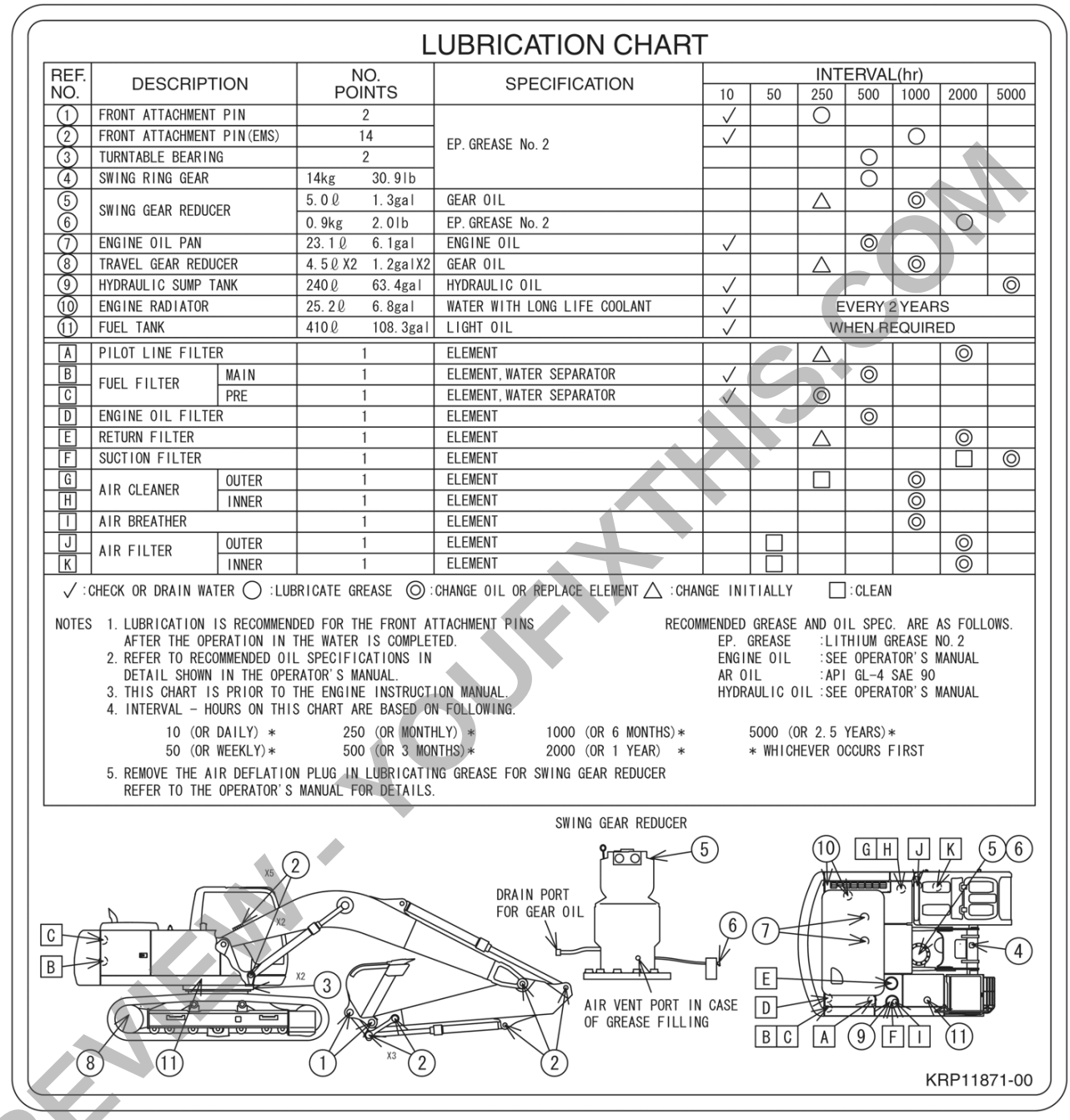
LUBRICATION CHART



KRP11871

Figure 2

IMPORTANT: *Always check your machines lube chart located under the tool box cover to ensure your machine's proper maintenance schedule.*

Commonly Replaced Filters

Filter	Part Number	Service Interval	Filter	Part Number	Service Interval
Engine Oil Filter	KHH0533	500 Hours	Outer Air Filter	KBH0921	1000 Hours
Fuel Main Filter	KHH0534	500 Hours	Inner Air Filter	KBH0922	1000 Hours
Fuel Pre-filter	KHH10590	250 Hours	Air Breather Filter	KRJ3461	1000 Hours
Pilot Oil Filter	KHJ10950	2000 Hours	Air Breather Packing	KRJ3463	
Return Filter	KRJ15830	2000 Hours	Suction Filter	KRJ10590	5000 Hours

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

ENGINE

Make ..... ISUZU
Type AI-4HK1X
Number of cylinders 4
SAE net horsepower ..... 157 HP (117 kW) @ 1,800 rpm
Displacement ..... 5.2 L
Maximum Torque ..... 463 lbf-ft (628 N-m) @ 1,500 rpm
Starter ..... 24 V-5.0 kW

ELECTRICAL SYSTEMS

Circuit ..... 24 volts
Battery ..... 92 amp hours
Alternator ..... 50 amp

HYDRAULIC SYSTEM

Open-center system, two variable displacement axial piston pumps and one gear pump for pilot controls, main control valve with one 4-spool valve and one 5-spool valve with auxiliary spool - stackable, oil cooler, auto power boost, boom and arm holding valveless, o-ring face seals, 6 micron return filter, firewall.

