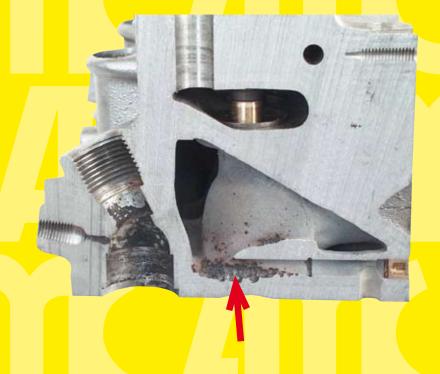






CYLINDER HEADS: MAIN BREAKDOWN CAUSES

1. Aluminium Corrosion/Cavitation

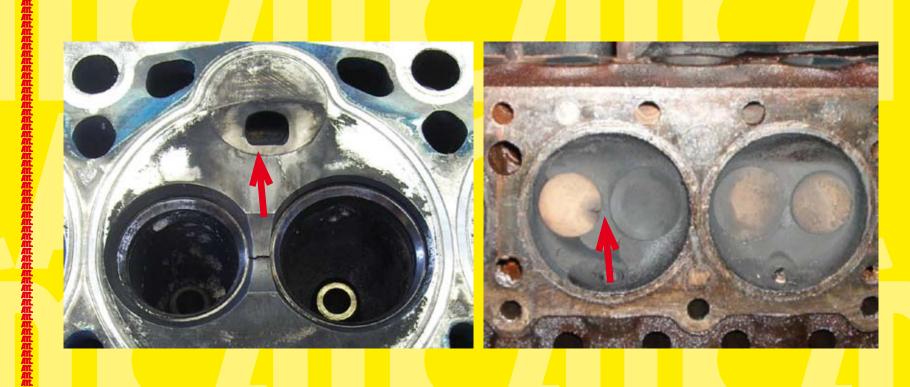




Use of poor coolants or simple water leads to aluminium corrosion.

Same head, but the customer used a quality coolant. No corrosion occurred.

2. Overheating



Damages caused by cooling system malfunctions.

3. Injection Failure



Faults in the injectors flow (incorrect adjustment, dirty hoses, etc.) can cause fuel leaks in the piston chamber.

The cyclic blast of these fuel de-

posits can burn and erode the aluminium of the cylder head main face.

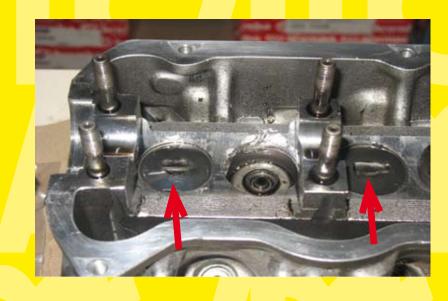
4. Overtorque (on caps or injectors)





The proper torque given by the OE manufacturer must always be respected. If not, cracks and breakings an affect caps or injector lodgings.

5. Installation Failure





The correct timing belt positioning and distribution adjustment must be carefully respected when repairing an engine.

