

SL4640 & (EU)
SL4640E & (EU)
SL4840 & (EU)
SL4840E & (EU)
SL5640 & (EU)
SL5640E & (EU)
SL6640 & (EU)
SL6640E & (EU)

GEHL®

Form No.
917000

Revision I
12/07

Skid-Steer Loaders



PARTS MANUAL

Introduction

For your safety and continued proper operation, use only genuine GEHL service parts. When ordering service parts, specify the correct part number, full description, quantity required, the unit model number and serial number.

The model and serial number decal for this unit is located on the left chassis upright. “Right” and “left” are determined from a position sitting on the seat and facing forward.

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

NOTE: *Purchase equivalent-quality tires for your loader. Contact your dealer for replacement tire information.*

NOTE: *Replacement batteries are not provided by the GEHL Company. For battery specifications see “Electrical - Chassis” chapter. ALL REPLACEMENT BATTERIES MUST BE PURCHASED LOCALLY.*

Refer to the abbreviations table located on this page for the various fastener descriptions. Standard attaching hardware torque values are also provided on the inside back cover. **If a part requires lubrication or a nonstandard torque value, it will be specified behind the part number description in parenthesis.**

Items shown in the parts list that do not have part numbers are shown for reference purposes only and are NOT available for purchase.

Dimensions are in inches unless otherwise specified.

NOTE: *The following abbreviations and symbols may be used herein:*

AMP	Ampere
AR	As Required
ASSY	Assembly
AUX	Auxiliary
CCA	Cold Cranking Amperage
CYL	Cylinder
DJS.	Dual Joystick
FRT	Front
FL	Flare
GA	Gauge
HEX	Hexagon
HF	High Flow
HYD	Hydraulics
JIC	Joint Industrial Council
JS	Joystick
kW	Kilowatt
LBS	Pounds
LT	Left
M (m)	Meter
MM (mm)	Millimeter
NA	Naturally-Aspirated
N/A	Not Applicable
NEG	Negative
NILN.	Nylon Insert Lock Nut
N•m	Newton Meter
NO	Number
NPT	National Pipe Thread
OPER	Operator
POS	Positive
PSI	Pounds per Square Inch
QTY	Quantity
REF	Reference
REQ'D.	Required
ROPS	Roll Over Protective Structure
RPM	Revolutions Per Minute
RT	Right
SAE	Society of Automotive Engineers
SN	Serial Number
SQ	Square
ST	Straight
TURBO	Turbocharged
V	Volt

TABLE OF CONTENTS

DESCRIPTION

PAGE

SECTION A: MAIN LOADER COMPONENTS

Chassis and Control Covers	1
Wheel Drives	13
Engine	19
Air Cleaner and Muffler	33
Coolers	49
Hydrostatic System - Drive Motors	57
Hydraulics - Chassis	81
Hydraulics - Lift Arm	91
Hydraulics - Auxiliary	101
Controls - Auxiliary Hydraulics	123
Controls - Lift and Tilt	127
Controls - Traction	139
Controls - Engine	159
Lift Arm.	169
All-Tach™ and Power-A-Tach™ Attachment Bracket	171
ROPS and Interior	177
Seat and Seat Belt Options	183
Restraint Bar	189
Grille and Engine Covers	191
Electrical - Chassis	193
Electrical - ROPS	201
Electrical - Lights	205
Ignition Switch (Earlier Models)	207
Electrical - Control	209
Sound Suppression	211
Tires.	217
Decals.	222

SECTION B: HYDRAULIC COMPONENTS

Lift Cylinder	233
Tilt Cylinder	235
Drive Motors - Single and Two-Speed	237
Tandem Pump	249
Gear Pump - Single	261
Gear Pump - Double	265
Self-Level Valve	269
Solenoids - Lift and Tilt	271
Solenoids - Brake	273
Main Control Valve.	275
Manifold - Hydraglide™ Ride Control	277
High-Flow Valve	279

TABLE OF CONTENTS

DESCRIPTION

PAGE

SECTION C: KITS AND ACCESSORIES

Back-up Alarm Kit 810404	283
Horn Kit 810401 <i>and the</i> Rearview Mirror Kit 806894	284
AM/FM Radio Kit 810429 (replaced by 810897 Radio Kit, see below)	285
Power-A-Tach™ Kit 810417 (46/4840) and 810418 (56/6640)	286
Front Door Kit 810412	287
Seat Belt Kits - 2" 810424 and 3" 810425	288
Seat Kits - Suspension 810422 and Standard 810423	288
Side Window Kit 810413	289
3-Point Restraint - 2" Seat Belt 810426 and 3" Seat Belt 810427	289
Pre-Cleaner Kit 808204 / 810909 <i>and the</i> Strobe Light Kit 805803	290
Counterweight Kit 810415 (SL46/4840) and 810416 (SL56/6640)	291
Crossmember Auxiliary Tube Kit 810469 (SL46/4840); 810470 (SL56/6640)	292
Cab Heater Kit 810414	293
Dual Flasher Kit 810421	294
Servo Bypass Plumbing Kit 187320 (4840) and 187317 (56/6640)	294
Impact-Resistant Front Door Kit 810561	295
Four-Point Lift Kit 810866 (replaced by 810945)	296
Remote Oil Filter Kit 810419	297
Single-Point Lift Kit 810834	298
Cab Heater Rework Kit 186935 - 810406 (Factory) or 810414 (Field) Heaters	299
Interior Console Kit 810494	299
Power-A-Tach™ Actuator Kit 810455	300
HVAC Kit 810471 (4840), 810472 (5640) and 810473 (6640)	301
Cab - HVAC Combination Kit Service Parts Assemblies	302
Cab Sound Suppression Kit 190785 (46/4840), 190787 (56/6640).	303
Cab Sound Suppression Kit 190786 (46/4840), 190788 (56/6640).	304
Dual Glow Upgrade Kit 189850	305
Remote Battery Terminal Kit 190759 <i>and the</i> Engine Block Heater Kit 808203	306
Backup Alarm Kit for Dual Joystick 810838 <i>and the</i> Cab Sound Suppression Kit 810776	307
Radio, AM-FM-WB Kit 810897 (replaces 810429)	308
Hydraulic Dampening Kit 810880	309
Four-Point Lift Kit 810945 (replaces 810866)	310
Hydraulic Power All-Tach™ Kit 810959 (46/4840), 810960 (5640) and 810961 (6640)	311
14-Pin Connector for Auxiliary Attachments Kit 811226	314
Other Available Accessories	315

