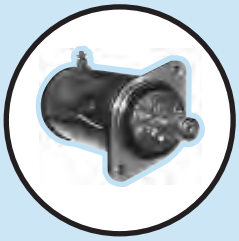
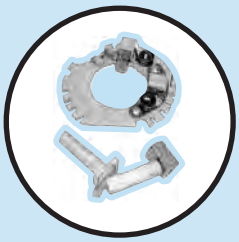
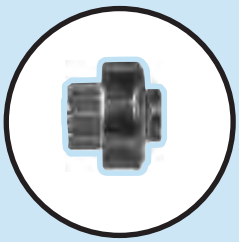
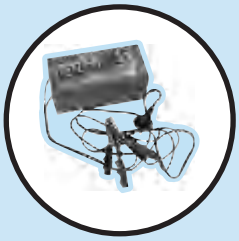
Power Products Handbook









PART 5

PWS

Personal Water Sports, Jet Ski Starter Motors & Accessories

PART 5 PWS

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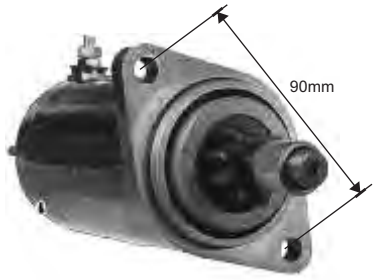
KEY SYMBOLS

DE	Drive End
CE	Commutator End
2(0)	2 Mount Holes Unthreaded
2(2)	2 Mount Holes Threaded
A:	Nose Cone Spiggot diameter
B:	Pre-mesh pinion measurement
16	Number of Teeth on Pinion, Direction of Rotation

Bombardier / Sea Doo / Challenger Boat

STR 111765

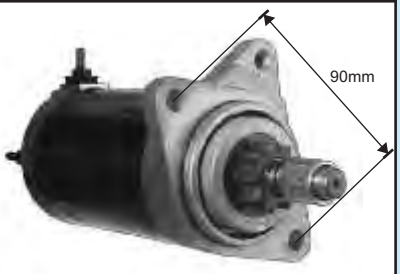


12V
Suits Bombardier, Sea Doo 580, 650, GTS, GTX, SPX, XP, Explorer "High Torque"
Repair Parts to Suit:
Brush Holder BHD 31206
CE Bracket BKT 11026
Drive SDV 139083

9Th, 29Ø

2(0) *A: 60* *B:25 mm.*

STR 111915



12V
Suits Bombardier, Sea Doo 580, 650, 720, GS, GSI, GTI, GTS, GTX, HX, SPI, SPX
Repair Parts to Suit:
Brush Holder BHD 31206
CE Bracket BKT 11026
Drive SDV 139083

9Th, 29Ø

3(1) *A: 60* *B:26 mm.*

STR 111918

12V
Suits Bombardier, Sea Doo, 800 Challenger Boat, GSX, GTX, SPX, XP
Repair Parts to Suit:
Brush Holder BHD 31206
CE Bracket BKT 11026
Drive SDV 139083

9Th, 29Ø

3(3) *A: 60* *B:24 mm.*

STR 111916

12V
Suits Bombardier, Sea Doo GSX, GXT, XT, LRV, RX, XP
951 engines 1998 →

9

STR 11431

12V
Suits Sea Doo 3D, GSX, GTI, GTX
782cc 1999 →

Drive SDV 234404

8

Honda, Kawasaki, Polaris, Suzuki, Yamaha

STR 11421

12V
Suits Honda 1200cc
Aqua Trax F12X
4 Stroke Jetski 2002 - 06
9 Splines

9

A: 30

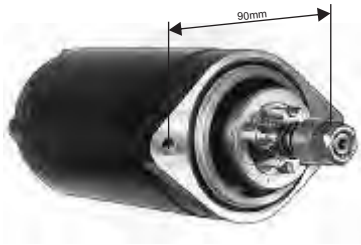
STR 11422

12V
Suits Kawasaki STX 1200, Ultra 150, JH 1200, JT 1200
Replacing 228000-8140
10 Splines
Body Diameter: 60mmØ

