

# > WE ARE RIPPA

Shandong Rippa Machinery Group Co., Ltd. is located in the sixth industrial park of Jining High-tech Zone, Shandong Province. It is a state-owned high-tech enterprise with import and export rights.

The company's employees are energetic and enterprising, constantly creating the legend and fame of the rippa!

R18 PRO  
Zero tail excavator  
1.8 T operating weight



**Shandong Rippa Machinery Group Co., Ltd.**

Address: No. 6 Industrial Park, 2166 Chongwen Avenue, Gaoxin District, Jining City, Shandong Province

Some specifications are based on engineering measurements and may differ from actual conditions. Specifications are for comparison purposes only and are subject to change without notice. Specifications of individual RIPPA devices may vary due to normal variations in design, manufacturing, operating conditions and other factors. Some images of RIPPA devices are not limited to standard packages.



[www.rippa.com](http://www.rippa.com)

## Rippa Mini Excavator

R18 PRO

Sometimes less is definitely more,  
especially if it gets tight.

The R18 PRO redefines the working radius.

**MORE PERFORMANCE ON SMALLEST SPACE.**

"The R18 PRO of Wacker Neuson completely rounds out the spectrum of compact excavators in the weight class between 1-2 tons. In doing so the R18 PRO sets new standards for compactness, performance and weight, but also in terms of easy handling, service access and operating comfort it is taking a new direction. Simply less in top form."



Full operating power on smallest space.  
And everything you  
need in the tough daily routine.

# R18 PRO

**Canopy with top window.**  
So you never lose orientation, especially when loading. The canopy can be easily demounted as needed.

**Roof protection net**  
Tops anti-falling object protection ceiling effectively blocks falling objects, improves work safety, protects operators and equipment, and ensures the safety and stability of the construction environment.

**Large volume diesel engine and efficient cooling system.**  
When you are working, you simply want to work and do so precisely without keeping an eye on the thermometer. 45° surrounding temperature is no reason to do so without performance.

**Load-sensing hydraulics system with variable displacement pump.**  
Guarantees the optimal coordination of all movements and full utilization of the existing performance. This makes easy handling even simpler and increases energy efficiency.

**Tight work conditions are its speciality.**  
The compact dimensions and the robust Zero Tail design make the R18 PRO an extremely agile

**Double action additional hydraulic unit as standard equipment.** This vastly expands the range of R18 PRO applications.

**Optional auxiliary control circuits available ex-works.** Up to 4 control circuits increase the working clearance of the R18 PRO.

**EASY LOCK – quick hitch system.** Ready for any new task within 30 seconds.

**Different attachments.** Because flexibility makes work performance more efficient.

**Telescopic undercarriage and folding blades.** For high stability and extreme agility even in confined spaces.



# R18 PRO

For everyone who wants more output in the heat of the daily action: The engine power of the R18 Pro is the cool sibling of efficiency



The R18 PRO prois a real miracle of power and space. Everything is installed on smallest space here but without leaving power and backup reserves to be missed. This adds to work satisfaction. Because the large volume diesel engine and the new cooling system promise high performance and efficiency also in high surrounding temperatures of up to 45 °C. This way you will always get the best out of any job.

