



SEA-DOO®
Watercraft

MANDATORY TOOL KIT
(P / N 295 000 087)

The first section of this document lists the mandatory tools included in this kit. The list includes the part numbers, descriptions, illustrations and applications.

These tools are necessary to ensure an adequate servicing of our watercraft in a reasonable amount of time.

The second section lists optional tools that we recommend for servicing Sea-Doo watercraft. They can be ordered through your regular parts channels.

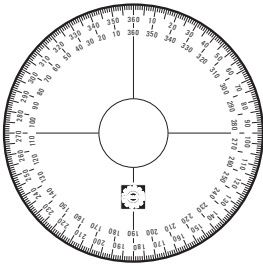
MANDATORY TOOLS

NOTE : The numbers outlined in black (example : 1) are reference numbers to tools from other divisions (Sea-Doo and / or Sea-Doo Jet Boats). Matching reference numbers indicate the same tool is being used on both products, even if the part numbers are different.

ENGINE

Degree wheel
P / N 295 000 007

1



A00B334

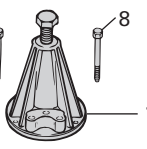
APPLICATION

All models.

8



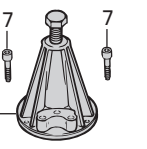
1



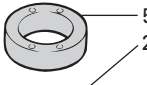
7



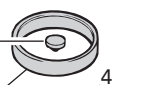
2



5



2



3



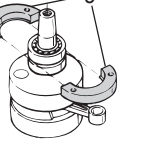
4



6



3



4



4

MAG sidePTO side

F01D884

1) Puller

200

P / N 290 876 298

2) Protective cap (both ends)

554

P / N 290 876 557

3) Ring (both ends)

555

P / N 290 977 490

4) Ring halves (PTO)

556

P / N 290 977 475 (2)

5) Distance ring (MAG)

557

P / N 290 876 569

6) Ring halves (MAG)

558

P / N 290 276 025 (2)

7) Screw M8 x 40

559

P / N 290 840 681 (2)

8) Screw M8 x 70

560

P / N 290 841 201 (2)

APPLICATION

All models.

Piston circlip installer

A) P / N 295 000 077

202

B) P / N 290 877 016

548







Piston circlip

A01B1P4

APPLICATION

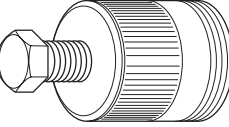
A) 587 engine.

B) 657, 717 and 787 engines.

Puller

P / N 295 000 106

5



A00C1A4

APPLICATION

All models.

Pusher

P / N 290 876 605

229



A00C0Y4

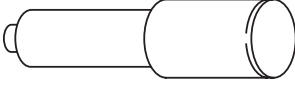
APPLICATION

All engines except 787.

Pusher

P / N 290 876 500

12



A00B2J4

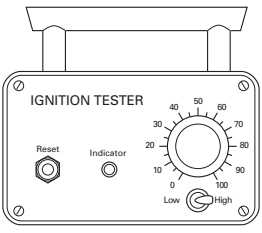
APPLICATION

All models.

Bombardier ignition tester

P / N 295 000 008

236



A00C1K4

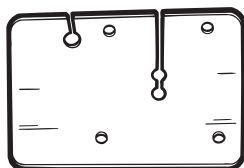
APPLICATION

All models.

ENGINE continued (MANDATORY TOOLS)

Rubber pad
P / N 295 000 101

547



F01B0J4

Puller plate
P / N 290 876 080

549



A00C1R4

Extension handle
P / N 295 000 125

550



F01D164

Screw M8 x 35 (3)
P / N 290 841 591

551



F00A094

Sleeve (3)
P / N 290 847 220

552



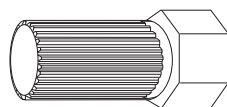
F00A0A4

APPLICATION

All models.

