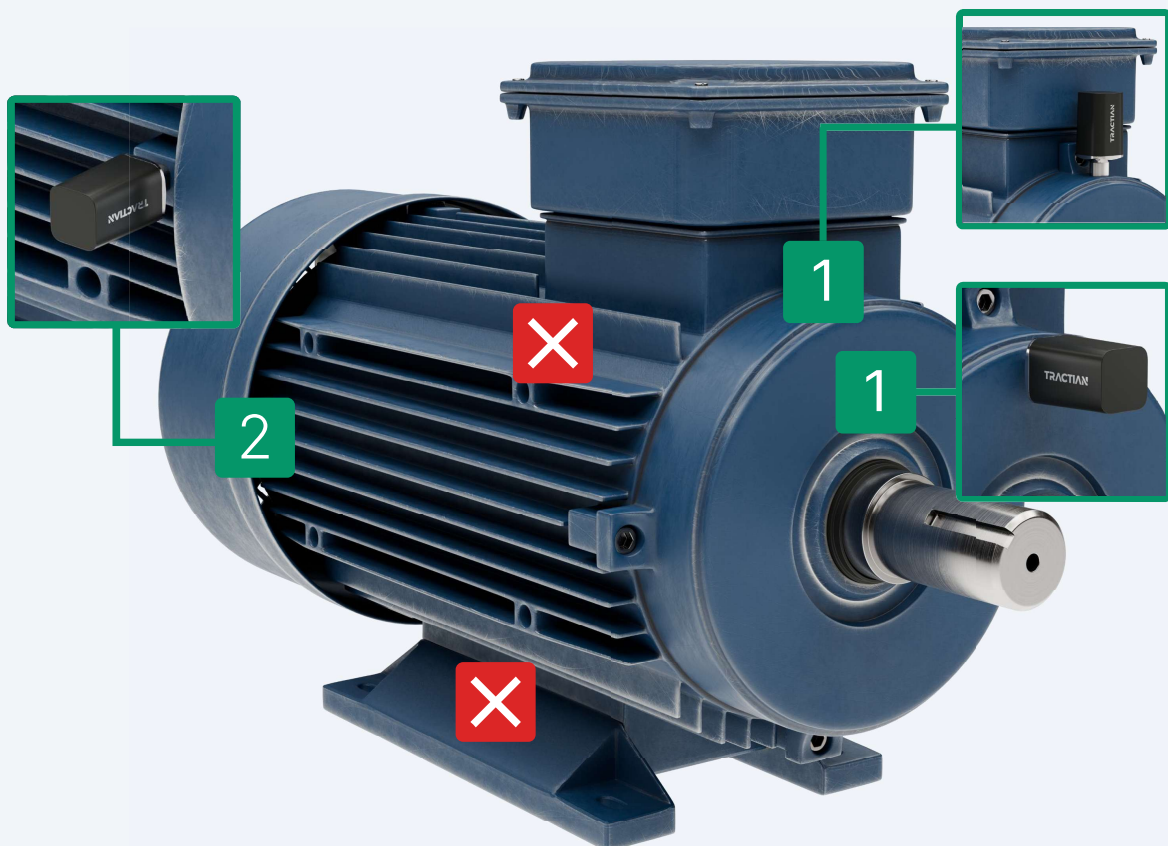


It is recommended to mount the sensor so that the Z-axis is oriented in the vertical direction of the equipment. The X and Y axes should be aligned with the horizontal and axial directions, respectively.

For electric motors, it is essential to monitor points close to the bearings, preferably at the following positions:

- 1 Drive End (DE)
- 2 Non-Drive end (NDE)

These points are strategic, providing better sensitivity in fault detection by allowing for improved propagation of the motor's vibration to the sensor