SECTION D: SCHEMATICS

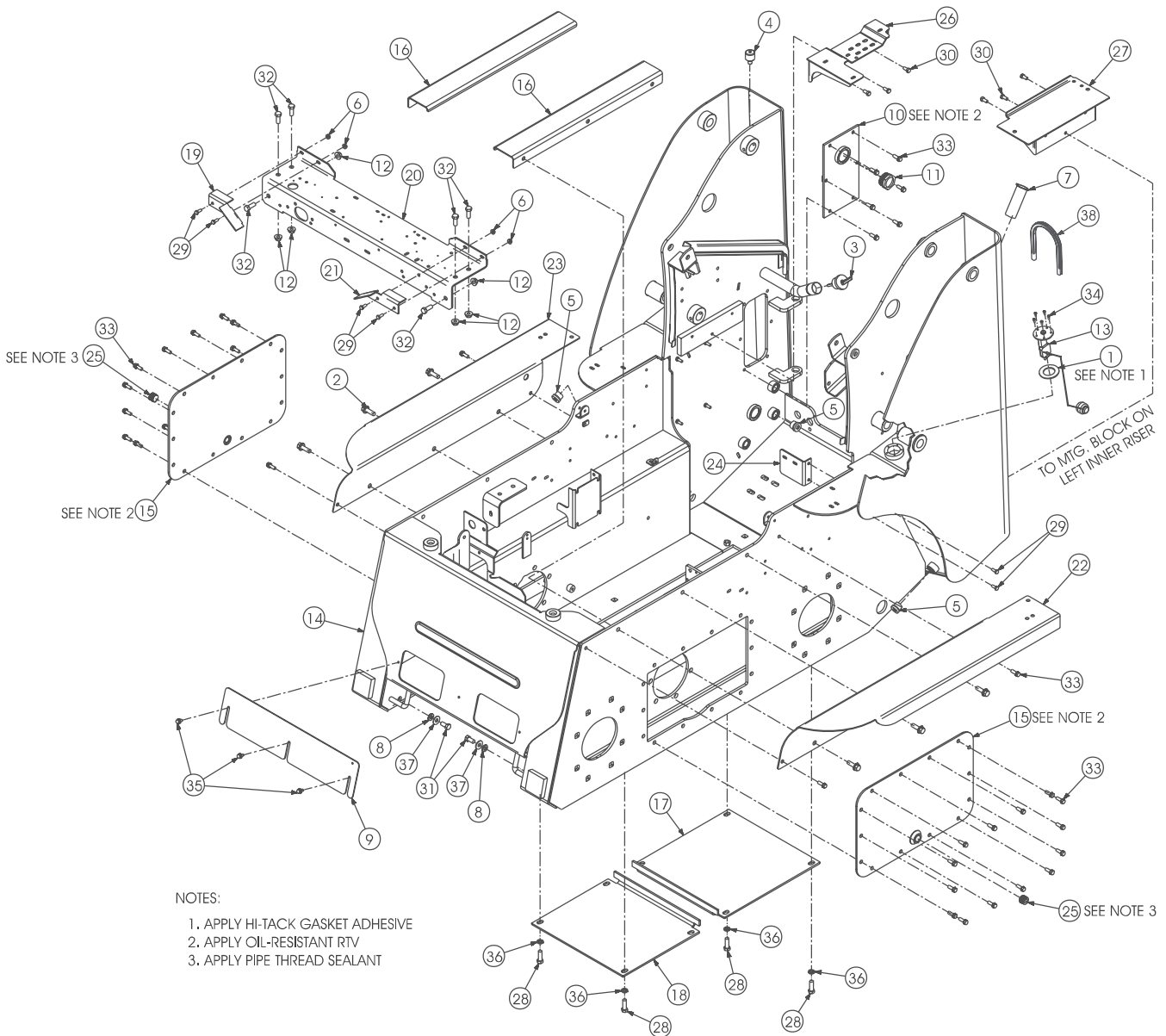
Hydrostatic/Hydraulic Schematic - Non-Dual Joystick Controls.	317
Hydrostatic/Hydraulic Schematic - Dual Joystick Controls	318
Electrical Schematics - ROPS and Chassis	319
Heater Schematic	323
HVAC Schematic	324
Electrical Auxiliary Hydraulics Schematic - Dual Joystick	325
Electrical Auxiliary Schematic - 14-Pin Connector.	326
Numerical Index	328
O-Ring Table, Coupling & Adapter Torque Table	345
Torque Specifications Table	Inside Back Cover

SECTION A: MAIN LOADER COMPONENTS

Chassis and Control Covers	1
Wheel Drives	13
Engine	19
Air Cleaner and Muffler	33
Coolers	49
Hydrostatic System - Drive Motors	57
Hydraulics - Chassis	81
Hydraulics - Lift Arm	91
Hydraulics - Auxiliary	101
Controls - Auxiliary Hydraulics	123
Controls - Lift and Tilt	127
Controls - Traction	139
Controls - Engine	159
Lift Arm	169
All-Tach™ and Power-A-Tach™ Attachment Bracket	171
ROPS and Interior.	177
Seat and Seat Belt Options	183
Restraint Bar	189
Grille and Engine Covers	191
Electrical - Chassis	193
Electrical - ROPS	201
Electrical - Lights	205
Ignition Switch (Earlier Models)	207
Electrical - Control	209
Sound Suppression	211
Tires	217
Decals	222

CHASSIS

4640 and 4840 Models



139567_139570

Ref. No.	Part No.	Description	Quantity 4640	Quantity 4840
1	072343	GASKET/FUEL SENDER	1	1
2	092164	SCREW/HEX 1/2 X 1-1/4	6	6
3	127342	CAP ASSEMBLY/FILLER	1	1
4	128591	BREATHER/RESERVOIR	1	1
5	131522	PLUG SAE12	3	3
6	131842	NUT/SPIRALLOCK™ 5/16	4	4
7	132050	STRAINER/FUEL FILL	1	1
	132051	CAP/FUEL FILL	1	1
	650702	SCREW/MACHINE PHILLIPS HEAD #6 X 3/8	2	2
8	132298	WASHER/SEAL	2	2
9	134345	COVER/TOEPLATE	1	1
10	134558	COVER ASSEMBLY/HYDRAULIC RESERVOIR	1	1
11	134756	SIGHT PORT/OIL LEVEL	1	1
12	134853	NUT/SPIRALLOCK™ 1/2	6	6
13	136013	SENSOR/FUEL	1	1
14	138289	CHASSIS 4640	1	-
	138334	CHASSIS 4840	-	1
15	138593	COVER/CHAINCASE	2	2
16	139501	FILLER/ROPS	2	2
17	139602	PLATE/FLOOR	1	1
18	140376	BELLYPAN/FRONT	1	-
	139743	BELLYPAN/FRONT	-	1
19	139971	COVER/SEAT UNDER RIGHT	1	1
20	139975	PLATE/CROSSMEMBER	1	1
21	139995	COVER/SEAT UNDER LEFT	1	1
22	140142	FENDER/LEFT	1	1
23	140143	FENDER/RIGHT	1	1
24	140752	BRACKET/SOLENOID	1	1
25	184670	PLUG/PIPE SQUARE SOCKET 3/4	2	2
26	189376b	WELDMENT/FILTER BRACKET	-	1
	187383a	WELDMENT/FILTER BRACKET	-	1
27	190560	TRAY ASSEMBLY/BATTERY	1	1
28	650569	SCREW/CAP 1/2 X 1-3/4	4	4
29	650486	SCREW/CAP 5/16 X 3/4	6	6
30	650488	SCREW/CAP 3/8 X 3/4	3	6
31	650494	SCREW/CAP 1/2 X 1	2	2
32	650495	SCREW/CAP 1/2 X 1-1/4	6	6
33	651042	SCREW/MACHINE HEX FLANGE 3/8 X 1	38	38
34	651312	SCREW/MACHINE PHILLIPS HEAD #10 X 1/2	5	5
35	651648d	SCREW/CAP THREAD FORMING 5/16 X 3/4	3	3
	651041c	SCREW/MACHINE HEX FLANGE 3/8 X 3/4	3	3
36	654030	WASHER/LOCK 1/2	4	4
37	654046	WASHER/FLAT 7/16	2	2
38	183916e	STRIP/TRIM	1	1

