

SERVICE SPECIFICATIONS AND SPECIAL TOOLS

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SERVICE SPECIFICATIONS AND SPECIAL TOOLS

TECHNICAL DATA

TECHNICAL DATA

	HP	30
ENGINE	Full Throttle Operating Speed	5500-6100 RPM
	Power	30 HP (22.1 kw) @ 6100 RPM
	Idle Speed (in-gear)	900 ± 50 RPM
	Weight (without engine oil)	Remote Models: 212 lbs. (96 kg) TEL Models: 216 lbs. (98 kg)
	Lubrication	For initial 10 hour break-in: Evinrude/Johnson 4-Stroke Oil, P/N 775597 After break-in: Evinrude/Johnson Ultra 4-Stroke Oil, P/N 775594
	Engine Type	Four-stroke, three-cylinder SOHC
	Displacement	36.4 cu. in. (597 cm ³)
	Bore	2.56 in. (65 mm)
	Stroke	2.36 in. (60 mm)
	Standard Bore	2.5591 to 2.5598 in. (65.000 to 60.020 mm) To bore oversize, add piston oversize dimension to standard bore.
	Crankshaft Journal	1.5741 to 1.5748 in. (39.982 to 40.000 mm)
	Rod Crankpin	1.4166 to 1.4173 in. (35.982 to 36.000 mm)
	Valve Clearance (cold engine)	0.005 to 0.007 in. (0.13 to 0.17 mm)
	Compression Ring End Gap	Top: 0.005 to 0.011 in. (0.12 to 0.27 mm) 2nd: 0.014 to 0.020 in. (0.35 to 0.50 mm)
	Piston-to-Cylinder Bore Clearance	0.004 in. (0.10 mm) maximum
	Test Propeller	P/N 5032468 (also requires bushing, P/N 5034620, and stopper, P/N 5034621)
	FUEL	Carburetion
Calibration		Adjustable low speed; Fixed intermediate and high speed
Starting Enrichment		TEL Models: Manual choke Remote Models: Choke solenoid
Carburetor Float Height		0.575 ± 0.040 in. (14.6 ± 1 mm)
Preferred Fuel		Regular unleaded
Acceptable Fuel		Any of the above gasolines with 10% Ethanol or 5% Methanol with 5% co-solvents
Minimum Octane		87 AKI (R+M)/2 or 90 (RON)
Additives		<i>2+4 Fuel Conditioner, Fuel System Cleaner, Carbon Guard</i> Use only BRP recommended fuel additives. The use of other additives may result in engine damage.

SERVICE SPECIFICATIONS AND SPECIAL TOOLS
TECHNICAL DATA

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	HP	30	
ELECTRICAL	Battery, Minimum Recommendation	12-Volt, 360 CCA (465 MCA) with 90 Minutes Reserve Capacity or 50 Ampere-Hour	
	Engine Fuse (25 Amp)	P/N 5031911	
	Charge Coil Output	15 Amperes	
COOLING	Type	Auto Pressure-Temperature Controlled	
	Thermostat opens	143°F (62°C)	
IGNITION	Type	Magneto Powered Capacitor Discharge	
	RPM Limit	6300	6500
	Spark Plugs	NGK-DCPR6E @ 0.030 in. (0.8 mm)	
	Ignition Coil	P/N 5032035	
GEARCASE	Gear Ratio	11:23 (2.09)	
	Lubricant	<i>HPF XR Gearcase Lubricant</i>	
	Capacity	8 fl. oz. (230 ml)	

STANDARD TORQUE SPECIFICATIONS

Standard Torque Chart

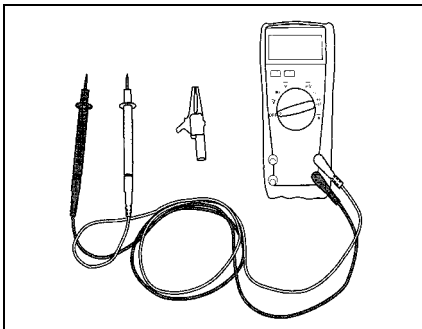
Size	In. Lbs.	Ft. Lbs.	N-m
No. 6	7–10	0.58–0.83	0.8–1.1
No. 8	15–22	1.25–1.83	1.7–2.5
No. 10	24–36	2–3	2.7–4.0
No. 12	36–48	3–4	4.0–5.4
1/4 in.	60–84	5–7	6.7–9.4
5/16 in.	120–144	10–12	13.5–16.2
3/8 in.	216–240	18–20	24.4–27.1
7/16 in.	336–384	28–32	37.9–43.4

