

PROCEDURE 9.040 MAIN LANDING GEAR INSTALLATION

In this procedure...

The main landing gear legs will be installed into the wing attachment points, and the flap actuator will be installed.

Parts used in this procedure have been provided in previous procedures.

Step 1. Remove Main Gear Attachment Brackets.

Remove the inboard and outboard attachment brackets for the wing.

Step 2. Install the outboard attachment bracket onto the Gear leg.

Assemble the outboard main gear clamp and slip over the inboard end of the main gear leg. Make sure the brake line-fitting hole is on the aft side of the gear leg. Measure from the inboard rib to rib R and set the inboard edge of the clamp at that distance from the inboard end of the gear leg. Install the pressure plate and pressure plate pad. Do not tighten the pressure plate bolts.



Step 3. Install the Inboard Gear Bracket.

Install the inboard gear bracket to the inboard end of the gear leg.



Step 4. Install Gear Leg into Wing.

Insert the inboard end of the gear leg into the wing, through the opening in Rib "R" and push the leg inboard until the inboard clamp rests against the inboard rib. Slip the Fore and Aft Outboard Brackets on to the pivot pins and reinstall the 5 AN5 Bolts. You may have to slide the clamp on the gear leg to achieve correct spacing. Torque all bolts to standard torque. Tighten the 3 Clamp Bolts to prevent gear movement and install safety wire.



Inboard bracket with flat actuator bracket installed



Step 5. Install Flap Actuator

- A. Remove the two plastic inserts from the jackscrew end of the actuator using pliers to clamp the insert and twist it gently to loosen the glue and remove. Use a .5" ream and carefully ream out the hole in the actuator.
- B. Attach the motor end of the actuator to the mounting bracket using the clevis pin. Secure with a cotter pin. Place the jack screw end of the actuator on the torque tube arm, insert the spacers on each side of the jack screw and secure the actuator with a AN3-10 bolt, large area washers and fiber lock nuts.
- C. Connect a 9 to 12 volt battery (Cordless Drill Battery works great.) to the actuator. (**Note: The positive lead from the battery is connected to the Red wire. The negative lead is connected to the Blue wire. If you connect the leads to the black and white wire you burn out the actuator.**) Cycle the actuator through its travel to insure clearance with the wing skin and freedom of movement. See attached wiring diagram.

