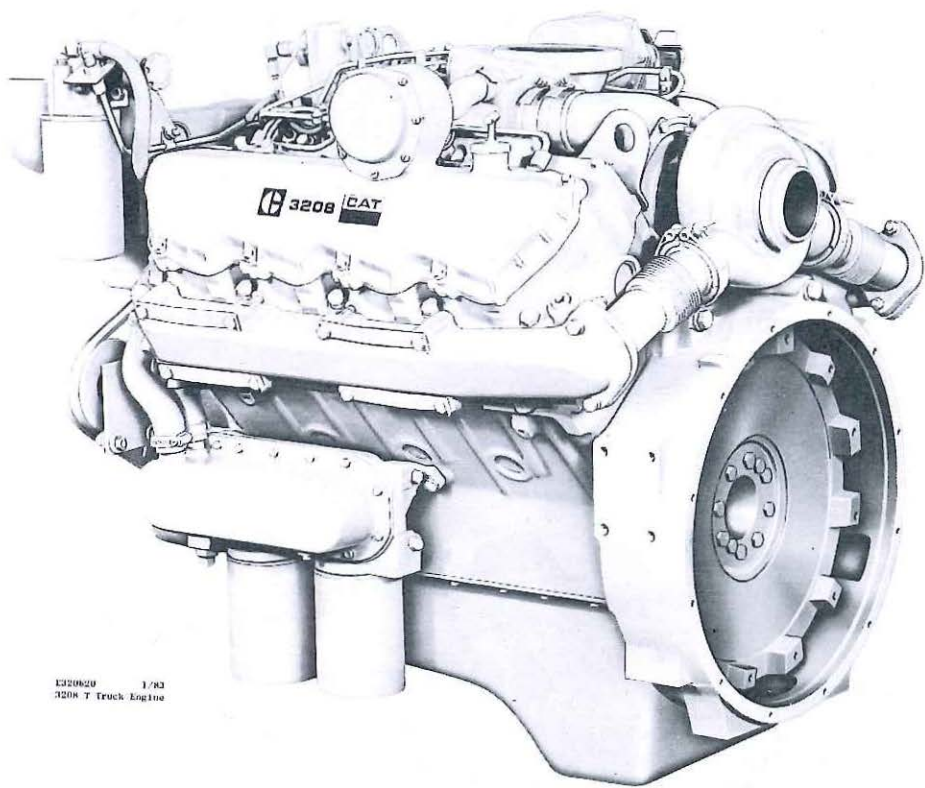


# **SAE** CHICAGO SECTION **NEWS**

**VOL. 54**

**MARCH, 1986**

**NO. 3**

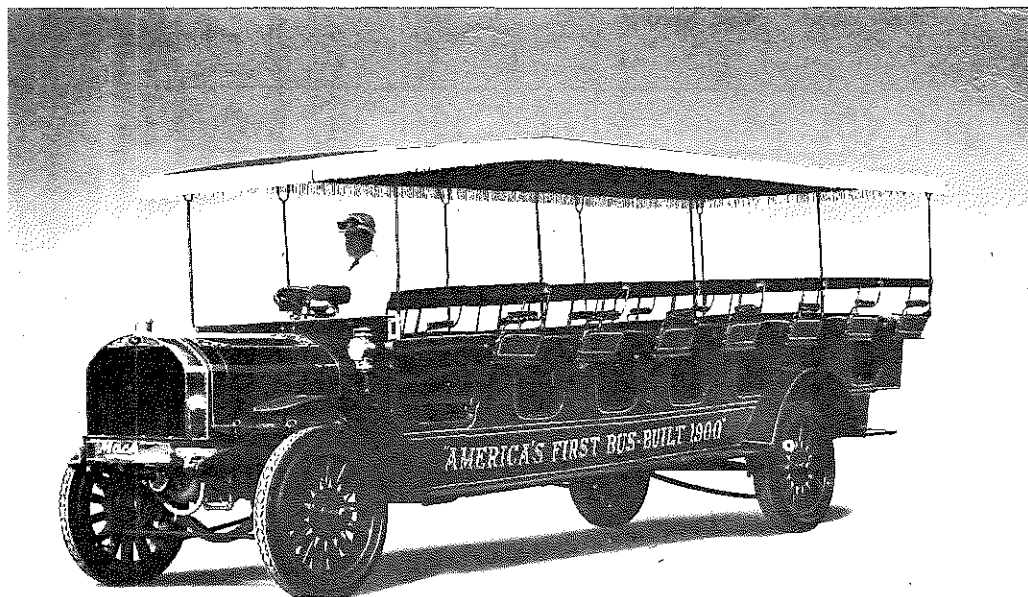


E320828 1/83  
3208 7 Truck Engine

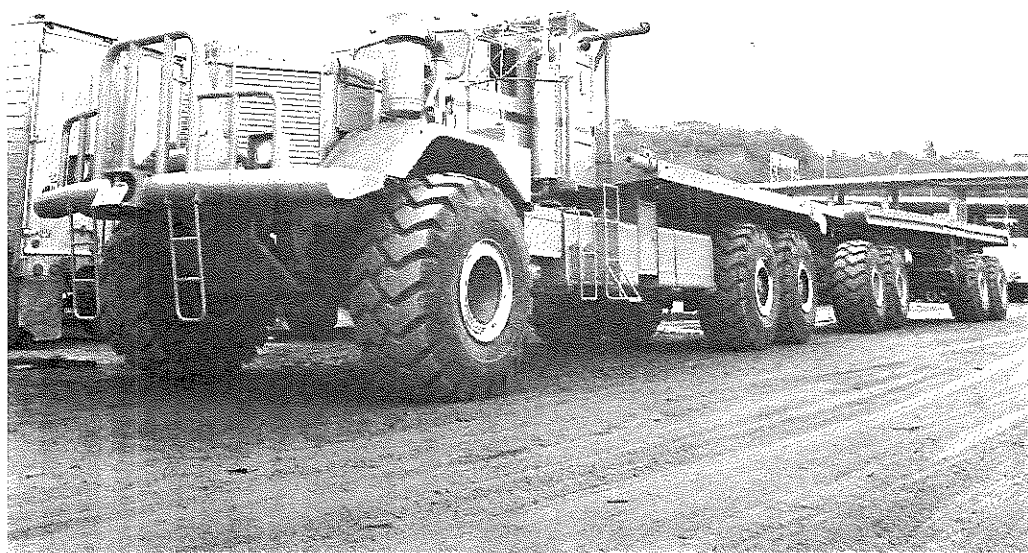
**CATERPILLAR 3208 DIESEL ENGINE  
FOR AGRICULTURAL EQUIPMENT.**

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Fram now makes more than 1,700 filters for oil, gasoline, air and diesel fuel, plus fuel