

Special Tools



EVINRUDE[®]
Johnson[®]



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ABOUT THIS CATALOG

Bombardier Recreational Products (BRP) develops service tools to support technicians who are performing specific *Evinrude*®/*Johnson*® service procedures. These tools allow procedures to be performed efficiently and accurately. *Evinrude/Johnson* service tools should be used whenever specific procedures in the service manuals call for their use.

	WARNING	
<p>If you use procedures or service tools that are not recommended by Bombardier Recreational Products, you alone must decide if your actions can injure people or damage the equipment being serviced.</p> <p>Always follow common shop safety practices. If you have not had training related to common shop safety practices, you should do so not only to protect yourself, but also to protect the people around you.</p> <p>Your understanding and adherence to the safety recommendations contained in the service manuals and use of good judgment when servicing outboards will help promote safety. Always be alert and careful: a good foundation for safety.</p>		

IMPORTANT: This catalog is a tool reference. Refer to the appropriate *Evinrude* or *Johnson* service manual for exact application and usage information.

The tools listed in this catalog are intended for use on current and late model *Evinrude* and *Johnson* outboards. For tool pricing, availability, and ordering information, contact *Evinrude/Johnson Genuine Parts*.

FEATURES

This catalog has many features that make it easy to use. They include:

- A complete table of contents listing 2-stroke and 4-stroke outboard tools by category or outboard system.
- Descriptive headers at the top of each page that indicate outboard type and tool category.
- Text description for each tool indicates specific use or model information.
- Two complete indexes are provided – one index lists tool names and descriptive names and the second index lists tools by part number.

WARRANTY

Evinrude/Johnson tools are warranted against defects in materials and workmanship for a period of one year after the date of sale. Any tool returned to BRP and found by BRP to be defective will be repaired or replaced at the option of BRP. BRP expressly disclaims any other warranty, whether expressed or implied, at the end of the one-year period. You may have other rights that vary from jurisdiction to jurisdiction.

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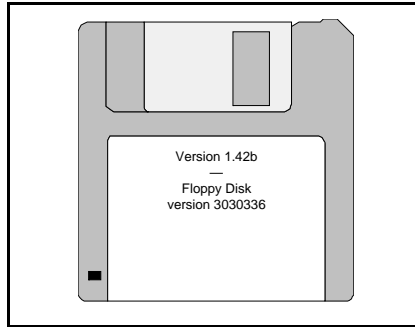
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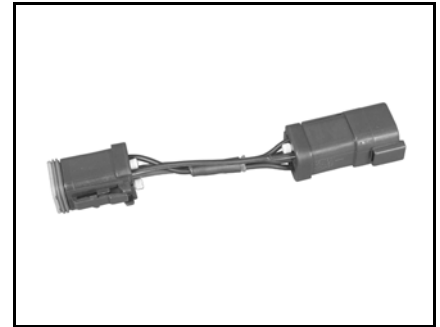
DIAGNOSTICS



Diagnostic Software (Windows † based) 005444
P/N 763724
(2000 and newer Evinrude DI and Evinrude E-TEC outboards)



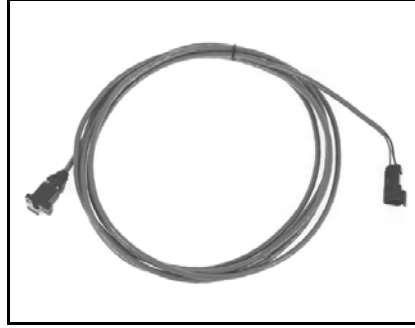
Diagnostic Software (DOS)
P/N 5005388
(DI and Ficht)



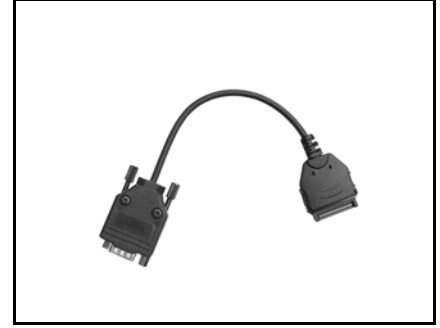
Bootstrap tool 002276
P/N 5000901 (old P/N 586551)
Use during program upgrades.



Engine Diagnostic Software for PDA 002516
with Palm † OS
P/N 777230 (2000 and newer Evinrude DI and Evinrude E-TEC outboards)



Interface cable (2-stroke) 45583
P/N 437955
Computer serial port to O/B communication connector



Modem cable 002566
P/N 776463 (Sony † brand S360 PDA)
P/N 775387 (Palm brand M500 PDA)
Use with PDA to connect interface cable.

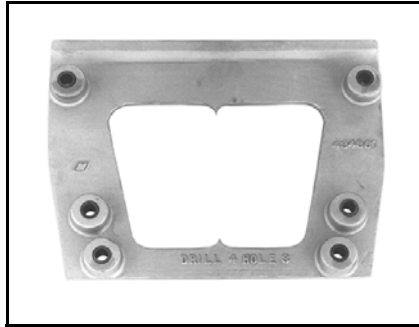
Computer Requirements for Diagnostic Software:

- IBM-compatible type – Battery powered laptop/portable computer
- Windows operating system – 95, 98, 2000, or XP
- Processor – Pentium 133 Mhz or higher
- RAM memory – 64 MB or higher (128 MB preferred)
- Harddrive capacity – 20 MG “free space” for installation
- Display resolution – 800 x 600 minimum
- CD-ROM drive
- 3½ inch floppy drive (add-on external floppy drives available)
- RS-232 / 9 pin serial port connector (add-on USB to serial adapters available)

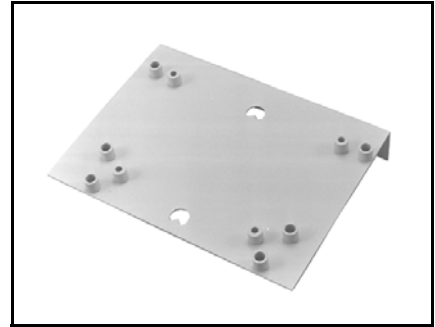
UNIVERSAL



Lifting ring assembly, **P/N 396748** 000669
Includes one set 1 1/8 in. screws,
P/N 398067 and one set 1 3/4 in. screws,
P/N 434292



Transom drill fixture, heavy-duty 24496
P/N 434367
(40 thru V8 outboards)



Transom drill fixture 33199
P/N 385368
(40 thru V8 outboards)



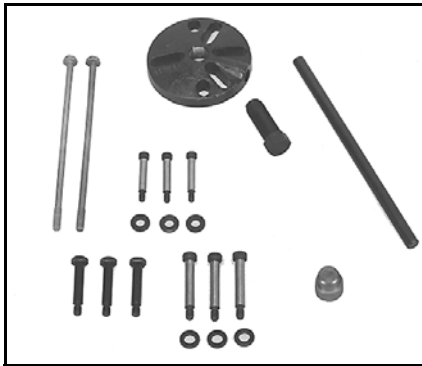
Lifting tool (60°V DI) 44686
P/N 342672



Tilt tube nut wrench 46879
P/N 342680



Temperature gun 45240
P/N 772018



Universal Puller Set 32885
P/N 378103
Contents of kit:
P/N 307636, puller body
P/N 307637, pressing screw
P/N 307638, handle
P/N 307639, washer (3), 11/32 in I.D.
P/N 307640, washer (3), 13/32 in. I.D.
P/N 307641, screw (3), 1/4-20 x 2 1/8 in.
P/N 307642, screw (3), 5/16-18 x 2 3/4 in.
P/N 307645, center guide
P/N 309492, screw (3), 5/16-24 x 2 7/16 in.
P/N 316982, screw (2), 5/16-18 x 8 in.
Flywheel puller screws
P/N 115308, screw (3 required: 2, 2.3, 3.3, 5)
P/N 5000007, screw and washer kit (40-70
4-stroke)



Lifting eye 001024
P/N 321537
(Use with Universal Puller Set)



Oetiker[†] pincers 001081
P/N 350860



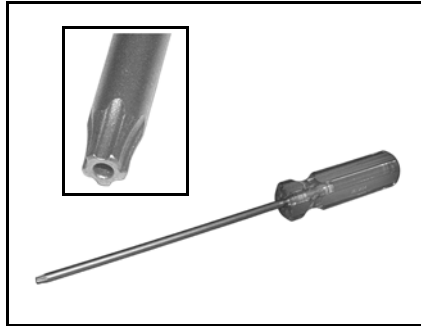
Torque wrench extension 23656
P/N 912031 (Steering drag link)



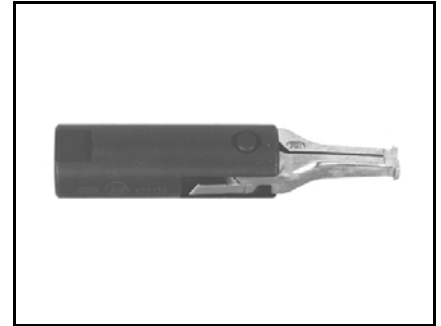
Tie strap installation tool 18105
P/N 323716



Tie strap installation tool
P/N 509785 32613



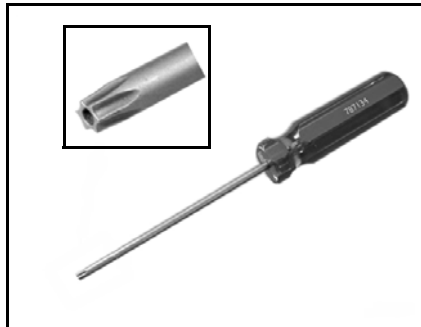
Torx † driver, 5 point tamper resistant
P/N 351204 002561
(2004 & newer 9.9/15, 90-175 carb. models)



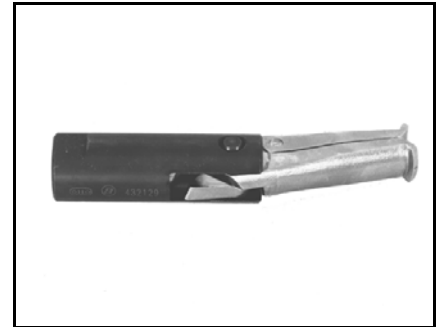
Puller jaws, bearing
P/N 432130 23149
Replacement jaws, P/N 437953



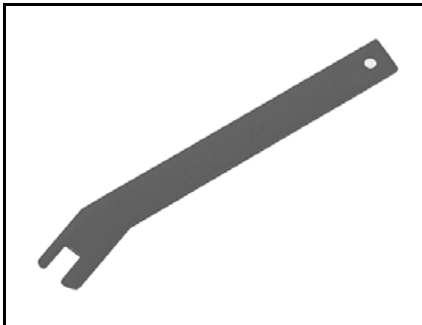
Tie strap installation tool
P/N 509786 32614



Torx driver, 6 point tamper resistant
P/N 787134 000113
(Various linkages, 2001 & newer)



