

TROUBLESHOOTING GUIDE		
SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
Rear brakes drag	Binding park brake cables	Adjust or replace cables and adjust.
	Improper brake adjustment	Adjust shoes and repair the brake shoe adjusters if necessary. See Brake Cluster Inspection and Cleaning on page 6-10.
One brake drags	Weak or broken brake shoe return springs	Replace the return springs.
	Improper brake shoe adjustment	Adjust shoes and repair the brake shoe adjusters if necessary. See Brake Cluster Inspection and Cleaning on page 6-10.
	Sticking wheel cylinder pistons	Replace the wheel cylinder. See Wheel Cylinder Replacement on page 6-19.
	Swollen wheel cylinder cups	Replace the wheel cylinder and purge the hydraulic system. See Wheel Cylinder Replacement on page 6-19, and Purging the Hydraulic System on page 6-32.
	Bent or distorted brake shoes	Replace the brake shoes. See Brake Shoe Removal on page 6-8.
	Loose or worn front wheel bearings	Adjust or replace front wheel bearings. See Section 7 – Steering and Front Suspension.
	Damaged brake line or hydraulic line	Replace brake lines or tubes as required. See Hydraulic Line and Hose Replacement on page 6-23.

BRAKE DRUM REMOVAL

See General Warning, Section 1, Page 1-1.

FRONT WHEEL BRAKE DRUM REMOVAL

WARNING

- If at any point in this procedure the hydraulic system is opened, the brakes must be bled after the correct reinstallation of the brake components. Failure to bleed the brakes could result in decreased braking performance due to air being trapped in the hydraulic system. Use only DOT 5 brake fluid. See Bleeding the Hydraulic Brake System on page 6-31.
1. Chock the rear wheels, release the park brake, loosen the front wheel lug nuts and lift the front of the vehicle with a chain hoist or floor jack. **See WARNING "Lift only one end..." in General Warning, Section 1, Page 1-1.**
 2. Place jack stands under the outer front frame I-beams and lower onto stands. **See Figure 5-2, Section 5, Page 5-3.**
 3. Remove the lug nuts and front wheel.
 4. Remove the front wheel brake drum.
 - 4.1. Remove the dust cover (1) and cotter pin (2) (**Figure 6-2, Page 6-7**).
 - 4.2. Remove the castle nut (3), large flat washer (4), wheel bearing (5) and drum (8). If the brake drum was easily removed, proceed to step 6.

