


# 5 - SEADOO/BRP



OPERATI  
MANU

**SEADOO**

 **JETLEV.COM**

 **elme TOOLS**

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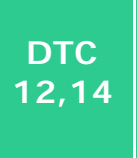


SEADOO TROUBLESHOOTING

# APPLICATIONS

# A

## SEADOO—DIAGNOSTICS



						
GTX (DESS RFI)	1998⇒2002	✓	✓	✓	ADC300 + ADC404 + ADC450	D
GSX (DESS RFI)	1999⇒2000	✓	✓	✓	ADC300 + ADC404 + ADC450	D
GTI (DESS RFI)	2004⇒2006	✓	✓	✓	ADC300 + ADC404 + ADC450	D
GTI-LE (DESS RFI)	2003⇒2006	✓	✓	✓	ADC300 + ADC404 + ADC450	D
GTI-RENTAL (DESS RFI)	2006	✓	✓	✓	ADC300 + ADC404 + ADC450	D
3D RFI (DESS RFI)	2004⇒2005	✓	✓	✓	ADC300 + ADC404 + ADC450	D
GTX DI (947 DI)	2000⇒2003	✓	✓	✓	ADC300 + ADC404 + ADC450	C
RX DI (947 DI)	2000⇒2003	✓	✓	✓	ADC300 + ADC404 + ADC450	C
LRV DI (947 DI)	2003	✓	✓	✓	ADC300 + ADC404 + ADC450	C
XP DI (947 DI)	2003⇒2004	✓	✓	✓	ADC300 + ADC404 + ADC450	C
GTX 4TEC (4 TEC)	2003⇒2006	✓	✓	✓	ADC300 + ADC404	B
GTX WAKE (4 TEC)	2003⇒	✓	✓	✓	ADC300 + ADC404	B
GTX LTD SUPERCHARGED (4 TEC)	2003⇒2007	✓	✓	✓	ADC300 + ADC404	B
GTX 155 (4 TEC)	2007⇒	✓	✓	✓	ADC300 + ADC404	B
RXP (4 TEC)	2004⇒	✓	✓	✓	ADC300 + ADC404	B
RXP-X (4 TEC)	2008⇒	✓	✓	✓	ADC300 + ADC404	B
RXT (4 TEC)	2005⇒	✓	✓	✓	ADC300 + ADC404	B
RXT-X (4 TEC)	2008⇒	✓	✓	✓	ADC300 + ADC404	B
GTI (4 TEC)	2007⇒	✓	✓	✓	ADC300 + ADC404	B
GTI RENTAL (4 TEC)	2007⇒	✓	✓	✓	ADC300 + ADC404	B
GTI SE (4 TEC)	2007⇒	✓	✓	✓	ADC300 + ADC404	B
WAKE 155	2008⇒	✓	✓	✓	ADC300 + ADC404	B
WAKE 215	2008	✓	✓	✓	ADC300 + ADC404	B
WAKE PRO 215	2009	✓	✓	✓	ADC300 + ADC404	B



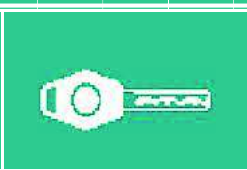
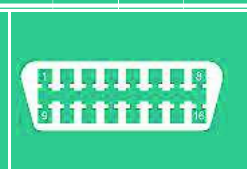

# APPLICATIONS

# A

## SEADOO—KEY PROGRAMMING



				
GS (DESS CARB)	1997⇒2001	✓	ADC300 + ADC404 + ADC450	D
GSX (DESS CARB)	1997⇒1999	✓	ADC300 + ADC404 + ADC450	D
GSX LTD (DESS CARB)	1997⇒1999	✓	ADC300 + ADC404 + ADC450	D
GTI (DESS CARB)	1997⇒2005	✓	ADC300 + ADC404 + ADC450	D
GTS (DESS CARB)	1997⇒2001	✓	ADC300 + ADC404 + ADC450	D
GTX (DESS CARB)	1997⇒2002	✓	ADC300 + ADC404 + ADC450	D
GTX LTD (DESS CARB)	1997⇒2002	✓	ADC300 + ADC404 + ADC450	D
HX (DESS CARB)	1997	✓	ADC300 + ADC404 + ADC450	D
SPX (DESS CARB)	1997⇒1999	✓	ADC300 + ADC404 + ADC450	D
XP (DESS CARB)	1997⇒2001	✓	ADC300 + ADC404 + ADC450	D
XP LTD (DESS CARB)	1997⇒2001	✓	ADC300 + ADC404 + ADC450	D
RX (DESS CARB)	2000⇒2002	✓	ADC300 + ADC404 + ADC450	D
LRV (DESS CARB)	2000⇒2001	✓	ADC300 + ADC404 + ADC450	D






