

Hartridge

All Makes Common Rail Injector Test

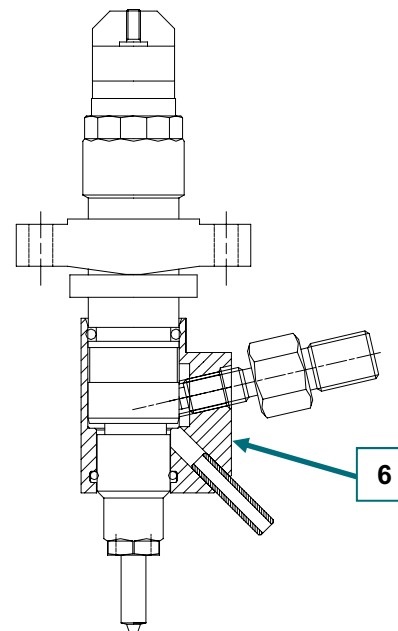
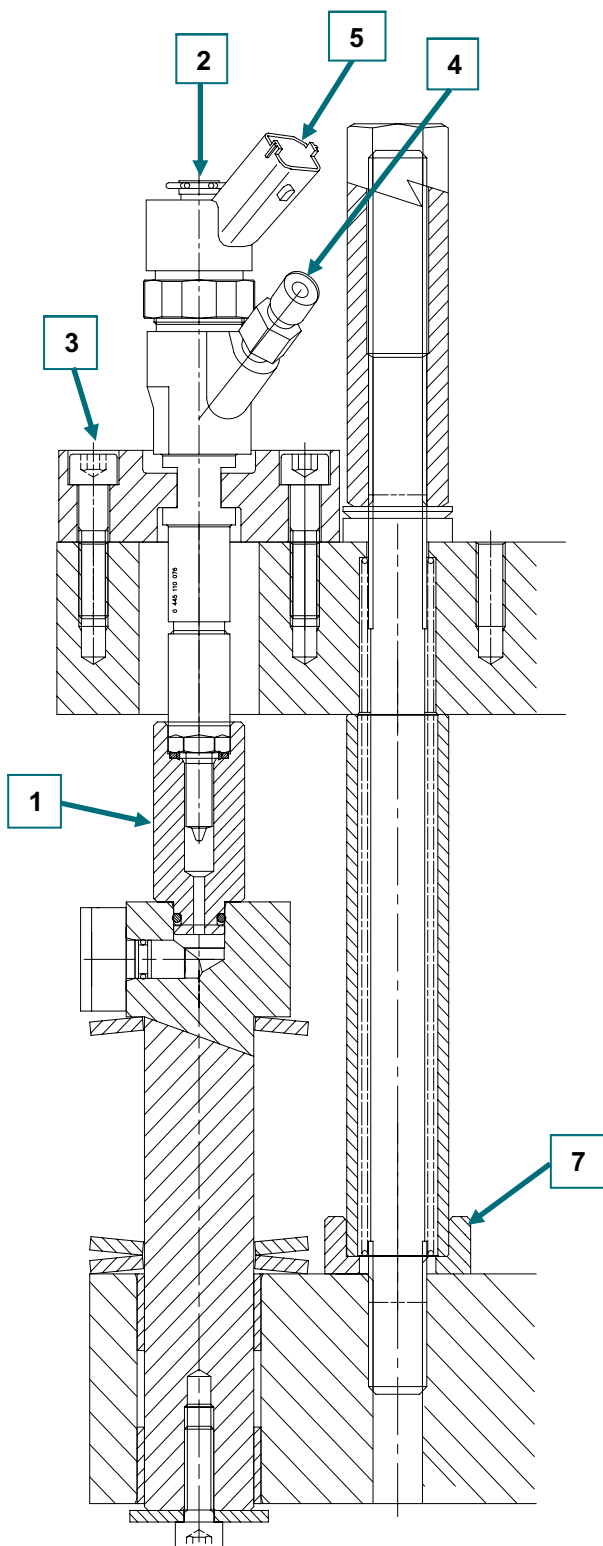
Application Coverage & Parts

This document details the Common Rail injector types and additional accessories that are required for testing on the **AVM2-PC** Test Stand using the All Makes Common Rail Injector Test Kit **HK900** or the **CRi-PC** Test Stand.

