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**Manifold Catalog**  
&  
**Anode Brochure**

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# Section 1

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## Johnson / Evinrude Gearcase

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# Johnson / Evinrude

## 2 & 3-CYL. LOOPCHARGED SMALL GEARCASE IDENTIFICATION

### Small Gearcase "Old" Style (1975-1988)

#### Physical Characteristics:

15-1/2" tall.

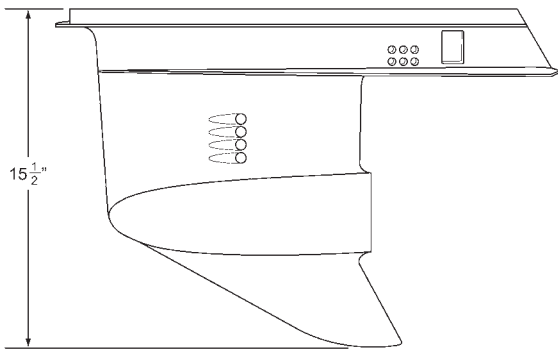
Straight at the trailing end of the gear housing and the fin.

Pointed at the trailing end of the cavitation plate.

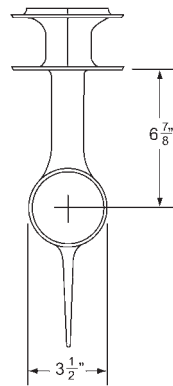
Six holes above the cavitation plate.

Internal water intake screens (four holes).

No speedo pitot.



Side View



Rear View



Top View

### Small Gearcase "New" Style (1989-2005)

#### Physical Characteristics:

15-3/4" tall.

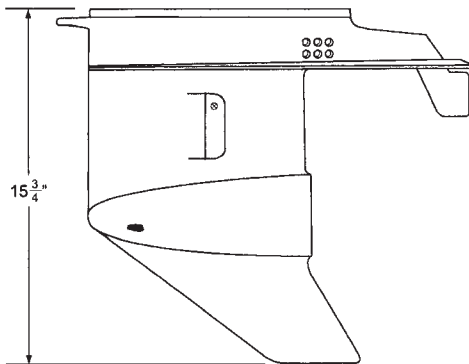
Straight at the trailing end of the gear housing and the fin.

Pointed at the trailing end of the cavitation plate.

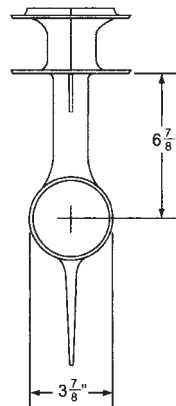
Six holes above the cavitation plate.

External water intake screens.

Includes speedo pitot.



Side View



Rear View



Top View

# Johnson / Evinrude

## 2 & 3-CYL. LOOPCHARGED LARGE GEARCASE IDENTIFICATION

### Large Gearcase (1975-2006)

#### Physical Characteristics:

17-7/16" tall.

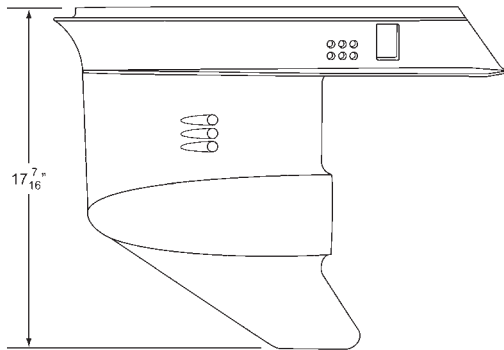
Straight at the trailing end of the gear housing and the fin.

Pointed at the trailing end of the cavitation plate.

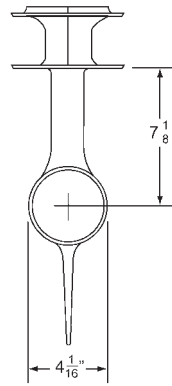
Six holes above the cavitation plate.

Internal water intake screens (three holes).

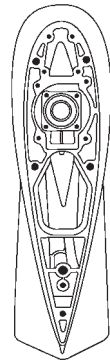
No speedo pitot.



Side View



Rear View



Top View

# Johnson / Evinrude

## V4 60° & V4 90° SMALL GEARCASE IDENTIFICATION

### Small Gearcase V4 90° (1978-1998)

#### Physical Characteristics:

18-3/16" tall.

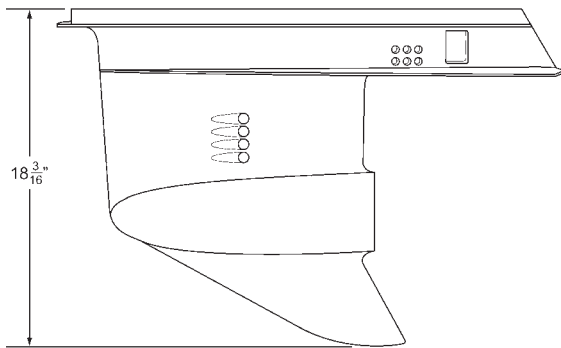
Straight at the trailing end of the gear housing and the fin.

Pointed at the trailing end of the cavitation plate.

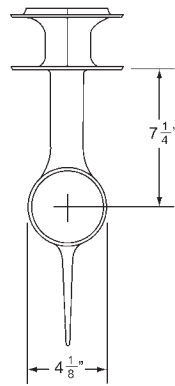
Six holes above the cavitation plate.

Internal water intake screens (four holes).

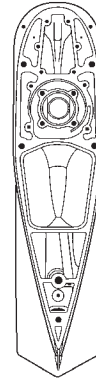
No pitot.



