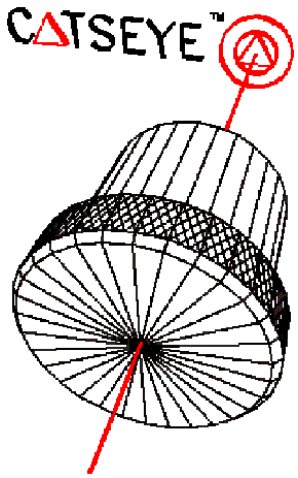
CATSEYE™ Collimation LLC; www.catseyecollimation.com; 42 Belmont Place; Madison, AL 35756; USA; Jim Fly; ATM Craftsman & Engineer; flyj@catseyecollimation.com; (256) 882-2523



CENTER SPOTTING THE PRIMARY MIRROR WITH THE *CATSEYE*™ PRECISION SELF-ADHESIVE TRIANGLE OR *HOTSPOT*™

Revised 03/05/10

CAUTION: Do not attempt to clean the acetate spotting template with water, alcohol, glass cleaner, solvents, etc. else damage to the print may result.

PREPARING THE SPOTTING TEMPLATE

- For ease of registration on the mirror, use scissors to trim the template along a diameter line 2" LARGER than the biggest mirror you intend to spot.
- Lay the clear acetate spotting template RIGHT SIDE UP (lettering is normal & left-to-right) on a clean flat surface (like the kitchen table).
- Apply a small piece of cellophane (Scotch) tape directly across the holes (4 for the triangle, 3 for HotSpot™) in the center of the template.
- Put the self-adhesive spot (triangle or HotSpot™) on the table - colored, reflective side up.
- Lay the template over the spot and adjust its position as necessary to exactly align the template spot outline (small/large triangle or HotSpot™ in the center) with the spot.
- With the eraser end of a pencil, CAREFULLY press the center of the template directly above the spot to adhere the cellophane tape adhesive (exposed through the template center holes) to the top of the spot.
- Turn the template upside down and with the tip of a razor blade, CAREFULLY pry up one corner of the adhesive backing on the triangle spot and peel away.
- Insure that the spot is still aligned with the spot outline on the spotting template; if not, replace the backing, remove the spot, realign, and re-adhere to the template tape.

PREPARING THE PRIMARY MIRROR

- If the mirror is mounted in the scope, remove the Primary mirror cell.
- If the mirror orientation in the cell must remain the same, mark the (3) angular locations of the Primary mirror adjustment screws on the side of the mirror near the reflective surface.
- If any part of the mirror cell (i.e. retaining clips, bolts, etc.) protrudes above the front surface of the mirror, you can either trim the template around them or remove the mirror from the cell before proceeding further.
- Place the cell and/or mirror on the table face up.
- If you have a pre-existing center spot (reinforcement ring, electrical tape, etc.), it is recommended that it be removed before proceeding. See Page 3 for my easy and painless removal procedure.

APPLYING THE CENTER SPOT

- CAREFULLY lay the clear acetate spotting template (with attached spot on the underside) over the mirror.
- Align the appropriate mirror diameter template outline ring (or arc segments) with the perimeter or bevel edge of the mirror.
- If you have marked the angular locations of the cell adjusting screws on the mirror, align the 3 spot radial projection lines on the template with the marks. (only one line registration alignment is needed if the others don't reach to the mirror edge.)
- Look directly over the mirror to "fine tune" placement to insure the template is perfectly centered on the mirror and the template radial lines are aligned with the adjustment screw locations (if marked).
- When you are confident that the template is positioned correctly, use the eraser end of a pencil and gently press the template down above the spot to adhere the spot to the mirror surface.
- Gently tamp the entire spot surface with the eraser end of the pencil to insure that it is firmly attached in place on the mirror
- CAREFULLY peal the template away to detach the cellophane tape from the spot.
- Gently re-tamp the spot with the eraser as necessary to insure full-surface adhesion to complete the application.

HOW TO REMOVE A PRE-EXISTING CENTER SPOT

* Please read the entire procedure before attempting to remove your spot! *

CAUTION - BE ADVISED! It's been reported that mirror coatings less than 90 days old can be subject to poor adhesion to the glass substrate and that aggressive spot removal activity may result in coating failure in the spot area.

That being said, for best performance from the ***CATSEYE***™ system, It's really best if you can get the old spot off. The most important part of this procedure is PATIENCE! - Do not get in a hurry to mechanically "force" the spot off; let the solvent do the work!

The technique I recommend uses Q-tips and a sparing amount of a solvent of choice. There are multiple adhesive types used for the various OEM spots found on today's mirrors so it may take experimentation with several solvents used in order of strength before the appropriate one does the job.

Start with isopropyl (rubbing) alcohol; I prefer the 91% variety; if this doesn't work satisfactorily, move up to fingernail polish remover (acetone & water) and if all else fails try 100% acetone.

Dip a Q-tip in the solvent and dab the entire spot to wet it thoroughly. Let it sit for a couple of minutes and then nudge it with the Q-tip until it breaks free. If the spot is stubborn, sometimes a wooden or plastic toothpick can be used to carefully pry up one edge of the spot and lift it off.

Once the spot is removed, clean the glue residue from the mirror with additional fresh Q-tips and solvent. Use dry, clean Q-tips to soak up excess solvent and remove smudges. Try to keep the working area as small as possible confined to the immediate spot area during the entire procedure. Even if the mirror does get a few minor scratches in the center, if you've done a good job, they will be well within the shadow of the secondary and they will not at all affect your viewing contrast.

If all this still sounds too risky or stressful for your demeanor to attempt, then the next best approach is to just blacken the spot with an Indelible black marker (try a Sharpie with a tapered point tip) and then apply the triangle on top of it. Good luck.

ENJOY EASY, PRECISION COLLIMATION!