



CHAPTER 11 STEERING SYSTEM

SECTION 1 GENERAL DESCRIPTION

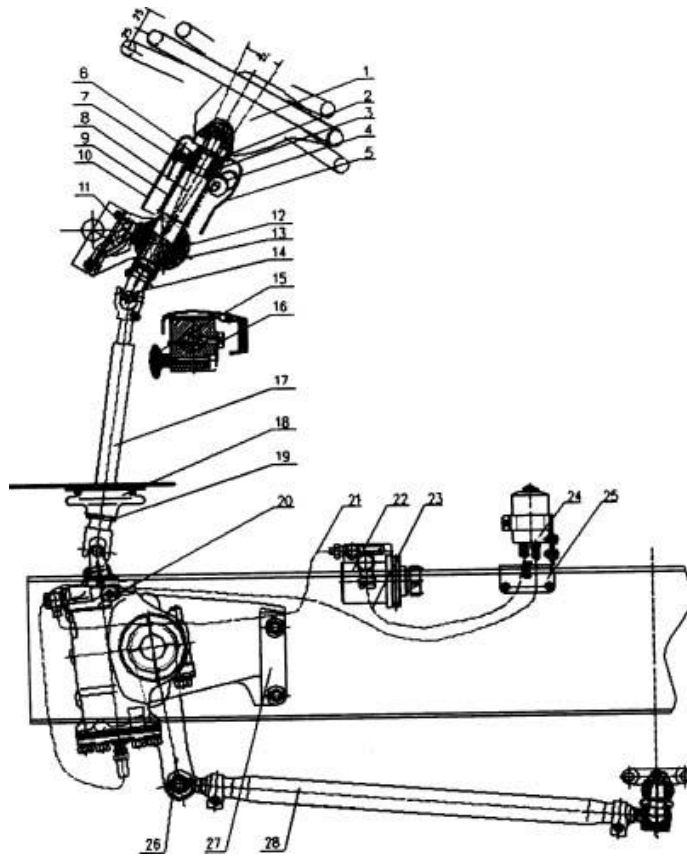


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All the series of automobiles of China National Heavy Duty Truck Group Co., Ltd. (SINOTRUCK) adopt integral hydraulic pressure booster power steering system. Structure of the power steering operating device is shown in Fig. 1.





1. Steering wheel
2. Retaining ring
3. Contact ring
4. Ignition switch assembly
- 5./10. Steering column cover
6. Steering column
7. Steering column cover erection support
8. Steering column sleeve
9. Spring
11. Wiring harness mount support
12. Steering column erection support
13. Steering column guide sleeve
14. Universal joint
15. Regulator handle
16. Travel limit screw
17. Steering telescopic shaft
18. Steering column jacket
19. Bush
20. Steering gear
21. High-pressure oil pipe
22. Steering booster vane pump
23. Inlet pipe
24. Steering oil tank
25. Steering oil tank installation bracket
26. Steering rock arm
27. Steering gear support
28. Steering draglink assembly

Fig. 11-1 Sketch of the hydraulic power steering system and steering gear



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Fig. 11-2, Fig. 11-3, Fig. 11-4 are respectively hydraulic pressure power steering system pipeline layouts of typical automobiles. Fig. 11-2 is for 4×2 and 6×4 types with relatively simple structures. Fig. 11-3 is for 6×2 type vehicle with elevatable bearing axle, the steering oil cylinder is not only for steering system power supply, but also for elevating shaft booster cylinder power supply. The part Nos. 7 and 8 oil pipes are respectively the inlet and outlet pipes of the elevating shaft booster cylinder. Fig. 11-4 is for double front shaft steering 8×4 type.