				
GTX (DESS RFI)	1998⇒2002	✓	ADC300 + ADC404 + ADC450	D
GSX (DESS RFI)	1999⇒2000	✓	ADC300 + ADC404 + ADC450	D
GTI (DESS RFI)	2004⇒2006	✓	ADC300 + ADC404 + ADC450	D
GTI-LE (DESS RFI)	2003⇒2006	✓	ADC300 + ADC404 + ADC450	D
GTI-RENTAL (DESS RFI)	2006	✓	ADC300 + ADC404 + ADC450	D
3D RFI (DESS RFI)	2004⇒2005	✓	ADC300 + ADC404 + ADC450	D






# APPLICATIONS

# A

## SEADOO—KEY PROGRAMMING



				
GTX DI (947 DI)	2000⇒2003	✓	ADC300 + ADC404 + ADC450	C
RX DI (947 DI)	2000⇒2003	✓	ADC300 + ADC404 + ADC450	C
LRV DI (947 DI)	2003	✓	ADC300 + ADC404 + ADC450	C
XP DI (947 DI)	2003⇒2004	✓	ADC300 + ADC404 + ADC450	C

				
GTX 4TEC (4 TEC)	2003⇒2006	✓	ADC300 + ADC404	B
GTX WAKE (4 TEC)	2003⇒	✓	ADC300 + ADC404	B
GTX LTD SUPERCHARGED (4 TEC)	2003⇒2007	✓	ADC300 + ADC404	B
GTX 155 (4 TEC)	2007⇒	✓	ADC300 + ADC404	B
RXP (4 TEC)	2004⇒	✓	ADC300 + ADC404	B
RXP-X (4 TEC)	2008⇒	✓	ADC300 + ADC404	B
RXT (4 TEC)	2005⇒	✓	ADC300 + ADC404	B
RXT-X (4 TEC)	2008⇒	✓	ADC300 + ADC404	B
GTI (4 TEC)	2007⇒	✓	ADC300 + ADC404	B
GTI RENTAL (4 TEC)	2007⇒	✓	ADC300 + ADC404	B
GTI SE (4 TEC)	2007⇒	✓	ADC300 + ADC404	B
WAKE 155	2008⇒	✓	ADC300 + ADC404	B
WAKE 215	2008	✓	ADC300 + ADC404	B
WAKE PRO 215	2009	✓	ADC300 + ADC404	B




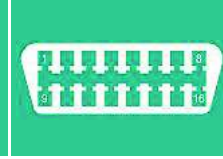



# APPLICATIONS

# A





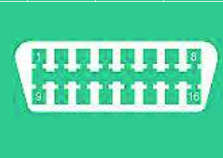

## JETLEV—KEY PROGRAMMING

 JETLEV.COM

				
JET LEV FLYER	2010⇒	✓	ADC300 + ADC404	B

## JETLEV—DIAGNOSTICS

 JETLEV.COM

			DTC 12,14			
JET LEV FLYER	2010⇒	✓	✓	✓	ADC300 + ADC404	A

# GENERAL OPERATION

# B

## SEADOO



### READ FAULT CODES

Displays the list of diagnostic trouble codes that are currently on the engine. Each fault needs to be investigated and fixed.

### CLEAR FAULT CODES

This function resets any fault codes in the ECU memory, once they have been fixed. If the problem has not been fixed, then the fault code will reappear.

### LIVE DATA

This function displays a list of LIVE DATA values from the engine ECU. This data list is what is available from the engine ECU, and each value will change as the engine components are operated. Please refer to vehicle manufacturers data for correct values and correct operating limits.

