



# Spare Parts Catalog

S 6-80

Material number: 1250.002.680

Current date: 13.04.2023

ZF Friedrichshafen AG  
Hauptverwaltung  
80038 Friedrichshafen  
Deutschland

Telefon: +49 7541 77-0

Telefax: +49 7541 77-908000

[www.zf.com](http://www.zf.com)

zuständiges Werk:  
Friedrichshafen

# Notes relating to the spare parts catalog

## Setup of the spare parts catalog

- Cover sheet
- Technical Cover (only in SDM print)
- Overview of figures
- Figure
- Associated parts list
- Next figure
- Associated parts list
- ...

## Figure and parts list



## Overview of figures

Bildtafel Figure	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
068.08.17	1316.170.001	AUSLEGER	WL	SHIFT TURRET	1	Stk
068.08.06	1316.170.031	DECKEL	WL*H-H *VM	COVER	1	Stk
068.08.14	1316.170.808	DECKEL	WL*AUSL+GEH*H-H*HF160N	COVER	1	Stk
08	1316.170.441	ANSCHLUSSTEILE	WL*NG-VORB*RG-SCHL*168N *BAJONETT	CONNECTING PARTS	1	Stk

The "gap" indicates that there is no separate graphics panel (poster) for this assembly  
The parts of this assembly are shown with the same mid-section number on the figure

### 1 Positions and subpositions

Pos.	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
0370	1315.201.054	RUECKLAUFBOLZEN	KPL.16S151*SG*L= 79	REV.IDLER SHAFT	1	Stk
/0120	0631.329.293	SPANNSTIFT		SLOT. PIN	1	Stk

Positions marked with "/" are the individual items of a completion  
For example: Position 0370 contains a centering pin with the position /0120

### 2 Combinations with standardized parts

Pos.	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
0630		VERSCHL.SCHR.		SCREW PLUG	1	Stk
	0636.302.067	VERSCHL.SCHR.		SCREW PLUG	1	Stk
	0634.801.249	DICHTRING	A 26 X 31	SEALING RING	1	Stk

The parts list shows the components included in the combination of standardized parts

### 3 Depiction of position/item number on the figure and in the parts list

01.620 - on the figure      01 relates to the assembly in which the position is included. Due to program-related reasons, it is shown on the figure.

0620 - in the parts list

Pos.	Sachnummer Product number	Benennung (Description)	Technische Info Technical info	Description (Benennung)	Menge Quantity	Einheit Unit
0620	0732.040.736	DRUCKFEDER		COMPRESSION SPRING	1	Stk

### 4 \*-Positions

Positions marked with an \* are optional i.e. inclusion in the parts list is not mandatory.  
The following note is shown on the figure

je nach Stücklistenausführung  
depending on spec. number  
\*  
suivant la nomenclature  
secondo la distinta base

### 5 Parts, dotted display

Parts with dotted display on the figure are only used for orientation of other parts

# Technical Cover

Page 1 from 3

Material number: 1250.002.680



S 6-80 /

Pos.	Information	Amendment number
001	Use case -----	
002	Customer NEOPLAN Bus	
003	City Stuttgart	
004	DUNS 31-581-9615	
005	Vehicle / Apparatus -----	
006	Sales Name N216	
007	Manufacturer NEOPLAN Bus	
008	Engineering Name	
009	Product Use BUS	
010	Vehicle/Hardware Type COACH	
011	SOP	
012	Engine	
013	Sales Designation	
014	Manufacturer Daimler	
015	Eng.Displ.	
016	Cylinder	
017	Nom. power 188 kW	
018	RPM at nom. power 2500 1/min	
019	Nom. torque 814 Nm	
020	RPM at nom. torque 1600 1/min	
021	Classification use case -----	
031	DYNAMIC TYRE RADIUS 526 mm	
034	REAR AXLE RATIO 6.34	
042	PERMISS.GROSS VEHICLE WEIGHT 16 t	
044	Product description -----	
045	INSTALLATION POS TRANSMISSION HORIZONTAL RIGHT	
046	TRANSMISSION ATTACHMENT FLANGE-MOUNTED	
047	INSTALLATION POSITION PRODUCT REAR	
048	RATIO, BOTTOM GEAR 6.7	
049	RATIO, TOP GEAR .73	
050	RATIO, 1ST GEAR 6.7	
051	SET OF RATIOS SG	
052	RATIO, 2ND GEAR 3.86	

# Technical Cover

Page 2 from 3

Material number: 1250.002.680



S 6-80 /

Pos.	Information	Amendment number
053	RATIO, 3RD GEAR 2.34	
054	RATIO, 4TH GEAR 1.44	
055	RATIO, 5TH GEAR 1	
056	RATIO, 1ST GEAR REVERSE 6.31	
057	RATIO, 6TH GEAR .73	
060	DESIGN, SHIFT SYSTEM TURNING SHAFT	
061	POSITION, GEAR SHIFT SYSTEM TOP	
062	DESIGN, SEPARATING CLUTCH FULL-SYNCHRONIZED	
063	REFERENCE LENGTH INPUT SHAFT 286 mm	
064	STANDARD TYPE INPUT SHAFT SAE	
065	NUMBER OF WEDGES INPUT SHAFT 10	
066	VERSION OF INPUT SHAFT FORM C	
069	NOMINAL DIAMETER INPUT SHAFT 1.75 in	
079	DIAMETER, RELEASE FLANGE 54 mm	
080	TYPE FIT RELEASE BEARING FLA. F8	
081	DESIGN BEARING OUTPUT STANDARD SUSPENSION	
082	OUTER DIA. OUTPUT FLANGE RA 150 mm	
083	NO.OF BORES OUTPUT FLANGE HA1 8	
084	BORE DIA. OUTPUT FLANGE RA 12.1 mm	
087	REF. LENGTH OUTPUT FLANGE RA 130.5 mm	
090	DIMENSION SHIFT TURRET DIST. 229.5 mm	
093	RADIUS 1 SHIFT LEVER 65 mm	
099	LENGTH G CONNECTION PART 47 mm	
100	LEVER POSITION SHIFTING OUTPUT B	
102	SHIFT CONNECTION DISTANCE S 90 mm	
104	LOCATION SUPPORTING POINT M	
106	ADJUST.DIMENSION DRAW BAR Z 280 mm	
119	SPRING FORCE DETENT PLUNGER RG 120 N	
121	DESIGN JOINT BALL JOINT NOT SPRING-LOAD	
123	DESIGN ASSEMBLY BALL JOINT JOINT POS.Y	
125	SELECTION PATTERN VARIANT GEAR SHIFT PATTERN 1	
127	LENGTH HAND LEVER 1 715 mm	
128	RATIO MECHANIC TACHO INPUT 2	

