

Digital Camera Procedure for Quality: Equipment Photo Tracking and Electronic Storage

1. PURPOSE

The following procedure explains how to track and transfer pictures from the digital camera to the computer, edit the images and store them.

2. SCOPE

This procedure applies to employees within the Equipment Manufacturing Center, assigned to shoot photos of major equipment for Quality Control.

3. PROCEDURE

SHOOTING

- **TRACKING:** When taking pictures of equipment, note information meaningful for tracking each exposure in the correct order. For Quality purposes, record the order's EMC number, the subject's gas and serial number.

- **PICTURE QUALITY:** When the quality is set at *uncompressed*, only two exposures are available before it becomes necessary to transfer pictures to the computer. More pictures are available when using poorer-quality settings. Experiment with different settings to arrive at the lowest-acceptable quality and the highest number of exposures. Here are the settings and minimum number of pictures stored:

Uncompressed	2	<i>EMC tends to shoot at 12 exposures, unless a request is made for an especially good-quality photo, in which case the photo is shot at settings of 2 or 7.</i>
Best	7	
Better	12	
Good	20	

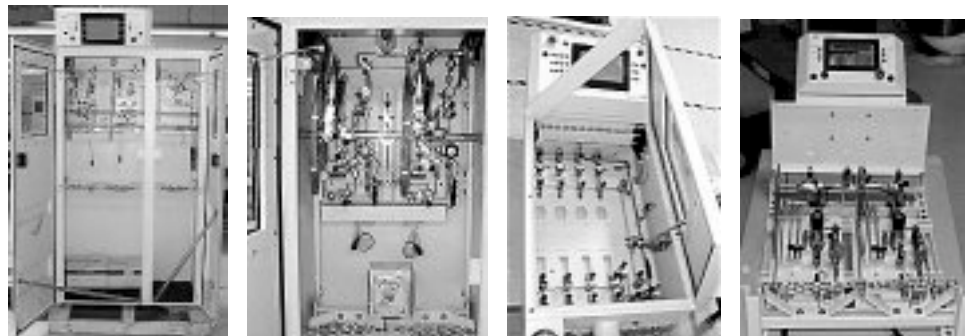
- **REQUIRED SETUP/NUMBER OF SHOTS:**

- If the order is a complete system, take one picture of the entire enclosure from top (including controller) to bottom, with open door. Then take one more picture of the entire panel within the cabinet/enclosure.

How to Find the Picture ID Number:

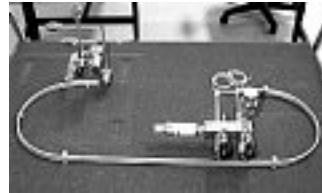
The ID# looks like this:
P001168 (P00_ _ _ _)

- Slide down and release the ←Play•Stop lever located at the rear left of the camera.
- Note the picture appearing on the screen.
- Click VIEW to see all pictures on the LCD screen.
- Click SELECT to highlight a particular picture.
- Press INFO: ID#, Date and Time appear.
- Record ID# on the top, righthand corner of the Final Quality Sheet.
- Finally, slide down and release the ←Play•Stop lever to clear the LCD screen.

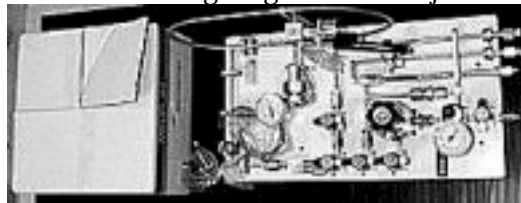


Digital Camera Procedure, cont'd

- For loose panels, take only one picture. (Same goes for loose pigtails.)



- If several duplicate items within an order are being shipped, only a picture of one of the items is necessary.
- When a number of items are being sent that are not complete systems, place the items close enough together to take just one picture.



