



- **SECTION 4 TIGHTENING TORQUE LIST FOR THE STEERING SYSTEM**



Training Document

HOWO ZZ4257S3241V

Tightening torque for the steering gear support fastening bolts		280N.m
Tightening torque for the steering gear fastening bolts		520N.m
Tightening torque for the steering wheel fastening bolts		70~80N.m
Tightening torque for the steering gear telescopic shaft cross universal joint fastening bolts		500N.m
Tightening torque for the steering rock arm fastening nuts		570N.m
Tightening torque for the steering tie rod and draglink ball pin nuts	M20×1.5	210~230N.m
	M24×1.5	250~280N.m
Tightening torque for the steering tie rod and draglink clamping nuts		70~90N.m



- **SECTION 5 MAINTENANCE OF THE STEERING SYSTEM**



Training Document

HOWO ZZ4257S3241V

- Maintenance items of the steering system are as follows:
 1. Check the hydraulic oil level in the oil tank. First of all, clean the oil tank and periphery, and prevent the soil from entering. During checking, pay attention to the oil dipstick scale. When the engine is working, the oil level should be in conformity with the oil scale; while the engine is not working, the oil level should be a little higher.
 2. After a new vehicle runs for 2,500Km, it is required to change hydraulic oil, at the same time to clean the filter element in the oil tank. Later on for running every 50,000Km (or twelve months) hydraulic oil change is required.
 3. Monthly check the oil level, and check hydraulic oil for cleanness.





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- Method to change the oil:
 - Raise the front axle.
 - Open the oil tank cover, and dismantle the oil return pipe on the steering gear.
 - Start the engine, keep it running at idle speed for about 10 seconds, and turn the steering wheel left and right to the limits for several times to enable the oil to drain from the oil tank, booster pump and steering gear.
 - Retighten the oil return pipe (pay attention to keep it clean and not to let the dirt or foreign objects enter the oil pipeline), clean the oil tank, fill oil in the filter and the element. It is better to replace the element every time when changing the oil.
 - After the oil tank is fully filled, run the engine in idle speed and turn the steering wheel left and right repeatedly; meanwhile fill oil continuously, until the oil level will no longer descend and no air foams appear. The oil level shall be kept between the marks.
- Note: Only qualified oil shall be used for replacing.
- Every time when performing the maintenance, check clearance in the rotating parts, such as steering tie rod and draglink connectors. If excessive clearance is found, replace the parts. When doing maintenance, fill grease to every point.

