



FORD PERFORMANCE

**M-6004-A504
2011-2014 Mustang 5.0L
Chain-drive kit**

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PRIOR TO INSTALLATION READ THESE INSTRUCTION COMPETELY
For questions, Call the FORD PERFORMANCE Techline 1-800-367-3788

Please visit <https://www.performanceparts.ford.com> for warranty information

Part #	Description	Qty
9L8Z-6C683-A	VCT/camshaft filter	4
BR3Z-6A340-A	Damper bolt	1
BR3Z-6256-G	Intake VCT sprocket	2
BR3Z-6C525-B	Exhaust VCT sprocket	2
BR3Z-6268-A	Secondary timing chain	2
BR3Z-6268-B	Primary timing chain	2
BR3Z-6279-A	VCT phaser bolt	12
BR3Z-6306-A	Crank sprocket	1
BR3Z-6B274-A	Chain guide	1
BR3Z-6M256-A	Chain guide	1
CR3Z-6K255-A	Tensioner arm	2
CR3Z-6L266-A	Primary chain tensioner	2
ML3Z-6K254-A	Secondary chain tensioner	2
ML3Z-6K297-A	Secondary tensioner guide	2
N806183-S437	Oil pump bolt	2
N807033-S439	Damper bolt washer	1
W503282-S437	Chain guide bolt	2
W701501-S	Dowel	1
W714251-S300	Oil pump stud bolt	1
W714252-S300	Oil pump stud bolt	1
W714258-S300	Dowel	3
N807352-S300	Primary tensioner bolt	4

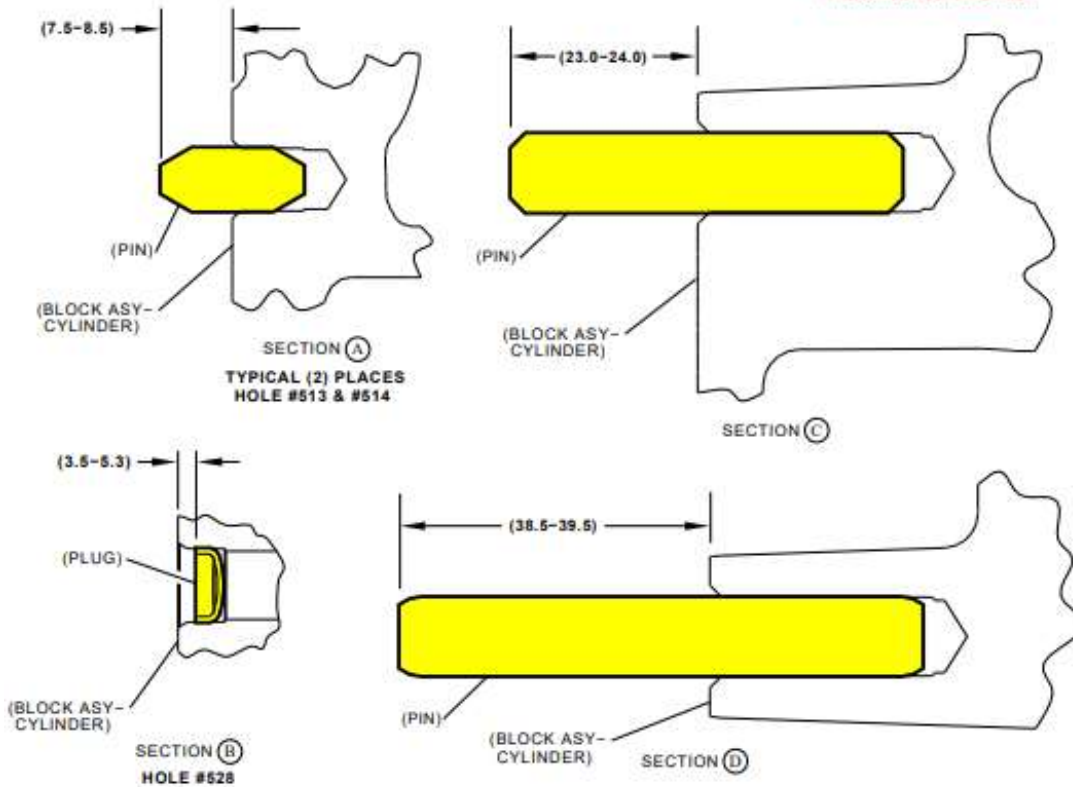
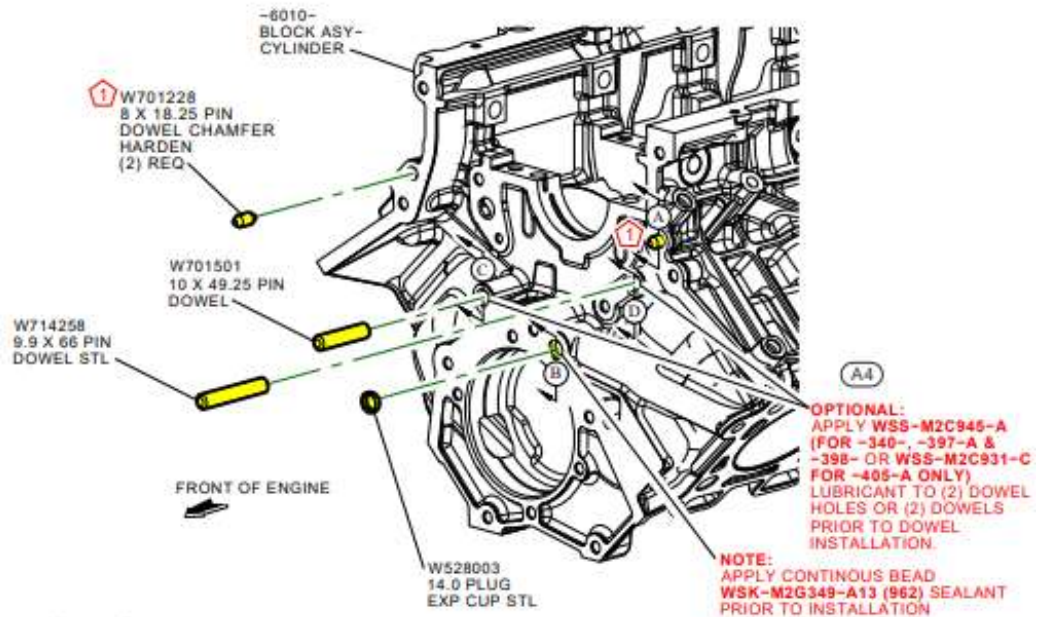
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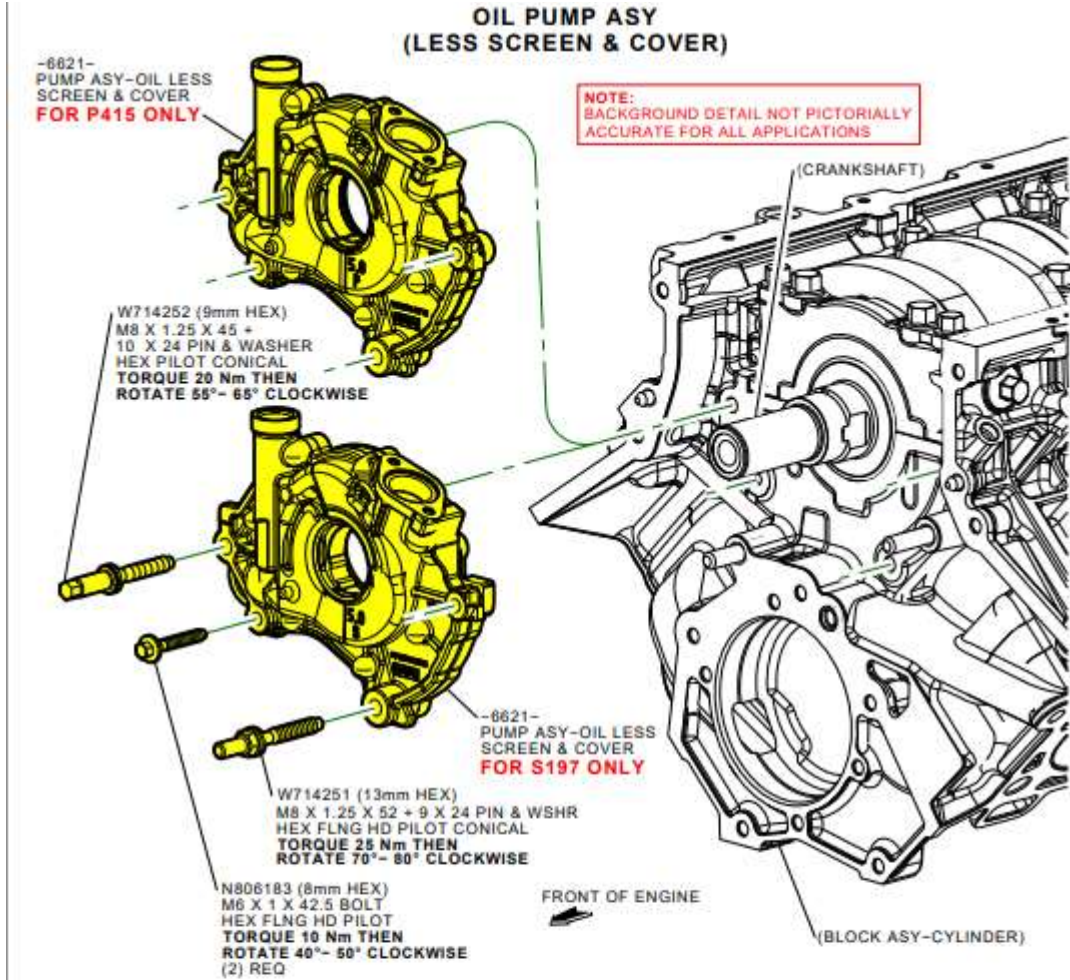
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ASSEMBLY PROCEDURE

