



# SFR Additive Booster for High Mileage Vehicles



## Supporting Material

- 100,000 Mile Field Trial
- Seal Conditioning Capability

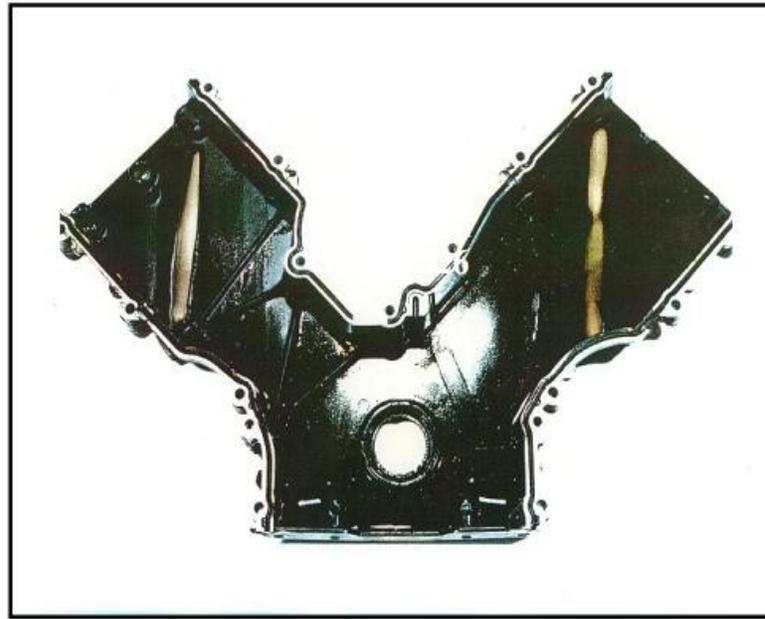
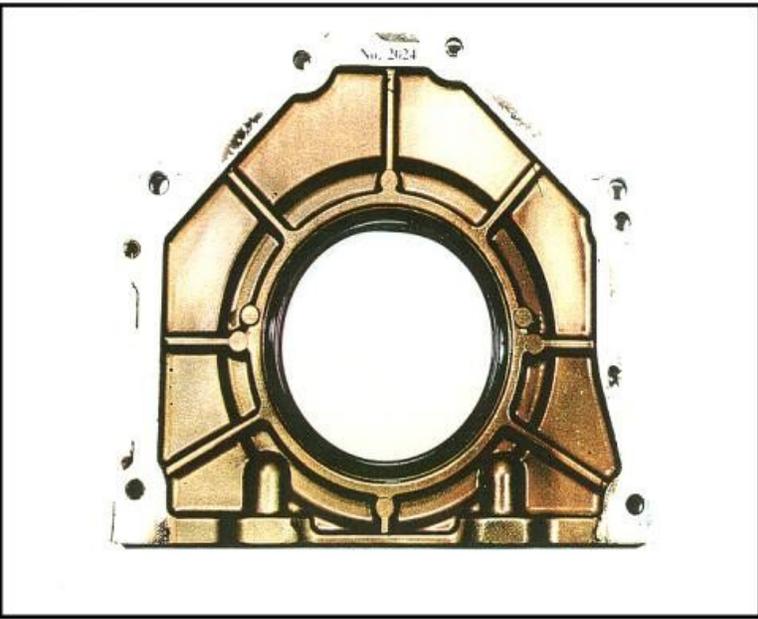
## High Mileage Field Trial Results

Field Trial	Formulation	Additive	Vehicles	100,000 mile AEV Rating	% Ring Stick
4.6L Crown Victoria (High Speed, 65-70)	0W-30 Synthetic	Baseline	2	5.96	33%
	0W-30 Synthetic	High Mileage	2	7.86	2%
4.3L V8 Chevrolet Caprice	5W-30 Mineral	Baseline	6	6.66	26%
(Taxi Cab)	5W-30 Mineral	High Mileage	5	7.85	11%

