DURING BRAKING THE FRICTION MATERIAL IS SANDWICHED BETWEEN THE MOVING DRUM AND THE STATIONARY SHOE. AGAINST THE DRUM WE SEE DYNAMIC FRICTION FORCES WHICH ARE ALWAYS LOWER THAN THE STATIC FRICTION WHICH OCCURS BETWEEN THE SHOE AND THE LINING. THEORETICALLY, THERE SHOULD BE NO FORCE ON THE RIVETS!! THE STATIC FRICTION OF NA27 IS HIGHER THAN THAT FOR, SAY, 261-1 AND THEREFORE NA27 SHOULD NOT NEED TO BE AS PHYSICALLY STRONG.

BUT WE ALL KNOW THAT LININGS CAN BREAK AWAY AT THE RIVET HOLES! SO THE RIVETS MUST BE DOING SOMETHING.

IN MY EXPERIENCE, RIVET HOLDING PROBLEMS HAVE ALWAYS OCCURRED WITH LININGS, RECENTLY FITTED, WHERE END CONTACT ONLY IS IN EFFECT. IN THIS CASE, THE WHOLE OF THE BRAKING FORCE IS BEING TAKEN ON TWO -- OR AT THE MOST, FOUR RIVETS. YOU NEVER SEE A RIVET HOLDING PROBLEM WITH A CROWN CONTACT! THE IMPORTANCE OF USING A LINING GROUND TO FMSI THICKNESSES CANNOT BE DISMISSED.

THE POSITION WE ARE IN TODAY IS THAT NA27 IS EQUIVALENT STRENGTH TO THE SIMILAR MATERIAL FITTED O.E. TO THE MEXICAN BEETLE. THIS MATERIAL MEETS THE RIVET HOLDING CONDITIONS SPECIFIED BY VOLKSWAGEN-WOLFSBURG. TRS AND TENSILE STRENGTHS ARE WITHIN 15% OF NORMAL O.E. PASSENGER CAR ACCEPTABLE FIGURES. BUT WE NEED SOMETHING BETTER.