PTO flywheel remover /
installer
P / N 295 000 001

553



F01J0T4

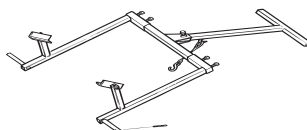
APPLICATION

All models.

NOTE : This tool is also
used for the impeller.

Puller
P / N 290 876 488

562



F01B0I4

APPLICATION

All engines

A) Alignment tool support

P / N 295 000 090

563

B) Alignment shaft

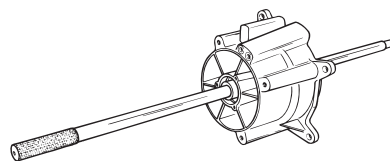
P / N 295 000 093

571

C) Alignment shaft

P / N 295 000 141

570



F01L2R4

APPLICATION

A) All models.

B) All models except HX.

C) HX.

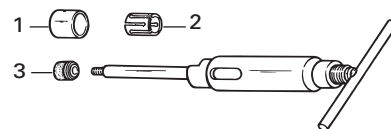
Piston pin puller

A) P / N 295 000 092

566

B) P / N 295 000 105

565



F01B0V4

APPLICATION

A) 657, 717 and 787 engines

Replacement parts :

1. Locating sleeve
(P / N 290 877 181)

772

2. Expansion sleeve
(P / N 290 877 041)

771

3. Extracting nut
(P / N 290 877 155)

770

B) 587 engine

Replacement parts :

1. Locating sleeve
(P / N 295 000 118)
(2)

769

2. Expansion sleeve
(P / N 295 000 117)
(2)

768

3. Extracting nut
(P / N 295 000 115)

767

MPem programmer

567

P / N 295 000 127



F01B254

APPLICATION

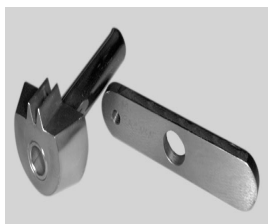
787 engine.

ENGINE continued (MANDATORY TOOLS)

Ring gear blocking tool

568

P / N 295 000 134



F01B264

APPLICATION

787 engine.

Ring gear puller tool

569

P / N 420 976 235



F01B294

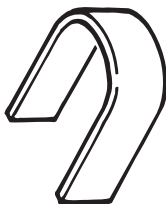
APPLICATION

787 engine.

Distance gauge

561

P / N 290 876 826



F01B0H4

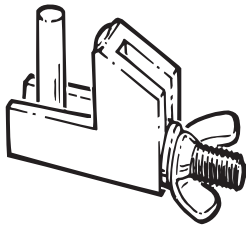
APPLICATION

587 and 657 engines.

COOLING / FUEL / OIL SYSTEMS (MANDATORY TOOLS continued)

Hose pincher
P / N 295 000 076

2



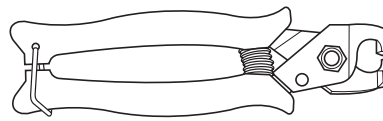
A01B214

APPLICATION

All models.

Pliers
P / N 295 000 054

606



F01B1T4

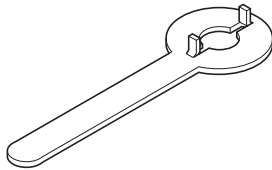
APPLICATION

All models.

NOTE : This tool is also used for the propulsion system.

Gear holder
P / N 290 277 905

235



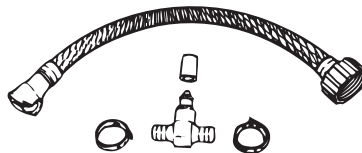
A00C164

APPLICATION

717 engine.

Flush kit
P / N 295 500 068

564



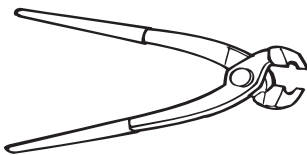
F01E014

APPLICATION

587, 717 and 787 engines.

Pliers
P / N 295 000 070

601

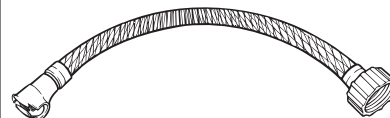


F01D174

APPLICATION

All models.

