

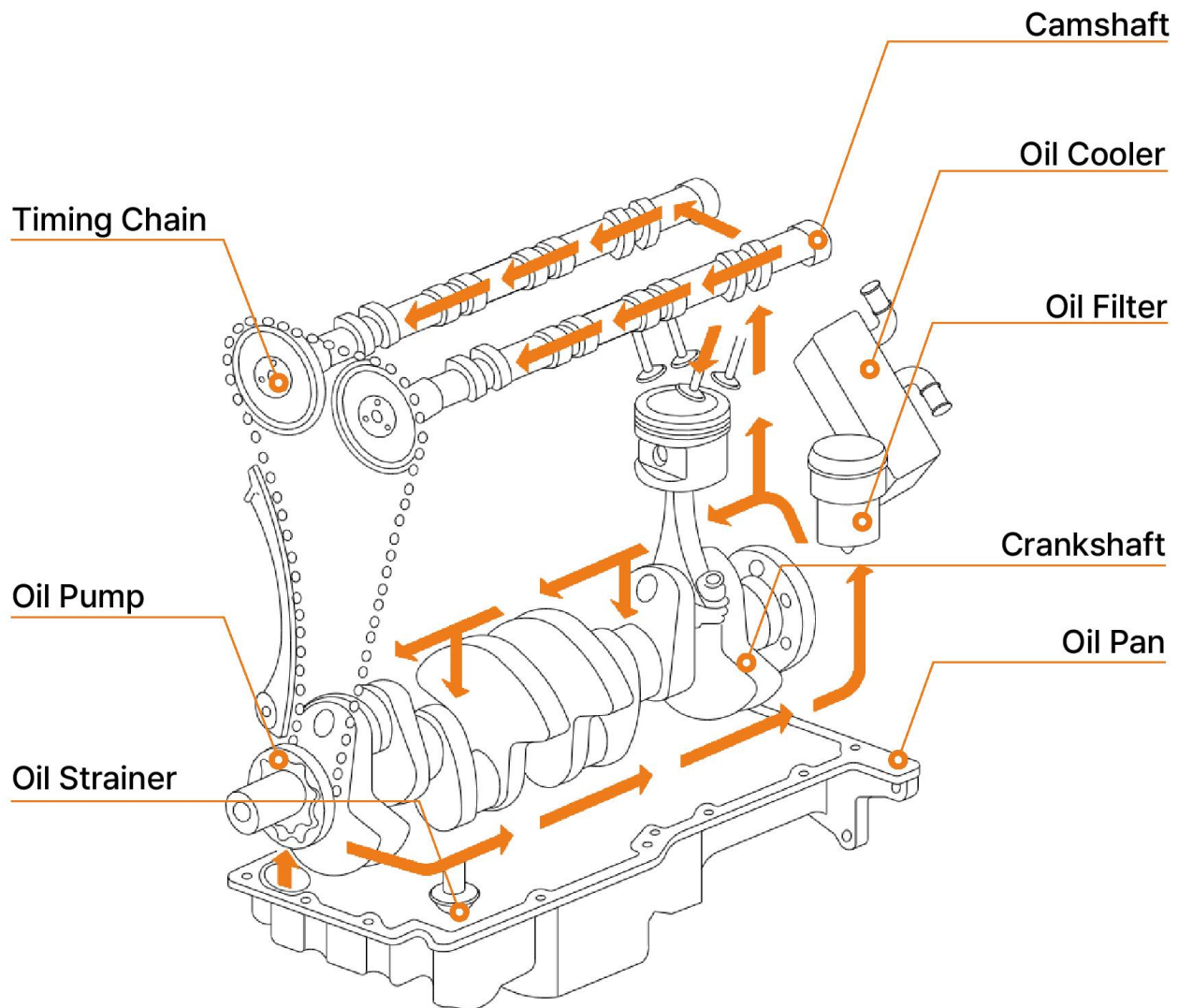
ATC[®]
AUTOTOP CO., LTD.

