



**SINOTRUK**

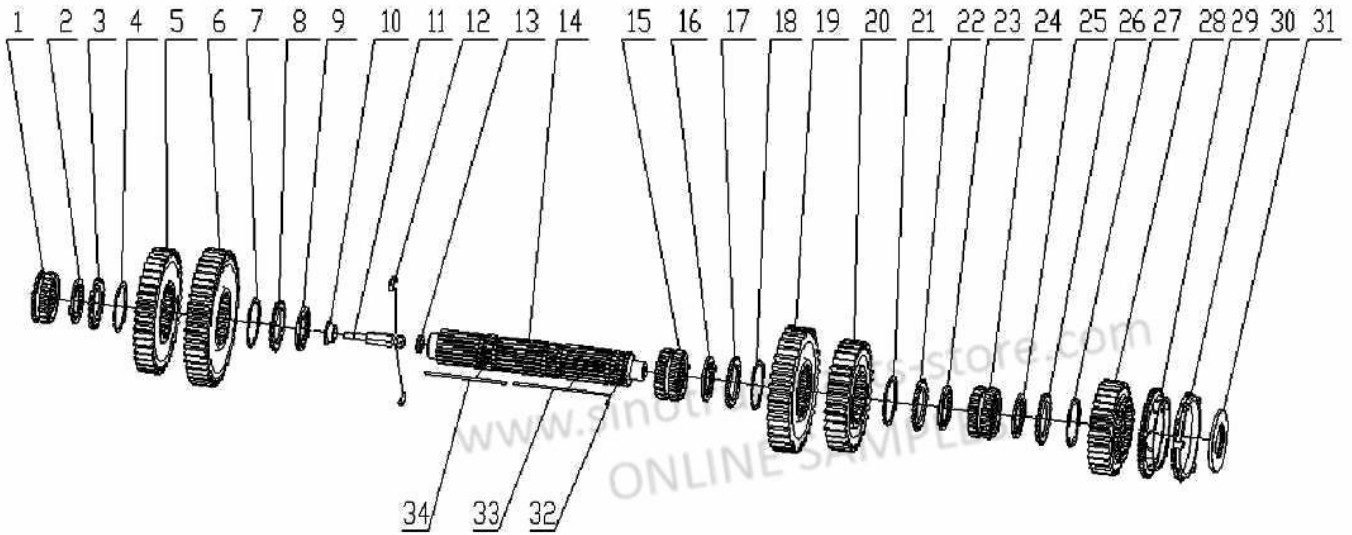
**HW20716 TRANSMISSION**

**SPARE PARTS CATALOG**

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主轴总成



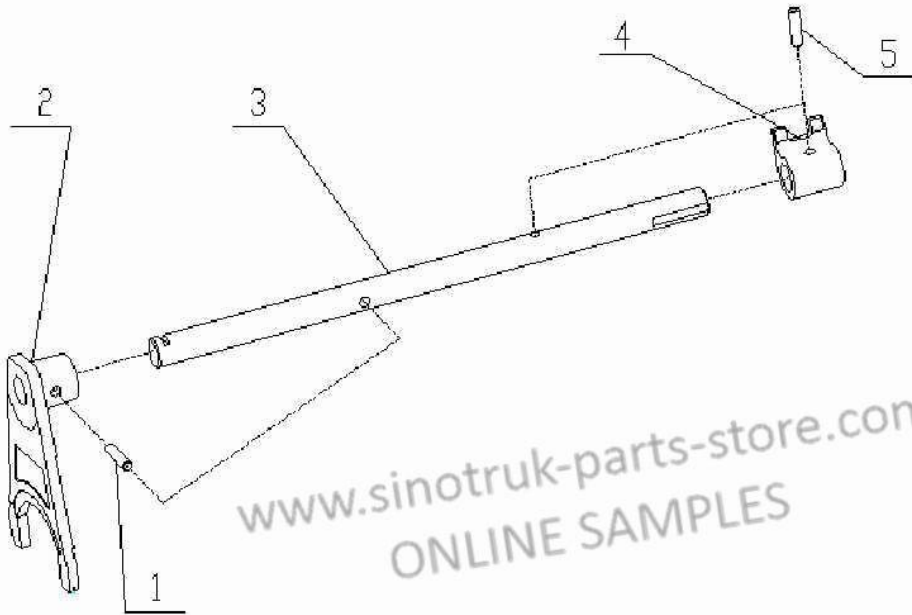
MAIN SHAFT ASSY

SINOTRUK HW20716 TRANSMISSION

Serial	Number	Name	Quantity
1	AZ2210040011	reverse gear sleeve	1
2	WG2210040021~24	spline adjusting gasket	1
3	WG2210040012	spline retaining gasket	1
4	WG2229040003	clamp	1
5	WG2210040007	main shaft reverse gear	1
6	WG2210040006	main shaft first gear	1
7	WG2229040003	clamp	1
8	WG2210040012	spline retaining gasket	1
9	WG2210040023	spline adjusting gasket	1
10	AZ2229040013	bulb pressure ring	1
11	WG2229040111	bulb	1
12	AZ2207040001	bulb seat ring	1
13	AZ2229040012	bulb seat ring	1
14	WG2210040101	main shaft	1
15	WG2210040010	main shaft sliding sleeve	1

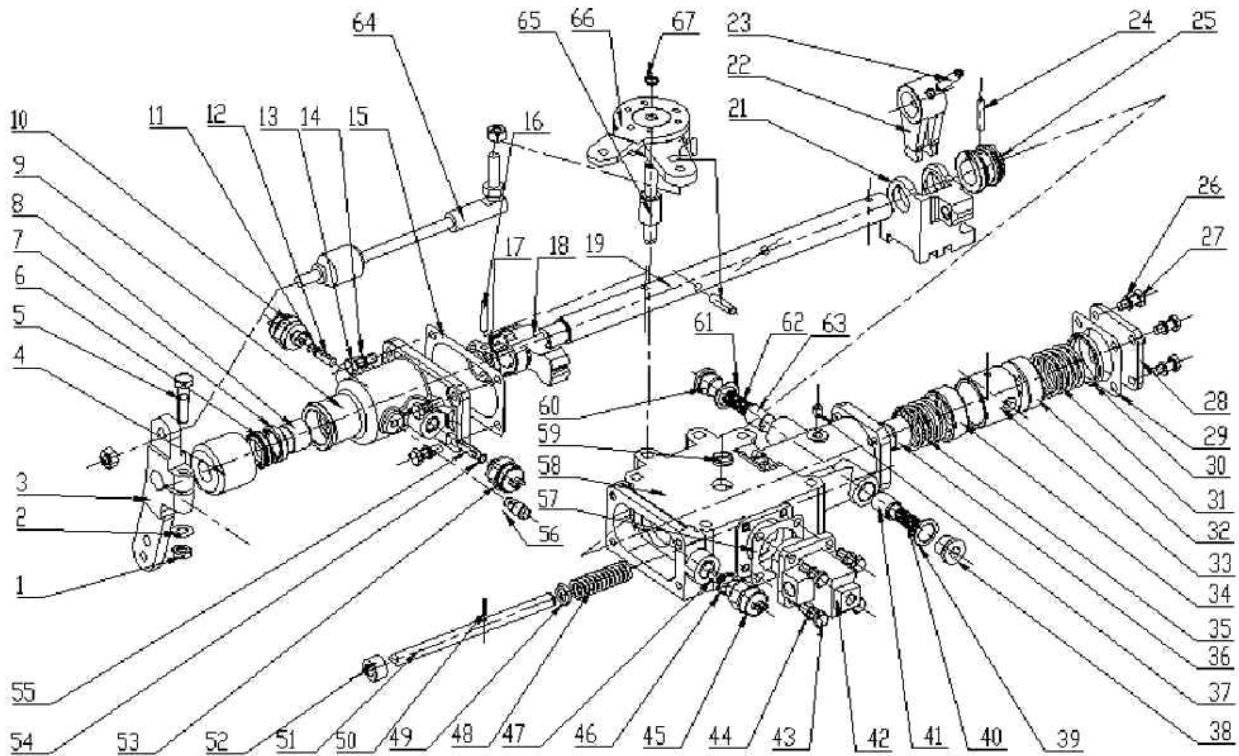
16	WG2210040021~24	spline adjusting gasket	1
17	WG2210040012	spline retaining gasket	1
18	WG2229040003	clamp	1
19	WG2210040006	main shaft second gear	1
20	WG2210040005	main shaft third gear	1
21	WG2229040003	clamp	1
22	WG2210040012	spline retaining gasket	1
23	WG2210040023	spline retaining gasket	1
24	WG2210040010	main shaft sliding sleeve	1
25	WG2210040021~24	spline adjusting gasket	1
26	WG2210040012	spline retaining gasket	1
27	WG2229040003	clamp	1
28	WG2210040003	driving main gear	1
29	WG2210020003	insert gear synchronizer cone boss	1
30	AZ2210020004	insert synchronizer ring	1
31	WG2210040002	main shaft big retaining gasket	1
32	Q5280310	elastic column pin	1
33	WG2229040001	hex key	1
34	WG2229040002	hex key	1

