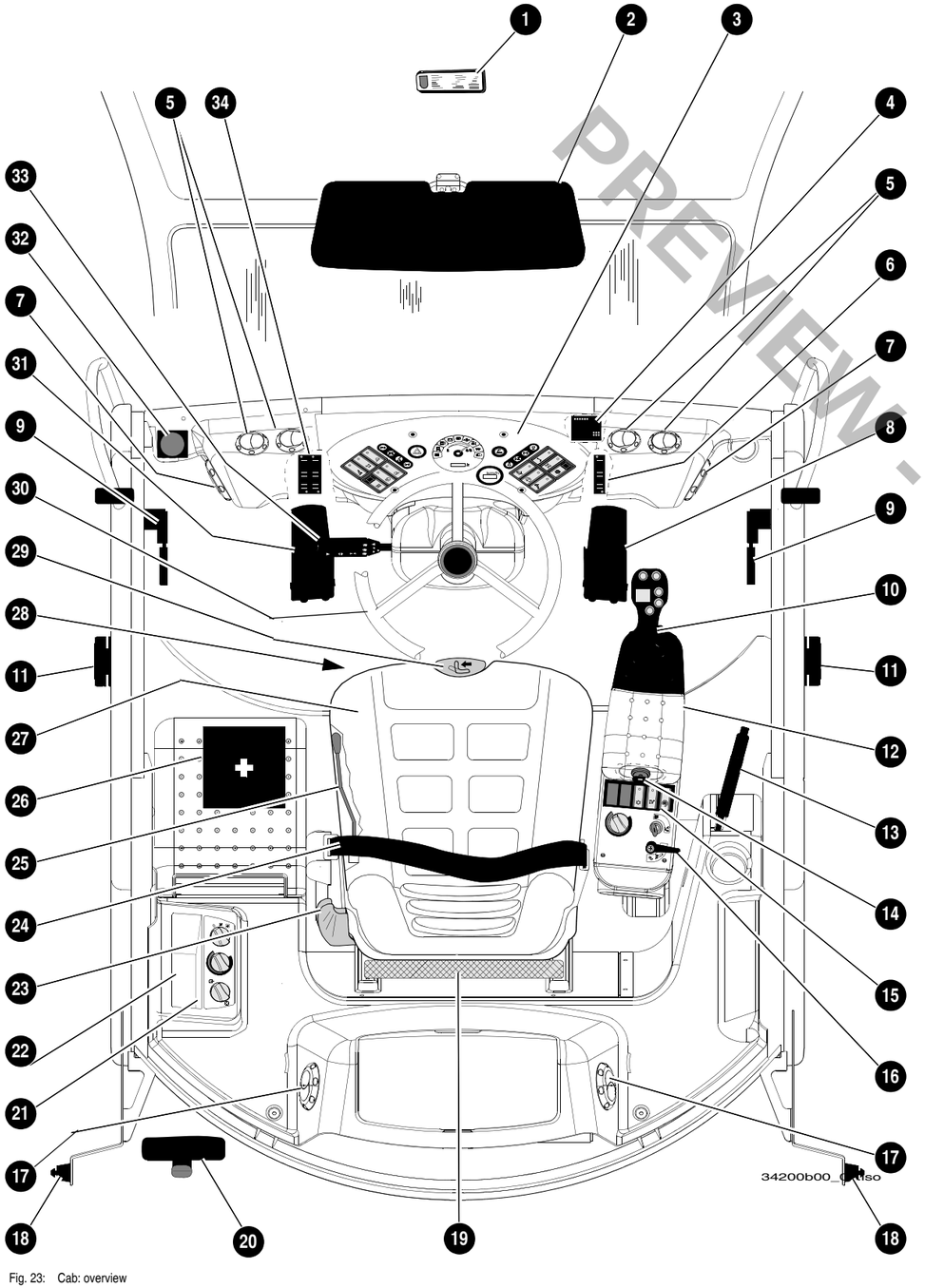


Fig. 23: Cab: overview

Cab: overview

Pos.	Description	For more information see page
	Roof console	
1	Interior light	*62*
2	Sun visor	
	Operator compartment	
3	Instrument panel	
4	Steering electronics (25 mph [40 km/h] option)	*54*
5	Air vent – front window	
6	Fuse box (right)	*139*
7	Air vent – side window	
8	Accelerator pedal	*57*
9	Door locks	*72*
10	Control lever – loader unit	*78*
11	Arrester lock – cab door	*72*
12	Control lever base	
13	Parking brake lever	*58*
14	Preheating/start switch	*43*
15	Switch panel in control lever base	
16	Control lever lock **10** for road travel	*78*
17	Air vent – rear window	
18	Bracket – cab door arrester	*72*
19	Storage pocket for operator's manual	
20	Tank – washer system	*58*
21	Side console	
22	Prepared installation for radio (option)	
23	Lever – weight adjustment	*68*
24	Seat belt	*70*
25	Lever – horizontal adjustment	*69*
26	Fixture – first-aid kit	
27	Operator's seat	*68*
28	Air vent – leg room	
29	Lever – backrest adjustment	*69*
30	Hydrostatic steering	*54*
31	Service brake pedal (hydrostatic)/inching	*48*
32	Brake fluid tank	*114*
33	Multifunctional lever	*59*
34	Fuse box (left)	*139*

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Maintenance schedule Model 342-01 (overview)

Work description

For service and maintenance work on the attachment, also refer to the operation and maintenance manual of the attachment manufacturer.

	Maintenance schedule/service hours					
	Regular maintenance (daily)	Delivery inspection	"A" every 50 hours (weekly)	1st Inspection[1] at 100 hours	"B" every 500 hours[2] 2nd Inspection	"C" every 1500 service hours (yearly)
Oil and filter changes ( ):						
Carry out the following oil and filter changes (check oil levels after test run):						
• Engine oil				●	●	●
• Engine oil filter				●	●	●
• Fuel filter				●	●	●
• Air filter[3, 4] replace safety cartridge every third time the air filter is replaced					●	●
