

DL SERIES **Dynalift**[®]

GEHL

Form No.
913287
Revision B
August 2008

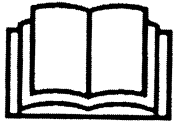
DL7/DL9/DL11/DL12

Telescopic Handlers



Operator's Manual

Indicator and Operation Symbols



Read Operator's Manual



Parking Brake



Horn



Engine Start



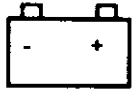
Ignition Switch ON



Safety



Fasten Seat Belt



Battery



Fuse



Engine Air Filter



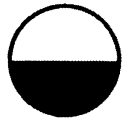
Engine Stop



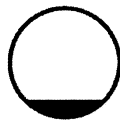
Hazard Flasher



Volume Full



Volume Half Full



Volume Empty



Diesel Fuel



Fuel Low



Head Lights



Transmission Temperature



Hydraulic Oil Filter



Starting Aid Injection



Engine Oil Pressure



Fan



Work Lights



Clutch Engaged



Clutch Disengaged



Low Accumulator Pressure



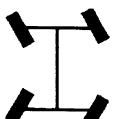
Wiper/Washer



Heater



Beacon



4-Wheel Steer



Raise Load



Tilt Rearward



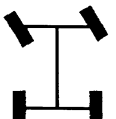
Retract Load



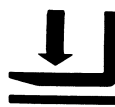
Air Conditioning



Turn Signal



Front Wheel Steer



Lower Load



Tilt Forward



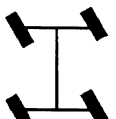
Extend Load



REAR
Rear Wheels
Alignment



Hourmeter



Crab Steer



Frame Level



Outriggers Down



Outriggers Up



Outrigger
(RH Shown)



Engine Coolant
Temperature

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IDENTIFICATION INFORMATION

Write your Gehl Dynalift® Telescopic Handler Model and Serial Numbers below.
Refer to these numbers when inquiring about parts or service from your Gehl dealer.

MODEL NO. DL
SERIAL NO. _____
GEHL® WEST BEND, WI 53095 U.S.A.

The model and serial numbers for this machine are on a decal located inside the operator's station.

Chapter 1

INTRODUCTION

The information in this Operator's Manual was written to give the owner/operator assistance in preparing, adjusting, maintaining and servicing of the Telescopic Handler. More important, this manual provides an operating plan for safe and proper use of the machine. Major points of safe operation are detailed in the **SAFETY** chapter of this manual.

GEHL Company asks that you read and understand the contents of this manual COMPLETELY, and become familiar with the machine before operating it.

This Telescopic Handler is primarily intended for use as a material handler. However, it may be equipped with an optional system: the Personnel Work Platform (PWP) System, which is intended for use when lifting personnel. When there is no other practical option available, this machine, when equipped with the PWP System, is approved for use to lift personnel, but only with an approved work platform, with the PWP System activated, and in full compliance with the "Mandatory Work Platform Safety Rules" (see SAFETY chapter).

The use of this Telescopic Handler is subject to certain hazards that cannot be eliminated by mechanical means, but only by the exercise of intelligence, care and common sense. It is therefore essential to have competent and careful operators, who are not physically or mentally impaired, and who are thoroughly trained in the safe operation of the equipment and the handling of the loads.

Throughout this manual information is provided that is set in *italic* type and introduced by the word **IMPORTANT** or **NOTE**. Be sure to read carefully and comply with the message or directive given. Following this information will improve operating and maintenance efficiency, help to avoid breakdowns and damage, and extend the machine's life. A chart of standard hardware torques is located in the back of this manual.

A storage pocket in the back of the seat is provided for storing the Operator's Manual. After using the manual, please return it to the pocket and keep it with the unit at all times! 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 Service Department 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 a position sitting on the seat and facing forward.

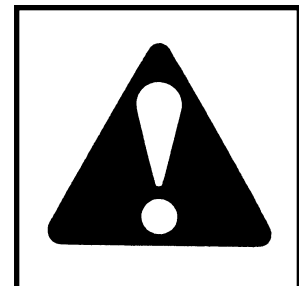
The wide GEHL dealership network stands ready to provide any assistance that may be required, including genuine GEHL service parts. All parts should be obtained from or ordered through your GEHL dealer. Give complete information about the part and include the model and serial number of the machine. Record the serial number in the space provided on the previous page, as a handy record for quick reference.