### ACTUATORS

These tests are useful for finding our specific problems with the engine. The tests include :-

- BUZZER
- FUEL PUMP
- BLOW BY VALVE
- BILGE PUMP
- CLOSE THROTTLE
- CPI VALVE
- ENGINE OFF

### SERVICE DATA

This function displays the service data of the craft, with hours run and the last service date.

### RESET SERVICE

This function resets the last service data, and allows the user to put in the new service date.

# FAULT CODES

# C

## SEADOO—4 TEC



- P0106 - Manifold atmospheric pressure sensor out of range
- P0107 - Manifold atmospheric pressure sensor or Manifold barometric pressure sensor shorted to ground
- P0108 - Manifold atmospheric pressure sensor or Manifold barometric pressure sensor shorted to 12V or open cct
- P0111 - Intake manifold temp sensor faulty
- P0112 - Intake manifold shorted to ground
- P0113 - Intake manifold shorted to 12V or open circuit
- P0116 - Engine temp sensor faulty
- P0117 - Engine temp sensor shorted to ground
- P0118 - Engine temp sensor shorted to 12V or open circuit
- P0122 - TPS out of range - short to ground
- P0123 - TPS out of range - short to 12V or open circuit
- P0231 - Fuel pump shorted to ground or open circuit
- P0232 - Fuel pump shorted to 12V
- P0261 - # 1 injector short to ground or open circuit
- P0262 - # 1 injector shorted to 12V
- P0264 - # 2 injector short to ground or open circuit
- P0265 - # 2 injector shorted to 12V
- P0267 - # 3 injector short to ground or open circuit
- P0268 - # 3 injector shorted to 12V
- P0236 - Knock sensor out of range
- P0336 - Crank position sensor - wrong RPM detected
- P0337 - No CPS signal, but CAPS signal detected
- P0339 - Crank signal fault not plausible with cam signal
- P0344 - Cam phase sensor signal missing
- P0351 - Ignition coil #1 open circuit or shorted to ground or to 12V
- P0352 - Ignition coil #2 open circuit or shorted to ground or to 12V
- P0353 - Ignition coil #3 open circuit or shorted to ground or to 12V
- P0461 - Fuel level sensor circuit out of range
- P0462 - Fuel level sensor shorted to ground
- P0463 - Fuel level sensor circuit shorted to 12V or open circuit
- P0505 - DLA output stage cut off memory circuit or output stage fault or open circuit or short to 12V
- P0513 - Incorrect DESS key
- P0520 - Oil pressure switch faulty
- P0544 - Exhaust gas temperature sensor faulty
- P0545 - Exhaust gas temperature switch shorted to ground
- P0546 - Exhaust gas temperature switch shorted to 12V or open circuit
- P0562 - Battery voltage too low
- P0536 - Battery voltage too high
- P0600 - CAN communication problem detected by EMS or MPEM
- P0601 - TPS learns unlikely or checksum fault
- P0602 - ECU not coded
- P0604 - RAM faulty
- P0605 - EEPROM faulty
- P0605 - Checksum fault EEPROM
- P0608 - Sensor 5V power supply short to ground
- P0608 - Sensor 5V power supply short to 12V
- P0616 - Starter relay short to ground or open circuit
- P0617 - Starter relay short to 12V
- P1102 - TPS adaption failure
- P1104 - TPS adaption cancelled
- P1148 - Fuel injector 1,2 or 3 - safety fuel cutoff disabled
- P1200 - Blow-by valve shorted to ground or open circuit
- P1201 - Blow-by valve shorted to 12V
- P1202 - Oil tank pressure switch implausible or blow-by valve still closed



