



Engine SM-82
VERSION 2019-3
SPARE PARTS MANUAL



PARTS LIST CATALOGUE

NORMS TO PLACE AN ORDER:

For fast and more efficient service, please specify the following information on spare parts orders that must be preferably done by FAX or e-mail as specified below:

- 1- Engine model: As shown in identification plate
- 2- Engine serial number: As shown in identification plate and stamped on crankcase
- 3- Item description + part number + quantity required

Spare parts requests must be addressed to:

recambios@solediesel.com

Telf.: +34 93 775 44 05

Fax: +34 93 775 30 13

The components shown in the catalog have:

- Figure: Number by which they are represented in scheme
 - Description: Trade name of the component
 - Quantity: Total number of parts used in the assembly of the part represented (may differ from the total minimum quantities)
- Hoses, indicates the total length in meters
-

The diagrams shown in this catalog of spare parts, have only the purpose to identify the piece in question, its representation is not meaningful and may differ from the actual piece.

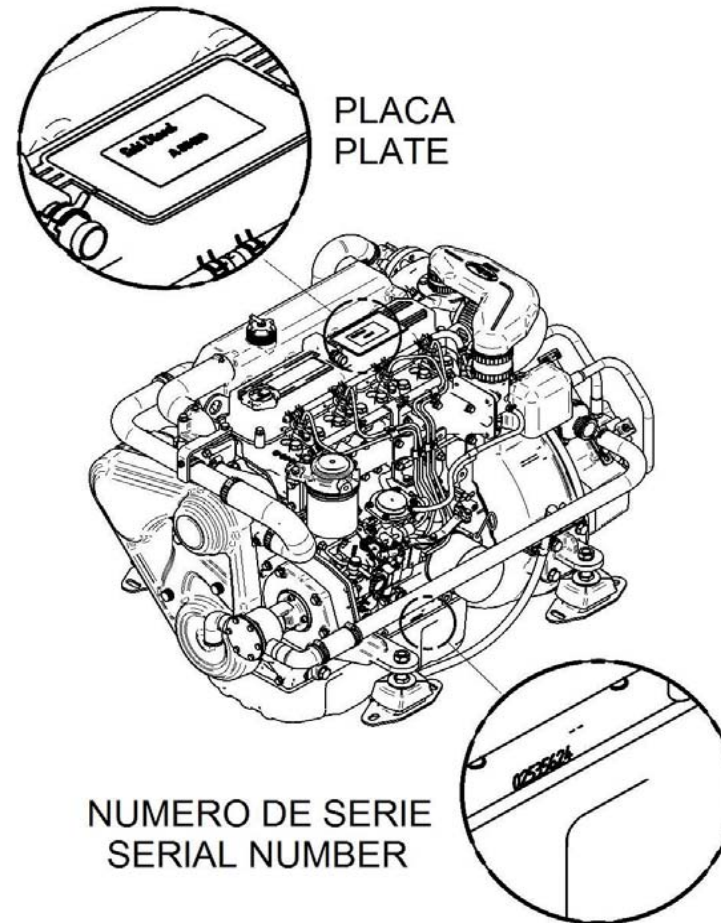
In case of doubt, contact Solé Diesel, or your authorized dealer.

The parts / or references in this catalog are subject to change without notice.

SOLÉ, S.A.

C-243b, Km, 2 - P.O. BOX 15
08760 Martorell (Barcelona) Spain

Download the latest version of this manual [HERE](#)



Engine Body

Cylinder Head
 Rocker Cover & Breather
 Valve Drive
 Timing Parts
 Gear Case
 Cranckcase
 Rear Plate
 Piston & Connectiong Rod
 Crankshaft & Flywheel
 Oil System
 Oil Pan
 Engine Brackets
 Bracket, Engine Control
 Oil cooler
 Belt Protection

Inlet & Exhaust

Inlet
 Turbocharger
 Spare parts, Turbocharger

Cooling System

Water Pump
 Cooler Pipes
 Water Cooler Assy MINI-74/SM-82/94
 Cross Brace Pump 1" SM-82/94 Gen.SM-81
 Wet Exhaust

Fuel System

Fuel Pipe
 Injection Nozzle
 Fuel Supply Parts

12V Electrical System

Kit Alternador 14V/95A
 Starter
 Electrical Wiring
 SVT 30 SM-82/94 Panel

Maintenance Kit

Gasket Kit
 Pipe Rubber Set,Water Line SM-82/SM-94
 Gasket Kit

Gearbox TM-93

Sheet 1.1/4
 Sheet 1.2/4
 Sheet 1.3/4
 Intermediate Shaft 2/4
 Input Shaft 3/4
 Output Shaft 4/4
 Maintenance Kit

Gearbox TM-93A

Sheet 1.1/4
 Sheet 1.2/4
 Sheet 1.3/4
 Intermediate Shaft 2/4
 Input Shaft 3/4
 Output Shaft 4/4

Gearbox TM-170

Sheet 1.1/4
 Sheet 1.2/4
 Sheet 1.3/4
 Input Shaft 2/4
 Intermediate Shaft 3/4
 Output Shaft 4/4
 Maintenance Kit

TM-345 Gearbox

Sheet 1/4
 Sheet 2/4
 Sheet 3/4
 Sheet 4/4
 Maintenance Kit

TM-345A Gearbox

Sheet 1/4
 Sheet 2/4
 Sheet 3/4
 Sheet 4/4
 Maintenance Kit

Gearbox TMC-260

Sheet 1/3
 Sheet 2/3
 Cooling System 3/3

Gearbox TM-880A

Sheet 1.1/4
 Sheet 1.2/4
 Sheet 1.3/4
 Input Shaft 2/4
 Intermediate Shaft 3/4
 Output Shaft 4/4
 Maintenance Kit

Gearbox TM-485A1

Sheet 1/4
 Sheet 2/4
 Sheet 3/4
 Sheet 4/4
 Maintenance Kit

GearBox ZF-63 IV

Sheet 1/2
 Sheet 2/2
 Mechanical Selector Valve
 Electric Selector Valve 12V/24V
 Electric Selector Valve 12V/24V (TV)

Kit Gearbox

Kit Z-Drive VOLVO 280/290 Z=26
 Kit Z-Drive Volvo 280/290 Z=10
 Kit GearBox TM-93
 Kit GearBox TM-345/A
 Kit GearBox BORG WARNER With Oil Cooler
 Kit GearBox BW (Without Oil Cooler)
 PRM-160 SAE7 Coupling Housing Kit
 Kit GearBox TMC-260
 Kit SAE 7
 Kit GearBox ZF 68 IV
 Kit GearBox TM-485A1
 Kit Bobtail

Electrical System

Kit 2nd Alternator 28V/55A
 Kit 2nd Alternator 14V/95A
 Kit 2nd Alternator 28V/140A
 Kit Wire Earth Isolated 12V SM-82/94
 Kit 24V Electrical System SM-82/94

Other Kits

Pressure Gauge Kit 10 BAR
Kit Trolling Valve for TM-93/A
Kit Trolling Valve for TM-345/A
Boiler Kit (S)
Kit Trolling Valve for TM-170/A

Exhaust System

Exhaust Flange (S)
Kit Dry Exhaust With Flexible Pipe (S)
Kit Dry Exh. Flexible Pipe & Silencer(S)

Power Take-off Pulley

Pulley 2B (S)
Pulley 2A (S)
Pulley 4A D138 (S)
Kit Power Take-off D40 (S)
Kit Pulley & Power Take-off 2A
Kit Pulley & Power Take-off 2B
Pulley 4B (S)
Pulley 4A D195 (S)

Kit Keel Cooling

Kit Keel Cooling & Dry Exh. GBox TM (S)

Kit Instrument Panel SVT

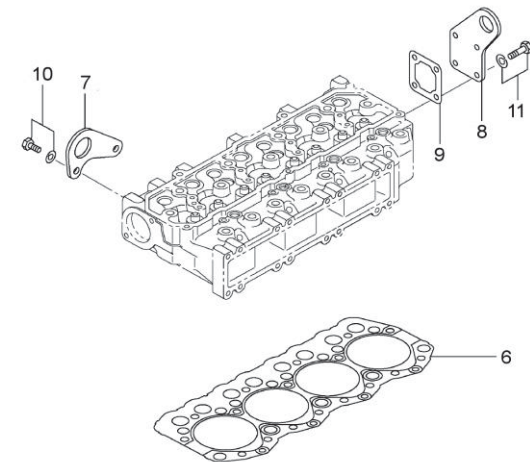
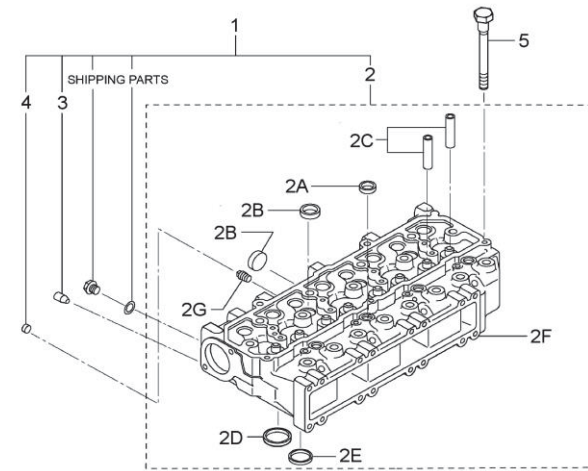
SVT 30 Panel 12V + Exh. Temp. Alarm Kit
SVT 30 24V Panel + Exh. Temp. Alarm Kit
Kit 2nd Panel SVT 40 SM-82/94 12V

Kits NMEA 2000 - One engine

Kit SDC 2000 SM-82/94 12V
Kit SDC 2000 SM-82/94 24V



D_MIE1_1_1		Cylinder Head			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17821001	1	Head Assy,Cylinder		
2	(*)	2	Not available [NP]		
2A	17220006	12	Cap, Sealing		
2B	13220012	7	Cap Sealing		
2C	17421002	8	Guide,Valve		
2D	17421061	4	Seat,Valve,IN		
2E	17421062	4	Seat,Valve,Exhaust		
2G	17820011	4	Plug, Tapered	12/07/2017	
2G	13120011	4	Plug, Tapered [NP]		12/07/2017
3	17421046G.3	1	Plug		
4	17821015	4	Cap,Sealing [NP]		
5	17421005	17	Bolt,cylinder head		
6	17821004	1	Gasket,Cylinder Head		
7	17420014	1	Eye,Lifting,Front		
8	17421018	1	Eye,Lifting;Head Rea		
9	17421011	1	Gasket		
10	17821012	2	Bolt,W/Washer [NP]		
11	17421012G.1	4	Bolt W/Washer (Generator)		

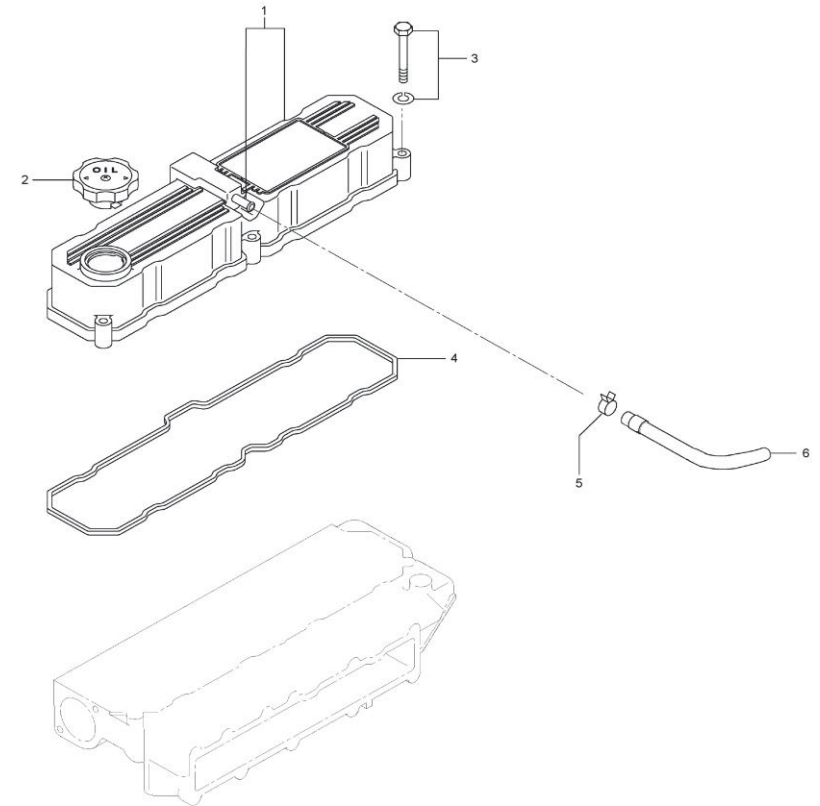


[NP] Not provided





D_MIE1_1_2 Rocker Cover & Breather						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17821009	1	Cover Assy,Rocker [NP]			
2	17821003	1	Cap Oil FILLER			
3	17421014G.1	5	Bolt W/Washer (Generator)			
4	17421010	1	Rocker Cover Gasket			
5	17821007	1	Clip,Hose [NP]			
6	17821006	1	Hose			

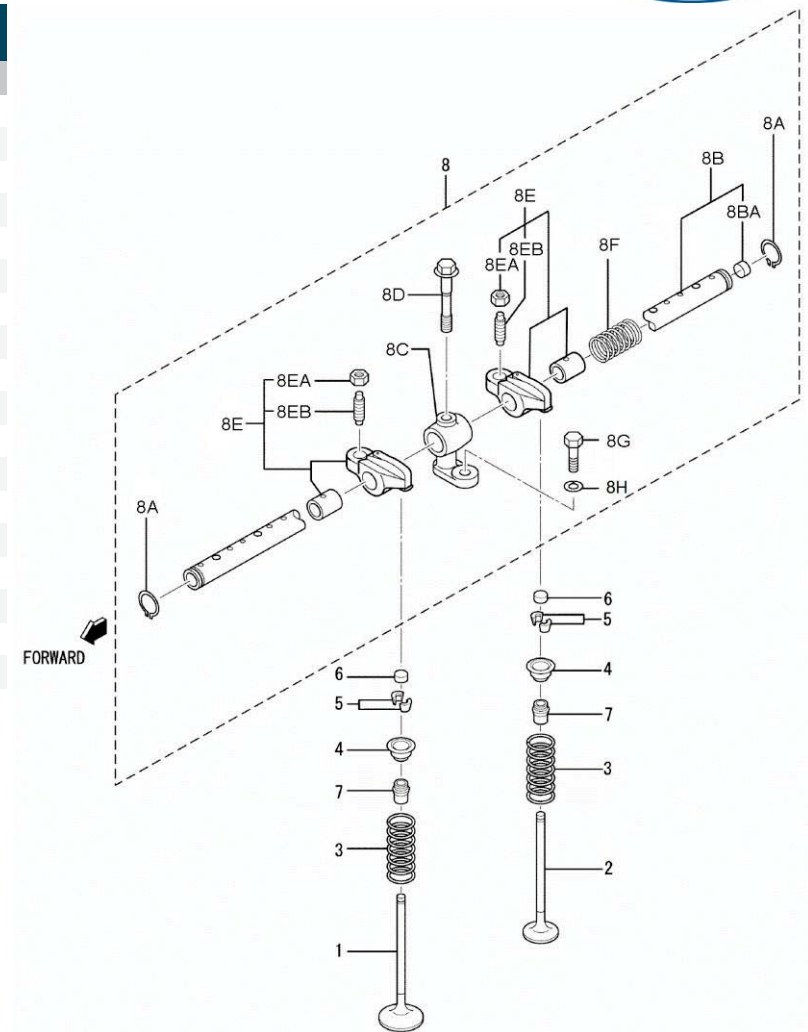


[NP] Not provided





D_MIE1_1_3		Valve Drive			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17422055	4	Intake Valve		
2	17422056	4	Exhaust Valve		
3	13322028	8	Spring, valve outler		
4	17422058	8	Retainer, Upper		
5	17122059	16	Cotter, Valve		
6	13322024	8	Cap		
7	17422054	8	Seal, Valve Stem		
8	(*)	1	Not available [NP]	01/01/2016	
8A	17222050	2	Ring, SNAP		
8B	17422046	1	Shaft Assy, Rocker		
8BA	13322023	2	Cap, Sealing		
8C	17422048	4	Bracket, Rocker Shaft		
8D	17422053	4	Bolt, Rocker Bracket		
8E	17422142.1	8	Rocker Assy		
8EA	17122060	8	Nut		
8EB	17122044	8	Screw Adjusting		
8F	17422047G.1	3	Spring, Rocker		
8G	52102258	4	Bolt DIN 933 M8-25 8.8		
8H	53033008	4	Washer GROWER DIN 127-8		

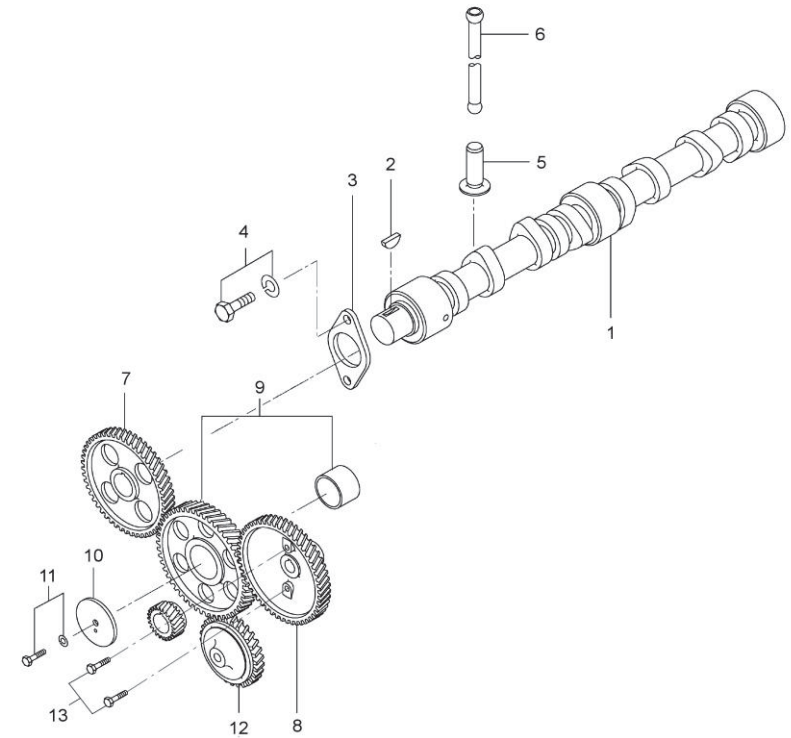


[NP] Not provided





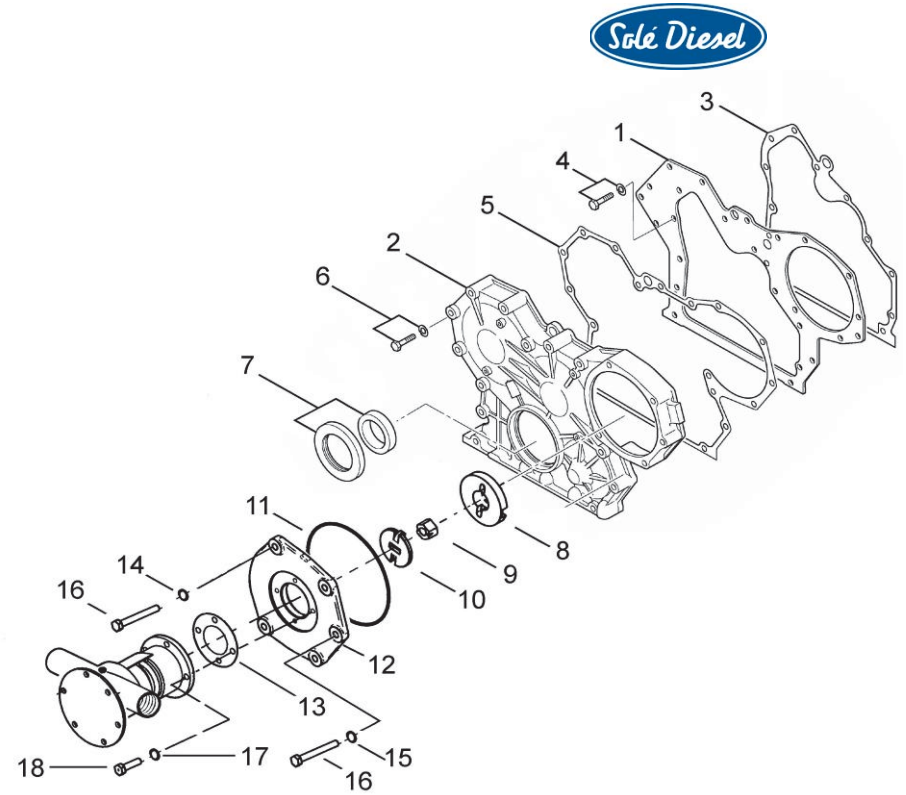
D_MIE1_1_4 Timing Parts						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17822035	1	Camshaft [NP]			
2	13322034	1	Key Woodruff			
3	17422075	1	Plate,THRUST			
4	17422037G.1	2	Bolt W/Washer (Generator)			
5	17122061	8	Tappet			
6	17122041	8	Rod, push			
7	17422037	1	Gear,CamShaft Z=46			
8	17810023	1	Gear, drive			
9	17822038	1	Gear,IDLER Assy Z=49 [NP]			
10	17122032	1	Plate, thrust			
11	17720010	1	Bolt,W/Washer			
12	17422066	1	Gear,Oil Pump Z=31			
13	52103256	2	Bolt DIN 912 M8-15 8.8			



[NP] Not provided



D_MIE1_1_5		Gear Case				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17420024G.1	1	Plate,Front (Generator)			
2	17420035G	1	Case,TIMING Gear			
3	17420018	1	Gasket,Front Plate			
4	17422037G.1	5	Bolt W/Washer (Generator)			
5	17420040	1	Gasket,Gear			
6	17520047	13	Bolt,W/Washer			
7	17420039.1	1	Seal Assy,Oil			
8	17811026	1	DriveR Plate,water pump			
9	17825002	1	Nut [NP]			
10	15310072	1	CrossHead Jaw Coupling			
11	17420047	1	O-Ring D. 140X2			
12	17810010	1	Block Water Pump			
13	13310013	1	Gasket,water pump			
14	53038008	4	Washer DIN 6798-A 8	26/06/2017		
15	53033008	1	Washer GROWER DIN 127-8			
16	52101269	5	Bolt DIN 931 M8-80 8.8			
17	51030006	4	Washer DIN 125-6			
18	52103156	4	Bolt DIN 912 M6-16 8.8			

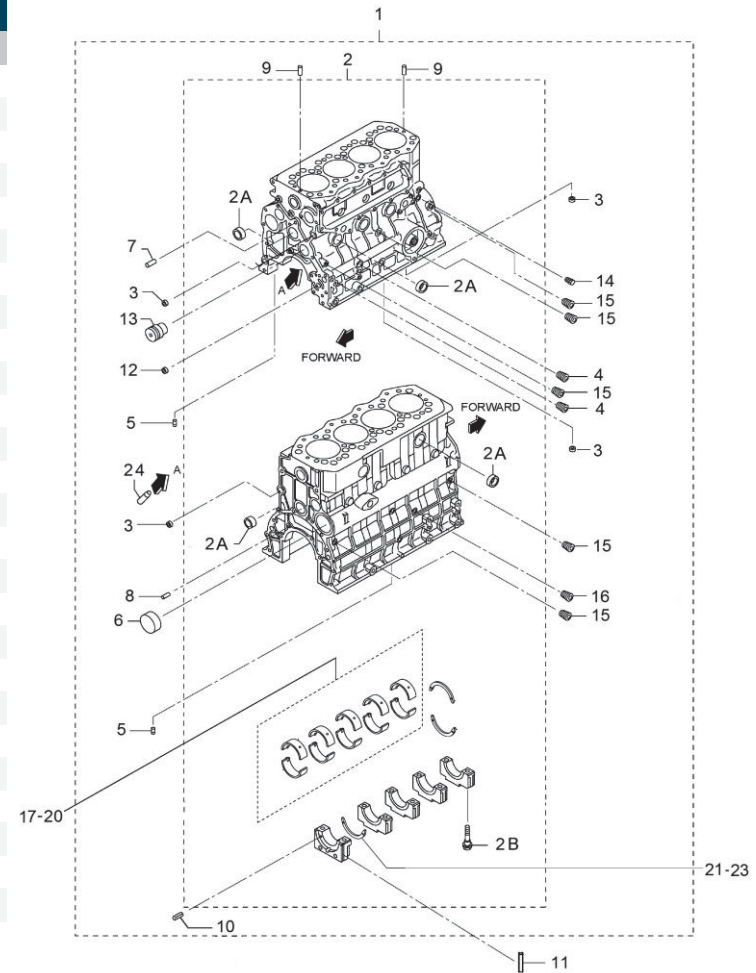


[NP] Not provided





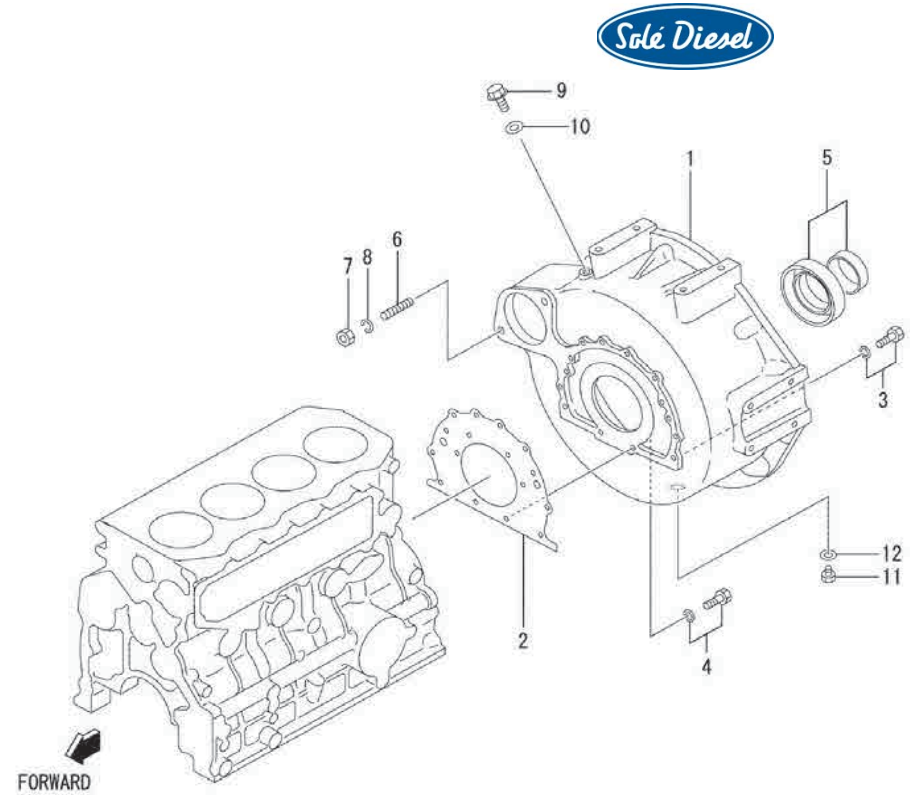
D_MIE1_1_6 Cranckcase					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17820001	1	Crankcase Assy [NP]		
2	(*)	1	Not available [NP]	01/01/2016	
2A	13320006	10	Cap, Sealing		
2B	17420009	10	Bolt Bearing Cap		
3	13320007	4	Cap, Sealing		
4	17420027G.1	2	Plug,TAPPERED (Generator)		
5	17421046G.3	3	Plug		
6	17420013G.3	1	Plug		
7	17420036	2	Pin,Dowel		
8	13320025	2	Pin		
9	17120019	2	Pin, dowel		
10	17420012	6	Pin, Spring		
11	17420112	2	Seal, Valve		
12	17420011G.3	1	Bushing		
13	17420034	1	Shaft, IDLER		
14	17120022	1	Plug, tapered		
15	17820011	5	Plug, Tapered		
16	17120021	1	Plug TAPER [NP]		
17	17420003	1	METAL,MAIN Set STD		
18	17420004	1	METAL,MAIN Set -0,25		
19	17420005	1	METAL,MAIN Set -0,50		
20	17420006	1	METAL,MAIN Set -0,75		
21	17420109	3	Plate,THRUST.C/S STD		
22	17420110	3	Plate,THRUST.C/S +0,15		
23	17420111	3	Plate,THRUST.C/S +0,30		
24	17820016	4	Pipe, Oil Jet [NP]		



[NP] Not provided



D_MIE1_1_7 Rear Plate						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17820002	1	Flywheel Housing [NP]			
2	17420025	1	Gasket,Rear			
3	17327129.2	10	Bolt			
4	17420028G.1	2	Bolt,W/Washer (Generator)			
5	13320063	1	Seal Oil			
6	13320067	2	Stud			
7	17827003	2	Nut [NP]			
8	53033010	2	Washer GROWER DIN 127-10			
9	17121016	1	Plug, drain			
10	17121013	1	Gasket			
11	13224045	1	Plug			
12	56000077	1	Washer 18-23-1,5			

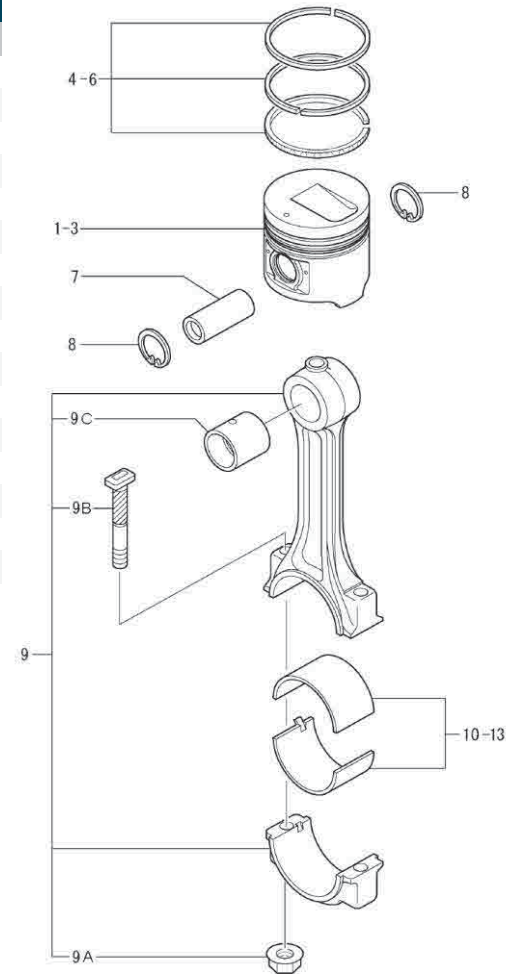


[NP] Not provided





D_MIE1_1_8 Piston & Connecting Rod					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17822001	4	Piston STD. [NP]		
2	17822002	4	Piston O.S 0,25 [NP]		
3	17822003	4	Piston O.S 0,50 [NP]		
4	17822006	4	Ring Set,Piston STD. [NP]		
5	17822007	4	Ring Set,Piston 0,25 [NP]		
6	17822008	4	Ring Set,Piston 0,50 [NP]		
7	17422009	4	Pin,Piston		
8	17422010	8	Ring,Snap		
9	17822012	4	Rod Assy. Connecting [NP]		
9A	17822011	8	Nut [NP]		
9B	17122013	8	Bolt,connecting rod		
9C	17422033	4	Bushing,Con-Rod		
10	17122014	1	Half Bearing, con-rod Std.		
11	17422015	1	Bearing Set,Con-Rod,U.S 0,25		
12	17822016	1	Bearing Set, Con-Rod,U.S 0,50 [NP]		
13	17822017	1	Bearing Set, Con-Rod,U.S 0,75 [NP]		

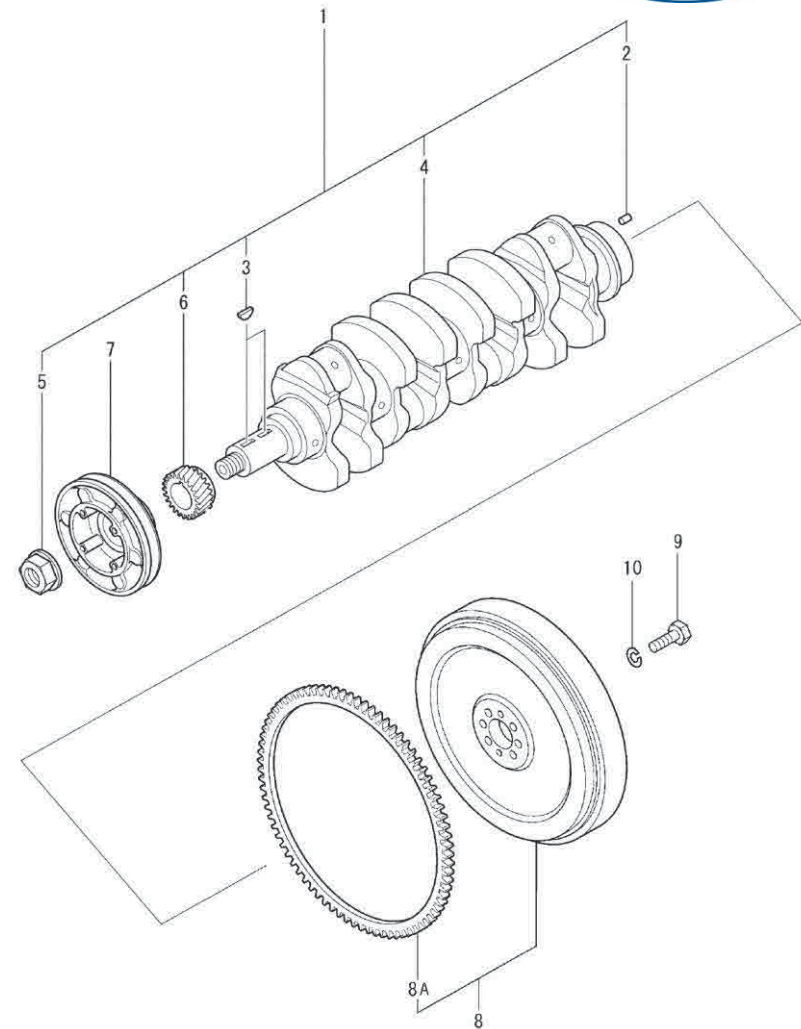


[NP] Not provided





D_MIE1_1_9 Crankshaft & Flywheel					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17822018	1	CrankShaft Assy [NP]		
2	13322059	2	Pin		
3	13322034	2	Key Woodruff		
4	(*)	1	Not available [NP]	01/01/2016	
5	17422026	1	Nut,CrankShaft		
6	17822019	1	Gear, CrankShaft [NP]		
7	17422024	1	Pulley CrankShaft		
8	17422027	1	Flywheel Assy		
8A	17422029	1	Gear,Ring Z=122		
9	13322065	6	Bolt		
10	53033012	6	Washer GROWER DIN 127-12		

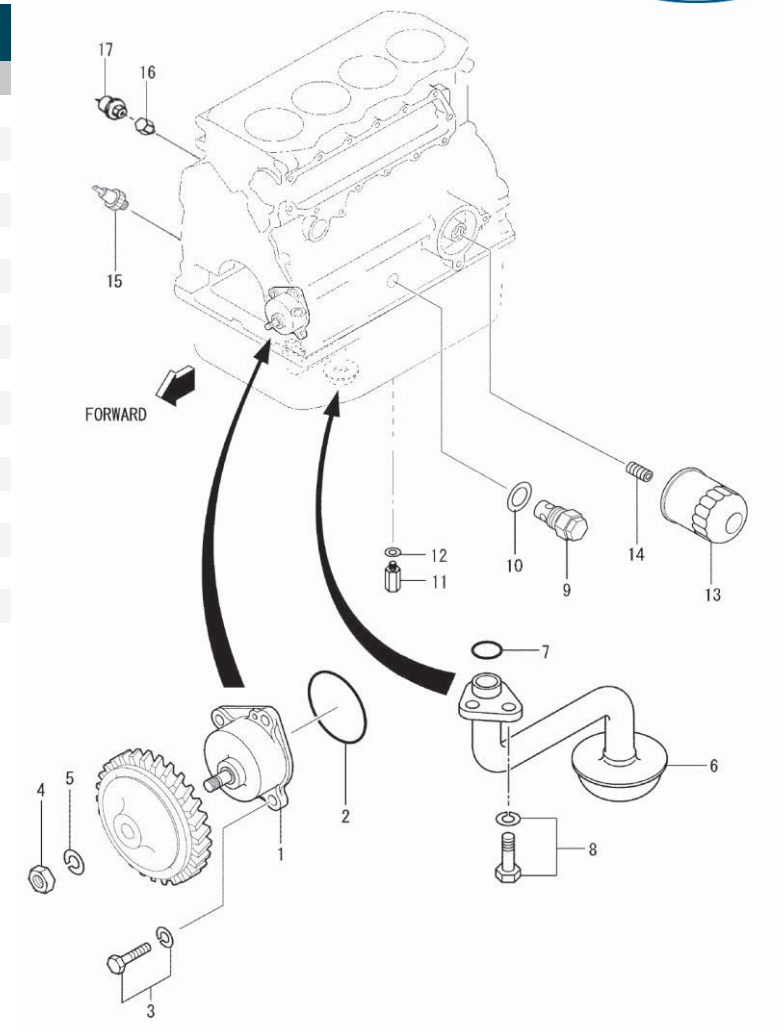


[NP] Not provided





D_MIE1_1_10		Oil System				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17524040	1	Pump Assy,Oil			
2	17424055	1	O-Ring D. 60X2			
3	17421012G.1	4	Bolt W/Washer (Generator)			
4	13122045	1	Nut			
5	53033010	1	Washer GROWER DIN 127-10			
6	17424052	1	STrainer,Oil			
7	17424060	1	O-Ring D. 22X2,4			
8	17422037G.1	2	Bolt W/Washer (Generator)			
9	17124071	1	Valve, Assy			
10	17424063	1	Gasket			
11	17824071	1	Valve, Assy [NP]			
12	17420017	1	Gasket			
13	17424051	1	Oil Filter Element MINI-74/SM-82/94			
14	17424054	1	Union,Oil Filter			
15	17827027	1	Switch, Oil pressure [NP]			
16	17117052	1	Oil Pressure Sensor Adaptor			
17	60900985	1	Pressure Sensor			

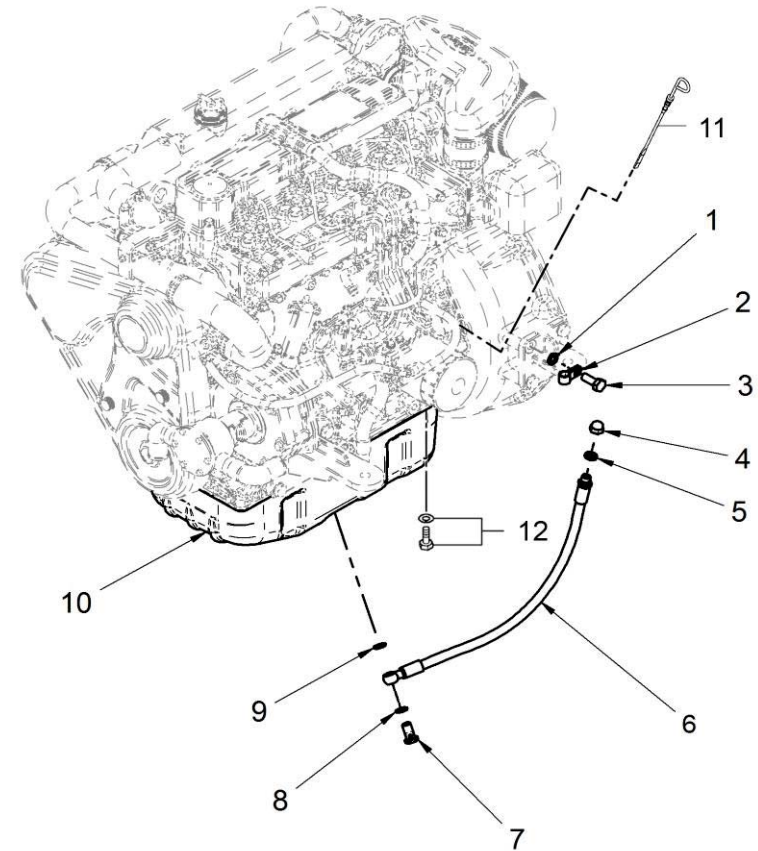


[NP] Not provided





D_MIE1_1_11 Oil Pan						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	53033012	1	Washer GROWER DIN 127-12			
2	17214022	1	Bracket, Pipe			
3	52102360	1	Bolt DIN 933 M12-35 8.8			
4	16514020	1	Plug			
5	56000217	1	Washer 13-20-3			
6	17114021	1	ExtraCTION Hose			
7	12814051	1	Screw,eye			
8	56000069	2	Washer 14-20-1,5			
10	17420030	1	Oil PAN Assy			
11	17420029	1	Gauge Oil LEVEL			
12	17821012	24	Bolt,W/Washer [NP]			

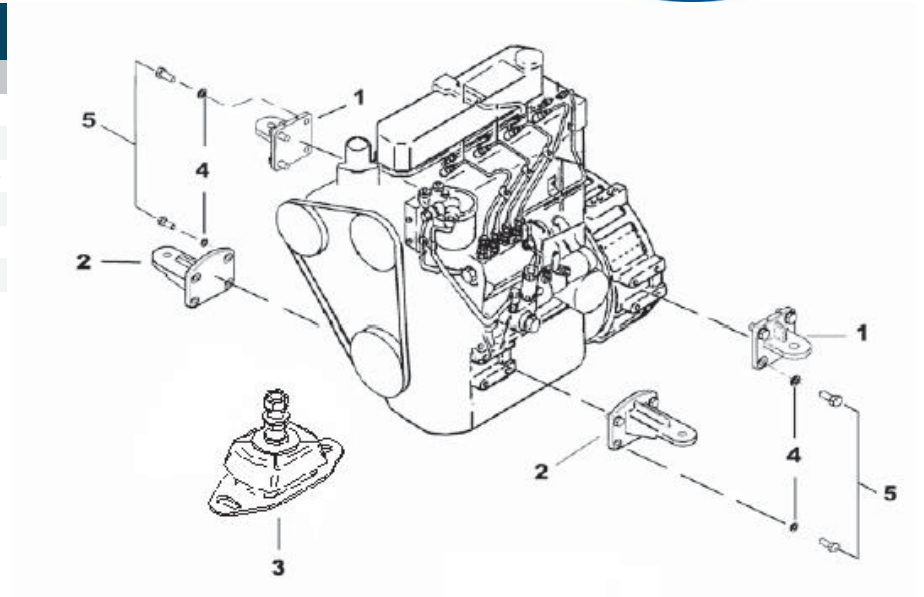


[NP] Not provided



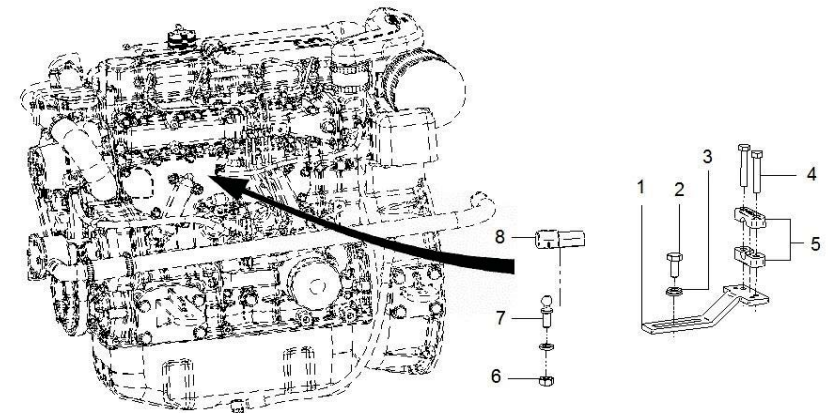


D_MIE1_1_12		Engine Brackets				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17410002	2	REAR Bracket			
2	17410001.2	2	Front Bracket	14/06/2018		
2	17410001	2	Front Bracket		14/06/2018	
3	61678000	4	Engine Mount Type D 55 SHA M16 H 110			
4	53033012	16	Washer GROWER DIN 127-12			
5	52102360	16	Bolt DIN 933 M12-35 8.8			



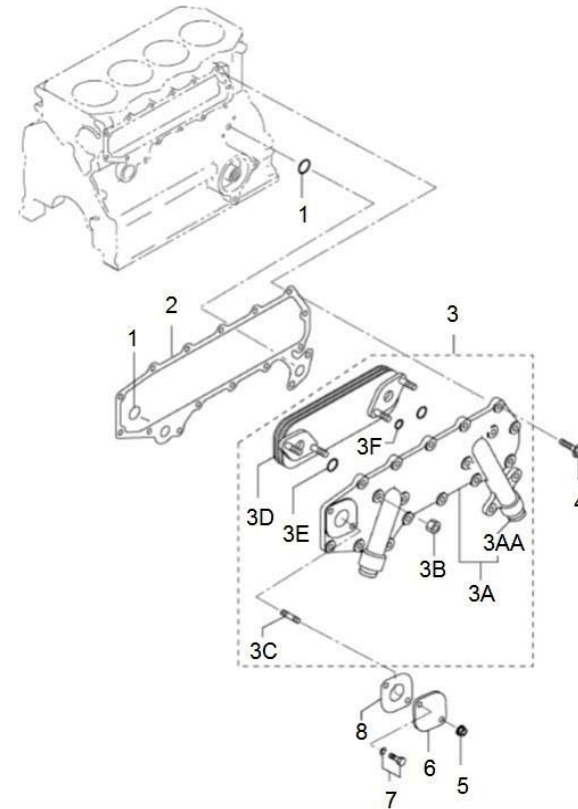


D_MIE1_1_13 Bracket, Engine Control						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	12119021	1	SUPPORT Clamp			
2	52102156	1	Bolt DIN 933 M6-16 8.8			
3	53033006	1	Washer GROWER DIN 127-6			
4	52102110	2	Bolt DIN 933 M5-30 8.8 CINCADO			
5	13819001	1	Half Flange Morse Cable			
6	52120006	1	Nut DIN 934 M6 8.8			
7	14419023	1	Ball JOINT			
8	15119015	1	CABLE Holder Ball			