一、二档拨叉轴总成



FIRST & SECOND GEAR SELECTOR ROD			
SINOTRUK HW20716 TRANSMISSION			
Serial	Number	Name	Quantity
1	AZ2229220002	pin	1
2	WG2214220001	selector	1
3	WG2212220002	selector rod	1
4	WG2214220003	forward gear shifting block	1
5	AZ2229220001	pin	1

小盖组件（双杆）



SMALL CAP SET (DOUBLE ROD)

SINOTRUK HW20716 TRANSMISSION

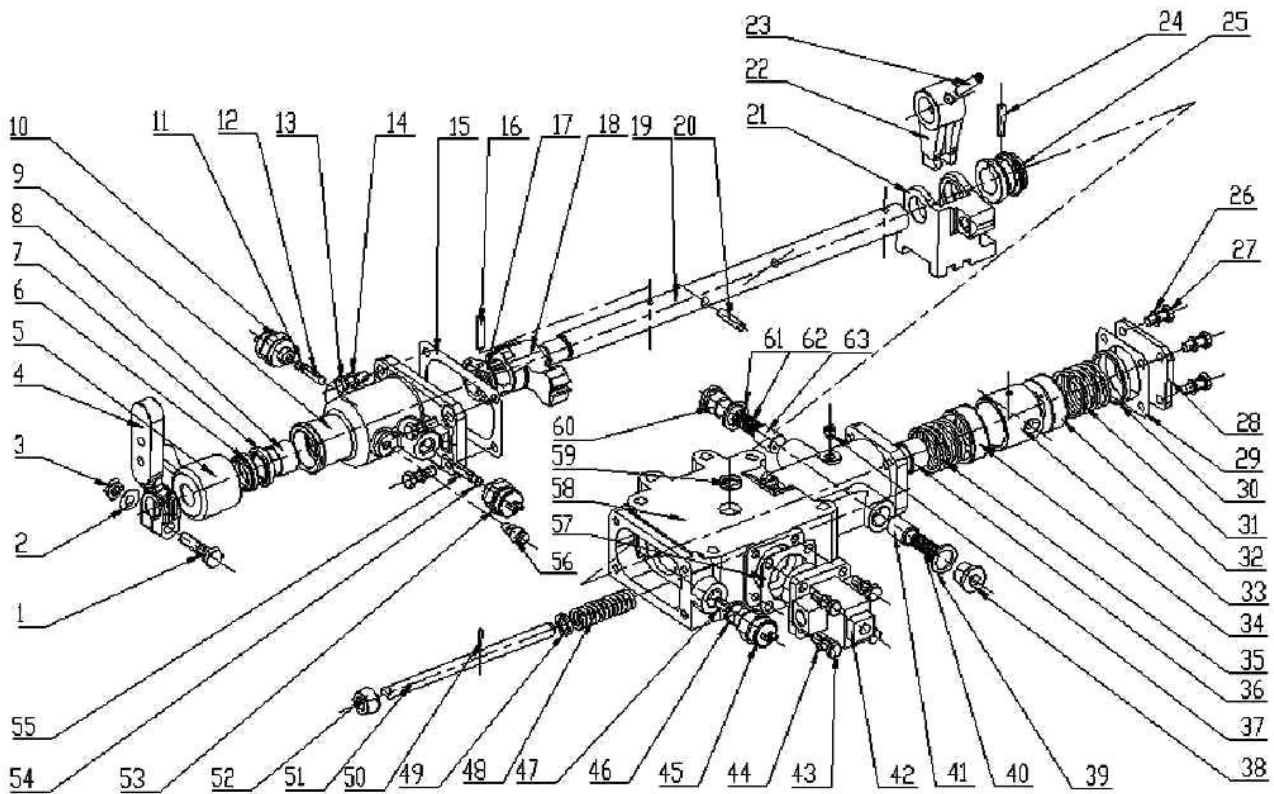
Serial	Number	Name	Quantity
1	Q340B10T13F2	I type hex nut	1
2	Q41810	spring gasket	1
3	WG2214210004	shifting rocking arm	1
4	WG2229210026	dustproof cover	1
5	Q150B1040TF2	hex head bolt	1
6	AZ9003072502	outer oil seal	1
7	AZ9003072501	inner oil seal	1
8	WG2229002520	compound bushing SF225X28X20	1
9	WG2222210003	end cover of small cap (rocking arm side)	1
10	179100710068	pressure switch (open)	1
11	Q43708	steel retaining ring for shaft	1
12	WG2229210028	sensor lifting pin	1
13	Q150B0825	hex head bolt	4
14	Q40308	spring gasket	4
15	WG2229210017	end cover gasket	1

16	Q5280632	elastic column pin	1
16、24	Q5280632	elastic column pin	1
17	WG2229210014	sensor driving ring	1
18	WG2229210013	self locking block	1
19	WG2212210003	shifting shaft (double shaft)	1
20	WG2229210012	driving pin	1
21	WG2214210001	interlocking fork	1
22	WG2214210002	shift head	1
23	WG2229210009	pin	1
25	WG2229210002	high-low gear positioning ring	1
26	Q40308	spring gasket	4
27	Q150B0820	hex head bolt	4
28	WG2229210023	end cover of small cap (range gear lock side)	1
29	WG2229210024	end cover gasket	1
30	WG2229210022	retainer	1
31	WG2229210021	spring	1
32	WG2229210004	seat ring	1
33	WG2229210005	spacer sleeve	1
34	WG2229210004	seat ring	1
35	WG2229210003	spring	1
36	WG2229002520	compound bushing SF225X28X20	1
37	WG2229210006	screw	1
38	190003960005	inner hex column screw plug	1
39	Q72320	sealing gasket	1
40	WG2229210020	range gear lock spring	1
41	WG2229210018	range gear locking pin	1
42	AZ2203250001	double H valve	
43	Q218B0820	inner hex column head screw	
44	Q40308	spring gasket	
45	WG2209280002	pressure switch (closed)	
46	WG2229280001	sealing gasket	
47	WG2229210027	neutral position sensor lifting pin	
48	WG2229210015	self locking spring	1
49	WG2229210011	spring retainer	1
50	AZ9003343178	needle bearing	1
51	WG2212210002	self locking pin shaft	1
52	WG2229210001	bushing	1
53	WG2209280003	pressure switch (open)	1

54	Q43708	steel retaining ring for shaft	1
55	WG2229210028	neutral position sensor lifting pin	1
56	Q901	breather plug	1
57	AZ2229250005	gasket for double H valve	
58	AZ2222210101	small cap housing	1
59	Q72220	plug	1
60	190003960005	inner hex column plug	1
61	Q72320	sealing gasket	1
62	WG2229210020	range gear locking spring	1
63	WG2229210018	range gear locking pin	1
64	WG2229210041	supporting rod	1
65	WG2229270003	selector supporting rod	1
66	WG2229210040	selector rod	1
67	Q43112	elastic retaining ring for shaft	1



