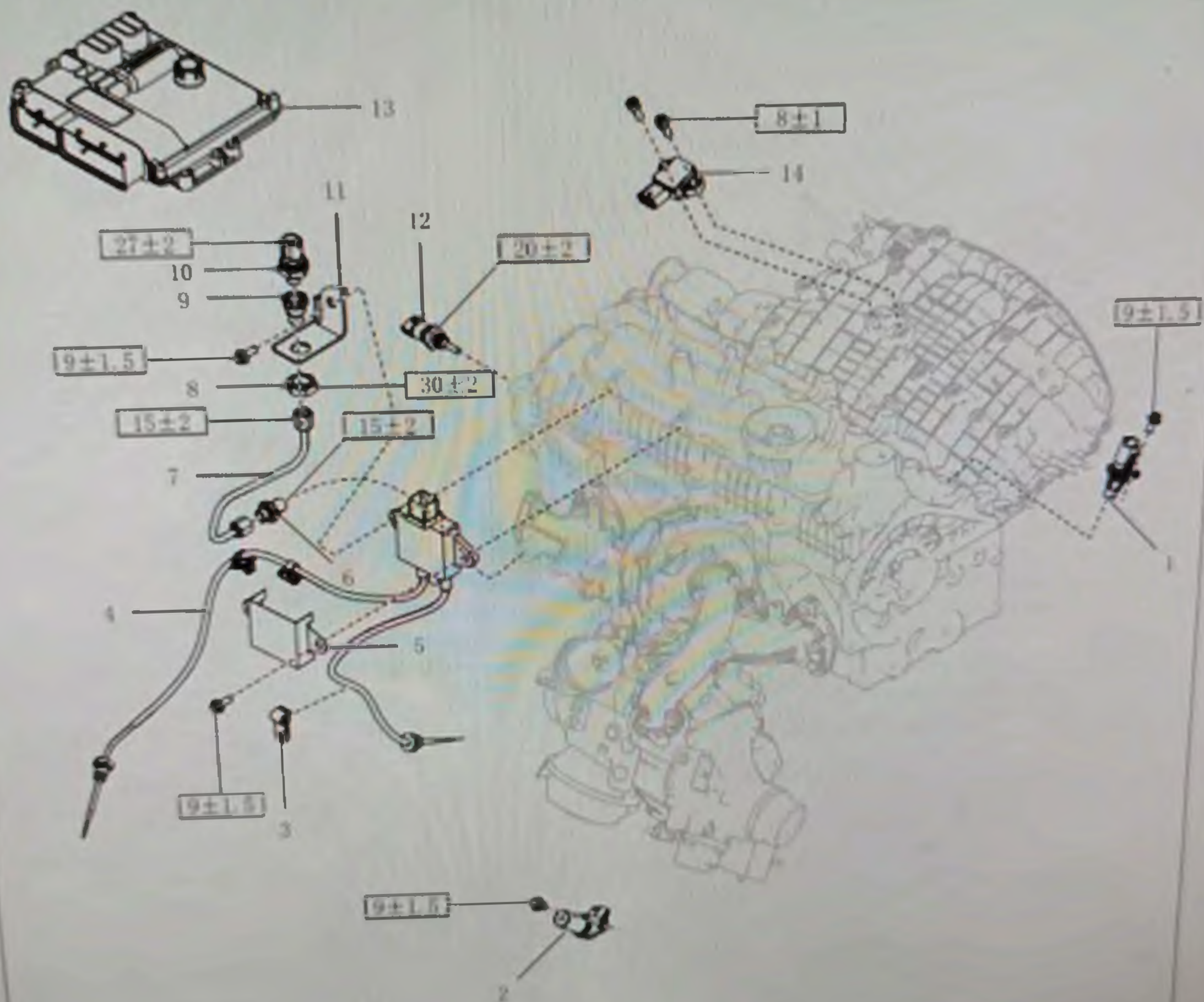




ENGINE CONTROL UNIT (ECU)

STRUCTURAL DIAGRAM SENSOR ASSEMBLY



9 ± 0.5 Specified torque

1. Camshaft position sensor
2. Crankshaft position sensor
3. High-temperature sensor harness bracket component
4. High-temperature sensor
5. High temperature sensor thermal shroud
6. Charger end connector of pressure sensor in front of turbine
7. Connecting pipe component of pressure sensor in

8. front of turbine
9. Thin hex nut
10. Connecting stud of pressure sensor in front of turbine
11. Pressure sensor in front of turbine
12. Bracket of pressure sensor in front of turbine
13. Coolant temperature sensor
14. ECU assembly
15. Air intake pressure and temperature sensor

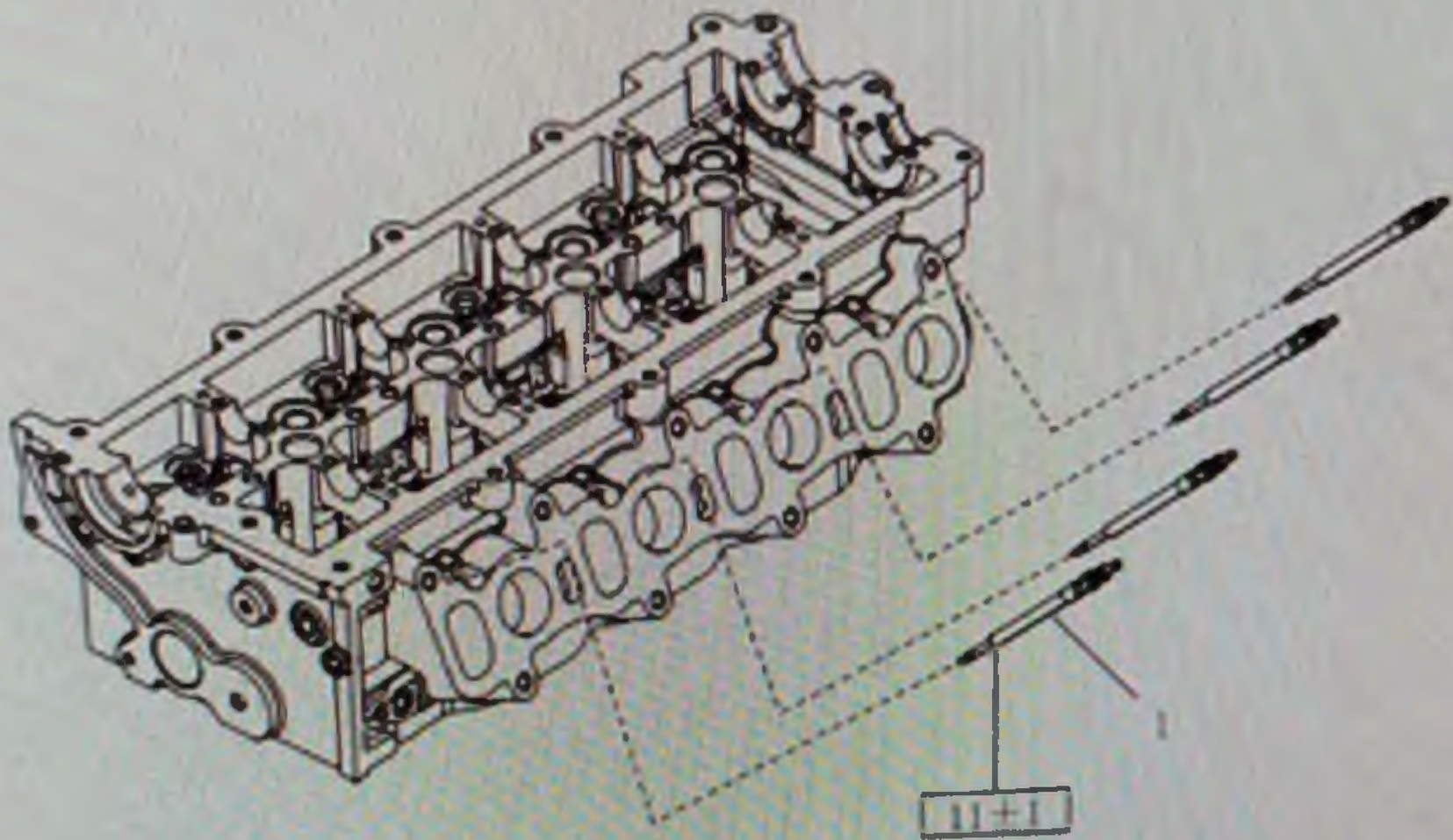
FUEL PIPELINE



1. High pressure fuel rail assembly
2. High-pressure fuel pump assembly
3. Spiral spring pin
4. Fuel pump belt pulley
5. High-pressure fuel pump belt pulley nut
6. Fuel return pipe clamp I
7. Fuel rail return pipe component
8. Fuel return pipe component
9. Fuel rail inlet pipe clamp assembly
10. Fuel rail inlet pipe components
11. Fuel injector inlet pipe component I
12. Fuel injector inlet pipe component II