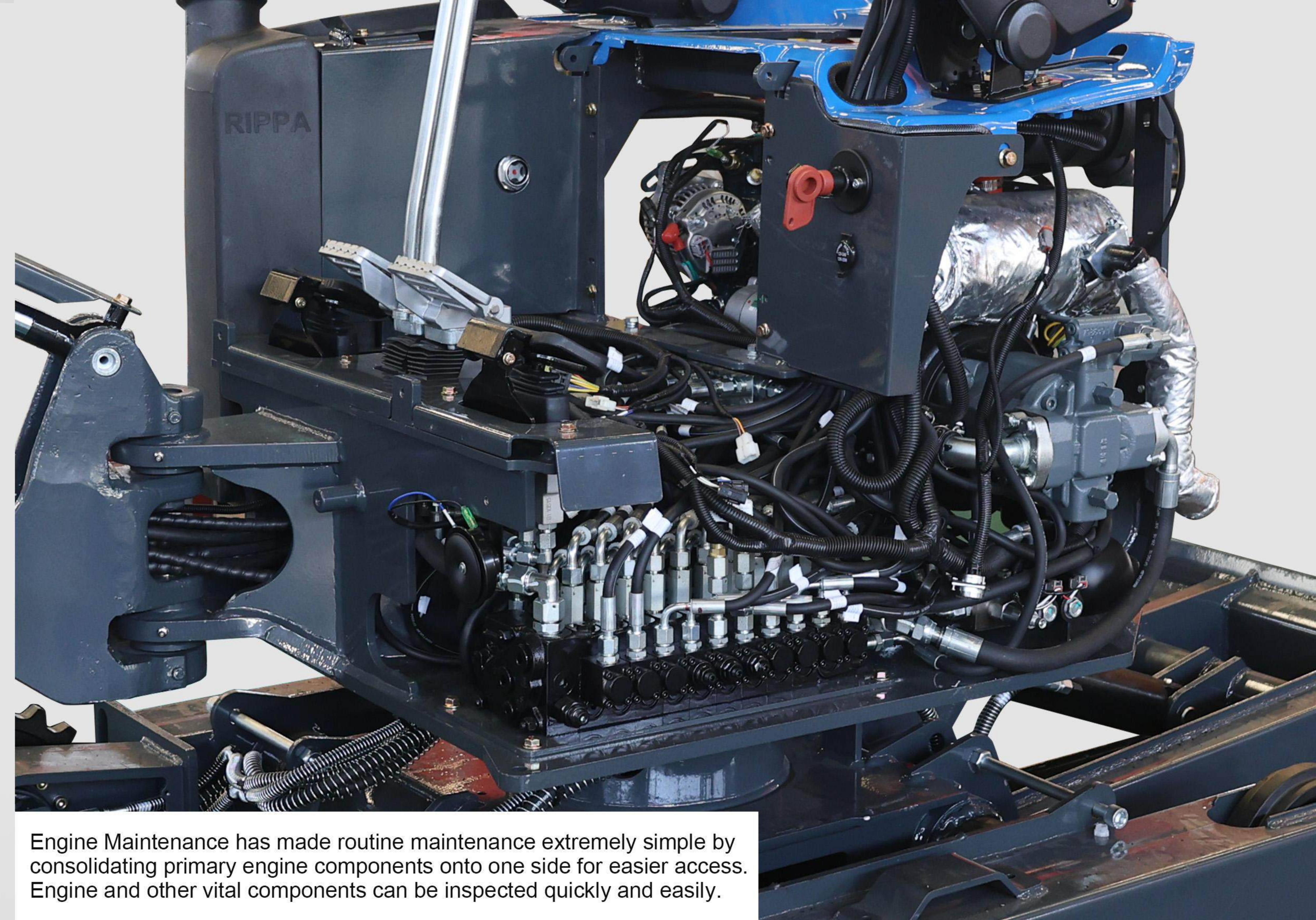
Cooling system

Fuel tank

Hydraulic fluid tank

Drive unit

Hydraulic valves



Engine Maintenance has made routine maintenance extremely simple by consolidating primary engine components onto one side for easier access. Engine and other vital components can be inspected quickly and easily.

