



V8 XJ Series/XK8

DATE 8/98

303-28

SERVICE

TECHNICAL BULLETIN

Revised Camshaft Drive Operations – Use Ball-ended Hex Drive Bit

MODEL	1997 MY-ON XK8 Range
	1998 MY-ON V8 XJ Series
VIN	001001-ON
	812256-ON

ISSUE:

Using a 10 mm ball-ended (wobble-drive) hexagon drive bit simplifies engine repair operations that require removing the exhaust camshaft sprocket retaining bolt.

A ball-ended bit allows the following repair operations to be performed without removing the timing cover.

OPERATIONS AFFECTED IN SECTION 303-01:

12-65-63	Timing Chain Tensioner -	Secondary -	'A' Bank -	Replace
12-65-64	Timing Chain Tensioner -	Secondary -	'B' Bank -	Replace
12-65-65	Timing Chain Tensioner -	Secondary -	Engine Set -	Replace
12-65-73	Exhaust Camshaft Sprocket -		'A' Bank -	Replace
12-65-74	Exhaust Camshaft Sprocket -		'B' Bank -	Replace
12-13-15	Exhaust Camshaft-		'A' Bank -	Replace
12-13-17	Exhaust Camshaft-		'B' Bank -	Replace

Labor Time Allowances for the above Service Repair Operations are revised to allow for the change in workshop procedure.

ACTION:

Use a 10 mm ball-ended hexagon drive bit, such as Snap-on FABLM10E, or equivalent (Illustration 1), to remove and retorque the retaining bolt of the exhaust camshaft without removing the timing cover (Illustration 2).



