

Just some of what Photoshop can do for your images-

1. Improved the **Brightness and/or Contrast**.
2. Remove/ Replace **distracting areas**.
3. Improve/ Change **colors of areas**.
4. **Sharpen or Blur** areas.
5. **Resize images** for email, websites, **for digital contests**, or for quality prints.

6. **Straighten perspective** (keystoning) of buildings in a single bound.
7. **Rotate/ Flip** images left or right, vertically or horizontally as desired.
8. **Rotate to straighten tilted horizons** or other objects.
9. **Crop Image** to remove extraneous areas and produce a simpler, stronger image.
10. **Transform** image by skewing or distorting for artistic or desired effects.

11. **Restore old photos** by Removing/ Replacing of specks, scratched, or cracks in old photos.
12. Introduce **Text** as titles, captions or other reasons.
13. Introduce a **wide variety of effects** to images or parts of images for artistic and other reason.
14. Introduce **one or more other images into an original image** using Layers feature.
15. **Improve portraits** by replacing distracting backgrounds and do photo retouching of portrait.

16. **Remove "Red Eye"** produced from portrait photos that used a flash.
17. **Merge several photos together** to form a Panorama composite.
18. **Add to an image with painting effects** features.
19. **Introduce tinting** to images such as sepia to produce an old or antique look.
20. **Combine multiple images into a single Picture**/ Print package rather than print individually.

21. **Convert printable images** to a format that **a lab can make into slides**.
22. **Convert color images to Black & White images**.
23. **Add a variety of Borders** (simulated frames).
24. and More !

*** Written for Elements 2.0 with parenthesis around new or relocated features of Elements 4.0.

*** While there are later versions of Elements 5.0 +, the basic techniques are still the same.

Basics of the Photoshop (PS) Screen Display-

Menu Bar- (Line @ Top)- File, edit, Image, enhance, layer, select, filter, view, window, Help

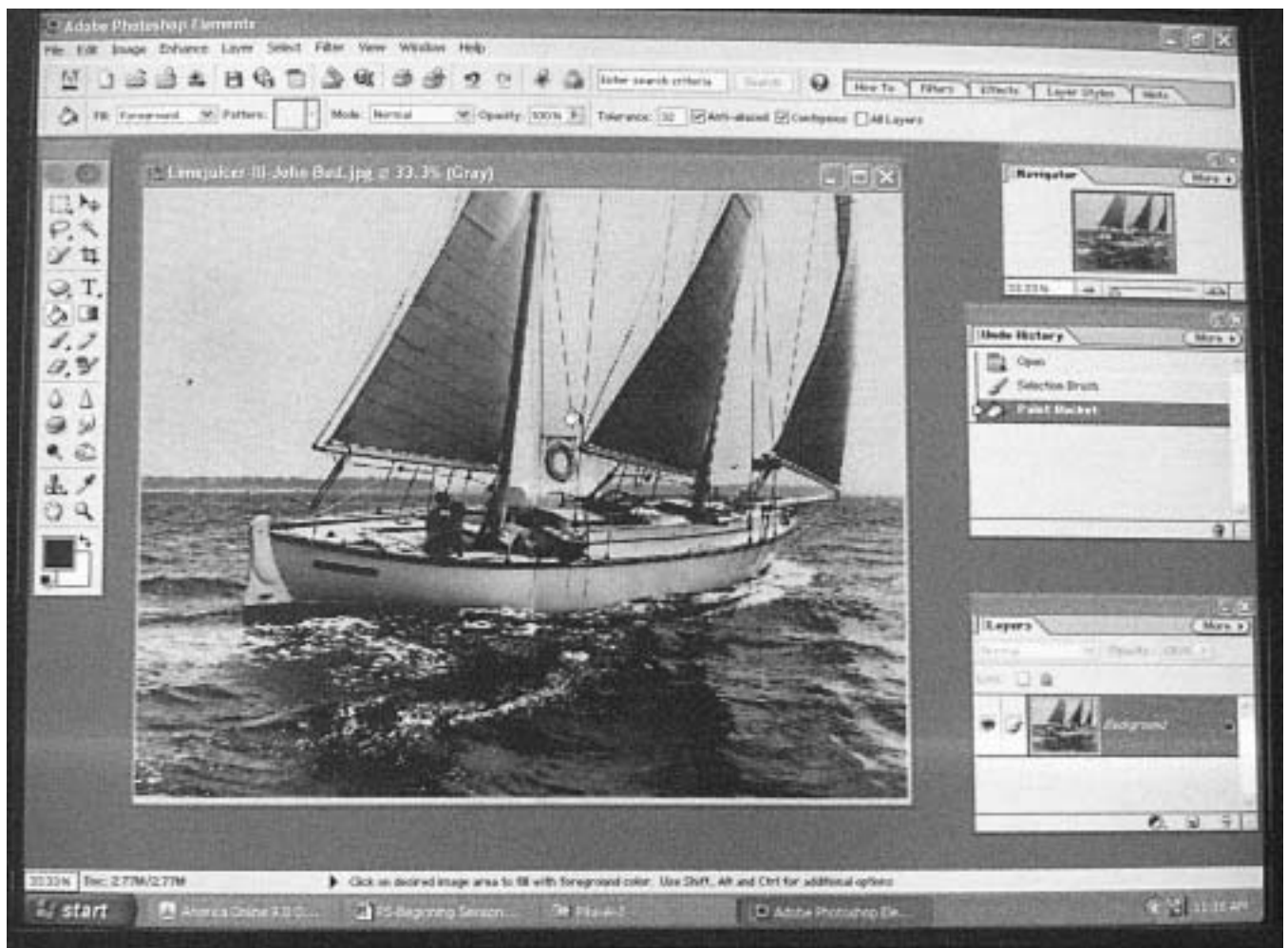
Shortcut Menu- (2nd line from top) (icons) adobe.com, new, open, **file browser (organizer)**, import, save, save for web, save as PDF, attach email, online services, print, print preview, forward or back, quick fix, color variations

