

Introduction - Sheet 1

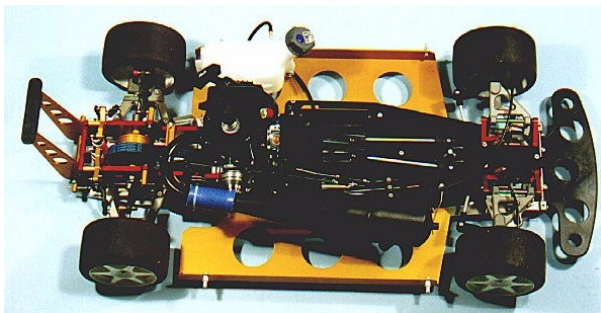


INTRODUCTION

Thank you for buying a PB DART, we are sure that your confidence in our product is well founded and that you will have many enjoyable hours of racing success with your car.

Although we understand that many of the more experienced car enthusiasts will wish to make modifications to their DART, we ask you all to build the car according to the instructions first. After you have run the standard car you will be able to judge the effect of your modifications.

It is a good idea to assemble your car in a situation where you can leave everything undisturbed between building sessions. You could build your car in only three or four hours, but it is far better to take a little more time and get it right.



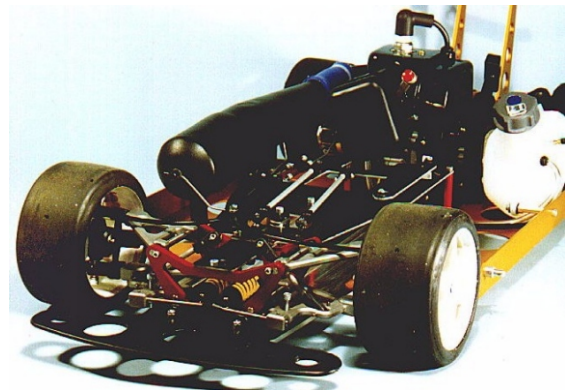
Tools & Additional Equipment

Before you start building, you will need to gather a few tools and some additional equipment together, it is not essential to have all the tools listed below but they do make assembly easier and quicker.

Some small trays (saucers) to hold nuts, bolts etc. modelling knife, sandpaper (fine & coarse), small flat file, metric/imperial ruler, internal callipers, No 0 & No 1 Pozzi Drive screwdriver, 3mm straight blade screwdriver, 5.5 & 7mm A/F box spanners, 8mm open spanner, standard pliers, medium external circlip pliers, 1.5, 2, 2.5, 3, 4 & 5mm A/F hexagon wrenches, mild (Blue) thread locking compound, cyanoacrylate glue, contact adhesive, grease, suitable paint and kitchen roll or rag. You will also need a 2 channel radio control set.

Lubrication

It is important that Wishbone Pivot Pins, Drive Shafts & Cups plus the Differential Shaft & Gears are kept lubricated with grease.



Important General Building Hint

When bolting major chassis components together. It is important that all relative screws should be partially screwed in, before any of them are tightened down. If you do not do this, you will find that some holes appear not line up, and also the car will end up twisted, giving unbalanced handling.

The following groups of items should be tightened down together:

Group 1

Rear Side Plates to Chassis
Side Plate Spacer & Upper Brake Pivot Plate.

Group 2

Front Bulkheads to Chassis
Front Shock Plate
Radio Plate & Pillars to Chassis

Engine

- 1). Mount engine assembly to R.H. rear side plate and chassis using 4 off M5 screws provided, in clutch pack and adjust mesh of drive gear.
- 2). Fit exhaust manifold to engine and mount silencer to manifold and front mount with silencer outlet pointing downwards.
- 3). Connect the spark generating unit to the double push in connector and to the chassis or case of the engine.
- 4). Connect the fuel feed line from the fuel tank to the lower connection on the carburettor.
- 5). Connect the return feed from the carburettor (upper) to the nipple in the top of the fuel tank.
- 6). Before starting for the first time introduce a couple of drops of lubricating oil into the cylinder via the spark plug hole.
- 7). Operate the fuel pump (clear plastic dome) until fuel is flowing fully back to the fuel tank.
- 8). Close choke and pull start engine twice only.
- 9). Open choke and pull start engine. Engine should fire within a couple of pulls. If not slightly open the throttle.

Wheels & Tyres

The car is supplied as standard with S1 grade rubber for the rear wheels and M1 grade for the front wheels. This is a typical set up for normal surfaces in normal temperatures being driven normally. From this you must understand that no single set of tyres can work under all circumstances. Tyres are designed with different rubbers to run at different temperatures. A top driver running a long race on high grip surface at a high ambient temperature will easily create temperatures in the tyres that will cause severe blistering and early failure, just as in the full size racing. Similarly to hard a grade of rubber will not come up to an adequate working temperature to grip well. Although the tyres we have supplied are proper racing rubbers it will be necessary to experiment with different rubbers in order to obtain the best performance on different tracks.

To mount the tyres on the hubs

- 1). First thoroughly sand the rim of the hub to obtain the best adhesion.
- 2). Sand and clean the tongue of the tyre.
- 3). Glue the ends of the inner foam together and fit over the hub. It is preferable to glue the foam to the hub.
- 4). Dust tyre and foam with French Chalk or Talcum powder, to lubricate.
- 5). Note the outside edge only of the tyre is braced, stretch the opposite side over hub.
- 6). Carefully stretch the tyre over the hub and the foam, taking care not to wrinkle the foam.
- 7). Fit the tyre tongue into the groove of the hub on one side only and manipulate the tyre until it sits perfectly in the groove.
- 8). Push the tyre gently away from the groove so that a small gap is between the hub and tyre.
- 9). Pour into the gap some super thin cyanoacrylate adhesive and ensure that it runs all the way around.
- 10). Gently pull back the tyre to close the gap and obtain a good bond. It is very helpful to have a large Jubilee clip to act as a tourniquet to ensure close contact with the hub.
- 11). Repeat on the other side when adhesive is set

Happy Racing