b. Mechanical means. Use sledge hammers, crowbars, picks, axes, or any other heavy tools which may be available, together with the tools normally included with photolithographic equipment, to destroy the equipment.

c. Weapons fire. Fire on all photolithographic equipment with the heaviest weapons available.

d. Scattering and concealment. Remove all easily accessible vital parts; scatter them through dense foliage, bury them in dirt or sand, or throw them in a lake, stream, well, or other bodies of water.

e. Burning. Pack rags, clothing, or canvas under and around the unit. Saturate this package with gasoline, oil, or diesel fuel and ignite.

f. Submersion. Totally submerge the unit in a body of water to provide some water damage and concealment. Saltwater will do the greatest damage to metal parts.

3. Listed below are the vital parts which must be destroyed. These parts, components, and assemblies are listed in the order, by each type of equipment, in which demolition should be accomplished. To render the unit inoperative, demolition of the additional parts, components, and assemblies will further destroy the unit.

a. Offset press - cylinder assembly, drive motor and gears, electrical circuits, and ink roller.

b. Process camera - lens, carriage assembly, vacuum-turbo compressors, vacuum back, and copyboard assembly.

c. Film processor - rack assemblies, electrical system, chemical tanks, and replenisher pumps.

d. Flip-top platemaker - power supply, exposure lamp assembly, vacuum pumps, vacuum frame glass, and mat.

e. Vacuum frame - vacuum pumps, light source, vacuum frame glass, and mat.

f. Layout tables - diffusing glass, glass assembly, and electrical assembly.

g. Collators - drum assembly, electrical system, and switches.

h. Paper cutter - hydraulic system, knife (blade), drive motor, electrical system, and flywheel.

i. Paper stitchers - head assembly, electrical system, swivel, and wire cutter.

j. Paper drill - motor, drill bits, and worktable.

k. Paper folder - fold plates, drive rollers, conveyor tapes, and motor.

l. Shredder - cutting cylinders, motor, and control panel.

m. Tractors and trucks - tires, alternator, fuel pump, cylinder block and heads, transmission and power transfer case, and fuel tank.

NOTE: Van equipment can be made inoperative or destroyed in conjunction with trailers.

n. Trailers - tires, air lines, air reservoir and chamber, and kingpin and brake assembly.

o. Generators - carburetor, governor, fuel pump, flywheel, control panel, and intake and exhaust manifold.

☆GPO: 1988 – 221-768/89335

DESTROY PHOTOLITHOGRAPHIC EQUIPMENT TO PREVENT ENEMY USE

DISTRIBUTION: US Army Training and Audiovisual Support Centers (TASC)

HEADQUARTERS, DEPARTMENT OF THE ARMY

OCTOBER 1988

This GTA is only a guide for destroying equipment to prevent enemy use. For more guidance, refer to local standing operating procedures and local retrograde plans.

1. When capture or the abandonment of photolithographic equipment to an enemy is imminent, the responsible unit commander makes the decision either to destroy the unit or to render it inoperative. Based on this decision, orders are issued which cover the desired extent of destruction. Whatever method of demolition is employed, it is essential to destroy the same vital parts of all photolithgraphic equipment and all corresponding repair parts.

a. If destruction to prevent enemy use is resorted to, the material must be so badly damaged that it cannot be restored to a usable condition in the combat zone either by repair or cannibalization. Adequate destruction requires that all parts essential to the operation of the material, including essential repair parts, be destroyed or damaged beyond repair.

b. However, when lack of time and personnel prevents destruction of all parts, priority is given to the destruction of those parts most difficult to replace. Equally important, the same essential parts must be destroyed on all like material so that the enemy cannot construct one complete unit from several damaged ones.

2. Explosives and mechanical means, either alone or in combination, are the most effective methods to destroy photolithgraphic equipment.

a. Explosives. Figures 1 through 4 are examples of placement of explosive charges. Place as many of the charges as the situation permits and detonate them simultaneously with a detonating cord and a suitable detonator.

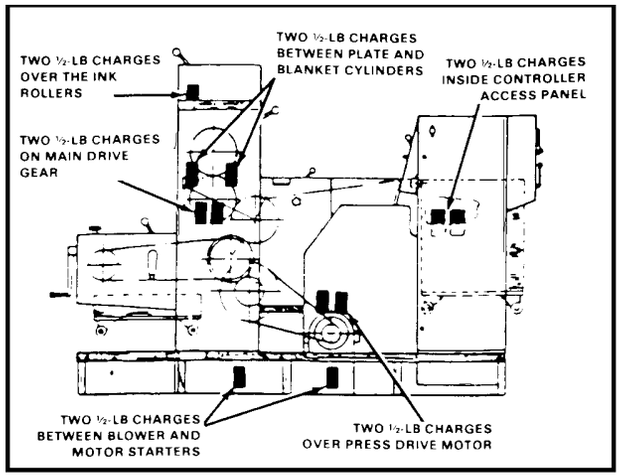

Figure 1. Offset press (single-color)

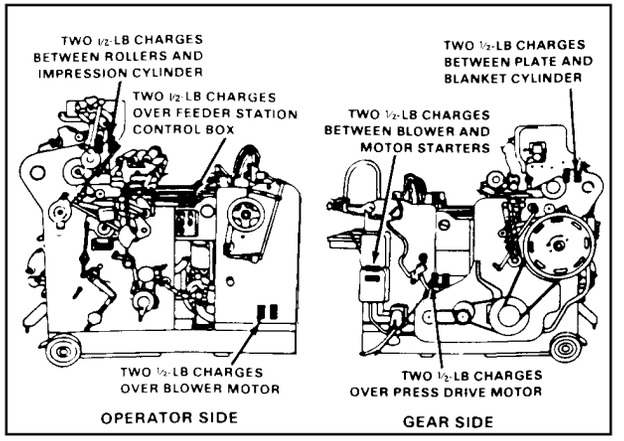

Figure 2. Offset press (DP)

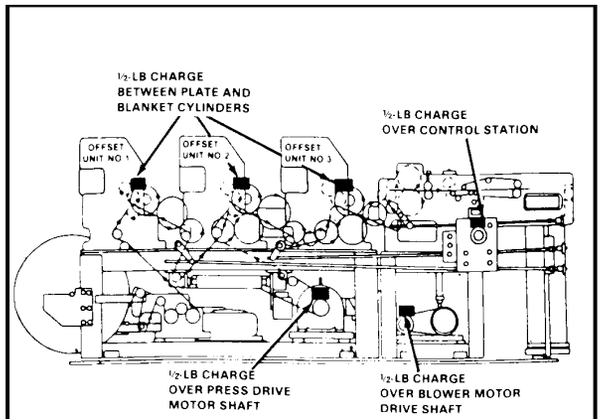

Figure 3. Offset press (three-color)

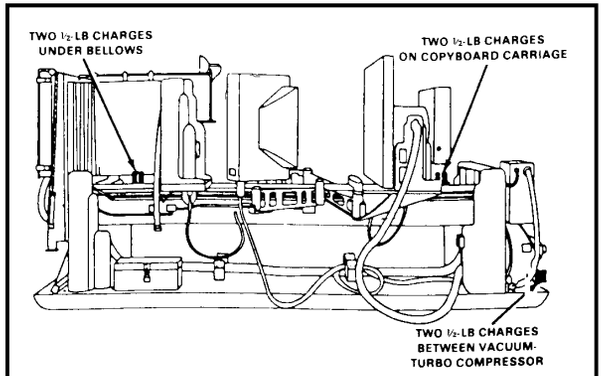

Figure 4. Process camera