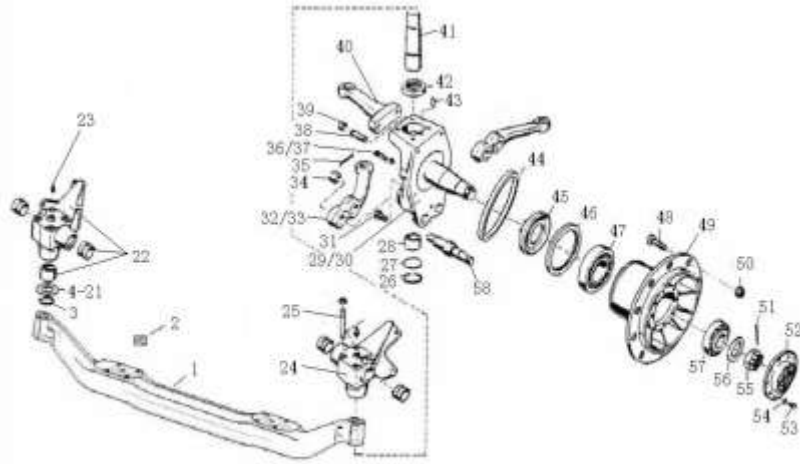


5. 前轴和转向/Front Axle and Steering System

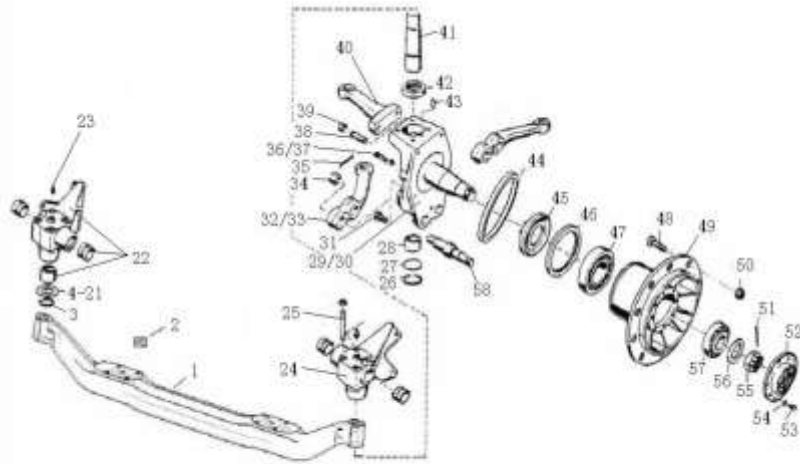
序号/ No.	名 称 / Designation		页 码 / Page No.
5,01	前桥总成/Front Axle Assy	-----	1
5,02	HOWO前轴(HF9, ABS, 小转角)/Front Axle	-----	2
5,03	转向横拉杆/Tie Rod	-----	5
5,04	转向拉杆/Tie Rod Ass.	-----	6
5,05	6.5吨拳形轴前轮制动器/Brake System	-----	7
5,06	转向装置(ZF8118)/Steering System	-----	9
5,07	前轴半挂牵引车制动装置/Front Axle Brake Device	-----	14



5. 02 HOWO前轴 (HF9, 小转角)/Front Axle

序号	零部件图号	名称	Part Name	数量	备注
No.	Part No.			Qty	Remark
1	AZ9719410109	9吨前轴总成	9t front axle assembly	1	
2	WG9719410028	铭牌	Nameplate	1	
3	WG880 410052	O形密封圈	O-ring	2	
4	WG880 410094	垫圈	Washer	1	
5	1880 410095	垫圈	Washer	1	
6	1880 410096	垫圈	Washer	1	
7	WG880 410097	垫圈	Washer	1	
8	1880 410104	垫圈	Washer	1	
9	1880 410105	垫圈	Washer	1	
10	1880 410106	垫圈	Washer	1	
11	1880 410107	垫圈	Washer	1	
12	1880 410108	垫圈	Washer	1	
13	WG9100410085	垫圈	Washer	1	
14	WG9100410086	垫圈	Washer	1	
15	WG9100410087	垫圈	Washer	1	
16	WG9100410088	垫圈	Washer	1	
17	WG9100410089	垫圈	Washer	1	
18	WG9100410090	垫圈	Washer	1	
19	WG9100410091	垫圈	Washer	1	
20	WG9100410092	垫圈	Washer	1	