Puller jaws, large
P/N 432129 23148
Replacement jaws, P/N 437954



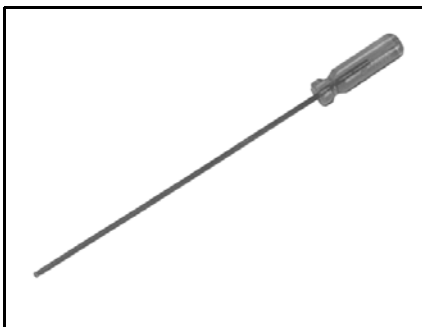
Hose clamp wrench
P/N 325043 23674



Flywheel holder
P/N 771311 42938
Engages flywheel ring gear



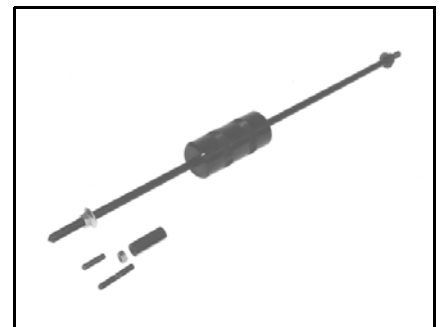
Puller jaws, small
P/N 432131 23150
Replacement jaws, P/N 437952



Screwdriver, 7/64 in. ballhex
P/N 327622 23664

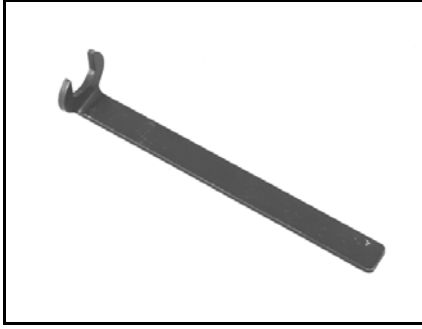


Flywheel holder
P/N 507976 002586
Strap type for no ring gear flywheel



Slide hammer
P/N 391008 CO1577
Includes: Slide, P/N 326002
Slide hammer bolt, P/N 390897
Adapter set, P/N 390898

2-STROKE UNIVERSAL



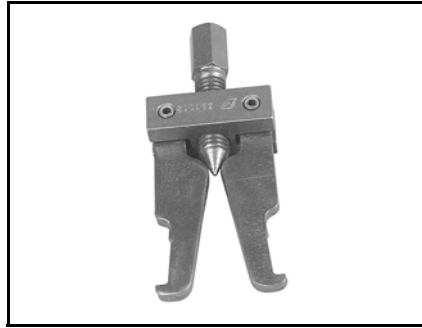
Puller wrench 23147
P/N 334359 (Use with puller jaws,
 P/Ns 432129, 432130, 432131)



Slide hammer 15345
P/N 432128



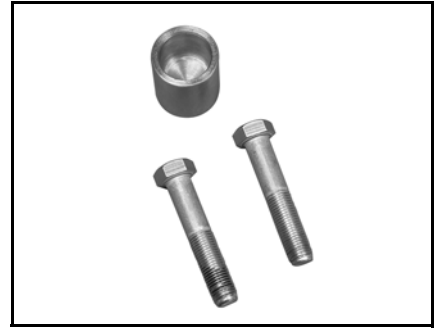
Spanner wrench (5/32, 3/16, 1/4 in. 32213
 holes) **P/N 912084**
 Replacement tip kit, P/N 987742



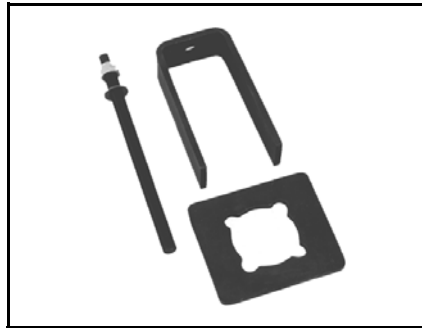
Puller jaws, wide (use with 391008) 001267
 P/N 391012
 Replacement jaws, P/N 391009



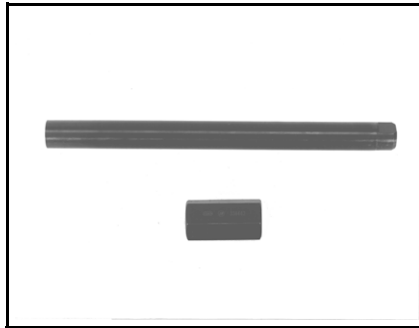
Flywheel service kit (60°V) 46215
 P/N 434649
 60° E-TEC requires P/N 5007181



Flywheel puller adapter kit 005314
P/N 5007181
 Used with P/N 434649



Puller bridge 23146
P/N 432127
 Use with 432129, 432130, 432131



Tilt tube service kit 33249
P/N 434523



Drive handle, 5/8-11 thread 31932
P/N 311880



Adapter, puller jaws 002597
P/N 334358
 Adapts puller jaws, P/Ns 432129,
 432130, and 432131, to slide hammer,
 P/N 391008



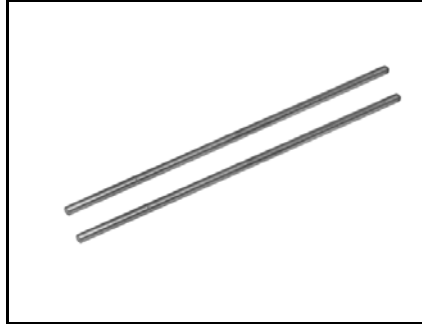
Adapter, slide hammer 39435
P/N 340624
 Use with slide hammer, P/N 391008,
 to remove tilt pin on 40/50



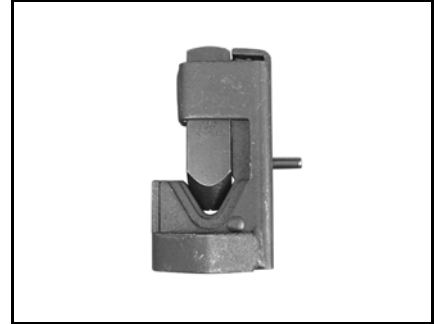
Drive handle, snap-on (no threads) 002585
P/N 378737



Syringe
P/N 346936



Guide pin set
P/N 383175



Battery terminal crimper
P/N 502224



Twist-Grip™ remover
P/N 390767



Puller jaws
P/N 391011
Replacement for puller, P/N 391010



Filter wrench
P/N 502227
Fits filters up to 4 in. (100 mm)



Remover, ball socket
P/N 342226



Cable shears
P/N 502226

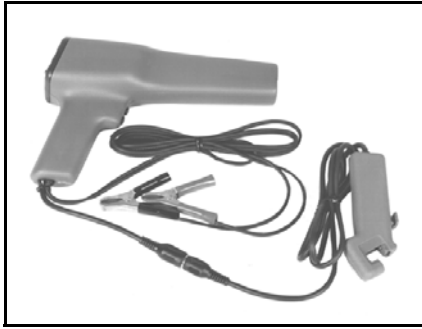


Propeller shaft seal tool, handle
and nut kit
P/N 434422

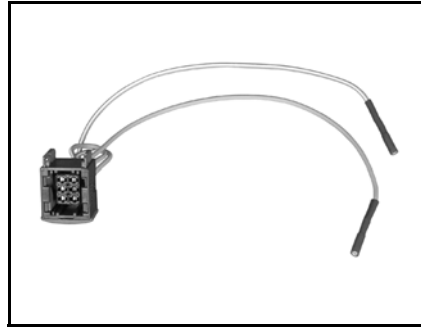


Installer, ball socket
P/N 342225

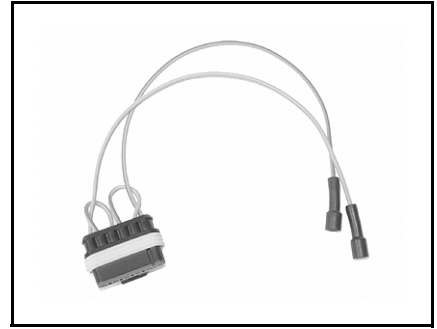
ELECTRICAL / IGNITION



Timing light/tachometer
P/N 775389 49789



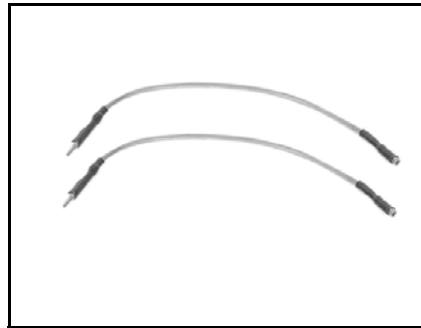
Stator test adapter
P/N 5006211 004222
(Evinrude E-TEC V4 & V6)



Stator test adapter
P/N 5005799 002273
(Evinrude E-TEC 40-90)



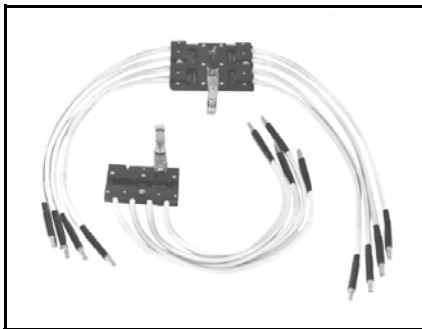
Test probe kit
P/N 342677 45241



Wire harness adapter leads
P/N 342228 40269
Use on Packard† connectors



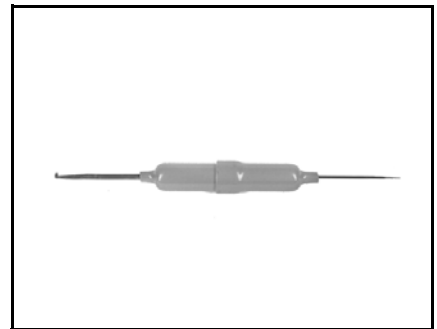
Peak reading voltmeter
P/N 507972 49799



Spark checker
P/N 508118 (All models, V6/V8)
P/N 507975 (4-wire) 49798



Amphenol crimping pliers
P/N 322696 30387



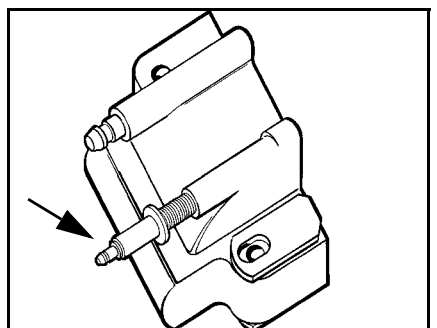
Deutsch† connector tool
P/N 342667 42004



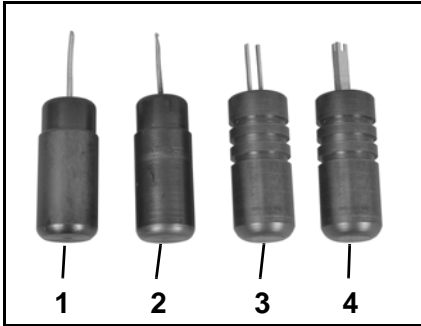
Amphenol connector tools:
1. Insert, P/N 322697
2. Pin removal, P/N 322698
3. Socket removal, P/N 322699 000798



