

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

Release 10 | 2024



FIRAD[®]

CATERPILLAR
INJECTOR
CATALOGUE



FIRAD[®]

LET THE FUTURE COME



**OEM CODES AND PARTS NUMBERS ARE
GIVEN FOR REFERENCE PURPOSE ONLY**

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ABBREVIATIONS

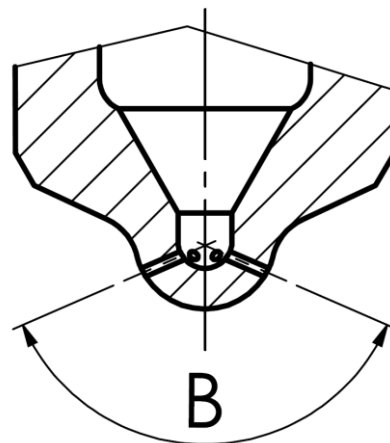
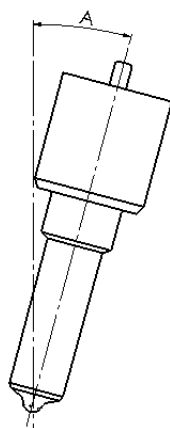
- Holes

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

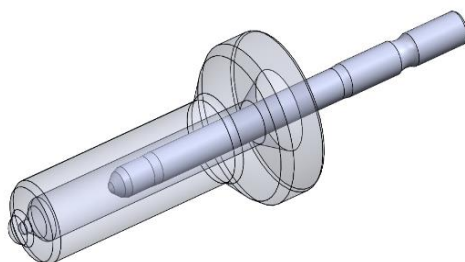
In this section are reported the information related to nozzle and micro holes angular position

Engine Angle	Spray Angle
A	B



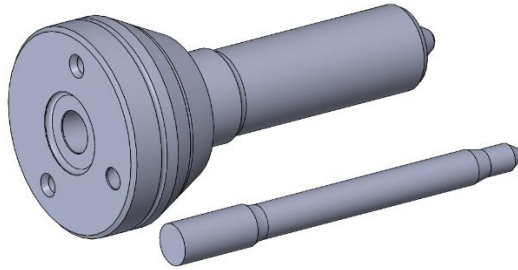
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HEUI Caterpillar Nozzles



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

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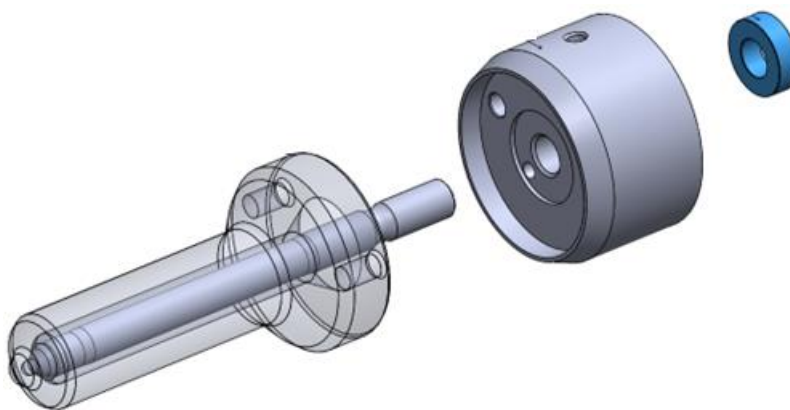
FIRAD code	Engine Angle	Spray Angle	OEM Part Number	CAT® Injector Part Number	CAT® Reman Injector Part Number	Engine	Holes
CN900A	0°	140°		174-7526 174-7527 232-1175	20R-0758	3408 3412	6 x 0,255
CN900B	16°30'	140°	DPE41026/ 32 (6-16)	141-7837 155-1819 169-7408 171-9704 171-9710 173-9272 173-9379 173-9380 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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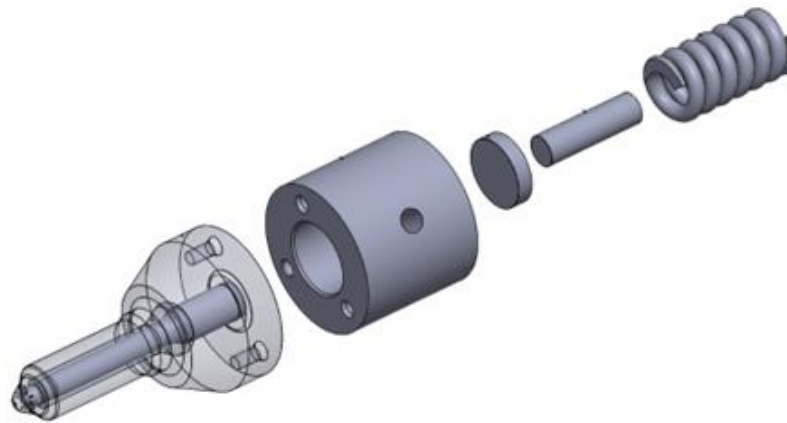
				174-7527		3412	
CN900H	0°	140°		232-1170		3412	6 x 0,255