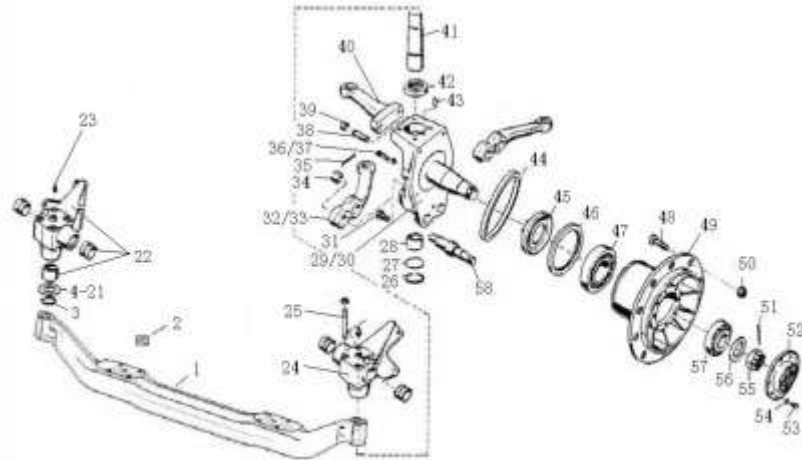
5. 02 HOWO前轴 (HF9, ,小转角)/Front Axle



5.02 HOWO前轴(HF9,小转角)/Front Axle

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
21	WG9100410093	垫圈	Washer	1	
22	WG4008410036	支架总成(右)	Bracket assembly (right)	1	
23	AZ9003963004	滑脂嘴总成(Q701B70)	Grease nozzle assembly (q701b70)	2	
24	WG4008410032	支架总成(左)	Bracket assembly (left)	1	
25	WG880 410075	双头螺柱	Stud stud	8	
26	Q43056	孔用弹性挡圈	Circlip for hole	2	
27	WG880 410100	盖	cover	2	
28	WG9100410129	衬套	bushing	1	
29	AZ9112410055	转向节(左)	Steering knuckle (left)	1	
30	AZ9112410155	转向节(右)	Knuckle (right)	1	
31	Q151C1220	六角头螺栓	Hexagon headed bolt	4	
32	AZ9719410042	转向横拉杆臂(左)	Steering cross rod arm (left)	1	
33	AZ9719410043	转向横拉杆臂(右)	Steering cross rod arm (right)	1	
34	1,90004E+11	六角槽形扁螺母(细牙)	Hexagon slotted flat nut (fine)	4	
35	Q5005050	开口销	Cotter pin	4	
36	WG4007411002	调整螺钉	Adjusting screw	2	
37	Q351B14T15	六角薄螺母	Hexagon thin nut	2	
38	WG880 410060	双头螺柱	Stud stud	2	
39	1,90004E+11	自锁螺母	Self locking nut	2	
40	AZ9719410005	转向节臂	Steering knuckle arm	1	

