

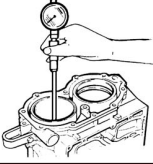


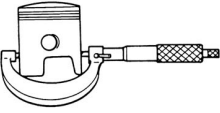


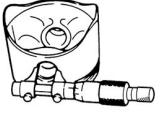


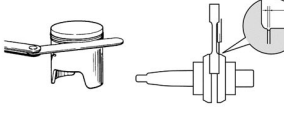

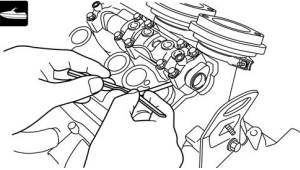



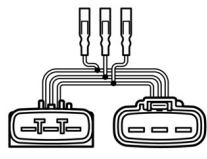

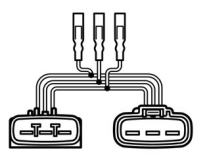

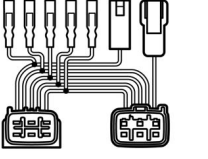
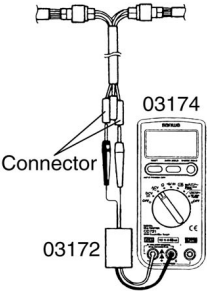

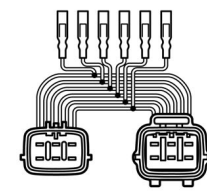

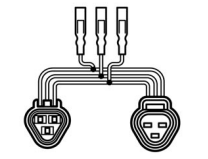


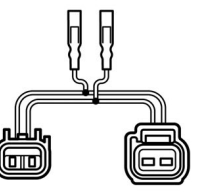

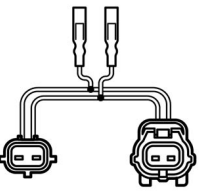


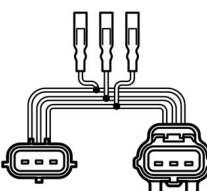


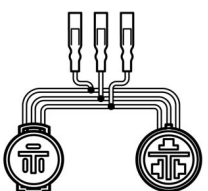


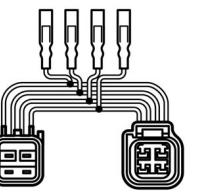

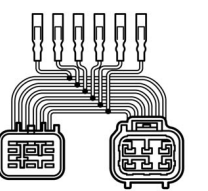

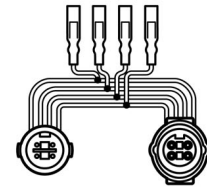

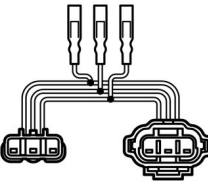

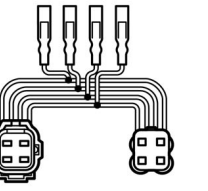


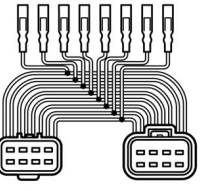

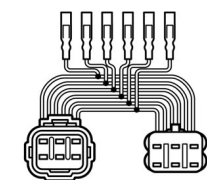

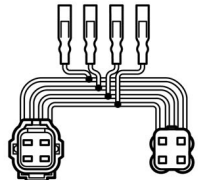

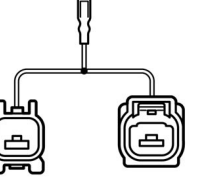


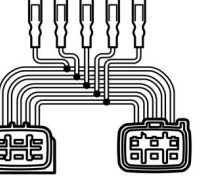


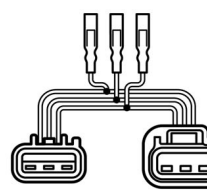


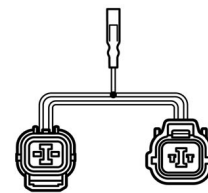


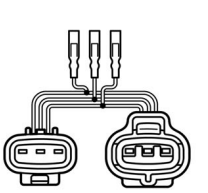

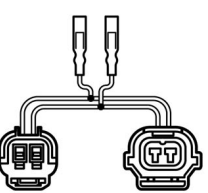
Описание прибора (продукты морского использования)

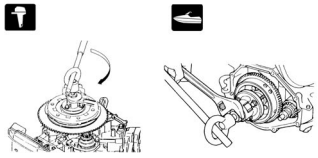
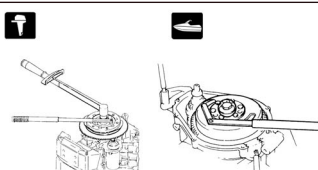
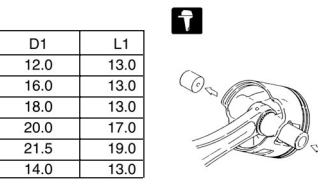
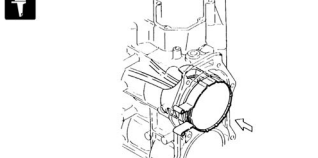
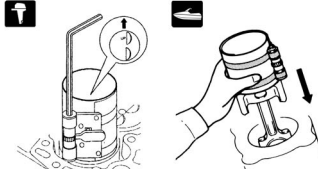
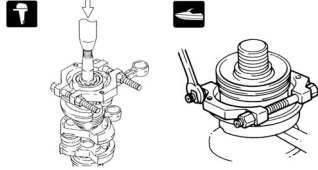
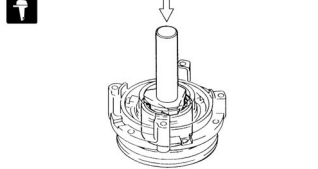
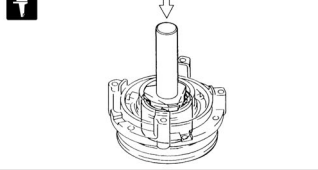
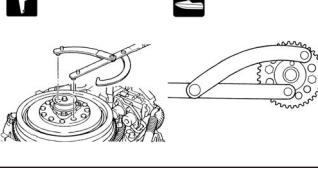
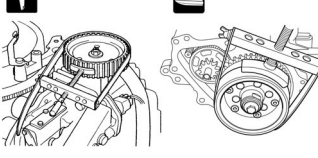
TOOL No. 90890-	Tool name	Usage	Note
01252	Dial gauge set		
06585	Dial gauge stand set		L : 173 L : 173
	06583 ¥ Dial gauge stand 173 06584 ¥ Dial gauge needle 173		
03112	Pocket tester		
03141	Timing light		
03160	Compression gauge		Plug type: B, C & D Ø1500 kPa
06563 Compression gauge extension M14 06582 Compression gauge extension M10			06563 d1:M14S d2:19 L1:135 06582 d1:M10S d2:14 L1:165
03174	Digital circuit tester		
06754 Ignition tester (Spark gap tester)			03174
06754 Ignition tester (Spark gap tester)			
06756	Vacuum/pressure pump gauge set		Vacuum ØB(-100) kPa Pressure ØB50 kPa

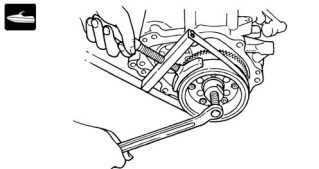
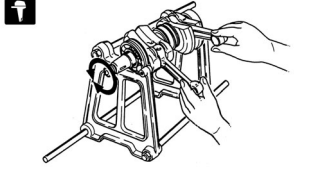
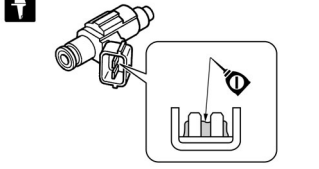
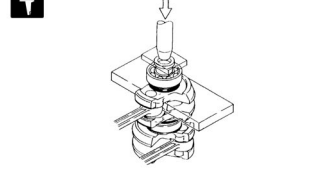
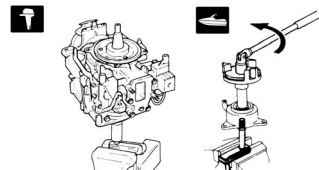
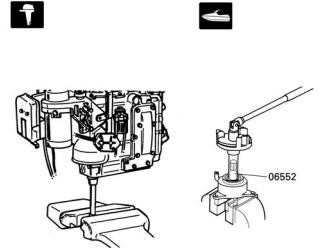
TOOL No. 90890-	Tool name	Usage	Note
06757	Throttle sensor adjusting lead FWY-3		
06865	Diagnostic flash indicator B		L3 m for 2 & 4 stroke Replaces 06765 (previous tool for 2 stroke) 06765
06864	Diagnostic flash adapter		for 4 stroke model with 06765 (previous tool for 2 stroke)
06862	Test connector FMY-8		
06760	Digital tachometer		
06840	Leakage tester		0-250 kPa
06786	Fuel pressure gauge		0-600 kPa 06785 Q'ty= 3pcs/pack
06842	Fuel pressure gauge adapter		use with 06786
06704	Digital caliper		0-150 mm