Options Bar- (3rd line)- variable controls per TOOL

Tool Box- (Vertical box with 24 tool)- (as icons) some with low-right corner for right click options marquee (M), move (V), lasso (L), magic wand (W), Brush select (A), crop (C), shape (U), type (T), Paint bucket (K), gradient (F), brush (B), Pencil (N), eraser (E), red eye (Y), blur (R), sharpen (P), sponge (Q), smudge (F), dodge (O), burn (J), clone (S), eyedropper (I), hand (H), zoom (Z), color picker (straighten, cookie cutter, spot healing)

Status Bar- lower left- various document info

Palette Well- right hand side-2nd line and space below to display various conditions. Typically: navigator size slider, tool/changes history , layers active and layer control, brushes, others



Monitor Calibration- Simplest (crudest) type available via Windows "Control Panel" (**NOT for LCD Monitors**)

* allow CRT type monitor first a 30 minute warm-up.

Control panel/ **Adobe Gamma**/ dot in step-step/ next/ **Profile Load/ browse for "sRGB** profile file in color folder/ select by OPEN/ next/ set monitor to highest contrast/ set brightness for outline of inner box/ next/ slider to make center box = outer box in general (least contrast difference)/ **set 6500 K daylight**/ next/ finish/ save as / "monitor calib-7-15-06" as a file name/ save. If monitor does not have controls for brightness and contrast, you may need to adjust through control panel "display" controls which doing the control panel "adobe gamma" steps.

* CP/ **Display**/settings/ advanced/ intel graphics/ properties/ monitor settings/ bright and contrast sliders.

* Other software and hardware programs are available for fine-tuning calibration and flat screen monitors.

Desktop Icon for "Photoshop Program" - If not present after installing program, go to START/ programs/ select "Photoshop"/ right click/ send to/ desktop/ exit and find icon on screen.

Direct Files to: OPEN into Photoshop- To enable the double click of a file to always go to Photoshop, select a file (like a JPG) in a WINDOWS directory/ file Menu/ **open with/ select Photoshop from list, check box near bottom of Menu that says "always open"**. **Then any jpg "no matter where it is" will always be opened into photoshop.** You can do the same for any & all BMP or TIF files as well. **This can also be specified near the bottom of the "Edit Menu" in Photoshop under "file associations"**.

Direct Color Management - Edit Menu/ color settings/ **NO management "or" (sRGB)**.