Main pump max flow ..... 2 x 55.7 gpm (2 x 211 l/min)
Pilot pump max flow ..... 4.8 gpm (18 l/min)

Relief valves pressures:

Boom/Arm/Bucket ..... 4,970 psi (343 bar)
In Power Boost Mode ..... 5,340 psi (368 bar)
Swing ..... 4,260 psi (294 bar)
Travel ..... 4,970 psi (343 bar)

Hydraulic cylinders:

	Bore x Rod x Stroke
Boom	4.7" x 3.3" x 49.4"
Arm	5.5" x 3.9" x 57.5"
Bucket	4.7" x 3.3" x 39.8"

Hydraulic Oil Filtration:

Return filter ..... 6 micron
Pilot filter ..... 8 micron
Suction screen ..... 155 micron

Control Valves:

Five control valve sections for left-hand travel, boom, arm, auxiliary circuit and swing acceleration.
Four control valve sections for right-hand travel, boom, arm and bucket acceleration.
Boom/arm load holding valves.

Swing

Fixed flow, piston-type pump.

Upperstructure swing speed ..... 0-11.5 rpm
Tail Swing ..... 9' 0" (2.75 m)
Swing Torque ..... 47,204 lbf-ft (64 kN-m)

Travel

Variable flow hydraulic motors with axial pistons. Planetary reduction gears.
Two speeds controlled from the instrument panel.

Low speed ..... 0 to 2.1 mph (0 to 3.4 km/h)
High speed ..... 0 to 3.5 mph (0 to 5.6km/h)
Drawbar pull ..... 42,489 lbf (189 kN)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

BEFORE OPERATING THE EXCAVATOR

WARNING: *Do not attempt to operate this excavator unless you have first read and perfectly understand the safety messages and instructions appearing in this manual.*

Before operating this excavator, be sure to do the following:

1. Check the level of all fluids (engine oil, hydraulic fluid and coolant) and make sure that the fluids and lubricants are suitable for prevailing conditions. See Lubrication/Filters/Fluids section and Operating The Excavator In Cold Weather section.
2. Carry out the daily maintenance operations. See Servicing Intervals section.
3. Inspect the excavator, look for any signs of possible leakage and check the hoses. Tighten or replace as necessary. See Maintenance/Adjustments section.
4. See Run-in Period section if the excavator is new or if the engine has been reconditioned.
5. Check the track assemblies. See Tracks in the Maintenance/Adjustments section.
6. Clean the steps and access handles. Grease, oil, mud or ice (in winter) on the steps and access handles can causes accidents. Make sure they are kept clean at all times.
7. Clean or replace any decals which are illegible. See Decals in the Safety/Decals/Hand Signals section.
8. Make sure that the engine hood and the side doors are properly closed and latched.
9. Secure the cab door in either fully closed or fully opened position.
10. Remove any obstructions which hinder visibility. Clean the windshield, the windows and the rear view mirrors.
11. Check that no tools or other items have been left on the excavator (be it on the undercarriage or the upperstructure) or in the operator's compartment.
12. Make sure nobody is on or under the excavator. The operator must be alone on the excavator.
13. Make sure nobody is standing in the excavator working area.
14. Find out about current safety measures in use on the work site.
15. Work out a convenient means of escape from the excavator (emergency exit via the windshield, the rear window glass) in the event of the cab door being jammed or the excavator turning over. See Windshield in the Controls/Instruments/ Accessories section.
16. Before undertaking any travel or working operations during hours of darkness, make sure the lighting and signalling equipment is fully operational.