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**WE GO
TOGETHER**

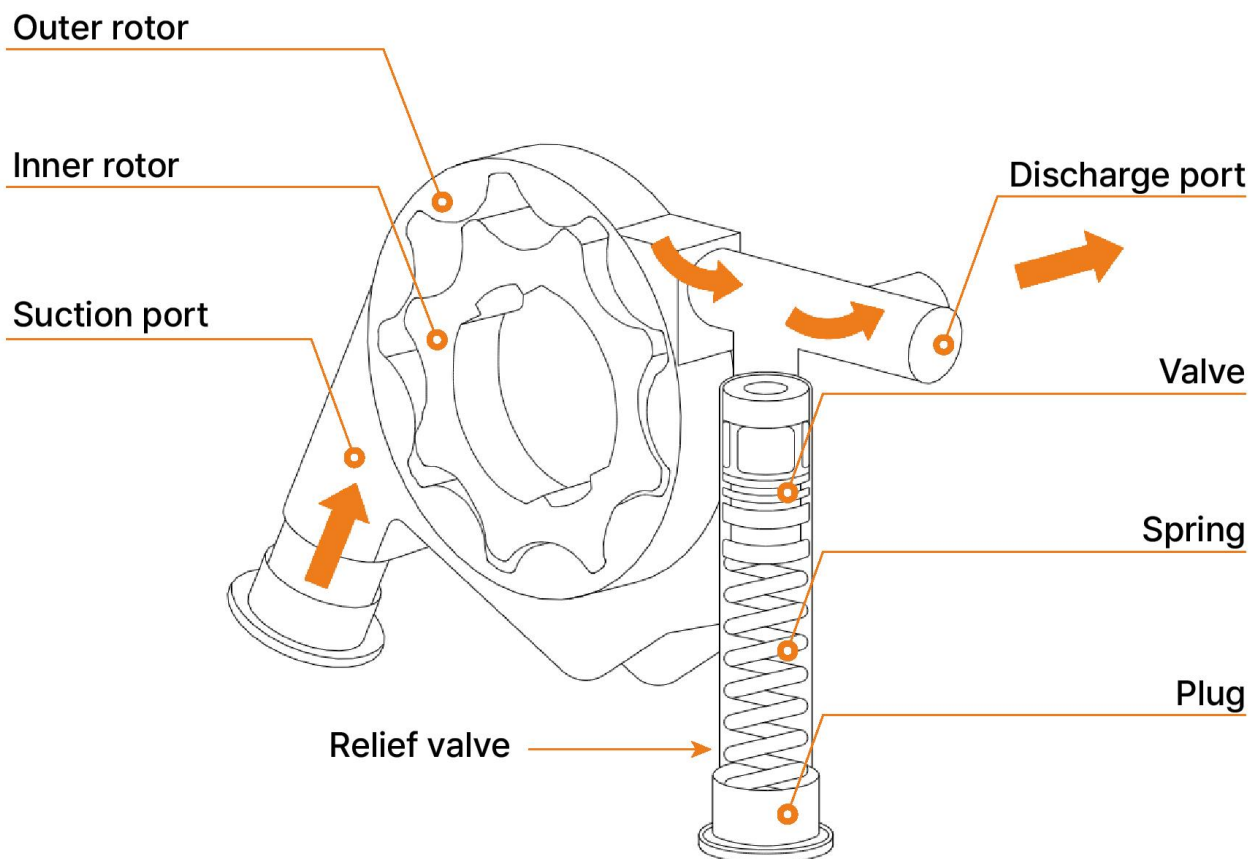
*We'll be the best Business
partner for you*





- The oil pump is an important part of circulating cooling oil into the engine. It functions to cool in the engine interior and lubricate and clean the engine interior.
- Some oil pumps supply oil not only to the inside of the engine, but also to valve lifts and timing parts.
- The oil pump is operated by the operation of the crankshaft, which draws oil from the oil pan through the oil strainer to supply oil to the oil filter, oil cooler and internal moving parts, and then returns to the oil pan.

- The structure of the oil pump consists of two rotors as Inner & Outer Rotors.
- When the engine rotates, the rotor of the oil pump rotates, and the oil pump from the oil pan starts suctioning engine oil from the suction port.
- Inhaled engine oil is generated from the suction port due to a change in volume in the gap between the rotors and it is moved to the discharge port.
- Oil from the discharge port is sent into the engine and above the specified pressure and then the relief valve opens and the oil moves back to the suction port.



