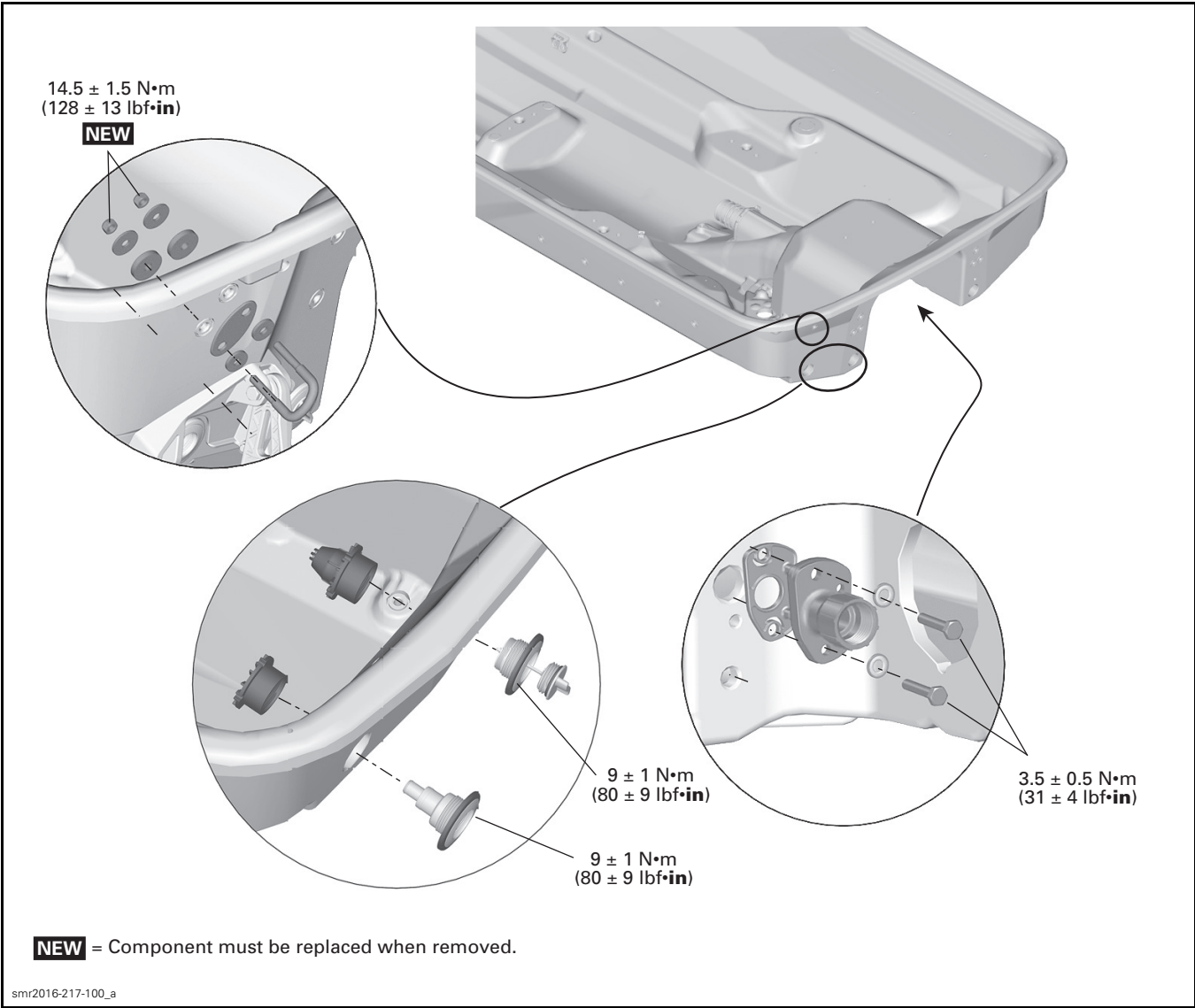
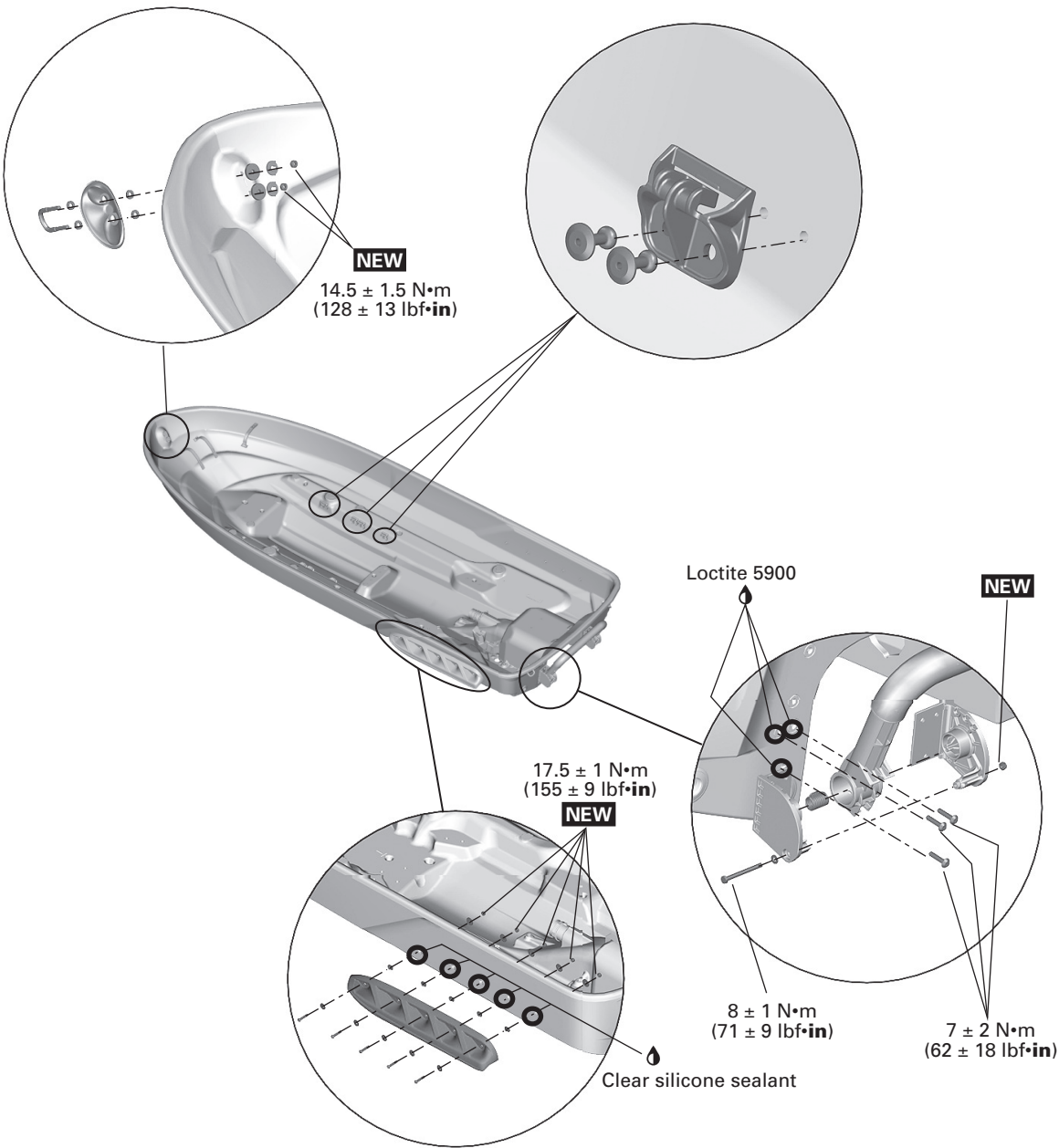