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.

GEHL Company, in cooperation with the Society of Automotive Engineers, has adopted this

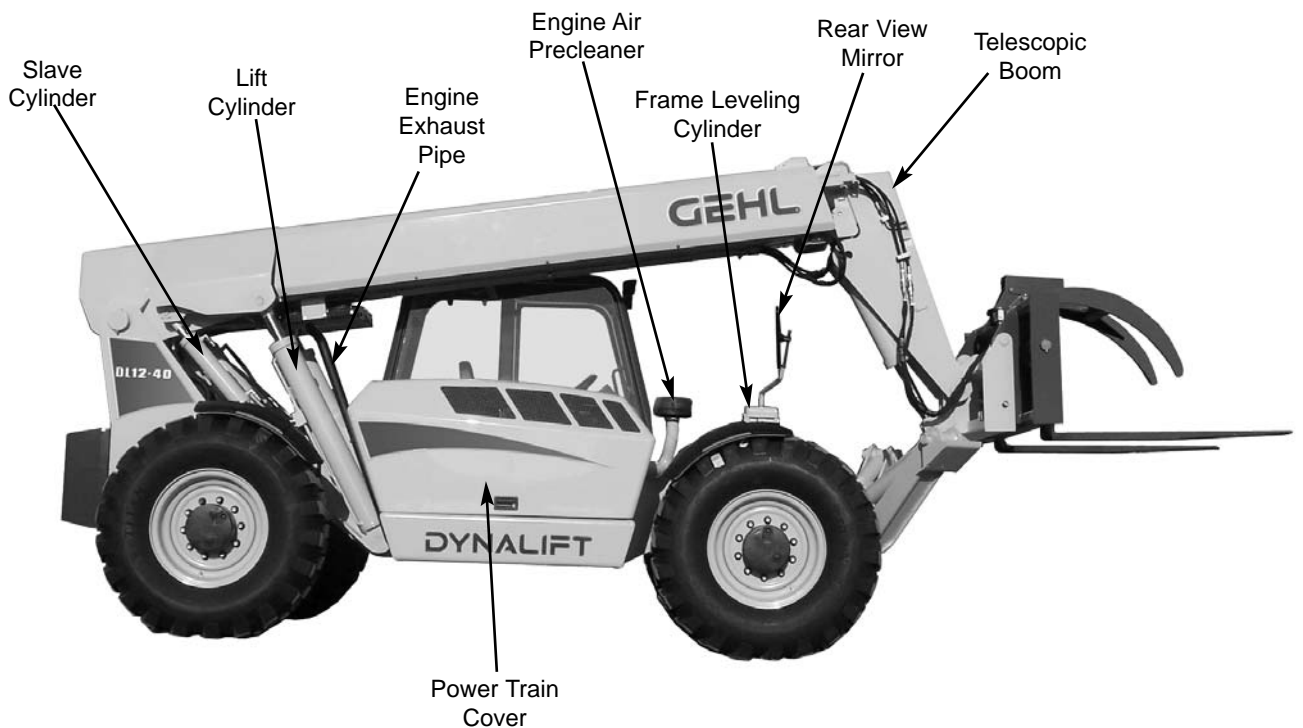
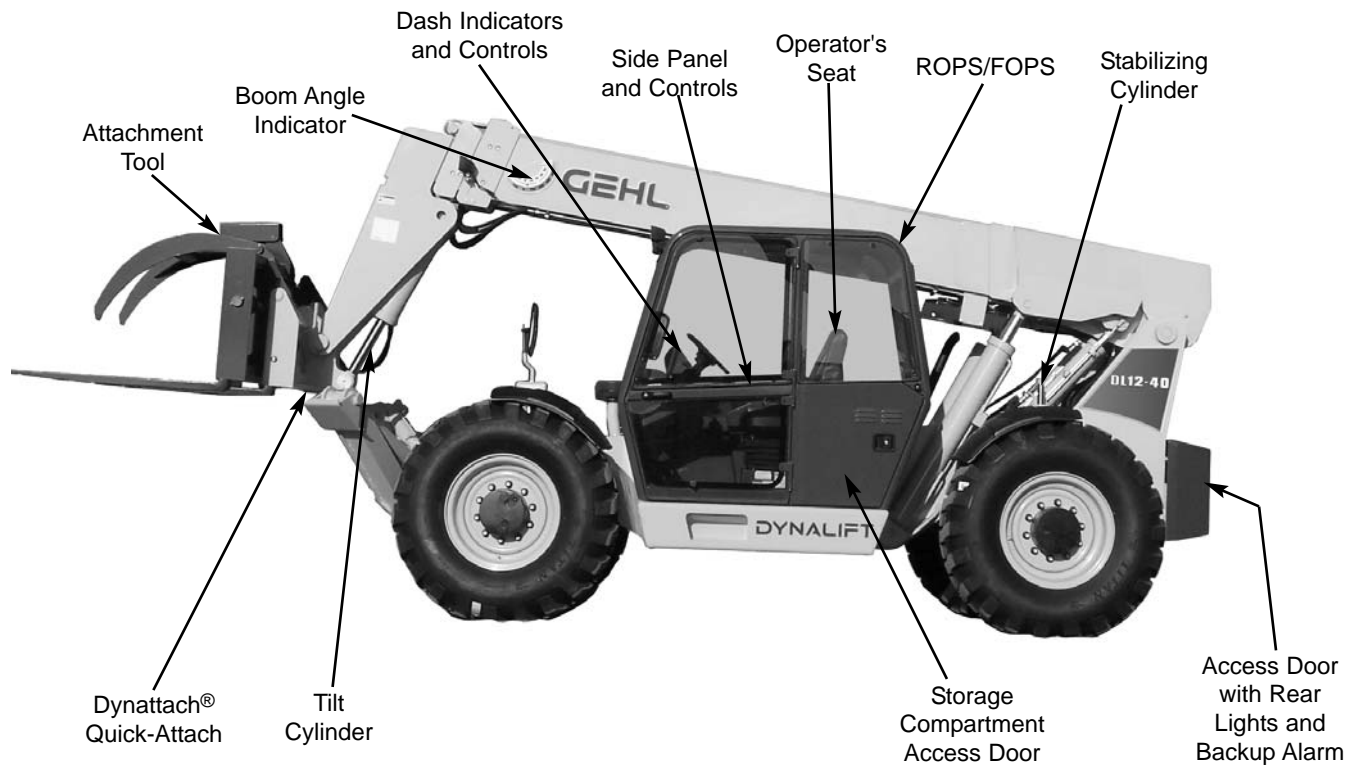
Safety Alert Symbol

