FORKLIFT

# SERVICE MANUAL

## *20DT-7*

HYUNDAI

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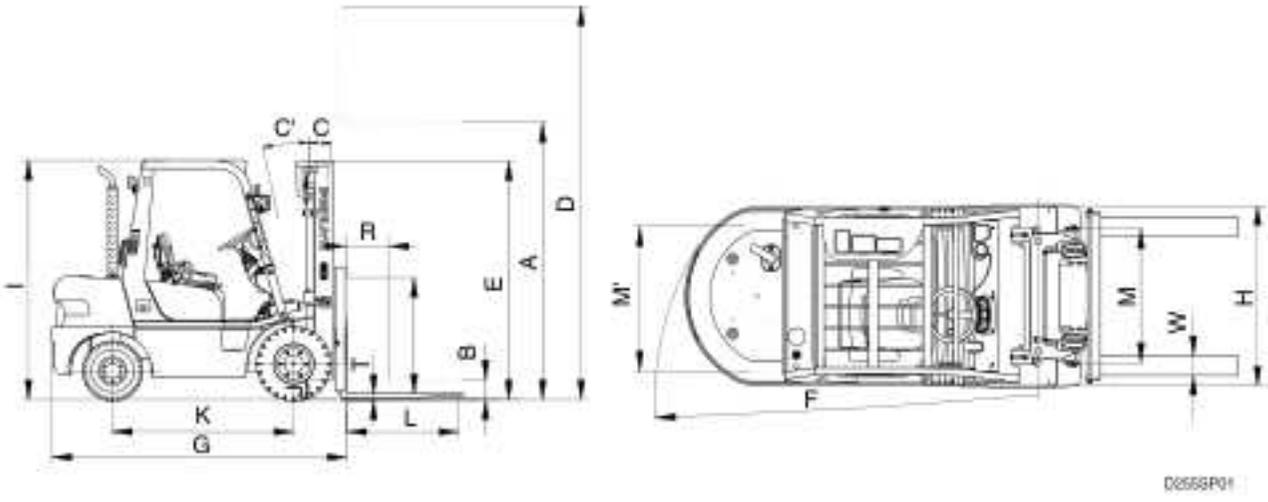
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## 2. SPECIFICATIONS

