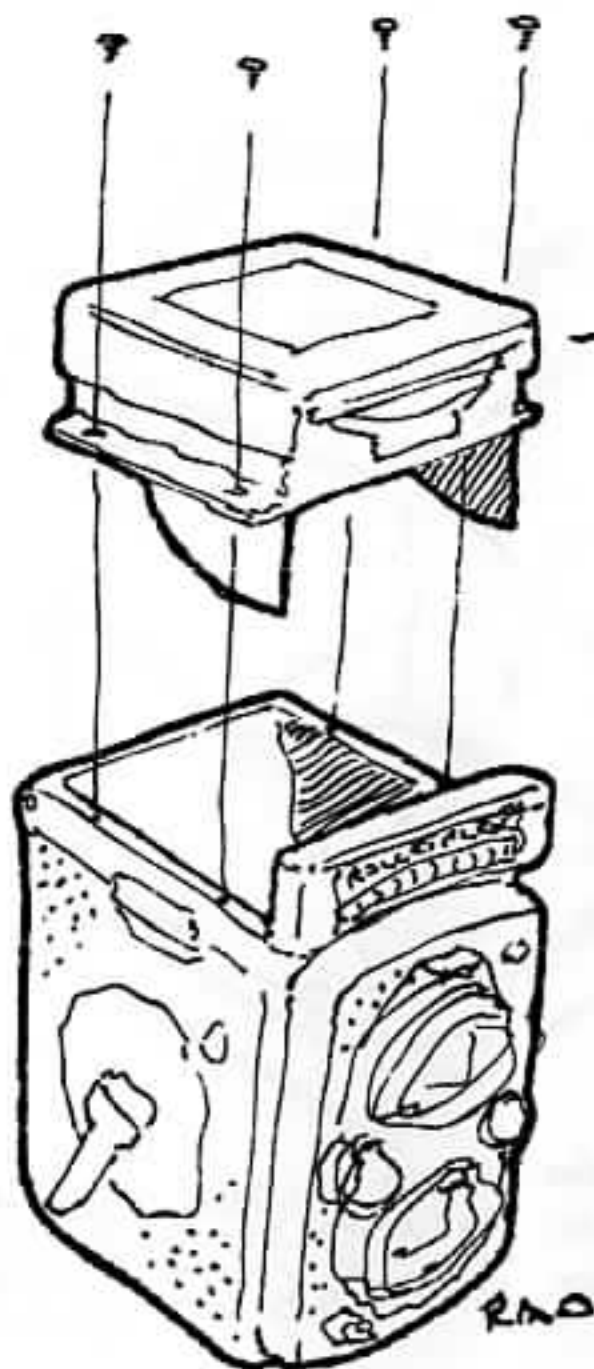


ROLLEI 3.5 E  
(FIXED HOOD)

