

## AGT INDUSTRIAL Shantui-STE35SR

# Shantui Mini Excavator 2.8 Ton Digger Tracked Crawler Hydraulic Engine EPA

## USER MANUAL

Brand: AGT INDUSTRIAL | Model: Shantui-STE35SR

### 1. INTRODUCTION

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This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Shantui Mini Excavator 2.8 Ton Digger. Please read this manual thoroughly before operating the machine to ensure proper use and to prevent damage or injury.



Image 1.1: The Shantui Mini Excavator 2.8 Ton Digger, a compact and powerful tracked crawler designed for various excavation tasks.

## 2. SAFETY INFORMATION

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Always prioritize safety when operating heavy machinery. Failure to follow safety instructions can result in serious injury or death.

- Read and understand all safety decals on the machine.
- Wear appropriate personal protective equipment (PPE), including hard hat, safety glasses, hearing protection, and steel-toed boots.
- Ensure the work area is clear of personnel and obstacles.
- Never operate the excavator under the influence of alcohol or drugs.
- Perform daily pre-operation checks as outlined in the maintenance section.
- Be aware of the zero-tail swing radius to avoid collisions in confined spaces.

## 3. PRODUCT OVERVIEW AND KEY COMPONENTS

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Familiarize yourself with the main parts and features of your Shantui Mini Excavator.



Image 3.1: Diagram highlighting key components such as the steel protection cover, LED working light, cast aluminum pedal, transport connector, easy service hose design, cylinder protection plate, breaker and auxiliary pipes, and mechanical quick change system.

### 3.1. Cabin and Controls

The spacious cabin provides a comfortable operation environment with an enlarged front windscreen and sunroof for wider visibility. It includes an air conditioner (warm air only), a touch radio, and stereo acoustics.

