OPERATING MANUAL (ANSI)

TELEHANDLERS

MODELS SJ1044 TH/THS SJ1056 TH/THS

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SKYJACK

This manual is based on Serial Number(s):

SJ1044 TH/THS	872 100 01 – 872 100 29
SJ1056 TH/THS	873 100 01 – 873 104 12

Please refer to the website (www.skyjack.com) for older Serial Numbers.

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The Safety Alert Symbol identifies important safety messages on telehandler, safety signs in manuals or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

This Safety Alert Symbol means attention!

Become alert! Your safety is involved.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT

IMPORTANT indicates a procedure essential for safe operation and which, if not followed, may result in a malfunction or damage to the telehandler.

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SKYJACK is continuously improving and expanding product features on its equipment, therefore, specifications and dimensions are subject to change without notice.

Telehandler Definition
A material handler designed primarily as a fork truck with a pivoting telescopic boom which enables it to pick and place loads at distances as well as various lift heights.

Purpose of Equipment
The SKYJACK telehandlers are designed to lift, handle and transport agricultural or industrial products by means of specific attachments.

Use of Equipment
The telehandler is a highly maneuverable, mobile work station. Lifting, handling and driving must be on a flat, level, compacted surface. It can be driven over uneven terrain only when the boom is fully lowered.

Manual
The operating manual is considered a fundamental part of the telehandler. It is a very important way to communicate necessary safety information to users and operators. A complete and legible copy of this manual must be kept in the provided weather-resistant storage compartment on the telehandler at all times.

Operator
The operator must read and completely understand both this operating manual and the safety panel label located on the telehandler and all other warnings in this manual and on the telehandler. Compare the labels on the telehandler with the labels found within this manual. If any labels are damaged or missing, replace them immediately.

Service Policy and Warranty
SKYJACK warrants each new product to be free of defective parts and workmanship for the first 2 years or 3000 hours, whichever occurs first. Any defective part will be replaced or repaired by your local SKYJACK dealer at no charge for parts or labor. In addition, all products have a 5 year structural warranty. Contact the SKYJACK Service Department for warranty statement extensions or exclusions.

Optional Accessories
The SKYJACK telehandler is designed to accept a variety of optional accessories. These are listed under “Attachments Installation and Operation” in Section 2. Operating instructions for these options (if equipped) are located in Section 2 of this manual.
For non-standard components or systems, contact the SKYJACK Service Department at

☎ : 800 275-9522
🖷 : 630 262-0006

Include the model and serial number for each applicable telehandler.

Scope of this Manual
a. **This manual applies** to the ANSI/ITSDF and CSA versions of the SJ1044 TH/THS and SJ1056 TH/THS telehandlers.

- **Equipment identified** with “ANSI” meets the ANSI/ITSDF B56.6-2011standard.
- **Equipment identified** with “CSA” meets the CSA B335-15 standard.

b. **CSA (Canada)**
Operators are required to conform to national, territorial/provincial and local health and safety regulations applicable to the operation of this telehandler.

c. **ANSI (United States)**
Operators are required by the current ANSI standards to conform to national, territorial/provincial and local health and safety regulations applicable to the operation of this telehandler.

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WARNING

Failure to comply with your required responsibilities in the use and operation of the telehandler could result in death or serious injury!

Operator Safety Reminders

A study conducted by St. Paul Travelers showed that most accidents are caused by the failure of the operator to follow simple and fundamental safety rules and precautions.

You, as a careful operator, are the best insurance against an accident. Therefore, proper usage of this telehandler is mandatory. The following pages of this manual should be read and understood completely before operating the telehandler.

Common sense dictates the use of protective clothing when working on or near machinery. Use appropriate safety devices to protect your eyes, ears, hands, feet and body.

Some attachments may not be approved for use with certain telehandler models. Use only approved attachments.

Any modifications from the original design are strictly forbidden without written permission from Skyjack.

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Electrocution Hazard

This telehandler is not electrically insulated. Use extreme caution around high-voltage overhead power lines and maintain a Minimum Safe Approach Distance (MSAD) of 10 feet from source of power. Adhere to all federal/national, state/provincial, or local safety regulations for your own protection.

No part of telehandler or payload should be brought closer to any energized overhead electrical conductor with nominal phase voltage rating as specified below:

Voltage	Distance
750 to 150,000	10 feet
150,000 to 250,000	15 feet
250,000	20 feet

DANGER

Never approach any power line with any part of telehandler. Use extreme caution; serious injury or death can result with contact from any power line.

IMPORTANT

Always assume electrical power sources and overhead lines are energized.

DO NOT USE TELEHANDLER AS A GROUND FOR WELDING.
DO NOT OPERATE TELEHANDLER DURING LIGHTNING OR STORMS.

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Safety Precautions

Know and understand all safety precautions before going on to the next section.

WARNING

DO NOT operate this telehandler without proper authorization and training. Failure to avoid this hazard could result in death or serious injury.

WARNING

Failure to heed the following safety precautions could result in tip over, falling, crushing, or other hazards leading to death or serious injury.

- **MAKE SURE** all DANGER, WARNING, CAUTION and INSTRUCTIONAL DECALS are in place and can be read. Clean or replace decals as required.
- **KNOW** all national, state/provincial and local rules which apply to your telehandler and jobsite.
- **WEAR** all the protective clothing and personal safety devices issued to you or called for by job conditions.
- **DO NOT** wear loose clothing, dangling neckties, scarves, rings, wristwatches or other jewelry while operating this telehandler.

- **DO NOT** climb on this vehicle for any reason.

- **DO NOT** stand on forks. Failure to heed could result in death or serious injury.

- **DO NOT** use carriage or any other portion of the boom for slinging loads unless on a manufacturer's approved attachment point that is supplied with the machine.

- **DO NOT** elevate the boom in windy or gusty conditions.

- **DO NOT** drive with boom elevated.

- **DO NOT** operate on surfaces not capable of holding the weight of the telehandler; including the rated load (e.g., covers, drains, and trenches).

- **DO NOT** maneuver a load while moving. This greatly increases the chance of spills and injury.

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

- **DO NOT** exceed the maximum safe operating slope.

- **DO NOT** use frame leveling when boom is elevated. Only use frame leveling when boom is retracted and in lowered position.

- **DO NOT** use the frame leveling mechanism to compensate for swinging loads.

- **DO NOT** enter the danger area under or around the boom when forks are off the ground or while engine is running.

- **DO NOT** lower the boom unless the area below is clear of personnel and obstruction.

- **DO NOT** elevate the boom while the telehandler is on a truck, forklift or other device or vehicle.

- **ENSURE** that there are no personnel or obstructions in the path of travel, including blind spots.

- **BE AWARE** of blind spots when operating the telehandler.

- **ALWAYS** Keep head, arms, hands, legs and all other body parts inside the operator's cab.

- **AVOID** jerks and sudden stops.

- **AVOID** entanglement with ropes, cords or hoses.

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

- **BE AWARE** of all obstructions while traveling. Check for clearance before traveling between obstacles.

- **USE CAUTION** when boom is fully extended. The further out the boom is extended, the less load telehandler can support.

- **USE CAUTION** when placing loads at high elevations and on downhill slopes.

- **WALK AROUND** the telehandler before operation and check for any visible signs of damage or malfunction.

- **ALWAYS** maintain three points of contact when entering vehicle. Use provided hand-holds and steps only.

- **YOU MAY EQUIP** a personnel work platform on the machine, providing it adheres to the standards laid out in Section 2.14-6.

- **ALWAYS** wear your seat belt when operating this vehicle.

- **KNOW** the weight of the load you are transporting. Never lift more than the lifting capacity at any given extension or elevation of the boom as listed on the capacity charts.

- **CHECK** for cracks and signs of stress.

- **TRAVEL SLOWLY** over rough terrain.

- **If operation in areas with holes or dropoffs is absolutely necessary,** ensure that all 4 wheels or outriggers (if equipped) have contact with firm surface. Then level the frame. Once frame is level the boom can be elevated. After elevation, the drive function must not be activated.

- **DRIVE DOWNHILL UNLOADED**. Without a load, the back end is the heaviest part of the telehandler. Driving downhill decreases potential for tipover.

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

- **DRIVE UPHILL LOADED**. When holding a load, driving uphill decreases potential for load to slip out.

- **LEVEL FRAME ON SLOPES** before elevating the boom.

- **WHEN TRANSPORTING LOADS** fully retract the boom, keep the load low to the ground and forks tilted back slightly. This is the most stable position possible for the vehicle.

- **KEEP** forks close to the ground when in motion to increase telehandler stability and decrease potential for injury to others. When fully stopped, lower forks completely to the ground.

- **TILT** forks backward slightly when traveling to decrease potential of load slipping off.

- **SECURE** loose loads with chains or straps to decrease potential of spills or injury to others.

- **TETHER LOADS** that may swing, keeping them close to the ground. Provide ample clearance for personnel to guide the load safely.

- **SLINGING LOADS** is acceptable only when the load is appropriately attached to the lifting hook, a jib boom or the heel of a tilted fork, and the precautions outlined in Section 2.13 are followed.

- **BE AWARE** of the telehandler's travel envelope, especially when turning. Keep sufficient clearance at all times between the telehandler and any obstacles or people.

- **KEEP OTHERS AWAY** at all times during operation.

- **CHECK** lights for proper function before operating.

- **ENSURE ALL** tires are in good condition and lug nuts are properly tightened.

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

- **DO NOT** alter or disable safety devices.
- **DO NOT** burn or drill holes in forks. Modifying any part of telehandler or attachment affects its capacity and/or stability.
- **DO NOT** try to start the telehandler by pushing or towing. Such operation may cause severe damage to the transmission - Refer to Section 2.
- **IF DRIVING ON ROADS OPEN TO PUBLIC TRAFFIC** respect the local regulations.
- **THE OPERATOR'S CAB** provides a falling object protection structure (FOPS) and a rollover protection structure (ROPS). **Do not make any modification to this structure.** If damaged, the cab cannot be repaired. It must be replaced.
- **STUNT** driving and horseplay are prohibited.
- **ALWAYS USE FRONT** steering when traveling at high speeds; i.e. on highways and public roads.
- **DO NOT** change steering mode while the telehandler is traveling. Change the steering mode only when telehandler is stopped.
- **ALWAYS** look in the direction of travel. Reduce speed and be especially careful when traveling in reverse and/or turning. Bring the telehandler to a complete stop before changing the direction of travel.
- **STAY CLEAR** of pinch points and rotating parts on the material handler. Getting caught in a pinch point or a moving part can cause serious injury or death. Before performing any maintenance on telehandler, follow the shutdown procedure on Section 2.10-9.
- **DO NOT** position the telehandler against another object to steady the load.
- **SHUT DOWN** by positioning the telehandler in a safe location. Lower boom to ground, apply the parking brake, move all controls to '**neutral**' and allow engine to idle for 3 to 5 minutes. Stop engine and remove ignition key to prevent unauthorized use. Block wheels.

WARNING

Always move all controls to neutral, engage park brake and shut off engine before leaving the operator's cab.

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Safety Precautions (Continued)

Know and understand all safety precautions before going on to the next section.

WARNING

Entering and exiting the telehandler should only be done using the three points of contact.

- Always face the telehandler when entering or exiting the cab.
- Three points of contact means that two hands and one foot or one hand and two feet are in contact with the telehandler or the ground at all times during entering and exiting.

WARNING

Operator should not use any telehandler that:

- does not appear to be working properly.
- has been damaged or appears to have worn or missing parts.
- has alterations or modifications not approved by the manufacturer.
- has safety devices which have been altered or disabled.
- has been tagged or locked out for non-use or repair.
- bears an unapproved attachment.

Failure to avoid these hazards could result in death or serious injury.

Jobsite Inspection

- Do not use in hazardous locations (see NFPA 505).
- Perform a thorough jobsite inspection prior to operating the telehandler, to identify potential hazards in your work area.
- Be aware of moving equipment in the area. Take appropriate actions to avoid collision.

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Symbols & Nomenclature			
Symbol	**Description**	**Symbol**	**Description**
	• Diesel Fuel • Fuel Tank		• Engine Oil Level
	• Engine Air Intake		• Hydraulic Oil
	• Engine Coolant		• Hydraulic Oil Level
	• Engine Coolant Level		• Positive Air Shutoff (Engine high idle)
	• Drain Water/Fuel Separator		• Transmission Oil Level
	• Engine Oil		• DEF (Diesel Exhaust Fluid)

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Forklift Hand Signals

2.0 Operation

This section provides the necessary information needed to operate the telehandler. It is important that the user reads and understands this section before operating the telehandler.

2.1 General

In order for this telehandler to be in good working condition, it is important that the operator meets the necessary qualifications and follows the maintenance and inspection schedule referred to in this section.