## 1 Hydraulics with LUDV – Load Sensing System and variable displacement pump.

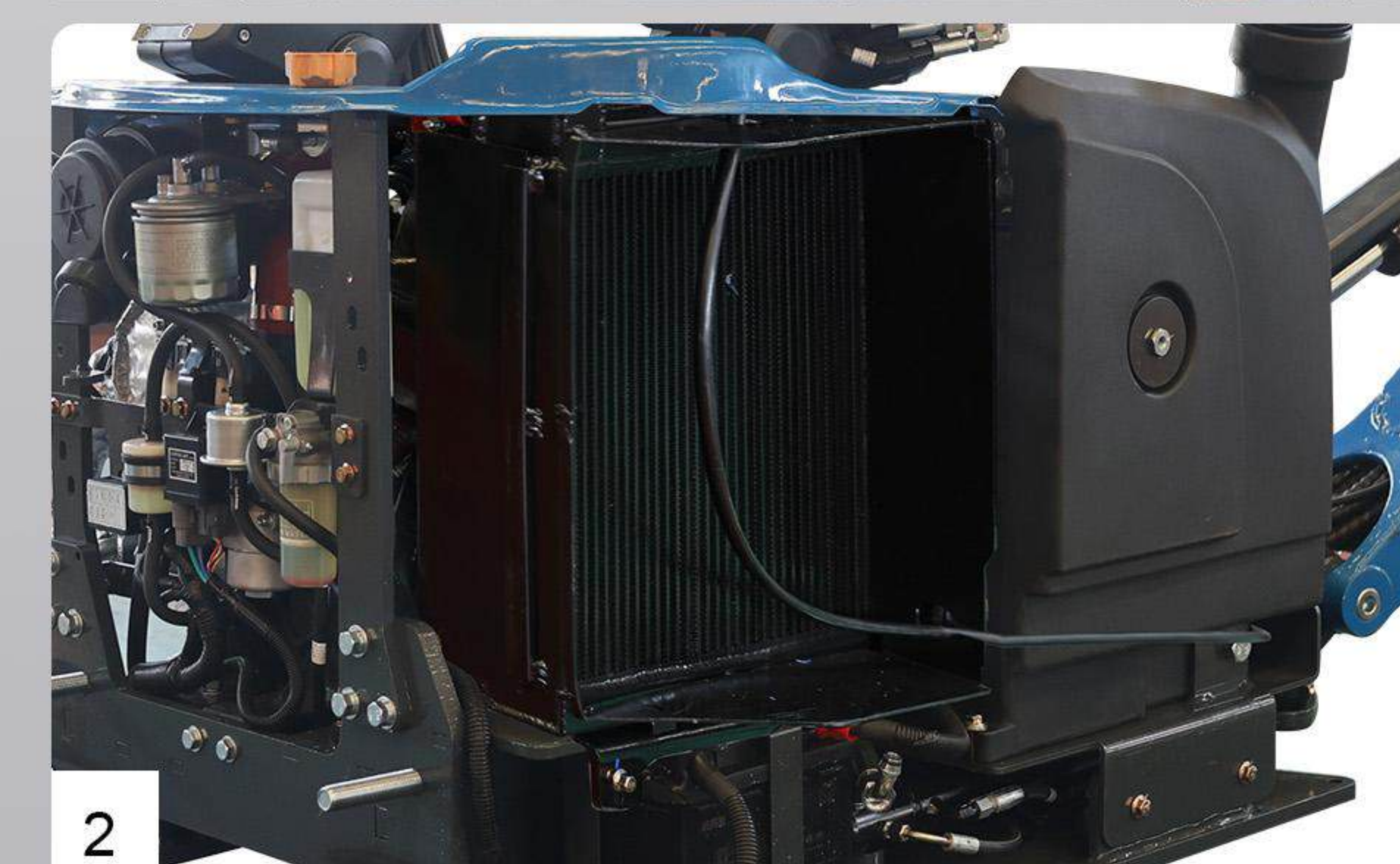
This enables finely tuned movements of the excavator and full utilization of the existing performance for easier handling. The combination with the variable displacement pump makes for a very energy efficient system. The R18 PRO quite simply changes your workflow to the better.

## 2 Longer useful life, cooler and absolutely wear-resistant.

The R18 Pro features an innovative cooling system that ensures extremely high thermal resistance by virtue of a newly developed coolant air circuit. This permits working at full load in surrounding temperatures of up to 45°C. The generally lower temperature level in the entire hydraulics system ensures a longer useful life of all components. The cooler completely made of metal can be accessed easily and with its wide mesh and very stable cooler lamellas it can be cleaned just as easily. This extremely robust design additionally minimizes the risk of damages



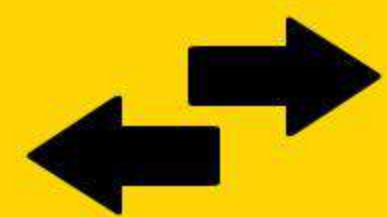
1



2

# R18 PRO

**Flexible performance is what matters today on the construction site.** Therefore, the R18 PRO is also prepared perfectly for this purpose.