✓ Ideal

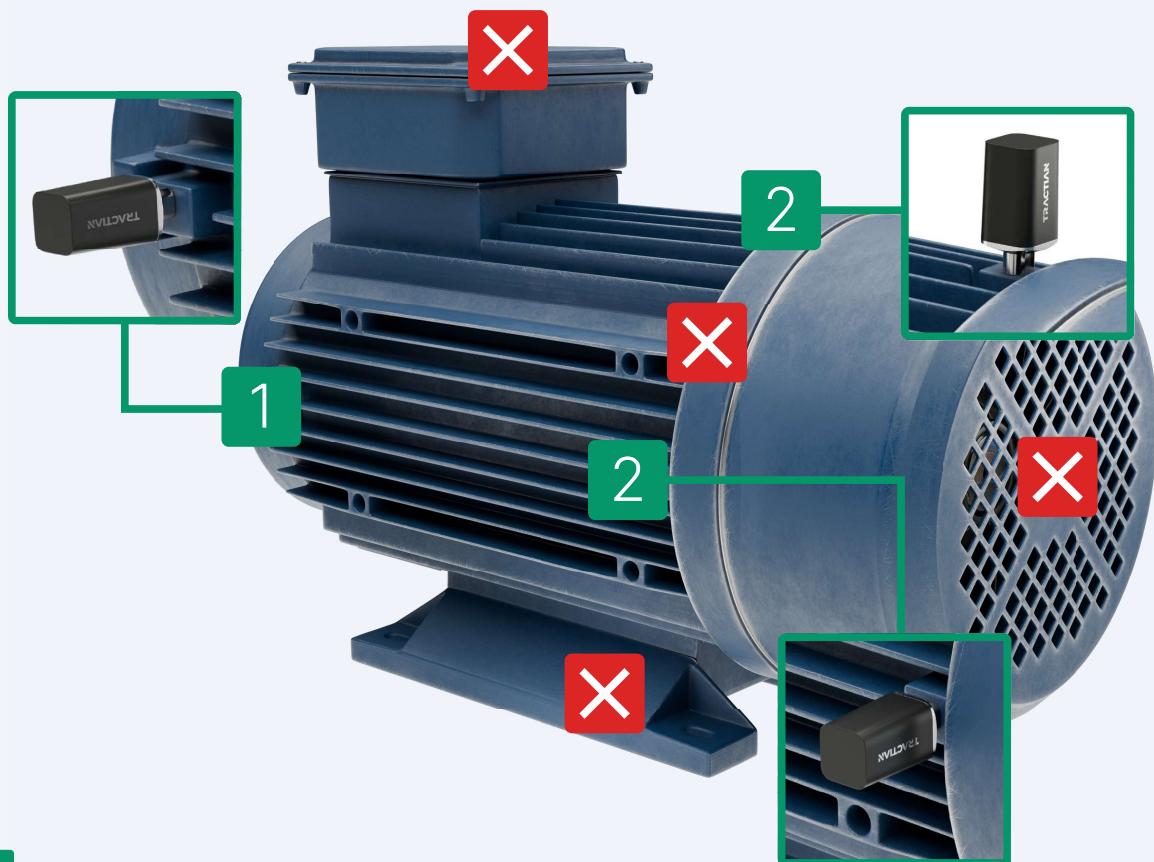
✗ Inadequate position

If it is not possible to align the Z-axis in the radial direction, it is recommended to mount the sensor so that at least two of its axes are aligned with the vertical and horizontal directions. Whenever possible, prioritize flat surfaces and locations close to the bearings to ensure greater accuracy in data collection.

For electric motors, it is essential to monitor points close to the bearings, preferably at the following positions:

- 1 Drive End (DE)
- 2 Non-Drive end (NDE)

These points are strategic, providing better sensitivity in fault detection by allowing for improved propagation of the motor's vibration to the sensor

