



Manuals.plus /

› HUAYEE /

› HUAYEE HY14C Mini Excavator User Manual

## HUAYEE HY14C

# HUAYEE HY14C Mini Excavator User Manual

Model: HY14C

## INTRODUCTION

---

This manual provides comprehensive instructions for the safe and efficient operation, maintenance, and troubleshooting of your HUAYEE HY14C Mini Excavator. The HY14C is a 1.4-ton mini excavator equipped with a 13.5 HP Briggs & Stratton gasoline engine, designed for various excavation tasks in confined spaces. Key features include a swing function, hydraulic thumb clamp, and a semi-automatic quick coupler for versatile attachment use.

## SAFETY INFORMATION

---

Always prioritize safety when operating heavy machinery. Read and understand all safety decals on the machine and this manual before operation. Failure to follow safety instructions can result in serious injury or death.

- Ensure all operators are trained and familiar with the machine's controls and capabilities.
- Wear appropriate personal protective equipment (PPE), including hard hat, safety glasses, hearing protection, and steel-toed boots.
- Inspect the excavator before each use for any damage, leaks, or loose components.
- Operate only on stable, level ground. Be aware of overhead and underground utilities.
- Keep bystanders, especially children, away from the operating area.
- Never operate the machine under the influence of alcohol or drugs.
- Turn off the engine and remove the key before performing any maintenance or adjustments.

## COMPONENTS OVERVIEW

---

Familiarize yourself with the main components of the HY14C Mini Excavator.



**Figure 1:** Key components of the HY14C Mini Excavator, highlighting the hydraulic thumbs, mobile phone holder, cup holder, swing arm function, and hydraulic cylinder.

## Briggs & Stratton Engine



The HY14C is powered by a 13.5 HP Briggs & Stratton XR2100 gasoline engine. This engine is designed for reliable performance, efficiency, and low operating noise, ensuring consistent power for excavation tasks.

## Hydraulic Thumb Clamp

The hydraulically powered thumb clamp allows for real-time adjustment based on the size and weight of the object

being grasped. It features a wide opening angle and strong clamping force, making it ideal for handling irregular materials like rocks and logs.

## Side Swing Function



### Swing arm functioning

With the ability to swing the arm in any direction the excavator can move the boom, bucket, or attachment to a precise location without shifting the base of the machine.

**Figure 2:** The excavator's side swing capability allows for precise positioning in tight spaces.

The upper structure of the excavator can rotate laterally by approximately 70-90 degrees. This function enables the boom, stick, and bucket to reach areas perpendicular to the machine's longitudinal axis, facilitating efficient operation in confined spaces such as alongside buildings or between closely spaced obstacles.

## Semi-Automatic Quick Coupler

This system combines mechanical and hydraulic components, using a hydraulic cylinder to assist in the locking and unlocking of attachments. While some manual alignment may be required, it simplifies the process of changing attachments, enhancing efficiency and ease of use.

## Hydraulic Cooler

The hydraulic cooler maintains the optimal temperature of the hydraulic oil by using air or water as a heat-exchange medium. This is crucial for ensuring the normal operation of hydraulic components, reducing wear, and extending the service life of the hydraulic system, especially during long-term and high-intensity work.

## Driving Console



# DRIVING CONSOLE

Humanized driving space design, comfortable and luxurious seats, reasonable layout of control levers and buttons, easy for single person operation.

**Figure 3:** The ergonomic driving console with clearly arranged controls.

The driving console features a humanized design with comfortable seating and a logical layout of control levers and buttons, making it easy for a single operator to manage the machine.

## SETUP

1. **Unpacking and Inspection:** Upon delivery, carefully unpack the excavator. Inspect for any visible damage during transit. Report any damage to the carrier immediately.
2. **Fluid Checks:** Before first use, check all fluid levels, including engine oil, hydraulic fluid, and fuel. Refer to the specifications section for recommended fluid types and capacities.

3. **Battery Connection:** Ensure the battery is securely connected. If disconnected for shipping, connect the positive (+) cable first, then the negative (-) cable.
4. **Fueling:** Fill the fuel tank with unleaded gasoline. Do not overfill.
5. **Attachment Installation:** If attachments are not pre-installed, use the semi-automatic quick coupler to securely attach the desired implement (e.g., bucket, hydraulic thumb). Ensure the locking mechanism is fully engaged.

## OPERATING INSTRUCTIONS

---

### Starting the Engine

1. Ensure the parking brake is engaged and all control levers are in the neutral position.
2. Insert the key into the ignition and turn it to the "ON" position.
3. If the engine is cold, apply choke as needed.
4. Turn the key to the "START" position. Release once the engine starts.
5. Allow the engine to warm up for a few minutes before beginning operation.

### Basic Controls and Movement

- **Travel Levers:** Use the two travel levers (typically foot pedals or hand levers) to control forward and reverse movement of the tracks.
- **Boom Control:** Operate the boom lever to raise and lower the main arm.
- **Stick Control:** Operate the stick lever to extend and retract the stick (forearm).
- **Bucket Control:** Operate the bucket lever to curl in or dump out the bucket.
- **Swing Control:** Use the dedicated swing lever to rotate the upper structure of the excavator left or right.
- **Dozer Blade Control:** Use the dozer blade lever to raise or lower the front blade for leveling or stabilization.

### Using the Hydraulic Thumb Clamp

The hydraulic thumb clamp is controlled by a dedicated lever or button on the control panel. Activate the control to open or close the thumb, allowing you to grasp and manipulate objects such as logs, rocks, or debris. Adjust the clamping force as needed for different materials.

