

IT'S BLUE  
IT'S GREEN  
IT'S FIRAD

Release 10 | 2024



**FIRAD**<sup>®</sup>

CATERPILLAR  
INJECTOR  
CATALOGUE



**FIRAD**<sup>®</sup>

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**OEM CODES AND PARTS NUMBERS ARE  
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## ABBREVIATIONS

### - Holes

In this section are reported the information about how many micro holes there are and their diameter, in this following way: <N.microholes> x <Diameter microholes>

### - Angles

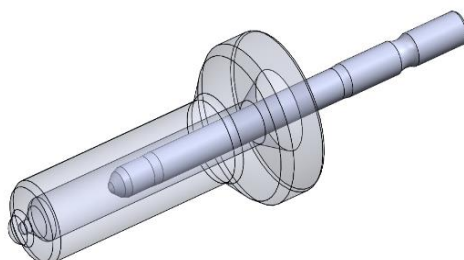
In this section are reported the information related to nozzle and micro holes angular position

Engine Angle	Spray Angle
A	B



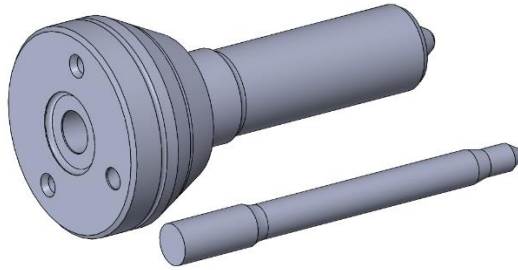
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## HEUI Caterpillar Nozzles



FIRAD code	Engine Angle	Spray Angle	CAT® Injector Part Number	Stamping	Engines	Holes
<b>C800E</b>	0°	129°	10R-7224=236-0962 235-2888	055T420553	C9	6 x 0,165
<b>C800T</b>	15°	132°	10R-4763=387-9428 10R-7225=387-9427 263-8218 20R-8066	015T396554 221F426554	C7	6 x 0,160
<b>C800U</b>	15°	132°	10R-4761=387-9430	315T426203	C7	6 x 0,140
<b>C800V</b>	0°	127°		099S423176		5 x 0,215
<b>C800W</b>	0°	127°	10R-7222=387-9433 10R-4764=387-9438 254-4339 20R-8064	330T418062	C7	5 x 0,210
			10R-7223=293-4073=387-9432 10R-7222=387-9433 10R-4764=387-9438	329T413176	C9	
<b>C800X</b>	0°	127°		264F413249		5 x 0,185
<b>C800Z</b>	0°	127°40'		123408062		5 x 0,225
<b>C801G</b>	15°	132°	10R-4762=387-9429	266F425162	C7	6 x 0,150
<b>C803T</b>	0°	125°30'	10R-4843	277F412160 337T392160		6 x 0,180
<b>C803U</b>	0°	126°	10R-9001	224T393249 228T393249		5 x 0,195
<b>C803V</b>	0°	126°	10R-4844			5 x 0,220