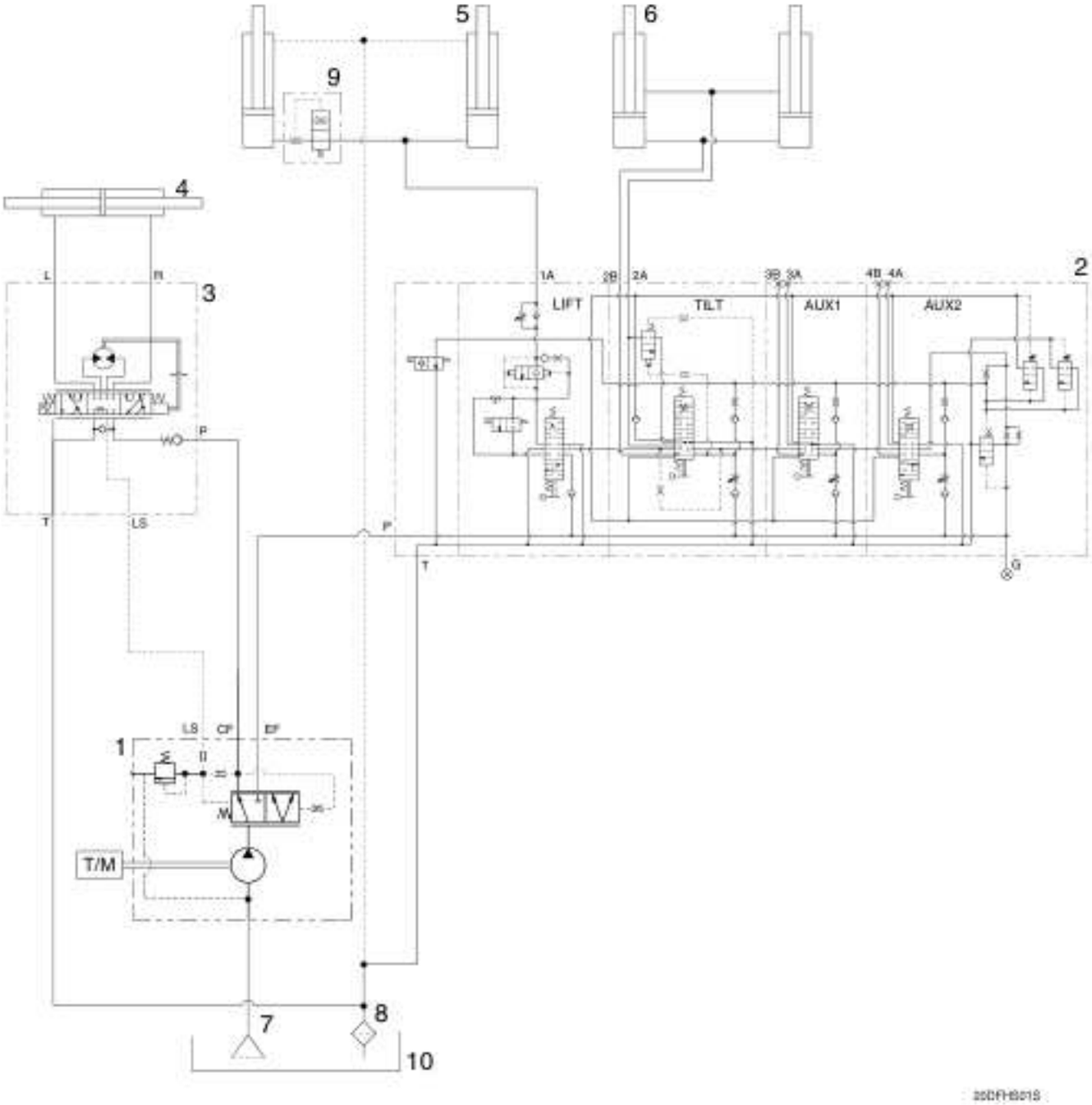



| Model | | | Unit | 20DT-7 | 25DT-7 | 30DT-7 | 33DT-7 |
|---|---|---|---|---|---|---|---|
| Capacity | | | kg | 2000 | 2500 | 3000 | 3300 |
| Load center | | R | mm | 500 | ← | ← | ← |
| Weight (Unloaded) | | | kg | 3417 | 3731 | 4186 | 4492 |
| Fork | Lifting height | A | mm | 3005 | ← | ← | 3205 |
| | Free lift | B | mm | 155 | ← | ← | ← |
| | Lifting speed (Unload/Load) | | mm/sec | 590/570 | 590/550 | 480/460 | 480/450 |
| | Lowering speed (Unload/Load) | | mm/sec | 450/500 | ← | ← | ← |
| | L × W × T | L,W,T | mm | 1050 × 100 × 45 | ← | 1050 × 122 × 45 | ← |
| Mast | Tilt angle (forward/backward) | C/C' | degree | 6/10 | ← | ← | ← |
| | Max height | D | mm | 4185 | ← | ← | 4385 |
| | Min height | E | mm | 2040 | ← | ← | 2190 |
| Body | Travel speed (Unload) | | km/h | 20.5 | ← | 21.5 | 21.4 |
| | Gradeability (Load) | | degree | 37.3 | 32.2 | 26.0 | 24.0 |
| | Min turning radius (Outside) | F | mm | 2248 | 2302 | 2393 | 2434 |
| ETC | Operating pressure | | kgf/cm² | 200 | ← | ← | ← |
| | Hydraulic oil tank | | / | 26 | ← | ← | ← |
| | Fuel tank | | / | 54 | ← | ← | ← |
| Overall length | | G | mm | 2534 | 2594 | 2692 | 2732 |
| Overall width | | H | mm | 1160 | ← | 1230 | ← |
| Overhead guard height | | I | mm | 2160 | ← | 2180 | ← |
| Ground clearance | | J | mm | 127 | ← | 145 | ← |
| Wheel base | | K | mm | 1650 | ← | 1700 | ← |
| Wheel tread front/rear | | M, M' | mm | 965/980 | ← | 1005/980 | ← |