13. Fuel injector inlet pipe component III
14. Fuel injector inlet pipe component IV
15. Hold-down block bolt
16. Spherical washer
17. Fuel injector hold-down block
18. Hold-down block supporting pole
19. Fuel injector assembly
20. Fuel injector O-ring
21. Fuel injector copper washer
22. High-pressure fuel pump bracket component
23. Coarse fuel filter assembly
24. Fuel filter assembly

PREHEATER PLUG ASSEMBLY



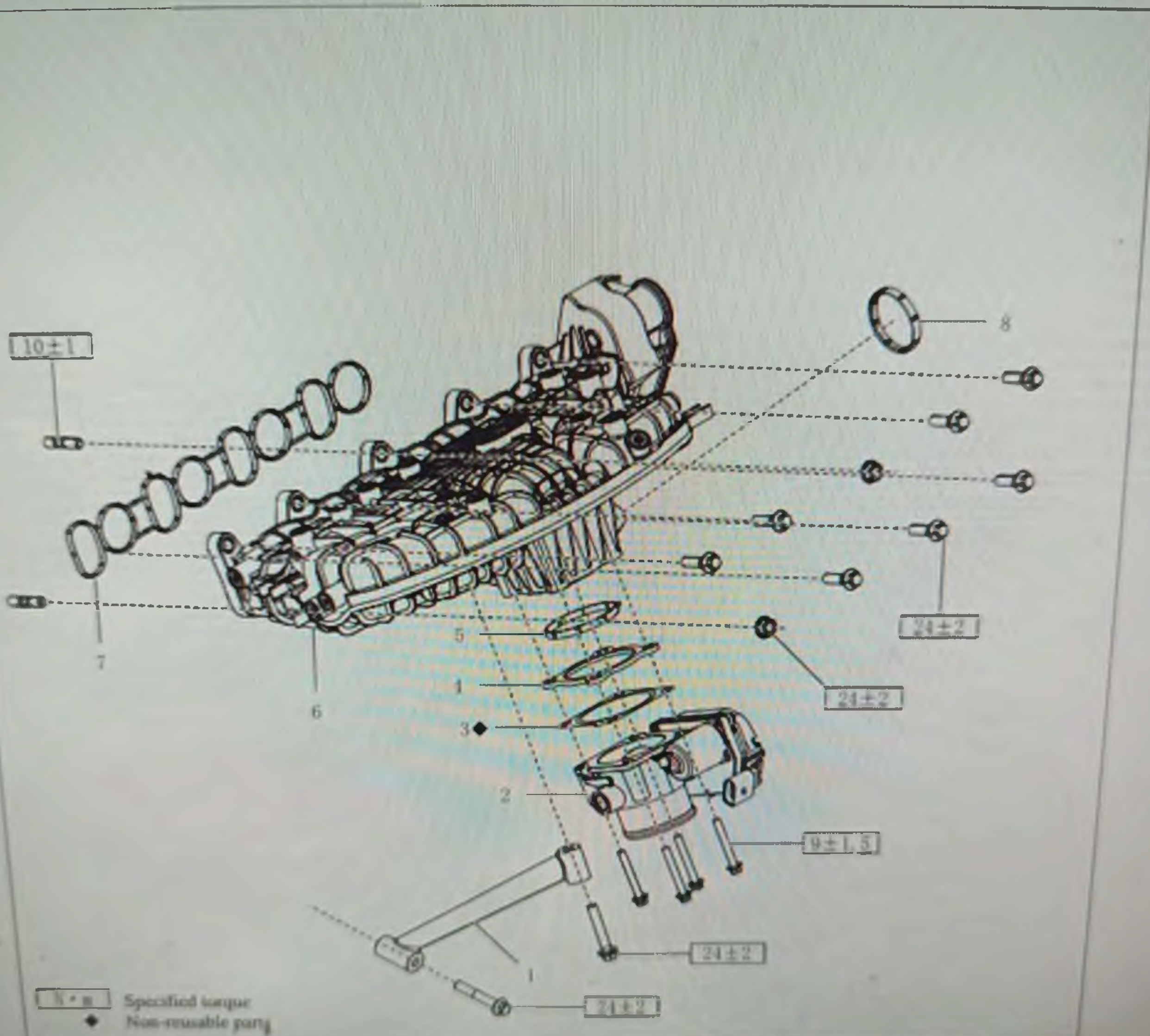
$N \cdot m$ Specified torque

1. Preheater plug assembly

AIR INTAKE SYSTEM

STRUCTURAL DIAGRAM

INTAKE MANIFOLD ASSEMBLY AND ELECTRONIC THROTTLE ASSEMBLY

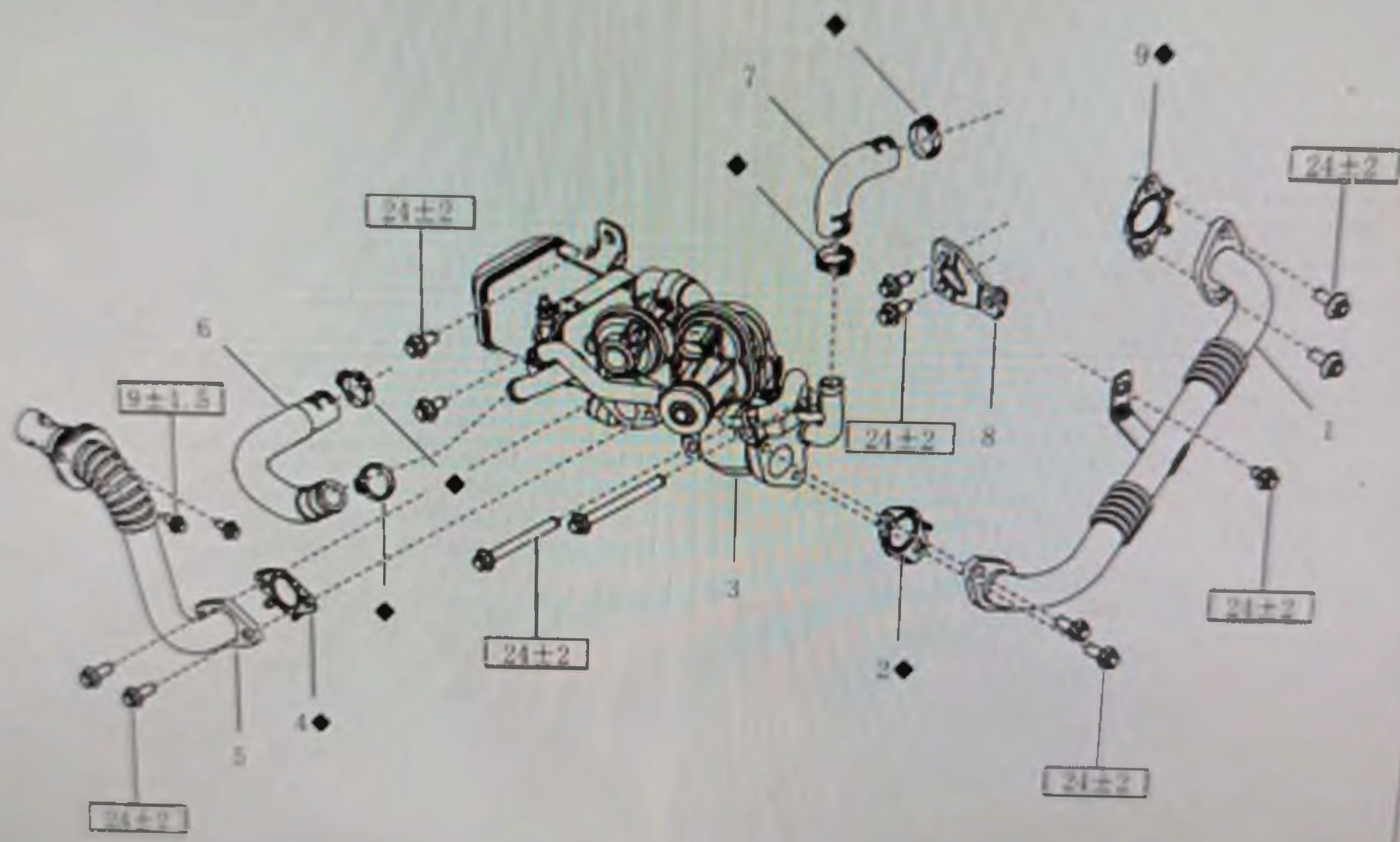


- 1. Intake manifold support
- 2. Electronic throttle assembly
- 3. Throttle gasket
- 4. Throttle transition gasket