TOOL No. 90890-	Tool name	Usage	Note
03016 06759	Cylinder gauge 35 - 60 Cylinder gauge 50 - 100	  	03016 35-60 mm 06759 50-100 mm 4 Use with dial gauge 01252
03006 03007 03008 03009	Outside micrometer 0-25 Outside micrometer 25-50 Outside micrometer 50-75 Outside micrometer 75-100	  	03006 0-25 mm 03007 25-50 mm 03008 50-75 mm 03009 75-100 mm
03010	Inside micrometer 5 - 25	  	5-25 mm
03180	Thickness gauge (Feeler gauge)	  	0.03, 0.05, 0.10 0.15, 0.20, 0.25 0.30, 0.35, 0.40 0.50 L: 75 B1: 6.0 B2: 12.7 L B1 B2
01399	Special thickness gauge	 	

TOOL No. 90890-	Tool name	Usage	Note

TOOL No. 90890- Tool name	TOOL No. 90890- Tool name	TOOL No. 90890- Tool name	Usage
06846 Test harness QLW-3  	06847 Test harness QLWD-3  	06848 Test harness FSW-6A  	
06849 Test harness SM6195021-6  	06857 Throttle sensor (06757) adjusting lead FWY-3  	06867 Test harness (06767) FWY-2   	06868 Test harness (06768) EJ-II-2  
06869 Test harness (06769) EJ-II-3   	06870 Test harness (06770) SMT250-3   	06871 Test harness (06771) FWY-4   	06872 Test harness (06772) FWY-6  
06875 Test harness (06775) AMP-4  	06877 Test harness (06777) HMT090-3  	06878 Test harness (06778) 090-4  	06879 Test harness (06779) FWY-8   
06880 Test harness (06780) SMT618-6  	06887 Test harness (06787) FW13613-2  	06888 Test harness (06788) FW13613-1  	06790 Test harness FSW-6   
06791 Test harness FWY-3-L   	06792 Test harness SMHW090-2   	06793 Test harness SMHW099-3   	06861 Test harness SM6195043  

TOOL No. 90890-	Tool name	Usage	Note																				
06521	Flywheel puller ①		Bolt ① 5/8-18UNF ② 06901 M8 X 1.25 L: 34.0 •: 12 ③ 06902 M6 X 1.0 L: 24.0 •: 12																				
06522	Flywheel holder																						
	Small end bearing installer																						
		<table border="1"> <thead> <tr> <th></th> <th>D1</th> <th>L1</th> </tr> </thead> <tbody> <tr> <td>06524</td> <td>12.0</td> <td>13.0</td> </tr> <tr> <td>06525</td> <td>16.0</td> <td>13.0</td> </tr> <tr> <td>06526</td> <td>18.0</td> <td>13.0</td> </tr> <tr> <td>06527</td> <td>20.0</td> <td>17.0</td> </tr> <tr> <td>06528</td> <td>21.5</td> <td>19.0</td> </tr> <tr> <td>06543</td> <td>14.0</td> <td>13.0</td> </tr> </tbody> </table>		D1	L1	06524	12.0	13.0	06525	16.0	13.0	06526	18.0	13.0	06527	20.0	17.0	06528	21.5	19.0	06543	14.0	13.0
	D1	L1																					
06524	12.0	13.0																					
06525	16.0	13.0																					
06526	18.0	13.0																					
06527	20.0	17.0																					
06528	21.5	19.0																					
06543	14.0	13.0																					
06529 06530 06843	Piston slider ø70 Piston slider ø85 Piston slider ø58		06529 ø: 70 (min ø59) 06530 ø: 85 (min ø75) 06843 ø: 58 (min ø49)																				
05158	Piston ring compressor		ø: 60–115																				
06534	Bearing separator		W: 25 X107 d1: M10 X1.25																				
06606	Driver rod LS		L1: 101.0 d1: 5/8-18UNF																				
06663	Ball bearing attachment (Roller bearing installer)		D1: 51.8 D2: 40 d1: 5/8-18UNF L1: 13 L2: 5																				
01235	Rotor holder																						
01701	Sheave holder																						



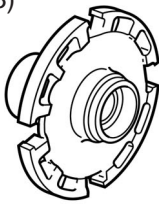


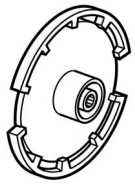
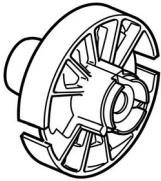
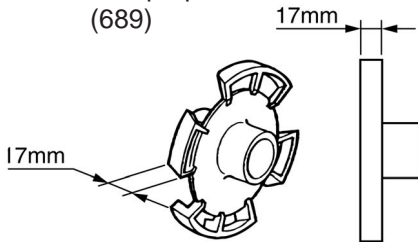
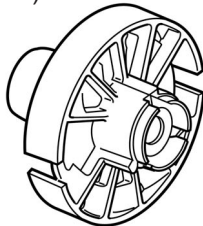

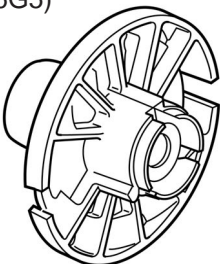
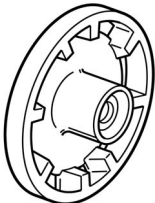
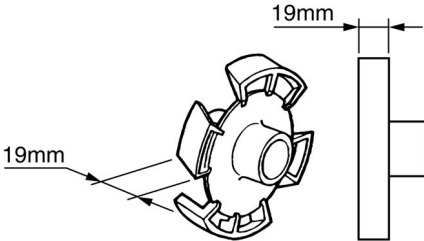

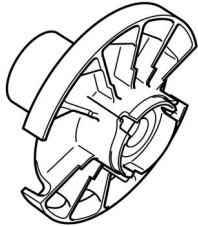
TOOL No. 90890-	Tool name	Usage	Note																																																					
01080	Rotor puller																																																							
03107	Crankshaft aligner																																																							
06991	Injector grease		for H.P.D.I. model																																																					
	Bearing inner race attachment																																																							
		<table border="1"> <thead> <tr> <th></th> <th>D1</th> <th>D2</th> <th>D3</th> <th>L1</th> <th>L2</th> </tr> </thead> <tbody> <tr> <td>06639</td> <td>48.5</td> <td>42.5</td> <td>36.5</td> <td>27.0</td> <td>21.0</td> </tr> <tr> <td>06640</td> <td>44.5</td> <td>38.5</td> <td>32.5</td> <td>24.0</td> <td>19.0</td> </tr> <tr> <td>06641</td> <td>43.0</td> <td>37.0</td> <td>30.5</td> <td>24.0</td> <td>19.0</td> </tr> <tr> <td>06644</td> <td>38.0</td> <td>31.5</td> <td>25.5</td> <td>21.0</td> <td>16.0</td> </tr> <tr> <td>06645</td> <td>32.5</td> <td>26.5</td> <td>20.5</td> <td>18.0</td> <td>13.0</td> </tr> <tr> <td>06660</td> <td>64.0</td> <td>60.0</td> <td>50.5</td> <td>37.0</td> <td>30.0</td> </tr> <tr> <td>06661</td> <td>61.0</td> <td>55.0</td> <td>45.0</td> <td>35.0</td> <td>28.0</td> </tr> <tr> <td>06662</td> <td>58.0</td> <td>52.0</td> <td>42.5</td> <td>33.0</td> <td>26.0</td> </tr> </tbody> </table>		D1	D2	D3	L1	L2	06639	48.5	42.5	36.5	27.0	21.0	06640	44.5	38.5	32.5	24.0	19.0	06641	43.0	37.0	30.5	24.0	19.0	06644	38.0	31.5	25.5	21.0	16.0	06645	32.5	26.5	20.5	18.0	13.0	06660	64.0	60.0	50.5	37.0	30.0	06661	61.0	55.0	45.0	35.0	28.0	06662	58.0	52.0	42.5	33.0	26.0
	D1	D2	D3	L1	L2																																																			
06639	48.5	42.5	36.5	27.0	21.0																																																			
06640	44.5	38.5	32.5	24.0	19.0																																																			
06641	43.0	37.0	30.5	24.0	19.0																																																			
06644	38.0	31.5	25.5	21.0	16.0																																																			
06645	32.5	26.5	20.5	18.0	13.0																																																			
06660	64.0	60.0	50.5	37.0	30.0																																																			
06661	61.0	55.0	45.0	35.0	28.0																																																			
06662	58.0	52.0	42.5	33.0	26.0																																																			
06069	Shaft holder		Double shaft Sprine D X n: 18 X 16 D X n: 13 X 11																																																					
06355 06552 06561 06562	Crankshaft holder 16 Crankshaft holder 20 Crankshaft holder 12 Crankshaft holder 18		Sprine 06355 D X n: 16 X 14 06552 D X n: 20 X 18 06561 D X n: 12 X 10 06562 D X n: 18 X 16																																																					