Coupler hose
P / N 295 500 099



F01E0Z4

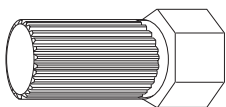
APPLICATION

All models.

PROPULSION SYSTEM (MANDATORY TOOLS)

Impeller remover /
installer

P / N 295 000 001



F01J0T4

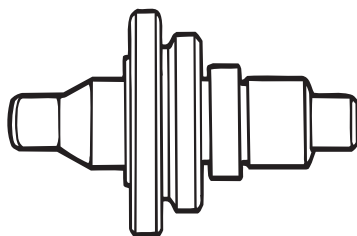
APPLICATION

All models.

NOTE : This tool is also
used for the PTO fly-
wheel.

Bearing / seal installer

P / N 295 000 107



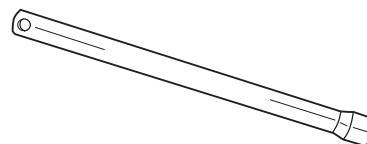
F01J4K4

APPLICATION

All models.

VTS tool

P / N 290 000 133



F01B2P4

APPLICATION

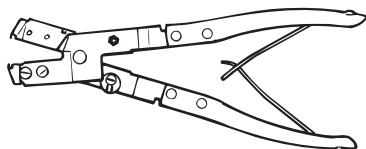
XP 1995 and 1996 models.

XP 800 1995 model.

SPX 1996 model.

Pliers

P / N 295 000 069



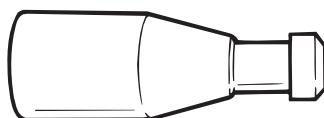
F01D184

APPLICATION

All models.

Impeller shaft guide

P / N 295 000 002



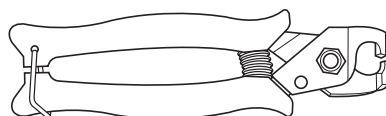
F01J1O4

APPLICATION

All models.

Pliers

P / N 295 000 054



F01B1T4

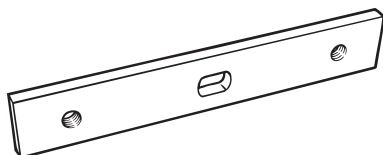
APPLICATION

All models.

NOTE : This tool is also
used for the for the fuel
system.

Impeller shaft holder

P / N 295 000 082



F01B0W4

APPLICATION

All models.

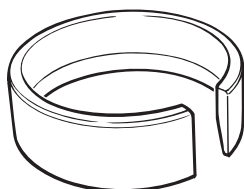
RECOMMENDED TOOLS

NOTE : The numbers outlined in black (example : **1**) are reference numbers to tools from other divisions (Sea-Doo and / or Sea-Doo Jet Boats). Matching reference numbers indicate the same tool is being used on both products, even if the part numbers are different.

ENGINE

Ring compressor
P / N 290 876 979

766



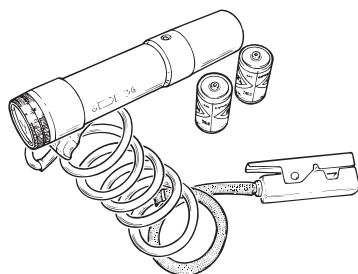
A01B1T4

APPLICATION

717 and 787 engines.

Stroboscopic timing light
P / N 295 000 078

225



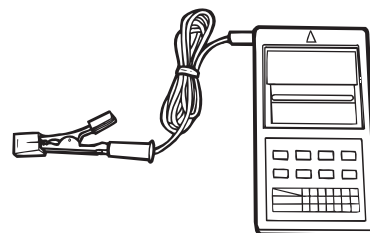
A01B2K4

APPLICATION

All models.

Digital / induction type
tachometer
P / N 295 000 100

237



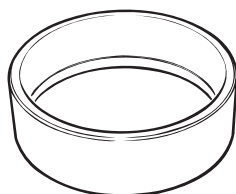
F01B1G4

APPLICATION

All models.