# FAULT CODES

# C

## *SEADOO—4 TEC*



P1502 - TOPS functional problem  
P1509 - Lake temperature circuit out of range  
P1510 - Lake temperature circuit low voltage  
P1511 - Lake temperature circuit high voltage  
P1513 - Exterior temperature circuit low voltage  
P1514 - Exterior temperature circuit high voltage  
P1517 - Compass out of range  
P1590 - VTS position sensor out of range  
P1591 - VTS position sensor - low voltage  
P1592 - VTS position sensor - high voltage  
P1593 - VTS malfunction  
P1607 - MPEM fault  
P1611 - P+ Test of ISC output signal failed  
P1655 - DESS line shorted to 12v  
P1656 - DESS line shorted to ground  
P1660 - Bilge pump shorted to ground or open circuit  
P1661 - Bilge pump shorted to 12v  
P1670 - Buzzer - short to battery voltage  
P1675 - Spare output 1 shorted to ground or open circuit  
P1676 - Spare output 1 shorted to 12V  
P1678 - Spare output 2 shorted to ground or open circuit  
P1679 - Spare output 2 shorted to 12V  
P1680 - Communication problem detected by MPEM  
P1681 - Communication problem - instrument cluster message missing  
P1682 - Communication problem - EMS message missing  
P1683 - COM RAM fault  
P1690 - VTS control up circuit open circuit or shorted to ground  
P1691 - VTS control up circuit shorted to battery  
P1692 - VTS control down circuit open circuit or shorted to ground  
P1693 - VTS control down circuit shorted to battery  
P0344, P1200 - Burnt TOPS 10A fuse  
P1675 - Burnt depth gauge or spare 2A fuse  
P0353, P0267 - Burnt cylinder #3 ignition coil and injection 10A fuse  
P0352, P0264 - Burnt cylinder #2 ignition coil and injection 10A fuse  
P0351, P0261 - Burnt cylinder #1 ignition coil and injection 10A fuse  
P1680, P1681 - Burnt information center 1A fuse  
P0616 - Burnt Bilge pump, beeper, diagnostic center 3A fuse  
P1678 - Burnt spare 5A fuse  
P0231 - Burnt starter, fuel pump 10A fuse  
P0600 - Burnt MPEM 2A fuse  
P1690, P1692 - Burnt VTS 7.5A fuse

# FAULT CODES

# C

## *SEADOO—DI*

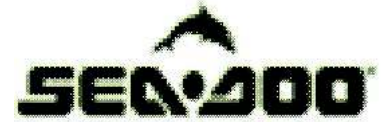


P1100	Direct injector MAG
P1101	Direct injector PTO
P0201	Fuel injector MAG
P0202	Fuel injector PTO
P0351	Ignition coil
P0352	Ignition coil
P0335	Encoder (CPS) Encoder Wrong pattern sensed
P0120	TPS
P0220	TPS
P1102	TPS
P1103	TPS
P0116	WTS
P0217	WTS
P0110	MATS
P0106	MAPS MAP Sensor out of range
P0105	MAPS
P1400	EGTS
P1401	EGTS
P0460	Fuel level sensor
P0230	Fuel pump
P0475	RAVE
P1300	Starting system
P0563	Battery voltage
P1500	Battery voltage
P0562	Battery voltage
P1501	Battery voltage
P0122	Sensor supply (TPS, MAG and MAPS)
P0222	Sensor supply (TPS, PTO)
P1600	ECU SETUP TDC and ECU not initialised
P0606	ECU
P0325	Knock sensor
P1601	Diagnostic cap

# FAULT CODES

# C

## SEADOO—RFI



P-0079	Rave valve solenoid signal too low
P-0080	Rave valve solenoid signal to high
P-0106	Manifold atmospheric pressure sensor out of range
P-0107	Manifold atmospheric pressure sensor shorted to ground
P-0108	Manifold atmospheric pressure sensor shorted to 12 V or open circuit
P-0111	Intake manifold temperature sensor functional problem
P-0112	Intake manifold temperature sensor shorted to ground
P-0113	Intake manifold temperature sensor shorted to 12 V or open circuit
P-0116	Engine temperature functional problem
P-0117	Engine temperature sensor short circuit to ground
P-0122	Throttle position sensor out of range
P-0122	Throttle position sensor short circuit to ground
P-0123	Throttle position sensor out of range - short-circuit to 12 V or open circuit
P-0231	Fuel pump shorted to ground or open circuit
P-0232	Fuel pump shorted to 12 V
P-0261	Inj #1 short-circuit to ground or open circuit
P-0262	Inj # 1 short-circuit to 12 V
P-0264	Inj #2 short-circuit to ground or open circuit
P-0265	Inj #2 short-circuit to 12 V
P-0336	Engine speed > [rpm] detected
P-0351	Ignition coil 1 open circuit or shorted to ground or to 12 V
P-0352	Ignition coil 2 open circuit or shorted to ground or to 12 V
P-0513	DESS incorrect key
P-0562	Battery voltage too low
P-0563	Battery voltage too high
P-0601	TPS learns unlikely or checksum fault
P-0601	Module call monitoring
P-0602	ECM not coded
P-0604	RAM faulty
P-0605	EPROM faulty
P-0605	Checksum fault EEPROM
P-0605	Coding ID checksum fault
P-0605	Coding checksum fault
P-0605	Programming checksum fault
P-0608	Sensor 5 V power supply short to gnd
P-0616	Starter relay open circuit
P-0617	Starter relay shorted to 12 V
P-0650	Check engine circuit open circuit or shorted to ground
P-1102	Throttle position sensor adaptation failure
P-1104	Throttle position sensor adaptation canceled
P-1148	Fuel injector 1, or 2 safety fuel cut off detected
P-1611	Engine speed > [rpm] detected
P-1655	DESS® line shorted to 12 V
P-1656	DESS® line shorted to ground
P-1670	Buzzer - Short to Battery Voltage
P-1671	Buzzer short-circuit to ground or open

