



# AB Slotsport

*Dedicated to supplying the best Slot Racing Products to Racers Worldwide*

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See page 4 for 2015 updates

## Build the Falcon Pro F1 chassis

The Pro Falcon F1 is designed primarily for Pro Falcon Racing, but may also be adapted for small motor classes using the lower pillar blocks and alternate motor mounts supplied in the kit (highlighted in yellow). The kit comes complete with pre-cut 1.5mm brass pans.

**DO NOT START CUTTING BEFORE YOU HAVE READ THESE INSTRUCTIONS FROM BEGINNING TO END!**

NOTES:-

### 1) FRONT PAN STOP

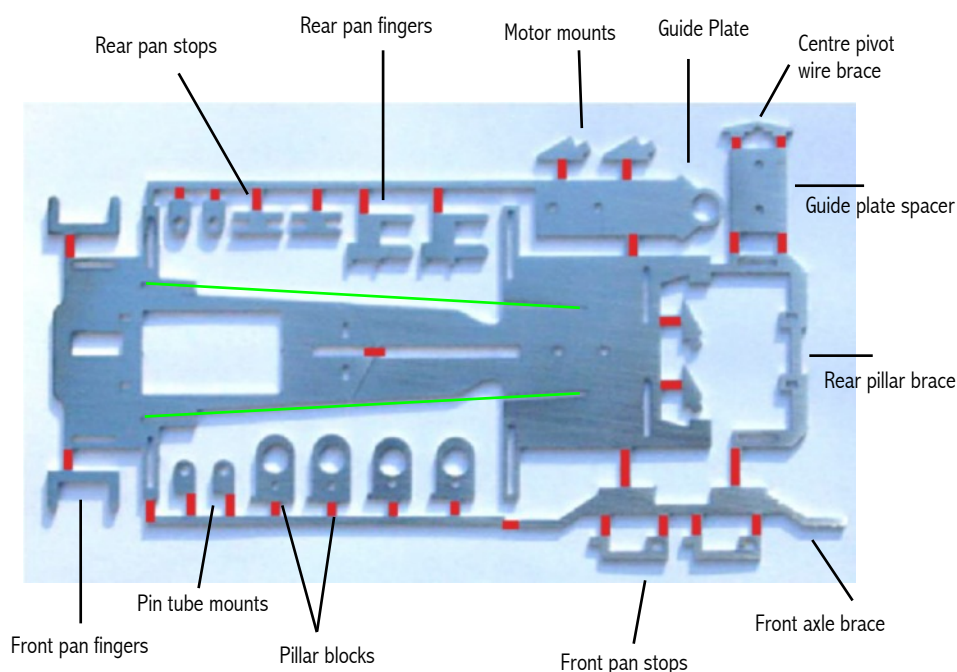
The closed section of the pan stop locates the OUTER finger of the upstop finger. The OPEN end of the Pan Stop locates the INNER upstop finger.

### 2) REAR PAN STOP

Examine the rear pan stops. You will notice that one side is wider than the other, the Widest side locates in the chassis, the thinner side is uppermost.

### 3) REAR PAN FINGERS

The short side legs of the rear pan fingers locate around the rear pin tube mounts.



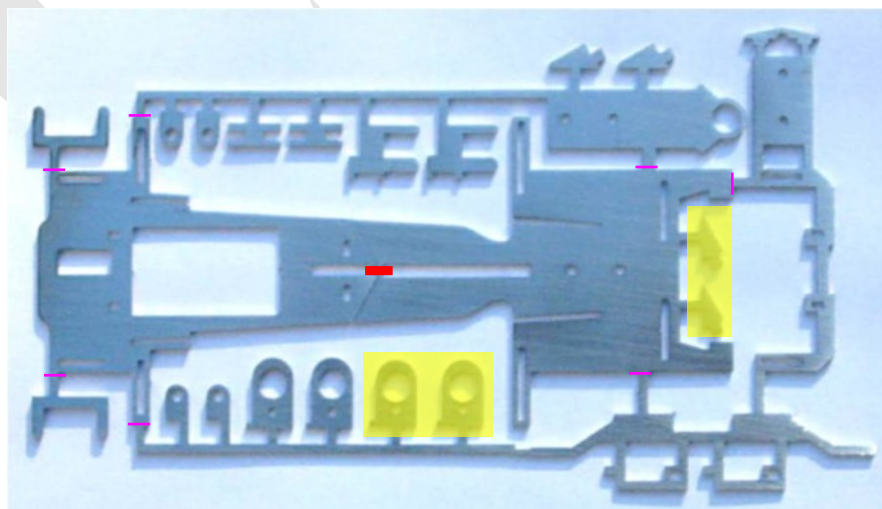
1) Cut the 0.032 chassis FLEX rails to length and solder into slots in the front and back of the centre section (as indicated by the green lines above). Ensure they are flush with the bottom of the chassis.

