



# DISC BRAKE INSTALLATION INSTRUCTIONS

## Important Information

This instruction sheet covers two types of disc brakes:

- **Hat-style:** Fits loosely over a standard idler hub with wheel bolts and nuts. If servicing hub during hat-style installation, refer to hub manufacturer's service instructions.
- **Integral:** Cast as a single unit, wheel studs and races pressed in.

Caliper seals and o-rings are installed with a special silicone-based grease. **DO NOT USE PETROLEUM BASED GREASE OR OIL.**

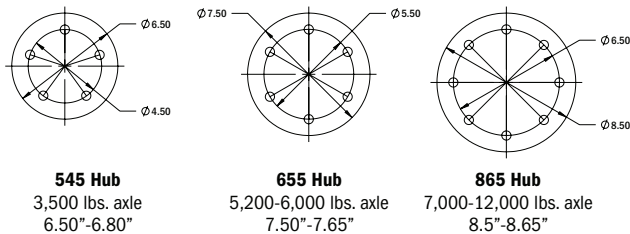
**When using a surge brake actuator, a reverse solenoid is required.**

**DO NOT PAINT GUIDE BOLTS AND GUIDE BOLT SLEEVES.**

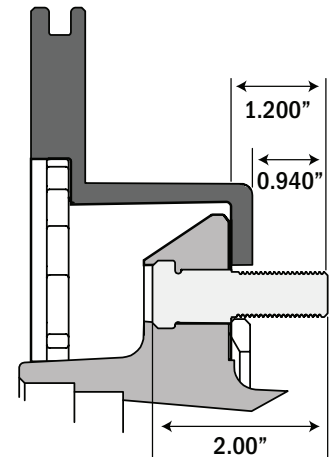
Appropriate installation, maintenance, and repair procedures are essential for the safe, reliable operation of vehicle brakes, as well as the safety of the individual doing the work. Refer to your trailer manufacturer's owner's manual for additional safety and procedural information before installation.

## Hat-Style Hub Installation

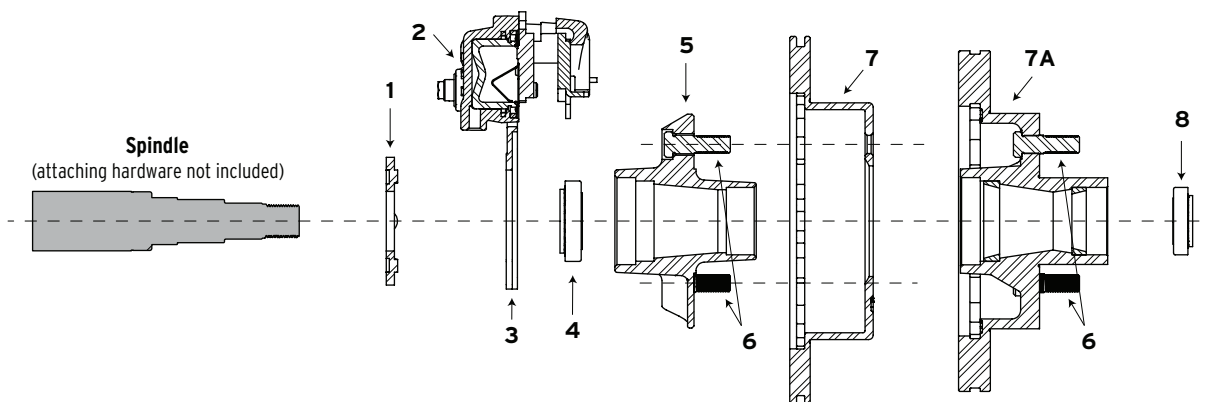
1. Kodiak hat-style disc brakes do not fit on all hubs. Use chart below to confirm hub will fit.



2. Confirm hub wheel bolts fit through the rotor wheel bolt holes and are long enough to fully engage the wheel nut after the rotor is installed. Standard 1/2-20 x 2" wheel bolts countersunk are suitable for most steel wheels and many mag type wheels, depending on the distance that the wheel bolts are countersunk in the hub and the distance wheel nuts are recessed. Confirm that there is sufficient thread length available for the wheel nut to develop a full strength connection.