IMPORTANT: These values apply only when a specific torque for a specific fastener is not listed in the appropriate section. When tightening two or more screws on the same part, DO NOT tighten screws completely, one at a time.

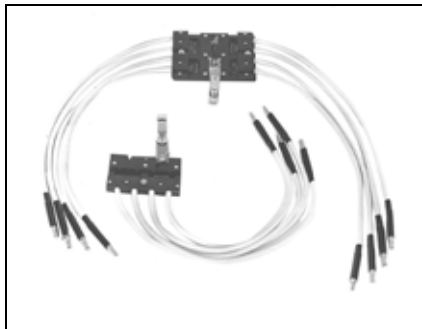
	WARNING	
<p>Torque wrench tightening specifications must be strictly adhered to. Replace any locking fastener (locknut or patch screw) if its locking feature becomes weak. Definite resistance to turning must be felt when reusing a locking fastener.</p> <p>If replacement is specified or required because the locking fastener has become weak, use only authorized <i>Evinrude/Johnson Genuine Parts</i>.</p>		

SPECIAL TOOLS

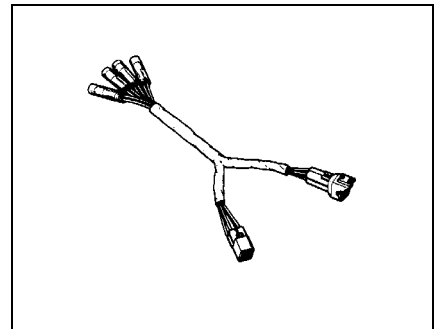
Electrical / Ignition



Digital multimeter DRC7265
Ohms resolution 0.01
Purchase through local supplier



Spark tester
P/N 508118



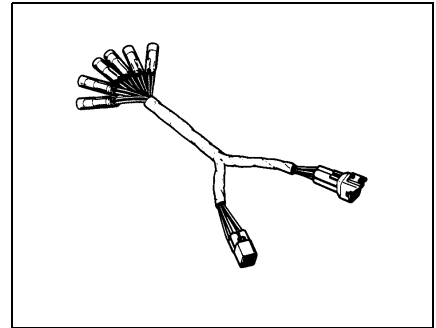
4-pin connector test cord
P/N 5034228



CD Peak reading voltmeter
P/N 507972



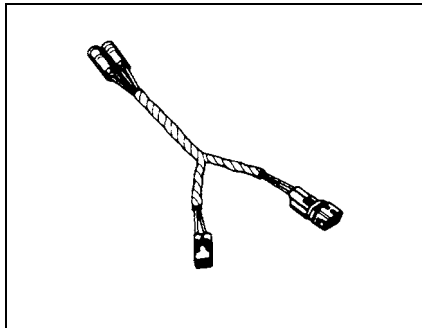
Tachometer/timing light
P/N 507980



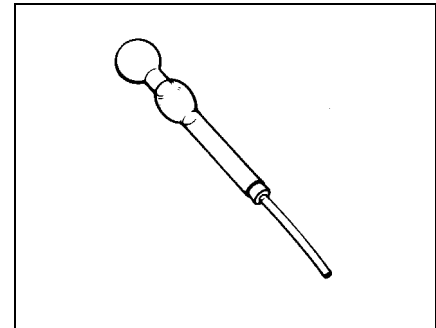
6-pin connector test cord
P/N 5034618



