

MODEL R182 AND TR182 SERVICE MANUAL

McCAULEY WHEEL AND BRAKE

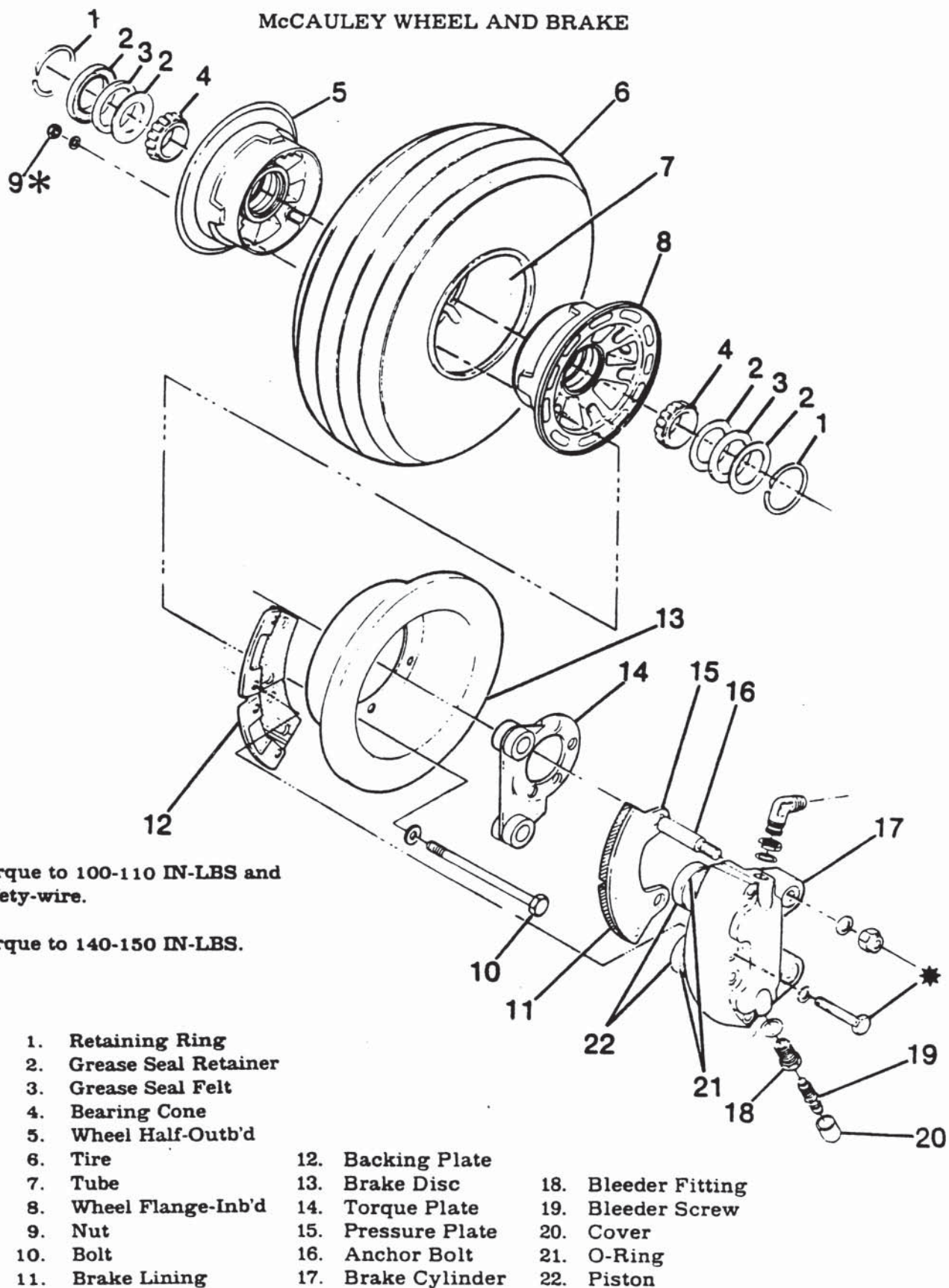


Figure 5-10. Main Wheel and Brake

MODEL R182 & TR182 SERIES SERVICE MANUAL

5-169. BRAKE INSTALLATION. (Refer to figure 5-10.)

- a. Remove bolts securing back plate and remove back plate.
- b. Pull brake cylinder out of torque plate and slide pressure plate off anchor bolts.
- c. Place back plate on a table with lining side down flat. Center a 9/64-inch (or slightly smaller) punch in the rolled rivet and hit the punch sharply with a hammer. Punch out all rivets securing the linings to the back plate and the pressure plate in the same manner.

NOTE

A rivet setting kit, Part No. 199-00100, is available from the Cessna Parts Distribution (CPD 2). This kit consists of an anvil and punch.

- d. Clamp the flat side of the anvil in a vise.
- e. Align new lining on back plate and place brake rivet in hole with rivet head in the lining. Place the head against the anvil.
- f. Center rivet setting punch on lips of rivet. While holding back plate down firmly against lining, hit punch with hammer to set rivet. Repeat blows on punch until lining is firmly against back plate.
- g. Realign the lining on the back plate and install and set rivets in the remaining holes.
- h. Install a new lining on pressure plate in the same manner.
- i. Position pressure plate on anchor bolts and place cylinder in position so that anchor bolts slide into the torque plate.
- j. Install back plate with bolts and washers, torque bolts to 110-120 in.-lbs.

5-170. BRAKE SYSTEM BLEEDING.

NOTE

Bleeding with a clean hydraulic pressure source connected to the wheel cylinder bleeder is recommended.

- a. Remove brake master cylinder filler plug and screw flexible hose with appropriate fitting into the filler hole at the top of the brake master cylinder.
- b. Immerse opposite end of flexible hose into a container with enough hydraulic fluid to cover end of the hose.
- c. Connect a clean hydraulic pressure source, such as a hydraulic hand pump or Hydro-Fill unit to the bleeder valve in the wheel cylinder.
- d. As fluid is pumped into the system, observe the immersed end of the hose at the master brake cylinder for evidence of air bubbles being forced from the brake system. When bubbling has ceased, remove bleeder source from wheel cylinder and tighten the bleeder valve.

5-171. BRAKE LINING BURN-IN.

5-172. DESCRIPTION. The brake pads are equipped with either a non-asbestos organic lining or an iron based metallic lining. These materials must be properly conditioned (glazed) in order to provide maximum performance and service life. This is accomplished by a brake burn-in.

- a. Non-asbestos organic lining.
 1. Taxi airplane for 1500 feet with engine at 1700 RPM applying brake pedal force as needed to develop a 5 to 9 knots taxi speed.
 2. Allow brakes to cool for 10 to 15 minutes.