D_MIE1_1_14		Oil cooler			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17424060	2	O-Ring D. 22X2,4		
2	17822112	1	Gasket, Side Cover [NP]		
3	17822110	1	Cooler Assy, Oil [NP]		
3A	17822111	1	Case Assy, Oil Cooler [NP]		
3AA	17822120	1	Plug Tapered		
3B	17125008.1	10	Nut, Flange		
3C	13321019	1	Stud		
3D	17822114	1	Element, Oil Cooler [NP]		
3E	17520017	2	O-Ring D. 30X3,4		
3F	17822115	4	O-Ring [NP]		
4	17822116	15	Bolt, Flange [NP]		
6	17822117	1	Cover [NP]		
7	17822118	1	Bolt, Flange [NP]		
8	17420048	1	Gasket		

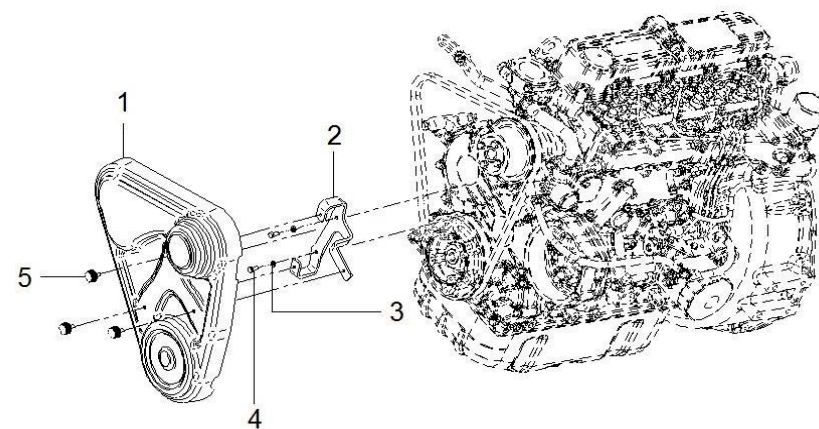


[NP] Not provided



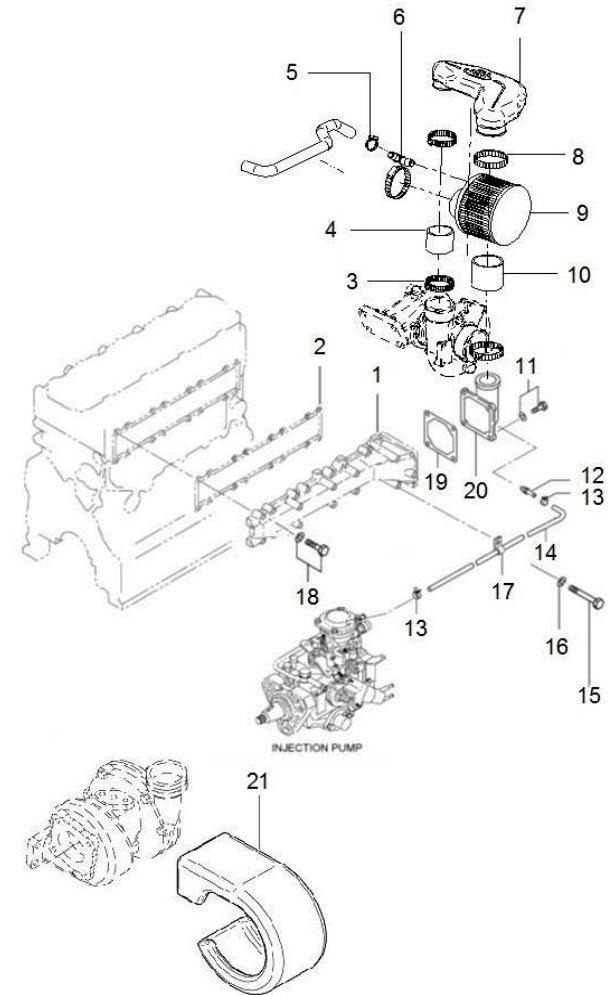


D_MIE1_1_15		Belt Protection			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17810021	1	Belt Protection		
2	17810022	1	Bracket Protection Belt		
3	53033006	2	Washer GROWER DIN 127-6		
4	52102156	2	Bolt DIN 933 M6-16 8.8		
5	13810070	3	Knob		





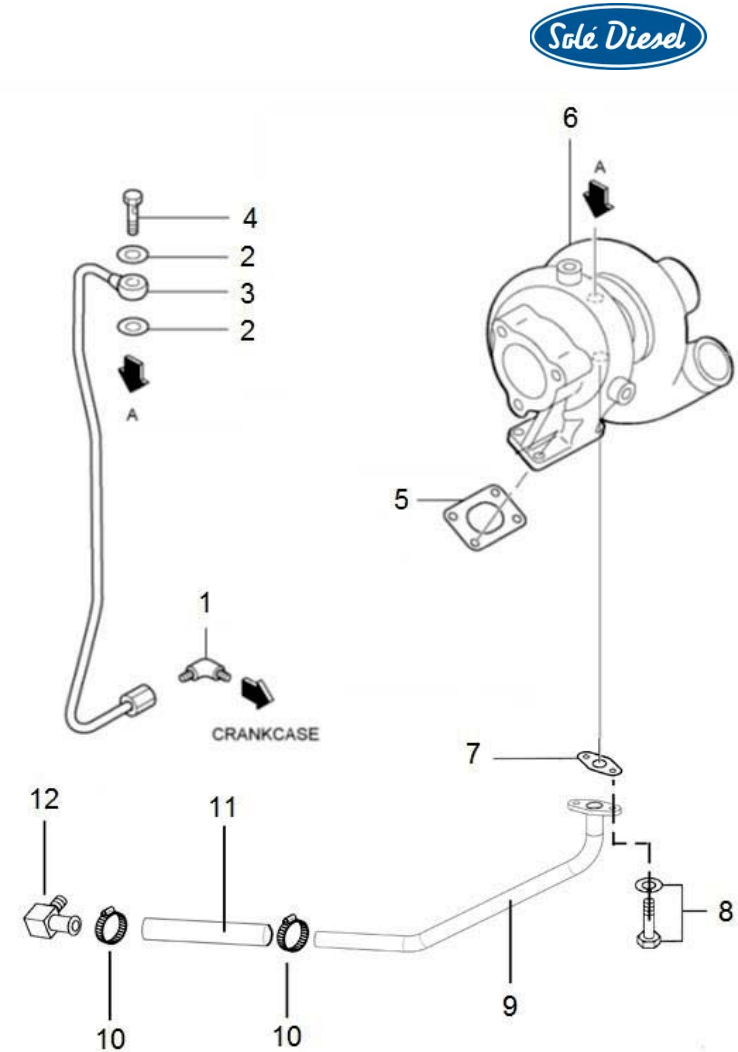
D_MIE1_2_1 Inlet						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17821030	1	Manifold Assy,Inlet [NP]			
2	17421032	1	Gasket IN.MANIFOld			
3	54082040	2	Clamp DIN 3017 40-60/12 W4			
4	17810030	1	Hose			
5	54081020	1	Clamp DIN 3017 20-32/9 W4			
6	17810013	1	Elbow,Frared Tube			
7	17810017	1	Adaptor			
8	54082050	3	Clamp DIN 3017 50-70/12 W4			
9	17810012	1	Air Filter			
10	17810031	1	Hose			
11	17125004.1	4	Bolt			
12	17821013	1	Nipple, Air [NP]			
13	17821017	2	Clip,Hose			
14	17821018	1	Hose			
15	17421014G	2	Bolt (Generator)			
16	53033008	2	Washer GROWER DIN 127-8			
17	17821016	1	Clip,Hose [NP]			
18	17421014G.1	14	Bolt W/Washer (Generator)			
19	17421042	1	Gasket			
20	17821029	1	Elbow, Air Inlet [NP]			
21	17818010	1	Termic, Bucklers			07/12/2016



[NP] Not provided



D_MIE1_2_2 Turbocharger						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17812007	1	Elbow [NP]			
2	17124056	2	Gasket			
3	17712006	1	Pipe			
4	17828006	1	Bolt, Eye [NP]			
5	17420049	1	Gasket			
6	17828002	1	Turbocharger, Assy			
7	17712004	1	Gasket			
8	52102156	2	Bolt DIN 933 M6-16 8.8			
9	17812005	1	Pipe			
10	54081020	2	Clamp DIN 3017 20-32/9 W4			
11	17728007	1	Hose,Oil			
12	17728008	1	Elbow			

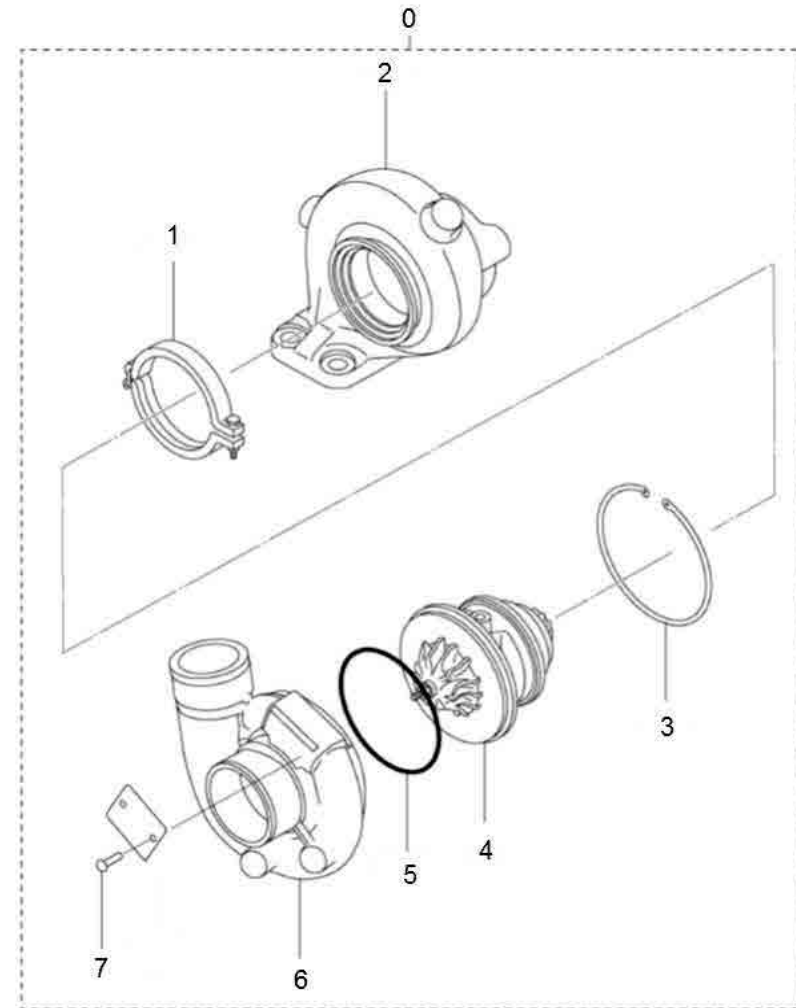


[NP] Not provided





D_MIE1_2_3 Spare parts, Turbocharger						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
0	17828002	1	Turbocharger, Assy			
1	17828002.9	1	Coupling Assy [NP]			
2	17828002.8	1	Housing, Turbine [NP]			
3	17828012.10	1	Ring, Snap [NP]			
4	17828012.6	1	Rotor, Turbine [NP]			
5	17828012.2	1	O-Ring [NP]			
6	17828012.1	1	Cover, Compressor [NP]			
7	17828012.11	2	Rivet [NP]			

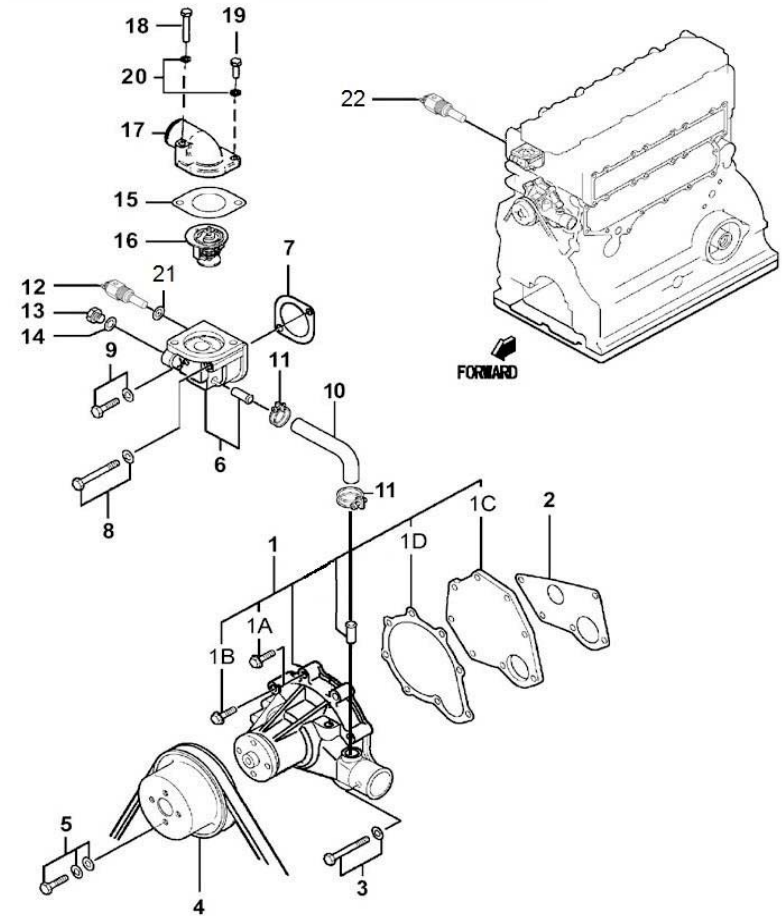


[NP] Not provided





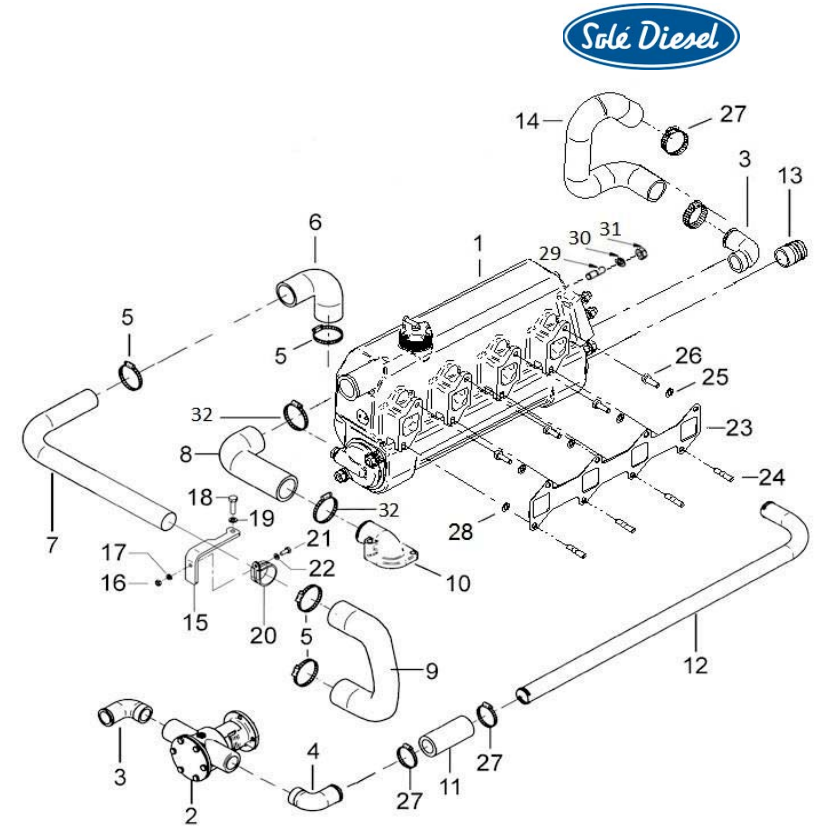
D_MIE1_3_1		Water Pump			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17421020G.1	1	Fresh Water Pump (tube Ø18)		
1A	17421026G	1	Bolt,Flange		
1B	17821026	2	Bolt, Flange [NP]		
1C	17421043	1	Cover,Water Pump		
1D	17421022	1	Gasket,Pump Cover		
2	17421041	1	Gasket,Side Cover		
3	17421039G.1	4	Bolt,W/Washer (Generator)		
4	17121021	1	Pulley,Water Pump		
5	17121056	4	Bolt DIN 933 M8-15 8.8		
6	17421037G.1	1	Case Assy (Generator)		
7	17421016G.1	1	Gasket(Generator)		
8A	17821038	1	Bolt, Flange [NP]		
8B	17821038	1	Bolt, Flange [NP]		
9	17821039	1	Bolt, Flange [NP]		
10	17421025G.1	1	Hose,BY-PASS (Generator)		
11	54081020	2	Clamp DIN 3017 20-32/9 W4		
12	60900980	1	Temperature Sensor		
13	17121016	1	Plug, drain		
14	17121013	1	Gasket		
15	17111021	1	Gasket		
16	17121027	1	Thermostat		
17	17111020	1	Fitting,water outlet		
18	52101263	1	Bolt DIN 931 M8-50 8.8		
19	52102259	1	Bolt DIN 933 M8-30 8.8		
20	53033008	2	Washer GROWER DIN 127-8		
21	56000073	1	Copper Washer 16-23-1,5		
22	17427080	1	Switch,Thermo		



[NP] Not provided



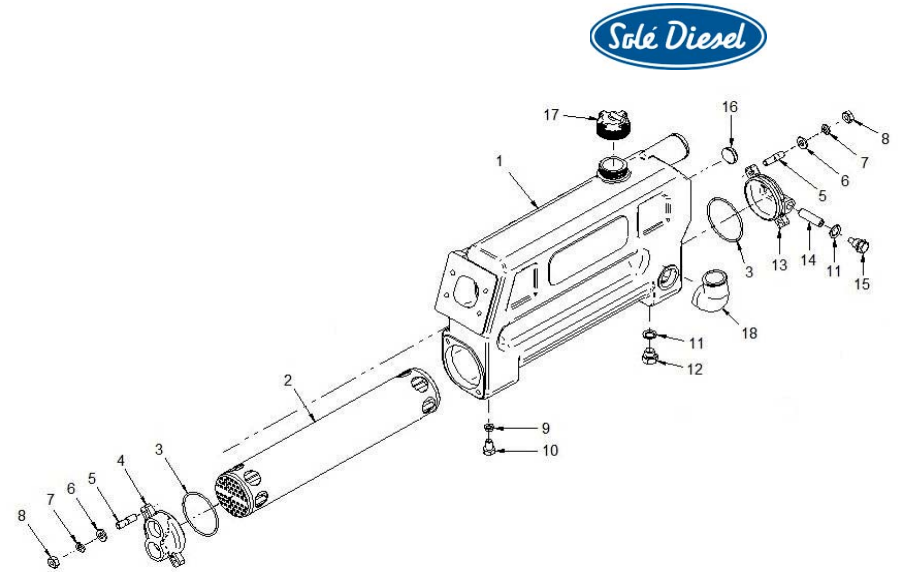
D_MIE1_3_2 Cooler Pipes					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17811000	1	Water Cooler Assy MINI-74/SM-82/94 [NP]		
2	37811001	1	1" Water Pump, Set		
3	14711021	2	Elbow N°1		
4	14711022	1	Elbow N°2		
5	54082032	4	Clamp DIN 3017 32-50/12 W4		
6	15211026	1	Elbow,rubber		
7	17011022	1	Pipe,from cooler to engine		
8	17411013	1	Elbow,Engine Water Exhaust		
9	16711016	1	Rubber Elbow		
10	17111020	1	Fitting,water outlet		
11	13211036	1	Pipe 30-40-100		
12	17411011	1	Pipe		
13	60180007	1	Outlet Coupling		
14	17811034	1	Rubber Wet Exhaust Inlet Bend		
15	17511014	1	Bracket		
16	52120006	1	Nut DIN 934 M6 8.8		
17	53033006	1	Washer GROWER DIN 127-6		
18	52102259	1	Bolt DIN 933 M8-30 8.8		
19	53033008	1	Washer GROWER DIN 127-8		
20	59071383	1	Clamp TYP.1 38/15 W1		
21	52102157	1	Bolt DIN 933 M6-20 8.8		
22	51030006	1	Washer DIN 125-6		
23	17421035	1	Gasket,Exhaust MANIFOld		
24	13311006	4	Stud,cover		
25	52102258	4	Bolt DIN 933 M8-25 8.8		
26	53038008	4	Washer DIN 6798-A 8		
27	54082025	4	Clamp DIN 3017 25-40/12 W4		
28	51125008	4	Nut Exhaust		
29	16511007	4	Stud		
30	53033010	4	Washer GROWER DIN 127-10		
31	55120110	4	Nut DIN 934 M10		
32	54082040	2	Clamp DIN 3017 40-60/12 W4	10/12/2018	



[NP] Not provided



17811000		Water Cooler Assy MINI-74/SM-82/94			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17811001	1	Body, Water Cooler [NP]		
2	18011004	1	Tubular Bundle		
3	18011008	2	O-Ring D. 72X3		
4	17411003	1	Water Cooler Cover		
5	16511007	4	Stud		
6	51030010	4	Washer DIN 125-10		
7	53033010	4	Washer GROWER DIN 127-10		
8	52120010	4	Nut DIN 934 M10 8.8		
9	56000205	1	Washer 10-16-3		
10	54102306	1	Bolt DIN 933 M10-16 INOX.		
11	56000073	2	Copper Washer 16-23-1,5		
12	12111076	1	Plug		
13	18011002	1	Water Cooler Cover		
14	18011031	1	Engine Anode 45 mm M.8		
15	18011009	1	Anode Plug		
16	12113092	1	Plug		
17	13811010	1	Cap		
18	17111011	1	Elbow 1 1/8"		

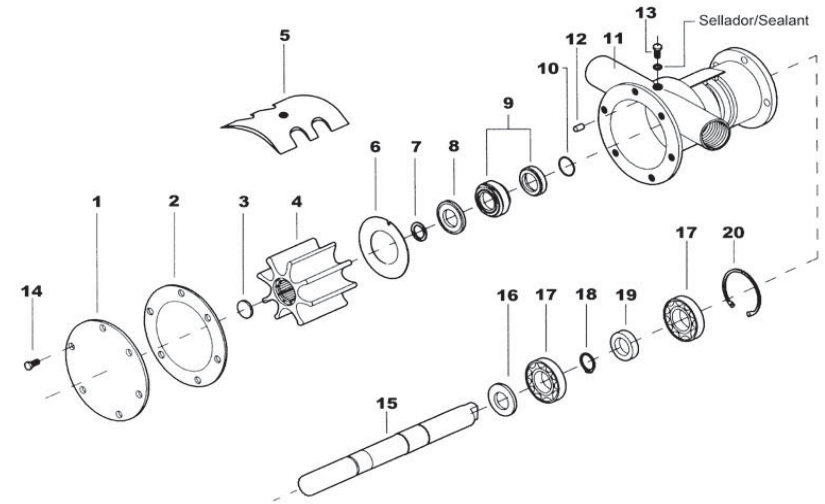


[NP] Not provided

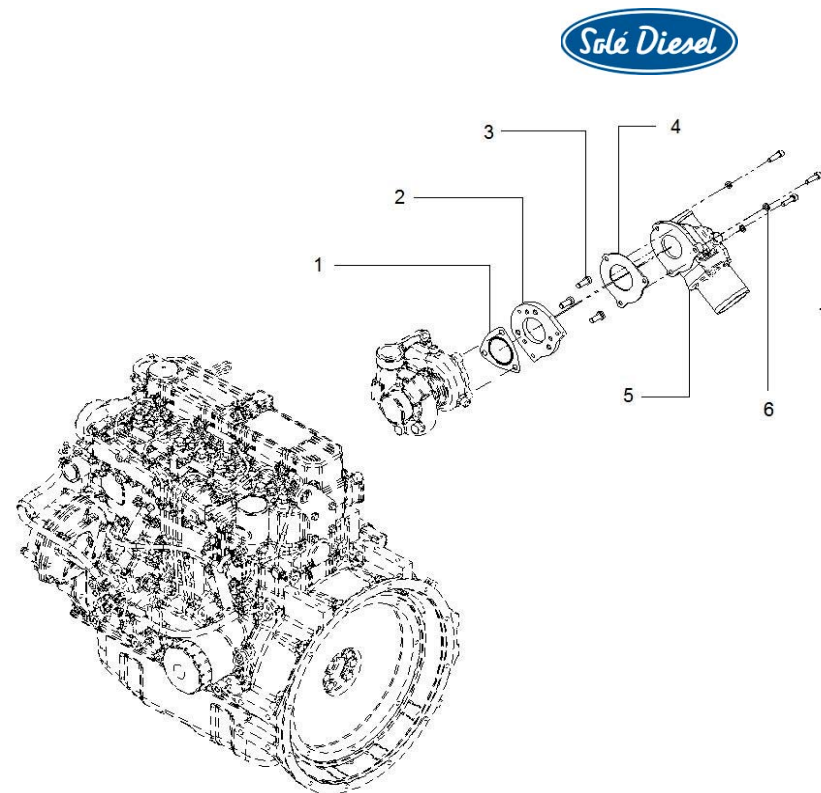




37811000		Cross Brace Pump 1" SM-82/94 Gen.SM-81			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	34711002	1	Cover Pump		
2	34711003	1	Gasket Cover		
3	34711041	1	Impeller Plug		
4	34711008	1	1" Impeller		
5	37811005	1	Cam 6,5 mm		
6	34711026	1	Plate,Friction		
7	54040016	1	CIRClip E-16		
8	36511018	1	Washer,seal		
9	36511019	1	Seal		
10	33311013	1	O-Ring D. 15X2		
11	36511001	1	Body,water pump		
12	36511017	1	Pin,Dowel	18/05/2007	
13	54108154	1	Bolt DIN 84 M6-10		
14	54102154	6	Bolt DIN 933 M6-10 INOX		
15	36511010	1	Shaft,pump		
16	36511015	1	Spacer 17X24X7		
17	33311014	2	Ball Bearing 6203		
18	53040017	1	Circlip DIN 471 E-17		
19	36511020	1	Seal 16-30-7		
20	53041040	1	Circlip DIN 472 I-40		

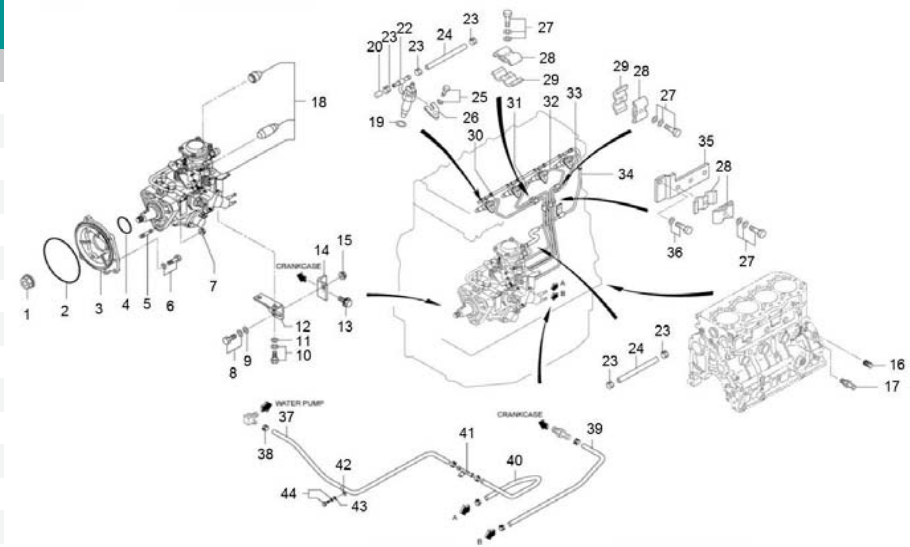


D_MIE1_3_5		Wet Exhaust				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17421014	1	Gasket			
2	17813014	1	Adaptor			
3	53104308	3	Bolt DIN 7984 M10-25 12.9			
4	17813016	1	Gasket			
5	17813015	1	Elbow,wet exhaust			
6	53033008	3	Washer GROWER DIN 127-8			
7	52103259	3	Bolt DIN 912 M8-30 8.8			





D_MIE1_4_1 Fuel Pipe					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17825002	1	Nut [NP]		
2	17825006	1	O-Ring [NP]		
3	17825005	1	Flange, Inj. Pump [NP]		
4	17825007	1	O-Ring [NP]		
5	17125009.1	3	Stud		
6	17721012	1	Bolt,W/Washer		
7	17125008.1	3	Nut,Flange		
8	17120062	1	Bolt,w/washer		
9	17825010	1	Washer [NP]		
10	17825011	2	Bolt,W/Washer [NP]		
11	51030010	2	Washer DIN 125-10		
12	17825013	1	Bracket , Injection Pump [NP]		
13	17425036	1	Bolt,Flange		
14	17825015	1	Bracket , Injection Pump [NP]		
15	17825016	1	Nut, Flange [NP]		
16	17120022	1	Plug, tapered		
17	17824004	1	Joint, Water [NP]		
18	17825001	1	Pump Assy,Fuel Injection [NP]		
19	17824007	4	Gasket, Nozzle [NP]		
20	17824008	1	Cap [NP]		
22	17826001	4	Nozzle, Assy [NP]		
23	17824006	11	Clip,Hose [NP]		
24	17824005	5	Hose [NP]		
25	17822118	4	Bolt, Flange [NP]		
26	17824013	4	Support, Nozzle [NP]		
27	17524025	4	Bolt,W/Washer		
28	17824011	6	Clamp [NP]		
29	17824012	2	Clamp [NP]		
30	17824015	1	Pipe Injection N.1 [NP]		
31	17824016	1	Pipe Injection N.2 [NP]		
32	17824019	1	Pipe Injection N.3 [NP]		
33	17824022	1	Pipe Injection N.4 [NP]		
34	17824002	1	Pipe, Fuel Return [NP]		
35	17824014	1	Stay		
36	17422037G.1	1	Bolt W/Washer (Generator)		

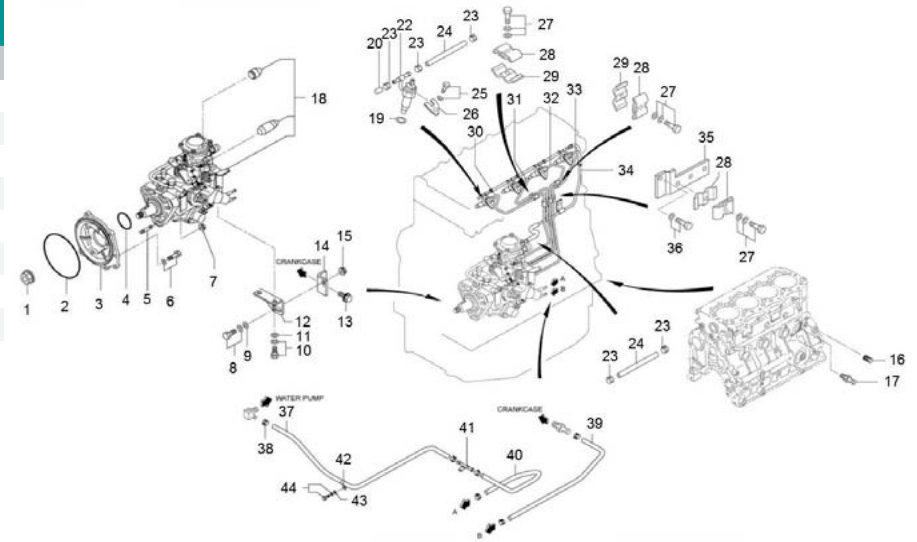


[NP] Not provided



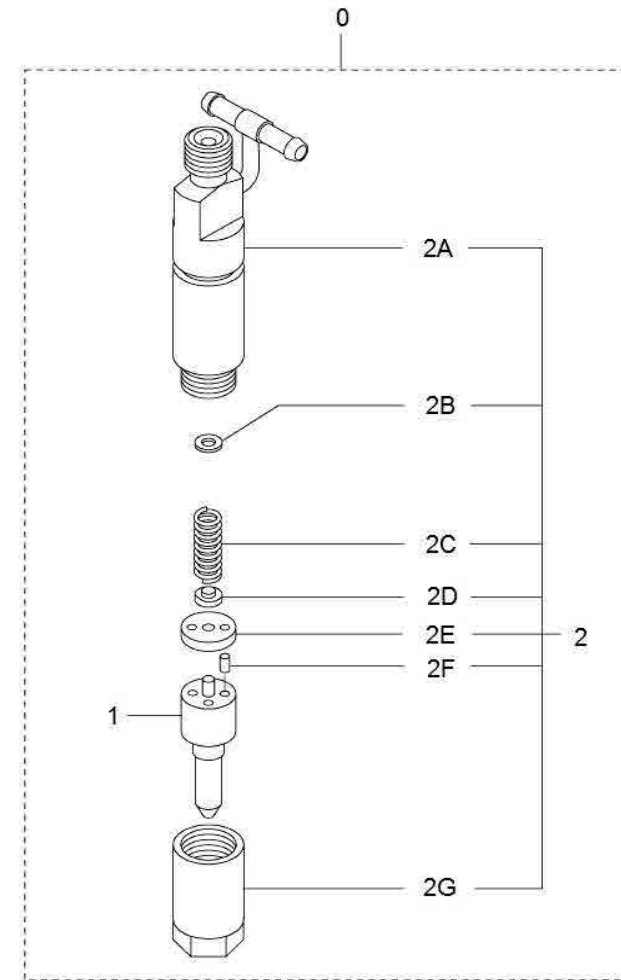


D_MIE1_4_1 Fuel Pipe						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
37	17824028	1	Hose [NP]			
38	17221023	6	Clip,Hose [NP]			
39	17824030	1	Hose, Coolant [NP]			
40	17824031	1	Hose, Coolant [NP]			
41	17824032	1	Pipe [NP]			
42	17824033	1	Clip [NP]			
43	17824034	1	Washer [NP]			
44	17824035	1	Bolt,W/Washer [NP]			





D_MIE1_4_2 Injection Nozzle						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
0	17826001	4	Nozzle, Assy [NP]			
1	17828018	4	Tip Assy, Nozzle [NP]			
2	17826003	4	Holder [NP]			
2A	17826002	4	Body, Assy [NP]			
2BA	17826020	0	Washer [NP] [VAR]			
2BB	17026144	0	Washer 1,050 [VAR]			
2BC	17026145	0	Washer 1,100 [VAR]			
2BD	17026146	0	Washer 1,150 [VAR]			
2BE	17026010	0	Washer 1,20 [VAR]			
2BF	17026011	0	Washer 1,25 [VAR]			
2BG	17026012	0	Washer 1,30 [VAR]			
2BH	17026013	0	Washer 1,35 [VAR]			
2BI	17026016	0	Washer 1,50 [VAR]			
2BJ	17026017	0	Washer 1,55 [VAR]			
2BK	17026019	0	Washer 1,60 [VAR]			
2BL	17026020	0	Washer 1,65 [VAR]			
2BM	17026022	0	Washer 1,75 [VAR]			
2BN	17026023	0	Washer 1,80 [VAR]			
2BO	17026131	0	Washer 1,275 [VAR]			
2BP	17026132	0	Washer 1,325 [VAR]			
2BQ	17026133	0	Washer 1,375 [VAR]			
2BR	17026134	0	Washer 1,425 [VAR]			
2BS	17026135	0	Washer 1,475 [VAR]			
2C	17026104	4	Spring,pressure			
2D	17026103	4	Pin,pressure			
2E	17026107	4	Packing,tip			
2F	17026008	8	Pin Straight			
2G	17826006	4	Nut, Retaining [NP]			

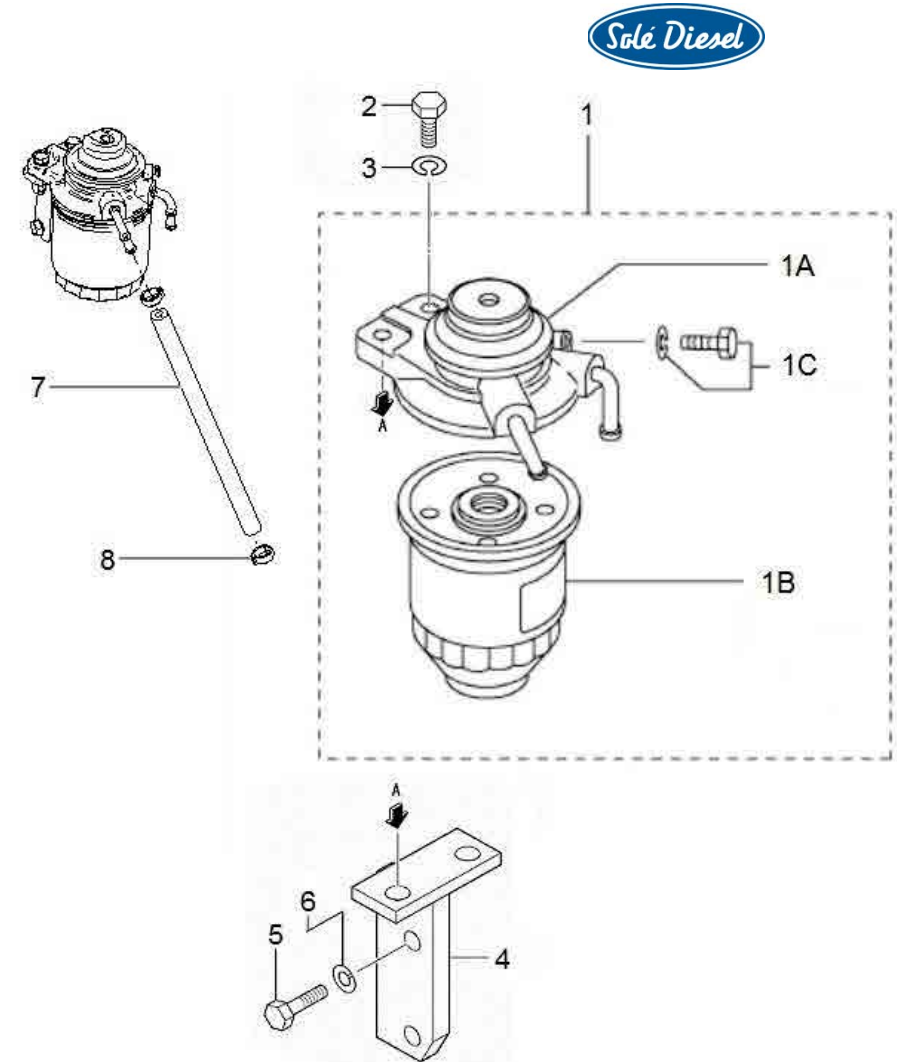


[NP] Not provided

[VAR] Variable according to repair



D_MIE1_4_5 Fuel Supply Parts						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17824020	1	Fuel Filter Assy [NP]			
1A	17824026	1	Cover,filter [NP]			
1B	17114022	1	Fuel Filter Element MINI-62			
1C	17824027	1	Plug Set, Air [NP]			

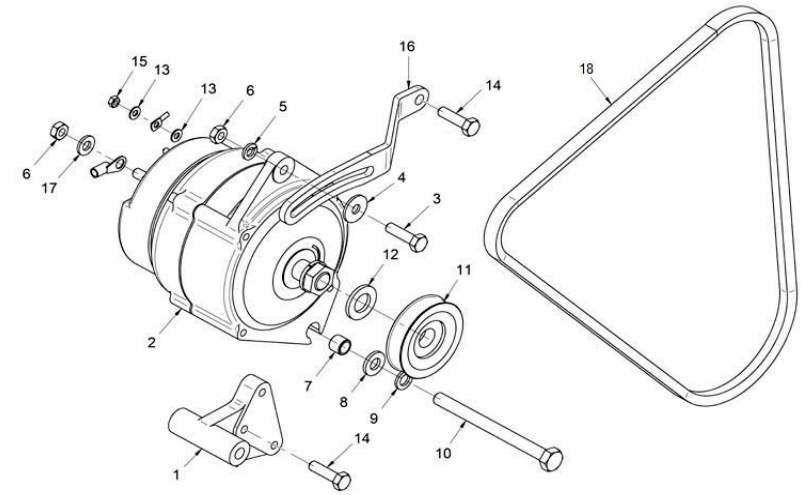


[NP] Not provided





D_MIE1_5_1 Kit Alternador 14V/95A					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17427002	1	Bracket,Alternator		
2	17117025	1	Alt. 14V/95A Mahle		
3	52102259	1	Bolt DIN 933 M8-30 8.8		
4	51031008	1	Washer DIN 9021 8		
5	53038008	1	Washer DIN 6798-A 8		
6	52120008	2	Nut DIN 934 M8 8.8		
7	17417025	1	Spacer 13.5x10.2x11		
8	51030010	1	Washer DIN 125-10		
9	53033010	1	Washer GROWER DIN 127-10		
10	52101325	1	Bolt DIN 931 M10-120 8.8		
11	17117016.7	1	Pulley		
12	51030016	1	Washer DIN 125-16		
13	51030005	2	Washer DIN 125-5		
14	17425036	2	Bolt,Flange		
15	52120005	1	Nut DIN 934 M5 8.8		
16	17427007	1	Plate,Adjusting		
17	51030008	1	Washer DIN 125-8		
18	17421028	1	Belt Type AX 45 1175 [NP]		

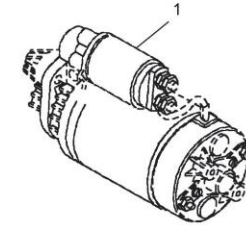


[NP] Not provided



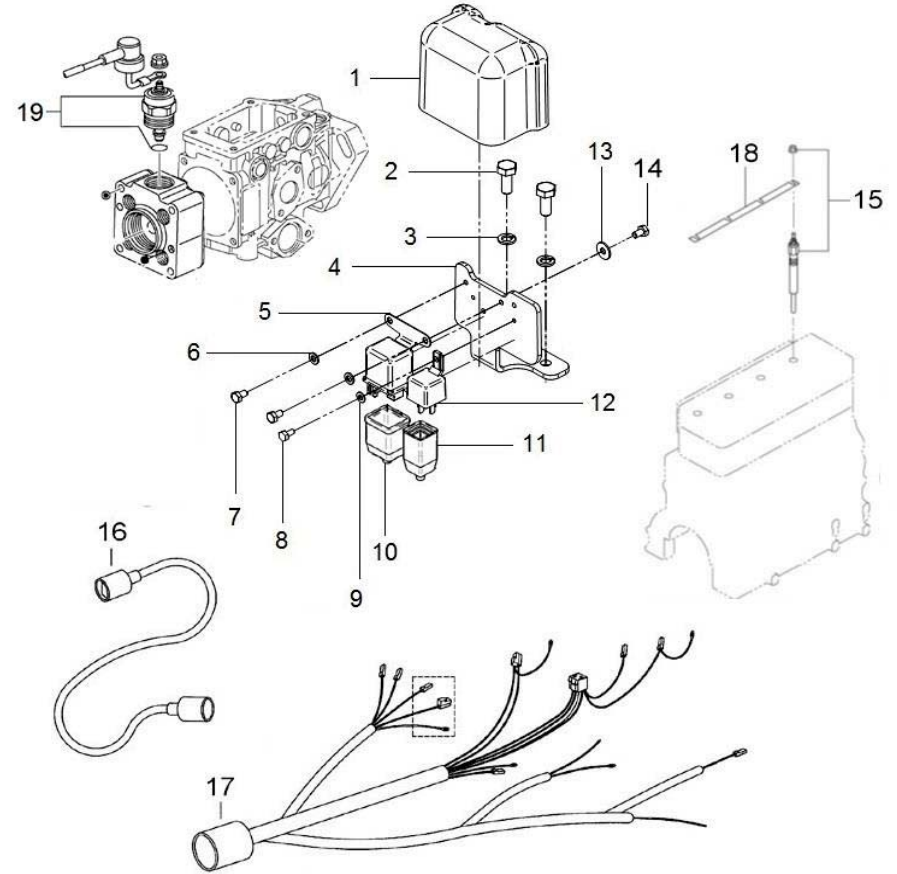


D_MIE1_5_3 Starter						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17827001	1	Starter Assy			





D_MIE1_5_5		Electrical Wiring			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	13817003	1	Cover		
2	52102308	2	Bolt DIN 933 M10-25 8.8		
3	53033010	2	Washer GROWER DIN 127-10		
4	17817001	1	Bracket		
5	13827005	1	Glow Relay		
6	51030006	2	Washer DIN 125-6		
7	52102154	3	Bolt DIN 933 M6-10 8.8		
8	52102104	1	Bolt DIN 933 M5-10 8.8		
9	51030005	1	Washer DIN 125-5		
10	13817007	1	Rubber Cover		
11	13817006	1	Cover		
12	13817005	1	Relay 6V		
13	51031006	1	Washer DIN 9021 6		
15	17827017	4	Plug, Glow [NP]		
16A	60938210.1	0	Engine Wiring Ext. 3 M. SUPERSEAL [VAR]		
16B	60985210.1	0	Engine Wiring Ext. 4 M. SUPERSEAL [VAR]		
16C	60985210.12.1	0	Engine Wiring Ext. 12 M. SUPERSEAL [VAR]		
16D	60985210.24.1	0	Engine Wiring Ext. 24 M. SUPERSEAL [VAR]		
17	60978200R	1	Wiring Electrical SM-82/94 SVT		
17A	60900179	1	-----		
18	17427018	1	Plate Glow Plug		
19	17825040	1	Valve, Magnet		