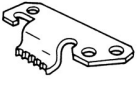
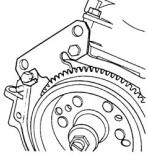
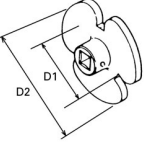
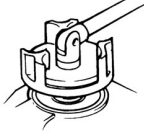
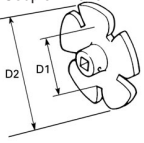
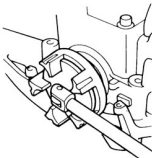
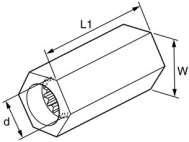
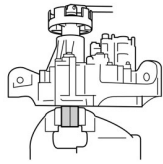
Обслуживание мотора

*1 G1-G8: General tool
*2 Up-date CD-ROM only

TOOL No. 90890-	Tool name	Usage	Note
G1-G4 *1	Deep socket 1-4		G1, S X L: 30 X 100 G2, S X L: 36 X 100 G3, S X L: 41 X 100 G4, S X L: 46 X 100
G5 *	T-type TORX socket T55		T55 A: 11.22
G6 *1	E-type TORX socket E10		E10 A: 9.42
G7 *1 G8 *1	TORX tamper resistant driver T20 TORX tamper resistant driver T25		T20 A: 3.86 T25 A: 4.43
60V-85300-00 *1 *2	Yamaha Diagnostic System (KIT)		Contents 1. Software 2. Adapter 3. Communication cable (USB) 4. Instruction Manual
60V-WS853-00 *2	Yamaha Diagnostic System (CD-ROM)		
01426 *1 06830 *1	Oil filter wrench 64 Oil filter wrench 72.5		01426 W: 64 06830 W: 72.5
04019	Valve spring compressor		L1: 45 L2: 22 D1: 31.0 D2: 28.4 L3: 5 D3: 32.1 D4: 16
04108 04114 06320	Valve spring compressor attachment		04108 06320 L1: 45 L1: 45 L2: 26 L2: 26 D1: 19.8 D1: 23.3 D2: 14 D2: 17 04114 L1: 43 L2: 26 D1: 19 D2: 17


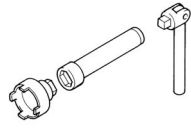
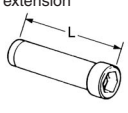
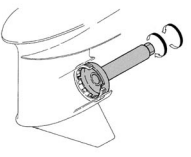
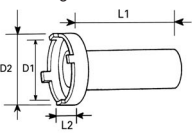
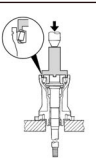
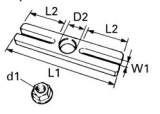
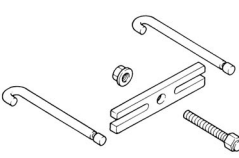

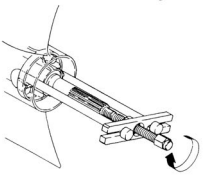
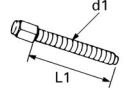
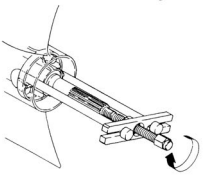
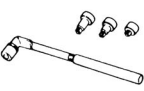
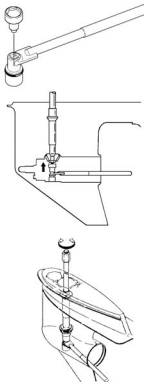
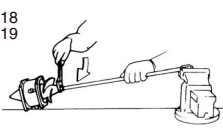
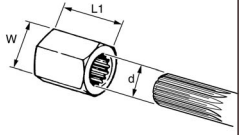
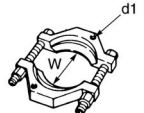

TOOL No. 90890-	Tool name	Usage	Note																																																																												
06801 *1 04064 *1 04111 *1 04116 *1	Valve guide remover/installer 5.4 Valve guide remover/installer 5.9 Valve guide remover 4.0 Valve guide remover 4.5		06801 04111 L1: 40.0 L1: 30.0 D1: 9.0 D1: 9.0 D2: 5.4 D2: 4.0 04064 04116 L1: 45 L1: 30.0 D1: 10 D1: 9.0 D2: 5.9 D2: 4.5																																																																												
06802 *1 04015 *1 06810 *1 04112 *1 04117 *1	Valve guide installer 5.4 Valve guide installer 5.6 Valve guide installer 5.5 Valve guide installer 4.0 Valve guide installer 4.5		06810 04117 L2: 22 L2: 22 D3: 5.4 D3: 5.5 D3: 4.5 D4: 9.2 D4: 9.9 D4: 8.3 D5: 12.0 D5: 12.0 D5: 10.0 H: 8.1 H: - H: 7.0 04015 04112 L2: 25 L2: 25 D3: 5.6 D3: 4.0 D4: 12.5 D4: 7.35 D5: 15.1 D5: 9.1 H: - H: 7.35																																																																												
06804 *1 04066 *1 04113 *1 04118 *1	Valve guide reamer 5.5 Valve guide reamer 6.0 Valve guide reamer 4.0 Valve guide reamer 4.5		06804 04113 L3: 65 L3: 53 D6: 5.5 D6: 4.0 04066 04118 L3: 65 L3: 45 D6: 6.0 D6: 4.5																																																																												
05041	Tap handle (5-6)		05041 for 5-6 mm																																																																												
04101	Valve lapper		L: 145 D: 14																																																																												
06316 *1 06553 *1 06811 *1 06812 *1	Valve seat cutter holder ø5.5 Valve seat cutter holder ø6.0 Valve seat cutter holder ø4.0 Valve seat cutter holder ø4.5		06316 06811 D: ø5.5 D: ø4.0 L: 60 L: 60 06553 06812 D: ø6 D: ø4.5 L: 80 L: 60																																																																												
	Valve seat cutter																																																																														
		<table border="1"> <thead> <tr> <th rowspan="2">Tool No.</th> <th rowspan="2">Tool name (a1-d2)</th> <th colspan="2">Dimension</th> <th rowspan="2">Outside diameter (d2)</th> </tr> <tr> <th>Cutter angle (a2)</th> <th>Inside diameter (d1)</th> </tr> </thead> <tbody> <tr><td>06315</td><td>Valve seat cutter 60°-26</td><td>60°</td><td>ø18.0</td><td>ø26.0</td></tr> <tr><td>06323</td><td>Valve seat cutter 60°-31</td><td>60°</td><td>ø18.0</td><td>ø34.0</td></tr> <tr><td>06324</td><td>Valve seat cutter 60°-36</td><td>60°</td><td>ø22.0</td><td>ø36.0</td></tr> <tr><td>06312</td><td>Valve seat cutter 45°-27.5</td><td>90°</td><td>ø19.5</td><td>ø27.5</td></tr> <tr><td>06555</td><td>Valve seat cutter 45°-30</td><td>90°</td><td>ø24.0</td><td>ø30.0</td></tr> <tr><td>06325</td><td>Valve seat cutter 45°-35</td><td>90°</td><td>ø24.0</td><td>ø35.0</td></tr> <tr><td>06313</td><td>Valve seat cutter 5°-25</td><td>170°</td><td>ø16.0</td><td>ø25.0</td></tr> <tr><td>06314</td><td>Valve seat cutter 5°-29</td><td>170°</td><td>ø16.0</td><td>ø29.0</td></tr> <tr><td>06326</td><td>Valve seat cutter 30°-32.5</td><td>120°</td><td>ø22.0</td><td>ø32.5</td></tr> <tr><td>06327</td><td>Valve seat cutter 30°-35</td><td>120°</td><td>ø24.0</td><td>ø35.0</td></tr> <tr><td>06328</td><td>Valve seat cutter 30°-27</td><td>120°</td><td>ø19.0</td><td>ø27.0</td></tr> <tr><td>06813</td><td>Valve seat cutter 60°-22</td><td>60°</td><td>ø10.0</td><td>ø22.0</td></tr> <tr><td>06814</td><td>Valve seat cutter 45°-24</td><td>90°</td><td>ø10.0</td><td>ø24.0</td></tr> <tr><td>06815</td><td>Valve seat cutter 30°-24</td><td>120°</td><td>ø10.0</td><td>ø24.0</td></tr> </tbody> </table>	Tool No.	Tool name (a1-d2)	Dimension		Outside diameter (d2)	Cutter angle (a2)	Inside diameter (d1)	06315	Valve seat cutter 60°-26	60°	ø18.0	ø26.0	06323	Valve seat cutter 60°-31	60°	ø18.0	ø34.0	06324	Valve seat cutter 60°-36	60°	ø22.0	ø36.0	06312	Valve seat cutter 45°-27.5	90°	ø19.5	ø27.5	06555	Valve seat cutter 45°-30	90°	ø24.0	ø30.0	06325	Valve seat cutter 45°-35	90°	ø24.0	ø35.0	06313	Valve seat cutter 5°-25	170°	ø16.0	ø25.0	06314	Valve seat cutter 5°-29	170°	ø16.0	ø29.0	06326	Valve seat cutter 30°-32.5	120°	ø22.0	ø32.5	06327	Valve seat cutter 30°-35	120°	ø24.0	ø35.0	06328	Valve seat cutter 30°-27	120°	ø19.0	ø27.0	06813	Valve seat cutter 60°-22	60°	ø10.0	ø22.0	06814	Valve seat cutter 45°-24	90°	ø10.0	ø24.0	06815	Valve seat cutter 30°-24	120°	ø10.0	ø24.0
Tool No.	Tool name (a1-d2)	Dimension			Outside diameter (d2)																																																																										
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06328	Valve seat cutter 30°-27	120°	ø19.0	ø27.0																																																																											
06813	Valve seat cutter 60°-22	60°	ø10.0	ø22.0																																																																											
06814	Valve seat cutter 45°-24	90°	ø10.0	ø24.0																																																																											
06815	Valve seat cutter 30°-24	120°	ø10.0	ø24.0																																																																											
03159	Vacuum gauge		0-760 mmHg																																																																												
03094	Vacuum gauge [Selector type]		0-(100) kPa Selector type 03060 (1 pc) d1: M6 d2: 4 L: 42																																																																												

