

Custom FX
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Universal Guide to

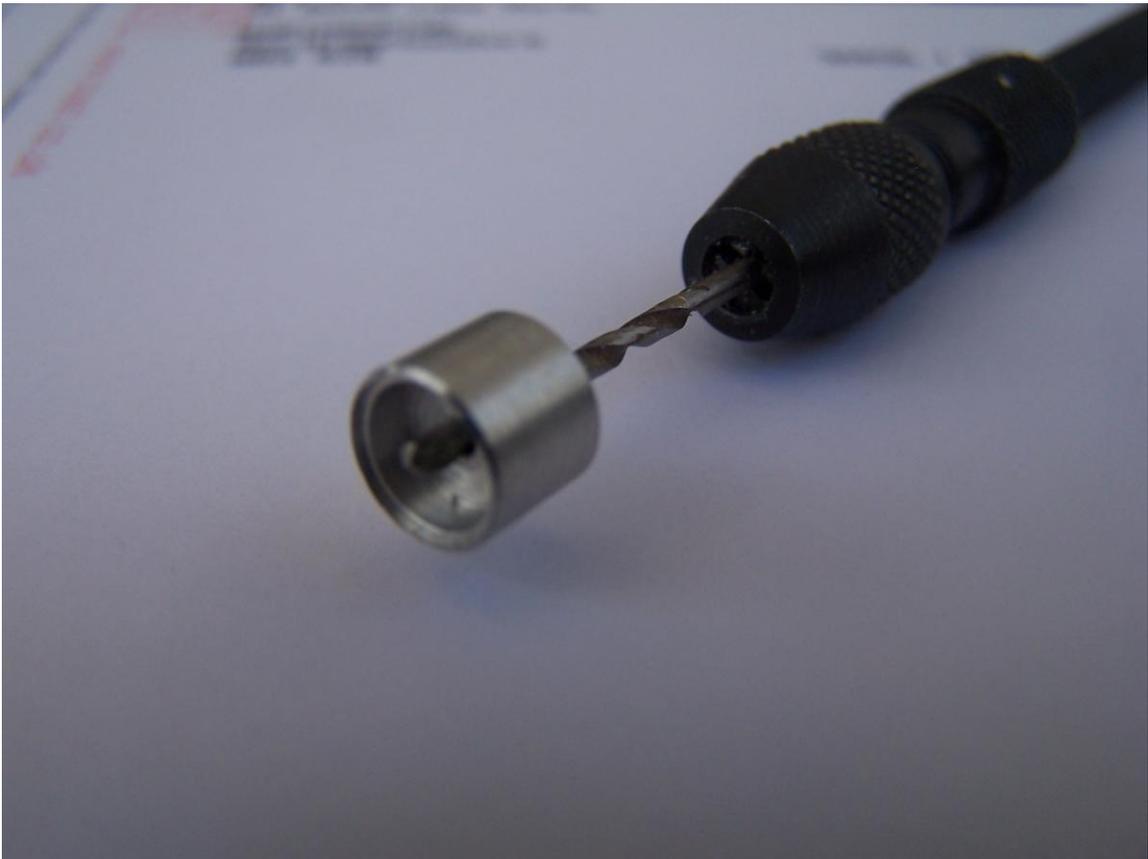
1/64 HO Aluminium & Resin Wheels, Photo Etch Inserts and Axles.

#1 Axles : If needed, cut down axles to required width depending on specific model or personal tastes, use a Dremel/hobby drill or a robust pair of side cutters for this job, where possible I try to use Tomy SG/Turbo front axles for the front wheels, and Aurora/Tomy rear axles for the rear wheels (will need opening up to 1.6mm for this, see section #2), to try and maintain continuity throughout the range of cars I do. Tomy SG/Turbo front axles are 1.19mm, Tomy/Aurora AFX rear axles are 1.58mm diameter. If you plan to use the Tomy Mega G chassis, use the Tomy axle from the SG or Turbo range of cars (The Mega G axle diameter is too small at 1.09mm) the axle hole on the chassis will need opening up accordingly, use a 1.2mm for this, the Mega G rear axle is 1.5mm in diameter, the wheels should be a straight push on fit for this. Tyco axles come in at 1.19mm as well, rear axles measure 1.55mm diameter, the rear wheels are a straight push and twist fit on these, early Tyco rear axles will need a “knurl” cutting on the axle ends (see section #2). It is important to get the axle width right first as the end of the axle needs to be flush with the inside of the wheel so the wheel insert sits flush. If you need to space out the wheel on the axle then use small washers or a plastic sleeve to do this, a piece of cotton bud stem or better still, the plastic spray tubes for the nozzle on a WD40 can will do the trick!