2.1-1 Operator Qualifications

- Only trained and authorized personnel shall be permitted to operate the telehandler.
- Safe use of this telehandler requires the operator to understand the limitations and warnings, operating procedures and operator's responsibility for maintenance. Accordingly, the operator must understand and be familiar with this operating manual, its warnings and instructions, and all warnings and instructions on the telehandler.
- The operator must be familiar with employer's work rules and related government regulations and be able to demonstrate the ability to understand and operate this make and model of telehandler in the presence of a qualified person.

WARNING

DO NOT operate this telehandler without proper authorization and training. Failure to avoid this hazard could result in death or serious injury.

2.1-2 Operator's Responsibility for Maintenance

WARNING

Maintenance must be performed by trained and competent personnel who are familiar with mechanical procedures.

Death or serious injury could result from the use of a telehandler that is not properly maintained or kept in good working condition.

- The operator must be sure that the telehandler has been properly maintained and inspected before using it.
- The operator must perform all the daily inspections and function tests found in Table 2.5, even if the operator is not directly responsible for the maintenance of this telehandler.

2.1-3 Maintenance and Inspection Schedule

- The inspection points covered in Table 2.5 indicate the areas of the telehandler to be maintained or inspected and at what intervals the maintenance and inspections are to be performed.
- The actual operating environment of the telehandler may affect the maintenance schedule.

WARNING

Use original or manufacturer-approved parts and components for the telehandler.

2.1-4 Owner's Inspections

It is the responsibility of the owner and/or operator to arrange daily, quarterly (or 250 hours) and annual inspections of the telehandler. Refer to Table 2.5 for recommended maintenance and inspection areas and intervals.

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2.2 Major Components

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2.3 Major Assemblies

The telehandler consists of four major assemblies: the frame, boom assembly, attachment and cab.

2.3-1 Frame

The frame is a one-piece weldment that supports the boom assembly. The parking brake is integral with the axle and is located in the front axle.

2.3-2 Cab

The cab is the safety structure enclosing the operator. It also furnishes the controls of the telehandler.

2.3-3 Boom Assembly

The boom is mounted on the frame and consists of telescoping boom sections. SJ1044 TH/THS telehandlers have three boom sections. SJ1056 TH/THS telehandlers have four boom sections. The fly boom assembly is welded to the end of last section in the boom assembly and includes a Lifting Hook for slinging loads. The telehandler is equipped with a carriage tilt cylinder, which is mounted to the inside of the jib. The quick attachment apron is mounted to the jib and is supported by the tilt cylinder.

2.3-4 Attachment

The attachment is a material-handling device attached to the boom. The standard attachment is a fork-carriage attachment. Refer to Section 2.13 for various optional attachments.

2.4 Serial Number Nameplate

The serial number nameplate, located at the front left side of telehandler lists the following:

- Model number
- Serial number
- Maximum capacity
- Maximum lift height
- Maximum machine weight without attachment
- Original supplied attachments
- Year of manufacture
- Voltage

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2.5 Component Identification

The following descriptions are for identification, explanation and locating purposes only.

2.5-1 Operator's Cab

The operator's cab allows vision from all sides and is equipped with a rollover and falling object protective structure.

WARNING

The operator's cab provides a falling object protection structure (FOPS) and a rollover protection structure (ROPS). Do not make any modification to this structure. If damaged, the cab cannot be repaired. It must be replaced.

A fully-enclosed cab with windows and door is available as an option. Included in this option are the windshield wiper(s), interior light and air heater/defroster. Air conditioner is also available as an option for fully enclosed cab.

The operator's seat is equipped with a seat belt. Use this seat belt at all times when operating telehandler.

Figure 2-1. Telehandler Seat

Seat

The telehandler seat is equipped with devices which allow for the adjustment of seat ride smoothness and distance from the controls. Adjust the seat so that foot pedals, steering wheel and instrument panel controls are within easy reach of the operator.

The ride control (If equipped) is located at the front of the seat and is operated by means of a rotary knob. Clockwise rotation decreases the firmness while counterclockwise rotation increases the firmness.

The fore and aft lock lever is located on the left side of the seat. Pushing the lever to the left unlocks the seat, allowing fore and aft adjustment.

WARNING

The seat belt must be worn at all times.

Manual Storage Box

This weather-resistant box is mounted at the back of the operator's seat. It contains the operating manual and other important documentation. The operating manual for this make and model of telehandler must remain with the telehandler and should be stored in this box.

Figure 2-2. Manual Storage Box

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2.5-2 Operator's Cab Controls

1. **Fuel Gauge** - Indicates the amount of fuel in the fuel tank. Fill the tank with ultra low sulfur diesel fuel only when the indicator needle moves below the 1/4 tank mark.

2. **Transmission Range Selector (If Equipped)** - Located on the direction control lever. The transmission has three speeds in either direction. Rotate handle grip to select speed range.

3. **Left and Right Turn Signals Switch (If Equipped)** - This rocker switch controls left and right turn signals located on both the front and rear of the telehandler.

4. **Engine Data Display Module** - Allows the operator to select the required engine data such as engine RPM, engine temperature, voltage; and visualize it in the following formats:
   - Analogue display
   - Digital data
   - Graphics
   - Multi-data (a combination of the above)
   - Current alarm messages

   (Refer to Section 2.5-3).

5. **Left and Right Outrigger Switches (If Equipped)** - Select to raise left outrigger. Select to lower left outrigger. Select to raise right outrigger. Select to lower right outrigger.

6. **Hazard Warning Light Switch (If Equipped)** - The hazard warning light switch activates all four turn signals to indicate an emergency situation.

7. **Transmission Oil Temperature Indicator** - This red light indicator illuminates when the transmission oil temperature is not within the normal operating range.

8. **Rear Axle Lock Indicator** - This red light indicates frame leveling is in slow/controlled mode, or locked mode when park and/or service brakes are applied.

9. **Glow Plug Indicator** - This light illuminates until glow plugs have completed their timed cycle. When the lamp goes out, the engine is ready to be started.

10. **Frame Level and Boom Interlock Indicator** - illuminates when the boom is elevated above 40° and telehandler frame is off level by more than 4°.

11. **Positive Air Shut-off Valve Indicator (If Equipped)** - Illuminates red for a few seconds when testing the functionality of positive air shut-off valve.

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12. **Reserve Brake Pressure Charge Indicator (If Equipped)** - This light illuminates when reserve brake accumulator pressure is low. (Refer to Section 2.6-2).

13. **Ignition Switch** - This is a 3-position, anti-restart switch.
When in "○" OFF position, it turns the engine off and key can be removed. When in "|" ON position, it provides power to ignition and auxiliary circuits. When in "||" START position, it starts the engine; when released, key returns to "|" ON position.

14. **Horn Button** - When depressed, the horn button activates an audible warning.

15. **12 Volt Power Port** - A convenient 12 Volt power port is located on the dashboard.

16. **Hourmeter** - This gauge records accumulated operating time of the telehandler.

17. **Park Brake Switch/Indicator** - This switch controls the spring applied, hydraulically released parking brake. Apply the parking brake by pressing the switch at the end marked (P) when the engine is running. When the brake is "ON", the red warning light illuminates.

18. **Capacity Charts** - This set of charts indicates operating limits specific to a telehandler model and attachments. Refer to Section 2.12.

19. **Front and Top Windshield Wiper/Washer Switch (If Equipped)** - This switch activates the wiper and the washer for the front and top windshields. Press top portion to activate washer/wiper. Press bottom portion to activate wiper.

20. **Rear Windshield Wiper/Washer Switch** - This switch activates the wiper and the washer for the rear windshield. Press top portion to activate washer/wiper. Press bottom portion to activate wiper.

21. **Positive Air Shutoff Valve Test Switch (If Equipped)** - This switch is used for testing the functionality of the positive air shut-off valve. It allows the operator to shut off the air supply to the engine if the engine continues running after the main power is shut down. (Refer to Section 2.6-1).

22. **Road Lights Switch (If Equipped)** - This switch activates the front headlights and rear tail lights.

23. **Work Lights Switch (If Equipped)** - This switch activates the front and rear work lights located on top of operator's cab.

24. **Boom Lights Switch (If Equipped)** - The boom light switch controls the light at the end of the boom.

25. **Steer Mode Switch** - This switch has three positions to allow selection of round (4-wheel) steer, front steer and crab steer.

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26. Steering Wheel - Turn the steering wheel to the left or right to steer the telehandler in the corresponding direction. Three steering modes are available (refer to Section 2.9-4).

27. Direction Control Lever - This lever allows forward or reverse travel. The center position is neutral. To select forward travel, lift from lock position and move the direction control lever to the "FWD" forward position; for reverse travel move lever to "REV".

28. SCR Switch (If Equipped) - This switch activates and deactivates the exhaust after-treatment regeneration cycle.

29. Level Indicator - Located on the upper cross member of the overhead guard. When the ball is centred in the indicator, this indicates that telehandler frame is level.

30. Rear View Mirror - Allows the operator to check the surrounding area behind telehandler.

31. Brake Pedal - The service brake is foot operated and is used to decrease speed or stop.

32. Accelerator Pedal - Press pedal to increase speed and release pedal to decrease speed.

33. Cab Heater and Air Conditioner Controls (If Equipped) - A switch and two knobs to adjust the temperature inside the cab.

34. Standard Joystick - This dual-axis lever is a multi-functional control allowing the operator to control boom operation (extend or retract and up or down), frame leveling, fork tilt, and auxiliary functions such as carriage side tilt or carriage swing. The lever returns to neutral position when released.

a) Raise the boom by moving joystick backward "". Lower the boom by moving the joystick forward "".

b) Extend the boom by moving the joystick to the right "". Retract the boom by moving the joystick to the left "".

c) Tilt attachment forward by pressing and hold attachment tilt enable switch "" and moving joystick forward "".

Tilt attachment backwards by pressing and holding attachment tilt enable switch "" and moving joystick backward "".

d) Frame level right by pressing and holding frame level enable switch "" and moving joystick to the right "".

Frame level left by pressing and holding frame level enable switch "" and moving joystick to the left "".

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e) Left auxiliary function (if equipped) is operated by pressing and holding the left button "".

Right auxiliary function (if equipped) is operated by pressing and holding the right button "" .

34. Premium Joystick (If Equipped)- This dual-axis lever is a multi-functional control allowing the operator to control boom operation (extend or retract and up or down), frame leveling, fork tilt, and auxiliary functions such as carriage side tilt or carriage swing. The lever returns to neutral position when released.

a) Raise the boom by moving joystick backward .

b) Lower the boom by moving the joystick forward .

c) Extend the boom by moving the joystick to the right . Retract the boom by moving the joystick to the left .

d) Tilt attachment forward by holding attachment tilt switch up. Tilt attachment backwards by holding attachment tilt switch down.

e) Frame level right by pressing and holding frame level enable switch and moving joystick to the right . Frame level left by pressing and holding frame level enable switch and moving joystick to the left .

f) Left auxiliary function and right auxiliary function (if equipped) are operated by pressing and holding the auxiliary function switch up or down. Hold up for a "left" function, and hold down for a "right" function.

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2.5-3 Engine Data Display Module

The DEUTZ Display combines a graphic LCD display with five function buttons at the bottom of the screen.

Figure 2-3 Engine Data Display Module

Function Buttons

- Pressing any button calls up the main buttons menu.
- The positioning of the symbols above the relevant button allows the button function to be changed. The buttons correspond to the following functions:
  1. Engine Main Display
  2. Quad Display
  3. Graphic Display
  4. Alarm Messages
  5. Exit

Figure 2-4 Main Buttons Menu

Contrast & Illumination Settings

- Pressing button 5 calls up the Contrast and Illumination menu when the menu symbols are not displayed.
- Adjust illumination using button 1 for dimming or button 2 for brightening the illumination.

Figure 2-5 Setting Screen illumination

- Adjust contrast by using button 3 to decrease contrast and button 4 to increase the contrast.

Figure 2-6 Setting Screen Contrast

Engine Main Display

- To show the engine main display, press any button to display the menu symbols, then press button 1.

Figure 2-7 Main Screen

- The top window shows two scales: Engine RPM and coolant level. The bottom left window shows the instantaneous fuel consumption while the right window shows the coolant temperature

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- Pressing button 1 repeatedly will display various parameters such as; fuel consumption, average fuel consumption per route and operating hours per route travelled

Quad Display

- This display gives the user rapid access to four displays, each of which can show four instruments. Information can be shown in either digital or analog format.
- To select the quad display, press any button to display the menu symbols and then press button 2.

Figure 2-8 Digital and Analog Quad Display

- The screens are displayed in sequence as a response to repeated pressing of button 2.
- Using the setting mode allows the user to set every instrument shown on the screen in order to be able to display various engine parameters from a long list.
- The setting mode is activated by pressing button 5. when the menu is visible.
- The menu as shown in the figure below appears in the setting mode.

Figure 2-9 Quad Display Settings

- Pressing button 1 causes the top left display to roam through all available engine parameters. Pressing button 2 roams through the top right display ...etc.
- Quit the display by pressing button 5.

Graphic Display

- The graphic display shows data trends in a large window and functions like an analog data recorder.
- To access the graphic display, press any button to display the main menu symbols, then press button 3.

