

# SERVICE BULLETIN

## FUEL INJECTION PUMP NEW PRODUCTS

ECD04-05E  
November, 2004

DENSO AUTHORIZED ECD SERVICE DEALERS ONLY

### SUBJECT : HP3/HP4 SUPPLY PUMP PRODUCT LIST

#### 1. Outline

This is a combined list of the common rail system HP3/HP4 supply pumps.

This list details pump part numbers by manufacturer, product information by part number, and exterior diagrams by part number.

#### 2. List of Pump Part Numbers by Manufacturer

##### 2.1. TOYOTA

Engine Model	DENSO Part Number	Customer Part Number
1KD	294000-001#	22100-30021-F
1CD	HU294000-006# (HU294000-010#)	22100-0G010-C (22100-0G010-B)
1KD/2KD	SM294000-011#	22100-0L010-F
1CD	294000-017#	22100-27020-A
1KD/2KD	SM294000-0350	22100-0L020
1KD	294000-038#	22100-30050 (22100-458F2 )

##### 2.2. ISUZU

Engine Model	DENSO Part Number	Customer Part Number	Customer OEM Part Number
			OPEL Part Number
4EE2	HU294000-007# (294000-015#)	8-97313862-2 (8-97313862)	97313862
- (High-Speed Edition)	SM294000-023#	8-97311373-3	-
4HK1	294000-026#	8-97328886-0	-
6HK1	294050-002#	8-97602049-1	-

### 2.3. HINO

Engine Model	DENSO Part Number	Customer Part Number	Customer OEM Part Number	
			TOYOTA Part Number	NISSAN DIESEL Part Number
N04C	294000-019#	22730-1261B	22100-78190	-
J05D	294000-025#	22730-1321A	-	16730-Z5002
J08E	294050-001#	22730-1311A	-	16730-Z5001

### 2.4. MAZDA

Engine Model	DENSO Part Number	Customer Part Number
RF-DI	294000-004#	RF5C 13 800A

### 2.5. MITSUBISHI (MFTBC)

Engine Model	DENSO Part Number	Customer Part Number
6M60T	294050-005#	ME302145

### 2.6. JOHN DEERE

Engine Model	DENSO Part Number	Customer Part Number
4045T,6068T	294000-005#	RE507959

### 2.7. NISSAN MOTOR

Engine Model	DENSO Part Number	Customer Part Number
YD1-K2	294000-012#	16700 AW403
	HU294000-016#	16700 AW420

### 2.8. Hyundai

Engine Model	DENSO Part Number	Customer Part Number
W (D4DA)	294000-029#	33100-45700

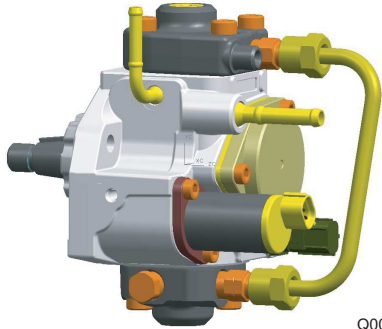
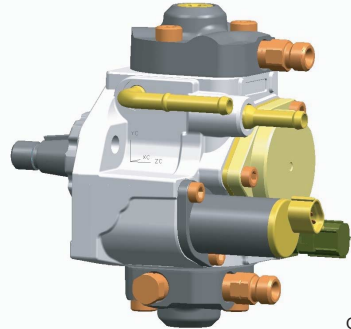
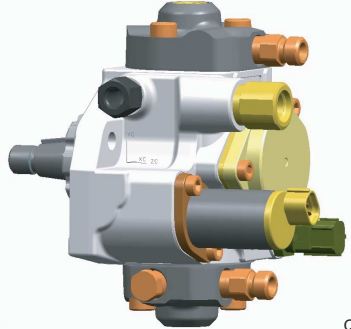
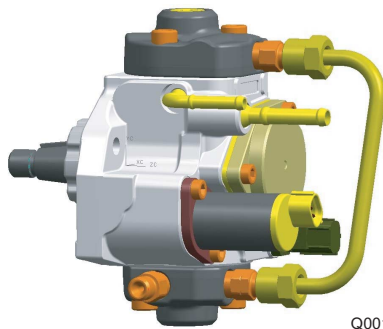
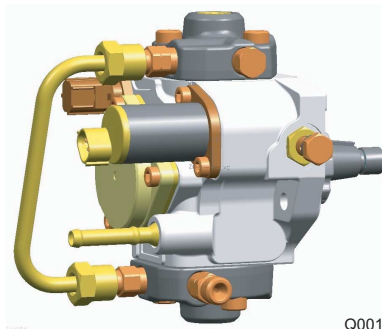
### 3. List of Products by Part Number