10

A: 30

STR 111840



12V
Suits Kawasaki JS400, JS440, JS550
Replacing 22800-4560
Repair Parts to Suit:
CE Bracket w/ Brushes BKT 136655
Brushes SBR 140714
DE Bush BUH 141228
Drive SDV 136208

9Th, 29.2Ø

2(2) ***A: 62*** ***B: 29 mm.***

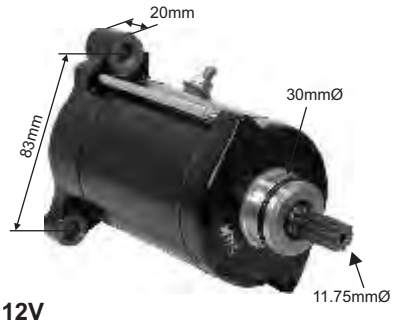
STR 111916

12V
Suits Kawaskaki, JF650, JH750, JH900, JH1100, JL650, JS650, JS750 JS800, JT750, JT900, JT1100
1986 →
Polaris Freedom, Genesis, Hurricane, Octane, MSX140, Pro 785, -1200, SL650, SL750, SL900, SLT750, SLX
9 Splines

9

A: 30 mm.

STR 111917



12V
Suits Yamaha FX700, RA700, SJ700, WB700, WR650, WRA700, WRB700, XL700 Wave Runner, Wave Raider, Wave Blaster
9 Spline

9

A: 30 mm.

STR 112009

12V
Suits Suzuki Tiger Shark, Baracutta 640, 900, 1000

9

STR 112011

12V
Suits Yamaha GP800, GP1200, GP1300, RA1100, SUV1200, WVT1100, XL800, XL1200, XLT800, EXS1200, EXT1200 Exciter, Wave Runner
9 Splines

9

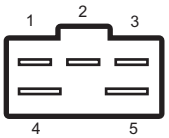
A: 30 mm.

Regulator / Rectifier Assemblies

RTF 20000

3 Phase Regulator/Rectifier Assembly
Suits Honda etc.
12v System 14.75v 5 Terminal
Unique Heatsink Design

1 AC
2 AC
3 AC
4 Battery +
5 Battery -



RTF 20002

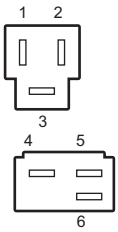
3 Phase Regulator/Rectifier Assembly

1-3 White - AC
4 Red - Battery +
5 Brown - Sensor
6 Black - Earth

RTF 20003

3 Phase Regulator/Rectifier Assembly
Suits Honda

1 AC
2 AC
3 AC
4 Sensor
5 Battery +
6 Battery -



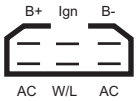
RTF 20004

3 Phase Regulator/Rectifier Assembly
Suits Polaris etc

Yellow	- AC
Yellow / Red	- AC
Yellow / Brown	- AC
Red	- Battery +
Brown	- Battery -

RTF 234407

Rectifier
Suits 20 Amp Charging systems with warning light circuit.
Replacing M131287, 12-403-01
6 Terminals



BHD 110665

Starter Repair Kit

Suits Sea Doo Jetski
Denso Starters,
Brush Holder BHD 133715
Bush 15x19x15mm
Brushes (2) 6x9x12mm

BHD 110666

Starter Repair Kit

Suits Kawasaki
w/o Brush holder
DE Bush 16 x 20 x 10.9mm
CE Bush 11.5 x 15 x 10.8mm
Brushes (4) 6.8 x 10.8 x 16.5mm
Seal 16 x 28 x 5mm

Brush Holders

BHD 31206

Brush Holder
LH, CCW
Suits Sea Doo, Bombardier w/ Mitsuba Starters
Fits STR 111915, 111765
Brushes 6 x 9 x 12mm