- 5. Air throttle seal ring
- 6. Intake manifold components
- 7. Intake manifold seal ring
- 8. EGR port seal ring

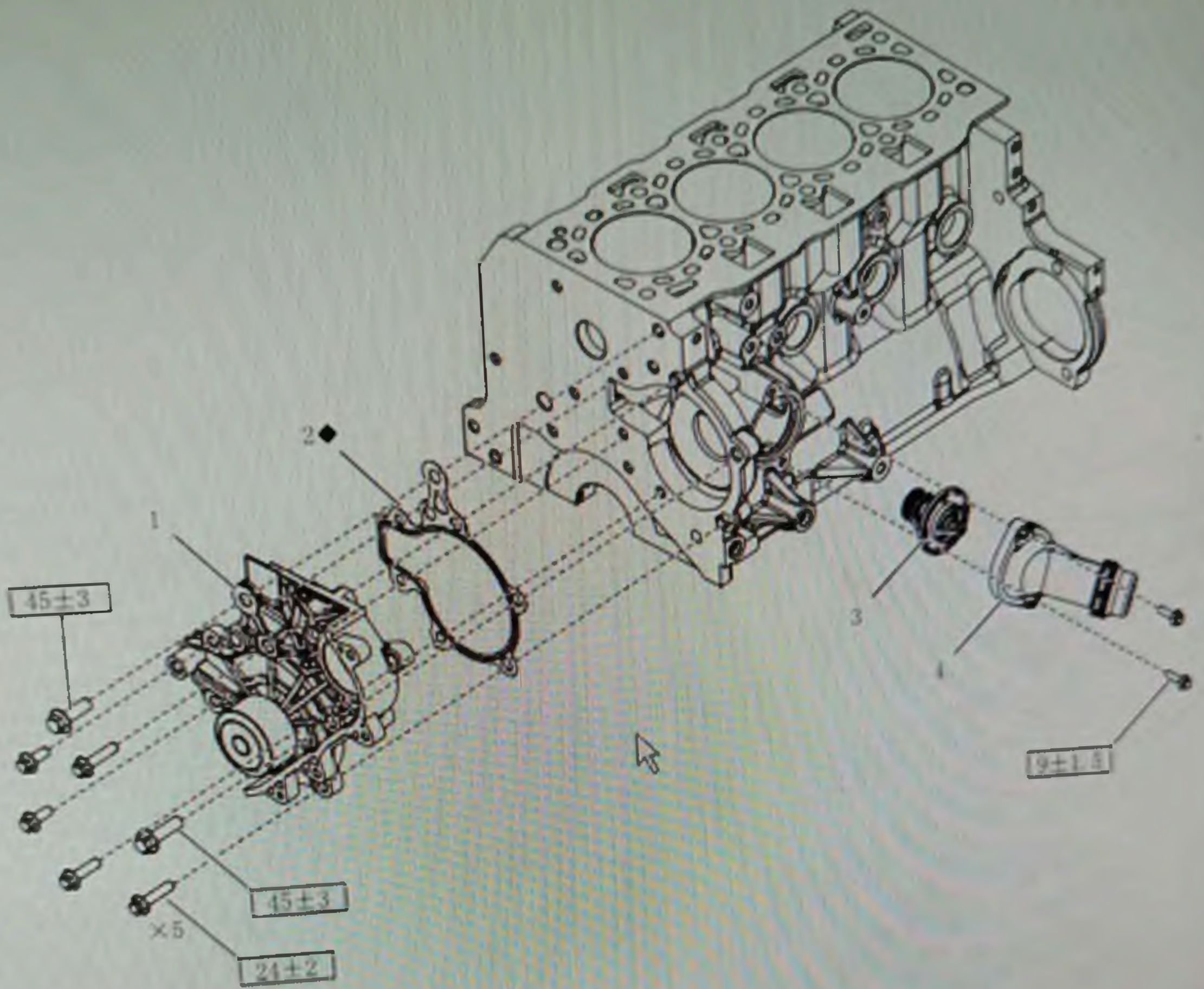
STRUCTURAL DIAGRAM

EGR SYSTEM



9 ± 1.5 Specified torque
 ◆ Non-reusable parts

- | | |
|------------------------------------|-------------------------------|
| 1. EGR air intake bellows assembly | 6. EGR water inlet hose |
| 2. EGR air inlet gasket | 7. EGR water outlet hose |
| 3. EGR assembly | 8. EGR bracket component |
| 4. EGR air vent gasket | 9. EGR air intake pipe gasket |
| 5. EGR air vent bellows assembly | |



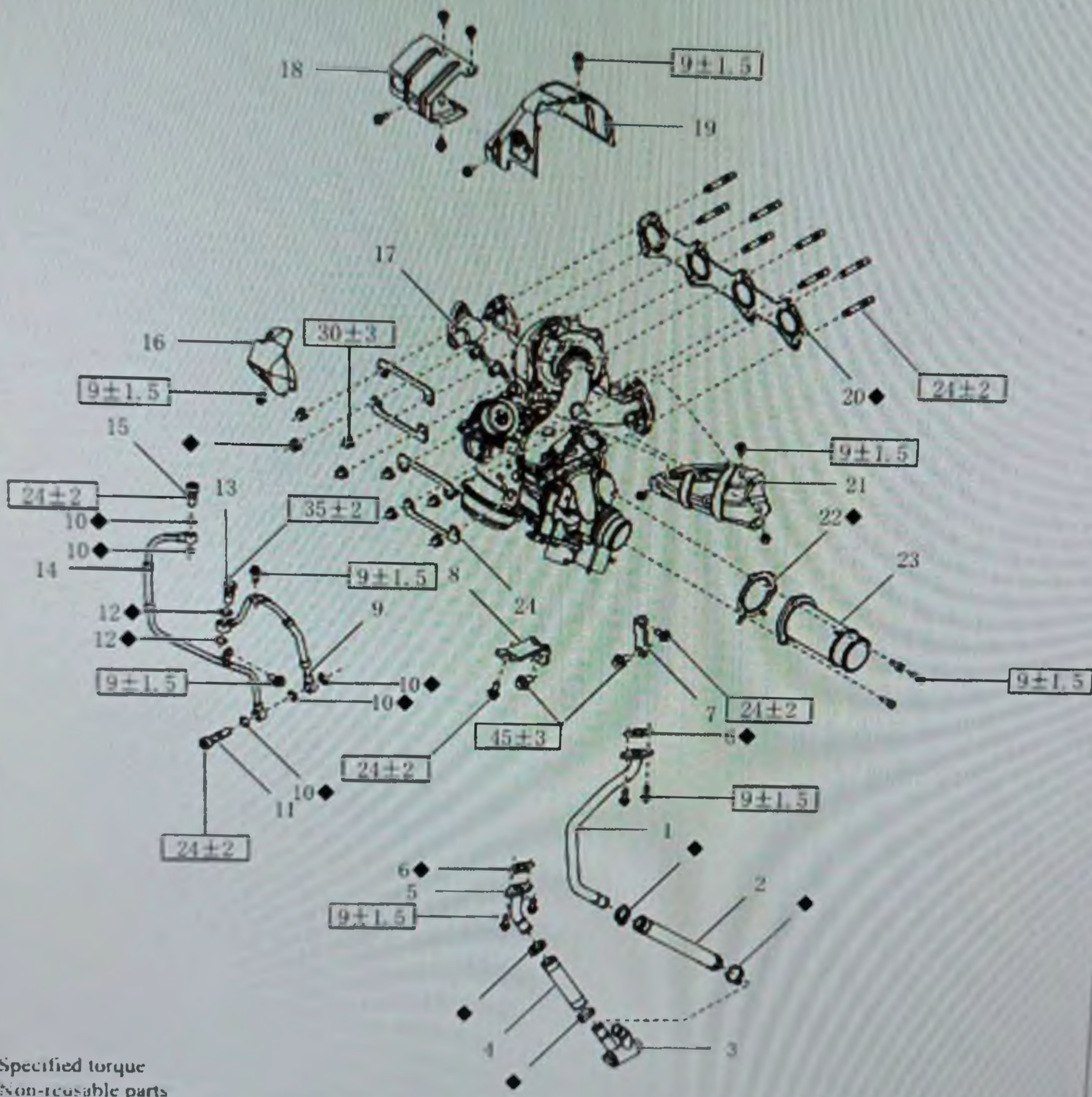
N · m Specified torque
 ◆ Non-reusable parts

