**Hydraulic System Fault Analysis**

**Meet ASE Task:** (A5-B-5) P-1 Diagnose braking concerns caused by hydraulic malfunctions.

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_ Time on Task \_\_\_\_\_\_\_\_\_\_**

**Make/Model/Year \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ VIN \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Evaluation: 4 3 2 1**

Poor stopping or dragging brakes or pulling can be caused by hydraulic system failure or faults.

**\_\_\_\_\_ 1.** Check master cylinder for proper brake fluid level and condition.



**\_\_\_\_\_ 2.** Verify proper operation of the base brakes.

\_\_\_\_\_ OK

\_\_\_\_\_ Pulls to the left during braking (see Step 3).

\_\_\_\_\_ Pulls to the right during braking (see Step 3).

\_\_\_\_\_ Brakes do not release fully (see Step 4).

\_\_\_\_\_ Poor stopping (see Step 5).

\_\_\_\_\_ Other brake system concerns (describe) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_ 3.** Pulling can be caused by a stuck caliper piston on the side *opposite* the direction of the

 pull.

If there is a pull to the right during braking, check the left side caliper.

#### OK \_\_\_\_ NOT OK \_\_\_\_

If there is a pull to the left during braking, check the right side caliper.

#### OK \_\_\_\_ NOT OK \_\_\_\_

**\_\_\_\_\_ 4.** Brakes that do not fully release can be caused by a fault with the flexible brake hose

 and/or a stuck caliper piston

#### Visually check the flexible brake hose. OK \_\_\_\_ NOT OK \_\_\_\_

 Check that the caliper piston can be moved into the caliper bore easily.

#### OK \_\_\_\_ NOT OK \_\_\_\_

**\_\_\_\_\_ 5.** Poor stopping can be caused by a stuck caliper or wheel cylinder piston. Check that

 all hydraulic pistons are free.

 LF = **OK \_\_\_\_ NOT OK \_\_\_\_**

RF = **OK \_\_\_\_ NOT OK \_\_\_\_**

LR = **OK \_\_\_\_ NOT OK \_\_\_\_**

RR= **OK \_\_\_\_ NOT OK \_\_\_\_**