The R18 Pro does not only develop its efficiency on smallest space because of its compact dimensions but foremost due to the combination of its high-performance drive, the innovative hydraulics and its strong arm system. Therefore, we offer the R18 Pro also with two different dipper stick lengths. This is effective digging power on a new and compact level.

**Full safety and best protection.** The hose guide from the lifting arm to the chassis runs on the inside and is led through a two-piece pivot console. The lifting arm cylinder is positioned on the top side and therefore offers the optimal protection for the piston rod. This way, you are always at work with full safety

**Large LCD display,** with clear and colorful display, ensures a user-friendly interface, monitors equipment status in real time, and improves work efficiency and safety.

**Double bulldozer valve,** do not control bulldozer and telescopic, absolutely avoid oil leakage between bulldozer and telescopic

**Additional weight in use.** The easily mountable counter-weight provides the R18 PRO with additional stability and protection in the rear section.



## 1 Maximum flexibility on the transport gear:

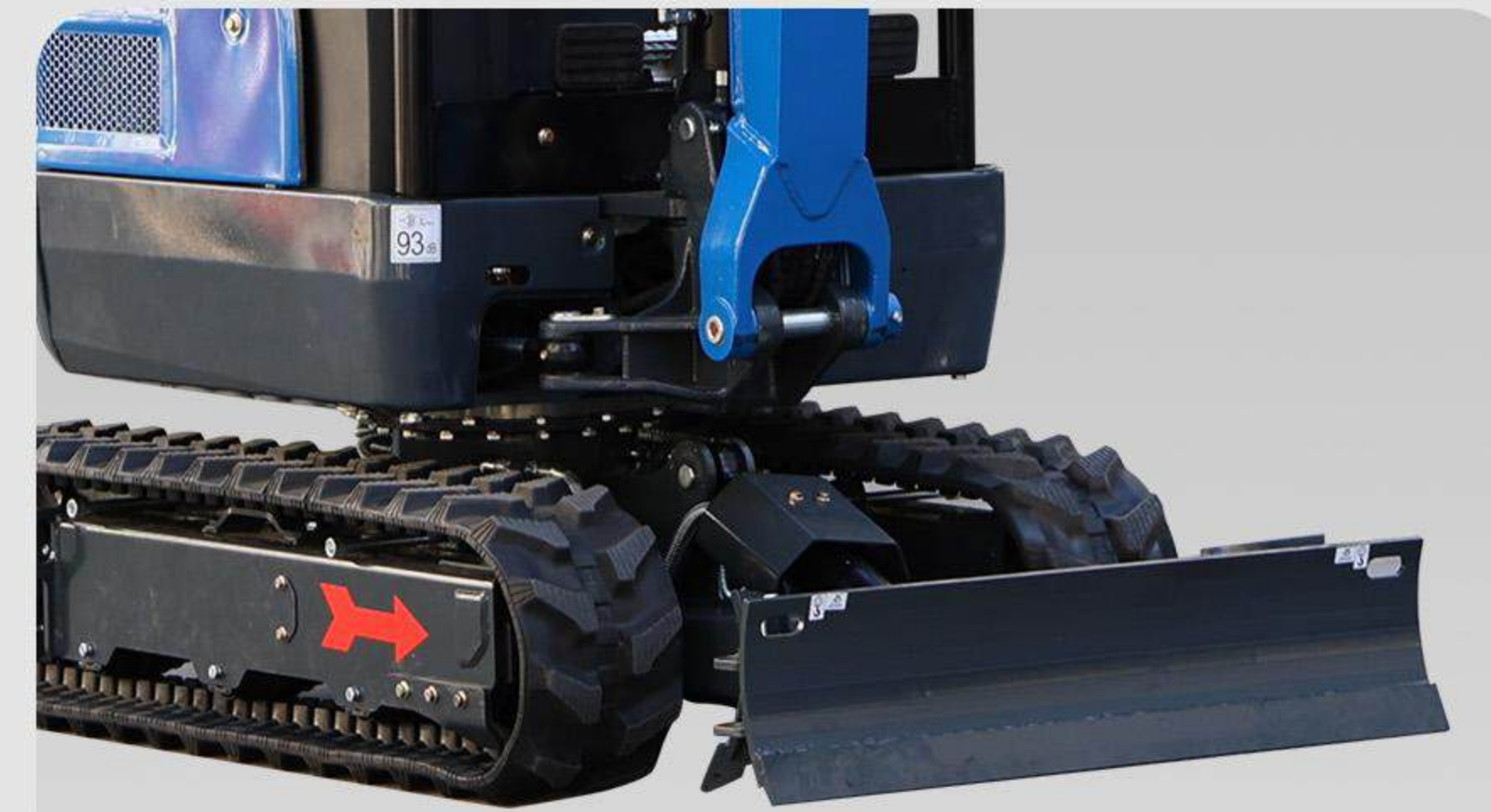
With an extremely stable telescopic undercarriage even the narrowest of passages become easy as child's play. At the same time, stability is always guaranteed.