- 1. Water pump assembly
- 2. Water pump gasket

- 3. Thermostat assembly
- 4. Thermostat cover components

CHARGER SYSTEM

EXPLODED VIEW DIAGRAM CHARGER ASSEMBLY

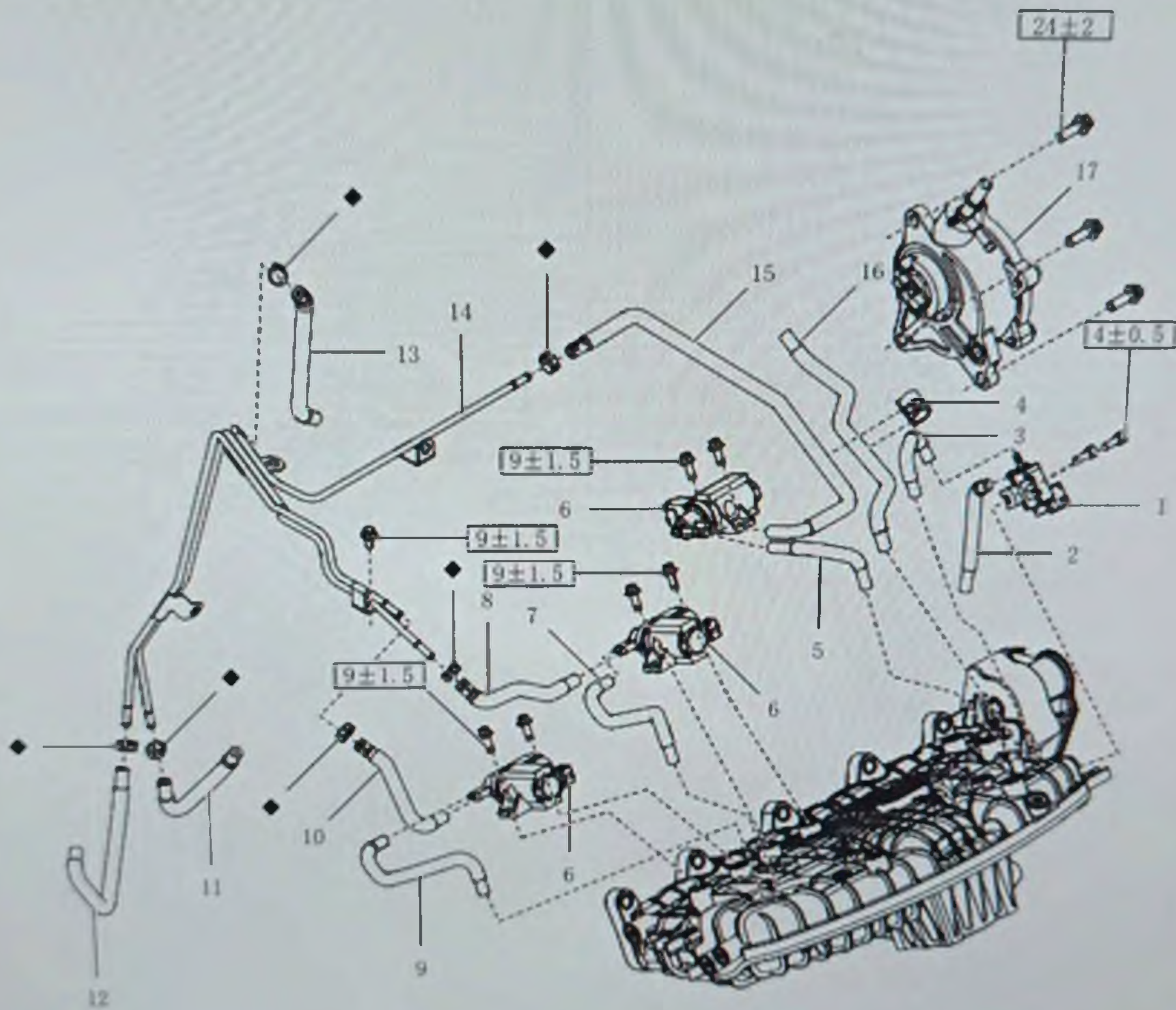


9±1.5 Specified torque
◆ Non-reusable parts

- 1 Charger oil return pipe component I
- 2 Oil return hose I
- 3 Charger oil return pipe connector component
- 4 Oil return hose II
- 5 Charger oil return pipe component II
- 6 Oil return pipe components gasket
- 7 Charger bracket II
- 8 Charger bracket I