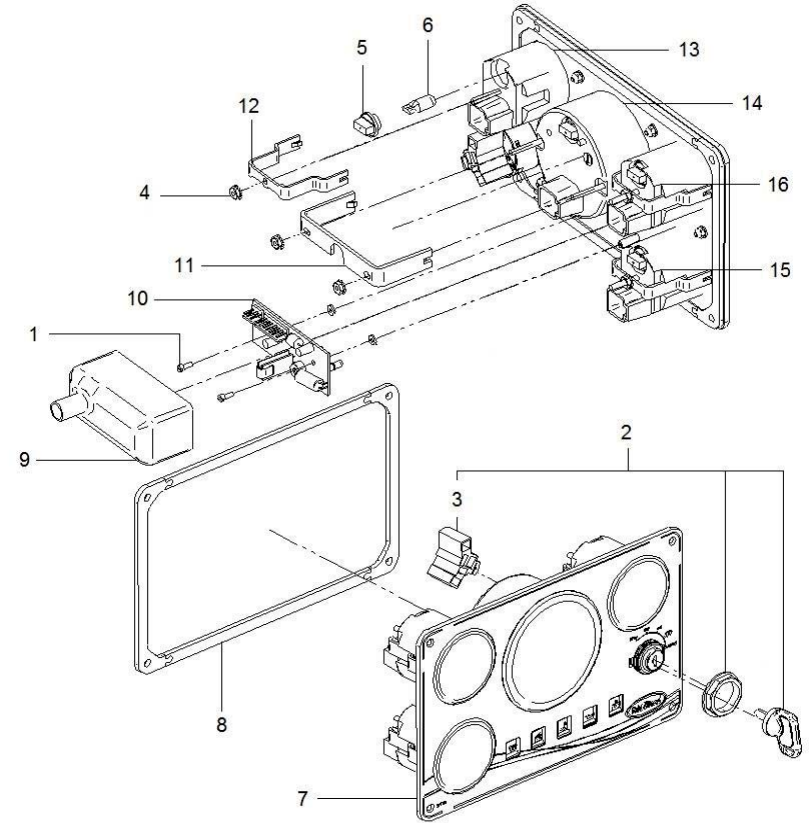
[NP] Not provided

[VAR] Variable according to repair





D_60978100		SVT 30 SM-82/94 Panel			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	54108003	2	Bolt DIN 84 M3-8 INOX.		
2	60900037	1	Key-Locking		
3	60900037.2	1	Connector		
4	60900910.2	5	Fixing Nut Gauge+Terminal		
5	60900931	4	SOCKET,WEDGE BASE		
6	60900929	4	Bulb 12V		
7	60990005.1	1	Panel N.3		
8	60990006.1	1	Gasket Panel		
9	60900096	1	Cover Plate for Motor Propeller		
10	60900301.2	1	V3 C.I. 12V Prop. Engine Board.Varnished [NP]		
11	60900910.1	1	Revolution Counter Fixing Bracket		
12	60900915.2	3	Gauge Fixing Bracket [NP]		
13	60900941	1	Voltmeter VT 12V		
14	60978900	1	Revol. Counter VT 12V SM-82/94		
15	60900937	1	Thermometer VT 12V		
16	60900939	1	Pressure Gauge VT 12V		
NS	60910014	1	System Back Panel SVT/MVT 30 12V [NS]		07/12/2016
NS	60900091	1	MICRO Relay 12V 12-20 [NS]		

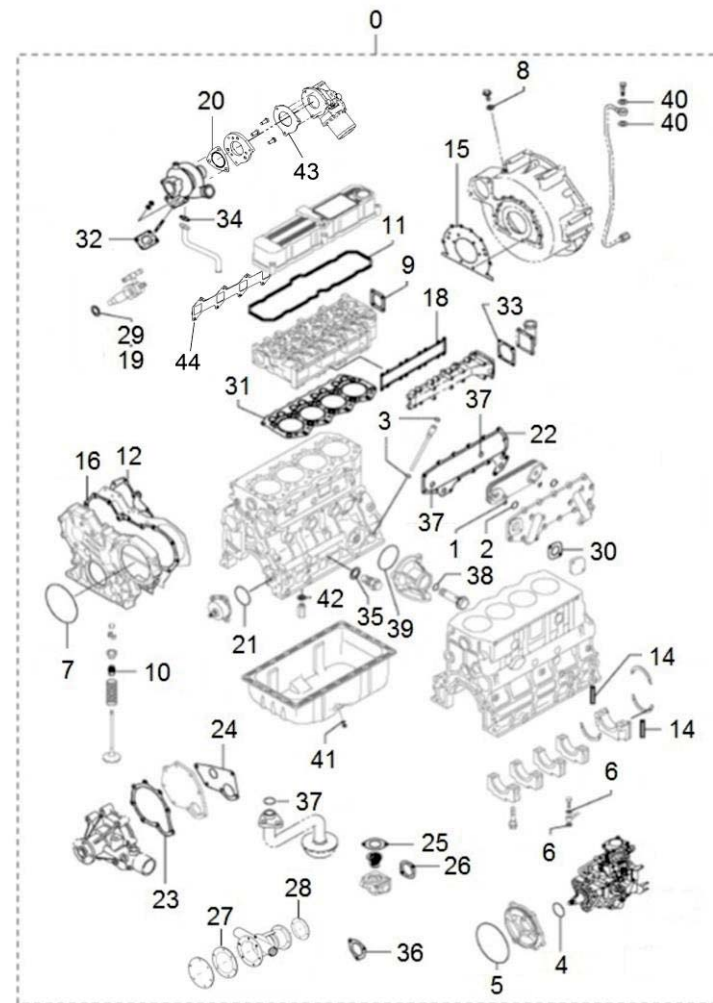


[NP] Not provided
 [NS] Not shown





D_17820101		Gasket Kit			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
0	17820101	1	Gasket Kit		
1	17822115	4	O-Ring [NP]		
2	17520017	2	O-Ring D. 30X3,4		
3	17120058	2	O-Ring D. 13X2,5		
4	17825007	1	O-Ring [NP]		
5	17825006	1	O-Ring [NP]		
6	17520074	2	Washer,Sealing		
7	17420047	1	O-Ring D. 140X2		
8	17121013	2	Gasket		
9	17421011	1	Gasket		
10	17422054	8	Seal,Valve Stem		
11	17421010	1	Rocker Cover Gasket		
12	17420018	1	Gasket,Front Plate		
14	17420112	2	Seal,Valve		
15	17420025	1	Gasket,Rear		
16	17420040	1	Gasket,Gear		
18	17421032	1	Gasket IN.MANIFOLD		
19	17024013	4	Gasket Nozzle		
20	17421014	1	Gasket		
21	17424055	1	O-Ring D. 60X2		
22	17822112	1	Gasket, Side Cover [NP]		
23	17421022	1	Gasket,Pump Cover		
24	17421041	1	Gasket,Side Cover		
25	17111021	1	Gasket		
26	17421016G.1	1	Gasket(Generator)		
27	34711003	1	Gasket Cover		
28	13310013	1	Gasket,water pump		
29	17824007	4	Gasket, Nozzle [NP]		
30	17420048	1	Gasket		
31	17821004	1	Gasket,Cylinder Head		
32	17420049	1	Gasket		
33	17421042	1	Gasket		
34	17524091	1	Gasket,Oil Pipe		
35	17424063	1	Gasket		
36	17821014	1	Gasket		

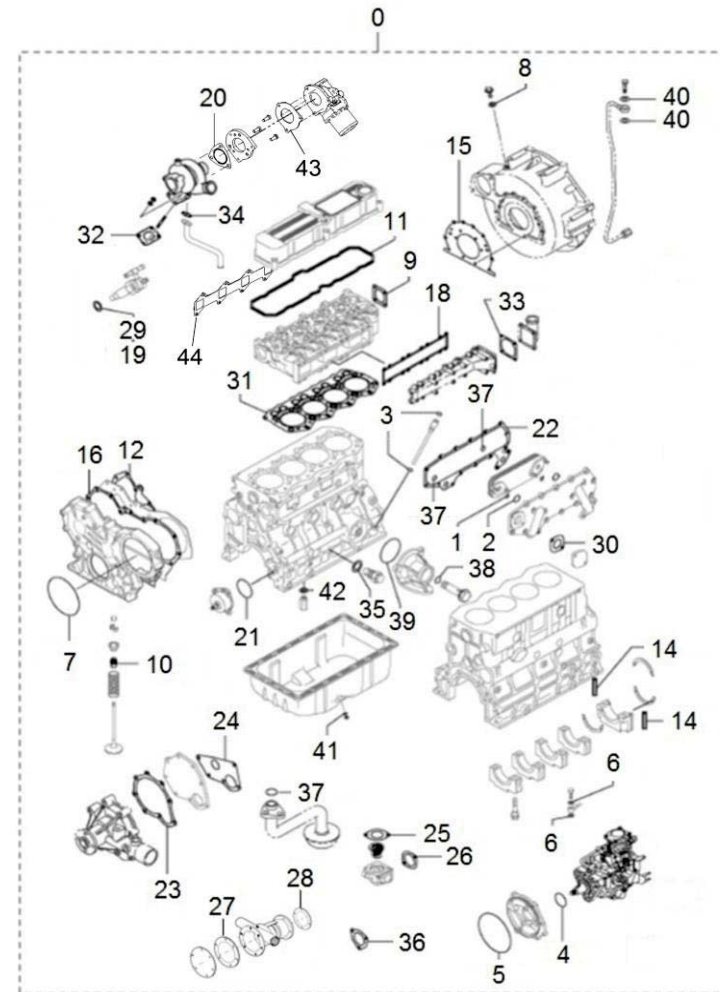


[NP] Not provided



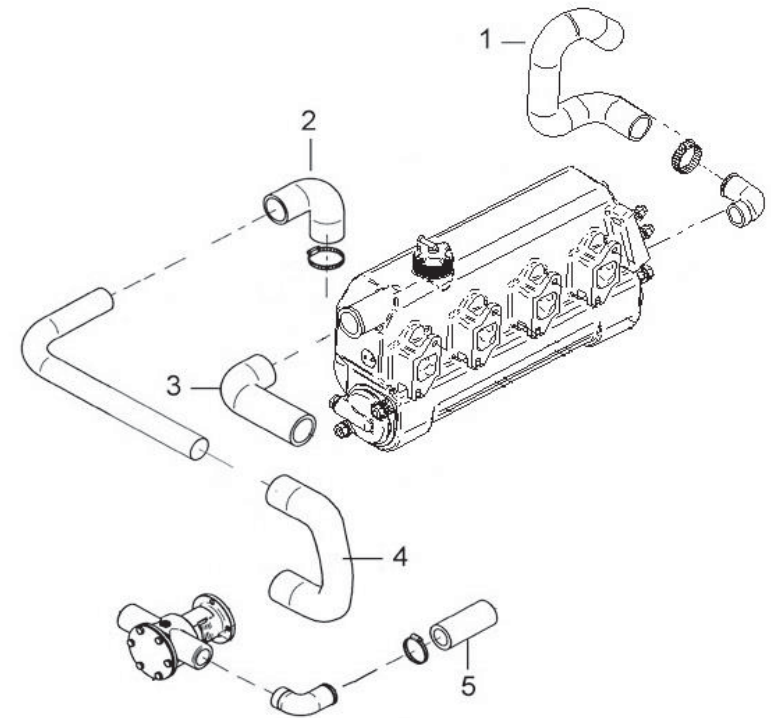


D_17820101 Gasket Kit					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
37	17424060	3	O-Ring D. 22X2,4		
38	17524056	1	O-Ring D. 40X6		
39	17524059	1	O-Ring D. 95X3		
40	17124056	2	Gasket		
41	17120074	1	Gasket		
42	17420017	2	Gasket		
43	17813016	1	Gasket		
44	17421035	1	Gasket,Exhaust MANIFOld		



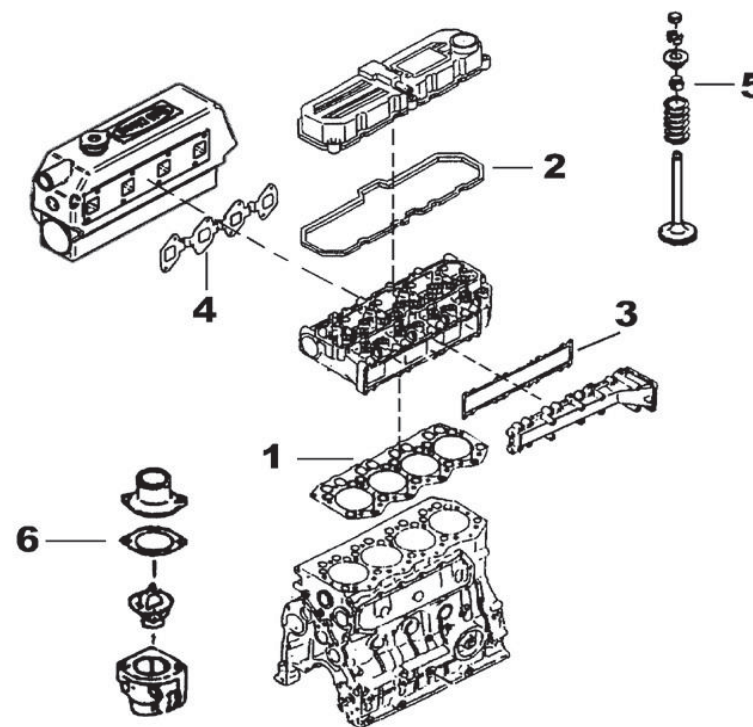


17811100		Pipe Rubber Set,Water Line SM-82/SM-94				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17811034	1	Rubber Wet Exhaust Inlet Bend			
2	15211026	1	Elbow,rubber			
3	17411013	1	Elbow,Engine Water Exhaust			
4	16711016	1	Rubber Elbow			
5	13211036	1	Pipe 30-40-100			



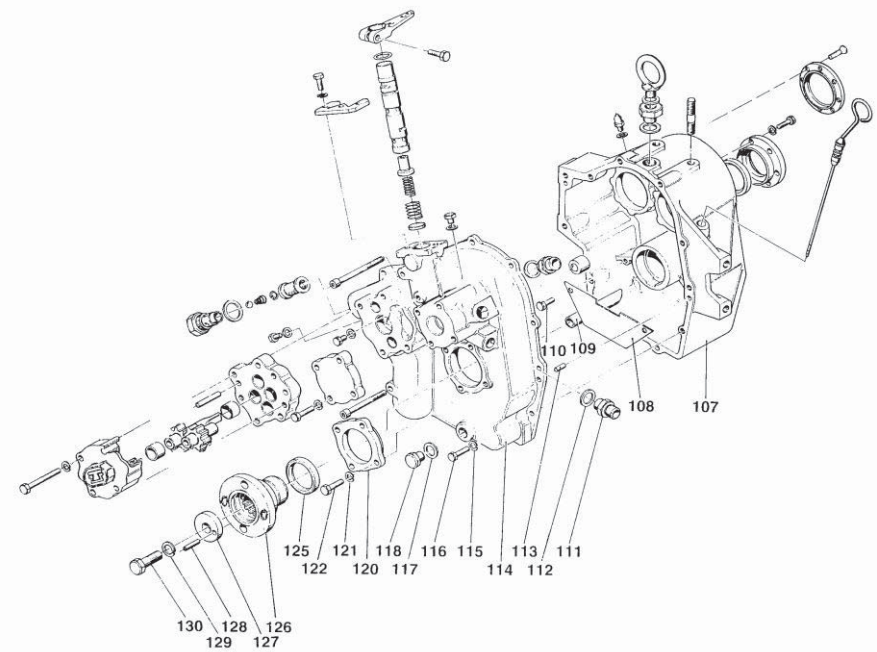


17820101.1		Gasket Kit				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17821004	1	Gasket,Cylinder Head			
2	17421010	1	Rocker Cover Gasket			
3	17421032	1	Gasket IN.MANIFOLD			
4	17421016	1	Exhaust manifold gasket			
5	17422054	8	Seal,Valve Stem			
6	17821031	1	Gasket			





D_5030_1.1		Sheet 1.1/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
100	24810103S	1	Grommet, Oil SILICON		
106	24830008	1	ROD, LEVEL Oil		
107	24810001	1	Front Body TM 93		
108	24810080	1	Plate Pipe [NP]		
109	24810081	1	ASPIRATION Tube [NP]		
110	24810082	2	Bolt DIN 933 M8-10 8.8 [NP]		
113	24810085	2	Pin		
114	24810002	1	Reverse Body TM 93		
117	24810088	1	Washer 14-20-1,5 [NP]		
118	24810011	1	Plug,oil drain		
119	24810089	1	Screw		
120	24810090	1	Cover		
125	24810214	1	Oil Grommet		
126	24810224	1	Flange, Output		
127	24810219	1	BUTT Washer		
128	24840220	1	Pin		
129	24810221	1	Washer GROWER DIN 127-14 [NP]		
130	24810222	1	Bolt DIN 933 M14X40 12.9		
131	24810095	1	Gear, Driven		
132	24810096	1	Gear, Driver		
134	24810098	3	Screw		
NS	24810046	1	Pump Assy Oil [NS]		

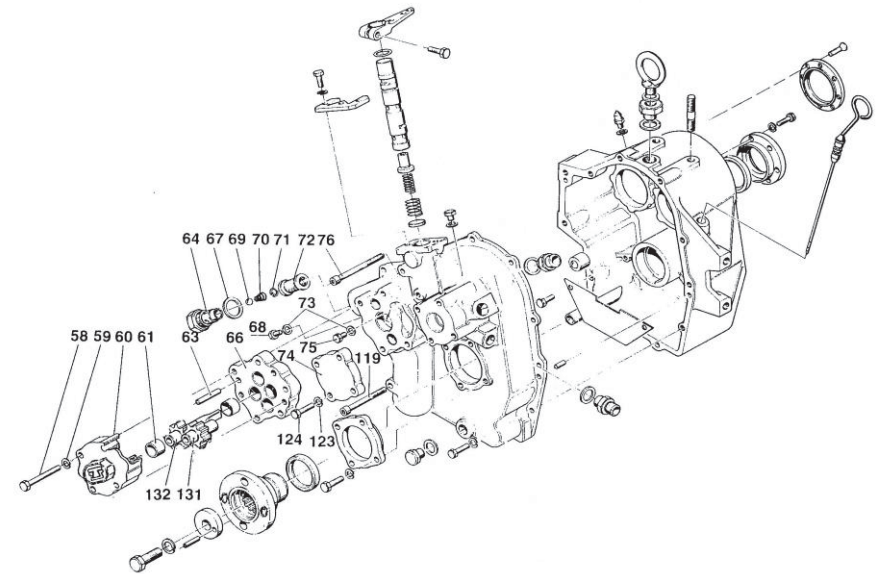


[NP] Not provided
 [NS] Not shown





D_5030_1.2		Sheet 1.2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
119	24810089	1	Screw		
123	53033008	4	Washer GROWER DIN 127-8		
124	52102258	4	Bolt DIN 933 M8-25 8.8		
131	24810095	1	Gear, Driven		
132	24810096	1	Gear, Driver		
58	52101266	4	Bolt DIN 931 M8-65 8.8		
59	24810014	4	Washer GROWER DIN 127-8 [NP]		
60	24810004	1	Oil Pump Body Cover		
61	24810025	4	Bushing		
63	24820023.1	2	Pin		
64	24810024	1	Plug, Oil Filter DRAIN		
66	24810003	1	Oil Pump Body, Engine Side		
67	24810027	1	Washer		
68	24810028	1	Screw		
69	18024143	1	Ball,steel 1/2"		
70	24810030	1	Valve Spring		
71	24810032	1	SNAP Ring		
72	24810035	1	Oil Filter		
73	24810036	2	Washer		
74	24810038	1	Cover		
76	24810040	1	Screw		
NS	52103158	3	Bolt DIN 912 M6-25 8.8 [NS]		



[NP] Not provided
 [NS] Not shown

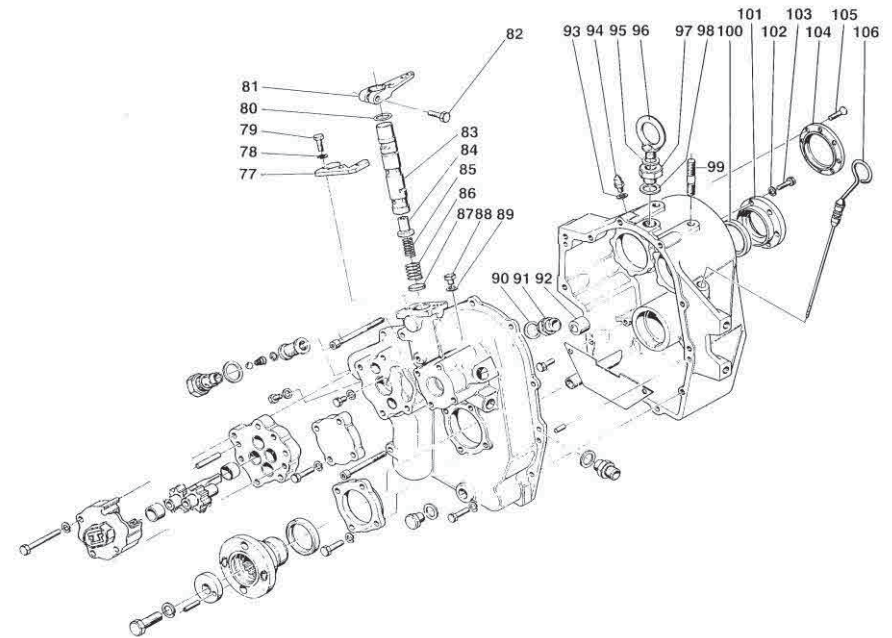




D_5030_1.3

Sheet 1.3/4

FIG.	REF.	QTY	DESCR.	FROM	UPTO
100	24810103S	1	Grommet, Oil SILICON		
101	24810072	1	Cover		
102	53033008	6	Washer GROWER DIN 127-8		
103	52102258	6	Bolt DIN 933 M8-25 8.8		
104	24810075	1	Cover		
105	24810076	8	Screw		
106	24830008	1	ROD, LEVEL Oil		
77	24810041	1	Support		
78	24810042	2	Washer GROWER DIN 127-6 [NP]		
79	24810044	2	Bolt DIN 933 M6-16 8.8 [NP]		
80	24810056	1	O-Ring D. 15,08X2,62 [NP]		
81	24810424	1	Lever		
82	24810047	1	Bolt DIN 933 M8-25 8.8 [NP]		
83	24810051	1	Distributor		
84	24810052	1	Valve		
85	24810053	1	Spring, Valve INNER		
86	24810054	1	Spring, Valve		
87	24810055	1	Expansion Plug		
88	24810028	1	Screw		
89	24810036	1	Washer		
90	24810059	1	Plane Washer		
91	24810060	1	Racord		
92	24810062	1	Valve BY PASS [NP]		
93	24810063	2	Plane Washer		
94	24810065	1	Plug		
96	24810012	1	Nut		
97	24810068	1	Plug		
98	56000083	1	Washer 21-26-1,5		
99	24810071	2	Stud		

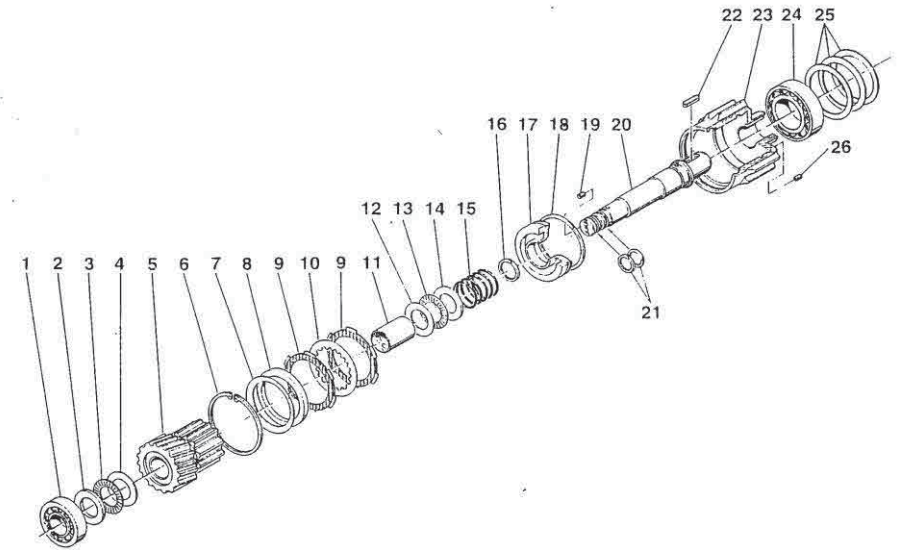


[NP] Not provided





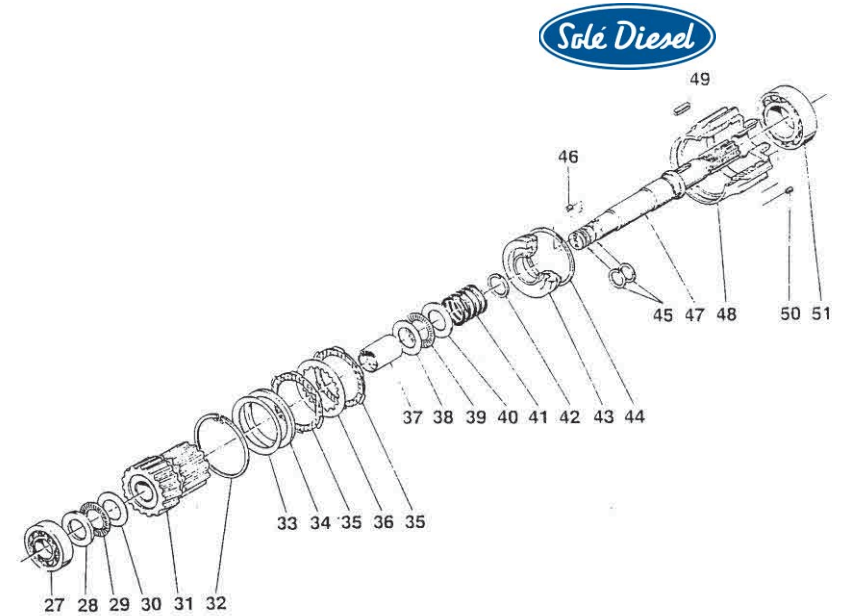
D_5030_2		Intermediate Shaft 2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24870207	1	Bearing		
2	24810307	1	Washer		
3	24810309	1	Roller		
4	24810310	1	Ring		
5A	24812302	1	Gear R. 1,5 TM 93		
5B	24813302	1	Gear R. 2 TM 93		
5C	24814302	1	Gear R. 2,4 TM 93		
5D	24815302	1	Gear R. 2,8 TM 93		
6	24810312	1	SNAP Ring		
7	24810313	1	Ring		
8	24810314	1	Grommet		
9	24810315	10	Disk		
10	24810316	9	Disk		
11	24810317	1	BushING		
12	24870118	1	THRUST RACE		
13	24810309	1	Roller		
14	24870318	1	THRUST RACE		
15	24810322	1	Spring		
16	24810323	1	Washer		
17	24810324	1	Piston		
18	24810325	1	Washer		
19	24810326	1	Plug		
20	24810301	1	INTERMEDIATE Shaft		
21	24810328	2	Washer		
22	24810329	1	KEY		
23	24810330	1	Bell		
24	24870206	1	Bearing		
25	24810333	0	Spacer [VAR]		
26	24810334	1	Plug		



[VAR] Variable according to repair



D_5030_3 Input Shaft 3/4					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
27	24870207	1	Bearing		
28	24810307	1	Washer		
29	24810309	2	Roller		
30	(*)	1	Not available [NP]		
31A	24812302	1	Gear R. 1,5 TM 93		
31B	24813302	1	Gear R. 2 TM 93		
31C	24814302	1	Gear R. 2,4 TM 93		
31D	24815302	1	Gear R. 2,8 TM 93		
32	24810312	1	SNAP Ring		
33	24810313	1	Ring		
34	24810314	1	Grommet		
35	24810315	10	Disk		
36	24810316	9	Disk		
37	24810317	1	BushING		
38	24870118	1	THRUST RACE		
40	24870318	1	THRUST RACE		
41	24810322	1	Spring		
42	24810323	1	Washer		
43	24810324	1	Piston		
44	24810325	1	Washer		
45	24810328	2	Washer		
46	24810326	1	Plug		
47	24810101	1	Input Shaft		
48	24810330	1	Bell		
49	24810329	1	KEY		
50	24810334	1	Plug		
51	24870206	1	Bearing		

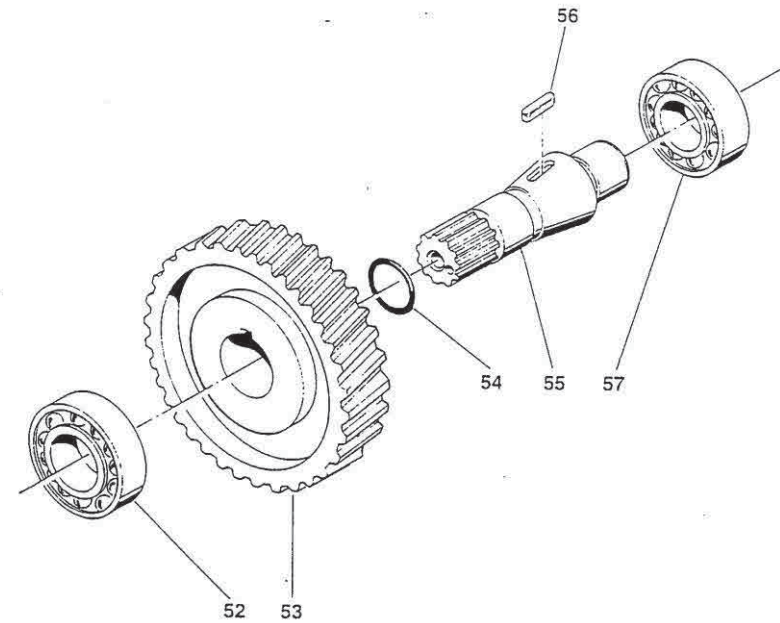


[NP] Not provided



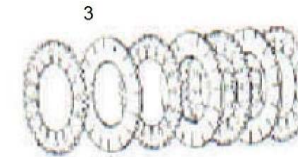
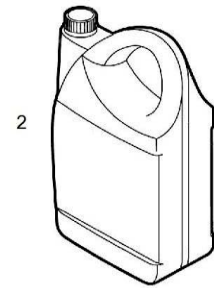
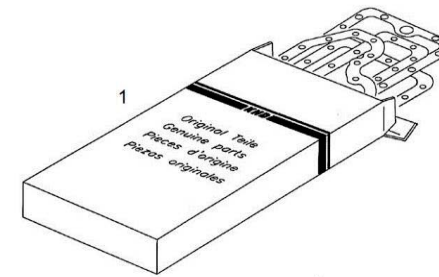


D_5030_4 Output Shaft 4/4						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
52	24810206	1	Conical Roller Bearing 32208			
53/55	24815201C	1	Gear+Output Shaft Kit			
53/55	24813201C	1	Gear+Output Shaft Kit			
53/55	24812201C	1	Gear+Output Shaft Kit			
53/55	24814201C	1	Gear+Output Shaft Kit			
54	24810209	1	O-Ring D. 38X3,5			
57	24810212	1	Bearing			



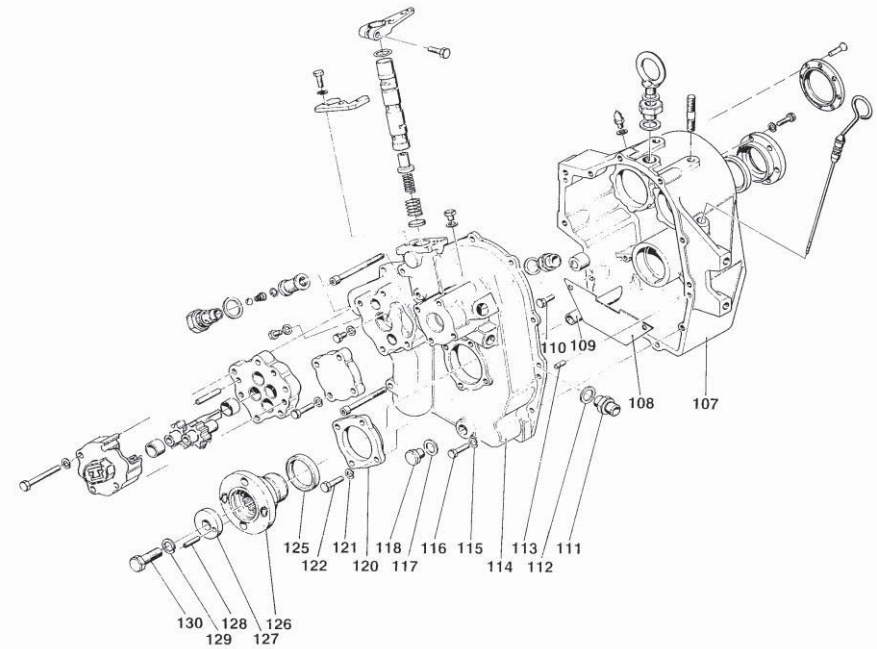


D_5030_5 Maintenance Kit					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24810401	1	Kit Gasket	15/06/2016	
2	A0105000	1	15W40 Sole Diesel Oil 5L	15/06/2016	
3	24810403	2	Clutch Plate Kit	15/06/2016	





D_5031_1.1		Sheet 1.1/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
107	24810001A	1	Front Body TM 93A		
108	24810080	1	Plate Pipe [NP]		
109	24810081	1	ASPIRATION Tube [NP]		
110	24810082	2	Bolt DIN 933 M8-10 8.8 [NP]		
113	24810085	2	Pin		
114	24810002A	1	Reverse Body TM 93A		
117	24810088	1	Washer 14-20-1,5 [NP]		
118	24810011	1	Plug,oil drain		
119	24810089	1	Screw		
120	24810090	1	Cover		
125	24810214	1	Oil Grommet		
126	24810224	1	Flange, Output		
127	24810219	1	BUTT Washer		
128	24840220	1	Pin		
129	24810221	1	Washer GROWER DIN 127-14 [NP]		
130	24810222	1	Bolt DIN 933 M14X40 12.9		
131	24810095	1	Gear, Driven		
132	24810096	1	Gear, Driver		
134	24810098	3	Screw		
NS	24810046	1	Pump Assy Oil [NS]		

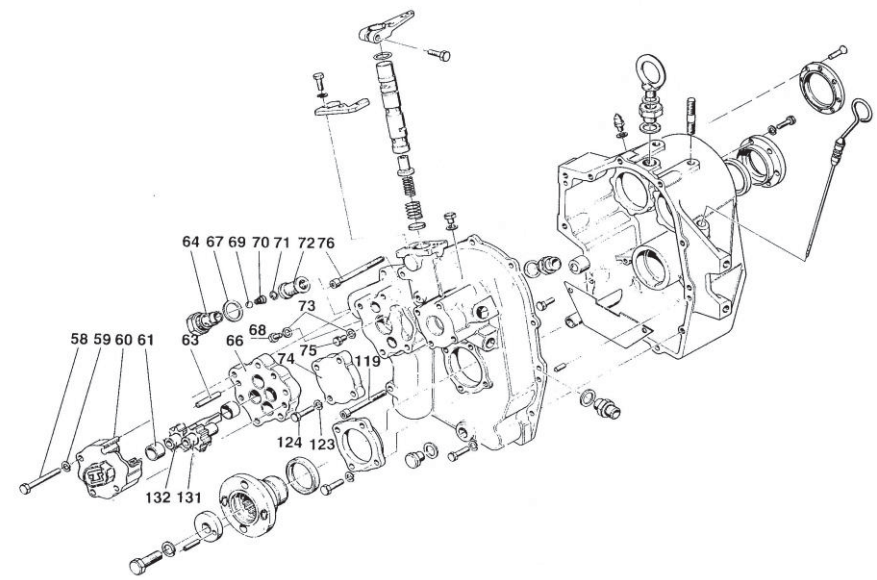


[NP] Not provided
 [NS] Not shown





D_5030_1.2		Sheet 1.2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
119	24810089	1	Screw		
123	53033008	4	Washer GROWER DIN 127-8		
124	52102258	4	Bolt DIN 933 M8-25 8.8		
131	24810095	1	Gear, Driven		
132	24810096	1	Gear, Driver		
58	52101266	4	Bolt DIN 931 M8-65 8.8		
59	24810014	4	Washer GROWER DIN 127-8 [NP]		
60	24810004	1	Oil Pump Body Cover		
61	24810025	4	Bushing		
63	24820023.1	2	Pin		
64	24810024	1	Plug, Oil Filter DRAIN		
66	24810003	1	Oil Pump Body, Engine Side		
67	24810027	1	Washer		
68	24810028	1	Screw		
69	18024143	1	Ball,steel 1/2"		
70	24810030	1	Valve Spring		
71	24810032	1	SNAP Ring		
72	24810035	1	Oil Filter		
73	24810036	2	Washer		
74	24810038	1	Cover		
76	24810040	1	Screw		
NS	52103158	3	Bolt DIN 912 M6-25 8.8 [NS]		



[NP] Not provided
 [NS] Not shown

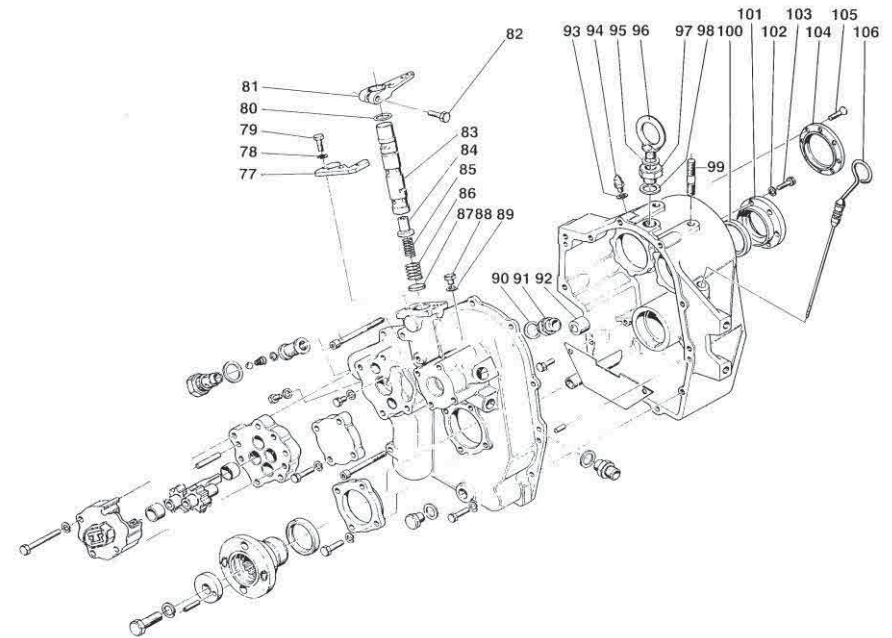




D_5030_1.3

Sheet 1.3/4

FIG.	REF.	QTY	DESCR.	FROM	UPTO
100	24810103S	1	Grommet, Oil SILICON		
101	24810072	1	Cover		
102	53033008	6	Washer GROWER DIN 127-8		
103	52102258	6	Bolt DIN 933 M8-25 8.8		
104	24810075	1	Cover		
105	24810076	8	Screw		
106	24830008	1	ROD, LEVEL Oil		
77	24810041	1	Support		
78	24810042	2	Washer GROWER DIN 127-6 [NP]		
79	24810044	2	Bolt DIN 933 M6-16 8.8 [NP]		
80	24810056	1	O-Ring D. 15,08X2,62 [NP]		
81	24810424	1	Lever		
82	24810047	1	Bolt DIN 933 M8-25 8.8 [NP]		
83	24810051	1	Distributor		
84	24810052	1	Valve		
85	24810053	1	Spring, Valve INNER		
86	24810054	1	Spring, Valve		
87	24810055	1	Expansion Plug		
88	24810028	1	Screw		
89	24810036	1	Washer		
90	24810059	1	Plane Washer		
91	24810060	1	Racord		
92	24810062	1	Valve BY PASS [NP]		
93	24810063	2	Plane Washer		
94	24810065	1	Plug		
96	24810012	1	Nut		
97	24810068	1	Plug		
98	56000083	1	Washer 21-26-1,5		
99	24810071	2	Stud		

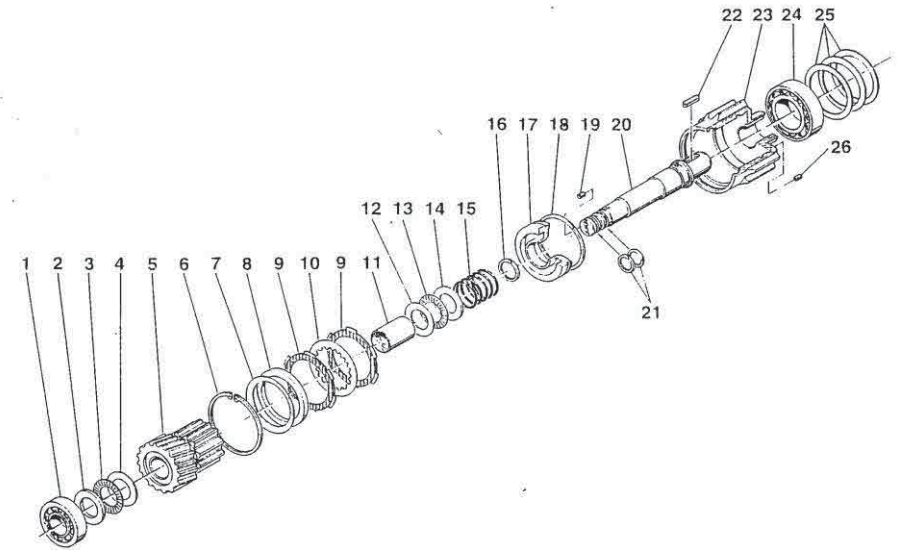


[NP] Not provided





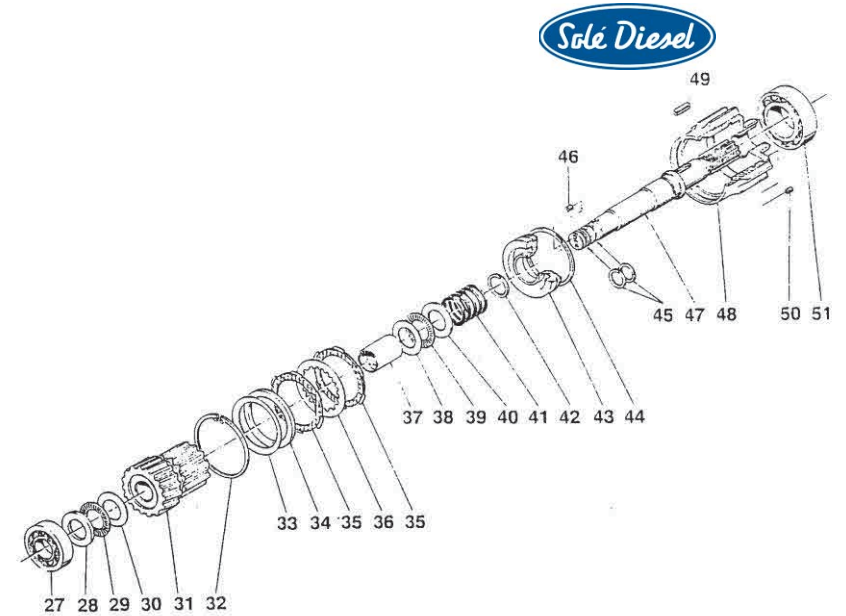
D_5031_2		Intermediate Shaft 2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24870207	1	Bearing		
2	24810307	1	Washer		
3	24810309	1	Roller		
4	24810310	1	Ring		
5	24814302A	1	Gear R. 2,4 TM 93A		
5	24812302A	1	Gear R. 1,5 TM 93A		
5	24813302A	1	Gear Red. 2 TM 93A		
6	24810312	1	SNAP Ring		
7	24810313	1	Ring		
8	24810314	1	Grommet		
9	24810315	10	Disk		
10	24810316	9	Disk		
11	24810317	1	BushING		
12	24870118	1	THRUST RACE		
13	24810309	1	Roller		
14	24870318	1	THRUST RACE		
15	24810322	1	Spring		
16	24810323	1	Washer		
17	24810324	1	Piston		
18	24810325	1	Washer		
19	24810326	1	Plug		
20	24810301	1	INTERMEDIATE Shaft		
21	24810328	2	Washer		
22	24810329	1	KEY		
23	24810330	1	Bell		
24	24870206	1	Bearing		
25	24810333	0	Spacer [VAR]		
26	24810334	1	Plug		



[VAR] Variable according to repair



D_5031_3 Input Shaft 3/4						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
27	24870207	1	Bearing			
28	24810307	1	Washer			
29	24810309	2	Roller			
30	(*)	1	Not available [NP]			
31	24813302	1	Gear R. 2 TM 93			
31	24814302	1	Gear R. 2,4 TM 93			
31	24812302	1	Gear R. 1,5 TM 93			
32	24810312	1	SNAP Ring			
33	24810313	1	Ring			
34	24810314	1	Grommet			
35	24810315	10	Disk			
36	24810316	9	Disk			
37	24810317	1	BushING			
38	24870118	1	THRUST RACE			
40	24870318	1	THRUST RACE			
41	24810322	1	Spring			
42	24810323	1	Washer			
43	24810324	1	Piston			
44	24810325	1	Washer			
45	24810328	2	Washer			
46	24810326	1	Plug			
47	24810101	1	Input Shaft			
48	24810330	1	Bell			
49	24810329	1	KEY			
50	24810334	1	Plug			
51	24870206	1	Bearing			