## 2 Robust, practical, folding:

The folding blade expansions that are extremely torsion-resistant ensure easy handling and are installed fixed on the transport gear. They will not be forgotten at the construction site again.



1



2

**Additional plus in safety.** A cylinder guard is added to the cylinder to effectively protect the cylinder.

**come standard with four-way hydraulic breaker lines,** paired with quick couplers for unmatched efficiency and versatility on the job site.

**A boom system with a future outlook.** The bending of the boom can be adjusted and the oil pipe can be effectively protected by running from the inside.

**Options for more working clearance:** The R18 PRO is optionally available with Powertilt and EASY LOCK.

**TA steel wire spring is installed outside the oil pipe.** to effectively prevent wear and damage to the oil pipe caused by rugged terrain, sharp objects and long-term friction.

# R18 PRO

**Flexibility and function is a promise of many.**  
But what really works in practice is only proven in the actual use on the construction site.



Functionality increases productivity in daily use, this is why we have built the R18 PRO with a focus on practical application so that you can always do an efficient job. Equal, whether in quick transport from A to B, simply lifting the machine or demounting the canopy. With the R18 PRO you decide for high functionality in the tough routine at the construction site.



4 screw points



**Arrive quickly at a new place of use:** The lifting eyes integrated in the canopy enable simple and quick moving or loading of the machine by means of the practical two-point suspension.

## **1 Simple demounting for extremely low head rooms.**

Sometimes the canopy just has to be demounted, even if doing so is not permitted in the ultimate work operation. The canopy can be demounted easily with just 4 screws while all machine functions remain preserved. At the place of use it is mounted back on in no time.

## **2 Additional weight in use.**

The easily mountable counter-weight made of massive cast steel provides the R18 PRO with additional stability and protection in the rear section.