End of Test

Baseline Oil

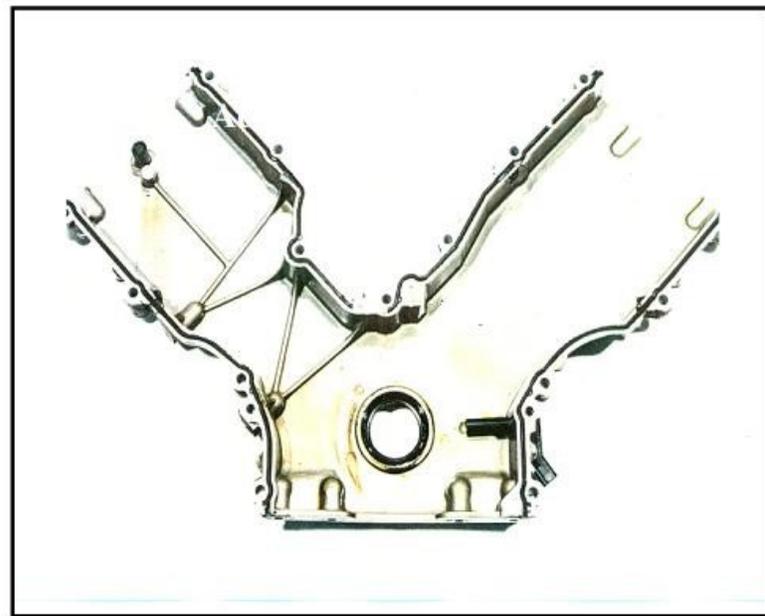
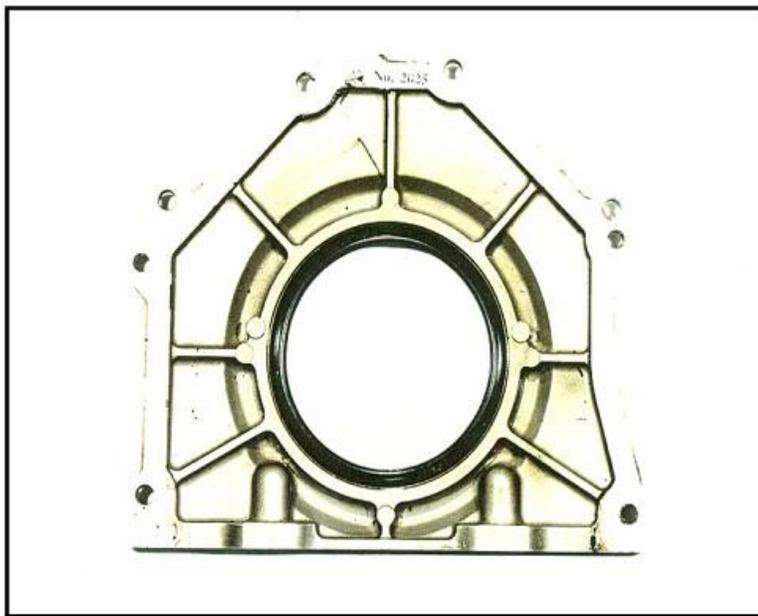
104,287 Miles



End of Test

Baseline with High Mileage Booster

101,148 Miles



# Fuel Economy Performance

Examples of support for the SFR High Mileage Additive used in the field trial indicates no negative impact on the Sequence VI Fuel Economy Performance

<i><b>Formulation</b></i>	<i><b>Additive</b></i>	<i><b>TBN</b></i>	<i><b>% FEI Seq. VIA</b></i>
<b>5W-30</b>	<b>C</b>	<b>6</b>	<b>1.01</b>
<b>5W-30</b>	<b>C + Detergent</b>	<b>9</b>	<b>1.16</b>
<b>10W-30</b>	<b>D</b>	<b>6</b>	<b>0.46</b>
<b>10W-30</b>	<b>D + Detergent</b>	<b>8</b>	<b>0.58</b>
<b>5W-30</b>	<b>E</b>	<b>6</b>	<b>1.13</b>
<b>5W-30</b>	<b>E + Detergent</b>	<b>10</b>	<b>1.27</b>

## Field Trial Conclusions:

Significantly improves deposit control and ring sticking in older vehicles.

