International Symbols

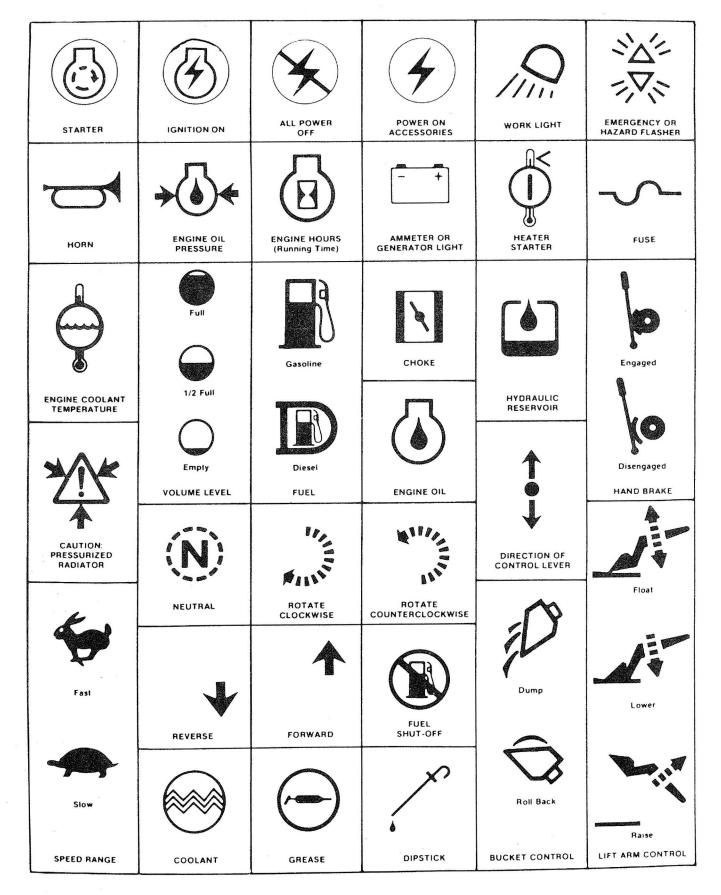


TABLE OF CONTENTS

SECTION 1 INTRODUCTION 1 Torque Values 3 Abbreviations 3	Control Rods	2-3
Abbroviations	Hand Throttle Adjustment	3
SECTION 2 SPECIFICATIONS 4	Throttle Cable Adjustment	3
General	Throttle Cable	-3!
Engine	Throttle Handle Assembly and	,
•	Throttle Rod	-36
SECTION 3 SAFETY 5-6	Drive Chains	
	Adjustment	36
SECTION 4 DECALS 7	Removal	
General Information	Installation	
New Decal Application	Axle and Sprocket	37
Decal Locations	Removal	-38
General Information		38
New Decal Application 7C	Axle and Wheel Bearings	39
		39
SECTION 5 LUBRICATION 9	Assembly	
General Information	Idler Sprockets and Bearings	
Oils	Removal	
Chaincases	Installation	4(
Engine Crankcase 9		
Hydraulic Oil Reservoir 9	SECTION 8 HYDROSTATIC SYSTEM	
Planetary Gearcase	Introduction	
Greasing	Neutral	
Engine Oil Viscosity Index 9	Forward	
Hydrostatic Oil Viscosity Index 9	Reverse	
	, 0 , , , , , , , , , , , , , , , ,	
SECTION 6 CHASSIS	Troubleshooting	
Description	Hydrostatic Testing	
General Information	Drive Motor	
Overhead Guard	Charge Pressure	
In-Seat Safety Switch-Before S.N. 2651 13	Service	40
In-Seat Safety Switch-After S.N. 2650 13	Tandem Pump	-00
Seat	Tandem Pump-Valve Block 54-	
1.00.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	Pump Drive Coupling	SC
Lift Arm Assembly	mydrostatic Drive Motor 50-	-00
Floor Plate	SECTION 9 HYDRAULIC SYSTEM	61
Bottom Covers	Introduction	
Consoles	Cylinders	62
Access Cover	Hydraulic Hoses and Tubing	62
Fuel Tank	Electrical Components	62
1 doi 1 din	Troubleshooting 63-	
SECTION 7 DRIVE		
Brakes	Control Valve Relief Pressure	
Disc Brake Adjustment	Lift and Tilt System Pump	
Brake Pad Replacement	Tilt Cylinders	65
Brake Cables	Lift Cylinders	66
Traction Drive T-Bar	Service	
Neutral Adjustment	Tilt Cylinders	
Servo Adjustment	•	67
Take-Up Rods	Lift and Tilt Cylinders Breakdown 68-	
Control Rods	Lift and Tilt System Gear Pump 69-	
Pivot Shaft and Torsion Tube 29-20	Servos	
T-Bar Assembly	Seal Kit Installation	
Lift/Tilt T-Bar	Hydraulic Oil Filter	
Control Linkage Adjustment	Hydraulic Oil Strainer	75
- · · · · · · · · · · · · · · · · · · ·	-	