Ignition analyzer
P/N 501890



2-pin connector test cord
P/N 5034617

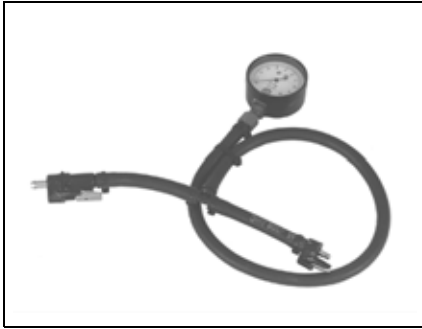


Hydrometer

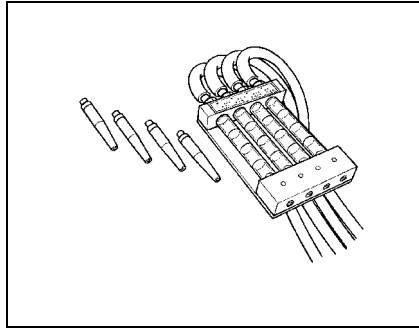
SERVICE SPECIFICATIONS AND SPECIAL TOOLS

SPECIAL TOOLS

Fuel



Fuel vacuum tester
P/N 390954

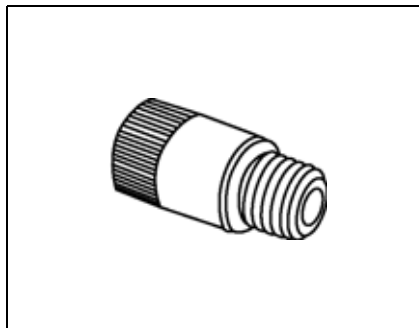


Carburetor synchronizer set
P/N 5034619

Gearcase



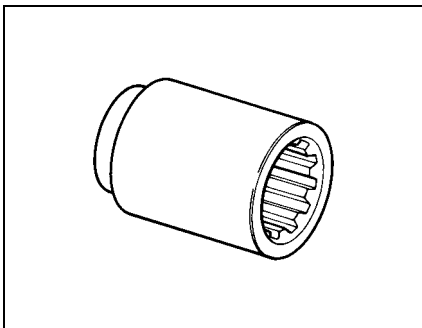
Spacer (Pinion bearing depth)
P/N 350932



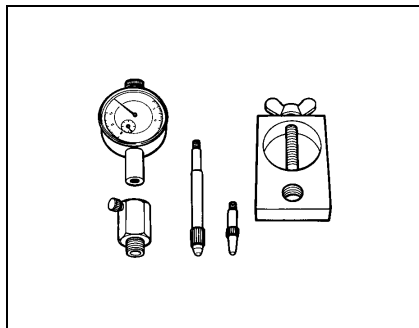
Gearcase adapter
P/N 772269



Propeller shaft bearing remover
P/N 5034764



Driveshaft holder
P/N 345834



Gear adjusting gauge set



Propeller shaft bearing installer
P/N 5034774



Pinion bearing removal/installation
P/N 5034763
Component of P/N 5005928 kit



Gearcase filler
P/N 501882



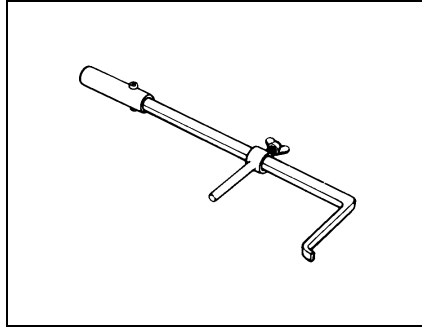
Gearcase pressure tester
P/N 507977 (Stevens P/N S-34)
Gearcase vacuum tester
P/N 507982 (Stevens P/N V-34)

SERVICE SPECIFICATIONS AND SPECIAL TOOLS
SPECIAL TOOLS

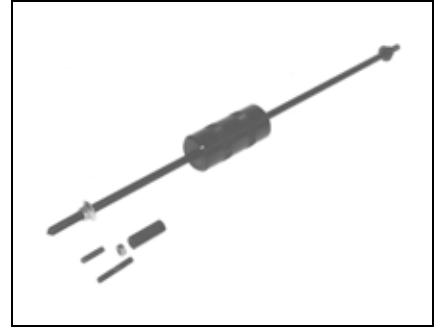
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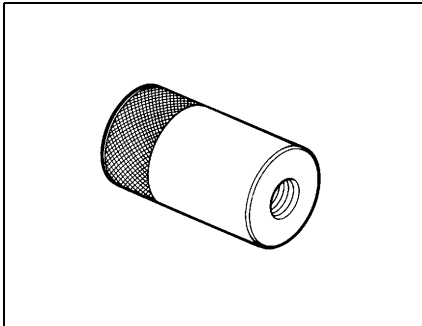
Bearing installer/remover
P/N 342685