1. ROTATE INNER ROTOR OF OIL PUMP ASY (-8621-) TO ALIGN WITH FLATS ON CRANKSHAFT POST AND SLIP OIL PUMP OVER UNTIL SEATED AGAINST BLOCK.

**NOTE:
PUMP MUST BE HELD AGAINST BLOCK UNTIL BOLTS ARE TORQUED.**

2. ROTATE OIL PUMP ASY, ALIGN BOLT HOLES, INSTALL (4) FASTENERS AND SIMULTANEOUSLY TORQUE TO SPECIFICATION.

**NOTE:
FOR PRODUCTION, ROTATION OF CRANKSHAFT DURING TORQUE PROCEDURE IS REQUIRED.**

SINGLE WRENCH METHOD (SERVICE)

1. ROTATE INNER ROTOR OF OIL PUMP ASY TO ALIGN WITH FLATS ON CRANKSHAFT POST AND SLIP OIL PUMP OVER UNTIL SEATED AGAINST BLOCK.

**NOTE:
PUMP MUST BE HELD AGAINST BLOCK UNTIL BOLTS ARE TORQUED.**

2. ROTATE OIL PUMP ASY, ALIGN BOLT HOLES, INSTALL (4) FASTENERS.
3. **TORQUE FASTENERS 0 Nm.**
4. **TORQUE M8 FASTENER W714251 25 Nm, M8 FASTENER W714252 20 Nm AND M6 FASTENERS N806183 10 Nm.**
5. **ROTATE M8 FASTENER W714251 70°- 80° CLOCKWISE, ROTATE M8 FASTENER W714252 55°- 65° CLOCKWISE AND M6 FASTENERS N806183 40° - 50° CLOCKWISE.**

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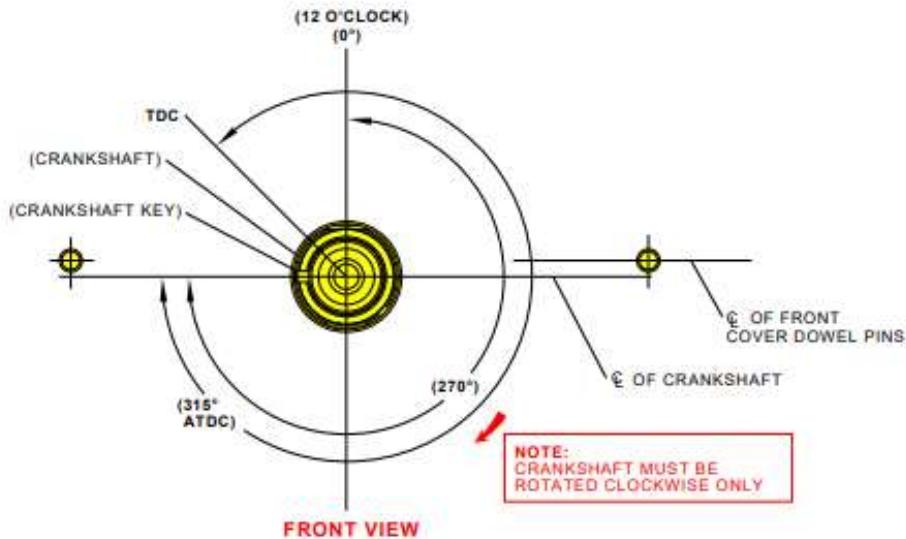
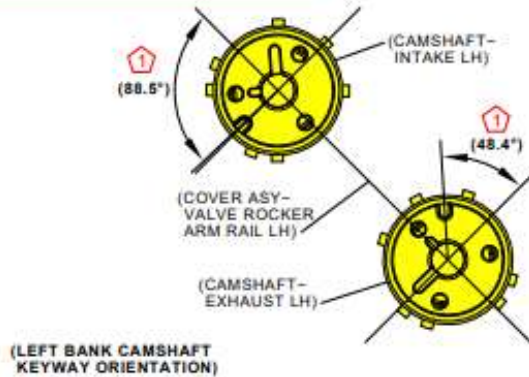
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CRANKSHAFT AND LH CAMSHAFT COMPONENTS (NEUTRAL POSITION)

NOTE:
CRANKSHAFT KEYWAY MUST BE CLOCKED AT (269°-271° (314°-316° ATDC)).
CAMSHAFT MUST BE CLOCKED RELATIVE TO CAM COVER RAIL AS
SHOWN, PRIOR TO CAM DRIVE COMPONENTS RUNDOWN AND TIGHTENING.



NOTE:
CRANKSHAFT, CAMSHAFTS, PRIMARY SPROCKETS & CHAINS, MUST BE POSITIONED TO SPECIFICATION SHOWN, PRIOR TO FASTENER INSTALLATION AND PRELIMINARY RUNDOWN.

⏏ REPRESENTS APPROXIMATE CAMSHAFT KEYWAY POSITIONS WHEN CAMSHAFTS ARE IN TDC FIRING POSITION SHOWN.