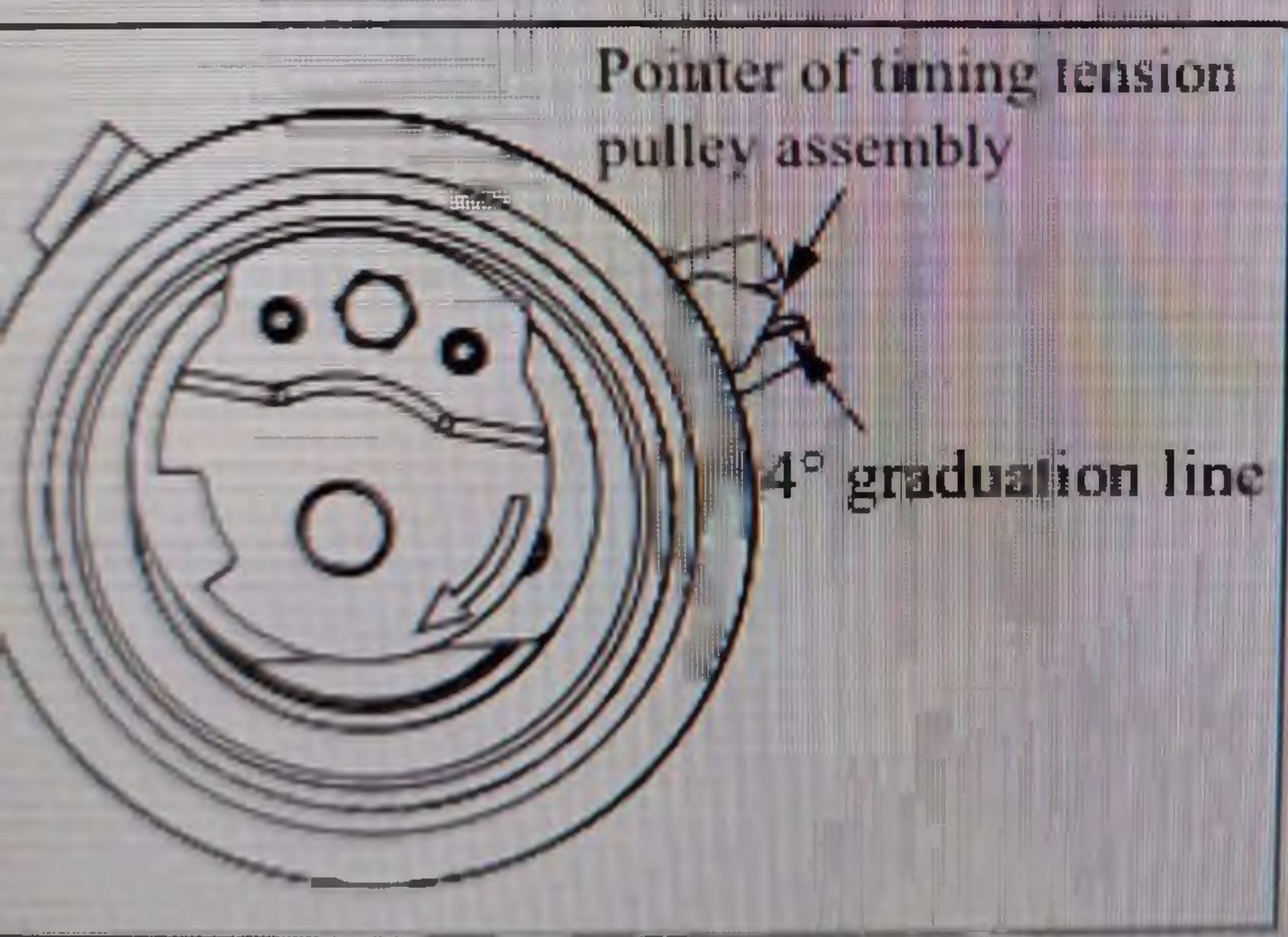
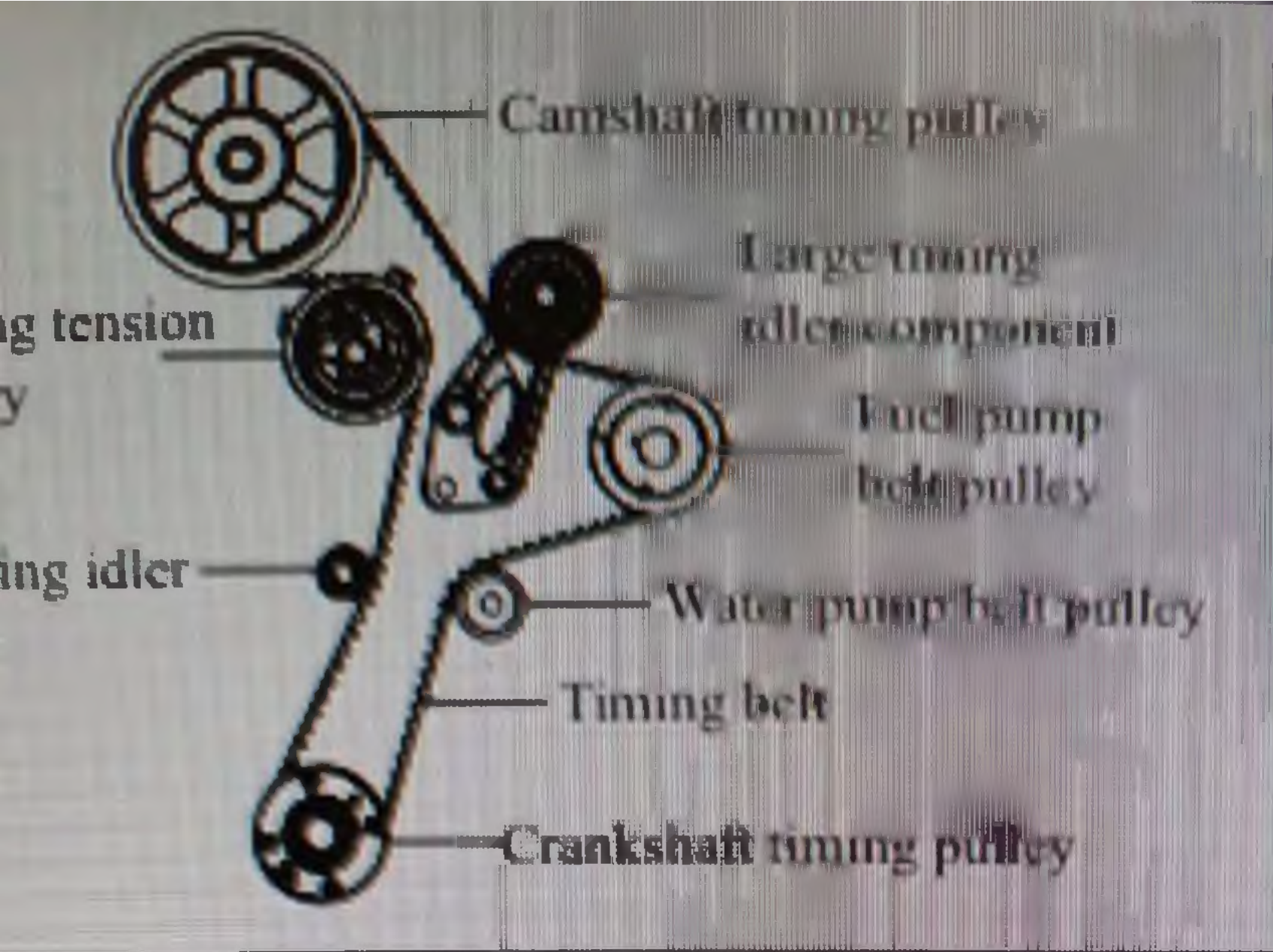
- 9 Oil inlet bolt III
- 10 Charger oil inlet pipe component I
- 11 Oil inlet bolt
- 12 Charger thermal shroud component III
- 13 Charger assembly
- 14 Charger thermal shroud component II
- 15 Charger thermal shroud component I
- 16 Exhaust manifold gasket component

VACUUM PIPE



9 ± 1.5 Specified torque

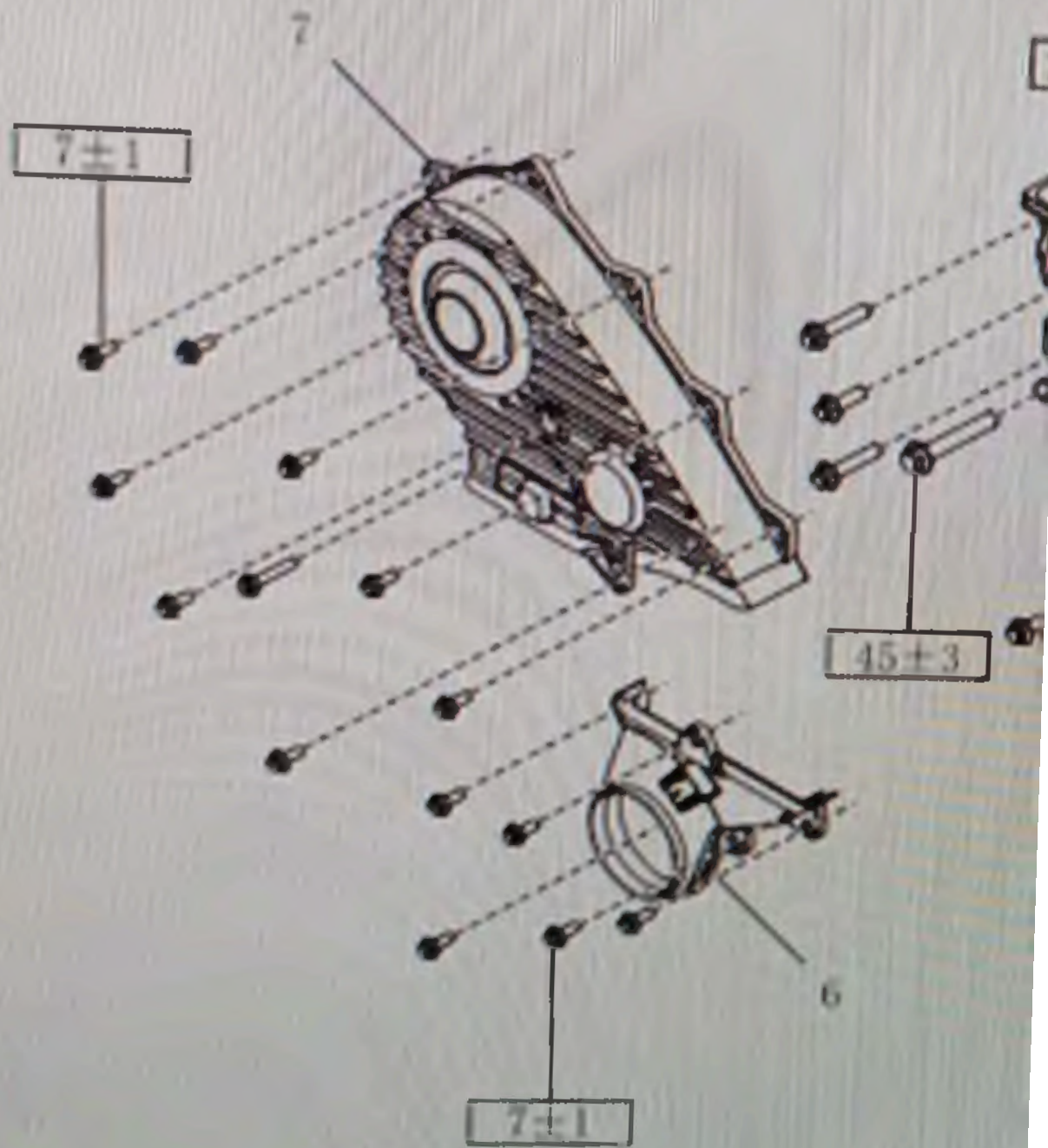
- | | |
|---|--|
| 1 Vacuum switching valve | 10 Vacuum switching valve hose II component |
| 2 Vacuum switching valve hose I component | 11 Charger actuator vacuum connecting hose II |
| 3 Vacuum storage tank connecting hose I component | 12 Charger actuator vacuum connecting hose III |
| 4 Hose clip | 13 Charger actuator vacuum connecting hose I component |
| 5 Vacuum pump storage tank connecting hose II component | |