to identify potential safety hazards, which, if not properly avoided, could result in injury. When you see this symbol in this manual or on the machine itself, you are reminded to BE ALERT! Your personal safety is involved!



Identification

(DL12-40 Shown)



Chapter 2

SPECIFICATIONS

Lifting Performance

Maximum lift capacity:

DL7-44:	7000 lbs. (3175 kg)
DL9-44:	9000 lbs. (4080 kg)
DL11-44:	11000 lbs. (4990 kg)
DL11-55:	11000 lbs. (4990 kg)
DL12-40:	12000 lbs. (5443 kg)

Maximum lift height:

DL7-44:	44'-4" (13.5 m)
DL9-44:	44'-4" (13.5 m)
DL11-44:	44'-4" (13.5 m)
DL11-55:	55'-5" (16.8 m)
DL11-55 (Low Boom):	55'-1" (16.8 m)
DL12-40:	40'-4" (12.3 m)

Capacity at maximum lift height:

DL7-44:	6000 lbs. (2721 kg)
DL9-44:	7000 lbs. (3171 kg)
DL11-44:	8000 lbs. (3629 kg)
DL11-55 (Outriggers up):	5000 lbs. (2267 kg)
DL11-55 (Outriggers down):	5500 lbs. (2495 kg)
DL11-55 (Low Boom)	5000 lbs. (2267 kg)
Outriggers up:	5000 lbs. (2267 kg)
DL11-55 (Low Boom)	5000 lbs. (2267 kg)
Outriggers down:	5500 lbs. (2495 kg)
DL12-40:	10000 lbs. (4535 kg)