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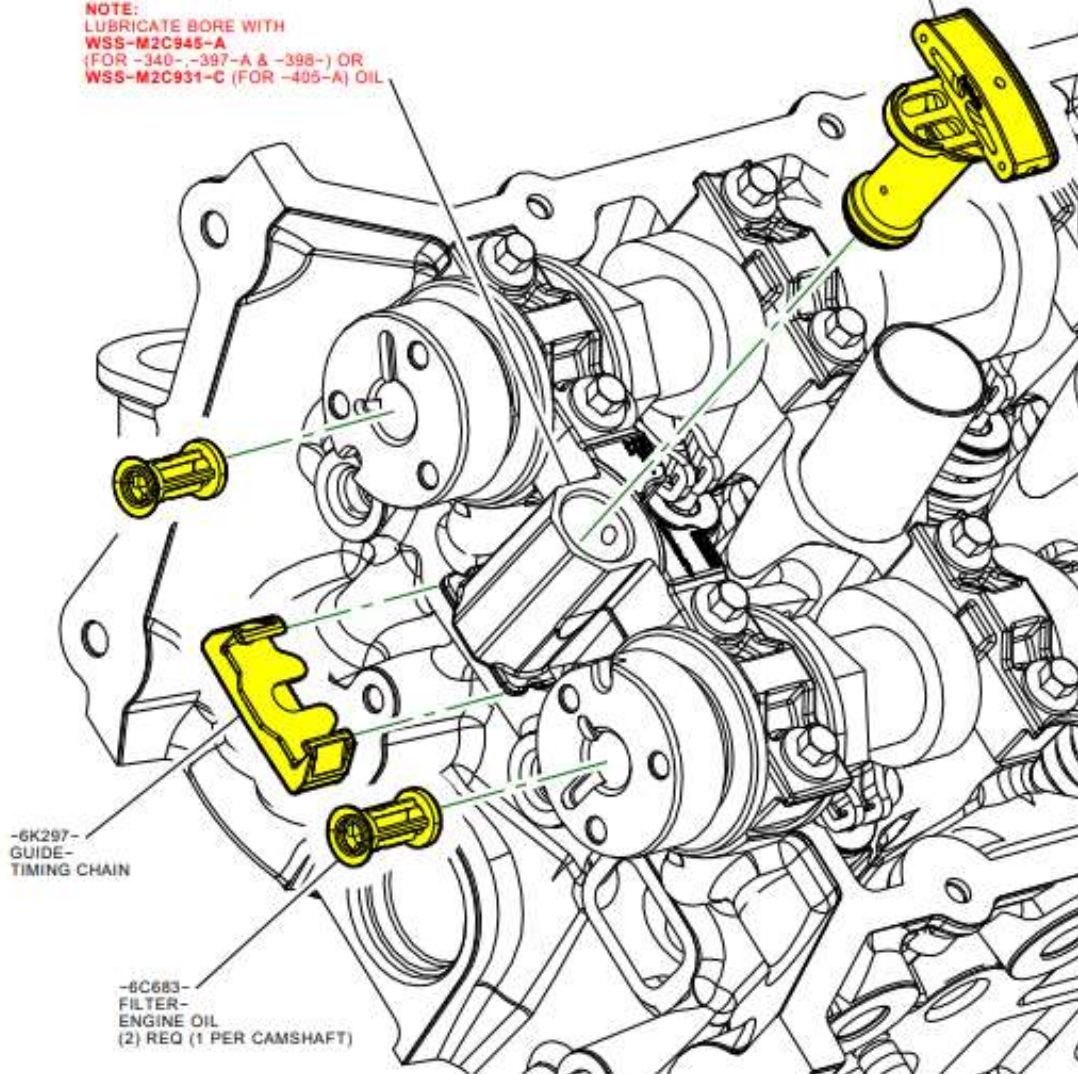
**SECONDARY CHAIN TENSIONER ASY LH, TIMING CHAIN
GUIDE AND ENGINE OIL FILTER**

S197 _____ SHOWN
P415 _____ TYPICAL

-6C270-
TENSIONER ASY-
SECONDARY CHAIN

(CAP ASY-CAMSHAFT
BEARING FRONT)

NOTE:
LUBRICATE BORE WITH
WSS-M2C945-A
(FOR -340-, -397-A & -398-) OR
WSS-M2C931-C (FOR -405-A) OIL



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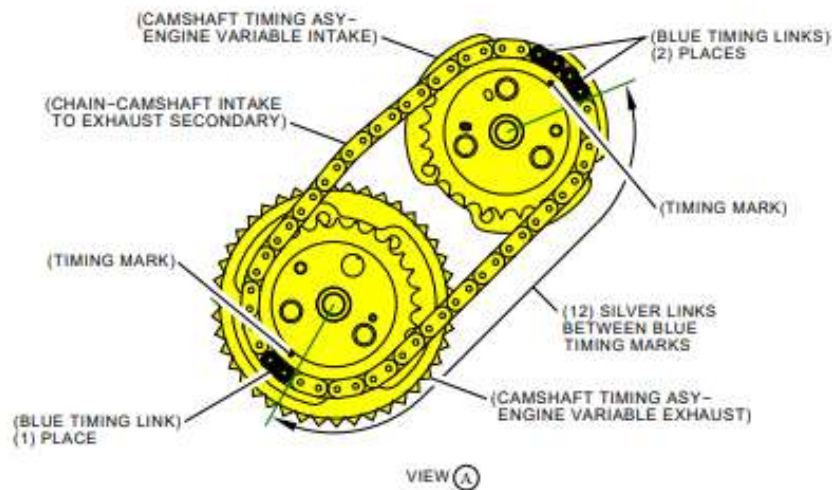
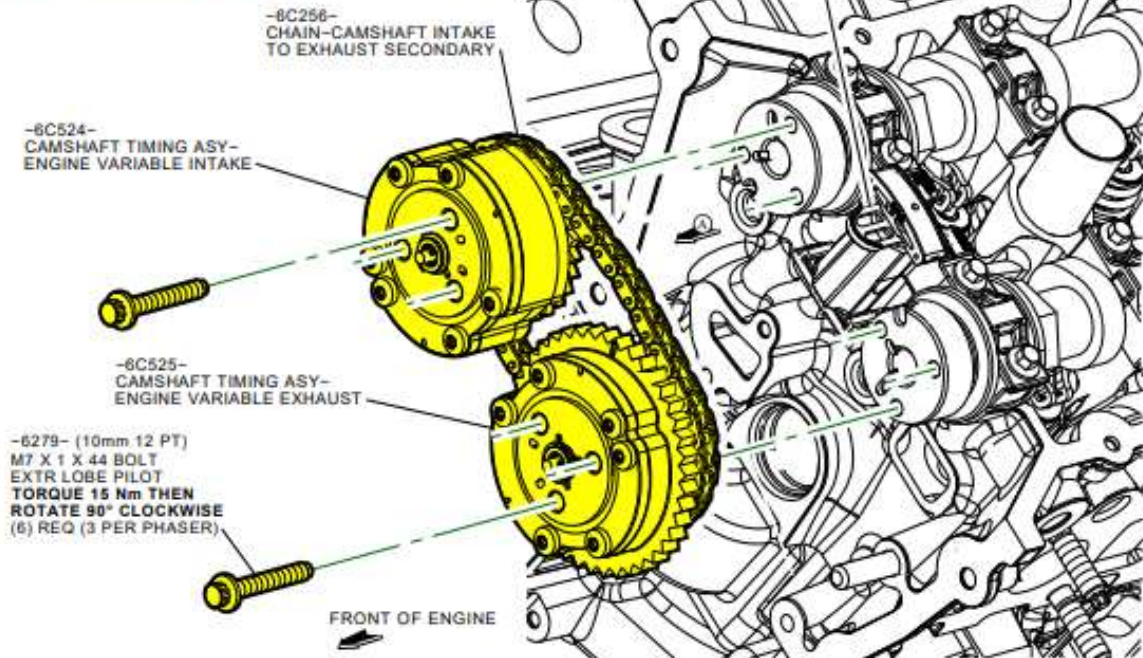
LH SECONDARY CHAIN CAMSHAFT INTAKE TO EXHAUST AND ENGINE VARIABLE CAMSHAFT TIMING ASY

NOTE:
PRE-ASSEMBLE SECONDARY CHAIN TO INTAKE & EXHAUST VCT UNITS. MARKED LINK PLATES LINE UP WITH TIMING MARKS ON ON BOTH INTAKE & EXHAUST VCT UNITS. ALIGN AS SHOWN IN VIEW A.