• Gearbox oil in front and rear axle differentials and in rear axle gearbox				●		●
• Gearbox oil in front and rear axle planetary drives, left and right				●		●
• Gearbox oil in 25 mph (40 km/h) gearbox (option)				●		●
• Hydraulic oil[5]						●
• Hydraulic oil filter				●		●
• Breather filter – hydraulic oil tank [4]						●
Inspection work ( ):						
Check the following material. Refill if necessary:						
• Engine oil	●	●	●			
• Hydraulic oil	●	●	●	●	●	●
• Gearbox oil in front and rear axle differentials and in rear axle gearbox		●			●	●
• Gearbox oil in front and rear axle planetary drives, left and right side		●			●	●
• Brake fluid[6]	●	●	●	●	●	●
Check cooler for engine and hydraulic oil for contamination. Clean if necessary[7]			●	●	●	●
When using biodegradable oil: Drain the condensation water in the hydraulic oil tank [5]					●	●
Clean dust valve on air filter housing [3]	●	●	●	●	●	●
V-belt: Check condition and pre-tension. Tighten or replace if necessary[8]		●	●	●	●	●
Check the fuel/water separator. Drain water if necessary			●	●	●	●
Clean filter insert on fuel pump, replace if necessary			●	●	●	●

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Specifications

Frame

Sturdy steel frame, rubber-mounted engine.

Engine

Engine	
Product	Deutz diesel engine
Model	F4M 2011
Type	In-line
No. of cylinders	4
Displacement	190 in.³ (3109 cm³)
Bore and stroke	3.7 x 4.4” (94 x 112 mm)
Compression ratio	19:1
Output (as per ISO 9249)	44 kW/59 DIN hp at 2400 rpm
Max. torque	144 lb.-ft. (195 Nm) at 1700 rpm
Specific minimum fuel consumption	298 g/hph (222 g/kWh)
Fuel injection system	Direct fuel injection
Firing order	1 – 3 – 4 – 2
Starting aid	Glow plug
Max. inclined position (engine no longer supplied with oil):	Max. lateral left/right inclination: 30/57% Max. uphill/downhill inclination: 30/57% **Follow tilting limit of the machine.**
Oil pressure	44 – 65 psi (3.0 – 4.5 bar) at 2300 rpm
Valve clearance (engine at cold temperature)	Intake valve 0.01” (0.3 mm) Exhaust valve 0.02” (0.5 mm)