Multimeter, analog
P/N 501873 49793



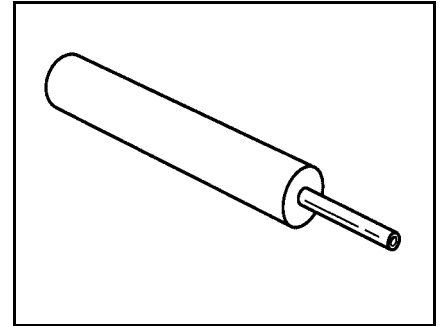
Ignition coil terminal extender
P/N 502054 CO3010



AMP[†] connector tools: 002277
 1. Primary Lock, **P/N 777077**
 2. Secondary Lock, **P/N 777078**
 3. Release, **P/N 351413**
 4. Installer, **P/N 777079**



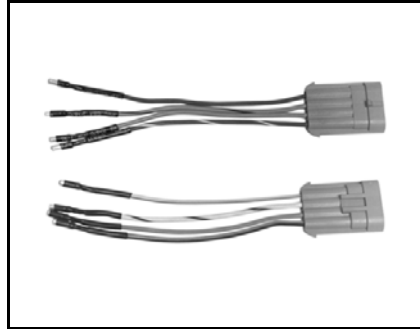
Ignition analyzer, 60°V carb models 23471
P/N 434017 – Includes 60° V6 harness kit, P/N 434127. Tests ignition sensor and allows static adjustment of idle and full advance ignition timing.



Removal tool, electrical pin DRC7183
P/N 345117
 Removes TPS pins from connector on DI outboards



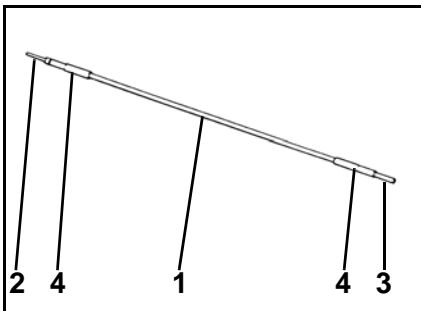
Pack load adapter 49797
P/N 507983



Harness kit, 60° V4 carb models 39651
P/N 437270
 Use with Ignition analyzer, P/N 434017.



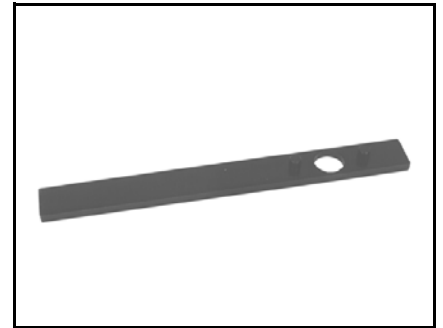
Coil locating ring 001274
P/N 342674
 (3.5)



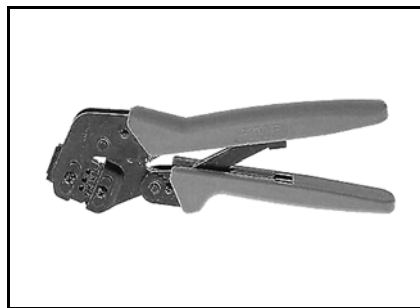
Amphenol[†] or Deutsch connector jumper wires 73158
 Make from:
 1. No. 16 wire, 8 in. (200 mm)
 2. Pin, P/N 511469 (Amphenol), or Pin, P/N 514679 (Deutsch)
 3. Socket, P/N 581656
 4. Shrink tube, 510628



Coil locating ring 32211
P/N 334994
 (6/8)



Flywheel holder 32611
P/N 115315
 (2.3-3.5)



Amp Pro-Crimper III Hand Tool 005514
P/N 777281
 Use on Superseal 1.5 contacts
 Replacement dies, P/N 777282



Ignition analyzer 49791
P/N 501890

FUEL / OIL



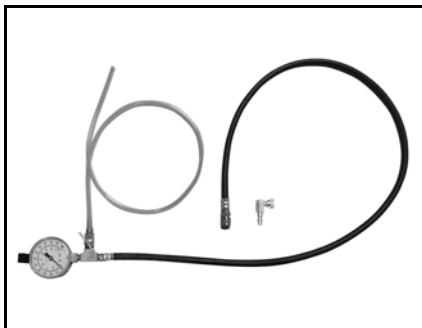
Fuel pressure gauge (15 PSI) 004560
P/N 5006397



Fuel pressure gauge (100 PSI) 002275
P/N 5000902
 Includes adapter valve **P/N 346189**



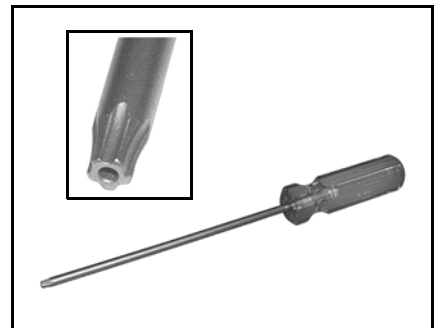
Syringe 50243
P/N 346936



Fuel pressure gauge (60 PSI) 005339
P/N 5007100



Fuel vacuum tester 23286
P/N 390954



Torx driver, 5 point tamper resistant 002561
P/N 351204
 (2004 & newer 9.9/15, 90-175 carb models)



Fuel pressure test adapter (Low) 000777
P/N 350929
 (DI and Evinrude E-TEC)



Oil pressure adapter 000179
P/N 350618
 (75-250 DI models)



Torx driver, 6 point tamper resistant 000113
P/N 787134
 (Various linkages, 2001 & newer)



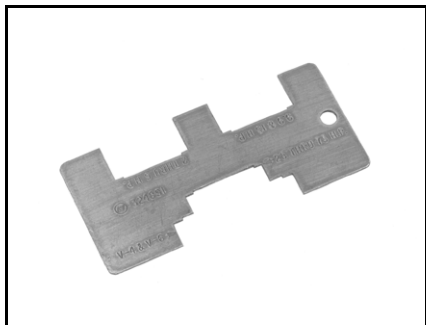
Fuel pressure test adapter (High) 000778
P/N 350902
 (DI and Evinrude E-TEC)



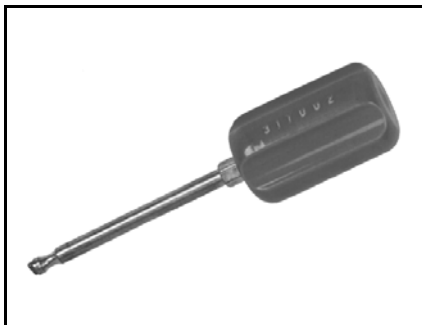
Injector test fitting kit 002465
P/N 5005844
 (Evinrude E-TEC fuel injector test)



Nipple cleaning tool 23655
P/N 326623



Float gauge
P/N 324891 23678



Orifice plug screwdriver
P/N 317002 23611



Oil pressure test fitting
P/N 773539 002801
(1997–2001 DI models)



Orifice plug driver
P/N 328026 23608



Orifice plug screwdriver
P/N 390542 23103
Replacement blade, P/N 328027

**2-STROKE
POWERHEAD**

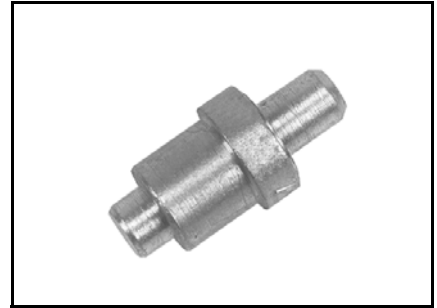
POWERHEAD



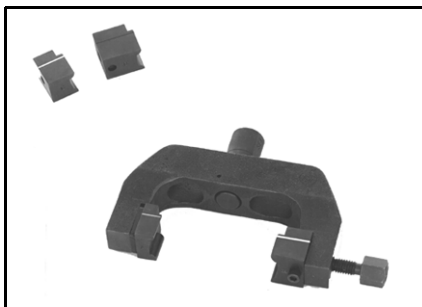
Cylinder bore gauge
P/N 775589 45303



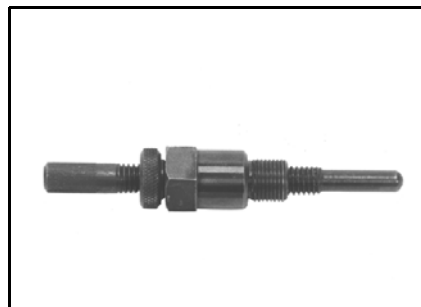
Powerhead Alignment Pin Kit
P/N 5007167 005279



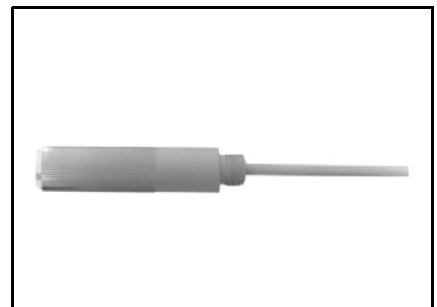
Wrist pin bearing remover/installer
P/N 327645 (5-8)
P/N 327637 (2, 4, 4.5) 23604



Rod cap alignment fixture
P/N 396749 21596



Piston stop tool
P/N 384887 46543a
Carburetor models



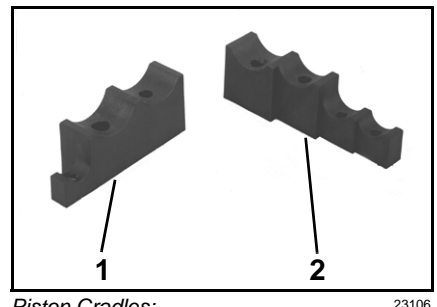
Piston stop tool, P/N 342679
Replacement tip kit, P/N 5006098
DI models 46543b



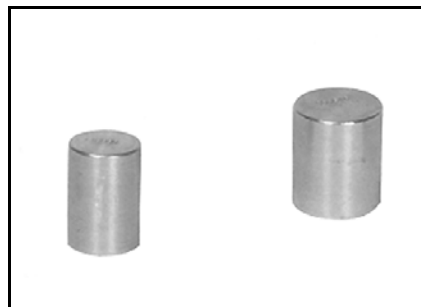
Ring compressors: CO3768
–Standard size
P/N 336314 (60°V & 40–90 Evinrude E-TEC)
P/N 326592 (40/50)
P/N 326591 (25/30)
P/N 339754 (9.9/15)
P/N 326589 (6/8)
–Oversize
P/N 336313 (60°V & 40–90 Evinrude E-TEC)
P/N 330222 (40/50)
P/N 330223 (25/30)
P/N 339755 (9.9/15)



Torquing socket, rod screws 000797/50242
P/N 331638 (5/16 in. 12 point hex)
P/N 346187 (3/8 in. 12 point hex)



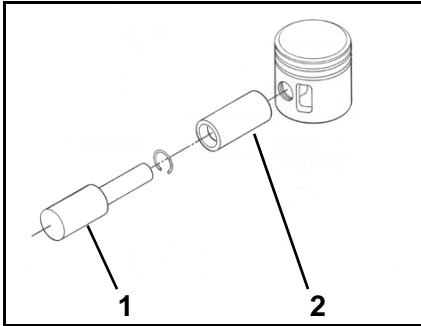
Piston Cradles: 23106
1. P/N 326572 (Evinrude E-TEC, V4, V6, 2 thru 4.5)
2. P/N 326573 (5 thru 70 3 cyl.)