2

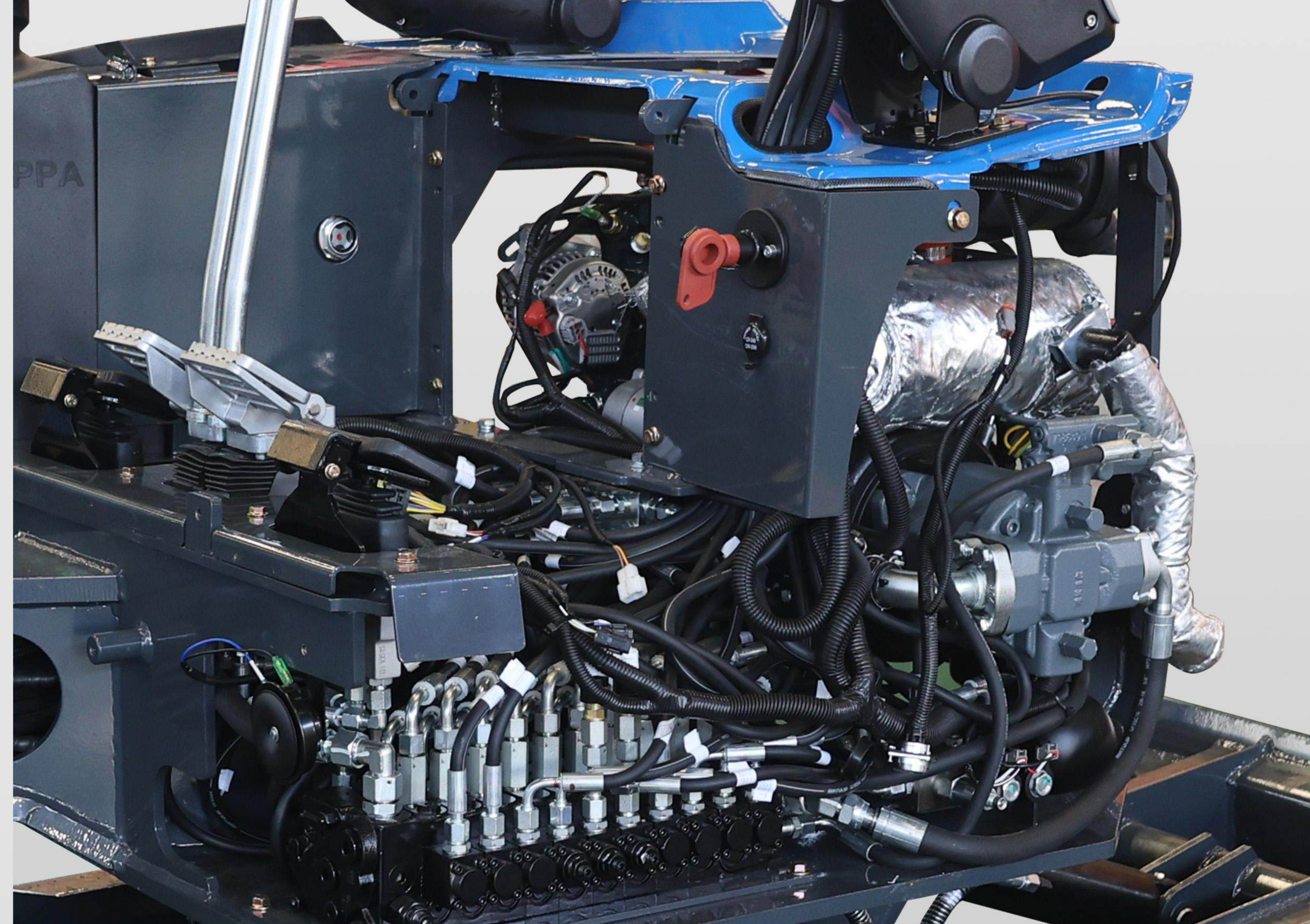


# R18 PRO

Everything has been thought of from the start in the design of the R18 PRO: That is why it has a square shape, is practical and easy to service.



The R18 PRO redefines suitability for everyday use. Using an adjustable wrench, the most important components can be disassembled on the construction site and all parts can be easily removed, accessed and inspected. With the R18 PRO, maintenance and disassembly have never been easier. Because on the construction site, too: time is money.



## 1 Open the lid for rapid service.

The rear lid of the R18 PRO guarantees easy maintenance access to filter elements and service.