### Stopping the Engine

1. Park the excavator on level ground.
2. Lower all attachments to the ground.
3. Engage the parking brake.
4. Allow the engine to idle for a few minutes to cool down.
5. Turn the ignition key to the "OFF" position.
6. Remove the key to prevent unauthorized use.

## MAINTENANCE

---

Regular maintenance is crucial for the longevity and optimal performance of your HY14C Mini Excavator. Refer to the maintenance schedule below.

### Daily Checks (Before Operation)

- Check engine oil level.
- Check hydraulic fluid level.

- Inspect tracks for damage or excessive wear.
- Check for any fluid leaks.
- Ensure all lights and safety features are operational.
- Clean debris from the engine compartment and radiator.

### Weekly / Every 50 Hours

- Lubricate all grease points (boom, stick, bucket pins, swing bearing).
- Check air filter and clean if necessary.
- Inspect battery terminals for corrosion and clean if needed.
- Check track tension and adjust if required.

### Monthly / Every 200 Hours

- Change engine oil and oil filter.
- Inspect fuel filter and replace if necessary.
- Check hydraulic hoses and fittings for wear or damage.
- Inspect fan belt tension.

### Annual / Every 500 Hours

- Replace hydraulic fluid and filter.
- Replace fuel filter.
- Inspect and adjust valve clearances (refer to engine manual).
- Check and clean spark plug.

## TROUBLESHOOTING

---

This section provides solutions to common issues you might encounter with your HY14C Mini Excavator. For problems not listed here, or if solutions do not resolve the issue, contact customer support.

Problem	Possible Cause	Solution
Engine will not start	No fuel; Dead battery; Clogged fuel filter; Spark plug issue	Check fuel level; Charge/replace battery; Replace fuel filter; Check/replace spark plug
Loss of hydraulic power	Low hydraulic fluid; Clogged hydraulic filter; Hydraulic pump issue	Check/add hydraulic fluid; Replace hydraulic filter; Contact service for pump inspection
Overheating engine	Low coolant; Clogged radiator fins; Overloaded operation	Check/add coolant; Clean radiator fins; Reduce load or operating time
Tracks not moving smoothly	Debris in tracks; Incorrect track tension; Worn tracks/rollers	Clean tracks; Adjust track tension; Inspect for wear and replace components if necessary

## SPECIFICATIONS

---

Detailed technical specifications for the HUAYEE HY14C Mini Excavator.



## HY14C MINI EXCAVATOR

Max ground digging radius:	3020mm/118in	Max vertical digging depth:	1610mm/63in
Max digging radius:	3080mm/121in	Min slewing radius:	1190mm/46in
Max digging depth:	1670mm/65in	Max dozer blade height:	150mm/5in
Max digging height:	2840mm/111in	Max dozer blade depth:	190mm/7in
Max dump height:	2080mm/105in	Chassis width:	940mm/37in

Figure 4: HY14C Mini Excavator dimensions and key digging parameters.

# HY14C

## MINI EXCAVATOR

### Basic

Operating weight :	1402kg/3091lbs
Bucket capacity :	0.02m <sup>3</sup>
Type of working :	Backhoe

### Engine

Brand :	Briggs&Stratton
Model :	XR2100
Displacement :	420ml/cc
Rated output power/speed :	13.5hp

### Speed

Max traveling speed :	1.2km/h
Slewing speed :	9rpm
Max grade ability :	30°

### Track

Ground pressure :	0.3kpa/cm <sup>2</sup>
Material :	Rubber
Tension type :	Mechanical tightening
Length :	1200mm/47in
Width :	180mm/7in

### Pump

Type :	Gear pump
--------	-----------

### Fuel/Hydraulic

Working pressure :	16mpa
Hydraulic oil flow :	17.6L/min
Hydraulic oil tank capacity :	15L/4gal
Fuel tank capacity :	6.6L/1.6gal

Figure 5: Comprehensive technical specifications for the HY14C Mini Excavator.

Category	Specification	Value
<b>General</b>	Model	HY14C
	Operating Weight	1402 kg / 3091 lbs
	Product Dimensions (L x W x H)	93 x 37 x 92 inches (2362 x 940 x 2337 mm)
	Bucket Capacity	0.02 m <sup>3</sup>
	Color	Red
<b>Engine</b>	Brand	Briggs & Stratton
	Model	XR2100
	Rated Output Power / Speed	13.5 HP / 420 CC
<b>Performance</b>	Max Ground Digging Radius	3020 mm / 118 in
	Max Digging Depth	1670 mm / 65 in
	Max Digging Height	2840 mm / 111 in
<b>Hydraulic System</b>	Working Pressure	16 Mpa
	Hydraulic Oil Flow	17.6 L/min
	Hydraulic Oil Tank Capacity	15 L / 4 gal
<b>Fuel System</b>	Fuel Type	Gasoline
	Fuel Tank Capacity	6.6 L / 1.6 gal
<b>Track</b>	Material	Rubber
	Length	1200 mm / 47 in
	Width	180 mm / 7 in

## WARRANTY AND SUPPORT

---

For warranty information, technical support, or any other inquiries regarding your HUAYEE HY14C Mini Excavator, please contact HUAYEE MECHANICAL directly. They are the seller and provide customer support.

**Returns:** This product is eligible for 30-day easy returns.

**HUAYEE**

CE

ISO

EURO5

## FOR YOUR SHOPPING EXPERIENCE

PLEASE CONFIRM

✓ Ships from : **HUAYEE MECHANICAL**

✓ Sold by : **HUAYEE MECHANICAL**

If you have any other questions

✓ Please feel free to contact : **HUAYEE MECHANICAL**

We will do our utmost to assist you



Figure 6: Contact information for HUAYEE MECHANICAL for support and inquiries.

When contacting support, please have your model number (HY14C) and purchase details ready to assist with faster service.