6. EMERGENCY PROCEDURES

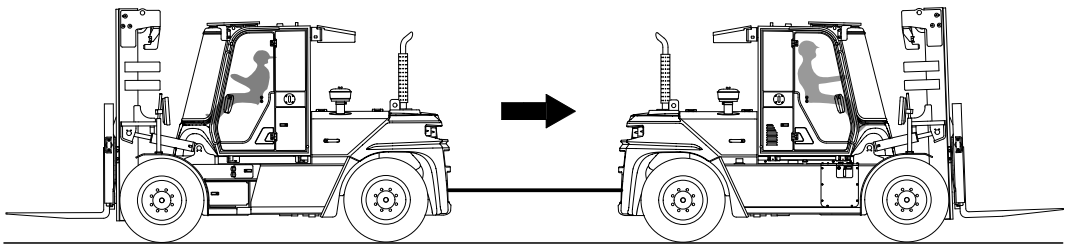
1. HOW TO TOW A DISABLED TRUCK

If your lift truck becomes disabled but it can be moved freely on its own wheels without further damage, use the following procedures to tow it safely to a repair area.

△ **It is important for your safety and the care of your lift truck to use the proper equipment and carefully follow these recommendations for safe towing.**

⚠ **DO NOT tow a lift truck if there is a problem with the brakes or tires or the steering cannot be operated. DO NOT tow up or down ramps and steep inclines. DO NOT attempt to tow a lift truck if traction or weather conditions are poor.**

1) Be sure to apply the parking brake or block the drive wheels on the disabled truck while working around it.
2) When possible, raise the carriage (forks) on the disabled truck about 300 mm (12 in) from the floor or ground. Secure the carriage with a chain.
3) Obtain another lift truck of equal or larger size carrying a partial load for traction.
4) Check that the counterweight bolts are in place and properly torqued. (This bolt is made of a special high tensile steel and is not commercially available. Replace it, when necessary, only with a genuine HYUNDAI replacement part).
5) Use an approved, solid metal tow bar with towing couplers that connect to the towing pins in the counterweights.
6) Release the parking brake on the towed truck.
7) Put the gear selector lever in the NEUTRAL position.



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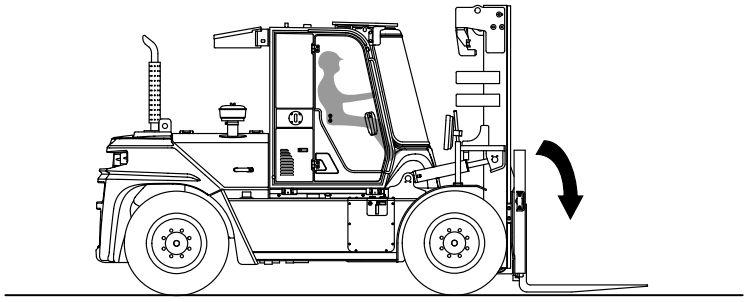
8) Tow the disabled truck backward. An operator must be on the towed truck.

   Tow the truck slowly. Careful towing is necessary to prevent injury to personnel or damage to the truck. The truck should be towed at a speed of less than 8 km/h (5 mph) with a driver in the seat. Do not lift the truck or any wheels off the floor or ground while the truck is being towed.

⚠ **The power steering will not operate on the disabled truck when the engine is not running.**

9) Park the disabled truck in authorized areas only. Fully lower the forks to the floor, put the gear selector lever in the NEUTRAL position and turn the staring switch to the OFF position. Set the parking brake switch the ON (LOCK) position. Remove the key and, when necessary, block the wheels to prevent the truck from rolling.



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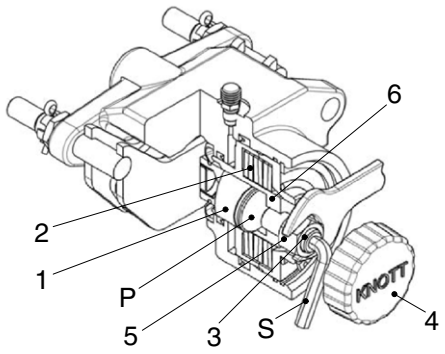
⚠ **Always engage the parking brake when parking a lift truck. The truck can move and cause injury or death to personnel near it.**

2. PARKING BRAKE RELEASE

Parking brake is operated by the spring force and released by hydraulic pressure.
If the engine or transmission does not operate, the parking brake will be operated to stop the truck.
For an emergency, the parking brake can be released as below.



