

Manufactured under exclusive licence from Team Lotus

The date was September 10th, 1972, the place the famous Monza Autodrome near Milan and the race was the Italian Grand Prix -final European round of the World Championship. Colin Chapman was not nearly as relaxed as usual, for Monza is hardly his favourite track. Peter Warr looked anxious too as did chief mechanic Eddie Dennis and the rest of his

The starter's flag was about to drop on a arace in which Emerson Fittipaldi and his black and gold John Player Special, could clinch the 122 World Championship. Fittipaldi would thus become not only the first Brazilian to clinch the title but also the youngest man ever to do so. It was just over two short seasons ago that Fittipaldi had made his Grand Prix debut. It was exactly two seasons since Jochen Rindt had died having already clinched the championship for Colin Chapman in a car that was basically the same as the one in which Emerson now sat, patiently, and without a sign of nervousness, for a race that may well have changed his whole way of life.

That the John Player Special was on the grid at all, resplendant as ever in that black and gold colour scheme, was a miracle. Emerson's cherished race car was damaged in a trans-



porter accident a few days earlier but for-tunately a spare, but older car was on the way in a separate truck. During race morning tests the car had developed a terrible judder in its front brakes and a disc had to be hurin its ront brakes and a disc had to endiredly changed. Then with less than an hour to go before the three o'clock start, a fuel leak was discovered. The tireless mechanics set to work and changed it in record time. And now Emerson was on the grid, row three And now Emerson was oil the gird, row three of the two-two-two line-up. On the front row Emerson could see Jackie Ickx's red Ferrari and Chris Amon's screaming blue Matra. On row two was Clay Regazzoni's Ferrari with Jackie Stewart's Tyrrell alongside. Emerson glanced to his left but Denny Hulme in the Vardhey Matham to the country of the two the country of the co glanced to his left but Denny rulime in the Yardley McLaren stoically stared into the distance and the pair did not exchange glances. Hulme still had a chance of the World title, so did Stewart, but if either man was to achieve such an aim he had to win the race with Emerson out of the first four. And then he had to go on to win the remaining two North American races. Mathematically the chances of Emerson's title slipping away were

with three wins in a row.

The engines' notes soared, the radio and T.V.

Commentators' voices squealed, the dust flew and the race was on. Ickx made a fantastic start into the lead with team mate Regazzoni start into the lead with team mate Regazzoni second. Emerson immediately moved into third place and just caught a glance in his mirrors of Jackie Stewart's car rolling to a halt. A lap later Emerson flashed by in third place behind the two Ferraris and saw the blue Tyrrell abandoned by the side of the track and the Scot walking back to his pit, the championship now slipped from his grasp. The clutch had broken on the start line. Just under an hour and a half later the black and gold John Player Special flashed under the chequered flag, the victor of a hard fought race. Emerson Fittipaldi was undisputed Champion of the World. The Monza Autodrome erupted, Brazilian students sang national songs

slim indeed but everyone knew that Stewart now had a car quite capable of providing him

erupted, Brazilian students sang national songs and Brazilian flags waved gaily—thousands of

slips of paper proclaiming "Emerson Fittipaldi World Champion driving a John Player Spe-cial" cascaded into the air. It was a carnival

This, then, was the climax of years of sweat and toil, success and failure, happiness and unknown grief.

The man behind the J.P.S., Anthony Colin Bruce Chapman, Designer, Team Manager and Chairman of the Lotus Group of Companies is a legendary figure in the motor racing world. His face shows many of the characteristics that have helped so much to produce teristics that have helped so much to produce the Lotus legend. He has a burning ambition to succeed, an india rubber ability to bounce back even when the odds are stacked high against him. A very precise man, little is left to chance. A perfectionist. Where others adapt Chapman creates. This is shown by some of the Lotus "Firsts". In racing from the early sixties until today he has been the major Cread Priy design propagator. His cars major Grand Prix design innovator. His cars have won five World Championship Titles, the Indianapolis 500 and almost certainly a greater total of minor events throughout the world than any other Marque in racing history. "Chunky"Chapman was born in London on 19th

"Chunky" Chapman was born in London on 19th May, 1928. He studied engineering at University College, London and in 1948 his first car was a 1937 Morris 8 Tourer, a present from his father. The young Chapman, with the help of another young man, Rodney Nuckey, made their first Special from a 1930 Austin 7 Fabric Saloon. This car, Registered Number DD 3493 was further transformed from a Trials Special to become the Lotus MK. I, called "Lotus" because the lotus is said to induce sleep, which the long dark hours of work on this car certainly did to its young creators. Re-registered OX 9292, this forerunner of a classic line soon scored Lotus' first competition successes in trials early in 1948. For a tion successes in trials early in 1948. For a short while his motor engineering was dormant as his final exams drew closer. His receptive brain absorbed knowledge like an academic sponge, and in record time it was Chapman B.Sc.

The Lotus MK II was by now being built and the obsession with cars increased when Chapman joined the R.A.F. Now commissioned and trained to "Wings" standard, Chapman raced the Mark II with Ford Engine successfully in amateur trials for some time. In 1949 he left the R.A.F. and in 1951 the Lotus MARK III appeared. Its success was instant. As a result of the great interest shown in his cars, January 1st, 1952 saw the formation of Lotus Engineering. From a stable owned by his father in Hornsey, London, Chapman made and sold components, and eventually Lotus Engineering produced their Mark 6 production car. The Lotus MK II was by now being built production car.