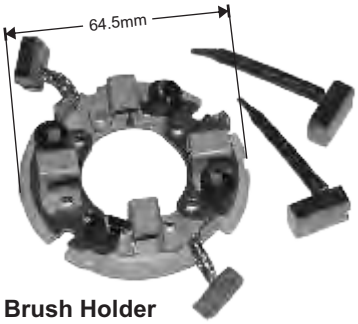
BHD 31210

Brush Holder
RH, CW
Suits Mitsuba Starters
Brushes 6 x 9 x 12mm

BHD 110635

Brush Holder
Suits Mitsuba Starters
Brushes 4.8 x 9.6 x 12mm

BHD 110643



Brush Holder

Suits Denso Starters
Brushes 6 x 9 x 12mm

BHD 110644

Brush Holder Kit

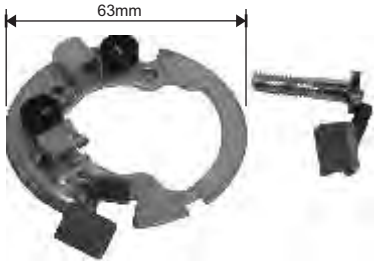
Suits Mitsuba Starters
Fits ATV, M/C, Jet ski
Brushes 6 x 9 x 13mm
Brush Holder BHD 31206

BHD 110648

Brush Holder

Suits Mitsuba Starters SM14
Brushes 6 x 10 x 10mm

BHD 110649



Brush Holder

Suits ND & Mitsuba Starters, STR 111918 Sea Doo
Brushes 6x9x12mm

BHD 110651

Brush Holder

Suits SM14 Mitsuba Starters
Brushes 6 x 10 x 10mm

BHD 133715

Brush Holder
12V
Brushes: 6 x 9 x 12mm

Suits 028000-8411, -9872, -9882, 128000-1431, -4461, -4500 Denso Starters

Brushes, Bracket Assemblies, D.E. & C.E. Brackets

SBR 8594

Starter Brush Set

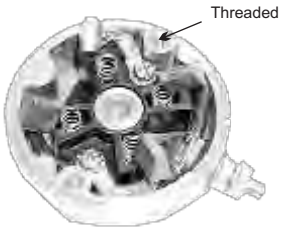
Suits Mitsuba Starters
Size 6 x 10 x 13mm

SBR 140714

12V Triangle Brush Set
Suits Marine outboard
Size 4.7 x 7.85 x 12.7 x 10.65 mm

Suits Brush Holder:
BHD 230402 & Com End
Suits Brackets: BKT 136655, BKT 136660 & BKT 137045

BKT 136655



CE Bracket Assembly

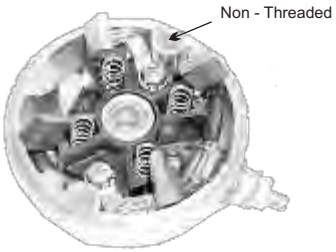
Suits U.T

Brush Holder to suit BHD 230402
Brushes to suit SBR140714

Bush to suit: BUH 141227

[With threaded through bolt holes]

BKT 136660



CE Bracket Assembly

Suits U.T.

Brush holder to suit BHD 230402
Brushes to suit SBR140714

Bush to suit BUH 141227

[With non-threaded through bolt holes]

BKT 11018

DE Bracket
w/o Needle Bearing, Seal & O Ring

Suits Yamaha

BKT 11019

CE Bracket
w/o Bush

Suits Tiger Shark

BKT 11020

DE Bracket
w/o Needle Bearing, Seal & O Ring

BKT 11026

CE Bracket
w/ Bush

Suits Sea Doo, Bombardier
Fits STR 111915, 111765

BKT 11027

CE Bracket
w/ Bush

Suits Kawasaki
Fits STR 111916

Drives

SDV 800045

Starter Drive
Suits Kawasaki Jetski
Fits STR 111840, S108-61F, -66
Size 29mmOD, 39.5mmOL
CCW 6 Splines
9 tooth