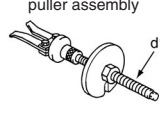
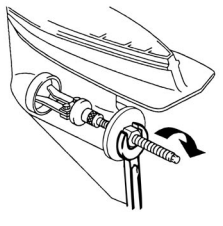
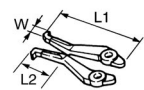
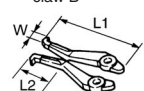
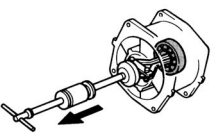
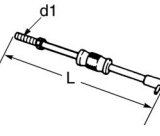
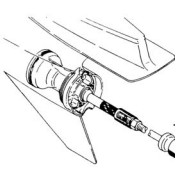
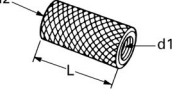
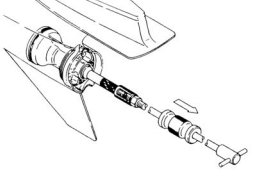
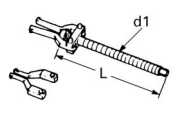
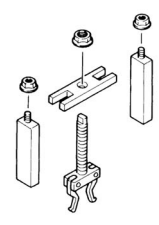
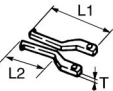
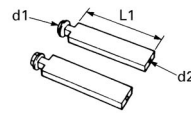
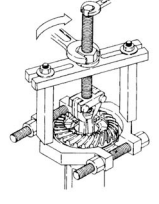
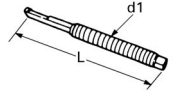
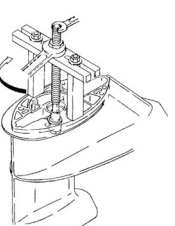
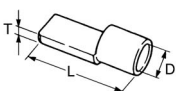
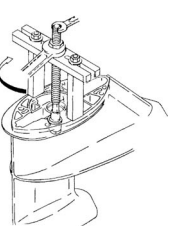
TOOL No. 90890-	Tool name	TOOL No. 90890-	Tool name	TOOL No. 90890-	Tool name
01601	Test propeller (646)	01609	Test propeller (647)	01611	Test propeller (663)
					
01613	Test propeller (664)	01618	Test propeller (676)	01619	Test propeller (683)
					
01620	Test propeller (688)	01621	Test propeller (689)	01624	Test propeller (6E5)
					
01625	Test propeller (6G1)	01626	Test propeller (6G5)	01627	Test propeller (6G8)
					
01629	Test propeller (61N)	01630	Test propeller (6L5)	01631	Test propeller (6L6)
					

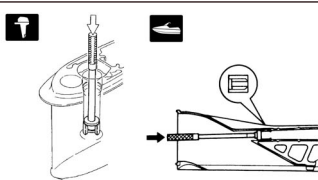
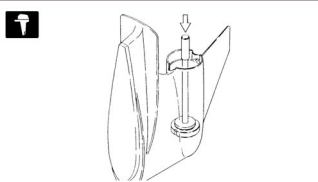
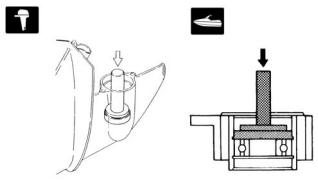
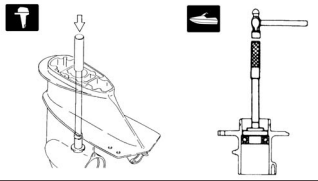
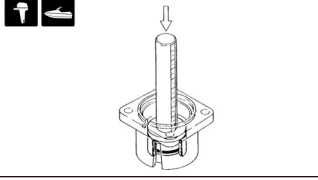
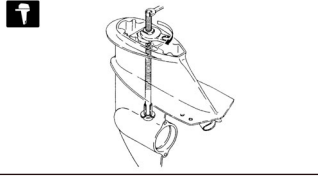
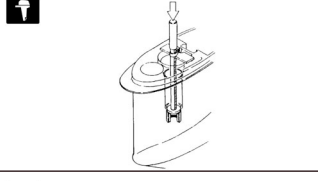
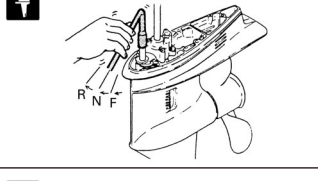
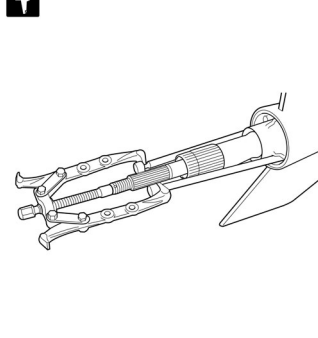
TOOL No. 90890-	Tool name	Usage	Note
06550	Flywheel holder 		
06425	Coupler wrench 		3 petals D1: 55 D2: 99.6
06546 06551	Coupler wrench Coupler wrench 		5 petals 06546 D1: 58 D2: 96 06551 D1: 52 D2: 96
06586	Shaft holder 		W: 38 N: 13 (Number of teeth) L1: 100 d: 25 (Shaft)