小盖组件（单杆）

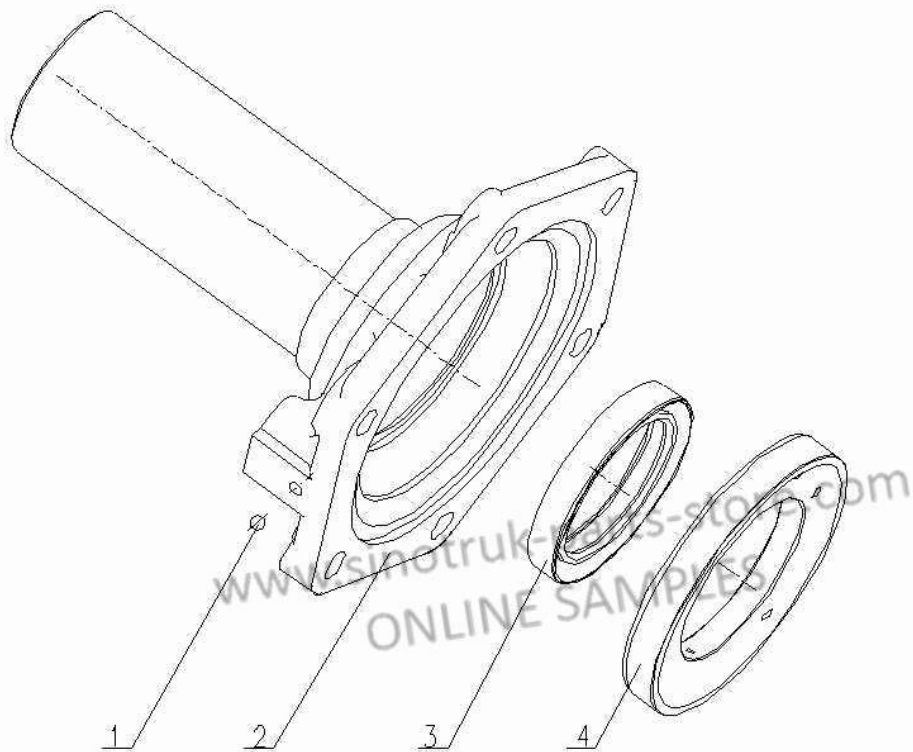


SMALL CAP SET (SINGLE ROD)			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	Q150B1040TF2	hex head bolt	1
2	Q41810	elastic gasket	1
3	Q340B10T13F2	I type hex nut	1
4	AZ2214210003	shifting rocking arm	1
5	WG2229210026	dustproof cover	1
6	AZ9003072502	outer oil seal	1
7	AZ9003072501	inner oil seal	1
8	WG2229002520	compound bushing SF225X28X20	1
9	AZ2222210002	end cover of small cap (rocking arm side)	1
10	179100710068	pressure switch (open)	1
11	Q43708	steel retaining ring for shaft	1

12	WG2229210028	sensor lifting pin	1
13	Q150B0825	hex head bolt	4
14	Q40308	spring gasket	4
15	WG2229210017	end cover gasket	1
16	Q5280632	elastic column pin	1
17	WG2229210014	sensor driving ring	1
18	WG2229210013	self locking block	1
19	AZ2212210001	shifting shaft	1
20	WG2229210012	driving pin	1
21	WG2214210001	interlocking fork	1
22	WG2214210002	shift head	1
23	WG2229210009	pin	1
24	Q5280632	elastic column pin	1
25	WG2229210002	high-low gear positioning ring	1
26	Q40308	spring gasket	4
27	Q150B0820	hex head bolt	4
28	WG2229210023	end cover of small cap (range gear lock side)	1
29	WG2229210024	end cover gasket	1
30	WG2229210022	retainer	1
31	WG2229210021	spring	1
32	WG2229210004	seat ring	1
33	WG2229210005	spacer sleeve	1
34	WG2229210004	seat ring	1
35	WG2229210003	spring	1
36	WG2229002520	compound bushing SF225X28X20	1
37	WG2229210006	screw	1
38	190003960005	inner hex column screw plug	1
39	Q72320	sealing gasket	1
40	WG2229210020	range gear lock spring	1
41	WG2229210018	range gear locking pin	1
42	AZ2203250001	double H valve	
43	Q218B0820	inner hex column head screw	
44	Q40308	spring gasket	
45	WG2209280002	pressure switch (closed)	
46	WG2229280001	sealing gasket	
47	WG2229210027	neutral position sensor lifting pin	
48	WG2229210015	self locking spring	1

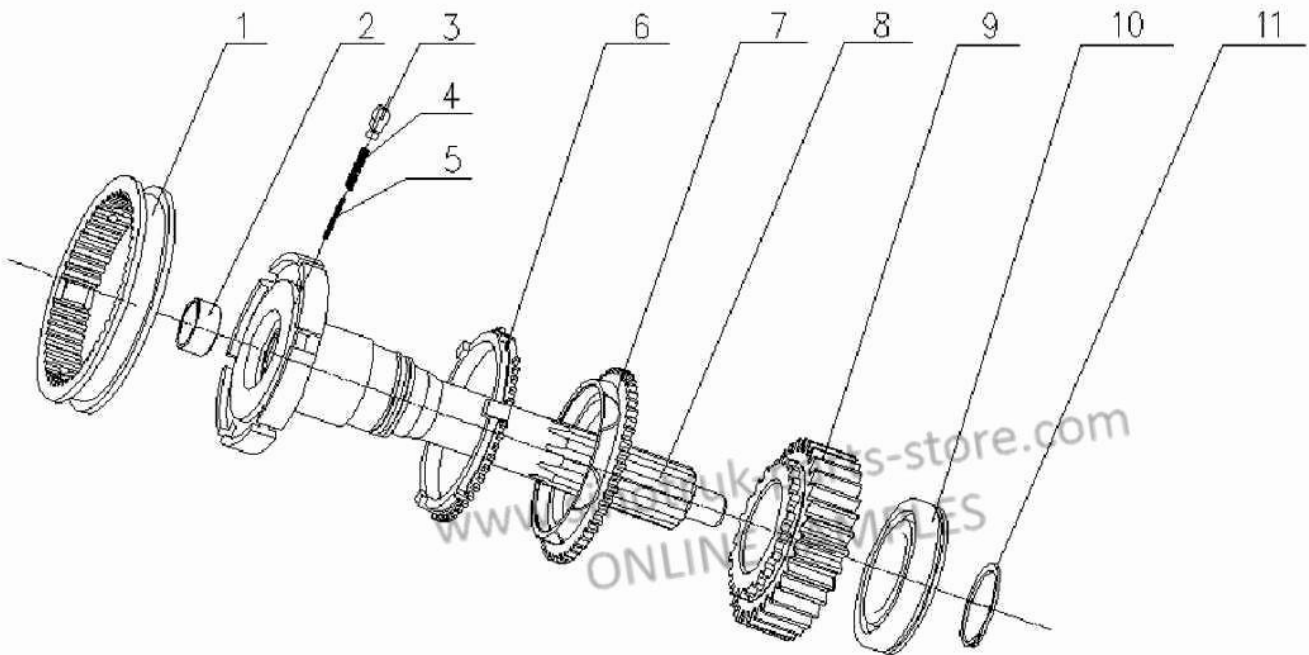
49	WG2229210011	spring retainer	1
50	AZ9003343178	needle bearing	1
51	WG22122210002	self locking pin shaft	1
52	WG2229210001	bushing	1
53	WG2209280003	pressure switch (open)	1
54	Q43708	steel retaining ring for shaft	1
55	WG2229210028	neutral position sensor lifting pin	1
56	Q901	breather plug	1
57	AZ2229250005	gasket for double H valve	
58	AZ2222210101	small cap housing	1
59	Q72220	plug	1
60	190003960005	inner hex column plug	1
61	Q72320	sealing gasket	1
62	WG2229210020	range gear locking spring	1
63	WG2229210018	range gear locking pin	1

