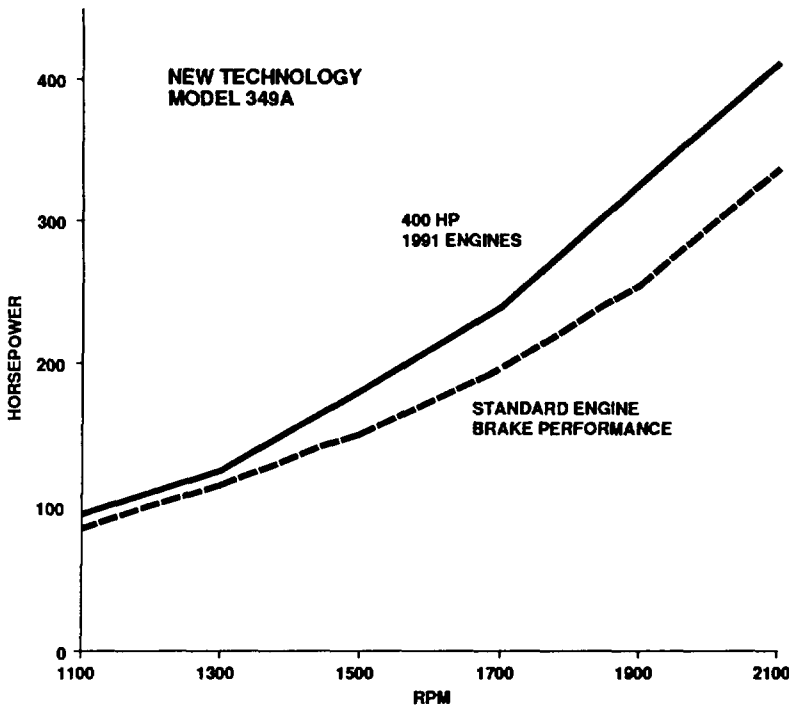


MODEL 349A

JAKE BRAKE® NEW TECHNOLOGY
FOR CATERPILLAR® 3406B/C ATAAC ENGINES



- New Technology and proven *Jacobs* components provide greatest retarding of any engine brake for this application
- Available for Caterpillar 3406B/C ATAAC engines rated 350 HP or greater
- Single component design vs exhaust brake combination gives simpler installation/greater reliability
- Patented hydraulic timing for improved retarding performance over standard brake technology
- Controls available for mechanical, PEEC and PEEC III applications



Retarding HP varies by engine rating					
HP					
RPM	Pre-91	1991, 1992			
	350+ HP	350	400	425	460
1100	100	100	95	90	95
1300	130	145	125	120	125
1500	185	215	180	170	170
1700	250	285	240	235	225
1900	315	355	325	315	290
2100	380	410	410	405	355

All horsepowers listed at SAE standard atmospheric conditions.

**JACOBS® MODEL 349A
NEW TECHNOLOGY ENGINE BRAKE
FOR CATERPILLAR ENGINES**



ENGINE BRAKE MODEL 349A (Two housings, each controlling three engine cylinders)

Overall Dimensions of Basic Engine Brake Housing	in.	mm
Height	2.9	72
Length	16.4	418
Width	5.9	148
Added Engine Height (Valve Cover Spacers)¹	2.4	60
Weight of Standard Engine Brake Kit	lbs	kg
Shipping Weight	95	43
Added Vehicle Weight ²	80	36
Number of Housings per Kit	2	

¹ Added height refers to overall vertical increase.

² Because some engine brake components replace standard engine parts, added Vehicle Weight does not necessarily equal weight of pre-installed *Jacobs* Engine Brake.

Torque Specifications

Exhaust valve bridge jamnut	24 lbft. (35 N•m)	Cat cylinder head bolt	330 lbft. (450 N•m)
Rocker hold-down bolts	330 lbft. (450 N•m)	Cat lower base capscrews	10 lbft. (14 N•m)
Brake housing flange screw	120 lbft. (163 N•m)	Cat valve cover	10 lbft. (14 N•m)
Hex head bolt	60 lbft. (82 N•m)		
<i>Power-Lash</i> [™] locknut	25 lbft. (35 N•m)		
Trigger cap	35 lbft. (47 N•m)		
Spacer studs	10 lbft. (14 N•m)		

Engine Brake Application and Adjustment

Engine	Engine Model Year	Slave Piston Lash Adjustment	Slave Piston Adjusting Tool P/N
3406C	1992*	0.018 in. (0.46 mm)	3087
3406B	1991**	0.018 in. (0.46 mm)	3087
3406B	Pre-91	0.018 in. (0.46 mm)	3087

* Serial number prefixes for 1992 model year: Mechanical Control - 3ZJ; PEEC III Control - 4CK
 ** Serial number prefixes for 1991 model year: Mechanical Control - 3ZJ; PEEC Control - 2EK

Caterpillar and Cat are trademarks of Caterpillar Inc.

* , *Jacobs*, *Jake Brake* and *Auto-Lash* are registered trademarks of *Jacobs* Vehicle Equipment Company.
Jake is a Marc. Reg. in Mexico. *Power-Lash*[™] is a trademark of *Jacobs* Vehicle Equipment Company.