OPERATING THE EXCAVATOR

WARNING: *Check all controls and safety devices in a safe, open area before starting work.*

When operating the excavator, be sure to do the following:

1. When starting the engine, be sure to use the correct procedure for the prevailing weather conditions. See Starting the engine.
2. Regularly consult the hourmeter to ensure that all servicing operations are carried out punctually. See Servicing Intervals sections.
3. If you use your excavator in particularly harsh conditions, the servicing intervals should be reduced accordingly.
4. Take note of the locations of pipes/cables before starting work.
5. Do not work near overhead high-voltage electric lines without checking beforehand that all necessary measures have been taken to respect the safest distances:

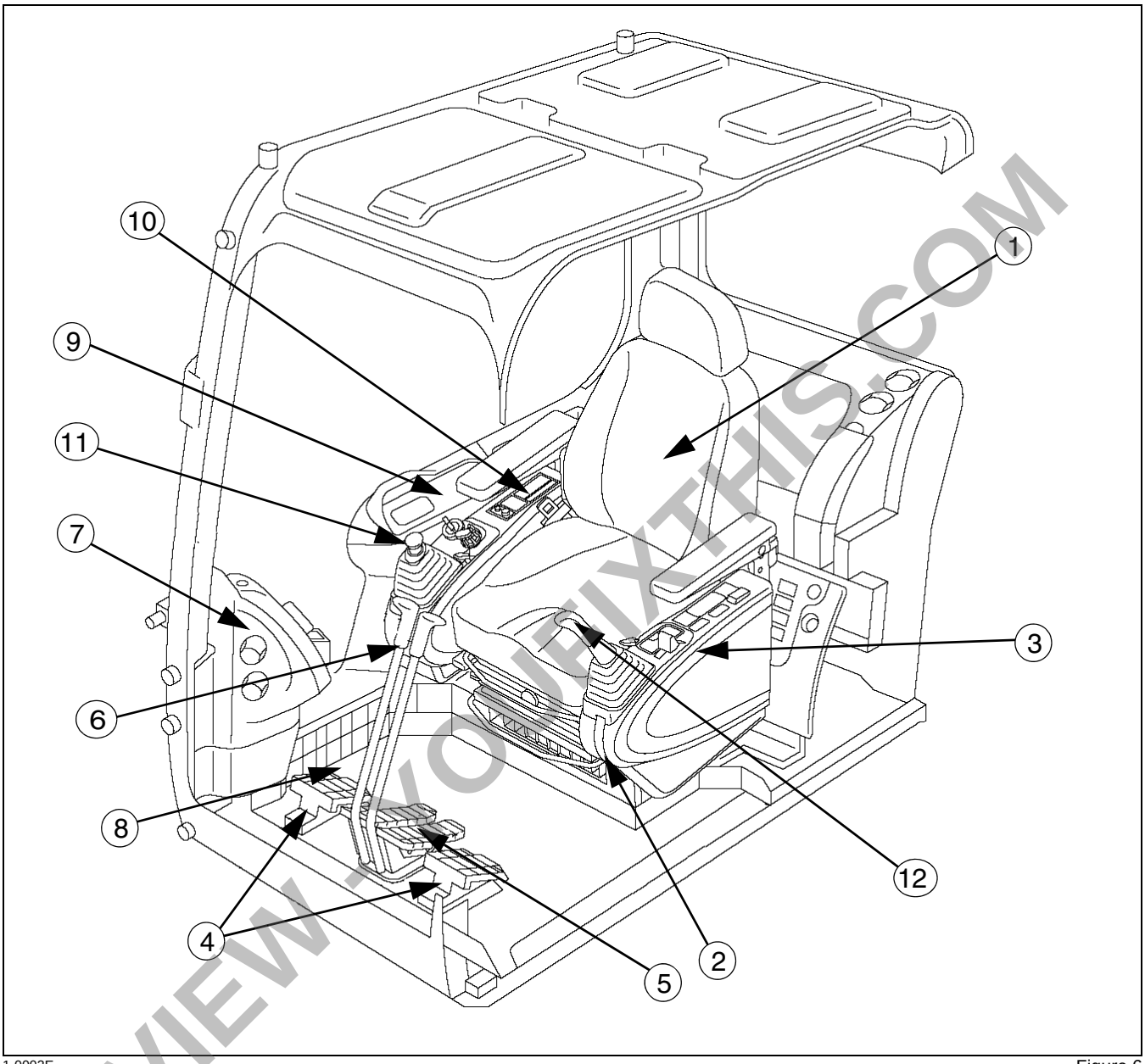
   Less than 57 000 volts: 10 feet (3 meters)

   More than 57 000 volts: 16 feet (5 meters)
6. Always know where any buried lines are and that they are properly marked. See Utility Safety section.
7. When working on a public highway, use standard traffic signs and take into consideration the working range of the upperstructure and its attachments.
8. Never operate the working or travel controls unless you are properly seated in the operator's seat with the seat belt correctly fastened.
9. Modify your operation to suit the type of work and working conditions. See Operating instructions in the Job Site Operation section.
10. Do not allow anyone within the excavator's operating radius. Stop all operations until everyone has moved away.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

POSITION OF THE OPERATOR'S COMPARTMENT CONTROLS AND ACCESSORIES



1-0002E

Figure 6

1. OPERATOR'S SEAT
2. GATE LOCK LEVER
3. LEFT-HAND CONSOLE
4. FOOT REST
5. TRAVEL CONTROL PEDALS
6. TRAVEL CONTROL LEVERS
7. FRONT CONSOLE
8. SINGLE PEDAL TRAVEL (OPTIONAL-NOT SHOWN)
9. INSTRUMENT PANEL
10. CLIMATE CONTROLS - AIR-CONDITIONER
11. RIGHT-HAND CONTROL LEVER
12. LEFT-HAND CONTROL LEVER