Direct Rulers and Units- Edit Menu/ preferences/ units & ruler/ ruler to "inches"/ type to "points"

Direct Basic Displays- "Windows" Menu/ put checks in front of: tools, shortcuts, options, navigator, undo history, layers, status bar.

Direct Status Bar Info- with a file picture opened go to **window Menu**/ check status bar on/ then click arrow near lower left corner of screen and select document size.

Direct Rulers to edge of Photo- View/ rulers

Opening a file- File Menu "**file browser (2.0 only)**" direct to basic folders "My Documents" or "My Picture", etc. You can even direct through "My Computer" to select C- drive (hard), D drive (CD reader). Can also open thru your scanner or camera software if loaded. Suggest you store your camera files in NEW folders (under My Pictures/ click file Menu/ NEW/ then type in a file name by subject matter or trip names to replace the NEW in the new folder. This way you should be able to find your pictures when you want them. (4.0 uses an optional and elaborate "File Organizer" to open and rearrange files).

Image Size & Resolution- Image/ Resize/ width & height in inches and resolution in PPI (pixels/inch) check box "constrain proportions" check box "resample image"

Resolution- For printing: use 300 PPI. For emails: use 72 PPI

Typically 300 PPI @ 8" x 10" = 8 x 300 x 10 x 300= 7.2 Mega pixels

In a 5.0 Mega pixel camera, the files are @ fine jpeg= 5.0 MB or less or @ tiff= 15.0 MB)

* Save the Printable version as a file (name with revision-"A" for first version) sized for image and at 300 PPI (best resolution). Use subsequent revisions as "B", "C", etc. to keep the original "A" unaltered and in tack should you decide to take a different or new type of enhancing techniques.

* An email version at 72 PPI file can be made from this when needed ("save as" with "E-mail" in title)

* Work down from best PPI (when needed), never the other way (up from 72 PPI) as software then makes up (creates) pixel that weren't really there to fill in new blanks (by some formula).

* **Scaling**- keeps all the pixels but changes the Length, width, and resolution by dragging with or without proportions maintained.

TOP LINE MENUS-

File Menu- (top line)

New (Photo Merge-Panorama), Open, Browse (File organizer), Open Recent, Create (create slide shows & greeting cards), **Close, Revert, Print, Duplicate.** and some others.

Edit Menu- (top line)

Undo, cut, copy, paste, clear, (Revert), fill, stroke, **Color settings, file association, Preferences.**

Image Menu- (top line) Can abort with ESC key or garbage can of history palette, or file Menu/ revert to original

duplicate- makes separate image.

rotate- 90, 180, flip horz., flip vert., custom.

transform- free, skew, distort, **perspective .**

crop- to paper size or other. Can crop and rotate in crop tool.

resize- image size and resolution or **SCALING.**

histogram- (in 4.0 in Window Menu)

adjustments & Mode= miscellaneous

Enhance Menu-(top line)

quick fix- three types of quick adjustments in one

auto levels

auto contrast

auto color

auto (Red Eye Fix)

adjust lighting- shadows, highlights, Brightness/contrast

adjust color- cast/ hue/ remove color/ **variations**

adjust Brightness & contrast- Bright & Contrast or by **LEVELS (with histogram)**

Layer Menu- (top line)

new, duplicate, fill, adjustment, merge, flatten, group

Select Menu- (top line)

all, deselect, reselect, **inverse,** feather (option), modify

with tool holding SHIFT key = **adds** section area to existing

with tool holding ALT key = **subtracts** section area to existing

Filter Menu- (top line)

* works inside a pre-selected area or **ALL**

* **artistic, blur, brush strokes, distort, noise, pixelate, render, sharpen, sketch, stylize, texture, others**

* all have variations in each category, many have sliders to control variations/ranges

Examples:

"Clouds" is under **Render**

"Stained Glass" is under **Texture**

View Menu- (top line)

Zoom in/out (crude) * better to use navigator slider (palette area)

* **fit to screen** - quick but not always proper- * better to use navigator slider (palette area)

* **rulers**

* snap to grid

Windows Menu- (top line) controls what's displayed to make quickly available on screen and palette area.

