

# Installation PROCEDURES

## SUBJECT

### JACOBS REPLACEMENT HOUSING INSTALLATION INFORMATION FOR 750, 760, 765, & 770

This engine brake housing is a direct replacement for a worn or cracked Jacobs housing. It is the installers responsibility to ensure the housing model is compatible with the engine model.

The internal components of this housing and it's installation procedure are exactly the same as a Jacobs housing, follow the procedures set forth by Jacobs for installation. Jacobs website will have the most current service information: [www.jakebrake.com](http://www.jakebrake.com)

Below is a quick reference of important installation requirements:

Before tightening the engine brake hold-down bolts, move the housing from side to side and then locate the housing in the center position of the movement.

Torque the 3 camshaft side housing capscrews to 40 lbft (55 N•m), then the six exhaust manifold side capscrews to 40 lbft (55 N•m). Then re-torque to 100 lbft (136 N•m) in the same sequence.

*Note: Early 760 housings have different length capscrews, the shorter ones are for the camshaft side.*

*Note: For lash setting, refer to the tag on the Engine Brake Housing. Lash setting must match the tag information on the housing being replaced. Models 750, 760 and 765 slave piston adjusting screw locknut torque is 25 lbft (35 N•m)*

Jacob's model 770 utilized the J-lash® slave piston adjusting screw for lash adjustment. This model has a specific adjustment procedure therefore it must be adjusted as follows:

1. Back out the adjusting screws above the slave pistons until the slave piston does not touch the exhaust rocker arm adjusting screw.

2. Insert the proper feeler gage between the slave piston and the exhaust rocker adjusting screw. Using a hex wrench turn in the adjusting screw until the slave piston contacts the exhaust rocker adjusting screw through the feeler gage. Continue turning in the adjusting screw until the valve springs begin to compress, then turn in one (1) additional turn. Wait at least 30 seconds for oil to be purged from the J-Lash adjusting screw.

*Note: All oil must be purged from the J-lash adjusting screw. If oil is below 60° F, 16° C, wait at least two minutes for oil to be purged from the J-lash adjusting screw.*

3. After the time interval specified in step (2), back out the adjusting screw ONLY until a light drag is felt on the feeler gage. Do not retract more than required to obtain a light drag on the feeler gage.

*Note: If the J-lash adjusting screw is backed out until it no longer compresses the slave piston spring, oil will enter the screw and the adjustment will be incorrect. If this occurs, repeat steps (1) and (2).*

4. Hold the J-Lash adjusting screw in place and torque the locknut to 35 N•m (300 lb-in). Recheck lash settings. If lash setting is incorrect, repeat steps (1) through (3) above.

Pacbrake offers partial housings, these require transferring some items from the housing being replaced into the replacement housing (ie: solenoid and lash screws).

Solenoid valve torque is 15 lbft (20 N•m)