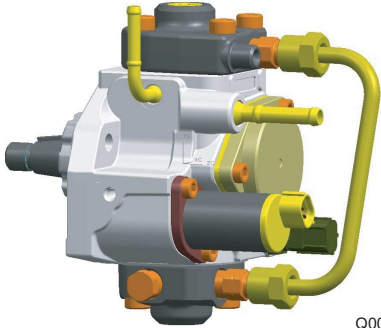
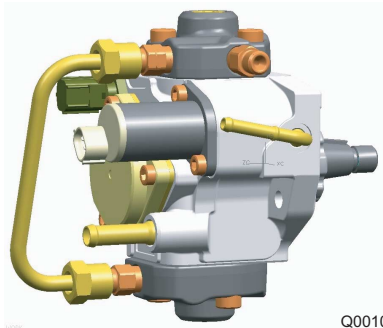
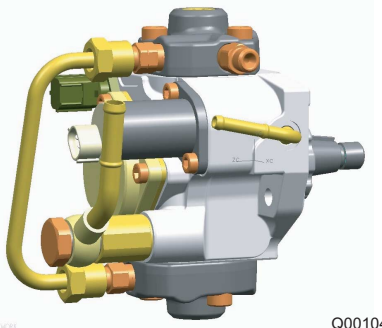
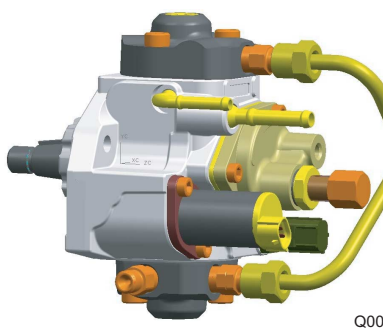
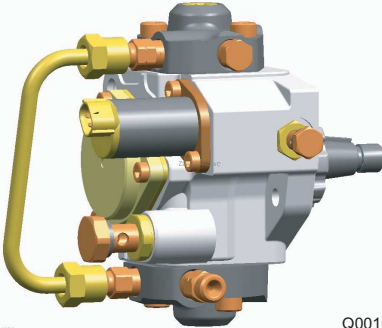
Pump Type		HP3						
DENSO Part Number		294000-001#	294000-004#	294000-005#	HU294000-006# (HU294000-010#)	HU294000-007# (294000-0150)	SM294000-011#	294000-012#
Customer		TOYOTA	MAZDA	JOHN DEERE	TOYOTA	ISUZU	TOYOTA	NISSAN MOTOR
Customer Part Number		22100-30021-F	RF5C 13 800A	RE507959	22100-0G010-C (22100-0G010-B)	8-97313862-2 (8-97319862-0)	22100-0L010-F	19400-AW430
OEM from the Customer		-	-	-	-	OPEL	-	-
Destination		Europe, Thailand	Europe	Worldwide	Europe	Europe	Thailand	Europe
Engine Model		1KD	RF-DI	4045T, 6068T	1CD	4EE2	1KD, 2KD	YD1-K2
Vehicle Name		Corolla, Avensis, Dyna, Hiace	MPV, MAZDA6	Tractor	Avensis, Corolla (UK)	OPEL-Corsa / Meriva	Hilux pick-up	X-Trail; Tino, Almera, Primera
SOP (start of Production)		2001. 08, 2002. 11	2002. 06	2002. 06	2003. 02	2004. 08	2002. 08	2003. 05
Roted Voltage		12V	12V	12V	12V	12V	12V	12V
SCV Type		Normally Closed	Normally Open	Normally Open	Normally Closed	Normally Open	Normally Closed	Normally Open
Speed Ratio (SP/Eg)		1 / 2	1 / 2	1 / 1	1 / 2	1 / 2	1 / 2	1 / 2
Specification	Direction of Rotation	Clockwise Rotation	Clockwise Rotation	Clockwise Rotation	Clockwise Rotation	Clockwise Rotation	Clockwise Rotation	Clockwise Rotation
	Cam Shaft	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (HU294191-0020)	Taper × Ø 20 (HU294191-0020)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (294191-0010)
	Cam Lift	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm
	Discharge Port	Rear Discharge (Top)	Rear Discharge (Top and Bottom)	Rear Discharge (Top and Bottom)	Side Discharge (Bottom)	Side Discharge (Bottom)	Rear Discharge (Top)	M-12 Side Discharge (Top)