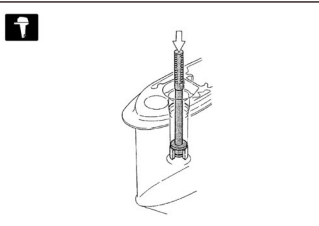
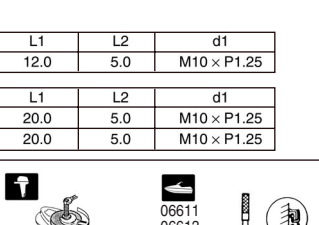
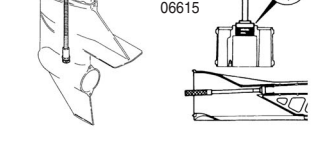
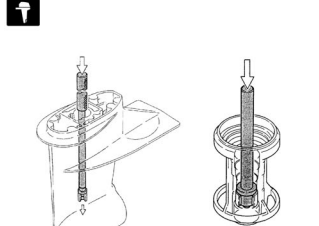
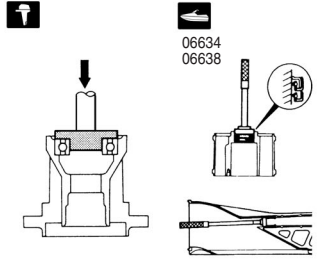
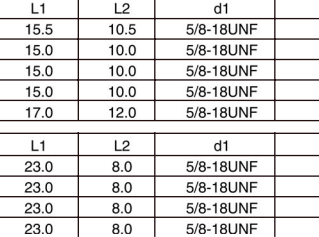
TOOL No. 90890-	Tool name	Usage	Note

TOOL No. 90890-02422						
Crank shaft jig set						
02351 	02352 	02353 3 pcs / ass'y	02354 3 pcs / ass'y	02355 	02357 	02359
02361 	02363 	02366 	02367 	02369 	02371 	02376
02379 	02384 	02385 	02386 	02387 	02388 2 pcs / ass'y	02389
02390 	02391 	02392 	02393 	02394 2 pcs / ass'y	02395 	02396
02399 	02401 	02402 2 pcs / ass'y	02403 	02404 	02419 (E25A/25V)	06590
02358 	02365 	02377 				
90890-02418 Crank separator kit (set 02416 + 02417)						
90890-02416 Disassembling kit						
02407 	02408 	02409 	02410 	02411 		
90890-02417 Assembling kit						
02412 	02413 	02414 	02415 			

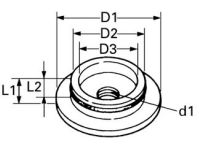
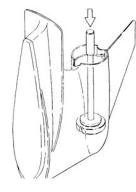
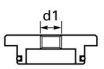
TOOL No. 90890-	Tool name	Usage	Note		
06509 06510 06511 06512	Ring nut wrench 1-4 		06509 D1: 67 ●: 32 06507 D1: 70 ●: 32 06511 D1: 86 ●: 32 06512 D1: 94 ●: 32		
06513	Ring nut wrench extension 		L: 172 ●: 32		
06578	Ring nut wrench 		06578 D1: 75 D2: 86 L1: 147 L2: 25		
06501	Stopper guide plate 		L1: 170 L2: 60 W1: 8 d1: M14 X 1.5 D2: 24.5		
06502 06503 06564	Bearing housing puller claw L Bearing housing puller claw M Bearing housing puller claw S 		06502 06564 L1: 290 L1: 220 L2: 10 W1: 8 d: 12 d: 6 06503 L1: 220 W1: 8 d: 8 Use with 06501		
06504	Center bolt 		L: 113.5 d1: M14X 1.5 ●: 19 Use with 06501		
06715 (06505)	Pinion nut holder 		06506 ●: 17 L: 17.0 06507 ●: 22 L: 27.0 06508 ●: 22 L: 40.0 Use with 06715 (06505)		
			06518 06519		
					
	Tool name	W	Number of teeth	L1	d (Shaft)
	06515 Drive shaft holder 1	22	11	30	13
	06516 Drive shaft holder 2	22	12	33	14
	06517 Drive shaft holder 3	22	14	33	16
	06518 Drive shaft holder 4	30	16	35	18
	06519 Drive shaft holder 5	30	18	35	20
	06520 Drive shaft holder 6	30	20	35	22
	06565 Drive shaft holder 7	22	10	30	12
06534	Bearing separator 		W: 25-107 d1: M10 X1.25		

TOOL No. 90890-	Tool name	Usage	Note
06523	Bearing outer race puller assembly 		06523 d1: 5/8-18UNF
	06532 • Outer race puller claw A 		06532 L1: 122.0 L2: 53.0 W: 10.0
	06533 Outer race puller claw B 		06533 L1: 124.0 L2: 55.0 W: 14.0 Use with 06523
06531	Slide hammer handle 		d1: 5/8-18UNF L: 590
06514	Puller head 		For counter rotation model L: 60.0 d1: M18 X1.5 d2: 5/8-18UNF Use with 06531
06535	Bearing puller assembly 		06535 L: 185.0 d1: M14 X1.5
	06536 • Bearing puller claw 1 06537 • Bearing puller claw 2 		06536 L1: 86.0 L2: 48.0 T: 10.0 06537 L1: 71.5 L2: 27.5 T: 6.0
06538	Stopper guide stand 		L1: 100.0 d1: M8 X1.25 d2: M8 X1.25 Use with 06501
06646	Bushing puller center bolt 		L: 170.0 d1: M14 X1.5
06648	Bushing puller spacer 		06648 L: 44.0 D: 15.0 T: 4.6

TOOL No. 90890-	Tool name	Usage	Note
06602	Driver rod SL		L1: 311 L2: 221 d1: M10 X1.25
06605	Driver rod LL		L1: 381 L2: 291 d1: 5/8-18UNF
06606	Driver rod LS		L1: 101 d1: 5/8-18UNF
06652	Driver rod L3		L1: 281 L2: 191 d1: M10 X 1.25
06604	Driver rod SS		L1: 101 d1: M10 X 1.25
06601	Bushing installer center bolt		L1: 280 d1: M10 X 1.25
06603	Bearing depth plate		L1: 100.0 L2: 30.0 t: 5
06052	Shift rod push arm		
06540	Gear puller		W: 50-100 H: Max 150

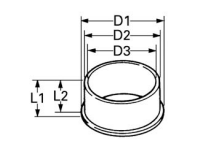
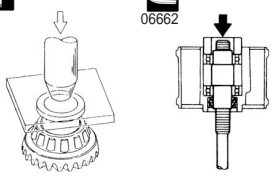
TOOL No. 90890-	Tool name	Usage	Note
A type	Bushing attachment		A Though hole
			B Closed hole
06649	D1: 18.0, D2: 14.0, L1: 12.0, L2: 5.0, d1: M10 x P1.25		
B type	Bushing attachment		A Though hole
			B Closed hole
06650	D1: 15.0, D2: 11.8, L1: 20.0, L2: 5.0, d1: M10 x P1.25		
06651	D1: 14.0, D2: 10.8, L1: 20.0, L2: 5.0, d1: M10 x P1.25		
A type	Needle bearing attachment		A Though hole
			B Closed hole
			06607
06608	D1: 47.0, D2: 40.0, L1: 17.0, L2: 12.0, d1: M10 x P1.25	↑	
06609	D1: 37.5, D2: 28.5, L1: 17.0, L2: 12.0, d1: M10 x P1.25	With O-ring	
06610	D1: 37.0, D2: 30.0, L1: 17.0, L2: 12.0, d1: M10 x P1.25	↑	
06611	D1: 33.0, D2: 25.4, L1: 16.5, L2: 11.5, d1: M10 x P1.25	↑	
06612	D1: 32.0, D2: 25.0, L1: 16.5, L2: 11.5, d1: M10 x P1.25	↑	
06613	D1: 30.0, D2: 23.8, L1: 16.5, L2: 11.5, d1: M10 x P1.25	↑	
06614	D1: 28.0, D2: 22.0, L1: 16.5, L2: 11.5, d1: M10 x P1.25	↑	
06615	D1: 26.0, D2: 20.0, L1: 16.5, L2: 11.5, d1: M10 x P1.25	↑	
06616	D1: 23.0, D2: 17.0, L1: 16.5, L2: 11.5, d1: M10 x P1.25	↑	
06653	D1: 35.0, D2: 28.0, L1: 17.0, L2: 12.0, d1: M10 x P1.25	↑	
06654	D1: 60.3, D2: 50.7, L1: 17.0, L2: 12.0, d1: M10 x P1.25	↑	
B type	Needle bearing attachment		B Closed hole
06617	D1: 20.0, D2: 14.0, L1: 19.0, L2: 14.0, d1: M10 x P1.25	With O-ring	
06618	D1: 17.5, D2: 12.7, L1: 16.5, L2: 13.5, d1: M10 x P1.25	↑	
A type	Ball bearing attachment		A Though hole
			B Closed hole
06631	D1: 48.9, D2: 30.0, L1: 15.5, L2: 10.5, d1: 5/8-18UNF	With O-ring	
06632	D1: 46.5, D2: 25.0, L1: 15.0, L2: 10.0, d1: 5/8-18UNF	↑	
06633	D1: 40.5, D2: 25.0, L1: 15.0, L2: 10.0, d1: 5/8-18UNF	↑	
06636	D1: 38.0, D2: 28.5, L1: 15.0, L2: 10.0, d1: 5/8-18UNF	↑	
06655	D1: 40.0, D2: 32.0, L1: 17.0, L2: 12.0, d1: 5/8-18UNF	↑	
B type	Ball bearing attachment		A Though hole
			B Closed hole
06634	D1: 41.5, D2: 20.0, L1: 23.0, L2: 8.0, d1: 5/8-18UNF	With O-ring	
06635	D1: 39.5, D2: 17.0, L1: 23.0, L2: 8.0, d1: 5/8-18UNF	↑	
06637	D1: 34.5, D2: 17.0, L1: 23.0, L2: 8.0, d1: 5/8-18UNF	↑	
06638	D1: 25.5, D2: 10.0, L1: 23.0, L2: 8.0, d1: 5/8-18UNF	↑	