Figure 2-10 Example of Graphic Display Showing Coolant Temperature

- The required time grid can be set in the configuration menu from 2, 10 or 30 minutes to 1, 2, 4 or 8 hours.
- The maximum and minimum values of the Y-axis that define the range of the display are automatically adapted to give an optimum overview of the visible data.
- The data to be displayed can be selected by repeatedly pressing button 3 when in graphic display mode.

Error Messages

- If a new error message is received, the DEUTZ display will beep and a flashing popup window will open with the latest error messages and details.

Figure 2-11 Error Message Popup

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- The error list is displayed by pressing any button. The errors already read appear in black text on a grey background. New messages that have not been read yet appear as emphasized grey text on a black background. The alarm last received is automatically displayed the first time the error list is called up.
- If the list is longer than the screen section, you can browse through the list using buttons 1 and 2.

Figure 2-12 Error Message

- The display cannot be quit until all alarms have been acknowledged by pressing button 3. The error list display can be activated at any time by pressing button 4.

Display Configuration

- Configuration mode allows the user to set various operating parameters and modes of the DEUTZ Display. This includes setting the units (metric or imperial), measuring range settings or engine service intervals.
- The configuration menu can be called up by pressing and holding down button 5 for at least 3 seconds.
- To secure the configuration display, the display prompts you to enter a PIN number before accessing the configuration menu.

Figure 2-13 PIN Popup

- The default PIN is 1111.
- Press buttons 1, 2, 3, 4, and finally press button 5 to confirm the information.

Figure 2-14 PIN Number Entry

- The configuration menu is displayed once the pin number has been entered.
- Buttons 1 and 2 allow scrolling up and down the menu, while button 4 calls up the highlighted selection.
- Use button 5 to exit configuration menu or browse back a level.

NOTE

Refer to the service manual of this telehandler for a list of error codes.

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2.6 Component Identification (Special Options)

The following descriptions are for identification, explanation and locating purposes only.

2.6-1 Positive Air Shutoff Switch (if equipped)

This system provides emergency overspeed shutdown protection for the engine. The engine will shut down and a red indicator light on the dash will illuminate for a few seconds.

When red indicator light is illuminated, telehandler will have no power and engine will not turn on.

2.6-2 Optional Reserve Braking System (if equipped)

In addition to the service brake, telehandlers equipped with this option have a secondary braking system. When the red warning light illuminates, stop the telehandler immediately and have it serviced by a trained technician.

WARNING

Do not operate telehandler when red indicator light is illuminated. Stop telehandler and have it serviced by a qualified/competent repair personnel.

2.6-3 Flashing Beacon (if equipped)

The flashing beacon is located on top of the operator's cab. This light is operational when key is in "|" ON position.

Figure 2-15 Flashing Beacon

2.6-4 Road Lights, Boom Lights & Work Lights (if equipped)

The boom lights are mounted at the front of the main boom section.

The work lights are mounted on the frame as well as on top of the operator's cab.

The road lights (Front headlights and taillights) have 2 settings; high beam and low beam headlights.

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Notes

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2.7 Operator's Responsibility

It is the responsibility of the operator, prior to each work shift, to perform the following:

1. Visual and Daily Maintenance Inspections

- Designed to discover any damage of components before the telehandler is put into service.
- Completed before the operator performs the function tests.

WARNING

Failure to locate and repair damage, and discover loose or missing parts may result in an unsafe operating condition.

2. Function Tests

- Designed to discover any malfunctions before the telehandler is put into service.

IMPORTANT

The operator must understand and follow the step-by-step instructions to test all telehandler functions.

The operator should make a copy of the Operator's Checklist (see Table 2.6) and fill out the visual and daily maintenance inspections and the function tests sections while performing the items outlined in Section 2.8 and Section 2.9.

IMPORTANT

If telehandler is damaged or any unauthorized variation from factory-delivered condition is discovered, telehandler must be tagged and removed from service.

Repairs to the telehandler may only be made by a qualified service technician. After repairs are completed, the operator must perform visual and daily maintenance inspections & function tests again.

Scheduled maintenance inspections shall only be performed by a qualified service technician (see Table 2.5).

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2.8 Visual & Daily Maintenance Inspections

Before performing the visual and daily maintenance inspections, ensure that the telehandler is parked on a firm level surface.

Begin the visual and daily maintenance inspections by checking each item in sequence for the conditions listed in this section.

WARNING

To avoid injury, do not operate a telehandler until all malfunctions have been corrected.

WARNING

To avoid possible injury, ensure telehandler power is off during your visual and daily maintenance inspections.

NOTE

While performing visual and daily inspections in different areas, be aware to also inspect all switches, electrical and hydraulic components.

2.8-1 Labels

Refer to the labels section in this manual and determine that all labels are in place and are legible.

2.8-2 Electrical

Maintaining the electrical components is essential to good performance and service life of the telehandler.

- Ensure proper operation of all gauges
- Inspect the following areas for chafed, corroded and loose wires:
  - boom wiring harnesses
  - frame wiring harnesses
  - cab wiring harnesses

Ensure electrical devices are properly secured with no signs of visible damage. Ensure there are no loose or missing parts.

2.8-3 Mirrors

Ensure mirrors are properly secured with no signs of visible damage.

2.8-4 Hydraulic

Maintaining the hydraulic components is essential to good performance and service life of the telehandler Perform a visual inspection and check for leaks around the following areas:

- hydraulic tank, filter(s), fittings, hoses, pump, and frame surface
- all hydraulic cylinders
- all hydraulic manifolds
- underside of the frame
- ground area under the telehandler

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2.8-5 Cylinders

- Ensure all cylinders are properly secured and there is no evidence of leakage.
- Grease weekly and check pins and bushings to ensure there is no evidence of damage.

2.8-6 Frame

- **Wheel/Tire Assembly**
  Tire and/or wheel failure could result in a telehandler tipover. Component damage may also result if problems are not discovered and repaired in a timely fashion.

- Check all tire treads and sidewalls for cuts or cracks that expose the cord plies.
- Check for punctures, holes and unusual wear.
- Check each wheel rim for damage and cracked welds.
- Check each lug nut for proper torque to ensure none are loose. Refer to Table 2.3.

WARNING

If any tire does not meet the criteria outlined above, remove telehandler from service and replace wheel/tire immediately.

- **Air-filled Tires**
  To safeguard maximum stability, achieve optimum telehandler handling and minimize tire wear, it is essential to maintain proper pressure in all air-filled tires. Refer to tire pressure label.

- Check each tire with an air pressure gauge and add air as needed.

WARNING

An improperly inflated tire may cause death or serious injury.

- **Foam-filled Tires**
  Tire condition can vary significantly depending on telehandler use, job site environment and preventative maintenance measures. Inspect tires periodically and pay extra attention to the following:

- Check for punctures or holes. Ensure they do not exceed 1 inch in diameter.

IMPORTANT

Do not intermix foam-filled and air-filled tires.

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- **Drive Axles**
  - Ensure drive axles are properly secured, there are no loose or missing parts, all fittings and hoses are properly tightened and there is no evidence of oil leakage.
- **Steer Cylinder**
  - Ensure steer cylinders are properly secured, there are no loose or missing parts, all fittings and hoses are properly tightened and there is no evidence of hydraulic oil leakage.
- **Battery**
  Proper battery condition is essential to good engine performance and operational safety. Improper fluid levels or damaged cables and connections can result in engine component damage and hazardous conditions.

WARNING

Explosion hazard. Keep flames and sparks away. Do not smoke near batteries.

WARNING

Battery acid is extremely corrosive - Wear proper eye and facial protection as well as appropriate protective clothing. If contact occurs, immediately flush with cold water and seek medical attention.

1. Check battery case for damage.
2. Clean battery terminals and cable ends thoroughly with a terminal cleaning tool or wire brush.
3. Ensure all battery connections are tight.
4. If applicable, check battery fluid level. If plates are not covered by at least 1/2” (13 mm) of solution, add distilled or demineralized water.
5. Replace battery if damaged or incapable of holding a lasting charge.

WARNING

Use original or manufacturer-approved parts and components for the telehandler.

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- **Engine Intake Air Filter**
  - Ensure there are no loose or missing parts and there is no visible damage.
  - Ensure air cleaner vaccuator valve is free from dirt or dust by squeezing the valve lips.
  - Check air cleaner service indicator and replace filter element if needed.

- **Fuel Tank " "**

IMPORTANT
Before using your telehandler ensure there is enough fuel for expected use.

  - Ensure fuel filler cap is secure.
  - Ensure tank shows no visible damage and no evidence of fuel leakage.

- **Fuel Leaks**
  Failure to detect and correct fuel leaks will result in an unsafe condition. An explosion or fuel fire may cause death or serious injury. Perform a visual inspection around the following areas:
  - hoses and fittings
  - fuel pump
  - fuel filter
  - fuel tank

DANGER
Engine fuels are combustible. Inspect the telehandler in an open, well-ventilated area away from heaters, sparks and flames. Always have an approved fire extinguisher within easy reach.

- **DEF Tank (if equipped)**

IMPORTANT
Before using your telehandler ensure there is enough Diesel Exhaust Fluid for expected use.

  - Ensure tank cap is secure.
  - Ensure DEF tank shows no visible damage and no evidence of leakage.

- **Hydraulic Oil Tank**
  - Ensure hydraulic filler cap is secure.
  - Ensure tank shows no visible damage and no evidence of hydraulic leakage.

- **Hydraulic Oil " "**
  - Be sure that the boom is in the lowered and stowed position, and then visually inspect the sight gauge located at the rear of the hydraulic oil tank.

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- Add fresh clean hydraulic oil as required. Refer to Table 2.4 for recommended oil type.

2.8-7 Engine Compartment

- Ensure compartment cover is secure and in proper working order.

WARNING

Beware of hot engine components.

- **Engine Oil Level on dipstick "▷ "**
  - Maintaining the engine components is essential to good performance and service life of the telehandler.
  - Oil level should be between the "L" low and "H" high marks. Add oil as needed. Refer to Table 2.4 for recommended oil type.
- **Engine Coolant " "**

WARNING

Pressurized fluid present in radiator. Never open radiator cap when hot. always open cap slowly.

  - Check coolant level on radiator.
  - Add coolant as required.
- **Belts**
  - Ensure belts are in good working condition and have correct tension. Replace if belts are cracked, frayed, or have chunks of material missing. Refer to service manual for proper replacement procedure.
- **Hydraulic Pump**
  - Ensure there are no loose or missing parts and there is no visible damage.
  - Ensure all bolts are properly tightened.
  - Ensure all fittings and hoses are properly tightened and there is no evidence of hydraulic oil leakage.
- **Fuel/Water Separator " "**
  - Ensure there are no loose or missing parts and there is no visible damage.
  - Ensure all fittings and hoses are properly tightened and there is no evidence of fuel leaks.
  - Drain water by opening water drain plug at bottom of filter. Close tightly after inspection.

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2.8-8 Transmission

- Ensure transmission shifter is working properly and there is no evidence of damage.

- **Check oil level on dipstick "▷ ⛽ "**
  - With park brake engaged and transmission shifter in "N" Neutral position, start engine.
  - Oil level should be in the "safe" zone. Add oil as needed. Refer to Table 2.4 for recommended oil type.

2.8-9 Boom

- Ensure there are no loose or missing parts and there is no visible damage.
- Ensure all bolts and pins are properly tightened.
- Ensure there are no visible cracks in welds or structure and there are no signs of deformation.
- Ensure all hoses are properly tightened and there is no evidence of hydraulic leakage.

- **Boom Angle Switches**
  - Ensure boom angle switches are properly secured with no signs of visible damage.
- **Slide Pads**
  - Ensure all bolts are tight, there is no visible damage to the slide pads and that no parts are missing.
- **Chains**
  - Ensure there are no loose or missing parts and there is no visible damage
- **Boom Angle Indicator**
  - Ensure all bolts are tight, and there is no visible damage and indicator swings freely.

2.8-10 Lifting Attachment

- Ensure there are no loose or missing parts and there is no visible damage.
- Ensure attachment is properly positioned and secured. (Refer to Section 2.13 for attachments installation and operation).

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2.8-11 Grease Fittings

Maintaining properly greased components is essential for good performance and service life of the telehandler. If components are improperly greased, it could result in component damage.

WARNING

Ensure that there are no personnel or obstructions in maintenance area.

Greasing intervals are based on average telehandler usage. Use of telehandler may vary significantly and greasing frequency must be adjusted to obtain maximum service life.

Refer to the Daily and Weekly Maintenance Chart located inside operator's cab for grease points location and service intervals.

2.8-12 Operator's Cab

- **Rollover and Falling Object Protective Structure (ROPS/FOPS)**
  - Ensure there is no visible damage.

WARNING

Do not modify, drill or alter the operator's cab in any way.