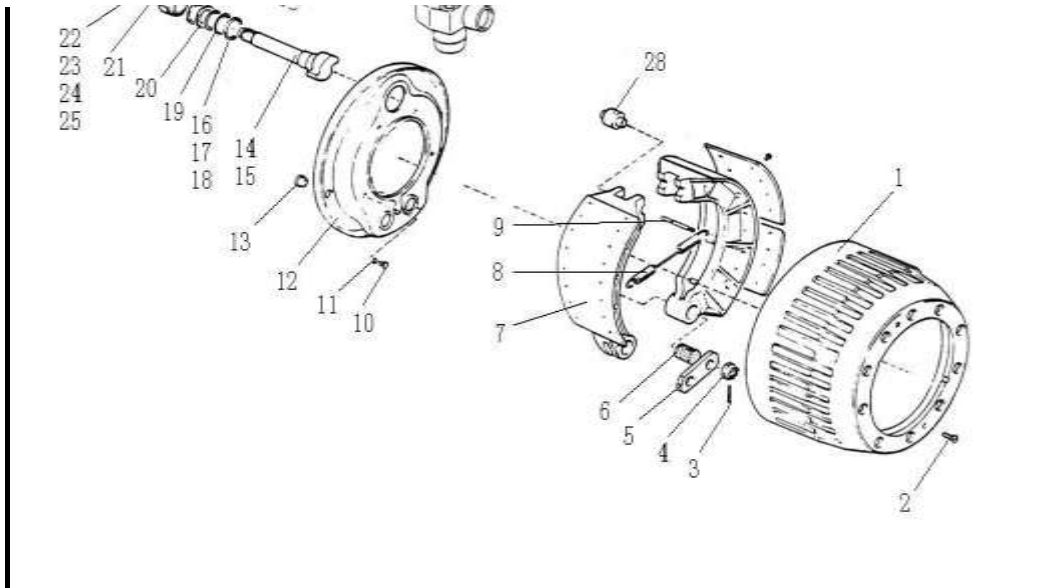
5.02 HOWO前轴(HF9,,小转角)/Front Axle



5.02 HOWO前轴(HF9,小转角)/Front Axle

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
41	WG9719410031	转向节销	Steering knuckle pin	2	
42	WG4007410049	推力圆锥滚子轴承	Thrust tapered roller bearing	2	
43	Q5211016	园柱销	Garden pin	2	
44	WG9112410019	ABS齿圈	ABS gear ring	1	
45	WG9900410114	隔环	Spacer ring	2	
46	WG9003074387	轴用密封圈	Sealing ring for shaft	2	
47	1,90003E+11	圆锥滚子轴承32314GB/T2	Tapered roller bearing 32314	2	
48	WG9100410104	车轮螺栓	Wheel bolts	10	
49	WG9112410009	前轮毂	Front wheel hub	1	
50	WG7117340001	车轮螺母	Wheel nut	20	
51	Q5006370	开口销	Cotter pin	2	
52	WG9100410043	罩	cover	2	
53	ZQ150B0816	六角头螺栓M8	Hexagon head bolt M8	16	
54	Q40308	弹簧垫圈	Spring washer	16	
55	WG9100411140	转向节锁紧螺母	Knuckle lock nut	1	
56	WG9100410062	垫片	Shim	2	
57	1,90003E+11	圆锥滚子轴承32310GB/T2	Tapered roller bearing 32310	2	
58	WG880 410038	制动蹄支承销	Brake shoe support pin	4	
59	1,90004E+11	自锁螺母	Self locking nut	8	

