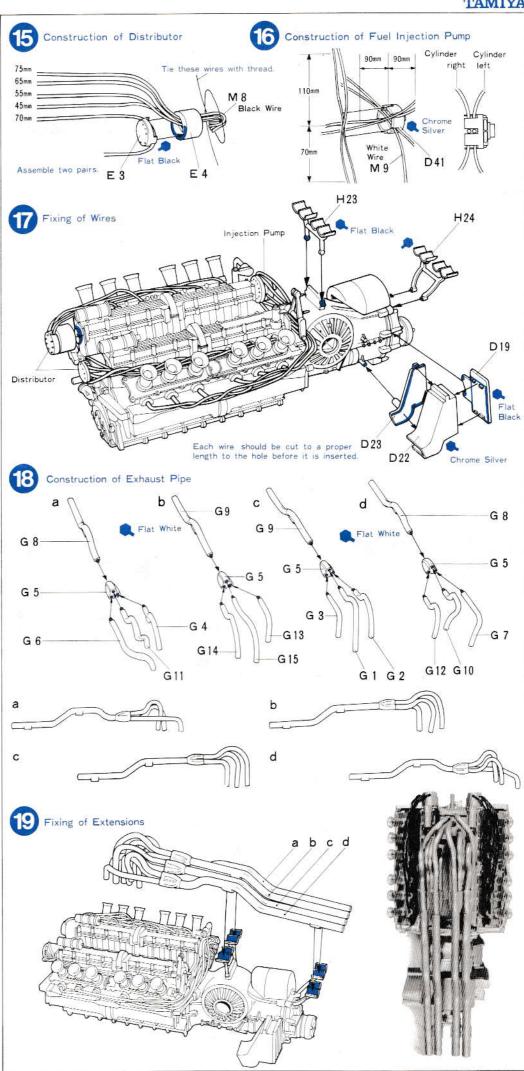
Mufflers should be arranged in the order of a, b, c and d from the right.

PAINTING

(Using a Flat Brush)

For flat surfaces a thicker flat brush is required. Always paint small parts while they are still on the sprue.









(Construction of Universal Joint) Do not cement F12.



(Construction of Rear Suspension)



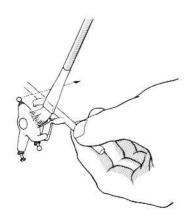
(Fixing of Rear Suspension)

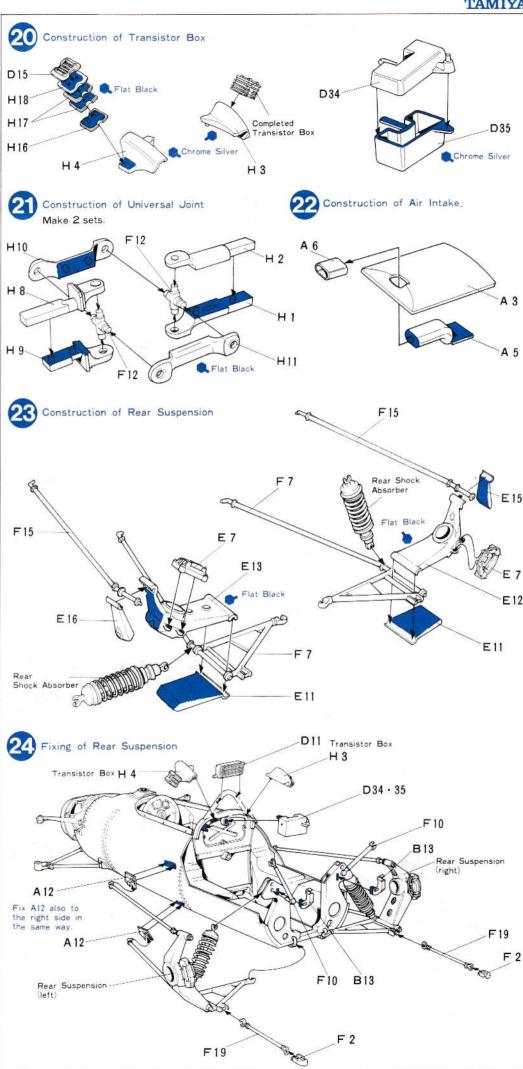
When fixing Suspension to Body, first put Suspension through A12. Each part should be just put in. Do not use adhesive.

PAINTING

(Painting of Uprights)

Small parts like the uprights should first be cleaned with a firm flat brush and then painted while still on the sprue. Only cut them from the sprue when they are dry.





