

Installation Addendum: Jake Brake® Models 317D/317E

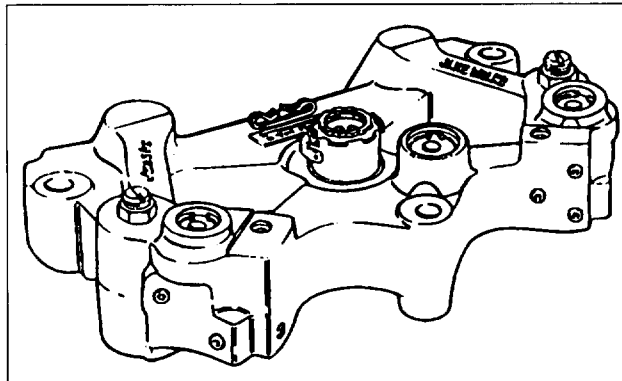


FIG. 1

The Jake Brake® Model 317D engine retarder has been designed and approved for use on 1991 and pre-1991 model year 3176 Caterpillar® engines and replaces the Models C317, C317A and 317B as the production model.

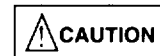
The Jake Brake® Model 317E is designed and approved for use on 1992 and later 3176 engine applications and replaces the Model 317C as the production model.

Refer to the chart on page 2 for specific application information. The new models have been designed for improved durability and performance.

The following symbols in this addendum and the installation manual it accompanies signal potentially dangerous conditions to the mechanic or equipment. Read this addendum carefully. Know when these conditions can exist. Then, take necessary steps to protect personnel as well as equipment.



THIS SYMBOL WARNS OF POSSIBLE PERSONAL INJURY.



THIS SYMBOL REFERS TO POSSIBLE EQUIPMENT DAMAGE.

NOTE:
INDICATES AN OPERATION, PROCEDURE OR INSTRUCTION THAT IS IMPORTANT FOR CORRECT SERVICE.

Fuels, electrical equipment, exhaust gases and moving engine parts present potential hazards that could result in personal injury. Take care when installing an engine brake. Always use correct tools and proper procedures as outlined in this manual.



SEE JACOBS® DRIVER'S MANUAL FOR PROPER ENGINE BRAKE DRIVER TECHNIQUES.

THE JAKE BRAKE® RETARDER IS A VEHICLE SLOWING DEVICE, NOT A VEHICLE STOPPING DEVICE. IT IS NOT A SUBSTITUTE FOR THE SERVICE BRAKING SYSTEM. THE VEHICLE'S SERVICE BRAKES MUST BE USED TO BRING THE VEHICLE TO A COMPLETE STOP.

The installation procedures for Model 317D and 317E are the same as given in the Installation Manual for the Jake Brake® Model C317A engine retarder, Jacobs P/N 015851, except as noted on this addendum sheet.

Models 317D and 317E Installation

Follow the installation procedures in the C317A Installation Manual, Jacobs P/N 015851, until the **"Valve Bridge Adjustment"** instructions at the top of page 6. The first four (4) paragraphs are replaced with the following instructions:

Use a blow gun nozzle with an extension to remove the oil from the bolt holes.

Refer to Fig. 12. Coat head bolt threads (2) and both faces of the related washers (1) with a moly lube (6V4876 or G-N metal assembly paste) prior to assembly. Install the head bolts with washer; torque to 203 lbft. (275 N•m).

Repeat the above procedure for the remaining two cylinder head bolts, one at a time.

Refer to Fig. 13. Install the cylinder head bolt spacers (1) and **HAND TIGHTEN ONLY**.

Continue with the "Model C317A Only" instructions as shown in the manual.

Change the **"Housing Installation"** instructions given on page 7 as follows:

Refer to Fig. 16. Set the housings in place over the mounting studs. Install the Jacobs holddown nuts (1) and torque to 59 lbft. (80 N•m).

Refer to Fig. 13 on page 6. Unscrew the cylinder head bolt spacer (1) until it contacts the bottom of the housing.

Refer to Fig. 16. Install the 70 mm bolts (2) through the housing into the spacer (one per housing) and torque to 41 lbft. (55 N•m).

Set the slave piston clearance according to the information in the Application and Adjustment Chart above.

Continue with the remaining installation procedures in the manual.

Application and Adjustment Information

Engine serial no. & Horsepower	Model Year	Slave Piston Clearance*	Gage P/N
Model 317D			
2YG prefix All ratings	pre-1991	0.045"	016896
Below 7LG07500 All ratings	1991	0.045"	016896
Model 317E			
7LG07500 and greater All ratings	1992	0.020"	018424

* Refer to Page 8 in installation manual for setting instructions.



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