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

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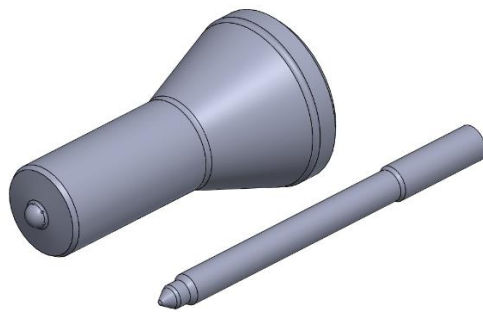


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EUI Caterpillar Nozzles (Needle Ø 3,64 – 3,83)



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

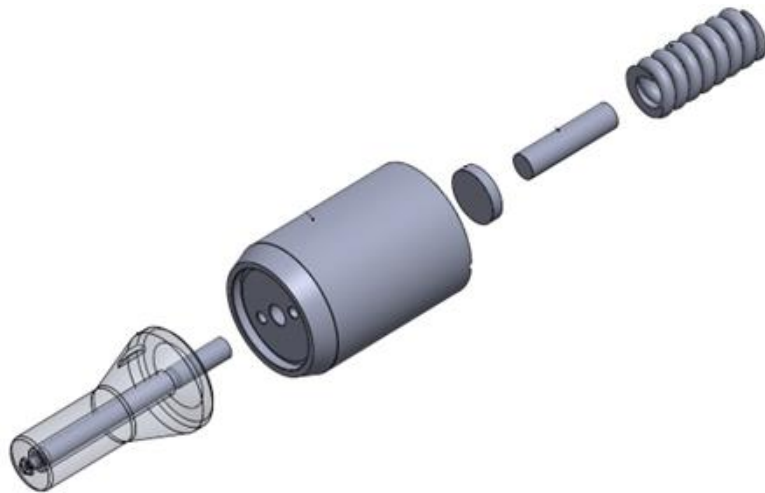
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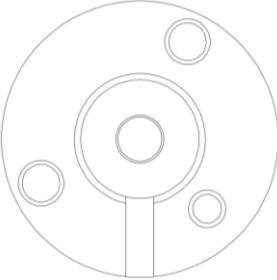



