**Brake Inspection Training Process and Procedures**

**Step Detail Can Be Found In The DTOG**

**Step 1 Trainer Does/Trainer Explains**

**Prepare for Service**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Wears required PPE (Safety Glasses, Nitrile Gloves, Oil/Slip Resistant Shoes) | Wears required PPE (Safety Glasses, Nitrile Gloves, Oil /Slip Resistant Shoes) |
| Prepares Tools | Trainee observes and listens |
| Identifies vehicle information | Trainee observes and listens |
| Determines whether brakes are disc or drum systems | Trainee observes and listens |
| Identify vehicle manufacturer’s wear limits | Trainee observes and listens |

**Test Drive Vehicle**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Check for drivability concerns | Trainee observes and listens |
| Drive vehicle into designated brake inspection bay | Trainee observes and listens |

**Inspect Brake Fluid and Master Cylinder**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Raise hood and install fender covers | Trainee observes and listens |
| Inspect master cylinder | Trainee observes and listens |
| Record brake fluid level | Trainee observes and listens |
| Test brake fluid | Trainee observes and listens |

**Prepare Vehicle for Brake Inspection**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Lift Vehicle | Trainee observes and listens |
| Inspect wheel bearings | Trainee observes and listens |
| Remove all 4 wheels | Trainee observes and listens |
| On drum brakes, apply dust penetrant | Trainee observes and listens |

**Inspect Disc Brakes**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Inspect brake line and hose | Trainee observes and listens |
| Inspect caliper housing | Trainee observes and listens |
| Verify caliper piston movement | Trainee observes and listens |
| Remove caliper and inspect interior | Trainee observes and listens |
| Remove brake pads | Trainee observes and listens |
| Inspect brake housing | Trainee observes and listens |

**Inspect Disc Brakes (Continued)**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Remove/Inspect caliper pins | Trainee observes and listens |
| Visually inspect brake pads | Trainee observes and listens |
| Measure thickness of brake pads | Trainee observes and listens |
| Visually Inspect surface of brake rotor | Trainee observes and listens |
| Measure the thickness of the brake rotor | Trainee observes and listens |
| Measure runout on outer surface of brake rotor | Trainee observes and listens |

**Inspect Drum Brakes**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Verify that brake components are secure | Trainee observes and listens |
| Remove brake drum | Trainee observes and listens |
| Verify that pistons inside wheel cylinder are not seized | Trainee observes and listens |
| Inspect wheel cylinder for leakage | Trainee observes and listens |
| Inspect the brake hardware | Trainee observes and listens |
| Visually inspect machined surface of brake drum | Trainee observes and listens |
| Measure inner diameter of brake drum | Trainee observes and listens |
| Visually inspect brake shoes | Trainee observes and listens |
| Measure thickness of brake shoes | Trainee observes and listens |

**Summarize results on Brake Inspection Form**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Compare actual measurements to OEM specifications | Trainee observes and listens |
| Preview the review | Trainee observes and listens |
| Discuss findings with customer | Trainee observes and listens |

**If No Service Required, Reassemble Parts**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Assemble brake | Trainee observes and listens |
| Install wheels | Trainee observes and listens |
| Lower vehicle | Trainee observes and listens |
| Have 2nd proficient technician re-torque all wheels (even if only removing two) on the ground with torque wrench | Trainee observes and listens |
| Remove fender cover and lower hood | Trainee observes and listens |

**Brake Inspection Training Process and Procedures**

**Step 2 Trainer Does/Trainee Explains**

**Prepare for Service**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Wears required PPE (Safety Glasses, Nitrile Gloves, Oil/Slip Resistant Shoes) | Wears required PPE (Safety Glasses, Nitrile Gloves, Oil /Slip Resistant Shoes) |
| Prepares Tools | Trainee observes and explains what is happening to trainer |
| Identifies vehicle information | Trainee observes and explains what is happening to trainer |
| Determines whether brakes are disc or drum systems | Trainee observes and explains what is happening to trainer |
| Identify vehicle manufacturer’s wear limits | Trainee observes and explains what is happening to trainer |

**Test Drive Vehicle**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Check for drivability concerns | Trainee observes and explains what is happening to trainer |
| Drive vehicle into designated brake inspection bay | Trainee observes and explains what is happening to trainer |

**Inspect Brake Fluid and Master Cylinder**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Raise hood and install fender covers | Trainee observes and explains what is happening to trainer |
| Inspect master cylinder | Trainee observes and explains what is happening to trainer |
| Record brake fluid level | Trainee observes and explains what is happening to trainer |
| Test brake fluid | Trainee observes and explains what is happening to trainer |