## 2 Simple demounting for quick access.

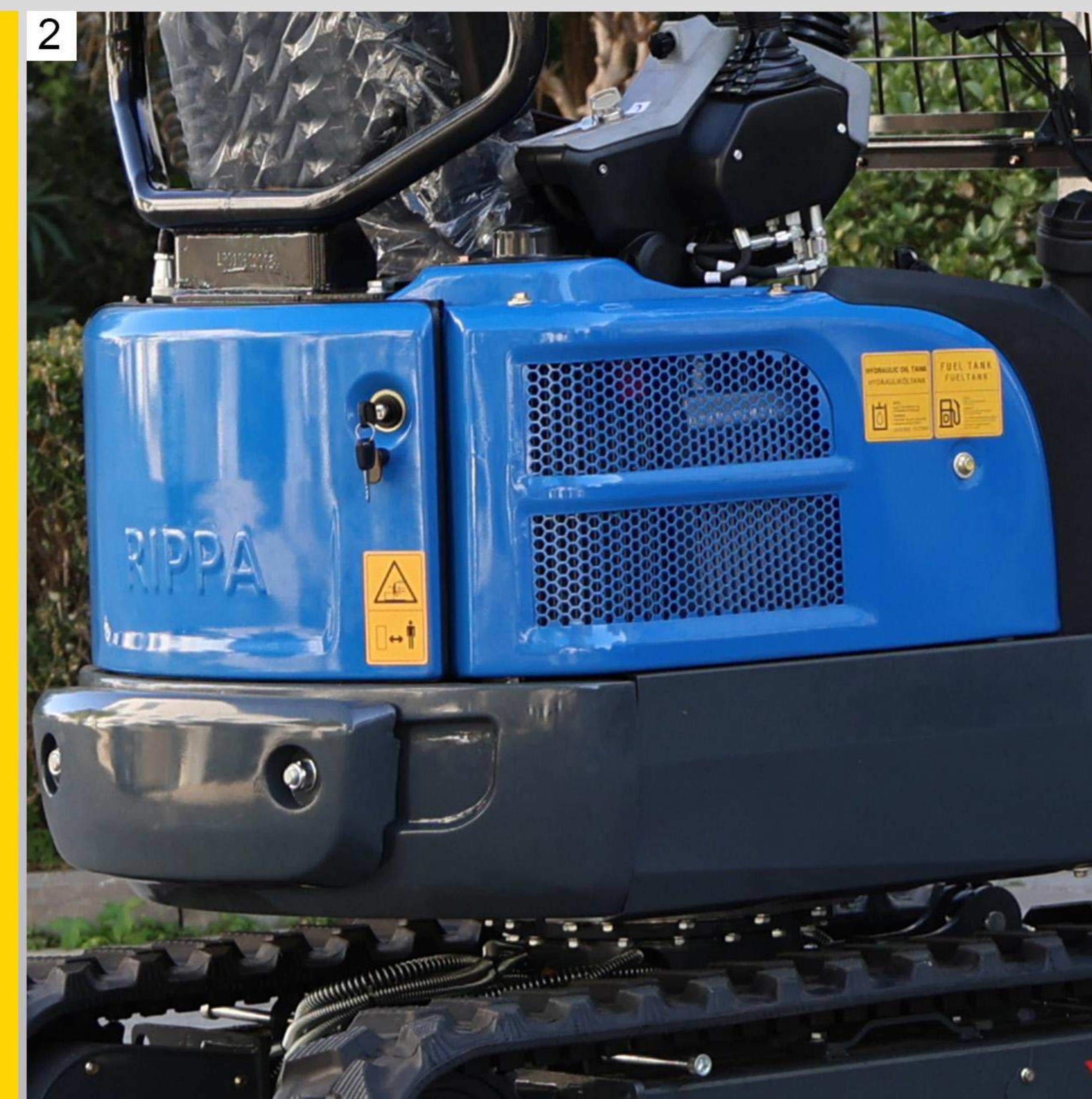
The two chassis covers on the side can be demounted simply by means of a wrench adjustable wrench and enable easy access to the chassis components.

## 3 Simply fold them up for servicing.

The oil circuit and solenoid valve, motor can be inspected and repaired by simply lifting the pedal by hand.

## 4 Quickly obvious hydraulic oil level.

The hydraulic oil level can be quickly and easily checked on the sight glass in the footwell of the R18 PRO.



**One size fits all.** With a wrench size 17 you have all maintenance tasks under control.

Because time is cash we designed the EZ17 in such a way that the maintenance effort is practically reduced to a minimum. This starts with the maintenance interval that has been doubled to 500 operating hours and is completed with the individual components that can be demounted and mounted with a wrench size 17. But see for yourself.



# R18 PRO

Those, who work a lot, appreciate three things: The perfect overview, full control and the certain extra in comfort.



In this sense, the canopy of the R18 PRO sets new standards in overview, safety, leg room and operating comfort. Everything is at the right place. Nothing blocks the sight of what is essential. Fatigue-free, comfortable and focused work therefore finally becomes reality.



**Everything in clear sight and under control.** The modular control lever stays allow for a completely new operating concept with the greatest level of clarity and safety. Everything is within reach here and is clearly arranged through the perfect integration of the switch panel, display element, proportional control, throttle lever, adjustable arm rests and dozer blade lever.

**The LCD screen** can clearly display key operating parameters such as engine speed, hydraulic pressure, fuel level and temperature, helping operators to understand the equipment status at any time to ensure efficient operation.