C802J	0°	125°	10R-1000=229-5919		C15	6 x 0,215
C802M	0°	130°	10R-0963=212-3463	053F803444	C10	6 x 0,180
C802N	0°	130°	10R-0956=211-3022		3406E	6 x 0,200
C802P	0°	130°	10R-0957=211-3023		3406E C15-C16	6 x 0,215
C802R	0°	131°	10R-0958=211-3024		3406E	6 x 0,230
C802S	0°	130°	10R-3262=249-0713		C13 C11	6 x 0,310
C802T	0°	125°		291F705909		6 x 0,270
C802V	0°	130°	211-3022 249-0713 10R-2782 10R-3262		C13 C11	6 x 0,225
C802W	0°	129°	350-7555=20R-0056	105T901245 208F701245	C12	6 x 0,180
C802X	0°	145°		215T377545		8 x 0,300
C803B	0°	136°		349S738803	C12	7 x 0,220
C803E	0°	125°30'	374-0751=20R-2285		C15 C18 C27	6 x 0,195
C803N	0°	151°	392-0200=20R-1264 386-1752		3512B 3508B 3516B	10 x 0,220
C803X	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	Bush bottom shape	CAT® Injector Part Number	Engine
FD150955	C802G		10R-0955=211-3025	C15
FD132977	C802L		10R-2977=249-0708	C13

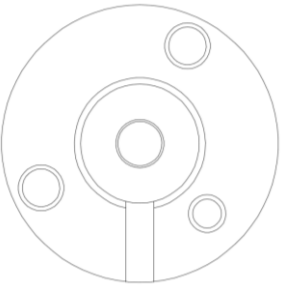

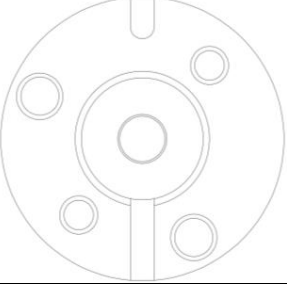
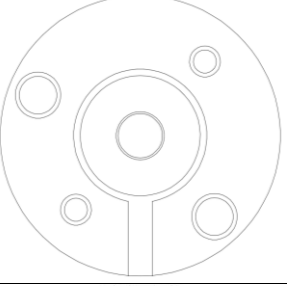

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FIRAD code kit	Firad Nozzle	Bush bottom shape	CAT® Injector Part Number	Engine
FD00800G	C800G		10R-2772=253-0618 CH11945(Perkins)	3406E 2806
FD00800C	C800C		10R-1290=250-1311 20R-0849=392-0211	3516E
FD00800J	C800J		10R-3264=253-0615	3406E
FD00802S	C802S		10R-3262=249-0713	C13 C11
FD00801P	C801P		20R-2285=374-0751	6015B


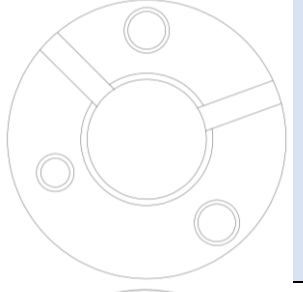
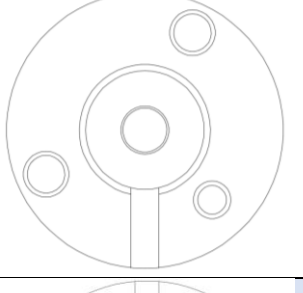
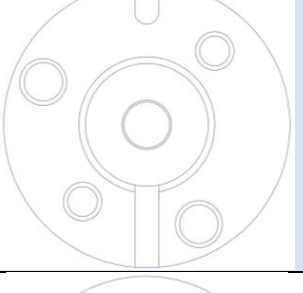

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FIRAD code kit	Firad Nozzle	Bush bottom shape	CAT® Injector Part Number	Engine
FD102772	C800G		10R-2772=253-0618 CH11945(Perkins)	C15 C18
FD00800D	C800D		20R-0849=166-6006	5230B 5130B
FD00801F	C801F		10R-8988=295-9085	C18 C32
FD00801R	C801R		20R-2284	3406E C15 C16
FD00800A	C800A			