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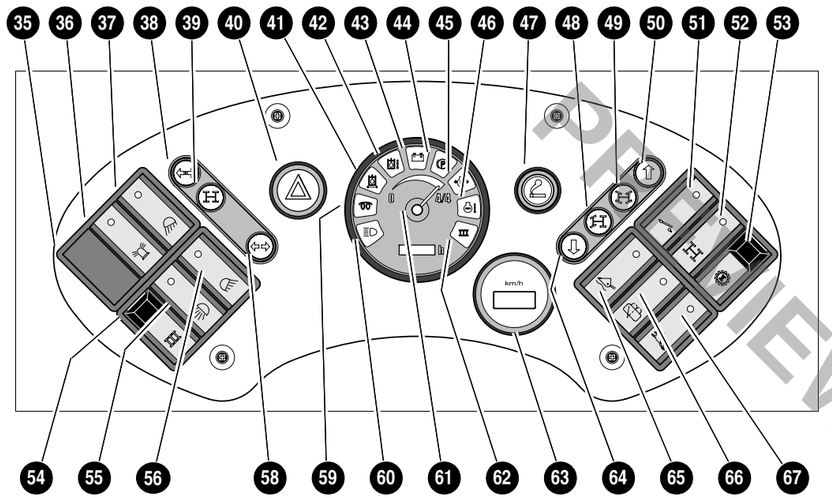


Fig. 24: Instrument panel: overview

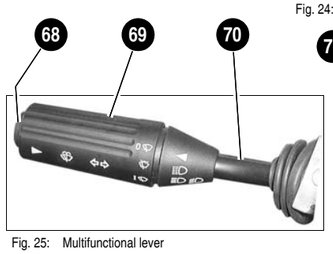
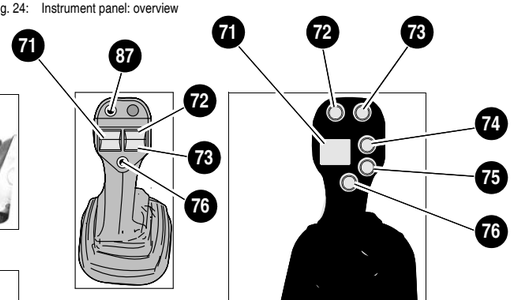


Fig. 25: Multifunctional lever



New Control Lever (Joystick)

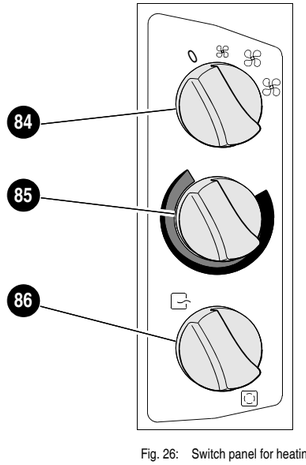


Fig. 26: Switch panel for heating

Fig. 27: Control lever base

Instrument panel, multifunctional lever and drive lever: overview

Pos.	Description	For more information see page
	Instrument panel	
35	**Not Assigned**	
36	Rocker switch – rotating beacon (option)	63
37	Rocker switch – front working light (option)	62
38	Indicator (green) – right/left turn indicator for rear attachments	42
39	Indicator (red) – steering synchronization (25 mph [40 km/h] high speed option)	54
40	Switch – hazard warning system	
41	Pressure indicator – hydraulic oil filter	43
42	Temperature indicator – hydraulic oil	42
43	Indicator (red) – alternator charge function	42
44	Indicator (red) – parking brake	42
45	Indicator (red) – engine oil pressure	42
46	Indicator (red) – diesel engine temperature	42
47	Socket/cigarette lighter	
48	Indicator (green) – front axle steering (25 mph [40 km/h] high speed option)	43
49	Indicator (green) – four wheel steering (25 mph [40 km/h] high speed option)	43
50	Indicator (green) – forward driving direction	43
51	Rocker switch – front socket for electrically operated attachments (option)	82
52	Tip switch – steering synchronization (25 mph [40 km/h] high speed option)	54
53	Rocker switch with lock – four wheel/front axle steering (25 mph [40 km/h] high speed option)	54
54	Rocker switch with lock – 3rd control circuit	82
55	Rocker switch – lights	61
56	Rocker switch – rear working light	62
57	Not assigned	
58	Indicator (green) – right/left turn indicator	42
59	Indicator (yellow) – cold starter	42
60	Indicator (blue) – high beam	42
61	Fuel level indicator	
62	Indicator (red) – 3rd control circuit, continuous operation	82
63	Speedometer – high speed (25 mph [40 km/h] high speed option)	
64	Indicator (green) – reverse driving direction	56
65	Rocker switch – load stabilizer (option)	52
66	Rocker switch – rear wiper with tip switch for wiper water	66
67	Rocker switch – drive range selection (25 mph [40 km/h] high speed option)	54

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Maintenance schedule Model 342-01 (overview)

Work description

For service and maintenance work on the attachment, also refer to the operation and maintenance manual of the attachment manufacturer.