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## 1. HYDRAULIC CIRCUIT




| | | | |
|---|---|---|---|
| 1 | Hydraulic gear pump with Priority valve | 6 | Tilt cylinder |
| 2 | Main control valve | 7 | Suction strainer |
| 3 | Steering unit | 8 | Return filter |
| 4 | Steering cylinder | 9 | Down safety valve |
| 5 | Lift cylinder | 10 | Hydraulic tank |



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| Trouble symptom | Probable cause | Remedy |
|---|---|---|
| Lamps dimming even at maximum engine speed. | · Faulty wiring. | · Check for loose terminal and disconnected wire. |
| Lamps flicker during engine operation. | · Improper belt tension. | · Adjust belt tension. |
| Charge lamp does not light during normal engine operation. | · Charge lamp defective.<br>· Faulty wiring. | · Replace.<br>· Check and repair. |
| Alternator makes abnormal sounds. | · Alternator defective. | · Replace |
| Starting motor fails to run. | · Faulty wiring.<br>· Insufficient battery voltage. | · Check and repair.<br>· Recharge battery. |
| Starting motor pinion repeats going in and out. | · Insufficient battery voltage. | · Recharge battery. |
| Excessively low starting motor speed. | · Insufficient battery voltage.<br>· Starting motor defective. | · Recharge battery.<br>· Replace |
| Starting motor comes to a stop before engine starts up. | · Faulty wiring.<br>· Insufficient battery voltage. | · Check and repair.<br>· Recharge battery. |
| Heater signal does not become red. | · Faulty wiring.<br>· Glow plug damaged. | · Check and repair.<br>· Replace |
| Engine oil pressure caution lamp does not light when engine is stopped (with starting switch left in"ON" position). | · Caution lamp defective.<br>· Caution lamp switch defective. | · Replace<br>· Replace |



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## 1. Disassembly

### 1) CLAMPING PUMP

(1) Clamping pump in a vice with pump shaft facing up.
(Do not chuck the aluminum parts such as body and housing.)

(2) Mark V by permanent marker pen.
This will assure proper reassembly.

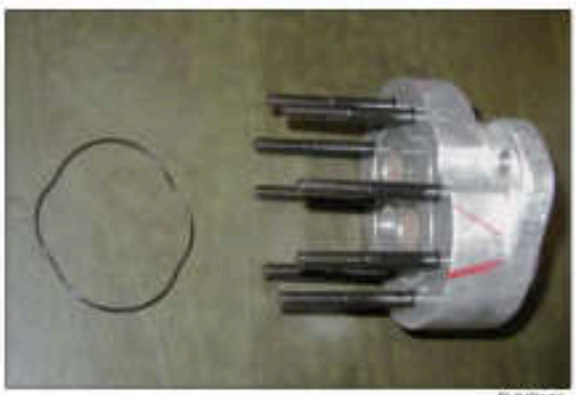

PUMP101

### 2) HOUSING

(1) Loosen 8 bolts and remove housing.

(2) Pry off snap ring for hole and remove oil seal from housing.

(3) Remove O-ring from housing.


PUMP102

### 3) GEAR

(1) Mark at the end of the idle gear by permanent marker pen before removing gear set. This will assure proper reassembly.