S197 _____ SHOWN
P415 _____ TYPICAL

(TENSIONER ASY-
SECONDARY CHAIN)
NOTE:
REMOVE CLIP AFTER
VCT AND SECONDARY
CHAIN INSTALLATION.
PUSH DOWN AND
DISENGAGE

(HEAD ASY-
CYLINDER LH)



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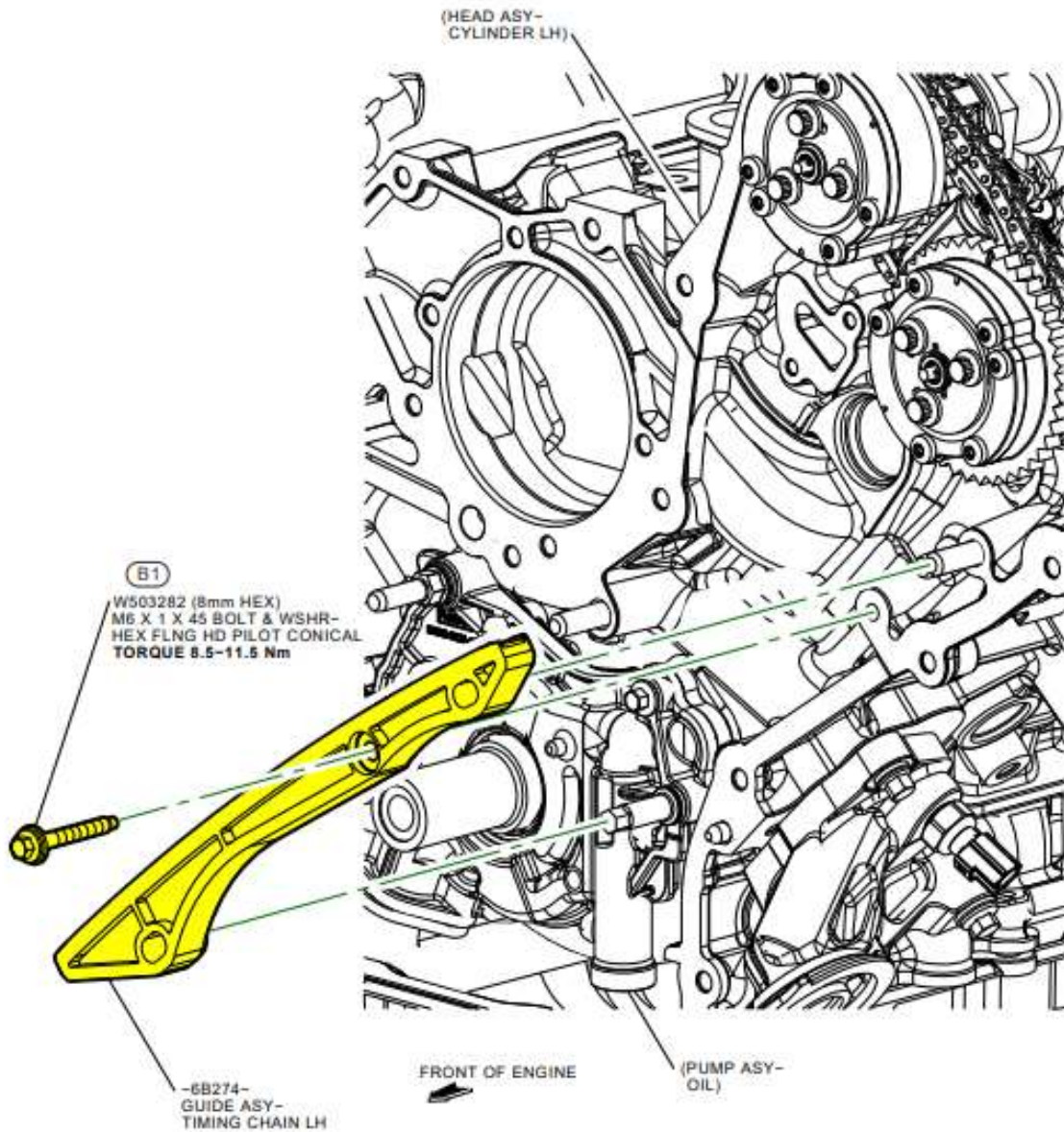
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TIMING CHAIN GUIDE ASY LH

S197 _____ SHOWN
P415 _____ TYPICAL



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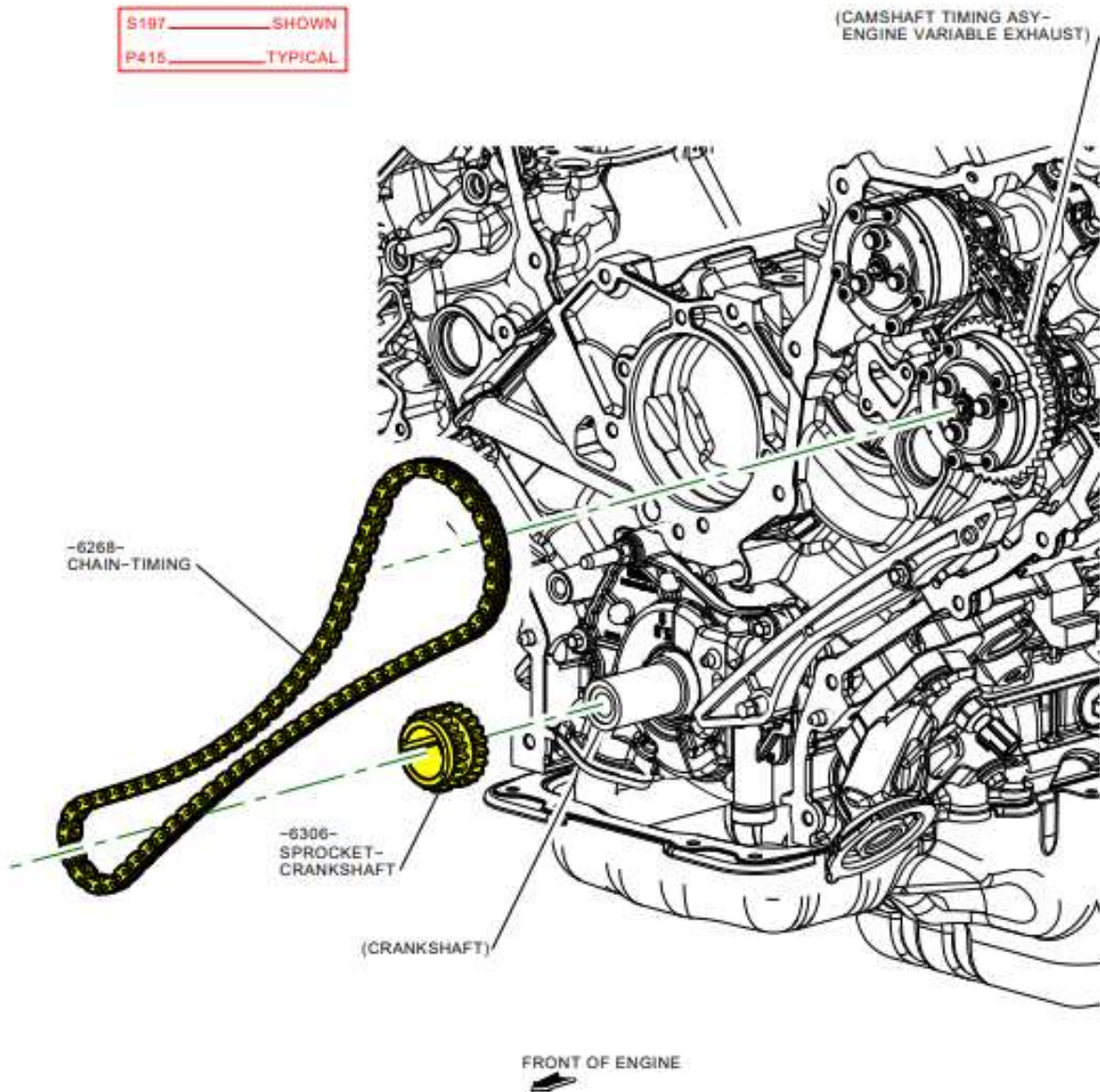