TYPICAL 10MM AF BALL-ENDED DRIVE BIT

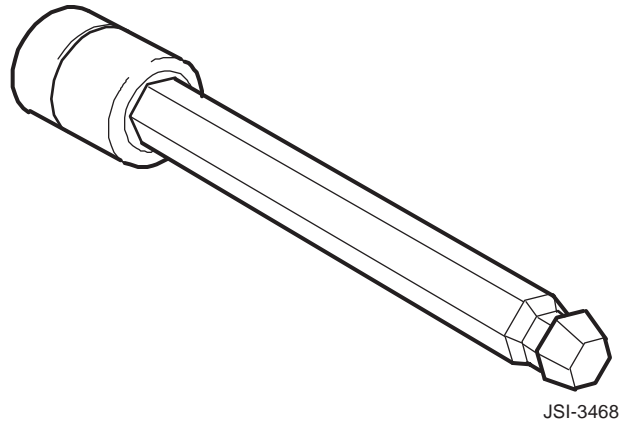


ILLUSTRATION 1

USING BALL-ENDED DRIVE BIT TO REMOVE SPROCKET BOLT

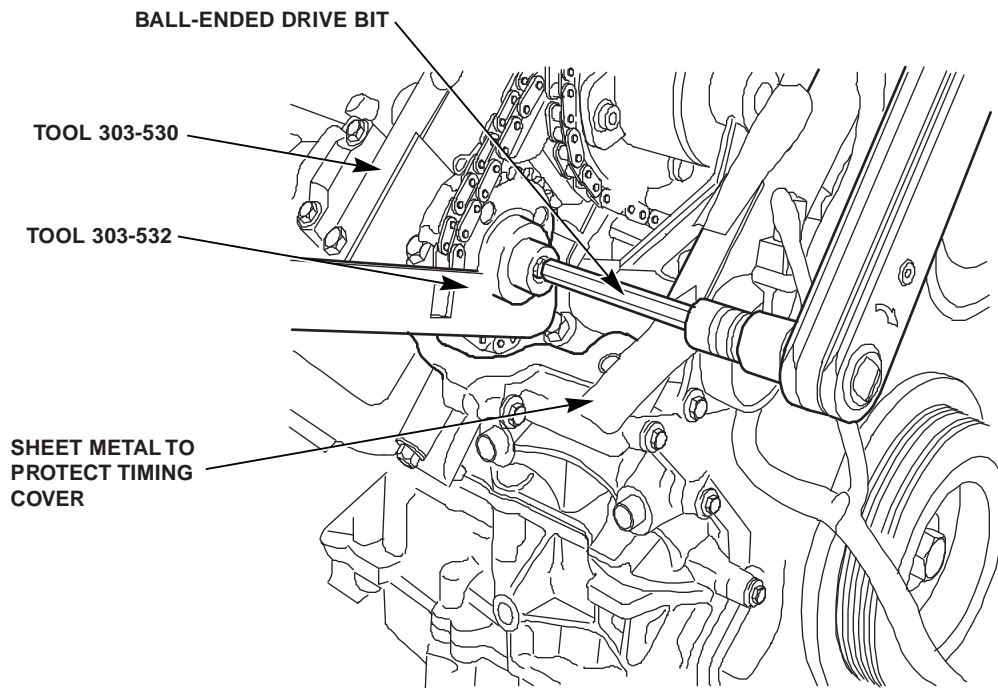


ILLUSTRATION 2

SUMMARY OF REVISED REPAIR PROCEDURE

ACCESS TO EXHAUST CAMSHAFT SPROCKET RETAINING BOLT

OPERATIONS REQUIRED	NOTES
1. Disconnect battery, open hood, remove engine cover(s), remove on-plug coil cover(s) and ignition coils, remove camshaft cover(s).	NO CHANGES
2. Disconnect the gas struts and fully open the hood to the 'service' position.	XK8 ONLY
3. Remove the EVAP Purge Valve.	XK8 ONLY
4. Partially drain the cooling system, remove the radiator closing panel and remove the top radiator hose.	ONLY REQUIRED FOR 'A' BANK ON SUPERCHARGED ENGINES
5. Remove the crankshaft position sensor, remove the torque converter access grommet, rotate engine as required, install crankshaft setting peg 303-531 (JD 216)	BASICALLY AS IN JTIS 4
IMPORTANT: WHEN ROTATING THE ENGINE, ENSURE THAT THE SECURING BOLT OF THE CRANKSHAFT DAMPER IS NOT LOOSEMED.	CHANGE - AS TIMING COVER HAS NOT BEEN REMOVED
6. Install the camshaft setting tool 303-530 (JD 215) and securing bolts.	AS IN JTIS 4 NO CHANGES
7. Position a length of steel strip (approx 150 x 15 x 3 mm) along the top joint face of the timing cover (Illustration 2) and secure it in position with adhesive tape, to protect the machined upper face of the timing cover from any damage from the use of the ball-end drive bit during following operations. IMPORTANT: IF THE SPROCKET RETAINING BOLT ON THE CAMSHAFT ON THE OTHER BANK OF THE ENGINE IS ALSO TO BE REMOVED OR RETORQUED, MAKE SURE THAT THE STEEL STRIP IS ALSO TRANSFERRED SO THAT THE UPPER MACHINED FACE OF THE TIMING COVER IS ALWAYS PROTECTED WHENEVER THE BALL-ENDED DRIVE BIT IS IN USE.	IMPORTANT CHANGE
8. Apply a Snap-on FABLM10E or equivalent ball-end drive bit and square-drive wrench to the camshaft sprocket securing bolt, loosen and remove the bolt. (See Illustrations). IMPORTANT: DURING THIS AND ANY SUBSEQUENT OPERATIONS ENSURE THAT NOTHING IS DROPPED INTO THE OPEN TIMING CASING. Access is now available for the other listed repair operations that require removing the exhaust camshaft sprocket retaining bolt.	CHANGE AS JTIS 4
9. Reassembly is basically the reverse of the above procedure.	

WARRANTY INFORMATION:

Revised Labor Time Allowances apply to the Service Repair Operations listed on Page 1.
Effective September 1, 1998.

XK8

<u>S.R.O.</u>	<u>DESCRIPTION</u>	<u>LABOR TIME ALLOWANCE</u>
		<u>4.0L</u>
12-65-63	Timing Chain Tensioner - Secondary - 'A' Bank - Replace -	1.60 hours
12-65-64	Timing Chain Tensioner - Secondary - 'B' Bank - Replace -	1.70 hours
12-65-65	Timing Chain Tensioner - Secondary - Engine Set - Replace -	2.85 hours
12-65-73	Exhaust Camshaft Sprocket - 'A' Bank - Replace -	1.55 hours
12-65-74	Exhaust Camshaft Sprocket - 'B' Bank - Replace -	1.65 hours
12-13-15	Exhaust Camshaft - 'A' Bank - Replace -	2.85 hours
12-13-17	Exhaust Camshaft - 'B' Bank - Replace -	2.95 hours

V8 XJ SERIES FROM VIN 812256

<u>S.R.O.</u>	<u>DESCRIPTION</u>	<u>LABOR TIME ALLOWANCE</u>	
		<u>4.0L</u>	<u>4.0L SC</u>
12-65-63	Timing Chain Tensioner - Secondary - 'A' Bank - Replace -	1.60 hours	2.60 hours
12-65-64	Timing Chain Tensioner - Secondary - 'B' Bank - Replace -	1.55 hours	1.55 hours
12-65-65	Timing Chain Tensioner - Secondary - Engine Set - Replace -	2.75 hours	3.75 hours
12-65-73	Exhaust Camshaft Sprocket - 'A' Bank - Replace -	1.55 hours	2.55 hours
12-65-74	Exhaust Camshaft Sprocket - 'B' Bank - Replace -	1.50 hours	1.50 hours