


PWC-KIT – Einziehbarer Skimast (Sea-Doo)

Produkt:	Sea-Doo_watercraft
Projekt Nein:	487800755_rev2
Anleitung P/N:	487800755
Überarbeitung Nr:	2
Änderungsdatum:	14. Februar 2018
Abgedeckter Artikel:	Einziehbarer Skimast (Sea-Doo)

Die folgenden Symbole können in diesem Dokument verwendet werden:

WARNUNG

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

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

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

WARNUNG

- 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.

- Wenn für die Installation des Kits eine Schablone erforderlich ist, stellen Sie sicher, dass die Schablone maßstabsgetreu ist.

- Sollte bei der Demontage/Montage das Entfernen einer Verriegelung (z. B. Sicherungsglaschen, 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.

WARNUNG

Einige wichtige Sicherheitsinformationen und/oder Betriebsanweisungen für den Endverbraucher können in diesem Anweisungsblatt enthalten sein. Stellen Sie sicher, dass Sie dem Kunden die Kit-Teilenummer sowie das diesem Kit beiliegende Anleitungsblatt mitteilen. Stellen Sie sicher, dass der Kunde Zugriff auf alle Informationen hat, die für die ordnungsgemäße Verwendung des Zubehörs erforderlich sind.

HINWEIS : VERWENDEN SIE DIE ANZUGSDREHMOMENTE IN DER FOLGENDEN TABELLE, WENN NICHT ANDERS ANGEGEBEN.

GRAD

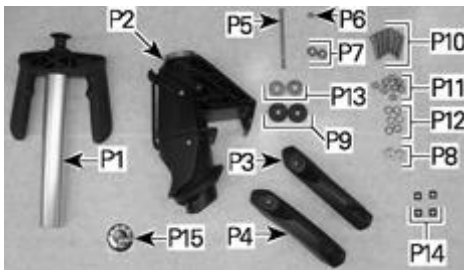
	5.8	8.8	10.9	12.9
M4	1,8 ± 0,2 N•m (16 ± 2 lbf• Zoll)	2,8 ± 0,2 N•m (25 ± 2 lbf• Zoll)	3,8 ± 0,2 N•m (34 ± 2 lbf• Zoll)	4,5 ± 0,5 N•m (40 ± 4 lbf• Zoll)
M5	3,3 ± 0,2 N•m (29 ± 2 lbf• Zoll)	5 ± 0,5 N•m (44 ± 4 lbf• Zoll)	7,8 ± 0,7 N•m (69 ± 6 lbf• Zoll)	9 ± 1 N•m (80 ± 9 lbf• Zoll)
M6	7,5 ± 1 N•m (66 ± 9 lbf• Zoll)	10 ± 2 N•m (89 ± 18 lbf• Zoll)	12,8 ± 2,2 N•m (113 ± 19 lbf• Zoll)	16 ± 2 N•m (142 ± 18 lbf• Zoll)
M8	15,3 ± 1,7 N•m (135 ± 15 lbf• Zoll)	24,5 ± 3,5 N•m (18 ± 3 lbf•ft)	31,5 ± 3,5 N•m (23 ± 3 lbf•ft)	40 ± 5 N•m (30 ± 4 lbf•ft)

M10	29 ± 3 N•m (21 ± 2 lbf•ft)	48 ± 6 N•m (35 ± 4 lbf•ft)	61 ± 9 N•m (45 ± 7 lbf•ft)	73 ± 7 N•m (54 ± 5 lbf•ft)
M12	52 ± 6 N•m (38 ± 4 lbf•ft)	85 ± 10 N•m (63 ± 7 lbf•ft)	105 ± 15 N•m (77 ± 11 lbf•ft)	128 ± 17 N•m (94 ± 13 lbf•ft)
M14	85 ± 10 N•m (63 ± 7 lbf•ft)	135 ± 15 Nm (100 ± 11 lbf•ft)	170 ± 20 N•m (125 ± 15 lbf•ft)	200 ± 25 N•m (148 ± 18 lbf•ft)
M16	126 ± 14 N•m (93 ± 10 lbf•ft)	205 ± 25 N•m (151 ± 18 lbf•ft)	255 ± 30 N•m (188 ± 22 lbf•ft)	305 ± 35 N•m (225 ± 26 lbf•ft)
M18	170 ± 20 N•m (125 ± 15 lbf•ft)	273 ± 32 N•m (201 ± 24 lbf•ft)	330 ± 25 N•m (243 ± 18 lbf•ft)	413 ± 47 N•m (305 ± 35 lbf•ft)