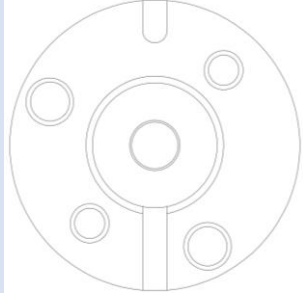

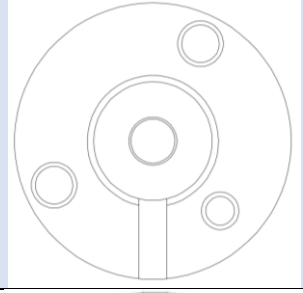
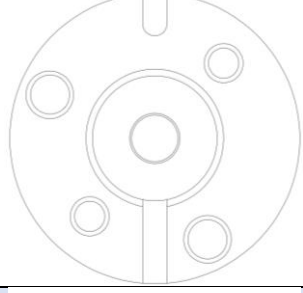
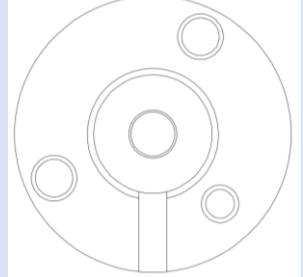
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FIRAD code kit	Firad Nozzle	Bush bottom shape	CAT® Injector Part Number	Engine
FD00801E	C801E		CH12082(Perkins)	C15 3176C C10
FD00802W	C802W		350-7555=20R-0056	C12
FD00803B	C803B		166-0149=0R-9530	C12
FD155919	C802J		10R-1000=229-5919	C15
FD00800Y	C800Y		10R-8501=211-3023	C15, C13 3406E C16

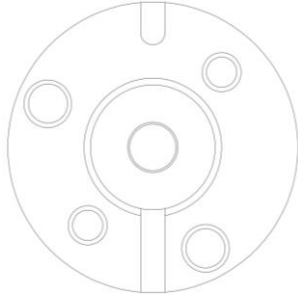
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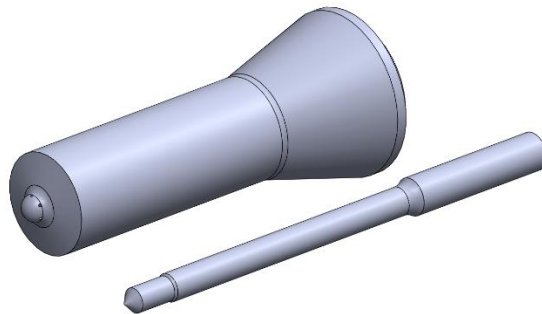
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FIRAD code kit	Firad Nozzle	Bush bottom shape	CAT® Injector Part Number	Engine
FD151273	C802H		10R-1273=249-0709	C15

EUI Caterpillar Nozzles (Needle Ø 3,00)

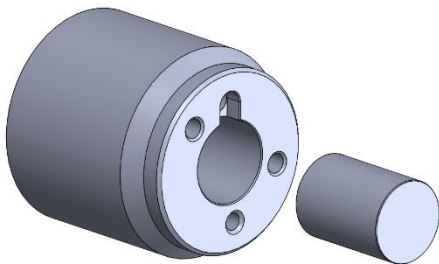


FIRAD code	Engine Angle	Spray Angle	CAT® Injector Part Number	Stamping	Engines	Holes
C800B	0°	137°			3116	6 x 0,225
C801A	0°	155°20'	0R-8475=127-8207	7E-0506	C15	6 x 0,220
C802U	0°	136°				6 x 0,155
C802Z	0°	135°	0R-8461=127-8222	4P-1733		6 x 0,190
C803L	0°	135°	0R-8682=127-8216	104-4632	3114E 3116E	6 x 0,170

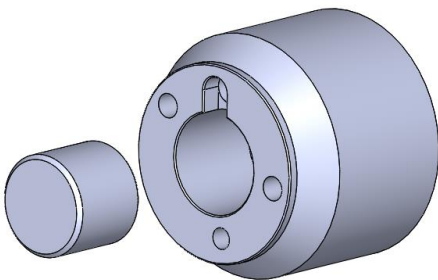
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Caterpillar plunger valve kits