This model dispensed with the Austin 7 prewar chassis and featured an all-new lightweight tubular spaceframe. Colin did all the design and stress-work himself and it was a tour de force in rigidity combined with light weight. It weighed only 55 lb. bare, or 90 lb. with brackets and stressed body panels attached, and after a slow start it became a great success. At one period Colin built eight production cars virtually singlehanded, but when help came from De Havilland Aircraft employees Peter Ross "Mac" Mackintosh and Mike Costin, Lotus Engineering was really under way. Costin was another intuitive engineer in the Chapman mould, and his brother This model dispensed with the Austin 7 pre under way. Costin was another intuitive en-gineer in the Chapman mould, and his brother Frank was an aerodynamicist who was roped in to assist in designing an all-new sports-racing car for 1954. Colin specified 85 bhp, weight under 10 cwt and a top speed in excess of 125 mph. The resultant Lotus Mark 8 was a smoothly attractive projectile, and Colin pruned its spaceframe chassis right down to

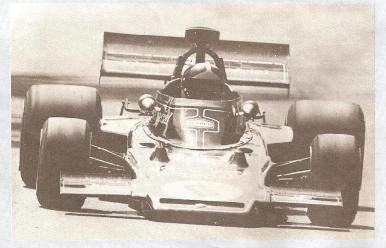
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weight just 35 lb. At this stage he divided Lotus into two halves, one half building production cars and com-ponents and the other half—Team Lotus—de-signing, building and running racing cars. This system continued throughout the formative period of Chapman's brainchild; through more and more successful sports-racing cars, and and more succession sports are grading care, and successes with them in major races like the TT and Le Mans successes which made his name as a master engineer in chassis and suspension design.

He was retained as a consultant by both BRM

He was retained as a consultant by both BRM and Vanwall, and the 1956 teardrop Vanwall which finally won the World Manufacturers Championship in 1958 was as near to being a Lotus product as anything built outside the works could be. Colin designed the chassis frame and Frank Costin the aerodynamic hightailed bodywork. Chapman's work with BRM engendered the use of "Chapman strut" rear suspension which finally persuaded their powerful 2½-litre four-cylinder cars to handle. In 1957 Colin built his first Lotus single-seater-the Formula 2 Mark 12, Team Lotus ran the cars in Formula 1 in 1958, before replacing them with the "mini-Vanwall" Mark 16 for 1958-59. While the sports cars had gained a tremendous reputation for Chapman and his team, the Formula 1 projects did little to enhance it. They overheated, and were plagued by problems with their new Lotus-

plagued by problems with their new Lotus-made gearboxes. But the sports car production lines were booming, and production of the road/ race Lotus Elite got under way after claiming headlines at the 1957 London Motor Show. This was a staggering example of Chapman's design originality using an integral glass fibre body shell with the mechanical and suspension components joined directly metal to glass fibre.



Main Specifications

····Full monocoque made from sheet aluminium, 18 gauge inner skin 1 gauge outer skin. 58in. front, 51in. rear

Wheelbase ... 99in.

The experts said it wouldn't work, but it did and it worked well. Sadly it was far too expensive to make, and the 988 finally built by Lotus in their new factory at Cheshunt nearly ruined the Company.

By that time Colin had followed Cooper's

By that time Colin had followed Cooper's World Championship winning lead and had built rear-engined single-seaters for Formula 1, Formula 2 and Formula Junior use in 1960. The Lotus 18 won more Formula 1 races that season than Cooper, although the Surbiton team won the World Championships, and dominated the minor classes. In 1961 a new lightweight, more streamlined Grand Prix Lotus was Britain's closest challenger to the new 1500cc FI Ferraris while the Lotus Formula Juniors took a stranglehold on the class. If you wanted to get ahead in racing at this you wanted to get ahead in racing at this time you had to get a Lotus. The Chapman recipe for success was proving to be so suc-

recipe for success was proving to be so successful. In 1962 he again vaulted one step ahead of the Grand Prix opposition by introducing the monocoque chassis Lotus 25 to Formula 1. With Jimmy Clark driving, the new flying fuel tank ran Graham Hill and BRM hard for the World Championship, losing through an oil leak in the very last event. Team Lotus won four Grands Prix, their first ever, in that season, and in 1963 Clark and Chapman's monocoque won the World Championship, winning a record seven qualifying rounds in the season. In 1964 they were pipped again in the last round, and in 1965 they won their second titles for driver



and manufacturer, and added the Indy "500" crown with a Formula 1-based car powered by Ford.

Lotus Elans were running on road and track, the Lotus-Ford twin-cam engine was a huge success, the Lotus-Cortina saloon was cleaning success, the Lotus-Cortina saloon was cleaning up in races and rallies, and Chapman then forged the links which brought the Ford-Cosworth Grand Prix engine into existence, won Team Lotus the World Chapmionship in 1968, 1970 and 1972 and became the first unit in GP history to notch over 50 Championship



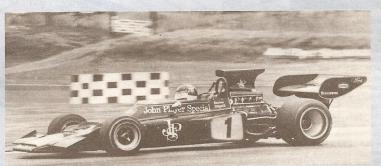
The Chapman story and the Lotus story are tightly entwined, and they have both been marred by tragedy. The loss of Jim Clark in a Formula 2 car early in 1968 was a shocking blow to Chapman, Team Lotus and the racing world. Colin and Jimmy had forged an invincible partnership in their eight full seasons together; Colin's cars usually having that slight edge over the opposition which a driver with Clark's ability could turn into a crushing domination. domination.

domination.

The turbine Lotus 56 brought the distinctive wedge shape to Indianapolis in 1968 and almost won Chapman his second "500". The qualifying records Joe Leonard set to take pole position in the Type 56 stood until Peter Revson bettered them in 1971 with the McLaren M16. And if imitation is the sincerest form of flattery, there was flattery to spare in the wedge lines of the M16. The McLaren designer had received his inspiration from the Lotus 72, which in turn was a development of the Type 56 and the follow-up 4-wheel drive Type 63 Formula 1 cars in 1969.

Suspension .....Front: Double wishbone and Torsion bars.
Rear: Lower parallel links, Twin
Radius rods, single top links and
Torsion bars.

Cosworth-Ford DFV V8 2993 cc. Engine Max, Power 465hhp at 10,800r.p.m. Max, Torque 245lbs/ft at 8500r.p.m. Hewland 5-speed FG-400 Gearho



In 1970 another startlingly advanced and trend-setting Lotus, the 72, brought Jochen his World title, sadly as the first posthumous Champion in racing history. But with Emerson Fittipaldi driving the all-

black Lotus 72s as John Player Specials, Chapman has another World title to his credit in 1972.

in 1972.