* = checked for normal use

images, * tools, * short cuts, * options, * file browser-only 2.0, * navigator, * hints (help), how to- (help)

* undo history, (histogram), color swatches, * layers, effects, * status bar, others

HELP Menu- (top line)

Normally goes to INTERNET or on-line Adobe HELP in many Elements versions.

* **HELP "without" Internet** is available via: 1. Elements **Windows Menu:** "Hints" and "How to" into palette area.

2. "Index" of help -alphabetic on help's keyword.

TOOLS in TOOL BOX-

Selection of Parts of an Image - Marquee/Elliptical tool, Polygon Tool, Magic Wand Tool

- * Allows application of other tools and filters to selected areas only. Rest unchanged.
 - * Once selection made, selection area can be moved (dragged) to new location by placing cursor in area and dragging area to new location and release for final.
 - * Add or subtract from selection by using tool again and holding down either shift (+) or alt (-) and go over area to added or subtracted.
 - * Delete current selection with "control D", when through with area or when want to start selection over.
1. **Marquee/Elliptical (2)**- drag cursor over area, release. If circular or square desired, hold down shift key as you drag.
 2. **Lasso- (3) - Lasso, Magnetic Lasso, Polygon Lasso**- magnetic has some tolerance control options.
 3. **Magic Wand**- Similar to magnetic Lasso except has tolerance control based on similar colors in image. Once wand is click on a color all or adjacent areas of same color are selected. Has tolerance adjustments (width of colors) and contiguous (adjacent only) controls) to get area.
 4. **Brush Selection**- Allows selection of an area by using cursor as a paint brush to sweep over area desired. Brush size, brush softness, brush width controls are also available. **Note:** Brush sizes can be adjusted up and down **by clicking the left or right bracket keys** (near the "P" key).
 5. **Cropping**- Similar to the Marquee tool except area outside the cropping box is removed. This allows the removal of undesirable areas and the recomposing of desirable areas in to rectangle. If cursor is placed outside of a corner of the cropping box, the chosen rectangle can be rotated (as in correcting a horizon)

Insertion Tools - Shapes, Text, Paint Bucket, Gradient, Brush, Pencil, Eraser, Red-Eye, (Straighten, Cookie Cutter, Spot Healer)

Effects Tools - Blur, Sharpen, Sponge, Smudge,
Dodge, Burn - Use exposures option controls of less than 50% to permit better response
Each repeated drag of bush over an area, applies a new burn or dodge.

*** Special Tools** - Clone Stamp, Eyedropper, Hand, Zoom, (spot healer)

Clone Stamp- Allows copying of one area of an image into another section using paint brush strokes.
A Very powerful tool. Can be used to replace distracting areas in an image with copy of a non-distracting area of image. Color and details of copied area are maintained. Controls are: Brush type (edges) and stroke size, and opacity. 100% opacity equals complete replacement, while less can merge copied area over original area allowing both to show.

Spot Healer- Similar to Clone tool- makes spot assume color and texture of surrounding pixels.

Eye Dropper- Uses cursor to select an existing spot's color in image to set the "**Color Picker**" Tool.

Hand- Allows dragging of an over-zoomed image around to see hidden parts. Quicker than sliders.

Zoom- Magnifies a section of an image to allow finer workmanship with tools. Does not affect image's actual size. It just allows better screen looks at an area. Good for showing flecks and other defects in an image that would not be seen in full screen view.

Color Picker- Allows full spectrum color choices using sliders and graduated color box shades. After using the vertical basic color slider to put desired color range into box, a click of a specific spot in box sets the desire color. The color then is available to be applied with the brush, paint bucket, gradient other tools. Lower left corner symbol sets basic black/white as the foreground and background colors. The arrow symbol in the upper right corner allows the swapping of foreground & background choices.

LAYERS for MANY EFFECTS & ADJUSTMENTS-

Layers- * **Another powerful feature.** * Acts like having multiple slides in a projector. Allows work on separate layers without affecting basic picture loaded as the first slide (on bottom as a background image). The opacity of each layer above the background layer can obscure (block) the layers beneath by varying the amount of the % opacity (1-100). Once you start multiple layers, it is best to display the layers palette (Window Menu/ check Layers) so that you can see what layer your working in (selectable by clicking layer in palette). The order of the layers can be moved up or down relative to other layers in the layers palette display.