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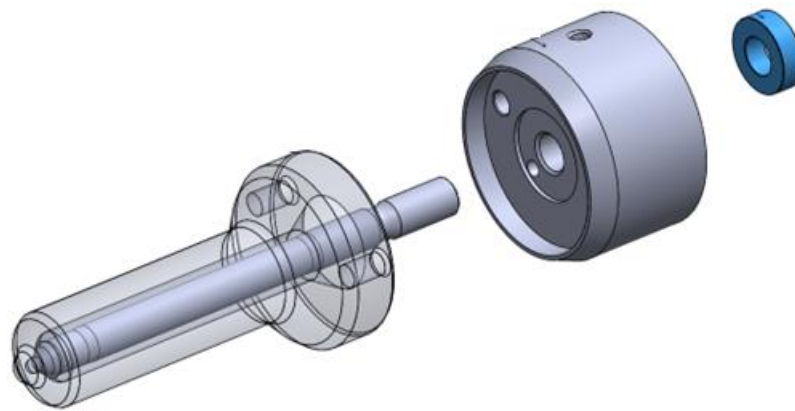
FIRAD code	Engine Angle	Spray Angle	OEM Part Number	CAT® Injector Part Number	CAT® Reman Injector Part Number	Engine	Holes
CN900A	0°	140°		174-7526 174-7527 232-1175	20R-0758	3408 3412	6 x 0,255
CN900B	16°30'	140°	DPE41026/ 32 (6-16)	141-7837 155-1819 169-7408 171-9704 171-9710 173-9272 173-9379 173-9380 188-1320 196-4229 222-5972 178-6342	OR-9350 OR-9348 10R-1257	3126A 3126B	6 x 0,165
CN900C	16°30'	140°	DPE41016/ 32 (6-17)	173-4059 173-4061 173-9267 173-9268 196-1401 222-5963 222-5967 177-4754 177-4752	OR-9349 10R-1262 10R-0782 10R-9237	3126A 3126B	6 x 0,175
CN900D	0°	130°		198-6877 204-2467	20R-4147	3408 3412	6 x 0,260
CN900E	16°30'	140°	(6-175)	222-5966	10R-0781	3126B	6 x 0,175
CN900G	0°	140°		174-7526	20R-0758	3408	6 x 0,250

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				174-7527		3412	
CN900H	0°	140°		232-1170		3412	6 x 0,255

## HEUI Caterpillar Nozzle kit



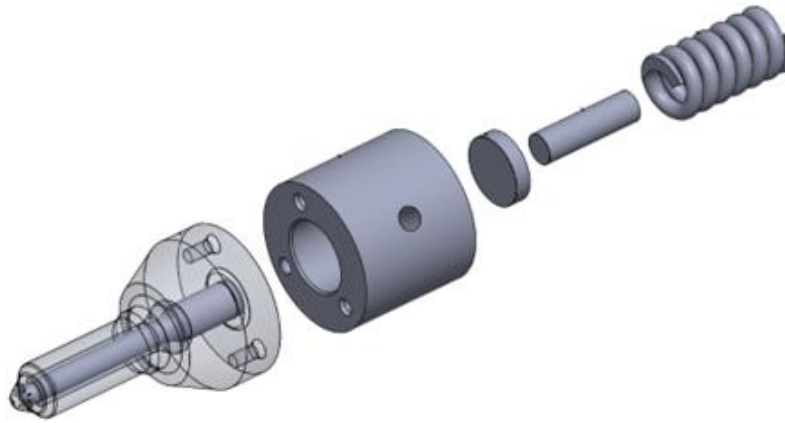
FIRAD code kit	Firad Nozzle	CAT® Injector Part Number	Engine
FD00800E	C800E	10R-7224=236-0962 235-2888	C9
FD00800T	C800T	10R-4763=387-9428 10R-7225=387-9427 263-8218	C7
FD00800U	C800U	10R-4761=387-9430	C7
FD00800W	C800W	10R-7222=387-9433 10R-4764=387-9438 254-4339	C7/C9
FD00801G	C801G	10R-4762=387-9429	C7

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FIRAD code	Firad Nozzle	OEM Part Number	CAT® Injector Part Number	CAT® Reman Injector Part Number	Engine
FD00900A	CN900A		174-7526 174-7527 232-1175	20R-0758	651E 657E
FD00900B	CN900B	DPE41026/32 (6-16)	141-7837 155-1819 169-7408 171-9704 171-9710 173-9272 173-9379 173-9380 188-1320 196-4229 222-5972 178-6342	0R-9350 0R-9348 10R-1257	3126E 3126B 3126
FD00900C	CN900C	DPE41016/32 (6-17)	173-4059 173-4061 173-9267 173-9268 196-1401 222-5963 222-5967 177-4754 177-4752	0R-9349 10R-1262 10R-0782 10R-9237	3126 3126E 3126B
FD00900D	CN900D		198-6877	20R-4147	3412E

