- **SECTION 5 TWIN STEERING RIGID FRONT AXLE**

- ## I. Structure

For the structure of twin steering rigid front axle, see the Fig. 7-12. The basic structure is mainly the same as that of single rigid front axle, and only some individual connecting parts are different.

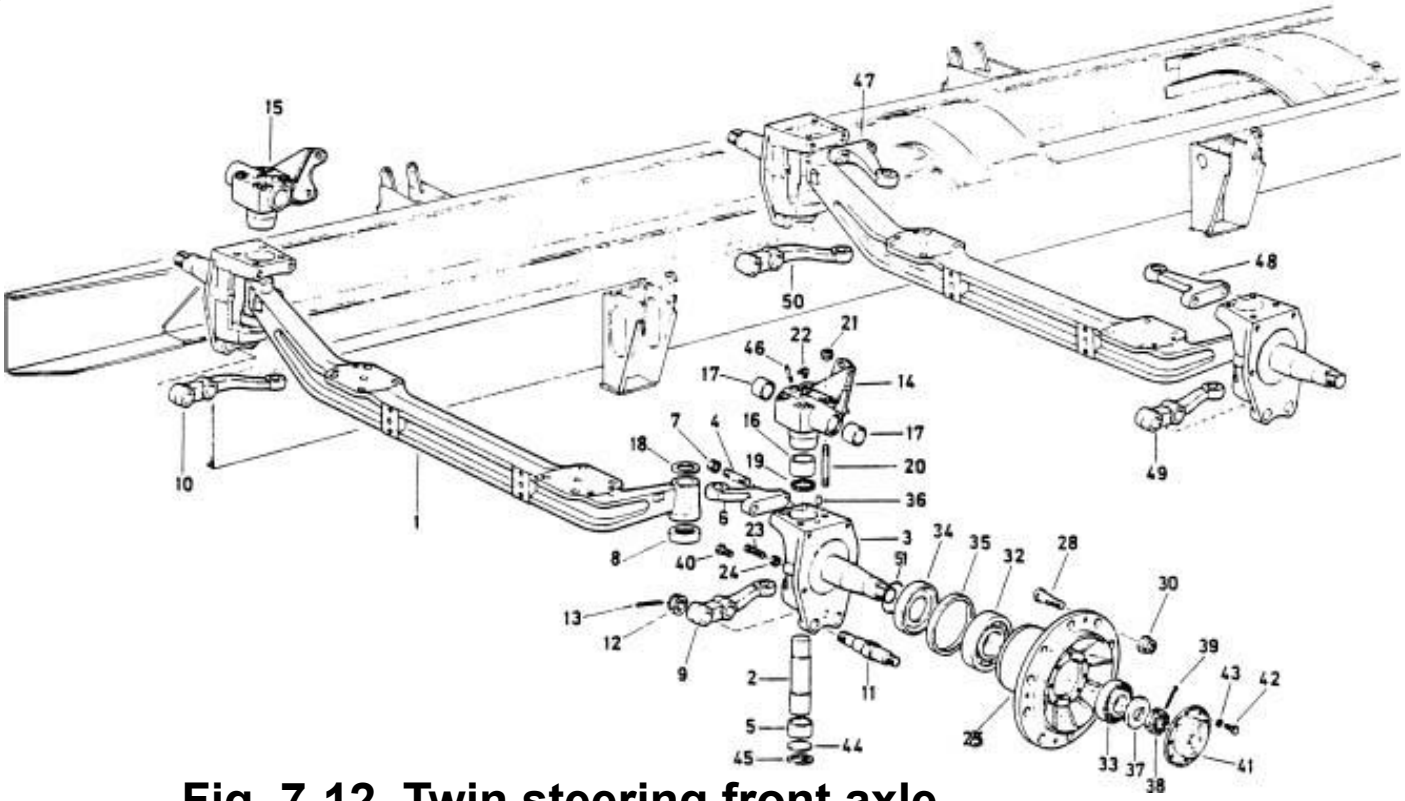


**Fig. 7-12 Twin steering front axle**

- **II. Adjustment for Twin Steering Primary and Main Shaft Straight-through Is Shown in Fig. 7-12a**
- ① Put the primary shaft wheel at the straight-through position using the wheel straight through alignment gauge , and rotate the steering gear input shaft to the upper end surface reticule, facing right ahead ( at this moment the steering gear is in the middle position)，and then adjust the length of the steering drag link to enable both ends to connect with the steering rocker and steering knuckle arm respectively.
- ② The steering of the main shaft wheel is controlled by one set of steering drag link mechanism, which consists of three drag links and two intermediate rocker supports. The length adjustment of the first and second drag links should ensure two intermediate rockers to be perpendicular to the ground. Use again the front shaft wheel straight-through alignment gauge to make the two ends connect with the steering rocker and the main shaft steering knuckle arm respectively. When adjusting the steering drag link mechanism of the main shaft, the primary shaft wheel must be in the straight-through position and remain unchanged.