# Technical Cover

Page 3 from 3

Material number: 1250.002.680



S 6-80 /

Pos.	Information	Amendment number
130	ASSEMBLY POS. ANGLE TACHO OUTPUT 1	
131	SWITCH, REVERSE GEAR y	
132	DESIGN, RG (REV.GEAR) SWITCH CLOSING	
133	NOTE ON SWITCH, REVERSE GEAR DETENT PLUNGER	
136	REF.LENGTH,RELEASE BEAR.FLAN 170 mm	
147	ASSEMBLY TYPE RC-BLOCK 1 A	
151	SUPPORT POINT RC- BLOCK 1 n	
205	OIL CAPACITY, GEARBOX 13 dm3	
206	OIL GRADE PERMISSIBLE ACC. TO TE-ML02	
207	COLOR JET BLACK	
209	COLOUR CLASSIFICATION ACC. TO RAL 9005	
210	PAINTING, ZF STANDARD 915 W	
213	CODING OUTER CONSERVATION KA1	
214	SCOPE OUTER CONSERVATION T	
215	CODING INNER CONSERVATION KI1	
216	CONSERVATION SPECIFICATION ZFN 916	
217	CODING NUMBER OF PLUGS S03	

# Assembly group overview

Page 1 from 1

Material number: 1250.002.680



S 6-80 /

Picture	Pos.	Material number	Name	Quantity	Amend. no.	Techn. Info.
035.01.01-1	110	1250.101.019	TRANSMISSION HOUSING	1		
035.02.01-1	130	1250.102.035	INPUT SHAFT	1		
035.02.40-1	140	1250.102.402	CONNECTION PLATE	1		
	150	1250.102.800	INPUT SHAFT	1		
035.03.05-1	160	1250.103.042	COUNTERSHAFT	1		
035.03.42-1	180	1250.103.800	COUNTERSHAFT	1		
035.04.04-1	200	1250.104.226	MAIN SHAFT	1		
035.04.42-1	210	1250.104.416	MAIN SHAFT	1		
035.05.01-1	220	1250.105.002	RETURN	1		
035.06.07-1	230	1250.106.077	SHIFT SYSTEM	1		
035.07.01-1	250	1268.107.180	HOUSING COVER	1		
	260	1268.107.404	HOUSING COVER	1		
035.07.21-1	270	1268.107.474	GEARSHIFT SHAFT	1		
033.07.10-1	280	1250.107.554	SHIFT TURRET	1		
	288	1268.107.400	CONNECTING PARTS	1		
	300	1250.107.545	CONNECTING PARTS	1		
033.12.01-1	310	1268.149.019	SET OF SPRINGS	1		
033.14.40-1	320	1283.122.001	SUPPORT	1		
033.14.40-1	330	1268.122.426	SUPPORT	1		
035.18.11-1	360	1250.108.102	SPEEDOMETER COVER	1		
	370	1250.108.800	SPEEDOMETER COVER	1		
015.98.04-1	38	6005.183.003	SHIFT SYSTEM	1		
015.98.40-1	40	6005.183.404	SHIFT LEVER	1		