9

SDV 800049

Starter Drive
Suits Bombardier Jetski, Sea Doo
Fits STR 111765, 111915, 111918
Size 29mmOD, 33mmOL, 12mmID
CCW 6 Spline
9 tooth

9

SDV 230760

Starter Drive
Suits Hitachi Starters
Fits Yamaha
Size 46.5mmOD, 39.5mmOL
CCW 6 Spline
11 tooth

11

SDV 230761

Gear Shaft Assembly

Suits Yamaha
Size 19 Tooth, 15 Spline, 107mmL

19

SDV 230762

Gear Shaft Assembly

Suits Polaris
Size 17 Tooth, 87mmL, 39mmOD
CCW

17

SDV 234269

Starter Drive

Suits Nippondenso
Fits Sea Doo
Size 29mmOD, 33.6mmL
6 Spline

9

SDV 234404

Starter Drive

Suits Nippondenso 228000-6240
Fits Sea Doo
Size 28mmOD, 34mmOL
6 Spline
8 tooth

8

EC 133716

Retainer kit

Check Part 4 For Many Pinion Options

Bushes, Armatures & Accessories

BUH 141227

CE Bush
Size 8.55 x 11.7 x 10mm
Fits CE Brackets
BKT 136660, BKT 136655,
BKT 137045

BUH 141228

DE Bush
Size 17.2 x 20 / 25.3 x 13.1mm

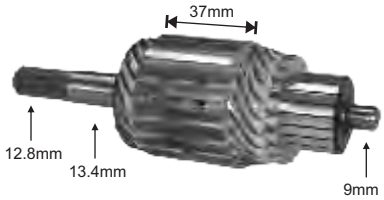
BUH 141226

DE Bush
Suits Mitsuba Starters
Size 13 x 19 x 12mm

WSA 11006

Armature
12V
Fits Kawasaki
Size OL: 160mm / OD 47mm
9 Spline

WSA 11003



Armature
12V
Fits Suzuki
Size OL: 150mm / OD 47mm
10 Spline

WSA 11011

Armature
12V
Fits ND Starters, Sea Doo
Size OL: 192mm / OD 48mm
6 Spline

MARINE 6

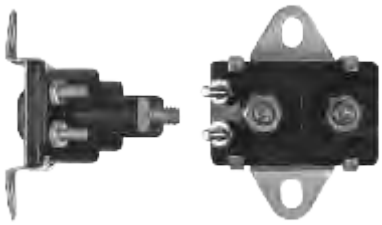
12V 5A Automatic
Electronic Battery Charger
Marinised circuit board to
eliminate corrosion
Suits Standard, Sealed, Maintenance
Free and Gel Type Batteries

Components & Accessories

SND 234860

12V Solenoid
Mounts in rubber saddle
Suits Motorcycle, Quads, Trikes, Jetskis

SND 80058



12V Universal
Small Engine Solenoid

SND 231811

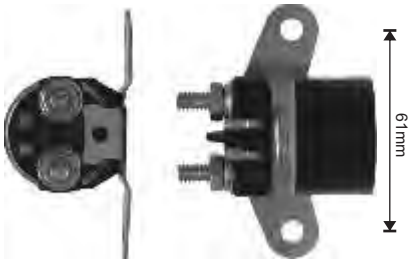
12V Solenoid
Suits Harley Davidson

SND 80061

12V Solenoid

Suits Yamaha M/C, ATV & PWS

SND 80062



12V Solenoid

Suits Suzuki M/C, ATV & PWS

SND 80063

12V Solenoid

Suits Honda M/C, ATV & PWS

SND 133711

12V Solenoid

Suits Small engines
on outdoor power equipment

IGS 22548

Universal Magneto
Ignition Switch

Red	- Battery
Black	- Ground
Black/Yellow	- Magneto
Yellow/Black	- Electric Choke
Yellow/Red	- Start
Purple	- Ignition

See Part 9 For more options of Switches & Solenoids