Oil Seal Remover



Slide hammer P/N 391008
Adapter P/N 340624



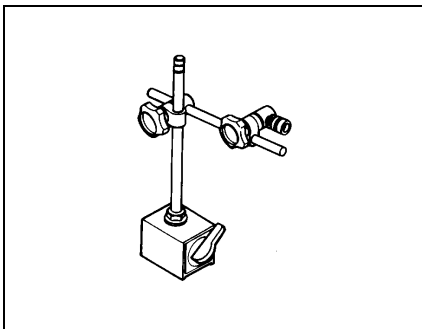
Propeller shaft remover
P/N 5034762



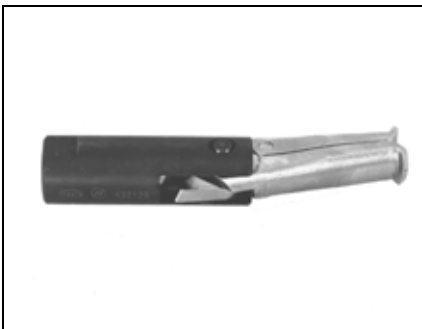
Small puller jaws P/N 432131
(replacement jaws P/N 437952)



Test wheel P/N 5032468
Bushing P/N 5034620
Stopper P/N 5034621



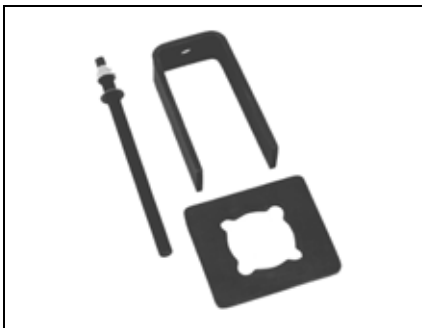
Magnetic Stand



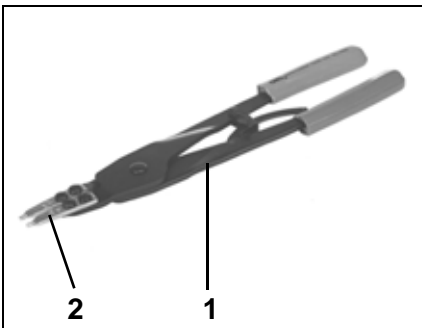
Large puller jaws P/N 432129
(replacement jaws P/N 437954)



Pinion bearing remover and installer kit
P/N 391257 (Use with centering guide
from kit P/N 5000009)



Puller Bridge
P/N 432127



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

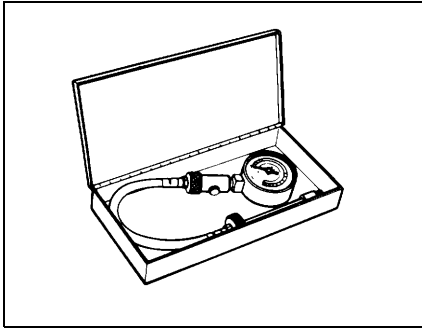


Seal installer
P/N 326545

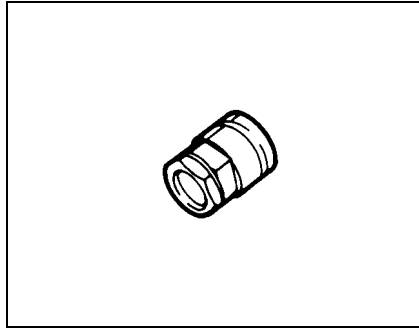
SERVICE SPECIFICATIONS AND SPECIAL TOOLS

SPECIAL TOOLS

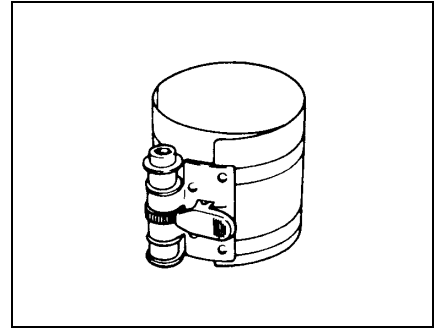
Powerhead



Compression gauge
Adapter (12 mm)