# Picture

Page 1 from 1

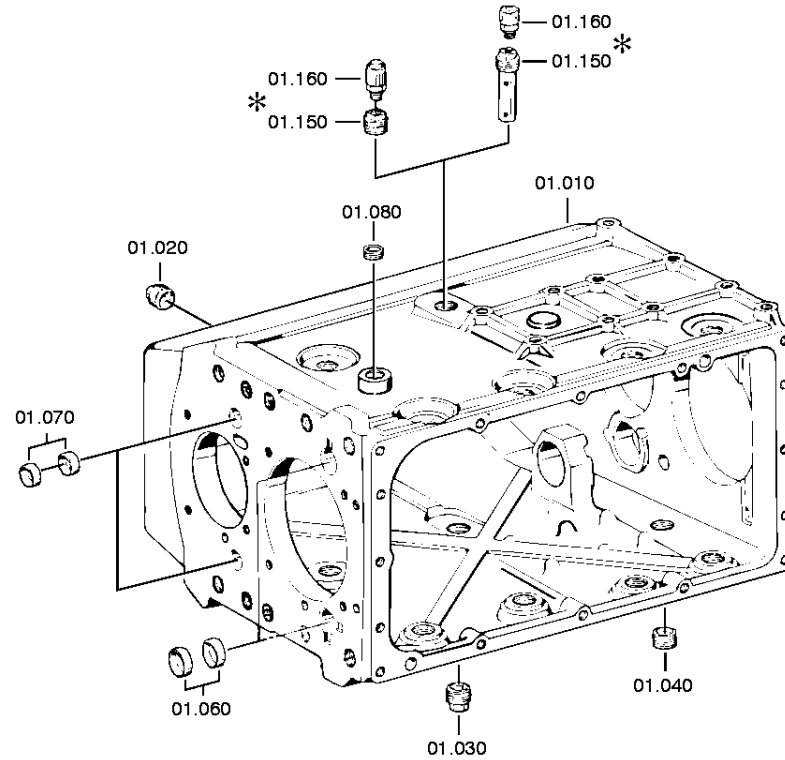
Material number: 1250.002.680

Picture: 035.01.01-1

Material-assembly-group-no: 1250.101.019



S 6-80 /  
TRANSMISSION HOUSING



# Picture

Page 1 from 2

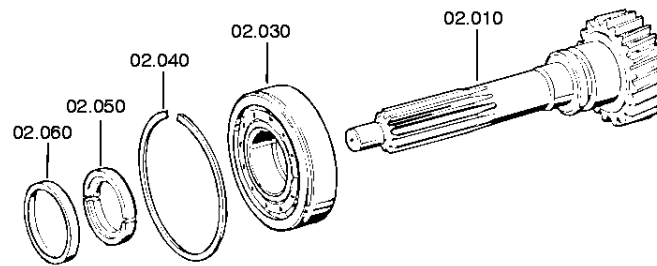
Material number: 1250.002.680

Picture: 035.02.01-1

INPUT SHAFT



S 6-80 /  
INPUT SHAFT





# Picture

Page 2 from 2

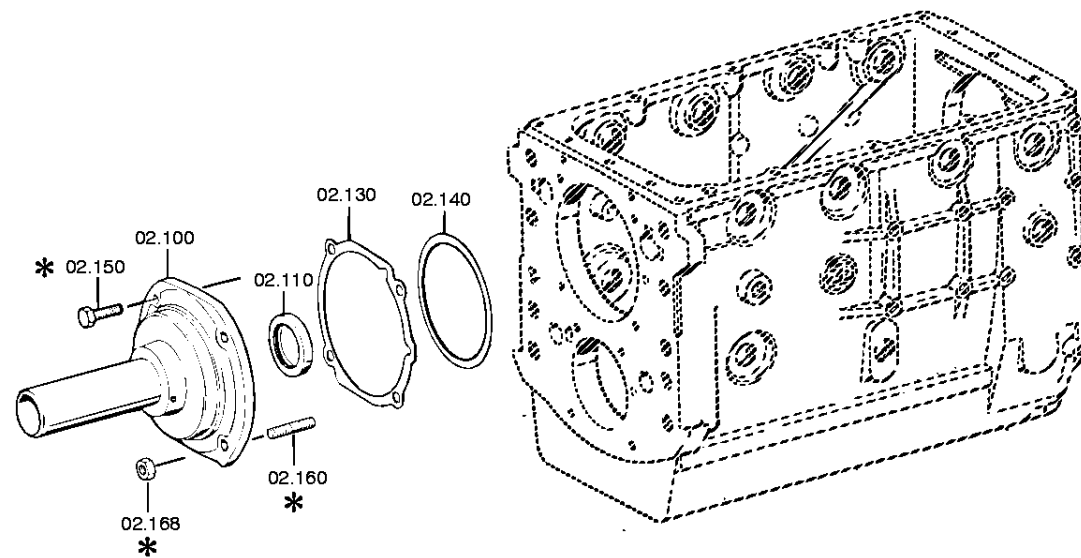
Material number: 1250.002.680

Picture: 035.02.40-1