HULL

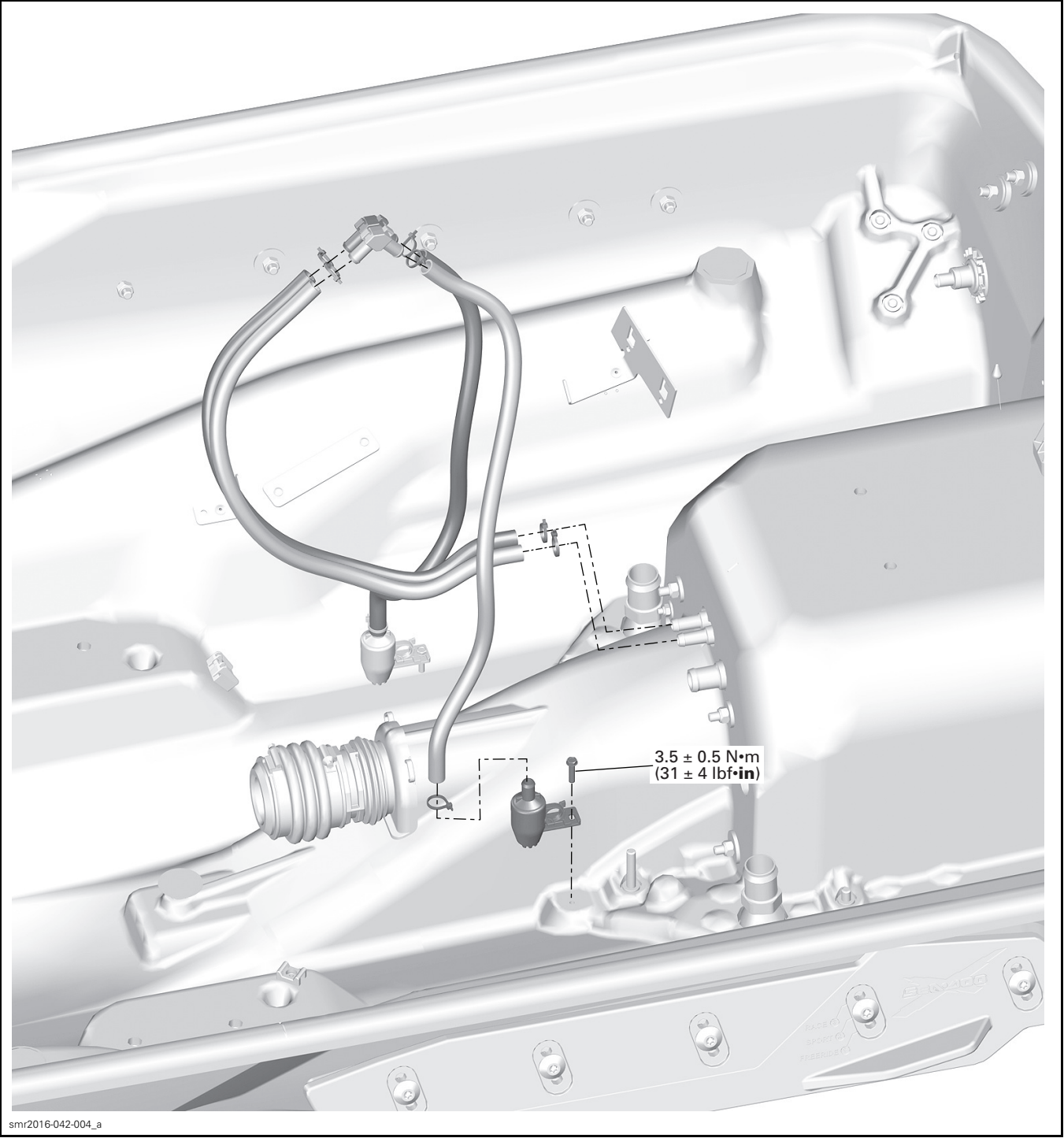
SERVICE PRODUCTS

Description	Part Number	Page
BRP HEAVY DUTY CLEANER	293 110 001	8-10
CLEAR SILICONE SEALANT	296 000 309	10-12
LOCTITE 5900	293 800 066	8-10