WARNING: *Before starting the engine, make sure that you are fully aware of the location of and the function of each control. Incorrect operation of the controls can cause serious injuries.*

ATTENTION: *To start the engine the gate lock lever must be in the down position for the engine to crank.*

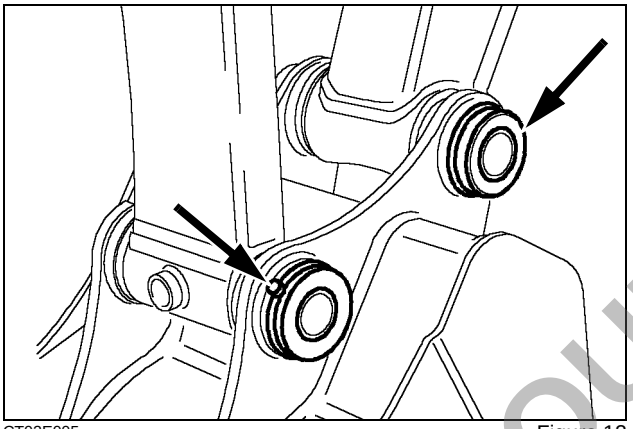
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

REPLACING A BUCKET

REMOVAL

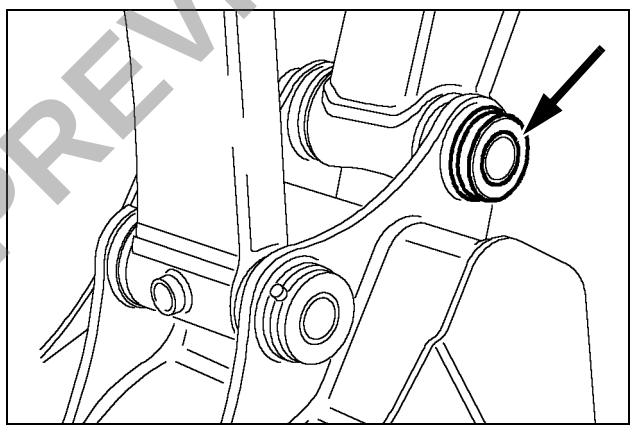
1. Place the bucket flat on flat, horizontal ground. Operate the attachment controls so that the arm/bucket linkage pin is not gripped by the weight of the arm.
2. Stop the engine and remove the starter switch key.
3. Remove the snap rings and retaining pins then remove the pins from the bucket.
4. Start the engine.
5. Disengage the attachment from the bucket and save the linkage seals.



CT02E005 Figure 12

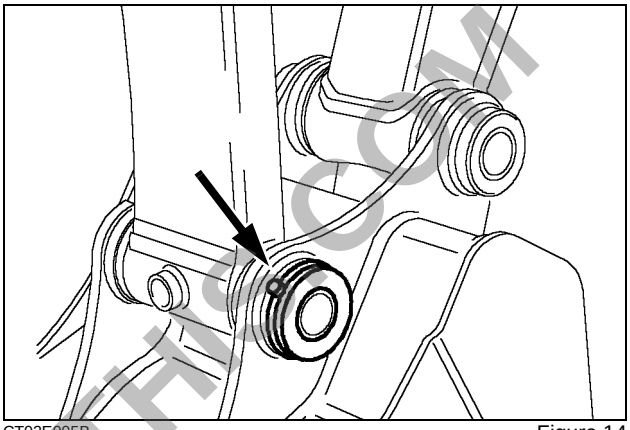
INSTALLATION

1. Install the linkage seals on the arm bushing shoulders. Change them if necessary.
2. Start the engine. Extend the bucket cylinder rod to bring it into its housing. Stop the engine and remove the starter switch key.
3. Install the arm/bucket linkage pin, then the retaining pins and the rings.



CT02E005A Figure 13

4. Start the engine. Remove the bucket cylinder rod to bring it in its housing, shut down the engine and remove the starter switch key.
5. Install the connecting rod/bucket linkage pin then the retaining pins and the snap rings.
6. Push the seals back into their housings.
7. Grease the linkage pins.



CT02E005B Figure 14

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TRANSPORTING THE EXCAVATOR

BY RAIL

Since transport by rail is subject to special regulations, consult an approved organization.

ON A TRAILER

WARNING: *This excavator could slip and fall from a trailer or ramp and cause serious injury. Make sure the trailer and ramps are clean. The excavator should be in line with the trailer before being loaded.*

WARNING: *Be sure to turn the Auto-idle off to avoid the throttle changing while trying to load the machine.*

Make sure you know the safety rules and regulations before transporting the excavator. Make sure both trailer and excavator are fitted with the right safety equipment.