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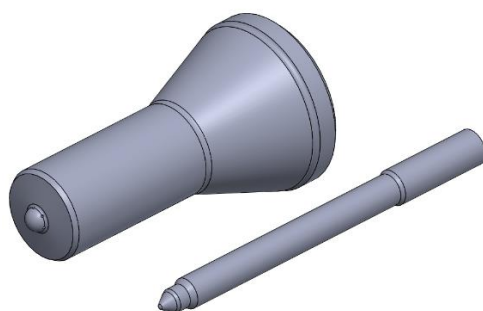


			204-2467		
<b>FD00900E</b>	CN900E	(6-175)	222-5966	10R-0781	3126E 3126B
<b>FD00900G</b>	CN900G		174-7526 174-7527	20R-0758	651E 657E
<b>FD00900H</b>	CN900H		232-1170		

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## EUI Caterpillar Nozzles (Needle Ø 3,64 – 3,83)



FIRAD code	Engine Angle	Spray Angle	CAT® Injector Part Number	Stamping	Engines	Holes
C800A	0°	130°			3406E	6 x 0,220
C800C	0°	160°	10R-1290=250-1311 20R-0849=392-0211 20R-1275=386-1766 392-0214	136F009455 229F400162	3516E	8 x 0,295
C800D	0°	160°	20R-0849=166-6006 20R-1270=148-5759		3516E	8 x 0,300
C800DA	0°	160°				
C800DB	0°	160°				
C800F	0°	130°			3516E	6 x 0,295
C800G	0°	130°	10R-2772=253-0618 CH11945(Perkins)		3406E 2806	6 x 0,275
C800GA	0°	130°				6 x 0,260
C800H	0°	160°			3516B/E 3500B 3508B 3512B	8 x 0,290
C800L	0°	156°		007T509455 006S509455	3516E	8 x 0,310
C800J	0°	130°	10R-3264=253-0615		3406E	6 x 0,225
C800Y	0°	130°	10R-8501=211-3023 10R-8501=191-3003		C15, C13 3406E	6 x 0,215

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			10R-8501=0R-9257 10R-2781=118-9030 10R-2781=0R-4894		C16	
<b>C800N</b>	0°	132°		145T909108		6 x 0,160
<b>C800P</b>	0°	130°			18L	6 x 0,290
<b>C800R</b>	0°	150°		265F503538		10 x 0,255
<b>C800S</b>	0°	150°	250-1300 229-0169		3500	10 x 0,310
<b>C801B</b>	0°	148°	10R-0725=212-3464		C10 3176C	8 x 0,200
<b>C801E</b>	0°	130°	CH12082(Perkins)		C15 3176C C10	6 x 0,240
<b>C801F</b>	0°	132°	200-1117 CH12071(Perkins) 10R-8988=295-9085	257F709083	3406E	6 x 0,320
<b>C801H</b>	0°	130°	276-8307=10R-7231 CH10948(Perkins)		C18 C32	6 x 0,280
<b>C801J</b>	0°	140°	10R-0725=212-3464		C10 3176C	8 x 0,195
<b>C801N</b>	0°	127°		009T703484		6 x 0,220
<b>C801P</b>	0°	130°	20R-2285=374-0751	191T710635		6 x 0,195
<b>C801R</b>	0°	126°	20R-2284=374-0750 253-0615	152S703437 3437-N2	365C	6 x 0,225
<b>C801S</b>	0°	140°	20R-1266=386-1754 20R-1266=392-0202 20R-1279=392-0218 20R-1279=386-1770		3500B 3508B 3521B 3516B/E	7 x 0,305
<b>C801T</b>	0°	130°30'				6 x 0,300
<b>C801U</b>	0°	135°		194F007746		7 x 0,295
<b>C801V</b>	0°	131°	20R-0055=317-5278	323T709108		6 x 0,165
<b>C802F</b>	0°	147°	10R-0967	119F723412		6 x 0,165
<b>C802G</b>	0°	131°	10R-0955=211-3025	234T733665	C15	6 x 0,250
<b>C802H</b>	0°	124°	10R-1273=249-0709		C15	6 x 0,205
<b>C802L</b>	0°	130°	10R-2977=249-0708		C13	6 x 0,195

