



Figure 1-7. Right Side with Motor Panel.

the shutter drive and counter drive mechanism. A shutter cover plate screwed to the front of the box protects the shutter. On top of the camera box is a recess in which the film magazine sits and an opening through which the film is drawn from the magazine to the film compartment of the camera. A metal dust plate is provided to cover this opening when a magazine is not in place. The magazine take-up belt passes between two rollers in an aperture at the top of the box. Two dove-tail gibs on the bottom of the box slide in the bearings, and a joining each gib is a shift rack which engages with the gear of the rack-over mechanism. A locating plate with two holes matches the locating surface in the camera base. A handle on the top of the box is for carrying the camera.

1-9. CAMERA DRIVE.

1-10. The camera is driven by a motor forming an integral part of the right-hand door. (For information on available motors see paragraphs 1-24 through 1-28A.) The motor drive shaft couples with the movement shaft. The movement shaft moves the pull-down lever and the assembly that actuates the registration pins by a cam arrangement. The drive gear near the center of the movement shaft meshes with the driven gear on the shutter shaft. The drive gear located to the rear of the camera on the shutter shaft drives the drive gear on the sprocket shaft assembly. The sprocket shaft drives the sprocket. A drive gear near the right end of the sprocket shaft drives the counter drive shaft assembly.

The drive gear on the rear end of the counter drive shaft assembly drives the drive gear of the frame counter assembly. Alternate motion and composition gears are installed throughout the camera to minimize operating noise.

1-11. Film is drawn from the magazine and fed to the movement by the sprocket. The film is held against the sprocket by two sprocket film guide assemblies. The film take-up belt passes around a pulley on the sprocket assembly and a pulley on the magazine take-up drum. The sprocket assembly contains a disc-type clutch which permits slippage between the sprocket and the pulley which drives the magazine take-up belt.

1-12. MOVEMENT (see figure 1-8.)

1-13. The high speed movement moves the film intermittently and holds it in position for the exposure of each successive frame. A double-prong pull-down claw moves the film to place behind the aperture. Two registration pins on the registration arm hold the film stationary at the moment of exposure. The registration pin throw-out knob is provided to enable the operator to withdraw the registration pins for threading film. The movement is a double cam type. Both cams are mounted on the movement drive shaft. One actuates the pull-down mechanism; the other the registration pins. The movement is designed to operate satisfactorily at speeds as high as 128 frames per second.