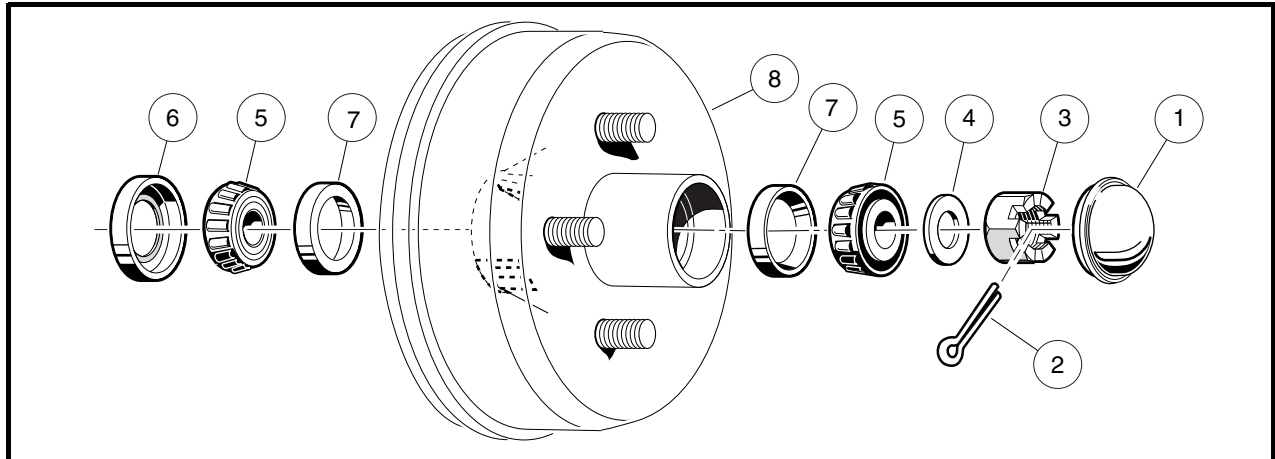


Figure 6-2 Front Spindle and Brake Drum Assembly

5. To remove tight brake drums:

5.1. On the back of each brake cluster assembly, locate the heads of the two brake shoe adjusters.

5.2. Use a torque wrench and a Torx #T-27 driver, or hydraulic brake adjuster (CC 102169401), and gently rotate the adjuster bolts to increase the clearance between the brake shoe lining and the brake drum (**Figure 6-3, Page 6-7**). See following **NOTE**.

NOTE: If the adjusters require more than 65 in-lb (7.3 N·m) of force to rotate, they must be replaced. See **Brake Shoe Adjuster Replacement on page 6-21**.