filter/water separators, transmission filters and modulators. In short, a filter for just about any application.

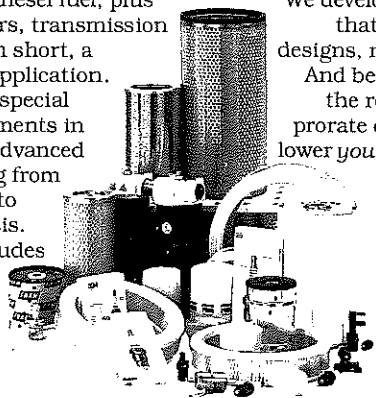
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We develop custom air cleaner units that are integral to your overall designs, not adopted "hang ons."

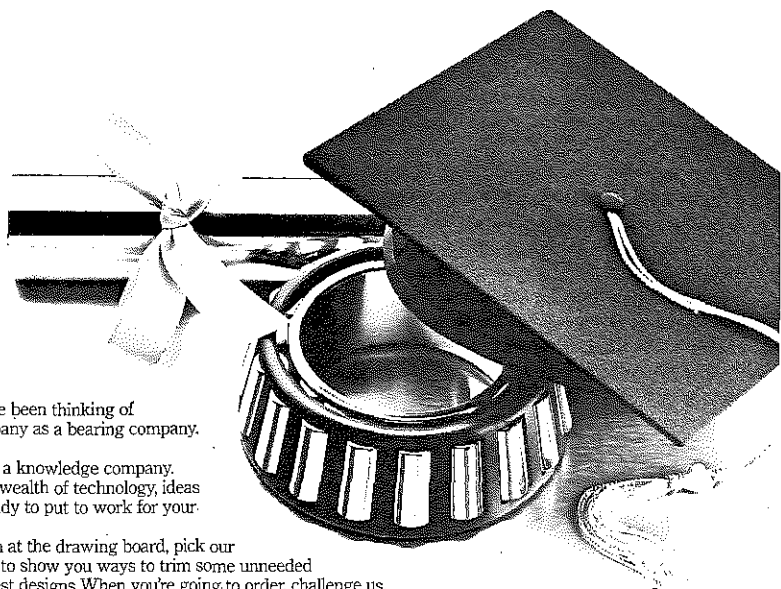
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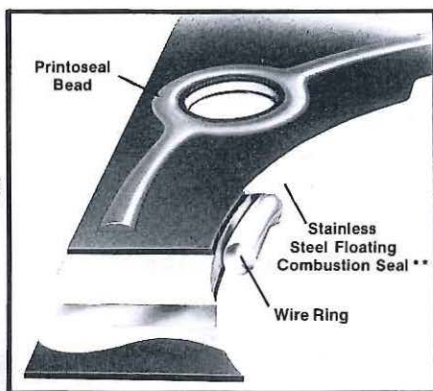
840188