a) 4840: SN 408500 and Before

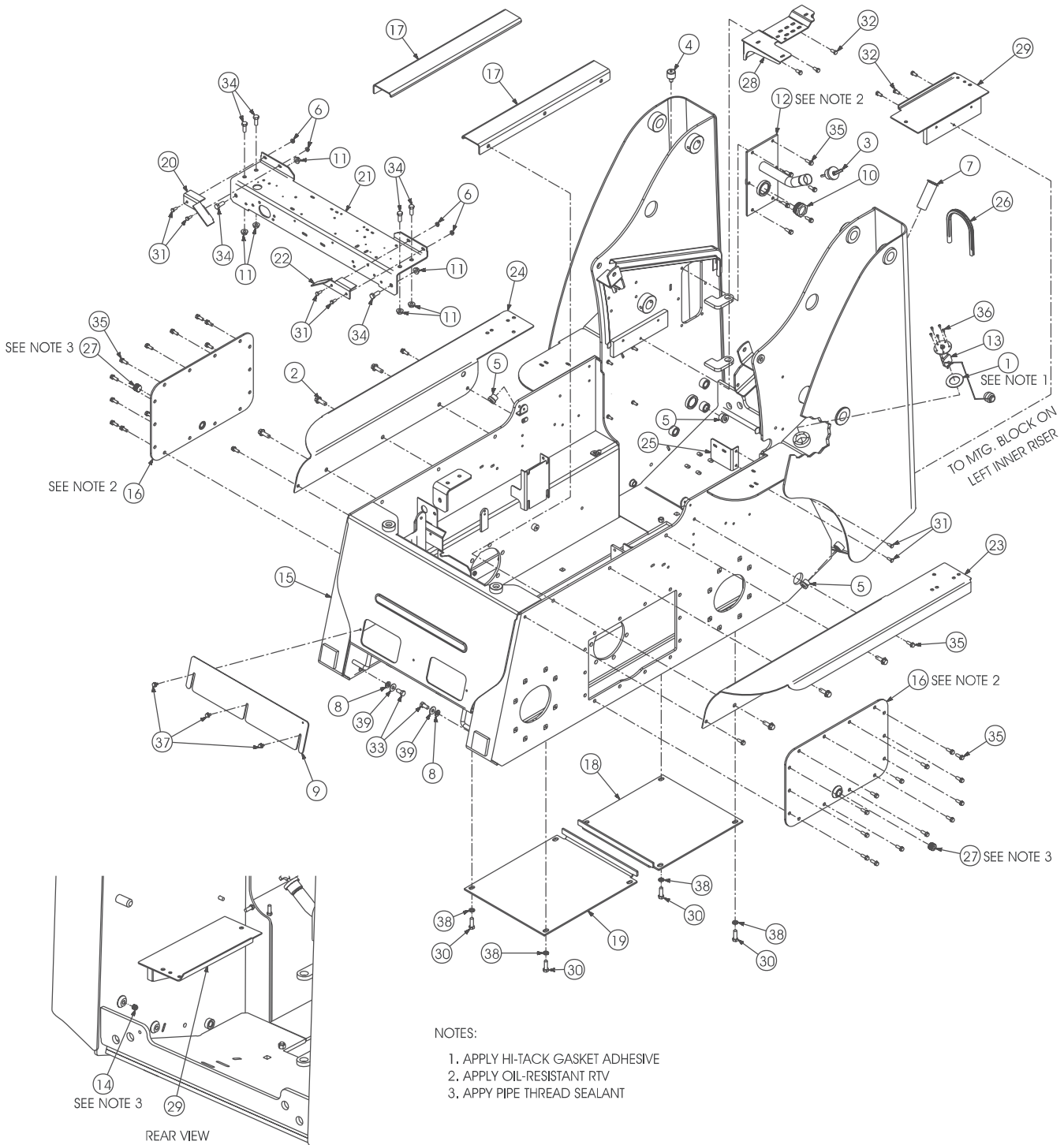
b) 4840: SN 408501 and Up

c) OLDER-STYLE PART NUMBER, CHECK YOUR SKID-STEER LOADER FOR CORRECT SCREW SIZE.

d) NEWER-STYLE PART NUMBER, CHECK YOUR SKID-STEER LOADER FOR CORRECT SCREW SIZE.

e) TRIM STRIP USED ON OLDER-STYLE SKID-STEER LOADERS.

5640 and 6640 Models



Ref. No.	Part No.	Description	Quantity 5640	Quantity 6640
1	072343	GASKET/FUEL SENDER	1	1
2	092164	SCREW/HEX 1/2 X 1-1/4	6	6
3	127342	CAP ASSEMBLY/FILLER	1	1
4	128591	BREATHER/RESERVOIR	1	1
5	131522	PLUG SAE12	3	3
6	131842	NUT/SPIRALLOCK™ 5/16	4	4
7	132050	STRAINER/FUEL FILL	1	1
	132051	CAP/FUEL FILL	1	1
	650702	SCREW/MACHINE PHILLIPS HEAD #6 X 3/8	2	2
8	132298	WASHER/SEAL	2	2
9	134345	COVER/TOEPLATE	1	1
10	134756	SIGHT PORT/OIL LEVEL	1	1
11	134853	NUT/SPIRALLOCK™ 1/2	6	6
12	135769	COVER ASSEMBLY/HYDRAULIC RESERVOIR	1	1
13	136013	SENSOR/FUEL	1	1
14	137907	PLUG/HEX SCREW 1/4	1	1
15	138386	CHASSIS 5640	1	-
	138355	CHASSIS 6640	-	1
16	138593	COVER/CHAINCASE	2	2
17	139501	FILLER/ROPS	2	2
18	139602	PLATE/FLOOR	1	1
19	139603	BELLYPAN/FRONT 5640	1	-
	139605	BELLYPAN/FRONT 6640	-	1
20	139971	COVER/SEAT UNDER RIGHT	1	1
21	139975	PLATE/CROSSMEMBER	1	1
22	139995	COVER/SEAT UNDER LEFT	1	1
23	140135	FENDER/LEFT	1	1
24	140136	FENDER/RIGHT	1	1
25	140752	BRACKET/SOLENOID	1	-
26	183916e	STRIP/TRIM	1	1
27	184670	PLUG/PIPE SQUARE SOCKET 3/4	2	2
28	189376b	WELDMENT/FILTER BRACKET	1	1
	187383a	WELDMENT/FILTER BRACKET	1	1
29	190560	TRAY ASSEMBLY/BATTERY	1	1
30	650569	SCREW/CAP 1/2 X 1-3/4	4	4
31	650486	SCREW/CAP 5/16 X 3/4	6	4
32	650488	SCREW/CAP 3/8 X 3/4	6	6
33	650494	SCREW/CAP 1/2 X 1	2	2
34	650495	SCREW/CAP 1/2 X 1-1/4	6	6
35	651042	SCREW/MACHINE HEX FLANGE 3/8 X 1	38	38
36	651312	SCREW/MACHINE PHILLIPS HEAD #10 X 1/2	5	5
37	651648d	SCREW/CAP THREAD FORMING 5/16 X 3/4	3	3
	651041c	SCREW/MACHINE HEX FLANGE 3/8 X 3/4	3	3
38	654030	WASHER/LOCK 1/2	4	4
39	654046	WASHER/FLAT 7/16	2	2