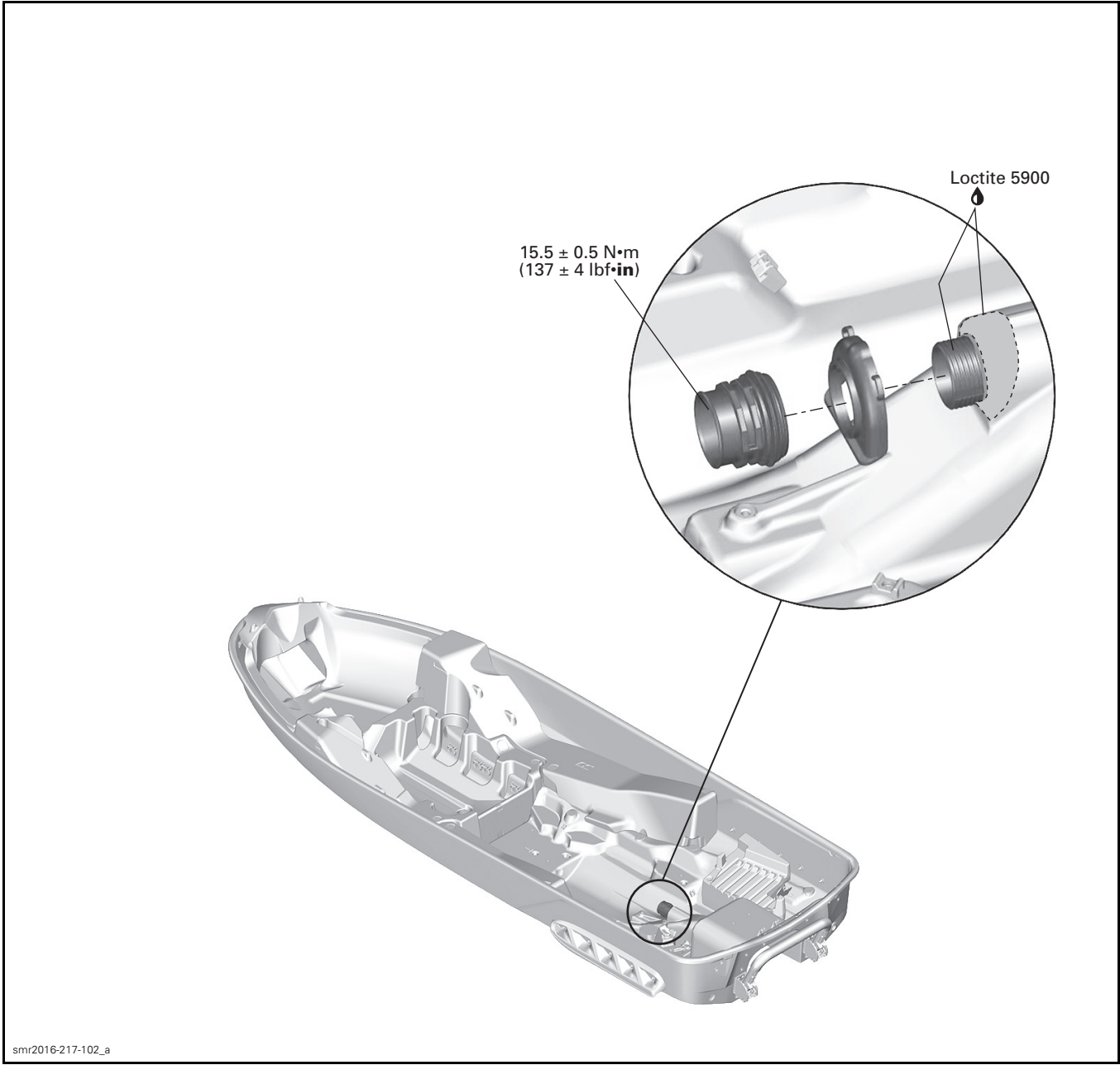




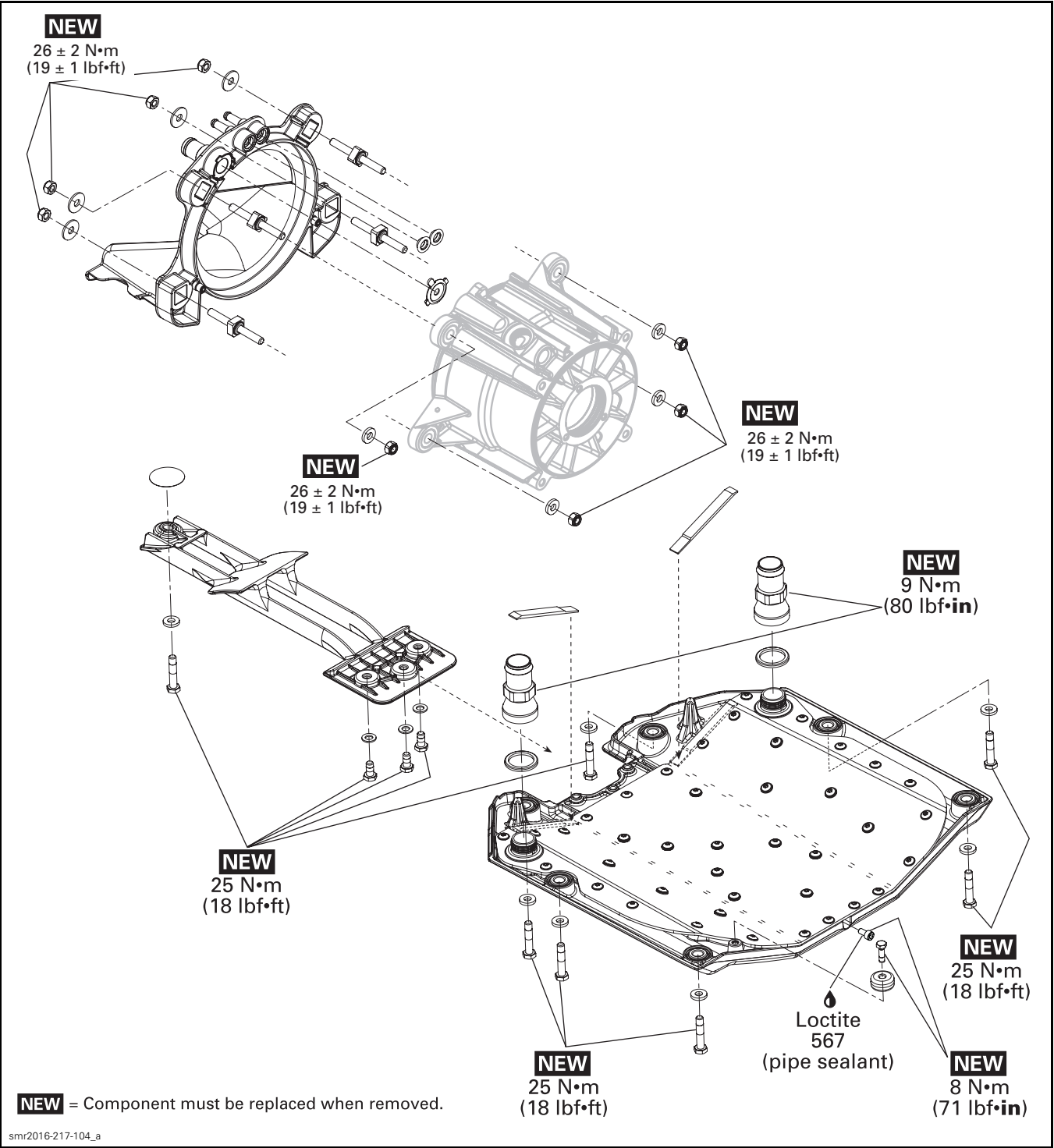
NEW = Component must be replaced when removed.