Coil centering tool
P / N 290 876 922

209



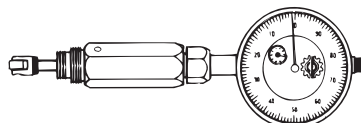
A01B1V4

APPLICATION

717 engine.

Dial indicator
(TDC gauge)
P / N 295 000 143

230



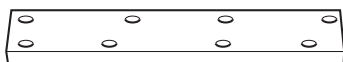
A00B2E4

APPLICATION

All models.

Cylinder aligning tool
P / N 290 876 904

220



A00B084

APPLICATION

All models.

Distance gauge
A) P / N 290 876 827
B) P / N 290 876 828

760



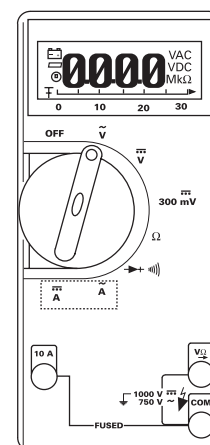
F01B0H4

APPLICATION

A) 717 engine.
B) 787 engine.

Digital multimeter
P / N 529 022 000

242



F01B104

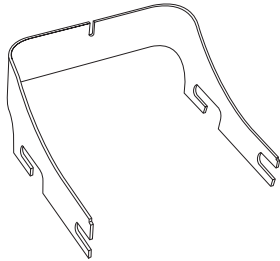
APPLICATION

All models.

ENGINE continued (RECOMMENDED TOOLS)

Timing mark pointer
P / N 295 000 130

774



F01B204

APPLICATION

All engines except 787.

Timing mark pointer
P / N 295 000 135

754



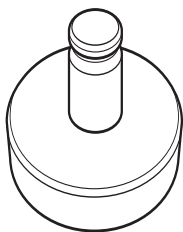
F01H544

APPLICATION

787 engine.

Oil seal pusher
P / N 290 877 740

759

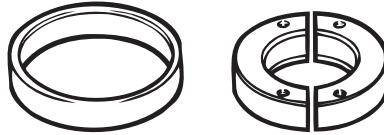


F01B2C4

APPLICATION

787 engine.

Ring halves and ring
P / N 290 876 330 (halves) **761**
P / N 290 876 480 (ring) **762**



F01B2D4

APPLICATION

787 engine.

Engine lifting device
Not sold by Bombardier
Do it yourself
Refer to *Shop Manual* section
04-01



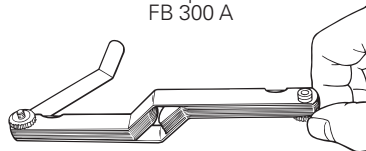
F01D0A4

APPLICATION

All models except 787.

Feeler gauge 45°
Not sold by Bombardier

Snap-on
FB 300 A

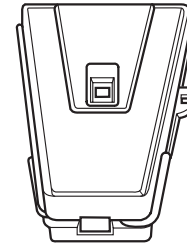


F01B1K4

APPLICATION

All models.

Spark tester
Not sold by Bombardier
Superex Canada Ltd
No. 15-785



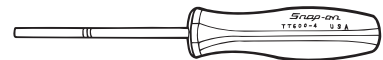
F01B1H4

APPLICATION

All models.

Terminal remover
Not sold by Bombardier

Snap-on
TT 600-4



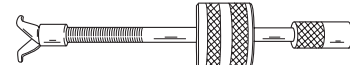
F01B1J4

APPLICATION

All models.

Slide hammer puller
Not sold by Bombardier

Snap-on : Handle CJ93-1
Hammer CJ125-6
Claws CJ93-4



F01J0Z4

APPLICATION

All models.

NOTE : This tool is also used to pull out impeller shaft seal.