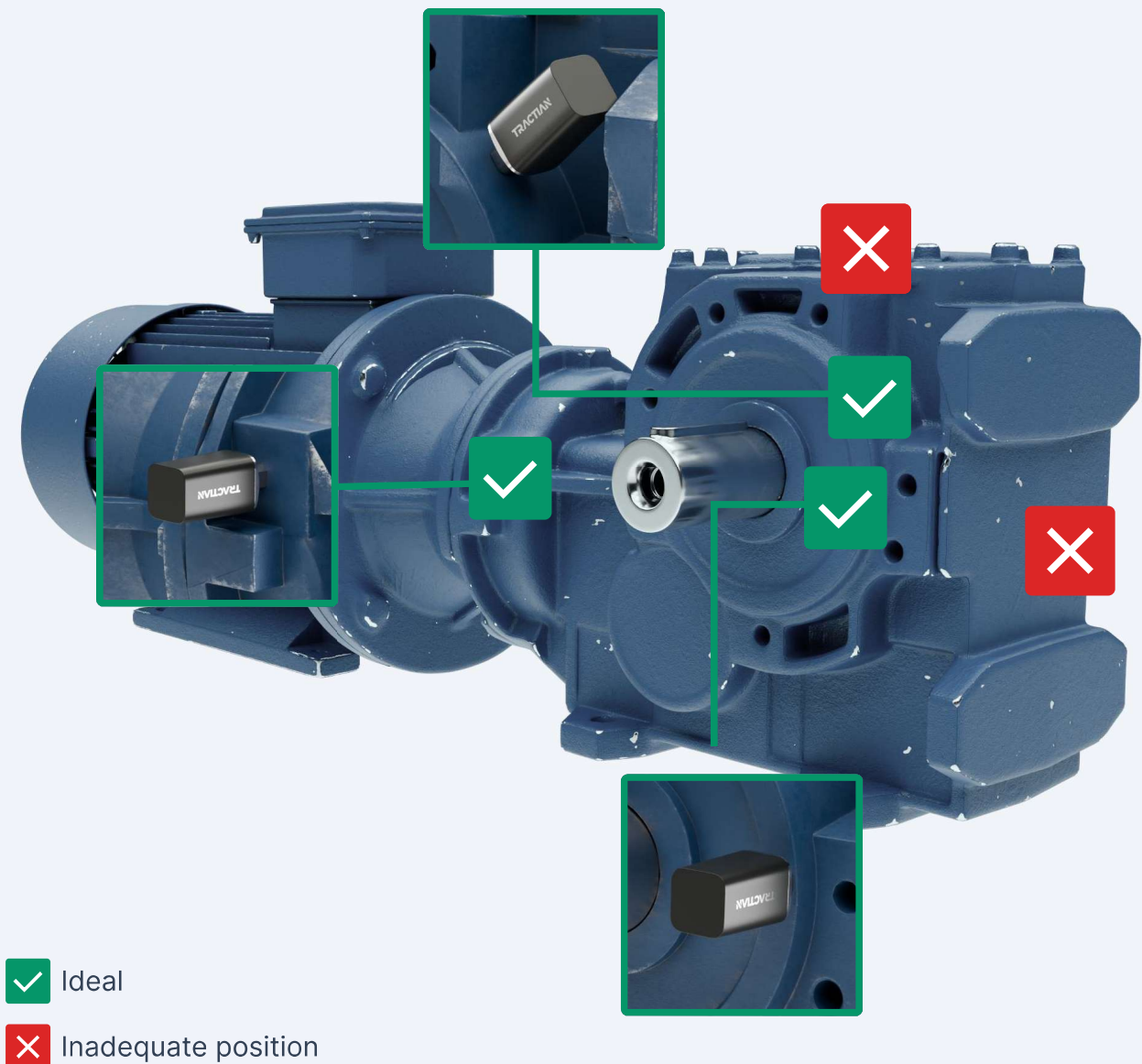


✓ Ideal

✗ Inadequate position

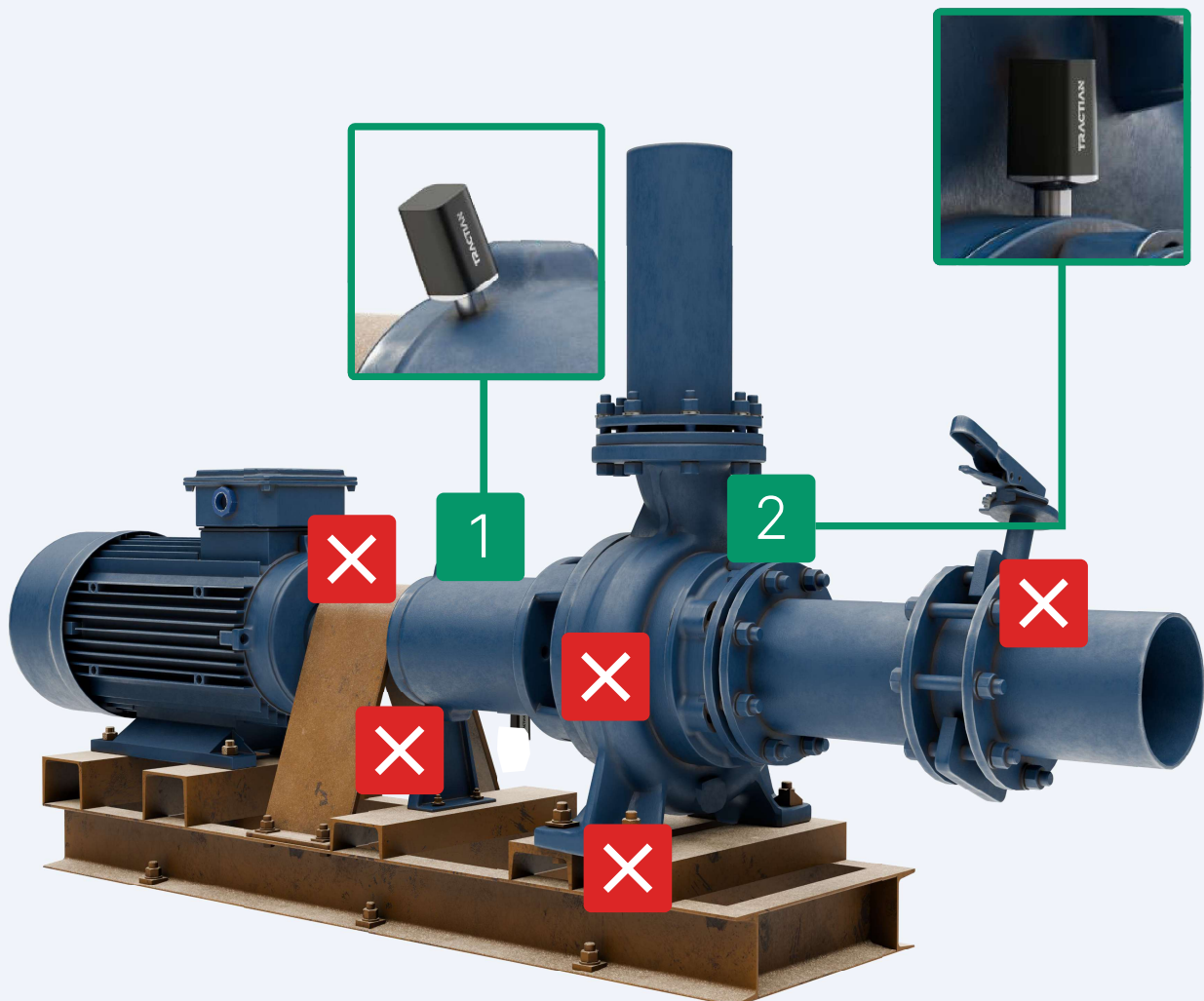
It is recommended that for bevel, parallel shaft, and worm gear gearboxes, one should install one sensor per shaft of the equipment.

Both the input and output of the gearbox must be monitored. For each additional reduction stage, an additional sensor should be installed as close as possible to the corresponding gear to accurately detect failures related to each stage of the system.