(Construction and Painting of Figure)
Construct Figure as shown in the diagram.
Do not fix arms now. They are to be fixed later on.



PAINTING

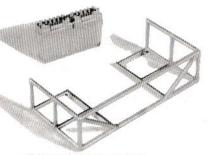
(Painting the Figure)

Paint Figure ivory white overall. Then, draw red lines and the features of the face with a pointed brush.



(Construction of Accessory Parts)

C 3 is a transparent part and must be constructed carefully. If too much adhesive is applied, it will be tarnished.



(Construction of Wheels)

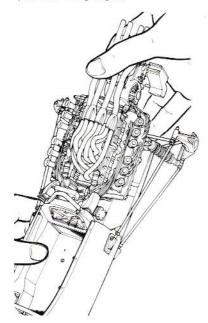
Front Tyres are narrower than Rear Tyres. Make sure of wheel width before fixing them.

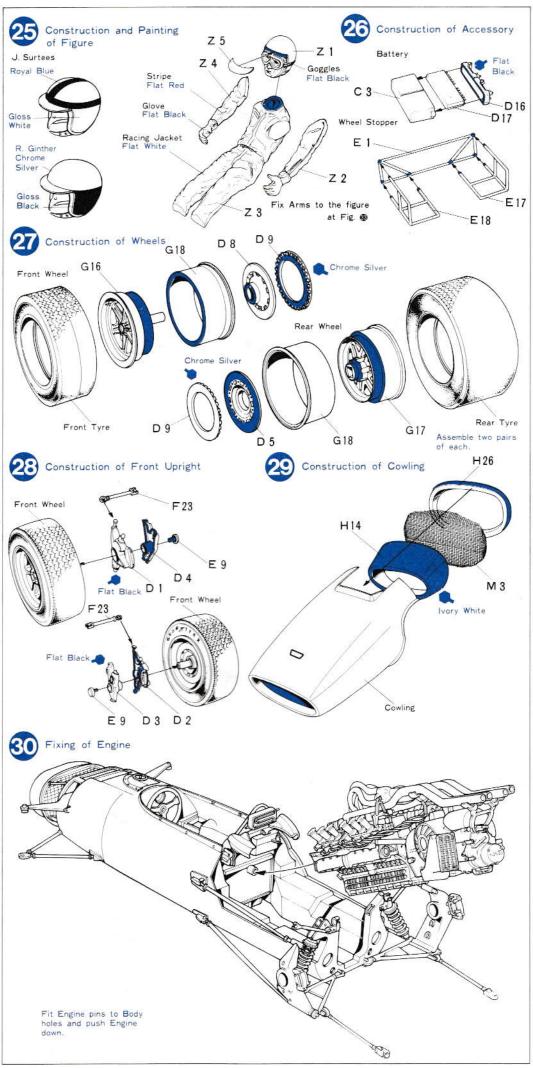
(Construction of Cowling)

 $\mbox{H26}$ serves as a support Gauge for $\mbox{M3}$ and must be fixed securely.

(Fixing of Engine)

Hold Engine as shown in the figure and fit it into Body. If it is forced into Body, seams may come off or slender parts may break. Pay attention to the motion of each part when fitting Engine.

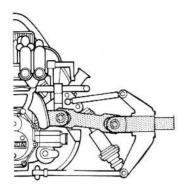




(Fixing of Universal Joint)

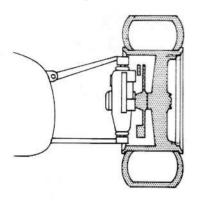
Fix Universal Joint with Rear Suspension pulled outward.

A9 and F13 should be under Exhaust Pipes.



@(Fixing of Wheels)

Rear Wheels should be just fit in. When fitting Front Wheels, be careful of the direction of Uprights.



(Fixing of Figure)

Fix Figure together with Seat. Fix figure arms after Figure has been mounted. Then, fix Windscreen.