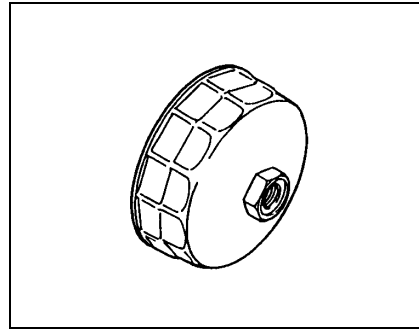
Handle adapter (NEWAY P/N 503-1)



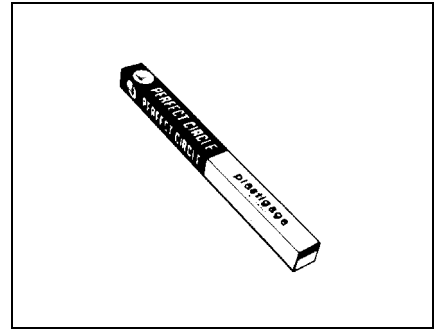
Piston ring compressor



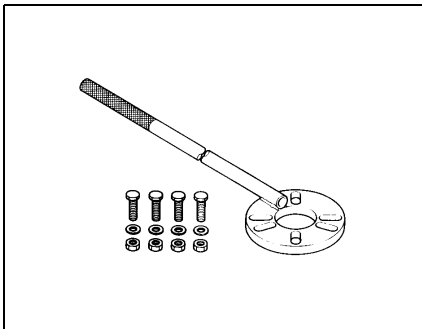
Cylinder bore gauge
P/N 771310



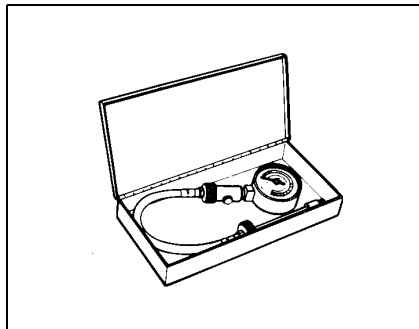
Oil filter wrench



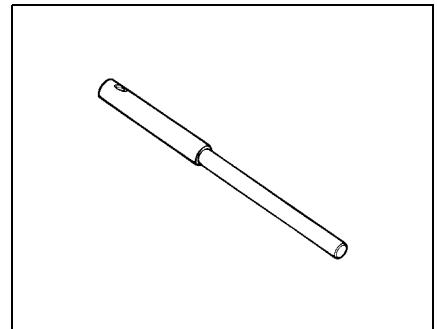
Plastigage[®]



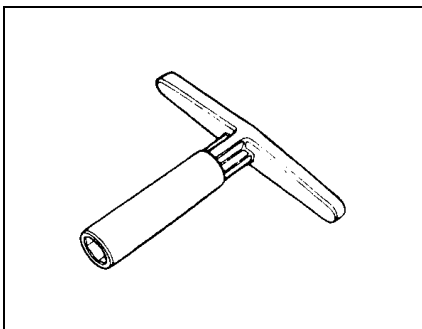
Flywheel holder
P/N 5034227



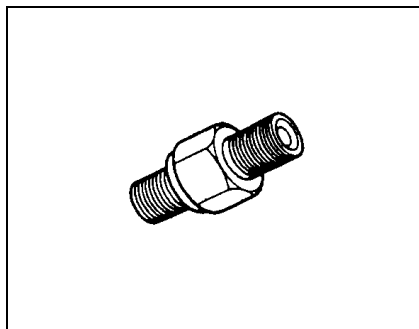
Oil pressure gauge
P/N 5000900



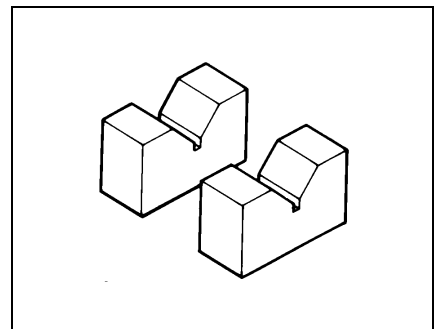
Solid pilot (NEWAY P/N-100-5.52)