a) 5640: SN 506600 and Before. 6640: SN 605500 and Before

b) 5640: SN 506601 and Up. 6640: SN 605501 and Up

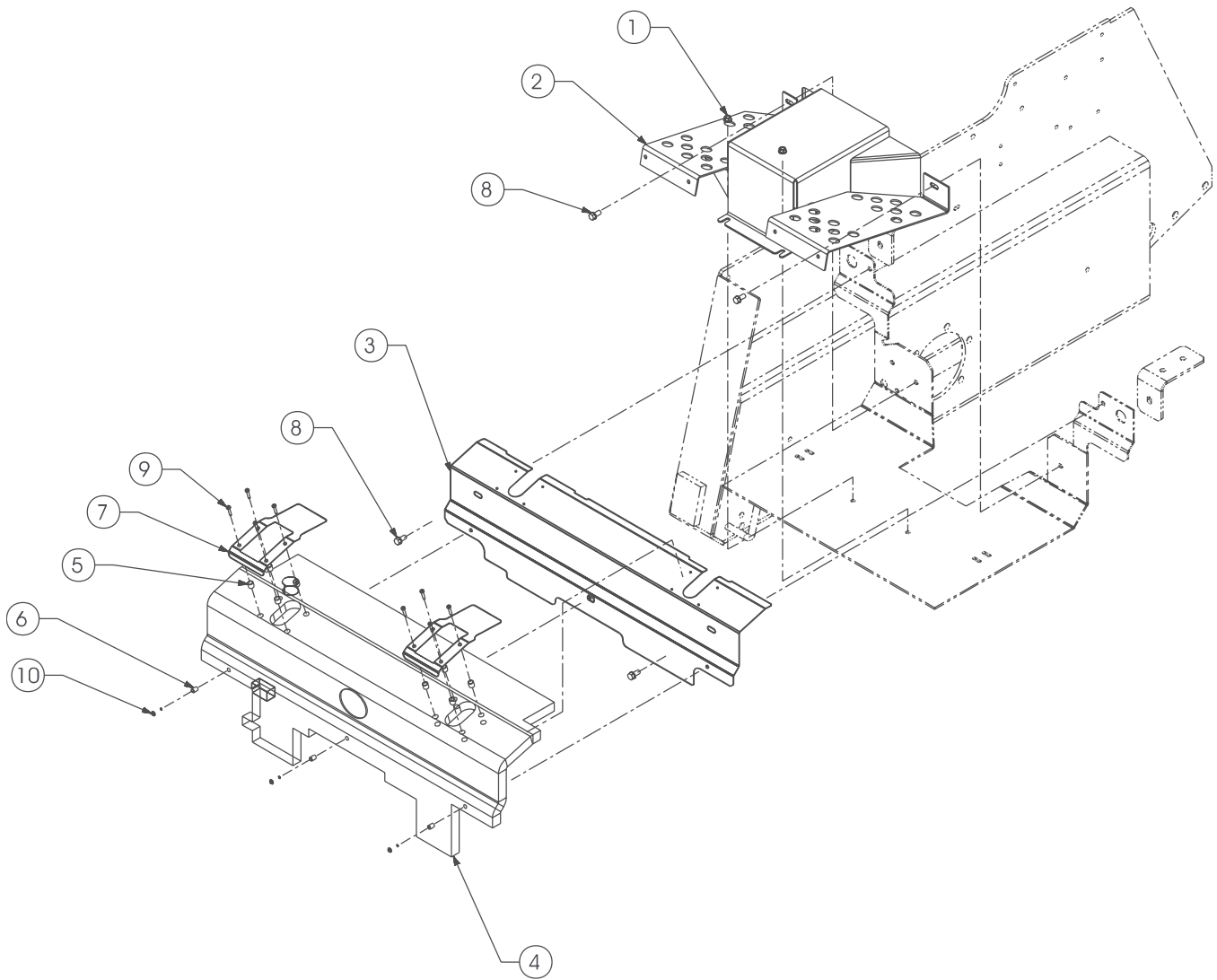
c) OLDER-STYLE PART NUMBER, CHECK YOUR SKID-STEER LOADER FOR CORRECT SCREW SIZE.

d) NEWER-STYLE PART NUMBER, CHECK YOUR SKID-STEER LOADER FOR CORRECT SCREW SIZE.

e) TRIM STRIP USED ON OLDER-STYLE SKID-STEER LOADERS.

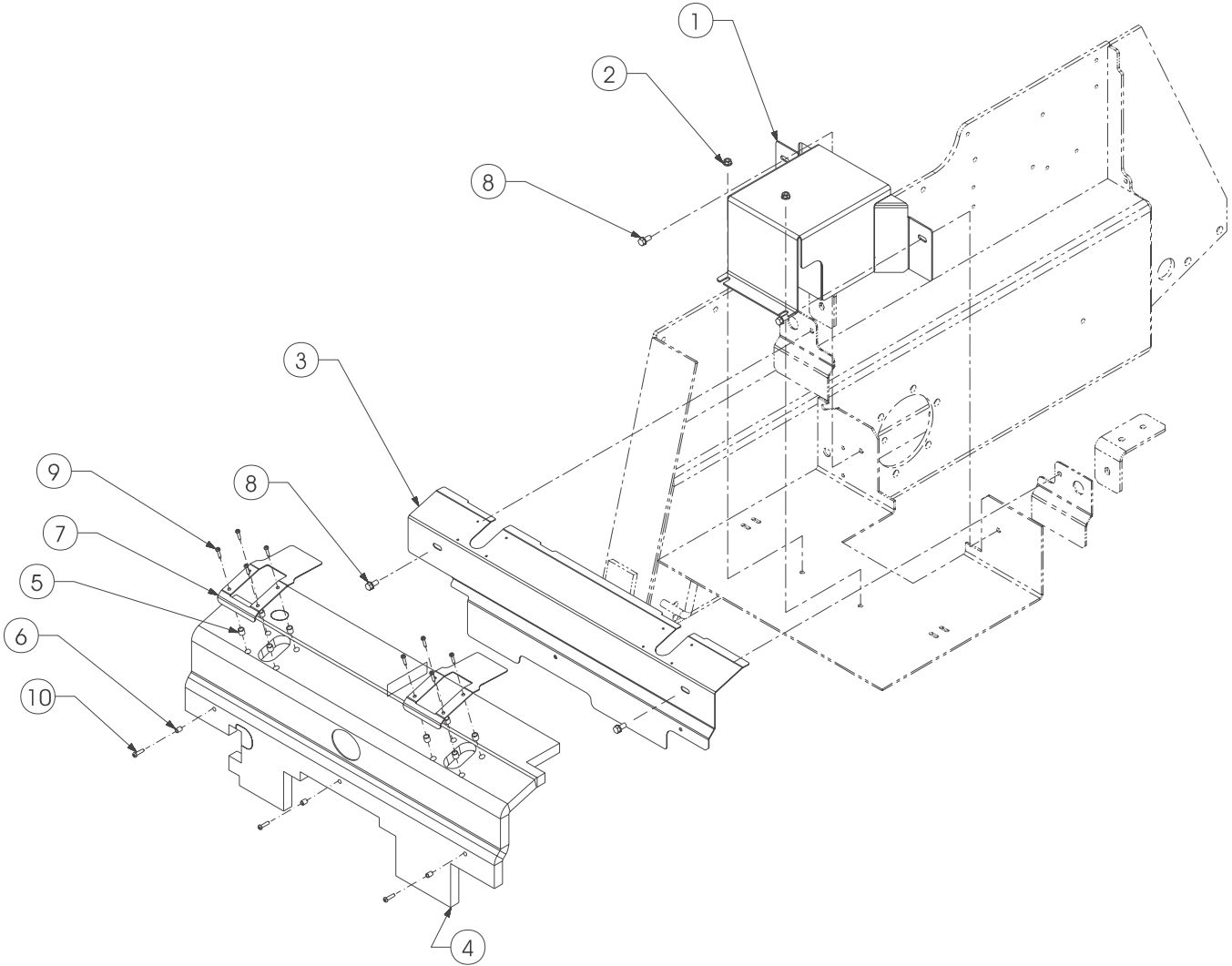
Spiralock is a trademark of H.D. Holmes, licensed to Detroit Tool Industries. License includes U.S. and foreign patent rights. Loctite is a registered trademark of the Loctite Corporation.