2) Cut a length of 0.080" stainless tubing for the centre pivot. Carefully trim out the pivot slot tag (coloured red), Solder in pivot tube, ensuring it is flush with the bottom of the chassis. Oil the inside of the tube after soldering and insert 0.062 pivot wire.

3) Locate the pivot wire brace in the two slots in the centre section and solder brace and wire into position.

4) Now Start by trimming the small components from the main chassis frame (as indicated by coloured lines on the photo to the right).

The Drawing above right indicates all cuts for the components. Sections marked red are scrap.



5) Assemble guide plate spacer and guide plate and use 0.062 piano wire or brass tube in the holes provided to align. Solder the guide spacer and guide plate into position followed by the front axle brace.

Ensure chassis flexes correctly.

6) Solder in the front and rear upstops. Ensure that the closed portion of the front upstop brackets face outward, with the open end facing inward. Ensure that the THICK portion of the rear upstop bracket face downward and are soldered into the slots and that the thinner section is facing upwards.

7) It is necessary to solder a thin piece of brass shim (flat braid clip) to the chassis directly under the front inner upstop. (see photo below). Once this has been done, ensure the pan upstop finger slides freely through the front upstop. Use wet and dry paper to polish the upstop fingers and brass shim.

7) Align the brass pans and solder the front and rear upstop fingers in place (along with the the rear pin mount brackets), ensure pans move smoothly. Solder in the front pin mount brackets.

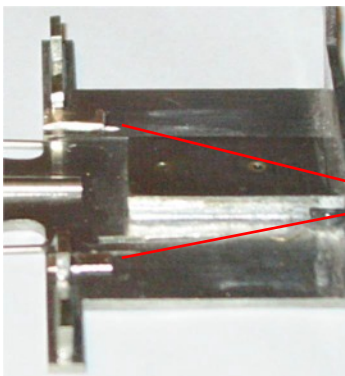
8) Fit the Rear Pillar blocks and pillar block brace. (the brace wraps around the front of the pillar blocks and also functions as a locator for the motor brackets). Insert the motor brackets into the brace and centre section and solder the rear end.

9) using 0.015 wire, bend a "pan tie" (bite bar) and solder across the pans to the outside edges, (locate this just in front of the motor box) ensuring you put a bend in the centre to clear the centre pivot tube. Ensure pans move freely.

10) Solder in the pin tubes.

11) Bend 2 identical 0.062" piano wire stub axles to suit the profile of the front axle bracket and tack in place (or if using "Czech" fronts, use 0.055 wire and either form stub axles or form a "drop axle" as pictured below). Fit front wheels (ensuring a maximum overall width of 68mm) - you may have to trim the front axle bracket on both sides equally to attain correct width dependant on your front wheel choice. Place a thin piece of card (thickness of a cigarette packet) under the centre section - this will give chassis clearance) and tack the axle in place. Ensure correct width and that wheels are at 90 degrees to the block. Wire "wrap" the stub axles /drop axle to the front axle bracket (using shunt wire or strands of lead wire, then solder stub axles/drop axle to the front axle bracket, ensuring you flow solder around the wire wraps. This is essential to ensure strength in the front axle location.

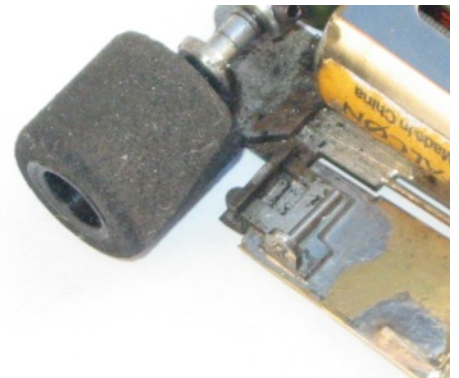
12) Scrub entire chassis well using washing up liquid and hot water to remove all traces of acid flux and crud. You can also use "Astonish" Oven and cookware cleaner, available from most supermarkets, this cleans chassis very effectively).



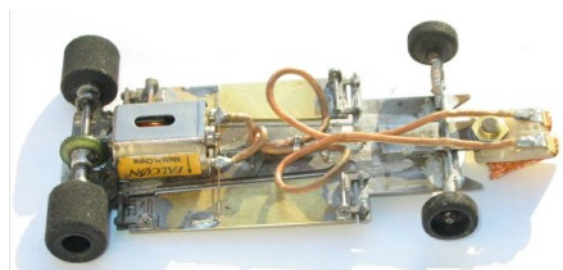
Inner, Front Upstop shim, use 0.5mm brass (braid clip)



Polish underside leading edge of pan prior to installation. Add a small "skid" made from brass shim (braid clip) to front T bar and radius/polish.