输入轴端盖及导油环



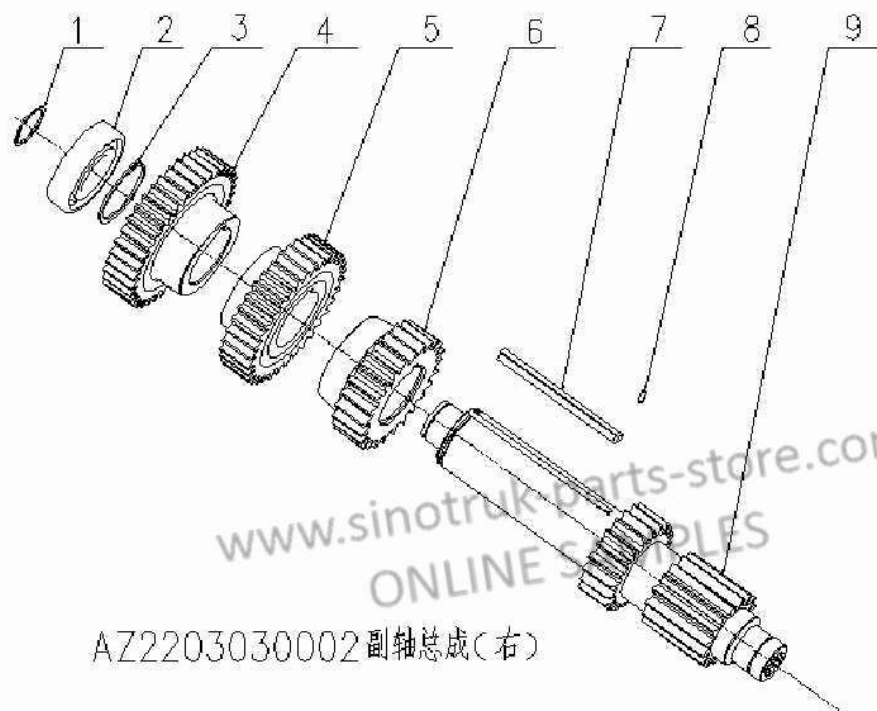
INPUT SHAFT CAP & GUIDING RING			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	AZ9003335500	steel ball	1
2	WG2222020001	input shaft cap	1
3	AZ9003070055	frame oil seal PS 55 75 12	1
4	AZ2229020007	guiding ring	1

输入轴及齿轮总成



INPUT SHAFT & GEAR			
SINOTRUK HW20716 TRANSMISSION			
Serial	Number	Name	Quantity
1	AZ2210020005	synchronizing sliding bushing	1
2	WG2229020005	bushing	1
3	WG2229020001	synchronizing pushing block	3
4	WG2229020002	outer spring for pushing block	3
5	WG2229020003	inner spring for pushing block	3
6	AZ2210020004	synchronizer ring	1
7	WG2210020003	synchronizer cone boss	1
8	WG2210020001	input shaft	1
9	WG2210020002	transmission driving gear (low)	1
10	AZ9003326213	bearing	1
11	AZ2208020001	clamp	1

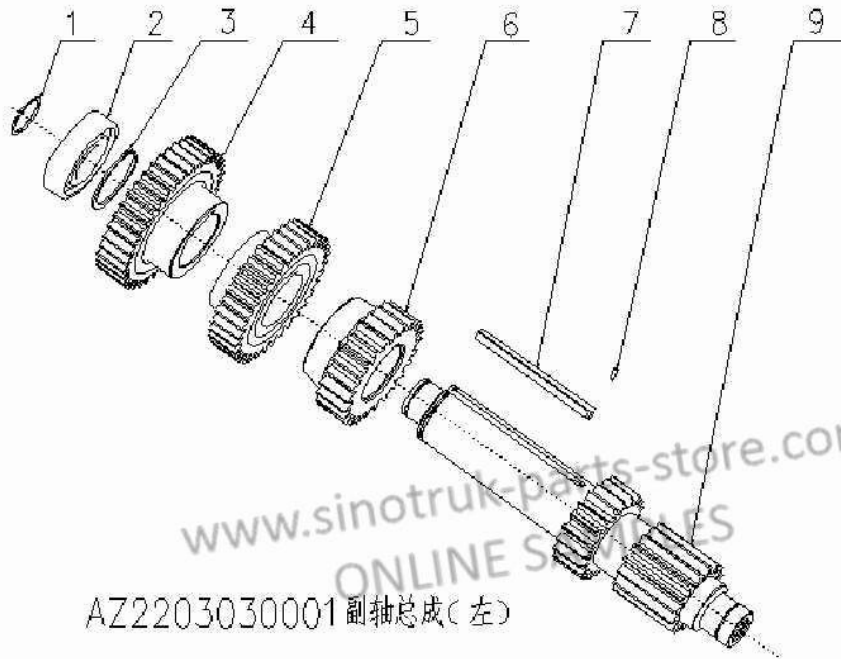
副轴总成（右）



AZ2203030002 副轴总成（右）

DEPUTY SHAFT (RIGHT)			
SINOTRUK HW20716 TRANSMISSION			
Serial	Number	Name	Quantity
1	Q43145	elastic retaining ring	
2	AZ9003329309	column bearing	1
3	Q43170	elastic retaining ring	1
4	AZ2210030005	low driving gear for deputy shaft	1
5	AZ2210030004	high driving gear for deputy shaft	1
6	AZ2210030003	third gear deputy shaft	1
7	WG2229030001	long flat key	1
8	Q5280514	elastic column pin	1
9	AZ2210030002	deputy shaft (right)	1

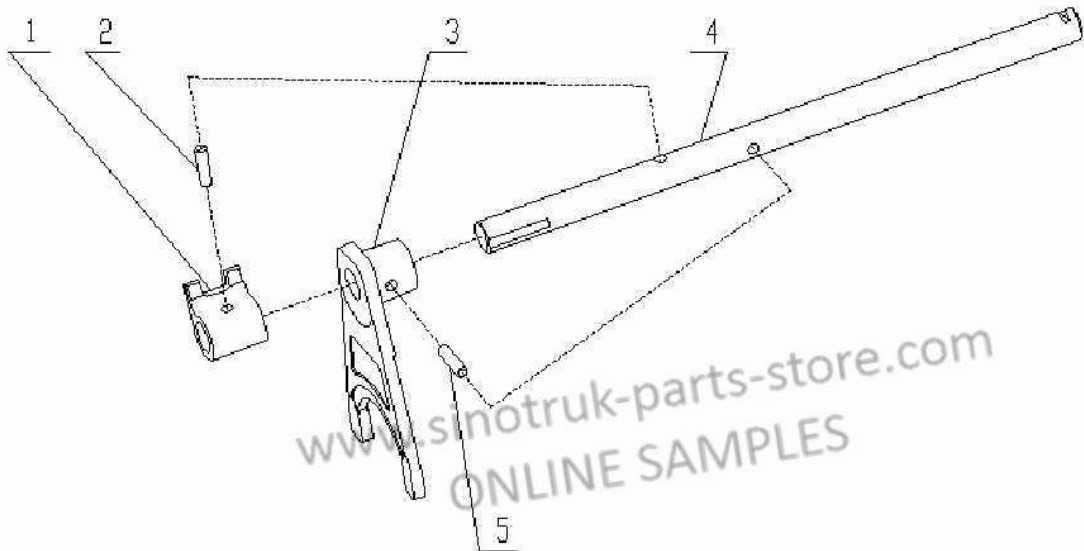
副轴总成 (左)



AZ2203030001 副轴总成(左)

