

Design Features Of Main assembly Of STEYR Truck

1 ENGINE

- i. One cylinder one head, easy to disassemble.
- ii. Left set injection pump (view from the free-end of engine), convenient to arrange the vehicle with the engine.
- iii. Inner-concealed oil cooler, reliable and safe.
- iv. Rear-set turbocharger, compact arrangement and small difference in external dimensions of different engines.
- v. All of in-line and six-cylinder engines, with high generality.

2 CLUTCH

420mm: Dry single plate, effective friction diameter 420mm, with torsional shock absorbing helical springs; Pressurized by 36 helical springs.

430mm: Dry single plate, effective friction diameter 430mm, with torsional shock absorbing helical springs; Pressurized by pull type diaphragm spring.

3 TRANSFER CASE

Model: VG1200; High ratio: 1.00; Low ratio: 1.75; Mechanical lever control beside driver's seat

4 FRONT AXLE

Rigid Front Axle: The no-drive rigid front axle are fitted on all 4×2 and 6×4 vehicles, axle capacity 6500Kg. 8×4 vehicle are fitted with twin non-drive rigid front axle;

Toe-in: 2-4mm(Nylon tyre); 0±1mm(Radial tyre);

Camber: 1°; Castor: 3°; Kingpin inclination: 1°

Max. Angle of steering lock, inside/outside: 44°/32°;

Front Drive Axle: The front drive axle are fitted on all 4×4, 6×6 vehicles, axle capacity 6500Kg. 1-stage bevel pinion/crown wheel main reduction with planetary reduction ration for front drive axle is 6.72;

Toe-in: 2-6mm(Nylon tyre); 0±1mm(Radial tyre);

Camber: 1°30'; Castor: 9°; Kingpin inclination: 0°

Max. Angle of steering lock, inside/outside: 43°/30°30';

5 REAR AXLE

Central main reducer plus wheel hub reduction STEYR rear axle, with axle differential lock, steel plate pressed axle housing. Single reduction rear axle is designed especially for good road.

6 PROPELLER SHAFT

Cross Bearing and Sliding Spline, intermediate shaft and hanger applied for long wheel base models;

--- 57mm bearing cap, 180mm Yoke Flange: Transfer Case drive; or 360HP/420HP direct drive; Capacity 17000Nm;

--- 57mm bearing cap, 165mm Yoke Flange: Double Axle drive; Capacity 15000Nm;

--- 52mm bearing cap, 165mm Yoke Flange: Single Rear Axle Drive;

Capacity 10000Nm;

--- 48mm bearing cap, 150mm Yoke Flange: Front Axle Drive; CAPACITY 6299Nm;

7 SUSPENSION

- i. Front suspension

Parabola leaf spring with shock reducer and stabilizer

ii. Rear suspension

Main and secondary leaf spring (4×2), and bogie suspension (6×4)

8 STEERING SYSTEM

ZF 8095 and ZF8098, hydraulic controlled pneumatic power assisted steering, worm and sector steering gear ratio: 22.2(26.2)

9 BRAKING SYSTEM

Dual circuit air brake system, service brake (foot brake), aux. brake (Engine exhaust brake), emergency and parking brake (hand brake), and trailer brake. Working pressure: 0.75Mpa. Main brake cylinder operated by depressing pedal directly.

10 ELECTRICAL SYSTEM

i. Single circuit system

ii. 24V negative Alternator integrated silicon rectifying alternator, 28V, 35A,

iii. Starter:24v 8.1kW, with crutch brake

iv. Battery: 2x12V 135 (165, optionally)

11 TYRES AND RIMS

i. Tube type tyre and rim;

ii. 11.00-20, 11.00R20 tyre with 8.0-20 rim are applied for degraded road range vehicles;

iii. 12.00-20 tyre with 8.5-20 rim are optional for most STEYR trucks, especially ideal for rough road and off road application (mining or military purpose);

iv. 12.00R20 tyre with 8.5-20 rim is optional for road range trucks;

v. 14.00-20, 14.00R20 tyres with 10.0-20 rim are applied for most single tyre off road trucks.

12 FRAME

Ladder type, cold rolled and riveted;

Main Frame: 243×80×8mm; Secondary Frame: 218×70×5mm

13 DRIVER'S CAB

9001:

Standard STEYR cabin; Forward control, full steel fabricated, 2-door single cabin; Tilted forward with hydraulic hand pump and cylinder; mainly equipped on Tippers and Military Trucks at present;

Options: Zinc paint; Single sleeper; Air Conditioner;

7001:

Developed from 9001, newly designed integrated instruments of dashboard; Optional for tippers and standard for cargo trucks and prime movers;

Options: Zinc paint; Single sleeper; Air Conditioner; Long cabin; High roof or medium high roof cabin with double sleeper;

5001:

Virtually it is called STEYR king. Newly designed model for road application purpose vehicles, completely different from 9001 and 7001. All electrical device controlled by Central Controlling Board intelligently with bulbs diagnosis and fault code display function. Medium High Roof Cabin or High Roof Cabin, both with double sleepers and air conditioner for option.