	Maintenance schedule/service hours					
	Regular maintenance (daily)	Delivery inspection	"A" every 50 hours (weekly)	1st Inspection[1] at 100 hours	"B" every 500 hours[2] 2nd Inspection	"C" every 1500 service hours (yearly)
Check valve tip clearance (engine timing): Set if necessary					●	●
Battery: Check charge condition					●	●
Other inspection work ( ):						
Heating: Clean dust filter, replace every 1500 service hours if necessary[9]						●
Check and set service and parking brake pads. Replace if necessary				●	●	●
Tire check (damage, air pressure, tread depth)	●	●	●	●	●	●
Check screws and nuts or screw connections for tightness on the following assemblies/components. Tighten if necessary						
• Engine and engine bearing				●	●	●
• Steering system				●	●	●
• Hydraulic system				●	●	●
• Loader unit (pin locking)				●	●	●
• Axle mounting, axle suspension				●	●	●
• Counterweight (attachment)				●	●	●
• Attachment cap screws of propshafts				●	●	●
• Attachment cap screws of cab				●	●	●
• Wheel nuts		●		●	●	●
Electric system: Check electrical and ground connections, chafing on wiring harness, battery terminals		●		●	●	●
Lubrication service ( ):[10]						
Lubricate the following assemblies/components:						
• Rear axle oscillating bearing		●	●	●	●	●
• Front and rear axle planetary drive bearings, left and right		●	●	●	●	●
• Loader unit– *see section Lubricating the loader unit* on page 113						
• Lift frame bearing		●	●	●	●	●
• Tilt rod bearing		●	●	●	●	●
• Tilt lever bearing		●	●	●	●	●
• Lift cylinder bearing		●	●	●	●	●

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Power train

Variable displacement pump		
Type		Automotive, infinitely variable hydrostatic axial-piston gearbox
Displacement		0 – 2.7 in.³/rev (0 – 45 cm³/rev)
Max. operating pressure Δp		4931 psi (340 bar)
Starting RPMs		1250 – 1300 rpm at 725 psi (50 bar) HP
Droop		2100 $^{\pm 150}$ rpm, 5802 psi (400 bar) high pressure
Boost pump:		
Type		Internal gear pump
Displacement		0.7 in.³/rev (11.6 cm³/rev)
Charging/boost pressure		435 psi (30 bar) at 1500 rpm
Control		Speed-sensitive, hydraulic displacement adjustment with pressure cut-off
Driving direction		Electro-hydraulic control
Inching		Inching valve
Variable displacement motor		
Type		Axial piston motor (swash plate design)
Displacement	Standard	1.3 to 4.9 in.³/rev (20.6 to 80.7 cm³/rev)
	High speed option	2.2 to 14.2 in.³/rev (36.1 to 233 cm³/rev)
Drive speed	Standard	1st drive range: 0 – 3.2 mph (0 – 5.1 km/h), forward and reverse 2nd drive range: 0 – 12.4 mph (0 – 20 km/h), forward and reverse
	High speed option	1st drive range: 0 – 3.2 mph (0 – 5.1 km/h), forward and reverse 2nd drive range: 0 – 25.0 mph (0 – 40 km/h), forward and reverse
Tractive effort		8093 lbf (36.0 kN)

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Maintenance schedule Model 342-01 (overview)