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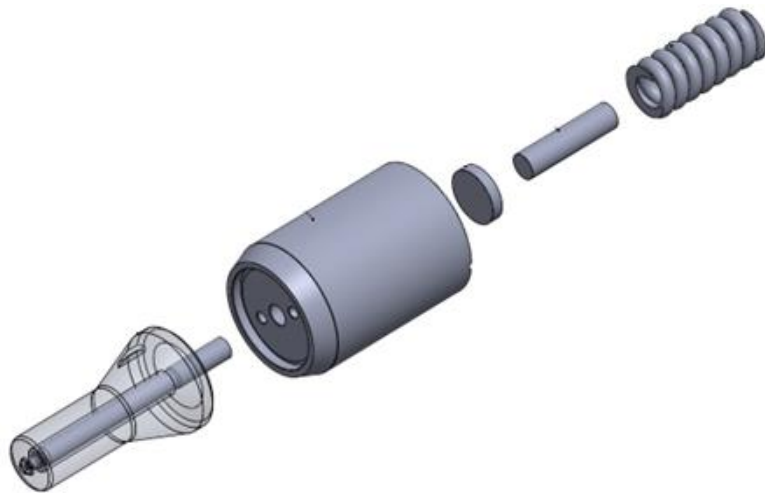
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<b>C802J</b>	0°	125°	10R-1000=229-5919		C15	6 x 0,215
<b>C802M</b>	0°	130°	10R-0963=212-3463	053F803444	C10	6 x 0,180
<b>C802N</b>	0°	130°	10R-0956=211-3022		3406E	6 x 0,200
<b>C802P</b>	0°	130°	10R-0957=211-3023		3406E C15-C16	6 x 0,215
<b>C802R</b>	0°	131°	10R-0958=211-3024		3406E	6 x 0,230
<b>C802S</b>	0°	130°	10R-3262=249-0713		C13 C11	6 x 0,310
<b>C802T</b>	0°	125°		291F705909		6 x 0,270
<b>C802V</b>	0°	130°	211-3022 249-0713 10R-2782 10R-3262		C13 C11	6 x 0,225
<b>C802W</b>	0°	129°	350-7555=20R-0056	105T901245 208F701245	C12	6 x 0,180
<b>C802X</b>	0°	145°		215T377545		8 x 0,300
<b>C803B</b>	0°	136°		349S738803	C12	7 x 0,220
<b>C803E</b>	0°	125°30'	374-0751=20R-2285		C15 C18 C27	6 x 0,195
<b>C803N</b>	0°	151°	392-0200=20R-1264 386-1752		3512B 3508B 3516B	10 x 0,220
<b>C803X</b>	0°	130°	250-1301=10R-3256 392-0201=20R-1265 11R-0680	086F420170	3516B 3512B	10 x 0,205

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## EUI Caterpillar Nozzle kit (Needle Ø 3,64 – 3,83)



FIRAD code kit	Firad Nozzle	CAT® Injector Part Number	Engine
FD150955	C802G	10R-0955=211-3025	C15
FD132977	C802L	10R-2977=249-0708	C13
FD00800G	C800G	10R-2772=253-0618 CH11945(Perkins)	3406E 2806
FD00800C	C800C	10R-1290=250-1311 20R-0849=392-0211	3516E
FD00800J	C800J	10R-3264=253-0615	3406E
FD00802S	C802S	10R-3262=249-0713	C13 C11
FD00801P	C801P	20R-2285=374-0751	6015B
FD102772	C800G	10R-2772=253-0618 CH11945(Perkins)	C15 C18
FD00800D	C800D	20R-0849=166-6006	5230B 5130B
FD00801F	C801F	10R-8988=295-9085	C18 C32
FD00801R	C801R	20R-2284	3406E C15