TOOL No. 90890- Ball bearing attachment

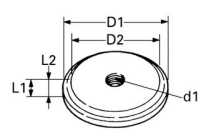
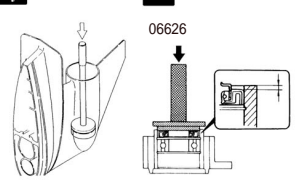
	D1	D2	D3	L1	L2	d1	Note
06629	89.0	59.0	—	21.5	13.5	5/8-18UNF	With O-ring
06630	59.5	45.0	33.0	21.5	13.5	5/8-18UNF	↑
06656	89.0	49.5	38.0	21.5	13.5	5/8-18UNF	↑
06657	70.0	50.8	38.0	21.5	13.5	5/8-18UNF	↑

Bearing inner race attachment

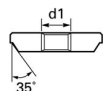



	D1	D2	D3	L1	L2
06639	48.5	42.5	36.5	27.0	21.0
06640	44.5	38.5	32.5	24.0	19.0
06641	43.0	37.0	30.5	24.0	19.0
06642	41.0	34.5	28.5	22.0	17.0
06643	40.0	33.5	27.5	22.0	17.0
06644	38.0	31.5	25.5	21.0	16.0
06645	32.5	26.5	20.5	18.0	13.0
06659	70.0	65.0	55.0	37.0	30.0
06660	64.0	60.0	50.5	37.0	30.0
06661	61.0	55.0	45.0	35.0	28.0
06662	58.0	52.0	42.5	33.0	26.0

Bearing outer race attachment


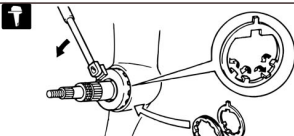
Taper roller bearing




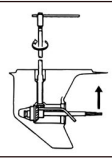
	D1	D2	L1	L2	d1
06619	90.0	85.0	12.0	5.0	5/8-18UNF
06620	82.5	76.0	12.0	5.0	5/8-18UNF
06621	79.0	72.5	12.0	5.0	5/8-18UNF
06622	65.0	61.0	12.0	5.0	5/8-18UNF
06623	58.0	55.0	11.0	5.0	5/8-18UNF
06624	52.0	49.0	11.0	5.0	5/8-18UNF
06625	52.0	48.0	11.0	5.0	5/8-18UNF
06626	50.0	47.0	11.0	5.0	5/8-18UNF
06627	47.0	44.0	11.0	5.0	5/8-18UNF
06628	42.0	38.8	11.0	5.0	5/8-18UNF
06658	95.0	90.1	12.0	5.0	5/8-18UNF

Dual propeller model SUPPLIER : K & L Supply Company
 Order or Reference Mr. Chris Campbell K & L supply (USA)
 Tel : +1-408-727-6767, Fax : +1-408-727-4842
 E-mail : christophere399@klsupply.com

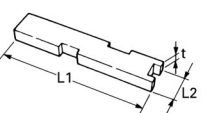
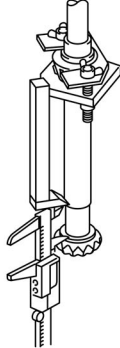
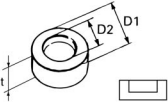

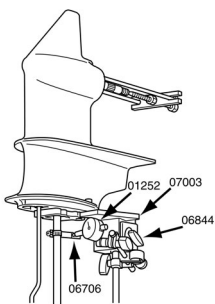
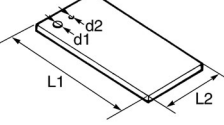
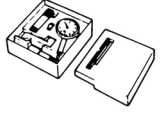
TOOL No. 90890- Grand nut wrench

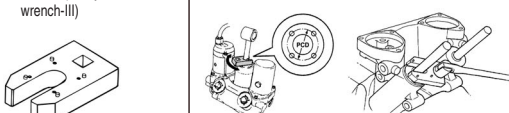
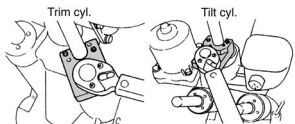
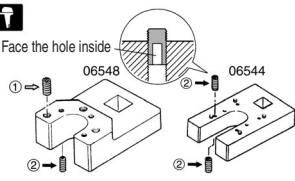
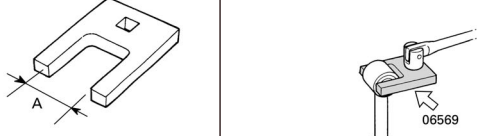
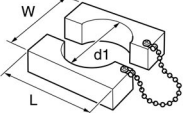
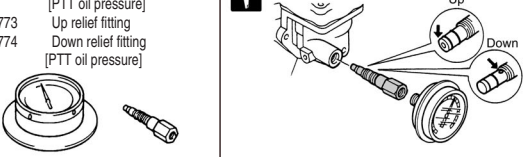
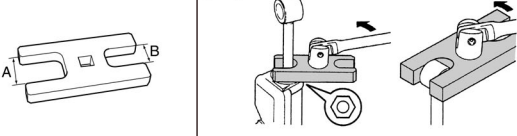
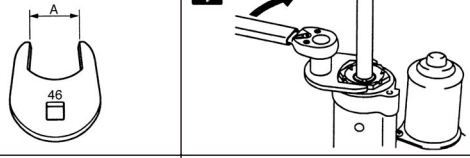
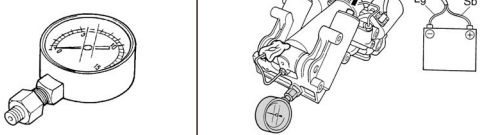
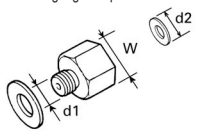



YB-42224 Pinion nut wrench

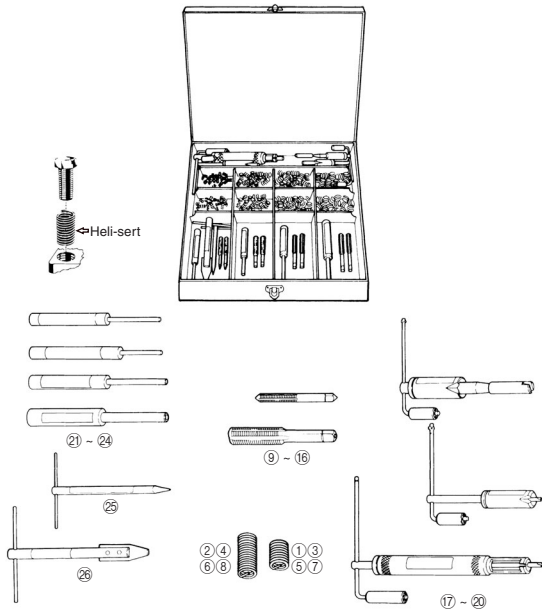
TOOL No. 90890-	Tool name	Usage	Note

TOOL No. 90890-	Tool name	Usage	Note
06701	Shimming plate		L1: 100.0 L2: 20.0 t: 10.0
06710	Pinion height gauge		H: 150
06712	Pinion height gauge plate B		
06703	Pinion height plate		D1: 35.0 D2: 19.0 t: 10.0
06704	Digital caliper		0-150 mm
06844	Magnet base B		
06706	Backlash indicator		L1: 26.8 L2: 9.0
07003	Magnet base plate		L1: 200 L2: 80 t: 12 d1: 11.5 d2: 8
01252	Dial gauge set		