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CRANKSHAFT SPROCKET AND TIMING CHAIN



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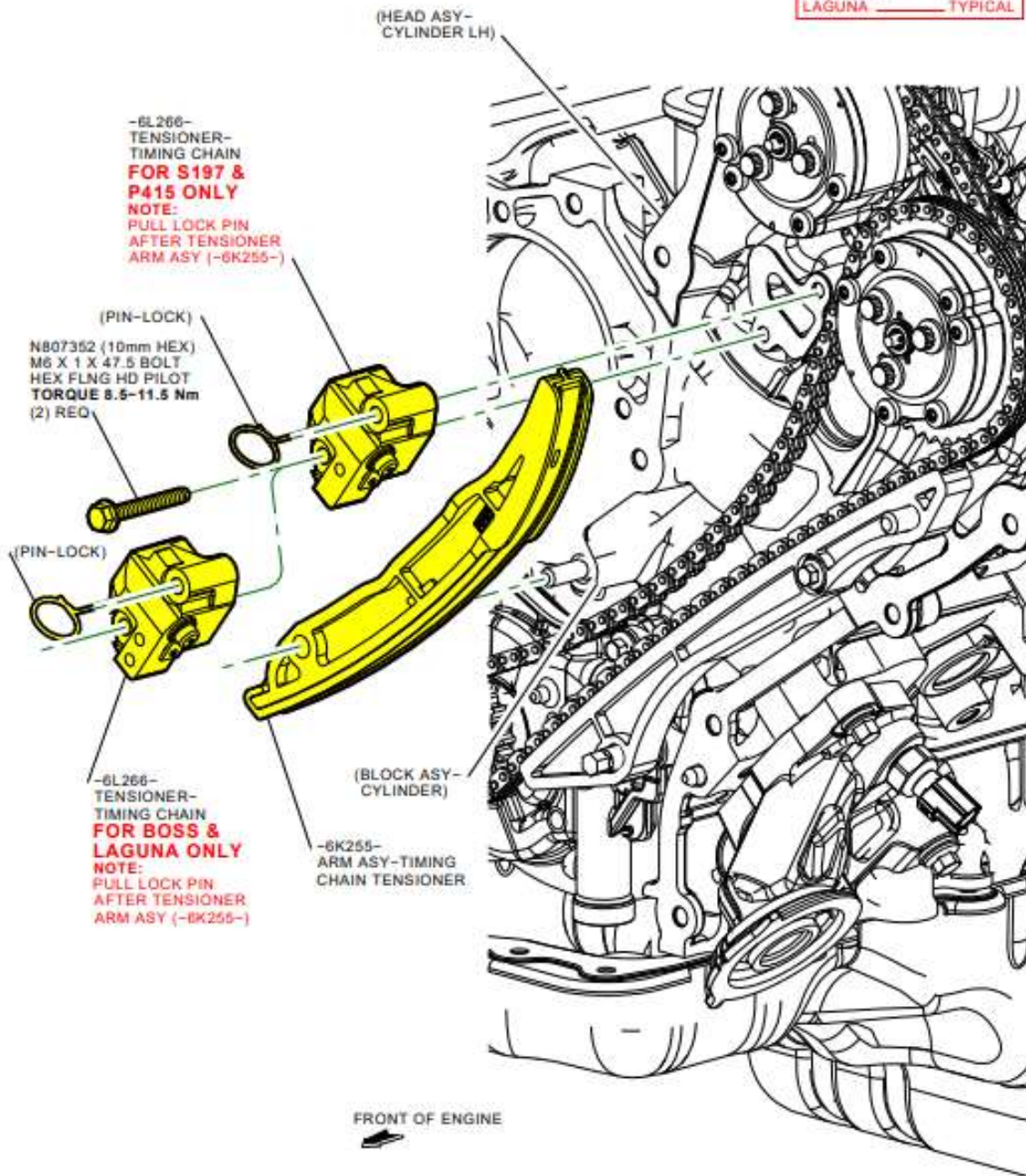
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TIMING CHAIN TENSIONER ARM ASY AND TIMING CHAIN TENSIONER LH

S197 _____ SHOWN
P415/BOSS/
LAGUNA _____ TYPICAL



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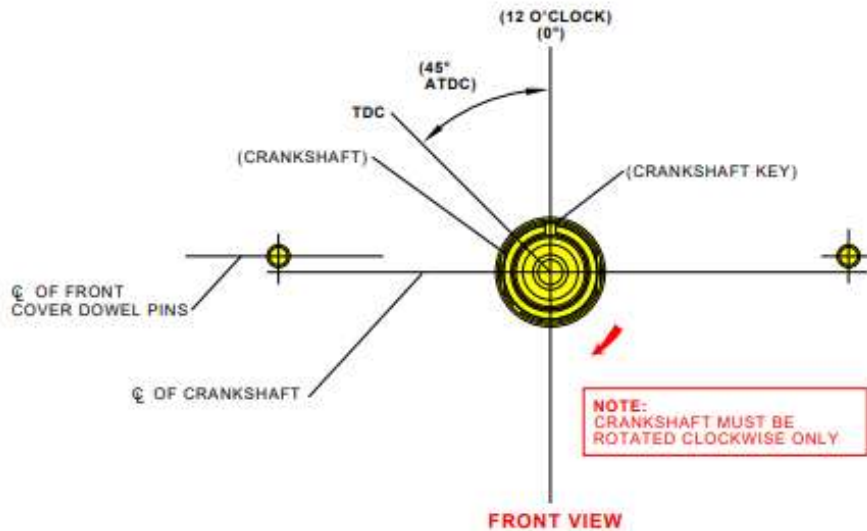
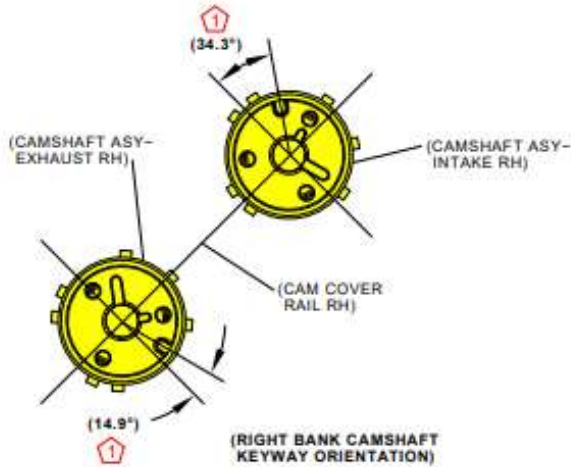
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CRANKSHAFT AND RH CAMSHAFT COMPONENTS (NEUTRAL POSITION)

NOTE:
CRANKSHAFT KEYWAY MUST BE CLOCKED AT (12 O'CLOCK 0° (44°-46° ATDC)).
CAMSHAFT D-SLOTS MUST BE CLOCKED RELATIVE TO CAM COVER RAIL AS SHOWN, PRIOR TO CAM DRIVE COMPONENTS RUNDOWN AND TIGHTENING.



NOTE:
CRANKSHAFT, CAMSHAFTS, PRIMARY SPROCKETS & CHAINS, MUST BE POSITIONED TO SPECIFICATION SHOWN, PRIOR TO FASTENER INSTALLATION AND PRELIMINARY RUNDOWN.

① REPRESENTS APPROXIMATE CAMSHAFT KEYWAY POSITIONS WHEN CAMSHAFTS ARE IN TDC FIRING POSITION SHOWN.