NOTE: 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	DESCRIPTION	part number	QTY
P1	Handle (ski pylon)	291004765	1
P2	Support	291002553	1
P3	Lateral Arm (RH)	291002712	1
P4	Lateral Arm (LH)	291002711	1
P5	M6 x 100 Hexagonal Bolt	230060060	1
P6	M6 Elastic Stop Nut	232561200	5
P7	M6 Flat Washer	234062600	2
P8	Flat Washer	293050001	2
P9	Rubber Washer	293830037	2
P10	M8 x 40 Rounded Head Bolt	205484060	6
P11	M8 Elastic Stop Nut	232581200	8
P12	M8 Stainless Flat Washer	234081600	6
P13	M8 Stainless Flat Washer	250200011	2
P14	Nut Housing	269501166	4
P15	BRP Logo Decal	219902983	1

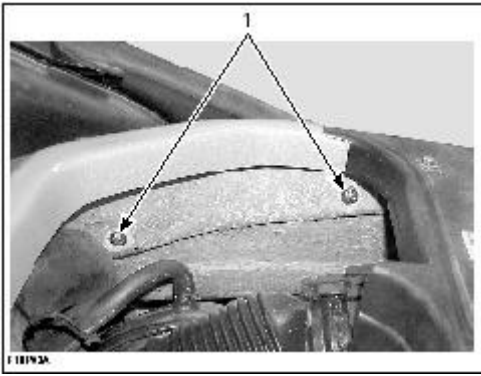
Instructions

Preparation

1. Remove or lift seat.

Up to 2009

2. Remove side bolts from both sides of grab handle; keep bolts and flat washers for reuse.



1. Grab handle side bolts

NOTE: Lift coolant reservoir out of its bracket and set it aside in order to ease removal of right forward bolt.

3. Remove two M8 x 45 hexagonal bolts that are retaining grab handle at rear center; discard their elastic stop nuts but keep inside and outside flat washers with bolts for reuse.

4. Remove grab handle and set aside.

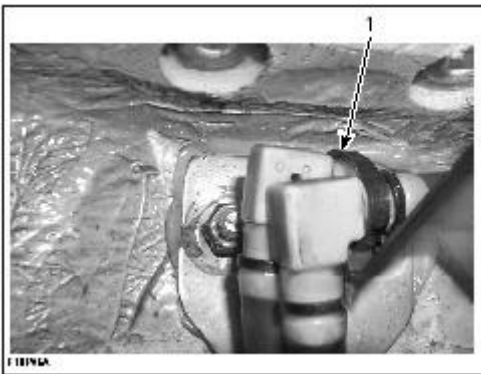


1. Grab handle center screws M8 x 45

5. Cut locking tie around upper exhaust hose (except on RXT™-X™ models).

6. With a bungee cord, pull and secure hose forward; this will provide more working space.

7. For vehicle with bailer hoses secured to U-Clamp retainer plate, cut locking tie to unhook and set bailer hoses aside.



Hoses secured with locking ties

1. Locking tie around bailer hoses

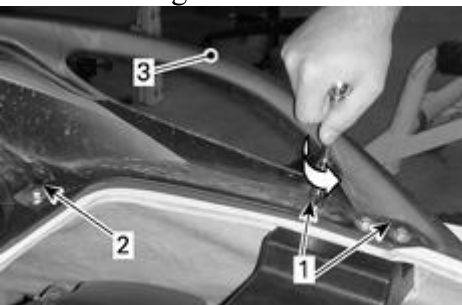
NOTICE Locking tie is secured onto the 90° fittings. It is the way to secure bailer hoses once wake pylon installation is completed.

2010 and up GTX and RXT platforms

8. Remove grab handle and bridge bolts from body (8 x M6 bolts: 6 on sides and 2 at rear):

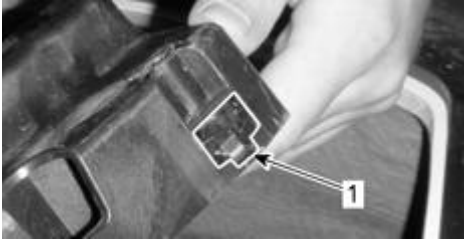
8.1 Remove the 4 bridge bolts.

8.2 Remove grab handle rear bolts.



typical - Rxp shown

1. Bridge bolt
 2. Grab handle bolt
 3. Grab handle
- 8.3 Remove bridge with coolant reservoir and set it aside.
8.4 Remove and discard stop nuts and nut housings. Keep flat washers for reuse.

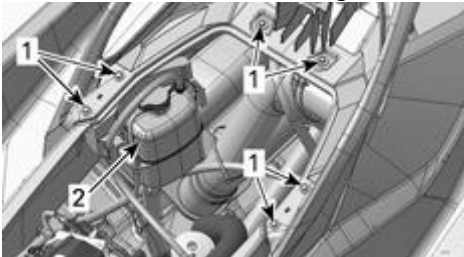


1. Nut housing mounted in bridge
8.5 Remove remaining (2) grab handle bolts.



1. Grab handle
 2. Handle bolt removal
- 2011 and up GTI, GTR and GTS platforms

9. Remove grab handle and coolant bottle
9.1 Remove the 6 retaining bolts. Keep flat washers for reuse.



typical - GTI shown

1. Retaining bolts to remove
 2. Coolant bottle
- 9.2 Remove and discard stop nuts and nut housings in coolant bottle support.

All models

10. Remove and discard U-clamp, exterior finish plate and nuts.

NOTE: Keep retainer plate inside (already trapped in silicone) or flat washers, depending on vehicle.

Replacement parts are supplied with the new kit.



U-Clamp hook assembly

1. U-Clamp
2. Hook
3. Finish plate

Drilling and Assembling

NOTICE Proper understanding of the following steps is of the utmost importance. Make sure the instructions are understood before starting to drill holes in the deck.

2010 and up - Applicable models

1. Remove decal.



NOTE: Use the correct template for your watercraft. Model names are indicated on template.

2. Precut and center hole template (attached to the instructions) in circular flat recess on deck (previous decal location) using tape.

NOTE: Make sure to orient template correctly according to reference lines. Vertical line must be aligned with length of vehicle, upside pointing towards bow.



hole template in position - GTX - RXT model shown



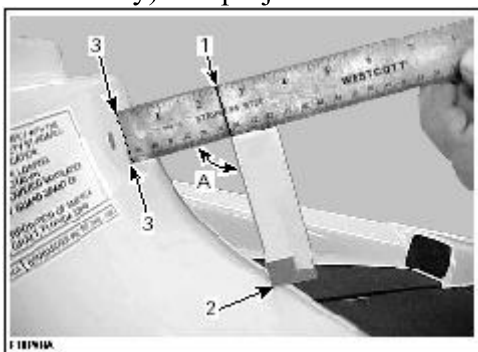
Hole template in position - GTI, GTR and GTS model shown

3. Punch target mark.



Up to 2009

4. Using a square set at 61.6 mm (2-13/32 in), start at center between both U-clamp holes (respect the angle of the body) and project the most center position on the rear hull.



Using square for mast hole location

1. Distance from surface = 61.6 mm (2-13/32 in)

2. Most center position on rear hull
 3. Square laid flat to the angle of body
 - A. 90° angle
 5. Mark that spot with a marker pen. Punch it as a guide for drilling operation.
- All models

6. Place a piece of wood under drilling location to protect internal components if necessary.



Piece of wood used as protector

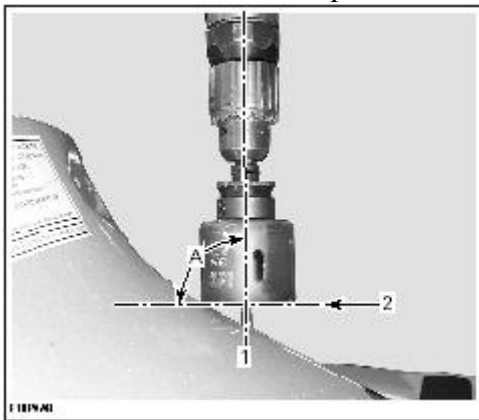
7. Using a 4.7 mm (3/16 in) bit, gently drill a hole in hull.

