JAKE BRAKE®
Jacobs Vehicle
Equipment Company

Service Letter

Service Letter No. 409
October, 1994

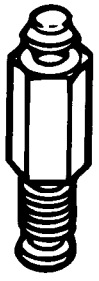
SUBJECT: Screw and Pin Assemblies

MODELS AFFECTED: 310/310A

Jacobs has re-released Screw and Pin Assembly, P/N 014676, for use in Caterpillar installed Model 310A engine brakes. Previously, a pre-set Screw and Pin Assembly, P/N 019171, was used to simplify the installation on the engine assembly line, but Caterpillar has decided to return to the standard assembly. Model 310/310A kits sold through the Jacobs distributor never used the P/N 019171 Screw and Pin Assembly.

Any inventory of the P/N 019171 Screw and Pin Assembly should not be used. Return any inventory of P/N 019171 to Jacobs.

Screw and Pin Assembly
P/N 014676



Screw and Pin Assembly
P/N 019171

Setting the Screw and Pin Assembly in a Guideless Bridge

The Caterpillar® 3176B engine uses a "guideless" exhaust valve bridge design. When using the Model 310A Engine Brake on this engine, a special bridge is used which incorporates the Jacobs® pin and screw assembly, P/N 014676. Under normal use, the pin and screw assembly does not need to be adjusted. However, should the need arise to replace the pin and screw, use the following procedure to ensure the proper height adjustment:

1. Place the Caterpillar exhaust bridge (Caterpillar P/N 6I4584) in a soft jaw vice. Remove the jam nut (P/N 014721) and screw and pin assembly (P/N 014676). Note that these parts are assembled using retaining compound; any parts damaged during disassembly are to be replaced.
2. Clean the parts to be reassembled with an appropriate solvent (Loctite® 755 or equivalent). Reapply a retaining compound to the screw body threads (Loctite 620 or equivalent). A primer is recommended to ensure quick setting of the retaining compound.
3. Install the screw and pin assembly and jam nut into the bridge.
4. Install the Jacobs installation tool (P/N 019764) in the soft jaw vice with the pins up. Place the bridge assembly over the installation tool so that the recesses of the bridge are over the pins.
5. Turn the screw counterclockwise until the bridge lies flat against the installation tool. Turn the installation tool in the vice so that the bridge assembly and tool are held together by the vice.

(continued)

6. Turn the screw clockwise until the screw and pin assembly contacts the installation tool pin.
7. Tighten the jam nut to 18 lbft. of torque.

Note that the 6I4584 Caterpillar bridge is not available as a service part from Jacobs, either alone or in an assembly, and must be ordered from a Caterpillar dealer.