



MACHINE ENABLING AND STARTING THE DIESEL ENGINE

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8.1. GENERAL INFORMATION

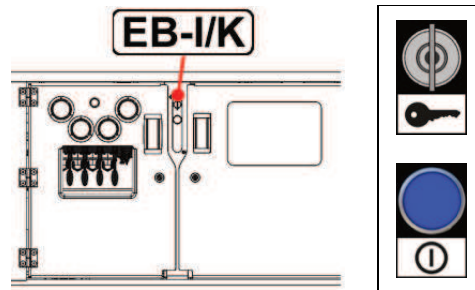
Preliminary information

The Diesel engine can be started in the following ways:

- Via the radio control - NORMAL CONDITION.



- From the control board [EB-I/K] of the vehicle.



NOTE

If you start the Diesel engine from the [EB-I/K] control board, the command and control functions of the vehicle are limited.

Radio control Safety precautions

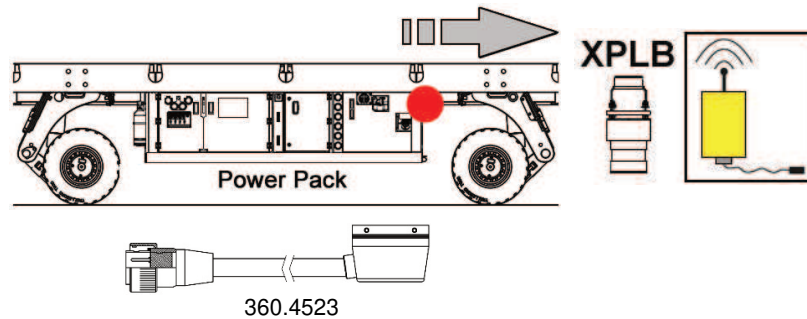


WARNING

The radio control shall only be operated by properly trained personnel.

Connection of radio control receiver

To ensure the operation of the radio control, connect the receiver to the [XPLB] connector using the cable [360.4523].



Preparing the taps




ATTENTION

Prepare all the taps as described in paragraph 3.2 (unless faults/failures of vehicle components are present).



8.1.1 Starting the diesel engine via the radio control

Operating procedure


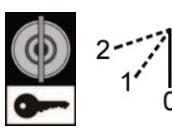
- 1) Enable the transmitter (see paragraph 5.3). 
- 2) Enable the vehicle to operate: act on the transmitter (radio control) ① lever selector switch or on ① the control board **[EB-I/K]** button (INIT function).
 - Transmitter: operate the selector switch after hearing/seeing the buzzer signal.



- Control board [EB-I/K]: the ① button (INIT) starts flashing and the buzzer emits a warning sound/light indicating that the system is operational. Once the system is operational, press the ① button (INIT); the button light is steadily lit.



- 3) Start the Diesel engine using the transmitter ↻ selector switch (radio control) or by turning the master key 🔑 of the **[EB-I/K]** control board all the way.

Selector	General key
	

After start-up, check that the display of the transmitter (radio control) and the touch screen display show the normal operation icons and that no alarm conditions are present.



NOTE

In the event that the electronic system does not get activated (failure of control unit X90) or does not allow the Diesel engine to start, you must follow the emergency start-up procedure referred to in paragraph 8.1.3.


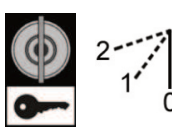


WARNING

Never leave the vehicle unguarded with the engine running.

SWITCHING OFF THE DIESEL ENGINE

To turn off the Diesel engine, operate the selector switch ⌘ of the transmitter (radio control) or turn the master key 🔑 to position "0".

Selector	General key
	



ATTENTION

Make sure to stop the vehicle before switching off the engine.

8.1.2 Diesel engine start via the control board [EB-I/K] — Radio control not working

Precautions for use and safety



WARNING

The command and control functions of the vehicle are limited compared to those available on the radio control.



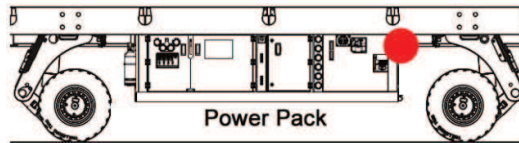
NOTE


When using the vehicle without a radio control, it is possible to:

- Lift and lower the vehicle by means of the electric cabinet control board [EB1] or the distribution block.
- Steer the suspensions via the relevant proportional valves.