6. Repeat steps 1 through 5 for the opposite front wheel if necessary.

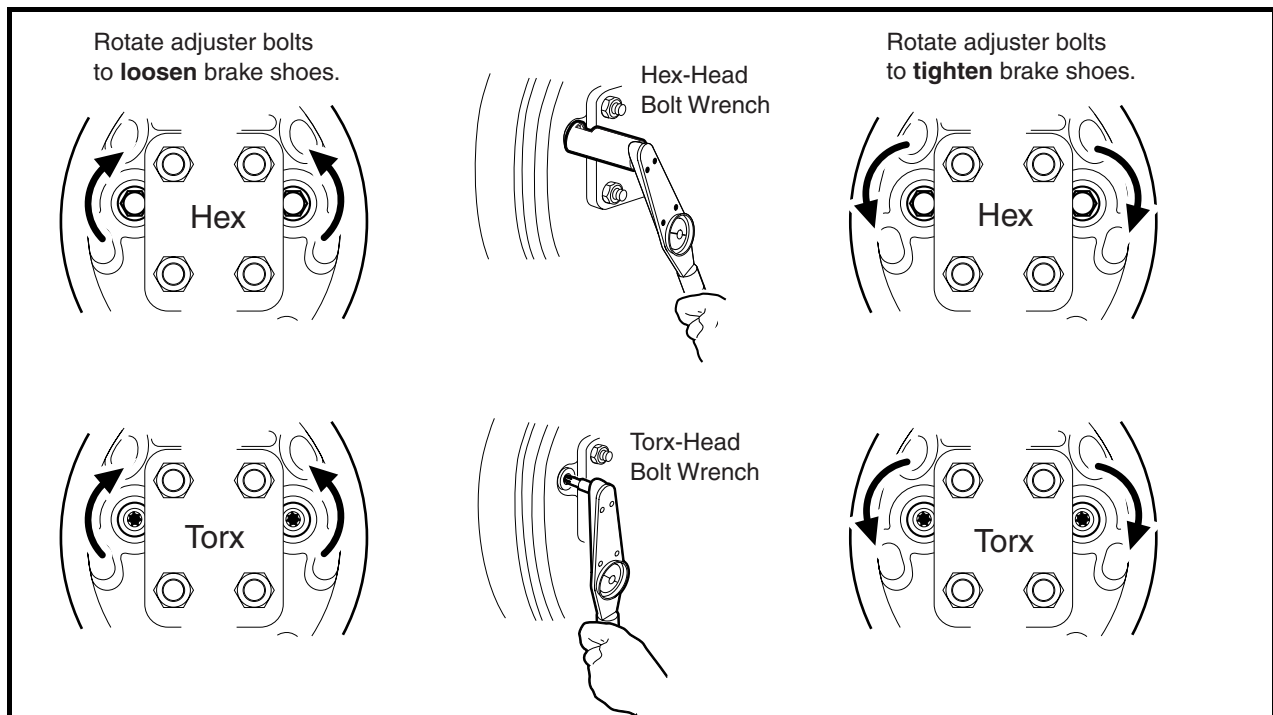


Figure 6-3 Loosen or Tighten Brake Adjusters

REAR WHEEL BRAKE DRUM REMOVAL

⚠ WARNING

- Use only approved replacement brake drums designed for your vehicle. For MC012C-AS00 transaxles, use CC 102264701.
1. Chock the front wheels, release the park brake, loosen the rear wheel lug nuts and lift the rear of the vehicle with a chain hoist or floor jack. **See WARNING "Lift only one end..." on page 1-2.**
 2. Place jack stands under the axle tubes and lower onto stands.
 3. Remove the lug nuts and remove rear wheel.
 4. Remove the brake drum. If the brake drum was easily removed, proceed to step 6.
 5. To remove tight brake drums:
 - 5.1. On the back of each brake cluster assembly, locate the bolt heads of the two brake shoe adjusters.
 - 5.2. Use a torque wrench and a Torx #T-27 driver, or hydraulic brake adjuster (CC 102169401), and gently rotate the adjuster bolts to increase the clearance between the brake shoe lining and the brake drum (**Figure 6-3, Page 6-7**). **See following NOTE.**

NOTE: If the adjusters require more than 65 in-lb (7.3 N·m) of force to rotate, they must be replaced. **See Brake Shoe Adjuster Replacement on page 6-21.**

- 5.3. Rotate the brake drum slightly to remove it.
6. Repeat steps 3 through 5 for the opposite rear wheel if necessary.

BRAKE SHOE REMOVAL

See General Warning, Section 1, Page 1-1.

⚠ WARNING

- If at any point in this procedure the hydraulic system is opened, the brakes must be bled after the correct reinstallation of the brake components. Failure to bleed the brakes could result in decreased braking performance due to air being trapped in the hydraulic system. Use only DOT 5 brake fluid. See Bleeding the Hydraulic Brake System on page 6-31.

FRONT BRAKE SHOE REMOVAL

1. Remove the brake drum. **See Front Wheel Brake Drum Removal on page 6-6.**
2. Use pliers or a brake tool to rotate the cup washer and compression spring assembly 90° and remove the cup and spring from each brake shoe (**Figure 6-4, Page 6-9**). **See following NOTE.**

NOTE: The brake shoes are under spring tension and can release suddenly when cup and spring assemblies are removed.

3. Pull brake shoes and tensioning springs from the brake cluster assembly (**Figure 6-7, Page 6-9**).
4. Repeat steps 1 and 3 for the opposite front wheel if necessary.

REAR BRAKE SHOE REMOVAL

1. Remove the brake drum. See **Rear Wheel Brake Drum Removal** on page 6-8.

NOTE: It is recommended that the wheel bolt flange (22) be removed prior to brake shoe removal (Figure 6-5, Page 6-9).

2. Remove rubber boot (26), large flat washer (23), cotter pin (25), and locking cap (27) (Figure 6-5, Page 6-9).
3. Remove the flanged nut (24) and large flat washer (23) from the axle end.
4. Slide the wheel bolt flange (22) off of the splined axle end.
5. Use pliers or a brake tool to rotate the cup washer and compression spring assembly 90° and remove the cup and spring from each brake shoe (Figure 6-6, Page 6-9).

NOTE: The brake shoes are under spring tension and can release suddenly when cup and spring assemblies are removed.

6. Pull brake shoes and tensioning springs from the brake cluster assembly (Figure 6-7, Page 6-9).
7. Repeat steps 1 through 6 for the opposite rear wheel if necessary.