* The EYE in each layer of the layer palette can be turned off to remove it from the screen and printer should that be desired or for print or to isolate working layer from distractions in other layers.

* Dragging another selected image with the Move tool into another image automatically puts the second image into a new layer. In order to keep sizes compatible, the images should each be of the same pixel resolution. If not, the size of one of the new images layer can either mushroom or shrink surprisingly or drastically.

* Image sizes can also be adjusted to new proportions with the Image/ transform/ free transform/ shift key & drag to new size.

* Notes:

1. Document status (lower left corner of screen) size will show size of net image on left and size of file with multiple layers (right).

* When saving image with layers, Photoshop saves the larger file as a ".PSD"

* When printing or desire to make the file into a smaller JPG file, it must be flattened into a single layer by using the "flatten Image" command in the Layers Menu. Once that is done, there are no further layer controls available.

2. Sometimes you may get a prompt that says "the layer is locked" see padlock symbol in corner of layer palette (Photoshop may have done it on its own- for some reason).

* Make a duplicate layer in the Layer Menu/ duplicate/ OK and you'll now be able to work in this new layer without a lock in it.

Some "How To" Photoshop Techniques & Procedures-

1. **Insert Text titles in image-** click "T" text tool, click Color Box on option line of tool to get "color Picker". Slide color to an appropriate contrasting color for text area in the image. Text size of 30 for starters.
 - * Size of type can be changed from tool option line as well as font. You can resize with handles.
 - * Position of text can be moved with Move tool or by dragging handles in text box.
 - * Bevels & drop shadows can be added via the Window Menu/ Styles & Effects/ styles choices.
 - * Change Text Lighting Angle, Shadow distances, Bevel sizes via the Layer Menu/ Layer Style/ Settings.
 - * Warping text into shapes can be done from TEXT tool/ options line (2nd), warp icon/ choices.
 - * Text needs to be highlighted or cursor inside text to make changes.
2. **Create a Mat (frame) for your Photos-** Select Menu/ All or (cntrl A) then Select Menu/ Save Selection
Image menu/ image / H & W & resolution for inside paper size
Image menu/ canvas size/ check relative/ H & W 0.5 for half inch frame/ OK
Selection Menu/ load Selection, then Selection Invert (cntrl, shift, I) to select frame area.
Use Eyedropper tool to pick a color in Image to be used in Frame. Use Paint Bucket in Frame.
Filter Menu/ Texture/ Craquelure/ space 42, depth 5, bright 7 to start effect/ OK
3. **Sharpen Filter-** Use the Filter menu's / Sharpen/ UNsharpen Mask/ Sliders to sharpen the Entire photo or a Selected area of an image. The unsharpen mask filter is the best of the 4 sharpen filters because it has three different sliders to control the sharpening effect with a magnified preview aide of a spot on the image to help you decide the best slider positions for the sharpening. The others do not offer controls.
4. **Blur Filter-** Use the Filter menu's / Blur/ Gaussian Blur/ Sliders to Blur the Entire photo or a Selected area of an image. The Gaussian Blur is like the Unsharpen mask in that it has slider controls and magnified preview areas to help in controlling the Blur. The Motion Blur filter and the Radial Blur filter offer different and controllable effect variations. For example: If you had a picture of bicycle racer frozen sharp by a high shutter speed, you could apply the Motion Blur filter to it and make it look like a slow shutter speed image. Often, the slow shutter blurred look imparts a more dramatic impression of speed than the frozen look.
5. **Artistic Filter-** Use the Filter menu's/ Artistic filter for a dozen of more artistic effects on all or part of an image. Some of the choices are: Colored Pencil, Fresco, Neon Glow, Palette Knife, Sponge, & Watercolor. Each has slider controls and a magnified preview to assist in varying the degree of the effects.
6. **Replace Bald Skies-** Use the Magic Wand Selection tool to select all the bald areas of the sky. Set the tool option line (2nd) to tolerance of 5-25, uncheck "contiguous", check Anti-Bias. Now click cursor in a bald spot of the sky. If it doesn't get all the sky areas (leaving branches out), use Control D or "Deselect" from the Select Menu and change the tolerance to get a better selection. If you see some other non-sky areas that the Magic Wand got, you can use the Lasso Selection tool with the ALT key to remove (subtract them from Wand's selection). Use the Eraser tool to clear out the bald sky into a transparent state (checkerboard pattern). Use the Color Picker to select a proper blue color (for foreground). then go to the Gradient tool and drag the cursor from the top of the sky to the bottom of the sky area. An option to the gradient tool is to use the Paint Bucket tool for a solid fill. Repeating the Bucket clicks until all sky areas are filled. **Another way**, is to use the Layer Menu and chose New Fill Layer/ solid or gradient. **Still another way**, is to use clouds from another picture by dragging it into the New layer. **A final way**, is to goto the Filters Menu/ Render/ Clouds for the new fill layer.

