

Topic No.	Rev. Level	Topic Date	Group No.	
95T2-1	—	01-Jan-1995	02	
Expiration Date (U.S. and Canada): —		Expiration Date (International): —		
Engine Family	Fuel System	Plant	Build Date	
			From	To
4B, B3.9	All	Default	01-Jan-1900	31-Dec-9999
6B, ISB, QSB5.9, B5.9	All	Default	01-Jan-1900	31-Dec-9999
Design Application		Market Application		
All		All		

B Series Cylinder Head (Field Fix 187) (t014)

This Service Parts Topic will obsolete and supersede service parts topic 94T2–4 due to parts changes and information errors.

B Series Cylinder Heads

The 4B Series and 6B Series pre–1991 model cylinder heads with the 9 mm injector bores have been made obsolete and have been superseded by the 1991 model industrial cylinder heads with 7 mm injector bores. When servicing all pre–1991 engines, the 1991 model industrial cylinder head should be used to retain the correct swirl for combustion purposes. If the 1991 model automotive cylinder head, (low swirl) is used on any pre–1991 model engine, poor performance and smoke issues can result due to improper combustion.

The “Injection Pumps and Injectors Midrange Engines” Manual , Bulletin No. 3666037, should be used to cross reference the old 9 mm injector to the correct 7 mm injector when updating to the 7 mm injector bore cylinder head.

All marine premium cylinder heads have 7 mm injector bores and high swirl pattern only. A low swirl marine premium head is being developed and will be released at a later date.

Field Fix 187 provides authorization to use the new cylinder heads on the certified models and CPLs listed below:

Family	Model	Cylinder Head	CPL	Agency	Effect Date	Term Date
403	6BTA5.9	3917055	600	EPA	10SEP1987	31DEC1989
		3917055	856	CARB	16DEC1987	31DEC1990
402	6BT5.9	3917055	716	CARB	21FEB1986	31DEC1987
		3917055	761	EPA	31JAN1986	31DEC1987
		3917055	804	CARB	23OCT1987	31DEC1990
383	4BTA3.9	3919357	595	EPA	05JUN1986	31DEC1987
		3919357	857	CARB	23DEC1987	31DEC1990
382	4BT3.9	3919357	727	CARB	03FEB1986	31DEC1987

“FF 187” **must** be stamped on the engine data plate when the cylinder head upgrade is performed on these CPLs for compliance with emission documentation requirements.

B Series Cylinder Heads						
Engine Model	4B (6)	4B	6B (6)	6B	6B	6B
Application	All Industrial and pre - 1991 Auto	Auto 1991 to 1993	Industrial 177 hp and Under and Pre- 1991 Auto	Auto 1991 to 1994	Industrial Above 177 hp	Marine
Injector Size	7 mm	7 mm	7 mm	7 mm	7 mm	7 mm
Swirl	High	Low	High	Low	Low	High
Complete Head (1)	3802339	3927330	3802340	3927300 (2) 3927301	3927301	3927303
Machined Head (3)	3919357	3926427	3917055	3925401	3925401	3925763

Intake Valve	3920867	3920867	3920867	3920867	3920867	3920867
Exhaust Valve	3920868	3920868	3920868	3920868	3920868	3925175
Intake Spring	3926700	3926700	3926700	3926700	3926700	3926700
Exhaust Spring (4)	3926700	3926700	3926700	3926700	3926700	3925667
Intake Retainer	3900299	3900299	3900299	3900299	3900299	3900299
Exhaust Retainer	3900299	3900299	3900299	3900299	3900299	3925666 (7)
Intake Stem Seal (5)	3921640	3921640	3921640	3921640	3921640	3921640
Exhaust Stem Seal	39910097	3901097	3901097	3901097	3901097	3901640
Intake Insert	3906854	3906854	3906854	3906854	3906854	2925177
Exhaust Insert	3904105	3904105	3904105	3904105	3904105	2925176
Collets	3900250	3900250	3900250	3900250	3900250	3900250

NOTE

1. Complete cylinder head include valves, springs, seals, etc., and is ready for installation.
2. Cylinder head, Part No. 3927300, has Part No. 3916691 exhaust brake spring installed from the factory.
3. The bare machined head without expansion plugs installed, or seat inserts if marine.
4. Exhaust brake valve spring for automotive is Part No. 3916691.
5. Use Part No. 3901097 seals on the intake valves for naturally aspirated engines.
6. Pre 1991 model cylinder heads with 9 mm injector bores are no longer produced and have been superseded to the 1991 model cylinder head. Consult the Injection Pumps and Injectors Midrange Engines manual for the 7 mm injector needed.
7. Marine retainer is a valve rotator.

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