1. Place a block (1) behind the trailer wheels. Install the trailer side extensions (if equipped). Make sure the angle (2) of the extension is not over 15°.

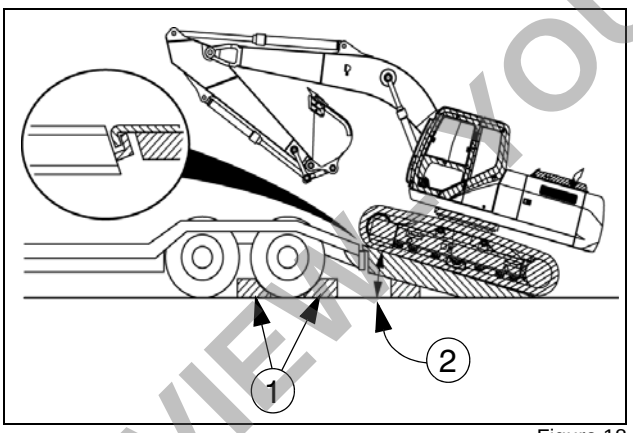
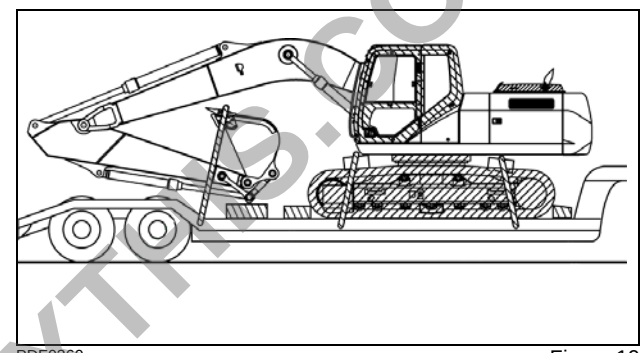


Figure 18

2. Place the excavator in line with the trailer, with the travel reduction gears toward the access ramps. Raise the attachment and bring it to about 8" (20 cm) above the bed of the trailer
3. Turn the throttle down to the low position and make sure you are in the low speed travel mode.
4. When moving from the ramps onto the trailer bed, raise the boom slightly as soon as the attachment touches the trailer so as to bring the excavator level and then move forward until the excavator is resting entirely on the trailer.
5. When the excavator is completely on the trailer, raise the attachment slightly and swing the upperstructure so as to bring the attachment round to the access ramp side.
6. Place the excavator completely in front of the trailer so that the attachment can rest on the floor of the trailer.
7. Shut down the engine, remove the starter switch key, raise the gate lock lever.
8. Make sure that all doors, hoods and access panels are correctly locked.
9. Fold the rear view mirrors inwards.
10. Use blocks and chains to fasten the excavator to the trailer.



PDF0360

Figure 19

11. Excavator is now ready for transport

Measure the distance between the ground and the highest point of the excavator. You must know the overall height. See Excavator Overall Dimensions section.

UNLOADING THE EXCAVATOR

1. Remove the blocks and fastening chains.
2. Start the engine.
3. Lower the gate lock lever.
4. Raise the attachment to bring it a few inches above the trailer bed.
5. Move slowly while raising the attachment so as to maintain it a few inches above the ground.
6. Turn the rear view mirrors back to their correct position.

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

HARDWARE TORQUE INSPECTION

MAINTENANCE SPECIFICATION

Check .....Every 250 hours
(after the first 50 hours during the run-in period)

At the end of each working day, check all mounting nuts and screws for tightness and tighten if necessary. Make sure no hardware items are missing. Replace them, if necessary.

Component	Screw (Ø)	Wrench (mm)	Torque setting (Nm)
Travel reduction gear (*)	M16	24	267-312
Drive sprocket (*)	M16	24	267-312
Idler wheel (*)	M16	24	267-312
Upper roller (*)	M20	30	521-608q
Lower roller (*)	M18	27	371-432
Track shoe	M20	30	300, then turn 120°
Counterweight	M33	50	1862-2058
Turntable (undercarriage)	M20/M24	30/36	468-545/784-919
Turntable (upperstructure)	M20/M24	30/36	468-545/784-919
Swing reduction gear (*)	M20/M24	30/36	539-630/784-919
Engine (*)	M16	24	206-247
Engine mounts (*)	M10	17	64-74
Radiator	M16	24	147-177
Hydraulic pump (*)	M10 M12	17 Male	63-73 367-496
Hydraulic reservoir (*)	M16	24	232-276
Fuel tank (*)	M16	24	232-276
Control valve (*)	M16	24	330-360
Hydraulic swivel (*)	M12	19	107-188
Cab	M16	24	157
Batteries	M10	17	20-29

NOTE: *Use Loctite 262, or the equivalent, on screws marked (*).*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