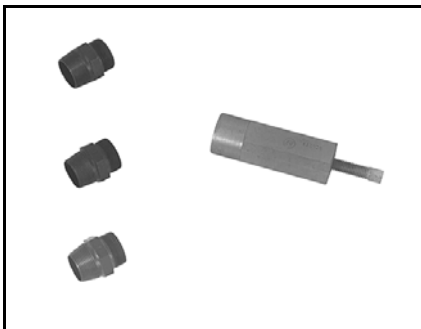
Wrist pin bearing installers: 41029
P/N 336660 (60°V, 25/30, 40/50, and V4/V6 crossflow)
P/N 338646 (90°V)



Wrist pin pressing pins: 23668
P/N 396747 (90°V)
P/N 326356 (60°V, 40–90 Evinrude E-TEC, 25/30)
P/N 392511 (9.9/15)
P/N 333141 (6/8)



1. Wrist pin retaining ring drivers: DR1641
P/N 396747 (90°V)
P/N 318599 (60°V, 40/50, 25/30 and V4/V6 crossflow)
P/N 392511 (9.9/15, driver and cone)
P/N 333141 (6/8)
2. Wrist pin cones:
P/N 331913 (90°V)
P/N 318600 (60°V, 40/50, 25/30 and V4/V6 crossflow)
P/N 333142 (6/8)



Crankshaft upper seal remover/installer kit
P/N 391060
 Contains:
 Remover, P/N 326270 (9.9/15)
 Remover, P/N 326269 (5-8)
 Remover, P/N 326268 (3-4.5)
 Pressing screw, P/N 342227
 Body, not available separately



Crankshaft bearing/sleeve installers: 21953B
P/N 338649 (90°V)
P/N 338647 (60°V)
P/N 338648 (V4/V6 crossflow)
P/N 342686 (40/50, 55C, 50-70 3 cyl.)
P/N 339749 (25/30)



Installer, upper crankcase seal 22534
P/N 334500
 (40/50, 55C)



Installer, lower crankcase seal 22431
P/N 339752
 (40/50 and 3 cyl. 1993 and newer, 55C 1989 and newer)



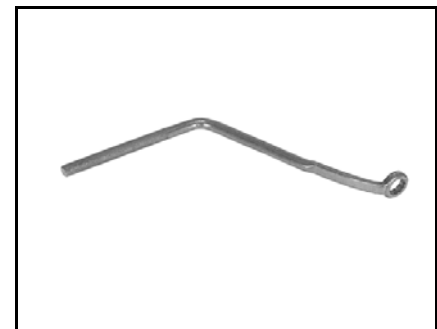
Crankshaft upper seal remover 23624
P/N 387780
 (25/30)



Installer, crankshaft upper seal 16718
P/N 321539
 (25/30)



Installer, crankshaft lower seal 22428
P/N 333520
 (25/30)



Wrench, offset 32961
P/N 322700
 (25/30)



Installer, crankshaft lower seal 23660
P/N 433391
 (9.9/15)



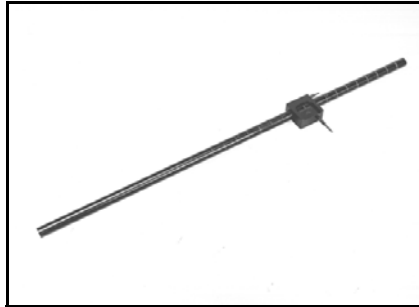
Remover, crankshaft bearing 001264
P/N 115316
 (3.5)

GEARCASE

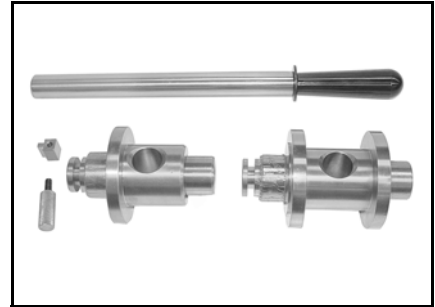
General



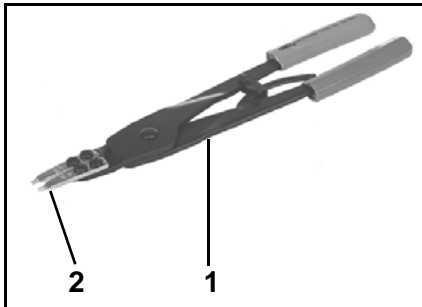
Gearcase filler 49790
P/N 501882



Shift rod height gauge (30 in. rod) 32872
P/N 389997 (40 and above)
P/N 339029 (30 in. rod only)



Gearcase Alignment Gauge Kit 004315
P/N 5006349
Use on V6 gearcase housings



1. Retaining ring pliers, **P/N 331045** 2036
2. Replacement tip set, **P/N 395967**



Testers 49794
P/N 507977, Pressure tester
P/N 507982, Vacuum tester



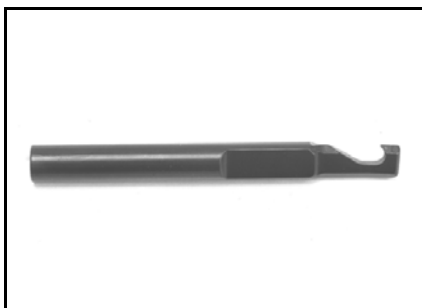
Gearcase Alignment Gauge (V4) 005072
P/N 352879
Use with Gearcase Alignment Gauge Kit, **P/N 5006349**



Puller, heavy duty (2 required) 2030
P/N 330278 (Use with body and screw from Universal Puller Kit, **P/N 378103** to remove bearing housing)

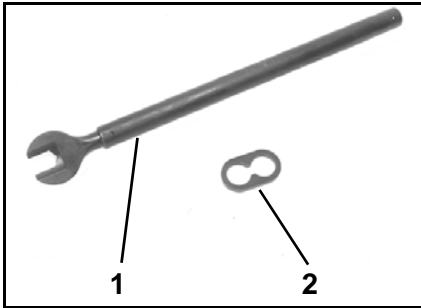


Gearcase Alignment Pin Kit 005401
P/N 5007231

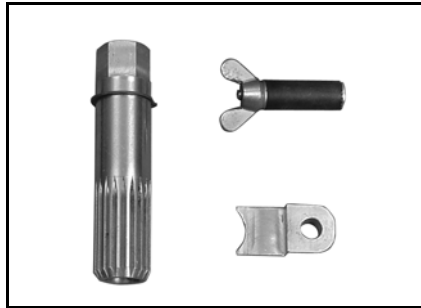


Lower driveshaft puller 47257
P/N 342681
(V4, V6) Use with **P/N 391008**

Driveshaft and Pinion



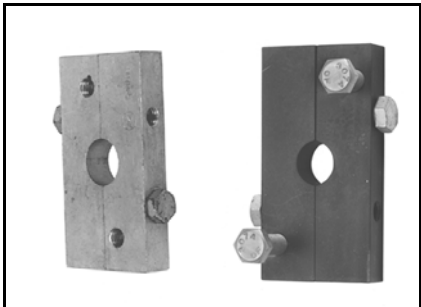
1. Pinion nut wrench, **P/N 334455** 40371
2. Wrench retainer, **P/N 341438**
(V4/V6)



Lower Driveshaft Spline Tool Kit 005074
P/N 5007052



Lower Driveshaft Wrench 005073
P/N 352877



Driveshaft pullers: 32884/47254
1. **P/N 387206** (40-70)
2. **P/N 390706** (V4/V6)
3.



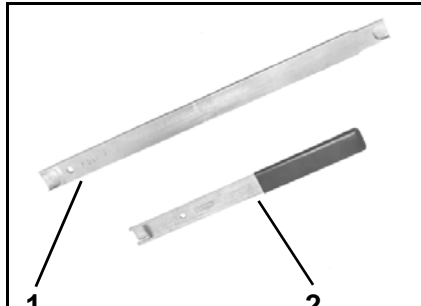
Backing plate 23621
P/N 325867
Use with 387206 and 390706 pullers



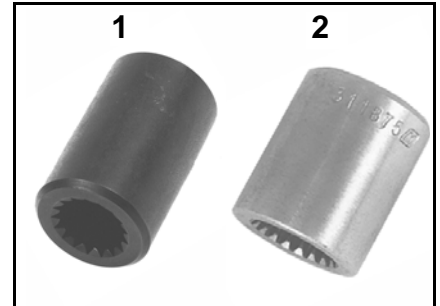
Lower Driveshaft Shimming Bolt 005445
Use with Universal Driveshaft Shim-
ming Tool Kit to shim "S2" gearcase
P/N 352878



Driveshaft Seal Protectors: 23692
1. **P/N 312403** (40-60 D.I.; 40-60 2 cyl.;
55C 1993 thru; 50-70 3 cyl. 1989 thru)
2. **P/N 318674** (75/90 D.I., V4/V6)



Pinion nut holder 40372
1. **P/N 342216**, (V4/V6, 40/50)
2. **P/N 320675**, (40-60 Evinrude E-TEC,
55C)



Driveshaft Sockets 16302
1. **P/N 334995** (40-60 D.I.; 40/50/60 2
cyl.; 55C 1993 thru; and 50/60/70 3 cyl.
1989 thru)
2. **P/N 311875** (V4, V6 ALL, and 70
4-stroke)

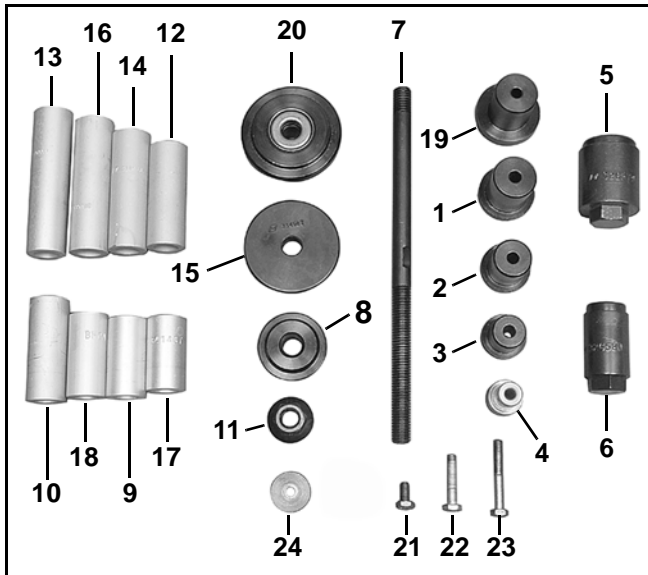


Installer, driveshaft seal, single 38032
P/N 341439
(V4, V6, V8, 1995-1999)