DEPUTY SHAFT (LEFT)			
SINOTRUK HW20716 TRANSMISSION			
Serial	Number	Name	Quantity
1	Q43145	elastic retaining ring	
2	AZ9003329309	column bearing	1
3	Q43170	elastic retaining ring	1
4	AZ2210030005	low driving gear for deputy shaft	1
5	AZ2210030004	high driving gear for deputy shaft	1
6	AZ2210030003	third gear deputy shaft	1
7	WG2229030001	long flat key	1
8	Q5280514	elastic column pin	1
9	AZ2210030001	deputy shaft (left)	1

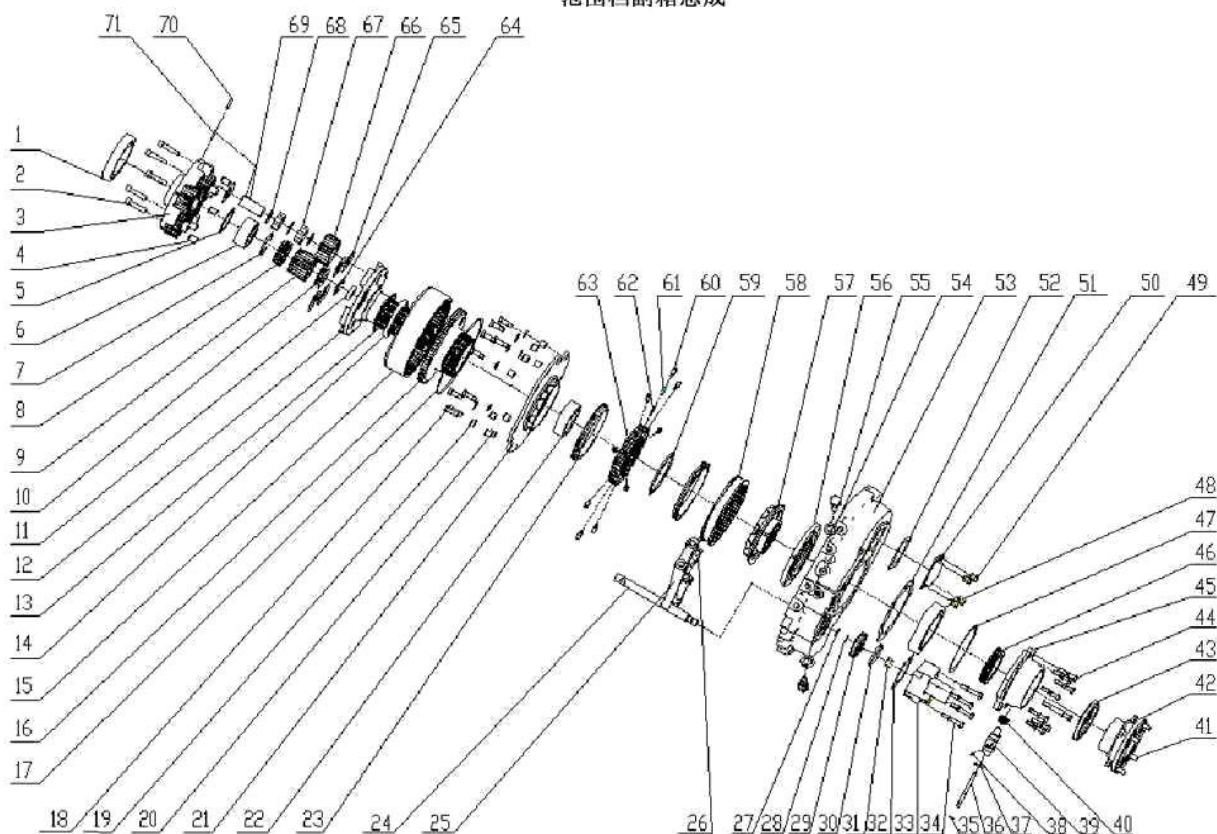
三、四档拨叉轴总成



THIRD & FORTH GEAR SELECTOR ROD			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	WG2214220003	forward gear shifting block	1
2	AZ2229220001	pin	1
3	WG2214220001	selector	1
4	WG2212220103	selector rod	1
5	AZ2229220002	pin	1



范围档副箱总成

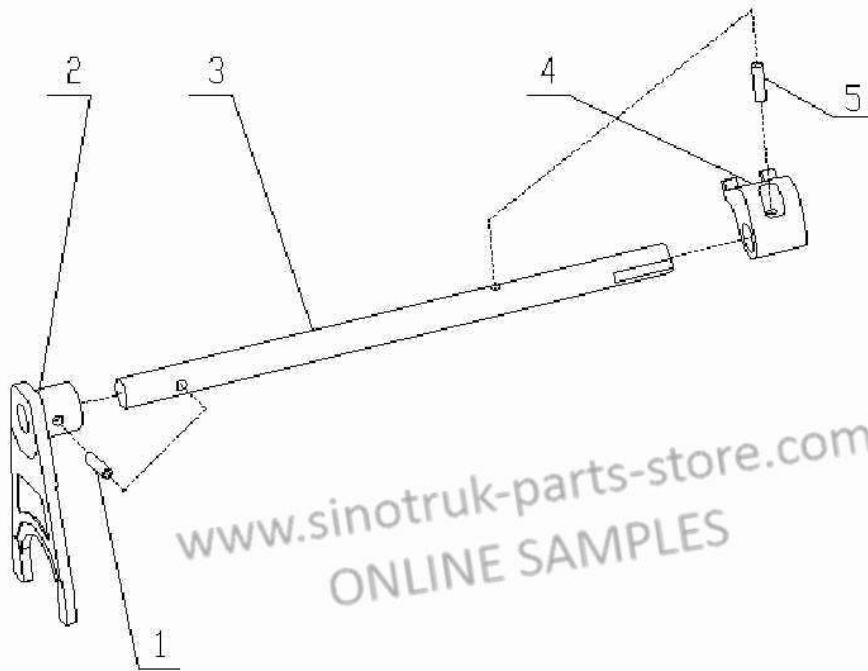


RANGE GEAR DEPUTY BOX			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	AZ9003326020	rolling bearing	1
2	AZ9003821255	inner hex column head screw	5
3	AZ2225100002	planetary carrier	1
4	WG2229100001	sleeve	5
5	AZ2229100005	gasket for sun wheel (front)	1
6	AZ2210100002	spline sleeve	1
7	Q43875	steel retaining ring	1
8	AZ2210100003	transition sleeve	1
9	WG2210100001	sun wheel	1
10	AZ2229100006	gasket for sun wheel (rear)	1
11	AZ9003326322	rolling bearing	1
12	AZ2225100001	output shaft	1

13	AZ9003991125	steel retaining ring	1
14	AZ9003321820	rolling bearing	1
15	WG2210100005	annular gear	1
16	WG2210100006	gear carrier	1
17	WG2229100012	steel retaining ring	1
18	Q150B1235	hex head bolt	9
19	Q40112	flat gasket	9
20	AZ2229100002	sleeve	9
21	AZ2203100005	low gear cone boss	1
22	WG2229100032	spacer bushing	1
23	WG2210100009	range gear synchronizing ring	2
24	WG2214100002	range gear shifting rod	1
25	WG2214100001	range gear shifting fork	1
26	WG2229100042	shifting fork block	2
27	AZ9003072503	O ring	1
28	AZ9003071700	O ring	1
29	WG2229100045	range gear piston	1
30	AZ9003076900	O ring	1
31	AZ9003870016	hex nut M16×1.5	1
32	WG2229100046	paper pad for range gear cylinder	1
33	WG2222100003	range gear cylinder	1
34	Q150B1065	hex head bolt	4
34	Q40310	spring gasket	4
35	AZ9003071001	mileage sensor joint oil seal	1
36	AZ2212100002	small gear shaft for mileage sensor	1
37	AZ9003072500	O ring	1
38	Q5220526	column pin	1
39	WG2222100002	mileage joint body	1
40	AZ2210100016	small gear for mileage sensor	1
41	Q151B1450	hex head bolt	4
42	WG2210100018	output flange Φ180	1
43	AZ9003070105	frame oil seal	1
44	Q150B1055	hex head bolt	6
44	Q170B1055	hex head bolt with hole	1
44	AZ9003801087	hex head bolt	1
44	Q40310	spring gasket	8
45	WG2222100001	output shaft rear cap	1
46	WG2210100015	mileage sensor worm rod	1