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PROCEDURES

HULL

Hull Repair

The repair procedures of the hull is not the same as a fiberglass composite hull and deck. The standard polyester based fiberglass repair kits **will not work** with this type of hull. The polyester will not adhere to the hull material. Only two-part epoxy repair material should be used.

To repair a hull, the use of an Epoxy repair system, such as the WEST SYSTEM® or equivalent epoxy, is mandatory.

However, the finish on the hull is a polyester based gelcoat with a bonding layer between the hull and the gelcoat. Standard gelcoat refinishing can be performed if the damage is limited to the color surface. If damage requires the removal or the repair to structure material, the epoxy may also be used as a barrier coat before refinishing with gelcoat. Epoxy adheres to hull material, and gelcoat adheres to epoxy.

An epoxy repair kit can be purchased directly from WEST SYSTEM.

Go to www.westsystem.com.

On this site you will find complete repair instructions, click on HOW TO USE.

Also training videos, tools and several products are available on the web site.

Consumer Assistance

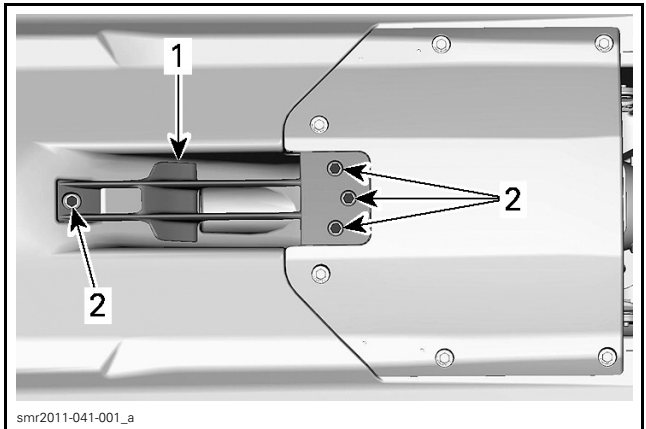
North and South America
WEST SYSTEM 102 Patterson Ave. P.O. Box 665 Bay City, MI 48707-0665 Phone: 989 684-7286 Toll free: 866 937-8797 Fax: 989 684-1374
Europe, Middle East, Africa and Asia
WESSEX RESINS AND ADHESIVES LIMITED Cupernham House, Cupernham Lane, Romsey England SO51 7LF Phone: 44-1-794-521-111 Fax: 44-1-794-517-779 E-mail: info@wessex-resins.com

Australia, South Pacific and Asia
ATL COMPOSITES P.O. Box 2349/Southport 4215 Queensland, Australia Tel.: +61 7-5563-1222, Fax: +61 7-5563-1585 E-mail: info@atlcomposites.com
New Zealand, South Pacific and Asia
ADHESIVE TECHNOLOGIES LTD. 17 Corbans Ave./Box 21-169, Henderson Auckland, New Zealand Phone: 64-9-838-6961 Fax: 64-9-836-4849 E-mail: enquiries@adhesivetechnologies.co.nz

INLET GRATE

Removing the Inlet Grate

- 1. Remove inlet grate retaining screws using an impact tool. Discard screws.



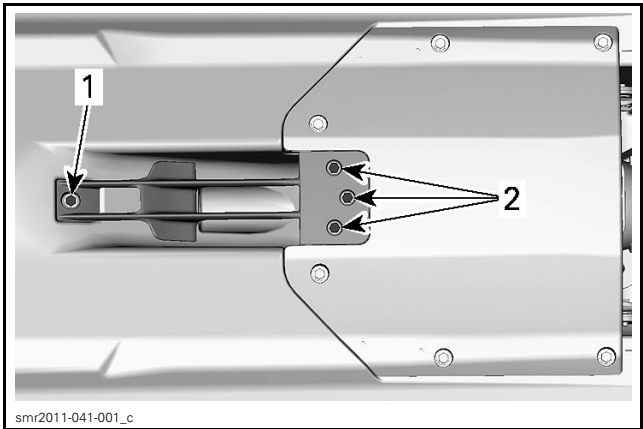
TYPICAL – GTS MODEL SHOWN
1. Inlet grate
2. Inlet grate screws

- 2. Remove inlet grate.

Installing the Inlet Grate

- 1. Install NEW inlet grate retaining screws at the proper location.

INLET GRATE SCREWS		
LOCATION	MODEL	SCREW SIZE
Front	All	M8 x 45
Rear	GTS, GTI, GTR and WAKE 155	M8 x 16

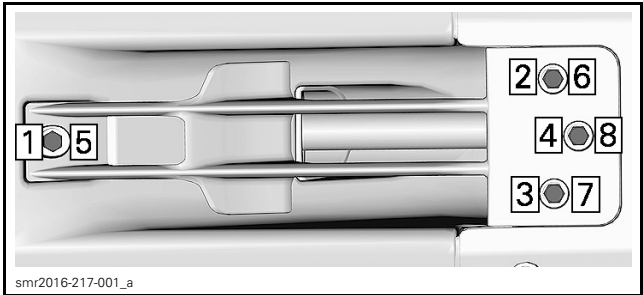


SCREW LOCATION

- 1. Front
- 2. Rear

2. Tighten screws to the specified torque and sequence.

TIGHTENING TORQUE		
INLET GRATE SCREWS	First step (1-4)	Hand tighten
	Second step (5-8)	25 N•m (18 lbf•ft)