Covers - Hand Controls



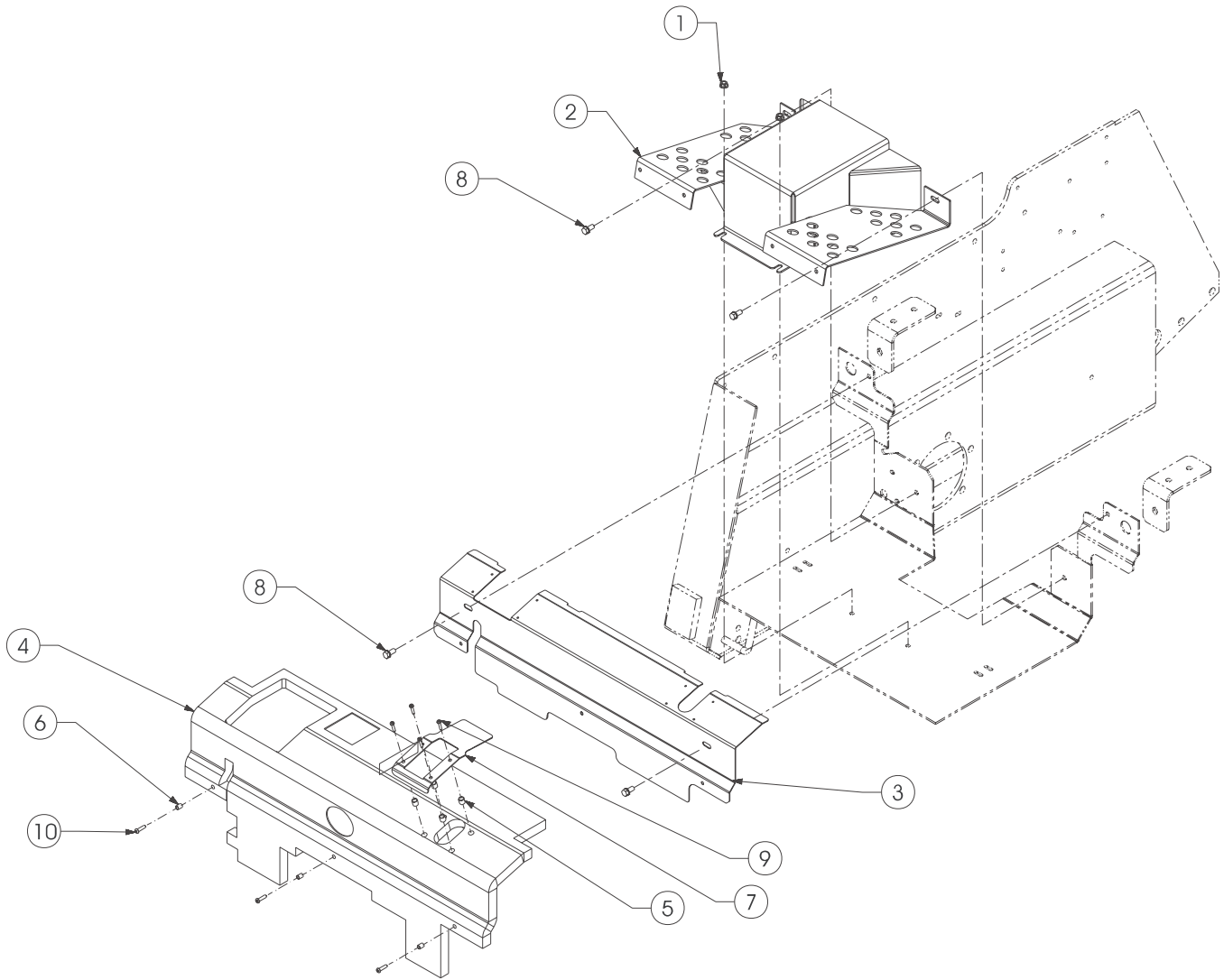
Ref. No.	Part No.	Description	Quantity 4640/4840	Quantity 5640/6640
1	134852	NUT/SPIRALOCK™ 3/8	2	2
2	135006	FLOOR ASSEMBLY/FRONT	1	-
	135947	FLOOR ASSEMBLY/FRONT	-	1
3	139629	COVER/CONTROL	1	1
4	190175	PAD/SOUND	1	-
	189633	PAD/SOUND	-	1
5	190203	SUPPORT/BOOT BEZEL	8	8
6	190400	SPACER	3	3
7	190457	COVER/BOOT	2	2
8	651041	SCREW/MACHINE HEX WASHER HEAD 3/8 X 3/4	4	4
9	651651	SCREW/TAPPING TORX DRIVE PAN HEAD #10 X 1	8	8
10	L70486	SCREW/TRUSS TORX DRIVE 1/4 X 1	3	3