Work description For service and maintenance work on the attachment, also refer to the operation and maintenance manual of the attachment manufacturer.	Maintenance schedule/service hours					
	Regular maintenance (daily)	Delivery inspection	"A" every 50 hours (weekly)	1st Inspection[1] at 100 hours	"B" every 500 hours[2] 2nd Inspection	"C" every 1500 service hours (yearly)
• Tilt cylinder bearing		●	●	●	●	●
• Quickhitch facility: Bearing on lift frame		●	●	●	●	●
• Hinges, joints and fittings (e.g., door arrester)			●	●	●	●
Functional check ( ):						
Check the function of the following assemblies/components. Rectify if necessary:						
• Service and parking brake	●	●	●	●	●	●
• Steering system	●	●	●	●	●	●
• Lights and electrical system	●	●	●	●	●	●
Leakage check ( ):						
Check for tightness, leakage and chafing: pipes, flexible lines and screw connections of the following assemblies and components. Correct if necessary:						
• Air intake line (air filter – engine)	●	●	●	●	●	●
• Engine lubrication (engine – filter)	●	●	●	●	●	●
• Fuel lines[11]	●	●	●	●	●	●
• Cooling system (engine – hydraulic oil)	●	●	●	●	●	●
• Steering system (flexible lines and rams)	●	●	●	●	●	●
• Hydraulic system/loader unit (flexible lines and rams) [12]	●	●	●	●	●	●
• Brake system (flexible lines and rams)	●	●	●	●	●	●

1. Work to be carried out once after the first 100 service hours. This work must be carried out by an authorized dealer for warranty claims to be acknowledged.
2. Work after the first 500 service hours (2nd Inspection) must be carried out by an authorized dealer for warranty claims to be acknowledged.
3. Replace filter as indicated by the indicator on the instrument panel, however at least every 12 months or 1500 service hours.
4. When working in an acidic environment, replace the filter every 300 service hours.
5. When using biodegradable oil: Drain the condensation water in the hydraulic oil tank every 500 service hours, and in any case before the cold season.
6. Replace every two years.
7. Depending on operation and dust conditions, it may necessary to clean the cooler more frequently.
8. Replace the toothed belt every 3000 service hours or after 5 years at the latest (toothed belt must be replaced by authorized staff).
9. Depending on operation and dust conditions, it may be necessary to replace the dust filter more frequently.
10. Lubricate attachment according to manufacturer's instructions.
11. Replace flexible fuel leak oil lines every twoyears.
12. Replace flexible lines every six years (UVV, DIN 20066 part 5).

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Safety instructions

Mandatory safety shutdown procedure

Before operating this equipment, read and study the following safety information. In addition, be sure that every individual who operates or works with this equipment is familiar with these safety precautions.

Before leaving the machine:

- Lower the working equipment to the ground and support it securely.
- Reduce throttle and turn off the engine.
- Lock out controls by raising right-hand control console.
- Remove the ignition key and take it with you.

Unauthorized modifications

Any machine modification made without authorization from Gehl could create a safety hazard, for which the machine owner would be responsible.

For safety reasons, use only genuine Gehl parts. For example, using incorrect fasteners could lead to a condition in which the safety of critical assemblies is dangerously compromised.

Attachment precautions

Optional kits are available through your dealer. Because Gehl cannot anticipate, identify and test all of the attachments that owners may wish to install on their machines, please contact Gehl for information on approval of attachments, and their compatibility with optional kits.

Operational safety

Control the machine cautiously and gradually until you are fully familiar with all the controls and handling.

Avoid high-voltage lines. Serious injury or death can result from contact or proximity to high-voltage electric lines. The bucket or boom does not have to make physical contact with power lines for current to be transmitted. Use a spotter and hand signals to keep away from power lines not clearly visible to the operator.

Depending upon the voltage in the line and atmospheric conditions, strong current shocks can occur if the boom or bucket is closer than 10’ (3 m) to the power line. Very high voltage and rainy weather can further increase the safe operating distance.

Before starting any type of operation near power lines *(either above-ground or buried cable-type)*, always contact the power utility and establish a safety plan with them.

Before starting to dig, contact authorities. Contact Diggers Hotline One-Call Information at 1-888-258-0808.

Below-ground hazards also include natural gas lines, water mains, tunnels and buried foundations. Know what is underneath the work site before starting to dig.

Be aware of height obstacles. Any object in the vicinity of the boom could represent a potential hazard, or cause the operator to react suddenly and cause an accident. Use a spotter or signal person when working near bridges, phone lines, work site scaffolds, or other obstructions.

Use care on loose ground. Carrying heavy loads over loose, soft ground or uneven, broken terrain can cause dangerous side-load conditions and possible tipover and injury. Traveling with a suspended load or an unbalanced load can also be hazardous.

If temperatures are changing, be cautious of dark and wet patches when working or traveling over frozen ground. Stay away from ditches, overhangs and other weak support surfaces.

Never rely on jacks or other inadequate supports when maintenance work is being done. Use solid support blocking.