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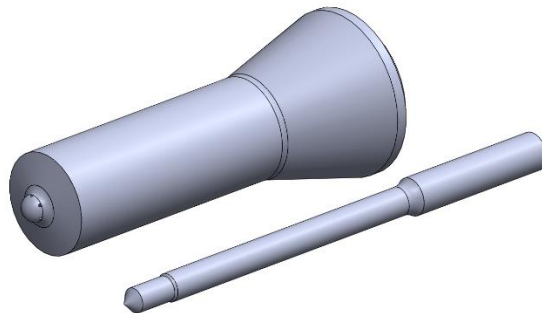
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FIRAD code kit	Firad Nozzle	CAT® Injector Part Number	Engine
			C16
<b>FD00801P</b>	C801P	20R-2285=374-0751	
<b>FD00800A</b>	C800A		
<b>FD00801E</b>	C801E	CH12082(Perkins)	C15 3176C C10
<b>FD00802W</b>	C802W	350-7555=20R-0056	C12
<b>FD00803B</b>	C803B	166-0149=0R-9530	C12
<b>FD155919</b>	C802J	10R-1000=229-5919	C15
<b>FD00800Y</b>	C800Y	10R-8501=211-3023	C15, C13 3406E C16
<b>FD151273</b>	C802H	10R-1273=249-0709	C15

## EUI Caterpillar Nozzles (Needle Ø 3,00)



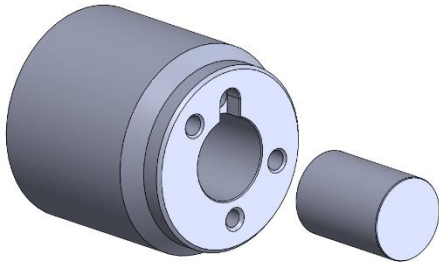
FIRAD code	Engine Angle	Spray Angle	CAT® Injector Part Number	Stamping	Engines	Holes
<b>C800B</b>	0°	137°			3116	6 x 0,225
<b>C801A</b>	0°	155°20'	0R-8475=127-8207	7E-0506	C15	6 x 0,220
<b>C802U</b>	0°	136°				6 x 0,155

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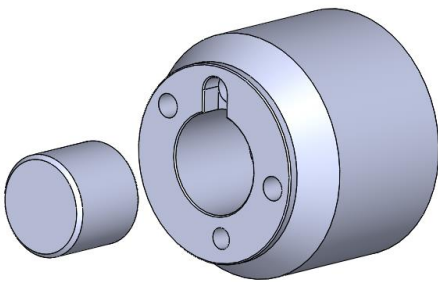
<b>C802Z</b>	0°	135°	0R-8461=127-8222	4P-1733		6 x 0,190
<b>C803L</b>	0°	135°	0R-8682=127-8216	104-4632	3114E 3116E	6 x 0,170

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## Caterpillar plunger valve kits