Handle (NEWAY P/N-505)



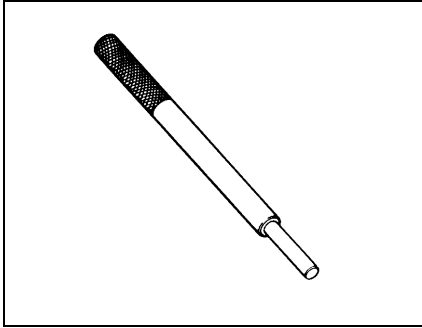
Oil pressure gauge adapter
P/N 350930



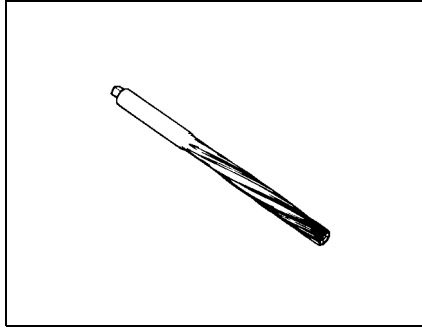
"V" block set

SERVICE SPECIFICATIONS AND SPECIAL TOOLS
SPECIAL TOOLS

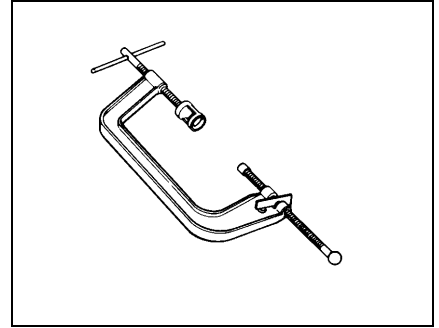
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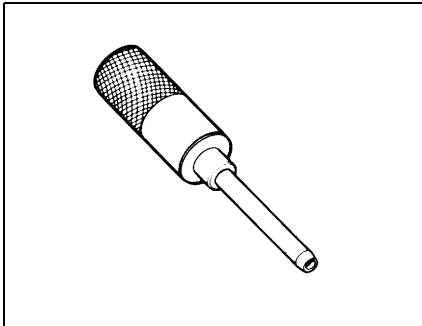
Valve guide installer



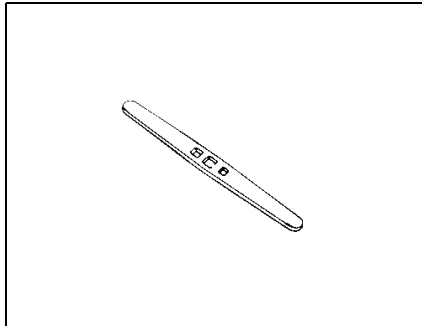
Valve guide reamer
(10.5 mm bore diameter)