PAINTING

(Finishing)

Use a fine liner brush to paint the detail onto the tyres. The completed model can be polished with wax to improve the finish



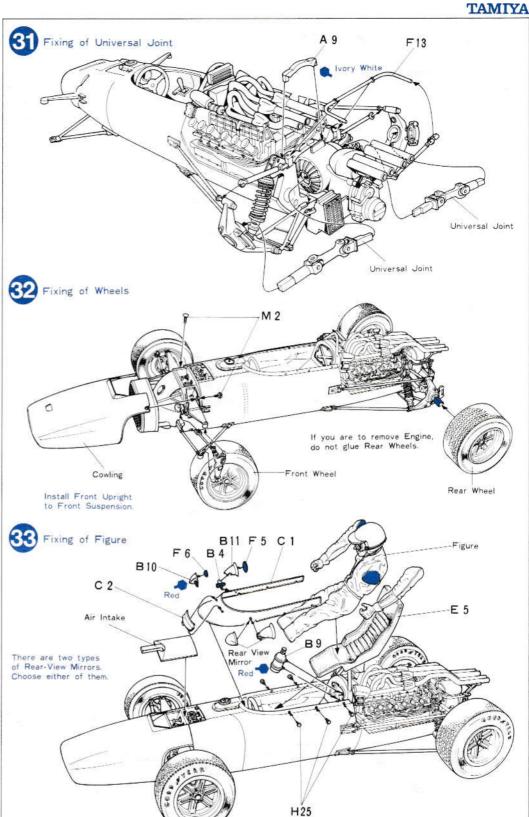
TAMIYA ACRYLIC PAINTS

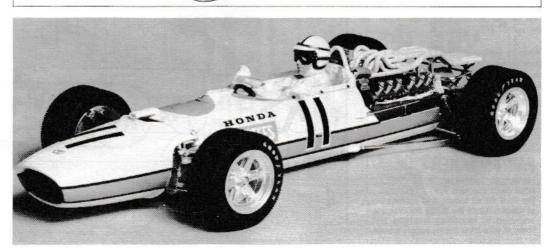
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PAINTING APPLYING DECALS

COLOURS NEEDED FOR THIS KIT

(GLOSS WHITE)

White tined with yellow for painting the Body.

(FLAT BLACK)

To be used for the Cam-Shaft Cover and Oil Cooler.

(CHROME SILVER)

Bright Silver to touch up plated parts and to paint bolts, etc.

(METALLIC GREY)

To be used for the Engine.

(FLAT WHITE)

Used as radiating paint for the muffler, Add a small amount of Silver to lend realism to the colour.

(FLESH)

Used in painting the skin. Add Flat Brown to give the face effects of light and shade.

(INSIGNIA RED)

Glossy red. Used in painting the fender mirror, fire extinguisher, etc.

(MARK)

Use the mark of either John Surtees or Richie Ginther. Choose a number from the ranking table.

APPLYING DECALS

The illustrations on this page show the positions of the decals. More precise instructions for some decals will be found in the step by step building instructions.

Before applying decals clean the surface of the plastic well with a soft cloth.

Place the decal in water. When the paper wrinkles take it out and place it on a cloth or towel.

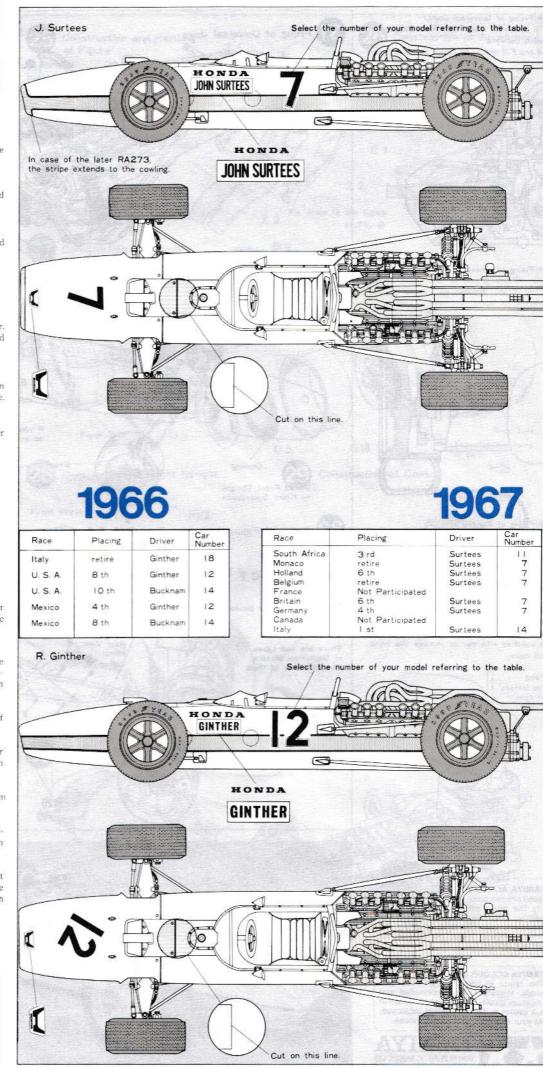
A minute or two later slide the decal from the paper into position onto the kit.