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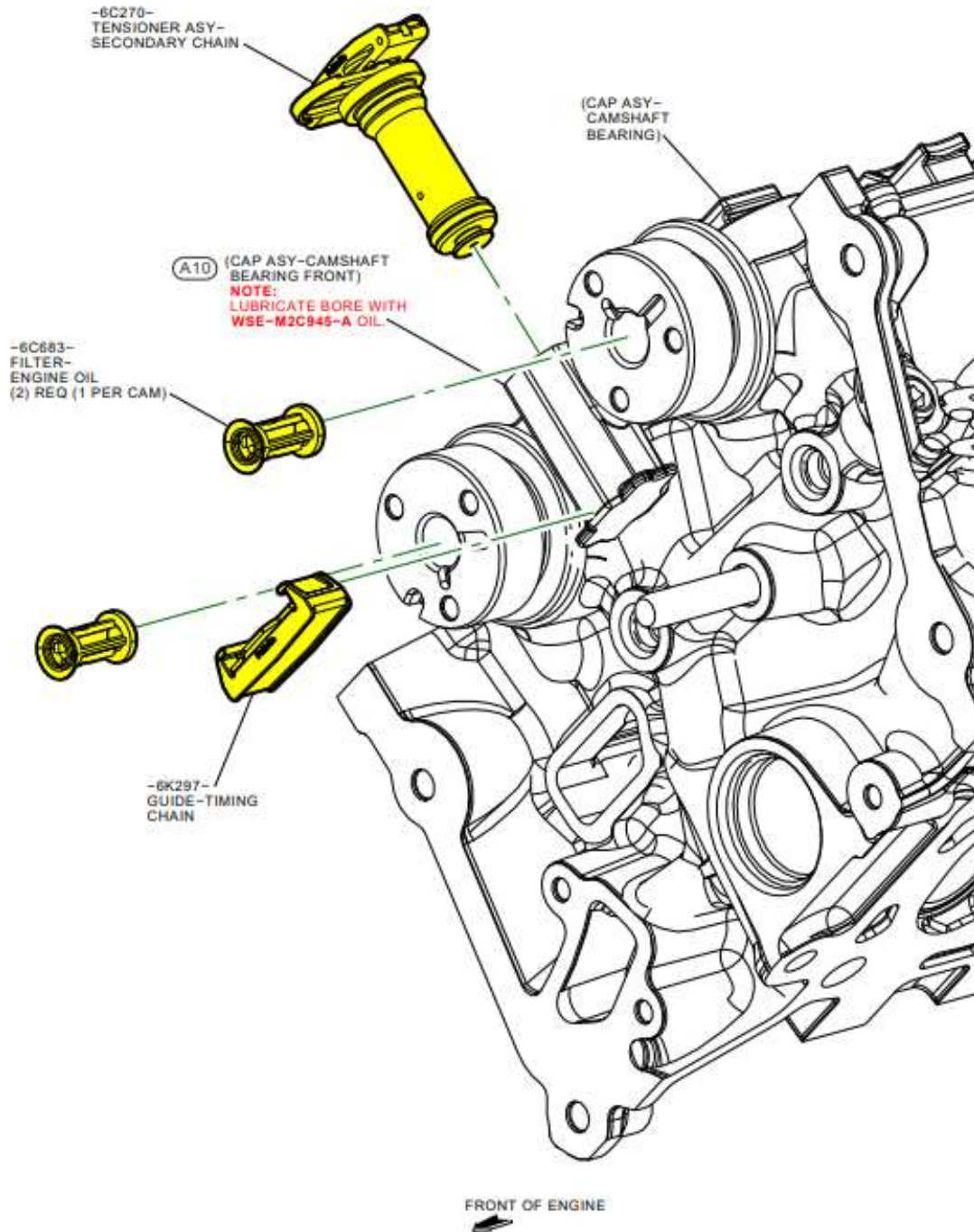


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SECONDARY CHAIN TENSIONER ASY RH, TIMING CHAIN GUIDE AND
ENGINE OIL FILTER



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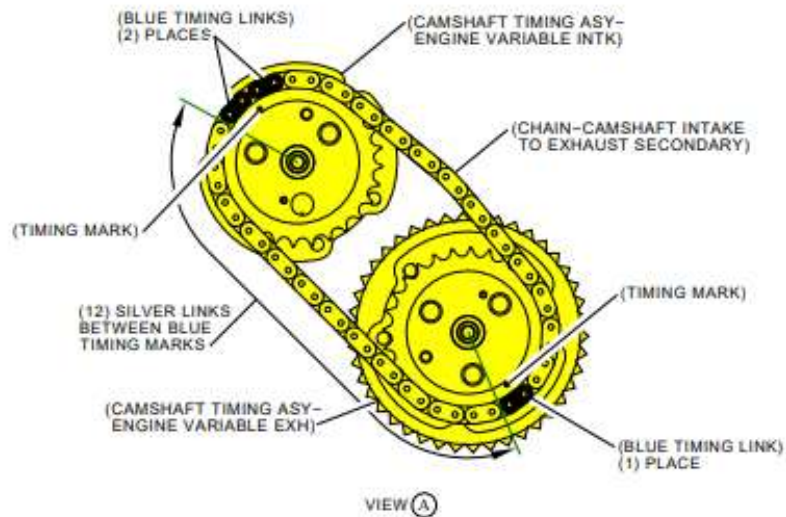
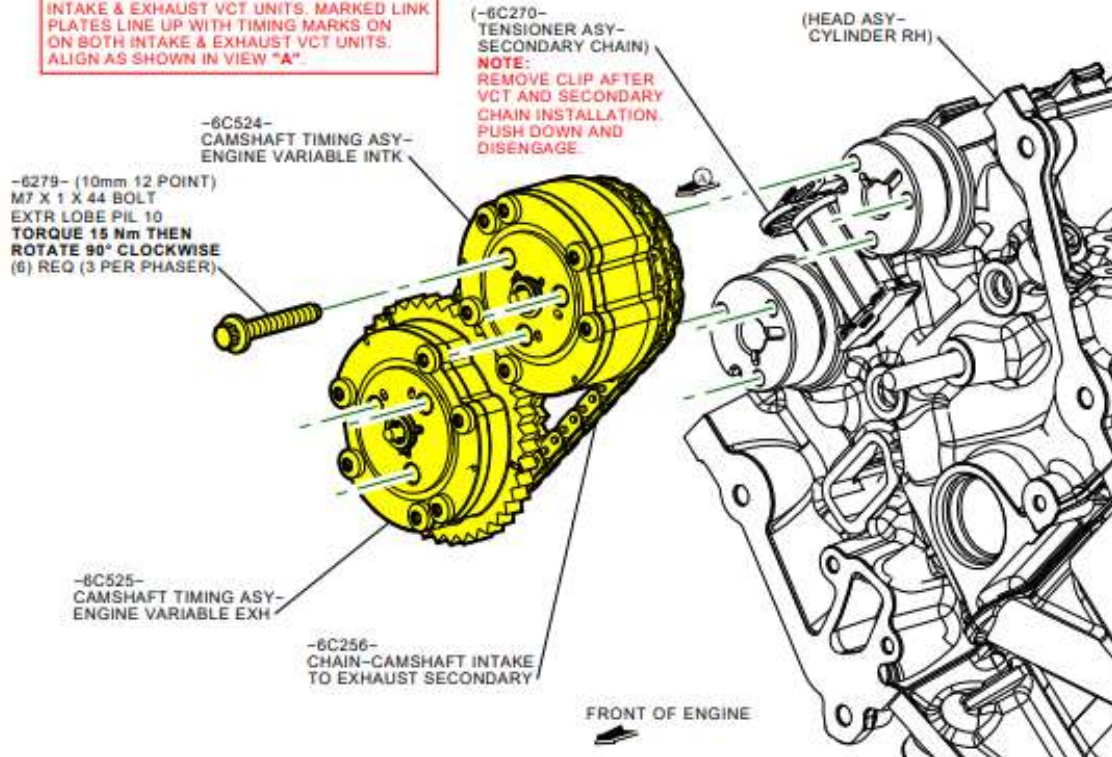
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RH SECONDARY CHAIN CAMSHAFT INTAKE TO EXHAUST AND ENGINE VARIABLE CAMSHAFT TIMING ASY

NOTE:
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ALIGN AS SHOWN IN VIEW "A".