TOOL No. 90890-	Tool name	Usage	Note
06544 (06544) *1	Cylinder-end screw wrench (Tilt cylinder wrench-III)		PCD: 1) 28.0 2) 38.0 3) 47.0
06587 (06548) *1	Trim & tilt wrench		PCD M4: 32.0 M6: 35.0
92A08-06312 92A08-04312	Set screw ① for 06548 Set screw ② for 06544 & 06548		① M6 X 12 mm Use with 06548 ②/M4 12 mm Use with 06544 & 06548
06569	Tilt rod wrench		A: 38
06572	PTT piston vice attachment		D: 45.0 L: 80.0 W: 60.0
06776 06773 06774	Hydraulic pressure gauge [PTT oil pressure] Up relief fitting Down relief fitting [PTT oil pressure]		0-16 Mpa 06773: 06774: Use with 06776
06560	Power tilt wrench		A: 35 B: 25.4
06588	PTT wrench 46		A: 46
06580	PTT oil pressure gauge assembly		0-16 Mpa
06581	PTT oil pressure gauge adapter		d1: N10 x 1.0 W: 19 d2: 9.5

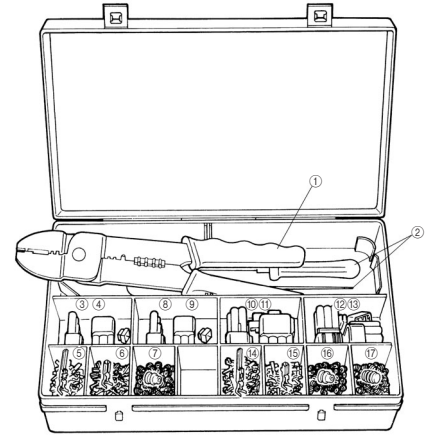
Специальные вервисные инструменты (Другое)

"HELI-SERT" KIT (P/No. 980890-0555)



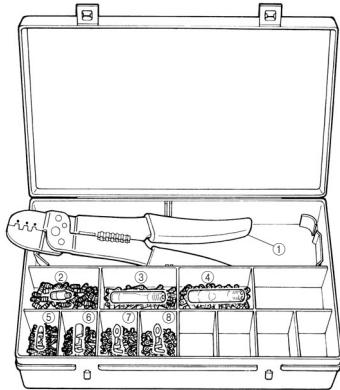
No.	Description	Q'ty	No.	Description	Q'ty	No.	Description	Q'ty
1	Heli-sert M5 X 0.8 X 1.5D	20	10	Tap M5 X 0.8 No.3	1	19	Inserting tool (S-type)	1
2	Heli-sert M5 X 0.8 X 2D	20	11	Tap M6 X 1.0 No.2	1	20	Inserting tool (S-type)	1
3	Heli-sert M6 X 1.0 X 1.5D	20	12	Tap M6 X 1.0 No.3	1	21	Tang break tool M5	1
4	Heli-sert M6 X 1.0 X 2D	20	13	Tap M8 X 1.25 No.2	1	22	Tang break tool M6	1
5	Heli-sert M8 X 1.25 X 1.5D	20	14	Tap M8 X 1.25 No.3	1	23	Tang break tool M8	1
6	Heli-sert M8 X 1.25 X 2D	20	15	Tap M10 X 1.25 No.2	1	24	Tang break tool M10	1
7	Heli-sert M10 X 1.25 X 1.5D	20	16	Tap M10 X 1.25 No.3	1	25	Extracting tool M3-5	1
8	Heli-sert M10 X 1.25 X 2D	20	17	Inserting tool (P-type)	1	26	Extracting tool M6-10	1
9	Tap M5 X 0.8 No.2	1	18	Inserting tool (S-type)	1	27	Tool box	1

COUPLER KIT (P/No. 980890-0553)



No.	Description	Q'ty	Q'ty
1	Crimper		1
2	Terminal pick	2 types in 1 set	1
3	Coupler housing	2P, Male (Water craft, Start SW)	1
4	Coupler housing	2P, Female (Water craft, Start SW)	1
5	Terminal, male	for Watercraft	20
6	Terminal, female	for Watercraft	20
7	Grommet	for Watercraft	40
8	Coupler housing	2P, Male (Outboard Motor)	1
9	Coupler housing	2P, Female (Outboard Motor)	1
10	Coupler housing	3P, Male (Outboard Motor)	1
11	Coupler housing	3P, Female (Outboard Motor)	1
12	Coupler housing	4P, Male (Outboard Motor)	1
13	Coupler housing	4P, Female (Outboard Motor)	1
14	Terminal, male	for Outboard Motor	20
15	Terminal, female	for Outboard Motor	20
16	Grommet	for Outboard Motor	40
17	Plug	for Outboard Motor	20

"HELI-SERT" KIT (P/No. 980890-05354)

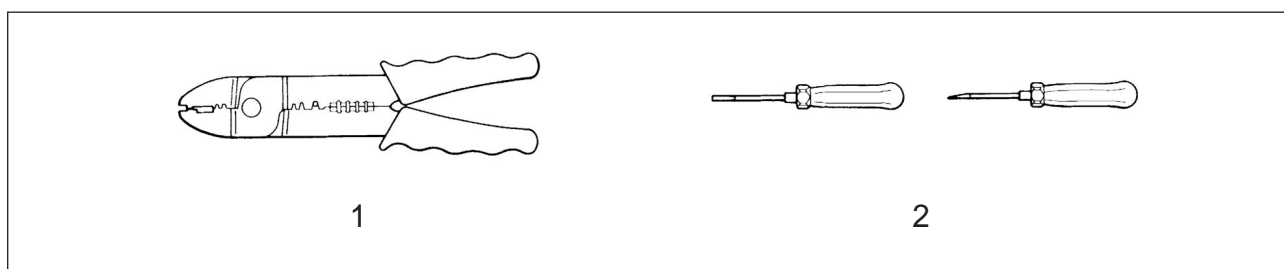


No.	Name	Note	Q'ty
1	Crimper		1
2	Sleeve, plug	for round plug	20
3	Sleeve, socket	for round socket	20
4	Sleeve, socket	for 2 wires	20
5	Round plug	Galvanized	20
6	Round socket	Galvanized	20
7	Eye terminal	for 5 mm screw	20
8	Eye terminal	for 4 mm screw	20

No.	Name	P/No.	Order Qty	Piece(s)
1	Crimper	90890-05357	1	1
2	Sleeve, plug	9E312-00617	1	100
3	Sleeve, socket	9E312-10735	1	100
4	Sleeve, socket	9E312-20735	1	20
5	Round plug	9E210-10400	1	100
6	Round socket	9E210-11400	1	100
7	Eye terminal	9E110-10510	1	100
8	Eye terminal	90890-05207	1	100