TRANSFERRING PICTURES TO COMPUTER (Also refer to *DC120 Zoom Digital Camera User's Guide*)

- Open Kodak icon on desktop.
- In dialog box, Choose *Get All Pictures from the Camera*.



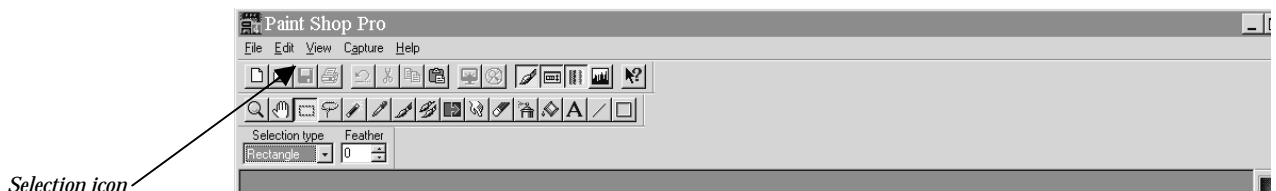
Digital Camera Procedure, cont'd

*Deleting all pictures from the camera after transferring is a default that can be changed under the **Preferences** icon.*

- Select *Transfer* icon at bottom.
- Answer *Yes* to *Are you sure you want to delete source pictures after a successful transfer?*
- Once pictures successfully transfer, these files (named by photo ID #'s) are automatically saved to *D:\kodak\Memory\Memory*. Check the *Memory* folder to see that this has happened, however, don't open the files from this point.

IMAGE EDITING

- Open Paint Shop Pro, then *File, Open*.
- Go to *D:\kodak\Memory\Memory*, then find needed photo ID#'s and open. Open the desired picture by double-clicking one of the icons.
- If vertical shots were taken, the image can be rotated. Go to the *Image* menu, then *Rotate*. From there, the direction and degrees may be selected.
- To adjust contrast and brightness, select the *Colors* menu, *Adjust*, and *Brightness/Contrast*. Experiment by selecting *Preview* before the final *OK*.



- To crop out unwanted portions of a photo, choose the selection icon and drag around the desired portion of the picture. Go to *Image, Crop*, and everything outside of the selection will fall away.
- Other options are available. Those listed here are the most frequently used editing tools.

In the rare instance that more than one picture has been taken of the same object, the files may be named as follows:

Ex.
12345
12345-a
12345-b...

SAVING TO FINAL LOCATION

- When image editing is complete, refer to the flow chart for breakdown of folders in *Explorer*. The photo file should be *Saved As* (with *.jpg* extensions) to the proper location on the hard drive. Each file should be named by the serial number of the equipment: if the subject is a complete system, use the enclosure serial number; otherwise, use the panel serial number. For a large order, the folders may already be set up; otherwise, you need to create new folders.
- Copy and transfer the EMC Number folder containing the pictures you added to *Shared\ETG_ops\Digital QA Photos\Customer*, enabling anyone to view customer photos. Again, refer to attached diagram.

Digital Camera Procedure, cont'd

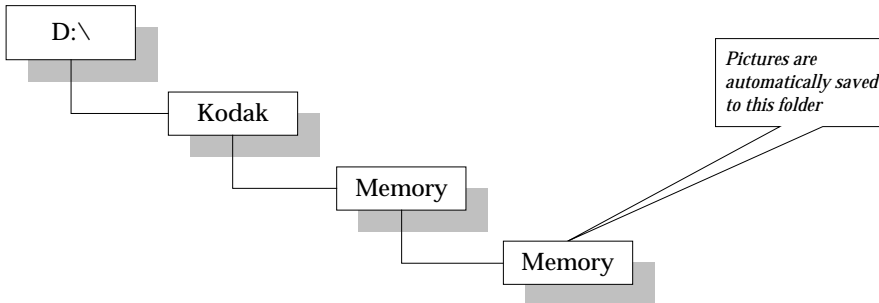
CLEANING OUT MEMORY FOLDER

- Finally, go to the *Memory* folder and delete each file. As a result, each time new pictures are transferred from the camera, only the most recent photos are in *Memory*.