**Prepare Vehicle for Brake Inspection**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Lift Vehicle | Trainee observes and explains what is happening to trainer |
| Inspect wheel bearings | Trainee observes and explains what is happening to trainer |
| Remove all 4 wheels | Trainee observes and explains what is happening to trainer |
| On drum brakes, apply dust penetrant | Trainee observes and explains what is happening to trainer |

**Inspect Disc Brakes**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Inspect brake line and hose | Trainee observes and explains what is happening to trainer |
| Inspect caliper housing | Trainee observes and explains what is happening to trainer |
| Verify caliper piston movement | Trainee observes and explains what is happening to trainer |
| Remove caliper and inspect interior | Trainee observes and explains what is happening to trainer |
| Remove brake pads | Trainee observes and explains what is happening to trainer |
| Inspect brake housing | Trainee observes and explains what is happening to trainer |

**Inspect Disc Brakes (Continued)**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Remove/Inspect caliper pins | Trainee observes and explains what is happening to trainer |
| Visually inspect brake pads | Trainee observes and explains what is happening to trainer |
| Measure thickness of brake pads | Trainee observes and explains what is happening to trainer |
| Visually Inspect surface of brake rotor | Trainee observes and explains what is happening to trainer |
| Measure the thickness of the brake rotor | Trainee observes and explains what is happening to trainer |
| Measure runout on outer surface of brake rotor | Trainee observes and explains what is happening to trainer |

**Inspect Drum Brakes**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Verify that brake components are secure | Trainee observes and explains what is happening to trainer |
| Remove brake drum | Trainee observes and explains what is happening to trainer |
| Verify that pistons inside wheel cylinder are not seized | Trainee observes and explains what is happening to trainer |
| Inspect wheel cylinder for leakage | Trainee observes and explains what is happening to trainer |
| Inspect the brake hardware | Trainee observes and explains what is happening to trainer |
| Visually inspect machined surface of brake drum | Trainee observes and explains what is happening to trainer |
| Measure inner diameter of brake drum | Trainee observes and explains what is happening to trainer |
| Visually inspect brake shoes | Trainee observes and explains what is happening to trainer |
| Measure thickness of brake shoes | Trainee observes and explains what is happening to trainer |

**Summarize results on Brake Inspection Form**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Compare actual measurements to OEM specifications | Trainee observes and explains what is happening to trainer |
| Preview the review | Trainee observes and explains what is happening to trainer |
| Discuss findings with customer | Trainee observes and explains what is happening to trainer |

**If No Service Required, Reassemble Parts**

|  |  |
| --- | --- |
| **Trainer** | **Trainee** |
| Assemble brake | Trainee observes and explains what is happening to trainer |
| Install wheels | Trainee observes and explains what is happening to trainer |
| Lower vehicle | Trainee observes and explains what is happening to trainer |
| Have 2nd proficient technician re-torque all wheels (even if only removing two) on the ground with torque wrench | Trainee observes and explains what is happening to trainer |
| Remove fender cover and lower hood | Trainee observes and explains what is happening to trainer |

**Brake Inspection Training Process and Procedures**

**Step 3 Trainee Does/Trainer Explains**

**Prepare for Service**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Wears required PPE (Safety Glasses, Nitrile Gloves, Oil/Slip Resistant Shoes) | Wears required PPE (Safety Glasses, Nitrile Gloves, Oil /Slip Resistant Shoes) |
| Prepares Tools | Trainer observes and provides feedback to trainee |
| Identifies vehicle information | Trainer observes and provides feedback to trainee |
| Determines whether brakes are disc or drum systems | Trainer observes and provides feedback to trainee |
| Identify vehicle manufacturer’s wear limits | Trainer observes and provides feedback to trainee |

**Test Drive Vehicle**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Check for drivability concerns | Trainer observes and provides feedback to trainee |
| Drive vehicle into designated brake inspection bay | Trainer observes and provides feedback to trainee |

**Inspect Brake Fluid and Master Cylinder**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Raise hood and install fender covers | Trainer observes and provides feedback to trainee |
| Inspect master cylinder | Trainer observes and provides feedback to trainee |
| Record brake fluid level | Trainer observes and provides feedback to trainee |
| Test brake fluid | Trainer observes and provides feedback to trainee |

**Prepare Vehicle for Brake Inspection**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Lift Vehicle | Trainer observes and provides feedback to trainee |
| Inspect wheel bearings | Trainer observes and provides feedback to trainee |
| Remove all 4 wheels | Trainer observes and provides feedback to trainee |
| On drum brakes, apply dust penetrant | Trainer observes and provides feedback to trainee |

**Inspect Disc Brakes**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Inspect brake line and hose | Trainer observes and provides feedback to trainee |
| Inspect caliper housing | Trainer observes and provides feedback to trainee |
| Verify caliper piston movement | Trainer observes and provides feedback to trainee |
| Remove caliper and inspect interior | Trainer observes and provides feedback to trainee |
| Remove brake pads | Trainer observes and provides feedback to trainee |
| Inspect brake housing | Trainer observes and provides feedback to trainee |