Forward reach at max. lift height:

DL7-44:	3'-4" (1016 mm)
DL9-44:	3'-4" (1016 mm)
DL11-44:	3'-4" (1016 mm)
DL11-55:	6'-7" (2007 mm)
DL11-55 (Low Boom):	5'-9" (1753 mm)
DL12-40:	2'-0" (610 mm)

Reach below grade:

DL7-44:	2'-0" (610 mm)
DL9-44:	2'-0" (610 mm)
DL11-44:	2'-0" (610 mm)
DL11-55:	2'-10" (864 mm)
DL11-55 (Low Boom):	2'-2" (660 mm)
DL12-40:	1'-4" (406 mm)

Frame leveling:

10° left/10° right

Loader Performance

Breakout force:

DL7-44:	11000 lbs. (48.9 kN)
DL9-44:	12500 lbs. (55.6 kN)
DL11-44:	14000 lbs. (62.2 kN)
DL12-40:	14000 lbs. (62.2 kN)

Maximum dump height:

DL7-44:	42'-11" (13.1 m)
DL9-44:	42'-11" (13.1 m)
DL11-44:	42'-11" (13.1 m)
DL12-40:	39'-0" (11.9 m)

Maximum reach at max. dump height:

DL7-44:	2'-3" (686 mm)
DL9-44:	2'-3" (686 mm)
DL11-44:	2'-3" (686 mm)
DL12-40:	1'-2" (356 mm)

Dump angle at maximum dump height:

DL7-44, DL9-44, DL11-44,	
DL12-40:	24°

Maximum loadover height:

DL7-44:	44'-2" (13.5 m)
DL9-44:	44'-2" (13.5 m)
DL11-44:	44'-2" (13.5 m)
DL12-40:	40'-3" (12.3 m)

Dump height at 45° dump angle:

DL7-44:	34'-0" (10.4 m)
DL9-44:	34'-0" (10.4 m)
DL11-44:	34'-0" (10.4 m)
DL12-40:	30'-9" (9.4 m)

Maximum reach at 45° dump angle:

DL7-44:	14'-3" (4.3 m)
DL9-44:	14'-3" (4.3 m)
DL11-44:	14'-3" (4.3 m)
DL12-40:	11'-10" (3.6 m)

Rollback at ground level: 30°

Total bucket rotation: 132°

Parallel lift: Standard

General Dimensions

Based on standard machine equipped with listed tires, 48" (1.2 m) masonry carriage and 48" (1.2 m) pallet forks.

Recommended tire type:

DL7:	13.00x24 G2 12-ply
Inflate to	70 psi (480 kPa)
DL9, DL11, and DL12:	14.00x24 G2 12-ply
Inflate to	70 psi (480 kPa)

Overall length, less forks:

DL7-44:	20'-7" (6.3 m)
DL9-44:	20'-7" (6.3 m)
DL11-44:	20'-7" (6.3 m)
DL11-55:	20'-10" (6.3 m)
DL11-55 (Low Boom):	21'-2" (6.5 m)
DL12-40:	19'-4" (5.9 m)

Overall width:

DL7:	8'-1" (2.5 m)
DL9, DL11, DL12:	8'-3" (2.5 m)

Overall height:

DL7:	7'-10" (2.4 m)
DL9, DL11, DL12:	7'-11" (2.4 m)

Ground clearance: 16" (400 mm)

Wheel base: 10'-8" (3.3 m)

Outside turn radius: 12'-2" (3.7 m)

Machine weight:

DL7-44:	23250 lbs. (10546 kg)
DL9-44:	24650 lbs. (11181 kg)
DL11-44:	25400 lbs. (11521 kg)
DL11-55:	28460 lbs. (12909 kg)
DL11-55 (Low Boom):	28460 lbs. (12909 kg)
DL12-40:	25300 lbs. (11475 kg)

Instrumentation

Gauges: Fuel level, engine coolant temperature, engine oil pressure, voltage meter and hourmeter

Monitoring lights:

Oil pressure, coolant temperature, alternator, low fuel, air filter restriction, hydraulic filter restriction, transmission temperature, accumulator charge pressure

Monitoring alarms:

Low accumulator charge

Visual indicators:

Boom angle, boom extension, frame angle

Steering System

Steer valve: Fixed displacement rotary

Displacement/Rev: 20 cu. in. (328 cc)

System pressure: 2500 psi (172 bar)

Steer cylinders: 1 per axle

Steer mode valve:

3-position, 4-way solenoid, dash-mounted switch actuation.

