## TRAILER BRAKE TROUBLESHOOTING

#### NO BRAKES

- · Check for defective circuit breaker.
- Check for open or shorted circuit.
- Check for properly wired system, including a good ground between towing vehicle and trailer, not through trailer hitch.
- Check for defective controller or loose wiring at controller.
- · Check brake adjustment.
- Check for defective resistor or loose wiring at resistor (hydraulic units only).
- Check for defective or worn magnet(s).
- Check for damaged or worn connector between towing vehicle and trailer.
- · Ensure correct controller is installed.

#### INTERMITTENT OR SURGING BRAKES

- · Check for defective circuit breaker.
- · Check for out-of-round brake drums.
- Check for properly wired system, including a good ground between towing vehicle and trailer, not through trailer hitch.
- · Check for defective magnets or magnet wiring.
- Check for loose or worn wheel bearings.

#### **INEFFECTIVE OR WEAK BRAKES**

- · Insure trailer is not overloaded.
- Check for loose or corroded connections.
- Check for properly wired system, including a good ground between towing vehicle and trailer, not through trailer hitch.
- · Check for shorted circuit.
- Check for proper variable resistor resistance (external resistoror controller) to trailer (for hydraulic units only).
- · Worn or defective magnet.
- Check brake adjustment. Check for bent backing plate flange.
- Check for contaminated brake linings.
- Check brake system wiring to ensure proper gauge wiring is used.
   Ensure wiring is not connected through the stop light circuit.
- Check for worn, damaged or improper brake linings.
- Check for weak or broken brake shoe return spring.
- · Check for defective or worn brake drums.
- · Check for loose axle.
- · Check that correct controller is installed.
- · Improper controller installed or settings (level or gain).

### **GRABBING OR LOCKING BRAKES**

- Check for improperly installed flanges.
- Check for contaminated brake linings (grease on linings).
- · Check for weak or broken brake shoe return spring.
- · Check for out-of-round brake drums.
- Ensure a variable resistor is installed (if necessary) (hydraulic units only).
- Check for variable resistor for proper resistance (hydraulic units only).

### **GRABBING OR LOCKING BRAKES (Continued)**

- · Check that correct controller is installed.
- · Rust on armature plate or brake drum.
- · Check for loose or worn wheel bearings.
- · Improper controller installed position.
- · Check for improper gain setting.
- Check for improper boost setting.

### DRAGGING BRAKES

- · Check brake adjustment.
- · Check for defective controller.
- · Check for improperly installed flange.
- Check for corroded brake assembly.
- · Check for weak or broken brake shoe return spring.
- Check for worn or damaged lever arm between magnet and brake shoe.
- · Improper controller installed position.

#### **NOISY BRAKES**

- · Check brake adjustment.
- · Check for worn brake shoes.
- · Check for contaminated brake linings.
- Check for weak or broken shoe return springs.
- · Check for bent backing plate.
- · Check for improperly installed flange.
- Check wheel bearing adjustment.
- · Check for worn or damaged wheel bearings.
- Check for worn or damaged magnets.

### BRAKES LOCKED, BRAKE PEDAL NOT DEPRESSED

- · Check stoplight switch adjustment.
- Check for short between stoplight switch circuit and power supply circuit.
- If brakes are locked when 4-way flashers are operated, check for Pulse Preventer installed in circuit.
- Check breakaway switch (pulled).

### **UNEVEN TIRE WEAR**

Possibly due to: A bent or misaligned axle, Improper tire inflation. On tandem axle trailers, check voltage at front axle and rear axle with brakes applied. At times, the front axle will "lift" allowing front wheel to lock and slide. Correction can be made installing magnets with even resistance.

### **INOPERATIVE BREAKAWAY SWITCH**

- Check for dead or weak 12-volt battery, on trailer.
- · Check all wiring and connections.
- · Check breakaway switch.
- If only one brake is operating, check other magnets.

# TRAILER BRAKE ADJUSTMENT\*\*

Brakes should be adjusted after the first 200 miles of operation when the brake shoes and drums have "seated" and at 3000 mile intervals, or as use and performance requires. The brakes should be adjusted in the following manner:

 Jack up trailer and secure on adequate capacity jack stands. Follow trailer manufacturers recommendations for lifting and supporting the unit. Check that the wheel and drum rotate freely.

WARNING Do not lift or support trailer on any part of the axle or the suspension system.

- Remove the adjusting hole cover from the adjusting slot on the bottom of the brake backing plate.
- With a screwdriver or standard adjusting tool, rotate the starwheel of the adjuster assembly to expand the brake shoes. Adjust the brake shoes out until the pressure of the linings against the drum makes the wheel very difficult to turn.

Note: With drop spindle axles, a modified adjusting tool with about an 80 degree angle should be used.

- 4. Then rotate the starwheel in the opposite direction until the wheel turns freely with a slight lining drag.
- 5. Replace the adjusting hole cover and lower the wheel to the ground.
- 6. Repeat the above procedure on all brakes.

▲ WARNING Never crawl under your trailer unless it is resting on properly placed jack stands.

Follow the trailer manufacturers recommendations for lifting and supporting the unit. Do not lift or place supports on any part of the suspension system.

\*\*Note: Trailer Brake Adjustment procedures courtesy Dexter Axle.