Covers - Hand & Foot Controls



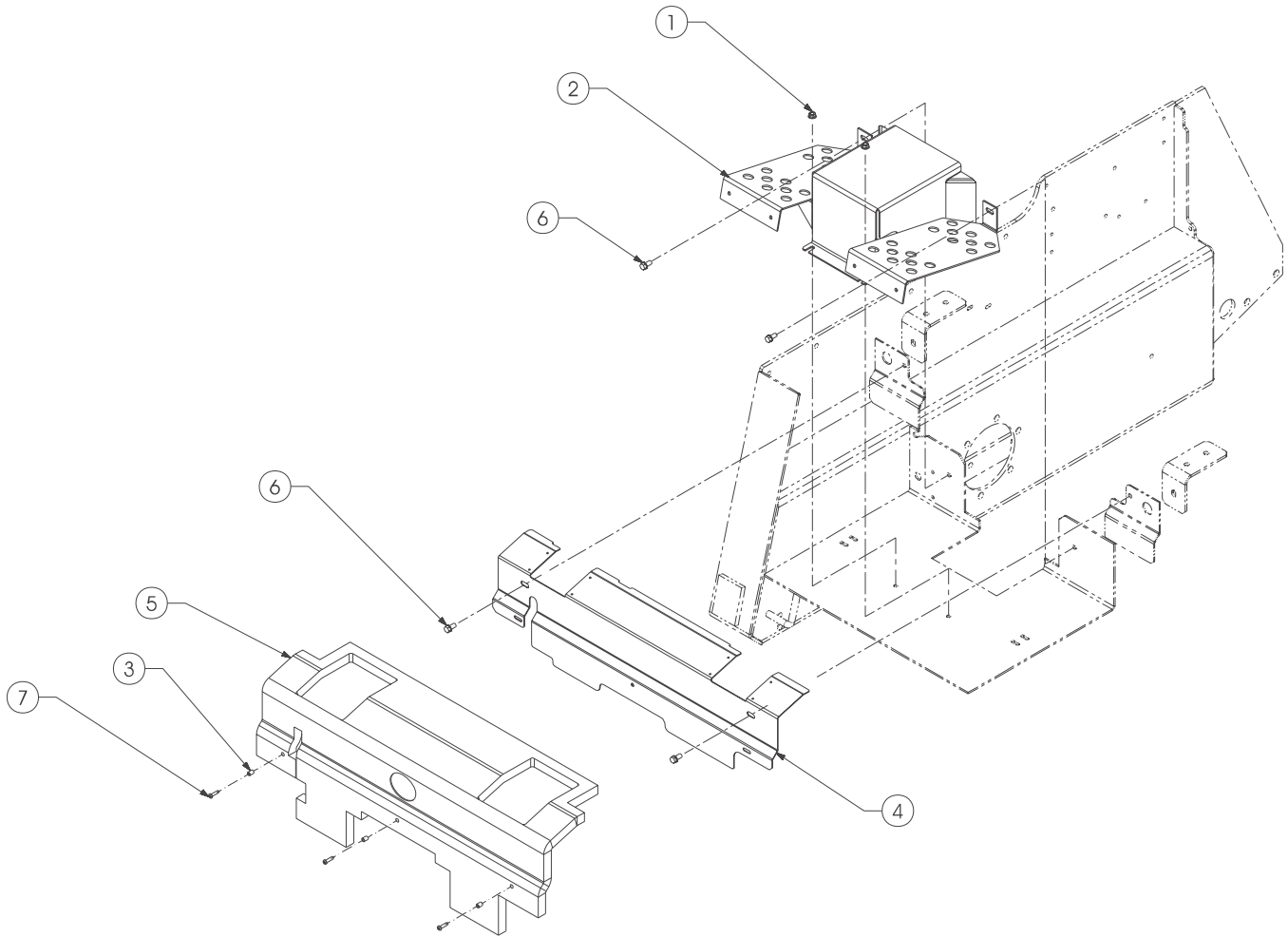
Ref. No.	Part No.	Description	Quantity 4640/4840	Quantity 5640/6640
1	135090	FLOOR ASSEMBLY/FRONT	1	-
	131804	FLOOR ASSEMBLY/FRONT	-	1
2	134852	NUT/SPIRALOCK™ 3/8	2	2
3	183350	COVER/CONTROL	1	1
4	190175	PAD/SOUND	1	-
	189633	PAD/SOUND	-	1
5	190203	SUPPORT/BOOT BEZEL	8	8
6	190400	SPACER	3	3
7	190457	COVER/BOOT	2	2
8	651041	SCREW/MACHINE HEX WASHER HEAD 3/8 X 3/4	4	4
9	651651	SCREW/TAPPING TORX DRIVE PAN HEAD #10 X 1	8	8
10	L70486	SCREW/TRUSS TORX DRIVE 1/4 X 1	3	3

Covers - T-Bar/Joystick Controls



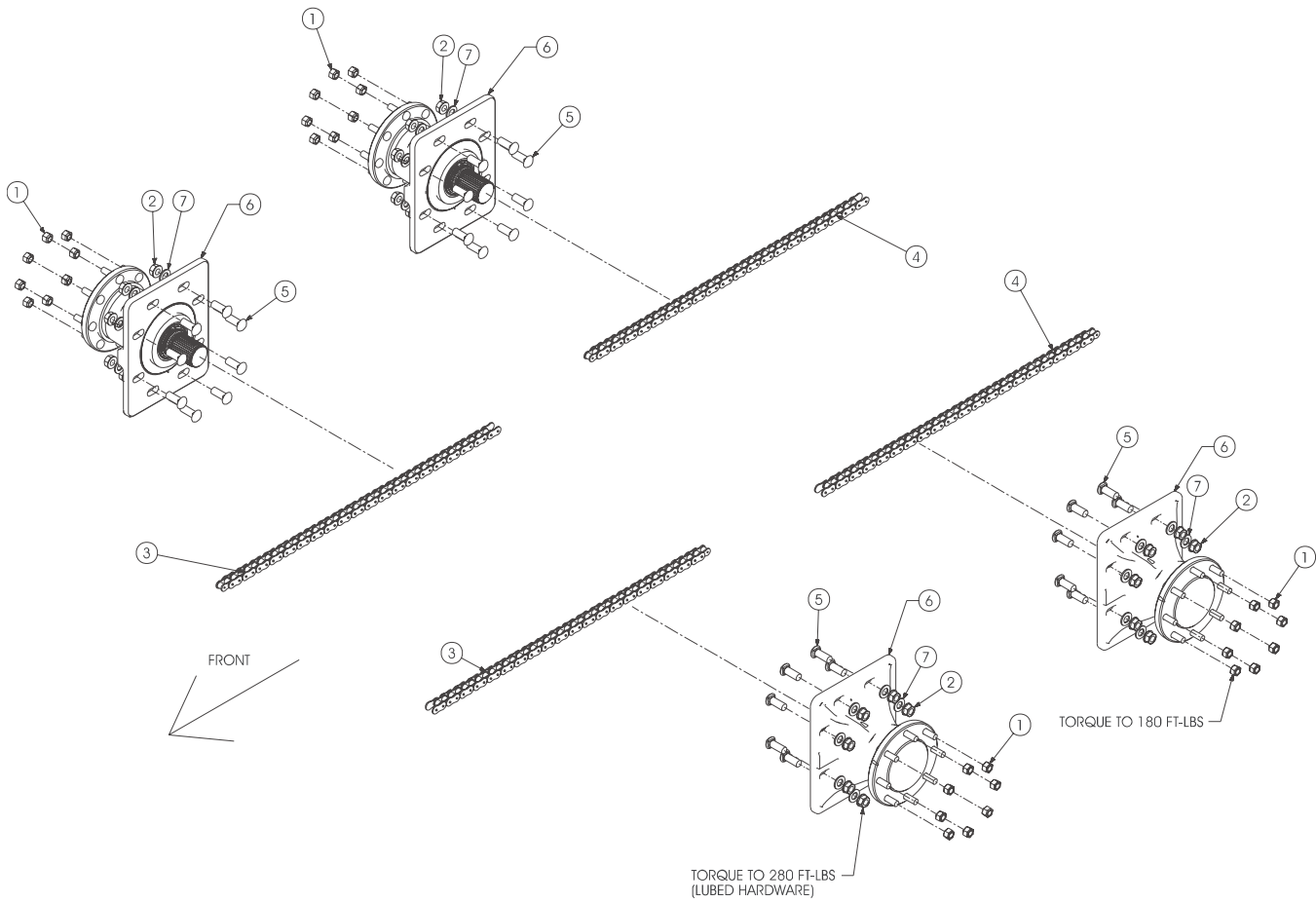
Ref. No.	Part No.	Description	Quantity 4640/4840	Quantity 5640/6640
1	134852	NUT/SPIRALOCK™ 3/8	2	2
2	135006	FLOOR ASSEMBLY/FRONT	1	-
	135947	FLOOR ASSEMBLY/FRONT	-	1
3	188033	COVER/CONTROL	1	1
4	190177	PAD/SOUND	1	-
	190339	PAD/SOUND	-	1
5	190203	SUPPORT/BOOT BEZEL	4	4
6	190400	SPACER	3	3
7	190457	COVER/BOOT	1	1
8	651041	SCREW/MACHINE HEX WASHER HEAD 3/8 X 3/4	4	4
9	651651	SCREW/TAPPING TORX DRIVE PAN HEAD #10 X 1	4	4
10	L70486	SCREW/TRUSS TORX DRIVE 1/4 X 1	3	3