PUMP103

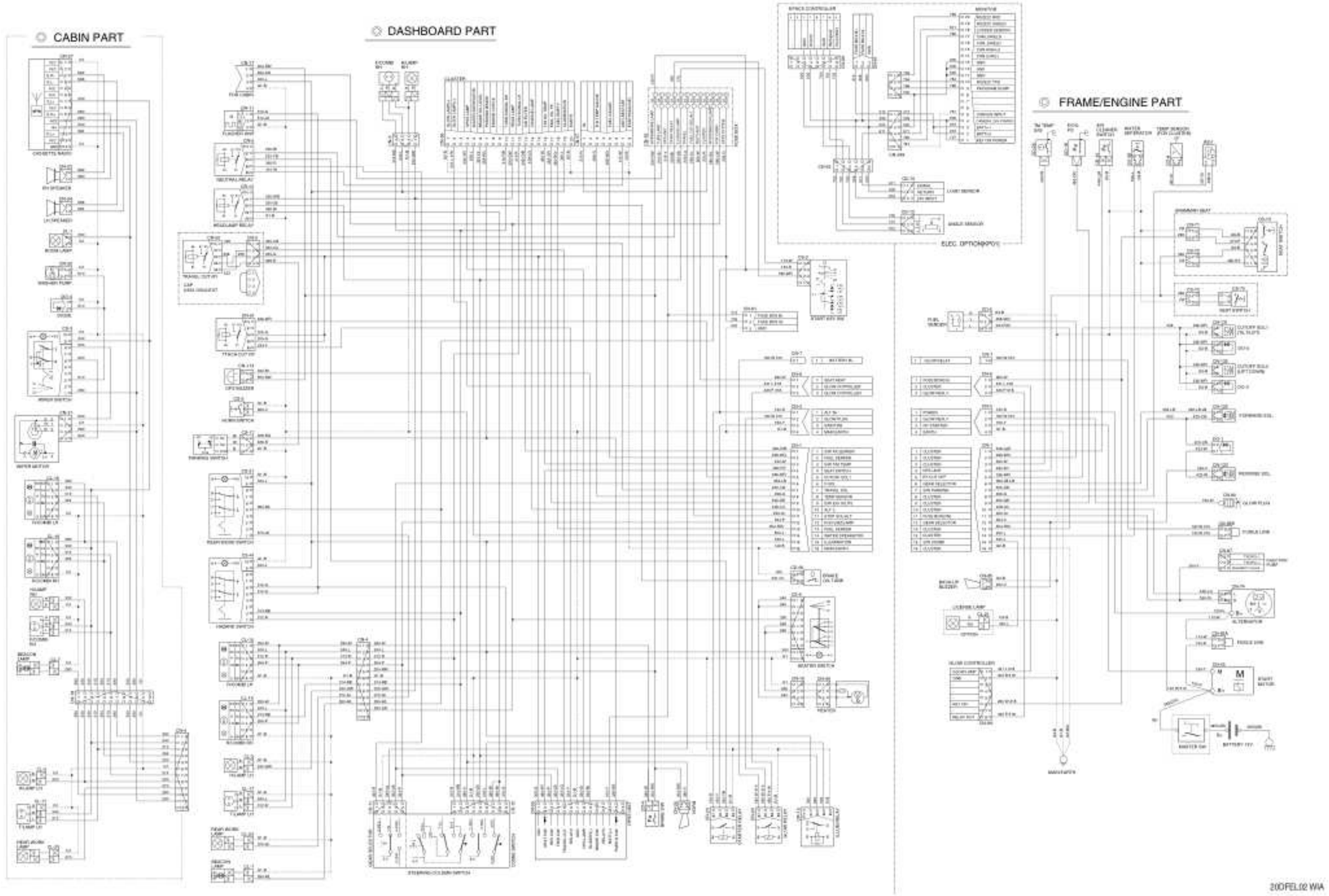
(2) Dissemble gear set and side plate from body.

(3) Dissemble E-type ring and backup ring from side plate.


PUMP104



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