There are two key points for pump monitoring:

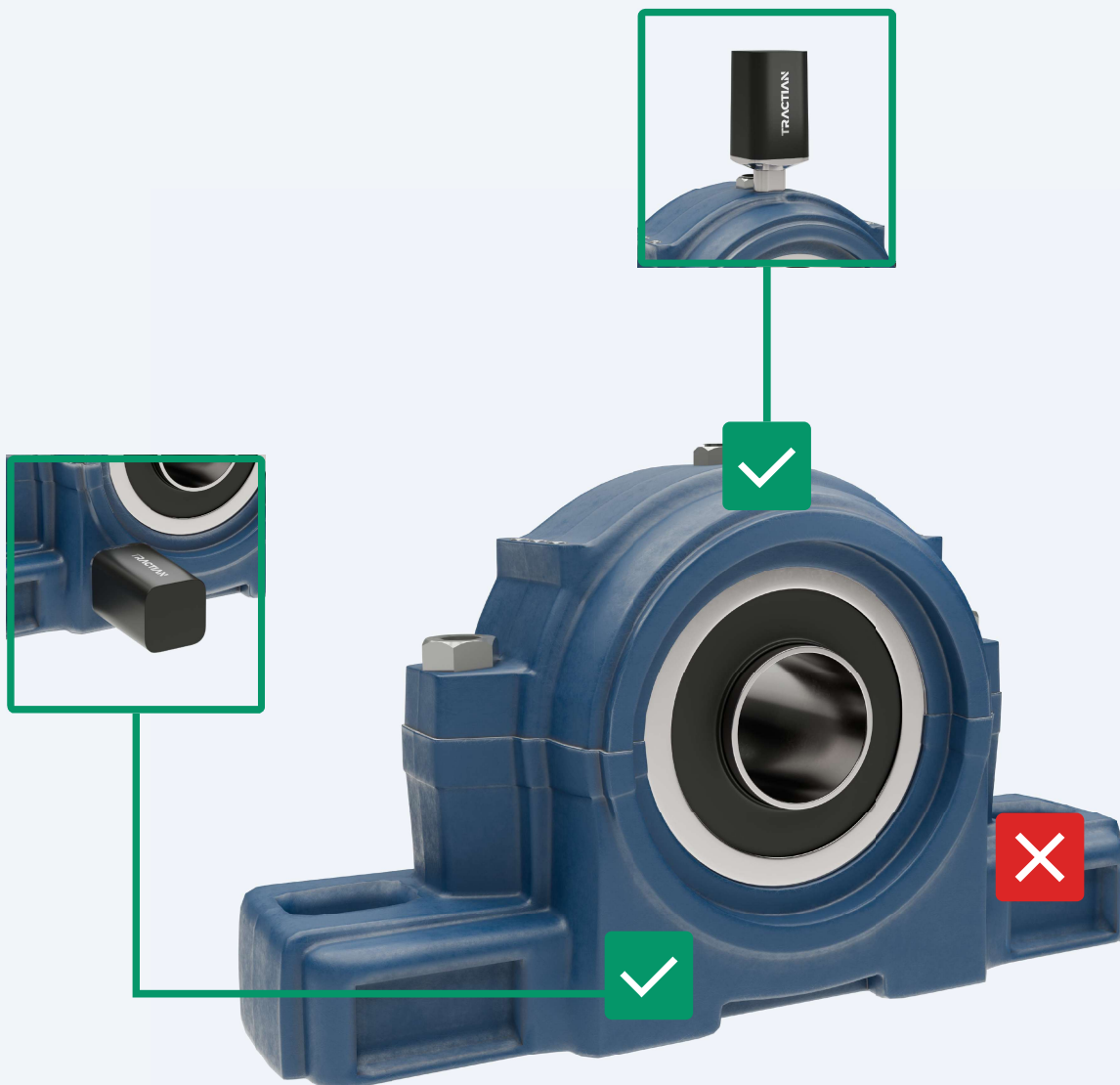
- 1 Drive End (DE): The sensor should be installed as close as possible to the bearing housing to ensure greater sensitivity to vibration.
- 2 Region near the pump blades: This position is essential for detecting issues such as cavitation, blade wear, and bearing problems.



✓ Ideal

✗ Inadequate position

It is recommended to mount the sensor so that the Z axis is oriented in the vertical direction of the equipment. The X and Y axes should be aligned with the horizontal and axial directions, respectively.