TIGHTENING TORQUE SEQUENCE

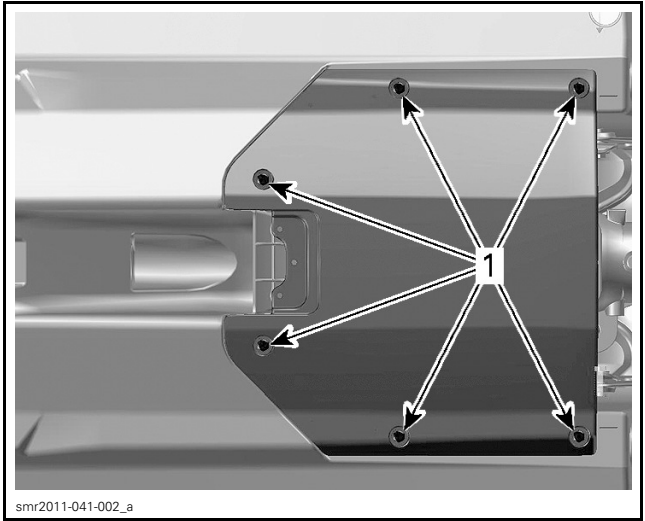
RIDE PLATE

Removing the Ride Plate

1. Remove inlet grate, see procedure in this subsection.
2. Remove jet pump. Refer to *JET PUMP*.
3. Drain cooling system. Refer to *COOLING SYSTEM*.
4. From inside the hull, disconnect coolant hoses from the ride plate.
5. Remove coolant hose fittings from the ride plate.

NOTICE If possible, remove the hose fittings from the ride plate before removing the ride plate. If fittings cannot be removed, proceed with care when removing the ride plate.

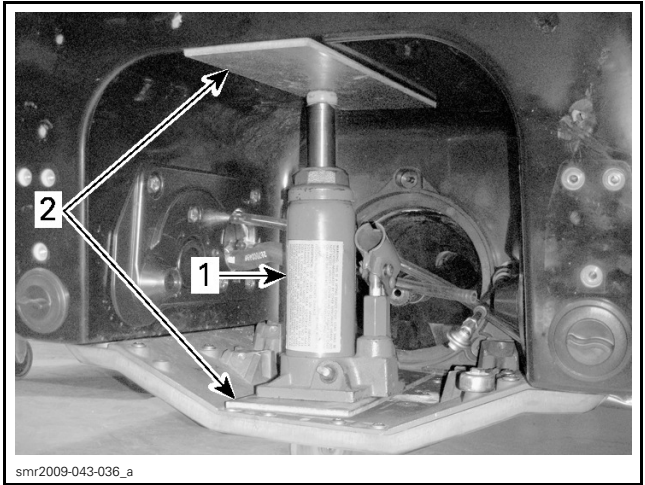
6. Heat ride plate retaining screws using a heat gun.
7. Using an impact tool, remove and discard retaining screws.



TYPICAL

- 1. Ride plate retaining screws

8. Install a low height hydraulic bottle jack and 2 steel plates between ride plate and hull as per following illustration.



TYPICAL

- 1. Hydraulic bottle jack
- 2. Steel plates

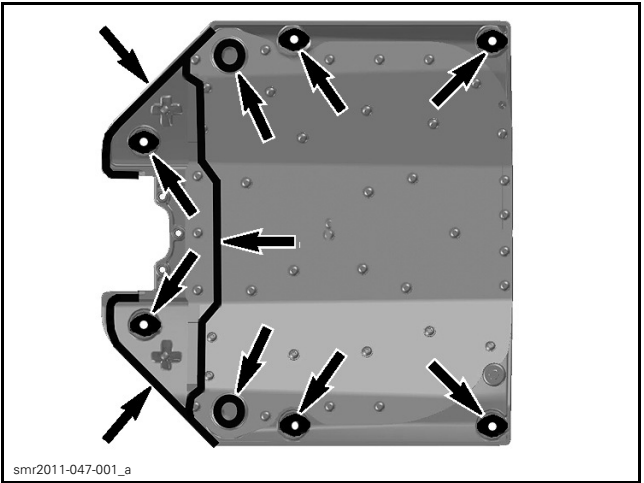
9. Heat the edge of the ride plate with a heat gun to soften the sealant.
10. Start pumping the hydraulic jack slowly.
11. Using a sharp knife, carefully cut the sealant around the ride plate edges.
12. Pump the hydraulic jack slowly to pry the ride plate from the hull.

Cleaning the Ride Plate

- 1. Carefully scrape off all excess sealant from ride plate and hull.
- 2. Clean hull surface with BRP HEAVY DUTY CLEANER (P/N 293 110 001) to eliminate grease, dust and sealant residue. Clean fitting threads.

Installing the Ride Plate

- 1. Apply LOCTITE 5900 (P/N 293 800 066) sealant as illustrated.



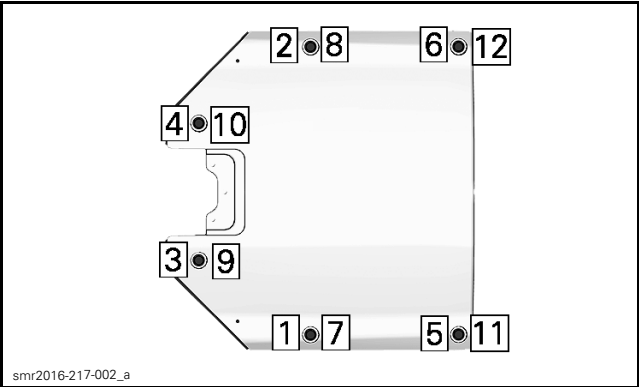
SEALANT APPLICATION

- 2. Install both hose fittings on the ride plate. Tighten to the specified torque.

TIGHTENING TORQUE	
Hose fittings	9 N•m (80 lbf•in)

- 3. Position ride plate on hull and thread **NEW** screws 5 turns by hand.
- 4. Position inlet grate and thread **NEW** screws 5 turns by hand. Refer to *INLET GRATE* in this subsection.
- 5. Tighten screws to the specified torque and sequence.

TIGHTENING TORQUE		
RIDE PLATE SCREWS	First step (1-6)	Hand tighten
	Second step (7-12)	25 N•m (18 lbf•ft)



RIDE PLATE TIGHTENING SEQUENCE

- 6. Tighten inlet grate screws to the specified torque and sequence, refer to *INLET GRATE INSTALLATION* in this subsection.

