



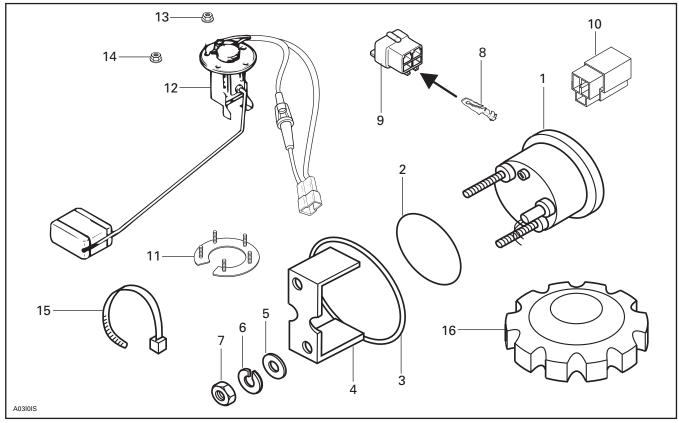
#### FUEL GAUGE KIT (P/N 861 505 200)

## \land WARNING

For safety reasons, this kit must be installed by an authorized Ski-Doo<sup>®</sup> snowmobile dealer. Should removal of a locking device (e.g. lock tabs, self-locking fasteners, etc.) be required when undergoing disassembly/assembly, always replace with a new one. This instruction sheet should be given to the purchaser. This kit is designed for specific applicable models only. It is not recommended for units other than those for which it was sold.

**NOTE:** Installation time is approximately **1.0** hour.

# PARTS TO BE INSTALLED



- 1. Fuel Gauge White
- 2. Gauge Packing
- 3. Formed Washer
- 4. Gauge Holder
- 5. Flat Washer 7/32 (2)
- 6. Lock Washer (2)
- 7. Nut (2)
- 8. Male Connector (4)

- 9. 4-Connector Housing
- 10. 3-Connector Housing
- 11. Float Support, S-Series
- 12. Fuel Sender
- 13. Flanged Nut M4 (5), S-Series
- 14. Flanged Nut M5 (5), F-Series
- 15. Locking Tie
- 16. Fuel Tank Cap

# INSTRUCTIONS

## Fuel Level Sender

Disconnect battery (if equipped).

### 🕂 WARNING

Always disconnect battery cables exactly in the specified order. Disconnect BLACK negative ground cable first, then RED positive cable. Electrolyte or fuel vapors can be present.

Remove seat. Disconnect connector housing between fuel tank and seat.

Close fuel shut-off valve (if so equipped). Squeeze fuel supply line with hose pincher then unplug fuel line from valve.

#### S-Series Models

Drain fuel tank completely.

Remove tank from the vehicle.

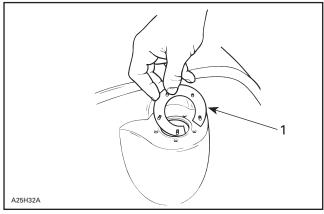
Using a 42 mm (1-21/32 in) hole saw cut tank sender hole **using the dot as center guide**.

**NOTE:** Put a small dab of grease on drill bit to minimize the quantity of particles from falling into fuel tank.

Using a 4.2 mm (11/64 in) drill bit, drill the 5 sender retaining screw holes using dots as a center guide.

Thoroughly clean fuel tank.

Install float support **no. 11**, gasket and sender unit **no. 12**.



1. Float support

Secure with flanged nuts **no. 13** (M4), initially torque to 1 N•m (8 lbf•in) then finalize torque in criss-cross sequence to 2.5 N•m (22 lbf•in).

Replace fuel tank cap with the one supplied **no. 16**.

Properly reinstall fuel tank. Connect sender harness. Do not reinstall seat yet.

#### **F-Series Models**

Remove steering padding.

To lift tank cover, drill rivets near footrests and remove the 2 nuts in the back of tank cover.

Remove tank from vehicle.

Drain fuel tank completely.

Using a 42 mm (1-21/32 in) hole saw, cut tank sender hole in the center of the studs.

**NOTE:** Put a small dab of grease on drill bit to minimize the quantity of particles from falling into fuel tank.

Thoroughly clean fuel tank.

Install gasket and sender unit no. 12.

Secure with flanged nuts **no. 14** (M5), initially torque to 1 N•m (8 lbf•in) then finalize torquing in a criss-cross sequence to 2.5 N•m (22 lbf•in).

Replace fuel tank cap with the one supplied **no. 16**.

Properly reinstall fuel tank then fuel tank cover with new rivets (not included). Connect sender harness. Reinstall steering padding. Do not reinstall seat yet.

## Electric Fuel Gauge

#### S and F-Series Models

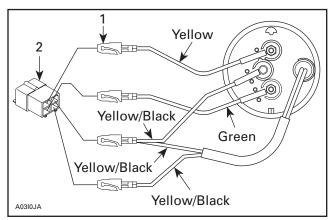
Remove windshield (if necessary).

Position template (found on the last page of this document) on the center of the RH side of the dashboard, cut a 63.5 mm (2.5 in) hole.

# **CAUTION:** Ensure there are no wires behind dashboard that might be damaged.

#### Models Prior to 1998

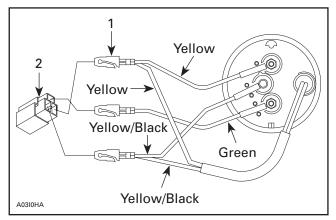
Install male connector **no. 8** on gauge wires and position in housing **no. 9** as per following illustration.



- 1. Male connector
- 2. 4-connector housing

#### Starting with 1998 Models

Install male connector **no. 8** on gauge wires and position in housing **no. 10** as per following illustration.



- 1. Male connector
- 2. 3-connector housing

#### All Models

Install gauge packing **no. 2** on fuel gauge **no. 1** then install into dashboard.

Install formed washer **no. 3** then gauge holder **no. 4**.

Install flat washers no. 5, lock washers no. 6 then nuts no. 7.

Connect housings.

Secure wire harness with a locking tie **no.15**.

Reinstall windshield.

Connect battery cables.

## 

Connect RED positive cable FIRST, then BLACK negative cable.

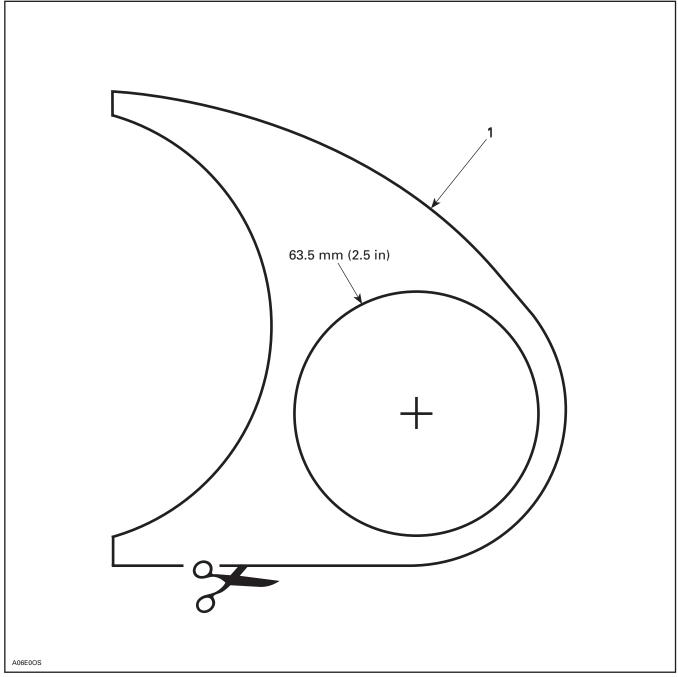
Test gauge operation with fuel tank empty and full. Ensure there is no fuel leak at the sender.

Connect seat harness and reinstall seat.

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# DRILLING TEMPLATE

Use this template to position drill hole for gauge in dashboard.



1. Position over dashboard decal

# 861 505 200

1.	515 175 343	Fuel Gauge White	Indicateur de niveau de carburant blanc
2.	414 807 200	Gauge Packing	Joint torique
3.	517 258 600	Formed Washer	Rondelle moulée
4.	414 806 600	Gauge Holder	Support d'indicateur
5.	391 301 700	Flat Washer 7/32 (2)	Rondelle plate 7/32 (2)
6.	414 833 700	Lock Washer (2)	Rondelle-frein (2)
7.	414 833 600	Nut (2)	Écrou (2)
8.	409 210 000	Male Connector (4)	Raccord mâle (4)
9.	409 209 300	4-Connector Housing	Logement de raccords à 4 circuits
10.	409 204 200	3-Connector Housing	Logement de raccord à 3 circuits
11.	513 032 500	Float Support, S-Series	Support de flotteur, série S
12.	415 115 500	Fuel Sender	Capteur de niveau de carburant
13.	233 241 414	Flanged Nut M4 (5), S-Series	Écrou à épaulement M4 (5), série S
14.	233 251 414	Flanged Nut M5 (5), F-Series	Écrou à épaulement M5 (5), série F
15.	414 115 200	Locking Tie	Attache
16.	572 039 600	Fuel Tank Cap	Bouchon de réservoir de carburant