

## **Installation and QC on Actuator and Disc Brakes**

1. Read and follow the installation instructions for both the actuator and disc brakes.
2. Prior 2012 models ONLY: Pay particular attention to priming the dampener in the actuator. Failure to properly fill the dampener with brake fluid before bleeding the brakes will result in hard to bleed brakes and “soft” or “spongy” brake action.
3. Prior 2012 models ONLY: Filling the dampener requires pushing and retracting the coupler housing through its full range of motion at least three times with the brake line open or disconnected. The dampener cannot be filled using the pry bar or screwdriver in the bleeding hole.
4. Caliper position must allow one of the bleeder valves to be at the “12:00” position to allow all air to escape.
5. When using an air assist power bleeder, fill the tank with 18 to 25 lbs of air pressure. Do not go over 25 or below 16 lbs during use.
6. On multi axle braked trailers, start bleeding with the closest brake first. Follow with the next closest and so on.
7. When bleeding apply pressure first, open valve to release air, close bleeder valve on caliper before closing valve on the power bleeder. If manually bleeding, close caliper valve before releasing pressure from the pry bar position.

## **Verify Bleeding Process**

1. Using a screwdriver or pry bar, manually operate the master cylinder. Pump three times. Each “pump” should have more resistance.
2. Hold the manually applied pressure on the third pump and try turning a braked wheel. The wheel should be difficult to turn. Do not expect the wheel to lock using manual pressure as this is generally not enough pressure to create a fully stopped wheel.
3. The second options is to spin or turn the wheel then manually pressure the master cylinder to verify that the brake pads are being forced against the rotor.

## **Checking the Brake System for Lack of Pressure**

1. Verify that all brake lines are not kinked or in a position to be compressed by the suspension.
2. Verify that all caliper bleeder valves are closed.
3. Verify that all fittings are secure and do not leak.
4. Verify that brake lines do not have an “upward” facing loop in which to collect air. This condition will make bleeding more difficult as air is trapped in the top position of the loop.
5. Verify that the calipers move freely and that the brake lines do not cause binding or pressure to the caliper.
6. Verify that the reverse backing solenoid is properly connected and that the return line is properly attached and is not leaking fluid.
7. Verify that the dampener was properly filled with brake fluid and that the master cylinder is filled with DOT 3 fluid.

Most times the cause of poor braking is air in the lines. The source can be the upward directed loops in the lines, releasing the pressure at the actuator before closing the caliper bleeding valve creating air suction at the caliper, leaks in the system and improperly filled dampener in the actuator.

For other trouble shooting, see the separate ”Disc brake check list”