NOTICE Take care not to press too hard to start so bit will not skid off position, thus damaging paint surface. Do not drill too deeply, this could damage the intercooler or other components.



8. Using a 57 mm (2-1/4 in) hole saw gently start piercing the hull in a vertical alignment. Saw will bite at front first; slowly keep on drilling in that vertical alignment until saw goes through body lining.

NOTICE The pilot drill bit should not extend too far out of the hole saw. When performing this step, be careful not to drill in components located right under this location.



Using hole saw for pylon mast opening

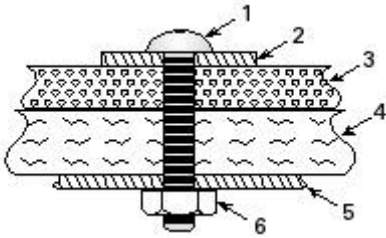
1. Vertical alignment
 2. Hole saw parallel with bumper line
 - A. 90° angle
9. Clean outside and inside hull from fiberglass residues.



10. Insert pylon support lower end through hole.

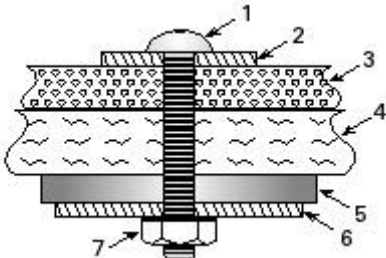


1. Pylon support [P2] installed to its location
11. Lean support upper section against body and align with U-clamp/hook holes.
12. Insert M8 x 40 screw and flat washer to the support upper section.
13. Assemble stop nut on backside and fasten manually against the retainer plate or washers.



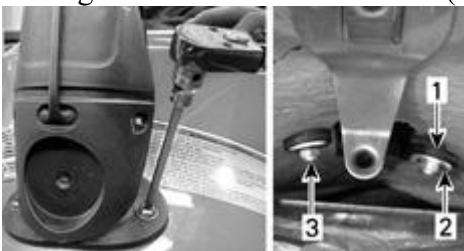
Upper section assembly

1. M8 x 40 screw [P10]
2. Flat washer [P8]
3. Support [P2] upper section
4. Body lining (fiberglass)
5. Retainer plate or kept flat washers
6. Stop nut [P11]
14. Tighten stop nut to $11.5 \pm .5 \text{ N}\cdot\text{m}$ ($102 \pm 4 \text{ lbf}\cdot\text{in}$).
15. Drill 8 mm (5/16 in) holes through body lining by using lower section holes as templates (not shown).
16. Remove the piece of wood protecting the internal components.
17. Insert M8 x 40 screw with flat washer to the support lower section holes.
18. Assemble rubber washer, steel flat washer and stop nut on the backside and fasten manually against body lining.



Lower section assembly

1. M8 x 40 screw [P10]
2. Flat washer [P12]
3. Support [P2] lower section
4. Body lining (fiberglass)
5. Rubber washer [P9]
6. Steel flat washer [P13]
7. Stop nut [P11]
19. Tighten nuts to $11.5 \pm .5 \text{ N}\cdot\text{m}$ ($102 \pm 4 \text{ lbf}\cdot\text{in}$).



Assembling support lower section

1. Rubber washer [P9]

2. Steel flat washer [P13]
3. Nut [P11]

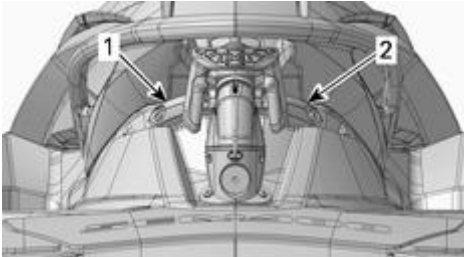


20. Locate side and position of lateral arms (LH & RH) on the support.
NOTE: RH & LH parts names are indicated on the backside.



See LH/RH indication on backsides

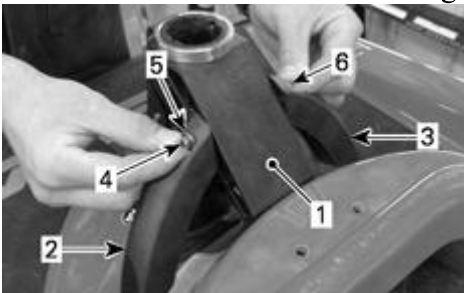
NOTE: For GTI, GTR and GTS models, invert RH and LH side for installation.