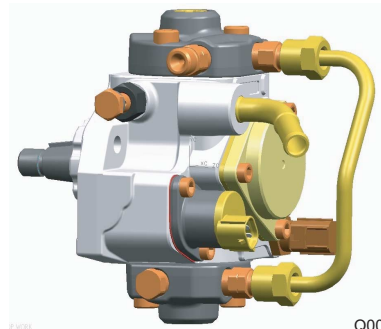
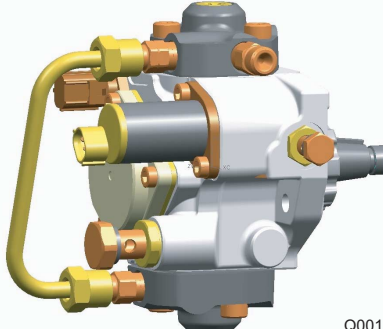
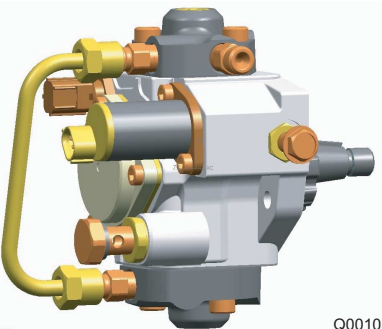
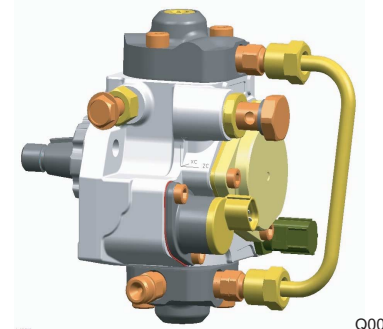
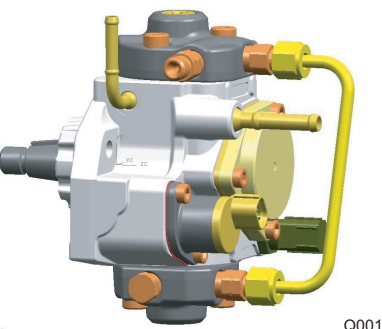
Pump Type		HP3						
DENSO Part Number		HU294000-016#	294000-017#	294000-019#	SM294000-023#	294000-025#	294000-026#	
Customer		NISSAN MOTOR	TOYOTA	HINO	ISUZU	HINO	ISUZU	
Customer Part Number		16700-AW420	22100-27020-A	22730-1261B	8-97311373-3	22730-1321A	8-97328886-0	
OEM from the Customer		-	-	TOYOTA	-	NIASSAN DIESEL	GENERAL MOTORS	
Destination		Europe	Europe	Australia	Thailand	North America	North America	
Engine Model		YD1-K2	1CD (DPNR)	N04C	- (High-Speed Model)	J05D	4HK1	
Vehicle Name		X-Trail; Tino, Almera, Primera	Avensis (UK)	Dutro (Dyna)	D-Max	-	N series	
SOP (start of Production)		2003. 05	2003. 07	2004. 01	2004. 09	2003. 12, 2004. 08	2004. 01	
Roted Voltage		12V	12V	24V	12V	12V	12V	
SCV Type		Normally Open	Normally Closed	Normally Open	Normally Open	Normally Open	Normally Open	
Speed Ratio (SP/Eg)		1 / 1	1 / 2	1 / 1	1 / 1	1 / 1	1 / 1	
Specification	Direction of Rotation	Clockwise Rotation	Clockwise Rotation	Counterclockwise Rotation	Clockwise Rotation	Clockwise Rotation	Counterclockwise Rotation	
	Cam Shaft	Taper × Ø 20 (HU294191- 0020)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (HU294191- 0020)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (294191-0010)	
	Cam Lift	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm	
	Discharge Port	M-12 Side Discharge (Top)	Side Discharge (Bottom)	Side Discharge (Bottom)	Side Discharge (Top)	Side Discharge (Top)	Side Discharge (Top)	Side Discharge (Top)