3. Confirm that the brake flange was installed correctly. There should be a nominal clearance between the outer edge of the caliper mounting bracket and the inner edge of the rotor. This clearance dimension should be the same when measured at either of the two threaded mounting holes. This nominal clearance may vary by manufacturer and by size of the axle. Generally, clearance will be between 1/4" and 1/2".
4. After installation of the caliper, confirm that the rotor turns freely and the caliper will slide on the guide bolt sleeves.
5. Check to see that the flange of the hub is clean and smooth. Remove any rust or corrosion and file smooth any burrs.



| Item | Description                               |
|------|-------------------------------------------|
| 1    | Brake Flange (welded to spindle)          |
| 2    | Calipers (bolted to mounting bracket)     |
| 3    | Mounting Bracket (bolted to brake flange) |

| Item | Description   |
|------|---------------|
| 4    | Inner Bearing |
| 5    | Hub           |
| 6    | Wheel Bolts   |

| Item | Description        |
|------|--------------------|
| 7    | Rotor              |
| 7A   | Integral Rotor/Hub |
| 8    | Outer Bearing      |

6. Check hub is true with a straight edge. Consult axle manufacturer if total indicator runout exceeds 0.015.”
7. Install rotor and ensuring it fits perfectly to the hub face after assembly. Install three wheel nuts and torque to 10-20 ft.-lbs. to temporarily clamp rotor to hub.
8. Rotate hub assembly and check for ease of rotation and proper concentricity and run-out. Note: If run-out is excessive, “clock” the rotor relative to the hub. Repeat as necessary to minimize run-out. Mark this location for future reference.
9. Proceed to **Caliper Installation** section.

### Integral Hub Installation

1. Wipe the hub bearing cups with a clean cloth, lubricate the inside bearing cone and cup and install the bearing, then press the rear seal flush with the machined top of the seal cavity on the rear of the hub according to Dexter's Light Duty Service Manual.
2. Wipe a thin coat of lubricant on the rubber seal's inner lip. Lubricate the spindle-bearing journals and lightly lubricate the seal journal.
3. Slide the hub & rotor carefully onto the spindle with a slight rotation to guide the inner bearing cone and seal over the spindle threads, bearing journals, and the seal journal without nicking the seal lip.
4. Repack outer bearings according to Dexter's Light Duty Service Manual. Then install original spindle nut hardware to finger-tighten the nut.
5. While continuously rotating the hub, slowly tighten the nut to 30 ft.-lbs. The bearings should bind but not lock up. If they lock up, investigate and repair as required.
6. Leave the hub stationary and slowly loosen the wrench just until the torque on the nut goes to zero. The torque will typically go to zero suddenly; don't loosen past that point.
7. While rotating the hub, tighten the spindle nut according to manufacturer's instructions.
8. Proceed to **Caliper Installation** Section.

### Inboard Rotor Installation

1. Install caliper mounting bracket on brake flange.
2. Attach spacer to assembled hub and torque bolts to 95 ft.-lbs.
3. Attach rotor to assembly and torque bolts to 95 ft.-lbs.
4. Install entire assembly on spindle following the hub installation procedure above.
5. Install caliper

### Caliper Installation

#### 3,500-8,000 lbs. axles:

1. Install caliper mounting bracket at the recommended 3 o'clock position on left side and 9 o'clock position on right side with provided nuts and bolts
2. Install caliper with bleed screw pointing up. If caliper has two bleed screws, bleed from the highest bleed screw. Torque caliper guide bolts to approximately 40-50 ft.-lbs. Bleeder screw should always be pointing up to properly expel entrapped air.
3. Bleed brakes and reinstall wheel nuts following instructions in Dexter's Light Duty Service Manual.

#### 9,000-12,000 lbs. axles:

1. Caliper should be mounted with bracket at 12 o'clock.
2. Torque caliper mounting bracket bolts per axle manufacturer's recommendations.
3. On custom air ride suspensions, the caliper is recommended to be “clocked” towards the suspension pivot point.
4. Bleed brakes and reinstall wheel nuts following instructions in Dexter's Medium Duty Service Manual.

### Brake Hose/Line Installation

1. Use a brake hose with a male 3/16” inverted flare fitting to connect to the caliper with enough flexibility to allow the caliper to move at least 1/2” as the brake pads wear. Tighten the brake line into the brass fitting inlet on the caliper to one-half turn past finger tight. For additional information on routing brake lines, please reference Brake Line Instruction Sheet (059-B17-00). Connect and secure all brake lines appropriately for the trailer's intended use. Ensure that the caliper and brake inlet line have sufficient clearance to the trailer frame and suspension to avoid contact under any loading scenario.

### Road Testing

1. Install the trailer wheel and ensure the wheel inside has clearance to the brake caliper body as it rotates. Tighten all lug nuts in a star pattern with an accurate torque wrench to the torque specified by the trailer manufacturer.



## CAUTION

**When finished with the installation, torque the wheel nuts to the trailer manufacturer's specifications. Re-torque nuts again at 10, 25, and 50 miles to avoid a possible wheel separation, which can result in property damage, serious injury, or death.**

2. Road test the trailer in a safe location. After the first few stops, check the brake fluid in the actuator reservoir and top off again to the proper level. Note: brake performance may not be optimum until the brake pads adjust and seat themselves to the rotor. If braking performance still needs improvement, repeat the brake bleeding procedure to resolve.

**SCAN BELOW TO VIEW  
CURRENT SERVICE MANUALS**



**SCAN BELOW FOR KODIAK  
GENUINE REPLACEMENT PARTS**