WORKING RANGES

	9' 8" (2.94 m) Arm	7' 11" (2.41 m) Arm
A. Maximum Reach	32' 6" (9.90 m)	30' 11" (9.42 m)
B. Maximum Reach @ Ground Level	31' 11" (9.73 m)	30' 4" (9.24 m)
C. Maximum Digging Depth	21' 10" (6.65 m)	20' 0" (6.10 m)
D. Maximum Dig Height	31' 6" (9.61 m)	30' 10" (9.41 m)
E. Maximum Dump Height	22' 4" (6.81 m)	21' 7" (6.59 m)
F. Digging Depth - 8' Level Bottom	21' 3" (6.47 m)	19' 4" (5.90 m)
G. Bucket Rotation	177°	177°
H. Maximum Vertical Wall Depth	19' 7" (5.96 m)	18' 1" (5.50 m)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

EXCAVATOR TRAVEL

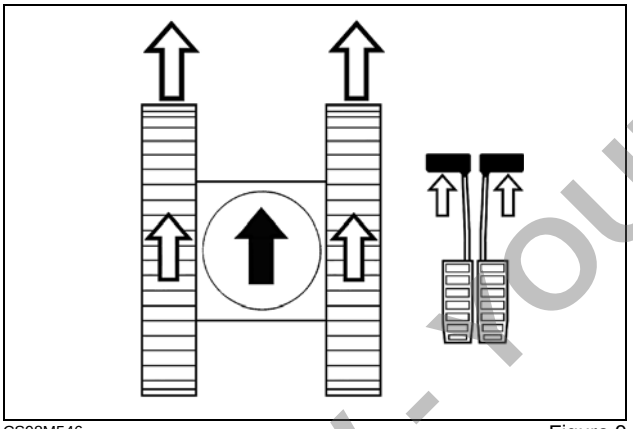
WARNING: *In the normal travel position, the operator's compartment is above the idler wheels and the travel reduction gears are to the rear of the upperstructure. If the upperstructure is turned 180 degrees in relation to the undercarriage, the controls are reversed.*

IMPORTANT: *Before any travel operation, raise the attachment.*

NOTE: *Travel speed depends on the tilting angle of the levers and the travel mode speed selected. See High Speed Travel Switch in Instruments and Controls.*

1. Straight line travel (Forward Travel)

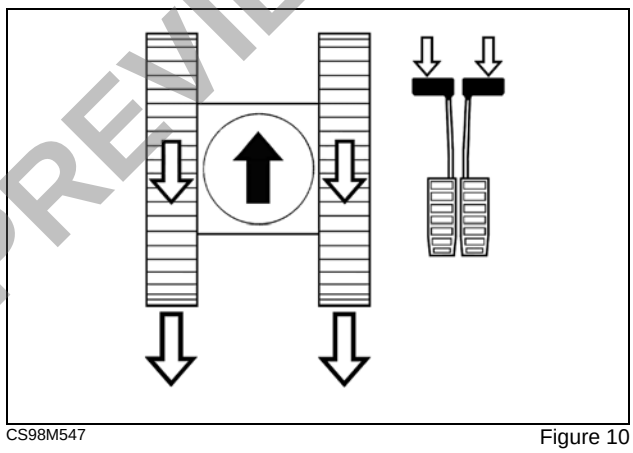
   Press the two pedals (or push the two levers) forward at the same time.



CS98M546 Figure 9

2. Straight line travel (Reverse Travel)

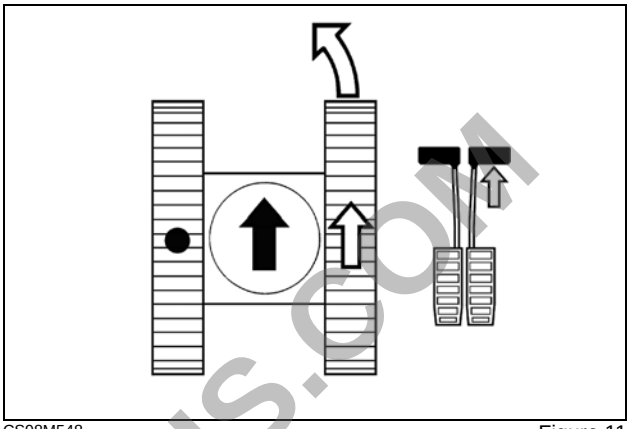
   Press the two pedals (or push the two levers) rearward at the same time.



CS98M547 Figure 10

3. Turning to the left (Forward Travel)

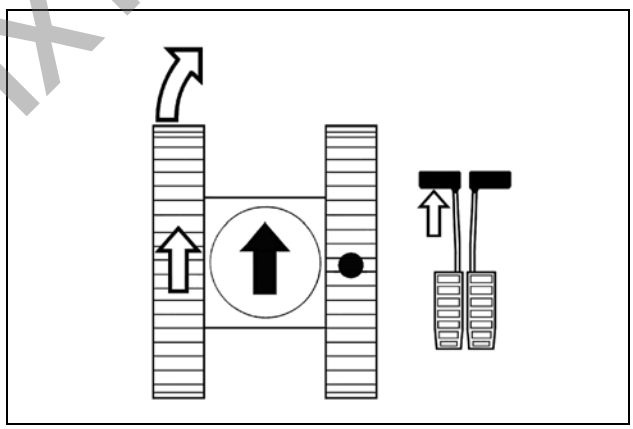
   Simply press the right-hand pedal or the right-hand lever forward.