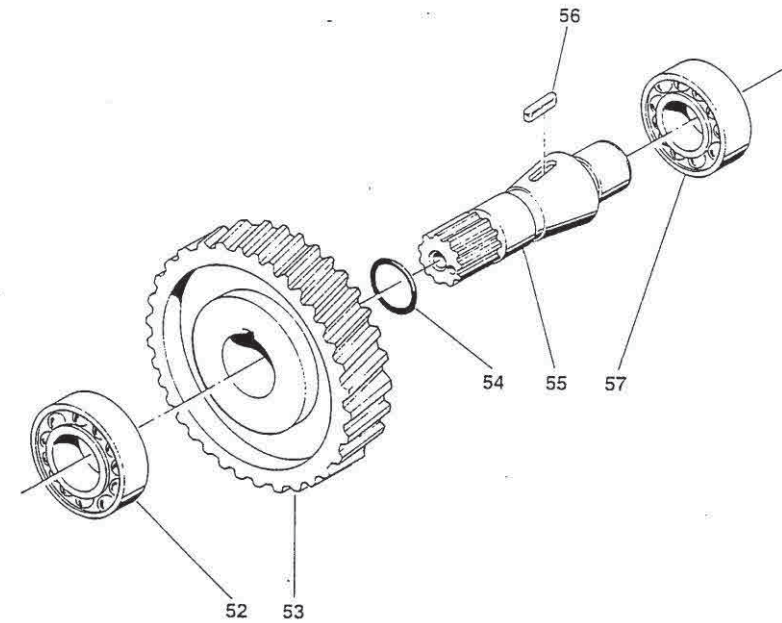


[NP] Not provided



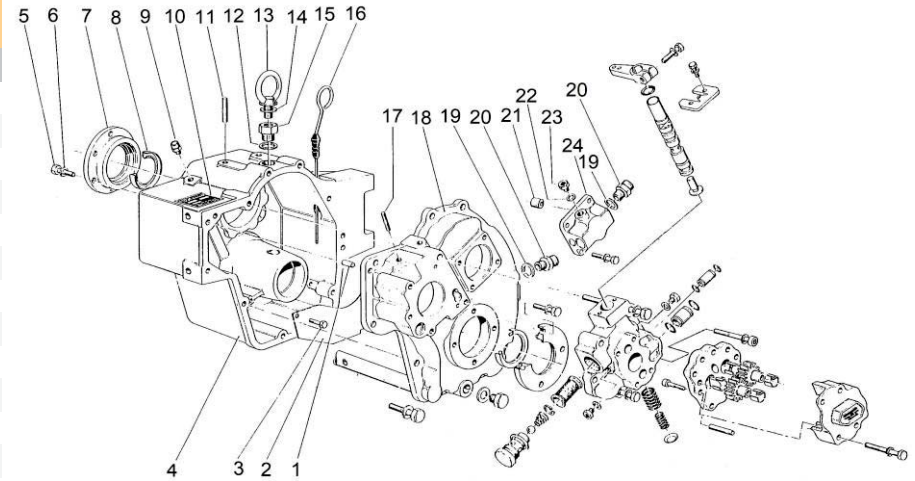


D_5031_4 Output Shaft 4/4					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
52	24810206	1	Conical Roller Bearing 32208		
53/55	24814201AC	1	Gear+Output Shaft Kit		
53/55	24812201AC	1	Gear+Output Shaft Kit		
53/55	24813201AC	1	Gear+Output Shaft Kit		
54	24810209	1	O-Ring D. 38X3,5		
57	24810212	1	Bearing		





D_5027_1.1		Sheet 1.1/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820090	2	Pin		
2	24816080	1	Plate Pipe		
3	24810082	2	Bolt DIN 933 M8-10 8.8 [NP]		
4	24820001	1	Front Body TM 170		
5	24810047	6	Bolt DIN 933 M8-25 8.8 [NP]		
6	24810014	6	Washer GROWER DIN 127-8 [NP]		
7	24820072	1	Cover Input Shaft		
8	24820103	1	Oil Grommet		
9	24810065	1	Plug		
10	24820005.1	1	NAME Plate		
11	24810071	2	Stud		
12	56000083	1	Washer 21-26-1,5		
13	24810012	1	Nut		
14	24810063	1	Plane Washer		
15	24810068	1	Plug		
16	24810008	1	ROD, Oil LEVEL		
17	24820071	2	Stud		
18	24820002	1	Reverse Body TM 170		
19	24810059	2	Plane Washer		
20	24810060	2	Racord		
21	24810062	1	Valve BY PASS [NP]		
22	24820086	1	Washer 8-13-1,5 [NP]		
23	24830105	1	Plug		
24	24820102	1	Cover, REAR		

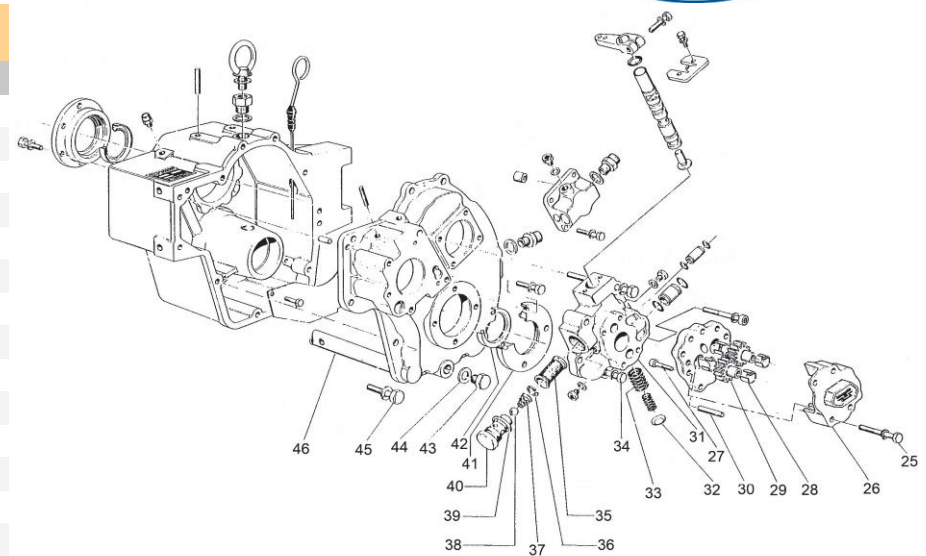


[NP] Not provided





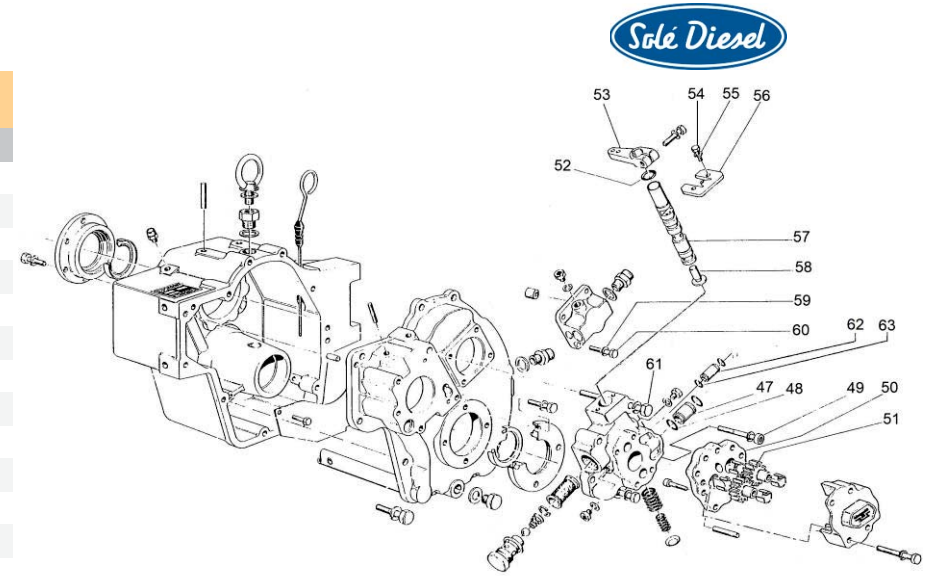
D_5026_1.2 Sheet 1.2/4						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
25	24810013	4	Bolt DIN 931 M8-65 8.8 [NP]			
26	24820015.1	1	Oil Pump Body			
27	24820025.1	3	Bolt DIN 912 M6-25 8.8 [NP]			
28	24810025	4	Bushing			
29	24810096	1	Gear, Driver			
30	24820023.1	2	Pin			
31	24820026	1	Distributor Cap			
32	24810055	1	Expansion Plug			
33	24816054	1	Spring, Valve			
34	24820098	2	Bolt DIN 912 M10-50 8.8 [NP]			
35	24810035	1	Oil Filter			
36	24810032	1	SNAP Ring			
37	24810030	1	Valve Spring			
38	18024143	1	Ball,steel 1/2"			
39	24810027	1	Washer			
40	24810024	1	Plug, Oil Filter DRAIN			
41	24820208	1	Cover Front			
42	24820214	1	Grommet			
43	24810011	1	Plug,oil drain			
44	24810088	1	Washer 14-20-1,5 [NP]			
45	52101314	1	Bolt DIN 931 M10-55 8.8			
46	24816081	1	Aspiration Tube TM 880A			
NS	24820013	2	Bolt DIN 912 M10-30 8.8 [NP] [NS]			
NS	24810026.1	3	Cover [NS]			
NS	24820090	2	Pin [NS]			
NS	52103311	9	Bolt DIN 912 M10-40 8.8 [NS]			



[NP] Not provided
 [NS] Not shown



D_5026_1.3		Sheet 1.3/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
47	24820062	2	Tube, Racord		
48	24820063	2	O-Ring D. 15X1,7		
49	24820013	2	Bolt DIN 912 M10-30 8.8 [NP]		
50	24810026.1	3	Cover		
51	24810095	3	Gear, Driven		
52	24810056	1	O-Ring D. 15,08X2,62 [NP]		
54	24810044	2	Bolt DIN 933 M6-16 8.8 [NP]		
55	24810042	2	Washer GROWER DIN 127-6 [NP]		
56	24810041	1	Support		
57	24810051	1	Distributor		
58	24810052	1	Valve		
59	24820075	4	Washer GROWER DIN 127-10 [NP]		
60	24820076	4	Bolt DIN 933 M10-30 8.8 [NP]		
61	24820087	1	Bolt DIN 931 M10-130 8.8 [NP]		
62	24820060	1	Tube, Racord		
63	24820059	2	O-Ring D. 10X1,7		
82	24810424	1	Lever		
NS	56000083	1	Washer 21-26-1,5 [NS]		
NS	24820102	1	Cover, REAR [NS]		
NS	24830105	1	Plug [NS]		
NS	24820103	1	Oil Grommet [NS]		

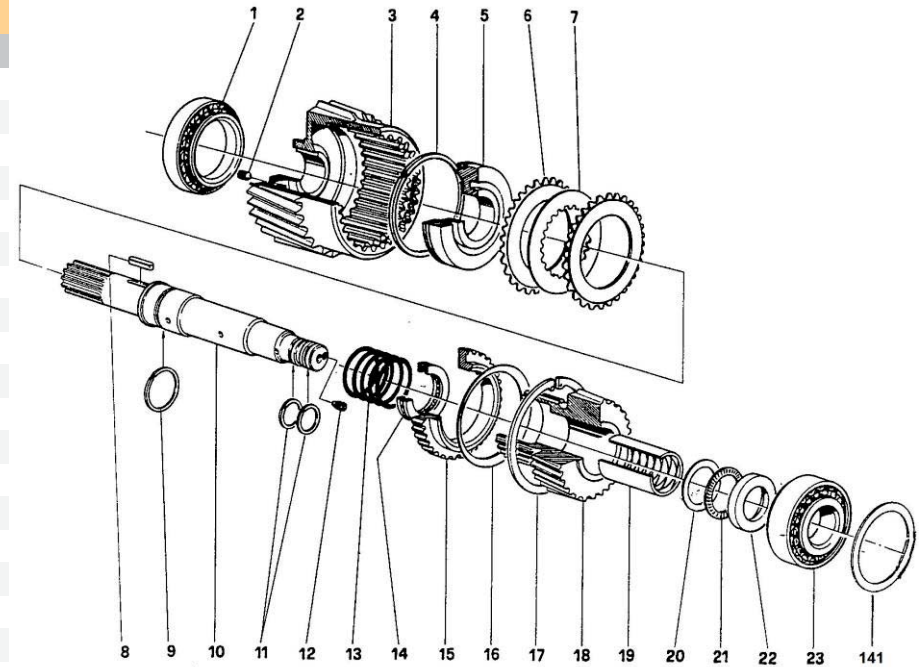


[NP] Not provided
 [NS] Not shown





D_5027_2		Input Shaft 2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820134	1	Conical Roller Bearing 32011-JR		
2	24810334	1	Plug		
3	24820130	1	Bell		
4	24820125	1	Washer		
5	24820124	1	Piston		
6	24820115	9	Disk		
7	24820116	8	Disk		
8	24810211	1	KEY		
9	24820126	1	Washer		
10	24820101	1	Input Shaft		
11	24810328	2	Washer		
12	24810326	1	Plug		
13	24820122	1	Spring		
14	24820123	1	Bearing		
141	24810333	0	Spacer [VAR]		
15	24820113	1	Grommet		
16	24820129	1	Ring		
17	24820128	1	SNAP Ring		
18A	24822302	1	Gear R. 1,50 TM 170		
18B	24823302	1	Gear R. 2,04 TM 170		
18C	24824302	1	Gear R. 2.50 TM 170		
18D	24825302	1	Gear Red. 2,94 TM 170		
19	24820117	1	Bushing		
20	24820118	1	Ring		
21	24820121	1	Roller Bearing AXK-4060		
22	24820105	1	Washer		
23	24820104	1	Conical Roller Bearing 32307		

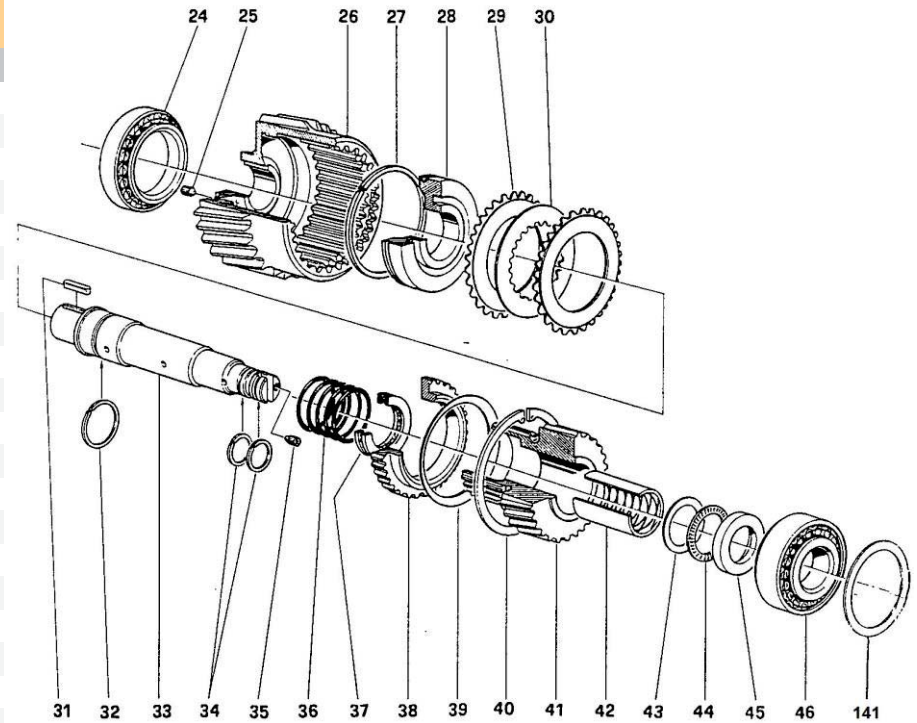


[VAR] Variable according to repair





D_5027_3		Intermediate Shaft 3/4				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
141	24810333	0	Spacer [VAR]			
24	24820134	1	Conical Roller Bearing 32011-JR			
25	24810334	1	Plug			
26	24820330	1	Bell			
27	24820125	1	Washer			
28	24820124	1	Piston			
29	24820115	9	Disk			
30	24820116	8	Disk			
31	24810211	1	KEY			
32	24820126	1	Washer			
33	24820301	1	INTERMEDIATE Shaft			
34	24810328	2	Washer			
35	24810326	1	Plug			
36	24820122	1	Spring			
37	24820123	1	Bearing			
38	24820113	1	Grommet			
39	24820129	1	Ring			
40	24820128	1	SNAP Ring			
41A	24822302	1	Gear R. 1,50 TM 170			
41B	24823302	1	Gear R. 2,04 TM 170			
41C	24824302	1	Gear R. 2.50 TM 170			
41D	24825302	1	Gear Red. 2,94 TM 170			
42	24820117	1	Bushing			
43	24820118	1	Ring			
44	24820121	1	Roller Bearing AXK-4060			
45	24820105	1	Washer			
46	24820104	1	Conical Roller Bearing 32307			

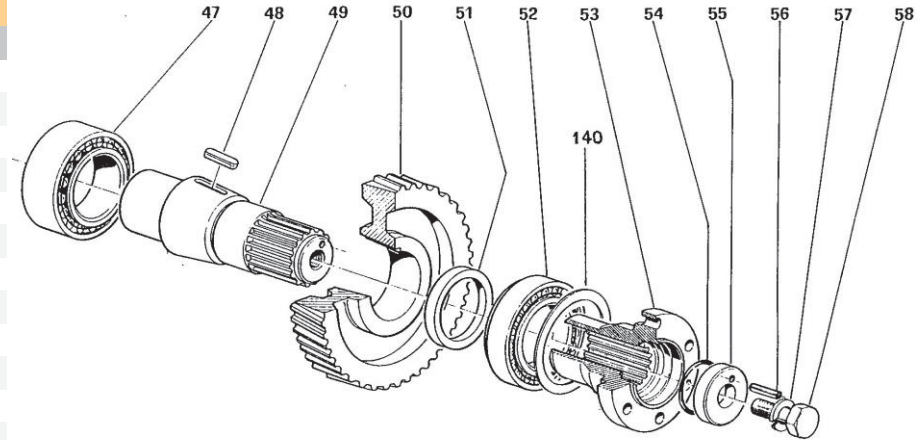


[VAR] Variable according to repair





D_5027_4		Output Shaft 4/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
140	24820333.1	0	Shim [VAR]		
47	24820206	1	Conical Roller Bearing 33210		
49/50	24824201C	1	Gear+Output Shaft Kit+Spacer		
49/50	24823201C	1	Gear+Output Shaft Kit+Spacer		
49/50	24825201C	1	Gear+Output Shaft Kit+Spacer		
49/50	24822201C	1	Gear+Output Shaft Kit+Spacer		
51	24820209	1	Spacer, Output Shaft		
52	24820212	1	Conical Roller Bearing 30210-J2/Q		
53	24820224	1	Flange, Output		
54	24820225	1	O-Ring D. 45X3,5		
55	24820219	1	BUTT Washer		
56	24820220	1	Pin		
57	53033016C	1	Washer	22/09/2018	
57	24820221	1	1 [NP]		21/09/2018
58	24820222.1	1	Screw		



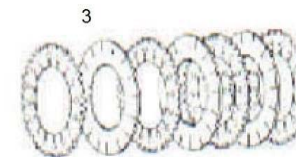
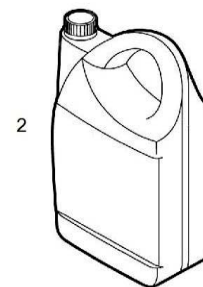
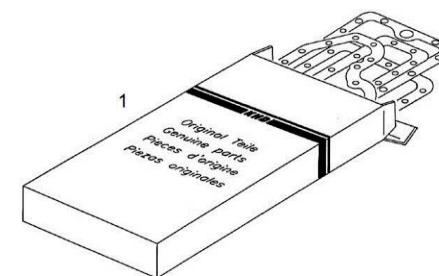
[NP] Not provided

[VAR] Variable according to repair



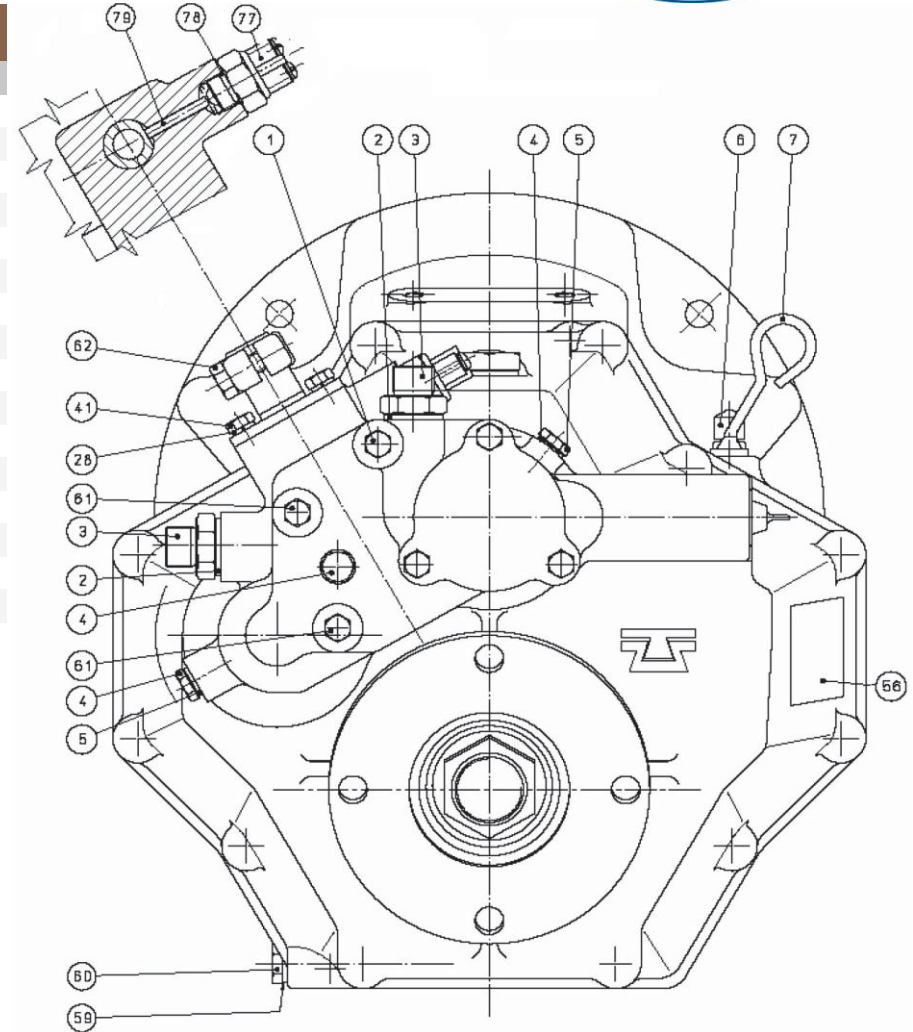


D_5027_5		Maintenance Kit			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820401	1	Kit Gasket	15/06/2016	
2	A0105000	1	15W40 Sole Diesel Oil 5L	15/06/2016	
3	24820403	2	Clutch Plate Kit	15/06/2016	





D_5023_1		Sheet 1/4				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	24850091	1	Screw			
2	24850092	3	Washer			
3	24850090	2	Washer			
4	24820068	3	Plug M8X1			
5	24820086	3	Washer 8-13-1,5 [NP]			
6	24810065	1	Plug			
7	24850008	1	Gauge Oil LEVEL			
26	24850028	11	Screw			
41	24810044	5	Bolt DIN 933 M6-16 8.8 [NP]			
56	24850005	1	Plate, IDENTIFICATION			
59	24810063	1	Plane Washer			
60	24850011	1	Plug,oil drain			
61	24850040	2	Bolt DIN 933 M6-25 8.8 [NP]			
62	24810047	1	Bolt DIN 933 M8-25 8.8 [NP]			
77	24810532	1	SWITCHER			
78	24810533	1	O-Ring D. 14X1,7			
79	24850527	1	Pin			



[NP] Not provided

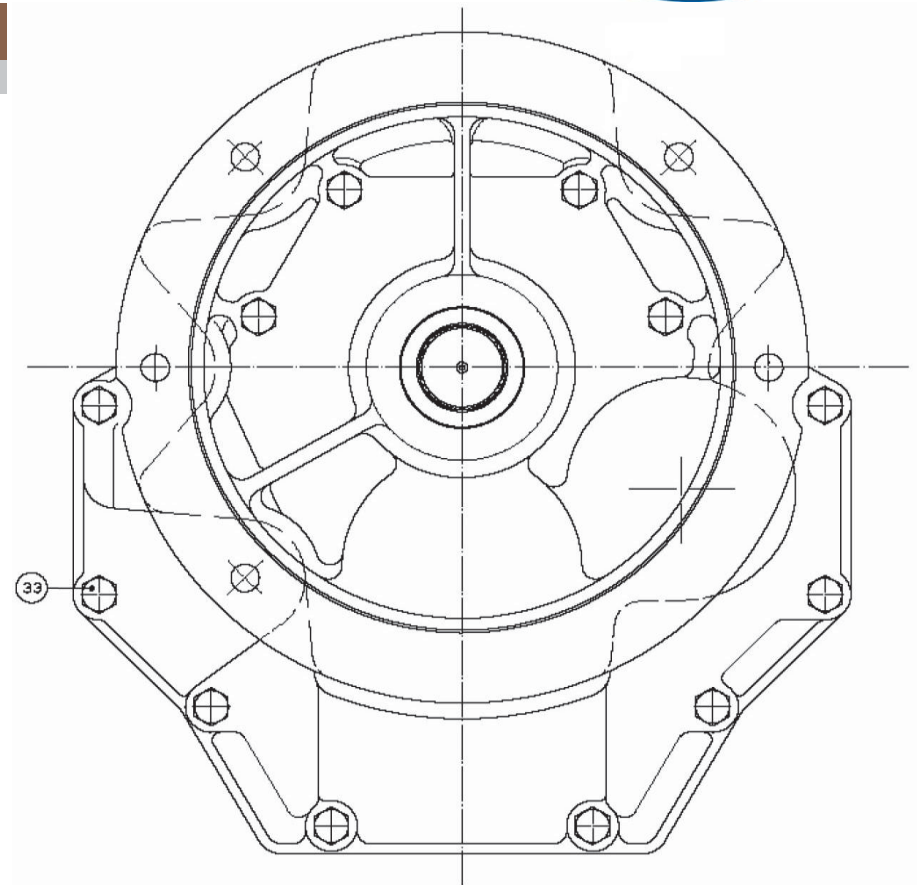




D_5023_2

Sheet 2/4

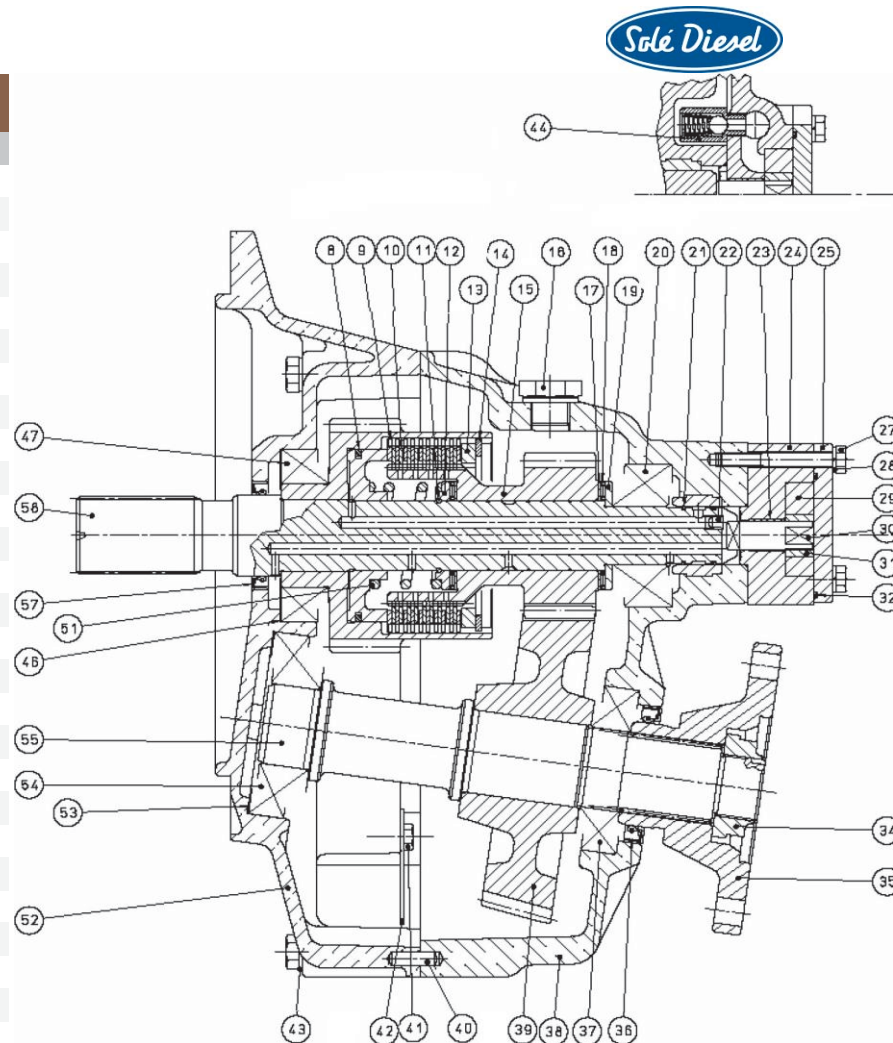
FIG.	REF.	QTY	DESCR.	FROM	UPTO
33	24830113	1	Screw		





D_5023_3 Sheet 3/4

FIG.	REF.	QTY	DESCR.	FROM	UPTO
8	24850323	2	Washer		
9-10	24850403	2	Clutch Plate Kit		
11	24850310	2	Ring		
12	24850307	2	Ring		
13	24850333	2	Spacer		
14	24850312	2	SEGER		
15A	24852203	1	Gear R. 1,54 TM 345		
15B	24853203	1	Gear R. 2 TM 345		
15C	24854203	1	Gear R. 2,47 TM 345		
16	24850012	1	Plug		
17	24850318	4	Ring		
18	24850306	4	Bearing, needle		
19	24850325	2	Washer		
20	24850308	2	Conical Roller Bearing 32305		
21	24850328	4	Washer		
22	24810326	2	Plug		
23	24850016	1	Bushing		
24	24850020	1	PUMB Box		
25	24850015	1	Pump Cover		
27	24850029	3	Screw		
28	24810042	9	Washer GROWER DIN 127-6 [NP]		
29	24850095	1	Gear, Pump Out		
30	24850094	1	Pump Shaft		
31	24850096	1	Gear, Pump INNER		
32	24850097	1	O-Ring D. 50X1,7		
34	24850099	1	Nut		
35	24850224A	1	Flange, Output TM-345A		
36	24840103	1	Grommet		
37	24850212	1	Conical Roller Bearing 30207A		
38	24850001A	1	Front Body TM-345A		
39A	24852210	1	Gear R. 1,54 TM 345		
39B	24853210	1	Gear R. 2 TM 345		
39C	24854210	1	Gear R. 2,47 TM 345		
40	24850013	2	Pin		
42	24850080	1	Plate Pipe		

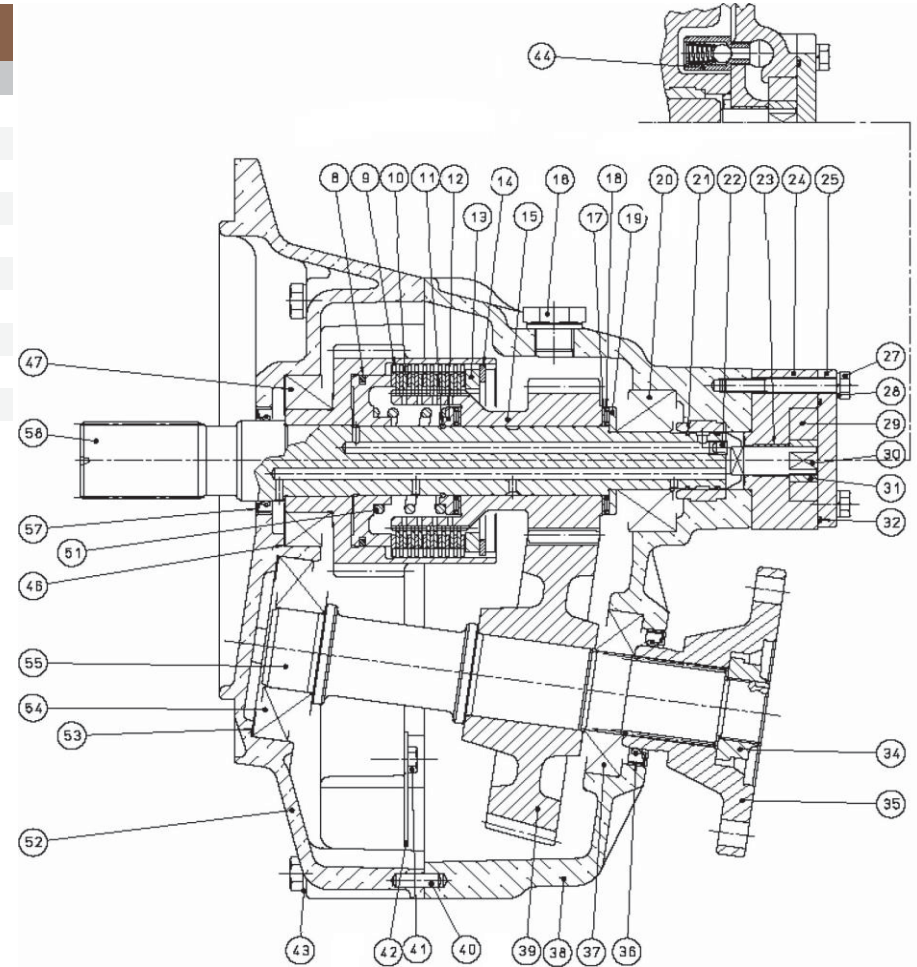


[NP] Not provided



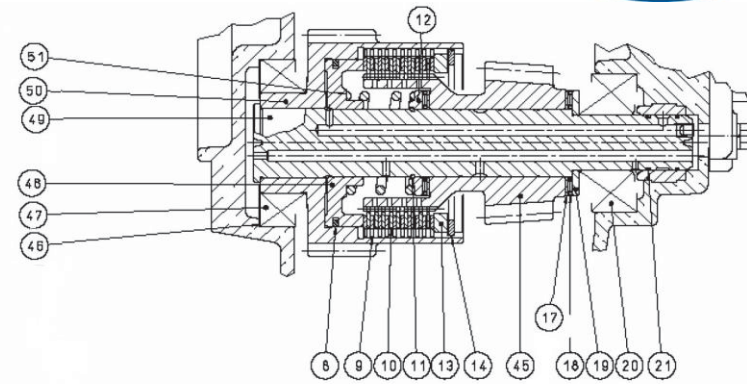


D_5023_3		Sheet 3/4		FROM	UPTO
FIG.	REF.	QTY	DESCR.		
43	24850093	12	Washer		
44	24850063	1	By pass Valve		
46	24850108	6	Shim Adjusting		
47	24850104	2	Conical Roller Bearing 32009-X		
51	24850122	2	Spring		
52	24850207A	1	Cover TM-345A		
53	24810333	3	Spacer		
54	24850206	1	Conical Roller Bearing 31307A		
55	24850201	1	Output Shaft		
57	24810103S	1	Grommet, Oil SILICON		
58	24850101	1	Input Shaft		

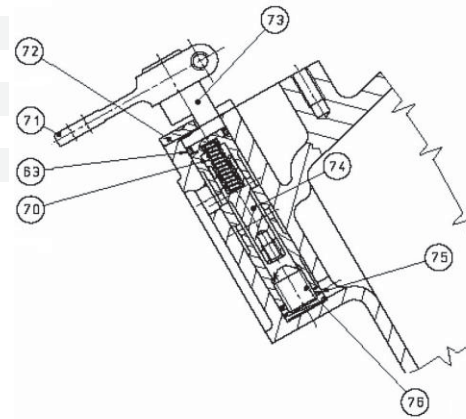




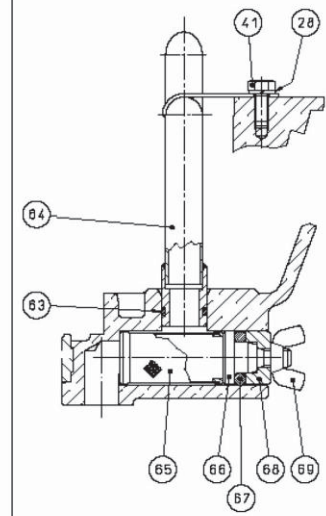
D_5023_4		Sheet 4/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
45A	24852203	1	Gear R. 1,54 TM 345		
45B	24853203	1	Gear R. 2 TM 345		
45C	24854203	1	Gear R. 2,47 TM 345		
48	24850124	2	Piston		
49	24850301	1	INTERMEDIATE Shaft		
50	24850330	1	Bell		
63	24810056	2	O-Ring D. 15,08X2,62 [NP]		
64	24850081	1	Aspiration Tube		
65	24810035	1	Oil Filter		
66	24850085	1	Pin		
67	24850059	1	O-Ring D. 50X5,3 [NP]		
68	24850076	1	Spacer		
69	24850057	1	Nut		
70	24850030	1	Spring		
71	24810424	1	Lever		
72	24810041	1	Support		
73	24850062	1	Selector Valve		
74	24850052	1	Valve		
75	24850078	1	Spring		
76	24850079	1	Screw		



INTERMEDIATE SHAFT ASSEMBLY



SELECTOR VALVE ASSEMBLY



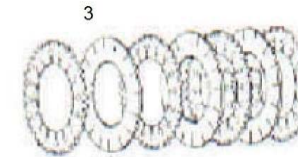
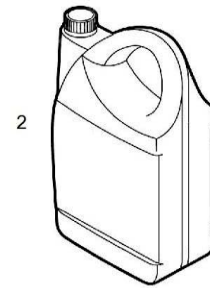
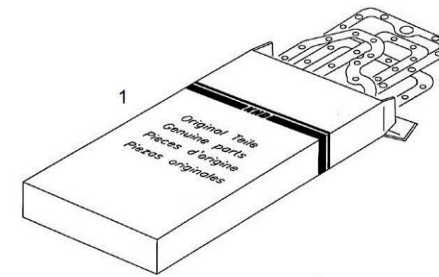
OIL FILTER ASSEMBLY

[NP] Not provided



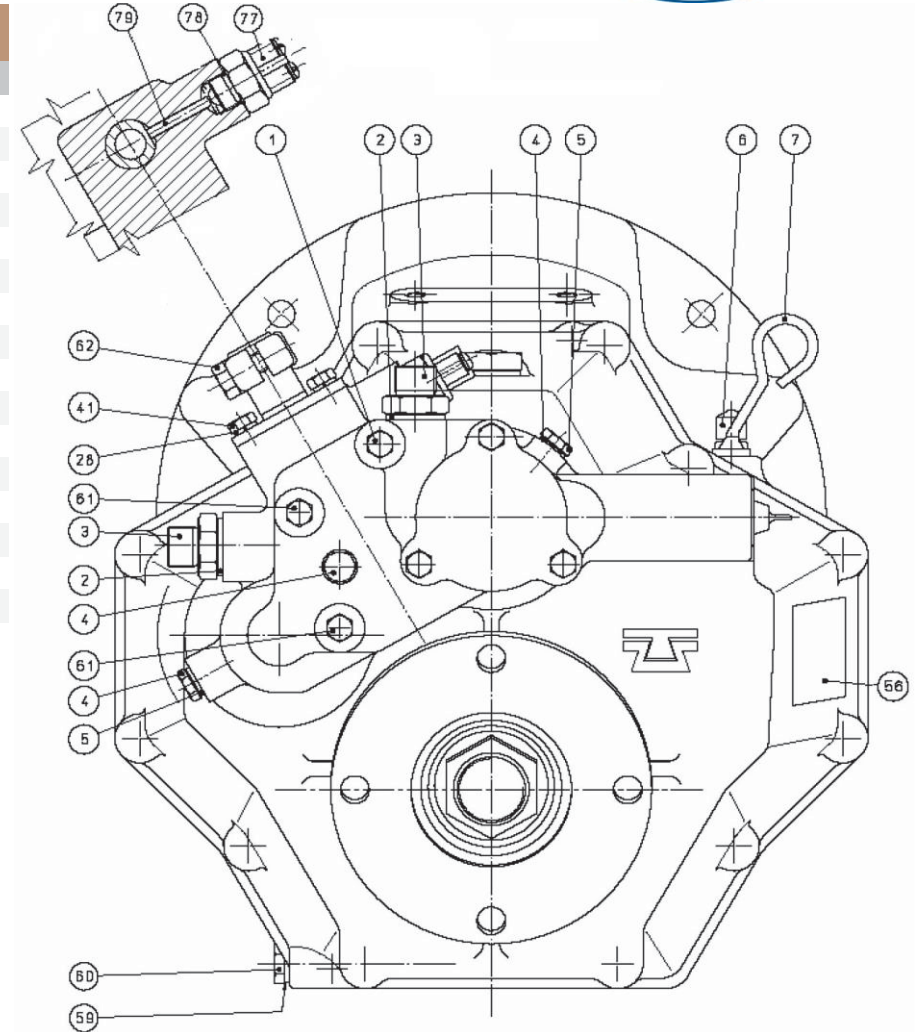


D_5023_5		Maintenance Kit			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24850401	1	Kit Gasket	15/06/2016	
2	A0105000	1	15W40 Sole Diesel Oil 5L	15/06/2016	
3	24850403	2	Clutch Plate Kit	15/06/2016	





D_5024_1		Sheet 1/4				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	24850091	1	Screw			
2	24850092	3	Washer			
3	24850090	2	Washer			
4	24820068	3	Plug M8X1			
5	24820086	3	Washer 8-13-1,5 [NP]			
6	24810065	1	Plug			
7	24850008	1	Gauge Oil LEVEL			
26	24850028	11	Screw			
41	24810044	5	Bolt DIN 933 M6-16 8.8 [NP]			
56	24850005	1	Plate, IDENTIFICATION			
59	24810063	1	Plane Washer			
60	24850011	1	Plug,oil drain			
61	24850040	2	Bolt DIN 933 M6-25 8.8 [NP]			
62	24810047	1	Bolt DIN 933 M8-25 8.8 [NP]			
77	24810532	1	SWITCHER			
78	24810533	1	O-Ring D. 14X1,7			
79	24850527	1	Pin			



[NP] Not provided

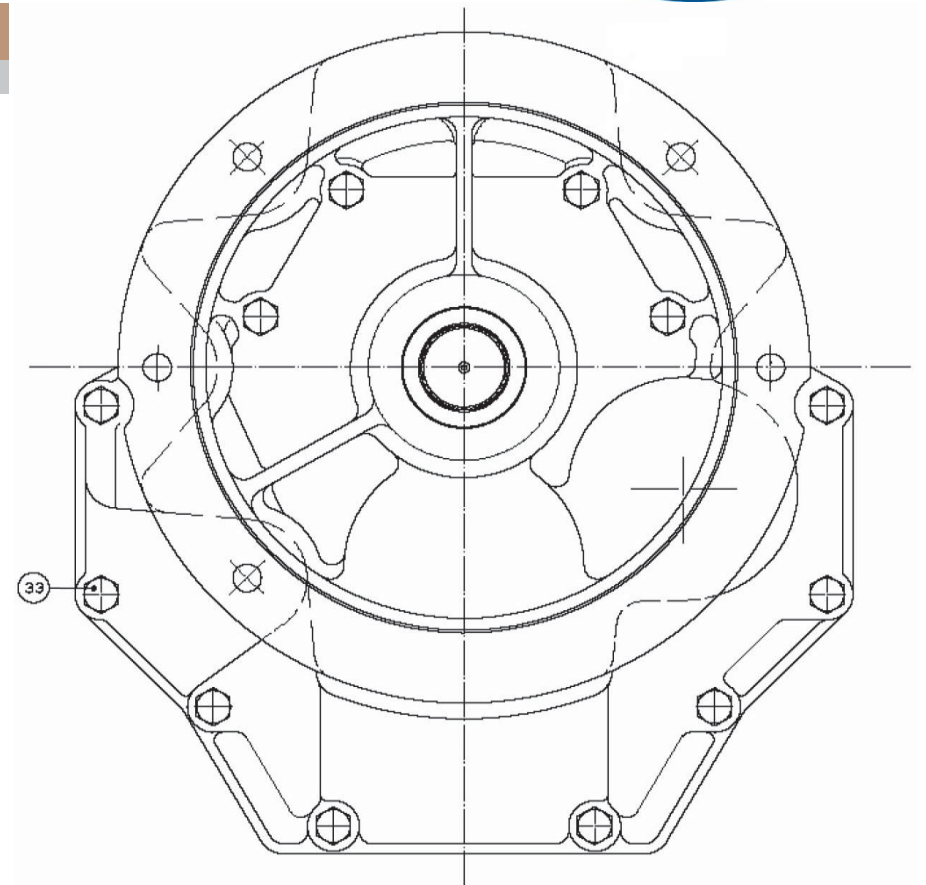




D_5024_2

Sheet 2/4

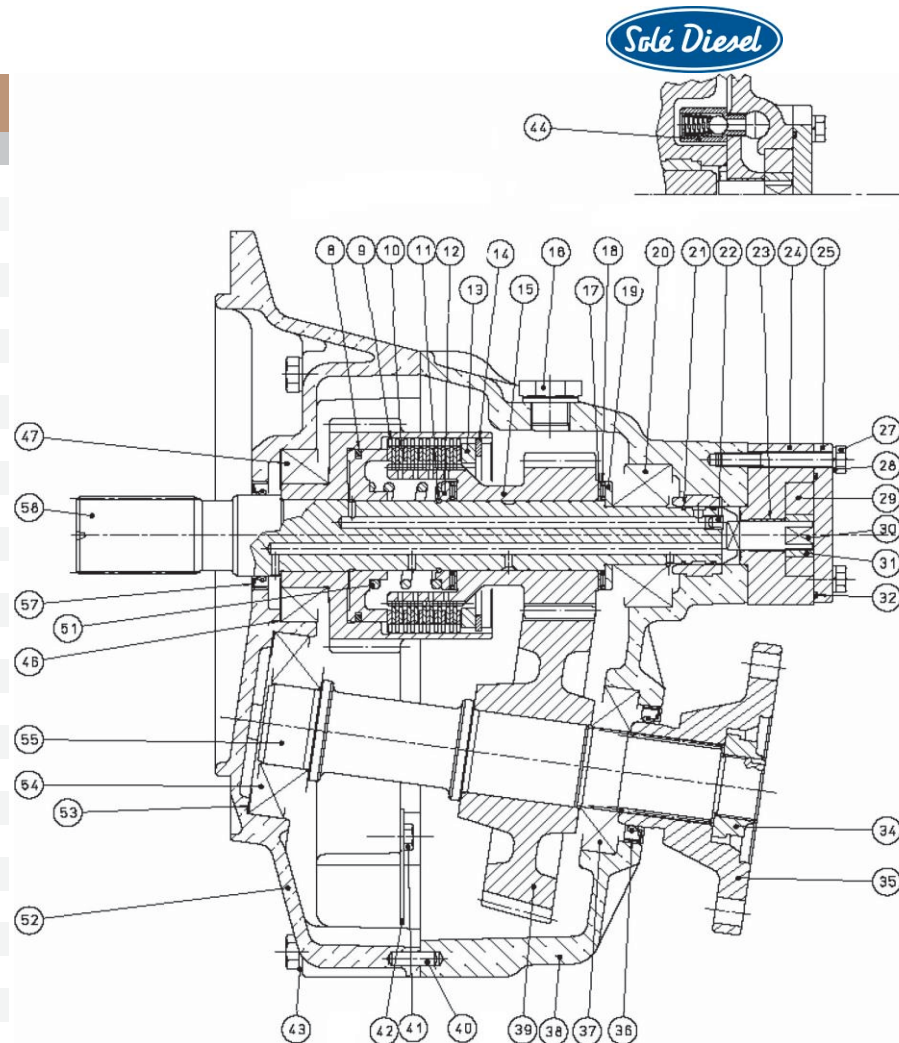
FIG.	REF.	QTY	DESCR.	FROM	UPTO
33	24830113	1	Screw		