6. Install timing
 (a) Verify timing
 (b) Put timing b

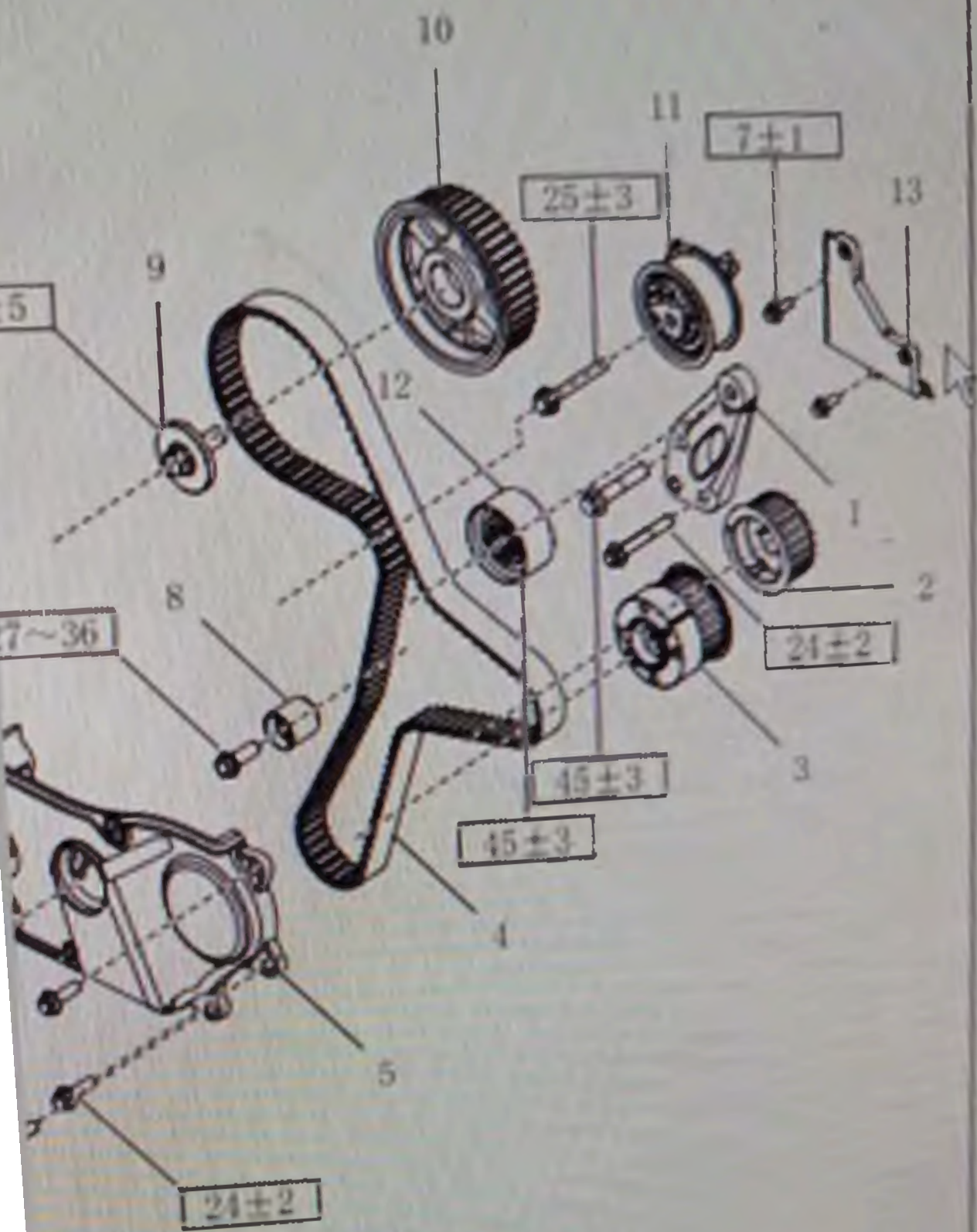
(c) Adjust mount
 bly with inner
 sion pulley a
 the base.
 (d) Fasten timing
 (e) Remove insta
 (f) Turn clockwis
 pointer shall b
 sion pulley po
 tally at the po
 tension pulley
 and the pointer