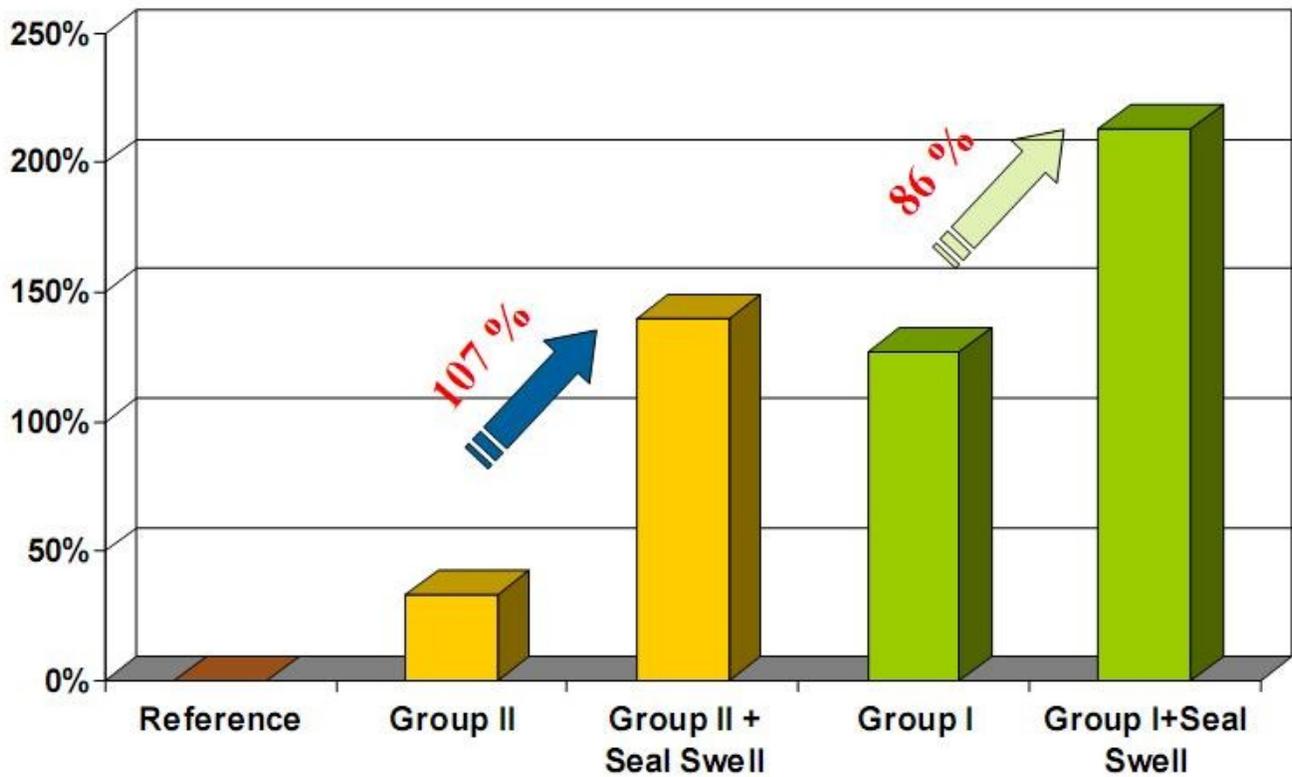
Provides demonstration data to prove concept in different driving conditions and vehicles.

Demonstrates no compromise in FE, wear, emissions system protection.

No negative impact on fuel economy

Oil leakage maybe caused by hard and brittle old seals  
 Seal swell agent present in SFR High Mileage booster, acts to soften and expand the seals to help recover like “new” seal performance.

## Seal Swell Performance



Formulation	Reference oil	Group II	Group II + Seal Swell	Group I	Group I + Seal Swell
<b>% Relative Volume Change</b>	0	33%	140%	127%	213%

Reference : DBL 6674 seal test / NBR-34

# High Mileage Attributes and Benefits

## Performance Attributes

High Mileage Oil demonstrated:

Improved High Temperature Deposit Performance

Improved Ring Stick Performance

No Significant Wear

Improved Catalyst durability for CO (Calcium based detergents significantly improved catalyst deterioration rate for CO).

No Negative Impact in Sequence VIA Fuel Economy

Seal Swelling Capability

## Performance Benefits

High Mileage Oil Booster Assists On:

Reducing Deposit Formation=improved overall wear protection

Conditioning Seals and prevent Leaks

Reducing Oil Consumption