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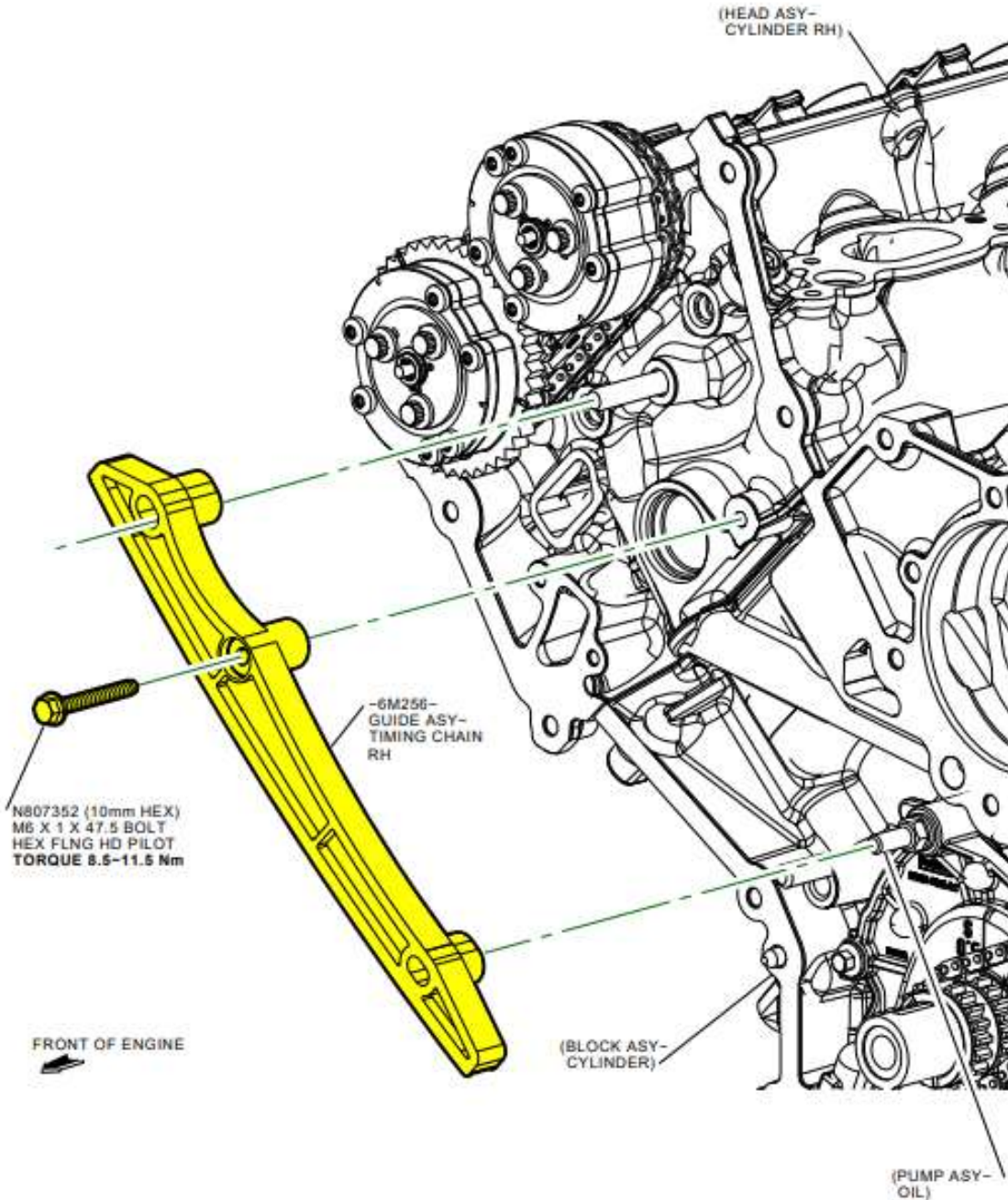


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TIMING CHAIN GUIDE ASY RH



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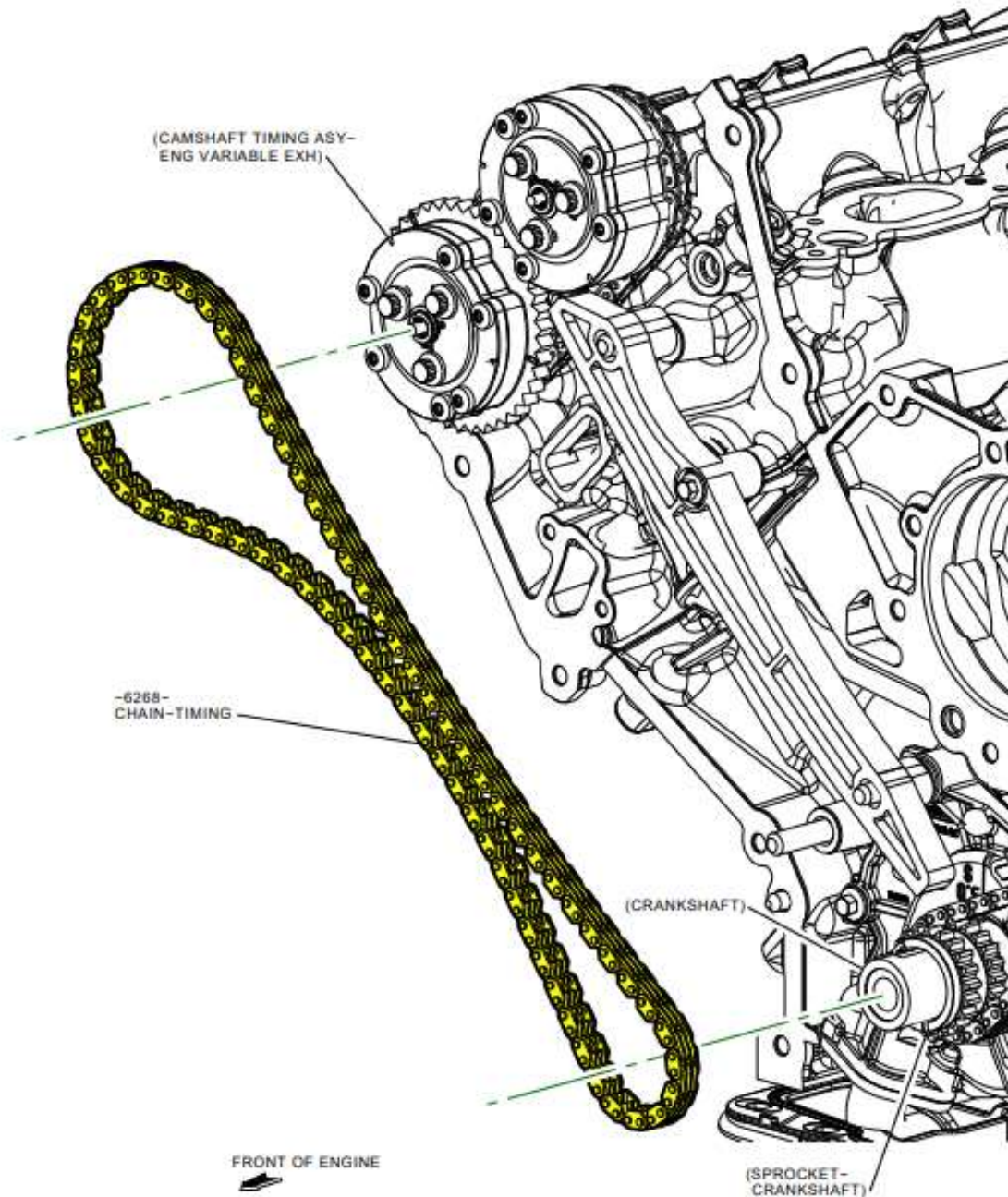