INPUT SHAFT



S 6-80 /  
INPUT SHAFT



# Picture

Page 1 from 2

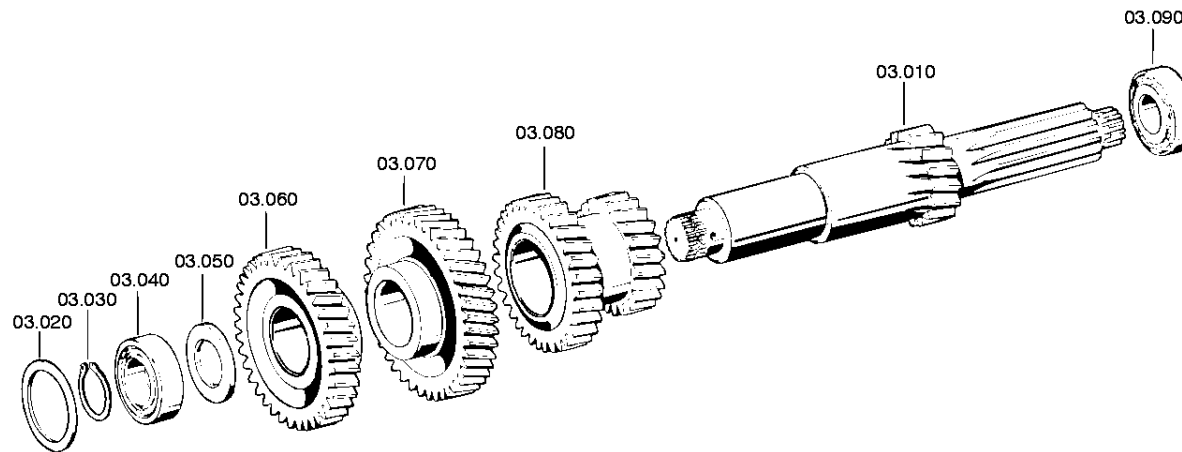
Material number: 1250.002.680

Picture: 035.03.05-1

COUNTERSHAFT



S 6-80 /  
COUNTERSHAFT



# Picture

Page 2 from 2

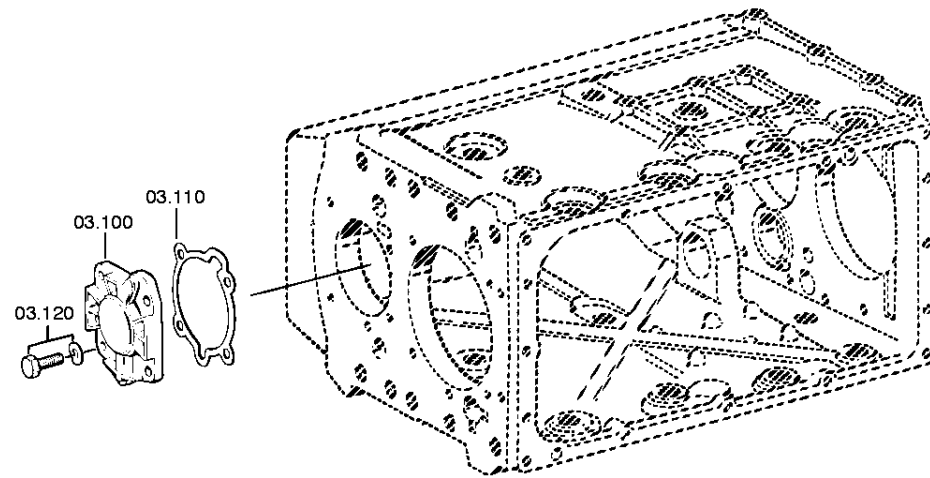
Material number: 1250.002.680

Picture: 035.03.42-1

COUNTERSHAFT



S 6-80 /  
COUNTERSHAFT



# Picture

Page 1 from 2

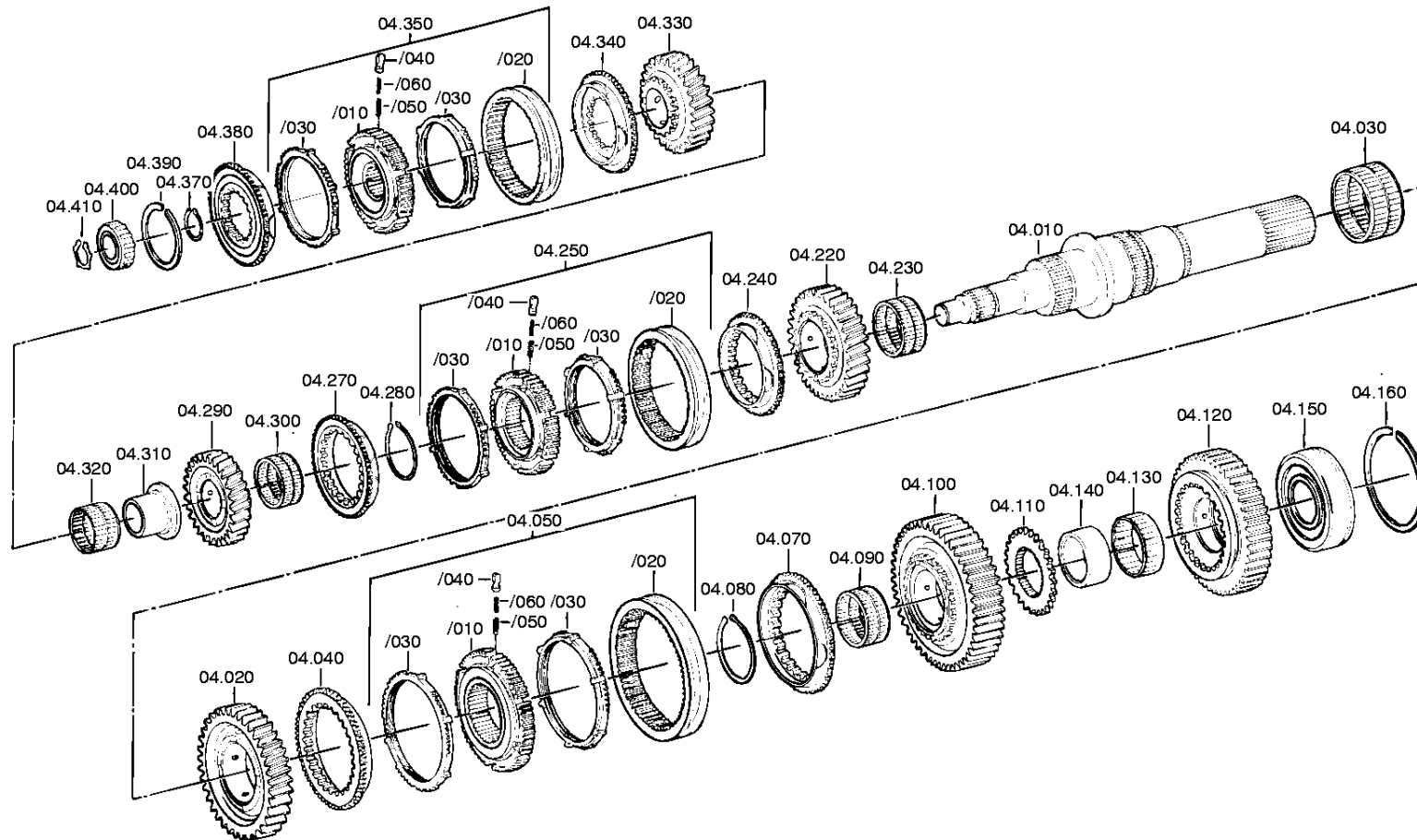
Material number: 1250.002.680