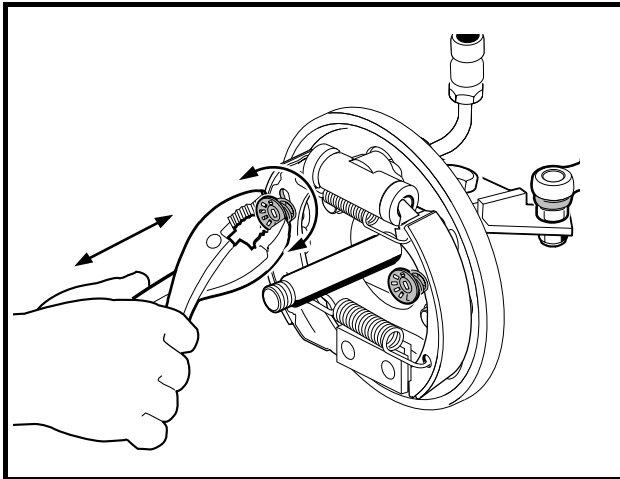


Figure 6-4 Rotate Front Spring Cups

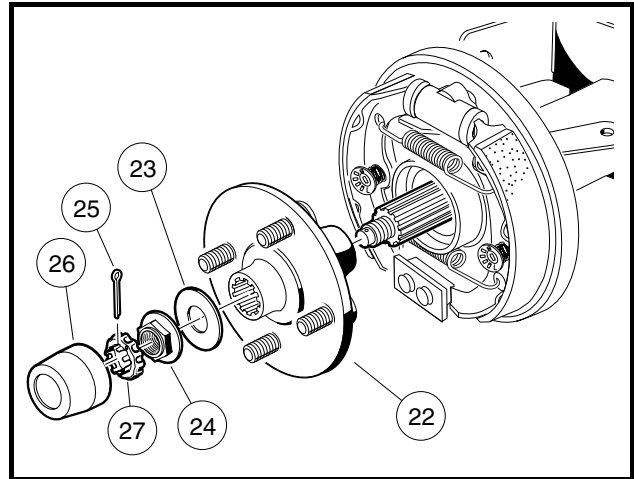


Figure 6-5 Rear Wheel Bolt Flange Assembly

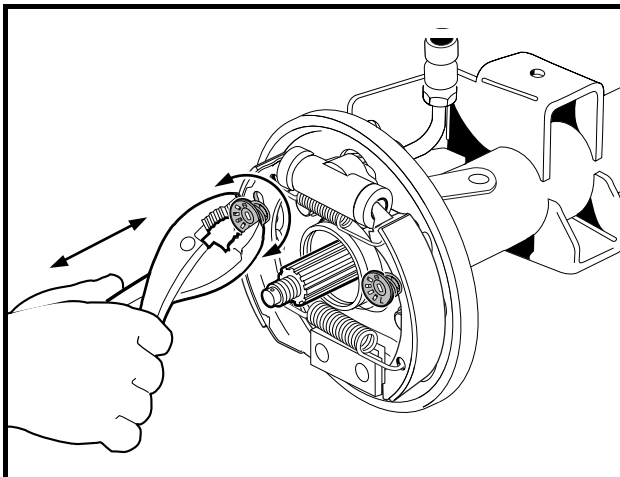


Figure 6-6 Rotate Rear Spring Cups

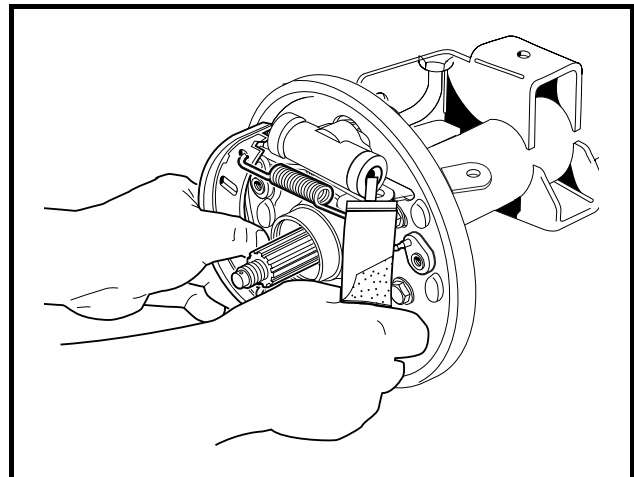


Figure 6-7 Remove Brake Shoes