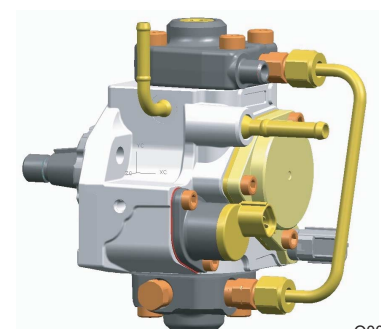
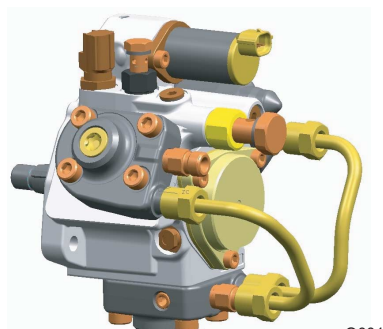
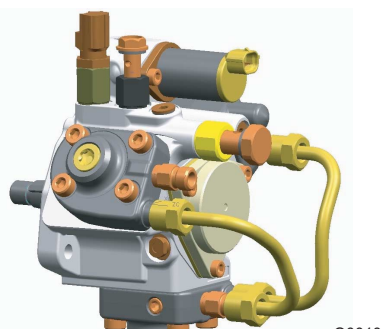
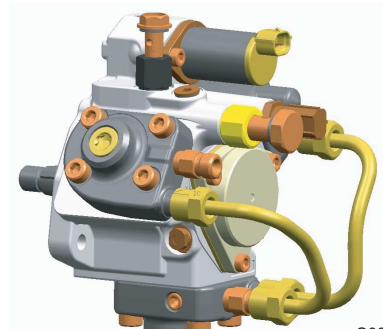
Pump Type		HP3			HP4		
DENSO Part Number		294000-029#	SM294000-035#	294000-038#	294050-001#	294050-002#	294050-005#
Customer		HYUNDAI	TOYOTA	TOYOTA	HINO	ISUZU	mitsubishi motor
Customer Part Number		33100-47500	22100-0L020	22100-30050 (22100-458F2)	22730-1311A	8-97602049-1	ME302145
OEM from the Customer		-	-	-	NISSAN DIESEL	GENERAL MOTOR	-
Destination		Korea	General Areas	Europe	North America	North America	North America
Engine Model		D4DD	1KD, 2KD	1KD	J08E	6HK1	6M60T
Vehicle Name		Mighty	IMV	Landcruiser, Landcruiser Prado	-	F series, C5660	Fighter
SOP (start of Production)		2004. 09	2004. 08	2004. 08	2003. 12	2004. 01	-
Rotated Voltage		24V	12V	12V	12V	12V	12V
SCV Type		Normally Open	Normally Closed	Normally Closed	Normally Open	Normally Open	Normally Open
Speed Ratio (SP/Eg)		1 / 1	1 / 2	1 / 2	1 / 1	1 / 1	1 / 1
Specification	Direction of Rotation	Counterclockwise Rotation	Clockwise Rotation	Clockwise Rotation	Clockwise Rotation	Counterclockwise Rotation	Counterclockwise Rotation
	Cam Shaft	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (SM294191-0050)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (294191-0010)	Taper × Ø 20 (HU294191-0020)	Taper × Ø 20
	Cam Lift	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm	8.8 mm
	Discharge Port	M14-Side Discharge (Bottom)	Side Discharge (Top)	Rear Discharge (Top)	Rear	Rear	M-14 Rear

#### 4. List of Exterior Views by Part Number

DENSO Part Number	294000-001#	294000-004#	294000-005#	HU294000-006# (HU294000-010#)	HU294000-007# (294000-0150)
Exterior View Diagram					

DENSO Part Number	SM294000-011#	294000-012#	HU294000-016#	294000-017#	294000-019#
Exterior View Diagram	 Q001026	 Q001043	 Q001044	 Q001042	 Q001035

DENSO Part Number	SM294000-023# (294000-021#)	294000-025#	294000-026#	294000-029#	SM294000-035#
Exterior View Diagram	 Q001046	 Q001036	 Q001033	 Q001029	 Q001040

DENSO Part Number	294000-038#	294050-001#	294050-002#	294050-005#
Exterior View Diagram	 Q001038	 Q001037	 Q001047	 Q001027