Installer, driveshaft seal, back to back 32924
P/N 330268 (V4, V6, V8 1999 to
present and 1994 and older)

2-STROKE GEARCASE



**Pinion Bearing Remove/Install Kit (2-Stroke),
P/N 5005927* (previously P/N 391257)**

Includes:

1. P/N 326574 Remover/installer
2. P/N 326575 Remover/installer
3. P/N 326577 Remover/installer
4. P/N 326578 Remover/installer
5. P/N 326579 Remover
6. P/N 326580 Remover
7. P/N 326582 Rod
8. P/N 326583 Pilot plate
9. P/N 326584 Spacer
10. P/N 326585 Spacer
11. P/N 326586 Nut
12. P/N 330067 Spacer
13. P/N 330068 Spacer
14. P/N 334986 Spacer
15. P/N 334987 Pilot plate
16. P/N 339753 Spacer
17. P/N 341437 Spacer
18. P/N 350932 Spacer
19. P/N 350958 Installer
20. P/N 391260 Pilot plate
21. 1/4 x 1/2 in. hex-head screw (1)
22. 1/4-20 x 1 1/4 in. hex-head screw (1)
23. 1/4-20 x 1 3/4 in. hex-head screw (1)
24. 1 in O.D. x 1/4 I.D. flat washer (1)

*Contains components required to service pinion bearing on Evinrude/Johnson gearcases 9.9 –250/V6 (1989 and newer).

Note: Refer to 4-Stroke Pinion Bearing Remove/Install Kit, P/N 5005928, for additional components required to service 4-stroke gearcases.

Pinion Bearing Remove/Install Tool Chart

2-Stroke Models

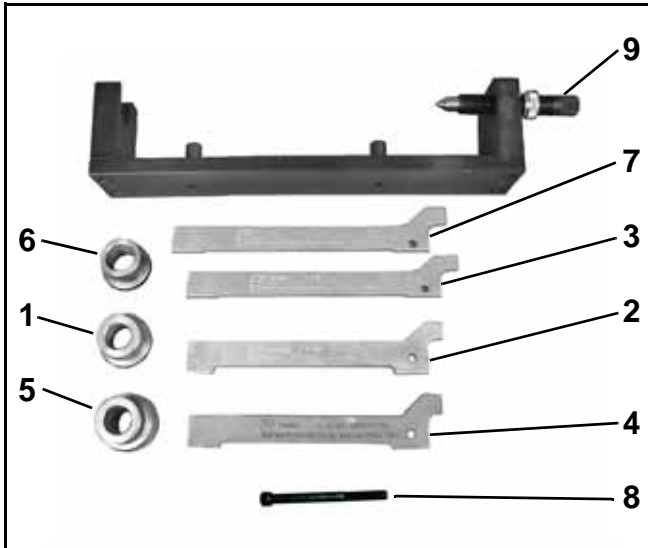
(Use Pinion Bearing Remove/Install Kit, P/N 5005927)

	9.9/15	25/30	40/50	40-60 Evinrude E-TEC, 55C (50-70 3 cyl.)	75-90 Evinrude E-TEC, 60° V4 ("S" type)	90° V4 (NOT "S" type)	V4/V6 "O" type V6 "L" type	V6 "M" type	V6/V8 (Non-current)
Rod	326582	326582	326582	326582	326582	326582	326582	326582	326582
Pilot plate	326583	326583	334987 (433033)	391260	391260	391260	391260	391260	391260
Nut				326586			326586	326586	326586
Remover	326578	326577	326757	326580	326574	326574	326579	326579	326579
Installer				326575			350958	350958	326574
Washer									326587
Spacer(s)	326585 339753	330067 330068	334986 (433033)	326584	341437	326585	326584	350932	326584

4-Stroke Models

(Use Pinion Bearing Remove/Install Kits: P/N 5005927 and P/N 5005928)

	9.9/15	25/30	40/50	60/70 ('99-'00)	60/70 ('01 thru)	90-140
Rod	326582	326582	326582	326582	326582	326582
Pilot plate	326583	5000009	5000009	5000003	391260	391260
Remover Installer	351055	5034763	5000009	326574	341437	326574
Spacer	326585	350932	326584	326584	341437	341437



002601

Universal Driveshaft Shimming Tool Kit (2-Stroke), P/N 5005925* (previously P/N 393185)

Includes:

1. P/N 328363 Collar
2. P/N 328366 Gauge bar
3. P/N 328367 Gauge bar
4. P/N 334984 Gauge bar
5. P/N 334985 Collar
6. P/N 341440 Collar (replaces P/N 328362)
7. P/N 349957 Gauge bar (V6 "M" style)
8. P/N 352878 Lower driveshaft shimming bolt (S2 gearcase)
9. P/N 393279 Pressure screw

*Contains components required to shim Evinrude/Johnson gearcases 40–250/V6 (1989 and newer).

Note: Refer to 4-Stroke Shimming Kit, P/N 5005926, for additional components required to shim 4-stroke gearcases.

Driveshaft Shimming Tool Reference Chart (2-Stroke)

Outboard Model/Type	Year	Collar	Gauge Bar	
40, 48, 50	1989 and newer	334985	334984	
40–60 Evinrude E-TEC; 55 C	1979 and newer	328363	328366	
60° V4 – "S" type gearcase	1995 and newer	341440	328367	
V6 – "O" & "L" type gearcase	1976 and newer	341440	328367	
V6 – "M" type gearcase	2002 and newer	341440	349957	
Non-current	50	1972–1974	328361	
	2 cyl. recreational*	1988 and older	328361	328365/328364*
	3 cyl. (20 in. shaft)	1972 and newer	328363	328366
	3 cyl. (15 in. shaft)	1975–1986	328363	328365
	90° V4	1969 and newer	341440	328366
	V8	1985 and newer	341440	330224

* Refer to applicable service manuals and bulletins.

Note: Collar, P/N 341440, supersedes from collar, P/N 328362.

Below: Gauge bars and collars not contained in the Universal Driveshaft Shimming Tool Kit, P/N 5005925.



41553

Gauge bars (typical)
P/N 328364 (2 cyl.; see chart)
P/N 328365 (2 cyl., 3 cyl.; see chart)
P/N 330224 (V8 gearcase only)



49794

Collars (typical)
P/N 328361 (50 1972-74)

2-STROKE GEARCASE



Installer, driveshaft/prop seal
P/N 342666
(40/50, 1996 and newer) 42232



Installer, driveshaft seal
P/N 326552
(25/30) 002609



Remover, pinion bearing
P/N 319880
(6/8) 001265



Installer, driveshaft seal
P/N 335823
(40,48,50, 1989 and newer) 32886



Driveshaft bearing installer, upper
P/N 319931
(9.9/15) 32639



Remover/installer, prop shaft bearing
P/N 392091
(3.5) 001295

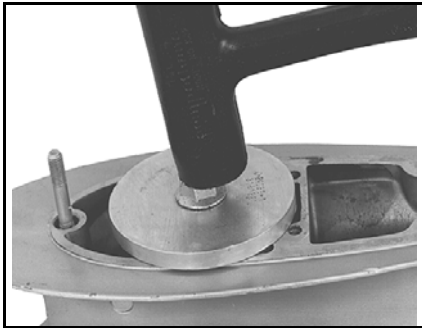
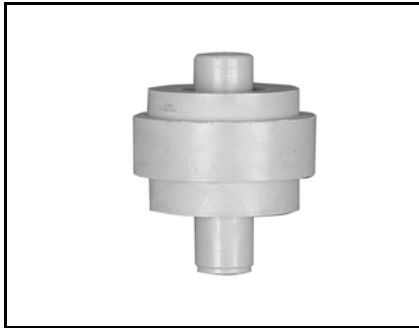
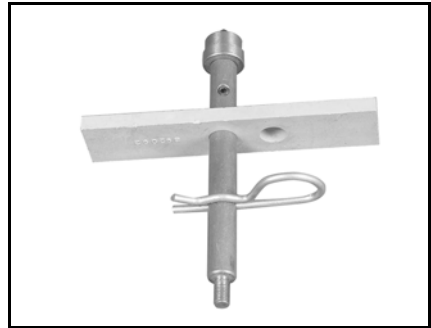


Plate
P/N 318122
(25/30) 21813



Installer, driveshaft seal
P/N 326554
(9.9/15) 002610



Driveshaft bearing installer/remover
P/N 392092
(3.5) 001266



Installer, driveshaft bearing
P/N 322923
(25/30) 21887A



Installer, pinion bearing
P/N 319878
(6/8) 001268

Propeller Shaft



Installer, prop shaft seal (back to back) 32973
P/N 336311
(V6 1999 and newer, 1994 and older)



Installer, prop shaft seal 002603
P/N 326551
(40-90 Evinrude E-TEC, 55C, V4, 3 cyl)



Installer, prop shaft bearings 23547
P/N 334997
(1989 and newer 40/50)



Installer, prop shaft front/rear bearing 32880
P/N 339750
(1993 and newer V6)



Installer, front/rear prop shaft bearing 32962
P/N 326562
(40-90 Evinrude E-TEC, 55C, V4, 3 cyl)



Installer, prop shaft seal 22429
P/N 335821
(25/30)



Installer, prop shaft seal (small shaft) 32970
P/N 326690
(V6/V8, 1991 and older)



Installer, prop shaft/driveshaft seal 42233
(single extended lip)
P/N 342665 (1996 & newer 3 cyl. /V4 thru 1998)



Installer, prop shaft bearing 22420
P/N 335820
(25/30)



Installer, front prop shaft bearing 15355
P/N 432401
(1992 and older V6)



Installer, prop shaft/driveshaft seals 42232
P/N 342666
(1996 and newer 40/50)



Installer, front prop shaft bearing 32999
P/N 321428
(25/30)

2-STROKE GEARCASE



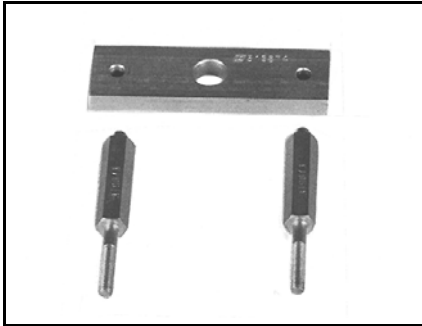
Installer, prop shaft seal
P/N 342663
(9.9/15) 40993