**Inspect Disc Brakes (Continued)**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Remove/Inspect caliper pins | Trainer observes and provides feedback to trainee |
| Visually inspect brake pads | Trainer observes and provides feedback to trainee |
| Measure thickness of brake pads | Trainer observes and provides feedback to trainee |
| Visually Inspect surface of brake rotor | Trainer observes and provides feedback to trainee |
| Measure the thickness of the brake rotor | Trainer observes and provides feedback to trainee |
| Measure runout on outer surface of brake rotor | Trainer observes and provides feedback to trainee |

**Inspect Drum Brakes**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Verify that brake components are secure | Trainer observes and provides feedback to trainee |
| Remove brake drum | Trainer observes and provides feedback to trainee |
| Verify that pistons inside wheel cylinder are not seized | Trainer observes and provides feedback to trainee |
| Inspect wheel cylinder for leakage | Trainer observes and provides feedback to trainee |
| Inspect the brake hardware | Trainer observes and provides feedback to trainee |
| Visually inspect machined surface of brake drum | Trainer observes and provides feedback to trainee |
| Measure inner diameter of brake drum | Trainer observes and provides feedback to trainee |
| Visually inspect brake shoes | Trainer observes and provides feedback to trainee |
| Measure thickness of brake shoes | Trainer observes and provides feedback to trainee |

**Summarize results on Brake Inspection Form**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Compare actual measurements to OEM specifications | Trainer observes and provides feedback to trainee |
| Preview the review | Trainer observes and provides feedback to trainee |
| Discuss findings with customer | Trainer observes and provides feedback to trainee |

**If No Service Required, Reassemble Parts**

|  |  |
| --- | --- |
| **Trainee** | **Trainer** |
| Assemble brake | Trainer observes and provides feedback to trainee |
| Install wheels | Trainer observes and provides feedback to trainee |
| Lower vehicle | Trainer observes and provides feedback to trainee |
| Have 2nd proficient technician re-torque all wheels (even if only removing two) on the ground with torque wrench | Trainer observes and provides feedback to trainee |
| Remove fender cover and lower hood | Trainer observes and provides feedback to trainee |

**Brake Inspection Training Process and Procedures**

**Step 4 Trainee Does/Trainee Explains (Trainer Provides Feedback)**

**Prepare for Service**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Wears required PPE (Safety Glasses, Nitrile Gloves, Oil/Slip Resistant Shoes) | Wears required PPE (Safety Glasses, Nitrile Gloves, Oil /Slip Resistant Shoes) |
| Prepares Tools | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Identifies vehicle information | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Determines whether brakes are disc or drum systems | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Identify vehicle manufacturer’s wear limits | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Test Drive Vehicle**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Check for drivability concerns | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Drive vehicle into designated brake inspection bay | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Inspect Brake Fluid and Master Cylinder**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Raise hood and install fender covers | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Inspect master cylinder | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Record brake fluid level | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Test brake fluid | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Prepare Vehicle for Brake Inspection**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Lift Vehicle | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Inspect wheel bearings | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Remove all 4 wheels | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| On drum brakes, apply dust penetrant | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Inspect Disc Brakes**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Inspect brake line and hose | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Inspect caliper housing | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Verify caliper piston movement | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Remove caliper and inspect interior | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Remove brake pads | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Inspect brake housing | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Inspect Disc Brakes (Continued)**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Remove/Inspect caliper pins | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Visually inspect brake pads | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Measure thickness of brake pads | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Visually Inspect surface of brake rotor | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Measure the thickness of the brake rotor | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Measure runout on outer surface of brake rotor | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Inspect Drum Brakes**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Verify that brake components are secure | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Remove brake drum | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Verify that pistons inside wheel cylinder are not seized | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Inspect wheel cylinder for leakage | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Inspect the brake hardware | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Visually inspect machined surface of brake drum | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Measure inner diameter of brake drum | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Visually inspect brake shoes | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Measure thickness of brake shoes | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Summarize results on Brake Inspection Form**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Compare actual measurements to OEM specifications | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Preview the review | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Discuss findings with customer | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**If No Service Required, Reassemble Parts**

|  |  |
| --- | --- |
| **Trainee** | **Trainee/Trainer** |
| Assemble brake | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Install wheels | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Lower vehicle | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Have 2nd proficient technician re-torque all wheels (even if only removing two) on the ground with torque wrench | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |
| Remove fender cover and lower hood | Trainee explains what he is doing to the trainer and the trainer provides feedback if necessary |

**Repeat step 4 of the 4 step training process until the employee is proficient.**