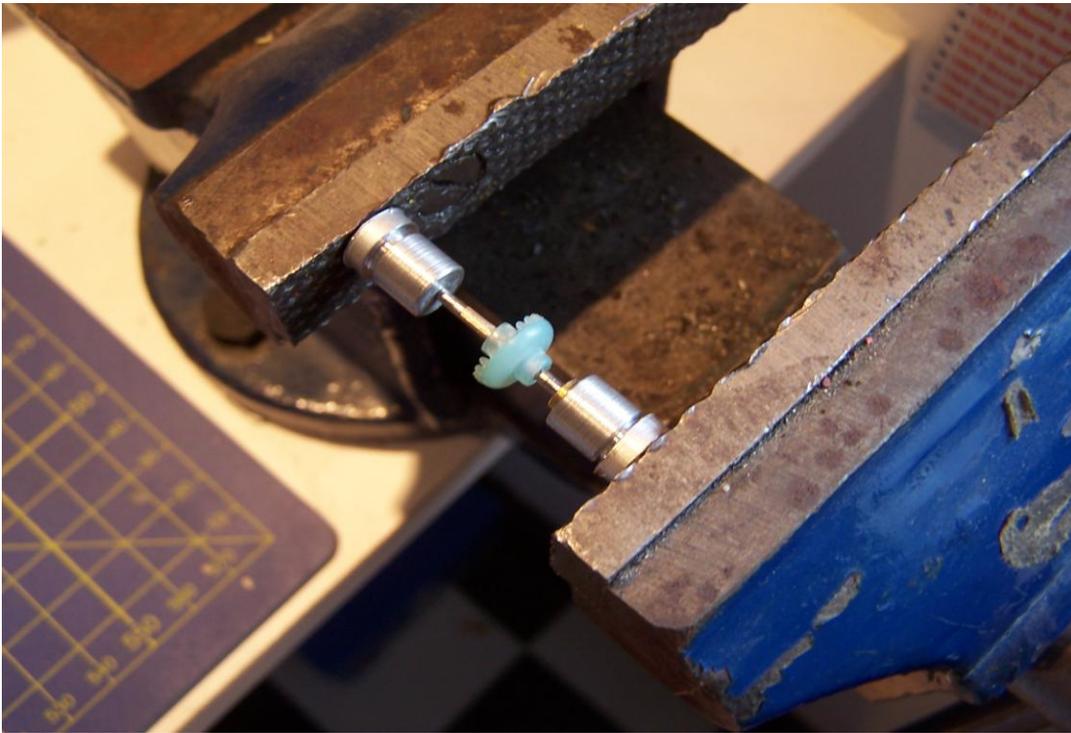
#2 Aluminium Wheels : These were designed to be a universal fitment to most HO slot or 1/64 scale model cars, the axle holes come pre drilled at 1.15mm for the fronts and 1.5mm for the rears, there are no edges (to stop the tyres being pushed on too far) on the outer wheel areas as I wanted them to be as realistic looking as possible, also there is no shoulder or extension around the axle area as in some of my kit applications the wheels need to be as tight to the chassis as possible. These come fresh from the machine shop, so may have swarf or cutting oil in the dish/hub area, clean these out using a cotton bud or toothbrush, also at this point it is advisable to just run a sharpened point or small drill bit around the inside edge of the wheel where the photo etch insert will sit, this will remove any debris and machine burrs. If using the the Tomy SG/Turbo front axle or Tyco (440 or earlier chassis styles) the aluminium wheels should be a simple push and twist fit, Aurora or TomySG/Turbo rear axles require a clearance of 1.6mm to make fit, a 1.6mm drill bit in a pin vice is all that is required to do this. Rear wheels will fit the Tomy Mega G and Tyco 440 chassis axles without any modifications, on earlier Tyco chassis rear axles, you may have to “knurl” the ends of the axle (use some heavy duty wire cutters to do this job) so the wheels grip the axle once pressed on. To attach wheels to the front axle, it’s a case of holding the axle with some large pliers and “twist” on the wheel. For the rears, I press them on in a vice, I cut the actual “pin” off from a Tyco (as they are made from

#2 Aluminium Wheels Continued :

