

HASSELBLAD A70: ALL-PERF MOD

The A70 back for the Hasselblad V system, designed for 70mm film, can be easily modified for all-perf and 65mm use. The modification is completely reversible, and once it has been completed, the back will be able to shoot all forms of 70mm film (perforated and unperforated), as well as 65mm film.

All that is required is the removal of the frame-counting sprocket in the back and then its replacement with a rubber wheel.

You'll need an all-perf wheel. These have been machined in the past by various companies and individuals. Most of these designs are machined from aluminum and feature a torus-shaped gasket that slips in a groove. These work fine if the washer is in good shape, but their disadvantage is that the gasket only makes contact with the film at the tip of its curve.

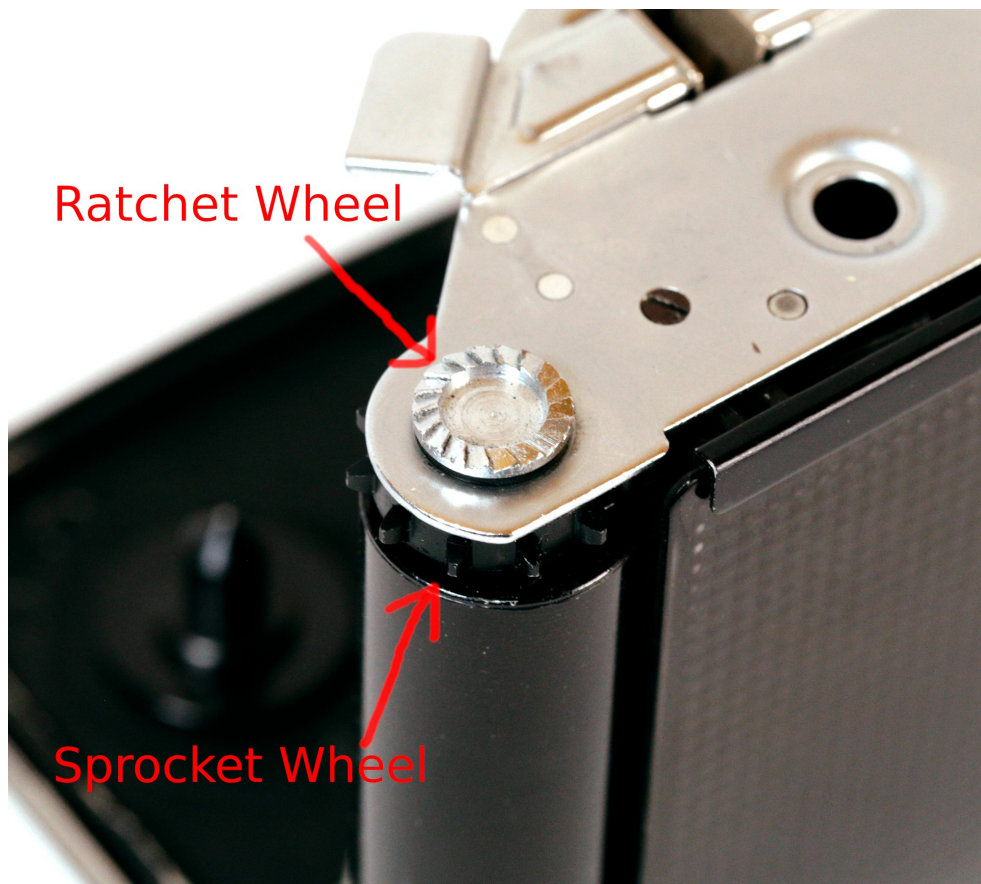
A better design is offered, at the time of this writing, via a machinist in Ukraine. His beautifully machined wheels (the current versions are made out of brass) use an "X" gasket that makes contact with the film at two points. We recommend this product. It will take a long time to receive from Ukraine, and shipping anywhere but Europe will be expensive, but it can be found on Ebay.