7. Check timing
 (a) After alignment
 pulley, fuel pun
 clockwise by tw
 to shell align



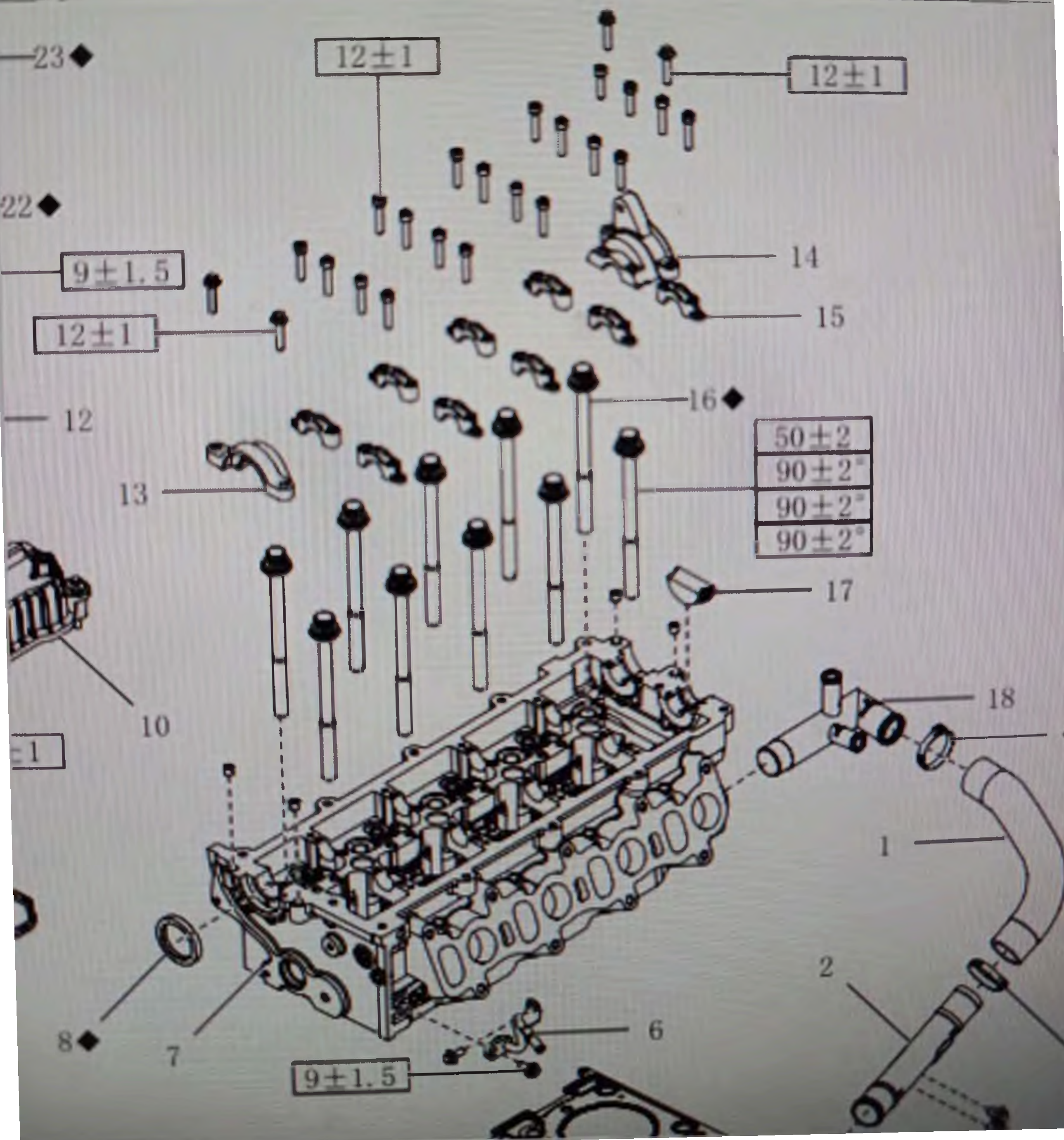
N·m Specified torque

1. Timing idler bracket

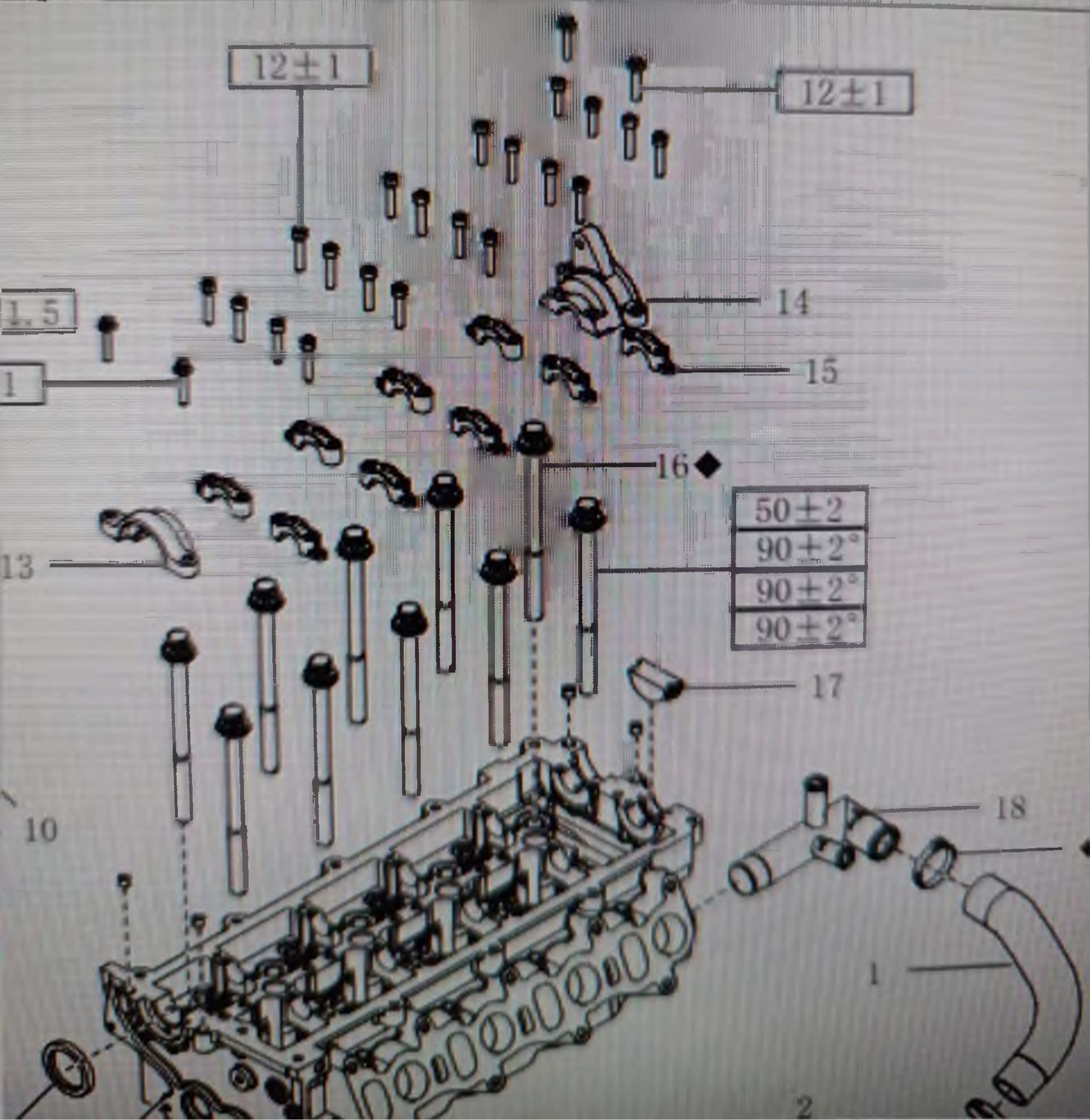


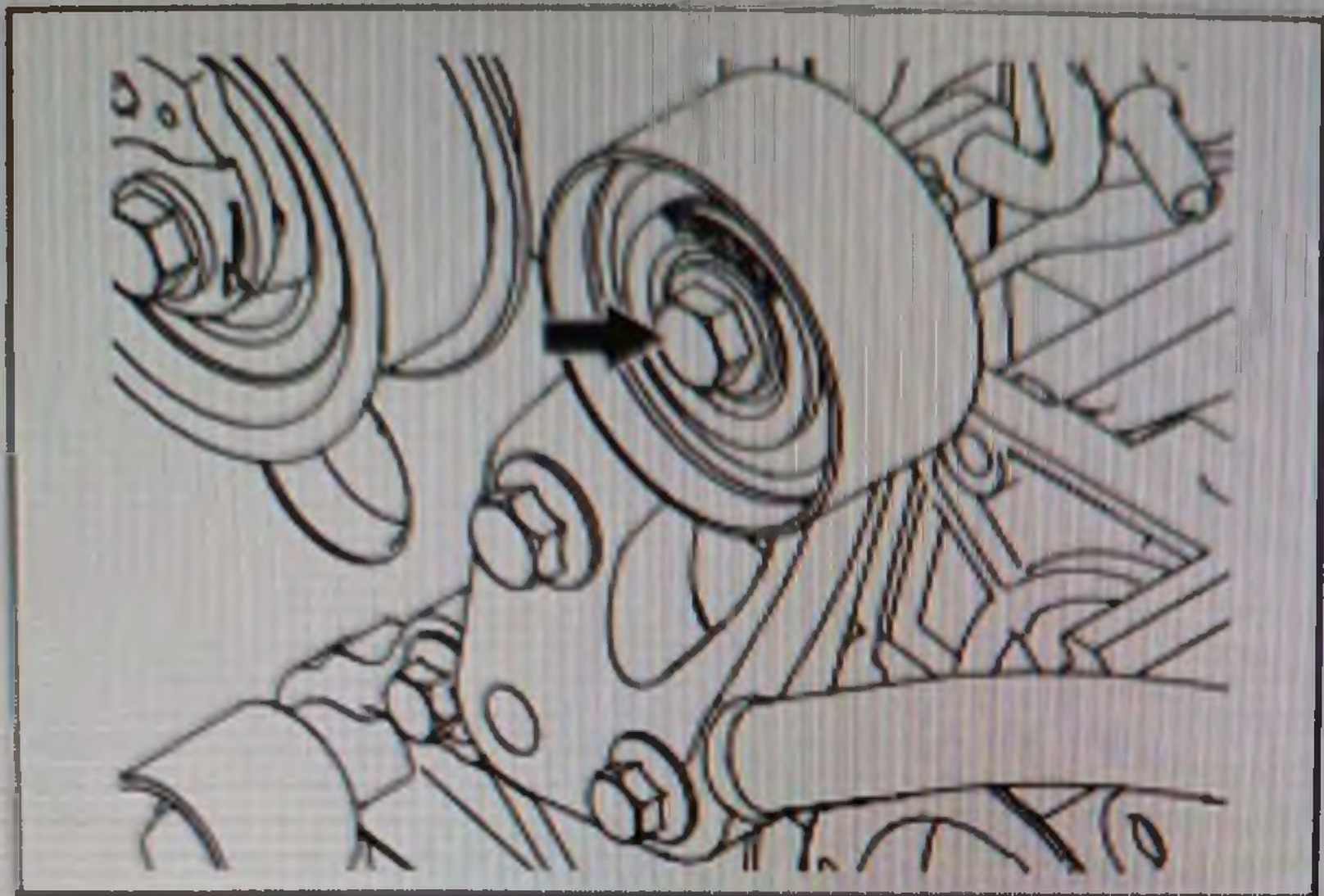
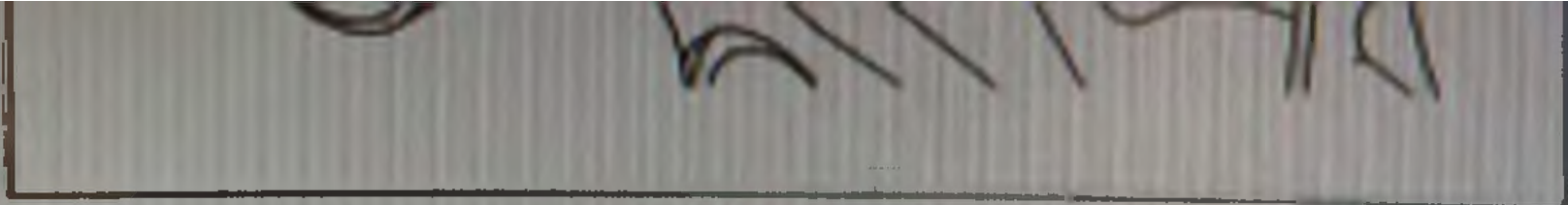
8. Timing idler
 Belt washer assembly of camshaft timing pulley