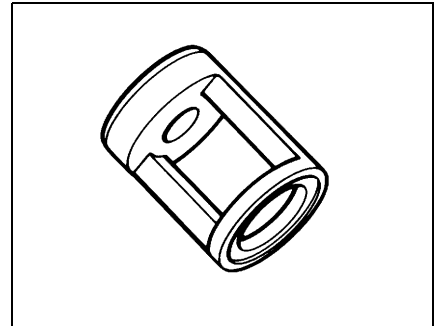
Valve spring compressor
P/N 346186



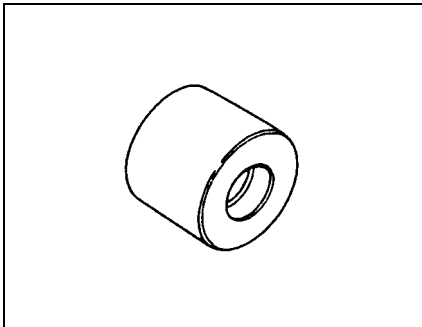
Valve guide installer



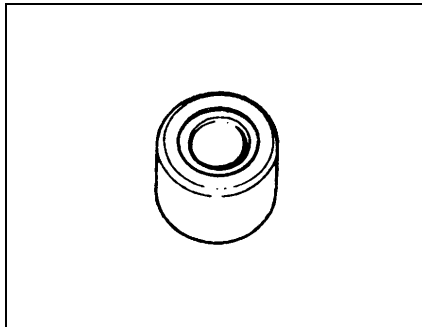
Valve guide reamer handle



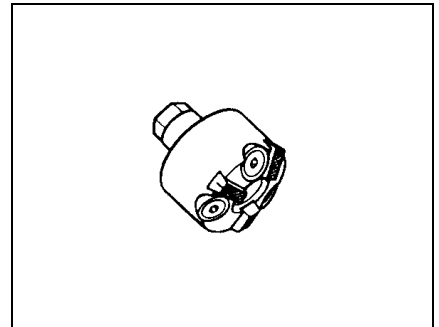
Valve lifter attachment
P/N 5000899



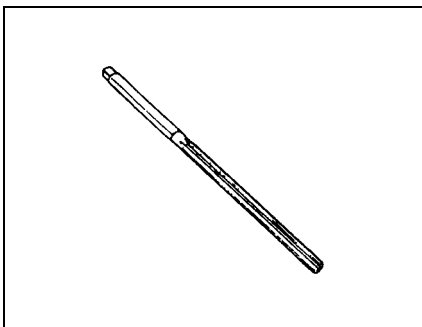
Valve guide installer attachment



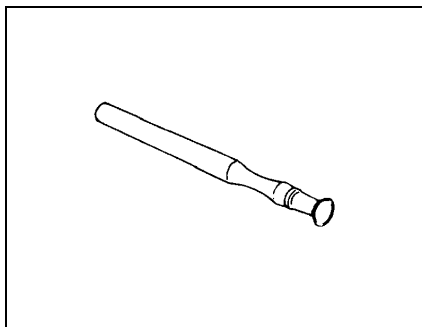
Valve guide stem seal installer
attachment



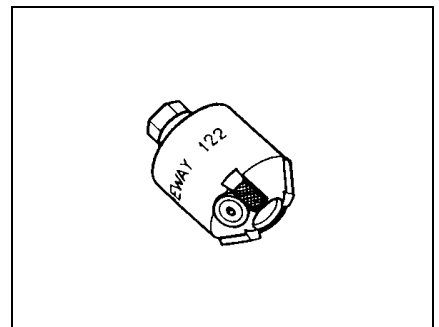
Valve seat cutter (N-121)



Valve guide reamer
(5.5 mm bore diameter)



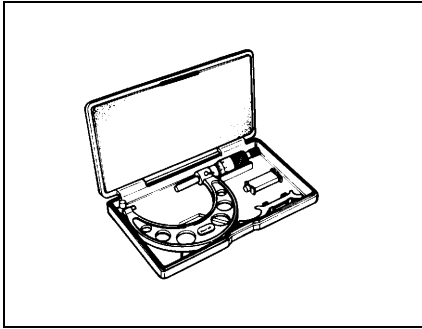
Valve lapper



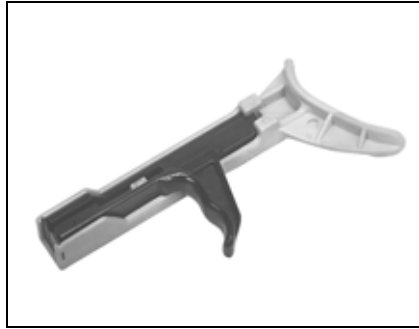
Valve seat cutter (N-122)