The drawings on this document show a typical setup of an injector and its fixturings. The additional accessories that are required for testing are as follows:

1. Nosepiece Adaptor and Seals
2. Backleak Adaptor (*not shown*)
3. Clamp Block
4. HP Pipe - Rail to Injector (*not shown*)
5. Electrical Cable (*not shown*)
6. Fuelling Sleeve Assembly – Side-ported Injectors
7. 9kN Spacer*

*N.B. Item 7 (9kN Spacer) is included with the All Makes Common Rail Injector Test Kit **HK900** and the **CRi-PC** Test Stand.



In general the Clamp Block, HP Pipe, and Fuelling Sleeve will be specific to a given part number (or set of part numbers that are dimensionally identical). The other accessories are common to a range of part numbers. Please refer to the application tables overleaf to establish the correct accessories required for each application.

Bosch Application Matrix

Injector Part Number	Application(s)			Nosepiece Adaptor	Backleak Adaptor	Clamp Block	HP Pipe	Cable Set	Fuelling Sleeve
	VM	Range	Model						
	1	2	3						
0445 110 002 0445 110 068 0445 110 119	Alfa Romeo	145, 146 156 166	1.9 JTD 1.9/2.4 JTD 2.4 JTD	HK907	HK909	HK918	HK919	HK902	N/A
	Fiat	Bravo/Brava Marea Marengo Multipla	1.9 JTD 1.9/2.4 JTD 1.9 JTD 1.9 JTD						
	Lancia	Kappa Lybra	2.4 JTD 1.9/2.4 JTD						
0445 110 008 0445 110 044 0445 110 062 0445 110 076	Chevrolet	Tracker	2.0 D						
	Citroen	Berlingo C5 Evasion Jumper Jumpy Xantia Xsara Xsara Picasso	2.0 HDi 2.0 HDi 2.0 HDi 2.0/2.2 HDi 2.0 HDi 2.0 HDi 2.0 HDi 2.0 HDi						
		Peugeot	206 306 307 406 607 806 Boxer Expert Psrtner			2.0 HDi 2.0 HDi 2.0 HDi 2.0 HDi 2.0 HDi 2.0 HDi 2.0/2.2 HDi 2.0 HDi 2.0 HDi			
			Fiat			Scudo Ulysse	2.0 JTD 2.0 JTD		
			Lancia			Z	2.0 JTD		
			0445 110 009 0445 110 010 0445 110 011 0445 110 012 0445 110 024 0445 110 025 0445 110 034 0445 110 035 0445 110 055 0445 110 069 0445 110 070 0445 110 071 0445 110 072 0445 110 073 0445 110 074 0445 110 094 0445 110 095 0445 110 096 0445 110 099 0445 110 100 0445 110 104 0445 110 105 0445 110 106 0445 110 107 0445 110 108 0445 110 116 0445 110 121 0445 110 129 0445 110 156 0445 110 181 0445 110 182 0445 110 189 0445 110 190			Mercedes Benz	Vito Sprinter C Class E Class G Class S Class V Class CLK		
Renault	Espace Laguna Master Megane Scenic Trafic						1.9 DCI		
0445 110 028 0445 110 029 0445 110 030 0445 110 047 0445 110 048 0445 110 049 0445 110 130	BMW	3 Series 5 Series 7 Series X5					330d/330xd 530d 730d/740d 3.0d		
	MG/Rover	75							
0445 110 036 0445 110 057	Citroen	C5 C8					2.2 HDi 2.2 HDi		
	Peugeot	406 607 807					2.2 HDi 2.2 HDi 2.2 HDi		
0445 110 021 0445 110 110 0445 110 146	Renault	Espace Laguna Master Megane Scenic Trafic					1.9 DCI		
0445 110 028 0445 110 029 0445 110 030 0445 110 047 0445 110 048 0445 110 049 0445 110 130	BMW	3 Series 5 Series 7 Series X5					330d/330xd 530d 730d/740d 3.0d		
0445 110 047 0445 110 048 0445 110 049 0445 110 130	MG/Rover	75							
0445 110 036 0445 110 057	Citroen	C5 C8					2.2 HDi 2.2 HDi		
0445 110 036 0445 110 057	Peugeot	406 607 807					2.2 HDi 2.2 HDi 2.2 HDi		

Bosch Application Matrix (continued...)