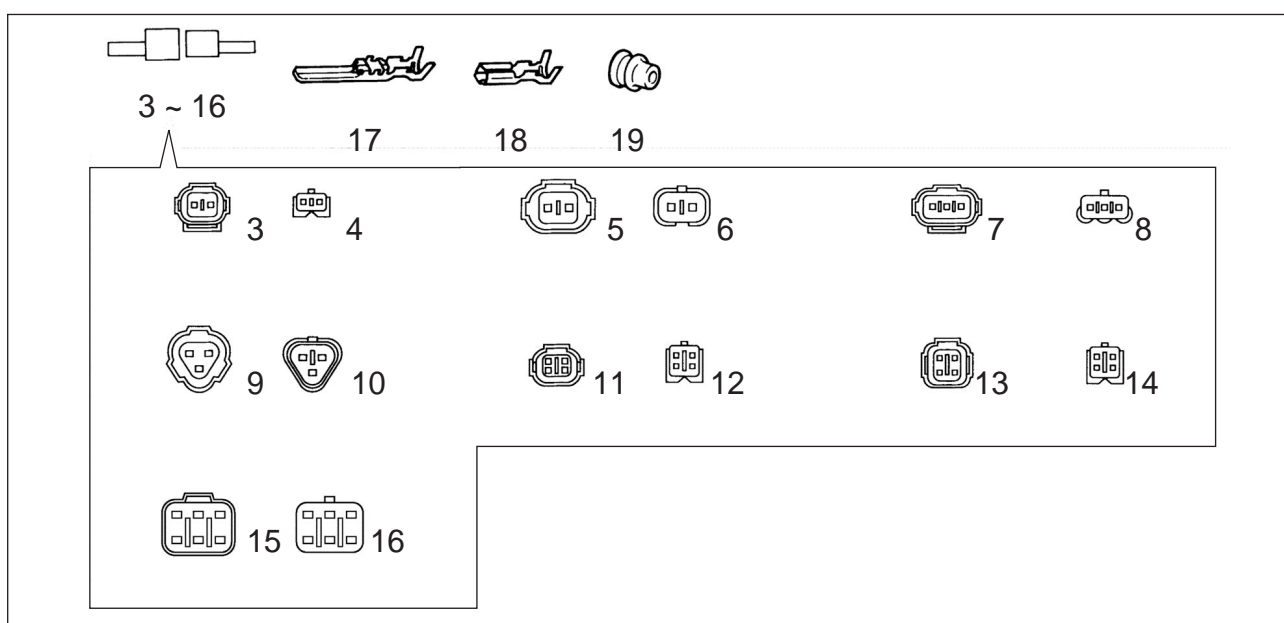
Дополнительные детали

Общего использования



No.	Name	Specification	P/No .	Order Q'ty	Piece(s)	Note
1	Crimper coupler (61A)		90890-05356	1	1	
2	Terminal pick (61A)		90890-05361	1	1	2 types in 1 set

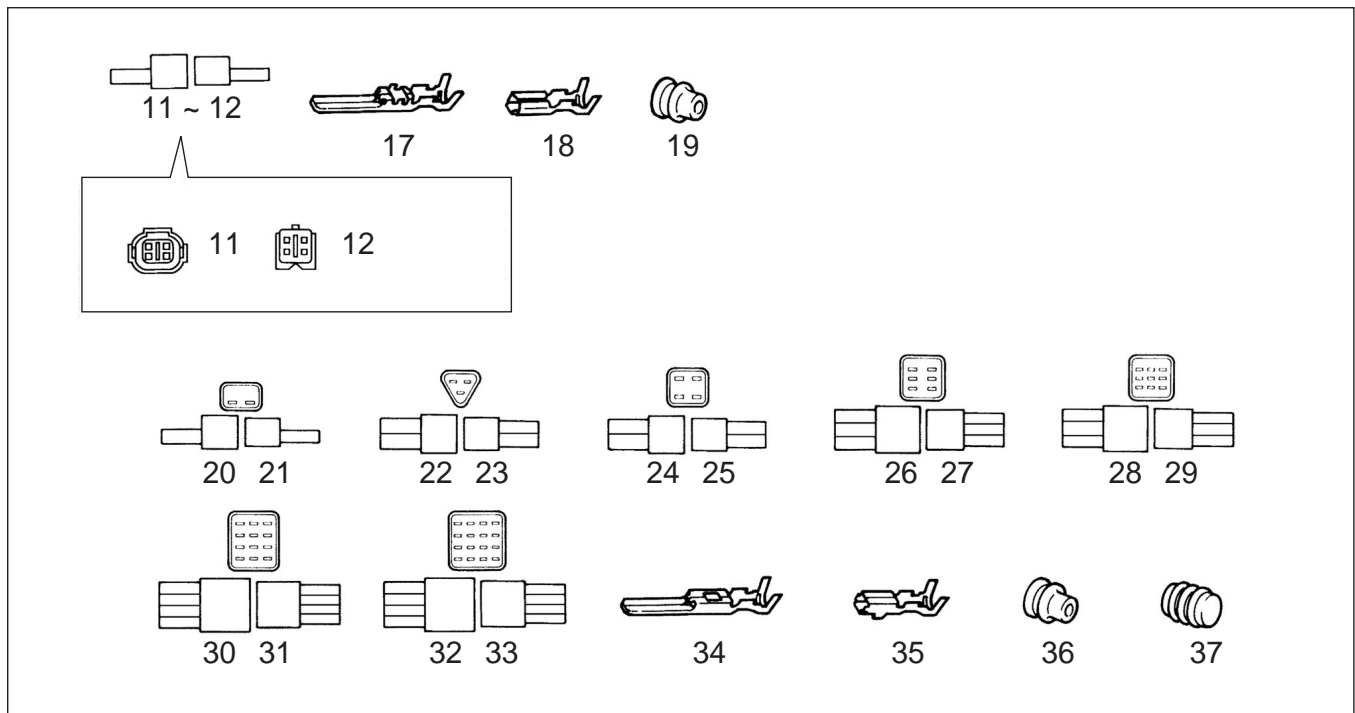
Водное транспортное средство



No.	Name	Specification	P/No .	Order Q'ty	Piece(s)	Note
3	Coupler housing	2P, Male, White	9E450-02433	1	10	Start sw.-harness
		2P, Male, Black	9E451-02433	1	10	Stop sw.-harness
4	Coupler housing	2P, Female, White	9E450-02533	1	10	Start sw.-harness
		2P, Female, Black	9E451-02533	1	10	Stop sw.-harness
5	Coupler housing	2P, Male, White	9E470-02413	1	10	Oil level gauge
6	Coupler housing	2P, Female, White	9E470-02513	1	10	Oil level gauge
7	Coupler housing	3P, Male, White	9E450-03433	1	10	Charge coil-CDI
		3P, Male, Black	9E451-03433	1	10	Pulser coil-CDI
8	Coupler housing	3P, Female, White	9E450-03533	1	10	Charge coil-CDI
		3P, Female, Black	9E451-03533	1	10	Pulser coil-CDI
9	Coupler housing	3P, Male, White	9E470-03413	1	10	Speed sensor
10	Coupler housing	3P, Female, White	9E470-03513	1	10	Speed sensor
11	Coupler housing	4P, Male, White	9E450-04433	1	5	Oil level gauge, trim gauge and remote oil tank
12	Coupler housing	4P, Female, White	9E450-04533	1	5	
13	Coupler housing	4P, Male, White	9E470-04413	1	5	Meter unit-harness
14	Coupler housing	4P, Female, White	9E470-04513	1	5	Meter unit-harness
15	Coupler housing	6P, Male, White	9E450-06433	1	5	(64T)
16	Coupler housing	6P, Female, White 1 5	9E450-06523	1	5	(64T)
17	Terminal, male		9E212-10303	1	50	
18	Terminal, female		9E212-11303	1	50	for above #3 D#16
19	Grommet		9E322-90606	1	50	

Дополнительные детали

Внешний мотор



No.	Name	Specification	P/No.	Order Q'ty	Piece(s)	Note
11	Coupler housing	4P, Male, White	9E450-04433	1	5	Oil level gauge, trim gauge and remote oil tank
12	Coupler housing	4P, Female, White	9E450-04533	1	5	
17	Terminal, male		9E212-10303	1	50	for above #11 & #12
18	Terminal, female		9E212-11303	1	50	
19	Grommet		9E322-90606	1	50	
20	Coupler housing	2P, Male, White	9E470-02205	1	10	
		2P, Male, Black	9E471-02205	1	10	
21	Coupler housing	2P, Female, White	9E470-02305	1	10	
		2P, Female, Black	9E471-02305	1	10	
22	Coupler housing	3P, Male, Black	9E471-03205	1	10	
23	Coupler housing	3P, Female, Black	9E471-03305	1	10	
24	Coupler housing	4P, Male, Black	9E471-04205	1	5	
25	Coupler housing	4P, Female, Black	9E471-04305	1	5	
26	Coupler housing	6P, Male, Black	9E471-06205	1	5	
27	Coupler housing	6P, Female, Black	9E471-06305	1	5	
28	Coupler housing	9P, Male, Black	9E471-09205	1	5	
29	Coupler housing	9P, Female, Black	9E471-09305	1	5	
30	Coupler housing	12P, Male, Black	9E471-12205	1	5	
31	Coupler housing	12P, Female, Black	9E471-12305	1	5	
32	Coupler housing	16P, Male, Black	9E471-16205	1	5	
33	Coupler housing	16P, Female, Black	9E471-16305	1	5	
34	Terminal, male		9E212-12005	1	50	for above #20 - #33
35	Terminal, female		9E212-13005	1	50	
36	Grommet		9E311-E0506	1	50	
37	Plug		9E322-F0607	1	50	for empty terminal