- **Seat**
  - Ensure seat is properly secured with no sign of visible damage.
  - Ensure seat belt is working properly with no sign of visible damage.
- **Pedals**
  - Ensure brake and accelerator pedals are secure, no loose or missing parts, no sign of visible damage and movements are not obstructed.
- **Manual**
  - Check to be sure manual storage box is present and in good condition.
  - Ensure a copy of operating manual, and other important documentation are enclosed in manual storage box.
  - Ensure manual is legible and in good condition.
  - Always return manual to the manual storage box after use.

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- **Operator's Cab Controls**

WARNING

Ensure that you maintain three points of contact to mount/dismount the cab.

Use the steps of telehandler to access operator's cab.

- Ensure door and windows (if equipped) are secure and in proper working order.
- Ensure steering wheel is secured with no sign of visible damage.
- Ensure all switches and controls are properly secured with no sign of visible damage.
- Ensure all switches and controls are returned to their neutral position and movements are not obstructed.
- Ensure capacity charts are in place and are legible.

DANGER

Do not operate the telehandler if capacity charts are missing or not legible.

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2.9 Function Tests

Function tests are designed to discover any malfunctions before telehandler is put into service. The operator must understand and follow step-by-step instructions to test all telehandler functions.

IMPORTANT

Never use a malfunctioning telehandler. If malfunctions are discovered, telehandler must be tagged and placed out of service. Repairs to telehandler may only be made by a qualified service technician.

Repairs to the telehandler may only be made by a qualified service technician. After repairs are completed, the operator must perform visual and daily maintenance inspections & function tests again.

Prior to performing function tests, be sure to read and understand Section 2.10 - Start Operation.

WARNING

Ensure that there are no personnel or obstructions in test area and that there is sufficient room to test all telehandler functions.

2.9-1 Operator's Cab Controls

WARNING

Ensure that you maintain three points of contact to mount/dismount the cab.

- **Test Starter Operation**

1. Enter cab and close door (if equipped).

WARNING

The seat belt must be worn at all times.

2. Sit in the driver's seat and fasten seat belt.
3. Using a spotter, adjust the mirrors.
4. Ensure parking brake is engaged and shift lever is in neutral. Ensure all controls/ switches are in neutral position
5. Insert key into ignition switch and select "|" ON position.
   Result: Engine data display module and glow plug indicator light should turn on.
6. Wait until glow plug indicator light turns off then turn the key to start position until engine starts then return key to "|" ON position.

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WARNING

DO NOT over crank the starter. Do not crank for more than 15 seconds, Wait for 15 minutes before attempting to start engine again. If engine fails to start after multiple attempts, contact qualified/ competent repair personnel.

- **Test Horn**

  1. Push "" horn on steering wheel.
     Result: Horn should sound.

WARNING

If the warning indicator lights illuminate when engine is running, immediately shut down the telehandler and have it serviced.

- **Test Lights (If Equipped)**

  1. Use a spotter to check if all lights are working well. The spotter should maintain a safe distance from telehandler.

  2. Turn parking brake switch to off position.
     Result: Rear brake lights should turn off.

  3. Depress service brake pedal.
     Result: Rear brake lights should turn on.

  4. Select boom lights switch (if equipped) to on position.
     Result: Boom lights should turn on.

  5. Select the front work lights switch (if equipped) to on position.
     Result: Front work lights should turn on.

  6. Select the front/rear work lights switch (if equipped) to on position.
     Result: Front/rear work lights should turn on.

  7. Select low beam headlights switch to on position.
     Result: low beam headlights and tail light should turn on.

  8. Select high beam headlights switch to on position.
     Result: High beam headlights & taillights should turn on.

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- **Test Boom Functions**

WARNING

Ensure there are no personnel or obstructions in test area and there is sufficient room to test all telehandler functions.

1. Ensure the park brake is engaged.
2. Raise the boom by moving the joystick backward.
   Result: Boom should raise and boom angle indicator should be functioning.
3. Extend the boom by moving the joystick to the right.
   Result: Boom should extend and boom extension indicators are visible.
4. Retract the boom by moving the joystick to the left.
   Result: Boom should retract.
5. Lower the boom by moving the joystick forward.
   Result: Boom should lower.
6. Lower the boom until attachment is approximately 2 feet above the ground.

- **Test Attachment Functions**

Standard Multi-functional Joystick:

1. Tilt attachment forward by pressing and holding the carriage tilt enable button while moving the joystick forward.
   Result: Attachment should tilt forward.
2. Tilt attachment backward by pressing and holding the carriage tilt enable button while moving the joystick backward.
   Result: Attachment should tilt backward.

Premium Multi-functional Joystick (If Equipped):

1. Tilt attachment forward by pressing and holding the attachment tilt switch up.
   Result: Attachment should tilt forward.
2. Tilt attachment backward by pressing and holding the attachment tilt switch down.
   Result: Attachment should tilt backward.

NOTE

Ensure to test all attachment functions if telehandler is equipped with optional attachments. (Refer to Sections 2.13 and 2.14 for attachment installation and operation).

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- **Test Frame Leveling and Level Indicator**

1. Ensure park brake is engaged, boom fully retracted and below 40°.

2. Tilt the frame to the right by pressing and holding frame level enable switch and moving the joystick to the right.
   Result: Frame should tilt to the right, and frame level indicator should indicate movement to the right.

3. Tilt frame to the left by pressing and holding frame level enable switch and move the joystick to the left.
   Result: Frame should tilt to the left, and frame level indicator should indicate movement to the left.

4. Level the machine by pressing and holding frame level enable switch and moving the joystick to the right. Frame level indicator should be at 0°.

- **Test Boom Interlock & RAS System**

1. Ensure park brake is engaged, transmission shifter in neutral, boom fully retracted and below 30°.

2. Frame level left and stop when the frame level indicator reads over 5° and less than 6°.

3. Raise the boom.
   Result: boom should raise then stop raising at 40° and the interlock light should illuminate.

4. Frame level left.
   Result: Frame should NOT tilt to the left.

5. Frame level right.
   Result: Frame should tilt to the right in slow mode, interlock light should go out, then frame level function should stop before 5° and the interlock light should re-illuminate.

6. Level the machine until frame level indicator reads 0°.
   Result: Frame should tilt to the left and interlock light should go out.

7. Raise the boom above 40°.
   Result: Boom should raise fully.

8. Lower the boom while carefully observing the frame level indicator.
   Result: Boom should lower and as boom passes below 40°, operator should observe the frame level indicator angle shift by 0.5° to 1.5°.

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- **Test Accelerator Pedal**

  1. Ensure parking brake is engaged and transmission is in neutral.
  2. Press accelerator pedal slowly.
     Result: The engine RPM should increase.
  3. Release the accelerator pedal.
     Result: The engine RPM should decrease.

- **Test Reverse Alarm, Driving & Service Brake**

  1. Ensure park brake is engaged and transmission is in neutral.
  2. Depress service brake pedal and ensure path of intended motion is clear.
  3. Release parking brake.
     Result: Parking brake indicator light should turn off.
  4. Move transmission lever to “REV” reverse position and release the service brake pedal slowly.
     Result: Telehandler should move backward and back-up alarm should sound.
  5. Depress service brake pedal slowly.
     Result: Telehandler should stop.
  6. Move transmission shifter to FWD 1st gear and slowly release service brake pedal.
     Result: Telehandler should slowly move forward.
  7. Depress service brake pedal slowly.
     Result: Telehandler should stop.
  8. Return transmission lever to neutral position and engage parking brake.

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- **Test Parking Brake**

WARNING

The seat belt must be worn at all times.

1. Ensure telehandler is on a firm, level surface.

2. Ensure the path of intended travel is clear and area around telehandler is clear of any personnel or obstructions.

3. Depress service brake, move parking brake switch to off position.
   Result: Parking brake indicator light should turn off.

4. Move transmission lever to FWD 1st gear and gradually release service brake pedal.
   Result: Telehandler should roll forward.

5. Move parking brake switch to on position.
   Result: Parking brake should engage, telehandler should stop immediately (less than two seconds), and parking brake indicator light should illuminate.

- **Test Steering**

CAUTION

Before changing steering modes, bring all four wheels into alignment (i.e., in the straight-ahead position).

WARNING

Before driving on public roads and highways check the alignment of the wheels and drive with FRONT steering only.

WARNING

Do not change steer mode while telehandler is traveling.

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NOTE

Avoid steering the wheels while telehandler is stationary.

4 wheel Steering

Figure 2-16. 4 Wheel Steering

1. Ensure path of intended motion is clear.
2. Ensure all four wheels are aligned straight ahead.
3. Release parking brake switch and depress service brake pedal.
4. Press the upper portion of the steering mode selector switch " " for 4 wheel steering.
5. Turn the steering wheel to the left or right and drive forward.
   Result: Telehandler should move in the chosen direction, producing a turning circle, with front wheels pointing in the opposite direction to the rear wheels.
6. Steer telehandler straight ahead until all four wheels are aligned.
7. Depress service brake pedal until the telehandler stops.

WARNING

- Do not use 4 wheel steering mode when driving on public roads and highways.
- Do not travel at high speeds (3rd gear) when using 4 wheel steering mode.

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Front Steering

Figure 2-17. Front Steering

8. Select steering mode selector switch to middle "" position for front steering.

9. Turn steering wheel to the left or right and drive forward.
   Result: Only front wheels of the telehandler should turn in the chosen direction.

10. Steer telehandler straight ahead until all four wheels are aligned.

11. Depress service brake pedal until telehandler stops.

Crab Steering

Figure 2-18. Crab Steering

12. Press the lower portion of the steering mode selector switch to backward "" for crab steering.

13. Turn the steering wheel left or right and drive forward.
    Result: Telehandler should move in chosen direction with both front and rear wheels in the same direction.

14. Steer telehandler straight ahead until all four wheels are aligned.

15. Depress service brake pedal until telehandler stops.

16. Engage park brake.

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- **Test Outriggers (if equipped)**

WARNING

Ensure that there are no personnel or obstructions in test area and that there is sufficient room to test all telehandler functions.

1. Ensure parking brake is engaged and transmission is in neutral.

2. Lower outriggers by pressing and holding left and right outriggers switches down.
   Result: Outriggers should lower.

3. Raise outriggers by pressing and holding left and right outriggers switches up.
   Result: Outriggers should raise up.

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2.10 Start Operation

Carefully read and completely understand the Operating Manual and all warnings and instruction labels (refer to labels section) on the telehandler.

WARNING

DO NOT operate this telehandler without proper authorization and training. Failure to avoid this hazard could result in death or serious injury.

Before operating this telehandler, perform the following steps:

1. Visual and daily maintenance inspections (see Section 2.8)
2. Function tests (see Section 2.9)
3. Jobsite inspection
   It is the responsibility of the operator to perform a jobsite inspection and avoid the following hazardous situations:

   - holes or drop-offs
   - ditches or soft fills
   - floor obstructions, bumps or debris
   - overhead obstructions
   - electrical cords, hoses and high voltage conductors
   - hazardous locations (see NFPA 505)
   - inadequate surface support to withstand all load forces imposed by the telehandler
   - wind and weather conditions
   - the presence of unauthorized personnel
   - other possible unsafe conditions

WARNING

An operator should not use any telehandler that:

- does not appear to be working properly.
- has been damaged or appears to have worn or missing parts.
- has alterations or modifications not approved by the manufacturer.
- has safety devices which have been altered or disabled.
- has been tagged or blocked out for non-use or repair.

Failure to avoid these hazards could result in death or serious injury.

2.10-1 Starting the Engine

WARNING

Ensure that you maintain three points of contact to mount/dismount the cab.

1. Enter cab and close door (if equipped).
2. Sit in the driver's seat and fasten seat belt.

WARNING

The seat belt must be worn at all times.

3. Ensure parking brake is on and gear selector in neutral position.
4. To start the engine, turn the ignition switch to on position. Turn the key to start position.

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2.10-2 Driving the Telehandler

WARNING

- Be aware of blind spots when operating the telehandler.
- Ensure that there are no personnel or obstructions in the path of travel, including blind spots.
- When traveling at high rate of speed, use front wheel steering mode.
- Slow the telehandler prior to turning.
- Always look at the direction of travel.
- Travel in reverse only at slow rate of speed. Drive only as fast as condition allows.
- Keep attachment or load low (18 - 24 inches) to the ground which gives the best visibility and stability.
- Ensure outriggers (if equipped) are fully raised before driving.

The telehandler is equipped with a power-shift transmission. The transmission has forward and reverse gears with speed ranges available in both directions.

1. Depress service brake pedal then lift and move transmission control lever to the desired direction of travel.

2. Release parking brake.

3. Begin selecting first gear and slowly release service brake pedal.

4. Depress accelerator pedal slowly to increase speed. Twist the transmission hand grip to select higher gear until the desired speed is reached.

5. Select appropriate gear for the task being performed. Select lower gear when transporting load, traveling through deep mud, rough terrain, or slopes. Select higher gears only when traveling long distances on smooth terrain without a load.