Relief valve

- Relief Valves are designed to relieve pressure at a set pressure. In typical fuel oil applications they are used at the outlet of positive displacement pumps.
- In case a valve is closed downstream from the pump the relief valve will open and allow the fuel to be circulated back to the tank the pump is pumping from.

01

Check the car model and OE part number of the oil pump.
Engine damage may occur when fitted with similar models.

02

The rotor, oil seal of the oil pump are precise parts. Shock or drop may damage the rotor or oil seal.

03

The oil pump is a functional part and must be installed by a technician.

04

When replacing the oil pump, drain the residual oil from the engine completely and renew the oil filter as well.

05

When the engine is heated, the engine oil is very hot and can cause burns.
Make sure to cool the engine completely before installing the oil pump.

06

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Make sure to cool the engine completely before installing the oil pump.

07

Do not start without engine oil.
Vehicle engines can be severely damaged in a short time.

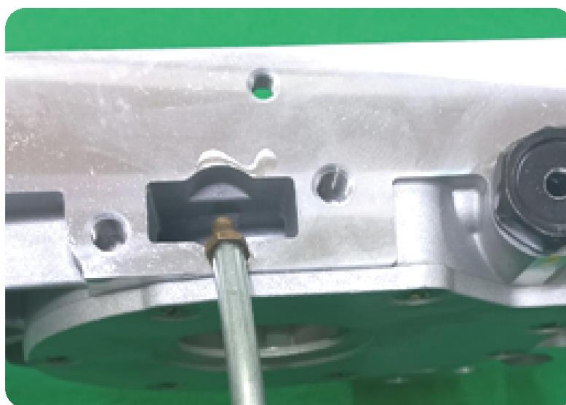
08

After installing the oil pump, check for leakage of parts connected to the pipeline. Leakage may occur at the part joints connected to the pipeline, not the oil pump.

04 Precaution in Handling

1 Put enough engine oil inside the oil pump.

1. Lubricating will prevent pump seizure and suction failure.
2. In the case of an old engine, residue such as carbon is stuck inside the engine oil pipeline, which interferes with the supply of the oil pump. The lubrication of the oil pump is helpful.



2 Clean the oil strainer thoroughly.

1. If there is any foreign substance in the mesh and pipe of the oil strainer, it is difficult to sucking engine oil from the oil pan.



3 Check the Crankshaft end play.

1. Make sure that the end play of the crankshaft is within the manufacturer's prescribed range.
2. When the gap of the crankshaft is large, the oil seal of the oil pump is damaged or detached.



01

- ▶ After disassembling the used oil pump, clean the gasket and foreign substances remaining on the mounting surface using a solvent to clean that does not cause wear.
- ▶ Failure to remove damage, deformation or foreign substances from the mounting surface may cause oil leakage and pressure reduction.

02

- ▶ Always use engine oil when cleaning, disassembling and installing moving or rotating parts.
- ▶ The application of engine oil prevents a decrease in the suction power of the oil pump.

03

- ▶ Ensure that any foreign substances enter the inside of the oil pump prior to installation.
- ▶ Contamination or foreign substances can damage the rotor, cause the become stuck in a gap in the relief valve, preventing the valve from opening, and causing abnormal pressure.

04

- ▶ Before installing the oil seal, make sure that the mounting surface is free of damage, deformation, or foreign substances. Install the oil seal and make sure it is seated correctly.
- ▶ Incorrect oil seal installation can cause leakage or low pressure.

05

- ▶ Always use a new gasket and O-ring when installing the oil pump. When installing the O-ring, be careful not to get caught between the surfaces on which the O-ring is mounted.
- ▶ Incorrect installation of O-rings can cause leakage or low pressure.

06

- ▶ The rotor of the oil pump is a precise part and requires careful handling. In particular, be careful not to shock or imprint during inspection or installation.
- ▶ Damaged rotors cause incorrect operation of the oil pump or low pressure.

07

- ▶ When installing the oil pump, tighten the bolts in the diagonal direction. Always install in accordance with the torque, tools and sequence of the manufacturer's vehicle specification to prevent damage or leakage.

08

- ▶ After installing the oil pump, warm up the engine to the proper temperature by idling the engine. Stop the engine, check the oil height and top up the oil to the appropriate height.
- ▶ When the oil circulates after the oil pump has been replaced, the remaining air inside the engine is released.