Ski Pylon installation on GTI, GTR and GTS

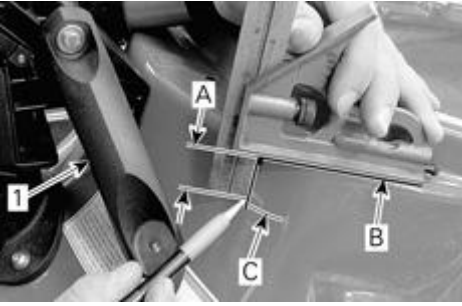
1. RH arm installed on LH side
2. LH arm installed on RH side

21. Assemble M6 x 100 bolt through the ski pylon support with M6 flat washers and nut.



Typical

1. Ski pylon support [P2]
2. RH arm [P3]
3. LH arm [P4]
4. M6 x 100 bolt [P5]
5. M6 flat washer on both sides [P7]
6. M6 nut [P6]
22. Tighten M6 x 100 bolt to $8 \pm 1 \text{ N}\cdot\text{m}$ ($71 \pm 9 \text{ lbf}\cdot\text{in}$).
- Up to 2009
23. Using a square, trace gauge line for drilling.



1. RH arm [P3]

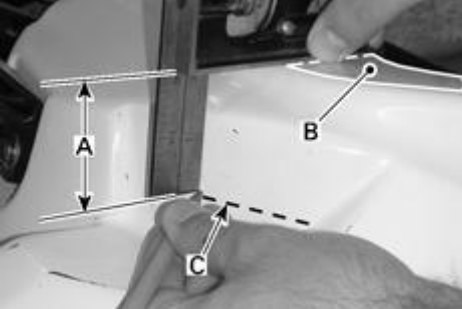
A. Distance from surface to drilling gauge line = 35 mm (1-3/8 in)

B. Surface reference plane

C. Gauge line trace

2010 and up GTX and RXT platforms

24. Using a square, trace a line for drilling.



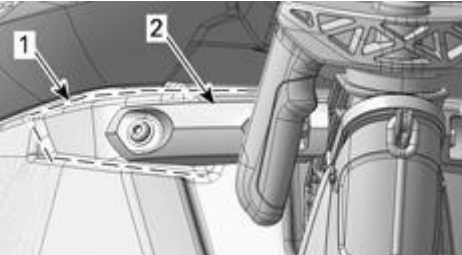
A. Distance from surface to drilling gauge line = 52 mm (2 in)

B. Reference plane surface

C. Gauge line trace

All models

25. Rotate/bring arm to its position aligning the center of its hole with the gauge line or centering it vertically in its recess for GTI, GTR or GTS platforms.



Ski Pylon Arm installation - GTI- shown - Typical

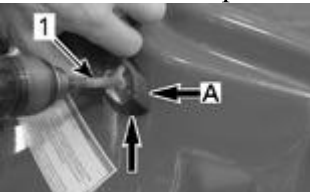
1. Recess

2. Ski Pylon arm centered vertically

NOTE: Make sure that arm is correctly oriented and that its surface matches that of the hull.

26. Drill a 8 mm (5/16 in) hole through body lining by using arm screw hole as a template.

NOTICE Respect arm screw hole angle during drilling for a better assembling. Hold part firmly.



1. 8 mm (5/16 in) drill bit

A. Holding part in position

27. Insert a M8 x 40 screw [P10] with a flat washer [P12] through both arm holes.

28. Assemble a flat washer [P12] and a stop nut [P11] on the backside and fasten manually against body lining.

29. Tighten arm screws to $11.5 \pm 1.5 \text{ N}\cdot\text{m}$ ($102 \pm 13 \text{ lbf}\cdot\text{in}$).

Reinstallation and Final Assembly

Up to 2009

1. Remove bungee cord so upper exhaust hose sets to its position and secure upper exhaust hose with a locking tie.

2. Reinstall grab handle using new nut housings [P14], nuts and the kept M6 bolts on both sides.
3. Tighten to $8 \pm 1 \text{ N}\cdot\text{m}$ ($71 \pm 9 \text{ lbf}\cdot\text{in}$).