6. Always bring the telehandler to a complete stop before changing the direction of travel.

2.10-3 Driving on Slopes

WARNING

Driving on slopes or inclines can be dangerous and result in forklift tipover or loss of load.

- Avoid excessively steep slopes or unstable surfaces. Do not drive across excessively steep slopes under any circumstances.
- Avoid turning on slopes, if at all possible.

1. Keep load low and proceed with caution.

2. Reduce travel speed and downshift to a lower gear before reaching a slope.

3. Ascend and descend slopes with the “heavy end” or the telehandler pointing up the slope.

NOTE

When the telehandler has **no load**, the rear is considered the “heavy end.” Travel with the **attachment pointed downhill**.

When the telehandler is **carrying a load**, the front is considered the “heavy end.” Travel with the **attachment pointed uphill**.

4. When driving across a slope, keep frame level.

Figure 2-19. Driving on a Slope

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2.10-4 Steering the Telehandler

Steering is controlled by means of the steering wheel in conjunction with the steering mode selector rocker switch for the type of steering desired.

4 wheel Steer

This steer mode is most commonly used on the job site and will give the smallest turn radius available.

WARNING

- Do not use 4 wheel steering mode when driving on public roads and highways.
- Do not travel at high speeds (3rd gear) when using 4 wheel steering mode.

Figure 2-20. 4 Wheel Steering

Front Steer (2 wheel)

Two-wheel steer is used during road travel in order to reduce the risk of possible overturn due to over-steering.

NOTE

Loss of electrical power will allow front steering only.

Figure 2-21. Front Steering

Crab Steer

The crab steer is used for maneuvering into tight spots.

Figure 2-22. Crab Steering

2.10-5 Leveling the Telehandler

1. Tilt the frame to the right by pressing and holding frame level enable switch and move the joystick to the right.
2. Tilt the frame to the left by pressing and holding frame level enable switch and move the joystick to the left.
3. Release the joystick to stop.

2.10-6 Raising or Lowering Boom

WARNING

Ensure that there are no personnel or obstructions and there is sufficient room to perform all telehandler functions.

1. To raise the boom, move the joystick backward. To lower the boom, move the joystick forward.
2. Release the joystick to stop.

2.10-7 Extending or Retracting Boom

WARNING

Ensure that there are no personnel or obstructions and there is sufficient room to perform all telehandler functions.

1. To extend the boom, move the joystick to the right. To retract the boom, move the joystick to the left.
2. Release the joystick to stop.

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2.10-8 Tilting the Attachment

Standard Multi-functional Joystick:

1. Tilt attachment forward by pressing and holding the tilt enable button while moving the joystick forward.
2. Release joystick to stop.
3. Tilt attachment backward by pressing and holding the carriage tilt enable button while moving the joystick backward.
4. Release joystick to stop

Premium Multi-functional Joystick (If Equipped):

1. Tilt attachment forward by pressing and holding the attachment tilt switch up.
2. Release switch to stop.
3. Tilt attachment backward by pressing and holding the attachment tilt switch down.
4. Release switch to stop.

2.10-9 Handling Loads

WARNING

- Before commencing operation, familiarize yourself with the capacity charts specific to telehandler model and attachment.
- Know the weight of the load and the most extreme height and distance required to pick or place the load.
- Do not lift load on a gradient steeper than 5%.
- Never position the load behind front face of the tires.
- Never drive the telehandler with the boom raised.
- Ensure not to exceed telehandler lift capacity (refer to capacity charts). Exceeding lift capacity could cause tipover resulting in death or serious injury.
- When performing lift operation where the operator cannot see load at all times, the operator has to be assisted by a spotter using approved hand signals. (Refer to Forklift Hand Signals on Page 16).

1. Drive as close as possible to load pickup/placement site.
2. Place transmission shifter into neutral position and engage parking brake.
3. Level the frame before lifting the load.
4. Use attachment to pickup/place the load. Refer to procedure Section 2.13 for specific attachment uses.
5. If using fork attachment, tilt forks backward to stabilize the load.

2.10-10 Parking and Shutting-down the Telehandler

CAUTION

Operator should observe the following when parking the telehandler:

- Avoid parking on slopes or near excavation, ditches or soft fills. If parking on slopes cannot be avoided, ensure frame is leveled and telehandler is positioned at a right angle across the slope.
- Avoid parking on roads or highways. If it cannot be avoided, ensure to display warning flags during the day and flares or flashing lights at night.

1. Position telehandler on a firm and level surface.

WARNING

Always engage parking brake before leaving the cab.

2. Bring telehandler to a full stop.

- With foot on service brake, engage parking brake.

3. Move transmission shift lever to neutral position.
4. Release service brake and ensure machine doesn't roll.
5. Retract boom fully and position attachment on ground.
6. Allow engine to idle for 3 to 5 minutes..

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7. Shut off engine and remove key.

WARNING

Ensure that you maintain three points of contact to mount/dismount the cab.

8. Dismount from telehandler.

9. Chock or block wheels to prevent telehandler from rolling.

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2.11 Refueling Procedure

2.11-1 Diesel Fuel

This section provides the operator with procedure on how to refuel telehandler with diesel fuel.

IMPORTANT

Before using your telehandler ensure there is enough fuel for expected use.

- Fill diesel tank with Ultra Low Sulfur Diesel only.
- Use extreme caution while refueling telehandler.
- Ensure that engine and all systems are turned off before refueling.
- Refuel the telehandler only in a well ventilated area away from open flame and other sources of ignition, authorized by your employer and supervisor.
- To minimize possible static electricity fires, ensure filler nozzle touches rim of filler opening to aid the dissipation of static electricity.
- Never try to start telehandler if you smell diesel.

WARNING

Do not smoke in an area where telehandlers are stored or refueled.

1. Ensure engine and all systems are turned off.
2. Open fuel cap.
3. Carefully pour diesel fuel into the tank, ensuring no spillage occurs.
4. Close and secure fuel cap.
5. Ensure there are no leaks in fuel system.
6. Wipe up any spilled fuel.
7. Dispose of rags in an approved container.

2.11-2 Diesel Exhaust Fluid (DEF) (if equipped)

Diesel Exhaust Fluid is an organic urea solution needed to operate the Selective Catalytic Reduction (SCR) system.

When DEF level falls below 15% of tank capacity, an error message will popup on the Engine Data Display Module as shown below to warn the operator of diminishing DEF level.

When DEF level falls below 10%, the error message will start flashing. Shut down engine and refill DEF tank immediately.

IMPORTANT

Before using your telehandler ensure there is enough DEF for expected use.

- Fill DEF tank with approved urea solution only.
- Never fill DEF system with water or diesel.

1. Ensure engine and all systems are turned off.
2. Open DEF tank fill cap.
3. Carefully pour diesel exhaust fluid into the tank, ensuring no spillage occurs. Refer to Table 2.4 for recommended DEF type.
4. Close and secure fill cap.
5. Ensure there are no leaks in the system.
6. Wipe up any spilled DEF.

WARNING

To avoid engine and SCR system malfunction, NEVER let DEF level fall below 5% tank capacity.

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2.12 Selective Catalytic Reduction (SCR) and Standstill

The SCR system is monitored for possible formation and build up of crystals (cystalisation). Crystalisation can occur when the engine's workload is low, or it's operating times are too short.

As soon as cystalisation is detected a standstill regeneration request is issued and displayed on the screen of the DEUTZ engine data display module (see Figure 2-22).

It is recommended that the operator initiate the standstill process as soon as possible after the standstill request is issued and displayed.

Figure 2-22. Standstill Request symbol

IMPORTANT

If standstill is not performed, the engine control unit may activate Support Mode. Engine sound may change, available torque is reduced and engine speed may be limited. It is recommended to perform standstill as soon as possible once the Standstill Request is issued and displayed.

2.12-1 Standstill

Perform the following steps to complete standstill regeneration:

1. Allow the engine to warm up. Coolant temperature must be at least 75˚ C.

2. Move the telehandler to an open area, away from any flammable material.

WARNING

During standstill the exhaust pipe may reach very high temperatures. Hot exhaust parts can cause serious injury or ignite nearby material. Avoid contact with the exhaust pipe and park telehandler at a safe distance from flammable objects.

3. Ensure the transmission is in neutral and the parking brake is applied.

4. Activate standstill by pressing the SCR switch on the dash controls. The DEUTZ engine display module displays the Standstill Ongoing symbol (see Figure 2-24) and engine speed may change.

Figure 2-23. SCR Switch on dash

Figure 2-24 Standstill Ongoing symbol

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5. Standstill usually takes 35 to 40 minutes. During this time, the machine cannot be used.

IMPORTANT

In order to successfully complete standstil, a specific engine operating state is required and the telehandler cannot be used during the standstill process. If standstill is interrupted by operating the telehandler or turning the SCR switch off, the error message will continue to be displayed and standstill will need to be completed fully.

6. When standstill is completed, the Standstill Ongoing symbol disappears from the display and engine speed returns to normal. The telehandler may now be used normally.

NOTE

Short intervals between standstill errors may be an indication of a defect . Have the engine be serviced by a trained technician as soon as possible.

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Notes

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Fig 2-25 Sample Capacity Chart

2.13 Use of the Capacity Charts

The capacity charts are located in the operator's cab. They are used to determine maximum load capacity for telehandler equipped with different attachment combinations.

To properly use a particular capacity chart, the operator must first determine the following:

1. Ensure the capacity chart is for the specific telehandler model and the attachment.
2. Determine the weight of the load to be lifted.
3. Ensure that the load center for the load is at or within the load center specified for the attachment.
4. Determine the height where the load is to be picked or placed.
5. Determine the reach where the load is to be picked or placed
6. The maximum capacity is determined by the intersection lines between height and reach on the capacity chart. If the intersection of the lines occurs at a division between capacity zones, the smaller of the two capacity values must be used.

NOTE

The weight of the load must be equal to or less than the number in the capacity zone.

WARNING

When handling loads, ensure that boom extension indicator and boom angle indicator remain within previously determined/calculated capacity zone.

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2.13-1 Examples on Reading the Capacity Chart

The Operator must verify that the capacity chart corresponds with both telehandler and attachment model number.

The following scenarios show various conditions the operator may encounter:

	Load Weight	Forward Reach	Lift Height	Boom Angle	Boom Extension	Capacity	OK to Lift
1	2500 lbs (1 134 kg)	21 ft (6.4 m)	32 ft (9.7 m)	43°	G	3000 lbs (1 361 kg)	YES
2	2000 lbs (907 kg)	28 ft (8.5 m)	24 ft (7.3 m)	28°	H	1500 lbs (680 kg)	NO
3	600 lbs (272 kg)	35 ft (10.7 m)	8 ft (2.4 m)	7°	I	400 lbs (181 kg)	NO
4	3500 lbs (1 588 kg)	8 ft (2.4 m)	52 ft (15.8 m)	69°	I	4000 lbs (1 814 kg)	YES
5	6500 lbs (2 948 kg)	18 ft (5.5 m)	24 ft (7.3 m)	36°	E	400 lbs (181 kg)	NO
6	9700 lbs (4 400 kg)	7 ft (2.1 m)	16 ft (4.9 m)	39°	A	1000 lbs (454 kg)	YES

Fig 2-26 Capacity Chart Examples

NOTE

This is a sample capacity chart only! DO NOT use this capacity chart.
Use chart inside cab.

NOTE

If the intersection occurs on a bold line separating the capacity regions, the smaller of the two capacity values must be used.

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2.14 Attachments Installation and Operation

Several attachments aside from the frequently used attachment/fork combination are available for use with the telehandler. Installation and operation of other approved attachments are covered in this section.

2.14-1 Installing Attachments Using the Quick Attach Feature

1. Fasten the tethered pin assemblies to the apron using the pins, washers, and cotter pins (See diagram below)
2. Ensure the apron is in the tilted forward position with the quick attach pins hanging from the tether.
3. Position the attachment on level ground.
4. Locate the boom so that the apron upper bar can be raised and tilted backwards to engage the attachment and lift it clear of the ground.
5. Engage the attachment as described in step 4, aligning the holes in the attachment for the installation of the quick attach pins at a working height.
6. Install the quick attach pins and secure them with lynch pins to the outside of the attachment.

2.14-2 Removing Attachments Using the Quick Attach Feature

1. Position the boom so the attachment is just above level ground.
2. Shut down engine.
3. Move the quick attach pins and lynch pins from the apron and attachment and leave them in a hanging position.
4. Start engine.
5. Lower boom and tilt the apron forward (while retracting the boom) to clear the attachment.

WARNING

Visually check the attachment is correctly coupled and secured to the boom before operating the telehandler.

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Figure 2-27 Quick Attach Apron

2.14-3 Handling Loads at Ground Level

WARNING

- Handle only loads within the rated capacity as shown on the capacity charts mounted on the telehandler.
- Ensure the capacity chart used corresponds to the attachment fitted to the telehandler.
- Use only manufacturer's approved attachments. The use of non-approved attachments may cause telehandler instability and tipover, which may result in sever injury or death to operators or bystanders.
- Ensure that the load center for the load is at or within 24 inches of forks.
- Deploy outriggers (if equipped) to stabilize the telehandler during operations involving heavy loads.
- Use a spotter when possible to assist in handling the load.