Low oil level

If you have low oil pressure at idle, make sure that your engine's oil level is correct. Check your dipstick and make sure it's not under the MIN mark. If you have a low oil level, the oil pump can suck up air from the sump and make a low and fluctuating oil pressure.

Wrong type of engine oil

The oil you use in your engine could cause a low oil pressure for your engine, especially at idle. If you are using 0w-20 oil in an engine that requires 5w-50 oil, you could get a low oil pressure when the engine is hot.

Dirty pickup to the oil pump

If your oil level is correct, and you are sure that the oil type is correct, the most common cause of low oil pressure is too much dirt in the pickup to the oil pump. That filter/net could catch a lot of dirt and may have to be cleaned.

Oil leak or damaged bearings

There could be an internal oil leak inside your engine. It will make your oil pressure low, and it could leak from a crack or a bad internal gasket. If the engine bearings have excessive clearance it could result in low oil pressure.

Plugged Filter

If the filter becomes clogged with contaminants and the bypass valve does not operate correctly, it may lead to lubricant starvation. A clogged filter is often the result of an overextended oil. It may also be caused by water and/or soot contamination.

Engine Wear

If the oil level on the dipstick is between "add" and "full," a possible cause of low pressure would be worn engine bearings, especially if the engine has very high mileage. Excessive wear reduces the original flow restriction, which consequently drops the pressure.

Defective Oil Pressure Gauge

If the oil pressure warning light has come on but you have confirmed that the oil level is correct and the engine is running normally with no unusual noises or high temperatures, the problem may be a defective sensing unit.

Oil Bypass Valves Are Open

If the engine oil bypass valves are set in the "Open" position, it can result in lower engine oil pressure. The cause of open bypass valves is usually debris in the engine oil. Oil Pump Screen An open lubrication system could also be caused by a piston cooling nozzle that is missing or Damaged.

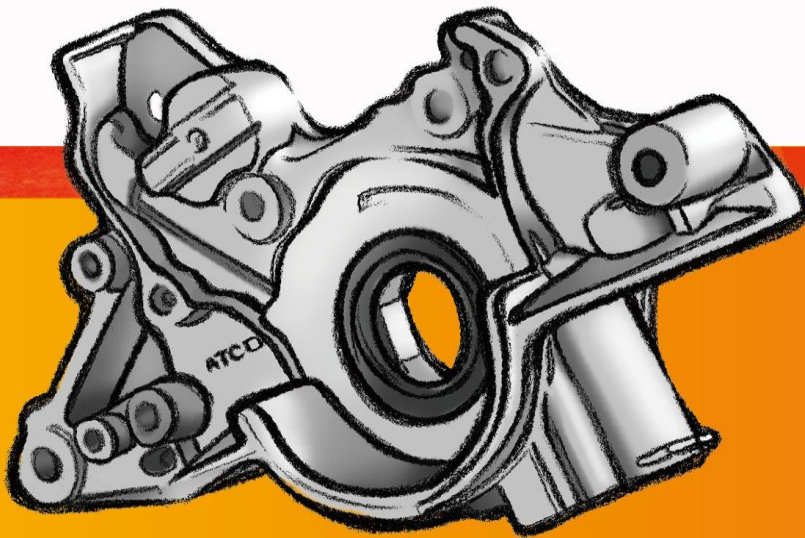
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AUTOTOP CO., LTD.

OIL PUMP






PRODUCTS LIST





ATC

Oil Pump






AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1001	MFU6119700J	MFU6119700K	CREDOS 1.8	
AOK1002	OK05414100A	OK054 14100B	SPORTAGE	
AOK1003	OK24A14100A	OK24A 14100B	AVELLA	
AOK1004	OK2A114100A		SEPHIA2	
AOK1005	OK30C14100C	OK30C 14100D	RIO DOHC	
AOK1006	OK30F14100C	OK30F 14100D	RIO DOHC	
AOK1007	OK47A14100		TRADE	
AOK1008	OK62014110	145614110	CERES	
AOK1009	OK65A14100D	OK65A14100E	FRONTIER 1TON	








AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1010	0K80014100A		POWER COMBI	
AOK1011	0K93314100	KK15014100B	PRIDE	
AOK1012	0K93514100A		SEPHIA II 1.5	
AOK1013	0K97214100A		SPORTAGE 2.0 SOHC	
AOK1014	0K9BV14100D		CARNIVAL 2.5	
AOK1015	0RFB314100A	0RFB314100B	BESTA 2.2	
AOK1016	0VN0114100		BESTA 2.7	
AOK1017	2131002400	2131002550	AOTS 01MY TCI	
AOK1018	2131002500		ATOZ	
AOK1019	2131002550	2131002400	MORNING	





AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1020	2131021000	2131021010	EXCEL	
AOK1021	2131022650	2131022010	ACCENT	
AOK1022	2131023000	2131023001	BETA ENGINE	
AOK1023	2131025001	2131025002	NF SONATA	
AOK1024	2131026010	2131026020	ACCENT DOHC	
AOK1025	2131026650		VERNA	
AOK1026	2131026800		PRIDE 05MY	
AOK1027	2131026802	2131026801	LAVITA	
AOK1028	2131027000		TUCSON	
AOK1029	2131027001		SANTAFE TCI	


AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1030	2131027010		NEW SPORTAGE	
AOK1031	2131027060	2131027410	NF SONATA TCI	
AOK1032	2131027400		TUCSON 2.0 TCI	
AOK1033	2131027410	21310 27060	LOTZX	
AOK1034	2131027900	2131027910	TRAJET	
AOK1035	213102A000	213102A001	AVANTE XD	
AOK1036	213502A150	213502A151	AVANTE 1.6 DIESEL	
AOK1037	2131033B00		ELANTRA 91MY	
AOK1038	213102Y000	213102Y010	CREDOS1.8	
AOK1039	2131032086	2131032084	PORTER GASOLINE	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1040	2131032482	2131032475	SONATA SOHC	
AOK1041	2131033030	2131033010	ELANTRA	
AOK1042	2131033142	2131033110	SONATA DOHC	
AOK1043	2131035002	MD154258	NEW GRANDEUR V6	
AOK1044	2131035700		MARCIA 3.5	
AOK1045	2131035800		MARCIA 2.5	
AOK1046	2131036010		GALLOPER 3.0	
AOK1047	2131037100		EF SONATA	
AOK1048	2131038062	2131038011	OPTIMA	
AOK1049	2131039011	2131039511	GRANDEUR XG 3.0	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1050	2131039511	2131039011	TERRACAN 3.5	
AOK1051	213103B003	213103B005	EQUUS 99 GDI	
AOK1052	213103C100	213103C120	OPIRUS	
AOK1053	213103C200	213103C300	LAMDA ENGINE	
AOK1054	213103E000	213103E001	GRAND CARNIVAL	
AOK1055	213103X000	0K95414100A	CREDOS DOHC	
AOK1056	2131045500		E-MIGHTY	
AOK1057	2134042106	2134042103	STAREX	
AOK1058	2131042500	2131042000	GALLOPER 2.5	
AOK1059	2134042501		PORTER	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1060	2134042505	2134042503	GALLOPER	
AOK1061	2134042506	2134042504	TERRACAN	
AOK1062	2134042800		GRACE	
AOK1063	261004A000		SORENTO	
AOK1064	261004A012	261004A010	GRAND STAREX	
AOK1065	261004X150	261004X180	TERRACAN 2.9	
AOK1066	2610041700		MIGHTY2	
AOK1067	2610041710		FRONTIER 2.5TON	
AOK1068	261004X100	0K55114100	CARNIVAL 2.9 TCI	
AOK1069	2610041000		MIGHTY D4AF	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1070	2610041400		MIGHTY	
AOK1071	261004X140	261004X201	BONGOⅢ 04MY	
AOK1072	261004X180	261004X150	BONGOⅢ 2.9	
AOK1073	261004X200	261004X140	PREGIO VAN	
AOK1074	2611045001	2610045010	COUNTY	
AOK1075	AA10014100		TOWNER	
AOK1076	2131027500		TUCSON NEW	
AOK1077	0K63114100		TOPIC	
AOK1078	213102A003		CERATO	
AOK1079	213102A300	213102A301	I30 DIESEL	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1080	213102A400	213102A401	CLICK	
AOK1081	2610045010	2611045001	E-MIGHTY NEW	
AOK1082	213102C300		CARENS	
AOK1083	2131003300	2131003100	i10	
AOK1084	213102F301		TUCSON IX DZL	
AOK1085	0SL7014100		TITAN2.5	
AOK1086	2134042100		STAREX OLD	
AOK1087	213102C200	213102C201	GENESIS COUPE NEW	
AOK1088	261104A701	261104A700	BONGO3 11MY	
AOK1189	213103CAC0		GENESIS OLD	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1091	2642045006		E-COUNTY 04MY	
AOK1092	0K67215010		CERES OLD	
AOK1093	2131003900	2131003910	ACCENT 08	
AOK1094	213102G002	213102G003	YF SONATA	
AOK1095	2131002552		MORNING NEW	
AOK1096	213102A600		i30	
AOK1097	2610048000		E-COUNTY 08EM	
AOK1098	2610048010		E-COUNTY 08EM NEW	
AOK1099	2610084460		11 TON EG TRUCK	
AOK1100	2610084000		D6CA	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1101	2131042510		LIBERO	
AOK1102	2610052010	251003C120	D6GA	
AOK1103	213103CBA0		K7	
AOK1104	2131005000		EON	
AOK1105	2131045021		MIGHTY2 NEW	
AOK1106	0K20314100		SEPHIA	
AOK1107	2131003910	2131003900	SOLARIS	
AOK1108	213102C000	213102C001	GENESIS COUPE	
AOK1109	2610093010	2510093000	EX200	
AOK1110	261204A700		GRAND STAREX VAN	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1111	2610084300		15TON	
AOK1112	2131026002		ACCENT NEW	
AOK1113	2131003010		i20	
AOK1114	2131003100	2131003300	i10 10MY	
AOK1115	213102F311		SPORTAGE TCI	
AOK1116	2131003150		i20 12MY	
AOK1117	213102C201	213102C200	GRAND STAREX 07MY	
AOK1118	261104A600	261104A603	SOLATI	
AOK1119	213102G010	213102G011	NF SONATA 08MY	
AOK1120	213102G001	213102G000	FORTE	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK1121	2610084001		UNIVERSE	
AOK1122	261103F100		MOHAVE	
AOK1123	261103A000		VERACURZ	
AOK1124	2131027080		CARENS 06MY	
AOK1125	2610083000		6D22	
AOK1126	2610093000	2610093010	6D16	
AOK1127	2610083001		HD160	
AOK1128	2610072000		91A	
AOK1129	2610084401		SUPER TRUCK	
AOK1130	0K87A14100		HD120	

