



HEAVY DUTY SERVICE BULLETIN

AMERICAN BRAKEBLOK DIVISION

BULLETIN NO. 10

THOSE ANNOYING BRAKE NOISES!
WHERE DO THEY COME FROM?



There are times when squealing brakes not only disturb the driver of the vehicle but also prove distracting to other motorists and pedestrians. What is misleading is that the average person associates the squealing brake with an unsafe stopping vehicle. Of course this is not necessarily true in every instance, for a brake to squeal there must of necessity be action within the drum. It is the undamped vibration that can be the cause for brake noise. The correction rests with arresting the vibration. When the resultant frequency is changed, the noise is muted and removed from the audible range of the human ear. It is known that when two surfaces rub against each other there is inherent vibration. We never actually fully eliminate the vibration but change its frequency to make it acceptable.

When the brake reline is thorough and done in text book fashion the possibility of brake noise is then scant. It is when things are left undone in the reline procedure that brake noise may present itself. A poor lining to drum fit, not properly centering the brake shoe assembly within the drum circle and the lack of lubrication of the brake shoe mechanisms are some of the most common areas of neglect.

With the advent of the bonded linings some years back, we recall some instances of brake noise at times. This was because the lining and shoe now being integral was more critical and meriting of a more exacting reline. The fact that a riveted set seemed to correct the noise problem in some of these cases did not reflect on the lining per se. Rather the flex, give or motion between the lining and shoe table in the riveted application was sufficient to interrupt and change the frequency of the possible vibration. So that we are fully understood, we do not at any time condone or encourage any laxity in the thoroughness of the reline whether the application is bonded or riveted.

Brake noise in the heavy truck field has never been a serious problem per se and this is especially true in fleets that are well maintained. Objectionable brake noise may be heard periodically which could result from too effective a brake when running with a light load or with no cargo. On the horizon now are valves and controls that meter and modulate the pressures to brakes commensurate with the demands of the vehicle load. These will relieve wheel hop and the brake chatter frequently heard particularly on trailers running light. Of course, the brake noise could also be the result of deferred or poor brake maintenance. The brakes on light trucks occasionally emit squeals and their causes could be many, especially the degree of the maintenance in the smaller fleets and in those of individual owners.

Brake lining in itself emits no noise since there is nothing in its composition to introduce it. It is when linings meet the revolving brake drum that things begin to happen inside the drum. We stress the need to properly service the foundation

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