- ③ If it is found that the truck has a defect in the main shaft tire during operation, then it is required to check if the tire shows any tear and wear while checking the truck straight-through, and if there is an obvious lateral slip mark, it shows the tire position is incorrect, and at this moment, it needs to identify the direction and size of the wheel deflection. The simplest method is to measure the distance between the highest points of left/right tire sides of the main shaft and leaf spring separately. The length adjustment of the third steering drag link shall be determined in accordance with the difference value in distance of the two sides, and in calculation, the drag link arm turning radius and tire radius of the measured area should be taken into account. After the adjustment, a road test should be carried out to check if the wheel is adjusted to the straight-through position, and at this time, the tire should have no lateral slip marks.

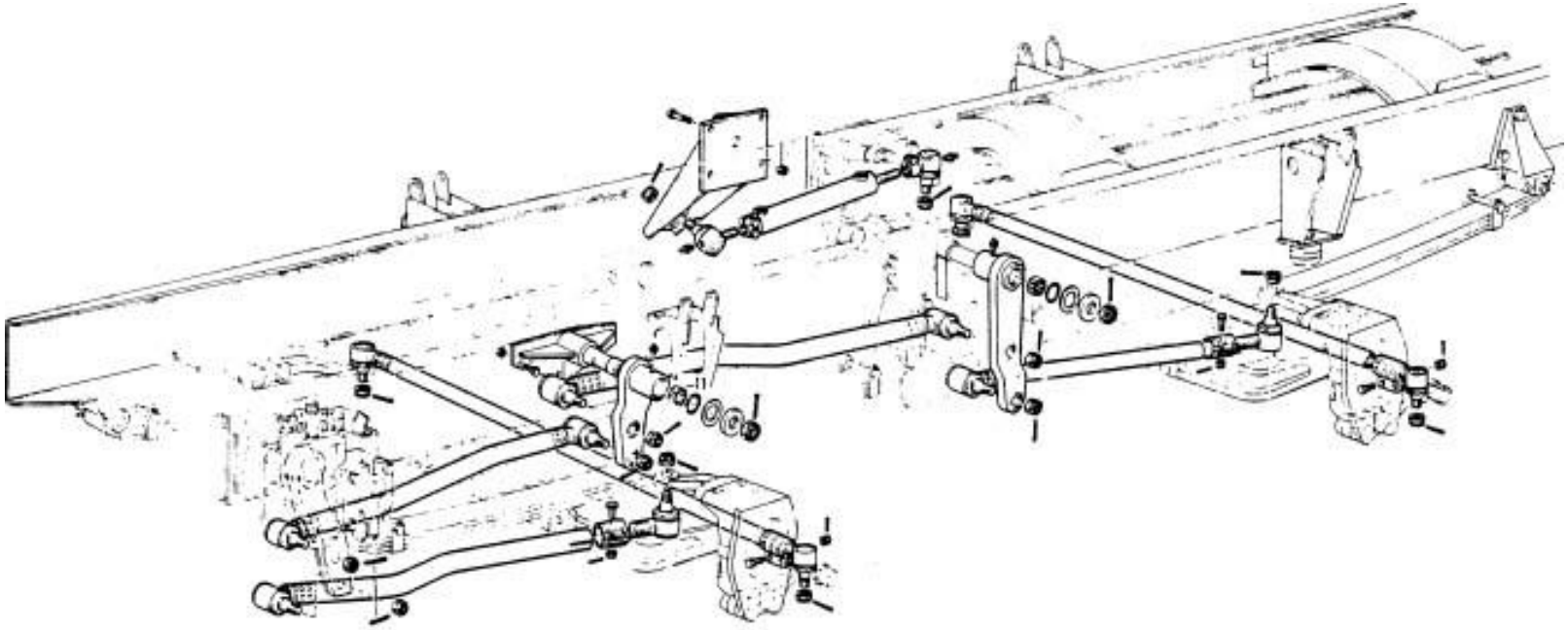

**Fig. 7-12a  Twin steering pull rod system**