ENGINE continued (RECOMMENDED TOOLS)

Protective mat
P / N 295 000 128

889



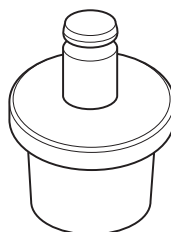
F02B0A4

APPLICATION

All models.

Rotary valve shaft
pusher
P / N 290 876 609

757



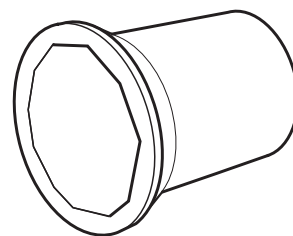
F01B2B4

APPLICATION

787 engine.

Exhaust outlet tool
P / N 295 000 132

831



F01B2A4

APPLICATION

Exhaust nut on transom.

Safety lanyard switch tool
P / N 295 000 121

775



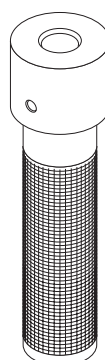
F01B244

APPLICATION

DESS switch.

Handle
P / N 290 877 650

758



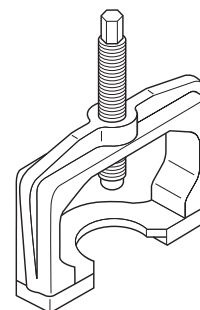
A00C3V4

APPLICATION

787 engine.

Gear / bearing puller
P / N 290 877 665

765



F04B034

APPLICATION

787 engine.

A) Four-pin magneto
harness
P / N 295 000 131

763

B) Six-pin magneto
harness
P / N 295 000 136

755



F01B284

APPLICATION

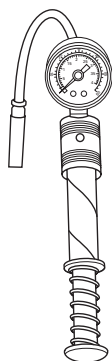
- A) 587, 657 and 717, 1995 and newer.
- B) 787 engine.

COOLING / FUEL / OIL SYSTEMS (RECOMMENDED TOOLS)

Pump gauge tester
(carburetor)

P / N 295 000 114

826



F01B0X4

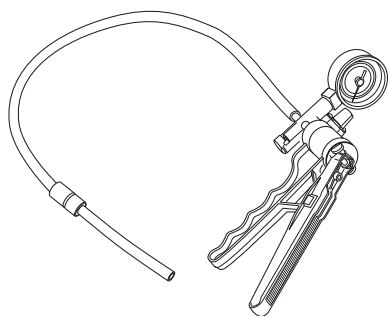
APPLICATION

All models.

Pump gauge tester
(fuel / oil reservoirs)

P / N 295 000 085

827



F01B0Y4

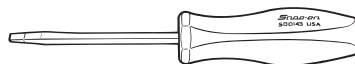
APPLICATION

All models.

Screwdriver

Not sold by Bombardier

Snap-on
SDD-143



F01B1P4

APPLICATION

All models.

Lighted adjustable mirror

Not sold by Bombardier

Snap-on
50101



F01B1I4

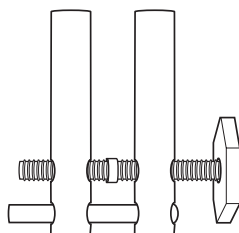
APPLICATION

All models.

Hose pincher

P / N 529 030 400

773



F01B234

APPLICATION

All engines.

PROPULSION SYSTEM (RECOMMENDED TOOLS)

Fitting

P / N 295 000 086

828



F01B0Z4

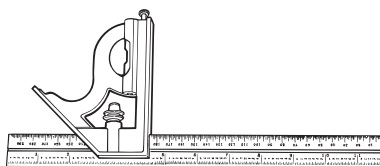
APPLICATION

All models.

Machinist's square

Not sold by Bombardier

Snap-on
PMF 122



F02B064

APPLICATION

Models equipped with reverse.

Bearing remover

P / N 295 000 144



F01J114

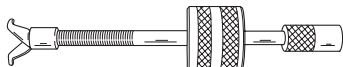
APPLICATION

All models.