Steer modes: 2-wheel, 4-wheel, crab

Outside turn radius: 12'-2" (3.7 m)

Braking System

Service brakes:

Oil-immersed disc-type,
hydraulic fluid type,
manual foot pedal actuation.

Parking brake:

Spring-applied, hydraulic-release
disc-type on front axle.
Actuation is electric switch with
engine running, automatic with
engine shutdown.

Electrical System

Type: 12-volt DC, negative ground

Alternator: 65A

Battery: 4DLT group,
900 cold-cranking amps

Circuit protection: Fuse panel

Backup alarm: 107 dB(A)

Horn: 111 dB(A)

Standard on all models:

Brake lights, neutral start switch,
master disconnect switch

Service Capacities

Cooling System:

20 qts. (18.9 L)

50/50 mixture

Anti-freeze protection: -34°F (-37°C)

Pressure cap: 16 psi (110 kPa)

Fuel tank: 30 gal. (114 L)

Hydraulic tank and
system: 45 gal. (170 L)

Transmission and cooler: 16 qts. (15 L)

Transfer case: 3 qts. (2.8 L)

Axles: 26.48M

Differentials: 14.8 qts. (14 L)

Hubs: 1.8 qts. (1.7 L)

Transmission

Type: Clark Powershift T16000

Speeds: 4 fwd / 2 rev

Torque converter:

Single-stage, dual-phase

Travel speeds, DL7:

1st gear: 3.2 mph (5.2 km/h)

2nd gear: 6.0 mph (9.7 km/h)

3rd gear: 12.1 mph (19.5 km/h)

4th gear: 22.0 mph (35.4 km/h)

Travel speeds, DL9, DL11, and DL12:

1st gear: 3.3 mph (5.4 km/h)

2nd gear: 6.3 mph (10.2 km/h)

3rd gear: 12.7 mph (20.4 km/h)

4th gear: 22.8 mph (36.7 km/h)

Axles (front and rear)

Type: Carraro

26.48M

Drive/steer, open differential, double
reduction planetary, full-time four
wheel drive

Overall ratio: 23.04:1

Drive Train

Transfer case: Durst with 1.063:1 ratio
and Lord vibration damper

Engine

Turbocharged aspiration:

John Deere 4045T

276 cu. in. (4.5 L) displacement,

115 hp (86 kW) @ 2500 rpm

Oil capacity: 15.5 qts. (14.7 L)

In-line 4-cylinder, 4-cycle,
direct injection diesel fuel system,
in-line fuel filter w/water trap,
positive pressure lubrication,
liquid pressurized cooling system,
dry dual-element air cleaner,
spin-on oil filter.

Hydraulic System

Type: Open-center

Pump: Dual-section gear type

Displacement / revolution:

Front: 1.77 cu. in. (29 cc)

Rear: 2.19 cu. in. (36 cc)

Flow @ 2500 RPM:

Front: 19 gpm (72 L/min)

Rear: 24 gpm (90 L/min)

Main relief pressure: 3000 psi (207 bar)

Aux. relief pressure: 2500 psi (172 bar)

Main control valve:

Parallel, 3-spool sectional,
remote hydraulic actuation

Frame level control valve:

Solenoid type w/ remote switch
actuation

Auxiliary control valve:

Parallel, 1-spool sectional,
remote hydraulic actuation with
joystick switch

Hydraulic filter:

Remote return type, 15-micron
media, replaceable element.
Rated flow: 70 gpm (265 L/min)
Rated pressure: 800 psi (55 bar)
By-pass pressure (full flow):
45 psi (310 kPa)

Hydraulic strainer:

In-tank suction, 149-micron media,
replaceable element.
Rated flow: 50 gpm (189 L/min)
By-pass pressure: 3 psi (20 kPa)

Operator's Station

Rollover Protective Structure (ROPS)

ISO 3471-1994

Falling Object Protective Structure
(FOPS)

Meets ANSI/ITSDF B56.6-2005,

Sec 8.16

ISO 3449-2005

Seatbelt:

Meets SAE J386

Chapter 3

CHECKLISTS

PRE-DELIVERY

The following Checklist is an important reminder of the inspections that **MUST** be made before delivering the Telescopic Handler to the customer. Check off each item after the prescribed action is taken.

✓ Check that:

- NO parts of machine have been damaged in shipment. Check for such things as dents and loose or missing parts; correct or replace components as required.
- Battery is securely mounted and not cracked. Cable connections are tight. Electrolyte at proper level.
- Cylinders, hoses and fittings are not damaged, leaking or loosely secured.
- Oil, fuel and air filters are not damaged, leaking or loosely secured.
- All grease fittings have been properly lubricated and no fittings are missing; see Lubrication chapter of this manual.
- Wheel nuts are torqued to 450 ft.-lbs. (610 Nm).
- Tires are inflated to 70 psi (480 kPa) cold.
- Hydraulic system reservoir, engine crankcase, engine coolant, transfer case, transmission and axles are filled to the proper operating fluid levels.
- All adjustments have been made to comply with the settings in this manual and in the separate engine manual.
- All guards, shields and decals are in place and securely attached.
- Model and serial number for this unit is recorded in space provided on this page and page 1.

Start the machine and test-run the unit while checking that proper operation is exhibited by all controls.

✓ Check that:

- All indicators (lamps, switches, etc.) function properly.
- All hand and foot controls operate properly.
- The PWP System operates properly (if equipped). Refer to Service and Storage chapter for the procedure to check the PWP System.
- Boom, Dynattach® or DynacARRIER® with attachment tool and frame level control all function properly.
- No hydraulic system leaks when under pressure.
- Listen for abnormal noises or vibrations; if detected, determine their cause and repair as necessary.

I acknowledge that the pre-delivery procedures were performed on this unit as outlined above.

Dealership's Name

Dealer Representative's Name

Date Checklist Filled Out

Machine Model No. Machine Serial No. Engine Serial No.

DELIVERY

✓ Check that:

The following Checklist is a reminder of the important information that **MUST** be passed on to the customer at the time the unit is delivered. Check off each item as it is explained to the customer.

- Review with the customer the contents of this manual and the AEM Safety Manual and for the following:
 - The Index at the back, for quickly locating topics;
 - The Safety, Indicators and Controls, and Operation and Adjustments chapters for information regarding safe use of the machine.
 - The Lubrication and Service and Storage chapters for information regarding proper maintenance of the machine. Explain that regular lubrication and maintenance are required for continued safe operation and long life.
 - Give this Operator's Manual and the AEM Safety Manual to the customer and instruct them to be sure to read and completely understand their contents before operating the unit.
 - Remind the customer of U.S. OSHA regulation 1910.178 (I), which specifies operator training requirements.
 - Explain that the customer **MUST** consult the engine manual (provided) for related specifications, operating adjustments and maintenance instructions.
 - Completely fill out the Owner's Registration, including customer's signature, and return it to the Company.
 - Explain that a copy of the warranty is included on the inside back cover of this Operator's Manual.

Customer's Signature

Date Delivered

(Pages 7 & 8 - have been removed at perforation)

Chapter 3

CHECKLISTS

PRE-DELIVERY

The following Checklist is an important reminder of the inspections that **MUST** be made before delivering the Telescopic Handler to the customer. Check off each item after the prescribed action is taken.

✓ Check that:

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Dealership's Name

Dealer Representative's Name

Date Checklist Filled Out

Machine Model No. Machine Serial No. Engine Serial No.

DELIVERY

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 - Explain that a copy of the warranty is included on the inside back cover of this Operator's Manual.

Customer's Signature

Date Delivered

(Dealer's File Copy - Remove at Perforation)

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(To be removed as Dealer's file copy)

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