Figure 2-28 Load Center

Picking up a Load

1. Move the transmission lever to neutral and apply parking brake.
2. Check that the telehandler is level using the level indicator. Adjust frame level if necessary.
3. Ensure the forks are as far apart as possible for the width of the load. This increases the stability of the load and the lift.
4. Approach load slowly with forks straight ahead and perpendicular to the load.
5. Deploy outriggers (if equipped) for maximum stability and insert forks under the load; making sure not to extend forks past the load so that any loads or equipment behind the load being lifted are not damaged, then raise it for 5 to 10 inches.
6. Tilt forks backwards and fully retract boom
7. Raise outriggers, then check telehandler stability before transporting the load.

NOTE

If the forks are longer than the load, move the forks under the load so that the tips of the forks do not extend beyond the load. Lift the load from the surface. Move backward a few inches (centimeters), then lower the load onto the surface and move forward to engage the load against the carriage. Tilt the forks backward just far enough to lift the load from the surface. When the boom is raised from the surface level, the tips of the forks move in an arc.

Transporting a Load

WARNING

When transporting a load, always travel according to jobsite and weather conditions.

1. Travel with caution to placement site with load kept as low to the ground as possible.
2. Keep load against carriage and forks tilted backward. This position keeps the load on the forks and provides better forward and side stability.
3. Apply brakes smoothly to bring telehandler to a complete stop before applying parking brakes.

Placing a Load

1. Move the transmission lever to neutral and apply parking brake.
2. Deploy outriggers (if equipped) and check that the telehandler is level using the level indicator. Adjust frame level if necessary.

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3. Extend boom to the desired reach and tilt forks forward in a horizontal position.

4. Place load in a horizontal position then lower boom until load is completely off the forks. Do not apply downward force with the forks.

5. Free the forks gradually by lowering and retracting the boom alternately.

6. When forks are clear of the load, fully retract the boom.

7. Raise outriggers (if equipped) and return to transport position.

2.14-4 Handling Loads at Variable Heights

WARNING

- Handle only loads within the rated capacity as shown on the capacity charts mounted on the telehandler.
- Ensure the capacity chart used corresponds to the attachment fitted to the telehandler.
- Use only manufacturer's approved attachments. The use of non-approved attachments may cause telehandler instability and tipover, which may result in severe injury or death to operators or bystanders.
- Ensure that the load center for the load is at or within 24 inches of forks.
- Deploy outriggers (if equipped) to stabilize the telehandler during operations involving heavy loads.
- Use a spotter when possible to assist in handling the load (refer to Forklift Hand Signals on Page 16).

Picking up a Load

1. Move transmission lever to neutral and apply parking brake.

2. Check that telehandler is level using the level indicator. Adjust frame level if necessary.

3. Ensure the forks are as far apart as possible for the width of the load. This increases the stability of the load and the lift.

4. Approach load slowly, raise and extend the boom until the forks are perpendicular to the load.

5. Deploy outriggers (if equipped) for maximum stability of telehandler.

6. Extend and lower the boom to insert the forks under load ; making sure not to extend forks past the load so that any loads or equipment behind the load being lifted are not damaged, then raise it 5 to 10 inches.

7. Tilt forks backwards. Fully retract the boom and raise outriggers (if equipped), then check telehandler stability before transporting the load.

Placing a Load

1. Move transmission lever to neutral and apply parking brake.

2. Deploy outriggers (if equipped) and check that the telehandler is level using the level indicator. Adjust frame level if necessary.

3. Raise and extend boom until the load is perpendicular over placement point.

4. Place the load in a horizontal position and lower boom until the load is completely off the forks. Do not apply downward force with the forks.

5. Free the forks gradually by lowering and retracting the boom alternately.

6. When forks are clear of the load, fully retract the boom and raise outriggers (if equipped), then return to transport position.

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2.14-5 Adjusting Forks

1. Adjust the location of both forks manually to suit a pallet pocket spacing as follows:

2. Raise the boom until fork eye is approximately shoulder high.

3. Tilt the attachment forward until the fork pivots on the bar, and no longer resting on the carriage's bottom rail (see Figure 2-29). This prevents binding on the bar, thus aiding its repositioning.

Figure 2-29 Fork Pivoting on the Bar

4. Grasping the fork near its eye, push the fork along the bar until it is in the desired position.

CAUTION

Be careful not to pinch fingers between the fork and any portion of the attachment.

2.14-6 Changing Forks

The carriage/fork combination is the most frequently used combination. Different loads may require changing forks with different ratings.

Figure 2-30 Changing Forks

1. Lower the boom with fork contacting the ground until approximately half of the fork float is used up.

2. Remove fork bar collars from fork bar.

3. Draw the bar out of the fork eye, being careful that the fork doesn't fall over, causing possible injury (see Figure 2-30).

4. Reverse steps 1 to 3 to install the replacement fork.

2.14-7 Slinging Loads

CAUTION

Sling loads from appropriate attachment or lifting hook to the jib boom or a tilted fork ONLY.

Figure 2-31 Lifting Hook

1. Slinging of loads must only be performed following a complete risk assessment by a qualified person regarding the rigging and guiding of any such load.

2. The rated capacity of the unit and attachment at the sling position must not be exceeded. The sling must be in good repair and restrained from movement at all times.

3. Retract the boom as far as is practical during pick and carry operations.

4. Perform all boom and traveling operations slowly and smoothly to prevent the load from swinging. Avoid turning if possible.

5. Only lift the load vertically and never drag it horizontally.

6. Transport the load with the bottom of the load and the mast as low as possible.

7. Use guide lines to restrain load swing whenever possible.

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2.15 Optional Attachments

The SKYJACK TH series telehandler is designed to accept a variety of optional “Quick Attach” attachments aside from regular fork carriage attachment.

2.15-1 Side Tilt Carriage

The side tilt carriage allows carriage to tilt to either side.

Installation Procedure:

1. Remove fork attachment or other attachment from boom and connect side tilt carriage attachment (refer to Sections 2.13-1 and 2.13-2).

Figure 2-32 Side Tilt Carriage

Operation:

1. Ensure the side tilt carriage attachment is positioned perpendicular to the load.

2. Handle load the same as regular fork carriage attachment (refer to Sections 2.13-3 and 2.13-4).

3. To operate using the Standard Multi-functional Joystick:
   - To tilt carriage left, hold left auxiliary function button down.
   - To tilt carriage right hold right auxiliary function button down.

4. To operate using the Premium Multi-functional Joystick (if equipped):
   - To tilt carriage left, hold auxiliary function switch up.
   - To tilt carriage right, hold auxiliary function switch down.

2.15-2 Swing Carriage

Swing carriage allows forks to swing left or right, reducing the needed turn angle of telehandler when placing loads. This is used for maneuvering loads in tight locations.

Installation Procedure:

1. Remove fork attachment or other attachment from boom and connect swing carriage attachment (refer to Sections 2.13-1 and 2.13-2).

2. Connect auxiliary hydraulic hoses to swing carriage attachment cylinders.

Figure 2-33 Swing Carriage

Operation:

1. Using optional attachment controller, ensure the swing carriage attachment is positioned perpendicular to the load.

2. Handle load the same as regular fork attachment (refer to Sections 2.13-3 and 2.13-4).

3. To operate using the Standard Multi-functional Joystick:
   - To swing carriage left, hold left auxiliary function button down.
   - To swing carriage right hold right auxiliary function button down.

4. To operate using the Premium Multi-functional Joystick (if equipped):
   - To swing carriage left, hold auxiliary function switch up.
   - To swing carriage right, hold auxiliary function switch down.

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2.15-3 Block Forks

The block forks are used primarily to load/unload and place cubes of concrete or cement blocks. Block forks are designed to be accepted on all carriages provided they are equidistant.

Installation Procedure:

1. Refer to Sections 2.13-6 to change the forks.

Figure 2-34 Block Forks

IMPORTANT
Ensure the forks are equally spaced.

Operation:

1. Using optional attachment controller, ensure the carriage attachment and forks are positioned perpendicular to the load.
2. Handle load the same as regular fork attachment ensuring all forks are in contact with the load at all times (refer to Sections 2.13-3 and 2.13-4).

2.15-4 Jib Boom

A jib boom is an attachment with a hook or jib eye load connection. This connection is used for extending the forward reach and lift height of the telehandler at the expense of load capacity.

Installation Procedure:

1. Remove fork attachment or other attachment from boom and connect truss boom attachment (refer to Sections 2.13-1 and 2.13-2).

Figure 2-35 Jib Boom

Operation:

1. Using boom controller, adjust jib boom over the center of the load.
2. Attach load to the hook using sufficient chains/cables.
3. While helpers guide the load, position load at placement point.

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2.15-5 Loader Bucket

A loader bucket has a high back and straight sides for cutting into piles of low density materials. This attachment is used for light material handling such as snow removal or transporting of grains and other loose materials. Material buckets are not meant for excavation as high twisting loads can damage the boom.

Installation Procedure:

1. Remove fork attachment or other attachment from boom and connect material bucket (refer to Sections 2.13-1 and 2.13-2).

Figure 2-36 Loader bucket

Operation:

1. Raise or lower boom to appropriate height for loading material from stockpile.
2. Position telehandler so that it is perpendicular to the stockpile. Drive slowly and smoothly into pile to load bucket.
3. Tilt bucket backwards enough to retain the load and back away from pile.
4. Drive to the unloading point and keep bucket approximately 4 feet above the ground.
5. Tilt bucket forward to dump load.

2.15-6 Truss Boom

A truss boom is an attachment with a hook or jib eye load connection. This connection is used for extending the forward reach and lift height of the telehandler at the expense of load capacity.

WARNING

Mounting truss boom changes center of gravity of telehandler. Consult capacity charts specific to attachment before handling loads.

Installation Procedure:

1. Remove fork attachment or other attachment from boom and connect truss boom attachment (refer to Sections 2.13-1 and 2.13-2).

Figure 2-37 Truss Boom

Operation:

1. Using boom controller, adjust truss boom over the center of the load.
2. Attach load to the pintle hook using sufficient chains/cables.
3. While helpers guide the load, position load at placement point.

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2.15-7 Third-Party Attachments & Platforms for Elevating Personnel

Skyjack's Variable Reach Rough Terrain Forklifts (RTFL), are designed to lift and/or handle industrial products by means of various attachments. Skyjack does not certify the design of third-party attachments, including platforms for elevating personnel. Skyjack does not assume any responsibility or liability for damages resulting from the use of third-party attachments on any of its TH RTFL's.

2.15-7-1 It is permissible to install and utilize third-party attachments (for platforms for elevating personnel, see Section 2.14-6-2), provided the following conditions are met:

WARNING

The combined mass of the attachment and load shall not exceed that of the RTFL load chart for the applicable load center. The rated capacity of the attachment shall not be exceeded.

IMPORTANT

In addition to the RTFL operating instructions, all instructions provided by the manufacturer of the attachment must be followed and any additional requirements of local authorities should also be followed.

Attachments shall be designed and constructed according to CSA B335 and ANSI/ITSDF B56.6, including markings identifying the combined RTFL and attachment weight, and the RTFL capacity with the attachment at maximum elevation and load laterally centered.

The attachment must be securely attached to the RTFL, per the attachment manufacturer's instructions.

Prior to using the attachment on each shift, the RTFL operator must visually examine the attachment for structural integrity and perform the daily inspection and function tests on the RTFL. Any equipment defects must be repaired before the attachment or RTFL can be used.

2.15-7-2 It is permissible to install and utilize a third-party platform for elevating personnel ("man-basket"), provided the following conditions are met:

WARNING

As per ANSI/ITSDF B56.6 and CSA B335, the RTFL must not be used to lift personnel unless there is no other practical option.

The minimum requirements for the design, construction and use of the man-basket attachment shall be as specified in ANSI/ITSDF B56.6 and CSA B335. Any additional requirements of local authorities must also be followed.

The combined mass of the platform, load, and personnel shall not exceed one-third of the capacity at 24" from the base of the RTFL forks.

The man-basket must have reflective material or an equivalent paint or material on the exterior front and sides so that it can be seen and readily identified as a man-basket when in use.

All instructions provided by the manufacturer of the man-basket must be followed.

The man-basket must be securely attached to the RTFL forks.

The RTFL must not travel when personnel are in the man-basket. Travel controls on the RTFL must be restricted when the man-basket is in use. Prior to using the man-basket, the RTFL operator must engage the parking brake and place the RTFL transmission in neutral.
No mobile equipment is permitted to operate in the immediate area when the RTFL and man-basket is operating.

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Once the man-basket is positioned at the desired height, the operator must shut the engine off to prevent inadvertent movement. An operator must be in the RTFL cab if personnel are in the man-basket.