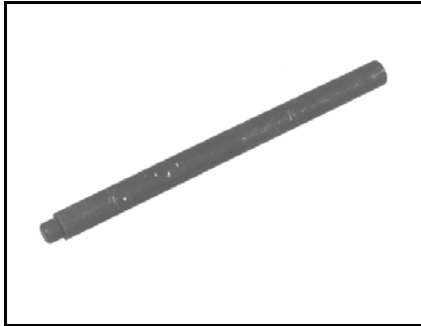
Installer, prop shaft bearing
P/N 339751
(9.9/15) 32881



Installer, prop shaft seal
P/N 327572
(3.5) 002613



Puller kit, propeller shaft
bearing housing
P/N 386631 (9.9/15) 32627



Remover, propeller shaft bearing
P/N 319880
(9.9/15) 23699

Counter Rotating (C/R)



Spanner wrench (C/R Models)
P/N 432400 (V6)
P/N 432399 (V8) 15358

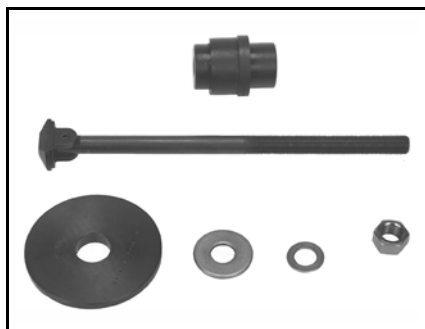


Propeller shaft adapter
(C/R Models)
P/N 432398 15356



Installer, forward gear bearing
(C/R Models)
P/N 339778 32519

Forward Bearing



Forward bearing service kit
P/N 433034
(1989 and newer 40/50) 16541

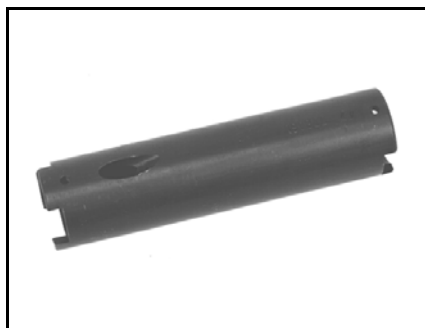


Installer, forward bearing race
P/N 319929
(9.9/15) 23218

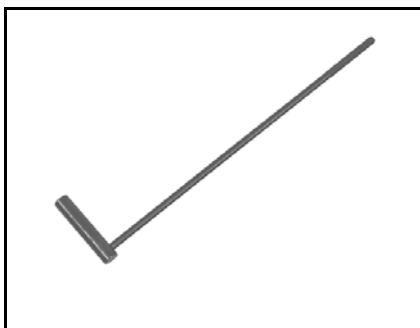


Installer, forward bearing race
P/N 326025
(6/8) 001270

Shift Rod and Shifter



Shift detent sleeve
P/N 328081
(25/30) 23544



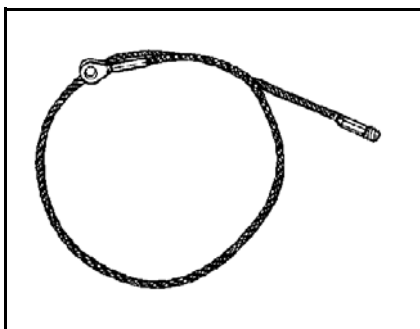
Shift rod bushing remover
P/N 327693
(9.9/15 and 25/30) 23542



Clutch dog spring depressor
P/N 390766
(6/8) 001269



Shift rod bushing installer
P/N 304515
(25/30) 23563

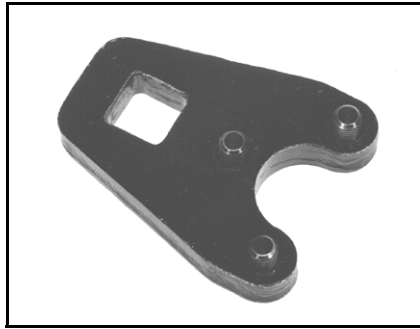


Yoke locator
P/N 319991
(9.9/15) DR4845

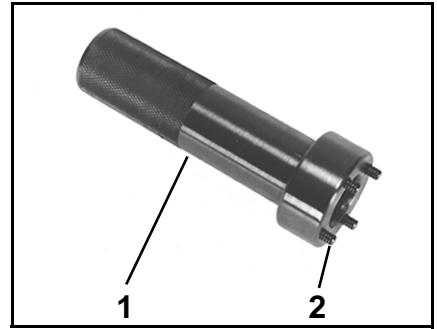
TRIM / TILT



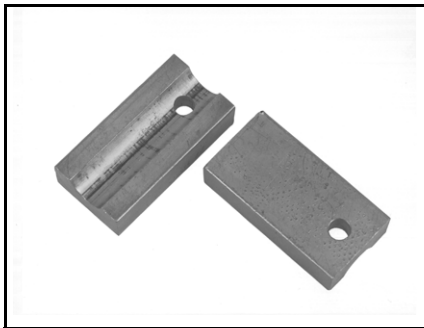
Gauge assembly, 2000 psi 33023
P/N 983975



Tilt cylinder end cap wrench 33741
P/N 326485



1. Trim cylinder end cap
remover/installer, **P/N 436710** 33742
2. Replacement tip, **P/N 437951**



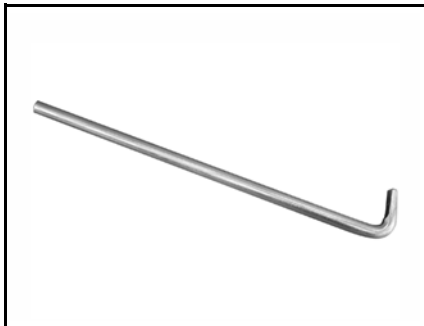
Hydraulic cylinder rod holder 23665
P/N 983213



Tilt cylinder seal protector 23694
P/N 326005



1. Trim/tilt service kit, **P/N 434524** 27340
2. O-ring kit for adapter tips,
P/N 434729

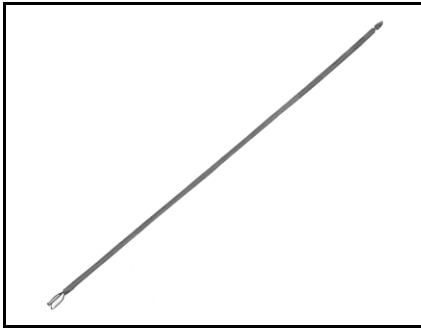


Trim sleeve remover 002607
P/N 325065



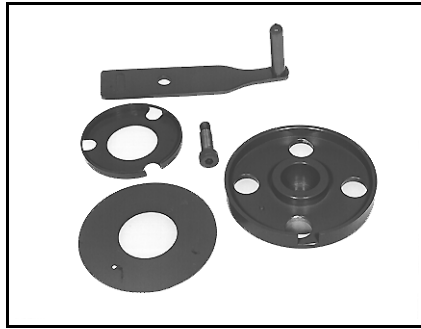
Tilt cylinder end cap wrench
(Evinrude E-TEC) 005340
P/N 352932

MANUAL STARTER



Starter rope threading tool,
P/N 378774

23682



Starter spring winder/installer, top-
mounted manual starters 32 c.i., 40-70
P/N 392093

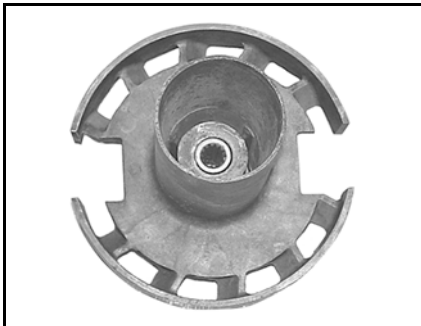
CO3583



Starter spring winder/installer, top
mounted manual starters 4-8, 9.9/15,
25/35 3-cyl., and 5-15 4-Stroke OMC
P/N 342682

50068

TEST PROPELLERS



Test propellers (2-stroke):

P/N 115306 (3.5)

P/N 390239 (6/8)

P/N 340177 (9.9/15)

P/N 434505 (25/30)

P/N 432968 (40/50 carb)

P/N 382861 (55C, 40/50 Evinrude E-TEC)

P/N 433068 (90-115 D.I./carb 20", 105C)

P/N 386246 (75/90 Evinrude E-TEC 20")

P/N 387388 (150/175 D.I./carb, 90 Evinrude
E-TEC 25" models)

P/N 398673 (150/175 CR or V4 CR models)

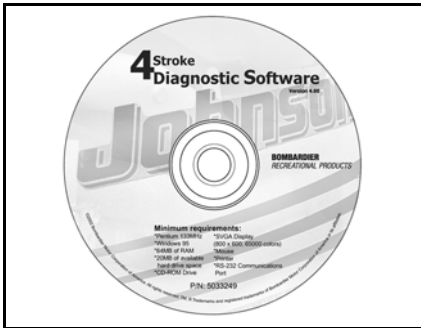
P/N 436080 (200-250)

P/N 436081 (200/250 CR)

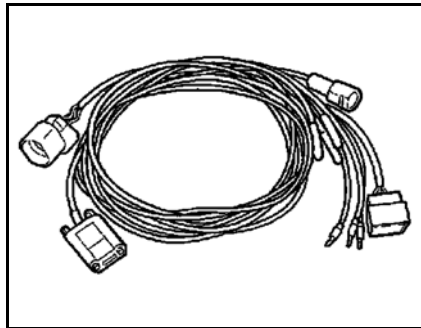
002796



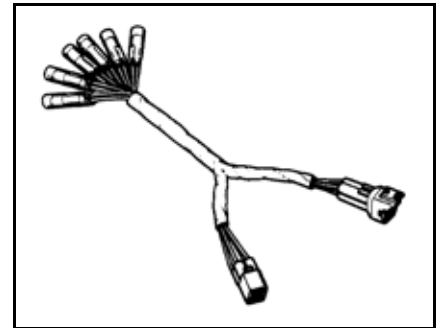
DIAGNOSTICS



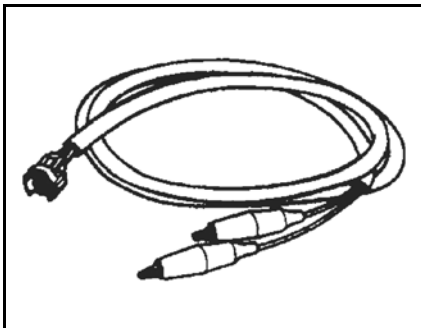
Diagnostic Software (Windows † based) 002800
P/N 5033251
(4-Stroke outboards)



Interface cable (4-stroke) 002803
P/N 787053



Test cords: 002550
2 pin, **P/N 5034617**
(25/30, 2000 and newer)
3 pin, **P/N 5035744**
(200/225 2004 and newer)
4 pin, **P/N 5034228**
(25/30 & 60/70)
4 pin, **P/N 5034230**
(40–70, 1998–2000)
6 pin, **P/N 5034618**
(25/30, 2000 and newer)
6 pin, **P/N 5034231**
(40–70, 1998–2000)
8 pin, **P/N 5034232**
(40–70, 1998–2000)
12 pin, **P/N 5034233**
(40–70, 1998–2000)