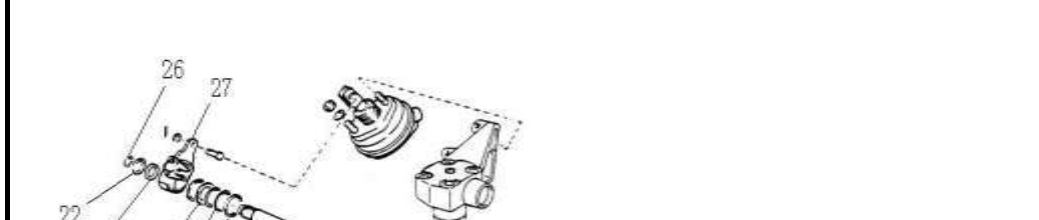
5.03 转向横拉杆/Tie Rod

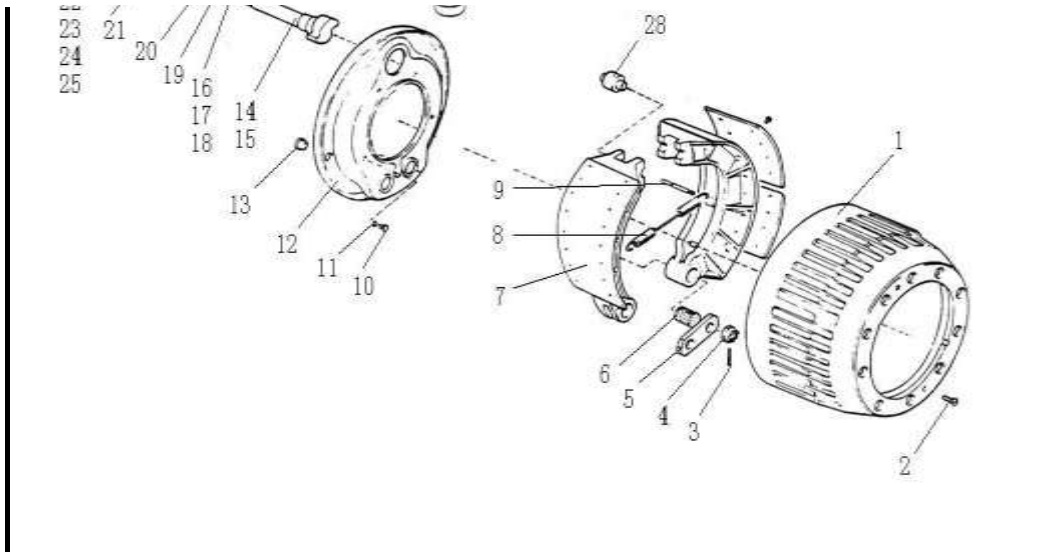


5.05 6.5吨拳形轴前轮制动器/Brake System

序号	零部件图号	名称	Part Name	数量	备注
No.	Part No.			Qty	Remark
1	WG9112440001	制动鼓	Brake drum	2	
2	Q2541025	十字槽沉头螺钉	Screw	4	
3	Q5005045	开口销	Pin	4	
4	190003872369	六角槽形扁螺母(细牙)	Nut	4	
5	WG880440008	限位板	Plate	2	
6	WG880440006	衬套	Bushing	4	
7	AZ9100440030	制动蹄总成	Brake shoe assembly	4	
7,1	AZ9100440018	制动蹄	Brake shoe	1	
7,2	WG9100440028	提升型制动摩擦片(54°)	Brake disc	1	
7,3	WG9100440026	提升型制动摩擦片(39°)	Brake disc	1	
7,4	WG9231340068	铆钉	Screw	14	
8	WG9100440061	回位弹簧	Spring	2	
9	WG1218G85	制动弹簧销	Pin	4	
10	ZQ150B0812	六角头螺栓M8	Bolt	8	
11	Q40308	弹簧垫圈	Spring washer	8	
12	WG9112440006	制动器防尘罩(带ABS)	Dust shield	2	
13	WG880340037	密封圈	Gasket	4	
14	WG9100440001	制动凸轮轴(左)	Brake camshaft	1	
15	WG9100440002	制动凸轮轴(右)	Brake camshaft	1	
16	WG880440010	附加垫片	Shim	4	

5.05 6.5吨拳形轴前轮制动器/Brake System



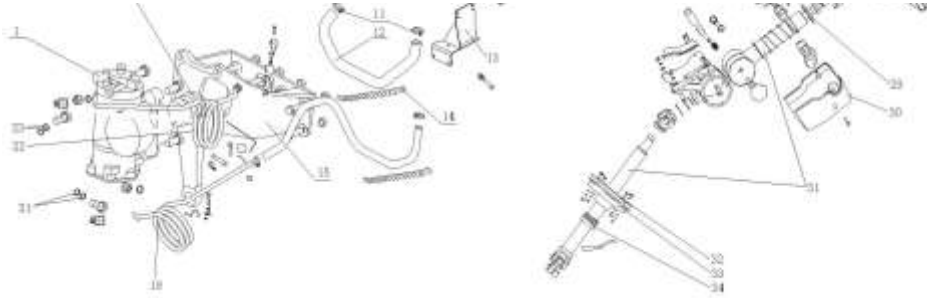


5.05 6.5吨拳形轴前轮制动器/Brake System

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
17	WG9100440011	附加垫片	Shim	4	
18	WG9100440012	附加垫片	Shim	4	
19	WG880340023	O形密封圈	O-ring	4	
20	WG880440015	隔套	Sleeve	2	
21	WG880340022	垫圈	Washer	2	
22	WG80320028	调整垫圈	Washer	1	
23	WG80320029	调整垫圈	Washer	1	
24	WG80320030	调整垫圈	Washer	1	
25	WG80320046	调整垫圈	Washer	1	
26	190003933116	轴用弹簧档圈	Circlip	2	
27	WG9100440005	间隙调整臂总成	Slack adjuster	2	
28	WG9100440021	滚轮	Roller	4	