# SPECIAL FUNCTIONS

# D

## SEADOO-JET SKI (4 TEC)

### DIAGNOSTICS

VEHICLE SELECTION

- + BRP
- + YAMAHA
- MERCURUISER
- KAWASAKI
- VERSION

< ^ ↶ ∨ >

VEHICLE SELECTION

- + 4 TEC

< ^ ↶ ∨ >

VEHICLE SELECTION

- + DIAGNOSTICS
- PROGRAMMING

< ^ ↶ ∨ >

VEHICLE SELECTION

- GTX
- RXT
- RXP

< ^ ↶ ∨ >

AD100 PRO MARINE

SWITCH IGNITION ON

✓

SECURITY ACCESS

PLEASE WAIT

█

### DIAGNOSTICS

ECU IDENTIFICATION

MANUFACTURER	BOMBARDIER
MODEL	PWC
MIN	ZZN69541D303
ENGINE TYPE	7221055
ECU NUMBER	N/A

✓

DIAGNOSTIC MENU

- ECU IDENTIFICATION
- FAULT CODES
- LIVE DATA
- SPECIAL FUNCTIONS

< ^ ↶ ∨

DIAGNOSTIC MENU

- DISPLAY FAULT CODES
- CLEAR FAULT CODES

< ^ ↶ ∨

DISPLAY FAULT CODES

FAULT CODES STORED	1
FAULT CODE	1 / 1
FAULT CODE NUMBER	P0513

DESS INCORRECT KEY

← ^ ∨

DIAGNOSTIC MENU

- ECU IDENTIFICATION
- FAULT CODES
- LIVE DATA
- SPECIAL FUNCTIONS

< ^ ↶ ∨

LIVE DATA

ENGINE SPEED	0	RPM
ENGINE TEMP	15	°C
BATTERY VOLTAGE	14.2	V
TPS OPENING	0.0000	%
INTAKE PRESSURE	100.4	KPa
EXHAUST GAS TEMP	16	°C
INTAKE AIR TEMP	15	°C
FUEL LEVEL	10	%