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TIMING CHAIN



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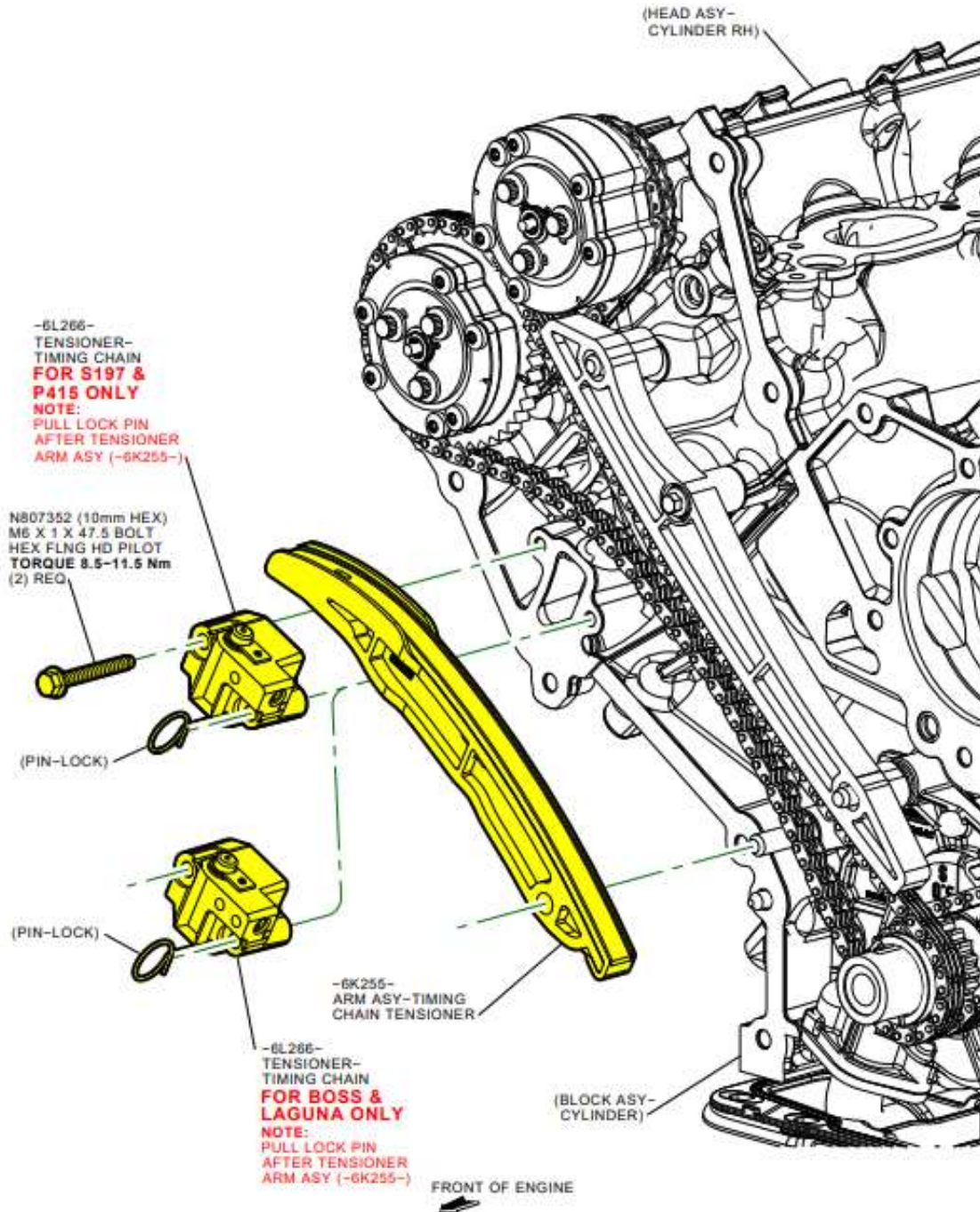


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**TIMING CHAIN TENSIONER ARM ASY AND
TIMING CHAIN TENSIONER RH**



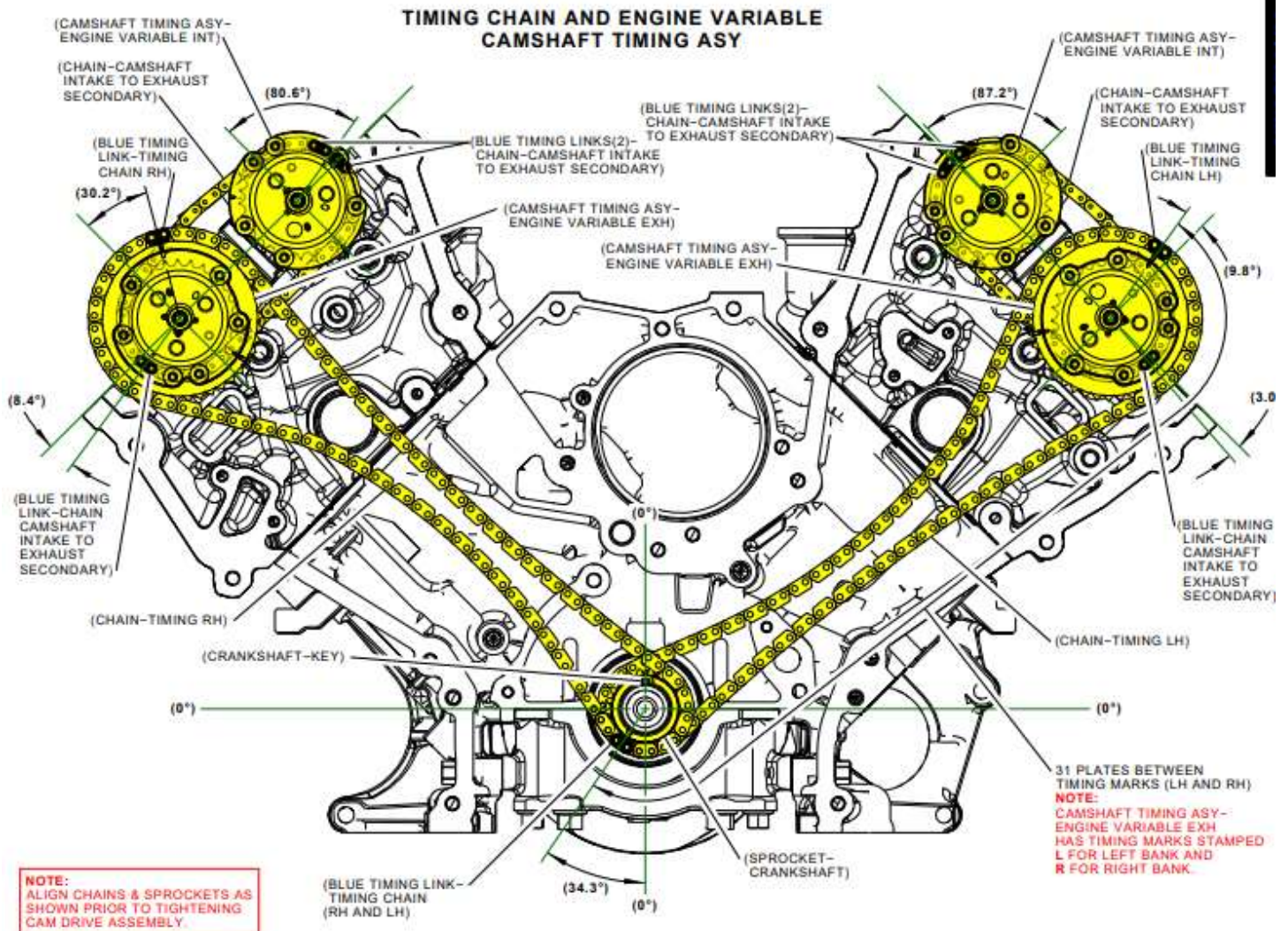
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