#### Designing and Testing Cylinder Head Gaskets for High Performance Sealing

Daniel E. Czernik

Fel — Pro Inc./Felt Products Mfg. Co.

International Congress  
& Exposition  
Detroit, Michigan  
February 27-March 2, 1984



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**FOX VALLEY DIVISION**  
**SAE Chicago Section**

**TUESDAY, MARCH 18, 1986**

**SPEAKER**



**DR. PHILIP ON**

**CHAIRMAN**



**WILSON D. DYSART**

**TRENDS IN AUTOMOTIVE AND  
INDUSTRIAL GEAR OILS**

**by  
PHILIP ON**

Increases in power and loading require modern lubricants to cope with severe thermal stressing while protecting equipment being lubricated. Lubricant technology must progress in quality to satisfy these requirements. A review will be made of trends in automotive and industrial gear oils.

**PHILIP ON** received his BS and PhD degrees in Chemistry from the University of California at Davis in 1977 and 1981, respectively. He began his employment with Unocal (formerly Union Oil) Science and Technology Division at Brea in 1981. He had worked in the Engine Oil, ATF and Wax group until being reassigned to the Industrial Lubricants and Greases group in 1985. His present assignments are gear oils, AW hydraulic oils and paper machine oils.

**WILSON D. DYSART** is Manager of Technical Services for Unocal Refining and Marketing Division. Bill has a M.S.M.E. degree from Purdue University and has been with Unocal for the past twenty-eight years in various Research and Marketing positions.

Elgin Community College  
1700 Spartan Drive  
Elgin, Ill.  
See map on opposite page

5:30 P.M. Social Half Hour  
6:00 P.M. Dinner  
7:00 P.M. Slide Presentation

**MEETING SPONSORS**

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Deadline: Noon Monday, Mar. 14, 1986  
Give Name and Company.

**MEAL PRICE**

<b>Member</b>	<b>\$11.00</b>
<b>Non-Member</b>	<b>\$13.00</b>
<b>Students</b>	<b>\$ 6.00</b>



**SPEAKER**



**W.L. SPRICK**

**CHAIRMAN**



**GEORGE F. RAAB**

**THE APPLICATION AND INSTALLATION  
OF  
DIESEL ENGINES IN AGRICULTURAL EQUIPMENT**  
by  
**W. L. SPRICK**

Agricultural equipment manufacturers design and produce many types of machines that are powered by diesel engines. They must be reliable, durable, easy to maintain. The engine must be integrated into the equipment to be compatible with its systems. It has water, fuel, air, lubrication and structural systems that must interface with the engine.

**MR. SPRICK** is a Supervising Engineer in the Engine Division Engineering Department of the John Deere Company. He is currently responsible for design, development and application of diesel engines used in agricultural, railroad, marine, electric power generation, earthmoving equipment. Sprick is a Registered Professional Engineer in Illinois. He received a BS in Mechanical Engineering from the University of Nebraska.

**DR. RAYMOND M. BRACH** is an Associate Professor in the Department of Mechanical Engineering at the University of Notre Dame. He has been the Director of the Summer Session for Minority Students for 5 years.