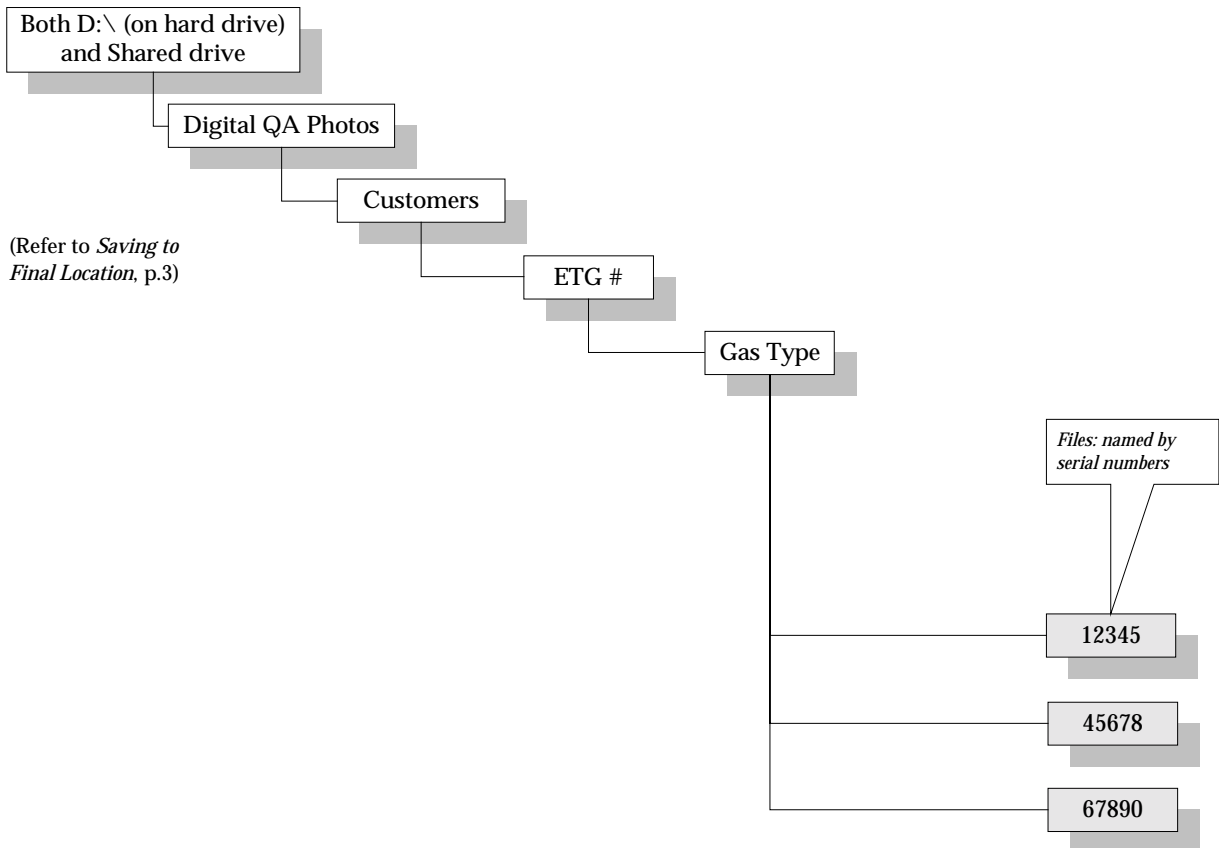
The preceding was a procedure for individual picture storage. From there, pictures can be imported into other applications (with an *Insert, Picture*) and combined/grouped as needed for printing.

Digital Camera Procedure, cont'd

Photo Location Before Image Editing



"Save-to" After Image Editing



Folder Organization in Explorer