SECTION 10 ELECTRICAL SYSTEM 91 Troubleshooting 91-92 SECTION 11 ENGINE 93 Introduction 93 Ordering Engine Parts 93 Troubleshooting 94-95 Service 96 Engine Oil Filter 96 Air Cleaner 96-97 Air Cleaner Element 97 Battery 97 Starter 98 Engine Exhaust Assembly 98-99 Fan Belt Adjustment 99-100 Radiator and Oil Cooler 100-102 Engine 102-104 Torque Specifications for Standard Machine Hardware 104-105	Self Leveling Valve75-79Differential Relief Valve79Planetary Gearcase79-83Solenoid Valve83Control Valve83-87Auxiliary Hydraulic Tubes88Auxiliary Hydraulic Control Cables89	
Introduction 93 Ordering Engine Parts 93 Troubleshooting 94-95 Service 96 Engine Oil Filter 96 Air Cleaner 96-97 Air Cleaner Element 97 Battery 97 Starter 98 Engine Exhaust Assembly 98-99 Fan Belt Adjustment 99-100 Radiator and Oil Cooler 100-102 Engine 102-104 Torque Specifications for Standard		
	Introduction 93 Ordering Engine Parts 93 Troubleshooting 94-95 Service 96 Engine Oil Filter 96 Air Cleaner 96-97 Air Cleaner Element 97 Battery 97 Starter 98 Engine Exhaust Assembly 98-99 Fan Belt Adjustment 99-100 Radiator and Oil Cooler 100-102 Engine 102-104 Torque Specifications for Standard	

SECTION 1

INTRODUCTION

This service manual covers the SL6620 and SL6625 Skid Loaders. The latest factory service information has been compiled by our Service and Engineering personnel to give you the best Service Information available. Follow all procedures carefully to avoid unnecessary delays and damage to any part of the Loader. Where procedures are given step by step, please follow them in order.

The Hydraulic System and the Engine are the two most critical systems of the Skid Loader, from a service stand-point. When any service is performed on the Hydraulic System, always clean the Hydraulic Components and Fittings before disconnecting any Hydraulic Lines, since contamination is the greatest cause of failure. For Engine repairs, consult your 200 Series Perkins Workshop Manual.

The Model Number and Serial Number are located on a Decal inside the Right Chassis Riser, above the Lift Cylinder Pivot.

"Right" and "Left" are determined from position on the Seat facing forward. From this position the Traction Control T-bar is on the "Left" and the Lift/Tilt Control T-bar is on the "Right".

The Perkins 4.154 Diesel Engine is used in the SL6620 and SL6625. The Engine Number is stamped on a machined pad on the right side of the Cylinder Block just above the Fuel Injection Pump. A typical Engine Number is GAB12345J.

TORQUE VALUES

The chart on the inside rear cover contains torque values for hardware used on this Loader. The grade of the Bolt can be identified by markings on the Bolt head. Most of the Bolts used are Grade 5. Use these torque values for all hardware except LN, TCS, TFS and SMS.