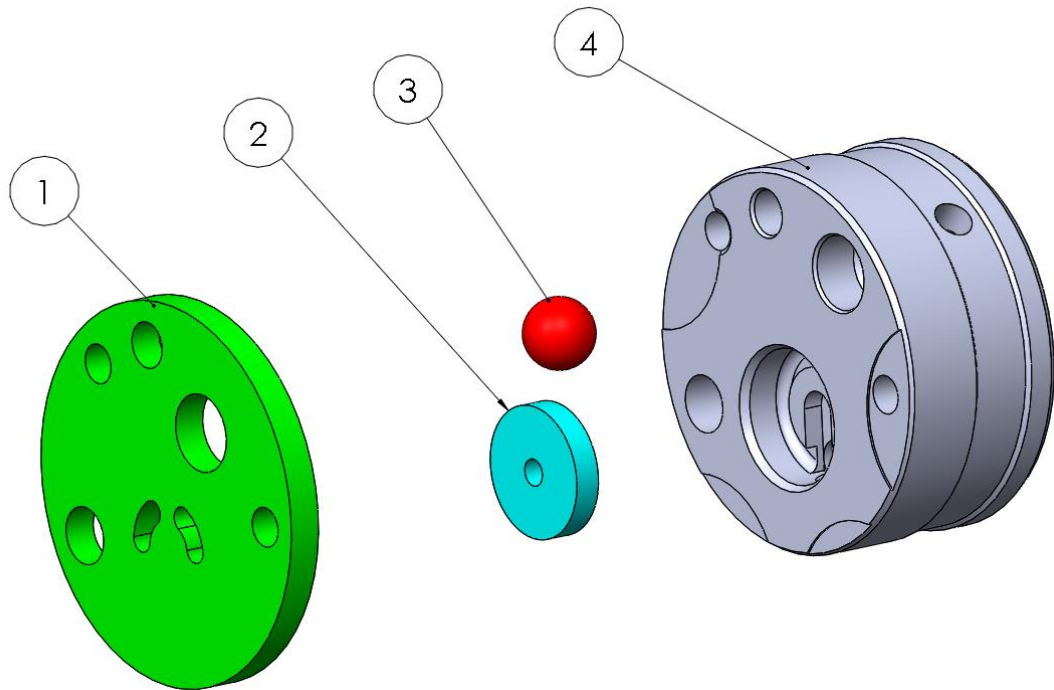
FIRAD code	Engine
FDK00003	C7



FIRAD code	Engine
FDK00002	C9

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Caterpillar one way valve kits

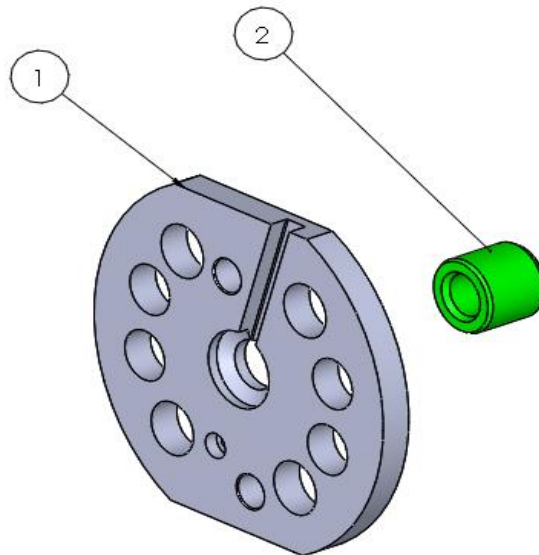


FIRAD Code	N. Part	FIRAD code	Engine
FDK00001	1	MCSA002	C9
	2	MCSA004	
	3	MCBA001	
	4	MCSA001	
FDK00005	1	MCSA005	C7
	2	MCSA004	
	3	MCBA001	
	4	MCSA006	