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Introduction

General information

Your decision to purchase this piece of Gehl equipment was a good one. We are sure that your decision was carefully considered and that you are looking forward to many years of reliable performance from this machine.

Gehl Company has invested much time and effort in developing its lines of equipment. The equipment you have purchased is built with a great deal of pride, and designed to provide long life, efficient operation, durability and dependability.

Modern machinery has become more sophisticated and, with that in mind, Gehl Company asks that you read and COMPLETELY understand the contents of this manual and become familiar with your new machine, BEFORE attempting to operate it.

This manual was developed specifically for the machine you have purchased. The information within is for your assistance in preparing, adjusting, maintaining and servicing your machine. More importantly, this manual provides an operating plan for safe and proper use of your machine. Major points of safe operation are detailed in the SAFETY chapter of this manual – *see Safety instructions* on page 16. Refer to the Table of Contents for an outline (by chapters) of this manual. Use the Index, located at the back of this manual, for specific chapter and topic/page number references.

If this machine is resold, Gehl Company recommends that this manual be given to the new owner.

If this machine was purchased "used," or if the owner's address has changed, please provide your Gehl dealer or Gehl Company with the owner's name and current address, along with the machine model and serial number. This will allow the registered owner information to be updated, so that the owner can be notified directly in case of an important product issue, such as a safety update program.

“Right” and “left” are determined from the position of sitting in the operator’s seat, facing forward.

Gehl Company reserves the right to make changes or improvements in the design or construction of any part without incurring the obligation to install such changes on any unit previously delivered.

Throughout this manual information is provided that is introduced by the word NOTE or IMPORTANT. Be sure to read carefully and comply with the message or directive given. Following this information will improve your operating or maintenance efficiency, help you to avoid costly breakdowns or unnecessary damage and extend your machine's life.

Operational safety and readiness of the machine depend partially on maintenance and service of the machine. This is why regular maintenance and service work is absolutely necessary. Extensive maintenance and repair work must always be carried out by a qualified technician with appropriate training. Insist on using Gehl original service parts when carrying out maintenance and repair work. This ensures operational safety and readiness of your machine, and maintains its value.

Our wide dealership network stands ready to provide any assistance required, including genuine Gehl service parts. All parts should be obtained from or ordered through your Gehl dealer. Give complete information about the part as well as the model number and serial number of your machine. Record numbers, in the spaces provided, as a handy record for quick reference.

Purchased from: _____

Date of Purchase: _____

Model No.: _____

Serial No.: _____

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Other controls

Exit on right side of cab



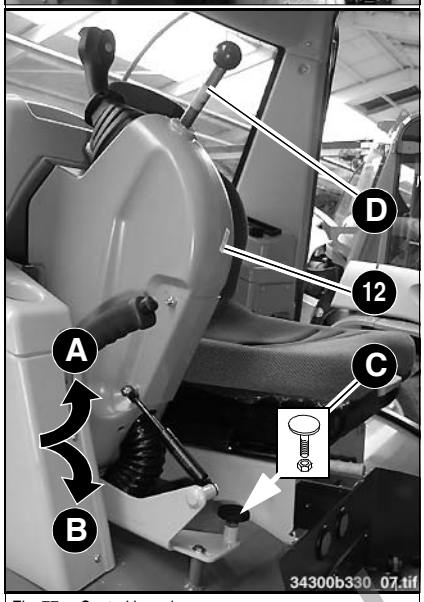


Fig. 77: Control lever base

The cab door on the right can be used as an entry and exit.

☞ *Do the following before entering or exiting the cab:*

- Stop and secure the machine – *see Parking the machine* on page 60.
- Lower the loader unit.
- Apply the parking brake.
- Turn off the engine.
- Remove the ignition key.
- Move control lever **10** (joystick) back and forth several times – *see Lowering the loader unit with the engine turned off* on page 80.
- Secure control lever **10** (joystick) – *see Control lever lock (joystick)* on page 78.

☞ *Raise control lever base **12** with handle **D** to position **A**.*

➥ The gas strut keeps the control lever base in the top position.

CAUTION!

*DO NOT use handle **D** on the control lever base as a support for your entrance or exit:*

☞ *Use the entrance handles in the cab.*

☞ *Fold control lever base **12** downwards to position **B** after you are in the cab.*

➥ The gas strut keeps the control lever base in the lower position.

NOTE:

The control lever base height can be set with stop bolt **C**.

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