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1	Thrust bolt	4	Screw cap	P	Even surface
2	Bank of cup springs	5	Lock nut	S	Socket wrench
3	Adjusting screw	6	Piston		

1) The truck has to be secured against rolling away.
2) Release the screw cap (4) and unscrew
3) Release the lock nut (5) with a spanner size 24 or 30 and turn the adjusting screw (3) with socket wrench size 8 or 10 manually counter-clockwise until the brake disc is free.

⚠ For the emergency release is an actuation torque of 40 Nm respectively 70 Nm required.

4) Mount the lock nut (5) and the screw cap (4) and tighten both as far as possible manually. (protection against dirt)

⚠ Now, the truck do not have any brake function. The truck must be secured against moving away with proper means. Before putting the truck into operation again, the brake has to be adjusted again. Refer to the service manual.

3. HOW TO USE BATTERY JUMPER CABLES

If your lift truck battery is discharged (dead), you can start your lift truck by jumping it from another lift truck that has a 12 V negative-ground electrical system. The "Booster" battery must be fully charged and in good condition. This section explains how to perform this procedure safely. To avoid damage to your lift truck and your battery or the possibility of harm to yourself, follow the instructions and warnings carefully. If you have any doubts, ask for help from an experienced mechanic.

If your truck has a battery with terminals on the side you will need a set of jumper cables with matching connector clamps or cable adapters for side mounted battery terminals.

△ **Use only a 12 V NEGATIVE GROUND SYSTEM to jump your truck. You can injure yourself and permanetaly damage your truck's 12 V starting motor and ignition system by connecting it to a 12 V power supply or to a positive ground system.**

⚠ **BATTERIES CONTAIN SULFURIC ACID. Avoid acid contact with skin, eyes, or clothing. If acid contacts your eyes or skin, flush immediately with water and get medical assistance. Wear safety glasses when working near the battery to protect against possible splashing of the acid solution.**

If the discharged battery has filler caps, check the fluid level. Do not use an open flame to check and do not smoke. If low, add distilled water to the correct level. Be sure to install the caps before jump starting.

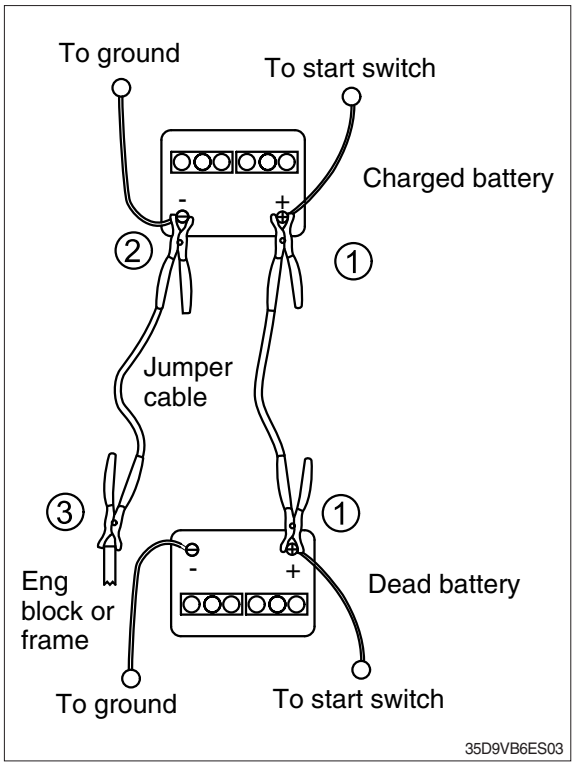
Do not jump start, charge, or test a sealed type battery if the test indicator looks illuminated or has a bright color. Install a new battery.

⚠ **BATTERIES EMIT EXPLOSIVE GAS. Do not smoke or have open flames or sparks in battery charging areas or near batteries. An explosion can result and cause injury or death.**
Hydrogen gas is produced during normal battery operation.
Hydrogen can explode if flames, sparks, or lighted tobacco are brought near the battery. When charging or using a battery in an enclosed space, always provide ventilation and shield your eyes. Wear safety glasses when working around batteries.