7. **Removing Dust & Scratches- One method** is to use the **Filter Menu's/ Noise/ Dust & Scratches** to blur the dust marks into the area they are in. Before using the Filter, use the Selection Brush tool to define the area to be blurred. The Dust & scratch filter has slide controls and a magnified preview to show the effectiveness of the sliders. You want to minimize the sliders to get the effect as it blurs the entire area so choose only an area that needs blur blending. **Another method** to remove dust and scratches is with the **Cloning tool**. Here again, care needs to be taken to pick a clean area that matches the dusty area so that the cloning doesn't look different in color or texture. Practice and patience needed here.
8. **Portraits-** Background changes & facial touchups. (**shows use of layers and filters**)
- * Open first an (non-portrait) image that has a nice background texture that would be suitable as a background for the portrait. You can even create one (File menu/ NEW) by using the color picker and paint bucket tool to set a basic solid color. You could then go to Filters Menu and add some Texture / Craquelure or another texture to the color for a more interesting background. Image/ Resize this background image to be a little larger than the portrait and at an appropriate resolution like 300 PPI for printing.
 - * Open the portrait file and enhance it if necessary for color, brightness & contrast from the Enhance menu. Image/ Resize this portrait image to be a little smaller than the background image and at an appropriate same resolution like 300 PPI for printing.
 - * With the portrait image active, click the MOVE tool (v) on the image and drag it into the background image. This move will make the portrait image into a layer above the background layer.
 - * Use the background eraser tool to carefully erase the current background from the portrait being careful not to erase parts of the portrait. You should see a checkerboard pattern where you erase. Adjust the size of the eraser circle and use the zoom tool to show some of the delicate areas better. It is best to do the erasing in small steps (lift the dragging key now and then. This allows you to undo a bad erasing section using the history palette by dragging the last eraser to the garbage pail. This will leave all previous eraser efforts intact.
 - * Use the Cropping tool, if necessary, to put the portrait into a pleasing box.
 - * To accommodate some retouching, make a duplicate layer from the Layer Menu/ duplicate.
The goal here for portraits is to soften the skin with a Blur tool but allow the eyes and teeth to be sharp. We can also retouch some wrinkles with the Cloning tool that were not softened enough by the Blur tool. This will be accomplished in the duplicate layer. Turn off the palette "eyes" on the other layer so that you can concentrate on the duplicate layer only.
 - * Soften skin by using the Filter Menu/ Blur/ Gaussian Blur/ radius to 1.6. This affects whole layer skin & hair & clothes.
 - * Using the Background Eraser tool (to produce crosshatch- adjust circle size for accuracy & zoom) erase the eyes and the area of the teeth.
 - * Click on the eye of the other portrait layer and you should notice that its sharp eyes and teeth are now showing through the erased areas of the duplicate. Before retouching wrinkles, merge these two portrait layers by clicking the empty box next to the eye on layer 1 portrait (it will now show a chain link). Go to Layers Menu/ Merge Link and they should combine into a single layer.
 - * Using the Clone tool with a brush size of about 20, find a skin color and texture that you would like to have replace the wrinkles. Hold down the ALT key on that spot and click it (left click without holding down). Now move the cursor over to the wrinkle area to be replaced and holding down the left click, drag the cursor over the blemish. You should see the area being replaced. Note that the spot being copied has an "X" on the screen and it also tracks the dragging motion. You can run into a non-skin colored area and it too will be copied (cloned). If that happens, you can erase that cloning step in the History palette and redo the step being more careful or move the starting spot.