



Refreshments provided
 Reservations required by September 6
 Purchase Tickets online at:
<http://www.midmichigansae.org>

Mid-Michigan Section Tour with Program
Monday, September 11, 2017
5:00pm - 7:30pm Tour, 7:45pm Program
The Lingenfelter Collection
 7819 Lochlin Drive, Brighton, Michigan
 Tickets \$25

Reservations required by Noon Wednesday, Sept. 6, 2017

Purchase Tickets online at: <http://www.midmichigansae.org>

Contact: Bernard Santavy at SAEMidMichSec@cs.com or (810)-635-7948

**The Mid-Michigan SAE section extends an invitation to attend our
 Tour of The Lingenfelter Collection of Classic and Unique Automobiles
 with a Technical Presentation by William Owen “ 1989 Pontiac TTA”**

Do not miss this opportunity to visit the Lingenfelter Collection and meet Ken Lingenfelter. What started out as five cars packed into a modest three-car garage has grown into a huge, beautiful collection of unique cars in a 40,000 square foot space. While the collection is not open to the public, it is available for corporate and charity events. Ken supports the American Cancer Society with moneys from tour events.



Bill Owen, the Buick engineer, who directed and assisted the merging of the Buick engine with the Pontiac Trans Am chassis will reveal what makes the 20th Anniversary Turbo TA so special. It is a complete mechanical package, and not just some tape stripes. Starting with the engine, Pontiac borrowed Buick's 3.8 liter (231cid) V6 turbo power-plant from the fabled 1986-87 Grand National. Some difference exist between the TTA motor and the GN version. Different heads were necessary in order to squeeze the motor between the strut towers. These heads, adapted from the transverse FWD version of the 3.8 liter motor, have the added benefit of improved exhaust flow and combustion chamber design. Subsequently, different pistons were required in order to maintain combustion chamber volume. Other changes to the TTA motor are a cross-drilled crankshaft, larger 12 fin/inch GNX-style intercooler in place of the GN's 10 fin/inch design, specially-designed stainless exhaust headers, a higher-pressure Bosch 237 fuel pressure regulator, and a recalibrated engine control module.