5.06 转向装置(ZF8118)/Steering System



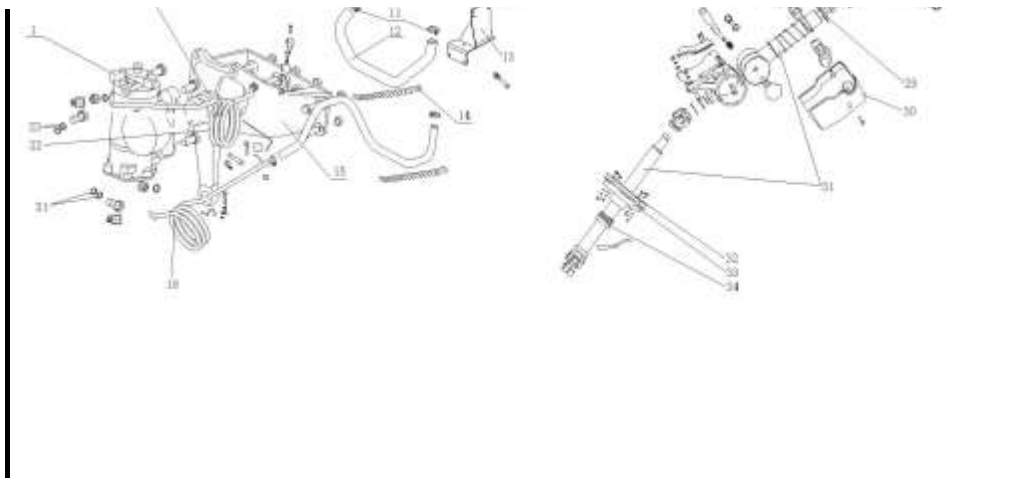


5.06 转向装置(ZF8118)/Steering System

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
1	WG9725478118	动力转向器	Power steering gear	1	
2	WG9725478020	转向摇臂	Steering rocker arm	1	
3	WG9725470118	高压软管	High pressure hose	1	
5	1,90004E+11	空心螺栓	Hollow bolt	1	
6	1,90003E+11	密封垫圈	Sealing washer	2	
7	WG9100470076	环状接头	Annular joint	1	
9	WG9725471016	转向助力叶片泵	Steering booster vane pump	1	
9,1	WG9725471016+(O型密封圈 (92.5x3.55) (南京ZF)	O-ring (92.5x3.55) (Nanjing ZF)	1	
10	WG9925470033	动力转向油罐总成	Power Steering Tank Assembly	1	
10,1	WG9925470033+(滤芯总成 (浠水天雄)	Filter element assembly (Xishui Tianxiong)	1	
10,2	WG9925470033+(上盖密封圈 (浠水天雄)	Top Seal Ring (Xishui Tianxiong)	1	
11	1,90004E+11	软管卡箍	hose clamp	2	
12	WG9731470097	成型软管	Forming hose	1	
13	WG9719472015	转向油罐支架	Steering tank bracket	1	
14	AZ9725470084	弹簧护圈	Spring retainer	1	
15	WG9725470295	转向器支架	Steering bracket	1	
18	WG9725472081	回油钢管总成 (带散热片)	Oil return pipe assembly (with radiator)	1	
21	T071800	组合密封圈	Combined Seal Ring	2	
22	WG9725472060	压油钢管总成 (带散热片)	Hydraulic Pipe Assembly (with Radiator)	1	
23	T071800	组合密封圈	Combined Seal Ring	2	

