THE ELECTRONIC FUEL INJECTION SYSTEM

Digital 'P' Pressure Sensing Type

Description

The electronic fuel injection system is divided into two sub-systems interconnected only at the injectors

The systems are

- 1 The fuel system delivering to the injectors a constant supply of fuel at the correct pressure, 2.5 bar (38 lbf in)
- 2 The electronic sensing and control system which monitors engine operating conditions of kaid, speed, temperature (coolant, and induction air) and throttle movement. The control system then produces electrical pulses of appropriate width to hold open the injector solenoid valves and allows the correct quantity of fuel to flow through the nozzle for each engine cycle

As fuel is held constant, varying the pulse width increases or decreases the amount of fuel passed through the injector to comply with the engine requirements

Pulse width and therefore fuel quantity is also modified to provide enrichment during starting and warming-up, at closed throttle, full throttle and while the throttle is actually opening

The injectors are operated by the Electronic Control Unit (ECU) in two groups of six. Each is further broken into two sub-groups of three, although each pair of sub-groups is operated simultaneously to make up the two groups of six twice per engine cycle

Injection in two groups of six

A Ba	ink		ВВа		
1A	3A	5A	1B	3B	5B
2A	44	6A	28	4B	68

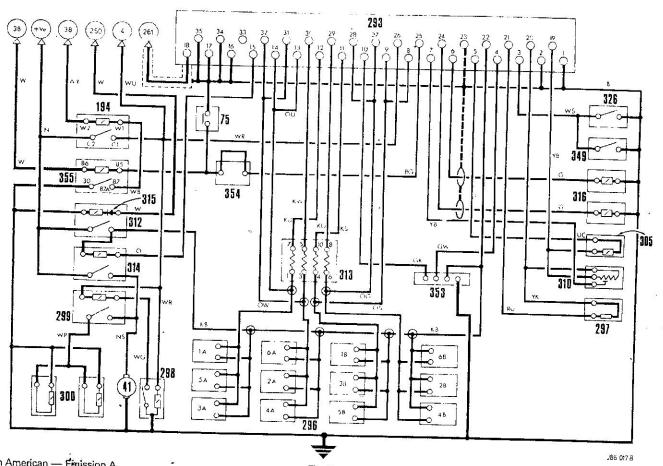
Firing order:

1A 6B 5A 2B 3A 4B 6A 1B 2A 5B

Cylinders numbered from front of engine

The induction system is basically the same as that on a carburetted engine tuned ram pipe, air cleaners, plenum chambers and induction ports Air is drawn through paper element cleaners to a butterfly vaive for each bank and to individual ports for each cylinder leading off the pienum chamber. The injectors are positioned at the cylinder nead end of each port so that fuel is directed at the back of each inlet valve

ĺ		A	11)	(4)	(3)	(4)	(5)	- (6,	
l	Front							Sales	
		В	(1)	(2)	(3)	(4)	(5)	(6)	
ĺ	(1)	Inlet op	13	13° BTDC					
	(2)	Inlet clo	oses				OAB	100000	
	(3)	Ingition	W	ith	engin			rmai	
		operatii	ng te	mper	ature				
			K/Eu.		24° BTDC				
	35	All others			25—27°				
						BTD	С		
	(4)	Exhaus	t ope	ens		55° B B D C			
	(5)	Exhaust closes 13° ATDC						7	



North American — Emission A