Back in 1970 Jackie Stewart was among the first to publicise the full, expected potential of the J.P.S. Star Brazilian Driver, Emerson Fittipaldi. At a presentation of Brazilian Driving Awards, Stewart noted that Emerson was going to be very good, and that when he entered Formula 1, Stewart, the World Champion, would be a bit worried. Not even Stewart could have foreseen that this forecast would

pion, would be a bit worried. Not even Stewart could have foreseen that this forecast would so quickly become a reality.

Emerson Fittipaldi was wide-eyed and inquisitive when he first raced Formula Ford at Zandvoort in May, 1969. But his considerable experience back home in Brazil, where he had raced motorbikes and karts since he was 12, and several types of cars since the age of 18, was a more than useful asset. He led the first Fr race, won his third, and quickly found an FF race, won his third, and quickly found an important ally in Jim Russell, proprietor of

important ally in Jim Russell, proprietor of the famous racing school. It was Russell who arranged for Emerson to have his first Formula 3 race, in July of 1969. At the wheel of a Lotus 59, the young Brazilian drove a careful 15 laps of Mallory Park to finish 5th. He would have liked to race in the F3 event which supported that year's British Grand Prix at Silverstone, but entries had closed even before the race at Mallory, and anyway he wasn't sufficiently well known to get a place on the grid at Silverstone. Eleven months later Emerson was called to Silverstone by Chapman to test the Gold Leaf 49C which Emerson's idol, Jochen Rindt had raced to success in the 1969 Grand Prix. It was only the second time Emerson had driven at Silverstone (the first time was in Formula Ford) and suddenly the straights seemed much shorter and the corners much

seemed much shorter and the corners much more acute.

The rest is in the record books; how Emers finished an excellent seventh in the 1970 British Grand Prix, fourth at Hockenheim, and then the terrible shock at Monza, where he was still feeling sore after an accident then the terrible shock at Monza, where he was still feeling sore after an accident in practice in his first Lotus 72, and Jochen Rindt perished in another practice accident. Suddenly, from being the awe-struck kid in the Silverstone paddock, Emerson became Lotus team leader. The United States Grand Prix was his next race; he won it, and with it the posthumous World Championship for his hero, Lokac Pindt. Jochen Rindt.

Jochen Rindt.

So far we have highlighted two men from the John Player Team Lotus Organisation. The operative word here is Team—a Team of only 25 people. The J.P.T.L.organisation is a bunch of very dedicated men and women who, according to Racing Manager, Peter Warr, are not just interested in going motor racing for the sake of taking part but "We go motor racing to win". He says the work loads and demands made on any individual by the Team are proof of this. In the age of commercial sponsorship,

the Sponsors also are not content with second best and the Team needs the money provided by their Sponsors to enable them to continue

with their furture racing programmes. People are always surprised to find that there People are always surprised to find that there are only 25 people working at John Player Team Lotus. But smallness is part of the team's success, because it keeps everything manageable. It demands devotion to duty and long hours of work, but it inspires the comradeship which gave every one of those 25 people such a feeling of satisfaction when John Player Team Lotus' won the teams fifth Constructor's title at Monza on September 10th, 1972. 10th 1972.

It's a long drive from London to John Player It's a long drive from London to John Player Team Lotus' headquarters at Hethel, near Norwich. To find the team's home, all you have to do is ask the way to Hethel, which would probably not even be marked on the map if it weren't for the giant factory of Lotus Cars Limited. The racing cars are maintained in their own set of single-storey wilding directly corporite the carmyling buildings, directly opposite the car-making

In fact, you don't often find everyone "back at the ranch" at JPTL. Even if the Formula 1 Team isn't away on the continent or roaming the globe, then the Formula 3 cars are likely

the globe, then the Formula 3 cars are likely to be travelling in Britain. Let's assume, however, that everyone is "at home", and that you've been lucky enough to receive an invitation to visit the factory.

Nobody seems to use the front door. They save time instead by picking their way through the activity in the Formula 2 shop and through the buying office. From there it's only a step into the organilar main office.

the buying office. From there it's only a step into the open-plan main office. The office houses the design staff, whose drawing boards half fill the room. Chief Accountant Manning Buckle has a corner to himself, while Peter Warr's personal assistant Trisha Strong has another corner. Warr himself supervises everything from his desk in the middle of the room, and to keep his paperwork up to date, he often comes in at 6 in the morning, before the telephone begins its worst. Indeed, hard work is something on which everyone at Team Lotus seems to thrive. There have been times when even the unquenchable

ryone at Team Lotus seems to thrive. There have been times when even the unquenchable appetite for work of the JPTL mechanics has seemed strained, but 1972 was a full, rather than a crowded season, in spite of the team's policy of taking part in races wherever the organisers are prepared to run them. Chief Mechanic Eddie Dennis, like all the team's other race mechanics, has a contract with the Company, which is something new and unusual for a Grand Prix team.

Company, which is something new and unusual for a Grand Prix team. Although Colin Chapman no longer handles the day-to-day running of the Team, his precepts are maintained, and his influence remains unchallenged. Perhaps it is the Chapman touch which Warr was searching for when he said: "There is something very special about Team Lotus, and it's very hard to put one's finger on it. When our mechanics play, they play hard, and when they work, they work very hard indeed. I think they're a grand bunch of people, and I'm proud to be associated with them all."



★Study the instructions and photoraphs before commencing assembly.

\*You will need a sharp knife, a screwdriver, a pair of tweezers, a file, and a pair of pliers.

\*Do not break parts away from sprue, but cut off carefully with a pair of pliers.

pair of pliers.

★Before finally cementing each part together, be sure that parts fit correctly together. And that you are aware of the next sequence to be followed.

tuse glue sparingly. Use only cement to both parts to be joined. Only blue shaded parts should be

This mark denotes number for Tamiya Paint colors.