**ELMHURST COUNTRY CLUB**

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AND

IRVING PARK ROAD (ROUTE #19)

**5:30 P.M. Social Half-Hour**

"ATTITUDE ADJUSTMENT HOUR"

**6:00 P.M. Dinner**

**7:00 P.M. Technical Session**

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n, safe, and cost effective.  
particular application, and  
h the machine.

ment of Caterpillar Tractor  
of diesel and natural gas  
ving, petroleum, etc. equip-  
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erospace and Mechanical  
nmer Program in Engineer-

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**Single Table Reservations Restricted to 8 people.**

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or

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**MICHIANA DIVISION**  
**SAE Chicago Section**

**TUESDAY, MARCH 18, 1986**

**PLANT TOUR**

**AM General Hummer Plant**

**Abstract of Tour:** The LTV — AM General Div. HMMWV (Hummer) military vehicle is replacing the venerable M-151 Jeep that has served for many years as the armed services general purpose vehicle. This new vehicle was designed by AM General to U.S. Government specifications and is being manufactured in LTV's AM General plant in Mishawaka, IN. The Hummer is a 4-wheel drive vehicle with an 8 cylinder diesel engine, geared hubs for ground clearance, 4 wheel power disc brakes and power steering. It is made in numerous configurations for special uses such as a cargo troop carrier, an ambulance, a communications vehicle, a missile carrier and an armament carrier.

**The Tour** will begin at the McKinley Hwy. Guard Station at LTV — AM General Div.'s Mishawaka plant. It will consist of items of special interest such as: a.) robotics in the body assembly area and paint areas (for applying the camouflage), and b.) CNC equipment in the body area, in addition to the assembly line and subassembly areas.

**5:15 p.m. — Tour**  
LTV — AM General Div.  
13200 McKinley Hwy.  
Mishawaka, IN  
**7:00 p.m. — Social Period**  
**7:30 p.m. — Dinner**  
Tony's Restaurant  
1213 E. Jefferson Blvd.  
Mishawaka, IN  
**8:30 p.m. — Question and Answer Period**

**Student Support:**  
Hydro-Components R & D Inc.

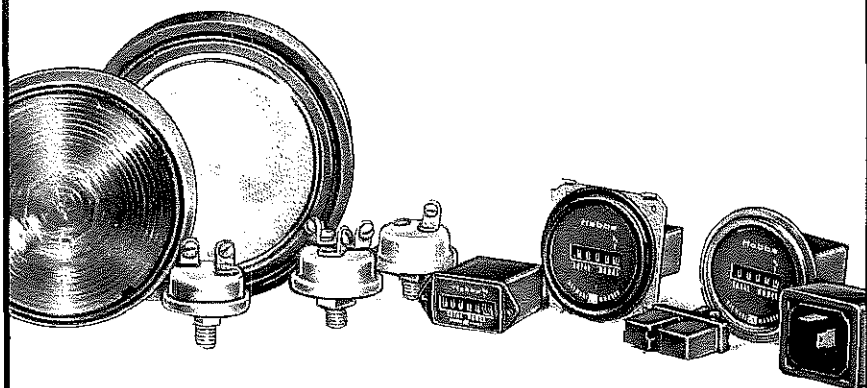
**Reservations:**  
Rodger Miller  
Allied Automotive  
(219) 237-2953

**Deadline: 4:00 P.M. EST**

**Wednesday, March 12, 1986**

**Prices**

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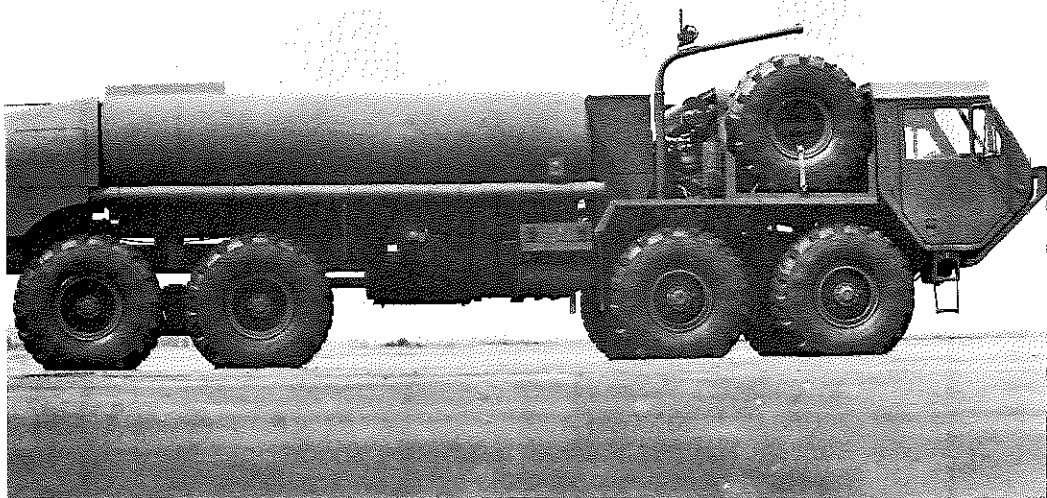
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**Jeff Green**  
Account Manager