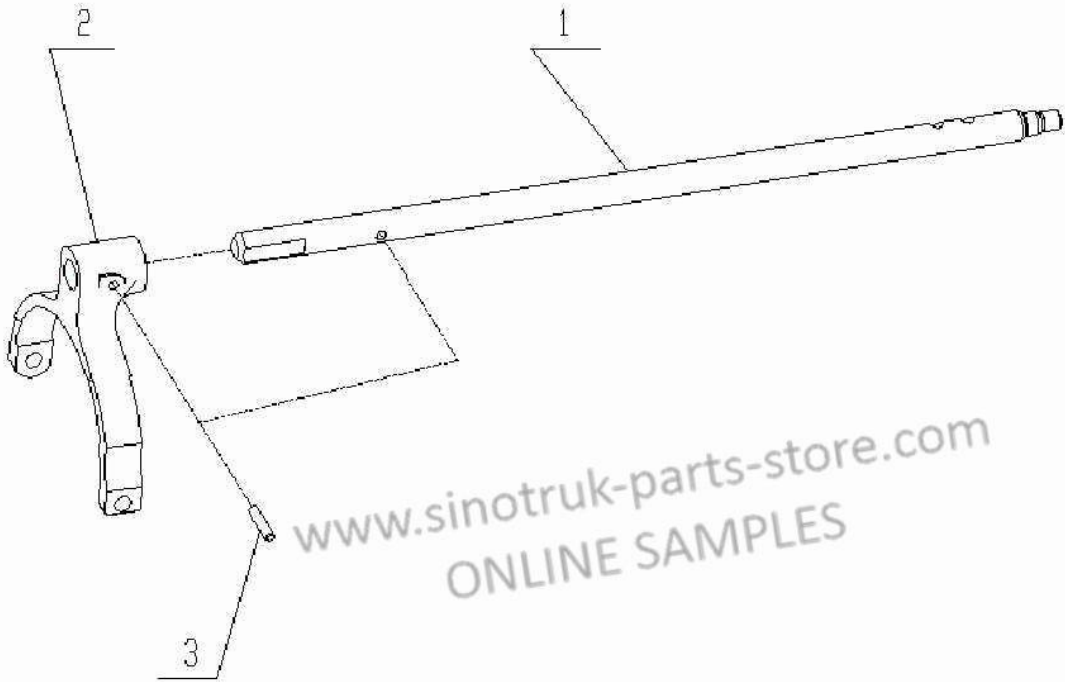
47	AZ2208100003	adjusting gasket set	1
48	AZ9003326218	rolling bearing	1
49	Q150B1216	hex head bolt	4
49	Q40312	spring gasket	4
50	AZ2229100047	plate	1
51	WG2229100041	paper pad for output shaft rear cap	1
52	AZ2229100048	gasket for plate	1
53	WG2220100002	rear housing of gearbox	1
54	AZ9003990024	elastic gasket	2
55	AZ2229100043	shifting fork supporting pin	2
56	AZ2203100007	guiding ring	1
57	AZ2203100006	high gear cone boss	1
58	WG2210100008	range gear synchronizing sleeve	1
59	AZ9003991130	elastic retaining ring	1
60	WG2229020001	synchronizing push block	9
61	WG2229020002	outer spring	9
62	WG2229020003	inner spring	9
63	WG2210100007	range gear synchronizing seat	1
64	AZ9003991056	elastic retaining ring	1
65	WG2229100008	planetary wheel gasket	10
66	WG2210100004	planetary wheel	5
67	AZ9003321118	column bearing 11X18	120
68	WG2229100007	spacing gasket	15
69	WG2212100001	planetary wheel shaft	5
70	Q5280630	elastic column pin	5
71	Q5280430	elastic column pin	5

倒档拨叉轴总成



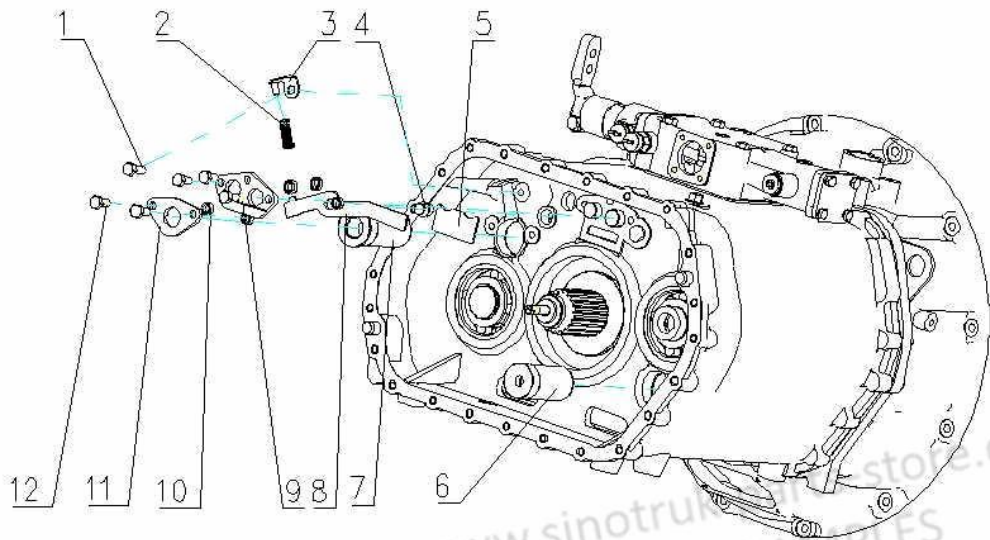
REVERSE GEAR SELECTOR ROD			
SINOTRUK HW20716 TRANSMISSION			
Serial	Number	Name	Quantity
1	AZ2229220002	pin	1
2	WG2214220001	shifting fork	1
3	WG2212220001	reverse gear shifting shaft	1
4	WG2214220002	reverse gear shifting block	1
5	AZ2229220001	pin	1

插分档拨叉轴总成



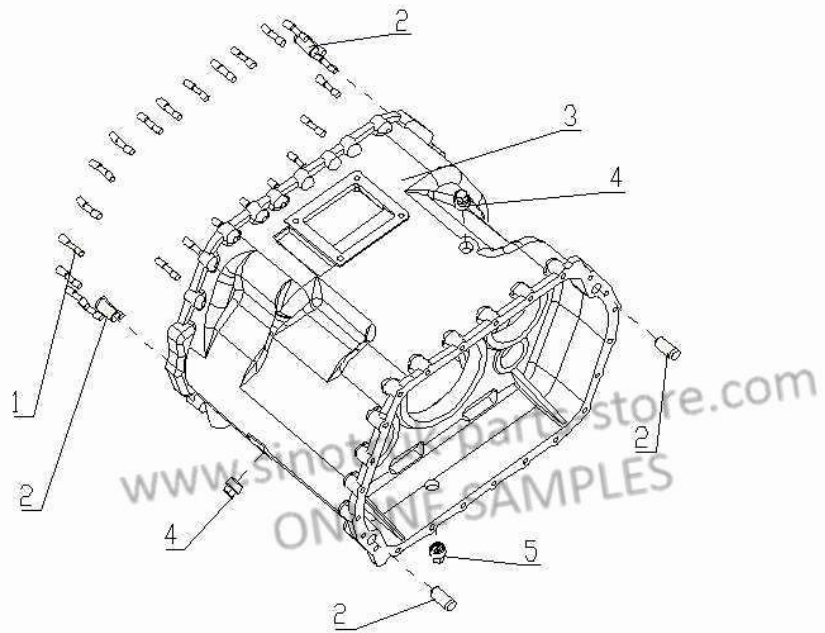
INSERT GEAR SELECTOR ROD			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	AZ2212230001	insert gear selector rod	1
2	AZ2214230001	insert gear selector	1
3	Q5220840	column pin	1