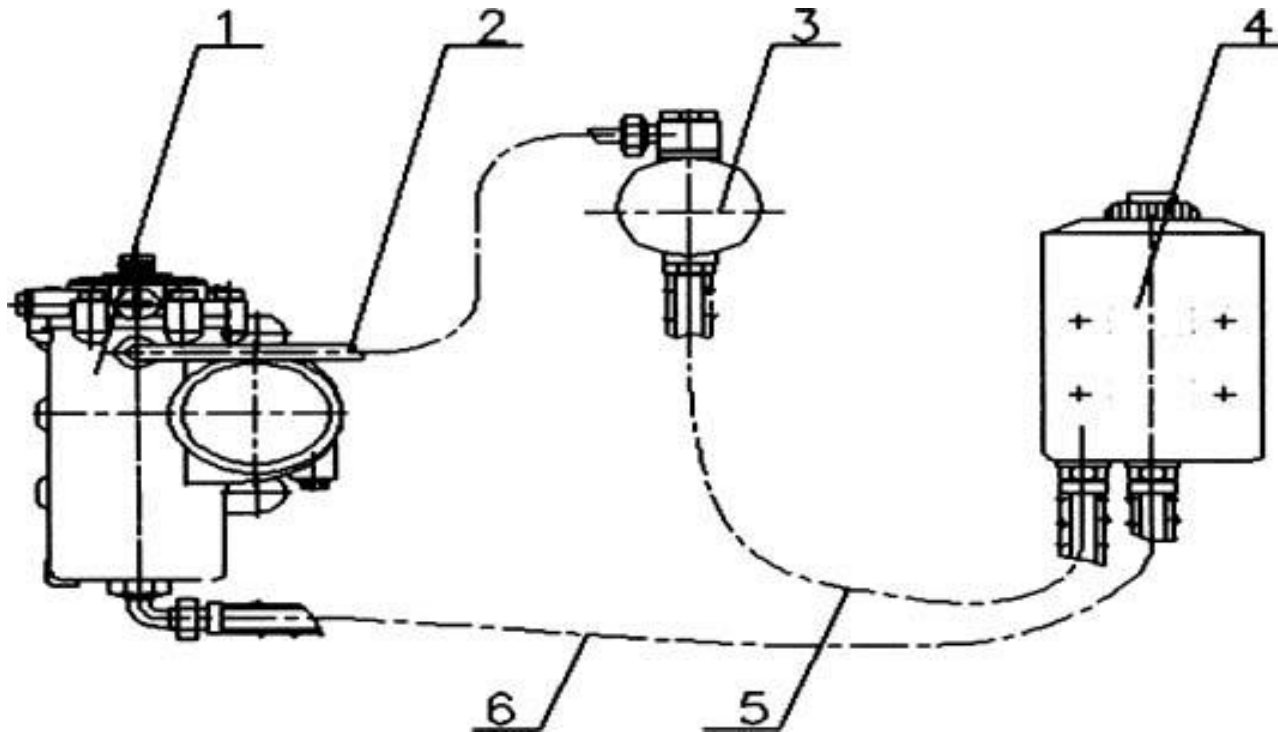
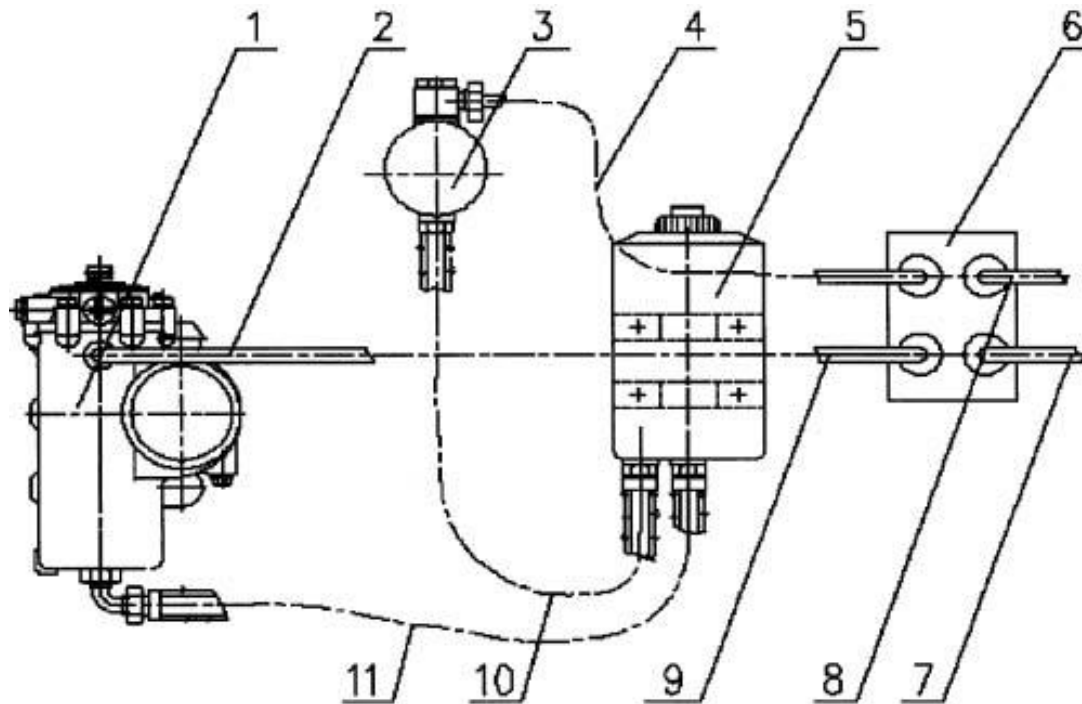