Black TS-14, X-1
Red X-7
Gun Metal X-10
Chrome Silver X-11
Gold Leaf X-12
Flat BlackXF-1
Flat Aluminum XF-16
Light BlueXF-23
Metallic Grey XF-56

1 Construction of Wing

Wing Support Arms K 8 should be fixed without using cement to make Wing moveable.



2 Construction of Front Cowling

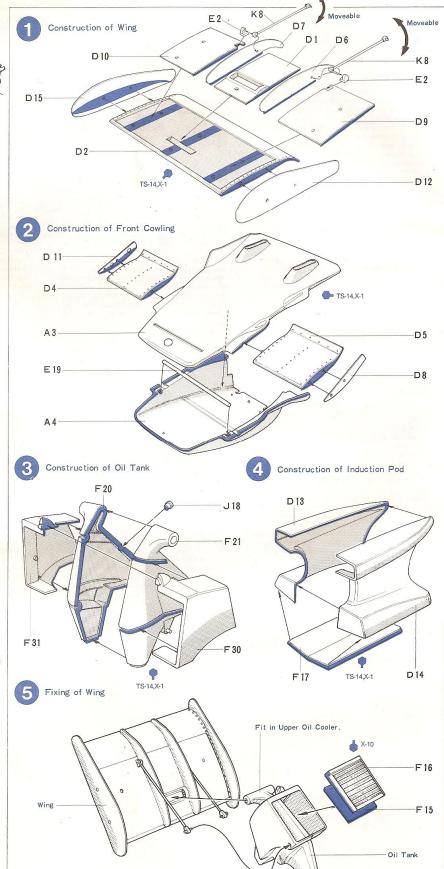
Front Spoilers D4 & D5 should be cemented carefully to keep horizontal.



5 Fixing of Wing

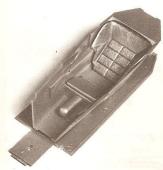
Firmly insert upper part of Oil Tank into Wing. Cement Oil Cooler on Oil







6 Construction of Cockpit Seat parts (L parts) cannot be glued. Insert them into holes of Cockpit. Fix Fire Extinguisher under Cockpit seat.



7 Construction of Body

Cement Body parts (right, left, upper & lower) on Lower Body Part B2 which is already glued to Cockpit. Cockpit should be fixed inside body.



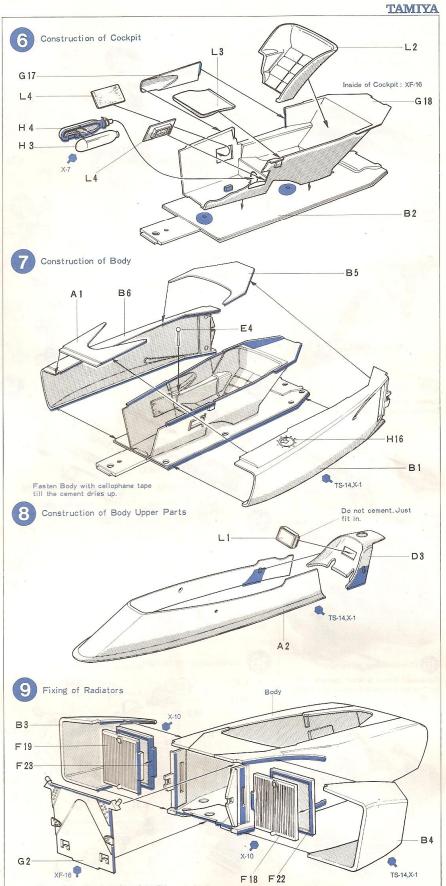
9 Fixing of Radiators

Cement Radiators before Rear Body is glued. Make sure of fixing position, front or rear and right or left.

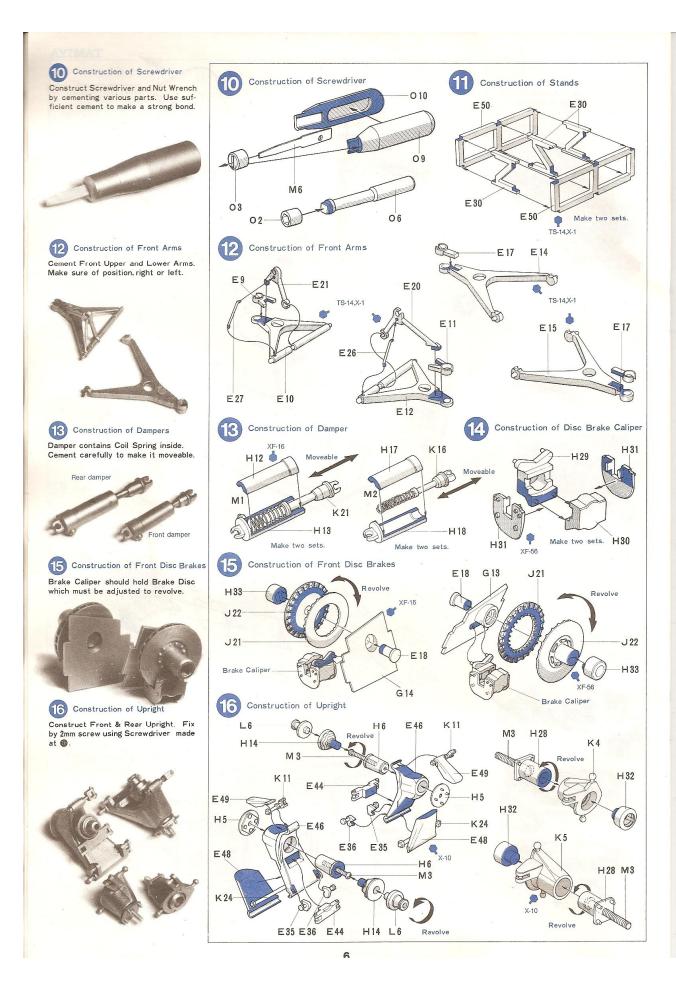
(Painting of Body)
Body may be constructed by process