Mercury Works has also developed an all-perf wheel that is cheaper and more readily available, at least in North America. It is made from plastic, with a nylon elastic band that provides excellent contact and grip with film (more surface area than any previous metal variety), and can be easily replaced if it ever wears out. The Mercury wheel can be purchased [here](#).

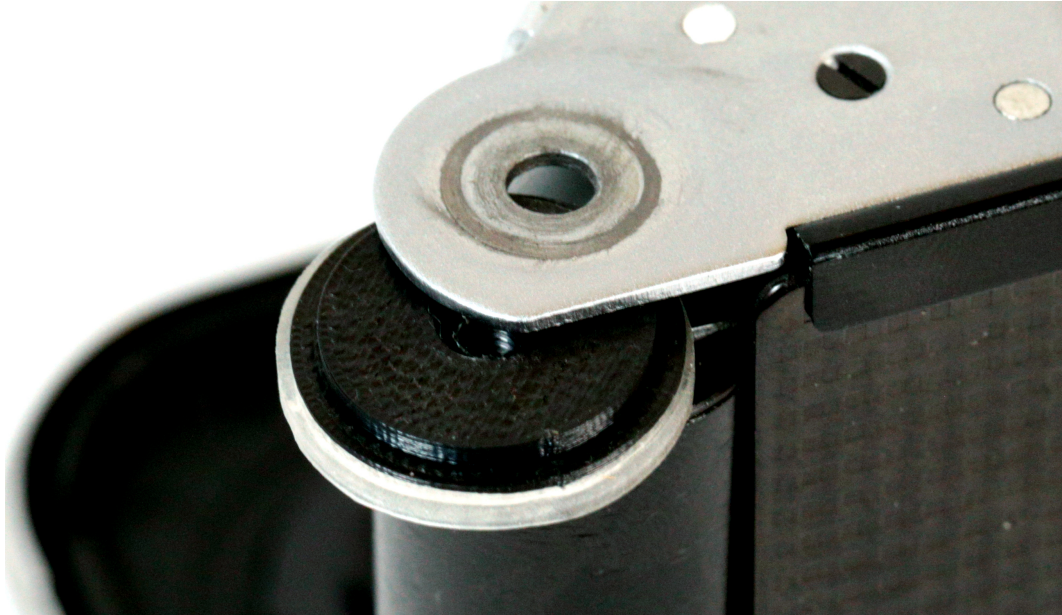


Step 1: Remove the ratchet wheel from the A70 insert. Just grasp it, turning it counter-clockwise until it comes loose. This can usually be done by hand, but if you can't get it to budge, you can use a pair of pliers on the wheel to get it to loosen. You must hold the sprocket wheel at the same time, to keep it from turning with the sprocket wheel! Completely remove the sprocket wheel and place it somewhere safe.



Step 2: Remove the sprocket wheel from the back. It isn't anchored once the ratchet wheel has been removed. Also take care to extract the small brass washer that is often installed on top of the sprocket wheel.

Step 3: Place the rubber all-perf wheel into the position that the sprocket wheel occupied, with the original brass washer placed on top of it, centered with the threaded hole.



Step 4: Replace the sprocket wheel, turning it clockwise to thread into the all-perf wheel. Turn it until it stops; do not force it any further. It should stand up several millimeters above the back insert's top surface:



Your A70 will now accept perforated 70mm, non-perforated 70mm, and 65mm motion picture film, as [sold by Mercury Works](#). When using 65mm film, you'll need Mercury "offset" cassette spools. Load your film onto these and then place them inside your Hasselblad A70 insert, with the thin end of the spool facing upward. This positions the film so that it will make full contact with the all-perf wheel in the back.

When loading the A70 with 65mm film, make sure the film is straight as it winds around the front of the insert (that it hasn't slipped down) and is making good contact with the all-perf wheel. Adjust if necessary before closing up the back.

There is no need to switch back to the old sprocket wheel when shooting perforated 70mm film; it will work perfectly with the all-perf wheel.



Mercury Works
www.shoot70mm.com