

### Front Hub Torque Correction



Models Affected: Certain 2005 thru 2014 Vision and All-American School and Activity buses.

The torque specification for the front hub, in certain Service Manuals, may not be correct. Please mark thru or remove the section in your service manual, and replace with the appropriate set of instructions as listed below.

#### Vision (BBCV)

Strike thru the section beginning with "Installation, Front" within the manual as listed below and replace using Page 2.

*NOTE:* The instructions may continue onto a second page within your manual.

Year	Manual Number	Chapter	Page Number
2005	00073757	Hyd Brake	9
2006	00085580	Hyd Brake	234
2007	00096422	Hyd Brake	234
2008	00109920 Vol 1	Hyd Brake	262
2009	00122629 Vol 2	Hyd Brake	490
2010	10004174	Hyd Brake	490
	10004173 Vol 2	Hyd Brake	490
2011	10013327 Vol 2	Hyd Brake	490
	10013328 Vol 1	Hyd Brake	493
2012	10020085 Vol 1	Hyd Brake	493
	10020084 Vol 1	Hyd Brake	491
2013	10028355 Vol 2	Hyd Brake	531
	10026186 Vol 2	Hyd Brake	491
	10026185 Vol 2	Hyd Brake	491
2014	10032188 Vol 2	Hyd Brake	571
	10032189 Vol 2	Hyd Brake	527

#### All American (D3FE, D3RE, T3RE)

Strike thru the section beginning with "**Hub and Rotor Assembly**" within the manual on page number as listed below and replace using Page 3.

NOTE: The instructions may continue onto a second page within your manual.

Year	Manual Number	Chapter	Page Number
2010	10008283 Vol 1	Air Brake	9
	10008284 Vol 1	Air Brake	234
2011	10013324 Vol 1	Air Brake	234
	10013325 Vol 1	Air Brake	262
2012	10020081 Vol 1	Air Brake	247
	10020082 Vol 1	Air Brake	255
2013	10026183 Vol 1	Air Brake	247
	10026182 Vol 1	Air Brake	255
2014	10032186 Vol 1	Air Brake	261
	10032185 Vol 1	Air Brake	275
	10032206 Vol 1	Air Brake	315



# BLUE BIRD

### Front Hub Torque Correction

## JPDAT

#### Vision Hydraulic Brake Insert

#### Installation, Front

Reinstall the front rotor by reversing the removal procedure:

- 1. Clean spindles before installing wheel end components.
- 2. Clean the threads on the spindles with a wire brush.
- 3. Coat the lip of the rubber seal with a thin layer of wheel bearing lubricant.
- 4. Slide the hub/rotor assembly straight onto the spindle to prevent damage to the seal.
- 5. Install the outer wheel bearing. Make sure bearing is properly lubricated.
- 6. After the hub and bearings are assembled in place on the spindle, install the bearing adjusting nut on the spindle against the outer bearing. The nut must be installed so that the nipple faces outward toward the hubcap. Tighten finger tight.
- 7. Torque the bearing adjusting nut to 200 ft lb while rotating the hub to seat the bearings. Back off the adjusting nut 1/2 turn. Re-torque nut to 50 ft lb while rotating hub back and forth. Back off nut 1/4 turn.
- 8. Install the pierced lock ring so that the inner tab locks into the spindle keyway and the adjusting nut nipple engages the through holes on the lock ring. Nut may be loosened slightly to install lock.
- 9. Install a new bendable lock washer onto the spindle so that the nipple engages one of the through holes on the lock ring.
- 10. Install the outer nut. Tighten to 240-260 ft lb. Rotate wheel in both directions. Wheel must rotate freely without binding.
- 11. Check bearing adjustment with a dial indicator and magnetic base. Bearing end play should be 0.001" to 0.005".
- 12. Bend two opposed lock washer sides over the flats of the outer wheel nut to lock it in position.
- 13. Install new axle flange gasket.
- 14. Install hubcap. Tighten to 12-13 ft lb
- 15. Reinstall caliper assembly. Torque mounting bolts to 320-335 ft lb (434-488 Nm).
- 16. Install ABS sensor.
- 17. Remove plug in hub cap and fill with proper oil. Use the sight glass indicator to fill to proper level. Do not overfill!



### Front Hub Torque Correction

### UPDATE

#### All American Air Brake Insert

#### **Hub And Rotor Assembly**

- 1. Clean spindles before installing wheel end components.
- 2. Clean the threads on the spindles with a wire brush.
- 3. Coat the lip of the rubber seal with a thin layer of wheel bearing lubricant.
- Carefully slide the hub and rotor assembly straight onto the spindle to prevent damage to the seal.
- 5. Install the outer wheel bearing. Make sure bearing is properly lubricated.
- 6. After the hub and bearings are assembled in place on the spindle, install the bearing adjusting nut on the spindle against the outer bearing. The nut must be installed so that the nipple faces outward toward the hubcap. Tighten finger tight.
- 7. Torque the bearing adjusting nut to 200 ft lb while rotating the hub to seat the bearings. Back off the adjusting nut 1/2 turn. Re-torque nut to 50 ft lb while rotating hub back and forth. Back off nut 1/4 turn.
- 8. Install the pierced lock ring so that the inner tab locks into the spindle keyway and the adjusting nut nipple engages the through holes on the lock ring. Nut may be loosened slightly to install lock.
- 9. Install the lock washer onto the spindle so that the nipple engages one of the through holes on the lock ring.
- 10. Install the outer nut. Tighten to 240-260 ft lb. Rotate wheel in both directions. Wheel must rotate freely without binding.
- 11. Check bearing adjustment with a dial indicator and magnetic base. Bearing end play should be 0.001" to 0.005".
- 12. Bend two opposed lock washer sides over the flats of the outer wheel nut to lock it in position.
- 13. Install new axle flange gasket.
- 14. Install hubcap. Tighten to 12-13 ft lb
- 15. Remove plug in hub cap and fill with proper oil. Use the sight glass indicator to fill to proper level. Do not overfill!