Slide hammer puller

Not sold by Bombardier

Snap-on : Handle CJ93-1
Hammer CJ125-6
Claws CJ93-4



F01J0Z4

APPLICATION

All models.

NOTE : This tool is also used to remove rotary valve shaft bearing.

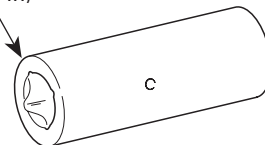
Fitting remover

Not sold by Bombardier

Do it yourself

Refer to *Shop Manual* section 09-01

Deep socket
14 mm
(9/16 in)



F01J2RA

APPLICATION

All models.

Hacksaw

Not sold by Bombardier

Snap-on
HS3



F01B1M4

APPLICATION

All models.

Flexible spout (oil)

P / N 414 8373 00

834

APPLICATION

All models.

SERVICE PRODUCTS

NOTE : The numbers outlined in black (example : **1**) are reference numbers to tools from other divisions (Sea-Doo and / or Sea-Doo Jet Boats). Matching reference numbers indicate the same tool is being used on both products, even if the part numbers are different.

Medium strength
threadlocker
P / N 293 800 015

154

Loctite 242 (blue)
(10 mL)



A00B324

APPLICATION

Cylinder head screws
(All engines).
Tuned pipe nut and screws.
Engine rubber mount screws.
Armature plate screws.
Magnet flywheel / crankshaft.
Carburetor mount nuts / screws.
Magnet coil screws.
Impeller housing cover screws
(except for plastic pumps).
Venturi / impeller housing
screws.
Intake grate screws.
Engine support screws.
Impeller housing / hull nuts.
Steering nozzle screws.
Reverse gate screws.

High strength
threadlocker
P / N 293 800 005

155

Loctite 271 (red)
(10 mL)



A00B2U4

APPLICATION

Impeller shaft thread.

High temperature
threadlocker
P / N 290 899 788

359

Loctite 648 (green)
(5 g)



A00B3D4

APPLICATION

Crankcase / plug at end of rotary
valve shaft.
Magnet / ring gear.

Gasket eliminator
P / N 293 800 007

152



Loctite 515
(50 mL)

A00B2T4

APPLICATION

Cylinder sleeve / O-ring groove.
Crankcase halves mating surface.
Crankcase screws.

Gasket eliminator
P / N 293 800 038

376



Loctite 518
(50 mL)

F01B124

APPLICATION

Impeller housing cover.
Venturi / impeller housing.
Impeller shaft seal.

SERVICE PRODUCTS (continued)

Solvent

P / N 293 800 019

157

Loctite Safety
Solvent 755



A00B3M4

APPLICATION

Impeller shaft threads.
Drive shaft splines.
Impeller threads and splines.

Primer for paste gasket

P / N 293 600 013

158

Loctite
Locquic Primer N
170 g (6 oz)



A00B3N4

APPLICATION

Crankcase halves mating
surface.
Impeller shaft thread.
Venturi / impeller housing
mating surface.

Gasket stripper

N / P 295 000 110

935



F01B1W4

APPLICATION

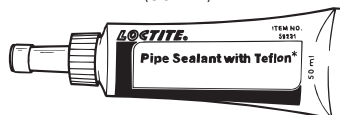
Mating surfaces of cylinders and
crankcase.
Crankcase halves.

Pipe sealant

P / N 293 800 018

358

Loctite 592
(50 mL)



A00B2V4

APPLICATION

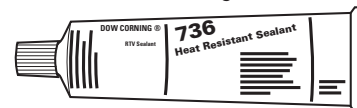
Plug on impeller housing cover.
Plastic fitting tool (P / N 295 000
086) on impeller housing cover.
Cooling system fittings.

Heat resistant sealant

P / N 413 709 200

374

Dow Corning 736



A00B3U4

APPLICATION

Tuned pipe.

Dielectric grease

P / N 293 550 004

350

Dow Corning



F01B164

APPLICATION

Battery posts and cable con-
nectors.
Thermosensor switch.