AUTOTOP Co., Ltd.

HYUNDAI / KIA

Oil Pump





[illegible]

Oil Pump

CHEVROLET

AUTOTOP Co., Ltd.

Oil Pump

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK2001	96350159	74344024	CIELO	
AOK2002	96386934		LANOS DOHC	
AOK2003	90298370	90231887	CIELO DOHC	
AOK2004	92067275		PRINCE	
AOK2005	92067276		REZZO	
AOK2006	94580158	25189697	TICO	
AOK2007	90412744		LEMANS (940101~960807)	
AOK2008	96325246	25189698	KALOS	
AOK2009	96351893	96350159	ESPERO	

CHEVROLET

AUTOTOP Co., Ltd.

Oil Pump

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK2010	96852440	96490075	MAGNUS L6	
AOK2011	25182605		TOSCA 1.8	
AOK2012	96837743	96440211	LACETTI DIESEL	
AOK2013	25189699	96879426	AVEO	
AOK2014	12640448		CAPTIVA	
AOK2015	12586665		GEN3	
AOK2016	24558579	2454124	N200	
AOK2017	9025210	23538209	SAIL	
AOK2018	55565003	55566793	CRUZE1.6	
AOK2019	12590152	12640448	CAPTIVA NEW	

AUTOTOP Co., Ltd.

CHEVROLET

Oil Pump

Oil Pump

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK2020	55556427	25195117	CRUZE1.8	
AOK2021	55574770	25199823	CRUZE1.4	
AOK2022	24525759		N300	
AOK2023	93186324		GENTRA	
AOK2024	12637040	12606585	MALIBU	

Oil Pump

KGM

AUTOTOP Co., Ltd.