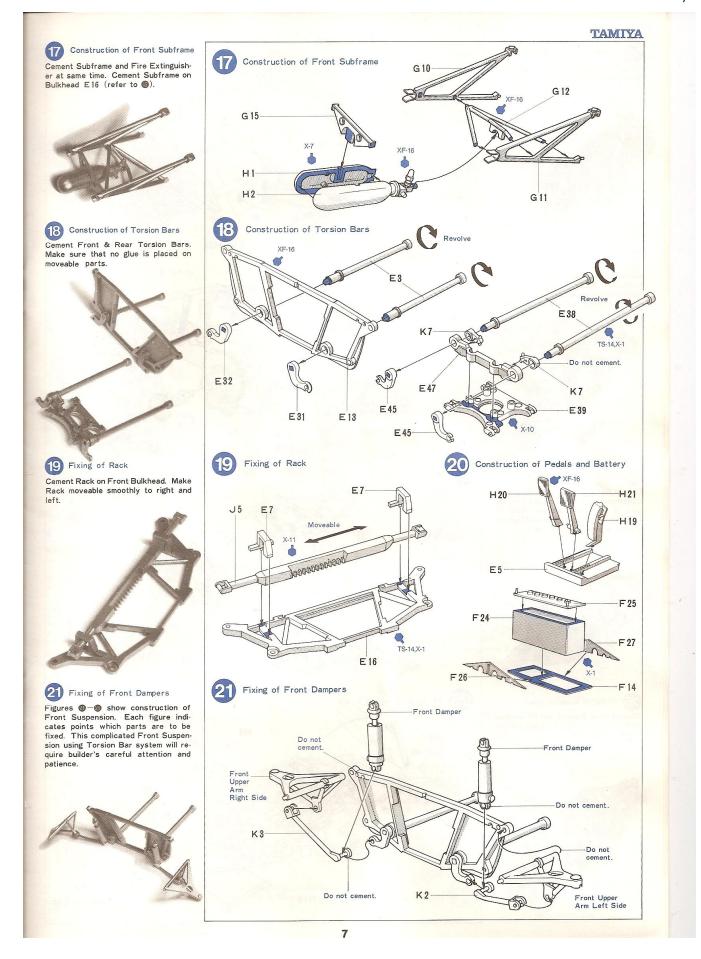
-2. Clean up all over body and paint with Black (TS-14, X-1). Then, when dry paste on Decals as per page 14.



