# ENGINE Babcox Babcox Harmonia of the second of the secon

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EngineBuilderMag.com

## SPORT COMPACTS

Turbochargers have this market on the rise again

#### **INSIDE:**

- 2019 Race Engine Challenge Rules
  - Drifting Market
- Valve Springs & Components
- 2019 Hot Products

### SCHUMANN'S SALES AND SERVICE .COM Industry Engine Parts Supplier Since 1970!

#### PERFORMANCE WET SUMP OIL PUMP APPLICATIONS

#### TRUCK:

OF MANUFACTURING ENGINEERS

RESEARCH AND DESIGN • SENIOR MEMBER OF THE SOCIETY

R&D !

OF THE FUTURE •

**TECHNOLOGY** 

**MONSTER - MUD PIT RACING - ROCK CLIMBER** 

#### SMALL BLOCK CHEVY

SBC-140-DFXV-3/4

#### **BIG BLOCK CHEVY V-8**

BBC-140-XV-3/4 BBC-ER-XV-3/4

#### **BIG BLOCK FORD (429-460 BLOCK)**

BBF-140-XV (CORE 84 HV) BBF-140-XV (CORE 84 BHV) BBF-140-XV (CORE 84 DHV)

#### DIRT AND PAVEMENT CIRCLE TRACK "WORLD'S LARGEST SELECTION"

#### SMALL BLOCK CHEVY V-8

SBC-XV-SSR-5/8 Street Stock / Sportsman SBC-XV-CP-3/4 Street Stock / Sportsman SBC-140-DFXV-3/4 Open Wheel Modified or Wet Sump Late Model

#### **BIG BLOCK CHEVY V-8**

BBC-XV-CPRQC Sportsman / Limited Late BBC-140-XV-3/4 Limited Late/ Open Late / Open Wheel Modified

#### LS CHEVY V-8

LS-PRO-XV Sportsman / Limited Late LS-PRO-XV-PI Sportsman / Limited Late LS-PRO-140-PI-FC Open Rule High R.P.M. & H.P.

#### EARLY WINDSOR FORD (289-302-347) V-8 EW-140-XV ALL RULES/R.P.M. & H.P. EW-XV-GPB

#### LATE WINDSOR 351W BLOCK V-8

LW-140-XV ALL RULES/R.P.M. & H.P. LW-XV-GPB

#### **SMALL BLOCK MOPAR**

MO-SB-XV-GPB STREET STOCK/SPORTSMAN

#### **LOW VOLUME DRAG RACE** "WORLD'S LARGEST SELECTION"

#### SMALL BLOCK CHEVY V-8

SBC-LVDR-5/8 SBC-LVDR-3/4 SBC-140-LV-3/4 SBC-140-LVDF-3/4

#### **BIG BLOCK CHEVY V-8**

BBC-140-LVDR-3/4 BBC-ER-DR

#### LS CHEVY V-8

LS-LVDR-140-PI-FC

LS-LVDR-ER-PI

#### EARLY WINDSOR FORD 289/302 V-8

EW-140-LVDR EW-ER-LV-GPB

#### **LATE WINDSOR FORD 351 V-8**

LW-140-LVDR LW-ER-LV-GPB

#### ALL OTHER FORD ENGINES (4 CYL., 6 CYL., V-8'S) **CUSTOM QUOTE BASIS**

#### **BIG BLOCK MOPAR (383, 426, 440 V-8)**

MO-BB-LVDR

#### **SMALL BLOCK MOPAR**

MO-SB-LVDR

#### **BIG BLOCK OLDS**

**BBO-SVDR** 

#### **SUBARU 2.5 LITER "LONGEVITY" OIL PUMPS SUBARU EARTH IS FLAT 2.5 LITER RACING**

SUB-DTG-10 MM VOLUME SUB-DTG-12 MM VOLUME

#### FEATURES:

- SCHUMANN PATENTED DIMPLE TECH GEARS FOR IMPROVED OIL FILM OF GEAR THRUST SURFACES!
- SCHUMANN PATENTED FORCED OIL STREAM FLOW TO O.D. OF ROTOR RING GEAR!
- LOWER OPERATIONAL OIL TEMPERATURES.
- LONGER PUMP LIFE!
- NO ENGINE MODIFICATIONS REQUIRED TO INSTALL!

SUB-STG-10 SUB-DTG-12

FIRST DELIVERY FEB 2019. TAKING ORDERS NOW.

#### **ENGINEERING CONCEPTS**

"140 TECHNOLOGY"

- GEAR PRESSURE BALANCE TECHNOLOGY FOR GEAR/ROTOR APPLICATIONS OF FORD AND MOPAR PERFORMANCE OIL PUMPS!
- LONGEVITY DIMPLE TECH TECHNOLOGY OF GEAR TO GEAR PERFORMANCE OIL PUMP'S!
- EXTERNAL MODULATION BALL VALVE OIL VOLUME AND OIL P.S.I. CONTROL. INSTANT OIL VOLUMETRIC BALANCE OF R.P.M. CHANGES.
- OIL VOLUME DEMANDS CONTROLLED BY A SEATED BALL WITH INSTANT REACTION CYCLE WITH ONLY .001 MOVEMENT. NO SLOW MOVING CUP/SPOOL NON SEATED VALVING. SELF CLEANING BALL VALVE NOT PRONE TO FOREIGN MATERIAL STICKING.
- PROMOTES CONSTANT INTAKE FLOW CYCLE AND CONSTANT EXHAUST FLOW THRU MODULATION OF OIL **VOLUME ENGINE DEMANDS. LOWEST TORQUE LOAD OF** MECHANICAL OIL PUMP COMPONENTS.
- NO HYDRAULIC LOCK-UP OF INTERNAL CUP/SPOOL VALVE DESIGNS.
- "ENERGY RECOVERY" PRO SERIES OIL PUMPS DIRECTS HORSEPOWER PRESSURE SPENT OIL ENERGY **VOLUME INTO THE INTAKE STREAM OF PICK-UP TUBE** AND FREE EFFICIENT ENERGY GAINS ARE RECOVERED AS ACTIVE INTAKE HORSE POWER GAINS!
- "ER-VAC" E.P.A. TECHNOLOGY OF CRANKCASE EMISSION CONTROL SYSTEM, FIRST TIME EVER, ENGINES WILL NOT BE VENTED TO THE ENVIRONMENTAL ATMOSPHERE OR REQUIRE ATMOSPHERIC 14.7 P.S.I. PRESSURE TO PRIME AND OPERATE WET SUMP OIL PUMPS.
- "DUAL FEED" SMALL BLOCK CHEVY OIL PUMP DESIGN CURES THE O.E.M BOTTOM SINGLE FEED OF OIL TO THE GEAR SET AND HELPS TO ELIMINATE AERATION.

#1 Manufacturer (over 150 Part #'s) of Performance Oil Pumps for Most Engines #1 Engineering (Ultimate Series, Energy Recovery, 140% Volume By-Pass, and

LS Extreme Series) with Patents Issue, Pending and Applied For!

#1 Of A Kind Custom Projects Our Specialty!

P.O. BOX 128 • BLUE GRASS, IOWA 52726 PHONE: 563-381-2416 • FAX: 563-381-2409