D_5024_3 Sheet 3/4

FIG.	REF.	QTY	DESCR.	FROM	UPTO
8	24850323	2	Washer		
11	24850310	2	Ring		
12	24850307	2	Ring		
13	24850333	2	Spacer		
14	24850312	2	SEGER		
15A	24852203A	1	Gear R. 1,54 TM 345A		
15B	24853203A	1	Gear Red. 2 TM 345A		
15C	24854203A	1	Gear R. 2,47 TM 345A		
16	24850012	1	Plug		
17	24850318	4	Ring		
18	24850306	4	Bearing, needle		
19	24850325	2	Washer		
20	24850308	2	Conical Roller Bearing 32305		
21	24850328	4	Washer		
22	24810326	2	Plug		
23	24850016	1	Bushing		
24	24850020	1	PUMB Box		
25	24850015	1	Pump Cover		
27	24850029	3	Screw		
28	24810042	9	Washer GROWER DIN 127-6 [NP]		
29	24850095	1	Gear, Pump Out		
30	24850094	1	Pump Shaft		
31	24850096	1	Gear, Pump INNER		
32	24850097	1	O-Ring D. 50X1,7		
34	24850099	1	Nut		
35	24850224A	1	Flange, Output TM-345A		
36	24840103	1	Grommet		
37	24850212	1	Conical Roller Bearing 30207A		
38	24850001A	1	Front Body TM-345A		
39A	24852210A	1	Gear R. 1,54 TM 345A		
39B	24853210A	1	Gear R. 2 TM 345A		
39C	24854210A	1	Gear R. 2,47 TM 345A		
40	24850013	2	Pin		
42	24850080	1	Plate Pipe		
43	24850093	12	Washer		

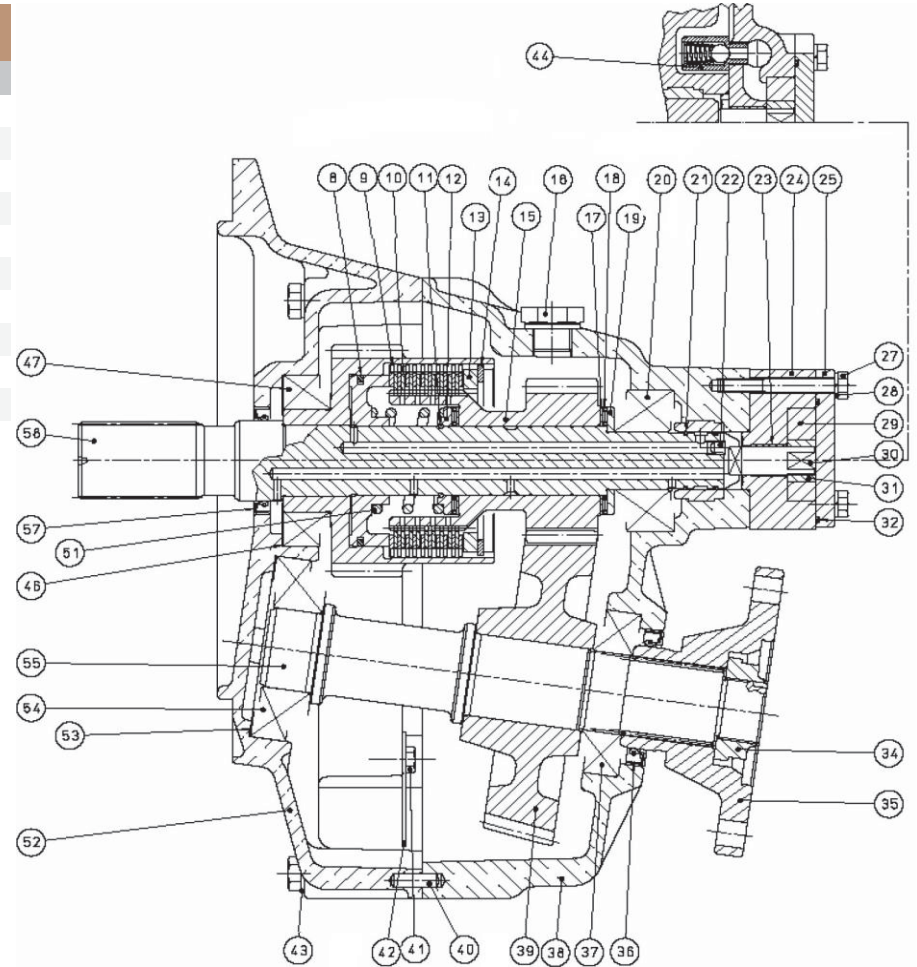


[NP] Not provided



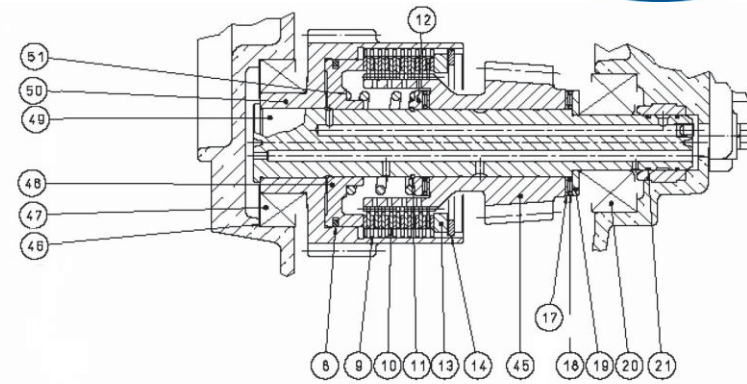


D_5024_3		Sheet 3/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
44	24850063	1	By pass Valve		
46	24850108	6	Shim Adjusting		
47	24850104	2	Conical Roller Bearing 32009-X		
51	24850122	2	Spring		
52	24850207A	1	Cover TM-345A		
53	24810333	3	Spacer		
54	24850206	1	Conical Roller Bearing 31307A		
55	24850201	1	Output Shaft		
57	24810103S	1	Grommet, Oil SILICON		
58	24850101	1	Input Shaft		

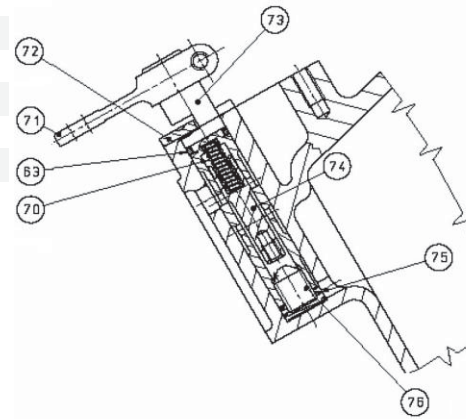




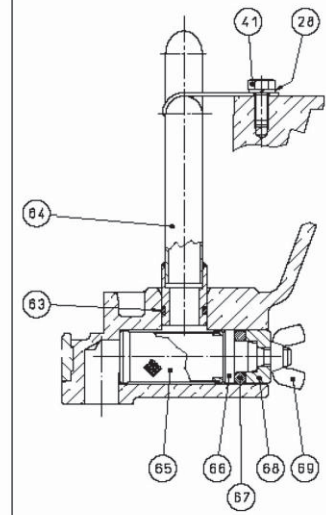
D_5024_4		Sheet 4/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
45A	24852302	1	Gear R. 1,54 TM 345A		
45B	24853302	1	Gear R. 2 TM 345A		
45C	24854302	1	Gear R. 2,47 TM 345A		
48	24850124	2	Piston		
49	24850301	1	INTERMEDIATE Shaft		
50	24850330	1	Bell		
63	24810056	2	O-Ring D. 15,08X2,62 [NP]		
64	24850081	1	Aspiration Tube		
65	24810035	1	Oil Filter		
66	24850085	1	Pin		
67	24850059	1	O-Ring D. 50X5,3 [NP]		
68	24850076	1	Spacer		
69	24850057	1	Nut		
70	24850030	1	Spring		
71	24810424	1	Lever		
72	24810041	1	Support		
73	24850062	1	Selector Valve		
74	24850052	1	Valve		
75	24850078	1	Spring		
76	24850079	1	Screw		



INTERMEDIATE SHAFT ASSEMBLY



SELECTOR VALVE ASSEMBLY



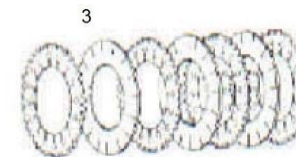
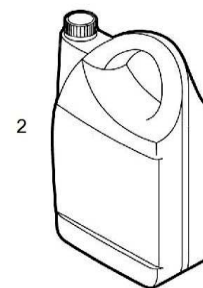
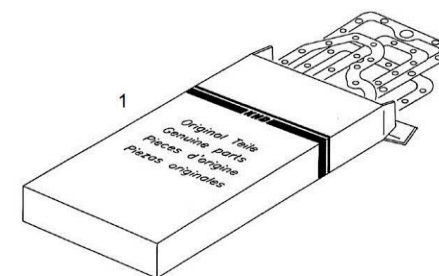
OIL FILTER ASSEMBLY

[NP] Not provided





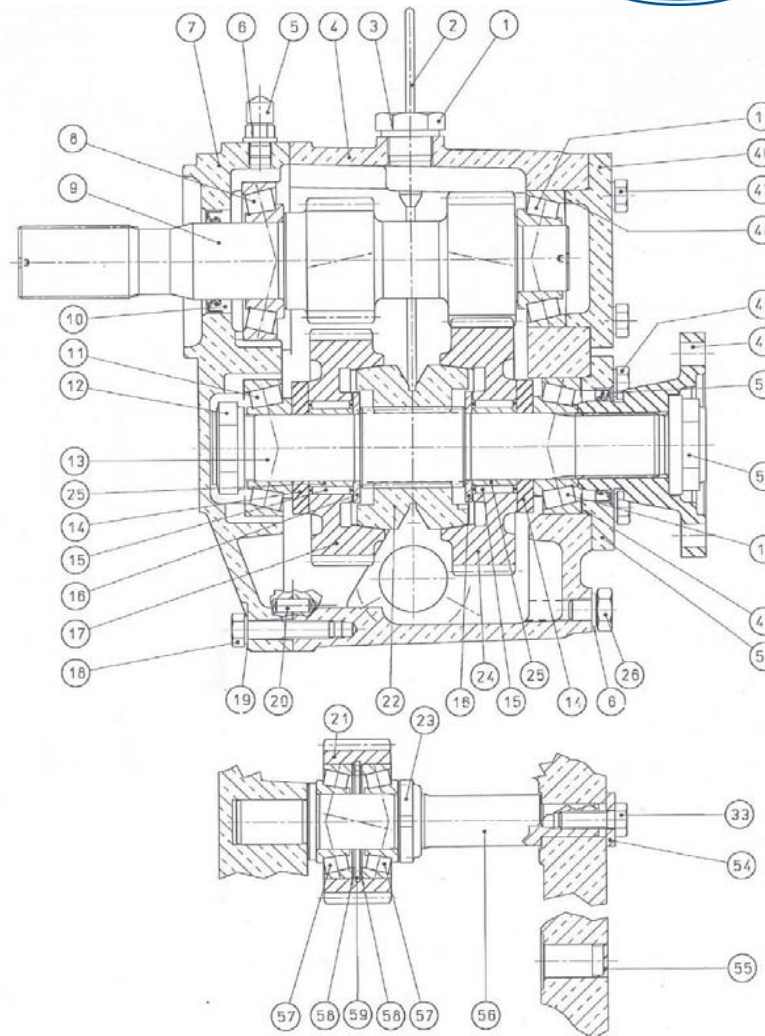
D_5023_5		Maintenance Kit			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24850401	1	Kit Gasket	15/06/2016	
2	A0105000	1	15W40 Sole Diesel Oil 5L	15/06/2016	
3	24850403	2	Clutch Plate Kit	15/06/2016	





D_5032_1 **Sheet 1/3**

FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24830011	1	Plug		
2	24890008	1	Gauge Oil Level		
3	56000083	1	Washer 21-26-1,5		
4	24890001	1	Cover		
5	24810065	1	Plug		
6	24810063	2	Plane Washer		
7	24890102	1	Cover		
8	24850212	1	Conical Roller Bearing 30207A		
9A	24895101	1	Input Shaft		
9B	24894101	1	Input Shaft		
9C	24893101	1	Input Shaft		
9D	24892101	1	Input Shaft		
10	24810103	1	Oil Grommet		
11	25710104	3	Conical Roller Bearing 32206-J2/Q		
12	24880222	1	Nut		
13	24880201	1	Shaft Output		
14	24880217	2	Shim		
15	24880204	2	Bearing, needle		
16	24880218	2	Shim		
17A	24894203	1	Gear		
17B	24892203	1	Gear		
18	52101261	9	Bolt DIN 931 M8-40 8.8		
19	24850093	17	Washer		
20	24860023	2	Pin		
21	24890302	1	Gear		
22	24890202	1	Clutch		
23	24890307	1	Nut		
24A	24894203	1	Gear		
24B	24895210	1	Gear		
24C	24894210	1	Gear		
24D	24893210	1	Gear		
25	24880205	2	CAGE		
26	24850011	1	Plug,oil drain		
33	52102258	1	Bolt DIN 933 M8-25 8.8		
46	24890205	1	Cover		

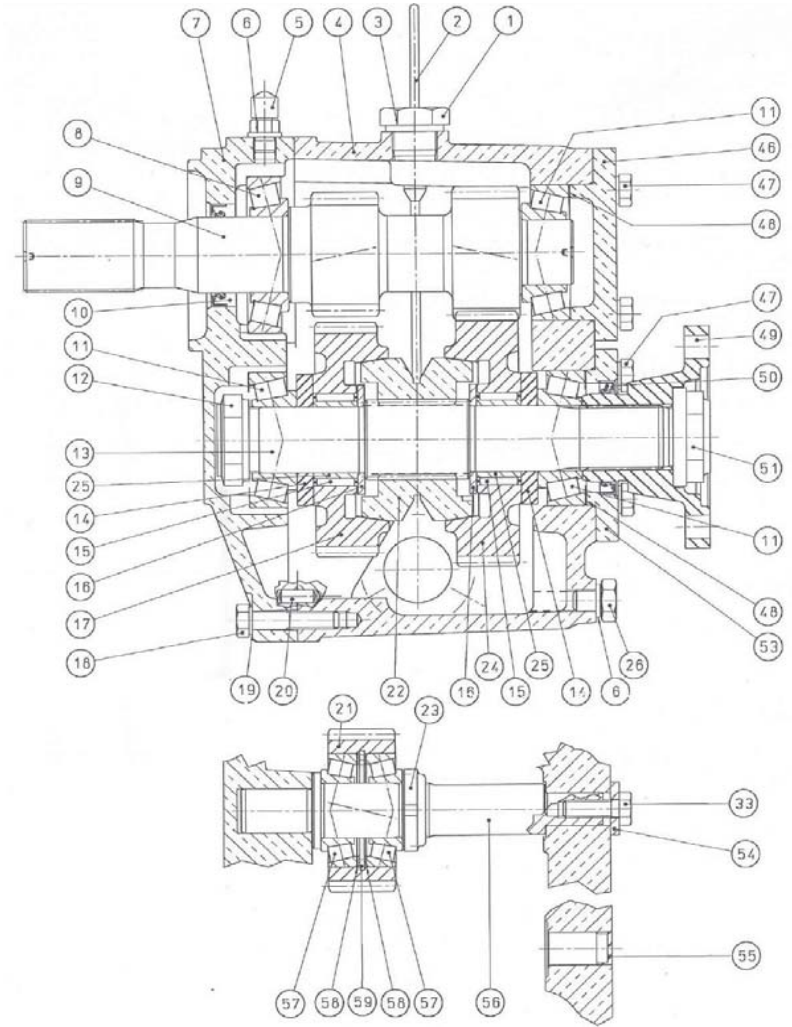


[NP] Not provided



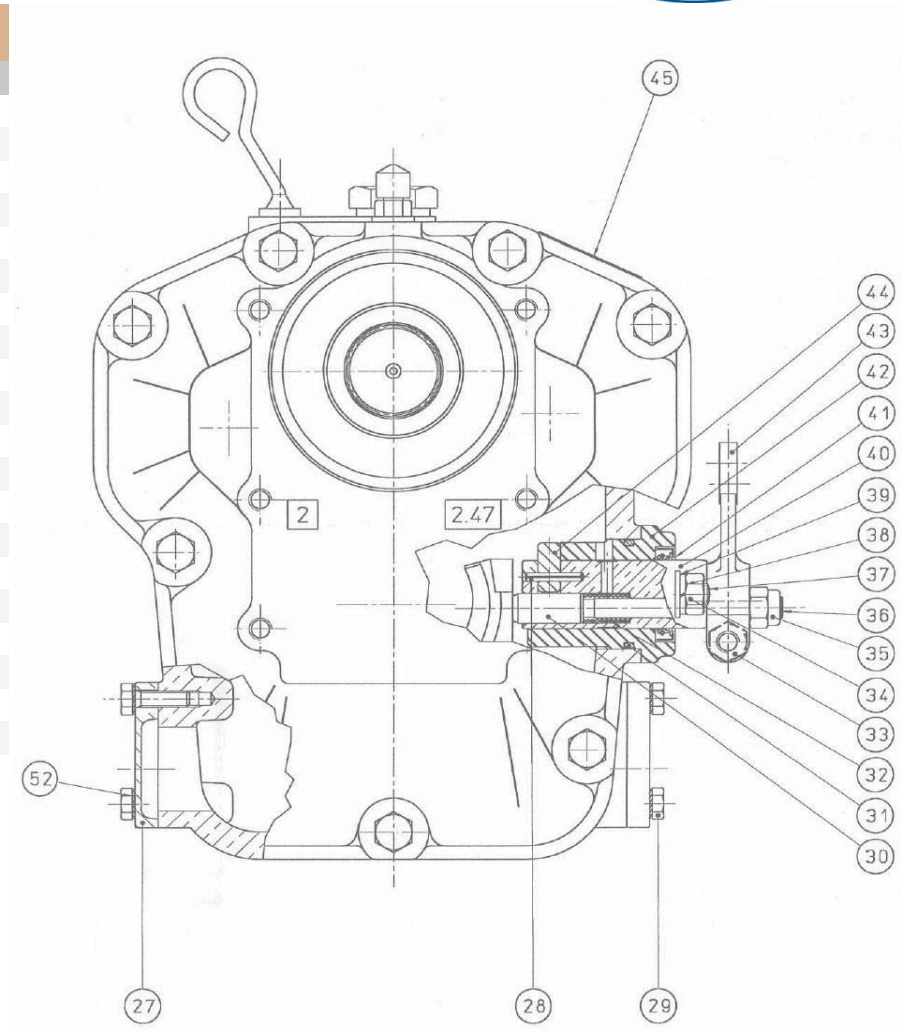


D_5032_1		Sheet 1/3				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
47	52102259	8	Bolt DIN 933 M8-30 8.8			
48	24813500.67	6	Spacer			
49	24880224	1	Flange Output			
50	24890214	1	Oil Seal			
51	24850099	1	Nut			
53	24890208	1	Cover			
54	24890306	1	Washer			
55	24890305	1	Plug			
56	24890301	1	INTERMEDIATE Shaft			
57	24860207	2	Conical Roller Bearing 30205A			
58	24890304	2	Washer [NP]			
59	53041052	1	CIRClip DIN 472 I-52			





D_5032_2		Sheet 2/3				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
27	24890026	2	Cover			
28	53052210	1	Pin DIN 1481 3-20			
29	52102257	6	Bolt DIN 933 M8-20 8.8			
30	24880423	1	Pad			
31	24860417	1	O-Ring			
32	24860411	1	Spring			
33	52102258	1	Bolt DIN 933 M8-25 8.8			
34	52120008	2	Nut DIN 934 M8 8.8			
35	51123008	1	Nut DIN 985 M8 5.6			
36	52111260	1	ROD DIN 913 M8-35 8.8			
37	24860071	2	STUD			
38	53033008	2	Washer GROWER DIN 127-8			
39	51030008	2	Washer DIN 125-8			
40	24880402	1	Shaft			
41	24860404	1	Oil Seal			
42	24880401	1	Cover			
43	24810424	1	Lever			
44	24860419	1	Pin			
45	24850005	1	Plate, IDENTIFICATION			
52	53038006	6	Washer DIN 6798-A 6			
NS	24890021	1	BW Coupling with TMC-260 [NS]			

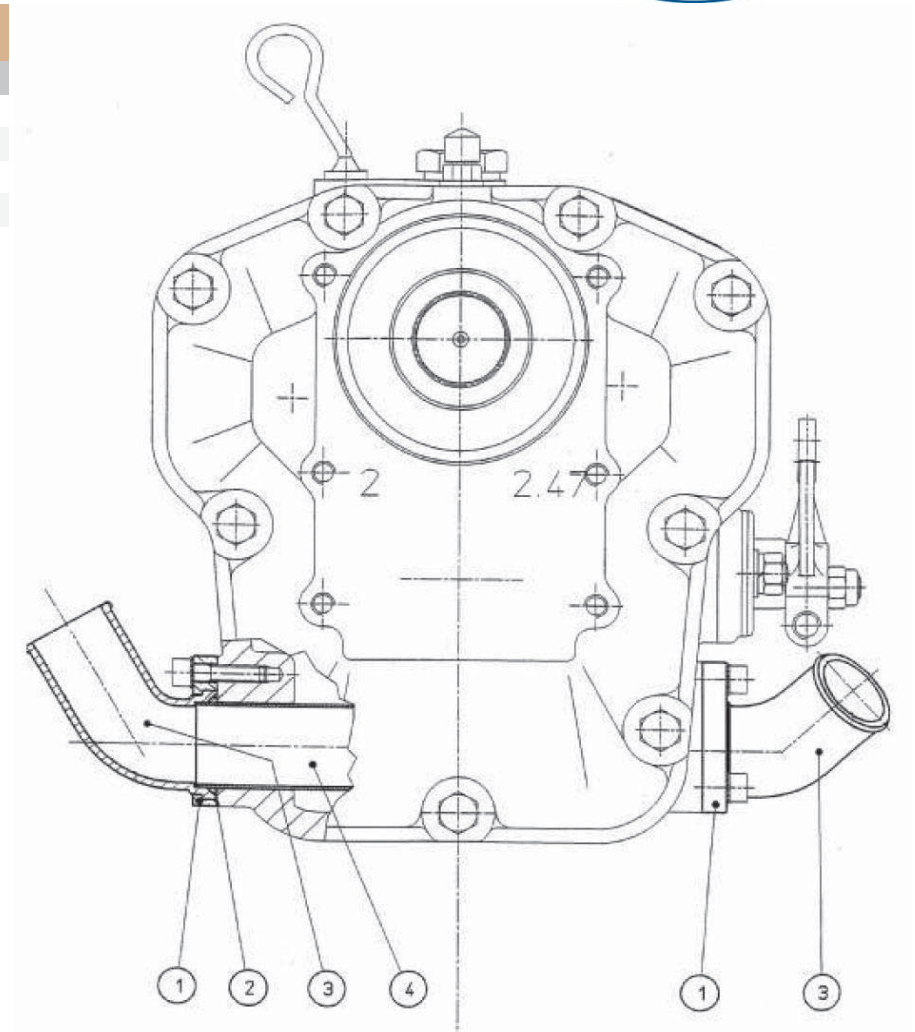


[NS] Not shown



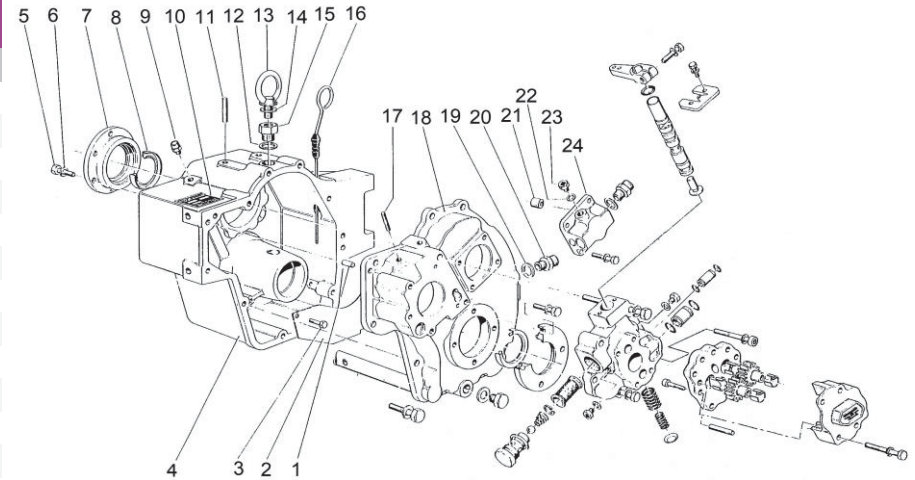


D_5032_3 Cooling System 3/3						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	24890051	2	Cover			
2	24890052	2	O-Ring D. 32X2,5			
3	24890053	2	Elbow			
4	24890054	1	Cooler Pipe			





D_5026_1.1		Sheet 1.1/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820090	2	Pin		
2	24816080	1	Plate Pipe		
3	24810082	2	Bolt DIN 933 M8-10 8.8 [NP]		
4	24816001	1	Front Body TM 880A		
5	24810047	6	Bolt DIN 933 M8-25 8.8 [NP]		
6	24810014	6	Washer GROWER DIN 127-8 [NP]		
7	24820072	1	Cover Input Shaft		
8	24820103	1	Oil Grommet		
9	24810065	1	Plug		
10	24820005.1	1	NAME Plate		
11	24810071	2	Stud		
12	56000083	1	Washer 21-26-1,5		
13	24810012	1	Nut		
14	24810063	1	Plane Washer		
15	24810068	1	Plug		
16	24810008	1	ROD, Oil LEVEL		
17	24820071	2	Stud		
18	24816002	1	REVERSE Body TM 880A		
19	24810059	1	Plane Washer		
20	24810060	1	Racord		
21	24810062	1	Valve BY PASS [NP]		
22	24820086	1	Washer 8-13-1,5 [NP]		
23	24830105	1	Plug		
24	24820102	1	Cover, REAR		

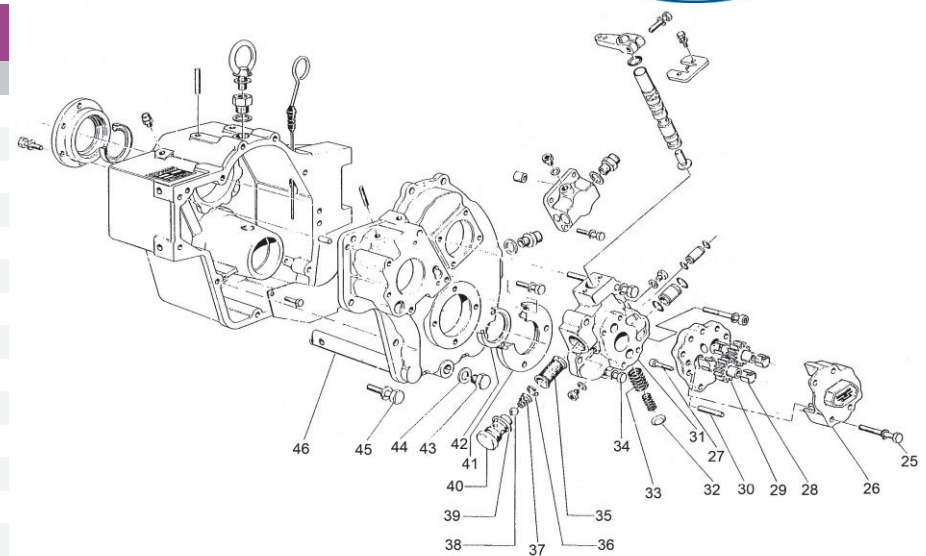


[NP] Not provided





D_5026_1.2 Sheet 1.2/4						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
25	24810013	4	Bolt DIN 931 M8-65 8.8 [NP]			
26	24820015.1	1	Oil Pump Body			
27	24820025.1	3	Bolt DIN 912 M6-25 8.8 [NP]			
28	24810025	4	Bushing			
29	24810096	1	Gear, Driver			
30	24820023.1	2	Pin			
31	24820026	1	Distributor Cap			
32	24810055	1	Expansion Plug			
33	24816054	1	Spring, Valve			
34	24820098	2	Bolt DIN 912 M10-50 8.8 [NP]			
35	24810035	1	Oil Filter			
36	24810032	1	SNAP Ring			
37	24810030	1	Valve Spring			
38	18024143	1	Ball,steel 1/2"			
39	24810027	1	Washer			
40	24810024	1	Plug, Oil Filter DRAIN			
41	24820208	1	Cover Front			
42	24820214	1	Grommet			
43	24810011	1	Plug,oil drain			
44	24810088	1	Washer 14-20-1,5 [NP]			
45	52101314	1	Bolt DIN 931 M10-55 8.8			
46	24816081	1	Aspiration Tube TM 880A			
NS	24820013	2	Bolt DIN 912 M10-30 8.8 [NP] [NS]			
NS	24810026.1	3	Cover [NS]			
NS	24820090	2	Pin [NS]			
NS	52103311	9	Bolt DIN 912 M10-40 8.8 [NS]			

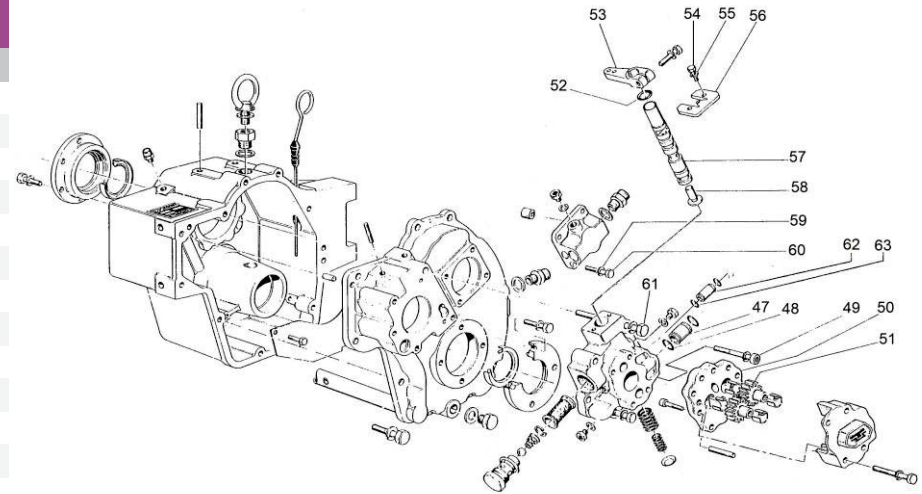


[NP] Not provided
 [NS] Not shown





D_5026_1.3		Sheet 1.3/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
47	24820062	2	Tube, Racord		
48	24820063	2	O-Ring D. 15X1,7		
49	24820013	2	Bolt DIN 912 M10-30 8.8 [NP]		
50	24810026.1	3	Cover		
51	24810095	3	Gear, Driven		
52	24810056	1	O-Ring D. 15,08X2,62 [NP]		
54	24810044	2	Bolt DIN 933 M6-16 8.8 [NP]		
55	24810042	2	Washer GROWER DIN 127-6 [NP]		
56	24810041	1	Support		
57	24810051	1	Distributor		
58	24810052	1	Valve		
59	24820075	4	Washer GROWER DIN 127-10 [NP]		
60	24820076	4	Bolt DIN 933 M10-30 8.8 [NP]		
61	24820087	1	Bolt DIN 931 M10-130 8.8 [NP]		
62	24820060	1	Tube, Racord		
63	24820059	2	O-Ring D. 10X1,7		
82	24810424	1	Lever		
NS	56000083	1	Washer 21-26-1,5 [NS]		
NS	24820102	1	Cover, REAR [NS]		
NS	24830105	1	Plug [NS]		
NS	24820103	1	Oil Grommet [NS]		

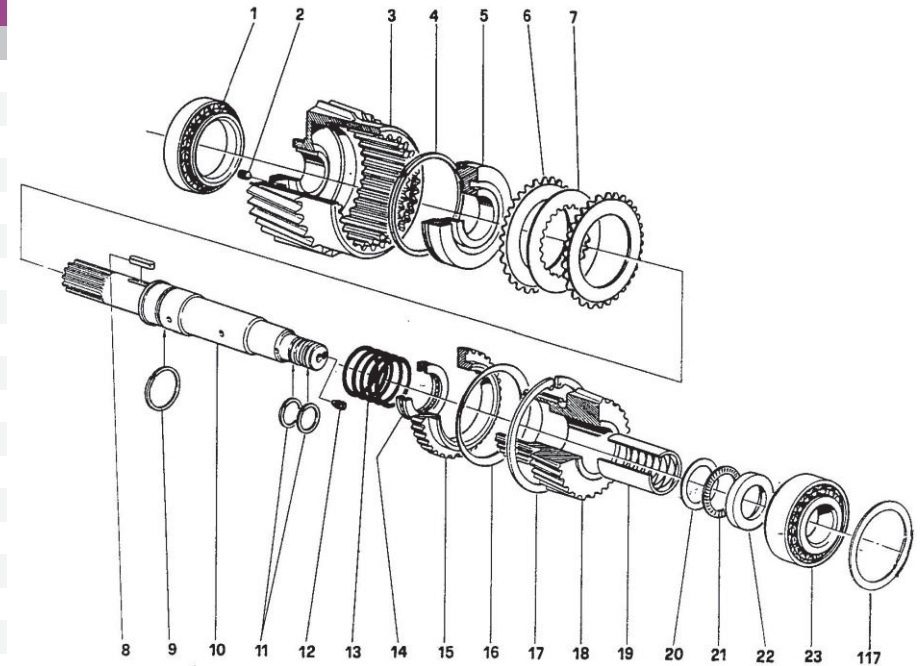


[NP] Not provided
 [NS] Not shown





D_5026_2		Input Shaft 2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820134	1	Conical Roller Bearing 32011-JR		
2	24810326	1	Plug		
3	24820130	1	Bell		
4	24820125	1	Washer		
5	24820124	1	Piston		
6	24820115	9	Disk		
7	24820116	8	Disk		
8	24810211	1	KEY		
9	24820126	1	Washer		
10	24820101	1	Input Shaft		
11	24810328	2	Washer		
117	24810333	0	Spacer [VAR]		
12	24810326	1	Plug		
13	24820122	1	Spring		
14	24820123	1	Bearing		
15	24820113	1	Grommet		
16	24820129	1	Ring		
17	24820128	1	SNAP Ring		
18A	24822302	1	Gear R. 1,50 TM 170		
18B	24823302	1	Gear R. 2,04 TM 170		
18C	24824302	1	Gear R. 2.50 TM 170		
19	24820117	1	Bushing		
20	24820118	1	Ring		
21	24820121	1	Roller Bearing AXK-4060		
22	24820105	1	Washer		
23	24820104	1	Conical Roller Bearing 32307		

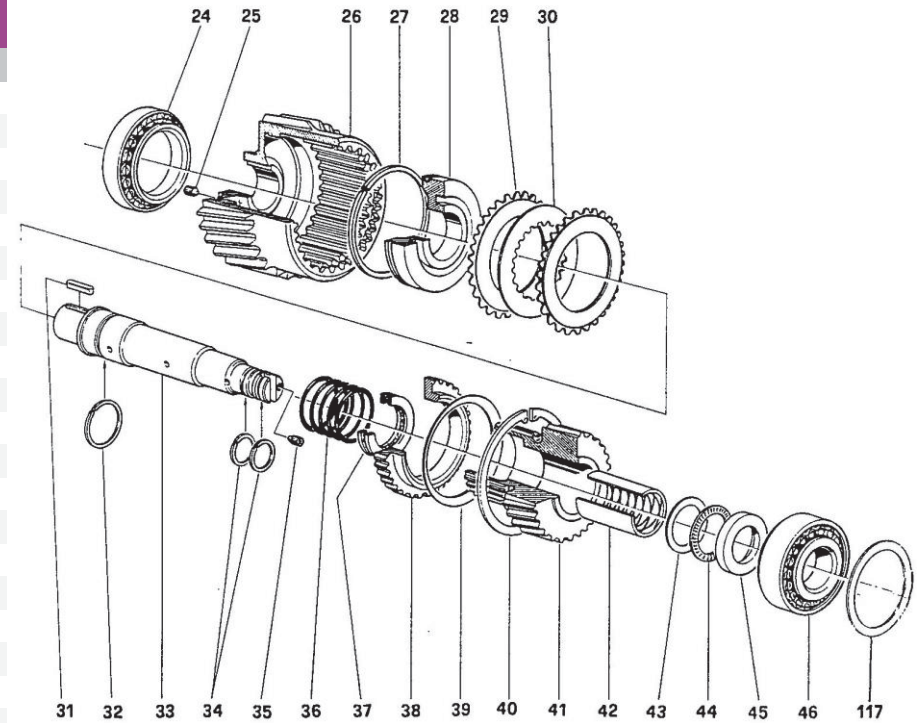


[VAR] Variable according to repair





D_5026_3		Intermediate Shaft 3/4				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
117	24810333	0	Spacer [VAR]			
24	24820134	1	Conical Roller Bearing 32011-JR			
25	24810326	1	Plug			
26	24820330	1	Bell			
27	24820125	1	Washer			
28	24820124	1	Piston			
29	24820115	9	Disk			
30	24820116	8	Disk			
31	24810211	1	KEY			
32	24820126	1	Washer			
33	24820301	1	INTERMEDIATE Shaft			
34	24820126	1	Washer			
35	24810326	1	Plug			
36	24820122	1	Spring			
37	24820123	1	Bearing			
38	24820113	1	Grommet			
39	24820129	1	Ring			
40	24820128	1	SNAP Ring			
41A	24822302A	1	Gear R. 1,53 TM 170A			
41B	24823302A	1	Gear R. 2,08 TM 170A			
41C	24824302A	1	Gear R. 2,60 TM 170A			
42	24820117	1	Bushing			
43	24820118	1	Ring			
44	24820121	1	Roller Bearing AXK-4060			
45	24820105	1	Washer			
46	24820104	1	Conical Roller Bearing 32307			

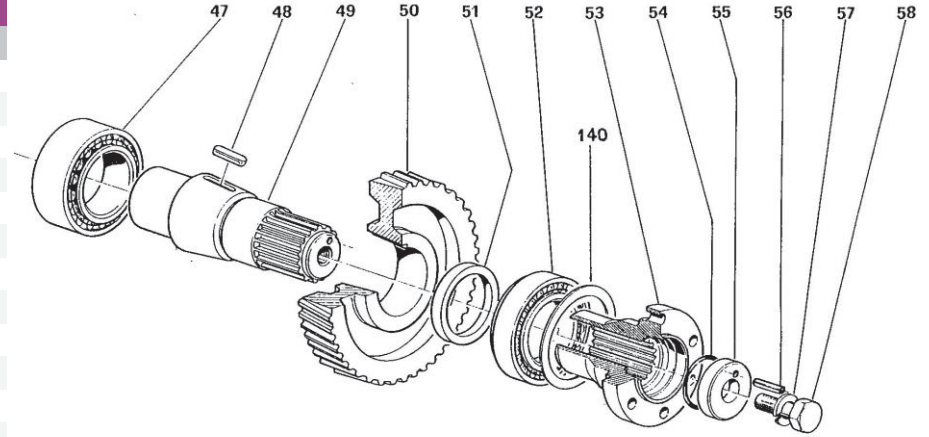


[VAR] Variable according to repair





D_5026_4 Output Shaft 4/4						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
140	24820333.1	0	Shim [VAR]			
47	24820206	1	Conical Roller Bearing 33210			
48/51	24823201AC	1	Gear+Output Shaft Kit+Spacer			
48/51	24822201AC	1	Gear+Output Shaft Kit+Spacer			
48/51	24824201AC	1	Gear+Output Shaft Kit+Spacer			
52	24820212	1	Conical Roller Bearing 30210-J2/Q			
53	24820224	1	Flange, Output			
54	24820225	1	O-Ring D. 45X3,5			
55	24820219	1	BUTT Washer			
56	24820220	1	Pin			
57	24820221	1	1 [NP]			
58	24820222.1	1	Screw			



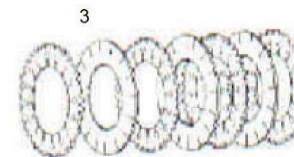
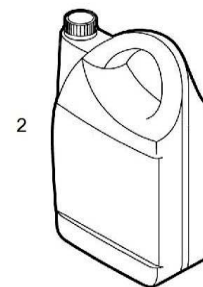
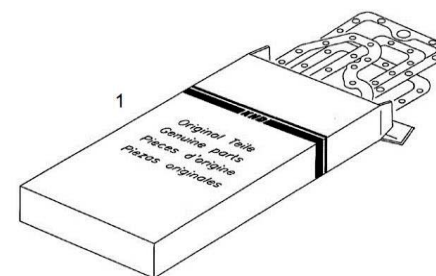
[NP] Not provided

[VAR] Variable according to repair



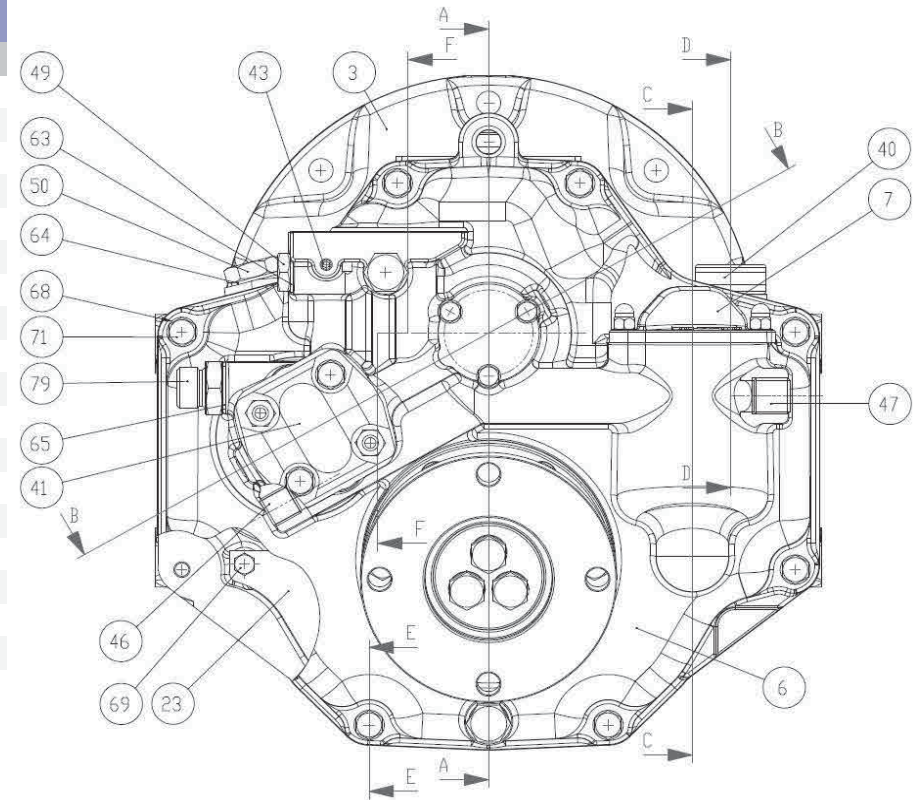


D_5027_5 Maintenance Kit					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820401	1	Kit Gasket	15/06/2016	
2	A0105000	1	15W40 Sole Diesel Oil 5L	15/06/2016	
3	24820403	2	Clutch Plate Kit	15/06/2016	