**Comfortable access and lots of space.** The low access height on the left side and the control lever support that can be flipped up let you quickly take a seat in the comfort zone of the R18 PRO. All levers and switches can be reached easily



## The best panorama for working.

Because the B-column is eliminated and because of the standard top window, nothing dampens the clear view when working. R18 PRO guarantees the perfect full 360-vision, also upward and downward and offers an extremely large field of vision. This way nothing will escape you. Especially for loading and unloading.

Technical data

| DIMENSIONS                     |  | us                                      | R18 PRO                                 |
|--------------------------------|--|-----------------------------------------|-----------------------------------------|
| Machine working weight         |  | 4008lb                                  | 1818kg                                  |
| Bucket capacity                |  | 1.59ft³                                 | 0.045m³                                 |
| Travel speed low/high speed    |  | 0-0.93/0-1.74mph                        | 0-1.5/0-2.8Km/h                         |
| Gradeability                   |  | 30%                                     | 30%                                     |
| Ground pressure                |  | 30.33Kpa                                | 30.33Kpa                                |
| Maximum digging force          |  | 12.8kN                                  | 12.8kN                                  |
| Maximum digging radius         |  | 156.5in                                 | 3975mm                                  |
| Maximum digging depth          |  | 95.3in                                  | 2420mm                                  |
| Maximum digging height         |  | 133.7in                                 | 3396mm                                  |
| Maximum unloading height       |  | 85.9in                                  | 2182mm                                  |
| Maximum deflection angle       |  | 111°                                    | 111°                                    |
| Track extension range          |  | 38.9-51.5in                             | 989-1309mm                              |
| Engine brand                   |  | Kubota                                  | Kubota                                  |
| Engine model                   |  | D902                                    | D902                                    |
| Maximum horsepower             |  | 15.8hp                                  | 16.1ps                                  |
| Maximum power                  |  | 11.8kw                                  | 11.8kw                                  |
| Maximum speed                  |  | 2300rpm                                 | 2300rpm                                 |
| Displacement                   |  | 0.24gal                                 | 0.898L                                  |
| Number of cylinders            |  | 3                                       | 3                                       |
| Cooling method                 |  | Water-cooled                            | Water-cooled                            |
| Engine oil change amount       |  | 0.98gal                                 | 3.7L                                    |
| Fuel form                      |  | Diesel                                  | Diesel                                  |
| Fuel grade                     |  | 0/-10                                   | 0/-10                                   |
| Theoretical fuel consumption   |  | 0.4-0.48gal/h                           | 1.5-1.8L/h                              |
| Transport length               |  | 94.6in                                  | 2403mm                                  |
| Transport width                |  | 38.9in                                  | 989mm                                   |
| Transport height               |  | 91.4in                                  | 2322mm                                  |
| Counterweight ground clearance |  | 19.1in                                  | 486mm                                   |
| Bucket width                   |  | 15.7in                                  | 400mm                                   |
| Boom length                    |  | 44.1in                                  | 1120mm                                  |
| Arm length                     |  | 70.1in                                  | 1780mm                                  |
| Bulldozer blade width          |  | 39/51.1in                               | 990/1300mm                              |
| Main pump type/model           |  | Variable piston pump/18                 | Variable piston pump/18                 |
| Main pump brand                |  | Taifeng Hydraulics                      | Taifeng Hydraulics                      |
| Main pump maximum flow         |  | 1.63gal/min                             | 41.4L/min                               |
| Multi-way valve                |  | 9-way hydraulic control multi-way valve | 9-way hydraulic control multi-way valve |
| Multi-way valve brand          |  | Taifeng Hydraulics                      | Taifeng Hydraulics                      |
| Rated set pressure             |  | 18MPa                                   | 18MPa                                   |
| Maximum set pressure           |  | 22MPa                                   | 22MPa                                   |
| Travel hydraulic motor type    |  | Built-in LTM02PA                        | Built-in LTM02PA                        |
| Travel motor brand             |  | Likechuan                               | Likechuan                               |
| Motor displacement             |  | 7.8/12                                  | 7.8/12                                  |
| Slewing hydraulic motor type   |  | Paiyi                                   | Paiyi                                   |
| Displacement                   |  | 245                                     | 245                                     |