5.06 转向装置(ZF8118)/Steering System

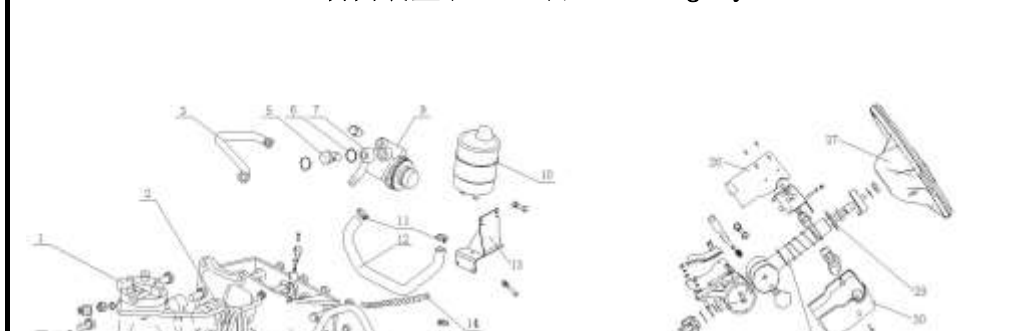


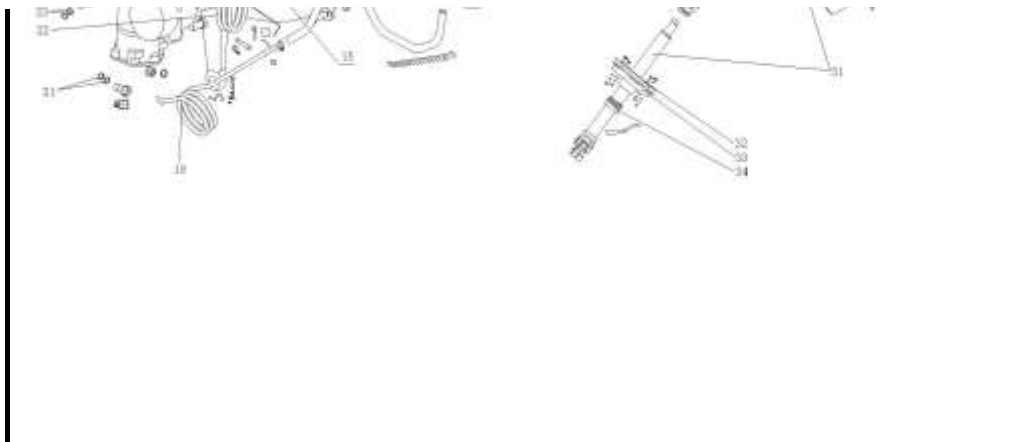


5.06 转向装置(ZF8118)/Steering System

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
26	AZ9719471041	转向柱罩(后部)	Steering Column Cover (Back)	1	
27	WG9725470099	转向盘带回位环总成	Steering Wheel Belt Return Ring Assembly	1	
27,1	WG9719470100	转向盘中心堵盖(大连本德)	Steering Wheel Center Blockage (Dalian Bende)	1	
27,2	WG9719470100	转向盘喇叭左按钮上体(大连本德)	Left button upper body of steering wheel horn (Dalian Bende)	1	
27,3	WG9719470100	转向盘喇叭左按钮下体(大连本德)	Left Button Lower Body of Steering Wheel Horn (Dalian Bende)	1	
27,4	WG9719470100	转向盘喇叭右按钮上体(大连本德)	Upper body of right button of steering wheel horn (Dalian Bende)	1	
27,5	WG9719470100	转向盘喇叭右按钮下体(大连本德)	Bottom body of right button of steering wheel horn (Dalian Bende)	1	
27,6	WG9719470100	喇叭压簧(大连本德)	Horn Pressure Spring (Dalian Bende)	1	
27,7	WG9719470100	转向盘喇叭线束(大连本德)	Steering wheel horn harness (Dalian Bende)	1	
29	WG9130583024	接触环	Contact ring	1	
30	AZ9719471042	转向柱罩(前部)	Steering Column Cover (Front)	1	
31	AZ9719471050	转向轴带管柱总成	Steering axle with string assembly	1	
31,1	WG9725470023	转向轴总成	Steering Shaft Assembly	1	
31,2	WG9100470436	六角薄螺母	Hexagon thin nut	1	
31,3	AZ9719470051	转向轴套	Steering axle sleeve	1	
31,4	Q41822	波形弹性垫圈	Wave spring washers	1	
31,5	AZ9003320012	深沟球轴承61905GB/T276-94	Deep groove ball bearing 61905GB/T276-94	1	
31,6	Q43125	轴用弹性挡圈	External Circlips	1	
31,7	WG9725470005	固定夹	Fixing clip	1	
31,8	WG9719470424	支座	Bearing	1	