传动轴



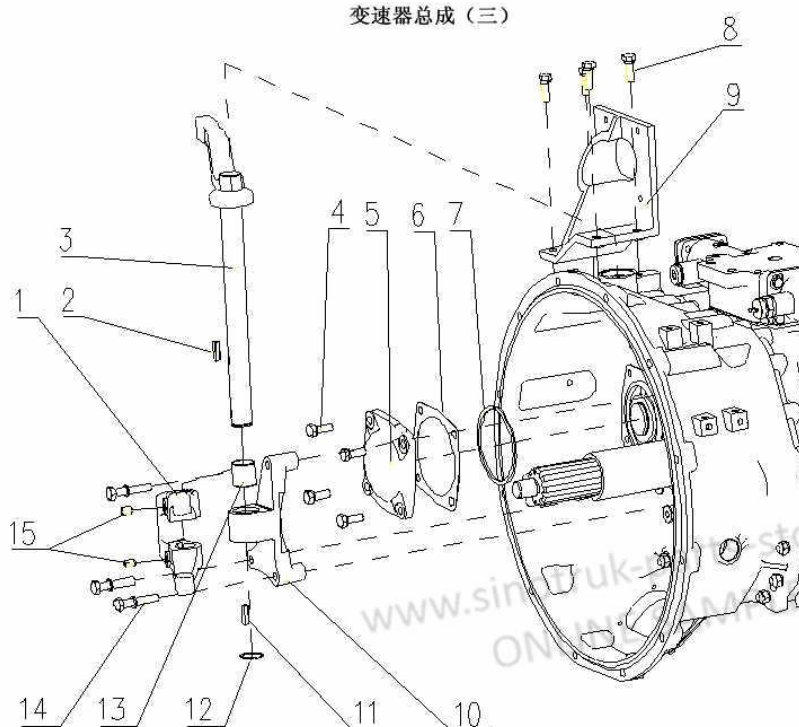
TRANSMISSION 1			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	Q150B1020	hex head bolt	1
2	WG2229210019	range gear locking spring	1
3	WG2010310012	spring positioning pin	1
4	WG2229100056	sub pin	1
5	WG2229100055	plate for locking plate	1
6	WG2212050002	right idler	1
7	WG2212050001	left idler	1
8	WG2229100051	interlocking plate	1
9	WG2229100053	big pressing plate	1
10	WG2229100054	block for pressing plate	5
11	WG2229100052	small pressing plate	1
12	Q150B1025	hex head bolt	5

变速器总成 (二)



TRANSMISSION 2			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	Q1231035	stud bolt	23
1	Q1231040	stud bolt	2
2	AZ2229010001	positioning pin	4
3	AZ2220010002	middle housing of gearbox	1
4	WG2229010002	screw plug	2
5	WG2203010002	oil outlet screw plug	1

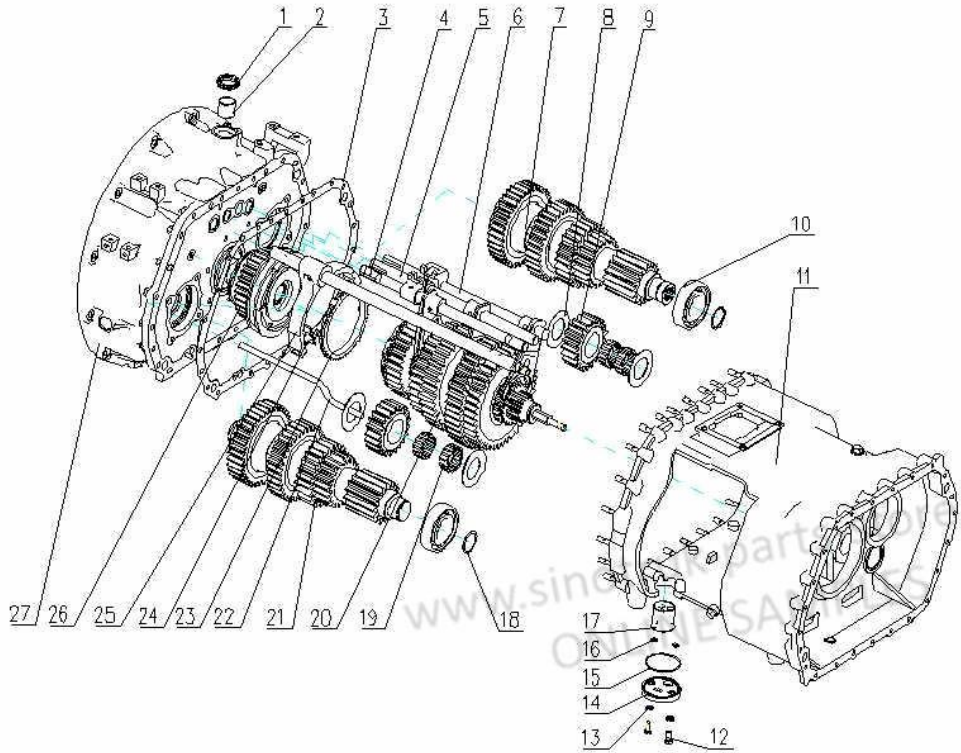
变速器总成 (三)



TRANSMISSION 3			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	AZ2214260001	separating fork of clutch	1
2	Q5510825	flat key	1
3	AZ2203260002	selector rod	1
4	Q150B1030	hex head bolt	4
4	Q40310	spring gasket	4
5	WG2222000001	deputy shaft end cap	1
6	WG2229000002	deputy shaft end cap gasket	1
7	AZ9003990100	thrust ring	1
8	Q150B1030	hex head bolt	4
8	Q40310	spring gasket	4
9	AZ2229260015	cylinder boost carrier	1
10	AZ2229260001	selector rod carrier	1
11	Q5510825	flat key	1
12	Q43130	elastic retaining ring	1
13	WG2229003030	compound bushing	1
14	AZ9003801062	hex head bolt	3
14	Q40310	spring gasket	3
15	Q2881016F9	inner hex cone end locking screw	2



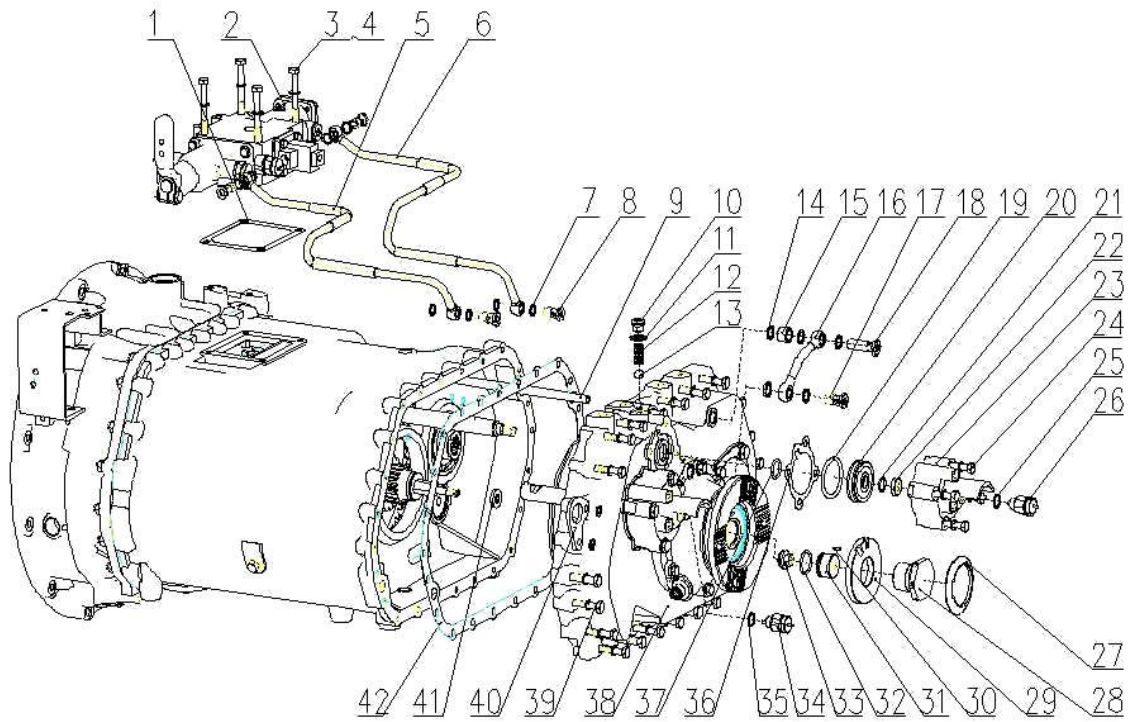
变速器总成 (四)