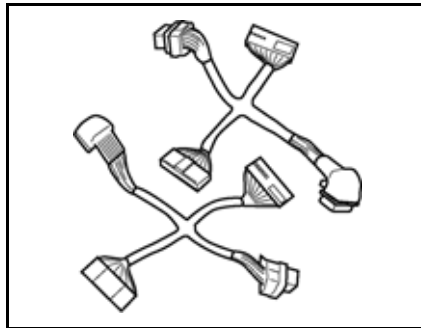
Injector test cord 002802
P/N 5034229
(40–225, 2001 and newer)



O₂ Sensor and Lead 48237
P/N 5000002



Test cord, 44 pin 002643
P/N 5034223
(40–140, 2001 and newer)



Test cord, 26 and 34 pin 00
P/N 5035745
(200/225, 2004 and newer)

Computer Requirements for 4 Stroke Diagnostic Software:

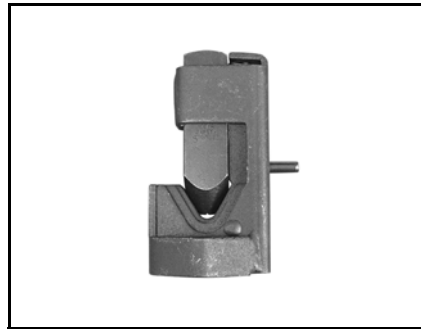
- IBM-compatible type – Battery powered laptop/portable computer
- Windows operating system – 95, 98, 2000, or XP
- Processor – Pentium 133 Mhz or higher
- RAM memory – 64 MB or higher (128 MB preferred)
- Harddrive capacity – 20 MG “free space” for installation
- Display resolution – 800 x 600 minimum
- CD-ROM drive
- RS-232 / 9 pin serial port connector (add-on USB to serial adapters available)

UNIVERSAL

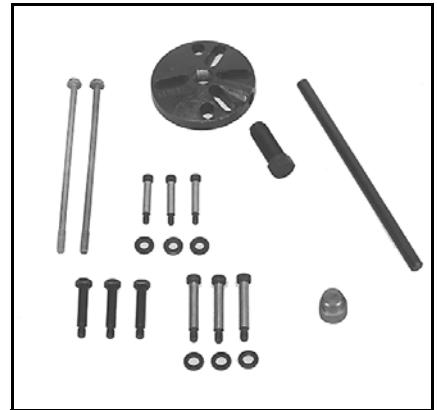
IMPORTANT: Refer to **UNIVERSAL** tools in **2-STROKE** section on page 4 for additional tool listings.



Temperature gun
P/N 772018 45240



Battery terminal crimper
P/N 502224 002604



Universal Puller Set 32885

P/N 378103

Contents of kit:

P/N 307636, puller body

P/N 307637, pressing screw

P/N 307638, handle

P/N 307639 Washer (3), 11/32 in I.D.

P/N 307640 Washer (3), 13/32 in. I.D.

P/N 307641 Screw (3), 1/4-20 x 2 1/8 in.

P/N 307642 Screw (3), 5/16-18 x 2 3/4 in.

P/N 307645 Center guide

P/N 309492 screw (3), 5/16-24 x 2 7/16 in.

P/N 316982 Screw (2), 5/16-18 x 8 in.

Flywheel puller screws

P/N 115308, screw (3 required)

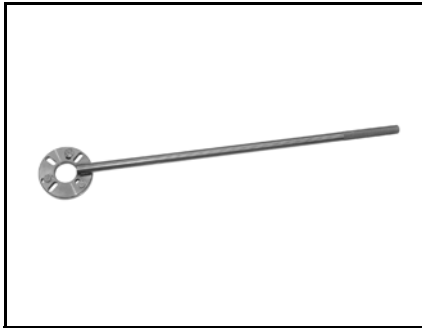
(2, 2.3, 3.3, 5)

P/N 5000007, screw and washer kit

(40/50 and 70 4-stroke)

P/N 5034235, screw and washer kit

(2002 and newer 9.9/15)



Flywheel holder
P/N 5034227 002605
(40–140)



Lift hook
P/N 5033048 (Use P/N 5030994 bolt)
(9.9/15) 002606



Cable shears
P/N 502226 002608



Filter wrench
P/N 502227 002622
Fits filters up to 4 in. (100 mm)

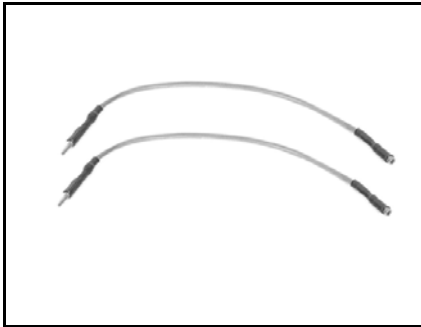


Lifting eye 001024

P/N 321537

Use with Universal Puller Set, P/N 378103

ELECTRICAL / IGNITION



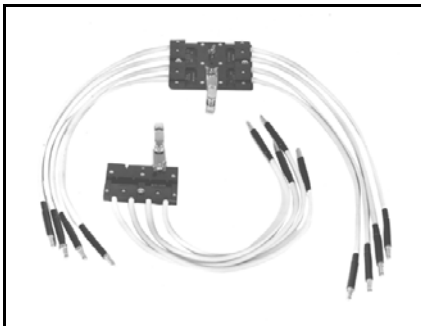
Wire harness adapter leads 40269
P/N 342228
9.9/15 (305cc) and EFI models



Peak reading voltmeter 49799
P/N 507972



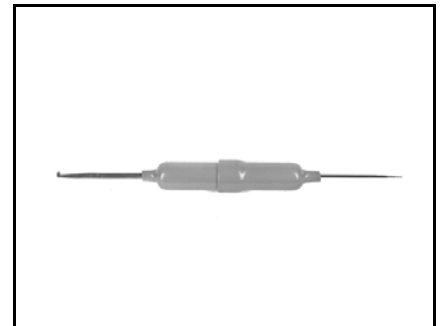
Flywheel removal, screw/washer kit 002570
P/N 5034235
(2002 and newer 9.9/15)



Spark checkers 49798
P/N 508118 (All models, V6/V8)
P/N 507975 (4-wire)



Timing light/tachometer 49789
P/N 507980



Deutsch connector tool 42004
P/N 342667



Adapter, ignition coil high tension lead 002798
P/N 5034234 (40/50)
P/N 5035748 (200/225) not shown



Stator alignment guide 002598
P/N 342670
Use with 334994 locating ring to
align ignition/alternator coils
5/6 and 8/9.9 (211cc)



Flywheel removal, screw/washer kit 002581
P/N 5000007
(40/50, 60/70, 90-140)
Use with 378103, Universal puller



Multimeter, analog 49793
P/N 501873

FUEL / OIL



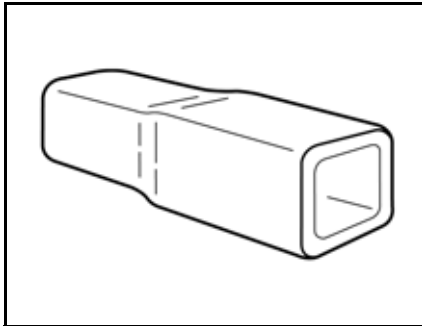
Carburetor flange nut wrench 40059
P/N 342211
(5-15)



Fuel pressure adapter 002795
P/N 5000900
(40/50, 60/70, 90-140, 200/225)



Fuel pressure gauge 002275
P/N 5000902



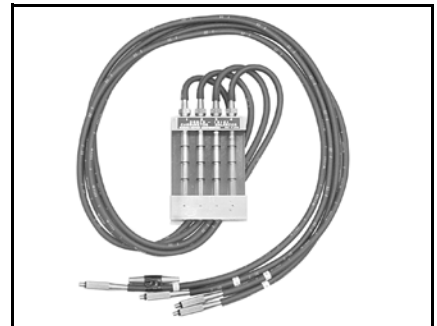
Fuel mixture socket, idle DRC7785
P/N 910245
9.9/15, (305cc)



Fuel pressure adapter 002624
P/N 350931
(40/50, 60/70, 90-140, 200/225)



Oil pressure adapter 002623
P/N 350930

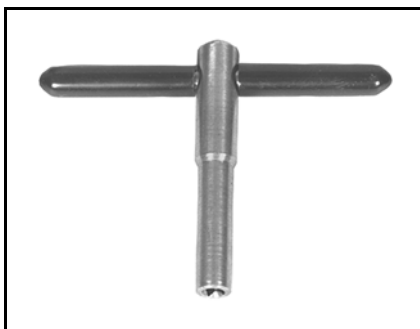


Carburetor balancer set 002797
P/N 5034619
25/30, (597cc)

POWERHEAD



Tappet holder 001206
P/N 5034226 (wedge only, P/N 351172)
(40/50, 90–140, 200/225)



Tappet adjusting tool 38202
P/N 341444
(5–15)



Crankshaft holder 002588
P/N 345827
(60, 70)



Tappet holder 002580
P/N 345832
(25/30, 40/50)



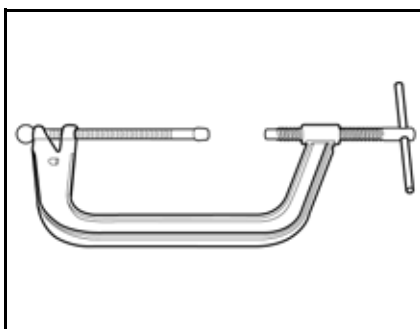
Valve lifter adapter kit 002625
P/N 5000899
(25/30, 40/50, 60/70, 90–140, 200/225)



Piston pin remover/installer 002626
P/N 345826
(40/50, 60/70)



Valve spring compressor 38351
P/N 341446
5/6, 8/9.9 (211cc) and 9.9/15 (305cc)



Valve spring compressor 50025
P/N 346186
(25/30, 40/50, 60/70, 90–140, 200/225)



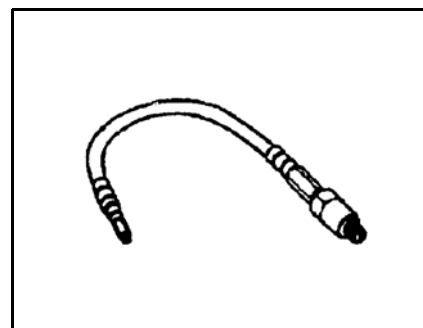
Crankshaft sleeve installers 38203
P/N 342675, 5/6
P/N 342662, 8/9.9 (211cc)
P/N 342210, 9.9/15 (305cc)



Cylinder bore gauge, 45303
P/N 775589



Crankshaft holder, 002587
P/N 5034236
(2002 and newer 9.9/15)

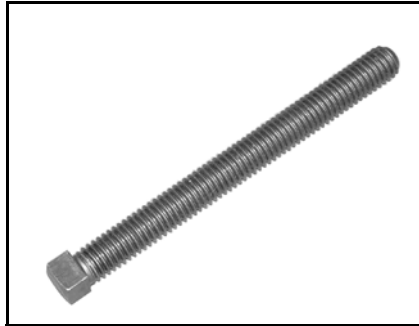


Compression gauge adapter 005515
P/N 5037485
(2.5)

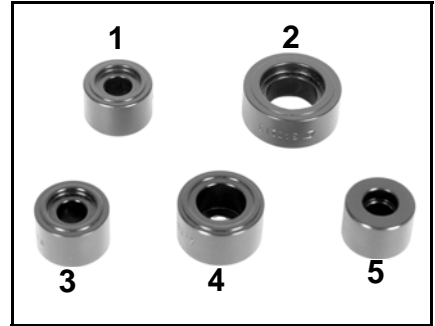
4-STROKE POWERHEAD



Gear alignment pin set
P/N 5037488
25 (2 cyl.) 005516



Pressing screw
P/N 342227 (5 thru 15) 002617
Use with seal remover, P/N 391060, to
remove camshaft seal.



