Ingersoll-Rand®
Utility Equipment

# Operating & Maintenance Manual

## Wheel Loader

### WL350

This manual contains important safety information.
Do not destroy this manual.
This manual must be available to the personnel who operate and maintain this machine.

Ingersoll-Rand
Utility Equipment

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## 3.11 Front Loader Installation

Values based on general-purpose bucket

| | Parallel Boom Geometry | |
|---|---|---|
| Width of bucket - 6 ft | 6 ft | 1,850 mm |
| Capacity in compliance with DIN/ISO 7546 (max. density = 1.8 t/m³) | approx. m³ | 0.8 |
| Payload in bucket | 3,858 lbs | 1,440 kg |
| Dumping height at 45° dumping angle | approx. 8 ft | 2,550 mm |
| Dumping reach at max. dumping height | approx. 2.29 ft | 700 mm |
| Max. bucket hinge pin height | approx. 10.5 ft | 3,200 mm |
| Tilt-back angle | 50° | 50° |
| Dumping angle at max. dumping height | 45° | 45° |
| Digging depth, horizontal bucket | approx. 39 inches | 100 mm |
| Lift capacity at ground level | 10,790 lb/f | 48,000 N |
| Ripping force at cutting edge of bucket | 10,116 lb/f | 45,000 N |
| Tipping load, straight | 14,253 lb/f | 4320 kg |
| Tipping load, articulated | approx. 12,579 lb/f | 4695 kg |
| Work cycle times,..... lift: | sec | 4.7 |
| .....lower: | sec | 3.2 |
| Dumping in uppermost position, in/ out | sec | 1.1 |

* In compliance with ISO 8313



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### Operation of Float Position

**NOTICE**

**The float position must always be switched off unless actuated.**

**Set switch (23/48) to "O".**

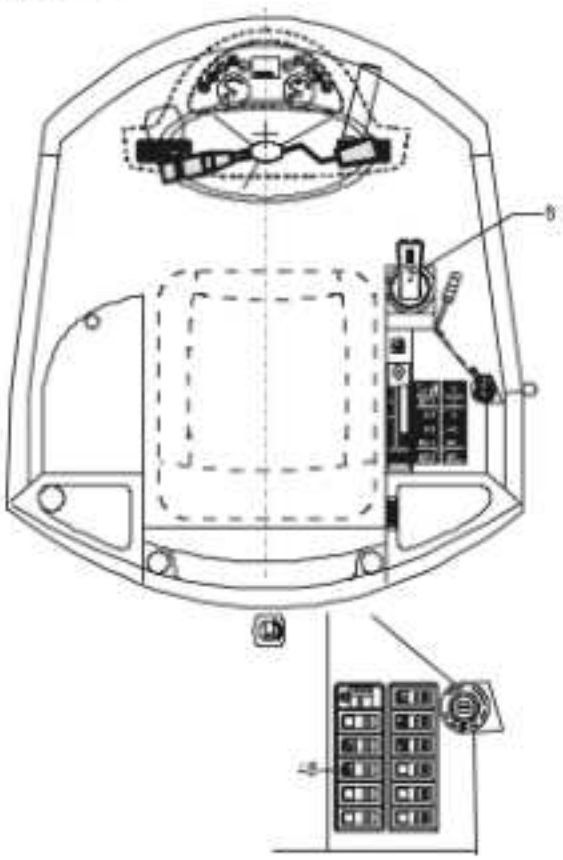


*Fig. 23 - Operation*

### Impulse Mode

- Set float position switch (23/48) to "1".
- Place bucket on ground.
- Press switch (23/8). Float position is activated.

### Continuous Mode

- Place bucket on ground.
- Set switch (23/48) to "2". The green indicator lamp lights up.



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### 7.9.2 Engine Oil Filter

The engine oil filter must be replaced with every engine oil change.