Grease

P / N 293 550 005

924

(400 g)



A00B2L4

APPLICATION

PTO flywheel.

SERVICE PRODUCTS (continued)

Synthetic grease
P / N 293 550 010

912



Sea-Doo
(400 g)

F01B154

APPLICATION

Cylinder and cylinder head screws.
Carburetor linkage.
Impeller shaft seal lips.
Drive shaft / impeller splines.
PTO flywheel

Lubricant
Not sold by Bombardier

G.E. Versilube
G341M



or
Esso Beacon 325

A00B1T4

APPLICATION

Sliding surface of starter armature shaft splines.

Anti-seize lubricant
P / N 293 800 023

362

Loctite anti-seize
lubricant
12 oz (454 g)



F01B174

APPLICATION

Crankshaft thread / PTO flywheel.
Crankshaft bearing seat.
Spark plug threads.
Ignition housing cover screws.

Penetrating lubricant
P / N 293 600 016

913

Bombardier
Lube



F01B0S4

APPLICATION

Throttle cable.
Wear ring (when new).
Corroded parts.
Water flooded engine.
Storage.

Sea-Doo fuel stabilizer
P / N 413 408 600

375



A00B3V4

APPLICATION

Fuel system.

Bombardier-Rotax
injection oil

915

P / N 413 802 900 (12 x 1 L)



F01B184

APPLICATION

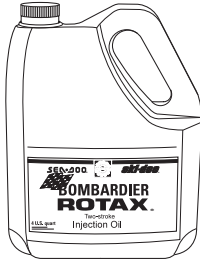
All models.

SERVICE PRODUCTS (continued)

Bombardier-Rotax
injection oil

P / N 413 803 000 (3 x 4 L) **916**

P / N 413 803 200 (205 L) **962**



F01B2H4

APPLICATION

All models.

Jet pump oil

P / N 293 600 011

Sea-Doo jet pump
synthetic oil



F01B0P4

APPLICATION

All models.

A) Silicone «Ultra Black»

P / N 293 800 030

B) Silicone
«Ultra Black HB»

P / N 293 800 028



(300 mL)

F01B1A4

APPLICATION

Ride shoe.

Jet pump fittings.

732 Multi-purpose sealant **917**

P / N 293 800 006

Dow Corning
(Clear)



F01B1C4

APPLICATION

Ride shoe screws.

Sealant adhesive

P / N 293 800 033

(Clear)



F01B1S4

APPLICATION

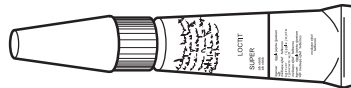
Ride shoe screws.

Sponson.

General purpose instant
adhesive

P / N 293 800 021

Loctite 495



A00B2V4

APPLICATION

Rubber to metal bonding and
most hard plastic.

Adhesive activator

P / N 293 530 036



F01B1Z4

APPLICATION

Decals.

Sea-Doo Cleaner

P / N 293 110 001(400 g) **946**

P / N 293 110 002 (4 L) **947**



F01B2J4

APPLICATION

All models.

SERVICE PRODUCTS (continued)

Gelcoat spray paint
Super white
P / N 293 500 076

933

Sea-Doo
paint



F01B1Q4

APPLICATION
All models.

Spray paint for metallic parts only
A) White
P / N 293 500 029
B) Purple
P / N 293 500 020

926

Sea-Doo
paint



F01B0Q4

APPLICATION
A) Engine assembly.
B) Tuned pipe and muffler.

Gun Kote
Not sold by Bombardier

Kal-Gard
Coating & Mfg. Corp.

APPLICATION
Magneto and armature plate.

Gelcoat (liquid)
1 liter super white
P / N 293 500 075

943

APPLICATION
All models.

Epoxy glue
Not sold by Bombardier
3M-05900

APPLICATION
All models.

Gelcoat repair kit
P / N 295 500 216

945

APPLICATION
All models.

Loctite sealant
N / P 413 7103 00

961

APPLICATION
Exhaust system 787 engine.