ABBREVIATIONS

AR - As Required AUX - Auxiliary BRKT - Bracket CB - Carriage Bolt CN - Castellated Nut

CS - Cap Screw (Hexagon Head)

DEG - Degree

FLN - Flanged Lock Nut FLS - Flanged Lock Screw I.D. - Inside Diameter

JIC - Joint Industry Conference

JN - Jam Nut L - Lock Washer LH - Left-Hand Thread

LN - Lock Nut LT - Left

- Nut

N

NA - Not Applicable
NF - National Fine Thread
NILN - Nylon Insert Lock Nut
NPT - National Pipe Thread
O.D. - Outside Diameter

P - Plain Washer

RGT - Right

RH - Right Hand Thread

RHMS - Round Head Machine Screw SHSS - Socket Head Set Screw

SL - Self-Locking

SMV - Slow Moving Vehicle

S/N - Serial Number Sq. - Square

SQHSS - Square Head Set Screw

T - Tooth

TCS - Thread-Cutting Screw TFS - Thread-Forming Screw

THD - Thread

THMS - Truss Head Machine Screw

WLS - Whiz-Lock Screw

The GEHL® Company and the Automotive Society Engineers have adopted this **SAFETY ALERT SYMBOL**



to pinpoint characteristics which, if **NOT** properly followed, can create a safety hazard. When you see this symbol in this manual or on the unit itself, you are reminded to **BE ALERT! YOUR SAFETY IS INVOLVED.**

SECTION 2

SPECIFICATIONS

All Dimensions are in inches (millimeters) unless otherwise noted.

GENERAL

GENERAL
Model & Description SL6620 and SL6625 Skid Loader SAE Operating Capacity*
Type A (Suffix A)
Dexron Automatic Transmission Fluid or equivalent all weather Hydraulic Fluid
Travel Speed 0-6.5 mph (0-11 kmk)
Drive
and Foot Accelerator Pedal
Controls Load Trak Side-mounted Lift/Tilt T-Bar
with Self-Leveling Lift Action
Load Trak Power Assisted Self-Centering
Side-mounted Traction T-Bar
Brakes Disc-type Hand-operated
(narking and emergency)
ROPS SAE Approved ROPS & FOPS,
Spring balanced with Self-Activating
Rollback Lock Safety Mechanism
Electrical System 12 Volt D.C. Wet Cell Battery
with 650 CCA, 12 Volt DC Starter
and 37 Ampere Alternator
Tire Size & Pressure
Standard
Flotation 12:00 x 16.5 6 ply - 50 to 55 PSI (385 kPa)
Electrical System 12 Volt DC Wet Cell Battery
with 650 CCA, 12 volt DC Starter and
37 Ampere Alternator
Overall Operation Height 154" (3912)
Overall Height with Operator Guard 82" (2083)

Ground Clearance
Overall Length
(w/17 cu. ft. Construction Bucket) 136" (3429)
Overall Length less Bucket 105" (2667)
Wheel Base
Dump Reach
Rollback at Ground
Dump Angle
Overall Width -
W/8.25 x 15 Tires
W/12:00 x 16.5 Tires

* Operating capacity rated with 72" (1829) Wide Construction Bucket, 12 x 16.5 Tires and a 175 lb. (79 kg) Operator, according to SAE J818.

ENGINE

Model & Description	4.154 Perkins,
	CID (.25 liter), Liquid-cooled,
	60 hp (44.7 kw) @ 3000 RPM
	8 N·m) Torque @ 2000 RPM
	der, 4 stroke indirect injection
Direction of Rotation	Clockwise from the Front
Compression Ratio	21:1
Cubic Capacity	153.9 in. (2.523 litres)
Stroke	4.0 in. (101.6 mm)
	3.5 in. (88.9 mm)
	0.012 in. (0.30 mm)
	30-60 lb. at maximum speed
and no	ormal operating temperatures
Crankcase Capacity 6.3	U.S. quarts (10.6 Imp. pints)
	(6.0 litres)
Cooling System Capacity	Approx. 12 qts.