- Place oil drip pan below the engine oil filter.
- Clean the outside of the engine oil filter.
- Unscrew the filter cartridge (36/4) using a commercially available tool and check that the fastening stud is firmly secured in the filter head.
- Dispose of the filter cartridge in compliance with regulations.
- Check filter head condition and clean.
- Fill the new filter with oil, wet the sealing ring with oil and tighten firmly by hand.
- After a test run, check the tightness of the engine oil filter cartridge.

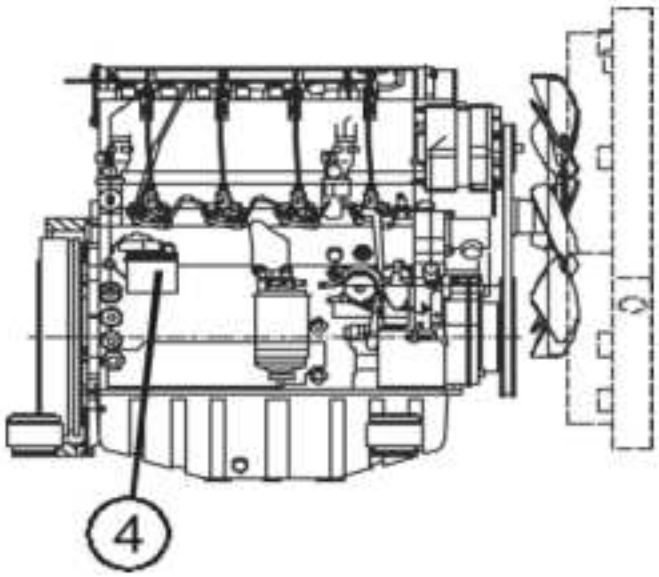



*Fig. 36 - Engine oil filter*



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## 1.3 Notes on Using the Instruction Book

**References to pictures and items**

The references to pictures and items contained in the text, such as *"Figure 12/4"* or *"12/4"* mean Figure 12, Item 4.

Look for these signs on the machine.

**⚠ DANGER**
**(Red Background)**
Indicates the presence of a hazard which WILL cause serious injury, death or property damage, if ignored.

**⚠ WARNING**
**(Orange Background)**
Indicates the presence of a hazard which CAN cause serious injury, death or property damage, if ignored.

**⚠ CAUTION**
**(Yellow Background)**
Indicates the presence of a hazard which WILL or can cause injury or property damage, if ignored.

**NOTICE**
**(Blue Background)**
Indicates important set-up, operating or maintenance information.

## 1.4 Environmental Requirements

Applicable environmental requirements must be observed for all tasks performed on and with the machine.

During installation, repair and maintenance tasks, particular care must be taken that substances that would damage the environment such as

- Lubricating grease and oil
- Hydraulic oil
- Fuel
- Coolants
- Cleaning fluids containing solvents

are not allowed to come in contact with the soil or the water system.

These substances must be stored in suitable containers and must be properly transported, collected and disposed of.

If the substances listed above do reach the soil, the leak or outlet must be stopped immediately and the fluid must be cleaned up with a suitable absorbent material. If necessary, the soil involved must be removed. Absorbent materials and removed soil must be disposed of



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### 7.9.6 V-Belts

**Checking the Condition of V-Belts**

**⚠ WARNING**

**Only check and tension V-belts with the engine off!**

**Danger of injury!**

- Visual check of complete V-belts.

**NOTICE**

**Replace worn or damaged V-belts immediately.**

**Checking the V-Belt Tension**

**NOTICE**

**To check the V-belt tension, a tension gauge is recommended. Check the tension in compliance with the manufacturer's operating instructions.**

**Checking the V-Belt Tension without a Tension Gauge**

- To check the tension, press the V-belt with your thumb in the middle of the greatest free length, and measure the sag.
- Using medium thumb pressure of approx.10lbF/45 N, the V-belt sag (A) should equal 3-.5 inches (10-15 mm).



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