- 7. Reinstall coolant hoses on ride plate fittings.

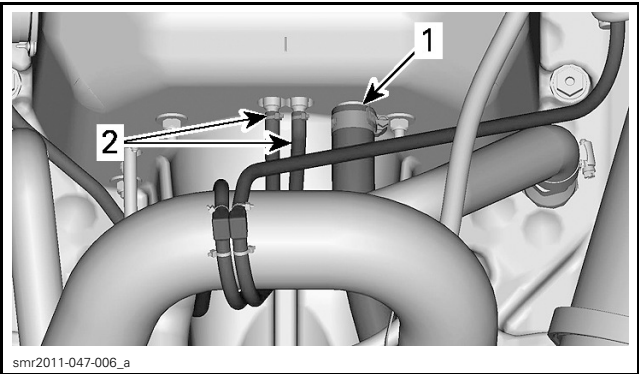
NOTICE Make sure the coolant hose clamp screws do not rub on any component.

- 8. Fill and bleed cooling system and carry out a leak test. Refer to *COOLING SYSTEM* subsection.
- 9. Install all remaining parts. Refer to the applicable procedures.

JET PUMP SUPPORT

Removing the Jet Pump Support

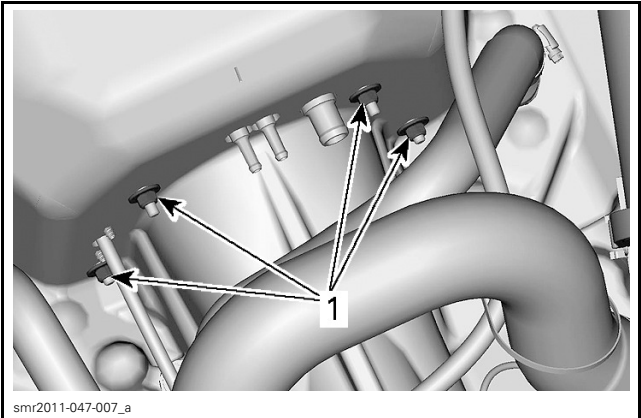
- 1. Remove the following parts:
 - Jet pump (refer to *JET PUMP* subsection)
 - Drive shaft (refer to *DRIVE SHAFT* subsection)
 - Ride plate (refer to *RIDE PLATE* in this subsection).
- 2. Disconnect hoses from jet pump support.



INSIDE THE HULL

- 1. Exhaust water supply hose
- 2. Bailer hoses

- 3. Remove jet pump support retaining nuts and washers.



INSIDE THE HULL

1. Jet pump support retaining nuts

4. Heat the jet pump support using a heat gun in order to soften the sealant.
5. Pull jet pump support off the hull.
6. Note the alignment shims location.

NOTICE Alignment shims have to be reinstalled at the same location.

Cleaning the Jet Pump Support

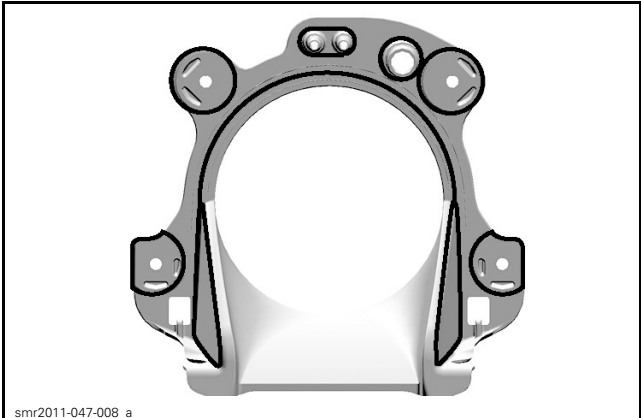
1. Scrape off all excess sealant from jet pump support, ride plate, and hull.
2. Inspect pump support for cracks or other damage.
3. Clean jet pump support and hull surface with BRP HEAVY DUTY CLEANER (P/N 293 110 001) to eliminate grease, dust, and sealant residue.

Installing the Jet Pump Support

1. Make sure sealant contact areas are clean and dry.

NOTE: If a new jet pump support is installed, perform a flame treat to increase the adhesion of the Loctite 5900.

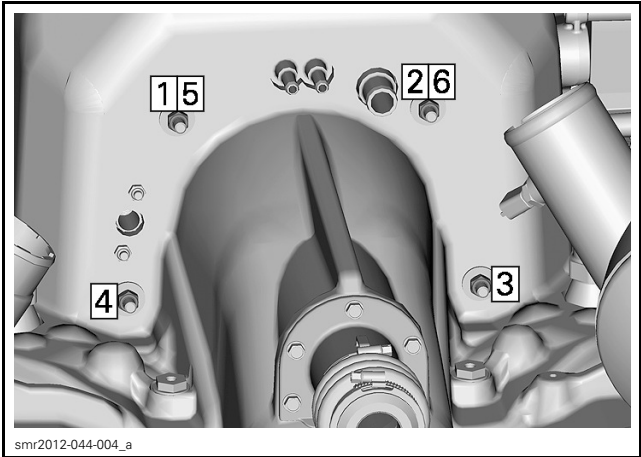
2. Apply LOCTITE 5900 (P/N 293 800 066) on the jet pump support as shown (thick black line).



SEALANT APPLICATION

3. Insert the studs in the jet pump support square holes.
4. Slide the alignment shims on the studs.
5. Position the jet pump support against the hull.
6. Inside the hull, thread all 4 retaining nuts.
7. Tighten retaining nuts to the specified torque and sequence.

TIGHTENING TORQUE	
Jet pump support retaining nuts	25 N•m (18 lbf•ft)



JET PUMP SUPPORT TIGHTENING SEQUENCE

8. Remove excess sealant.
9. Reinstall other removed parts. Refer to appropriate subsections for procedures.

THRU-HULL FITTING

Removing the Thru-Hull Fitting

1. Remove drive shaft, refer to *DRIVE SHAFT* subsection.
2. Heat the thru-hull fitting nut with a heat gun to soften the sealer.

- 3. Unscrew the thru-hull fitting nut and remove the spacer.
- 4. From underneath of the vehicle, heat the thru-hull fitting with a heat gun to soften the sealer.
- 5. Pull thru-hull fitting off the hull.