You can move the decal gently into position on the plastic with some water on the end of your finger.

When in position force any air bubbles out from under the decals and adsorb all the water by pressing and gently wiping with a soft cloth.

PAINT MARKER

Hand held, Tamiya enamel paint markers. For the final detail touch, and professional results. 12 of the most popular colors used in modeling. See and test them at your local hobby supply house.



TAMIYA

PARTS



A PARTS

- Inner Panel of Body A
- Inner Panel of Body B Master Cylinder Cover
- Part of Body (front)
- Air Intake A
- Air Intake B
- Bulkhead D Reverse A Arm Holder
- 9. Bulkhead F
- 10. Bulkhead E
- 11. Body Upper Panel 12. Radius Rod Fixings

PARTS

- Under Panel A
- Bulkhead A
- L-shape Metal Holder (right)
- Rear View Mirror A Support
- L-shape Metal Holder (left)
- Body (left)
- Body (right)
- Bulkhead B
- Extinguisher 10
- Rear View Mirror B Rear View Mirror A
- 12. Bulkhead C 13. Rear Stabilizer Holder
- 14. Fuel Cap
- 15. Shift Lever Frame
- 16. Under Panel B
- 17. Under Panel C



- 1. Wind Shield A Wind Shield B
- 3. Battery Case



PARTS

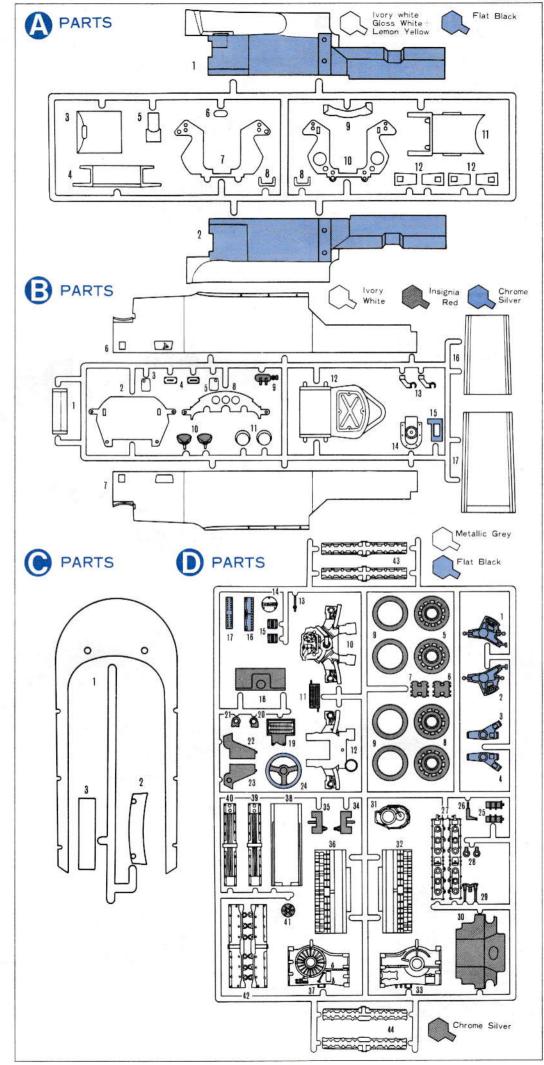
- Front Upright left A
- Front Upright right A Front Upright left B
- Front Upright right B Rear Brake Disk A
- Fuel Pump (right) Fuel Pump (left)
- Front Brake Disk A Brake Disk B
- Engine front Fuel Cooler
- 12. Engine rear 13. Clutch Piston Rod
- 14. AC Generator Cover
- 15. Transister Box A 16. Battery Cover 17. Battery Plate

- 18. Fuel Tank
- 19. Oil Cooler A
- 20. Front Arm Part (left) 21. Front Arm Part (right)
- 22. Oil Cooler B
- 24. Steering Wheel 25. Ignition Coil
- 26. Throttle Link
- 27. Throttle Plate
- Front Upper Arm Part 29. Brake Piston Rod 30. Water Tank A
- 31. Transmission (rear
- 32. Engine (right)
- 33. Transmission (right) 34. Fuel Reserve Tank A
- 35. Fuel Reserve Tank B
- 36. Engine (left)
- 37. Transmission (left)
- 38. Oil Pan
- 39. Cam Shaft Case A (upper, right) 40. Cam Shaft Case A (upper, left) 41. Injection Pump
- 42. Cam Shaft Case B (upper)
- 43. Cam Shaft Case A (lower) 44. Cam Shaft Case B (lower)