FIRAD code	Engine
FDK00003	C7

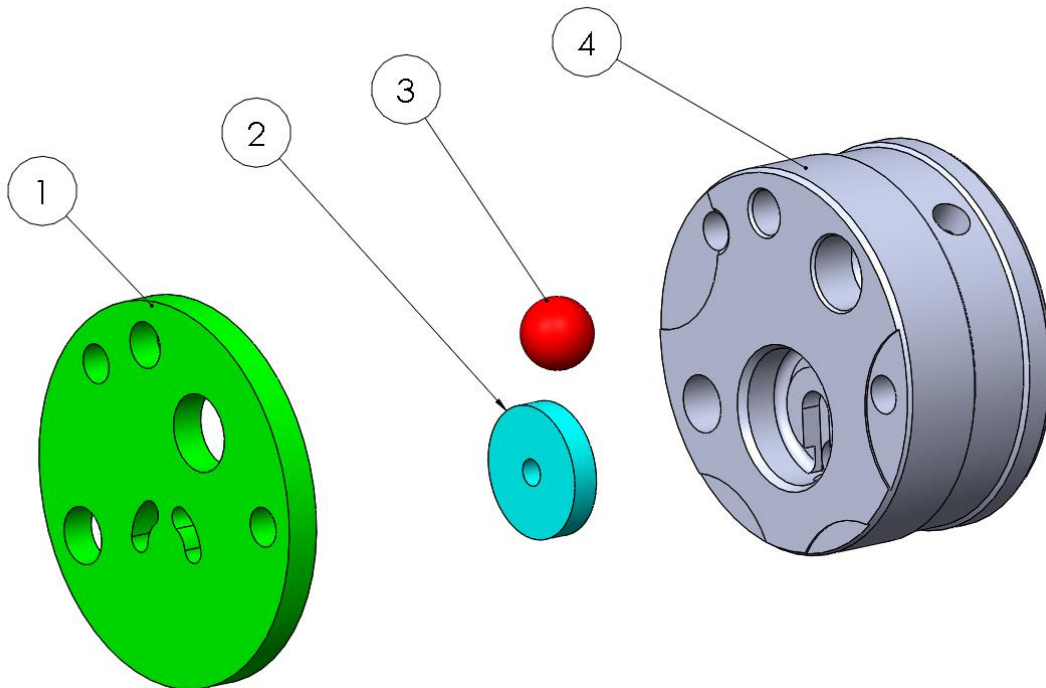


FIRAD code	Engine
FDK00002	C9

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## Caterpillar one way valve kits

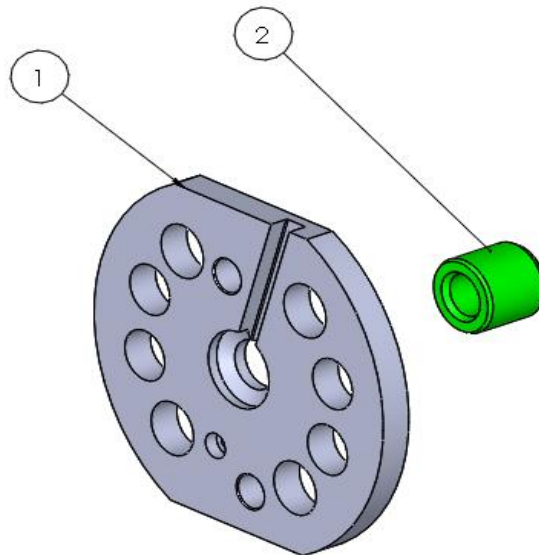


FIRAD Code	N. Part	FIRAD code	Engine
FDK00001	1	MCSA002	C9
	2	MCSA004	
	3	MCBA001	
	4	MCSA001	
FDK00005	1	MCSA005	C7
	2	MCSA004	
	3	MCBA001	
	4	MCSA006	

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## Caterpillar exhaust valve kit



N. Part	FIRAD code
1	MCPL001
2	MCSS001

FIRAD code	Engine
FDK00004	C9

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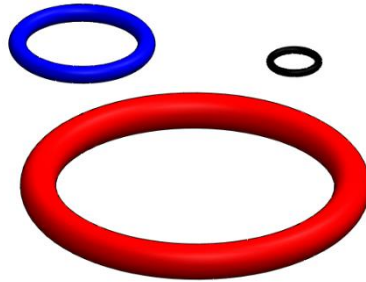


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## External Seal Kit



FIRAD code	CAT® Injector Part Number	Engines
MCESK001	249-0713=10R-3262 253-0618=10R-2772 374-0751=20R-2285 20R-2284 276-8307=10R7231 295-9085=10R8988	3116
MCESK002	166-6006=20R-0849 148-5759=20R-1270	C15

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FIRAD code	Engines
MCESK003	C9



FIRAD code	Engines
MCESK004	C9

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### CAT-C9-HEUI-INJ. INTERNAL KIT