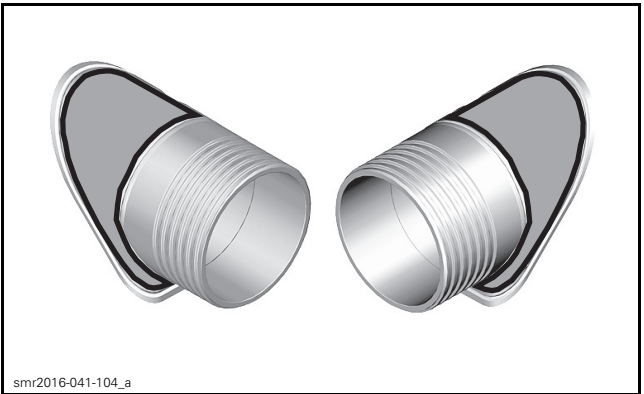
Cleaning the Thru-Hull Fitting Area

- 1. Scrape off all excess sealant from the hull.
- 2. Clean hull surface with BRP HEAVY DUTY CLEANER (P/N 293 110 001) to eliminate grease, dust, and sealant residue.

NOTE: Use only a clean, dry, oil free filtered air supply for dusting and drying parts or hull.

Installing the Thru-Hull Fitting

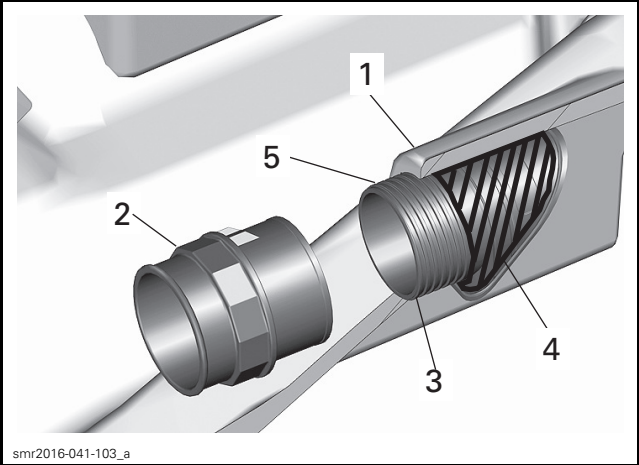
- 1. Make sure thru-hull fitting sealing surface is free of sealant residue, clean and dry before installation.
- 2. Apply LOCTITE 5900 (P/N 293 800 066) sealant all around on shaded surface.



SEALANT APPLICATION

- 3. Tighten nut to the specified torque.

TIGHTENING TORQUE	
Thru-hull fitting nut	15.5 N•m ± 0.5 N•m (137 lbf•in ± 4 lbf•in)



- 1. Hull (cut for clarity purpose)
- 2. Inner thru-hull fitting
- 3. Exterior thru-hull fitting
- 4. Sealant on exterior thru-hull fitting
- 5. Sealant over the threads

- 4. Install other removed parts, refer to the appropriate subsections.

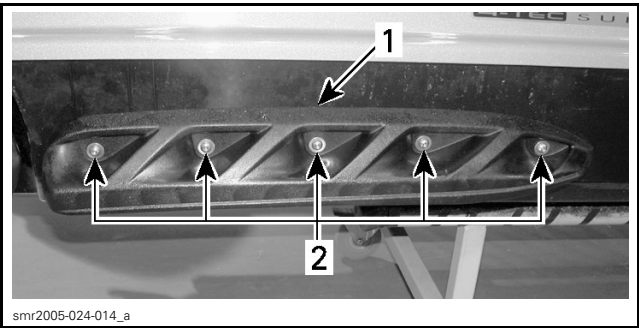
FIXED REAR SPONSONS

NOTE: Removal and installation procedure for RH and LH sponson is similar.

Removing the Fixed Rear Sponson

Remove resonator (on RH side) or muffler (on LH side). Refer to *EXHAUST SYSTEM* subsection.

From inside hull, hold sponson nuts while removing sponson retaining bolts and washers.

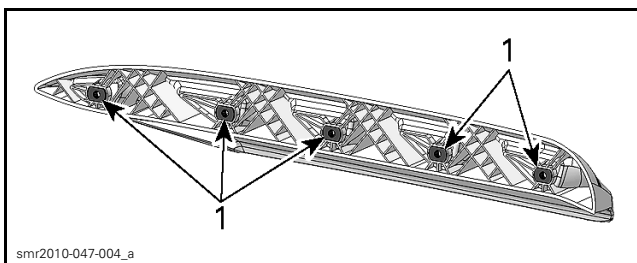


TYPICAL – RH SPONSON SHOWN

- 1. Sponson
- 2. Retaining bolts

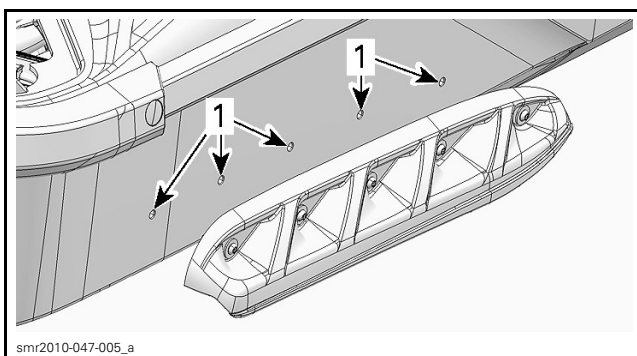
Installing the Fixed Rear Sponson

- 1. Clean any residues of silicone sealant on hull and sponsons.
- 2. Apply CLEAR SILICONE SEALANT (P/N 296 000 309) on back side of sponson spacers.



1. Apply silicone sealant here

3. Apply a small amount of CLEAR SILICONE SEALANT (P/N 296 000 309) into each hull hole.



1. Apply silicone sealant in these holes

4. Insert a bolt with washer through each hole and install the sponson against the hull.
5. From inside hull, secure each bolt with a washer and a NEW elastic stop nut.
6. Tighten nuts as specified in the exploded view.
7. Reinstall resonator. Refer to *EXHAUST SYSTEM* for the procedure.