D_5025_1		Sheet 1/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
3	24873001.1	1	Housing TM 485A1 [NP]		
6	24870102.1	1	Cover		
7	24870007.1	1	Cover		
23	24870080.1	1	BULKHead		
40	24870008.1	1	Gauge Oil LEVEL		
41	24870043	1	Pump Assy Oil		
43	24810506	1	Screw		
46	24870045.1	1	Screw [NP]		
47	24870046.1	1	Screw		
49	24810011	3	Plug,oil drain		
50	24830017	1	Plug		
63	24810088	3	Washer 14-20-1,5 [NP]		
64	24830016	1	Washer 18-23-1,5 [NP]		
65	24850092	1	Washer		
68	24850093	16	Washer		
69	24810044	7	Bolt DIN 933 M6-16 8.8 [NP]		
71	24830025	8	Bolt DIN 933 M8-35 8.8 [NP]		
79	24810527	1	SCREW, RACORD		



ATTN: FILE

[NP] Not provided

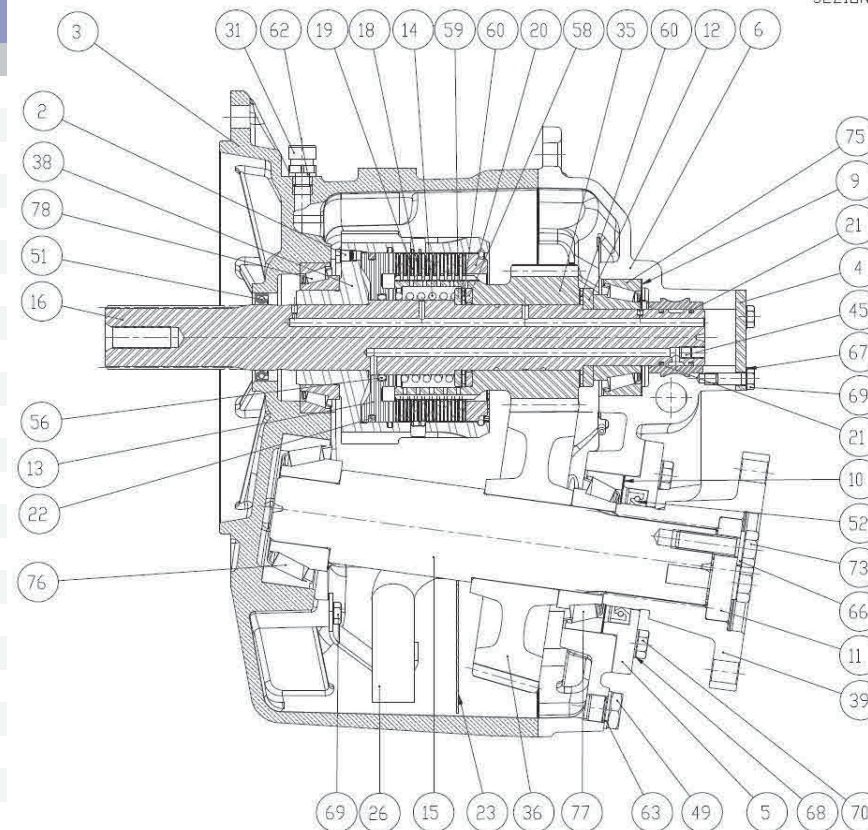




SEZIONE A-A

D_5025_2		Sheet 2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO

2	24870062	2	Selector Valve		
4	24870105	1	REAR Cover Input Shaft		
5	24870208	1	REAR Cover Output Shaft		
9	24813500.67	6	Spacer		
10	24870219	3	Shim		
11	24870222	1	Washer		
12	24810307	2	Washer		
13	24870124	2	Piston		
14	24810322	2	Spring		
15	24870201	1	Output Shaft		
16	24873101	1	Input Shaft		
18	24810316	18	Disk		
19	24870115	20	Conduct Disk		
20	24870113	2	Retainer Ring		
21	24810328	4	Washer		
22	24810325	2	Washer		
26	24870081.1	1	SUCTION Pipe [NP]		
31	24810065	1	Plug		
35	24873203	1	Gear R.2,09		
36	24873210	1	Gear R.2,09		
38	24870203	1	TRANSFER Gear,LAY Shaft		
39	24870224	1	Flange Output		
45	24850087	2	Plug		
51	24810103	1	Oil Grommet		
52	24870214	1	LIP Seal		
56	24870059	2	O-Ring		
58	24870318	2	THRUST RACE		
59	24870118	2	THRUST RACE		
60	24810309	4	Roller		
62	24810063	1	Plane Washer		
66	24820075	3	Washer GROWER DIN 127-10 [NP]		
67	24860092	5	Washer		
70	24810047	6	Bolt DIN 933 M8-25 8.8 [NP]		
73	52101310	3	Bolt DIN 931 M10-35 8.8		
75	24870207	2	Bearing		



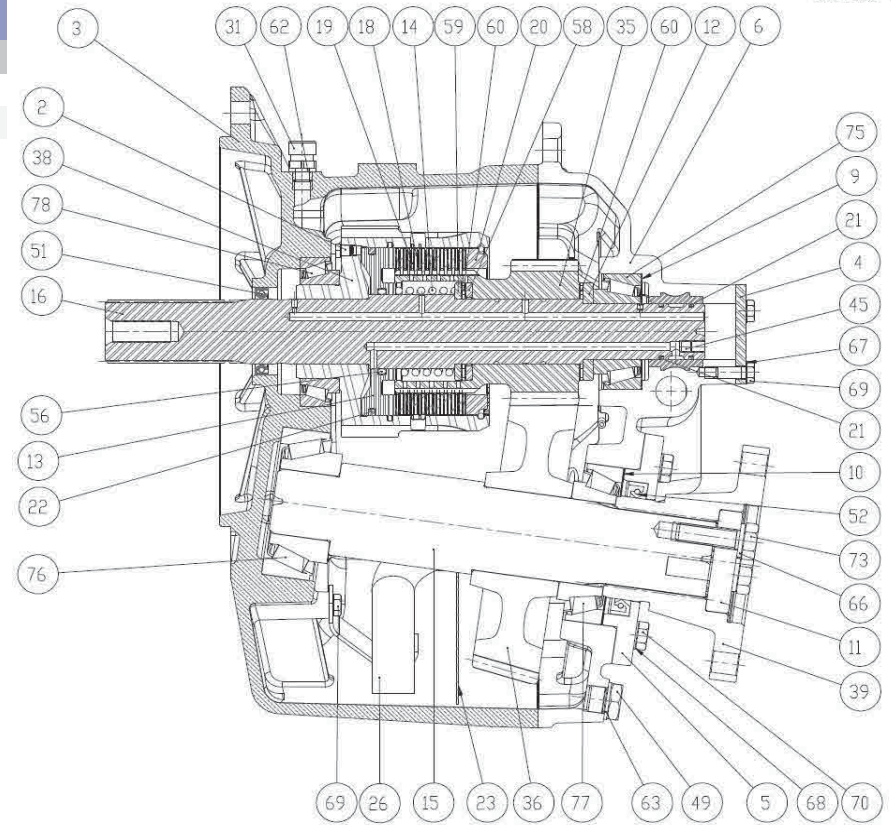
[NP] Not provided





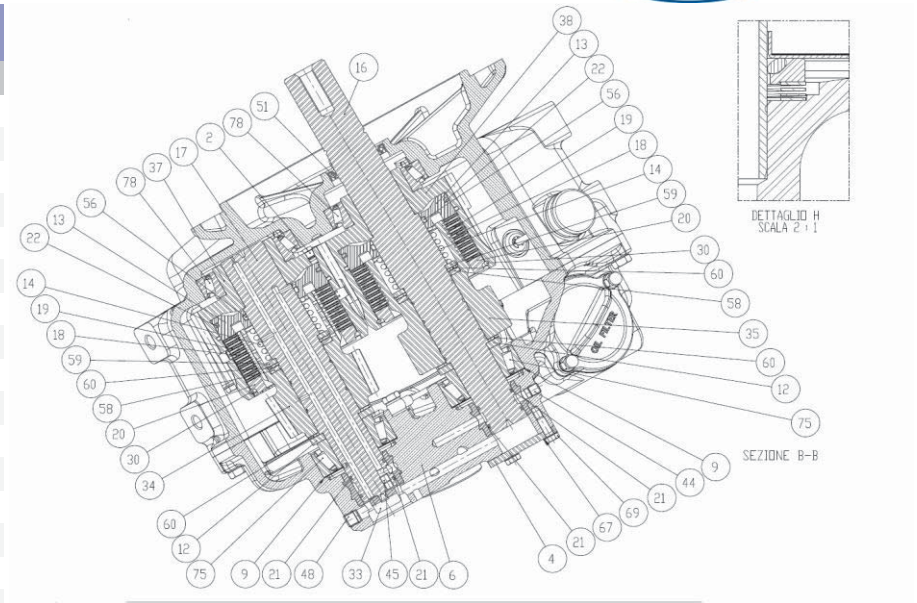
SEZIONE A-A

D_5025_2		Sheet 2/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
76	24870212	1	Conical Roller Bearing 30307		
77	24870205	1	Bearing		
78	24870206	2	Bearing		





D_5025_3 Sheet 3/4						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	24810062	1	Valve BY PASS [NP]			
17	24870301	1	LAY Shaft			
27	24870082.1	1	Pipe			
28	24870083.1	1	PIPE			
29	24870084.1	1	Bushing			
30	24870310	2	FIXING Ring			
32	24870035.1	1	Oil Filter			
33	24870303	1	Cover			
34	24873302	1	Gear R.2,09			
37	24870103	1	TRANSFER Gear,PRIMARY Shaft			
42	24870086.1	1	Spring [NP]			
44	24870044.1	1	Screw			
48	24870047.1	1	Screw			
55	24870009	1	O-Ring			
57	24870011.1	1	O-Ring			
61	24820086	2	Washer 8-13-1,5 [NP]			
80	24870083	1	PIPE			

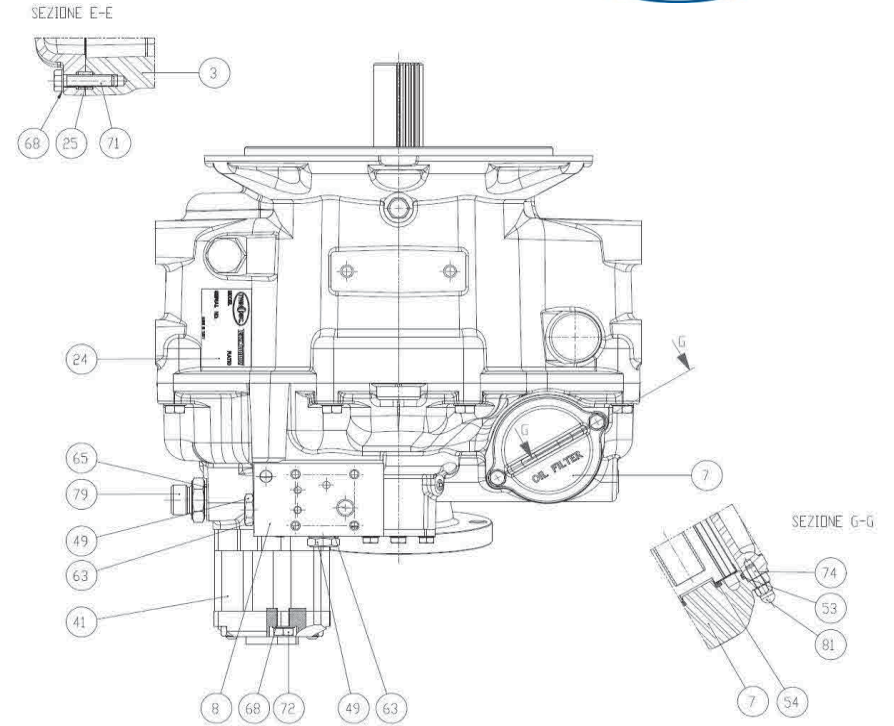


[NP] Not provided



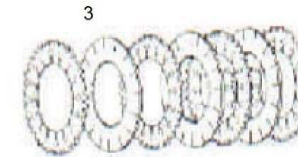
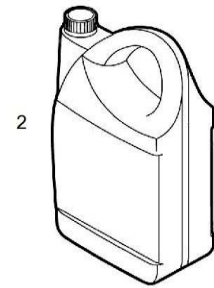
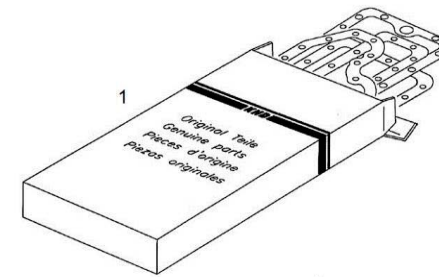


D_5025_4		Sheet 4/4			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
8	24870015	1	Gasket		
24	24850005	1	Plate, IDENTIFICATION		
25	24870085	2	Pin		
53	24870009.1	1	O-Ring		
54	24870010.1	2	O-Ring		
72	24870044	2	Screw		
74	24870071	2	Stud		
81	24870012.1	2	Nut		





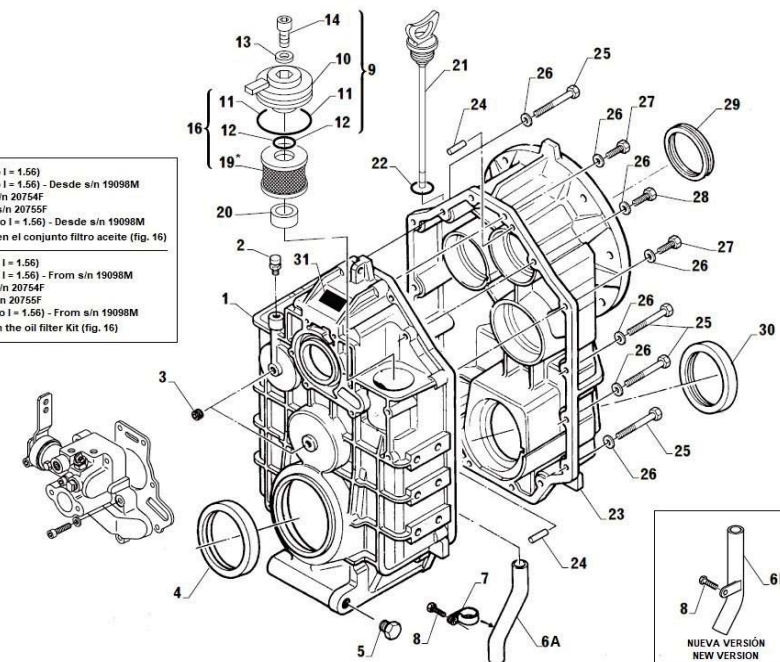
D_5025_5 Maintenance Kit						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	24873401	1	Gasket Kit	15/06/2016		
2	A0105000	1	15W40 Sole Diesel Oil 5L	15/06/2016		
3	24873403	2	Clutch Plate Kit	15/06/2016		





D_50Z3_1		Sheet 1/2			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24640001	1	Housing		
1	24640001	1	Housing		
2A	24640002	1	Breather valve		
2A	24640002	1	Breather valve		
2B	24642001	1	Hunger breather valve		
2B	24642001	1	Hunger breather valve		
3	24610036	2	Plug		
3	24610036	2	Plug		
4A	24640004	1	Output shaft seal		
4A	24640004	1	Output shaft seal		
4B	24642002	1	Output shaft seal		
4B	24642002	1	Output shaft seal		
5	24640005	1	Plug		
5	24640005	1	Plug		
6A	24640006	1	Suction pipe		
6A	24640006	1	Suction pipe		
6B	24640007	1	Suction pipe with support		
6B	24640007	1	Suction pipe with support		
7	24640008	1	Retainer support		
7	24640008	1	Retainer support		
8	24640009	1	Hex head screw		
8	24640009	1	Hex head screw		
9	24640010	1	Filter cover, assy.		
9	24640010	1	Filter cover, assy.		
11	24640011	1	O-Ring		
11	24640011	1	O-Ring		
12	24640012	1	O-Ring		
12	24640012	1	O-Ring		
13	24610413	1	Washer		
13	24610413	1	Washer		
14	24640014	1	Screw M8x30		
14	24640014	1	Screw M8x30		
16	24613352	1	Filter Assy,oil		
16	24613352	1	Filter Assy,oil		
19	24640018	1	Oilfilter		

FIG. 2B (solo ratio i = 1.56)
 FIG. 4B (solo ratio i = 1.56) - Desde s/n 19098M
 FIG. 21A - Hasta s/n 20754F
 FIG. 21B - Desde s/n 20755F
 FIG. 30B (solo ratio i = 1.56) - Desde s/n 19098M
 * Solo se vende en el conjunto filtro aceite (fig. 16)
 FIG. 2B (only ratio i = 1.56)
 FIG. 4B (only ratio i = 1.56) - From s/n 19098M
 FIG. 21A - Up To s/n 20754F
 FIG. 21B - From s/n 20755F
 FIG. 30B (only ratio i = 1.56) - From s/n 19098M
 * Supplied only in the oil filter Kit (fig. 16)

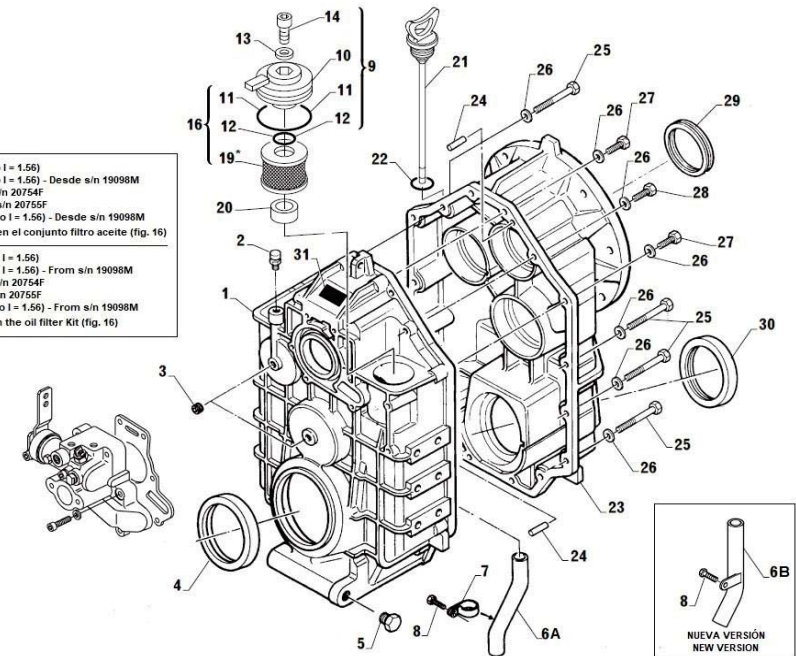




D_50Z3_1		Sheet 1/2			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
19	24640018	1	Oilfilter		
20	24640019	1	Gasket		
20	24640019	1	Gasket		
21A	24640020	1	Oildipstick		
21A	24640020	1	Oildipstick		
21B	24640021	1	Oildipstick + OR		
21B	24640021	1	Oildipstick + OR		
22	24640022	1	O-Ring		
22	24640022	1	O-Ring		
23	24640023	1	Cover (housing)		
23	24640023	1	Cover (housing)		
24	24640024	2	Locator pin		
24	24640024	2	Locator pin		
25	24640025	4	Hex head screw		
25	24640025	4	Hex head screw		
26	24640026	16	Washer		
26	24640026	16	Washer		
27	24640027	11	Hex head screw		
27	24640027	11	Hex head screw		
28	24640028	1	Hex head screw		
28	24640028	1	Hex head screw		
29	24640029	1	Input shaft seal		
29	24640029	1	Input shaft seal		
30A	24640030	1	Output shaft seal		
30A	24640030	1	Output shaft seal		
30B	24642003	1	Output shaft seal		
30B	24642003	1	Output shaft seal		
31	24640031	1	Name plate		
31	24640031	1	Name plate		

FIG. 2B (solo ratio I = 1.56)
 FIG. 4B (solo ratio I = 1.56) - Desde s/n 19098M
 FIG. 21A - Hasta s/n 20754F
 FIG. 21B - Desde s/n 20755F
 FIG. 30B (solo ratio I = 1.56) - Desde s/n 19098M
 * Solo se vende en el conjunto filtro aceite (fig. 16)

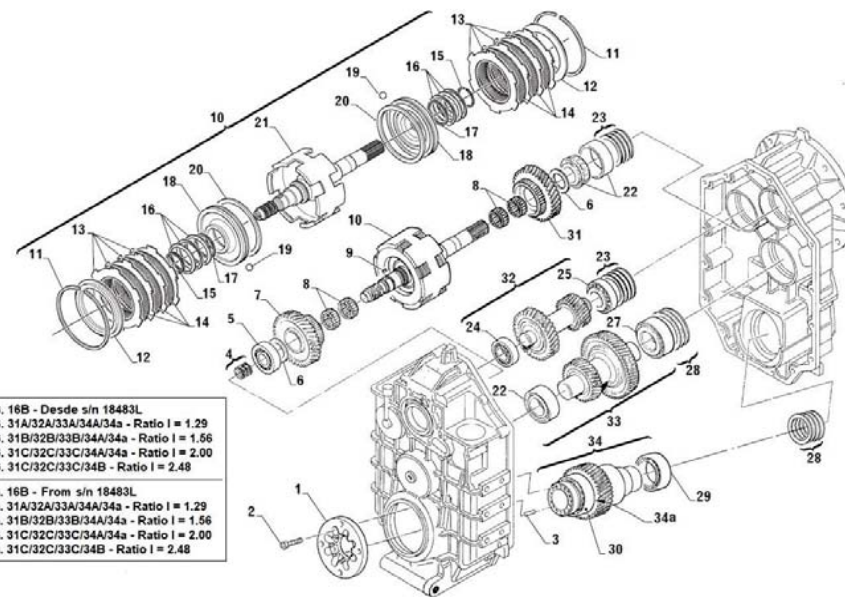
FIG. 2B (only ratio I = 1.56)
 FIG. 4B (only ratio I = 1.56) - From s/n 19098M
 FIG. 21A - Up To s/n 20754F
 FIG. 21B - From s/n 20755F
 FIG. 30B (only ratio I = 1.56) - From s/n 19098M
 * Supplied only in the oil filter Kit (fig. 16)





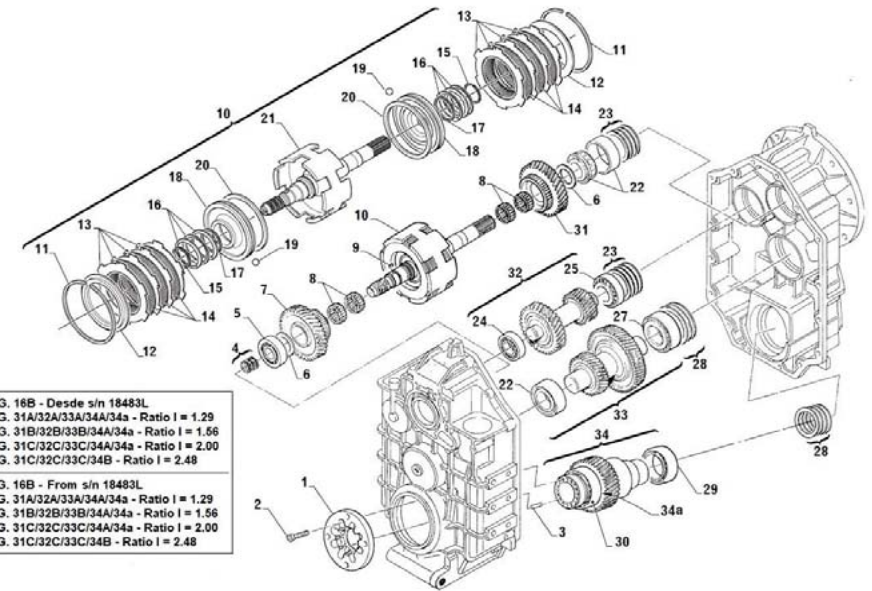
D_50Z3_2 Sheet 2/2

FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24640034	1	Flange		
1	24640034	1	Flange		
2	24640035	8	Screw		
2	24640035	8	Screw		
3	24640201	4	Locator pin		
3	24640201	4	Locator pin		
4	24640101	3	Piston ring		
4	24640101	3	Piston ring		
5	24640102	1	Tapered roller bearing		
5	24640102	1	Tapered roller bearing		
6	24640103	2	Butting ring		
6	24640103	2	Butting ring		
7	24640104	1	Reverse gear Z3=49		
7	24640104	1	Reverse gear Z3=49		
8	24640105	4	Needle bearing		
8	24640105	4	Needle bearing		
9	24640106	1	Key		
9	24640106	1	Key		
10	24640107	1	Input shaft, assy.		
10	24640107	1	Input shaft, assy.		
11	24640108	2	Snap ring		
11	24640108	2	Snap ring		
12	24640109	2	End disc		
12	24640109	2	End disc		
13	24640110	10	Outer clutch disc		
13	24640110	10	Outer clutch disc		
14	24640111	8	Inner clutch disc		
14	24640111	8	Inner clutch disc		
15	24640112	2	Retainer ring		
15	24640112	2	Retainer ring		
16A	24640113	6	Cup spring		
16A	24640113	6	Cup spring		
16B	24640114	6	Cup spring		
16B	24640114	6	Cup spring		
17	24640115	2	Inner clutch piston ring		





D_50Z3_2		Sheet 2/2			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
17	24640115	2	Inner clutch piston ring		
18	24640116	2	Clutch piston		
18	24640116	2	Clutch piston		
19	24640117	2	Ball		
19	24640117	2	Ball		
20	24640118	2	Outer clutch piston ring		
20	24640118	2	Outer clutch piston ring		
21	24640119	1	Input shaft and clutch housing		
21	24640119	1	Input shaft and clutch housing		
22	24640120	2	Tapered roller bearing		
22	24640120	2	Tapered roller bearing		
23A	24640121	2	Shim 0.1 mm		
23A	24640121	2	Shim 0.1 mm		
23B	24640122	2	Shim 0.15 mm		
23B	24640122	2	Shim 0.15 mm		
23C	24640301	2	Shim 0.2 mm		
23C	24640301	2	Shim 0.2 mm		
23D	24640302	2	Shim 0.5 mm		
23D	24640302	2	Shim 0.5 mm		
24	24640303	1	Tapered roller bearing		
24	24640303	1	Tapered roller bearing		
25	24640304	1	Tapered roller bearing		
25	24640304	1	Tapered roller bearing		
27	24640306	1	Tapered roller bearing		
27	24640306	1	Tapered roller bearing		
28A	24640307	2	Shim 0.1 mm		
28A	24640307	2	Shim 0.1 mm		
28B	24640308	2	Shim 0.15 mm		
28B	24640308	2	Shim 0.15 mm		
28C	24640309	2	Shim 0.3 mm		
28C	24640309	2	Shim 0.3 mm		
28D	24640310	2	Shim 0.5 mm		
28D	24640310	2	Shim 0.5 mm		
29	24640202	1	Tapered roller bearing		
29	24640202	1	Tapered roller bearing		
30	24640203	1	Tapered roller bearing		
30	24640203	1	Tapered roller bearing		
31A	24642104	1	Forward gear Z1=39		
31A	24642104	1	Forward gear Z1=39		
31B	24642105	1	Forward gear Z1=35		

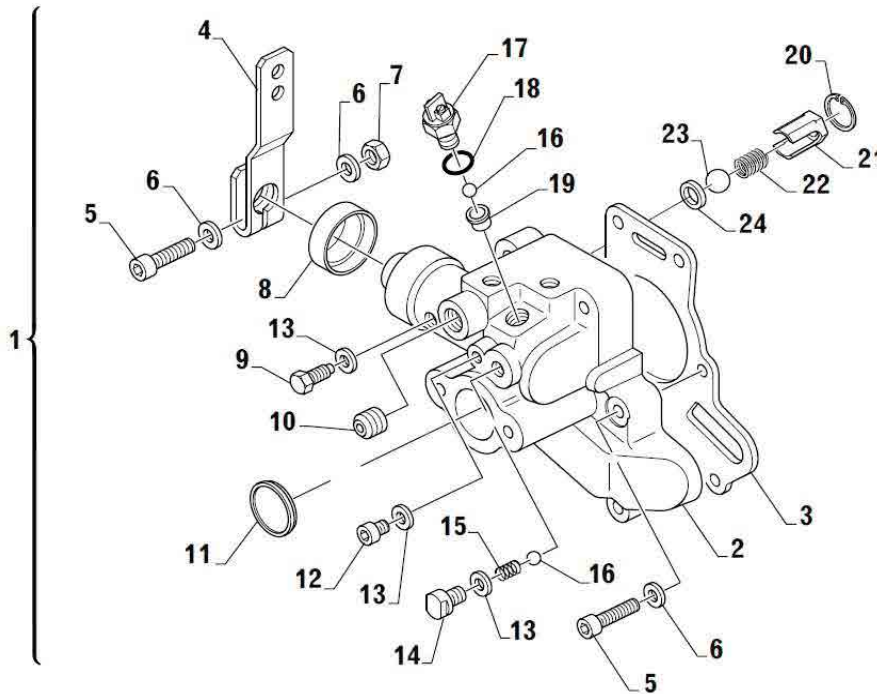


31B	24642105	1	Forward gear Z1=35
31C	24643101	1	Forward gear Z1=30
31C	24643101	1	Forward gear Z1=30
32A	24642306	1	Intermediate shaft Z4=45, Z5=36
32A	24642306	1	Intermediate shaft Z4=45, Z5=36
32B	24642307	1	Intermediate shaft Z4=45, Z5=32
32B	24642307	1	Intermediate shaft Z4=45, Z5=32
32C	24643302	1	Intermediate shaft Z4=45, Z5=27
32C	24643302	1	Intermediate shaft Z4=45, Z5=27
33A	24642308	1	Intermediate shaft Z2=49, Z6=33
33A	24642308	1	Intermediate shaft Z2=49, Z6=33
33B	24642309	1	Intermediate shaft Z2=53, Z6=33
33B	24642309	1	Intermediate shaft Z2=53, Z6=33
33C	24643303	1	Intermediate shaft Z2=58, Z6=33
33C	24643303	1	Intermediate shaft Z2=58, Z6=33
33D	24644303	1	Intermediate shaft Z2=58, Z6=32
33D	24644303	1	Intermediate shaft Z2=58, Z6=32
34a	24642212	1	Spacer
34a	24642212	1	Spacer
34A	24642210	1	Output shaft Z7=34
34A	24642210	1	Output shaft Z7=34
34B	24644204	1	Output shaft Z7=41
34B	24644204	1	Output shaft Z7=41



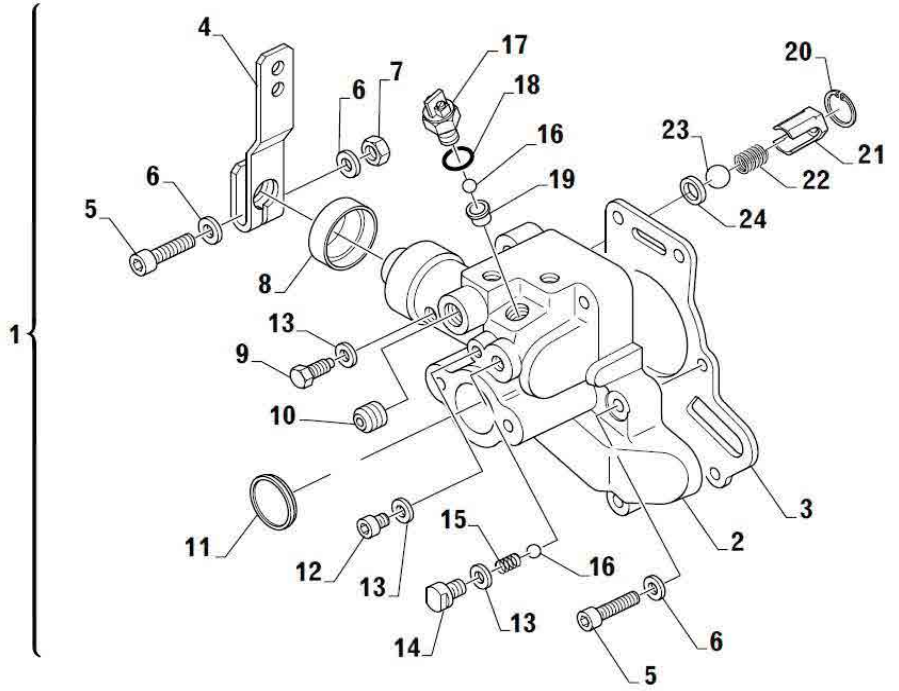
D_50Z3_3 Mechanical Selector Valve

FIG.	REF.	QTY	DESCR.	FROM	UPTO
1A	24640401	1	Control Valve Assy. 23 Bar		
1A	24640401	1	Control Valve Assy. 23 Bar		
1A	24640401	1	Control Valve Assy. 23 Bar		
1A	24640401	1	Control Valve Assy. 23 Bar		
3	24640403	1	Gasket		
3	24640403	1	Gasket		
3	24640403	1	Gasket		
3	24640403	1	Gasket		
4	24640404	1	Lever		
4	24640404	1	Lever		
4	24640404	1	Lever		
4	24640404	1	Lever		
5	24610404	7	Cap Screw M8X40		
5	24610404	7	Cap Screw M8X40		
6	24610033	8	Spring Washer		
6	24610033	8	Spring Washer		
6	24610033	8	Spring Washer		
6	24610033	8	Spring Washer		
7	24610041	1	Hex Nut		
7	24610041	1	Hex Nut		
7	24610041	1	Hex Nut		
7	24610041	1	Hex Nut		
8	24640408	1	Gasket		
8	24640408	1	Gasket		
9	24640409	1	Stop Screw		
9	24640409	1	Stop Screw		
10	24640410	1	Screw Plug		
10	24640410	1	Screw Plug		
11	24640411	1	Dummy Plug		
11	24640411	1	Dummy Plug		
12	24640412	1	Screw Plug M10X1		
12	24640412	1	Screw Plug M10X1		
12	24640412	1	Screw Plug M10X1		
12	24640412	1	Screw Plug M10X1		
13	24640413	3	Washer		





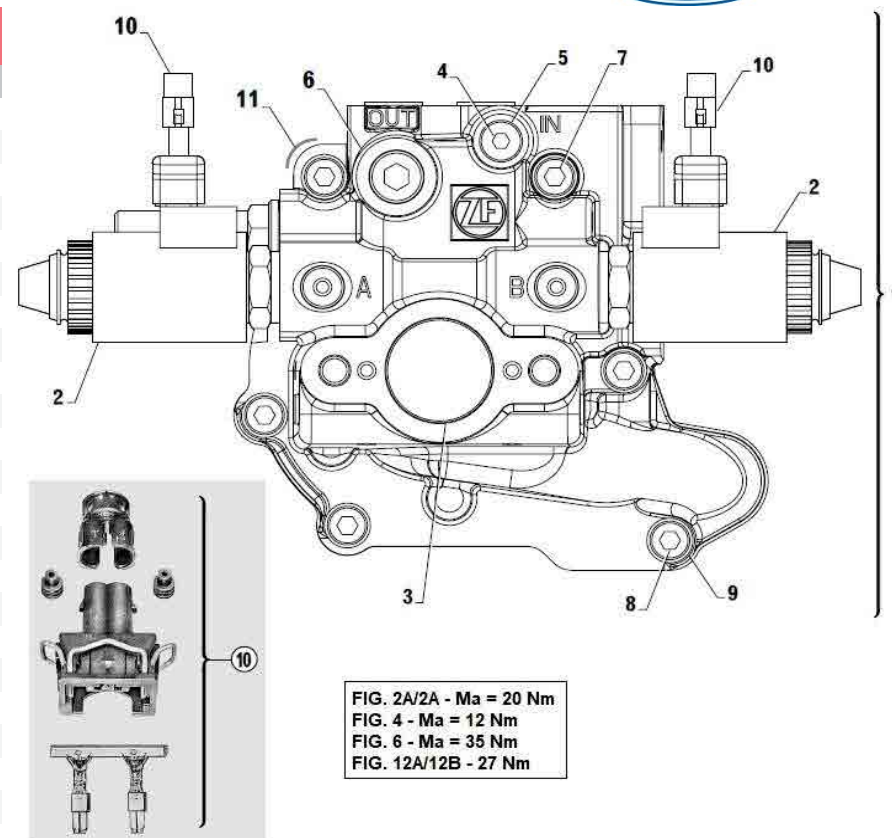
D_50Z3_3 Mechanical Selector Valve						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
13	24640413	3	Washer			
13	24640413	3	Washer			
13	24640413	3	Washer			
14	24640414	1	Guide Bolt			
14	24640414	1	Guide Bolt			
14	24640414	1	Guide Bolt			
14	24640414	1	Guide Bolt			
15	24640415	1	Spring			
15	24640415	1	Spring			
16	24640416	2	Ball			
16	24640416	2	Ball			
17	24640417	1	Neutral Safety Switch Assy.			
17	24640417	1	Neutral Safety Switch Assy.			
17	24640417	1	Neutral Safety Switch Assy.			
17	24640417	1	Neutral Safety Switch Assy.			
18	24640418	1	O-Ring			
18	24640418	1	O-Ring			
18	24640418	1	O-Ring			
18	24640418	1	O-Ring			
19	24640419	1	Bushing			
19	24640419	1	Bushing			
20	24640420	1	Snap Ring			
20	24640420	1	Snap Ring			
21	24640421	1	Bushing			
21	24640421	1	Bushing			
21	24640421	1	Bushing			
21	24640421	1	Bushing			
21	24640421	1	Bushing			
22	24640422	1	Spring			
22	24640422	1	Spring			
22	24640422	1	Spring			
22	24640422	1	Spring			
23	24640423	1	Ball			
23	24640423	1	Ball			
24	24640424	1	Spacer			
24	24640424	1	Spacer			





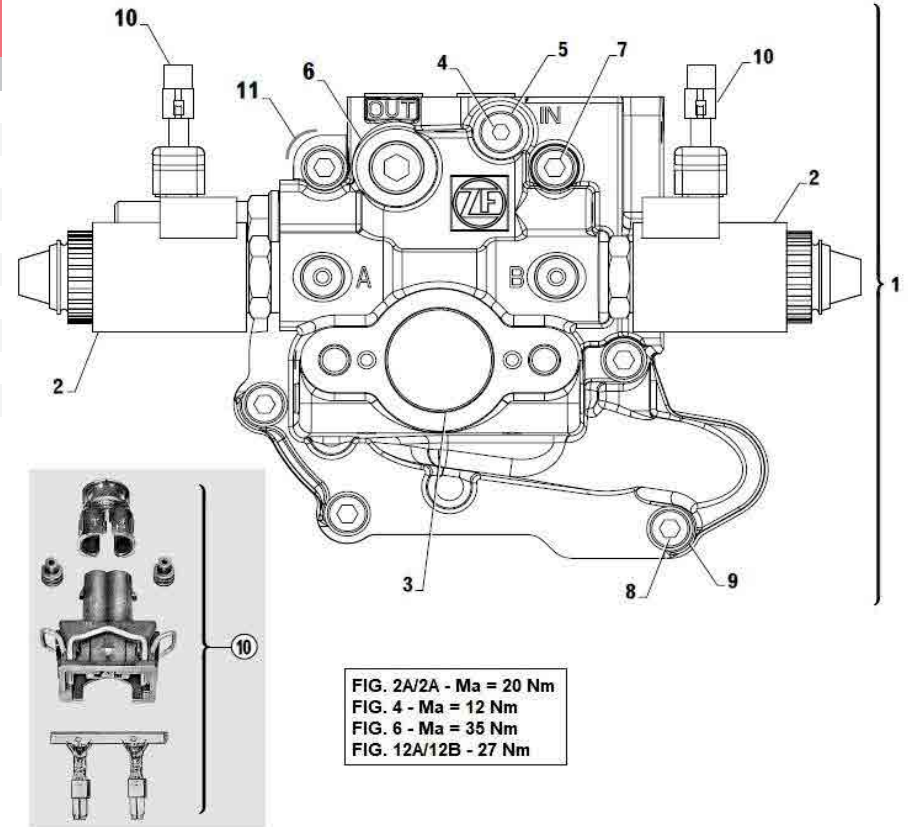
D_50Z3_4 Electric Selector Valve 12V/24V

FIG.	REF.	QTY	DESCR.	FROM	UPTO
1A	24640501	1	Electr. Selector Valve On/Off 26 Bar 12V		
1A	24640501	1	Electr. Selector Valve On/Off 26 Bar 12V		
1A	24640501	1	Electr. Selector Valve On/Off 26 Bar 12V		
1A	24640501	1	Electr. Selector Valve On/Off 26 Bar 12V		
1B	24640502	1	Electr. Selector Valve On/Off 26 Bar 24V		
1B	24640502	1	Electr. Selector Valve On/Off 26 Bar 24V		
1B	24640502	1	Electr. Selector Valve On/Off 26 Bar 24V		
1B	24640502	1	Electr. Selector Valve On/Off 26 Bar 24V		
2A	24640503	2	Solenoid Valve On/Off 12V, 26 Bar		
2A	24640503	2	Solenoid Valve On/Off 12V, 26 Bar		
2A	24640503	2	Solenoid Valve On/Off 12V, 26 Bar		
2A	24640503	2	Solenoid Valve On/Off 12V, 26 Bar		
2B	24640504	2	Solenoid Valve On/Off 24V, 26 Bar		
2B	24640504	2	Solenoid Valve On/Off 24V, 26 Bar		
3	24640411	1	Dummy Plug		
3	24640411	1	Dummy Plug		
3	24640411	1	Dummy Plug		
3	24640411	1	Dummy Plug		
4	24640412	1	Screw Plug M10X1		
4	24640412	1	Screw Plug M10X1		
4	24640412	1	Screw Plug M10X1		
4	24640412	1	Screw Plug M10X1		
5	24640413	1	Washer		
5	24640413	1	Washer		
5	24640413	1	Washer		
5	24640413	1	Washer		
6	24640410	1	Screw Plug		
6	24640410	1	Screw Plug		
7	24640509	2	Cap Screw M8X65		
7	24640509	2	Cap Screw M8X65		
7	24640509	2	Cap Screw M8X65		
7	24640509	2	Cap Screw M8X65		
8	24610404	4	Cap Screw M8X40		
8	24610404	4	Cap Screw M8X40		
8	24610404	4	Cap Screw M8X40		
8	24610404	4	Cap Screw M8X40		





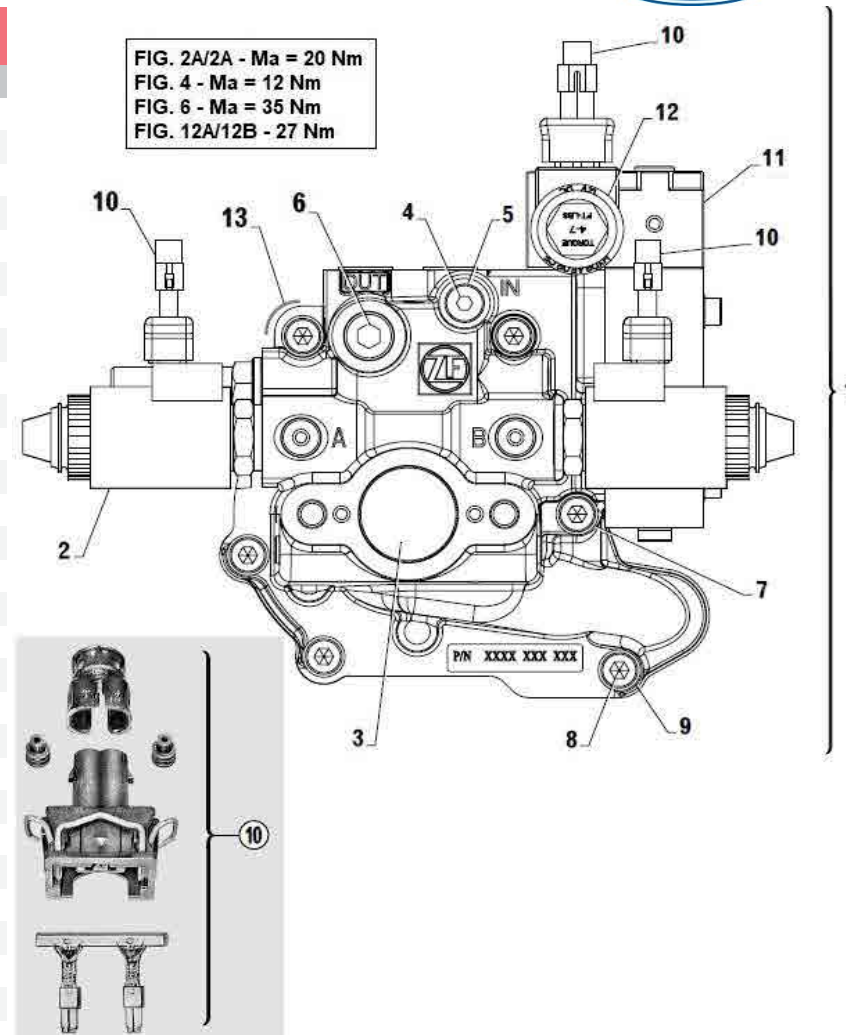
D_50Z3_4 Electric Selector Valve 12V/24V						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
8	24610404	4	Cap Screw M8X40			
9	24610033	6	Spring Washer			
9	24610033	6	Spring Washer			
9	24610033	6	Spring Washer			
9	24610033	6	Spring Washer			
10	24640512	2	Connector Kit			
10	24640512	2	Connector Kit			
11	24640403	1	Gasket			
11	24640403	1	Gasket			
11	24640403	1	Gasket			
11	24640403	1	Gasket			





