

SECTION 6 A SIMPLE METHOD FOR AIR PIPELINES SYSTEM TROUBLE ANALYSIS -- MIDDLE DISCONNECTING

- In practice there are various kinds of air pipeline system malfunctions, but if you have a good command of working principle of the whole system and the components, it will not be hard for you to analyze the malfunction causes. However, as the system is relatively complicated, when malfunction happens in some system and you want to find out which component has failed, you may feel quite overwhelmed. Here we would like to introduce to you a fast search method -- middle disconnecting.
- Core of the middle disconnecting is, first to find out the system where the malfunction occurred and the components related with the system, then disconnect mid-position of the system, and use a simple testing method to judge in which half the malfunction happened. After that, disconnect the mid-position of the half system where the malfunction occurred. Judge for the malfunction after testing the half of half, and so on. In this way every time you can exclude 50% of the components, and after several times you will be able to find out where the malfunction is quickly and accurately. Perform disconnection and repair after finding out the malfunction component.



- For example, when depressing the brake pedal, the (intermediate) rear axle braking chamber does not work. You may check the system schematic diagram for (intermediate) rear axle braking system and the related components as shown in Fig. 12-29.
- Let's at first disconnect the mid-position of the system, for example, from the main brake valve output connector "12". When depressing the brake pedal, if there is certain air pressure discharging from the air outlet, that means the half system before the main brake valve without problem: malfunction must be in the other half system after the main brake valve. Connect the union just disconnected. Determine the middle position of the half system where malfunction exists, for example, at control port "4" of the relay valve "16", disconnect the union, depress the brake pedal, if here we can see air pressure discharging, it means that the malfunction is after the relay valve. Disconnect the middle position after the relay valve, for example, at joint "2" of the relay valve ventilation pipe, depress the brake pedal, if here we cannot see air pressure discharging, it means that the malfunction is in the relay valve "16". If we perform troubleshooting with some testing instruments (for example, barometer), the testing will be more accurate.

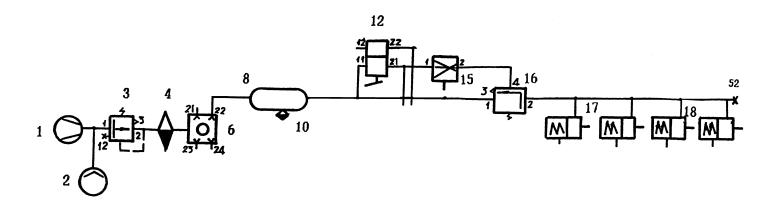


Fig. 12-29 (Intermediate) rear axle systematic sketch diagram