←

### DIAGNOSTICS

DIAGNOSTIC MENU

- ECU IDENTIFICATION
- FAULT CODES
- LIVE DATA
- ACTUATORS

< ^ ↶ ∨

ACTUATORS

- BUZZER
- FUEL PUMP
- BLOW BY VALVE
- BILGE PUMP
- CLOSE THROTTLE
- CPI VALVE
- ENGINE OFF

< ^ ↶ ∨

# SPECIAL FUNCTIONS

# D

## SEADOO-JET SKI (4 TEC) KEY PROG

### KEY PROGRAMMING

VEHICLE SELECTION

- + BRP
- + YAMAHA
- MERCURUISER
- KAWASAKI
- VERSION

< ^ ↶ √ >

VEHICLE SELECTION

- + 4 TEC

< ^ ↶ √ >

VEHICLE SELECTION

- + DIAGNOSTICS
- PROGRAMMING

< ^ ↶ √ >

AD100 PRO MARINE

SWITCH IGNITION ON

✓

ECU IDENTIFICATION

MANUFACTURER	BOMBARDIER
MODEL	PWC
VIN	ZZN69541D303
ENGINE TYPE	7221055
ECU NUMBER	N/A

✓

DIAGNOSTIC MENU

- ECU IDENTIFICATION
- FAULT CODES
- SPECIAL FUNCTIONS

< ^ ↶ √ >

### KEY PROGRAMMING

DIAGNOSTIC MENU

- KEYS STORED
- PROGRAM KEYS
- CLEAR KEYS
- SERVICE DATA
- RESET SERVICE

< ^ ↶ √ >

KEYS STORED

KEY 1	NORMAL
KEY 2	RENTAL
KEY 3	NORMAL
KEY 4	NORMAL
KEY 5	NORMAL
KEY 6	NORMAL
KEY 7	NORMAL
KEY 8	NORMAL

< ^ ↶ √ >

DIAGNOSTIC MENU

- KEYS STORED
- PROGRAM KEYS
- CLEAR KEYS
- SERVICE DATA
- RESET SERVICE

< ^ ↶ √ >

SECURITY ACCESS

PLEASE WAIT

█

< ^ ↶ √ >

CLEAR KEYS

ALL KEYS CLEARED

✓

DIAGNOSTIC MENU

- KEYS STORED
- PROGRAM KEYS
- CLEAR KEYS
- SERVICE DATA
- RESET SERVICE

< ^ ↶ √ >

### KEY PROGRAMMING

KEYS STORED

KEY 1	FREE
KEY 2	FREE
KEY 3	FREE
KEY 4	FREE
KEY 5	FREE
KEY 6	FREE
KEY 7	FREE
KEY 8	FREE

< ^ ↶ √ >

DIAGNOSTIC MENU

- KEYS STORED
- PROGRAM KEYS
- CLEAR KEYS
- SERVICE DATA
- RESET SERVICE

< ^ ↶ √ >

KEYS STORED

KEY 1	FREE
KEY 2	FREE
KEY 3	FREE
KEY 4	FREE
KEY 5	FREE
KEY 6	FREE
KEY 7	FREE
KEY 8	FREE

< ^ ↶ √ >

PROGRAM KEYS

WOULD YOU LIKE TO PROGRAM KEYS

✗ ✓

KEY TYPE

- NORMAL
- RENTAL
- LEARNER

< ^ ↶ √ >

PROGRAM KEYS

PLEASE CONNECT KEY AND HOLD IN PLACE

➔

# SPECIAL FUNCTIONS

# D

## SEADOO-JET SKI (4 TEC)

### KEY PROGRAMMING

SECURITY ACCESS

PLEASE WAIT

█

SECURITY ACCESS

ACCESS GAINED

█

✓

SECURITY ACCESS

SUCCESS

█

✓

KEYS STORED

KEY 1	NORMAL
KEY 2	FREE
KEY 3	FREE
KEY 4	FREE
KEY 5	FREE
KEY 6	FREE
KEY 7	FREE
KEY 8	FREE

✓

REPEAT PROCEDURE FOR ALL TYPES OF KEYS REQUIRED.

### SERVICE DATA

DIAGNOSTIC MENU

KEYS STORED  
PROGRAM KEYS  
CLEAR KEYS  
SERVICE DATA  
RESET SERVICE

< ^ ↶ ↷

SERVICE DATA

HOURS RUN	130
LAST SERVICE	13-08-07

←

### RESET SERVICE

DIAGNOSTIC MENU

KEYS STORED  
PROGRAM KEYS  
CLEAR KEYS  
SERVICE DATA  
RESET SERVICE

< ^ ↶ ↷

ENTER HOURS RAN

----

1	2	3	4	5
6	7	8	9	0

ENTER HOURS RAN

1234

×

✓

ENTER YEAR

--

1	2	3	4	5
6	7	8	9	0

ENTER YEAR

08

×

✓

ENTER MONTH

--

1	2	3	4	5
6	7	8	9	0





# SPECIAL FUNCTIONS

# D



## SEADOO-JET SKI (4 TEC)

### RESET SERVICE

ENTER MONTH

01

×				✓
---	--	--	--	---

ENTER DAY

--

1	2	3	4	5
6	7	8	9	0

ENTER DAY

06

×				✓
---	--	--	--	---

NOTE : PRESSING THE TICK AT THIS POINT WILL RESET THE SERVICE DATA TO WHAT HAS BEEN SELECTED.