Operating procedure

- 1) Close the [XPLB] connector with the cap [360.4491].




- 2) Connect the vehicle batteries → Switch [+24V] lever in the [ON] position.
- 3) General key  in position 1.



- 4) The  button (INIT) starts flashing and the buzzer emits a warning sound/light indicating that the system is operational. Once the system is operational, press the  button (INIT); the button light is steadily lit.



- 5) Start the Diesel engine by turning the general key  all the way.

On start-up, check that the display shows the normal operation icons and that no alarm conditions are present.



NOTE

In the event that the electronic system does not get activated (failure of control unit X90) or does not allow the Diesel engine to start, you must follow the emergency start-up procedure referred to in paragraph 8.1.3.

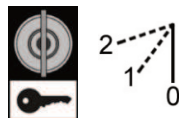


WARNING

Never leave the vehicle unguarded with the engine running.

SWITCHING OFF THE DIESEL ENGINE

General key  in position 0.



ATTENTION

Make sure to stop the vehicle before switching off the engine.

8.1.3 Starting of the Diesel engine in emergency conditions

Preliminary information

When the electronic system does not get activated (failure of the X90 control unit), to start the Diesel engine, you must follow the procedure on the following page.

Precautions for use and safety



WARNING

The vehicle should be used in emergency conditions only for the time strictly necessary and under the full responsibility of the operator, given that the command and control functions of the vehicle are limited and not safely monitored.



WARNING

Operate the controls very gradually and with extreme caution. The absence of an electronic control does not impose any restrictions on the use of the components, which can be overloaded and damaged, with potential risks for transport and persons and property surrounding the vehicle.



NOTE

When using the vehicle in emergency conditions, it is possible to:

- Lift and lower the vehicle via the distribution block.
- Steer the suspensions via the relevant proportional valves.
- Accelerate and brake the vehicle via the transmitter relevant potentiometers (8) and (19).

Refer to chapters 9 and 10.

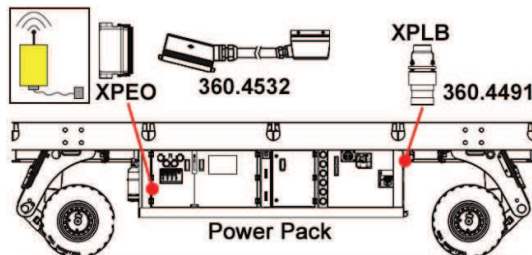



Operating procedure

- 1) Vehicle and radio control emergency stop buttons disabled (OFF).



- 2) Use the [360.4532] cable to connect the receiver to the [XPEO] connector.
- 3) Close the [XPLB] connector with the cap [360.4491].





- 4) Connect the vehicle batteries → Switch [+24V] lever in the [ON] position.
- 5) [EB-I/K] control board → general key  in position 1.
- 6) Check that all radio control switches are in position [0] and that all potentiometers on the radio control are at zero.



WARNING

Disregarding this instruction may result in the machine moving unintentionally once the engine has started.

- 7) Check that the S-KEY  key (1) is correctly inserted (arrow in the horizontal position).
- 8) Press the transmitter  (2) power button.

Continued →

Continued "Starting of Diesel engine in emergency conditions" →

Operating procedure

- 9) Press the transmitter power button **↑ START (2)** a second time. The green LED starts blinking slowly indicating that the transmitter is enabled and is communicating with the receiver.



- 10) Enable the transmitter controls → Selector switch (4) ⏻ in position [1].



- 11) Start the Diesel engine using the transmitter (radio control) selector switch ⏻ or by turning the general key 🔑 of the [EB-I/K] control board all the way.

Selector	General key

SWITCHING OFF THE DIESEL ENGINE

Operate the transmitter selector ⏻ (radio control) or turn the general key 🔑 to position 0.

Selector	General key



ATTENTION

Make sure to stop the vehicle before switching off the engine.

8.1.4 Functionality testing

Interventions to carry out

Position the vehicle at the operating height, then:

- test the right and left steering manoeuvres;
 - engage different steering types;
 - engage the forward and the reverse gear;
 - engage the service and the parking brakes;
 - perform the lifting/lowering in parallel, equalized and point to point.
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