Covers - Dual Joystick Controls

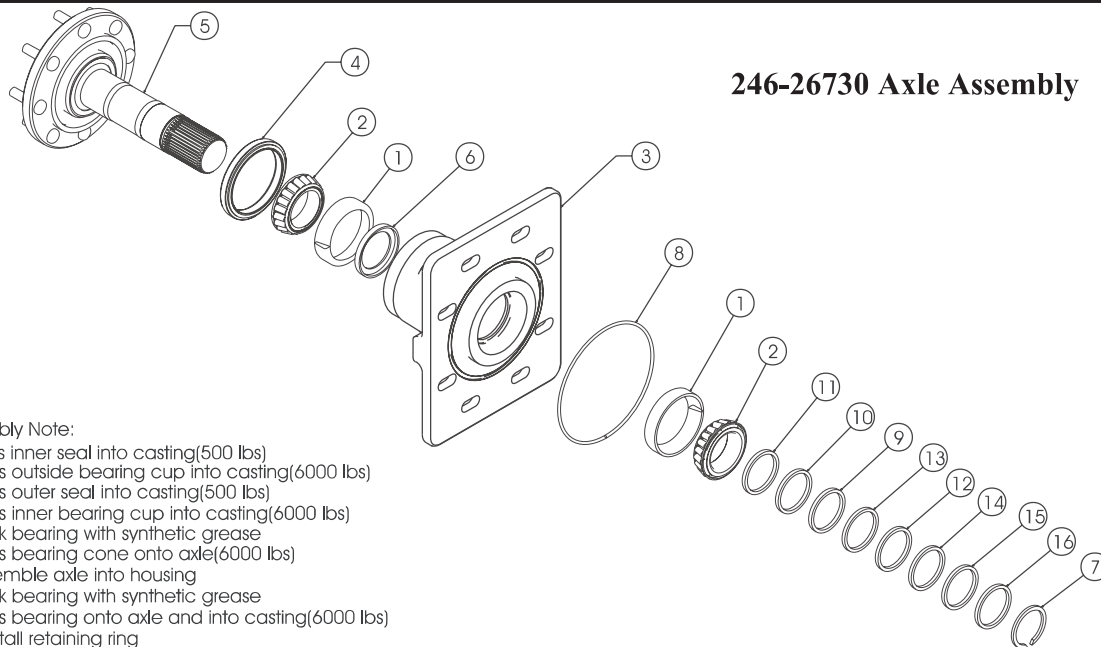


Ref. No.	Part No.	Description	Quantity 4640/4840	Quantity 5640/6640
1	134852	NUT/SPIRALOCK™ 3/8	2	2
2	135006	FLOOR ASSEMBLY/FRONT	1	-
	135947	FLOOR ASSEMBLY/FRONT	-	1
3	190400	SPACER	3	3
4	190878	COVER/CONTROLS	1	1
5	190882	PAD/SOUND/HEEL	1	-
	190879	PAD/SOUND/HEEL	-	1
6	651041	SCREW/MACHINE 3/8 X 3/4	4	4
7	L70486	SCREW/TORX DRIVE TRUSS HEAD 1/4 X 1	3	3

4640 and 4840 Models



246-26730 Axle Assembly



Assembly Note:

- 1) Press inner seal into casting(500 lbs)
- 2) Press outside bearing cup into casting(6000 lbs)
- 3) Press outer seal into casting(500 lbs)
- 4) Press inner bearing cup into casting(6000 lbs)
- 5) Pack bearing with synthetic grease
- 6) Press bearing cone onto axle(6000 lbs)
- 7) Assemble axle into housing
- 8) Pack bearing with synthetic grease
- 9) Press bearing onto axle and into casting(6000 lbs)
- 10) Install retaining ring
- 11) Measure gap between bearing and snap ring
- 12) Remove retaining ring
- 13) Install special washer of appropriate thickness
- 14) Install retainina rina and remove pressure

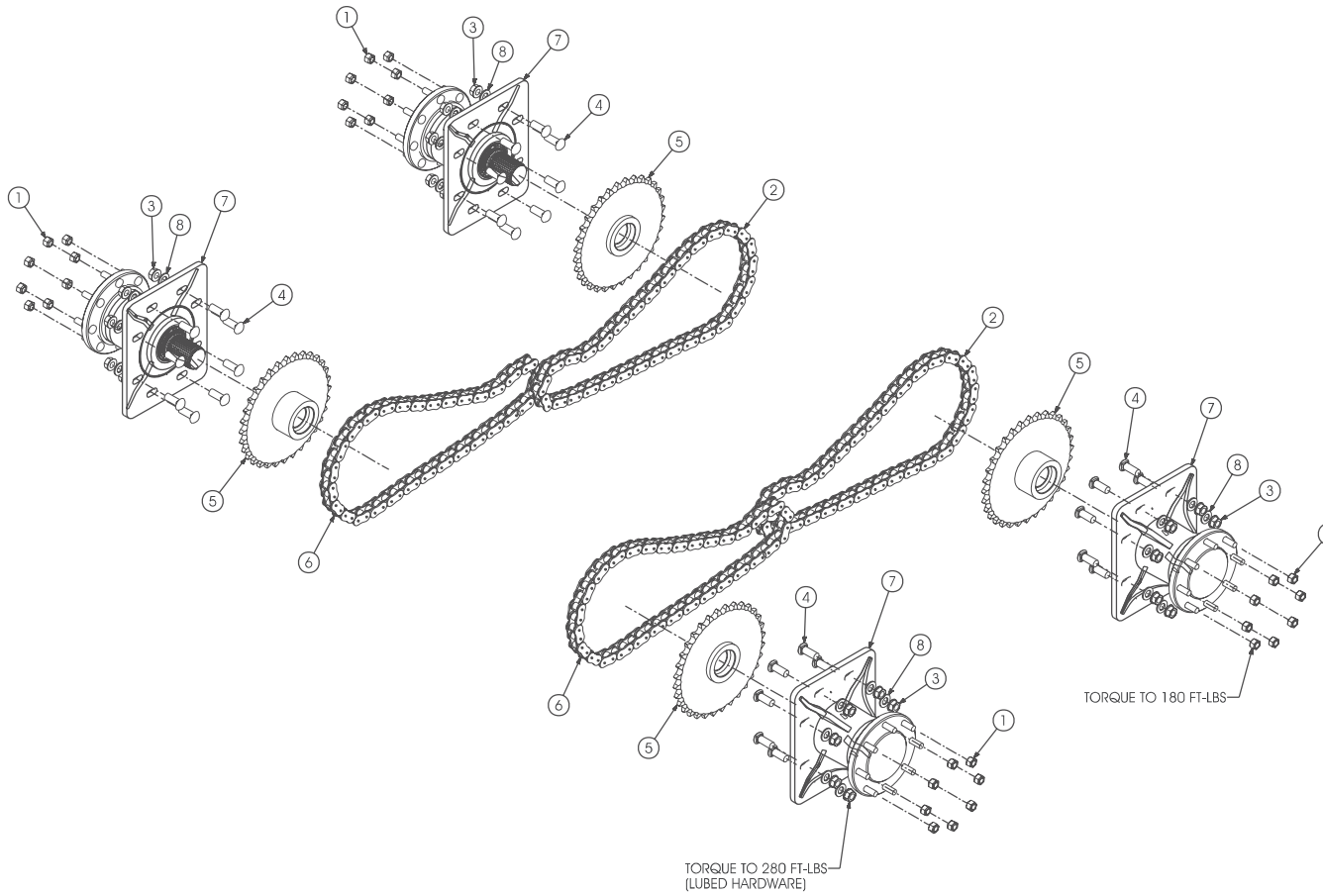
138663

WHEEL DRIVES

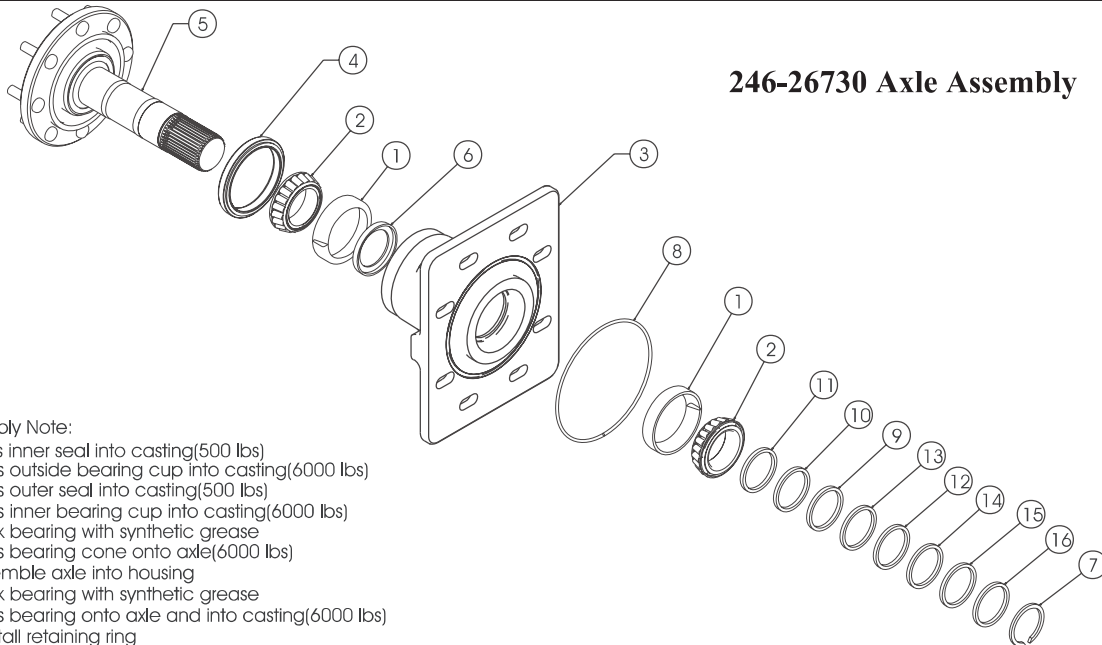
Ref. No.	Part No.	Description	Quantity 4640	Quantity 4840
1	079152	NUT/WHEEL	32	32
2	131609	NUT/SPIRALOCK™ 1/2	32	32
3	134503	CHAIN #80 X 66	4	2
4	134504	CHAIN #80 X 74	-	2
5	137072	BOLT/CARRIAGE 3/4 X 2	32	32
6	246-26730	ASSEMBLY/AXLE	4	4
	137915	BOLT/WHEEL	32	32
7	651564	WASHER/FLAT HARDENED 3/4	32	32

Ref. No.	Part No.	Description	Quantity Axle Assembly
1	010-28854	CUP/BEARING	2
2	010-32401	CONE/BEARING	2
3	138759	ASSEMBLY/AXLE	1
4	183784	SEAL/AXLE	1
5	320-32692	ASSEMBLY/AXLE AND BOLT	1
6	335-32282	SEAL/OIL	1
7	350-32539	RETAINING RING/EXTERNAL	1
8	350-32542	O-RING	1
9	400-32513	WASHER/SPECIAL .254	AR
10	400-32514	WASHER/SPECIAL .250	AR
11	400-32515	WASHER/SPECIAL .246	AR
12	400-32521	WASHER/SPECIAL .234	AR
13	400-32522	WASHER/SPECIAL .230	AR
14	400-32523	WASHER/SPECIAL .226	AR
15	400-32555	WASHER/SPECIAL .238	AR
16	400-32556	WASHER/SPECIAL .242	AR

5640 and 6640 Models



246-26730 Axle Assembly



Assembly Note:

- 1) Press inner seal into casting(500 lbs)
- 2) Press outside bearing cup into casting(6000 lbs)
- 3) Press outer seal into casting(500 lbs)
- 4) Press inner bearing cup into casting(6000 lbs)
- 5) Pack bearing with synthetic grease
- 6) Press bearing cone onto axle(6000 lbs)
- 7) Assemble axle into housing
- 8) Pack bearing with synthetic grease
- 9) Press bearing onto axle and into casting(6000 lbs)
- 10) Install retaining ring
- 11) Measure gap between bearing and snap ring
- 12) Remove retaining ring
- 13) Install special washer of appropriate thickness
- 14) Install retaining ring and remove pressure

138655

THANK YOU FOR VISITE WITH

www.repair-manuals.com

DOWNLOAD THIS FULL MANUAL

Until download and place it on your computer We care with you ,We really try our best to complete your orders, so your review is very important to us to improve our services

WE OFFER

ORIGINAL FACTORY MANUALS , WORKSHOP
MANUALS , SERVICE MANUALS , REPAIR

OUR VISION : 100 % CUSTOMER SATISFACTION,
AFTER SALE SERVICE AND KEEP IN TOUCH WITH