Injector Part Number	Application(s)			Nosepiece Adaptor	Backleak Adaptor	Clamp Block	HP Pipe	Cable Set	Fuelling Sleeve				
	VM	Range	Model										
				1	2	3	4	5	6				
0445 110 038 0445 110 063 0445 110 084 0445 110 087 0445 110 102 0445 110 141	Renault Vauxhall/ Opel	Avantime Espace Master Movano Vivaro	2.2 DCI 2.2 DCI 2.2/2.5 DCI 2.5 DCI	HK907	HK909	HK971	HK972	HK902	N/A				
0445 110 064 0445 110 101 0445 110 126	Hyundai Kia	Accent Elantra Matrix Santa Fe Tussan Trajet X-Trax Sportage	1.5 CRDi 2.0 CRDi 1.5 CRDi 2.0 CRDi 2.0 CRDi 2.0 CRDi 2.0 CRDi			HK939	HK940						
0445 110 075 0445 110 135	Citroen Peugeot	C3 Xsara 206 307	1.4 HDI 1.4 HDI 1.4 HDI 1.4 HDI			HK947	HK995						
0445 110 077 0445 110 078	Volvo	S60 S80 V70 XC70 XC90	2.4 D 2.4D, D5 2.4D, D5 2.4D, D5 D5			HK978	HK979						
0445 110 083 0445 110 183	Fiat Lancia Vauxhall/ Opel	Albea Doblo Idea Palio Panda Punto Strada Musa Ypsilon Agila Astra Combo Corsa Meriva Tigra	1.3 JTD 1.3 JTD 1.3 CDTi			HK980	HK981						
0445 110 085 0445 110 215	Toyota					HK982	HK983						
0445 110 086 0445 110 092 0445 110 185 0445 110 186	Kia Hyundai	Sorento Porter	2.5 CRDi 2.5 CRDi			HK942	HK938						
0445 110 118 0445 110 174	GM/Opal	Astra Combo Corsa Meriva	1.7 CDTi			HK943	HK944						
0445 120 002	Fiat Iveco Renault	Ducato Daily Mascott	2.8 JTD 2.8 Ltr 2.8 Ltr			HK908	HK909			HK922	HK923	HK902	N/A
0445 120 011	Fiat Iveco	Ducato 11/15/18 Daily 29/35	2.3 JTD 2.3 Ltr							HK973	HK974		
0445 120 003 0445 120 004 0445 120 019 0445 120 020	Renault	Premium Kerax	11.1Ltr	HK921	N/A	HK934	HK935	HK903	HK936				
0445 120 008	GM Chevrolet	Sierra Silverado	Duramax 2500HD Duramax 3500 Duramax 2500HD Duramax 3500			HK910	HK924		HK925	N/A			
0445 120 007 0445 120 018 0445 120 028	Cummins Ford Iveco VW	King Long Cargo, F250 65, 75, 80, 90, 100, 120, 130, 140, 150, 180, 320 Electronic & Constellation	3.9, 5.9 Ltr			HK907	N/A		HK926	HK927	HK928		
0445 120 012 0445 120 013	Renault	Midlum Premium	4.0, 6.2 Ltr 6.2 Ltr	HK998		HK975 + HK976	HK977	HK903	N/A				

Delphi Application Matrix

Injector Part Number	Application(s)			Nosepiece Adaptor	Backleak Adaptor	Clamp Block	HP Pipe	Cable Set	Fuelling Sleeve
	VM	Range	Model						
	1	2	3						
EJBR00801Z EJBR01101Z EJBR01301Z EJBR01302Z EJBR01601Z EJBR02001Z EJBR02201Z	Ford	Focus Transit Connect Tourneo Connect	1.8 TDCI	HK907	N/A	HK916 + HK930	HK917	HK904	N/A
EJBR00901Z EJBR01901Z EJBR02301Z EJBR02401Z EJBR02501Z EJBR02801D EJBR02901D EJBR03001D EJBR03201D	Kia	Karnival Pregio Bongo Frontier	2.9 HPDi 2.9 HPDi 2.9 HPDi 2.9 HPDi						
EJBR01701Z EJBR01801A EJBR01801Z EJBR02101Z EJBR02701Z	Renault Nissan	Clio Kangoo Megane Scenic Modus Almera Kubistar Micra	1.5 dCi 1.5 dCi 1.5 dCi 1.5 dCi 1.5 dCi 1.5 dCi 1.5 dCi						
	Suzuki	Jimny	1.5 Ddis						
EJBR02601Z	Ssangyong	Rodius Rexton	D27DT D27DT						
EJBR01001A EJBR01001Z	Suzuki Citroen	Liana C3	1.4 Ddis 1.4 HDI						
EJDR00002Z EJDR00101Z EJDR00201Z EJDR00202Z EJDR00301Z EJDR00401Z EJDR00402Z EJDR00403Z	Ford	Mondeo Transit	2.0 TDCI 2.0 TDCI						
EJDR00501Z EJDR00502Z EJDR00503Z EJDR00504Z EJDR00601Z	Ford Jaguar	Mondeo X400	2.0 TDCI 2.0 TDCI						