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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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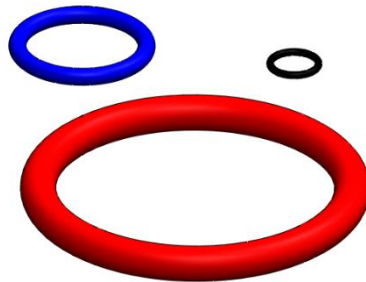


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External Seal Kit



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



FIRAD code	Engines
MCESK006	C9

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PARTS SET CAT3500-EUI



FIRAD code	Engines
MCESK007	3500

PARTS SET CAT3516E-EUI-INT

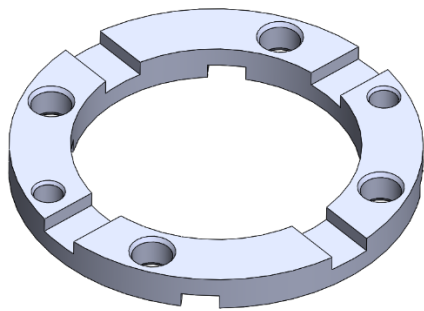


FIRAD code	Engines
MCESK008	3516

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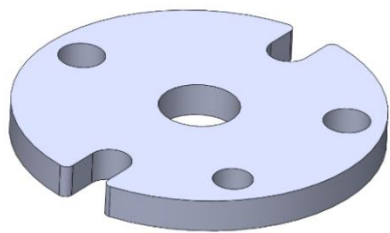
Caterpillar spare parts



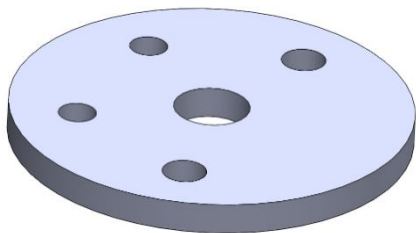
Solenoid spacer

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



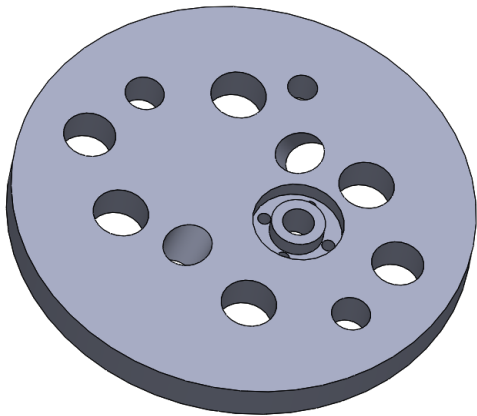
FIRAD code	Engine
MCSA007	C7

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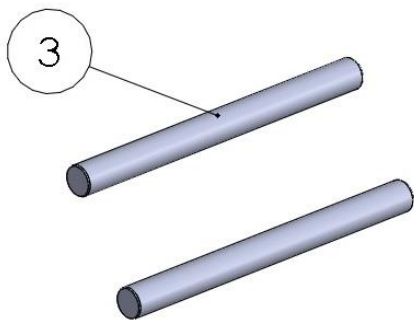
LET THE FUTURE COME



Hydraulic flow control plate

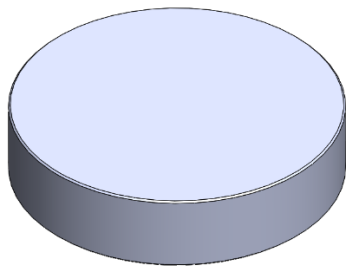
FIRAD code	Engine
MCPL002	C7

Caterpillar C7-C9 Nozzle reference pin



Description	FIRAD code
Nozzle Reference pin for C7-C9	MCCPN001

OEM CODES AND PARTS NUMBERS ARE GIVEN FOR REFERENCE PURPOSE ONLY



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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