



APRIL 28, 2023 • KEARNEY, NE



TECH & SKILLS REGIONAL CONFERENCES

All shops welcome!

NEED NOT BE AN AERA MEMBER TO ATTEND.

All attendees receive a **FREE** Tech Resource Manual,
plus many door prizes from several vendors!

\$75
FROM
EREF

AERA MEMBER SHOPS will receive a \$75 reimbursement from EREF
after attending any Tech & Skills Conference!

— SPONSORED BY —



Thursday, April 27

4:00 - 6:00 pm	EXHIBITOR SETUP
5:30 - 7:30 pm	DINNER sponsored by Blue Print Engines 5:30 pm Social / 6:30 pm Dinner Kearney Classic Car Museum 3600 US HWY 30B, Kearney NE ccc Kearney.com

Friday, April 28

7:00 - 8:00 am	EXHIBITOR SETUP
8:00 - 8:45 am	REGISTRATION, VISIT EXHIBITORS
8:45 - 9:00 am	WELCOME AND INTRODUCTIONS
9:00 - 10:00 am	TECHNICAL SESSION #1 Eric Grillot MAHLE <i>"Piston Design Insight: Pin Bores and Pin Deformation"</i>
	
	<p>In the general scheme of piston design, the pin bore is a relatively simple feature. However, it provides an important link in the transfer of force from the piston to the connecting rod, and ultimately to overall engine output. While simple, the correct design considerations are crucial for durability; the importance of which continues to grow as engine specific-output increases. We'll also look at the impact of varied pin geometry and pin materials to address some common misconceptions about "light weight" pins.</p>
10:00 - 10:30 am	BREAK, VISIT EXHIBITORS
10:30 - 11:30 am	TECHNICAL SESSION #2 Kevin Feeney, Point One Mfg. and Chuck Lynch, AERA <i>"Torque, Tensile and Clamp Load Pertaining to Engine Fasteners"</i>
	
	<p>Kevin, along with AERA Tech Chuck Lynch, will discuss the correlation of torque verses clamp load with the commonly used lubricants in the field along with Elastic verses Plastic deformation as it applies to fastener installation. The presentation will focus on the material used in the performance aftermarket, but the content will apply to the rebuilder as well.</p>
11:30 am - 1:00 pm	LUNCH (meal provided on site by the host) TABLETOP EXHIBITS OPEN
1:00 - 2:00 pm	TECHNICAL SESSION #3 Billy Godbold Godbold Engineering Solutions <i>"What We Didn't Know"</i>
	
	<p>Billy will talk about the last 25 years of NHR Pro Stock Engine Development to help us better focus on potential improvements for tomorrow. Topics discussed will be Volumetric Efficiency, Wave Tuning, Short Decks, Rod to Stroke, Engine Speed, Valvetrain Dynamics and Deflection, Combustion Efficiency, Cylinder Hone, Rings, Friction and Surface Engineering.</p>
2:00 - 2:30 pm	BREAK, VISIT EXHIBITORS
2:30 - 3:30 pm	TECHNICAL SESSION #4 Blue Print Engines <i>"How Engine Blocks are Made"</i>
	
	<p>Blue Print Engines will walk you through step-by-step from customer input to design and testing, coolant CFD, foundry requirements and machining. This will unlock some mysteries of why some features are made the way they are. Includes hands-on review and tour of machining an SBC block from a raw casting.</p>
3:30 pm	BLUE PRINT ENGINE TOURS
4:30 pm	CONFERENCE ENDS



Conference Location

BLUE PRINT ENGINES

2915 Marshall Avenue
Kearney NE 68847

Accommodations

HOLIDAY INN EXPRESS

508 S 2nd Ave
Kearney NE 68847
(308) 234-8100

Please call 308-234-8100, and request to make a reservation with your group under the name:

Blue Print Engines AERA Block

Block dates: Thursday, April 27 and Friday, April 28, 2023

Block group rate:
\$119.95 per room, per night, plus tax.

NOTE: The rate will not be available by calling worldwide reservations, or by going to holidayinnexpress.com or any other website.

Guest room cancellation deadline is 24 hours prior to the date of arrival. Reservations must be cancelled prior to 6:00 p.m. on the day prior to your arrival.

Room Block Cut-off 04-06-2023.

Reservations will still be accepted after this date at the group rate, however rooms will be subject to availability.

SPONSORED BY AERA & ENGINE PROFESSIONAL MAGAZINE
HOSTED BY:



WHEN: APRIL 28, 2023
WHERE: **BLUE PRINT ENGINES**
2915 MARSHALL AVENUE
KEARNEY NE 68847

Register online at aera.org/attend-blueprint
ATTENDEE REGISTRATION FORM

NAME _____

COMPANY NAME _____

AERA ID NUMBER _____ NON-MEMBERS PLEASE CHECK HERE.

COMPANY ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

E-MAIL OR FAX CONFIRMATION (REQUIRED) _____

SIGNED BY _____

FEES: \$15 per person – Please list additional attendee names from the same company below.

TOTAL AMOUNT ENCLOSED: _____

CHECK – PLEASE MAKE PAYABLE TO AERA.

CREDIT CARD: VISA MASTERCARD DISCOVER AMERICAN EXPRESS

CARD NUMBER: _____ EXPIRATION: _____ 3-DIGIT CSC: _____

CARDHOLDER NAME: _____

CARDHOLDER SIGNATURE: _____



If paying by credit card, please fax completed registration form to AERA
toll-free fax 888-329-2372

Or, **mail** your completed form with payment to: AERA-Engine Builders Association, 875 Feinberg Court, Suite 106, Cary, IL 60013.
Call AERA toll-free if you have any questions: 888-326-2372 or direct at 815-526-7600.



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**VISIT OUR WEBSITE FOR
THE LATEST INFORMATION:
aera.org/blueprint**