Crankshaft, upper seal installer: 45943
1. **P/N 342661**, 8/9.9 (211cc)
2. **P/N 342213**, 9.9/15 (305cc)
Crankshaft, lower seal installer:
3. **P/N 342215**, 5/6, 8/9.9 (211cc) and
9.9/15 (305cc)
Camshaft seal installer:
4. **P/N 342214**, 5/6 and 9.9/15 (305cc)
5. **P/N 342668**, 8/9.9 (211cc)



Wrist pin remover
P/N 342657
(5-15) 40253



Crankshaft remover / installer
P/N 5037487
25 (2 cyl.) 005518



Wrist pin retaining ring installer
P/N 341441
9.9/15 (305cc) 002616

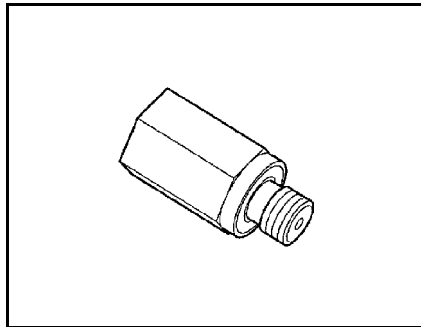


Seal remover, camshaft
P/N 342229
8/9.9 (211cc) Use with 391060 002794

GEARCASE



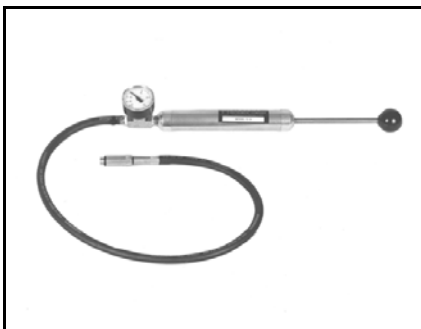
Gearcase filler 49790
P/N 501882



Gearcase fill/drain adapter – 2.5 005517
P/N 5037486



Gearcase fill/drain adapter 48642
P/N 772269



Testers 49794
P/N 507977, Pressure tester
P/N 507982, Vacuum tester



Pinion Bearing Remove/
Install Kit (4-Stroke) 002791
P/N 5005928
Includes:

1. 351055 remover/installer (9.9/15)
 2. 5000003 remover/installer (70, 1999–2000)
 3. 5000009 remover/installer, plate, screw (25/30, 40/50)
 4. 5034763 remover/installer (25/30)
- Use with Pinion Bearing Remove/Install Kit (2-Stroke), P/N 5005927. Refer to "Pinion Bearing Remove/Install Tool Chart" on page 16



Driveshaft socket 002592
P/N 345834
(25/30, 40/50)



Gear holder 001225
P/N 342689 (60 thru 140)
Lower plate only, P/N 351235
P/N 5035746 (200/225) not shown

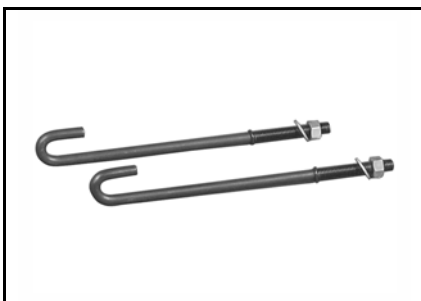


Driveshaft Shimming Kit (4-Stroke) 002790
P/N 5005926

- Includes:
- P/N 342687 gauge bar (70, 1999–2000)
 - P/N 351048 gauge bar (140)
 - P/N 351049 gauge bar (90/115)
 - P/N 351050 gauge bar (60/70, 2002 thru)
 - P/N 351051 collar (90/115/140)
- Use with Universal Driveshaft Shimming Tool Kit, P/N 5005925.



Driveshaft socket 16302
P/N 311875
(60/70)



Propeller shaft bearing housing puller 002573
P/N 5000004 (70, 1999–2000)
Use with Universal Puller Kit, P/N 378103

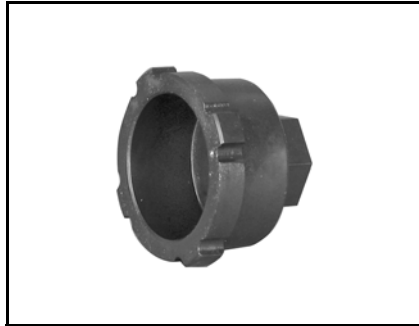


Driveshaft socket 002792
P/N 5034239
(90–140, 200/225)

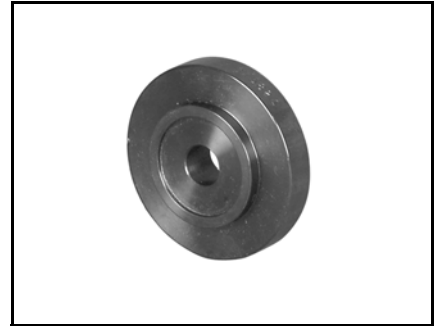
4-STROKE GEARCASE



Backlash indicators 48966
P/N 345836 (40/50)
P/N 345825 (60/70)
P/N 5035747 (200/225) not shown



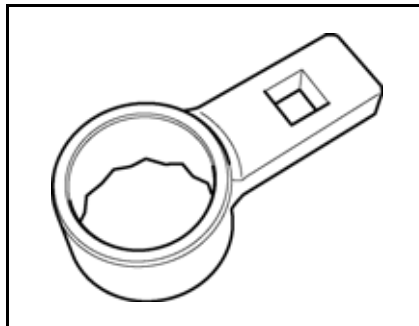
Propeller shaft bearing housing
retainer socket 002571
P/N 342688
(70 thru 2001)



Installer, fwd/rev gear bearings 002574
P/N 345824
(40/50 and 60/70)



Seal remover/installer kit 002579
P/N 5000001 (60/70)
Use handle and nut kit, P/N 434422



Wrench, upper driveshaft housing 00
P/N 5035743
(200/225)



Installer, driveshaft seals 48356
P/N 342685 (or P/N 914708)
(25/30, 60/70, 90-140)



Handle, housing installer 002575
P/N 345822



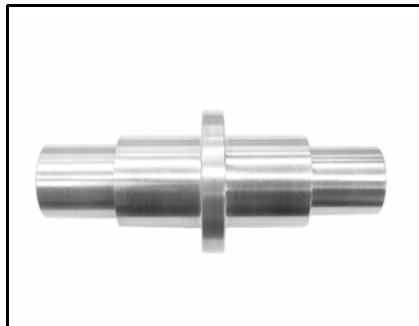
Remover, prop shaft bearing 002568
P/N 351126
(60/70, 90-140, 200/225)



Installer, prop shaft bearing 002576
P/N 345823
(60/70)



Installer, prop shaft bearing housing 002578
P/N 342690
(40/50, 60/70, 90-140, 200/225)



Installer, prop shaft bearing 002569
P/N 351058
(60/70, 90-140)



Installer, prop shaft bearings 002590
P/N 345835
(40/50)



Installer, driveshaft bearings and seals 002589
P/N 345829
(40/50)



Remover, prop shaft / bearing housing 002628
P/N 345831
(40/50, 60/70, 90-140, 200/225)
Use with P/N 391008 slide hammer



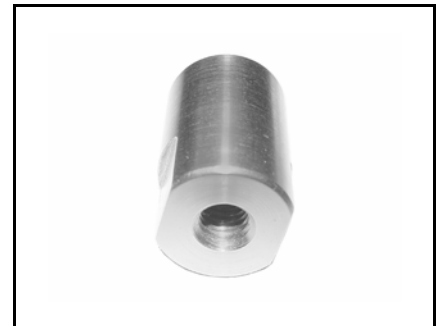
Installer kit, pinion bearing 002647
P/N 500009 Included in Driveshaft
Shimming Kit (4-Stroke) P/N 5005926
(60/70)



Installer, prop shaft seals 002615
P/N 345830
(40/50)



Remover, prop shaft, 002630
P/N 5034237
(2002 and newer 9.9/15)



Remover, prop shaft 002644
P/N 5034762
(25/30)



Installer, prop shaft bearing, 002645
P/N 5034774
(25/30)



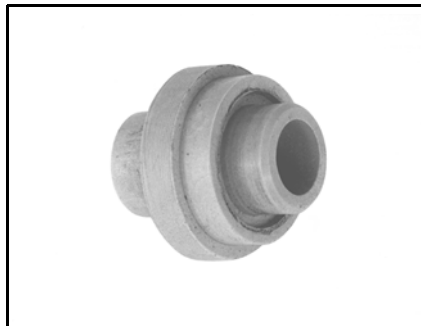
Installer, prop shaft seal 002793
P/N 326551
(60/70, 90-140)



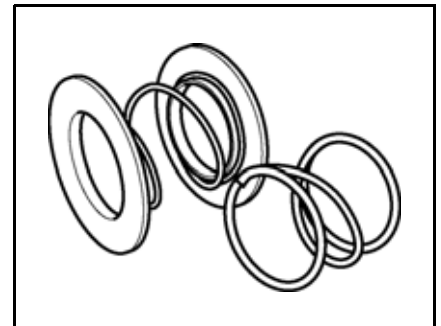
Installer kit, forward bearing race, 002594
P/N 5000008
(40/50)



Remover, prop shaft bearing 002646
P/N 5034764
(25/30)



Installer, prop shaft seal 23408
P/N 326545
(25/30)



Gear adjust spring set, 00
P/N 5035749
(200/225 CR models)

TEST PROPELLERS



Test propellers (4-stroke):
P/N 5032468 (25/30)(Use bushing, P/N 5034620 and stopper, P/N, 5034621)
P/N 5032458 (40/50)
P/N 5032478 (60/70)
P/N 5034161 (90–140)

TRIM / TILT



Spanner wrench (5/32, 3/16, 1/4 in. holes), **P/N 912084**
Replacement tip kit, P/N 987742



Tilt cylinder end cap wrench
P/N 326485

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