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WINCH WINCH SYSTEM SYSTEM DESCRIPTION

DESCRIPTION

a. The winch winds and releases the winch wire by reducing the speed of the motor force with a 3 stage planetary gear reducer that consists of 3 ring gear and planetary gear sets.

- **b.** During the release operation, as the motor rotates clockwise, the outer clutch sub-assembly also rotates clockwise. Then the screw connection operates in the loosening direction and the clutch releases. However, the driving force is transmitted and the winch drum rotates clockwise due to the screw connection between the outer clutch sub-assembly and inner clutch sub-assembly.
- **c.** During the wind operation, as the motor rotates counterclockwise, the outer clutch sub-assembly also rotates counterclockwise. As the clutch outer disc and clutch inner disc are secured together by the screw connection, the outer and inner clutch sub-assembly become a single unit, which rotates and transfers the driving force to rotate the winch drum counterclockwise.
- **d.** The winch can be operated remotely using the remote control switch. The switch has a wire that is 3 m (9.84 ft.) long.
- **e.** The remote control switch has the following built-in components: a power indicator light that indicates the power supply, and a motor overheat temperature indicator light and buzzer that indicate when the motor is overheating.

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