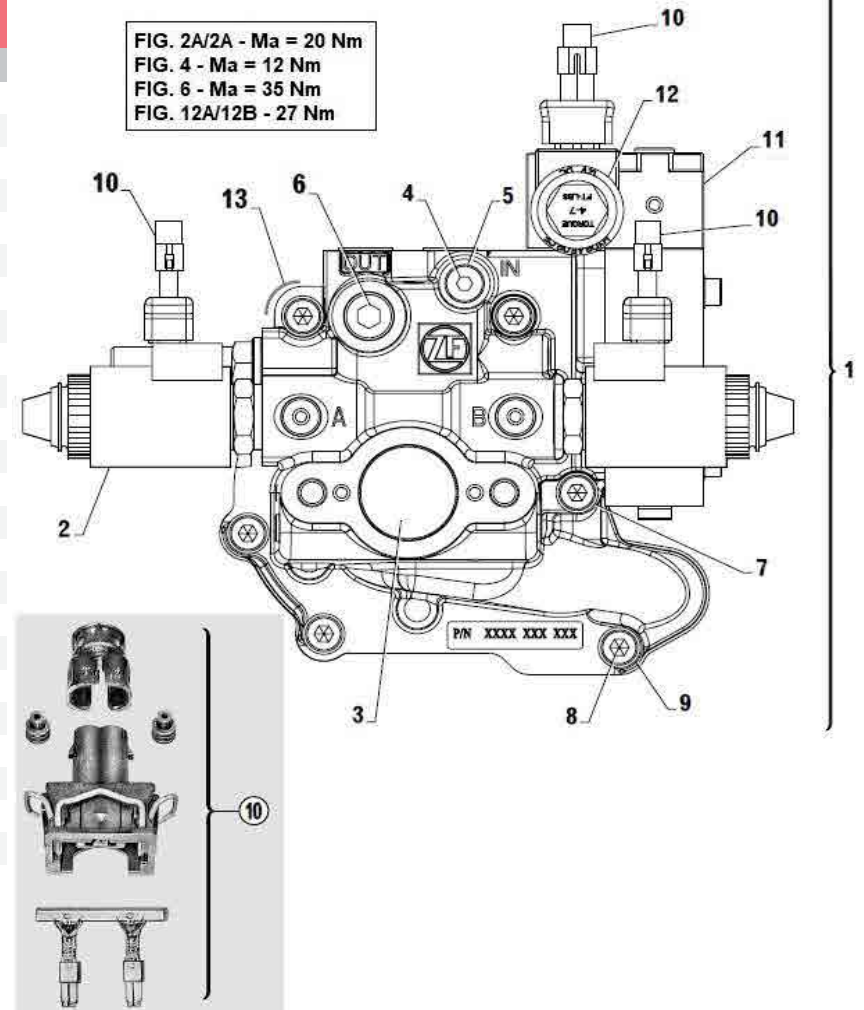
D_50Z3_5 Electric Selector Valve 12V/24V (TV)

FIG.	REF.	QTY	DESCR.	FROM	UPTO
1A	24640514	1	Elec. Selec. Valve On/Off 12V 26 Bar TV		
1A	24640514	1	Elec. Selec. Valve On/Off 12V 26 Bar TV		
1A	24640514	1	Elec. Selec. Valve On/Off 12V 26 Bar TV		
1A	24640514	1	Elec. Selec. Valve On/Off 12V 26 Bar TV		
1B	24640515	1	Elec. Selec. Valve On/Off 24V 26 Bar TV		
1B	24640515	1	Elec. Selec. Valve On/Off 24V 26 Bar TV		
1B	24640515	1	Elec. Selec. Valve On/Off 24V 26 Bar TV		
1B	24640515	1	Elec. Selec. Valve On/Off 24V 26 Bar TV		
2A	24640503	2	Solenoid Valve On/Off 12V, 26 Bar		
2A	24640503	2	Solenoid Valve On/Off 12V, 26 Bar		
2B	24640504	2	Solenoid Valve On/Off 24V, 26 Bar		
2B	24640504	2	Solenoid Valve On/Off 24V, 26 Bar		
2B	24640504	2	Solenoid Valve On/Off 24V, 26 Bar		
2B	24640504	2	Solenoid Valve On/Off 24V, 26 Bar		
3	24640411	1	Dummy Plug		
3	24640411	1	Dummy Plug		
3	24640411	1	Dummy Plug		
3	24640411	1	Dummy Plug		
4	24640412	1	Screw Plug M10X1		
4	24640412	1	Screw Plug M10X1		
4	24640412	1	Screw Plug M10X1		
4	24640412	1	Screw Plug M10X1		
5	24640413	1	Washer		
5	24640413	1	Washer		
6	24640410	1	Screw Plug		
6	24640410	1	Screw Plug		
6	24640410	1	Screw Plug		
6	24640410	1	Screw Plug		
7	24640509	2	Cap Screw M8X65		
7	24640509	2	Cap Screw M8X65		
7	24640509	2	Cap Screw M8X65		
7	24640509	2	Cap Screw M8X65		
8	24610404	4	Cap Screw M8X40		
8	24610404	4	Cap Screw M8X40		
8	24610404	4	Cap Screw M8X40		



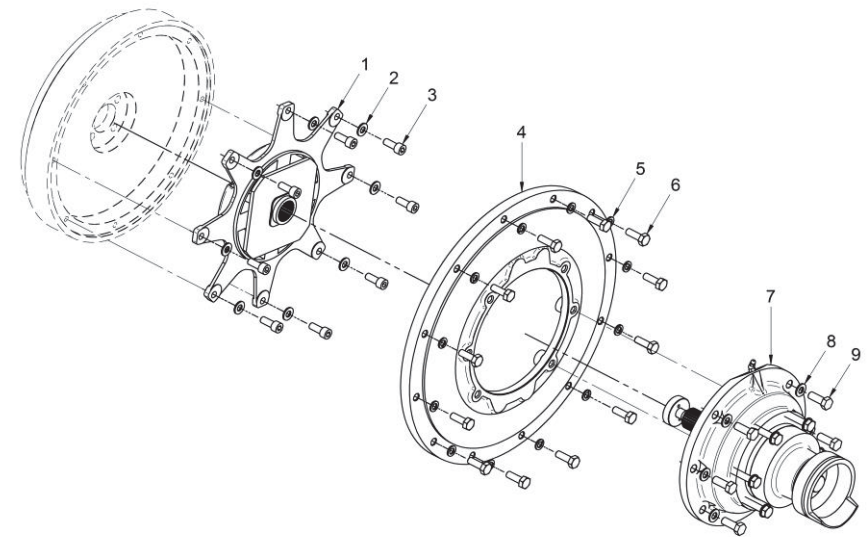


D_50Z3_5 Electric Selector Valve 12V/24V (TV)						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
8	24610404	4	Cap Screw M8X40			
9	24610033	6	Spring Washer			
9	24610033	6	Spring Washer			
9	24610033	6	Spring Washer			
9	24610033	6	Spring Washer			
10	24640512	3	Connector Kit			
10	24640512	3	Connector Kit			
10	24640512	3	Connector Kit			
10	24640512	3	Connector Kit			
11	24640526	1	Trolling Device			
11	24640526	1	Trolling Device			
11	24640526	1	Trolling Device			
11	24640526	1	Trolling Device			
12A	24640527	1	Proportional Valve 12V			
12A	24640527	1	Proportional Valve 12V			
12A	24640527	1	Proportional Valve 12V			
12A	24640527	1	Proportional Valve 12V			
12B	24640528	1	Proportional Valve 24V			
12B	24640528	1	Proportional Valve 24V			
12B	24640528	1	Proportional Valve 24V			
12B	24640528	1	Proportional Valve 24V			
13	24640403	1	Gasket			
13	24640403	1	Gasket			
13	24640403	1	Gasket			
13	24640403	1	Gasket			





17410110.1 Kit Z-Drive VOLVO 280/290 Z=26					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103308	8	Bolt DIN 912 M10-25 8.8		
4	14910012	1	Bell, housing reverser		
5	53033010	12	Washer GROWER DIN 127-10		
6	52102309	12	Bolt DIN 933 M10-30 8.8		
7	17410110.1R	1	Kit Z-Drive Volvo 280/290 Z=26		
8	53038012	6	Washer DIN 6798-A 12		
9	52301309	6	Bolt DIN 931 W7/16-30 8.8		
NS	M87503040	1	Water Intake Hose (HQ) D. 30-38 [NS]		
NS	14711030	1	Brass Elbow Connector [NS]		
NS	14711031	1	Elbow [NS]		
NS	54082025	2	Clamp DIN 3017 25-40/12 W4 [NS]		
NS	58088281	1	Pastic Cable Zip Tie [NS]		

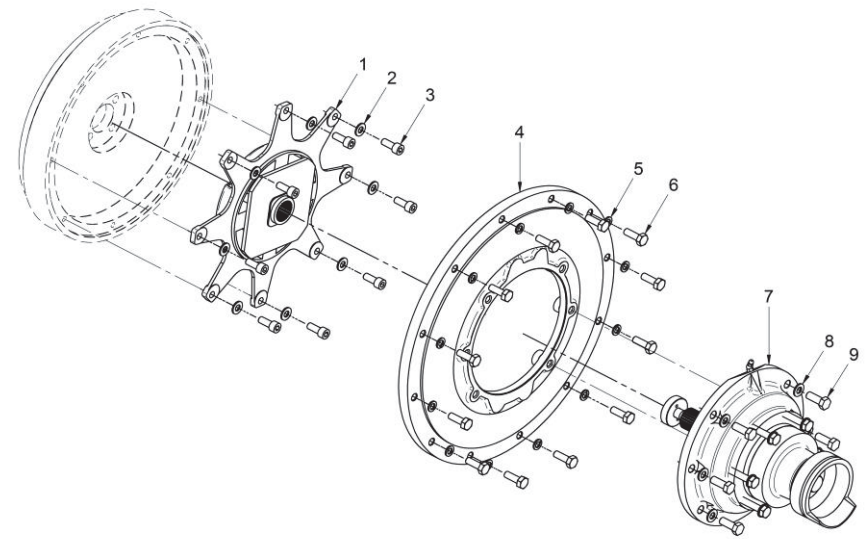


[NS] Not shown





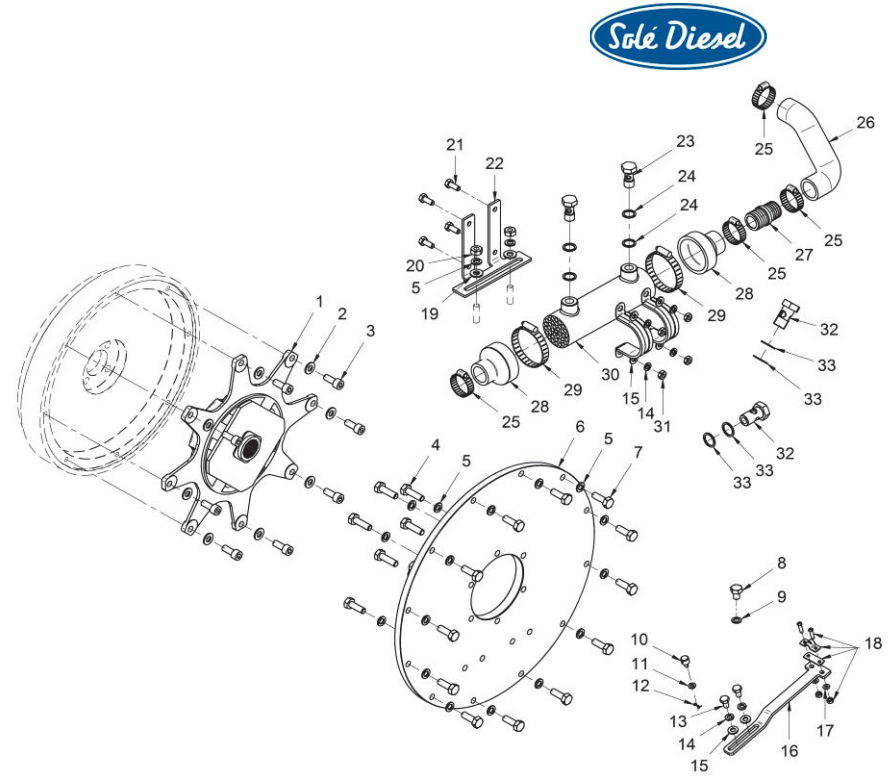
17410110.2		Kit Z-Drive Volvo 280/290 Z=10			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103308	8	Bolt DIN 912 M10-25 8.8		
4	14910012	1	Bell,housing reverser		
5	53033010	12	Washer GROWER DIN 127-10		
6	52102309	12	Bolt DIN 933 M10-30 8.8		
7	17410110.2R	1	Kit Z-Drive Volvo 280/290 Z=10		
8	53038012	6	Washer DIN 6798-A 12		
9	52301309	6	Bolt DIN 931 W7/16-30 8.8		
NS	M87503040	1	Water Intake Hose (HQ) D. 30-38 [NS]		
NS	14711030	1	Brass Elbow Connector [NS]		
NS	14711031	1	Elbow [NS]		
NS	54082025	2	Clamp DIN 3017 25-40/12 W4 [NS]		
NS	58088281	1	Pastic Cable Zip Tie [NS]		



[NS] Not shown



17410200		Kit GearBox TM-93			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103308	8	Bolt DIN 912 M10-25 8.8		
5	53033010	14	Washer GROWER DIN 127-10		
6	24810021	1	SAE3 Housing TM-93 and 170		
7	52102309	12	Bolt DIN 933 M10-30 8.8		
8	52102306	1	Bolt DIN 933 M10-15 8.8	06/06/2007	
9	56000061	1	Washer 10-16-1,5		
10	ALLPA.93	1	Coupling,cable	23/05/2017	
10	14719115	1	Coupling,cable		23/05/2017
11	51030006	4	Washer DIN 125-6		
12	51051107	1	Pin DIN-94 1,6-16		
13	52102256	2	Bolt DIN 933 M8-15 8.8		
14	53033008	6	Washer GROWER DIN 127-8		
15	51030008	6	Washer DIN 125-8		
16	18619020	1	Bracket,Gear box control		
17	51030005	2	Washer DIN 125-5		
18	24810913	1	Clamp,CABLE		
19	51030010	2	Washer DIN 125-10		
20	52120010	2	Nut DIN 934 M10 8.8		
21	52102257	4	Bolt DIN 933 M8-20 8.8		
22	13912041	1	Bracket,TM Oil Cooler		20/05/2018
22	18012041	1	Bracket,TM93/170 oil cooler	21/05/2018	
23	14712015	2	Bolt,Coupling pipe oil		
24	57000375	4	Washer 17-22-1,5		
25	54082025	4	Clamp DIN 3017 25-40/12 W4		
26	17411022	1	Rubber Elbow		
27	18011026	1	Pipe		
28	15312007	2	Water Cooler Cover		
29	54082050	2	Clamp DIN 3017 50-70/12 W4		
30	1A012051	1	Cooler,oil	18/12/2018	
30	14712051	1	Cooler,oil		18/12/2018
31	52120008	4	Nut DIN 934 M8 8.8		
34	59072604	2	Clamp	29/03/2014	
NS	17112024	2	Pipe, rev.oil Cooler [NS]		

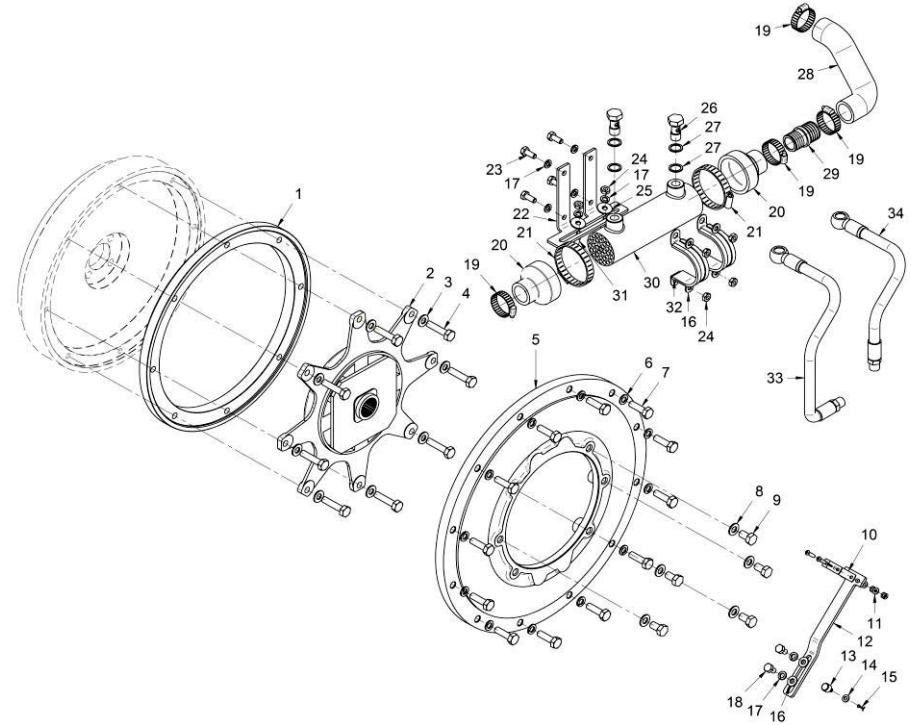


[NS] Not shown





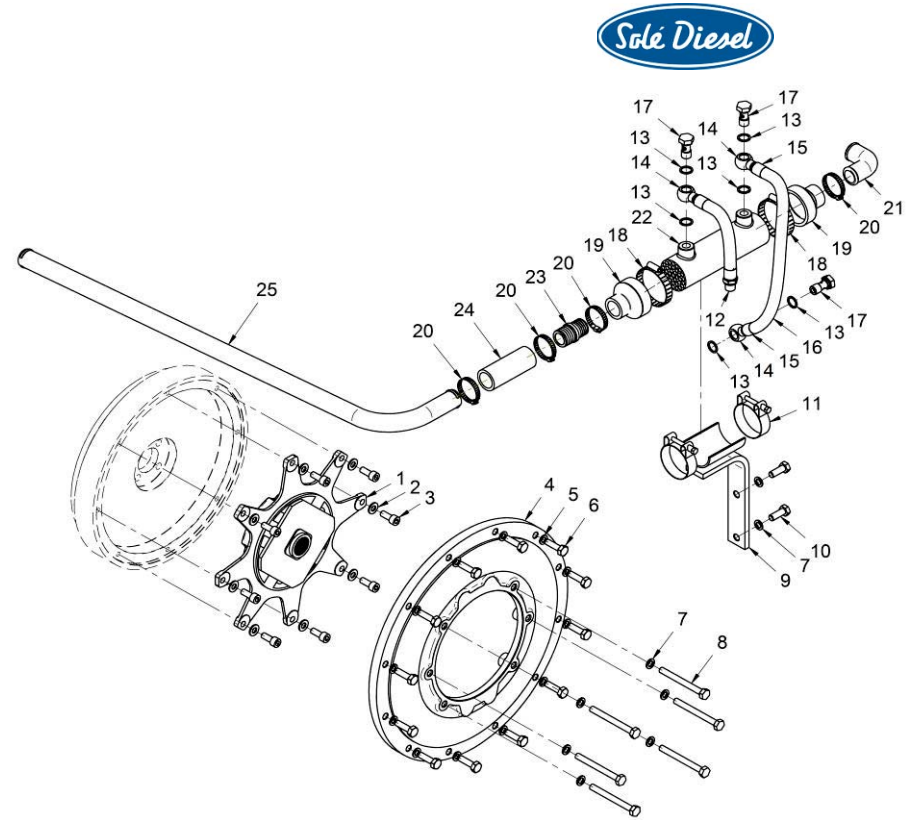
17410210		Kit GearBox TM-345/A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17410022	1	Flywheel Supplement		
2	16510170	1	Flexible Coupling Type C SAE 11"1/2		
3	53038010	8	Washer DIN 6798-A 10		
4	52101312	8	Bolt DIN 931 M10-45 8.8		
5	14910012	1	Bell,housing reverser		
6	53033010	12	Washer GROWER DIN 127-10		
7	52101310	12	Bolt DIN 931 M10-35 8.8		
8	53038012	5	Washer DIN 6798-A 12		
9	52302307	5	Bolt DIN 933 W7/16-20 8.8		
10	24810913	1	Clamp,CABLE		
11	51030005	2	Washer DIN 125-5		
12	18619020	1	Bracket,Gear box control		
13	ALLPA.93	1	Coupling,cable	23/05/2017	
13	14719115	1	Coupling,cable		23/05/2017
14	51030008	6	Washer DIN 125-8		
15	51051107	1	Pin DIN-94 1,6-16		
16	17511009	1	Hose		
17	53033008	8	Washer GROWER DIN 127-8		
18	52102256	2	Bolt DIN 933 M8-15 8.8		
19	54082025	4	Clamp DIN 3017 25-40/12 W4		
20	15312007	2	Water Cooler Cover		
21	54082050	2	Clamp DIN 3017 50-70/12 W4		
22	18012041	1	Bracket,TM93/170 oil cooler		
23	52102257	4	Bolt DIN 933 M8-20 8.8		
24	52120008	6	Nut DIN 934 M8 8.8		
25	51031008	2	Washer DIN 9021 8		
26	14712015	2	Bolt,Coupling pipe oil		
27	57000375	4	Washer 17-22-1,5		
29	18011026	1	Pipe		
30	1A012051	1	Cooler,oil	18/12/2018	
30	14712051	1	Cooler,oil		18/12/2018
31	12120018	2	Stud		
32	59072604	2	Clamp	29/03/2014	
33	17012024	2	Pipe		
NS	51030006	3	Washer DIN 125-6 [NS]		



[NS] Not shown

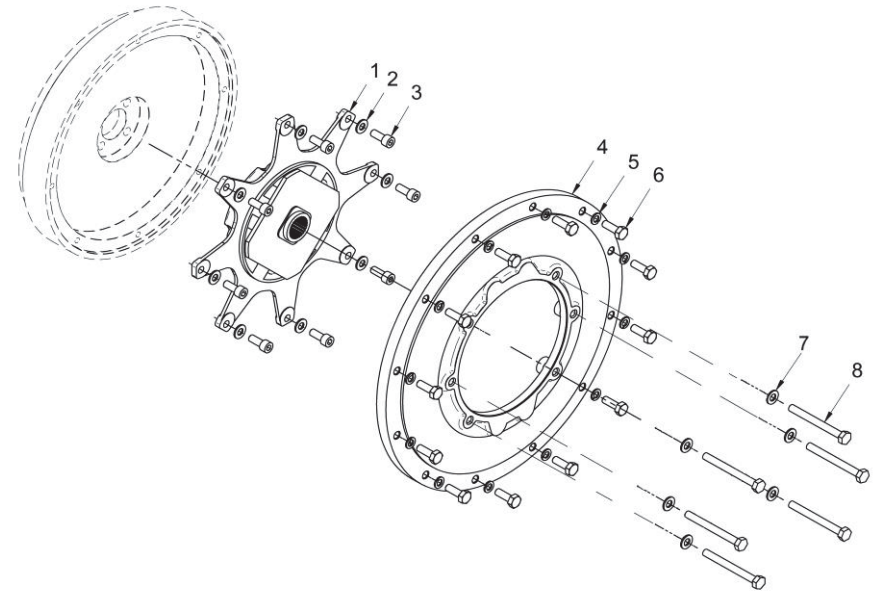


17410220 Kit GearBox BORG WARNER With Oil Cooler					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103308	8	Bolt DIN 912 M10-25 8.8		
4	14910012	1	Bell, housing reverser		
5	53033010	12	Washer GROWER DIN 127-10		
6	52102310	12	Bolt DIN 933 M10-35 8.8		
7	53033011	8	Washer GROWER DIN 127-11		
8	52301323	6	Bolt DIN 931 W7/16-100 8.8		
9	17112019	1	Bracket, Cooler Oil		
10	52302309	2	Bolt DIN 933 W7/16-30 8.8		
11	51083060	2	GP Clamp 59-63 W2		
12	14712032	1	Coupling, ball pipe oil		
13	57000375	6	Washer 17-22-1,5		
14	14712035	3	Collar, Union		
15	14712031	4	Retainer		
16	M84501019	1	LOW Pressure Hose D. 10-19	23/10/2008	
17	14712015	3	Bolt, Coupling pipe oil		
18	54082050	2	Clamp DIN 3017 50-70/12 W4		
19	15312007	2	Water Cooler Cover		
20	54082025	4	Clamp DIN 3017 25-40/12 W4		
21	15212022	1	Elbow	15/02/2017	
22	1A012051	1	Cooler, oil	18/12/2018	
22	14712051	1	Cooler, oil		18/12/2018
23	18011026	1	Pipe		
24	13211036	1	Pipe 30-40-100		
25	19211011	1	Pipe, water inlet		





17410221 Kit GearBox BW (Without Oil Cooler)					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
	14711030	1	Brass Elbow Connector	17/09/2018	
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103308	8	Bolt DIN 912 M10-25 8.8		
4	14910012	1	Bell,housing reverser		
5	53033010	13	Washer GROWER DIN 127-10		
6	52102310	12	Bolt DIN 933 M10-35 8.8		
7	16510004	1	Spacer,bell housing		26/07/2017
8	53038012	6	Washer DIN 6798-A 12		
9	52301323	6	Bolt DIN 931 W7/16-100 8.8		
NS	M87503040	1	Water Intake Hose (HQ) D. 30-38 [NS]		
NS	13817011	1	Bracket [NS]	05/02/2019	
NS	17411034	1	Hose [NS]		17/09/2018
NS	51030005	1	Washer DIN 125-5 [NS]	05/02/2019	
NS	51030006	1	Washer DIN 125-6 [NS]	05/02/2019	
NS	51031006	1	Washer DIN 9021 6 [NS]	05/02/2019	
NS	52102106	1	Bolt DIN 933 M5-15 8.8 [NS]	05/02/2019	
NS	52102157	1	Bolt DIN 933 M6-20 8.8 [NS]	05/02/2019	
NS	52102307	1	Bolt DIN 933 M10-20 8.8 [NS]	05/02/2019	
NS	52120006	1	Nut DIN 934 M6 8.8 [NS]	05/02/2019	
NS	53033006	1	Washer GROWER DIN 127-6 [NS]	05/02/2019	
NS	54082025	2	Clamp DIN 3017 25-40/12 W4 [NS]		17/09/2018
NS	59071452	2	Clamp 1 42/15 W1 [NS]	05/02/2019	
NS	60180007	1	Outlet Coupling [NS]	20/02/2014	17/09/2018

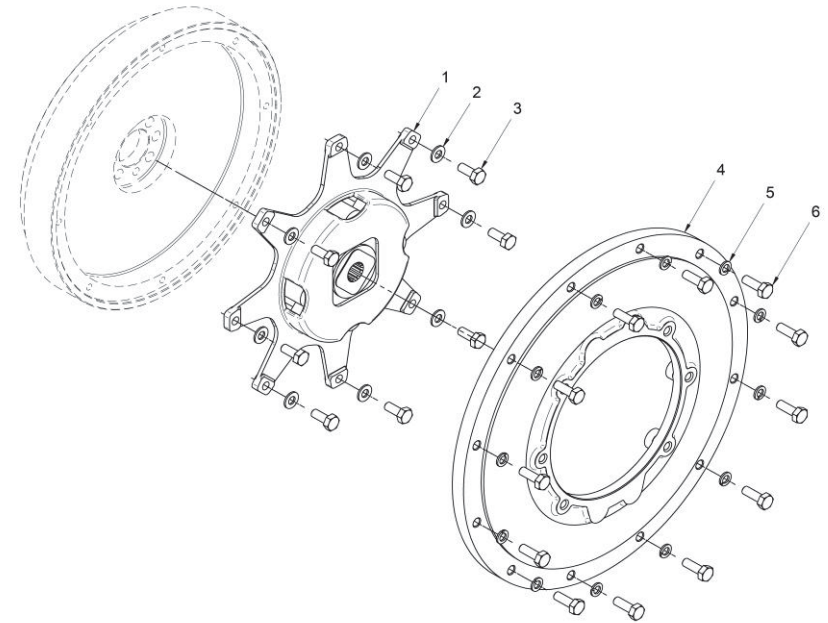


[NS] Not shown



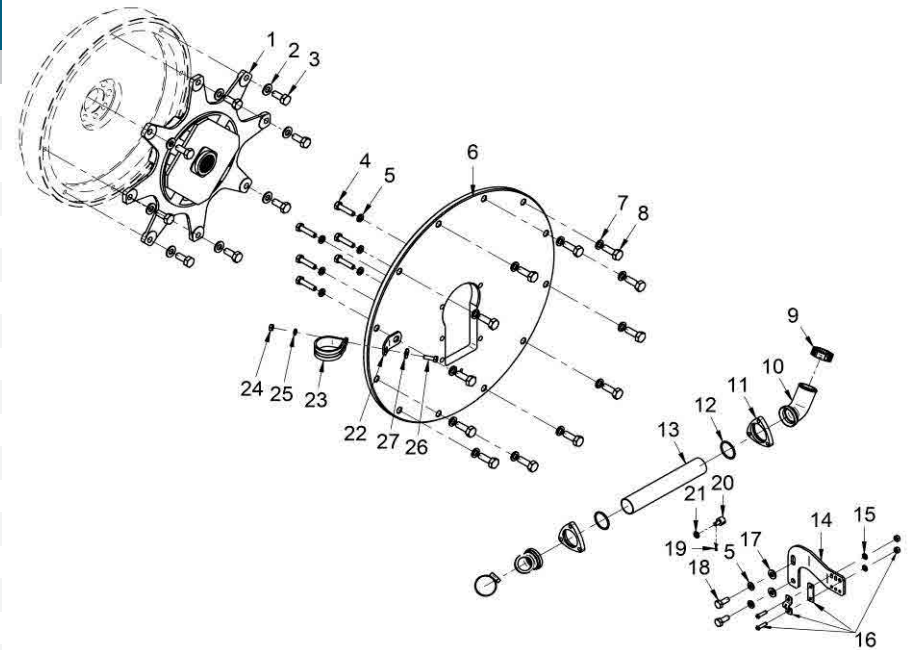


17410226 PRM-160 SAE7 Coupling Housing Kit					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510172	1	Flexible Coupling T. C SAE 11"1/2 PRM160		
2	53038010	8	Washer DIN 6798-A 10		
3	52102308	8	Bolt DIN 933 M10-25 8.8		
4	14910012	1	Bell,housing reverser		
5	53033010	12	Washer GROWER DIN 127-10		
6	52102309	12	Bolt DIN 933 M10-30 8.8		





17410227 Kit GearBox TMC-260					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52102308	8	Bolt DIN 933 M10-25 8.8		09/05/2018
3	52103308	8	Bolt DIN 912 M10-25 8.8	10/05/2018	
4	52101260	6	Bolt DIN 931 M8-35 8.8		
5	53033008	8	Washer GROWER DIN 127-8		
6	17410012	1	Adaptor Flange.		
7	53033010	12	Washer GROWER DIN 127-10		
8	52102309	12	Bolt DIN 933 M10-30 8.8		
9	54082025	2	Clamp DIN 3017 25-40/12 W4		
10	24890053	2	Elbow		
11	24890051	2	Cover		
12	24890052	2	O-Ring D. 32X2,5		
13	24890054	1	Cooler Pipe		
14	24880901	1	Bracket, GearBox Control		
15	51030005	3	Washer DIN 125-5		
16	24810913	1	Clamp,CABLE		
17	51030008	2	Washer DIN 125-8		
18	52102257	2	Bolt DIN 933 M8-20 8.8		
19	51051107	1	Pin DIN-94 1,6-16		
20	ALLPA.93	1	Coupling,cable	23/05/2017	21/11/2018
20	14719115	1	Coupling,cable		
21	51030006	2	Washer DIN 125-6		
22	13817011	1	Bracket		
23	59071452	2	Clamp 1 42/15 W1		
24	52120006	1	Nut DIN 934 M6 8.8		
25	53033006	1	Washer GROWER DIN 127-6		
26	52102157	1	Bolt DIN 933 M6-20 8.8		
27	51031006	1	Washer DIN 9021 6		
NS	M87503242	1	Water Intake Hose (HQ) D. 32-42 [NS]		
NS	52102106	1	Bolt DIN 933 M5-15 8.8 [NS]		

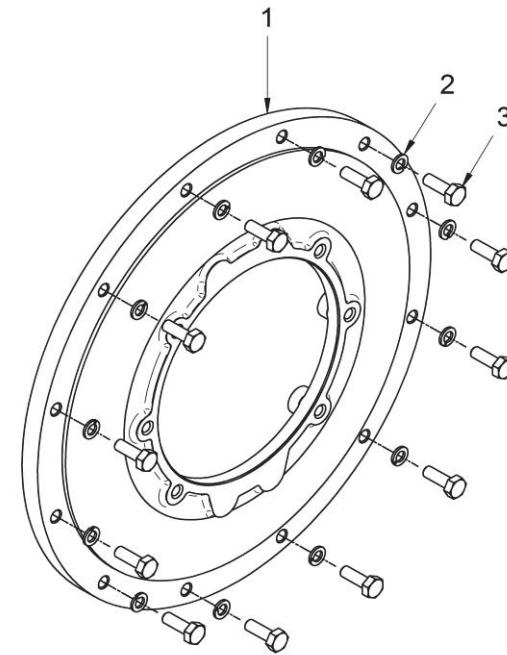


[NS] Not shown





17410228		Kit SAE 7		FROM	UPTO
FIG.	REF.	QTY	DESCR.		
1	14910012	1	Bell, housing reverser		
2	53033010	12	Washer GROWER DIN 127-10		
3	52102309	12	Bolt DIN 933 M10-30 8.8		



17410255		Kit GearBox ZF 68 IV			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103312	8	Bolt DIN 912 M10-45 8.8		
4	14910012	1	Bell,housing reverser		
5	53033010	16	Washer GROWER DIN 127-10		
6	52102309	12	Bolt DIN 933 M10-30 8.8		
7	53038012	6	Washer DIN 6798-A 12		
8	52302310	5	Bolt DIN 933 W7/16-35 8.8		
9	14719115	1	Coupling,cable		
10	51030006	6	Washer DIN 125-6		
11	51051107	1	Pin DIN-94 1,6-16		
12	52102157	2	Bolt DIN 933 M6-20 8.8		
13	55307104	2	Bolt DIN 86 W3/16-10		
14	14719013	1	Clamp,cable		
15	12119021	1	SUPPORT Clamp		
16	16519020	1	Bracket, Gear box control		
17	53033006	2	Washer GROWER DIN 127-6		
18	52120006	2	Nut DIN 934 M6 8.8		
19	52320716	1	Nut DIN 934 W 7/16 8.8		
20	17510004	1	Stud 7/16Wx44		
21	54082025	4	Clamp DIN 3017 25-40/12 W4		
22	15312007	2	Water Cooler Cover		
23	54082050	2	Clamp DIN 3017 50-70/12 W4		
24	57000375	4	Washer 17-22-1,5		
25	17017102	2	Spacer 10,5X22X46		
26	14712015	2	Bolt,Coupling pipe oil		
27	16512010	1	Bracket,oil cooler		
28	17511009	1	Hose		
29	18011026	1	Pipe		
30	1A012051	1	Cooler,oil	18/12/2018	
30	14712051	1	Cooler,oil		18/12/2018
31	51083060	1	GP Clamp 59-63 W2		
32	18512024	2	Pipe		
33	17410022	1	Flywheel Supplement		
35	52101319	2	Bolt DIN 931 M10-80 8.8		



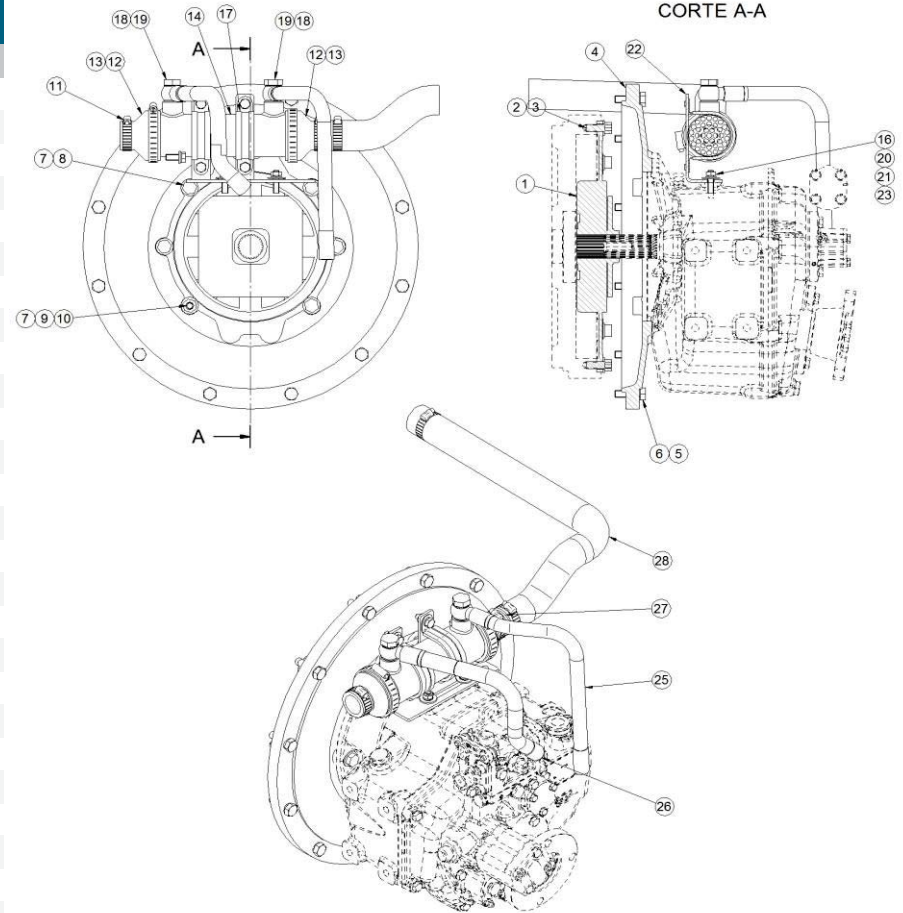


17410255 Kit GearBox ZF 68 IV						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
36	52302258	2	Bolt DIN 933 W3/8-25 8.8			





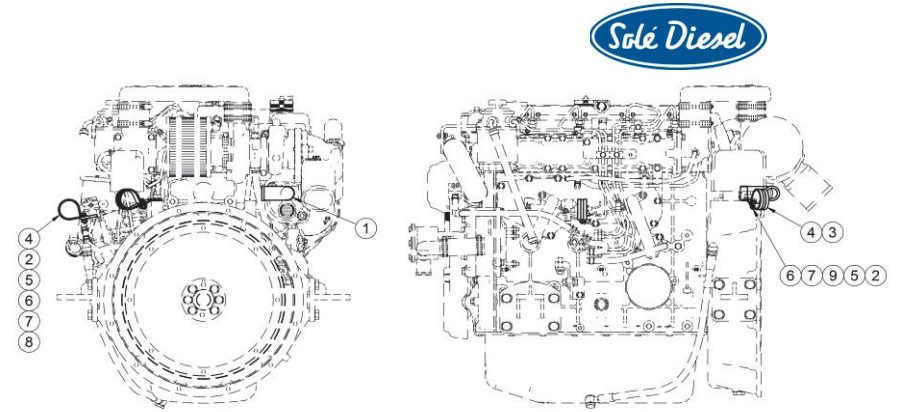
17510224		Kit GearBox TM-485A1			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	16510170	1	Flexible Coupling Type C SAE 11"1/2		
2	53038010	8	Washer DIN 6798-A 10		
3	52103308	8	Bolt DIN 912 M10-25 8.8		
4	14910012	1	Bell, housing reverser		
5	53033010	12	Washer GROWER DIN 127-10		
6	52102309	12	Bolt DIN 933 M10-30 8.8		01/11/2017
6	52102310	12	Bolt DIN 933 M10-35 8.8	02/11/2017	
7	53038012	6	Washer DIN 6798-A 12		
8	52302309	5	Bolt DIN 933 W7/16-30 8.8		
9	52320716	1	Nut DIN 934 W 7/16 8.8		
10	17510004	1	Stud 7/16Wx44		
11	54082025	4	Clamp DIN 3017 25-40/12 W4		
12	15312007	2	Water Cooler Cover		
13	54082050	2	Clamp DIN 3017 50-70/12 W4		
14	1A012051	1	Cooler,oil	18/12/2018	
14	14712051	1	Cooler,oil		18/12/2018
15	51030008	6	Washer DIN 125-8		
16	52120008	6	Nut DIN 934 M8 8.8		
17	59072604	2	Clamp	29/03/2014	
18	57000375	4	Washer 17-22-1,5		
19	14712015	2	Bolt,Coupling pipe oil		
20	53033008	8	Washer GROWER DIN 127-8		
21	51031008	2	Washer DIN 9021 8		
22	13912041	1	Bracket,TM Oil Cooler	02/11/2017	
22	18012041	1	Bracket,TM93/170 oil cooler		01/11/2017
23	12120018	2	Stud		
24	52102257	6	Bolt DIN 933 M8-20 8.8		
25	17512011	1	Pipe		
26	17512010	1	Pipe		
27	18011026	1	Pipe	02/11/2017	
28	1A011035	1	Hose	02/11/2017	
NS	13411036	1	Pipe 30-40-120 [NS]	02/11/2017	
NS	17519003	1	Bracket Spacer, Engine Control [NS]		
NS	24810913	1	Clamp,CABLE [NS]		
NS	52102112	2	Bolt DIN 933 M5-45 8.8 CINCADO [NS]		



[NS] Not shown



17810240 Kit Bobtail						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	14711026	1	Elbow N°3 [NP]			
2	53033006	2	Washer GROWER DIN 127-6 [NP]			
3	13817011	1	Bracket [NP]			
4	59071452	2	Clamp 1 42/15 W1 [NP]			
5	51030006	2	Washer DIN 125-6 [NP]			
6	52102157	2	Bolt DIN 933 M6-20 8.8 [NP]			
7	52120006	2	Nut DIN 934 M6 8.8 [NP]			
8	13817018	1	Spacer [NP]			
9	51031006	1	Washer DIN 9021 6 [NP]			
NS	M87503242	1	Water Intake Hose (HQ) D. 32-42 [NP] [NS]			

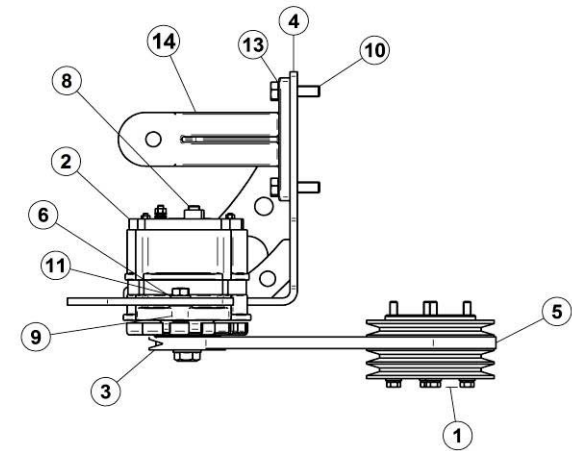
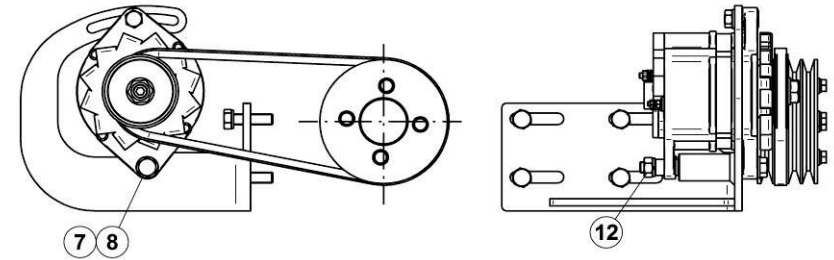


[NP] Not provided
 [NS] Not shown



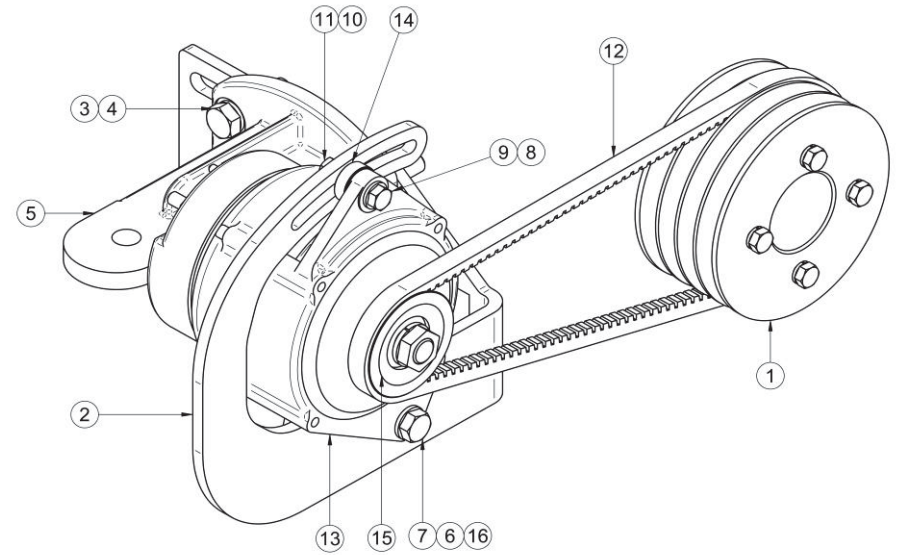


17417093		Kit 2nd Alternator 28V/55A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17410102	1	Pulley 4A D138 (S)		
2	17417027	1	Alt. 28V/55A Mahle	16/03/2016	
3	17417022	1	Pulley		
4	17417092	1	Bracket Alternator		
5	17117109	1	Belt Type SPAX 850	24/01/2017	
5	17417104	1	Belt Type SPAX 807		23/01/2017
6	51030010	1	Washer DIN 125-10		
7	51030012	2	Washer DIN 125-12		
8	52101376	1	Bolt DIN 931 M12-130 8.8		
9	52102309	1	Bolt DIN 933 M10-30 8.8		
10	52102361	4	Bolt DIN 933 M12-40 8.8		
11	52120010	1	Nut DIN 934 M10 8.8		
12	52120012	1	Nut DIN 934 M12 8.8		
13	53033012	1	Washer GROWER DIN 127-12		
14	17410001.1	1	Front Bracket		