Wire Wrap the axles / stub axles to the front axle mount and then solder. Use two small pieces of steel offcut to add a laminate to the top of the front chassis horns. This will prevent the guide from over rotation.



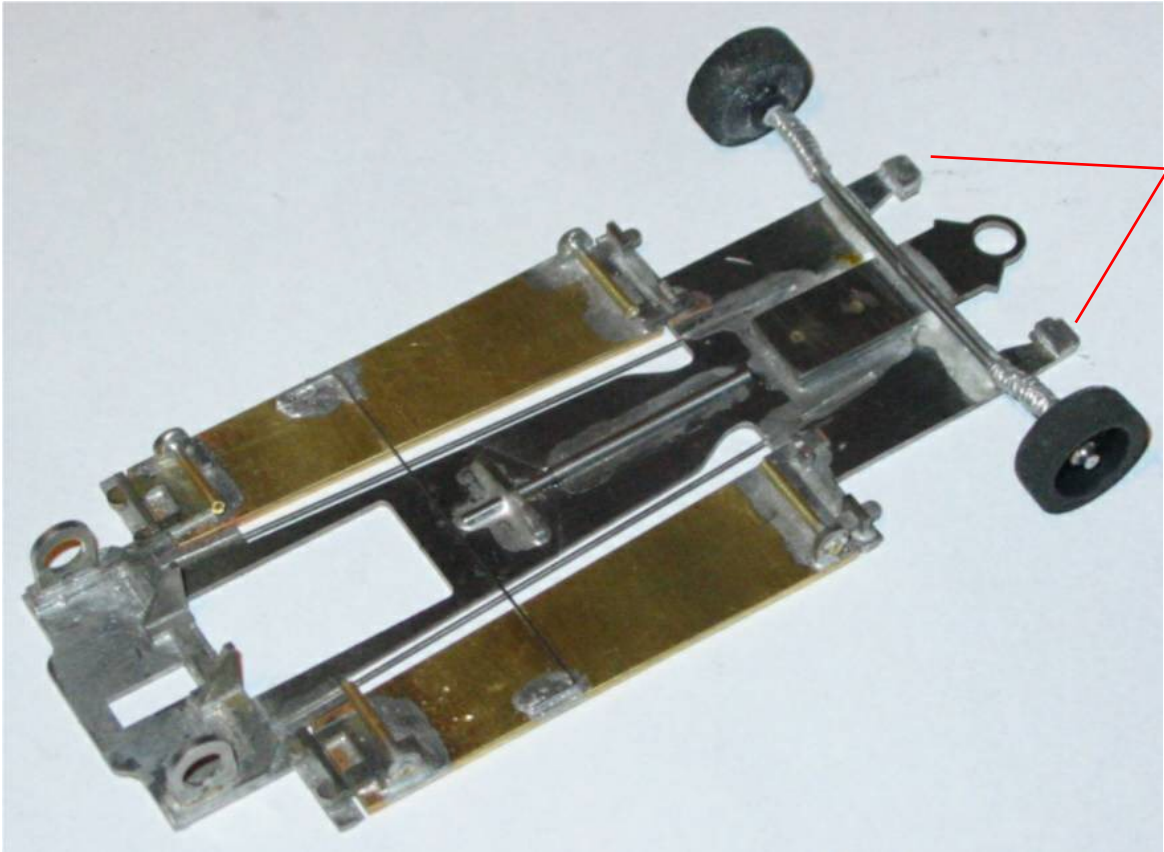
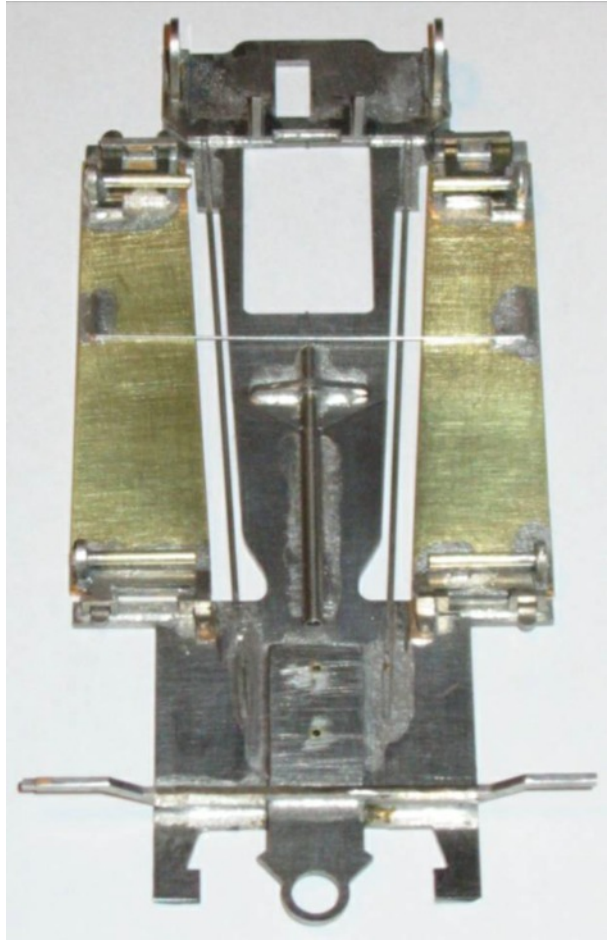
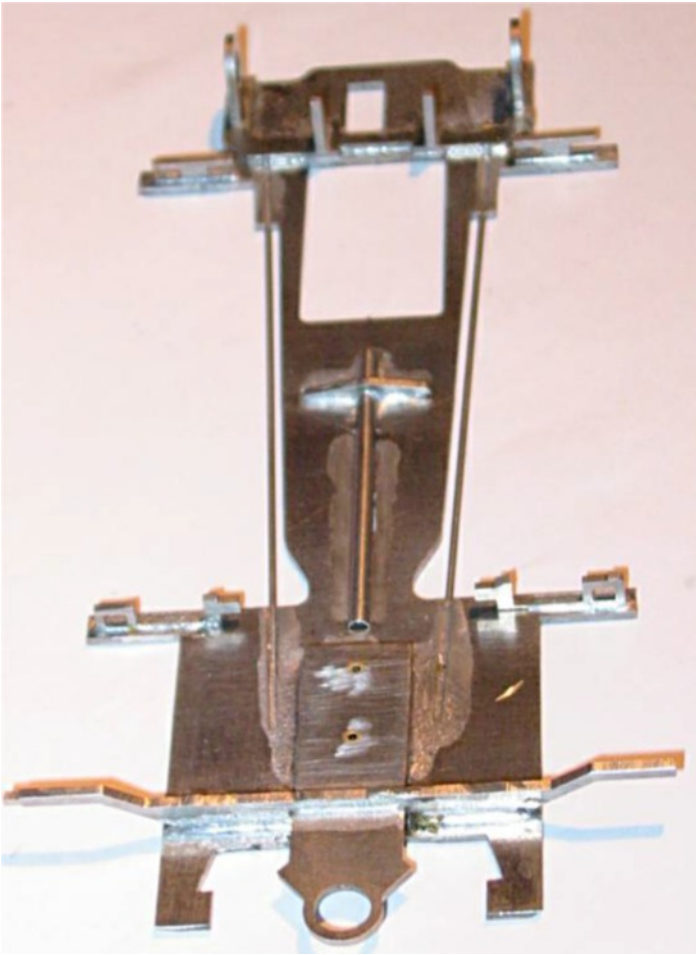
Fit rear bearings, motor, lead wire and rear tyres & go to the track!