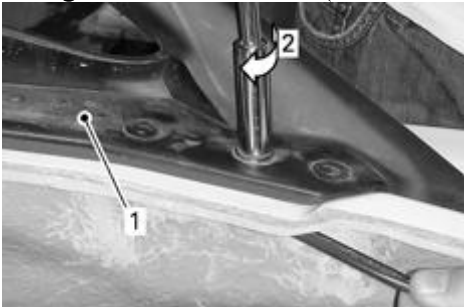
4. Secure grab handle at rear using kept M8 x 45 hexagonal bolts and flat washers with new M8 elastic stop nuts [P11].

5. Tighten nuts to $8 \pm 1 \text{ N}\cdot\text{m}$ ($71 \pm 9 \text{ lbf}\cdot\text{in}$).

2010 and up GTX and RXT platforms

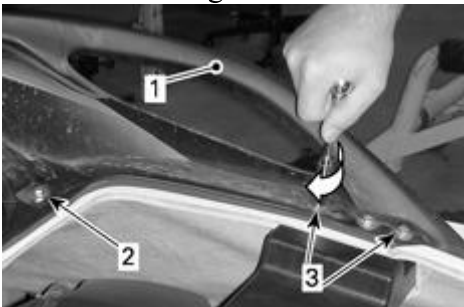
6. Reinstall grab handle using new nut housings [P14], nuts [P6], and the kept M6 bolts and washers on both sides and rear.

7. Tighten to $8 \pm 1 \text{ N}\cdot\text{m}$ ($71 \pm 9 \text{ lbf}\cdot\text{in}$).



1. Grab handle
2. Handle bolt installation

8. Reinstall bridge with coolant reservoir using the 4 bridge bolts and new M6 nut housings [P14].



1. Grab handle
2. Grab handle (rear) bolt
3. Bridge retaining bolt

9. Tighten nuts [P6] to $8 \pm 1 \text{ N}\cdot\text{m}$ ($71 \pm 9 \text{ lbf}\cdot\text{in}$).

2011 and up - GTI, GTR and GTS platforms

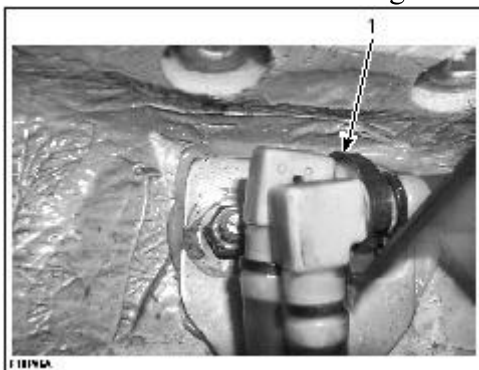
10. Reinstall grab handle and coolant bottle support using new nut housings [P14], nuts [P6] and the kept M6 bolts and washers on both sides.

11. Tighten to $8 \pm 1 \text{ N}\cdot\text{m}$ ($71 \pm 9 \text{ lbf}\cdot\text{in}$).

All models

12. If you moved bailer hoses, secure them back in place with a new locking tie.

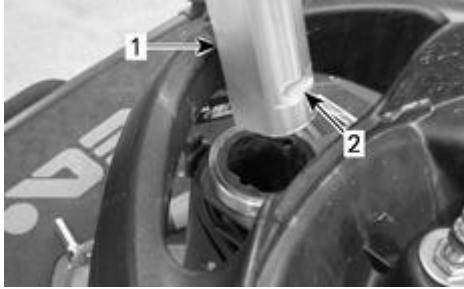
NOTICE Remember to align locking tie onto 90° fitting and not on hoses.



Hoses secured with locking ties

1. Locking tie around bailer hoses

13. Insert the pylon cylinder into the support.



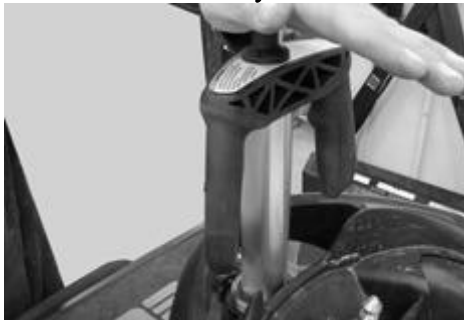
1. Pylon handle [P1]

2. Pylon cylinder notch for safety lock

14. Make sure cylinder slides up and down freely without obstruction from grab handle then resume the procedure.

!WARNING

Make sure the safety mechanism stops the cylinder in its up position.