Fig. 11-2

1.Power steering gear 2 High pressure oil pipe 3 Steering pump 4 Steering oil tank 5 Oil sucking pipe 6. Oil return pipe



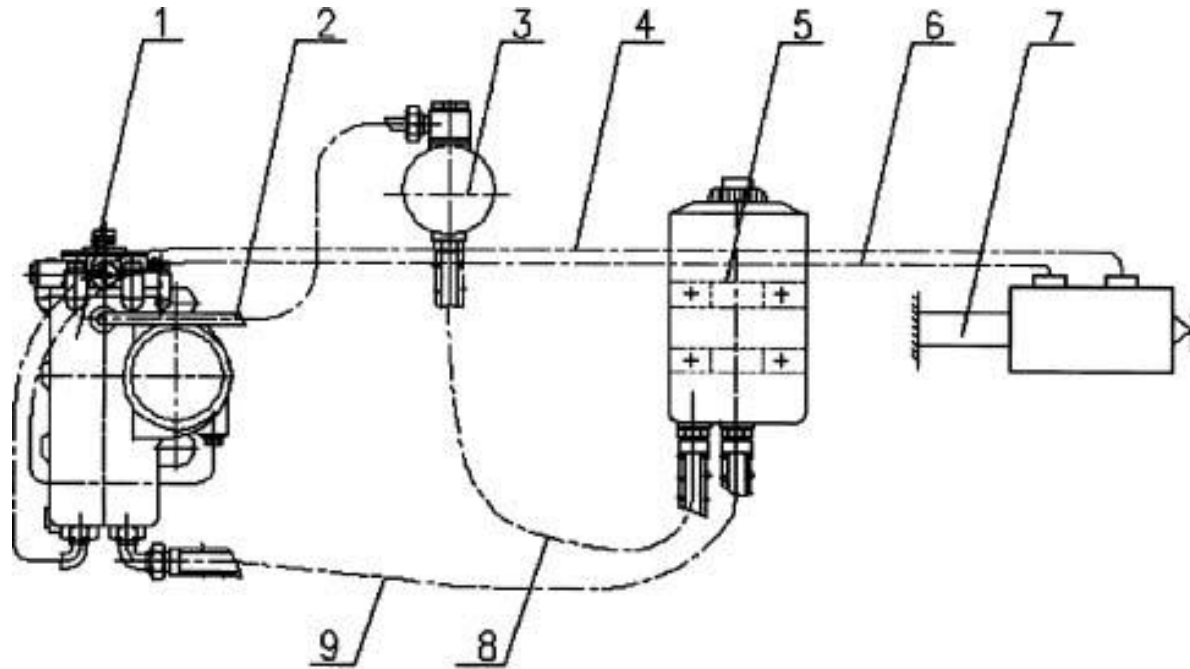
Fig. 11-3



1. Power steering gear 2,4,7,8,9. High pressure oil pipes 3. Steering pump 5 Steering oil tank 10. Oil sucking pipe 11. Oil return pipe



Fig. 11-4



1. Power steering gear
2. High pressure oil pipe
3. Steering pump
4. High pressure oil controller
5. Steering oil tank
6. High pressure oil pipe
7. Secondary steering axle booster cylinder
8. Oil sucking pipe
9. Oil return pipe