3) Put the truck with the booster battery as near to the other truck as necessary for the jumper cables to reach both batteries. Check and make sure that the trucks do not touch each other. Use particular care when connecting a booster battery to prevent sparks.

4) On both trucks:
   ① Apply the parking brake.
   ② Put the gear selector lever in the NEUTRAL position.
   ③ Turn the starting switch to the OFF position.
   ④ Turn all accessories to the OFF position and leave them off until after the engine has been started and the jumper cables have been removed.

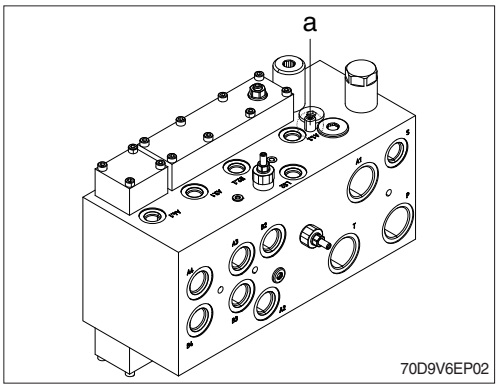
⚠ **To avoid short circuits, remove all jewelry and do not permit any metal tools to make contact between the positive battery terminal and other metal on the truck. When you connect jumper cable clamps to the positive terminals of the two batteries, make sure that neither clamp contacts any other metal. Injury can occur from electrical shock or explosion.**



5) Connect the jumper cables in the following sequence:
   ⓐ Connect a jumper cable from the positive (+; red) terminal on one battery to the positive (+; red) terminal on the other battery. Never connect positive (+; red) to negative (-; black), or negative to positive.
   ⓑ Connect one end of the second cable to the grounded negative (-; black) terminal of the jumper vehicle battery.
   ⓒ Connect the other end of the second cable to a stationary, solid metallic point on the engine of the stalled vehicle, not to the negative (-; black) terminal of its battery. Make this connection at a point at least 450 mm (18 in) away from the battery, if possible. Do not connect it to pulleys, fans or other parts that move. Do not touch hot manifolds that can cause sever burns.
6) Start the engine on the jumper vehicle and run the engine at a moderate speed for a minimum of five minutes.
7) Start the engine on the stalled vehicle. Follow the starting instructions in section 5, Starting and Operating Procedures in this manual. Be sure that the engine is at idle speed before disconnecting the jumper cables.
8) Remove the jumper cables by reversing the installation sequence exactly. Start by removing the last jumper cable from the stalled vehicle first. Remove the cable end from the engine block first, then the other end of the negative (-; black) cable.
9) Remove both ends of the positive (+; red) cable.

4. EMERGENCY FORK LOWERING

In case that the mast can not be lowered due to a problem in the controller, activate the emergency lowering valve on the MCV assembly by rotating the valve (a).



⚠ **Manual override features are intended for emergency use, not for continuous-duty operation.**

1) Rasing the cabin.

2) Use the L-wrench (3 mm) to slowly undo the screw for the emergency lowering feature in an anti-clockwise direction until lowering begins.

※ **Do not undo the screw more than 1.5 turns.**

※ **If lowering still does not begin, there is a mechanical block. Do not under any circumstances continue to unscrew the emergency lowering feature.**

3) After lowering is complete, the screw must be screwed back in again

※ **Screw locking is essential to prevent fork lifting (or lowering) slow (or malfunction) due to valve opening.**

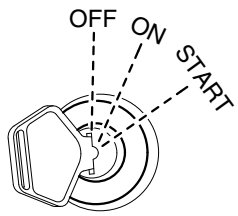
※ **Do not exceed a tightening torque of maximum 0.25 ~ 0.3 kgf·m (1.8 ~ 2.2 lbf·ft).**

⚠ **When operating the emergency lowering valve in order to lower the mast inevitably, always make certain that any person should not stand or pass under the mast, the fork and platform so as to avoid from unexpected accident such as severe personal injury or death.**

5. KEY-LOWERING INTERLOCK

When the engine is stopped and the start key is in the 'OFF' position, the fork does not lower when the lift lever is pushed forward. However, sitting on the seat, placing the engine start key in the 'ON' position and pushing the lift lever forward allows the fork to be lowered even if the engine stops.

※ **When the fork will not lower due to system malfunction or other reasons, it can be lowered by loosening the emergency lowering valve. (refer to page 6-6 for details.)**



Start switch

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