CS98M548 Figure 11

4. Turning to the right (Forward Travel)

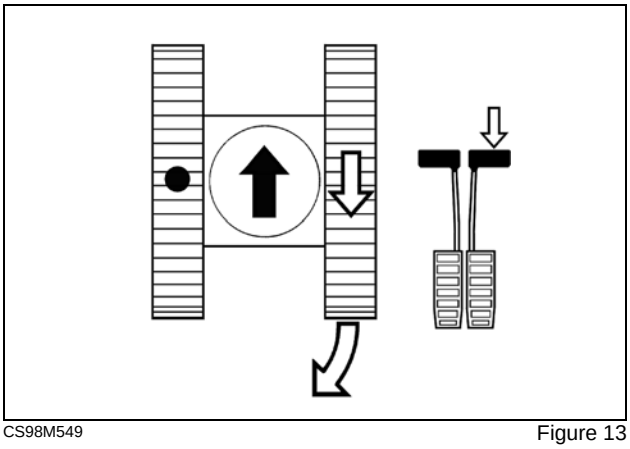
   Simply press the left-hand pedal or the left-hand lever forward.



CS98M551 Figure 12

5. Turning to the left (Reverse Travel)

   Simply press the right-hand pedal or the right-hand lever rearward.



CS98M549 Figure 13

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

INSTRUMENT PANEL

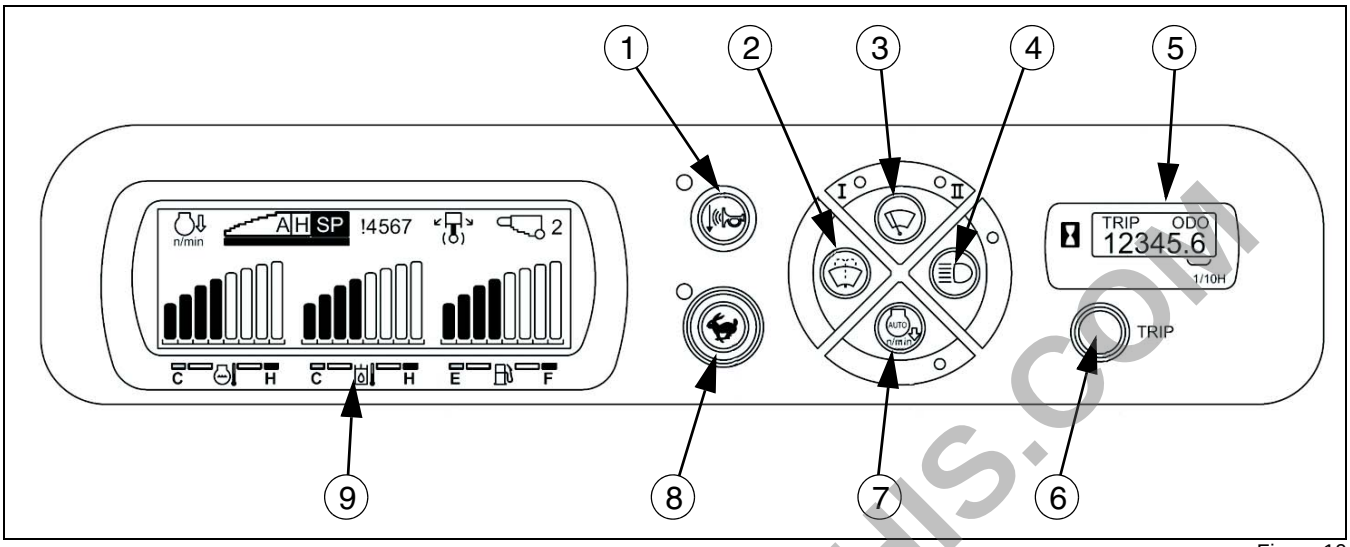


Figure 10

WARNING: *The role of the instrument panel is to indicate the state of the excavator and quickly warn the operator in case of any malfunction, through alarms.*

The instrument panel is not waterproof. Make sure that it does not get wet

1. HORN VOLUME CONTROL

   This button controls the volume of the horn. When you press the button a beep will occur and the light will illuminate. If the green light is on then horn is in low, if the light is not illuminated then it is normal volume.

   The horn volume will remain the same after the engine is shut down.

2. WINDOW WASHER CONTROL

   When pressed this button applies washer fluid to the windshield and turns the wipers on.