Denso Application Matrix

Injector Part Number	Application(s)			Nosepiece Adaptor	Backleak Adaptor	Clamp Block	HP Pipe	Cable Set	Fuelling Sleeve
	VM	Range	Model						
	1	2	3						
095000-0561 095000-0562 095000-0800 095000-0801	Komatsu			HK921	HK962	HK964 HK960	HK965 HK961	HK963	N/A
095000-0570 095000-0640 095000-0750	Toyota	23670-27030	Avensis Avensis Verso Previa RAV4	HK907	HK910	HK955 + HK956 + HK932	HK958	HK905	N/A
		23670-29025	Corolla						
		23670-39025	Land Cruiser						
095000-0940		23670-39035	4Runner Dyna Hiace Hilux Tiger 2.5L						
095000-5420		23670-09030	Avensis Avensis Verso Corolla Corolla Verso						
095000-5580		23670-29045	Avensis Corolla						
095000-5890		23670-39135	Land Cruiser						
095000-5930		23670-09060 23670-0L010	Hilux Vigo 2.5L						

Denso Application Matrix (continued...)

Injector Part Number	Application(s)			Nosepiece Adaptor	Backleak Adaptor	Clamp Block	HP Pipe	Cable Set	Fuelling Sleeve
	VM	Range	Model						
				1	2	3	4	5	6
095000-0740	Toyota	23670-39015	Land Cruiser	HK907	HK910	HK955 + HK956 + HK932	HK958	HK959	N/A
095000-0950		23670-39045	Dyna						
095000-6110		23670-09130	Avensis						
095000-6230		23670-09140	Corolla Verso RAV4						
095000-5050 095000-5480	John Deere		Tractor (6045 Engine)		N/A	HK966	HK967	HK963	HK968

Siemens VDO Application Matrix

Injector Part Number	Application(s)			Nosepiece Adaptor	Backleak Adaptor	Clamp Block	HP Pipe	Cable Set	Fuelling Sleeve
	VM	Range	Model						
				1	2	3	4	5	6
5WS40000-Z	PSA	1980 F0 (PSA) 96 521 736 80 (PSA)	DW10TD 2.0 Ltr 2 Valve	HK907	HK909	HK945	HK946	HK906	N/A
5WS40148-Z	Ford PSA	2S6Q-9F593-AB (Ford) 2S6Q-9F593-AC (Ford) 96 553 048 80 (PSA) 1980 E7 (PSA)	1.4 Ltr Euro 3			HK947	HK948		
5WS40149-Z	Ford PSA	2S6Q 9F593BC (Ford) 96 545 509 80 (PSA) 1980 J1 (PSA)	1.4 Ltr Euro 4			HK949	HK951		
5WS40156-4Z	Ford PSA Volvo	3M5Q 9F593DB (Ford) 1980J4 (PSA) 96 571 445 80 (PSA) 8603565 (Volvo)	DW10B Class 4						
5WS40156-Z	Ford PSA Volvo	3M5Q 9F593EB (Ford) 1980J5 (PSA) 96 571 447 80 (PSA) 8603564 (Volvo)	DW10B Class 5						

N.B. When ordering application kits for the single line **CRI-PC** Test Stand you will need to use the suffix C e.g. HK9xx/C.



Figure 1 AVM2-PC



Figure 2 HK900 All Makes Common Rail Injector Test



Figure 3 HK901 Backleak Measurement Unit



Figure 4 CRi-PC Control Box



Figure 5 Inside of the CRi-PC



Figure 6 Typical Application Kit



Figure 7 CRi-PC