SERVICE SPECIFICATIONS AND SPECIAL TOOLS
SPECIAL TOOLS

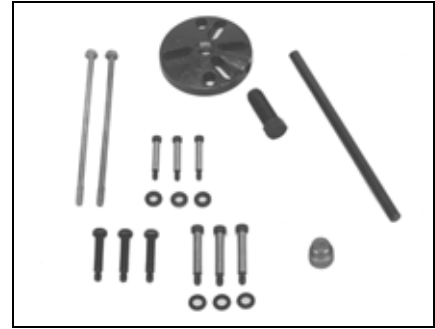
Universal



Micrometer set (0 - 75 mm)



*Tie strap installation tool
P/N 323716*



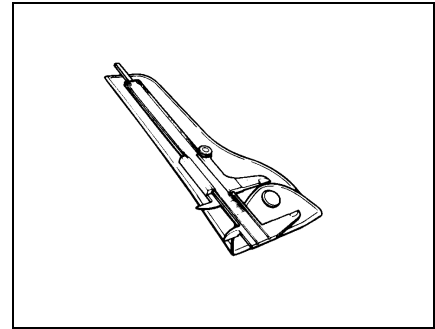
*Universal Puller Set
P/N 378103*



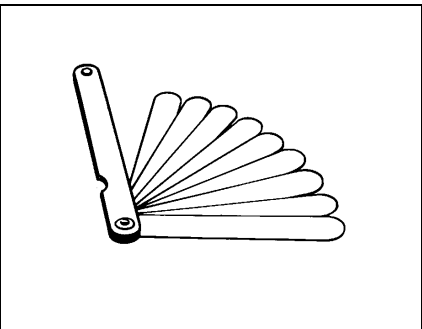
*Syringe
P/N 346936*



*Tilt tube nut wrench
P/N 912084*



Vernier calipers



Thickness gauge



*Torque wrench extension
P/N 912031*



*Temperature gun
P/N 772018*

SHOP AIDS

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Cleaning Solvent P/N 771087



Engine Tuner P/N 777185



Anti-Corrosion Spray P/N 777193



6 in 1 Multi-Purpose Lubricant P/N 777192



D.P.L. Spray P/N 777183



Silicone spray P/N 775630



Ultra 4-Stroke Outboard Oil, P/N 775594



4-Stroke Outboard Oil, P/N 775597



HPF XR™ Gear Lube P/N 778747



HI-VIS™ Gearcase Lube P/N 775605



Triple-Guard® Grease P/N 508298



Extreme Pressure Grease™
P/N 508303

SERVICE SPECIFICATIONS AND SPECIAL TOOLS
SHOP AIDS



Moly Lube P/N 175356



Needle Bearing Grease, P/N 378642



Starter Bendix Lube P/N 337016



Storage Fogging Oil
P/N 777186



Power Trim/Tilt and Power Steering Fluid
P/N 775612



Adhesive 847 P/N 776964



Lubriplate† 777 P/N 317619



Black Neoprene Dip P/N 909570



Electrical Grease P/N 504824



2 + 47M Fuel conditioner P/N 775613



Fuel System Cleaner P/N 777184



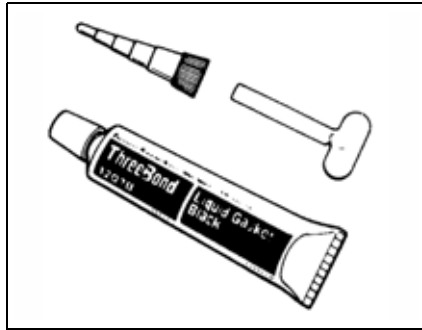
Carbon Guard™ P/N 775629

SERVICE SPECIFICATIONS AND SPECIAL TOOLS
SHOP AIDS

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Gasket Sealing Compound P/N 317201



ThreeBond[†] 1104, P/N 351052
 ThreeBond 1207B, P/N 351053



Permatex[†] No. 2, P/N 910032



GE[†] RTV Silicone Sealant P/N 263753



Pipe Sealant with Teflon P/N 910048



Thermal Joint Compound P/N 322170



GM[†] Gear Mark Compound P/N 772666



Locquic Primer P/N 772032



1. Screw Lock P/N 500417
 (Loctite[†] Purple 222 equivalent)
2. Nut Lock P/N 500421
 (Loctite Blue 242 Equivalent)
3. Ultra Lock P/N 500423
 (Loctite Red 271 Equivalent)