Prior to using the man-basket on each shift, the RTFL operator must visually examine the man-basket for structural integrity and perform the daily inspection and function tests on the RTFL. Any equipment defects must be repaired before the man-basket or RTFL can be used.

Radio or hand communication signals must be established between the RTFL operator and personnel in the man-basket. Signals must be clearly understood by all personnel performing the work. All workers must receive training and understand the signals. All radio communication must be heard above the noise of the surrounding environment and understood by the personnel in the man-basket. If used, radio equipment must be permissible or intrinsically safe for use in the area where the work is being performed.

All occupants must wear approved personnel fall protection equipment and must attach the lanyard to the anchor provided in the platform at all times.

Do not enter or exit the platform unless the machine is in the stowed position and the platform is at ground level.

Do not sit, stand or climb on the platform guardrails. Maintain a firm footing on the platform floor at all times.

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Notes

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2.16 Loading and Transporting

Know all national, state/provincial and local rules which apply to transporting of telehandlers.

Only qualified personnel shall operate machinery during loading and transporting.

Be sure vehicle capacity and loading equipment hoists, chains, straps, etc., are sufficient to withstand maximum telehandler weight.

The transport vehicle must be parked on a level surface and must be secured to prevent rolling while telehandler is being loaded or unloaded.

IMPORTANT
All turbo-engines air cleaner and exhaust must be sealed during transport.

2.16-1 Loading and Tie-down

1. Ensure telehandler is level prior to loading.
2. Fully lower and retract boom and raise outriggers (if equipped).
3. Ensure ramps are correctly positioned.
4. Using a spotter, carefully drive telehandler onto the transporting vehicle.
5. Once telehandler is loaded, apply parking brake and rest the attachment flat on the vehicle platform.
6. Move all controls to neutral position.
7. Turn key switch to "O" off position and remove key before transporting.
8. Chock telehandler wheels (if necessary).
9. Remove all loose items.
10. Anchor down telehandler to transport surface using tie-down points and secure the forks to the platform using sufficient straps. (See diagram below).

WARNING
Inspect telehandler for loose or unsecured items.

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Fig 2-38 Tie-down points

2.16-2 Lifting

1. Fully retract and lower boom and raise the outriggers.

2. Turn ignition switch to the "O" off position. Remove the key.

3. Block the rear axle by placing wood between the frame and the axle.

WARNING

Use rigging with load capacity sufficient to withstand telehandler weight. Refer to the serial plate of the telehandler for specific weight.

4. Properly adjust rigging to ensure telehandler remains level during lifting. See Center of gravity location.

SJ1044 TH

SJ1056 TH

Figure 2-39 Center of gravity and lifting points

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2.16-3 Towing the Telehandler

IMPORTANT

- Use this procedure only to remove telehandler from mud or other places where it cannot move under its own power. When possible, repair telehandler on site.
- Always chock wheels of the disabled telehandler to prevent accidental movement while preparing for towing. This is especially important if the failure occurs on an incline.
- Before towing, ensure there are no obstructions around or between telehandler and towing vehicle.
- The spotter must maintain a safe distance and must always be visible to the operator inside telehandler's cab.
- Ensure the towing vehicle, chains, tow bar, etc., are suitable for the job. The telehandler weight is stamped on the serial number nameplate.

1. Lower or raise boom and outriggers (if equipped) enough so that front tie-down points are fully accessible.
2. Carefully fasten tow chains to tie-down points on either front or rear of telehandler frame.
3. Remove chocks from wheels.
4. Enter cab and fasten seat belt.
5. Ensure transmission gear selector is in 'neutral' and the transmission lever neutral lock switch is in the 'N' neutral position.
6. Start the engine.
7. Release park brake.
8. Start towing the telehandler while operating the steering and brakes.
9. Move telehandler to a compact level surface.
10. Apply park brake.
11. Turn off engine and remove key from ignition switch.

WARNING

Ensure that you maintain three points of contact to mount/dismount the cab.

12. Dismount from telehandler.
13. Chock or block wheels to prevent telehandler from rolling.

CAUTION

Bad traction can cause telehandler or towing vehicle to slide. Grades can require additional distance to stop the telehandler. Be careful if traction conditions are bad or the machine on an incline.

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Fig 2-40 Towing the telehandler from front tie-down points

2.16-4 Using the telehandler as a tow vehicle

WARNING

Do not exceed rated towing capacity. Failure to do so may result in death or serious injury.

WARNING

Maximum towing capacity of the telehandler is determined with NO LOAD on BOOM. Never attempt to operate the boom or lift any load while telehandler is being utilized as a tow vehicle.

- **Towing Pin -** The towing pin utilizes the telehandler as a towing vehicle and is located at the rear of the telehandler as shown in the figure below.

Figure 2-41 Towing Pin

- **Pintle Hitch (if equipped) -** The pintle hitch utilizes the telehandler as a towing vehicle and is mounted and connected to a tapped plate located at the rear of the telehandler as shown in the figure below.

Figure 2-42 Pintle Hitch at rear of telehandler

Courtesy of MAC Equipment
https://macequipment.com

Table 2.1 Standard & Optional Features

MODEL	SJ1044 TH/THS	SJ1056 TH/THS
Diesel Engine	✓	✓
SCR System	×	×
Four-wheel drive	✓	✓
Three-Speed Transmisson	✓	✓
Three-Mode Steering	✓	✓
Open Operator's Cab	✓	✓
Enclosed Operator's Cab	×	×
Enclosed Operator's Cab with A/C	×	×
Spring-applied Hydraulically Released Parking Brake	✓	✓
Operator horn	✓	✓
Reverse/Backup alarm	✓	✓
Flashing Beacon	×	×
Four-Wheel Fenders	×	×
Positive Air Shut-off System	×	×
Engine Block Heater	✓	✓
Hydraulic Test Port(s)	✓	✓
Air Filled Tires	✓	✓
Foam Filled Tires	×	×
Reserve Brak System	×	×
Road/Work/Boom Lights	×	×
Outriggers	×	✓
Rear Axle Stabilization System (RAS)	✓	✓
Frame Leveling System	✓	✓
Premium Multi-functional Joystick	×	×
48" / 60" / 72" QA 10K Fork Carriages	✓	✓
48" / 60" / 72" Side-Tilt Fork Carriages	×	×
72" Swing Carriage	×	×
Lifting Hook	✓	✓
2 ft. Jib Boom	×	×
1.75 Cu. Yd. Bucket Loader Attachment	×	×
12 ft. Truss Boom	×	×
15 ft. Truss Boom	×	×

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Legend

✓ = Standard

× = Optional

N/A = Not Available

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Table 2.2 Specifications and Features

MODEL	SJ1044 TH/THS	SJ1056 TH/THS
Standard Engine		
Type	Deutz 3.6L Tier 4 Final	
Cylinders	4	
Horsepower @ 2300 RPM	74 HP	
Capacity	219 cu.in. (3600 cm^3)	
Torque @ 1300 RPM	286 lb. ft (387 N-m)	
Idle Speed*	1100 - 1150 RPM	
Fuel type	Diesel	
Optional Engine		
Type	Deutz 3.6L Tier 4 Final	
Cylinders	4	
Horsepower @ 2300 RPM	107 HP	
Capacity	219 cu.in. (3600 cm^3)	
Torque @ 1300 RPM	288 lb. ft (390 N-m)	
Idle Speed*	1100 - 1150 RPM	
Fuel type	Diesel	
Transmission		
Type	Powershift with soft shift	
Speeds forward	3	
Speeds reverse	3	
Travel Speeds		
Range 1	0-4 mph (1-7 km/h)	
Range 2	5-8 mph (8-13 km/h)	
Range 3	9-15 mph (14-24 km/h)	
Electrical		
Negative ground	12 Volts	
Alternator	60 Amps	
Battery	900 Amps	
Backup Alarm	107 DBM	
Dimensions		
Wheelbase	133 in. (337.82 cm)	
Overall width	8 ft. 6 in. (259.1 cm)	
Overall height	8 ft. 3 in. (246.84 cm)	8 ft. 5 in. (248.8 cm)
Overall length (less forks)	20 ft. 9 in. (632.7 cm)	22 ft. 6 in. (685.6 cm)
Ground clearance	19 in. (48.26 cm)	
Maximum weight without attachment	30,922 lb (14,026 kg)	33,482 lb (15,188 kg)
Turn radius (inside)	73 in. (185.4 cm)	
Turn radius (outside)	173 in (439.4 cm)	
Boom		
Number of sections	3	4
Maximum lift height	44 ft. 3 in. (13.48 m)	56 ft. 3 in. (17.15 m)
Maximum forward reach	29 ft. 4 in. (8.94 m)	42 ft. 2 in. (12.85 m)
Standard Forks	2.25 in. x 5 in. x 48 in. (Standard Tapered Forks)	
Carriage rollback	20°	
Carriage forward tilt	92.5°	

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*** Engine Idle Speed is measured with 5% droop when in gear.**

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Table 2.3 Tire/Wheel Specifications

SJ1044 TH/THS & SJ1056 TH/THS					
	FILL	Size	Pressure	Ply Rating	Wheel Nuts Torque
PRIMEX G3000	AIR	14.00 X 24 TG G-2	80 PSI (552 Kpa)	16	442 ft.-lb. (600 Nm)
	FOAM		-		
GALAXY GIRAFFE XLW	AIR		80 PSI (552 Kpa)		
	FOAM		-		
PRIMEX DNRZ II	AIR		99 PSI (683 Kpa)		
	FOAM		-		
SOLIDAIR	-	50.787 X 8.5 X 13.00 X 24	N/A	-	
SOLIDBOSS	-	50 X 13.00 X 24	N/A	-	
BLACKSTONE	FOAM	14.000 X 24	-	16	

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WARNING

Intermixing tires of different types or using tires of types other than those originally supplied with this equipment can adversely affect stability. Therefore, replace tires only with the exact original Skyjack-approved type. Failure to operate with matched approved tires in good condition may result in death or serious injury.

IMPORTANT

For proper function of each axle differential, all four wheels must have same tire size installed at all times. Failure to comply with this requirement will reduce the life of the differentials and reduce overall mobility of telehandler.

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Table 2.4 Recommended Fluids/Lubrication

		SJ1044 TH/THS	SJ1056 TH/THS
Engine	Fuel Type	Ultra Low Sulfur Diesel (EN 590, ASTM D975) or Biodiesel B20	
	Fuel Tank Capacity	35 gal (132 L)	
	Recommended Oil Type	SAE 15W40	
	Engine Oil Capacity	9.5 Quart (9.0 L)	
	Coolant Type (Standard)	COOLANT-ANTIFREEZE 50/50 PREMIX *	
	Coolant Type(Cold Weather Option)	COOLANT-ANTIFREEZE 60/40 PREMIX *	
	Coolant Tank Capacity	4.2 gal (16 L)	
	DEF (if equipped)	Diesel Exhaust Fluid (DEF)	
	DEF Tank Capacity	2.4 gal (9.4 L)	
Transmission	Oil Type	Multipurpose ATF	
	Capacity	14.2 Quart (13.5 L)	
Axles	Differential	Mobilube HD	
	Front Axle Capacity	13.7 Quart (13 L)	
	Rear Axle Capacity	8.2 Quart (7.8 L)	
	Planetary Wheel Ends	LS 85W-90	
	Capacity	2 Quart (1.89 L)	
Hydraulic Oil	Standard Factory Fill	ATF Dexron 3	
	Type	Multipurpose ATF	
	Tank Capacity	43.85 gal (166 L)	
Grease Points	Type	EP2 Grease	

* Refer to engine manufacturer's manual

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WARNING

Intermixing hydraulic oil of different types or using oils of types other than those originally supplied with this equipment can severely damage all hydraulic components. A full hydraulic oil system flush must be performed prior to adding a new type of hydraulic oil. Consult Skyjack service department.

General Maintenance

Before attempting any repair work, turn ignition switch to off position. Preventive maintenance is the easiest and least expensive type of maintenance.

Table 2.5 Maintenance and Inspection Schedule

Frequency	Daily	Weekly	Quarterly or 250 hours	Annually or 1000 hours
Visual and Daily Maintenance Inspections				
Labels	A		C*†	
Electrical	A			
Mirrors	A			
Hydraulic	A			
Cylinders	A			
Frame	A			
Wheel/Tire Assembly	A			
Air-filled Tires	A			
Foam-filled Tires	A			
Drive Axles	A			
Steer Cylinder	A			
Battery	A			
Engine Intake Air Filter	A			
Engine Coolant	A			
Fuel Tank				
Fuel Leaks				
D.E.F. Tank				
Hydraulic Oil Tank				
Hydraulic Oil				
Engine Compartment				
Engine Oil Level on dipstick	A			
Engine Coolant	A			
Belts	A			
Hydraulic Pump	A			
Fuel/Water Separator	A			
Transmission				
Oil level on dipstick	A			
Boom				
Boom Angle Switches	A			
Slide Pads	A			
Chain	A			
Boom Angle Indicator	A			
Lifting Attachment	A			
Grease Fittings				
Operator's Cab				
ROPS/FOPS	A			
Seat	A			
Pedals	A			
Manual	A			
Operator's Cab Controls	A			

Frequency	Daily	Weekly	Quarterly or 250 hours	Annually or 1000 hours
Function Tests				
Operator's Cab Controls			C*†	
Test Starter Operation	A			
Test Horn	A			
Test Lights (If Equipped)	A			
Test Boom Functions	A			
Test Attachment Functions	A			
Test Frame Leveling and Level Indicator	A			
Test Frame Leveling and Boom Interlock	A			
Test Accelerator Pedal	A			
Test Reverse Alarm, Driving & Service Brake	A			
Test Steering	A			
Test Positive Shut-off Valve	A			
Test Parking Brake	A			
Test Outriggers (If Equipped)	A			

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A - Perform Visual and Daily Maintenance Inspections & Functions Test. Refer to Section 2.8 and Section 2.9 of this manual.