FIRAD code	Engines
MCESK005	C9

### COMPLETE KIT OEM STANDARD CAT C9-INJECTOR



FIRAD code	Engines
MCESK006	C9

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## PARTS SET CAT3500-EUI



FIRAD code	Engines
MCESK007	3500

## PARTS SET CAT3516E-EUI-INT

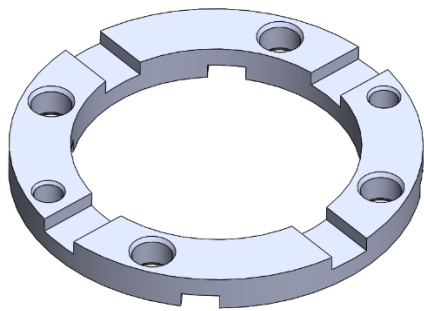


FIRAD code	Engines
MCESK008	3516

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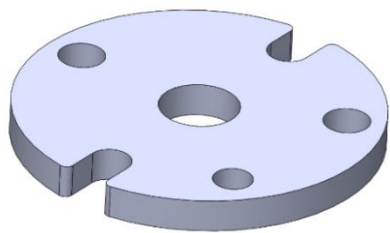
## Caterpillar spare parts



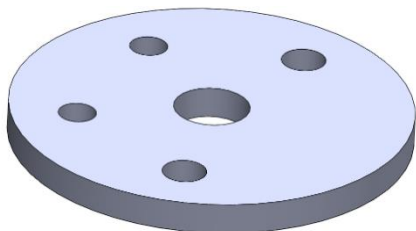
Solenoid spacer

FIRAD code	Thickness	Engine
MCSL001-288	2,88 mm	C9 – C7
MCSL001-290	2,90 mm	C9 – C7
MCSL001-292	2,92 mm	C9 – C7
MCSL001-294	2,94 mm	C9 – C7
MCSL001-296	2,96 mm	C9 – C7

Plate

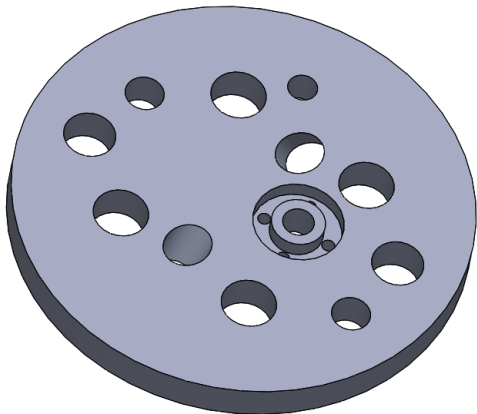


FIRAD code	Engine
MCSA003	C9



FIRAD code	Engine
MCSA007	C7

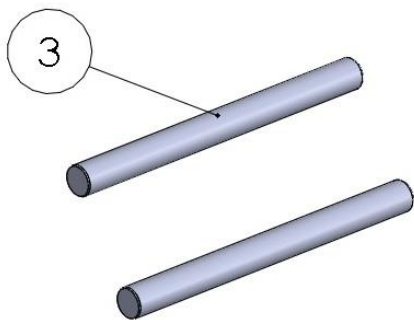
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**Hydraulic flow control plate**

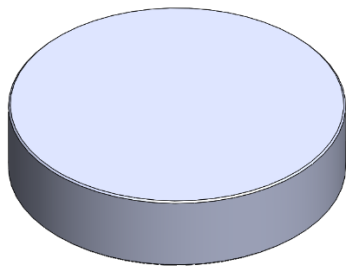
FIRAD code	Engine
MCPL002	C7

**Caterpillar C7-C9 Nozzle reference pin**



Description	FIRAD code
Nozzle Reference pin for C7-C9	MCCPN001

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**Outer diameter: 10 mm**

Shim

FIRAD code	Thickness	Engine
MCSH001-210	2,10 mm	C13 - C15 - 3406E
MCSH001-215	2,15 mm	C13 - C15 - 3406E
MCSH001-220	2,20 mm	C13 - C15 - 3406E
MCSH001-225	2,25 mm	C13 - C15 - 3406E
MCSH001-230	2,30 mm	C13 - C15 - 3406E
MCSH001-235	2,35 mm	C13 - C15 - 3406E
MCSH001-240	2,40 mm	C13 - C15 - 3406E
MCSH001-245	2,45 mm	C13 - C15 - 3406E
MCSH001-250	2,50 mm	C13 - C15 - 3406E
MCSH001-255	2,55 mm	C13 - C15 - 3406E
MCSH001-260	2,60 mm	C13 - C15 - 3406E

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