TRANSMISSION 4			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	AZ9003073001	frame oil seal	1
2	WG2229003030	compound sleeve	1
3	WG2229000001	gasket for front housing	1
4	AZ2203220003	3rd/4th gear selector rod	1
5	AZ2203220002	1st/2nd gear selector rod	1
6	AZ2203220001	reverse gear selector rod	1
7	AZ2203030002	deputy shaft assy (right)	1
8	WG2229050001	gasket	4
9	WG2210050001	idler	2
10	AZ9003320309	column bearing	2
11	AZ2203010001	middle housing	1
12	Q150B0822	hex head bolt	2

13	Q40308	spring gasket	2
14	WG2222240005	filter screen	1
15	AZ9003077100	O ring	1
16	AZ9003070085	O ring	2
17	AZ2203240007	filter screen	1
18	Q43145	elastic retaining ring	2
19	AZ9003395320	needle bearing	4
20	AZ2203040001	main shaft assy	1
21	AZ2203030001	deputy shaft ass (left)	1
22	WG2229240021	inside tube one	1
23	AZ2210020004	insert synchronizer ring	1
24	AZ2229230001	selecting block	2
25	AZ2203230001	insert gear selector rod	1
26	AZ2203020007	input shaft and gear	1
27	AZ2220000001	front housing	1

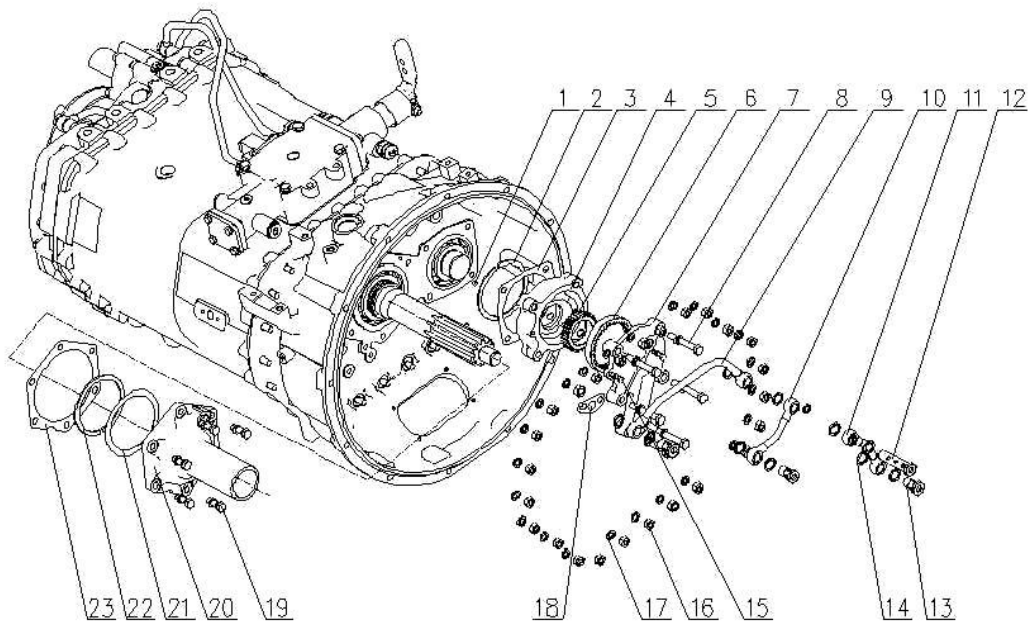
变速器总成 (五)



TRANSMISSION 5			
SINOTRUK HW20716 TRANSMISSION			
Serial	Number	Name	Quantity
1	WG2229210025	small cap paper pad	1
2	AZ2203210005	small cap assy (doubel rods)	1
3	Q150B1085	hex head bolt	4
4	Q40310	spring gasket	4
5	WG2203250006	air pipe assy II	1
6	WG2203250005	air pipe assy I	1
7	Q72314	sealing ring	8
8	190004000000	hollow bolt	4
9	WG2229240008	inside tube 2	1
10	AZ9003960004	inner hex screw plug	1
11	Q72320	sealing gasket	1
12	WG2229210019	locking spring for range gear	1
13	AZ9003331349	steel ball	1
14	Q72316	sealing gasket	5
15	WG2229240010	bushing	1

16	AZ2203240004	oil inlet pipe for deputy box	1
17	190004000000	hollow bolt	1
18	AZ9003961650	hollow bolt	1
19	AZ9003075450	O ring	1
20	AZ2229230002	insert gear piston	1
21	AZ9003071700	O ring	1
22	AZ9003870016	hex nut	1
23	AZ2222230001	insert gear cylinder	1
24	Q150B1065	hex head bolt	4
24	Q40310	spring gasket	4
25	WG2229280001	sealing gasket	1
26	179101000000	pressure switch	1
27	WG2229100074	locking plate	1
28	WG2229100073	bolt	1
29	WG2229100072	pressing plate	1
30	Q5280514	elastic column pin	1
31	WG2229100071	plug	1
32	AZ9003073150	O ring	1
33	WG2229100011	fixed nut	1
34	179101000000	pressure switch	1
35	WG2229280001	sealing gasket	1
36	AZ2229230003	insert gear cylinder paper pad	1
37	AZ9003072503	O ring	1
38	AZ2203100001	deputy box	1
39	Q150B1050	hex head bolt	16
39	AZ9003801058	hex head bolt	2
39	Q150B1060	hex head bolt	6
39	Q40310	spring gasket	24
40	WG2229100061	hanging plate	1
41	AZ2208040002	adjusting gasket for main shaft	
42	WG2229100062	paper pad for deputy box	1

变速器总成 (六)



TRANSMISSION 6			
<i>SINOTRUK HW20716 TRANSMISSION</i>			
Serial	Number	Name	Quantity
1	AZ9003338000	steel ball	1
2	AZ9003990100	thrust ring	1
3	WG2229000002	deputy shaft end cap gasket	1
4	AZ2222240001	oil pump body	1
5	AZ2210240001	driving gear for pump	1
6	AZ2210240002	annular gear for pump	1
7	AZ2222240002	end cap for pump	1
8	Q150B1090	hex head bolt	1
8	Q150B1040	hex head bolt	1
8	Q150B1070	hex head bolt	4
8	Q40110	flat gasket	2
8	Q40310	spring gasket	4
9	AZ2203240003	oil inlet pipe	1
10	AZ2203240002	oil inlet pipe for input shaft	1
11	AZ2203240001	oil outlet pipe	1

12	AZ9003961670	hollow bolt	1
13	1.90004E+11	hollow bolt	3
14	Q72316	sealing gasket	10
15	Q150B0618	hex head bolt	2
15	Q40306	spring gasket	2
16	Q341B10	hex nut	25
17	Q40310	spring gasket	25
18	WG2229240003	oil inlet pipe paper pad	1
19	Q150B1030	hex head bolt	5
19	Q40310	spring gasket	5
20	AZ2203020108	input shaft end cap and guiding ring	1
21	AZ2208020002	input bearing adjusting set	
22	AZ9003990120	thrust ring	1
23	WG2229020008	input shaft end cap paper pad	1