Picture: 035.04.04-1

MAIN SHAFT



S 6-80 /  
MAIN SHAFT



# Picture

Page 2 from 2

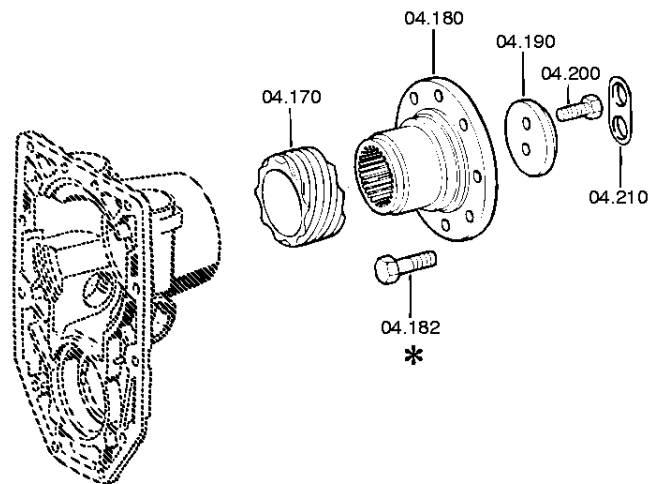
Material number: 1250.002.680

Picture: 035.04.42-1

MAIN SHAFT



S 6-80 /  
MAIN SHAFT



# Picture

Page 1 from 1

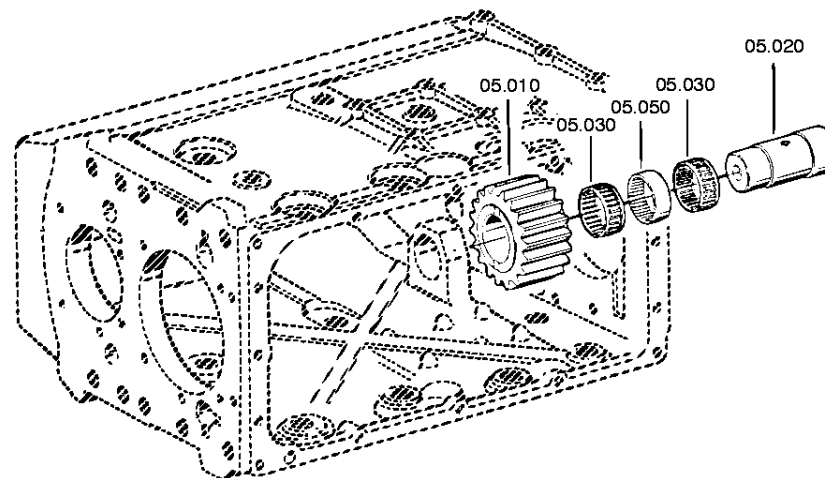
Material number: 1250.002.680

Picture: 035.05.01-1

Material-assembly-group-no: 1250.105.002



S 6-80 /  
RETURN



# Picture

Page 1 from 1

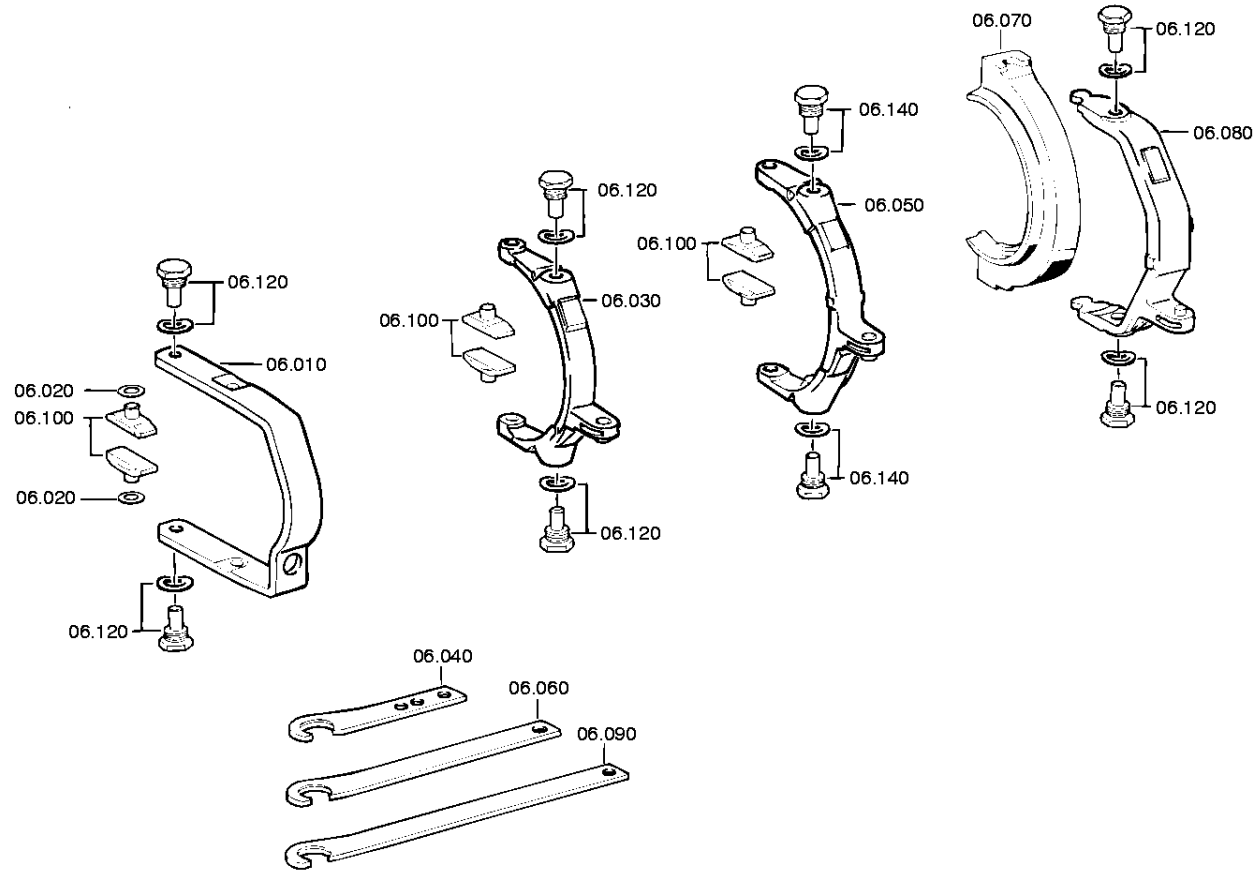