1.14.06



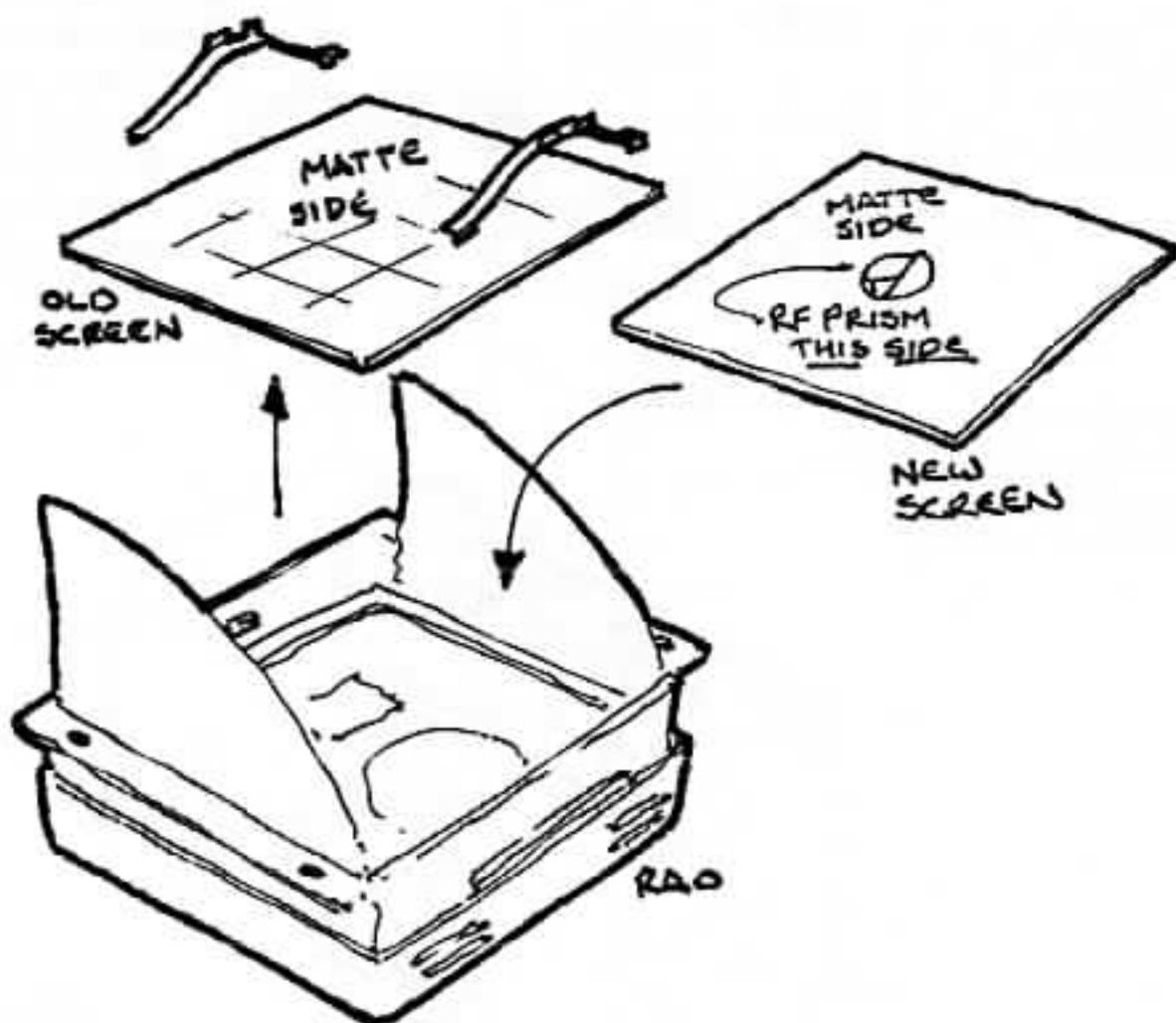
TILT REAR OF HOOD  
UP SLIGHTLY FOR  
CLEARANCE AT  
FRONT

Rowe 3.5E

1.14.06

SCREEN DIMS:

W: 56mm 2.21"  
H: 63mm 2.44"  
T: 1.2mm .047"



INSTALL NEW SCREEN  
MATTE SIDE DOWN IN  
PLACE OF ORIGINAL SCREEN.

# ROLLEIFLEX FOCUS ADJUSTMENT

1-18-06

REMOVE FRONT  
LEATHER FOR  
ACCESS TO SCREWS

SINCE YOU KNOW  
YOUR TAKING LENS  
IS OK, ALL YOU  
HAVE TO DO IS FIND  
A SUITABLY DISTANT  
TARGET, SET THE  
FOCUS KNOB  
AT INFINITY &  
ADJUST UNTIL  
THE SCREEN  
IS IN FOCUS.

RH THREAD ON  
2 RETAINING RINGS

BE SURE NOT TO  
MOVE DIALS WHILE  
DISASSEMBLED SO  
SETTINGS WILL  
STAY CORRECT.

TO ADJUST VF FOCUS,  
LOOSEN LOCK RING  
& ROTATE VIEWING  
LENS AS REQUIRED.

RAD

## NOTE:

- IF YOU DON'T WANT TO  
DO THIS DISASSEMBLY, YOU  
CAN ADJUST FOCUS BY SHIMMING:
- TO LOWER SCREEN, SHIM BETWEEN SCREEN AND HOOD.
  - TO RAISE SCREEN, SHIM BETWEEN HOOD AND BODY.

## Focusing Screen Installation Guide

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Your new focusing screen is not identical to your old one. In most older cameras the screen is made of glass, polished on top and frosted on the bottom... sometimes with a plastic Fresnel plate underneath to brighten the corners. In your new screen, the frosted focusing surface and the grooved Fresnel lens are provided on opposite sides of the same piece. In addition, a split image rangefinder spot is molded into the frosted side. Please note that the rangefinder spot is designed to be viewed directly on axis, with one eye... it is most effective when viewed through the focusing magnifier.

The screen is designed to be installed frosted side down, with the Fresnel rings on the top surface. It is 1.2mm thick, about the same as the glass screens that I have found in most TLR cameras. If you install it frosted side down, the location of the frosted focusing surface will be nearly identical to the location of this surface in your original screen, and there is a good chance that you may not have to readjust for correct focus after changing screens. In case you do find you have to readjust focus, I have included notes on how to make the adjustment.

The Fresnel rings in this screen are very fine, and I have not found them to be a distraction when focusing in the frosted field of the screen. If you find them objectionable, it is possible to install the screen frosted side up, which will create a very smooth focusing surface with no visible rings in the field. However, this will definitely require that you readjust focus since you will have relocated the focusing surface of the screen. Personally, I have not found this to be worth the trouble for the amount of benefit you get, but it can be done.

In any case, don't worry about focus adjustment until the new screen is installed: just verify before starting that your camera focuses correctly with its existing screen.

### Notes for TLRs:

To remove your existing screen in most TLRs, first you need to remove the finder hood by taking out 4 screws on top of the camera. You generally can't get a perfectly straight line on these screws, so use care and make sure your screwdriver is a good fit and in good condition. Once the hood is off, the screen can be removed from below by removing two spring clips. Just depress the center of the clip and pull it slightly away from the side wall to clear the little hook it's engaged in. In some cameras, there are other complications: hood springs that need to be removed for clearance, or parallax correction linkage that must be disconnected to remove the hood. I have included notes on these in the sketches for the models that I'm aware of.