Checking pylon handle movement

Pylon cylinder may be unlocked and removed from its support by pressing the support collar.



A. Pushing down collar to unlock cylinder

15. Reinstall coolant reservoir into its brackets.

16. Reinstall seat.

17. Apply BRP decal to its location.

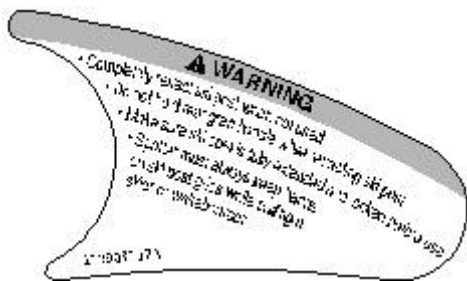


!WARNING

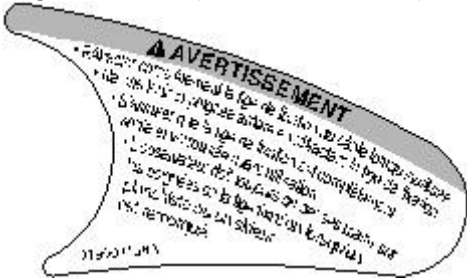
Completely retract ski pylon when not used. Do not hold rear grab handle while retracting ski pylon. Make sure it is fully extended and locked before use. Spotter must always keep hands on ski pylon handle while pulling a skier or a wakeboarder.

safety Label

This product comes with the following, already apposed, english warning label containing important safety information. Install the french label if necessary.



english label (P/N 219 903 137)

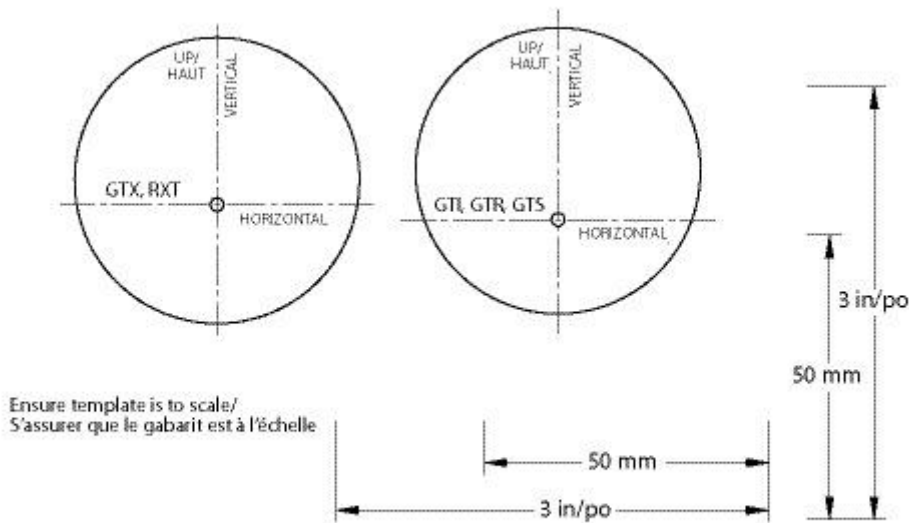


französisches Etikett (P/N 219 903 138)

Das Etikett sollte als fester Bestandteil dieses Produkts betrachtet werden. Wenn sich das Etikett löst oder schwer lesbar ist, wenden Sie sich bitte an einen autorisierten Händler, um es zu ersetzen.

Jede Person, die beabsichtigt, dieses Produkt zu verwenden, sollte die auf dem Warnschild enthaltenen Informationen lesen und verstehen, bevor sie dies tut.

Verwenden Sie die französischen Aufkleber, die in den französischen Aufklebersätzen des Fahrzeugs enthalten sind. Siehe den elektronischen Teilekatalog von BRP, um den passenden Aufklebersatz zu bestellen.



[Vorlage - Gabarit.pdf](#)