B - Perform Visual and Weekly Maintenance Inspections & Functions Test. Refer to Section 2.8 and Section 2.9 of this manual.

C - Perform Scheduled Maintenance Inspection. Refer to Service & Maintenance manual.

***** - Maintenance must be performed only by trained and competent personnel who are familiar with mechanical procedures.

† - Refer to Skyjack's website @ www.skyjack.com for latest service bulletins prior to performing quarterly or yearly inspection.

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Table 2.6 Operator's Checklist

OPERATOR'S CHECKLIST

Serial Number: _____

Model: _____

Hourmeter Reading: _____ Operator's Name (Printed): _____

Date: _____

Time: _____ Operator's Signature: _____

Each item shall be inspected using the appropriate section of the Skyjack operating manual.
As each item is inspected, check the appropriate box.

P - PASS
F - FAIL
R - REPAIRED
NA - NOT APPLICABLE

❑ DAILY
❑ FREQUENTLY
❑ QUARTERLY
❑ ANNUALLY

	N/A	P	F	R
Visual and Daily Maintenance Inspections				
Labels				
Electrical				
Mirrors				
Hydraulic				
Cylinders				
Frame				
Wheel/Tire Assembly				
Air-filled Tires				
Foam-filled Tires				
Drive Axles				
Steer Cylinder				
Battery				
Engine Intake Air Filter				
Engine Coolant				
Fuel Tank				
Fuel Leaks				
Hydraulic Oil Tank				
Hydraulic Oil				
Engine Compartment				
Engine Oil Level on dipstick				
Engine Coolant				
Belts				
Hydraulic Pump				
Fuel/Water Separator				
Transmission				
Oil level on dipstick				
Boom				
Boom Angle Switches				
Slide Pads				
Chain				
Boom Angle Indicator				
Lifting Attachment				
Grease Fittings				
Operator's Cab				
ROPS/FOPS				
Seat				
Pedals				
Manual				
Operator's Cab Controls				

	N/A	P	F	R
Function Tests				
Operator's Cab Controls				
Test Starter Operation				
Test Horn				
Test Lights (If Equipped)				
Test Boom Functions				
Test Attachment Functions				
Test Frame Leveling and Level Indicator				
Test Frame Leveling and Boom Interlock				
Test Accelerator Pedal				
Test Reverse Alarm, Driving & Service Brake				
Test Steering				
Test Positive Shut-off Valve				
Test Parking Brake				
Test Outriggers (If Equipped)				

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Notes

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Label Legend

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Operator's Cab

No.	Label Pictorial	Description
1		**Left Side Dash Panel** **SCR (Secondary Catalytic Reduction) Switch (if equipped)** • Select to start regeneration cycle. • Select to finish regeneration cycle. **Turn Signals Switch (if equipped)** • Select to signal left. • Select to signal right. **Outriggers Switches (if equipped)** • Select to raise left outrigger. • Select to lower left outrigger. • Select to raise right outrigger. • Select to lower right outrigger. **Hazard Warning Light Switch (if equipped).** **Always wear seat belt.** **Absolutely no riders.** **This vehicle is equipped with a backup alarm sound.**
2		**Transmission Selector** Transmission gear selector

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Operator's Cab (Continued)

No.	Label Pictorial	Description
3		**Right Side Dash Panel** **Boom Lights Switch (if equipped)** • Select to turn on boom lights. **Front and Rear Work Lights Switch (if equipped)** • Select to turn on front work lights. • Select to turn on front and rear work lights. **High/Low Headlights and Taillights Switch (if equipped)** • Select to turn on high beam headlights and tail lights. • Select to turn on low beam headlights and tail lights. **Positive Air Shutoff Switch (if equipped)** • Select to trigger the positive air shutoff valve. **Steering Mode Switch** • Select for 4 wheel steering. • Select for front steering. • Select for crab steering. **Rear Windshield Washer/Wiper Switch** • Select to turn on. Select to turn on wiper. **Front & Top Windshield Wiper Switch** • Select to turn on. Select to turn on wiper. **Park Brake Switch** • Select (P) to engage park brake.
4		**Horn** Horn label.

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Operator's Cab (Continued)

No.	Label Pictorial	Description
5		**Transportation Reminder** Ensure engine air cleaner, and exhaust are sealed during transportation.
6		**Hazard Identification** Read and understand outlined risks associated with this telehandler prior to operation.
7		**Windshield Washer Fluid Container** Windshield Washer fluid.
8		**Manual Storage Box** Indicates location of operating manual and other important documentation.
9		**Open Door (if equipped)** Squeeze to open cab door.
10		**Daily & Weekly Maintenance Chart** Grease points and lubrication intervals chart.
11		**Emergency Exit Procedure**

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Operator's Cab (Continued)

No.	Label Pictorial	Description
12		**Standard Multi-function Joystick** The multi-function single controls boom operation, frame leveling, fork tilt, and auxiliary functions. Move joystick forward or rearward to raise or lower the boom. Move joystick right or left to extend or retract the boom. Press and hold middle button and move joystick forward to tilt attachment forward. Press and hold middle button and move joystick rearward to tilt attachment rearward. Press and hold frame level enable switch and move joystick to the left to level the frame to the left. Press and hold frame level enable switch and move joystick to the right to level the frame to the right. Use optional attachment function switches to control the auxiliary functions of optional attachments.

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Operator's Cab (Continued)

Frame

DEF Tank (If equipped)

No.	Label Pictorial	Description
13		**Premium Multi-function Joystick (If Equipped)** The multi-function single controls boom operation, frame leveling, fork tilt, and auxiliary functions. Move joystick forward or backward to raise or lower the boom. Move joystick right or left to extend or retract the boom. Hold left switch up to tilt attachment forward. Hold left switch down to tilt attachment backward. Press and hold frame level enable switch and move joystick to the left to level the frame to the left. Press and hold frame level enable switch and move joystick to the right to level the frame to the right. Hold right switch up or down to control the auxiliary functions of optional attachments.
14		**Main Power Disconnect Switch** For use during maintenance only. Rotate clockwise to turn on main power, rotate counterclockwise to turn off main power, insert padlock into position.
15		**DEF Tank** Diesel exhaust fluid tank.

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Left Side View

No.	Label Pictorial	Description
1		**Keep Chains Tight** Ensure chains are tight
2	A B C D	**Extension Letters** Boom extension labels
3		**Grease** Grease point
4		**Rotation Angle** Boom rotation angle label
5	SKYJACK	**Skyjack Logo** Skyjack logo - 51” White
6	SKYJACK	**Skyjack Logo** Skyjack logo - 25” White

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Left Side View (Continued)

No.	Label Pictorial	Description
7	SJ1044 TH SJ1044 THS	**Model Number** Product identifier - 38” White
8		**Warning - Do Not Alter** Do not alter or disable limit switches or other safety devices.
9		**Keep Clear** Keep Clear.
10		**Body Crushing Hazard** Danger - Body crushing hazard
11		**Wheel Specifications** Refer to manual for wheel type, offset, pressure and torque.

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Left Side View (Continued)

No.	Label Pictorial	Description
12		**Tire Pressure or Foam Filled Tires*** Indicates rated tire pressure or foam filled tires. *Tire pressure will vary, may not be as shown.
13		**Unpinned Attachment** Unpinned attachment warning
14		**Tie Down Points** Only use these points for tying down.
15	SJ1044 TH SJ1044 THS	**Model Number** Product identifier - 25” White
16		**Ultra-low Sulfur Diesel Fuel Only** Refill fuel tank with ultra-low sulfur diesel fuel only.

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Rear View

Lifting Hook on Jib

No.	Label Pictorial	Description
1		**No Smoking** Do not smoke near this location.
2		**Grease** Grease point.
3		**Towing Capacity** Telehandler's maximum towing capacity & tongue weight.
4		**Warning - No Step** No step warning.
5		**Lifting Hook Capacity Warning** Refer to operator's manual and capacity chart inside cab.

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Right Side View

No.	Label Pictorial	Description
1		**Warning - Do Not Alter** Do not alter or disable limit switches or other safety devices.
2	SJ1044 TH SJ1044 THS	**Model Number** Product identifier - 38” White
3	SKYJACK	**Skyjack Logo** Skyjack logo - 51” White
4		**Grease** Grease point.
5		**Keep Chains Tight** Ensure chains are tight
6		**Unpinned Attachment** Unpinned attachment warning

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Right Side View (Continued)

No.	Label Pictorial	Description
7		**Tie Down Points** Only use these points for tying down.
8		**Keep Clear** Keep Clear.
9		**Body Crushing Hazard** Danger - Body crushing hazard
10		**Wheel Specifications** Refer to manual for wheel type, offset, pressure and torque.
11		**Tire Pressure or Foam Filled Tires*** Indicates rated tire pressure or foam filled tires. *Tire pressure will vary, may not be as shown.
12	SJ1044 TH SJ1044 THS	**Model Number** Product identifier - 17” White

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Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Right Side View (Continued)

No.	Label Pictorial	Description
13		**Crushing Hazard** Danger - Crushing hazard.
14		**Warning - No Step** No step warning.
15	SKYJACK	**Skyjack Logo** Skyjack logo - 17” White
16		**Hydraulic Oil Level** Indicates minimum/maximum oil level.
17		**Caution - Coolant Fill Point** Refer to service manual for coolant fill instructions.
18		**Hydraulic Oil ATF Dexron III** Refill Hydraulic oil tank with ATF Dexron III hydraulic oil.

Components of MAC Equipment
https://www.macequipmentllc.com/

Labels - Models SJ1044 TH/THS & SJ1056 TH/THS

Outriggers Labels

No.	Label Pictorial	Description
1		**Body Crushing Hazard** Danger - Body crushing hazard
2		**Crushing Hazard** Danger - Crushing hazard.

Compliments of MAC Equipment
https://www.macequipmentllc.com/

3.0 Skyjack Features

Your Skyjack machine may be equipped with the following features:

SKYCODED™

At the heart of every Skyjack machine, proven and simplistic control systems using Skyjack's colour coded and numbered wiring system make our machines the easiest to trouble shoot and repair. – Black #14 is for the lift function on a 3219, and it is lift on a 63AJ. Using an analog based control system allows Skyjack AWPs to operate using a simplified system with fewer and less expensive components – less maintenance and lower costs.

FLEXCAB™

Skyjack's TH series telehandlers feature an innovative cab design that allows fleet operators to easily convert between open and enclosed cabs with simple hand tools, providing increased flexibility for fleet movement and fast response to customer demands. Easily sourced flat glass panels with no custom curved profiles and a bolt-on/bolt-off window retention system ensures minimal downtime and incurred costs for repairing damaged glass in the field.

AXLDRIVE™

Skyjack's mechanical "axle based" drive system gives positive traction and excellent rough ground "terrain-ability'.This industry leading terrain capability means one can use the Skyjack Rough Terrain Scissor Lifts, Boom Lifts and Telehandlers in the most challenging of conditions.

READYHOOK™

Skyjack's yoke mounted lifting hook is fitted as standard on TH series telehandlers. With capacities that match the maximum lift capability of the telehandler the hook allows the safe under-slinging of loads and avoids the practice of using the forks as an underslung lifting device.

SMARTORQUE™

Skyjack's TH series of telehandlers use a low horse power, high torque engine that has been engineered to provide the necessary torque and hydraulic performance found in higher horse power engines. This provides the benefit of lower acquisition costs and the employment of minimal emission controlling modules that otherwise are both expensive and complicated. SMARTORQUE™ means no diesel particulate filter (DPF), no diesel exhaust fluid (DEF) and no other active exhaust after treatment on standard engines for Tier IV Final.

ACCESSORYZERS™

Having equipment with features and functionality that allow you and your customers to do more is a vital part of the utilization equation. Skyjack offers a range of accessory products to further expand a given products adaptability and your power to offer a truly flexible rental choice.

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California Proposition 65

WARNING

Engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, and other reproductive harm.

WASH HANDS AFTER HANDLING.

Compliments of MAC Equipment
https://www.macequipmentllc.com/

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SKYJACK™

www.skyjack.com