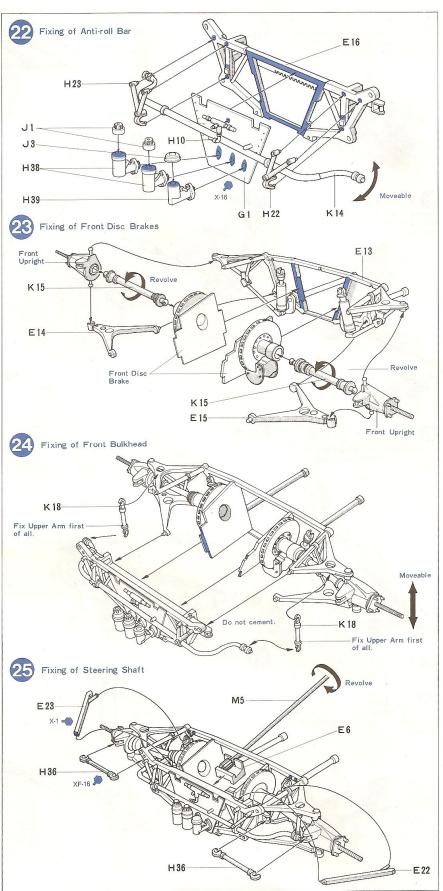


Have radiators lean towards engine a little



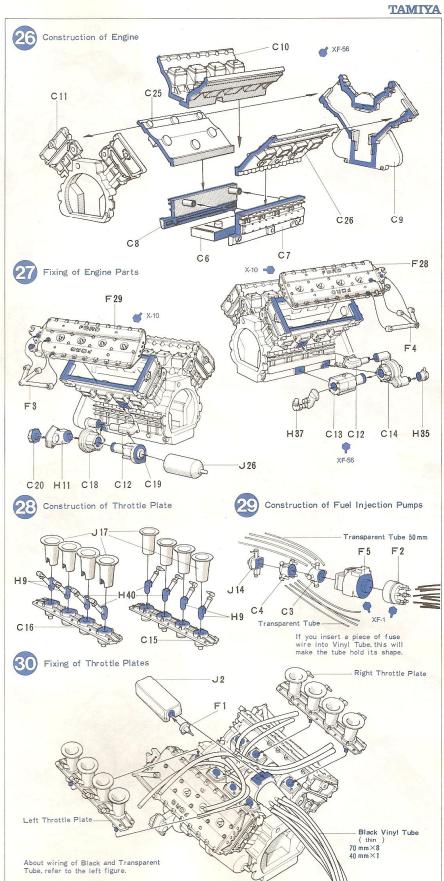




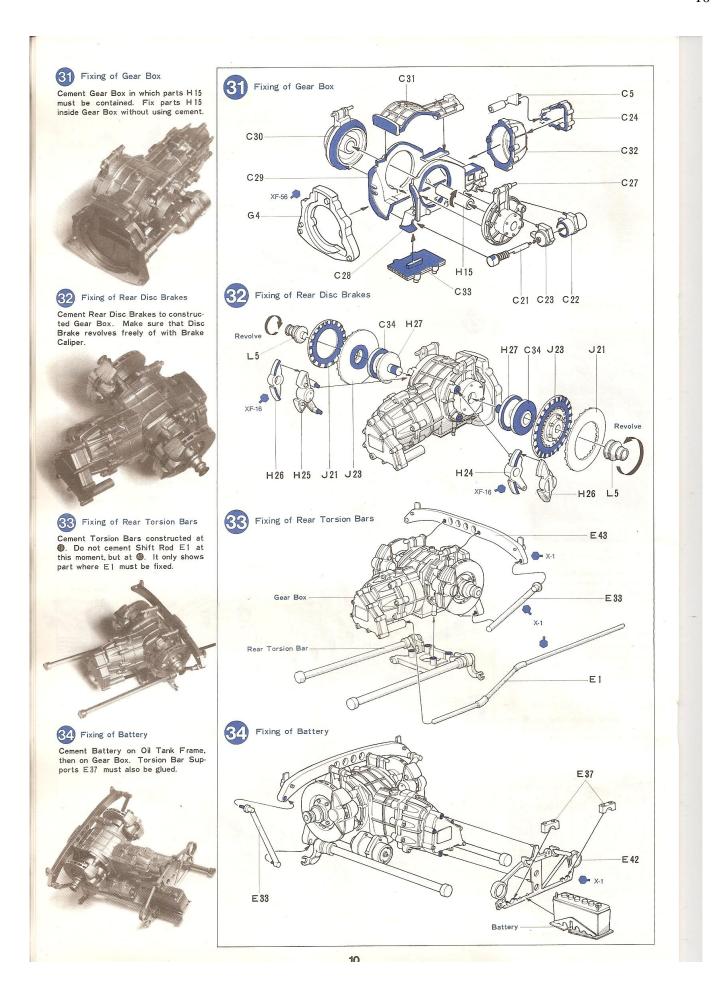


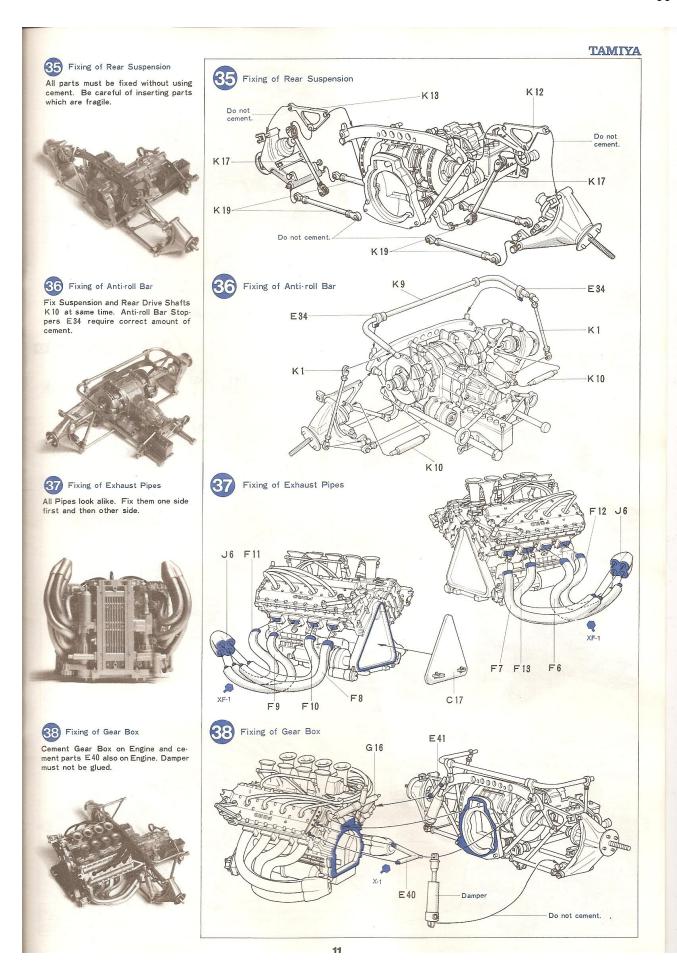


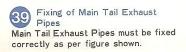
Black Vinyl Tube in center connects with part F1.



Q

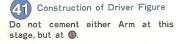


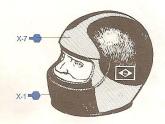






40 Construction of Wheels Cement and paint Wheels, then mount





Construction of Front Suspension

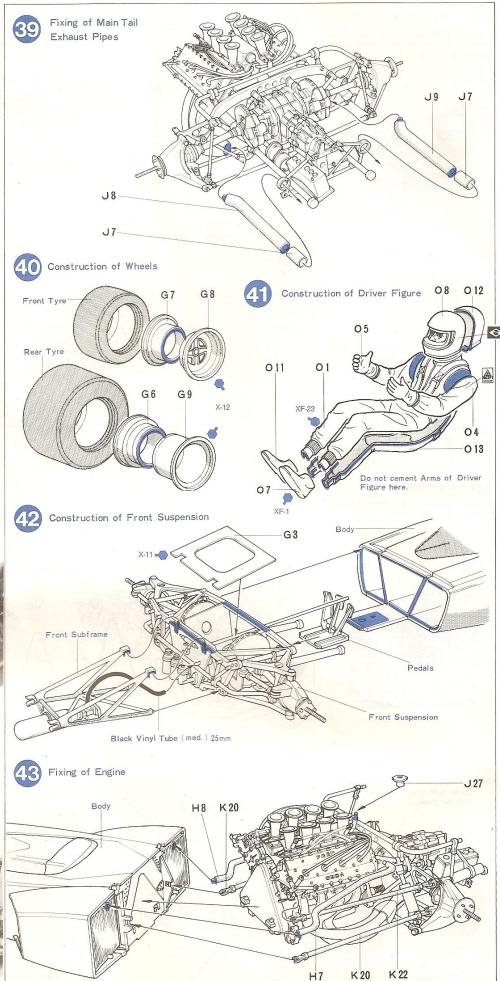
Foot Pedals must be glued inside Front Suspension first. Then cement Front Suspension on Body.