Engine Oil Viscosity Index

Temperature in $F(C)$	10 (-12) & Above	Below 10 (-12)
Viscosity	30W,10W-30	10W,5W-20
(Type CC or SF)	or 10W-40	or 5W-30



SECTION 3 SAFETY



BEFORE YOU ATTEMPT TO OPERATE THIS EQUIPMENT, READ AND STUDY THE FOLLOWING SAFETY INFORMATION. IN ADDITION, MAKE SURE THAT EVERY INDIVIDUAL WHO OPERATES OR WORKS WITH THIS EQUIPMENT, IS FAMILIAR WITH THESE SAFETY PRECAUTIONS.

GEHL Company always takes the operator and his safety into consideration when designing machinery and Guards for protection against exposed moving parts. However, some areas cannot be guarded or shielded. In addition, the Operator's Manual and Decals on the machine itself warn you of further danger and should be read and observed closely.

The safety alert symbol above means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! It stresses an attitude of "HEADS UP" for safety and can be found throughout this Operator's Manual and on the Unit itself.

Remember: The careful operator is the best operator. Most accidents are caused by human error. Certain precautions must be observed to prevent the possibility of injury or damage.

Please read the rules listed below for safe operation **BEFORE** you operate this equipment.

Use of the word CAUTION, WARNING or DANGER herein and on the machine itself signals three degrees of hazard. CAUTION is used for general reminders of good safety practices or to direct attention to unsafe practices. WARNING is used to denote a specific potential hazard. DANGER is used to denote the most serious specific potential hazard.

NEVER operate Loader without wearing Seat Belt!

NEVER attempt to operate Loader unless Operator Secondary Restraint Bar is "lowered"!

MANDATORY SAFETY SHUTDOWN PROCEDURE

Work of any type on machinery is always more dangerous when the Machine is operating. BEFORE cleaning, adjusting, lubricating or servicing this Unit, the following MANDATORY SAFETY SHUTDOWN PROCEDURE should ALWAYS be followed:

- 1. Move the Propulsion Control T-bar to the "neutral" position.
- Lower the Lift Arms completely and roll the Attachment (Bucket or Fork) forward so that the front edge is in contact with the ground.
- 3. Engage the Hand Brake.
- Move the Throttle to the slow idle position, shut the Engine off and remove the Ignition Key.
- If the Lift Arms MUST be left in the "raised" position. BE SURE to properly engage the Mechanical Lift Cylinder Lock instead of performing Step 2.

GEHL Skid Loaders are designed and intended to be used ONLY with a mounted GEHL Company Attachment (Bucket or Fork), or with an approved (by GEHL) Accessory Attachment! The GEHL Company will NOT be responsible for operator safety if used with an unapproved Attachment!

Some photographs, used herein, may show Door(s), Guard(s) or Shield(s) open or removed for illustration purposes ONLY! BE SURE that all Door(s), guard(s) or Shield(s) are in their proper position(s) and securely attached BEFORE operating the Loader!

Read and observe ALL Safety Information and Decals on the Loader BEFORE operating the Unit. In addition, familiarize yourself with ALL of the Safety Devices and periodically check that they are functioning properly!

The stability of a Skid Loader is determined by its desirable, but short, wheel base. Any or all of the following elements: the terrain, the Engine speed, the load being carried or dumped, and/ or abrupt T-Bar movements, can affect stability! IF MISUSED, ANY OF THE ABOVE FACTORS CAN CAUSE THE LOADER TO TIP, THROWING YOU FORWARD OR OUT OF THE UNIT, CAUSING DEATH OR SERIOUS BODILY INJURY! Therefore, ALWAYS have the Secondary Operator Restraint Bar "lowered" and wear the Seat Belt! Operate the Control T-Bars smoothly and gradually at an appropriate Engine speed which matches the operating conditions!