5.06 转向装置(ZF8118)/Steering System

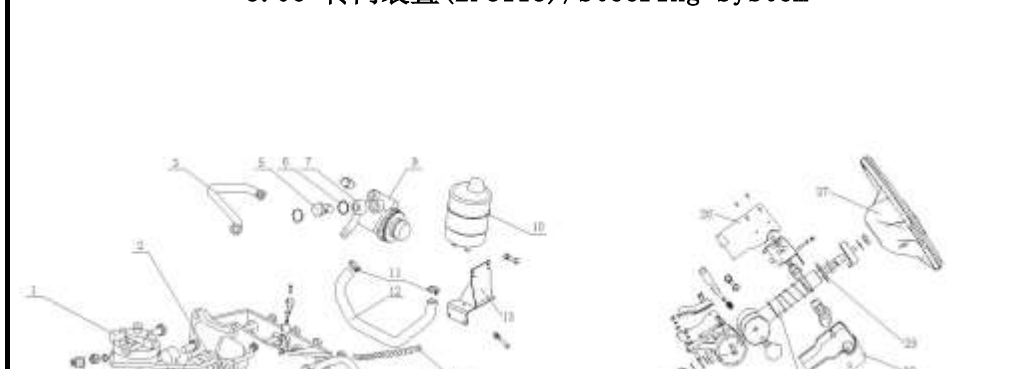


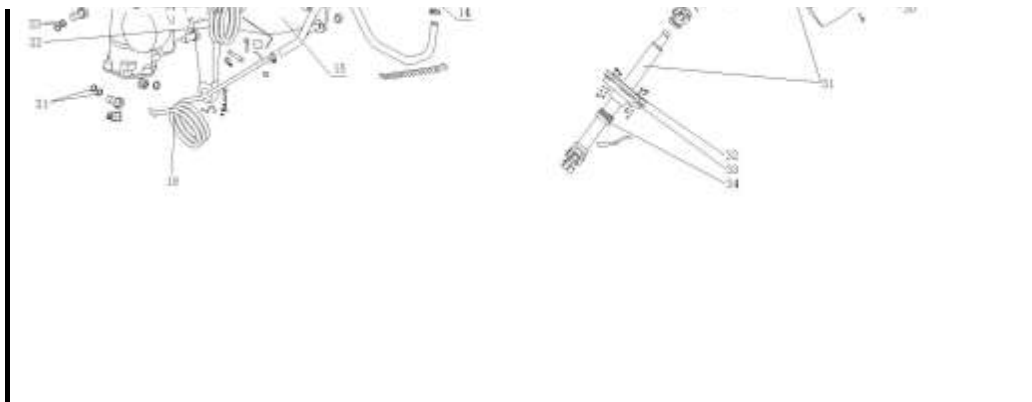


5.06 转向装置(ZF8118)/Steering System

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
31,9	WG9725470089	防盗螺栓	Anti-theft bolt	2	
31,1	WG9725580098	钥匙起动开关锁体总成	Key Start Switch Lock Assembly	1	
31,11	WG9100470071	滚子	roller	2	
31,12	WG9123470129	压缩弹簧	Compression spring	1	
31,13	WG9123470130	薄垫片	Shim	1	
31,14	AZ9719470056	转向柱安装支座	Steering column mounting support	1	
31,15	WG9719470054	转向柱导向套	Steering column guide sleeve	1	
31,16	WG9719470058	弹性压板	Elastic pressboard	1	
31,17	WG9719470057	行程限位螺钉	Travel limit screw	1	
31,18	WG9719470055	调整紧固螺栓	Adjust fastening bolt	1	
31,19	WG9123470150	调节手轮	Adjusting handwheel	1	
31,2	WG9123470153	压缩弹簧	Compression spring	1	
31,21	WG9123470155	垫圈	Washer	1	
31,22	WG9719470052	线束固定支架	Wire harness fixing bracket	1	
31,23	WG9100470459	环	ring	1	
31,24	Q150B0530	六角头螺栓	Hexagon headed bolt	2	
31,25	Q340B05	1型六角螺母	Type 1 hexagonal nut	2	
31,26	Q40316	弹簧垫圈	Spring washer	1	
31,27	Q150B0408	六角头螺栓	Hexagon headed bolt	2	
31,28	Q40304	弹簧垫圈	Spring washer	2	