6. Use ofold bolts.



	A	REFERENC	CIA	MODELO MOTOR				OPERACIONES Y PARES DE APRIETE en Nm o ANGULARES en GRADOS (*) TIGHTENING SEQUENCE, TORQUES In Nm and ANGLES in DEGREES (*) OPERATIONS ET COUPLES DE SERRAGE en Nm ou ANGULAIRES en DEGRES (*)											
H		REFEREN AMC		ENGINE TYPE					YLINDE	RHEAD	NCLAJE DE CULATA A BLOQUE D BOLT TIGHTENING SEQUENCE S DE SERRAGE DES VIS						Puentes árbol levas Camshaft caps	Inyectores	
U		RÉFEREN AMC		TYPE MOTEUR	1	2	3	4	5	6	7	8	9	10	11	Tomillos Bolts Vis de culasse	¿Reapriete? Re-tighten? Resserrage?	Chapeaux de palieres d'arbres à cames	Injectors Injecteurs
D A	90	08511 - 908 08512 - 908 08513 - 908 08770 - 908	8612 8613	4D55 4D56/T D4BH	40	80	120	(1)	120	(2)	(3)	(4)	(1)	120			SI YES OUI 1.000 KM (1) 120I	20	50-60
Г	901	18067 - 908 908367	167	XUD9 A/L D9B	20	40	60	(1)	60	90°	90°						NO	20	90
(3) E	DEJAI DEJAI	R ENFRIA	R EL M	DURANTE 10 MM DTOR, CON EL CA ESCAPAR	APOT AB	IIERTO,	4 HORAS		MA DI		(2) WA (3) LET	T THE EN	ENGINE I	JP DURI	NG 10 M N, WITH	INUTES AT 3 THE BONNE I MUST BE R	T OPEN, 4 H	OURS	
(3) C (4) C F (1) C (2) F (3) L	DEJAR REFRI DESSI RÉCH. LAISS	R ENFRIAI R IIGERACIÓ ERRER DE IAUFFER L SER REFRO	MOTOR R EL MO N E 90° TO LE MOTO DODIR L	DURANTE 10 MIN	LA P	ES AUX S	HORAS N DEL	SISTE	MA DI		(2) WA (3) LET (4) PRI (1) ALI (2) DEI (3) DEI	LE BOLZ N MOTOI	ENGINE I GINE CO IN THE C EN EINE R 10 MINU	UP DURI DL DOW DOLING VIERTEL ITEN LA DEN ABI	NG 10 M N, WITH SYSTEM DREHUP NG WAR	INUTES AT 3 THE BONNE	T OPEN, 4 H ELEASED N LASSEN, 3.0 T GEÖFFNE	00 RPM TER MOT	ORHAUBE
(1) C (2) F (3) L (4) L	DEJAR REFRI DESSI RÉCH. LAISS LAISS DESAI AQUE DEIXA	R ENFRIAI R R HIGERACIÓ ERRER DE LAUFFER L SER REFRO SER ÉCHAI L PARAFUS ECER O MC AR ESFRIA	MOTOR R EL MO N E 90° TO E MOTI DIDIR LI PPER L AR 90° OTOR E IR O MO	DURANTE 10 MIN DTOR, CON EL CA ESCAPAR BUTES LES VIS EUR PENDANT 1 E MOTEUR, AVEC	APOT ABE	ES AUX 3 POT OUVE DE REI	4 HORAS N DEL 8.000 RP ERT, 4 H FROIDIS	SISTE M EURES SEMENT	MA DI		(2) WA (3) LET (4) PRI (1) ALI (2) DE (3) DE (4) DE (1) ALI (2) RIS (3) LA	LE BOLZ N MOTOI N MOTOI R DRUCK	ENGINE IGNE CO IN THE CO IN T	UTTE LE	OREHUP NG WAR OHLEN I MUSS VITI R 10 MIN OTORE	INUTES AT 3 THE BONNE I MUST BE R NG LOCKER IM LAUFEN II	T OPEN, 4 H ELEASED N LASSEN, 3.0 T GEÖFFNETEN WERDEN RPM ANO APERT	00 RPM TER MOT	ORE
(1) C (2) F (3) L (4) L	DEJAR REFRI DESSI RÉCH. LAISS LAISS DESAI AQUE DEIXA	R ENFRIAI R R HIGERACIÓ HERRER DE LEER REFRE SER ÉCHAI HPARAFUS ECER O MC AR ESFRIA AR ESCAP	MOTOR R EL MO N E 90° TO E MOTI DIDIR LI PPER L AR 90° OTOR E IR O MO	DURANTE 10 MINI OTOR, CON EL CI ESCA PAR NUTES LES VIS EUR PENDANT 1 E MOTEUR, AVEC A PRESSION DU : TODOS LOS PAR DURANTE 10 MINI UTOR, COM O CA	APOT ABE	ES AUX 3 OOT OUVIE DE REI	4 HORAS N DEL 8.000 RP ERT, 4 H FROIDIS	SISTE M EURES SEMENT	MA DI		(2) WA (3) LET (4) PRI (1) ALI (2) DE (3) DE (4) DE (1) ALI (2) RIS (3) LA	LE BOLZ N MOTOI N MOTOI R DRUCK	ENGINE IGNE CO IN THE CO IN T	JP DURID DU DOU DOU DOU DOU DOU DOU DOU DOU DOU	OREHUP NG WAR OHLEN I MUSS VITI R 10 MIN OTORE	INUTES AT 3 THE BONNE I MUST BE R NG LOCKER MI LAUFEN I LASSEN MI ABGELASSI JUTI A 3.000 CON IL COF NE DEL SIST	T OPEN, 4 H ELEASED N LASSEN, 3.0 T GEÖFFNETEN WERDEN RPM ANO APERT	00 RPM TER MOT	ORE

- Old, lengthened bolts can prevent the achievement of the proper torque. New bolts must be used at all times and especially in new cylinder heads, to ensure a satisfactory reparation.
- It is also very important to carefully follow the bolts torque sequence. Those information sare always included in our bolts sets.