Oil Pump

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK3001	6611803601		NEW KORANDO	
AOK3002	6611804001	6611803601	MUSO	
AOK3003	6641800401		KYRON Q100	
AOK3004	6651800701		REXTON	
AOK3005	6641800301		KYRON	
AOK3006	6651800501		RODIUS	
AOK3007	6611804601		ISTANA	
AOK3008	6711800701		KORANDO SPORT	
AOK3009	1621803401		REXTON 06MY	

AUTOTOP Co., Ltd.

KGM

Oil Pump

Oil Pump

[illegible]

Oil Pump

HYUNDAI / KIA TIMING CHAIN COVER

AUTOTOP Co., Ltd.

Oil Pump

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK5001	2135004112		PICANTO	
AOK5002			AVANTE DIESEL	
AOK5003	2135003060		i20 18MY	
AOK5004	2135004132	2135004130	PICANTO NEW	
AOK5005	213502A650		i20 NEW	
AOK5006	213502A660		MATRIX	
AOK5007	213502B000		CEED 06MY	
AOK5008	213502B701		VELOSTER	
AOK5009	2135003052		KAPPA ENGINE	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK5010	213502B001	213502B000	AVANTE 11MY	
AOK5011	213502A101		NEW AVANTE	
AOK5012	213504A001		SORENTO WAGON	
AOK5013	213502E021		SOUL	
AOK5014	2135004180		GRAND i10	
AOK5015	2135004120		PICANTO 12MY	
AOK5016	213502A700	213502A702	TUCSON IX35	
AOK5017	213502G100		SANTAFE 09MY	
AOK5018	213502A500		ALL NEW PRIDE	
AOK5019	213502C100		GENESIS COUPE OLD	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK5020	213502A670		CLICK	
AOK5021	2135003101		ALL NEW ACCENT	
AOK5022	213502E310	213502E030	TUCSON IX	
AOK5023	213502A702	213502A700	i40	
AOK5024	2135003110		ACCENT 11MY	
AOK5025	2135003051		PICANTO 11MY	
AOK5026	213502E300	213502E030	SOUL NEW	
AOK5027	213502B011	213502B012	IX20	
AOK5028	213502E030	213502E350	FORTE KOUP	
AOK5029	213502F000		MAXCRUZ	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK5030	213502G004	213502G003	SANTAFE	
AOK5031	213502G300		M90	
AOK5032	213502GGA0		K5	
AOK5033	213502C101		GENESIS 08MY	
AOK5034	213502E410	213402E430	SONATA HYBRID	
AOK5035	213502E430	213502E411	SONATA HYBRID NEW	
AOK5036	2135003HA0		NIRO	
AOK5037	2135003140		H80	
AOK5038	213502A100		VERNA NEW	
AOK5039	2135004140		MORNING NEW 11MY	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK5040	2135003100		ALL NEW ACCENT 11MY	
AOK5041	213502E620		AVANTE 16MY	
AOK5042	213502G003	213502G004	TG GRANDEUR	
AOK5043	2135003080		STONIC	
AOK5044	2135025000	2135025001	TG GRANDEUR 2.4	
AOK5045	213502F600	213502F610	AZERA	
AOK5046	2135003120		ACCENT 18MY	
AOK5047	0K65A10500B		WIDE BONGO	
AOK5048	213502A120		CRETA	
AOK5049	213504A622	213504A621	SOLATI 14MY	

AUTOTOP NO.	OEM NO.	REF NO.	VEHICLE	IMAGE
AOK5050	213804A005		SORENTO 02MY	
AOK5051	213604A001		GRAND STAREX 15MY	
AOK5052	213704A410		SOLATI H350	
AOK5053	213502E601	213502E700	KONA	
AOK5054	213513CAA3		HG GRANDEUR	
AOK5055	213502E040		CARENS NEW	
AOK5056	213804A710		YF SONATA 09MY	
AOK5057	213502A710	213502A700	K3	
AOK5058	213502M010		VENUE	
AOK5059	2135003170		i30 17MY	



ATC[®]

AUTOTOP CO., LTD.

868, Geumbak-ro, Daechang-myeon, Yeongcheon-si,

Gyeongsangbuk-do, 38911, KOREA

Tel : +82.54.336.6691 Fax : +82.54.336.6692

E-mail : info@autotop.kr

www.autotop.kr