While the hood is off, you should take the opportunity to clean the mirror and the rear surface of the viewing lens, both of which will undoubtedly be very hazy and dirty. First blow off loose dust, then brush with a very soft brush. Most mirrors can be safely cleaned with a lens tissue moistened with camera lens cleaner, but in older cameras check on an upper corner before trying to clean the entire mirror. If you can't safely clean it, don't go

farther than the soft brush. Clean the rear surface of the lens just as you would the front, with lens cleaner and a lens tissue.

Install the new screen in place of the old one, frosted side towards the mirror, using the original clips. If there was a Fresnel plate under the original screen, you no longer need it; your new screen replaces both parts. The clips will still work with the one-piece screen.

Set the hood back in place and reinstall the 4 hood screws. Check focus by setting the focus dial to infinity and sighting on a distant object. If the focus appears correct, then you're okay. If you need to make a focus adjustment, there are 2 possibilities: the right way and the easy way; both work. The right way is to readjust the viewing lens to match the new screen position. I have included notes on how to do this for the cameras I'm familiar with.

In most cameras this requires some amount of disassembly of the front panel, which you may not want to do. You may also prefer not to do this if you're considering changing back to your original screen and don't want to disturb the settings. In this case, you can adjust the screen by shimming to shift its position. You will either place shims between the screen and the hood to lower it, or between the hood and the camera body to raise it.

- If the viewfinder focuses past infinity, shim under the hood between the screws on either side to raise the screen until it reads correctly.
- If the viewfinder fails to reach infinity, remove the screen and insert shims between the screen and the hood, directly above the spring clips, to lower the screen until it reads correctly.
- The depth of focus of an 80mm lens at  $f/3.5$  is about  $\pm 0.2\text{mm}$ , so you need to be able to control at least to this precision. A piece of "Dymo" plastic label tape is about 0.2mm thick, so this is a handy material to use for a shim; for finer control you can add a thinner tape or adhesive backed paper. The adhesive backing is very helpful in keeping things under control. (where appropriate I am enclosing a couple of small pieces of Dymo label tape with the screen, just in case you decide you'd like to do it this way)
- Note: Shimming will NOT be an adequate method if you have decided to install the screen frosted side up. For that there is no option but to readjust the viewing lens for the new screen position.

**Notes for Praktisix and Pentacon Six SLR:** The installation process is different and simpler than the process for TLRs described above. If the screen is installed frosted side down, focus adjustment is not necessary.

- I have provided a spacer to be placed under the front center retaining clip; this spacer **MUST** be used. Be sure that there is no downward pressure at the front corners of the screen, as there is no support under the screen at these locations in this camera.
- Focus adjustment **WILL** be necessary if you have decided to install the screen frosted side up. Use the adjustment screws under the screen for this purpose.
- Refer to the installation sketches provided for more details.

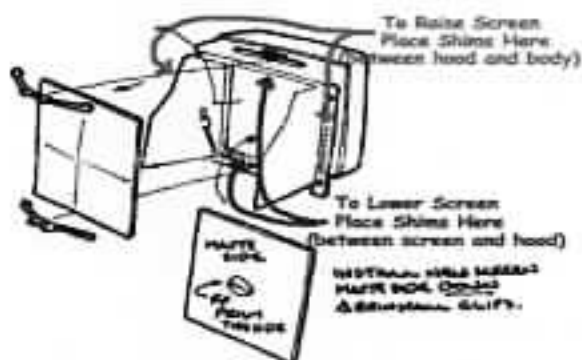
Once your new screen is in and your focus is correct, you're ready to load some film and go see how you like it! I hope you do.... thanks very much for giving it a try.

#### WHICH SIDE IS WHICH?



These images are to help you tell the Frosted (Matte) side from the Fresnel side.

#### Shim Placement Guide (Typical TLR Finder Hood)



### **Parting Shots: Notes on using the Waist Level Finder**

I've been using waist level finders now for about 30 years, and I wouldn't have expected to learn anything new at this point; but using the split-image rangefinder has led me to notice something that I should always have known but never paid attention to:

Many of us "fine focus" the TLR by flipping up the magnifier and then stuffing our eye down into it for a "close look". This is not only awkward and slow, but it's somewhat self-defeating: you get just as much magnification if you lower the camera down to a comfortable position at your waist. When held in this position, the 6mm split-image rangefinder spot will fill the entire magnifier lens. Now, you can fine-focus on this huge magnified rangefinder, then flip the magnifier down, quickly adjust your aim for composition on the full screen, and click off the shot. This method works without the rangefinder too, but with the split-image it makes the TLR almost as fast in operation as an eye level finder, with all of the added benefits of composition that the large groundglass offers. If you've always done it this way, I'm not ashamed to admit I missed it for many years.... if you've been sticking your eye into the hood like I have, try this method with your new screen. I think you'll like it much better.

**Thanks again!**

**Rick**