



## Athearn Hustler Replacement Drive Fitting Instructions for First Generation Model

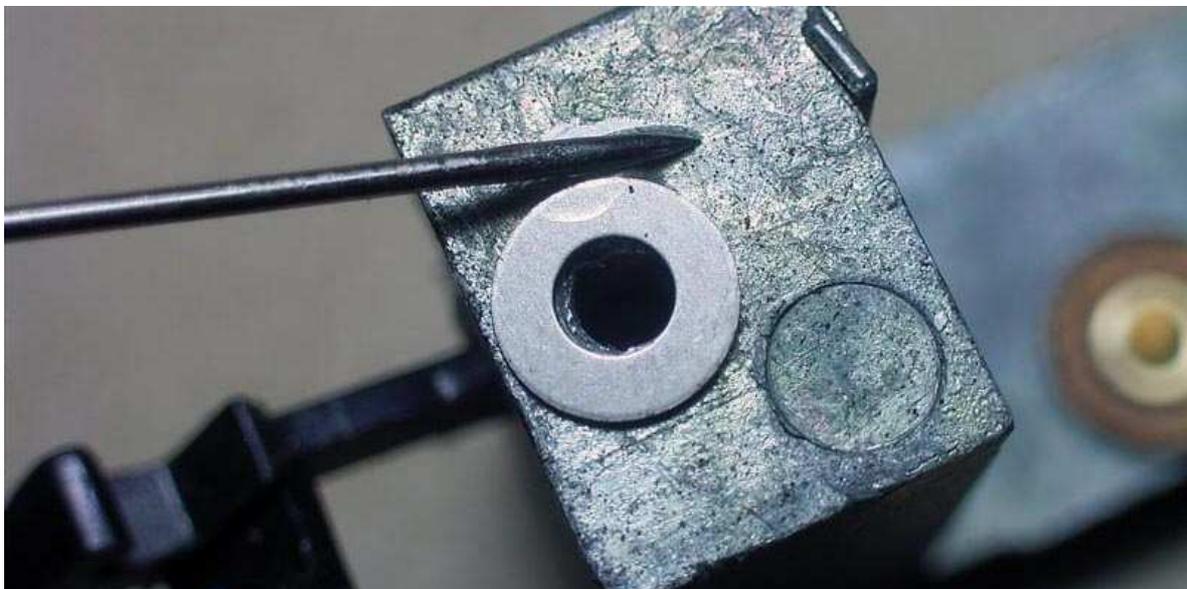


The First Generation model, shown on the right above, is the easiest model to convert. To begin, remove the body by popping it off the round lugs on the side of the cast Mazak frame.

Turn the drive section upside down and remove the screw holding the motor in place. Remove the motor and its wiring connection to the side frame. The motor is no longer required.

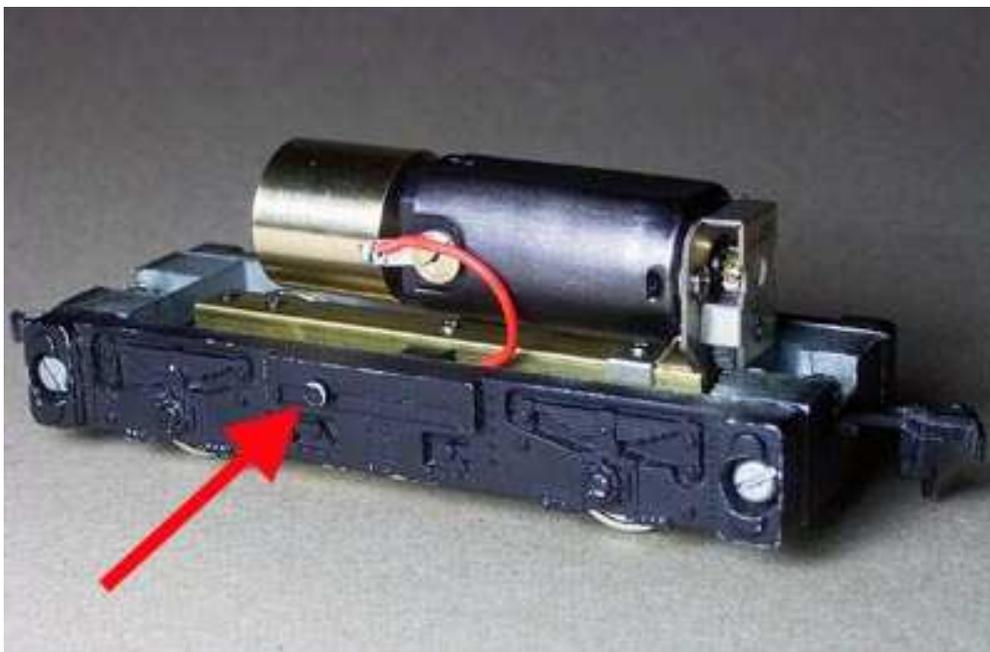
The cast frame has two sections electrically isolated from each other by insulating plastic pads, however this insulation will not be required as the new drive has fully insulated power collection that does not rely on the old frame section. Unscrew the two screws in the side ends of the insulated side frame and remove the frame. The wheels should fall out, and can be discarded if you wish, as they are no longer required.

Lever up the black plastic insulating pad on the side frame, and remove them, they are no longer required. Place one of the small steel washers over the hole in the larger frame section. This washer is required to maintain the correct frame spacing for the new pi-point axles. Align the washer over the hole and place a tiny drop of Superglue on the edge to hold it in place, as shown below. It is only glued in place to make it easier to re-assemble the side frame, nothing more.



Place the new Hollywood Foundry drive inside the larger of the two frame sections, with the flywheel section to the rear. The rear of the frames is identified by the round lug that hold the body on, this is offset towards the rear part of the frames, as indicated below by the arrow.

Position the pin-point axles in the original holes in the side frame. Place the thinner frame section over the pin-point axles, and screw in place. With the washers between the frame sections, the frames should just firmly hold the drive in place.



Please take care when handling the Hollywood Foundry drive not to bend or deform the phosphor bronze power collection pickups.

## DCC Considerations

If you requested your drive 'wired for DCC' then it will come with four wires attached, red and black connected to the power pickups, gray and orange connected to the motor. These colors are the NMRA standard for DCC wiring, and can be connected to the same color wires on your decoder. Any decoder with a 1 Amp capability should be OK to power this drive.

As the motor is fully isolated from the frame, unlike the original Athearn motor, there should be no issues with DCC compatibility.

## Lubrication

From time to time, place a small drop of oil on the axles close in to the black Delrin gearbox, also on the end of the small steel shaft supporting the white Delrin gear. A light Teflon bearing grease can be inserted through the square holes on the underside of the black Delrin axle gearboxes.

## Noise Reduction

When doing the original conversion, we found that after the body was replaced, it acted a bit like the body of an acoustic guitar, helping to amplify the mechanism noise. This was alleviated by placing thin slips of silicone material between the body and the frame, so we have included some of that material in the kit for you to use.

Simply cut narrow sections from the sheet of supplied silicone, about half an inch long, and place them on the underside of the body where it rests on the chassis. Use a smear of Superglue to hold the strips in place

Additionally, adding plasticine to the inside parts of the body can also help dampen the noise.