# SAE CHICAGO NEWS SECTION

Published by CHICAGO SECTION, SOCIETY OF AUTOMOTIVE ENGINEERS

**VOL. 54**

**MARCH, 1986**

**NO. 3**

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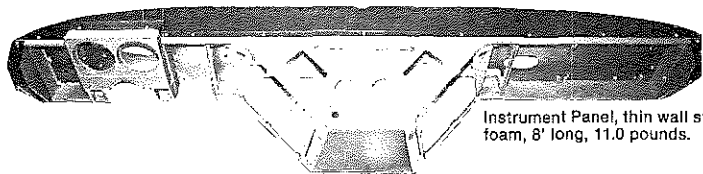
# SAE-CHICAGO SECTION

## 1985-1986 Meeting Dates

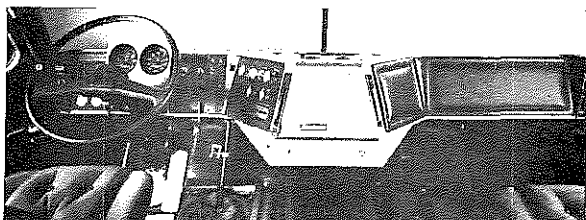
Date	Group	Subject
1985		
10-8	Chicago	Caterpillar Wheel Loader
10-15	Fox Valley	Caterpillar Integrated Tool Carrier
10-15	Michiana	New Energy Ethanol Plant
11-12	Chicago	Power Plants
11-19	Fox Valley	Epcot Center
12-9 to 12-12	Chicago	SAE - National Truck & Bus Meeting
1986		
1-14	Chicago	Manufacturing & Materials
1-21	Michiana	Aristotle Of Airfoils
2-11	Chicago	Parts & Accessories
2-18	Fox Valley	Harley-Davidson V-2 Engine
3-11	Chicago	Transportation Equipment
3-18	Fox Valley	Lubricants (Gear Oils)
3-18	Michiana	U.S. Military Vehicle - Hummer
4-15	Chicago	Fuels and Lubricants
4-22	Fox Valley	Engine Vibration Dampening
4-22	Michiana	East Race
5-13	Chicago	Advanced Technology



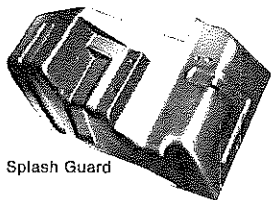
# High Performance Engineered Plastic



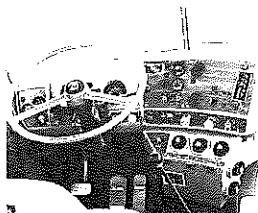
Instrument Panel, thin wall structural foam, 8' long, 11.0 pounds.



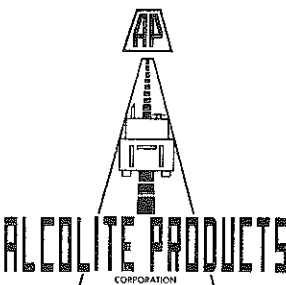
Mack Trucks M.H.



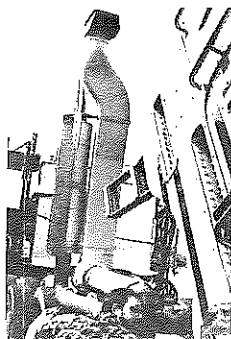
Splash Guard



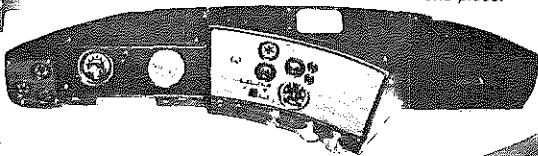
Padded Instrument Panels



32100 Groesbeck Hwy.  
Fraser, Michigan 48026  
(313) 296-6020



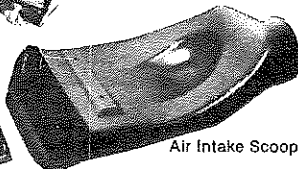
Peterbilt Snorkel 8'.0 long  
—one piece.



Headliner



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