17417097		Kit 2nd Alternator 14V/95A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17410102	1	Pulley 4A D138 (S)		
2	17417098	1	Bracket Alternator		
3	53033012	4	Washer GROWER DIN 127-12		
4	52102362	4	Bolt DIN 933 M12-45 8.8		
5	17410001.1	1	Front Bracket		
6	51030010	1	Washer DIN 125-10		
7	52101325	1	Bolt DIN 931 M10-120 8.8		
8	51030008	2	Washer DIN 125-8		
9	52101261	1	Bolt DIN 931 M8-40 8.8		
10	53033008	1	Washer GROWER DIN 127-8		
11	52120008	1	Nut DIN 934 M8 8.8		
12	17417105	1	Belt Type XPA 882		
13	17117025	1	Alt. 14V/95A Mahle	13/04/2016	
14	17217005	1	Spacer 8,5X25X8,5		
15	17117016.7	1	Pulley		
16	17417025	1	Spacer 13.5x10.2x11	09/09/2015	



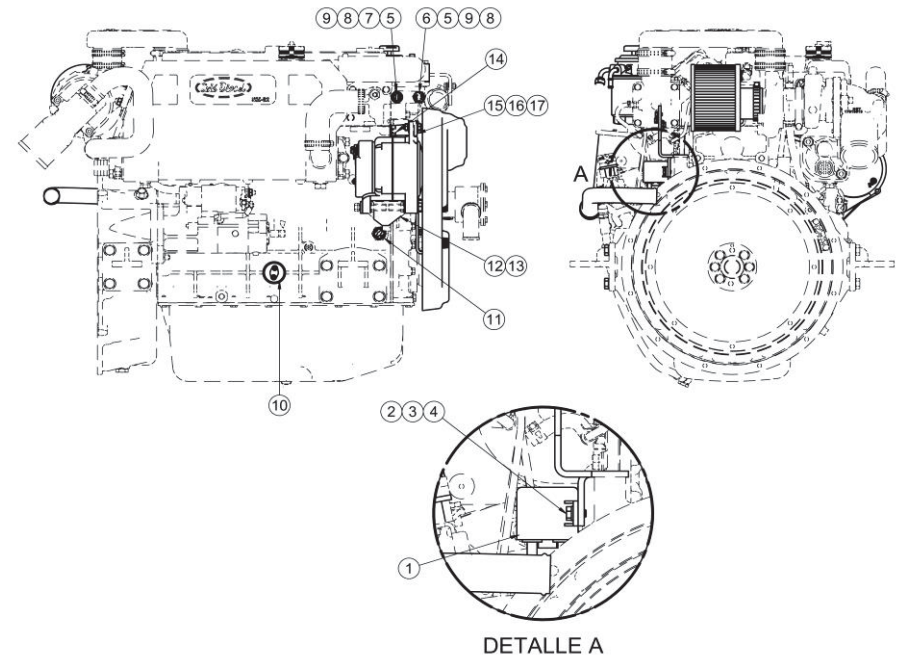


17517100		Kit 2nd Alternator 28V/140A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
	L_17517100	1	Kit 2nd Alternator 28V/140A Manual		
	17410001.2	2	Front Bracket		
	17417108	1	Alt. 28V 140A Mahle	19/06/2018	
	17417109	1	MGX1252KIT Alt. 28V 140A Pulley Kit	19/06/2018	
	17517105	1	Spacer 12,5X24X7,25		
	52102358	1	Bolt DIN 933 M12-25 8.8		
1	17517101	1	Alternator, Bracket		
2	17417106.1	1	Alternator 28V/140A		18/06/2018
3	52101369	8	Bolt DIN 931 M12-80 8.8		
4	17417104	2	Belt Type SPAX 807		
5	17510102.1	1	Pulley 2A		
6	53038008	4	Washer DIN 6798-A 8		
7	52101266	4	Bolt DIN 931 M8-65 8.8		
9	51101220	1	Bolt DIN 931 M12-240 8.8		
10	19417103	1	Plate		
11	52102359	1	Bolt DIN 933 M12-30 8.8		
12	51030012	10	Washer DIN 125-12		
13	53033012	11	Washer GROWER DIN 127-12		





17817200		Kit Wire Earth Isolated 12V SM-82/94		
FIG.	REF.	QTY	DESCR.	FROM UPTO
	60978102	1	SVT 30 SM-82/94 Panel Isolated	25/10/2017
1	19017113	1	Relay 12V Earth Isolated Nagares	
2	17817002	1	Bracket	
3	51030006	4	Washer DIN 125-6	
4	52102155	2	Bolt DIN 933 M6-12 8.8	
5	60900999.1	2	Connection M14X1,5 5/8" EXA.19 L=25	
6	60900972	1	High Coolant, 2 Poles	
7	60900982	1	Temperature SENDER	
8	56000069	2	Washer 14-20-1,5	
9	56000073	2	Copper Washer 16-23-1,5	
10	60900987	1	Sender, Oil Press.	
11	60900978	1	Switch, Oil Press	
12	17427002.1	1	Bracket, Alternator	
13	17117011	2	Bracket Bakelite Bushing	
14	17117012	2	Tensor Bakelite Bushing	
15	17427007.1	1	Plate, Adjusting	
16	52102259	1	Bolt DIN 933 M8-30 8.8	
17	51031008	1	Washer DIN 9021 8	
19	52120006	1	Nut DIN 934 M6 8.8	
25	60900091	1	MICRO Relay 12V 12-20	25/10/2017
26	52102104	1	Bolt DIN 933 M5-10 8.8	25/10/2017
NS	18525200	1	Stop SOLENOID (ETS)12V [NS]	
NS	18525202	1	Spring Valve Pump [NS]	
NS	54128005	1	Nut DIN 439 M5 INOX [NS]	10/11/2017
NS	60900152	1	Wire [NS]	
NS	60900157	1	Wire [NS]	
NS	60939048	1	MASS BLACK TO Wiring START [NS]	
NS	60978202R	1	SM-82/94 Elect. Wiring Earth Isolat. SVT [NS]	



[NS] Not shown



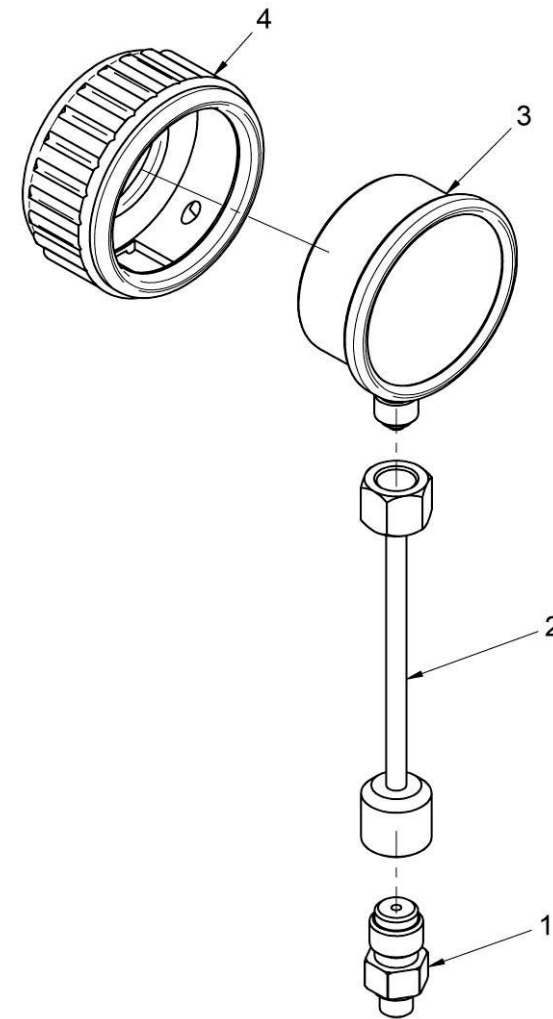


17817201		Kit 24V Electrical System SM-82/94			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
	TR.25.6	1	-----		
	17A27017	4	Glow Plug 24V		
	17117022	1	Pulley Alternator, Type A		
	17125301A	1	SOLENOID 24V.		
	17417005.1	1	Relay 24V 24-22A		
	17417024	1	Alternator 28V/55A		
	17527001.2	1	Starter Assy 24V		
	17527005.2	1	Glow Relay 24V		
	51030010	1	Washer DIN 125-10		
	52120010	1	Nut DIN 934 M10 8.8		
	53033010	1	Washer GROWER DIN 127-10		
	58088282	1	Pastic Cable Zip Tie		
	60978134	1	SVT 30 SM-82/94 24V Panel		



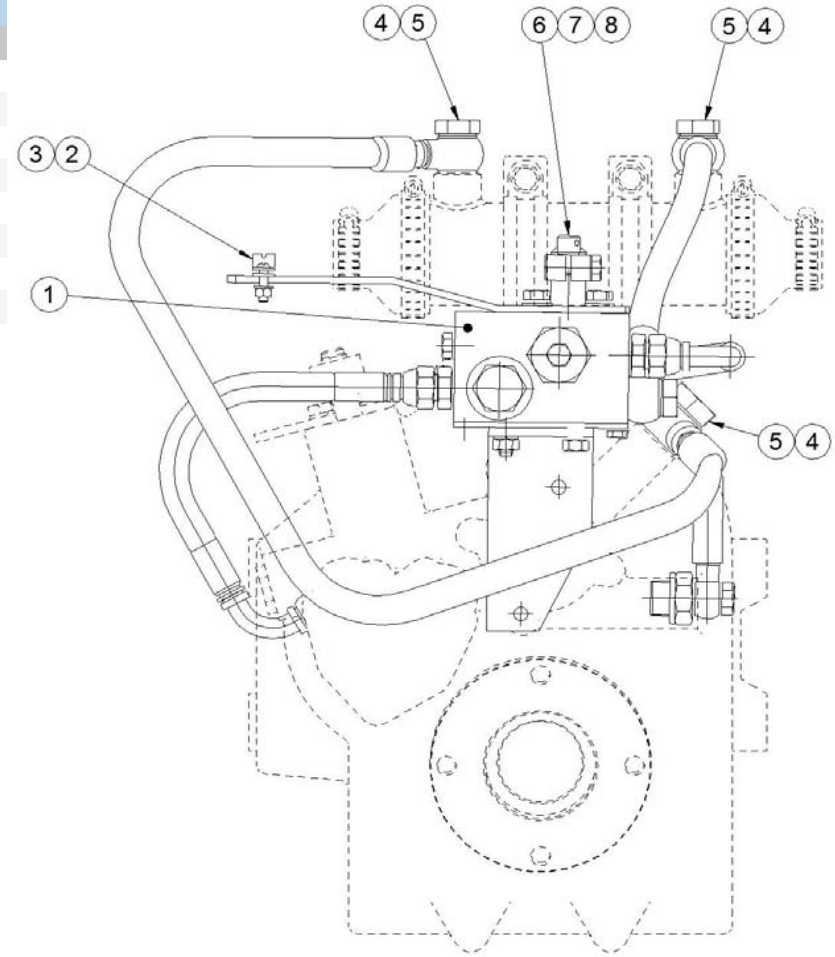


13812010		Pressure Gauge Kit 10 BAR			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	13812013.1	1	Pressure Tap		
2	13812011	1	Flexible Hose F-M G1/4-M16x2		
3	13812012	1	Pressure Gauge 0-10 bar		
4	13812014	1	Protective Rubber		





17012093		Kit Trolling Valve for TM-93/A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24810050	1	Trolling Valve TM-93		
2	24810913	1	Clamp,CABLE		
3	51030005	2	Washer DIN 125-5		
4	57000375	6	Washer 17-22-1,5		
5	14712015	3	Bolt,Coupling pipe oil		
6	14719115	2	Coupling,cable		
7	51030006	4	Washer DIN 125-6		
8	51051107	2	Pin DIN-94 1,6-16		
NS	17112024	2	Pipe, rev.oil Cooler [NS]		

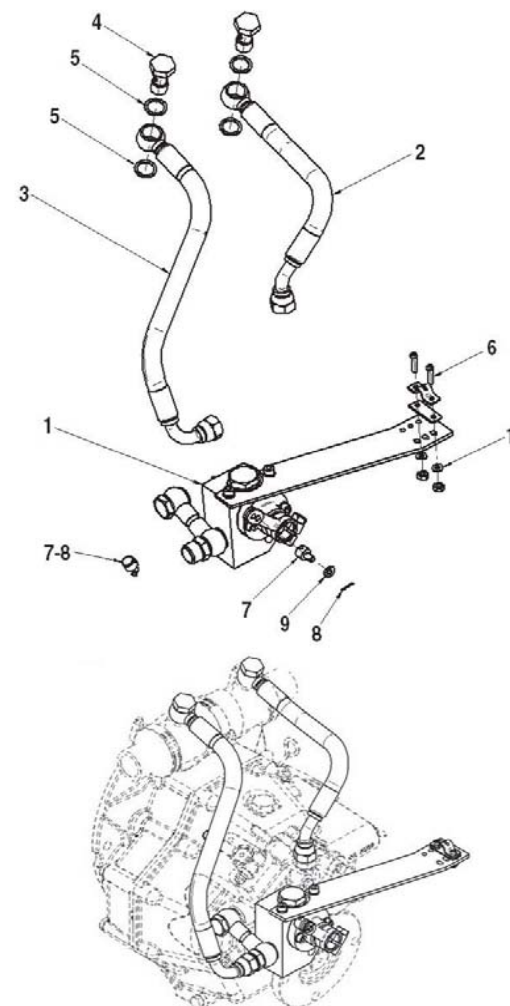


[NS] Not shown



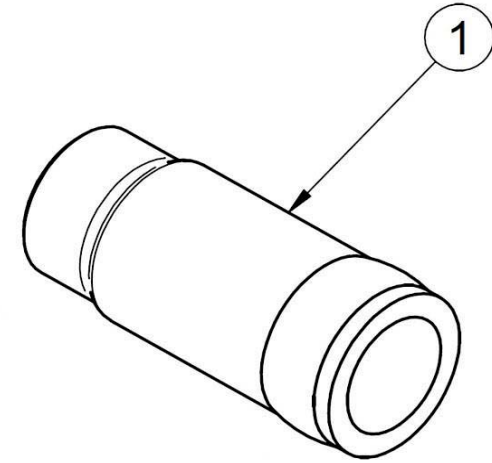


17012345		Kit Trolling Valve for TM-345/A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24850050	1	Trolling Valve TM-345A		
2	17012024	1	Pipe		
3	17512017	1	Pipe, rev.oil Cooler		
4	14712015	2	Bolt,Coupling pipe oil		
5	57000375	4	Washer 17-22-1,5		
6	24810913	1	Clamp,CABLE		
7	14719115	2	Coupling,cable		
8	51051107	2	Pin DIN-94 1,6-16		
9	51030006	1	Washer DIN 125-6		
10	51030005	2	Washer DIN 125-5		



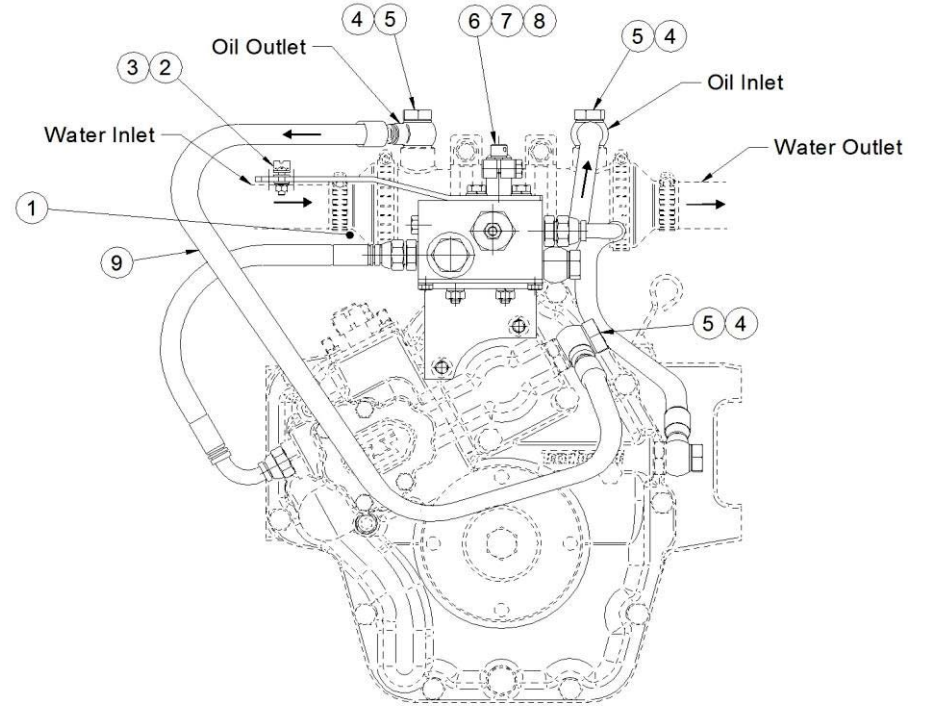


17211150 Boiler Kit (S)						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17124053	2	Joint			



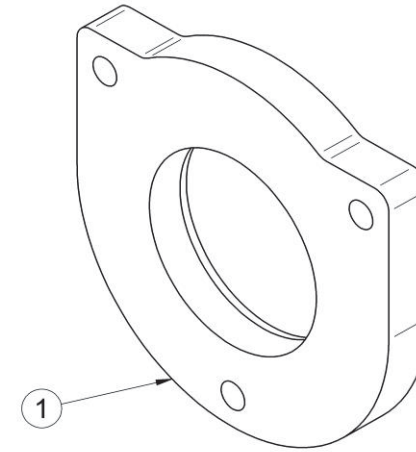
19012170 Kit Trolling Valve for TM-170/A

FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	24820050	1	Trolling Valve TM-170		
2	24810913	1	Clamp,CABLE		
3	51030005	2	Washer DIN 125-5		
4	57000375	4	Washer 17-22-1,5		
5	14712015	2	Bolt,Coupling pipe oil		
6	14719115	2	Coupling,cable		
7	51030006	4	Washer DIN 125-6		
8	51051107	2	Pin DIN-94 1,6-16		
9	17112024	2	Pipe, rev.oil Cooler		



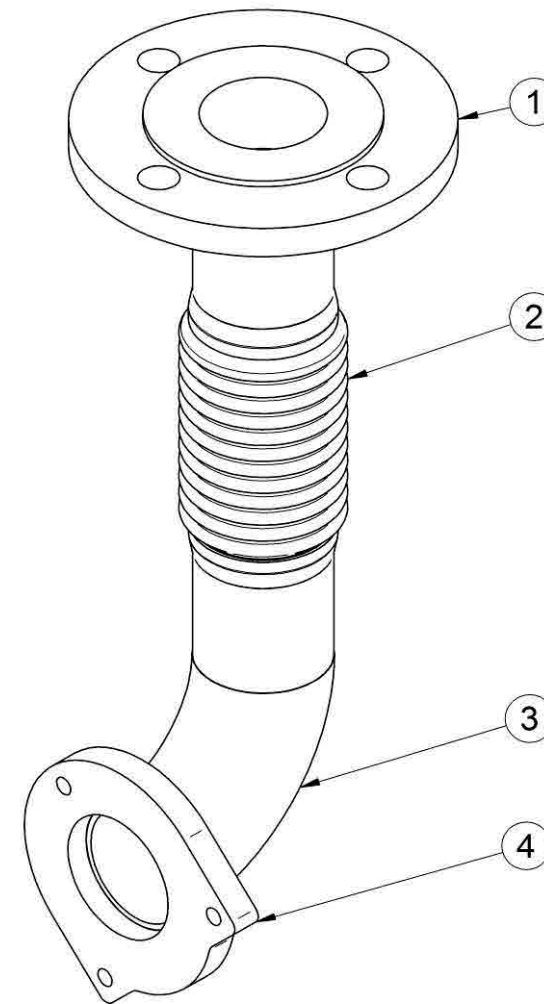


17813017 Exhaust Flange (S)						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17813017.1	1	Exhaust Flange			

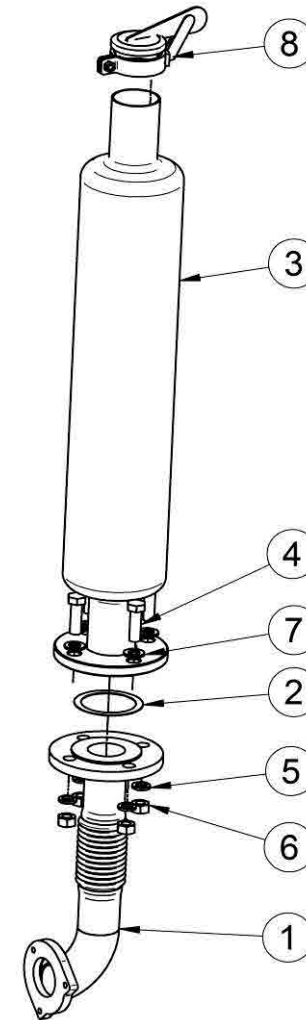




17813115 Kit Dry Exhaust With Flexible Pipe (S)					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	51068060	1	Flange		
2	19013017	1	Expansion,compensator		
3	51066060	1	KNEE 90 FIG. 6002/5 2"		
4	17813017.1	1	Exhaust Flange		

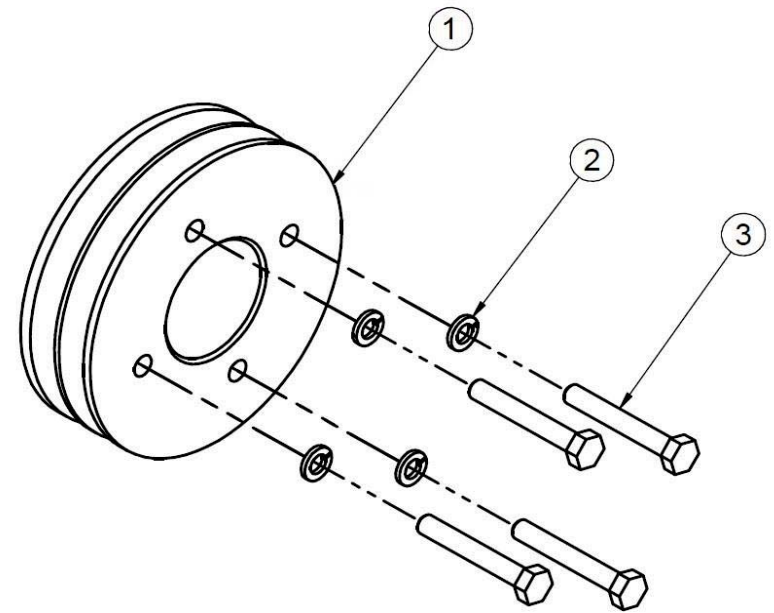


17813118 Kit Dry Exh. Flexible Pipe & Silencer(S)					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17813115	1	Kit Dry Exhaust With Flexible Pipe (S)		
2	19013020	1	Gasket		
3	17413018	1	Exhaust Muffler		
4	52101463	4	Bolt DIN 931 M16-50 8.8		
5	53033016C	4	Washer	10/12/2009	
6	52120016	4	Nut DIN 934 M16 8.8		
7	51030016	4	Washer DIN 125-16		
8	17413019	1	RAINCover		



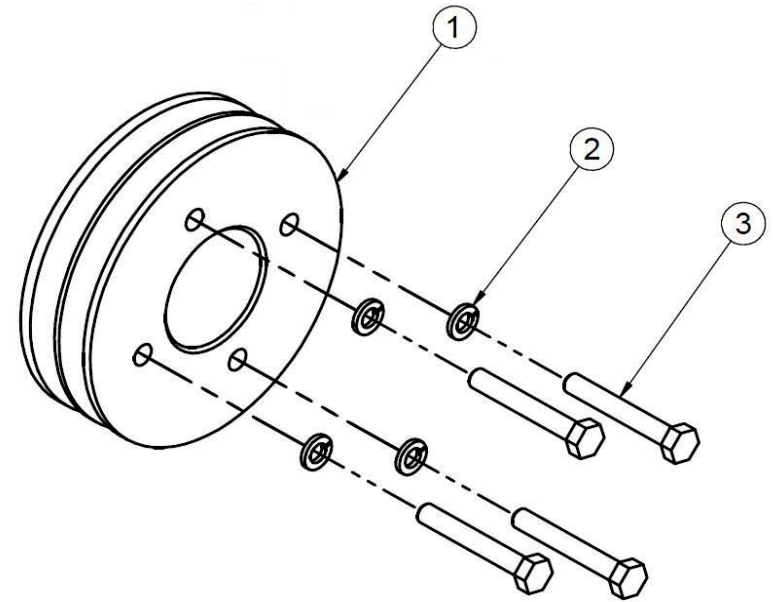


17110101		Pulley 2B (S)			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17110101.2	1	Pulley 2B		
2	53033008	4	Washer GROWER DIN 127-8		
3	52101265	4	Bolt DIN 931 M8-60 8.8		



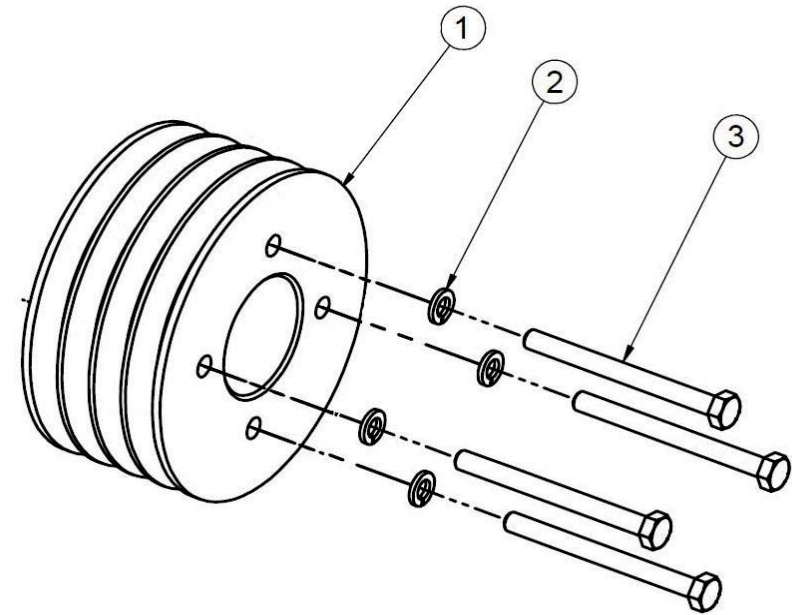


17110102 Pulley 2A (S)						
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17110102.3	1	Pulley 2A			
2	53033008	4	Washer GROWER DIN 127-8			
3	52101264	4	Bolt DIN 931 M8-55 8.8			



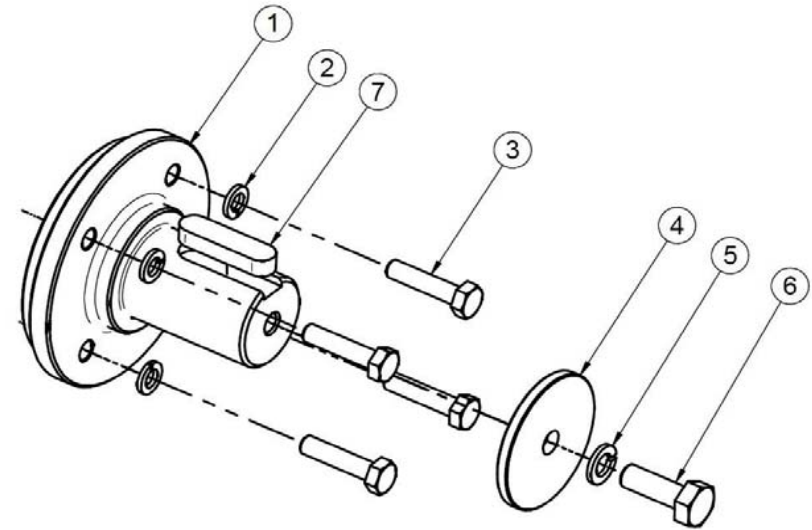


17410102		Pulley 4A D138 (S)			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17410102.1	1	Pulley 4A		
2	53033008	4	Washer GROWER DIN 127-8		
3	52101270	4	Bolt DIN 931 M8-85 8.8		



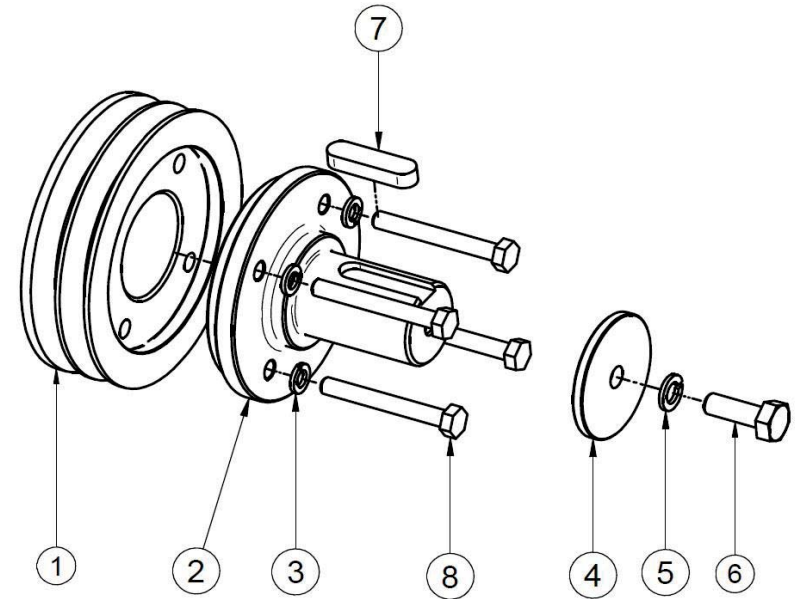


17410125		Kit Power Take-off D40 (S)			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17410125.1	1	PTO Shaft		
2	53033008	4	Washer GROWER DIN 127-8		
3	52102260	4	Bolt DIN 933 M8-35 8.8		
4	60500064	1	Butt Washer		
5	53033010	10	Washer GROWER DIN 127-10		
6	52102309	1	Bolt DIN 933 M10-30 8.8		
7	40040086	1	Flange Ø 40 Shaft Key		



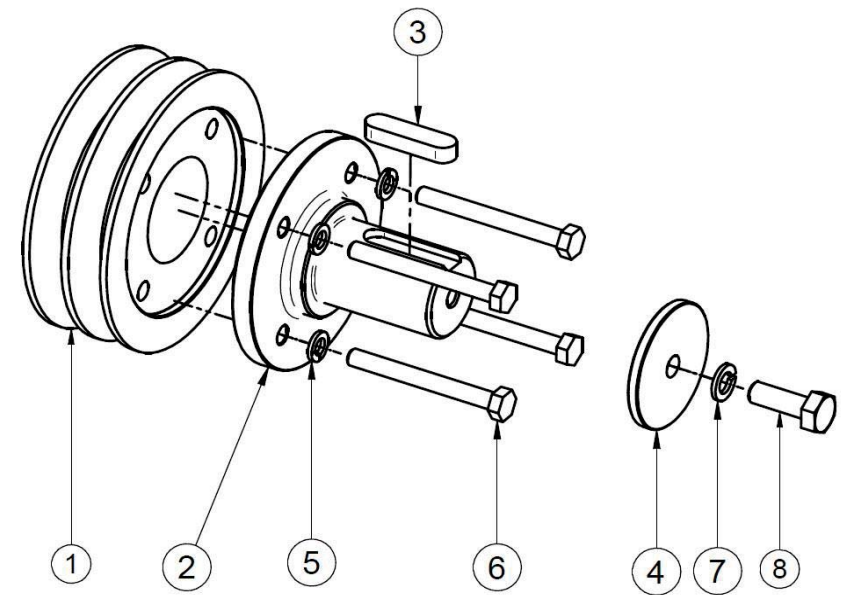


17410126		Kit Pulley & Power Take-off 2A			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17110102.1	1	2A Pulley		
2	17410125	1	Kit Power Take-off D40 (S)		
3	53033008	4	Washer GROWER DIN 127-8		
4	60500064	1	Butt Washer		
5	53033010	1	Washer GROWER DIN 127-10		
6	52102309	1	Bolt DIN 933 M10-30 8.8		
7	40040086	1	Flange Ø 40 Shaft Key		
8	52101266	4	Bolt DIN 931 M8-65 8.8		



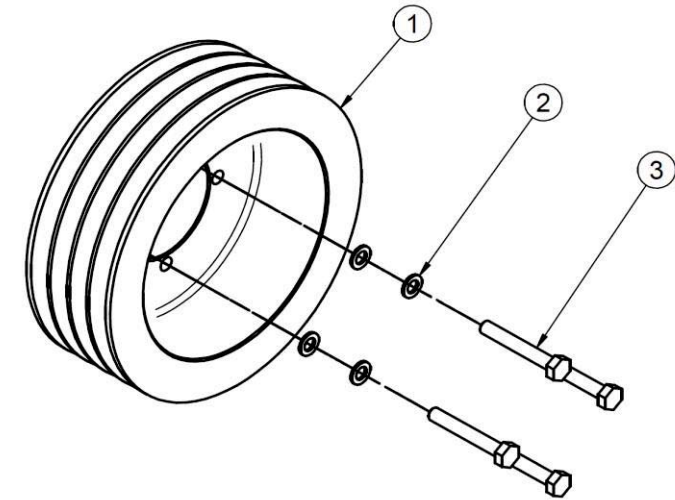


17410128		Kit Pulley & Power Take-off 2B			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17110101.1	1	Pulley 2B for PTO Shaft		
2	17410127	1	PTO Shaft		
3	40040086	1	Flange Ø 40 Shaft Key		
4	60500064	1	Butt Washer		
5	53033008	4	Washer GROWER DIN 127-8		
6	52101268	4	Bolt DIN 931 M8-75 8.8		
7	53033010	1	Washer GROWER DIN 127-10		
8	52102309	1	Bolt DIN 933 M10-30 8.8		



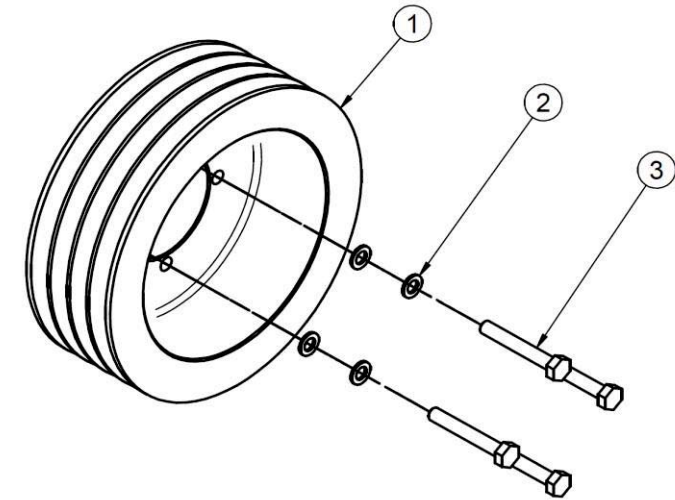


17510104		Pulley 4B (S)				
FIG.	REF.	QTY	DESCR.	FROM	UPTO	
1	17510104.1	1	Pulley 4B			
2	53038008	4	Washer DIN 6798-A 8			
3	52101264	4	Bolt DIN 931 M8-55 8.8			



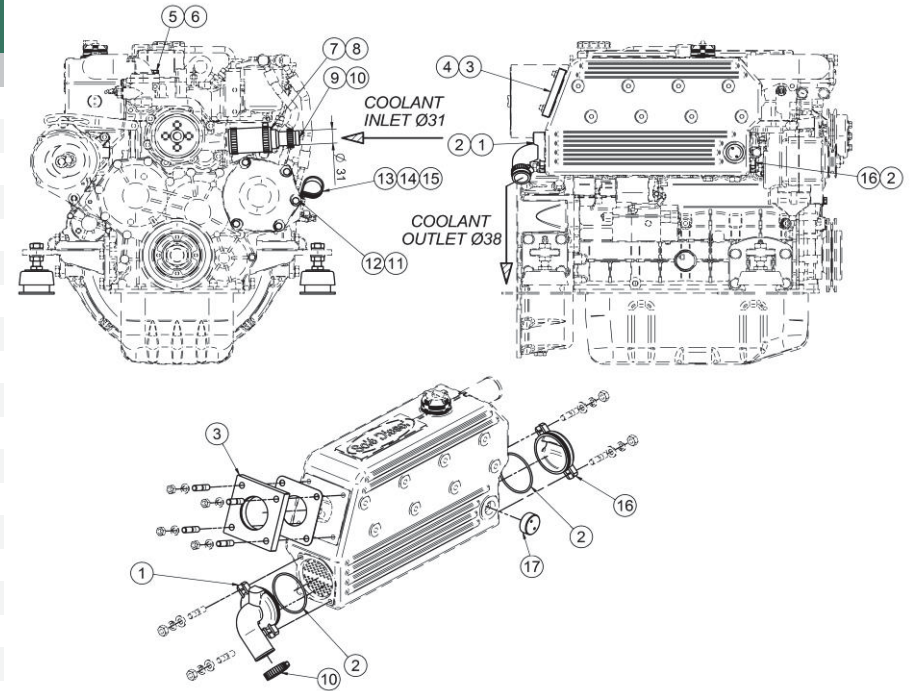


17510106		Pulley 4A D195 (S)			
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	17510106.1	1	Pulley 4A		
2	53038008	4	Washer DIN 6798-A 8		
3	52101264	4	Bolt DIN 931 M8-55 8.8		





17811200 Kit Keel Cooling & Dry Exh. GBox TM (S)					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
	13817018	1	Spacer	16/04/2018	
	17111010	1	Elbow	16/04/2018	
	52102156	1	Bolt DIN 933 M6-16 8.8	16/04/2018	
	52102157	1	Bolt DIN 933 M6-20 8.8	16/04/2018	
	52120006	1	Nut DIN 934 M6 8.8	16/04/2018	
	53033006	2	Washer GROWER DIN 127-6	16/04/2018	
1	18011103	1	Cover,Water Cooler		
2	18011008	2	O-Ring D. 72X3		
3	17813017	1	Exhaust Flange (S)		
5	52102258	1	Bolt DIN 933 M8-25 8.8		
6	53038008	1	Washer DIN 6798-A 8		
7	19411045	1	Pipe 42-54-90		
8	54082032	2	Clamp DIN 3017 32-50/12 W4		
9	17511015	1	Pipe		
10	54082025	3	Clamp DIN 3017 25-40/12 W4		
11	17420046	1	Cover,Gear Case		
12A	52101266	5	Bolt DIN 931 M8-65 8.8		05/06/2018
12B	53033008	5	Washer GROWER DIN 127-8		06/06/2018
13	59071383	1	Clamp TYP.1 38/15 W1		
13	59071452	1	Clamp 1 42/15 W1		
14	51030006	1	Washer DIN 125-6		
15	52102106	1	Bolt DIN 933 M5-15 8.8		
16	18011102	1	Cover,Water Cooler		
17	13311005	1	Plug		
NS	M87503242	0	Water Intake Hose (HQ) D. 32-42 [NS] [VAR]		
NS	58088280	2	Pastic Cable Zip Tie [NS]		



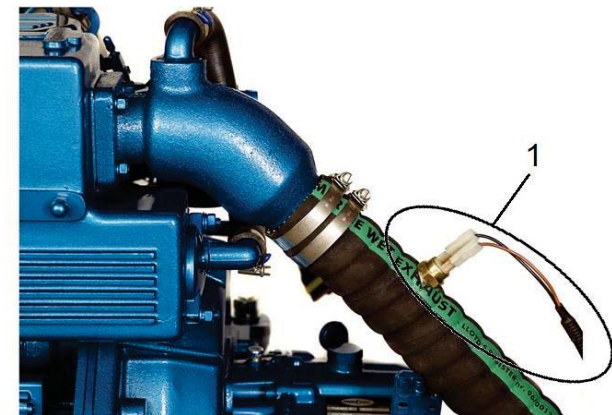
[NS] Not shown

[VAR] Variable according to repair



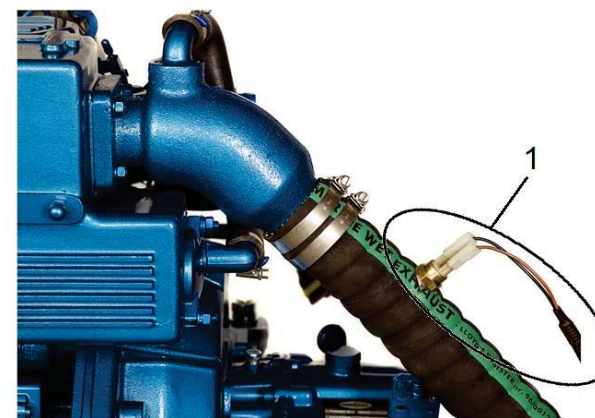


60910024 SVT 30 Panel 12V + Exh. Temp. Alarm Kit					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	60900280	1	Exhaust Temperature Alarm Kit		
2	60910004	1	SVT 30 Panel 12V		



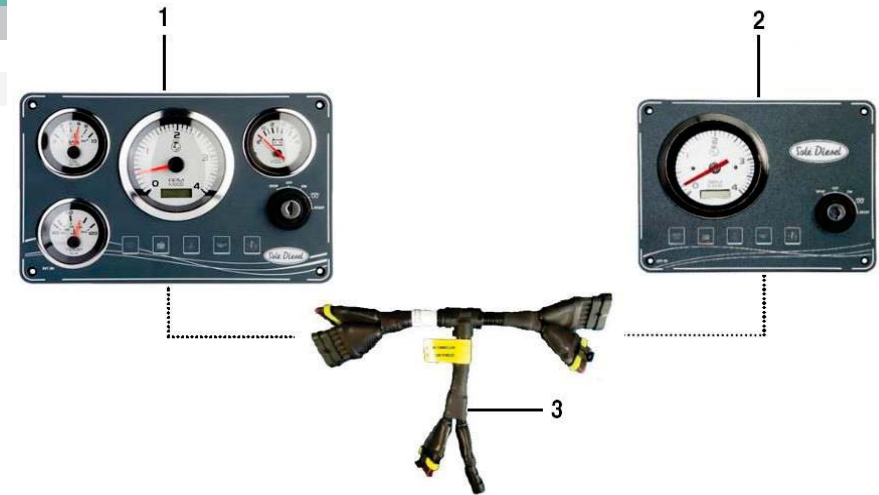


60910025 SVT 30 24V Panel + Exh. Temp. Alarm Kit					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	60900280	1	Exhaust Temperature Alarm Kit		
2	60910005	1	SVT 30 24V Panel		



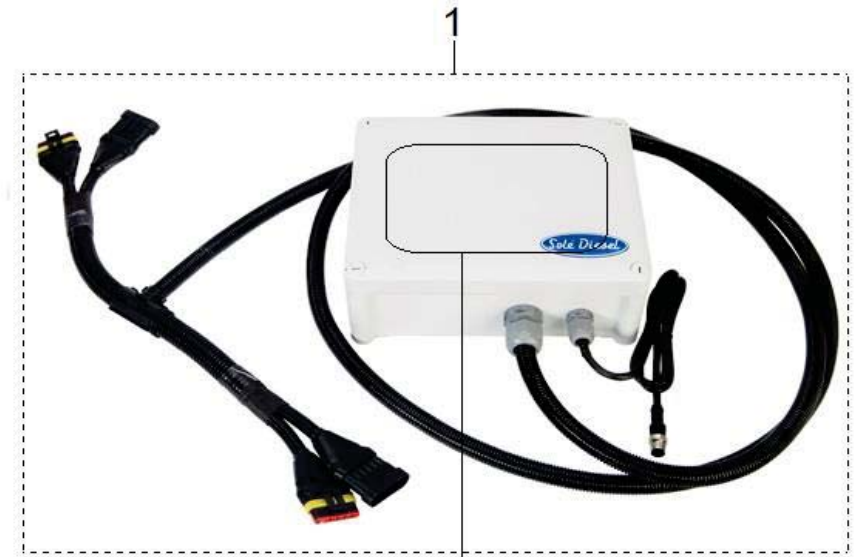


60978130 Kit 2nd Panel SVT 40 SM-82/94 12V					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	60978100	1	SVT 30 SM-82/94 Panel		
2	60978131	1	SVT 40 SM-82/94 Panel		
3	60900210.2	1	T Double Panel DERIVATION		





61478100 Kit SDC 2000 SM-82/94 12V					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	61400200	1	Kit SDC 2000 24V Standard		
2	60900091	2	MICRO Relay 12V 12-20		





61478200 Kit SDC 2000 SM-82/94 24V					
FIG.	REF.	QTY	DESCR.	FROM	UPTO
1	61400200	1	Kit SDC 2000 24V Standard		
2	60900092	2	MICRO Relay 24V 24-10		

