the turret until the zero azimuth on the turret ring, and the stationary ring gear, coincide. If the marks on the teeth of the drive pinion and the ring gear are not easily visible, improve the marks in order to facilitate reassembly. Attach the hoist slings at the lugs on the A-frame and remove the bolts at the thrust bearing mounting flange, at the bottom of the turret support. Hoist the entire assembly straight up and secure the drive pinion against turning. Retain the shims at the support fitting in the airplane as originally installed, to facilitate alignment when replacing the turret.

2. To remove the ring gear, disconnect at the mounting bolts and remove two opposite flanges by removing the 10 retaining bolts. Remove the gear from the structure and retain the shims as originally installed. With the flanges removed, the gear may be hoisted through the opening in the top of the fuselage.

(c) BOTTOM SPHERICAL TURRET.

1. In order to provide clearance for removal of the turret assembly, the rear portion of the fuselage must be raised until the center line of the airplane is approximately level. Position the turret so that the guns are directed rearward approximately 45 degrees to the left and 45 degrees downward from the center line of the airplane. This is necessary to facilitate removal of the ring gear without interference from surrounding structure. Place a supporting cradle beneath the turret, and raise slightly to relieve the turret weight from the supporting column.

**CAUTION**

It is very important that electrical power be turned off before attempting to disconnect the power leads to the turret. A fuse is not provided in the power line, and accidental grounding of the contacts may result in injury to the personnel and structural damage.

2. Disconnect the electrical wiring at the upper support bearing, and detach all ring gear mounts from the supporting structure. Remove bolts from the top fitting and retrieve the shims, retaining them as originally installed to facilitate reassembly adjustments. Disconnect the lower supports from the turret and remove the entire supporting truss from the airplane. Elevate the turret approximately 6 inches, until the turret flange clears the surrounding structure, and slip the ring gear (with fire cut-off cam attached) from the assembly. The entire turret assembly may now be lowered from the fuselage.

(d) SIDE GUN.—Disconnect the web strap securing the gun barrel, pull out the spring-loaded retaining bolt and lift the gun from the mount. The mount itself may be removed by loosening the bolts at each end.

(e) TAIL GUN.

1. Disconnect the ammunition boxes at four points on each support and remove them from the enclosure. Strap the hinged armor plate in the upward position and remove both guns. Remove the access door on the top of the enclosure aft of the sight, and disconnect the four cables at the turnbuckles. Remove the taper pin from the bearing collar and post at the base of the sight, inside the enclosure, and withdraw the sight from the top bearing. Release the two cables at the top of the post, and remove the four bolts in each bearing flange at the top and bottom of the gun support post. Tip the axis of the post to a horizontal position, and remove the assembly in the forward direction.

2. The elevation cables and rocker may be removed from the post by withdrawing the operating pin at the right side of the post.