Material number: 1250.002.680

Picture: 035.06.07-1

Material-assembly-group-no: 1250.106.077



S 6-80 /  
SHIFT SYSTEM



# Picture

Page 1 from 3

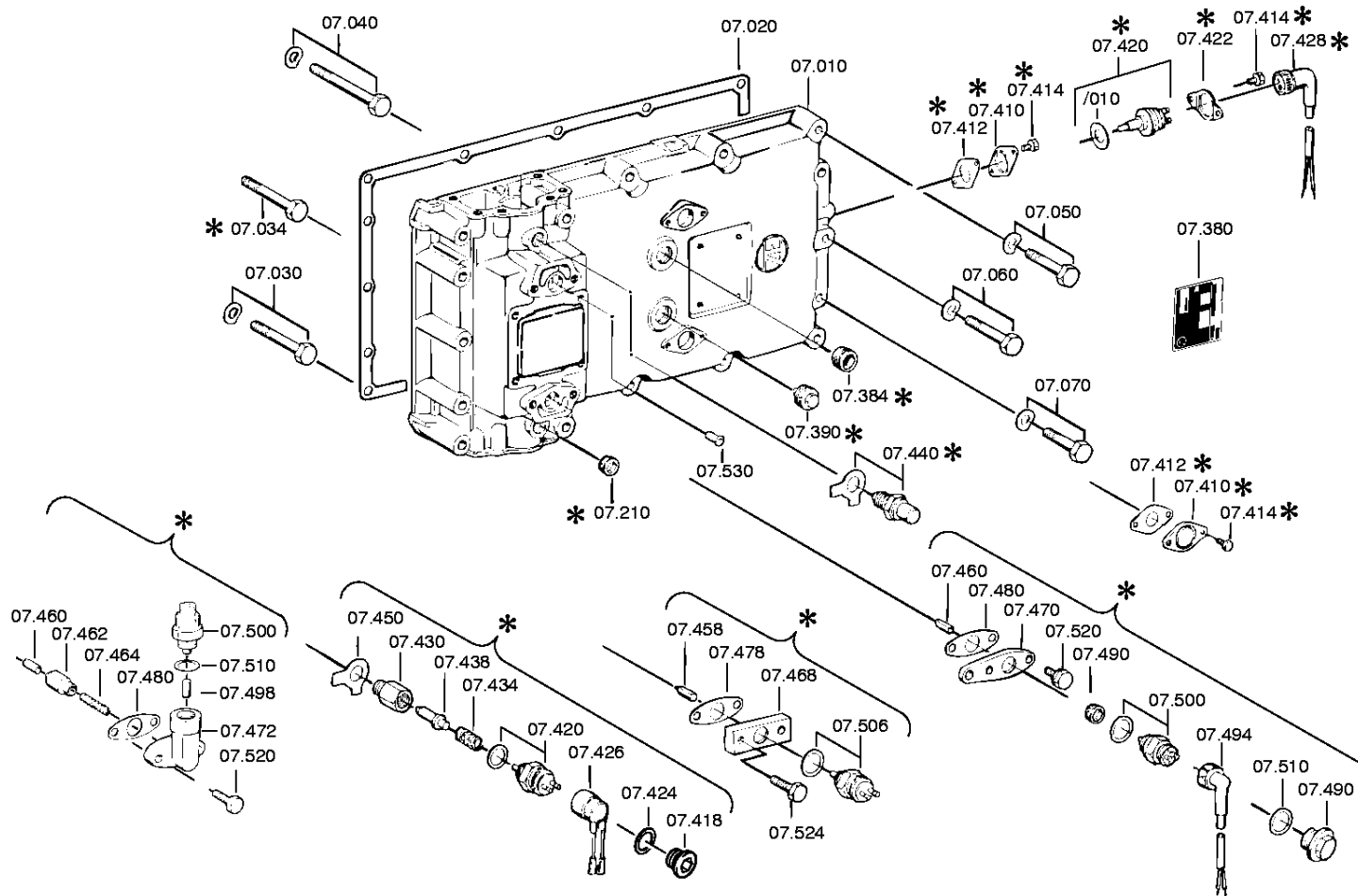
Material number: 1250.002.680

Picture: 035.07.01-1

HOUSING COVER



S 6-80 /  
HOUSING COVER





# Picture

Page 2 from 3

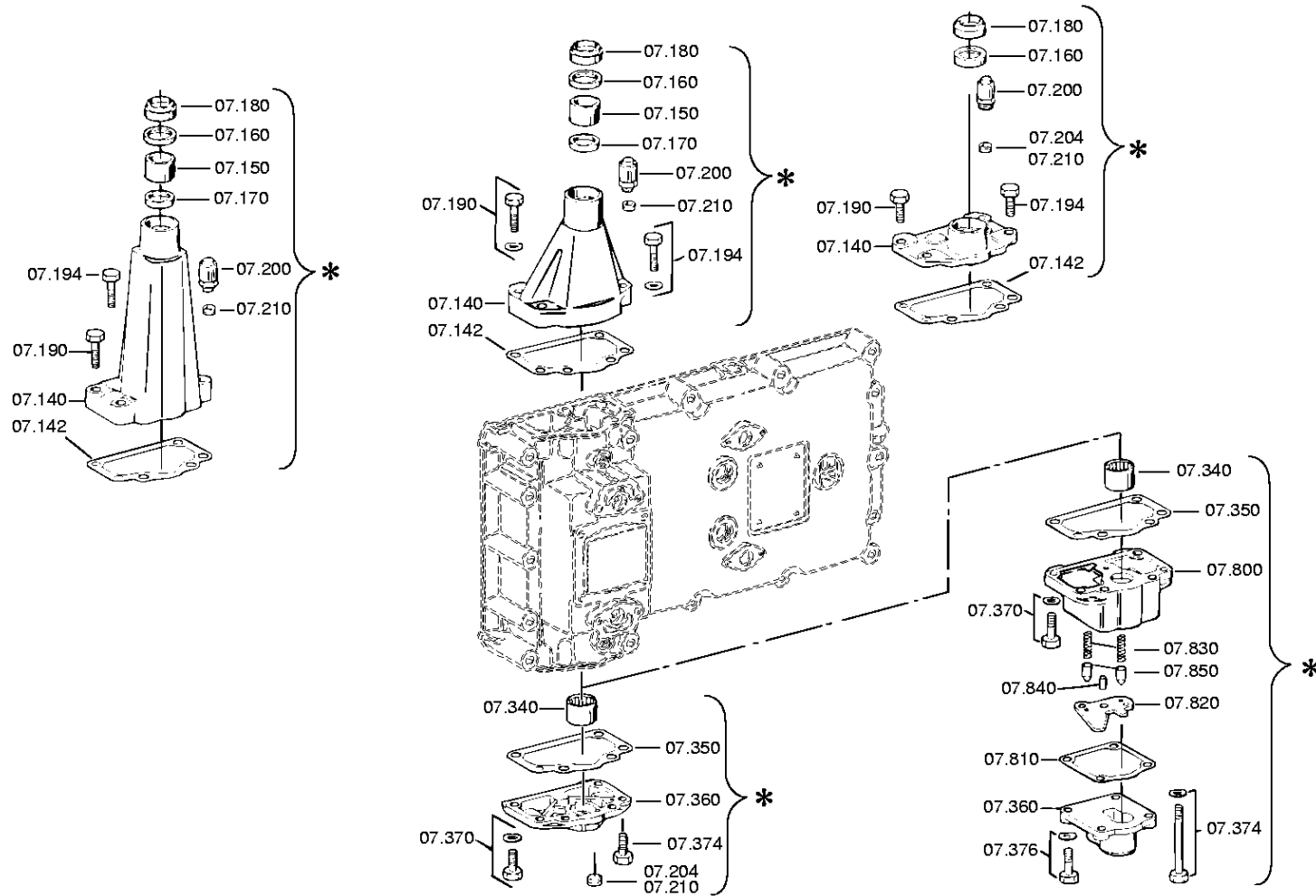
Material number: 1250.002.680

Picture: 033.07.10-1

HOUSING COVER



S 6-80 /  
HOUSING COVER



# Picture

Page 3 from 3