NOTE : THIS FUNCTION WILL ONLY WORK IF THE MAINTENANCE MESSAGE IS DISPLAYED ON DASH PANEL.

# GLOSSARY



ADC	Analogue to Digital Conversion
AC	Alternate Current
AP	Air Pressure Sensor
ATS	Air Temperature Sensor
B.U.D.S	Bombardier Utility and Diagnostic Software
CDI	Capacitor Discharge Ignition
CPS	Crankshaft Position Indicator
CSI	Cooling System Indicator
DC	Direct Current
DESS	Digital Electronic Security System
DI	Direct Injected
E.I.N	Engine Identification Number
ECM	Electronic Control Module
ECU	Electric Control Unit
EMS	Engine Management System
EPA	Environmental Protection Agency (USA)
HP	Horse Power
LED	Light Emitting Diode
MAG	Magneto
MPEM	Multi-Purpose Electronic Module
MPH	Mile Per Hour
MPI	Multi Protocol Interface
OPT	Optional
P/N	Part Number
PFD	Personal Flotation Device
PSI	Pounds Per Square Inch
PTO	Power Take Off
RAVE	Rotax Adjustable Variable Exhaust
RFI	Rotax Fuel Injection
RPM	Revolutions Per Minute
STD	Standard
TDC	Top Dead Centre
TPS	Throttle Position Sensor
VDC	Volts Direct Current
VCK	Vehicle Communication Kit
VTS	Variable Trim System
WTS	Water Temperature sensor

# SEADOO TROUBLESHOOTING



CODED SIGNALS	POSSIBLE	CAUSE REMEDY
2 short beeps (while installing safety lanyard on post).	<ul style="list-style-type: none"><li>• Confirms safety lanyard signal operation.</li></ul>	Engine can be started.
1 long beep(while installing Safety lanyard on watercraft post).	<ul style="list-style-type: none"><li>• Bad DESS system connection.</li><li>• Wrong safety lanyard.</li><li>• Defective safety lanyard.</li><li>• Dried salt water in safety lanyard cap.</li><li>• Defective DESS post.</li><li>• Improper operation of EMS ECU or defective wiring harness.</li></ul>	<p>Reinstall safety lanyard cap correctly over post.</p> <p>Use a safety lanyard that has been programmed for the watercraft.</p> <p>Use another programmed safety lanyard.</p> <p>Clean safety lanyard cap to remove salt water.</p> <p>Refer to an authorized Sea-Doo dealer.</p> <p>Refer to an authorized Sea-Doo dealer.</p>
1 short beep followed by 1 long beep.	<ul style="list-style-type: none"><li>• EMS ECU has been inadvertently set to onboard diagnostic mode.</li></ul>	Remove and reinstall safety lanyard.
4 short beeps every 3 seconds interval for 4 hours.	<ul style="list-style-type: none"><li>• Safety lanyard has been left on its post without starting engine or after engine was stopped.</li></ul>	To prevent battery discharge, remove the safety lanyard from its post.
A 2 seconds beep every minute interval.	<ul style="list-style-type: none"><li>• High pressure in oil separator tank.</li><li>• Low fuel level.</li><li>• Fuel tank level sensor or circuit malfunction.</li></ul>	<p>Refer to an authorized Sea-Doo dealer.</p> <p>Refer to an authorized Sea-Doo dealer.</p> <p>Refer to an authorized Sea-Doo dealer.</p>

# SEADOO TROUBLESHOOTING



## CODED SIGNALS

## POSSIBLE

## CAUSE REMEDY

A 2 seconds beep every 15 minutes interval.

- Watercraft is upside down.
- Engine coolant temperature sensor or circuit malfunction.
- Fuel level sensor or circuit malfunction.
- Exhaust temperature sensor or circuit malfunction.
- Engine oil pressure sensor or circuit malfunction.
- Low pressure in oil separator tank (engine oil leak).
- TOPS sensor or circuit malfunction.
- TOPS valve solenoid or circuit malfunction.
- EMS ECU failure.
- Bilge pump circuit low or high voltage (if so equipped).
- Starter solenoid circuit malfunction.

Turn watercraft upright. Refer to SPECIAL PROCEDURES.

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Continuously beeps.

- High engine temperature coolant.
- High exhaust temperature.

See engine OVERHEATING.

Refer to an authorized Sea-Doo dealer.