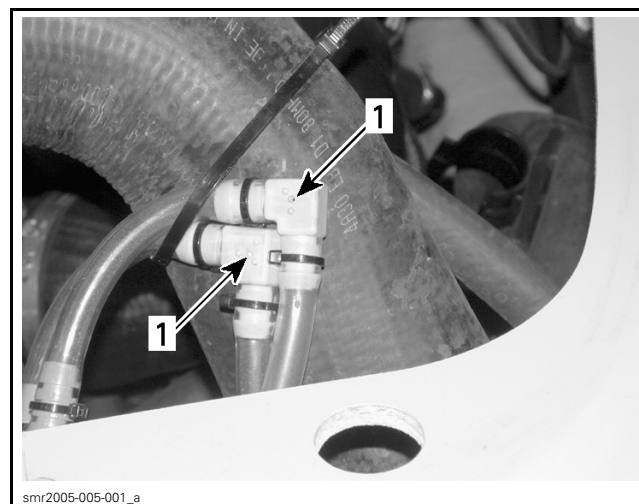
BAILERS

Two bailer pick ups (one each side), draw water from the bilge when watercraft is in operation.

The bailer pick ups are connected to syphon tubes mounted in the jet pump venturi that use the jet pump thrust to create a vacuum. The bailers are also connected to the bilge drain plugs in the stern.

Inspecting the Bailer Pick-Up

1. Check holes in the bailer pick-ups to see if they are obstructed. Clean if necessary.
2. Check if the hole on each bailer hose elbow fitting is obstructed. Clean elbow fittings if necessary.



TYPICAL

1. Elbow fitting holes

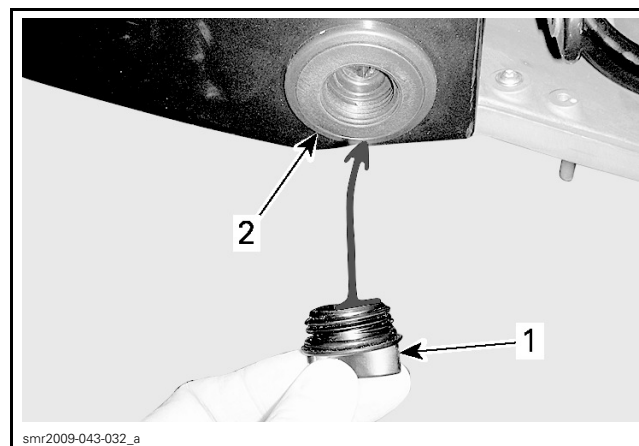
NOTE: When repositioning the bailer hose elbows, attach them at the highest available point on the exhaust hose.

DRAIN PLUGS

NOTE: Each drain plug on the stern are each connected to a bailer. When watercraft is off the water, the drain plugs can be removed to manually drain the bilge.

Removing the Drain Plug Neck

1. Unscrew the drain plug from the drain neck and pull the drain plug out of the neck.



DRAIN PLUG REMOVAL

1. Drain plug
2. Drain neck

2. Inside the hull, hold drain neck nut using adjustable pliers.
3. Insert a ratchet extension in the square hole, then unscrew the drain neck from the hull.



DRAIN NECK REMOVAL

Installing the Drain Plug Neck

- 1. Install drain neck and torque to specification.

TIGHTENING TORQUE	
Drain plug neck	9 N•m ± 1 N•m (80 lbf•in ± 9 lbf•in)

- 2. Reinstall all removed parts in the reverse order of removal.

BOW AND STERN EYELETS

Bow Eyelet Access

Open the front storage cover.

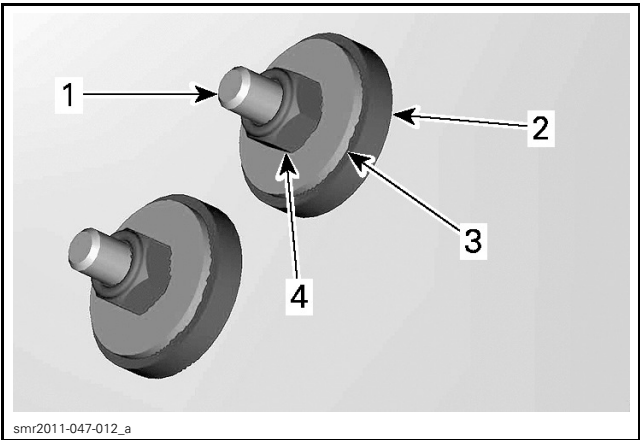
Stern Eyelet Access

Remove seat.

Removing Eyelets

- 1. Unscrew and discard both bow eyelet retaining nuts.

NOTE: Keep all washers for installation. Bow and stern eyelets have the same hardware layout.



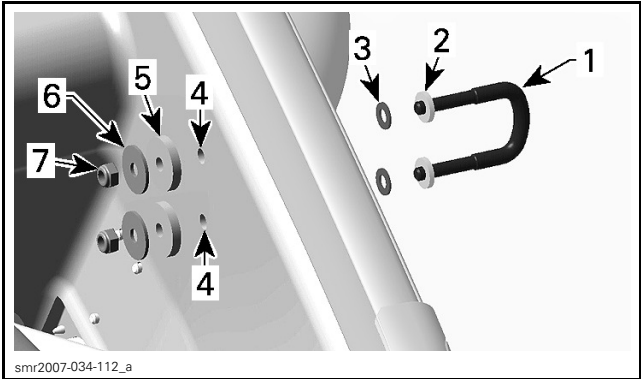
TYPICAL - INSIDE THE HULL
1. Threaded portion of the eyelet
2. Rubber washer
3. Large stainless steel washer
4. Elastic stop nut

- 2. Pull eyelet off the hull.
- 3. Clean any silicone sealant residue.

Installing Eyelets

- 1. Inside the hull, apply CLEAR SILICONE SEALANT (P/N 296 000 309) around eyelet mounting holes.
- 2. Position eyelet and hardware as illustrated. Use NEW elastic stop nuts.

NOTE: Bow and stern eyelets have the same hardware layout.



TYPICAL
1. Eyelet
2. Small stainless steel washer
3. Nylon washer
4. Loctite 5150 (silicone sealant) here
5. Rubber washer
6. Large stainless steel washer
7. Elastic stop nut

REQUIRED PRODUCT	LOCATION
CLEAR SILICONE SEALANT (P/N 296 000 309)	Inside hull, around holes

- 3. Tighten nuts to the specified torque.

TIGHTENING TORQUE	
Eyelet retaining nuts	14.5 N•m (128 lbf•in)