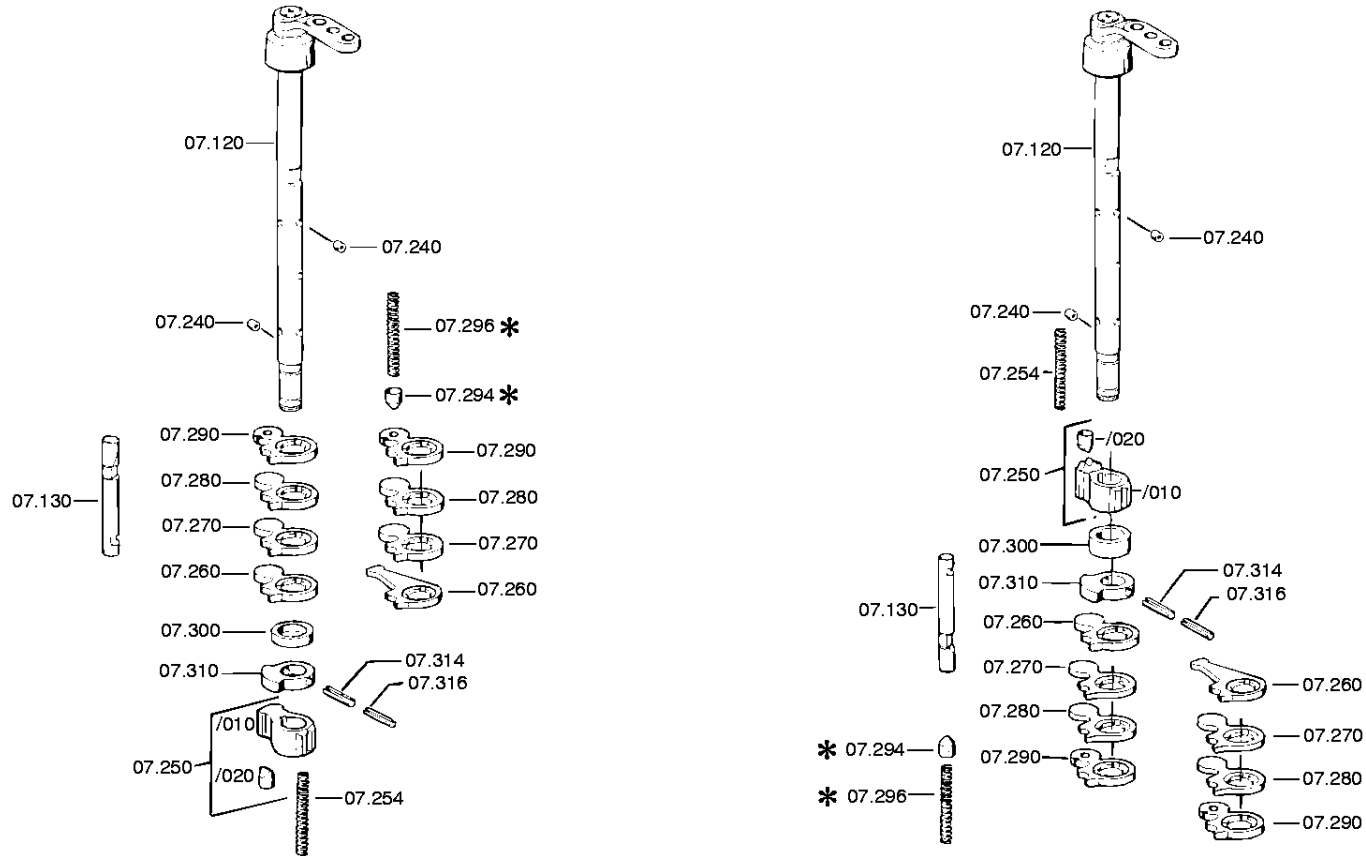
Material number: 1250.002.680

Picture: 035.07.21-1

HOUSING COVER



S 6-80 /  
HOUSING COVER



# Picture

Page 1 from 1

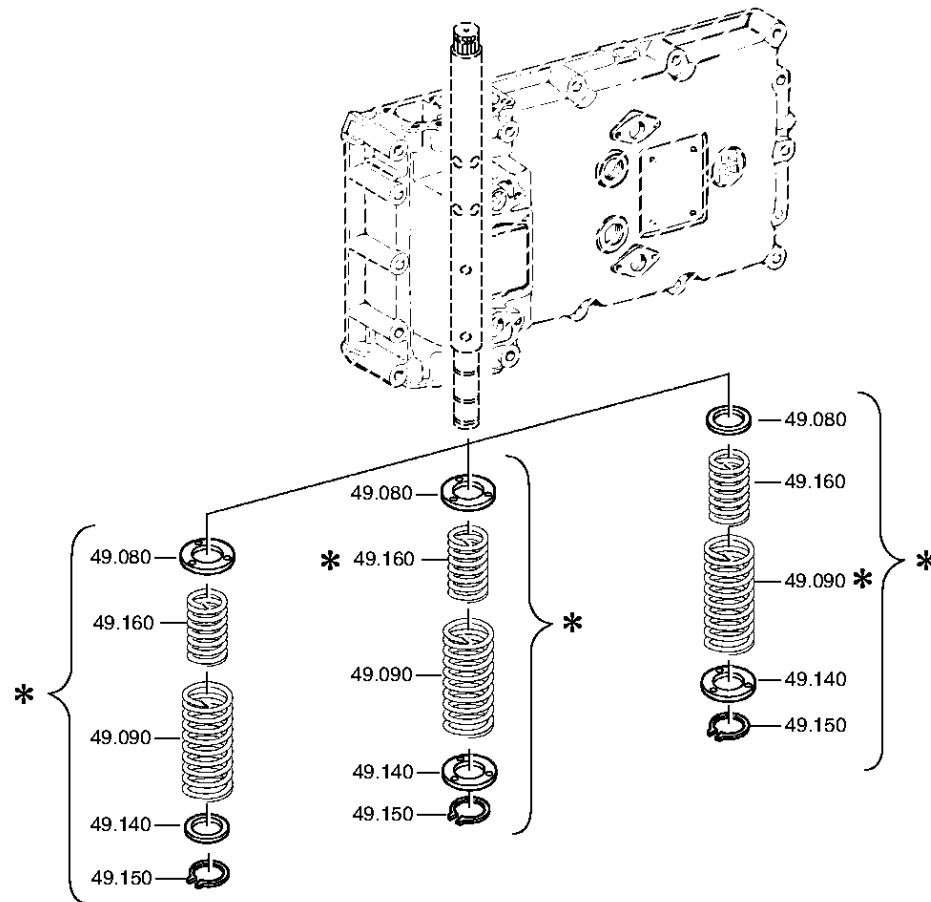
Material number: 1250.002.680

Picture: 033.12.01-1

Material-assembly-group-no: 1268.149.019



S 6-80 /  
SET OF SPRINGS



# Picture

Page 1 from 1

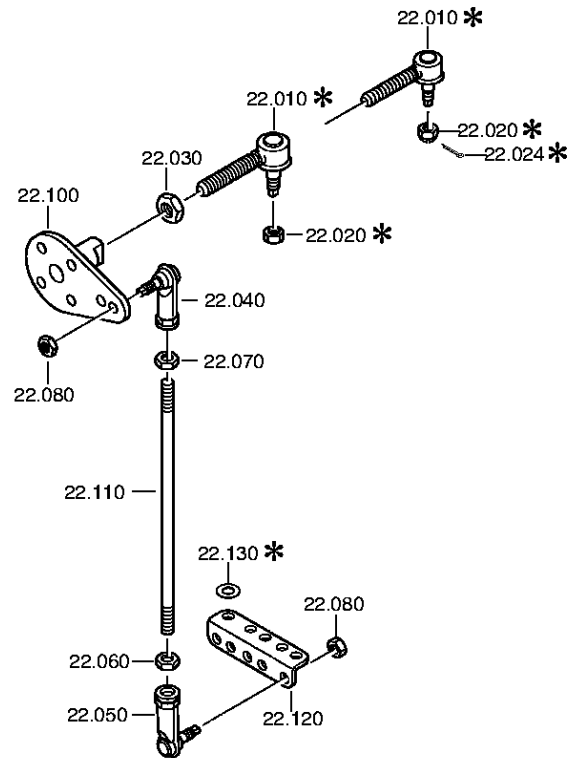
Material number: 1250.002.680

Picture: 033.14.40-1

SUPPORT



