6.10 拖车操作方法及注意事项

6.10 Operation method and precautions of towing

当车辆在路上出现了动力电池电量不足或者严重的故障,车辆不能行驶、现场无法修复需要拖车时,请参照以下操作步骤方法:

When the power battery of the vehicle is insufficient or serious fault occurs on the road, and the vehicle cannot be driven or repaired on site and a trailer is required, please refer to the following operation procedures and methods:

- **1**. 请安排与故障车辆相匹配的清障车(Road-block removal truck)进行拖车,清障车为拖吊型、中重型(**12** 吨以上)的适宜。
- 1. Please arrange the road-block removal truck matched with the faulty vehicle to tow the vehicle. The towing and heavy-duty road-block removal trucks are suitable (over 12 tons).
- 拆卸故障车辆后轮左右任意一边的半轴,把拆卸下来的所有零部件全部放到故障车辆车内放置好;
- 2. Disassemble the half axle on either the left or the right side of the rear wheel of the faulty vehicle, and put all the removed parts well into the vehicle with fault;
- 3. 如果能确认故障车辆的驱动电机为无故障(比如电机内部机械或电路故障)的情况下,可以选择拆卸驱动电机的九相线任意一端,此情况下拆卸后轮半轴或电机九相线,可二选一、且必须要选择拆卸其中的一项;
- 3. If it can be confirmed that the driving motor of the faulty vehicle is fault-free (such as internal mechanical or electrical fault of the motor), any end of the nine-phase line of the driving motor can be removed. In this case, either the rear wheel half axle or the nine-phase line of the motor can be removed, and one of them must be removed;









- **4.** 如果是选择拆卸驱动电机的九相线,在拆卸前必须要关钥匙、关低压总开关、拔掉高压维修开 关、并等待 **15** 分钟后用万用表检测过电机九相线无电的情况下,才可以进行拆卸驱动电机的 三相线;
- 4. If the nine-phase line of the driving motor is to be removed, before it is removed, turn off the key and the low-voltage main switch, pull out the high-voltage maintenance switch, wait for 15 minutes, and after detecting with a multimeter and confirming that the nine-phase line of the motor is dead, the three-phase line of the drive motor can be disassembled;





- 拆卸高压维修开关必须按照维修断高压电与上高压电流程进行。
- The removal of the high-voltage maintenance switch must be carried out according to the process of disconnecting and connecting the high-voltage power.
- 5. 打开故障车辆前脸活动盖板,将活动盖板放置到故障车辆车内;
- 5. Open the front movable cover plate of the faulty vehicle, and place it in the faulty vehicle;

- 6. 将清障车的拖车托举盘与故障车辆的底盘前端横梁连接牢固并举升故障车辆,使故障车辆的两 个前轮离地面高 200mm 左右;
- 6. Connect the trailer lifting plate of the road-block removal truck firmly to the crossbeam at the front end of the chassis of the faulty vehicle and lift the faulty vehicle, so that the two front wheels of the faulty vehicle are about 200mm off ground;
- 7. 把清障车的气管连接到故障车辆车头底盘第 1 根横梁处的外接气源接头;给故障车辆进行底盘 气路充气;









- Connect the air pipe of the road-block removal truck to the external air source joint at the first cross beam of the chassis under the head of the faulty vehicle; Inflating the chassis gas circuit of the faulty vehicle;
- 8. 确认好故障车辆钥匙是关闭状态、危险灯是打开状态且会双闪亮起来;
- 8. Confirm that the key of the faulty vehicle is off and the hazard lamp is on and flashes on both sides;



- 9. 然后松手刹,清障车开始缓慢起步拖车、以不超过 30KM/H 的低速安全行驶;
- 9. Then release the hand brake, and the road-block removal truck starts to slowly start the trailer and drive safely at a speed lower than 30KM/H;
- **10**. 故障车辆拖回修理厂后,应当检查车身周边的油漆及部件是否因拖车过程不慎损坏,及时报修处理;
- 10. After the faulty vehicle is towed back to the repair shop, check whether the paint and parts around the vehicle body are damaged accidentally due to the towing process, and report for repair in a timely manner if any;
- 11. 拆下的部件应当尽快恢复好;
- 11. The dismantled parts shall be restored as soon as possible;
- 12. 进行故障车辆的故障排除。
- 12. Troubleshoot the faulty vehicle.