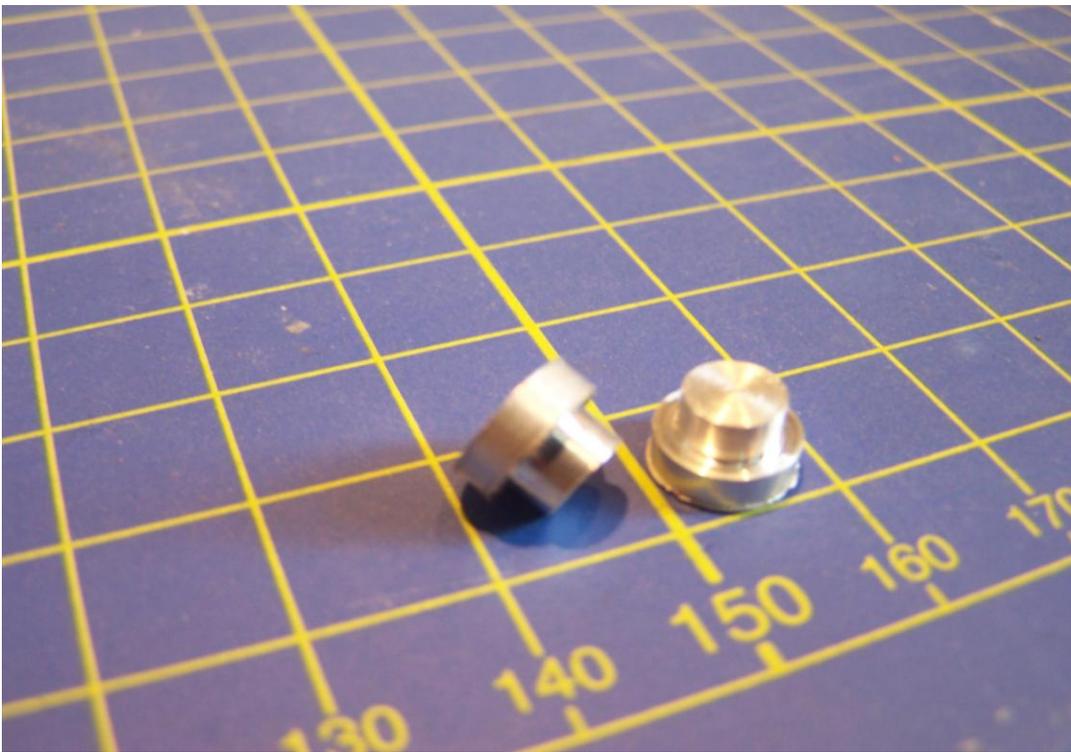
aluminium) chassis guide pin to make a drift (2 required), place in the dish/hub of each of the wheels, this will then protect the wheel and also provide a physical “stop” so the axle ends do not go past the inside wheel edge, put both wheels on the ends of the axles with each drift in the centre of each one, gently wind up the vice handle until it “grips” the drifts, now start to squeeze on the wheels, it is very important to go slowly on this as if your to aggressive you wind up bending the axle, drop the axle out of the vice every so often to check on progress into the wheel. I do a custom aluminium drift for this job if required, (see picture below) These wheels were designed for fitting std Tomy Turbo tyres (front and rear) due to there availability, but other brands my also fit. It is always advisable to use new fresh tyres as they always fit better.



Above picture shows a 1.6mm drill bit held in pin vice and run through rear wheel for fitment on larger diameter axles (Tomy SG/Turbo most Aurora axles).



Using a soft material drift, gently wind on the wheels using a hobby vice, go quietly!!



Aluminium drifts, £4.99 set of 2, please email.

#3 Resin Wheels : Check wheels for casting flashing and remove where necessary, time permitting I will always try and pre drill the axle centres when included them in my kits, the most important thing to be careful of is not to drill too deep into the wheel of wheels that come cast with a centre wheel nut or similar design. Again, when using Tomy front axles, use a 1.2mm jobber drill for clearance, use a 1.6mm jobber drill for rear Aurora or Tomy axles. Check specific kit instructions for tyres required, again, it is always advisable to fit new tyres for a better fit. Paint as required before final fitting,

#4 Photo Etched Wheel Inserts : These come off a big production fret so will have 2 “tang” opposite each other, these will require filing off, use a fine needle file for this job. With these smoothed off, check for fit in the wheels you are using, particularly important when fitting using aluminium wheels, if you find them not fitting correctly, gently sand around outside diameter, use 1000 grade paper DO NOT force the inserts in!!! repeat until they drop in nicely, secure using a drop of superglue in the centre. If you require the insert not to be set in to the aluminium wheel so deep, I do a resin “stand off” this pushes the insert out slightly, it can be gently sanded down to the desired width and painted black to set off the insert, please email for prices. These inserts can be used with most HO 1/64 scale wheels, they can be glued to the outside of a wheel or placed in deeper by countersinking the wheel by using a 5.6mm drill bit. I find the best result is to paint the inside of the wheel matt black (I use Tamiya XF-1) to emphasise the insert. Inserts can also be painted if required, if you want to paint them black then use a gloss black (Tamiya X-1) this shows up nicely against the matt black background of the wheel. The brass inserts can be polished back up by using 1000 grade paper, they will become dull by just simply handling them, use latex gloves if you want to maintain the shine on them while working with them, to maintain their “shine” they can be lacquered (Tamiya X-22 clear) if painting or lacquering inserts, don’t forget to sand off outer diameter as you can get paint build up which would stop insert fitting in the wheel.

Any additional information, drop me an email anytime, use the contact us page.