S 6-80 /  
SUPPORT



# Picture

Page 1 from 1

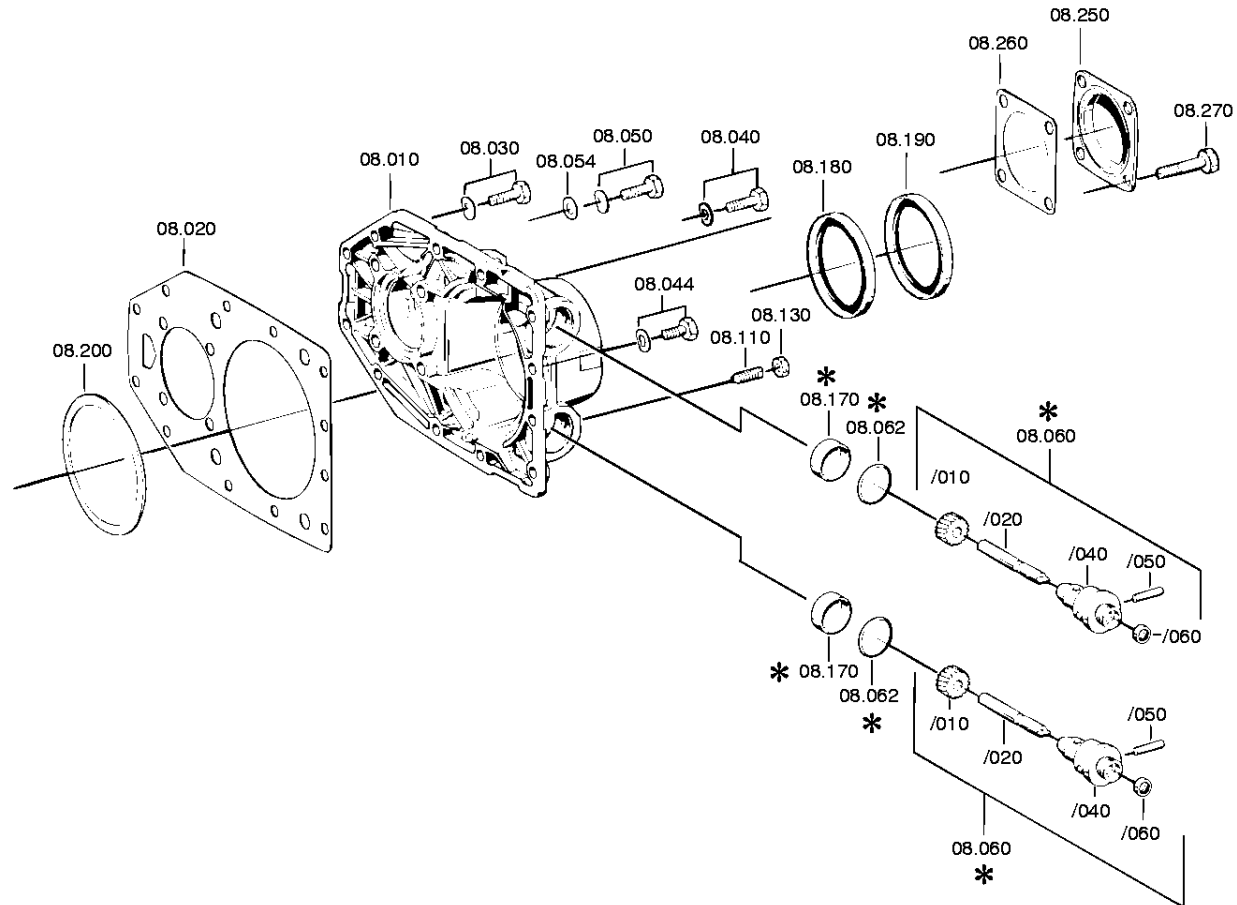
Material number: 1250.002.680

Picture: 035.18.11-1

SPEEDOMETER COVER



S 6-80 /  
SPEEDOMETER COVER



# Picture

Page 1 from 2

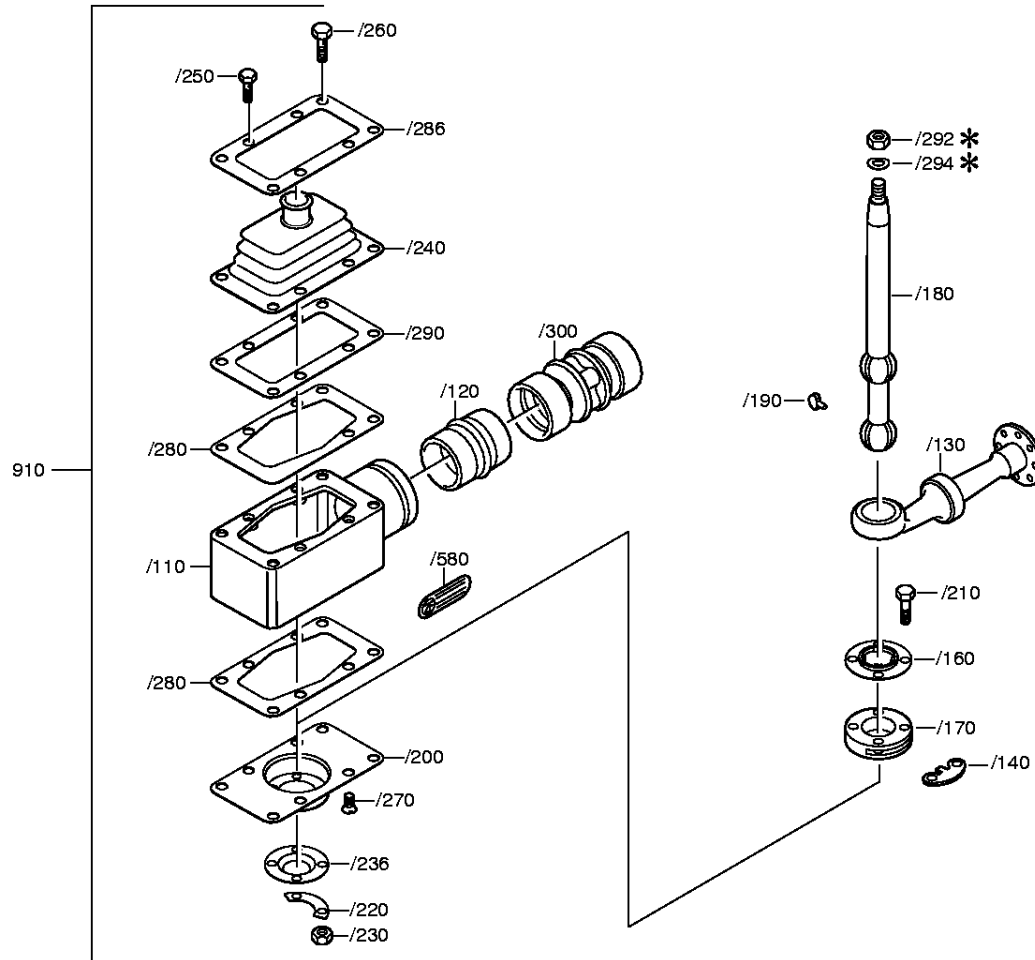
Material number: 1250.002.680

Picture: 015.98.04-1

SHIFT SYSTEM



S 6-80 /  
SHIFT SYSTEM



# Picture

Page 2 from 2

Material number: 1250.002.680

Picture: 015.98.40-1

SHIFT SYSTEM



S 6-80 /  
SHIFT SYSTEM

