

TABER LINEAR ABRASER MODEL 5750



JUNE 2016

IMPORTANT NOTICE—INCREASED OPERATING NOISE

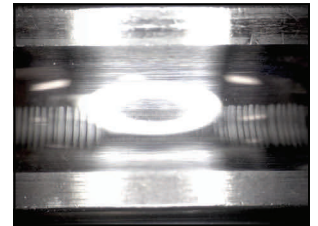
Taber Industries has been investigating the cause of increased motor noise for companies that perform high cycle testing with their Model 5750 Linear Abraser. After months of extensive testing and research, an independent laboratory has confirmed the root cause is electrically induced pitting of the motors ball bearings and raceway which is induced by the PWM drive circuit in the motor driver.

The issue is caused when stray electrical currents arc through the bearings. Electrical discharge machining (EDM) creates thousands of microscopic pits in the bearing's race and over time, the bearings degrade. The result is increased friction and noise. Eventually the rolling elements can cause fluting damage to the bearing races and the grease can become contaminated due to the free particles that result from the surface damage.

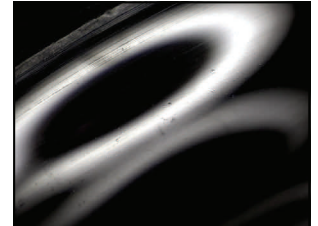
Operation of the Linear Abraser is NOT affected by this phenomenon, and test results will not be influenced.



Solid band of fluting on the outer ring raceway



Fluting on the inner ring raceway



Inner ring raceway, debris dents and arc pits

RESOLUTION—AFFECTED INSTRUMENTS

For instruments that were shipped during the 2011—2016 and exhibit excessive motor noise (>80 dB), a replacement motor kit is available through Taber Industries or an authorized Taber distributor. Potential instruments that may be impacted include serial numbers 20111012—20161611.

This kit includes a right angled motor with the bearings mounted in a vertical plane; an integrated bearing protection kit which includes a snubber circuit that discharges shaft voltage through the attached kit rather than through the bearings; and a modified mounting bracket. Detailed instructions are provided to ensure easy installation (reference p/n 135433).