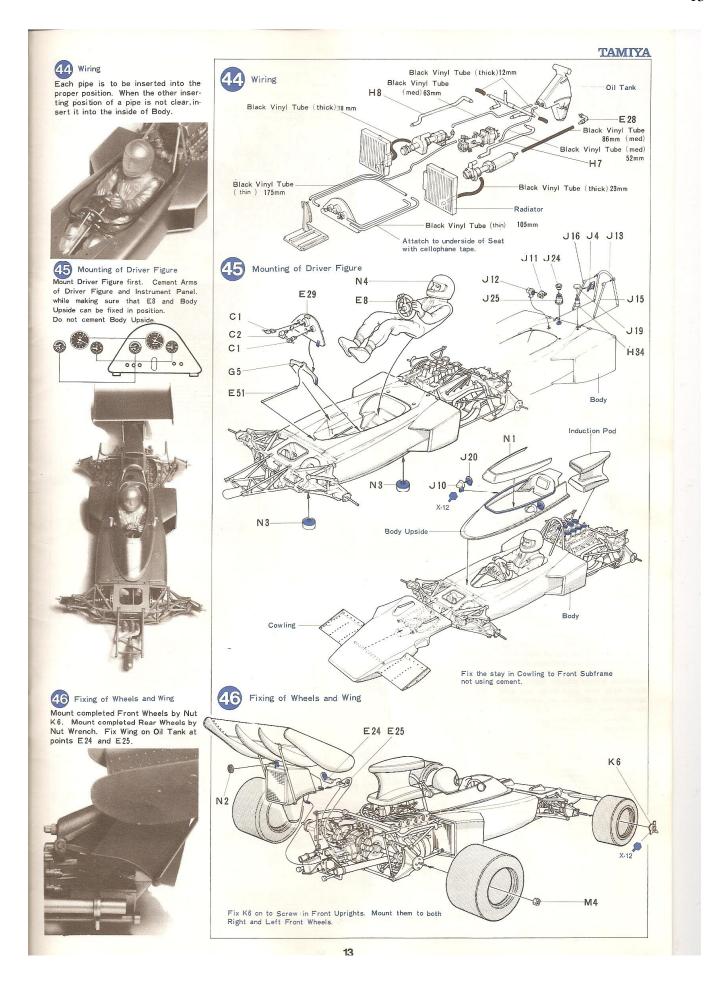
43 Fixing of Engine

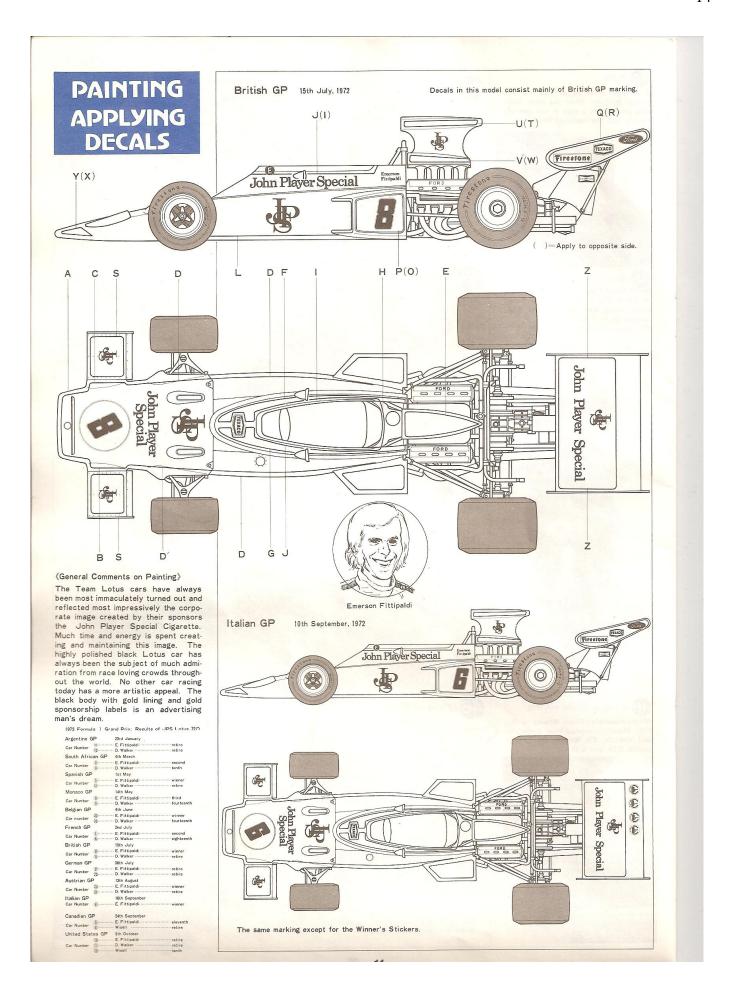
Insert Engine onto Body first. Joint Radius Arms K20 & K22 with Water Pipes H7.