WARNING: *Do not use the window washer if the reservoir is empty. It can cause damage to the window washer pump.*

3. WINDOW WIPERS CONTROL

   This button controls the window wipers. There are three settings:

   I - Intermittent wipers
   II - Continuous wipers
   No lights - wipers are off.

IMPORTANT: *Do not run the window wipers on a dry window for it can cause damage to the wipers and window.*

4. WORKING LIGHT CONTROL

   This button controls the working lights on the machine. When the light is on the working lights are on.

5. HOURMETER

   This display shows the total elapsed operating time of the engine.

6. TRIP CONTROL

   The TRIP button when pressed will show the trip hours for one minute, then return to the hour meter. To reset the trip, hold the button down for two seconds.

7. AUTOMATIC AUTO-IDLE SWITCH

   When the button is pressed a beep will sound and the light will illuminate and it will be in auto-idle mode. The machine will run at idle when the controls are in the neutral position for 5 seconds. When the controls are re-engaged, the engine rpms will return to the previous setting. The machine will stay in the same mode when the engine is turned off.

8. TRAVEL MODE CONTROL

   This button toggles between Low speed travel and High speed travel. When the light is off it is in Low speed when the light is on it is in High speed travel. When the engine is shut down it resets to Low speed.

IMPORTANT: *It is best to change travel speeds while the machine is not moving, changing speeds while traveling may cause erratic movement of the machine.*

9. DISPLAY MONITOR

   For more details see Computer Monitor Display on the next page.

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

HYDRAULIC EXCAVATOR QUICK COUPLER OPERATION

Quick couplers provide quick and easy removal and reinstallation of buckets, breakers, hammers, rippers, and other devices on the end of an excavator arm. With this convenience however comes the responsibility to ensure that these attachments are properly secured and cannot accidentally or inadvertently be dropped thus placing nearby workers in harms way.

- Read, understand, and follow the operating and safety instructions that are provided by the coupler manufacturer.
- Follow the coupler manufacturer's instructions for ensuring that the bucket, breaker, hammer, ripper, or other device has been properly coupled to the excavator's arm.
- Conduct the coupler manufacturer's test to ensure that the bucket, breaker, hammer, ripper, or other device has been properly coupled to the excavator's arm. Conduct this test each time you remove or reinstate an attachments.
- Never swing the bucket, breaker, hammer, ripper, or other device over workers and never let them under the bucket, breaker, hammer, ripper, or other device.
- Always use and install the independent secondary retention system.
- Only use quick couplers that are recommended and sized for your excavator.
- Remember that quick couplers decrease the lift capacity of your excavator. When lifting large or awkward loads use the lifting eye on the coupler and release and place the bucket, breaker, hammer, ripper, or other device on the ground.
- Remember that quick couplers change the working ranges and the reach of the excavator. The bucket, breaker, hammer, ripper, or other device could come in contact with the operator's cab or boom.
- Do not lift loads with the bucket, breaker, hammer, ripper, or other device until the operational safety checks have been conducted to ensure that the bucket, breaker, hammer, ripper, or other device had been properly coupled to the excavator's arm.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TABLE OF CONTENTS

CHAPTER 1
GENERAL INFORMATION
To the Owner 1-1
Excavator Components 1-3
Identification Numbers 1-5

CHAPTER 2
SAFETY, DECALS, AND HAND SIGNALS
Table of Contents 2-1
Safety Rules 2-3
Safety Area 2-3
Utility Safety 2-4
Operator Precautions 2-5
Decals 2-10
Hand Signals 2-16

CHAPTER 3
INSTRUMENTS AND CONTROLS
Table of Contents 3-1
Cab 3-3
Steps and Access Handles 3-4
Position of the Operator's Compartment Controls and Accessories 3-5
Operator's Seat 3-6
Seat Controls 3-7
Right-hand Control Arm and Instrument Panel 3-8
Instrument Panel 3-9
Computer Monitor Display 3-10
Anti-Theft Protection Device 3-11
Message Display List 3-12
Left-hand Control Arm 3-14
Front Console 3-15
Heating, Ventilation and Air-conditioning Control 3-16
Control Pattern Selector Valve 3-17
Arm and Upperstructure Swing Left-hand Control Lever In Pattern D 3-18
Boom and Bucket Right-hand Control Lever In Pattern D 3-18
Arm and Upperstructure Swing Left-hand Control Lever In Pattern C 3-19
Boom and Bucket Right-hand Control Lever In Pattern C 3-19
Travel Control 3-20
Single Pedal Travel - If Equipped 3-20
Gate Lock Lever 3-21
Cab Light 3-21
Coat Hanger Hook 3-21
Rear Right-hand Side Window 3-22
Cup Holder 3-22
Storage Tray 3-22
Storage Compartments 3-22
Cab Radio 3-23
Fuse Box 3-24
Windshield 3-25
Lower Front Window 3-26
Air Vents 3-27
Rear Window 3-27

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 150 pages

The full manual includes:

- All 150 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Link-Belt 210 X2 Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual