

PWC KIT - Tiefensucher

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September 2015
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21. Oktober 2010
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Die folgenden Symbole können in diesem Dokument verwendet werden:



Weist auf eine gefährliche Situation hin, die zum Tod oder zu schweren Verletzungen führen kann, wenn sie nicht vermieden wird.



Weist auf eine Gefahrensituation hin, die zu leichten oder mittelschweren Verletzungen führen kann, wenn sie nicht vermieden wird.

Weist auf eine Anweisung hin, deren Nichtbeachtung zu schweren Schäden an Fahrzeugkomponenten oder anderem Eigentum führen kann.



- Aus Sicherheitsgründen muss dieses Kit von einem autorisierten BRP-Händler installiert werden.
- Dieses Kit ist nur für bestimmte zutreffende Modelle ausgelegt (autorisierte BRP-Händler bestätigen die Modelle). Es wird nicht für andere Geräte als das (die) empfohlen, für die es verkauft wurde.
- Sollte bei der Demontage/Montage das Entfernen einer Verriegelung (z. B. Sicherungslaschen, selbstsichernde Verschlüsse etc.) erforderlich sein, immer durch eine neue ersetzen.
- Die Anzugsvorgaben für Drehmomentschlüssel müssen unbedingt eingehalten werden.
- Tragen Sie immer einen AUGENSCHUTZ UND GEEIGNETE HANDSCHUHE, wenn Sie Elektrowerkzeuge verwenden.
- Sofern nicht anders angegeben, muss der Motor bei allen Arbeiten am Fahrzeug ausgeschaltet sein.
- Achten Sie immer auf Teile, die sich bewegen können, wie Räder, Getriebekomponenten usw.
- Einige Komponenten können HEISS sein. Warten Sie immer, bis der Motor abgekühlt ist, bevor Sie Arbeiten ausführen.

ZU VERWENDENDES DREHMOMENT, WENN DIE DREHMOMENTE NICHT IM TEXT ANGEGEBEN SIND BEFESTIGUNGSGRÖSSE

	5,8 GRAD	8,8 GRAD	10,9 GRAD	12,9 GRAD
M4	$1,8 \pm 0,2 \text{ N}\cdot\text{m}$ ($16 \pm 2 \text{ lbf}\cdot\text{in}$)	$2,8 \pm 0,2 \text{ N}\cdot\text{m}$ ($25 \pm 2 \text{ lbf}\cdot\text{in}$)	$3,8 \pm 0,2 \text{ N}\cdot\text{m}$ ($34 \pm 2 \text{ lbf}\cdot\text{in}$)	$4,5 \pm 0,5 \text{ N}\cdot\text{m}$ ($40 \pm 4 \text{ lbf}\cdot\text{in}$)
M5	$3,3 \pm 0,2 \text{ N}\cdot\text{m}$ ($29 \pm 2 \text{ lbf}\cdot\text{in}$)	$5,0 \pm 0,5 \text{ N}\cdot\text{m}$ ($44 \pm 4 \text{ lbf}\cdot\text{in}$)	$7,8 \pm 0,7 \text{ N}\cdot\text{m}$ ($69 \pm 6 \text{ lbf}\cdot\text{in}$)	$9,0 \pm 1,0 \text{ N}\cdot\text{m}$ ($80 \pm 9 \text{ lbf}\cdot\text{in}$)
M6	$7,5 \pm 1,0 \text{ N}\cdot\text{m}$ ($66 \pm 9 \text{ lbf}\cdot\text{in}$)	$10,0 \pm 2,0 \text{ N}\cdot\text{m}$ ($89 \pm 18 \text{ lbf}\cdot\text{in}$)	$12,8 \pm 2,2 \text{ Nm}$ ($113 \pm 19 \text{ lbf}\cdot\text{in}$)	$16,0 \pm 2,0 \text{ Nm}$ ($142 \pm 18 \text{ lbf}\cdot\text{in}$)
M8	$15,3 \pm 1,7 \text{ N}\cdot\text{m}$ ($135 \pm 15 \text{ lbf}\cdot\text{in}$)	$24,5 \pm 3,5 \text{ N}\cdot\text{m}$ ($18 \pm 3 \text{ lbf}\cdot\text{ft}$)	$31,5 \pm 3,5 \text{ N}\cdot\text{m}$ ($23 \pm 3 \text{ lbf}\cdot\text{ft}$)	$40,0 \pm 5,0 \text{ N}\cdot\text{m}$ ($30 \pm 4 \text{ lbf}\cdot\text{ft}$)
M10	$29 \pm 3 \text{ N}\cdot\text{m}$ ($21 \pm 2 \text{ lbf}\cdot\text{ft}$)	$48 \pm 6 \text{ N}\cdot\text{m}$ ($35 \pm 4 \text{ lbf}\cdot\text{ft}$)	$61 \pm 9 \text{ N}\cdot\text{m}$ ($45 \pm 7 \text{ lbf}\cdot\text{ft}$)	$73 \pm 7 \text{ N}\cdot\text{m}$ ($54 \pm 5 \text{ lbf}\cdot\text{ft}$)
M12	$52 \pm 6 \text{ N}\cdot\text{m}$ ($38 \pm 4 \text{ lbf}\cdot\text{ft}$)	$85 \pm 10 \text{ N}\cdot\text{m}$ ($63 \pm 7 \text{ lbf}\cdot\text{ft}$)	$105 \pm 15 \text{ N}\cdot\text{m}$ ($77 \pm 11 \text{ lbf}\cdot\text{ft}$)	$128 \pm 17 \text{ N}\cdot\text{m}$ ($94 \pm 13 \text{ lbf}\cdot\text{ft}$)

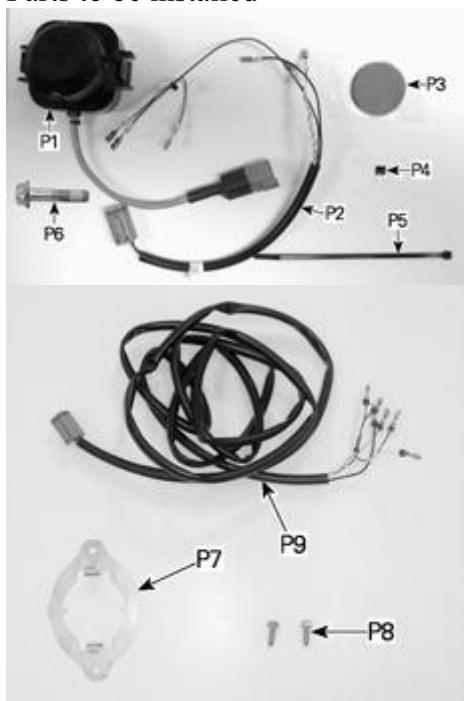
BEFESTIGUNGSGRÖSSE**ZU VERWENDENDES DREHMOMENT, WENN DIE DREHMOMENTE NICHT IM TEXT ANGEgeben SIND**

	5,8 GRAD	8,8 GRAD	10,9 GRAD	12,9 GRAD
M14	$85 \pm 10 \text{ N}\cdot\text{m}$ ($63 \pm 7 \text{ lbf}\cdot\text{ft}$)	$135 \pm 15 \text{ N}\cdot\text{m}$ ($100 \pm 11 \text{ lbf}\cdot\text{ft}$)	$170 \pm 20 \text{ N}\cdot\text{m}$ ($125 \pm 15 \text{ lbf}\cdot\text{ft}$)	$200 \pm 25 \text{ N}\cdot\text{m}$ ($148 \pm 18 \text{ lbf}\cdot\text{ft}$)
M16	$126 \pm 14 \text{ N}\cdot\text{m}$ ($93 \pm 10 \text{ lbf}\cdot\text{ft}$)	$205 \pm 25 \text{ N}\cdot\text{m}$ ($151 \pm 18 \text{ lbf}\cdot\text{ft}$)	$255 \pm 30 \text{ N}\cdot\text{m}$ ($188 \pm 22 \text{ lbf}\cdot\text{ft}$)	$305 \pm 35 \text{ N}\cdot\text{m}$ ($225 \pm 26 \text{ lbf}\cdot\text{ft}$)
M18	$170 \pm 20 \text{ N}\cdot\text{m}$ ($125 \pm 15 \text{ lbf}\cdot\text{ft}$)	$273 \pm 32 \text{ N}\cdot\text{m}$ ($201 \pm 24 \text{ lbf}\cdot\text{ft}$)	$330 \pm 25 \text{ N}\cdot\text{m}$ ($243 \pm 18 \text{ lbf}\cdot\text{ft}$)	$413 \pm 47 \text{ N}\cdot\text{m}$ ($305 \pm 35 \text{ lbf}\cdot\text{ft}$)

: The illustrations in this document show typical construction of the different assemblies and may not reproduce the full detail or exact shape of the parts; however, they represent parts that have the same or similar function.

: Installation time is approximately 1.0 hour.

Parts to be installed



ITEM	P/N	DESCRIPTION	QTY
P1	278 002 336	Depth Finder	1
P2	---	Wiring Harness	1
P3	293 550 042	Gel Pad	1
P4	710 001 008	Fuse (3A)	1
P5	414 115 200	Locking Tie	10
P6	207 284 060	Hexagonal Screw M8 x 40	2
P7	---	Depth Finder Support	1
P8	243 162 060	Flange Hexagonal Screw M6.81 X 20	2
P9	---	Wiring Harness	1

Instructions

Battery Access

For platforms without rear openings

1. Open front storage compartment.
2. Remove battery access panel

2.1 Remove both plastic fasteners and rubber tie.

2.2 Free panel from notches at the bottom by pulling it upwards.

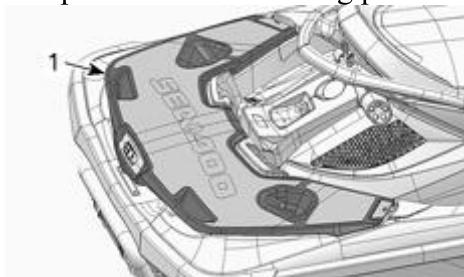


1. Battery access panel

2.3 Dissassemble and remove both panels halves from compartment.

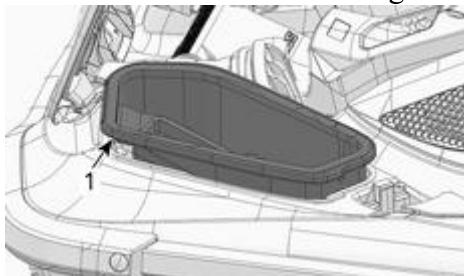
For platforms with rear openings with suspension

1. Open the aft re-boarding platform.



1. Re-boarding platform

2. Remove the starboard storage bin.



1. Starboard storage bin

For platforms with rear openings without suspension

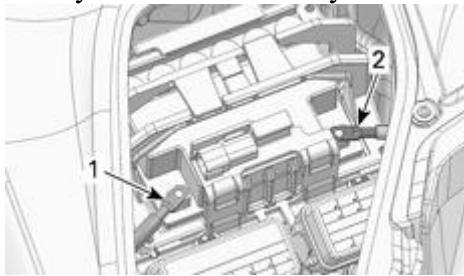
1. Open starboard access cover.

Electrical Connection

1. Disconnect BLACK (-) battery cable then the RED (+) cable.



Always disconnect battery cables exactly in the specified order.

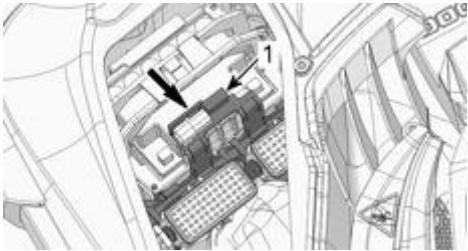


typical

1. BLACK (-) cable

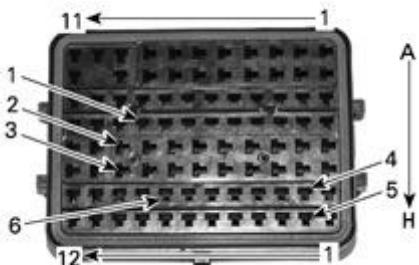
2. RED (+) cable

2. Lift and push the top of electrical component support to unlock it from battery holder. Move support aside to make room.



typical

1. Electrical component support
3. Detach fuse box from the electrical component support.
4. Move locking tabs aside to unlock the fuse box.
5. Remove fuse box cover.
6. Locate the free cavities (G8, G2, D9, E9, H2 and F9) to connect new wires.
: Cavities are identified at the back of the fuse box. Pay attention to the cavity numbers as the rows don't all have 12 cavities.



Depth finder - top view

1. D9
2. E9
3. F9
4. G2
5. H2
6. G8

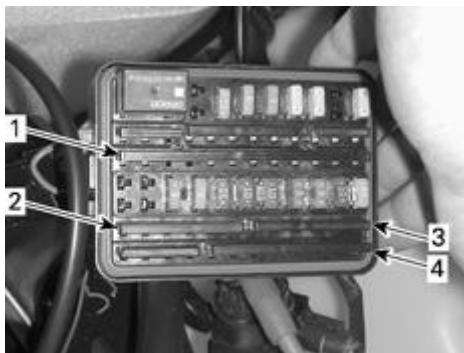
30A RELAY	1. 5A 2. 15A 3. 15A 4. 3A 5. 30A 6. 30A 7. 30A 8. 30A 9. 30A 10. 30A 11. 3A 12. 3A 13. 10A 14. 10A	1. 5A CTR. 2. 15A 3. 15A 4. 3A 5. 30A 6. 30A 7. 30A 8. 30A 9. 30A 10. 30A 11. 3A 12. 3A 13. 10A 14. 10A	+12 VOLTS ACCESSORY	+12 VOLTS	+12 VOLTS
			+12 VOLTS ACCESSORY		
10.	10.	10A	15. 10A	15. 10A	15. 10A
11.	11.	3A	12. 3A	12. 3A	12. 3A
12.	12.	3A	13. 10A	13. 10A	13. 10A
13.	13.	10A	14. 10A	14. 10A	14. 10A
14.	14.	10A	15. 10A	15. 10A	15. 10A
15.	15.	3A	16. 5A	16. 5A	16. 5A
16.	16.	3A	17. 5A	17. 5A	17. 5A
17.	17.	3A	18. 10A	18. 10A	18. 10A
18.	18.	3A	19. 15A	19. 15A	19. 15A
19.	19.	3A	ECM	ECM	ECM
COMMUNICATION (CAN HI)		COMMUNICATION (CAN LOW)			
+12 VOLTS ACCESSORY		GROUND			

7. Using a small tool, pull out the seal plugs from the related cavities (described previously) at the back of fuse box.



1. Seal out of its cavity - TYPICAL

8. Remove bus bar from D-Row, 2 bus bars from G-row, and the long bus bar from H-row.



Fuse box - top view

1. D-row
2. G-row LH side
3. G-row RH side
4. H-row

Carefully remove bus bar by simultaneously pulling on both sides of bus bar during removal.
 9. Select the appropriate wiring harness depending on vehicle model. For platforms with rear openings use short harness [P2]. For platforms without rear openings use long harness [P9]
 10. Insert wire terminals in their proper cavities and lock.

Action	Default routing cavity no	wire identification
Install	H2	Black
Install	G8	White with red stripes (CAN-HI)
Install	G2	White with black stripe (CAN-LOW)
Install	D9	Red with white stripe
Install	E9	Red with white stripe
Install	F9	Purple

: Terminal cavities have different orientations depending on their position in the fuse box. When inserting the terminals in their respective cavities, make sure to follow the orientation of the cavity. When the terminals are inserted correctly into their cavities, they will "click-in". Verify that the terminals are properly locked in their cavities by pulling back on the wire to be sure the retaining clips are holding to terminal.

11. Reinstall removed bus bars to their locations.
12. Install new 3A fuse [P4] in fuse box in cavity E9/F9.



1. 3A fuse [P4] installation location
13. Install the fuse box and its cover.

Depth Finder Installation

1. Install gel pad on depth finder.
- 1.1 Place the flat side of depth finder on a level surface.
- 1.2 Clean the concave surface of depth finder.
- 1.3 Remove the both protectors from gel pad.
- 1.4 Apply gel pad on depth finder.

Make sure not to trap air between gel pad and depth finder. Otherwise, the device may not work properly.



1. Gel pad [P3]

2. Depth finder [P1]

For platforms without rear openings

1. Locate installation zone in engine compartment on LH side and Install depth finder support [P7] onto hull using 2 flange hexagonal screws [P8].



Depth finder support location in engine compartment

1. Depth finder support

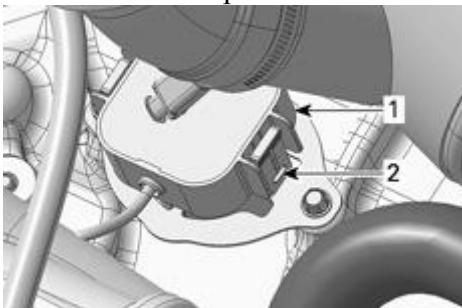
: Ensure to properly orient the support rounded notch towards the center of the hull.



1. Support rounded notch

2. Install the depth finder into its support with harness pointing towards center of hull. Squeeze retaining tabs to ease insertion.

3. Push on the depth finder until both locking tabs are locked.

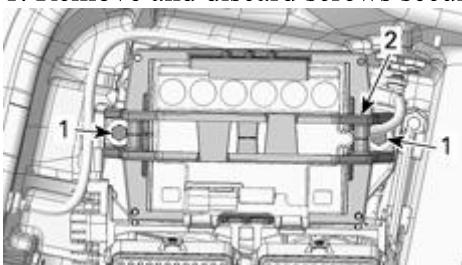


1. Depth finder

2. Locking tabs locked

For platforms with rear openings

1. Remove and discard screws securing battery holder to battery holder base (one on each side).

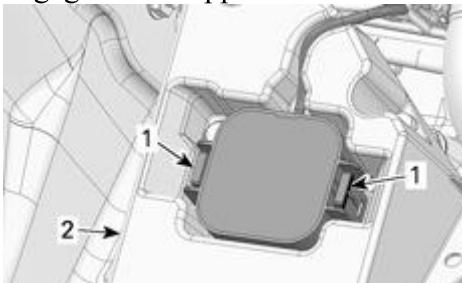


Parts removed for clarity

1. Retaining screws

2. Battery holder

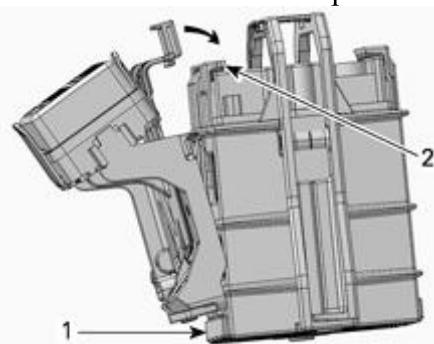
2. Unplug vent hose from battery.
3. Remove battery (with battery holder) from vehicle.
4. Install depth finder into battery holder base with the harness toward the pump.
5. Push on the depth finder until both locking tabs are locked. Make sure depth finder locking tabs are well engaged into support bracket.



1. Locking tabs
2. Battery holder base
6. Route the depth finder harness in the battery holder base groove.
7. Plug vent hose to the top of battery. Make sure vent hose is not pinched or bent.
8. Install the battery and support in vehicle using new M8 x 40 screws [P6].
9. Tighten battery holder screws to $14 \pm 2 \text{ N}\cdot\text{m}$ ($124 \pm 18 \text{ ft-lb}$).

For all platforms

1. Reinstall electrical component support.



Typical

1. Lower receptacle
2. Upper retaining tab
- 1.1 Insert lower tabs from component support into lower receptacle.
- 1.2 Push component support onto upper retaining tab.

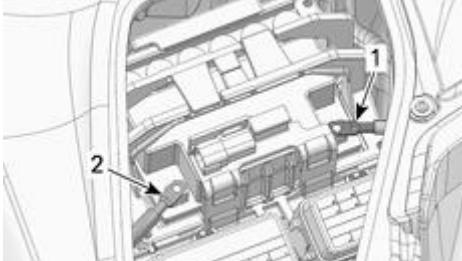


Typical

2. Route harness ([P2] or [P9] depending on model) from fuse box to depth finder along main wiring harness securing it with locking ties every 400 mm (16") along the way.
3. Apply small amount of DIELECTRIC GREASE (293 550 004) to wiring harness connector.
4. Connect depth finder connector to new wiring harness.
5. Connect RED (+) battery cable then the BLACK (-) cable.



Always connect battery cables exactly in the specified order.



typical

1. RED (+) cable
2. BLACK (-) cable
6. Install the tether cord cap onto the engine cut-off switch.
7. Check information center to confirm depth finder operation. Depending on models, depth finder reading is displayed at different possible display zones.



1. Possible display zones depending on model
8. Reinstall all other removed parts.
9. Launch watercraft in water and check depth finder operation.
10. Depending on model, to display the water depth under the hull, you may need to press MODE button until DISPLAY appears in the cluster then press SET button to select DEPTH. Wait a few second to confirm the selection. For more details, see yours Operator's Guide.



Never use the depth finder as a warning device to ride in shallow water. Use it as a navigation guide only.
Not to be used to get precise navigation data.

Depth Finder Troubleshooting

Depth finder TROUBLESHOOTING

SYMPTOM

POSSIBLE CAUSE

REMEDY

Nothing is displayed in the information center

Depth finder not connected.

Connect it properly.

12 V or ground wire open to depth finder.

Check fuse and wiring harnesses.

Problem with the communication link wires.

Check WHITE/BLACK and WHITE/RED wires to CAN bus-bars in fuse box.

- - - (ft oder m) wird angezeigt und der Sensor blinkt nach dem Selbsttest für 5 Sekunden

Wasserfahrzeug ist nicht im Wasser.

Starten Sie das Wasserfahrzeug im Wasser und überprüfen Sie es erneut.

Zwischen Gelkissen und Echolot bzw. zwischen Echolot und Batteriehalterbasis befindet sich Luft.

Tiefenmesser entfernen.
Gelkissen ersetzen.

Echolot ist defekt.

Probieren Sie einen neuen Tiefenmesser aus.