5.06 转向装置(ZF8118)/Steering System

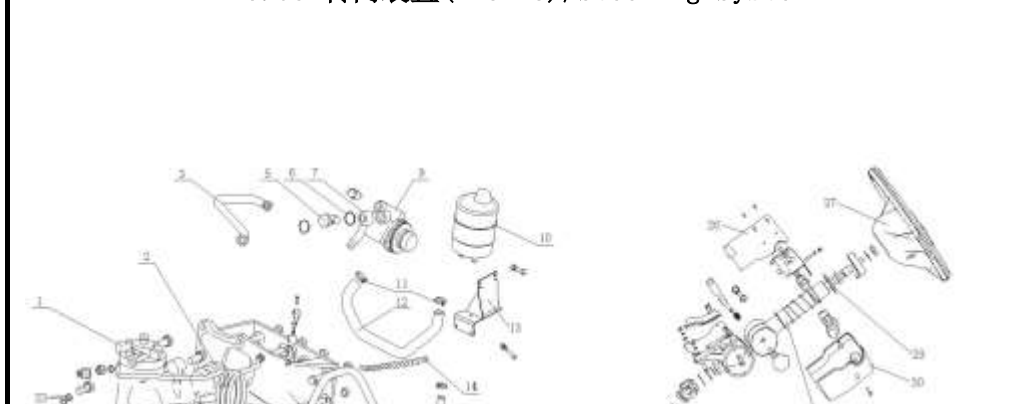


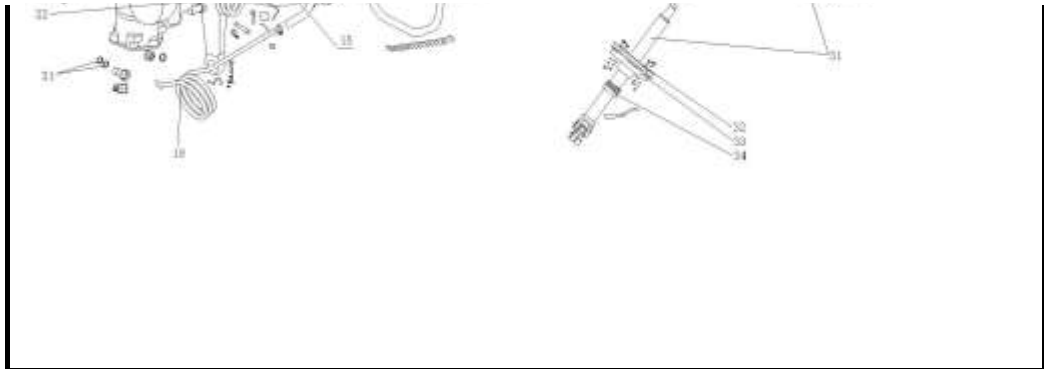


5.06 转向装置(ZF8118)/Steering System

序号	零部件图号	名称	Part Name	数量	备注
No.	Part No.			Qty	Remark
31,29	Q40104	平垫圈	Flat washer	2	
31,3	AZ9003320013	深沟球轴承61806GB/T276-94	Deep groove ball bearing 61806GB/T276-94	1	
31,31	Q43130	轴用弹性挡圈	External Circlips	1	
31,32	Q43042	孔用弹性挡圈	Elastic retaining rings for holes	1	
31,33	AZ9719470044	转向伸缩轴	Steering telescopic shaft	1	
31,34	AZ9719470043	万向节	A universal coupling	1	
32	WG9725478046	压板	Pressboard	1	
33	AZ9725477060	转向轴护套	Steering axle sheath	1	
34	WG9725470410	衬套	bushing	1	
35	MQ6W02819-002	六角安全螺栓M20X1, 5X45	Hexagonal safety bolts M20X1.5X45	5	
36	ZQ1811660TF6	六角法兰面带齿螺栓M16*1.5	Hexagonal flange face toothed bolt M16*1.5	6	
37	ZQ32516T13F6	六角法兰面带齿螺母M16*1.5	Hexagonal flange face toothed nut M16*1.5	6	
38	ZQ1841025	六角法兰面螺栓M10	Hexagonal flange bolt M10	4	
41	ZQ32010	六角法兰面螺母M10	Hexagonal flange nut M10	4	
42	ZQ1841030	六角法兰面螺栓M10	Hexagonal flange bolt M10	4	
43	ZQ32010	六角法兰面螺母M10	Hexagonal flange nut M10	4	
45	WG9100470098	回油软管	Oil return hose	1	
46	712W47410-0055	弹簧护圈	Spring retainer	1	
47	1,90004E+11	软管卡箍	hose clamp	2	
50	ZQ1840830	六角法兰面螺栓M8	Hexagonal flange bolt M8	4	

5.06 转向装置(ZF8118)/Steering System





5.06 转向装置(ZF8118)/Steering System

序号 No.	零部件图号 Part No.	名称	Part Name	数量 Qty	备注 Remark
51	ZQ32008	六角法兰面螺母M8	Hexagonal flange nut M8	4	
58	Q2720412	十字槽盘头自攻螺钉	Self-tapping screw with cross groove disc head	4	
59	Q2714250	十字槽盘头自攻螺钉	Self-tapping screw with cross groove disc head	2	
60	Q33208	2型全金属六角锁紧螺母	Type 2 all-metal hexagonal locking nut	4	
61	1,90004E+11	软管卡箍	hose clamp	1	
62	Q33206	2型全金属六角锁紧螺母	Type 2 all-metal hexagonal locking nut	4	
63	1,90003E+11	穿线护套	Threading sheath	150	
64	WG9725472075	支架	Bracket	1	
65	WG9718470070	卡套式铰接接头体	Sleeve articulated joint body	1	
66	WG9725470818	卡套式铰接六角螺栓	Sleeve articulated hexagonal bolt	1	
67	T071800	组合密封圈	Combined Seal Ring	2	
68	WG9725472070	支架	Bracket	1	
69	WG9725470816	空心螺栓	Hollow bolt	2	
70	WG9000365401	单管夹(Φ15)	Single pipe clamp (Φ15)	4	
71	WG9725470256	支架	Bracket	1	
72	ZQ1840810	六角法兰面螺栓M8	Hexagonal flange bolt M8	2	
73	WG9000365401	单管夹(Φ15)	Single pipe clamp (Φ15)	2	
74	ZQ1840620	六角法兰面螺栓M6	Hexagonal flange bolt M6	1	
75	ZQ32006	六角法兰面螺母M6	Hexagonal flange nut M6	1	

5.07 前轴半挂牵引车制动装置/Front Axle Brake Device