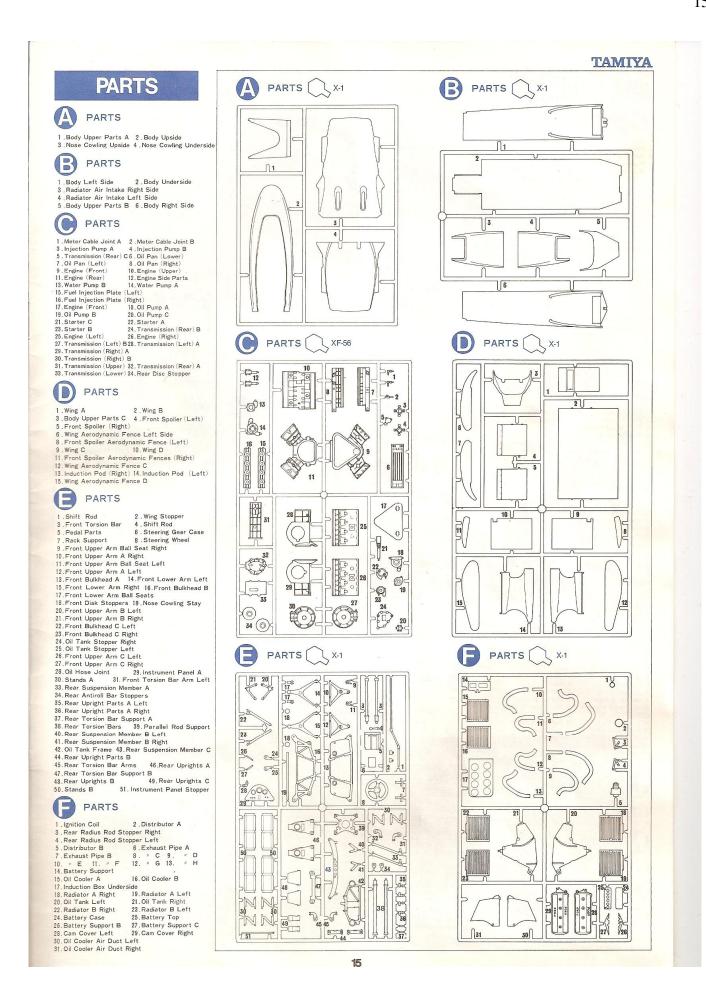




H7







## TAMIYA **PARTS** PARTS X-12 PARTS 1 979 200 PARTS 1. Front Bulkhead D 2. Rear Bulkhead 3. Front Bulkhead E 4. Clutch Case 5. Instrument Panel B 6. Rear Wheels A 7. Front Wheels A 9. Rear Wheels B 10. Front Subframe A Right 11. Front Subframe A Left 12. Front Subframe B 13. Front Bulkhead F. Right 14. Front Bulkhead F. Left 15. Front Subframe A Left 15. Front Subframe C. 16. Water Reservoir Tank 1 11 8 P 1 8 130 15. Front Subframe C 16. Water Reservoir Tank 17. Cockpit A 18. Cockpit B 14 130 PARTS 0 1. Rear Antiroll Bar Links 2. Front Suspension Arm Left 3. Front Suspension Arm Right 4. Front Upright Right 5. Front Upright Left 6. Wheel Nuts 7. Rear Torsion Bar Parts 8. Wing Support Arms 10. Rear Drive Shafts 12. I-shaped Arm Right 14. Front Antiroll Bar 15. Front Drive Shafts 16. Front Shock Absorbers C 17. Rear Torsion Bar Rods 19. Parallel Rods 20. Radius Lower Arms 21. Rear Shock Absorbers 22. Radius Upper Arm Left 23. Radius Upper Arm Right 24. Rear Upright Parts D 6 N6 16 0 16 용 5 15 80 23 20 ∑10 15 17 PARTS 18 S XF-16 1. Fire Extinguisher A 2. Fire Extinguisher B 3. Fire Extinguisher C 4. Fire Extinguisher D 5. Rear Wheel Stoppers A 6. Rear Wheel Stoppers B 7. Water Pipe Left 8. Water Pipe Right 9. Injection Nozzles Left 10. Brake Oil Hose Joint 11. Oil Pump 12. Rear Shock Absorbers A 13. Rear Shock Absorbers B 14. Pear Lipius 15. PARTS PARTS ⊚ <sup>17</sup> ⊚ 0 0 6 2 **\J18** 11000 20 19U 16 16 0 7 0 14. Rear Universal Joints 15. Gear Box Inside Parts 16. Fuel Cap A 17. Front Shock Absorbers A 18. Front Shock Absorbers B 19. Throttle Pedal 3 12 18. Front Shock Absorbers B 19. Throttle Pedal 20. Clutch Pedal 21. Brake Pedal 22. Front Antiroll Bar Support Right 23. Front Antiroll Bar Support Left 24. Rear Brake Caliper A Right 25. Rear Brake Caliper A Left 6. Rear Brake Calipers B 27. Rear Disk Stopper 28. Front Wheel Stoppers 29. Front Brake Calipers A 30. Front Brake Calipers B 31. Front Brake Calipers B 31. Front Brake Calipers C 32. Front Universal Joints A 5 04 ₹8 18 13 7Ň 11 13 24 32 6 14 19 373 0 25 10 36 33 31 G 20 51 29 20 21 23 0 38 12 33. Front Universal Joints B 35. Water Pump Parts 36. Lead Arm 37. Water Pump A 38. Brake Master Cylinder 39. Clutch Master Cylinder 40. Injection Nozzles Right 0 30 (Fa) 0 8 C C 26 ⊃<u></u>21 34 35 30 27 ○ < 50 © 0 126 251 €q 39 27 23 22 \$ \$ \$ \$ \$ \$ 27 0 Ŏ Q 17 Q 28 16 15 PARTS 40 1 . Brake Master Cylinder Caps 2 . Ignition Box 3 . Clutch Master Cylinder Cap 4 . Roll Bar A 5 . Rack 6 . Muffler Joints 7 . Mufflers A 9 . Muffler B Left 10 . Rear View Mirror A 11 . Fuel Filter A 11 . Fuel Filter A 12 . Fuel Filter B 13 . Roll Bar A 14 . Injection Pump 15 . Roll Bar C . Right 16 . Roll Bar C . Left 17 . Ram Pipes 19 . Fuel Cap C 20 . Rear View Mirrors B 21 . Brake Disks 24 . Fuel Cap D 25 . Fuel Cap E 25 . Fuel Cap E 27 . Oil Cleaner PARTS PARTS PARTS 2 (0 3 3 PARTS @<sup>2</sup> 5 **⊝**<sup>3</sup> 2 . Seat A 4 . Cockpit Parts 6 . Universal Boots B 1 . Headrest 3 Seat B dþ⊂ 5 . Universal Boots A 7 11 6 dþ⊂ PARTS 1. Windscreen 2. Tail Lamp 3. Body Stopper 4. Visor for Drivers Helmet 12 10 9 0 PARTS PARTS 1.Coil Spring (long) 2.Coil Spring(small) 3.2mm Screw 4.2mm Nut 5.Shaft with pinion 13 1 .Body Upper Half 2 . Center Lock Wrench A 3 . Screwdriver A 4 . Left Arm 5 . Right Arm 6 . Center Lock Wrench B 7 . Left Foot 8 . Head (front) 9 . Screwdriver B 10 . Screwdriver C 11 . Right Foot 12 . Head (rear) 13 . Body Lower Half 6 . Screwdriver Metal