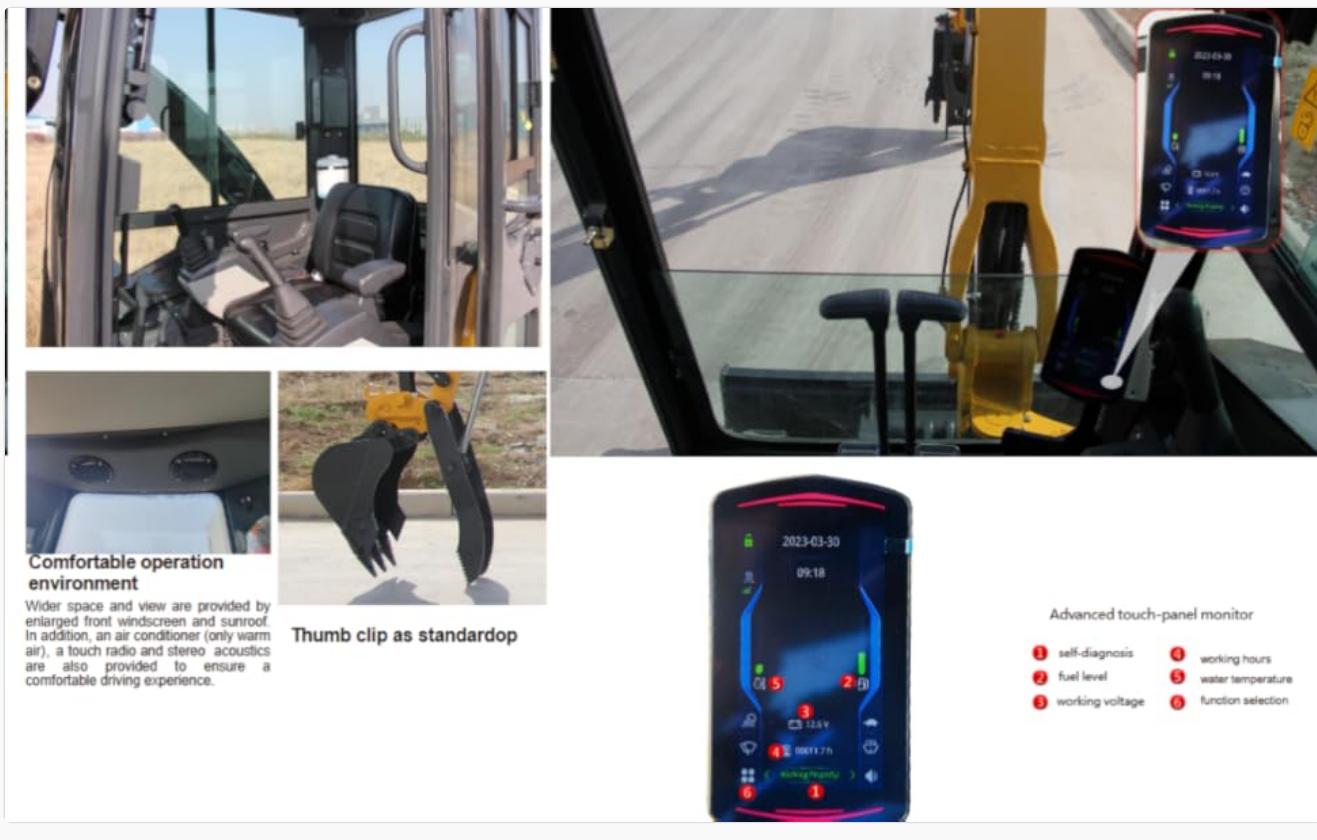


Image 3.2: View of the excavator's cabin interior, showing the operator's seat, control levers, and the advanced touch-panel monitor.

The advanced touch-panel monitor provides critical operational data, including:

- Self-diagnosis information
- Working hours
- Fuel level
- Water temperature
- Working voltage

## 4. SETUP AND INITIAL OPERATION

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### 4.1. Pre-Operation Checks

Before starting the excavator, perform the following checks:

1. Check all fluid levels (engine oil, hydraulic fluid, coolant, fuel).
2. Inspect tracks for damage or debris.
3. Verify all safety guards and covers are in place and secure.
4. Ensure all controls move freely and return to neutral.
5. Check for any visible leaks or loose connections.

### 4.2. Attaching Auxiliary Tools

This excavator is equipped with a breaker pipeline (standard) and auxiliary pipeline, along with a mechanical quick change system. This allows for easy attachment and detachment of various tools without manual labor, meeting diverse construction requirements.

Refer to the specific auxiliary tool's manual for detailed attachment and operation instructions.

## 5. OPERATING INSTRUCTIONS

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### 5.1. Engine Start-up

Ensure all controls are in neutral and the parking brake is engaged. Follow the manufacturer's specific engine start-up procedure, typically involving turning the ignition key and allowing the engine to warm up.

### 5.2. Excavation Techniques

The Shantui Mini Excavator is designed for precise and efficient operation, even in challenging environments.



Image 5.1: The excavator demonstrating its zero-tail swing capability in a confined space and its ability for flat ground operation.

- **Zero-Tail Swing:** The combination of zero-tail swing and arm deviation is ideal for narrow and complex working conditions. When operating near a wall, the excavator can perform direct excavation without frequent repositioning, ensuring flexible construction.
- **Flat Ground Operation:** Smooth flat ground operation is achieved through the collaborative use of superstructure swing, boom deviation, dozer blade rising and falling, and the long and short arms, along with the bucket and dozer blade.
- **Hydraulic System:** Equipped with a high-performance hydraulic system and relevant elements, the composite actions of the boom, arm, bucket, and swing motor are harmonious and smooth, providing excellent performance.

### 5.3. Engine and Power

The excavator is equipped with an engine that conforms to EPA4 and Stage V emission standards, delivering strong power for demanding tasks. This ensures both high performance and environmental compliance.

## 6. MAINTENANCE

Regular maintenance is crucial for the longevity and optimal performance of your excavator. Refer to the detailed maintenance schedule in the full service manual for specific intervals.

### 6.1. Daily Checks

- Check engine oil level.
- Check hydraulic oil level.
- Inspect coolant level.
- Check fuel level and drain water from the fuel filter.
- Clean air filter if necessary.

- Inspect tracks and undercarriage for debris or damage.
- Lubricate all grease points.

## 6.2. Refilling Capacities & Lubrications

Fluid Type	Capacity
Fuel Tank	33L
Cooling System	5L
Engine Oil	3.4L
Hydraulic Oil Tank	22L

Note: Always use fluids and lubricants recommended by the manufacturer.

## 7. TROUBLESHOOTING

This section provides basic troubleshooting steps for common issues. For complex problems, contact qualified service personnel.