PLY

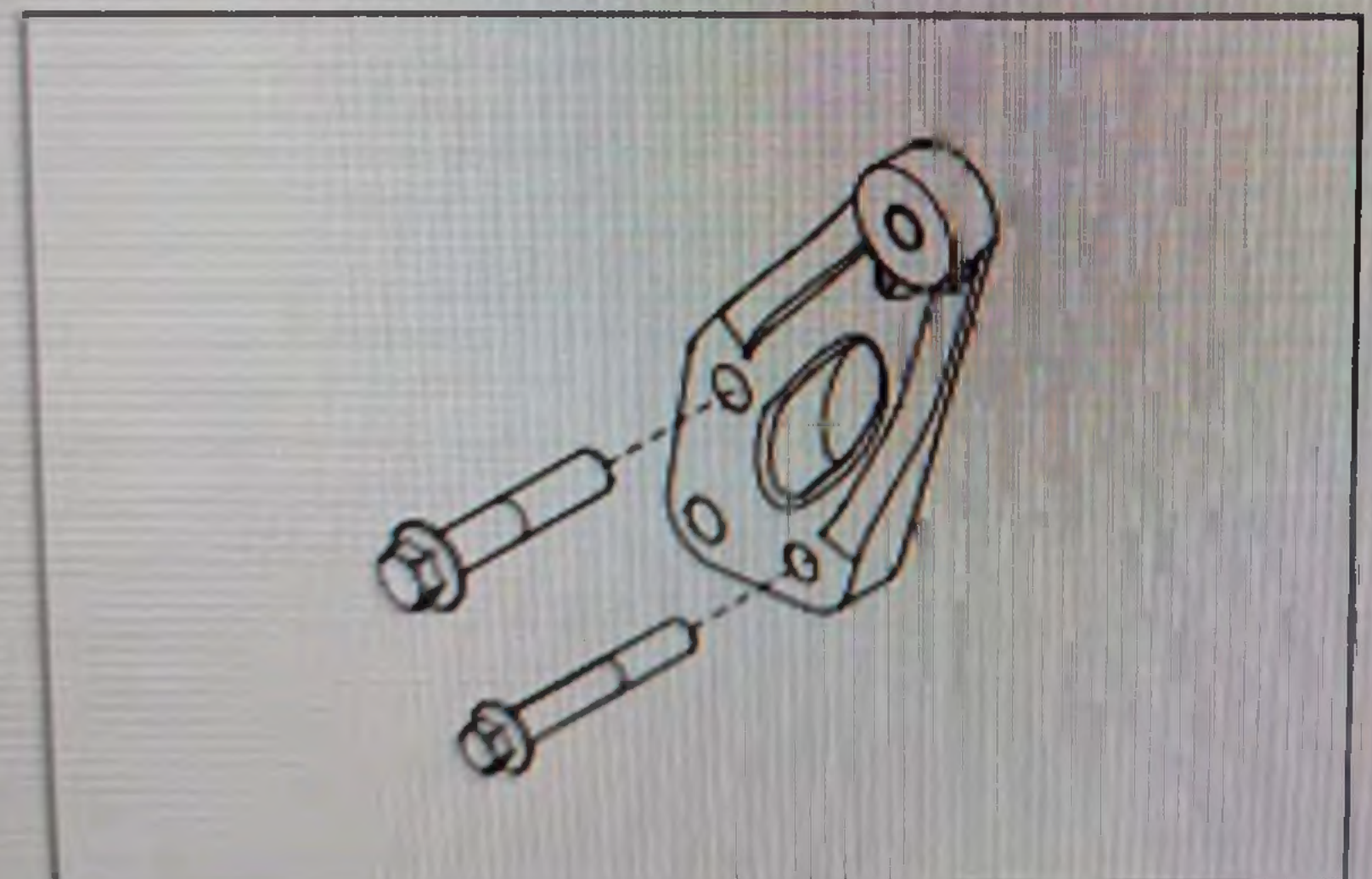


e repair and maintenance manual

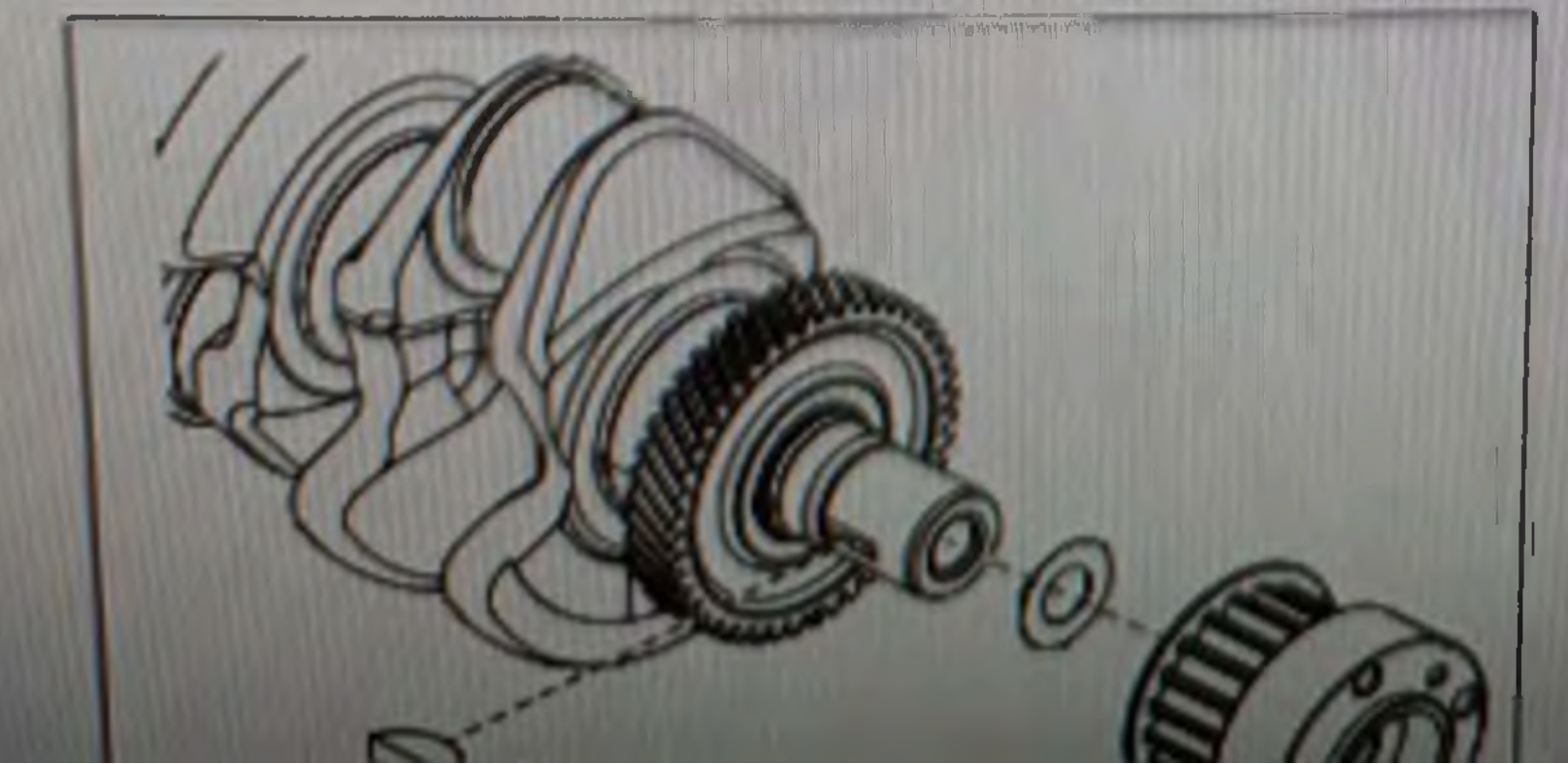




- 8. **Remove large timing component.**
- (a) Loosen large timing component.
- (b) Remove large timing component.



- 9. **Remove timing component.**
- (a) Loosen 2 bolts.
- (b) Take down timing component.



- ### INSTALLATION
- 1. **Install crankshaft.**
 - (a) Install new crankshaft.
 - (b) Install woodruff key in the exposed top plate crankshaft key slot on crankshaft.