PARTS

- L-Shape Metal
- Cowling Stopper Screw
- Cowling Net Steering Shaft
- . Coil Spring (small) . Coil Spring (large)
- 7 ,Rubber Tubing 8 .Black Wire
- 9 .White Wire



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PARTS



PARTS

- Wheel Stopper A
- 3. Distributor A
- Seat
- . Disc Caliper
- Rear Shock Absorber B
- 9. Front Wheel Stopper 10. Radiator A 11. Rear Upright C
- 12. Rear Upright A (right) 13. Rear Uprigh A (left)
- 13. Rear Oprigh A (left)
 14. Water Tank B
 15. Rear Upright B (right)
 16. Rear Upright B (left)
 17. Wheel Stopper B
- Wheel Stopper C
- 20. Master Cylinder
- 22. Radiator Support
 - 21. Radiater B 23. Instrument Panel

2. Shift Lever

4. Distributor B



PARTS

- Air Fanner
- 2. Clip for Stabilizer

14. Rear Shock Absorber A

16. Water Cooling Pipe 18. Front Shock Absorber B

20. Master Cylinder Cap

2. Exhaust Pipe B 4. Exhaust Pipe D

7 , Exhaust Pipe F 9 , Extension B

11. Exhaust Pipe H 13. Exhaust Pipe J

15. Exhaust Pipe L

2. Half Shaft B 4. Cooling Duct (left)

10. Half Shaft E 12. Shift Box

6. Self-starting Motor A

14. Inner Panel of Cowling

17. Rear Wheel A

19. Master Cylinder Part

- 3. Accel Rod Reciever (right) 4. Accel Rod Reciever (left)
- 6. Rear View Mirror B 8. Water Tank Cap
- Rear View Mirror A Reverse A Arm
- Front Lower Arm (left) 10. Rear I Arm
 Front Upper Arm 12. Cross
- 13. Stabilizer
- 15. Upper Radius Rod 17. Oil Cooling Pipe
- 19. Stabilizer Rod 20. 21. Front Lower Arm (right)
- 22. Front Stabilizer



PARTS

- 1. Exhaust Pipe A 3. Exhaust Pipe C
- Extension Joint 6 Exhaust Pipe E
- 8 Extension A
- 10. Exhaust Pipe G 12. Exhaust Pipe I
- 14. Exhaust Pipe K
- 16. Front Wheel A
- - PARTS
- 1. Half Shaft A
- 3. Cooling Duct (right) 5. Throttle Link B
- 7. Self-starting Motor B 8. Half Shaft C 9. Half Shaft D 10. Half Shaft E
- 11. Half Shaft F
- 13. Half Shaft Stopper 14. Inner F 15. Front Shock Absorber Stopper
- 16. Transistor Box B 18. Transistor Box D 17. Transistor Box C

- 19. Front Shock Absorber Axle
- 21. Oil Catch Tank A 23. Muffler Support A 20. Tie Rod
- 22. Oil Catch Tank B
- 24. Muffler Support B 25. Fixing Rivet of Windshield
- 26. Cowling Net Stopper



PARTS

- 2. Left Arm Head 4. Right Arm
- 3. Body 5 Visor

BUILD A COLLECTION OF TAMIYA PRECISION CAR MODELS

1/12 RENAULT RE-20 TURBO



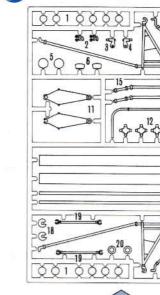








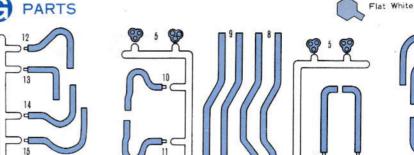




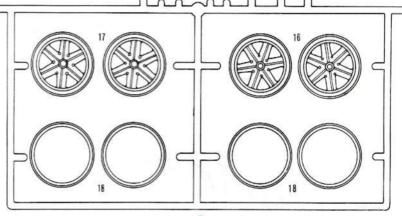


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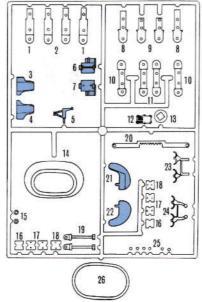
PARTS



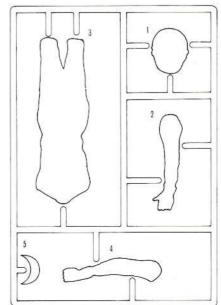




PARTS



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