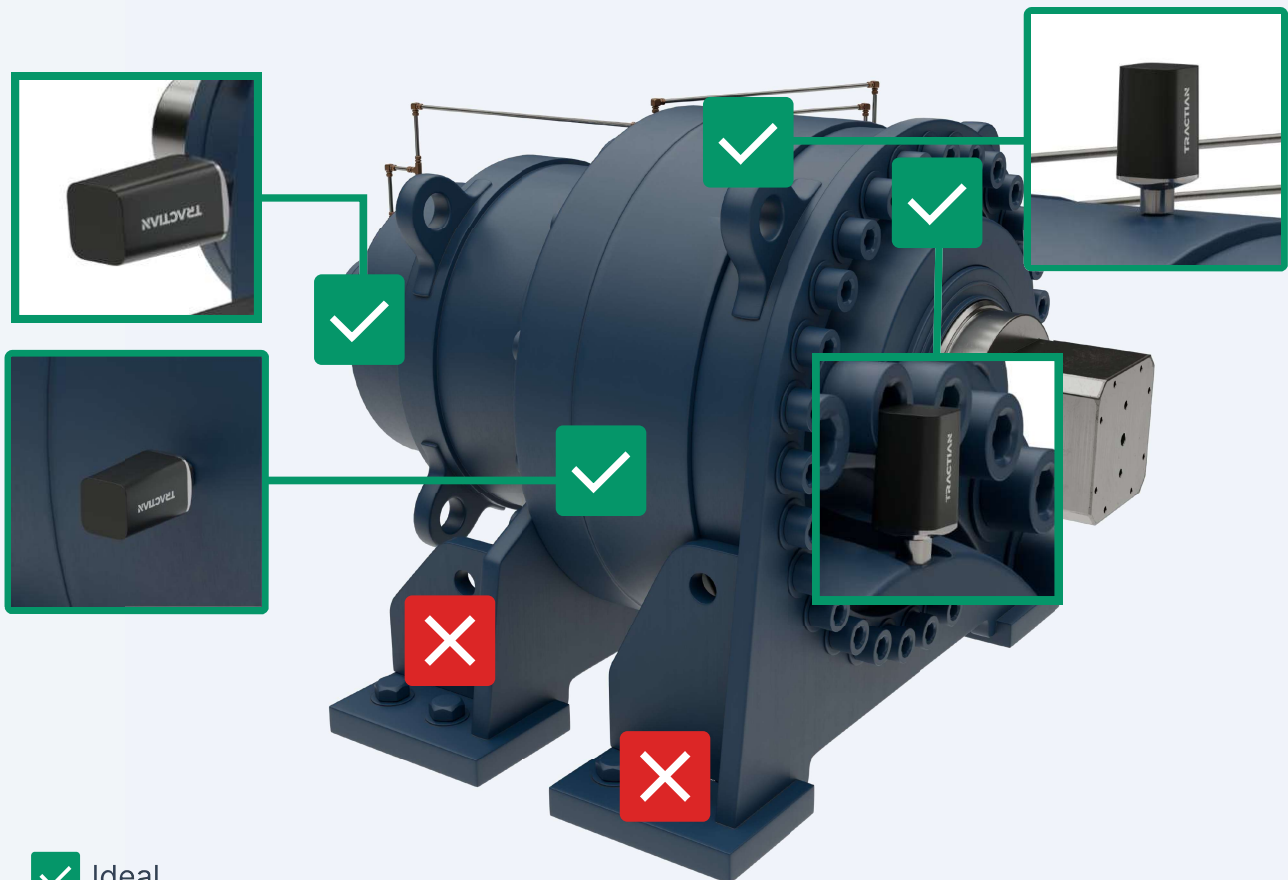
✓ Ideal

✗ Inadequate position

Key sensor placements for planetary gearboxes should follow basic principles of proximity to the most rigid structural points and those that best transmit the machine's vibration characteristics to the sensors.

The main monitoring positions are:

- **Gearbox input shaft:** It is recommended to install the sensor on the bearing, positioned radially in relation to the shaft.
- **Planetary stages:** The sensor should be mounted on the outer ring of each stage or on adjacent points that offer good rigidity and vibration transmissibility.
- **Output shaft:** Mounting the sensor on the bearing of the output shaft is also a valid option, especially for monitoring the gearbox's last stage.



✓ Ideal

✗ Inadequate position