Problem	Possible Cause	Solution
Engine fails to start	Low fuel, dead battery, ignition issue	Check fuel level, charge/replace battery, inspect ignition system. Refer to self-diagnosis on touch panel.
Loss of hydraulic power	Low hydraulic fluid, clogged filter, pump issue	Check hydraulic fluid level, inspect/replace filter. Contact service if problem persists.
Overheating engine	Low coolant, clogged radiator, faulty thermostat	Check coolant level, clean radiator fins, inspect thermostat. Monitor water temperature on touch panel.

Utilize the advanced touch-panel monitor's self-diagnosis feature for initial fault identification.

## 8. SPECIFICATIONS

Detailed technical specifications for the Shantui Mini Excavator 2.8 Ton Digger.

The standard and optional equipment varies from country to country. For more information, please contact with us.

Engine	
Oil filter	●
Fuel filter	●
Oil-water separator	●
Air filter	●
Radiator	●
Alternator	●
Auxiliary water tank	●
Electronic fuel feedpump	●
Muffler	●
Hydraulic system	
Hydraulic pilot control rod	●
Slewing parking brake system	●
Traveling parking brake system	●
Dual-speed traveling system	●
Electro-hydraulic proportional lever	○
Arm safety valve	○
Dozer blade safety valve	○
Light	
Boom light	●
Front cab light	●

● Standard equipment    ○ Optional equipment

Cab	
AM/FM radio	●
Engine safety start system	●
Windscreen washer and wiper	●
Left rearview mirror	●
Front working devices	
300 mmbucket	○
460mmbucket	●
600mmbucket	○
1200mmbucket	○
Breaker pipeling	●
Track	
300mm rubber track	●
300mm steel track	○

ENGINE	
Model	YANMAR 3TNV80F
Type	Vertical, water cool, 4-cyl.
No. of cylinder	3
Emission	EPA Tier 4 Final/Europe Stage V
Displacement	1.287L
Power output	14.8kW/2400rpm
HYDRAULIC SYSTEM	
Max. hydraulic flow	87L/min
DIGGING FORCE	
Bucket digging force	24kN
Arm digging force	14.8kN
BUCKET	
Type	Backhoe bucket
Bucket capacity	0.09m <sup>3</sup>
TRACK	
Type	Axial piston motor
Track roller	2x3
Track shoe	2x2
Travel speed	2/3.14m/h
Max. Drawbar pull	29kN
SWING SYSTEM	
Swing speed	0.15r/min
Brake type	Friction, 16/16mm frictional braking
REFILLING CAPACITIES & LUBRICATIONS	
Fuel tank	35L
Cooling system	8L
Engine oil	3.4L
Hydraulic oil tank	22L
OPERATING WEIGHT AND GROUND PRESSURE	
Show width	200m
Ground pressure	26.3kPa
Operating weight	2800kg

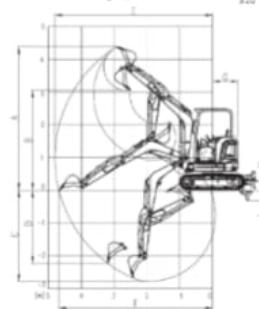


Image 8.1: Comprehensive specifications including engine details, hydraulic system performance, digging force, bucket capacity, and dimensions.

Specification	Value
Product Dimensions	104.33 x 57.87 x 36.22 inches
Item Weight	6173 pounds
Country of Origin	China
ASIN	B0CPLS65H9
Item Model Number	Shantui-STE35SR
Manufacturer	AGT
Engine Emission Standards	EPA4 and Stage V
Max. Hydraulic Flow	87L/min
Bucket Digging Force	24kN
Arm Digging Force	14.8kN
Bucket Capacity	0.09m <sup>3</sup>
Max. Digging Depth	2800mm
Max. Digging Radius	4800mm
Operating Weight	2800kg

## 9. WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the documentation provided at the time of purchase or contact the seller directly. AGT INDUSTRIAL is committed to providing support for its products.

For technical assistance, parts, or service inquiries, please contact your authorized AGT INDUSTRIAL dealer or the seller from whom you purchased the excavator. Provide your model number (Shantui-STE35SR) and ASIN (B0CPLS65H9) for faster service.

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