Don't forget to lubricate all moving parts.

The usual gear ratio for the Falcon is 10/30 however, on short tracks you may prefer to use a 9t pinion.

It may be necessary to apply lead to the front portion of the centre section and or pans to get just the handling characteristics you require.





Radius /  
polish the  
underside  
edges of  
the front  
horns.

## AB 2015 Falcon F1 chassis

The AB f1 chassis has dominated racing in the UK for over 5 years but we don't just "sit on our laurels"! . We endeavour to listen to our clients and reflect their requests.

2015 has seen a couple of changes to the design in regard to Pan options and consequently, the pan hangers.

You will see from the photo below that we have changed the front pan hangers and front pan fingers. This is due to the options of building the chassis with all steel 1mm pans, half and half steel and 16g brass pans, or all brass pans.

As a result of these changes the front and rear pan hangers are both now reversible, so one way up they give you the facility for 1mm steel pans and the other way up they give the facility for 16g brass pans. If you decide to go the 50-50 route with steel at the front and Brass at the rear, you need to set the pan hangers up for 1mm at the front and 16g at the rear .

You can cut the steel pan along the diagonal "stitch cut" in the pan and then use this as a template to cut the brass option pan to suit, solder the steel and brass components together (with a thin overlay across the joint and you have a 50-50 pan layout) which will give more weight to the rear of the chassis.

Construction of the rest of the chassis remains the same.