Side View



Rear View



Top View

### Small Gearcase V4 60° (1995-2006)

#### Physical Characteristics:

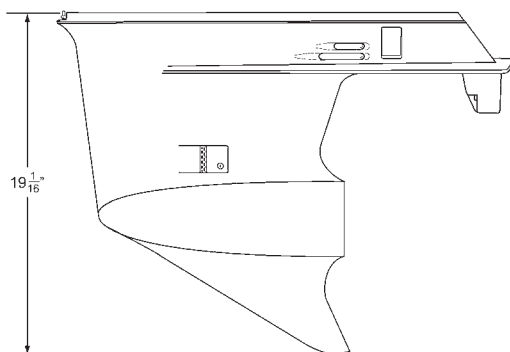
19-1/6" tall.

Curved at the trailing end of the gear housing and the fin.

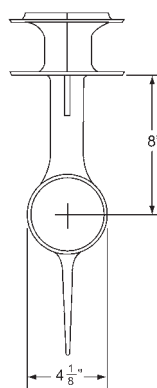
Flat at the trailing end of the cavitation plate.

Two slots above the cavitation plate.

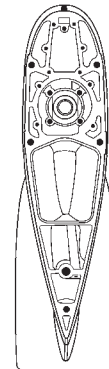
External water intake screens.



Side View



Rear View



Top View



# Johnson / Evinrude

## V4/V6 LARGE GEARCASE IDENTIFICATION

### Large Gearcase "O" Type V4 & V6 (1979-2006)

#### Physical Characteristics:

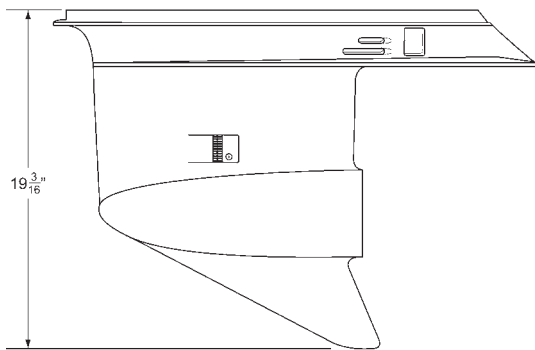
19-3/16" tall.

Straight at the trailing end of the gear housing and the fin.

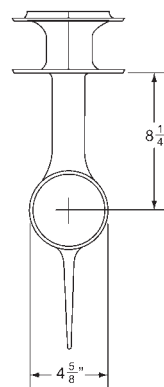
Pointed at the trailing end of the cavitation plate.

Two slots above the cavitation plate.

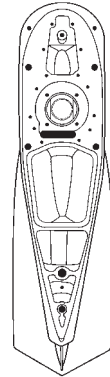
External water intake screens.



Side View



Rear View



Top View

### Large Gearcase "M" Type V4 & V6 (2002-2006)

#### Physical Characteristics:

19-3/16" tall.

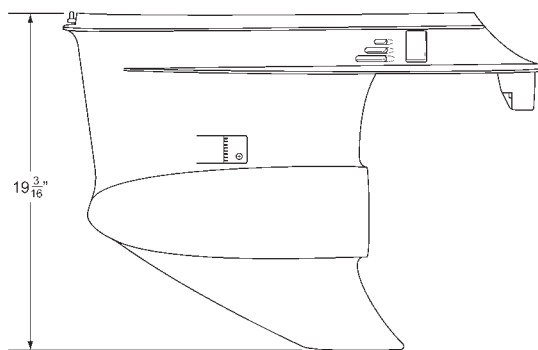
Curved at the trailing end of the gear housing and the fin.

Flat at the trailing end of the cavitation plate.

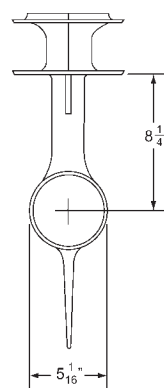
Three slots above the cavitation plate.

External water intake screens.

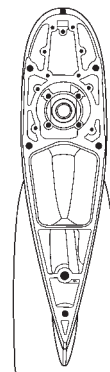
Includes speedo pitot.



Side View



Rear View



Top View

# Johnson / Evinrude

## V4 60° & V4 90° COMPLETE GEARCASE ASSEMBLY

### V4 60° (1995-Up)

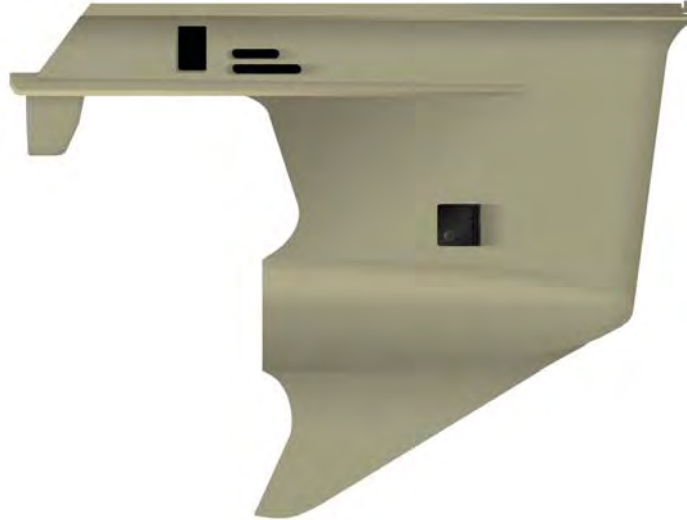
#### No. 28510

COMPLETE GEARCASE  
OEM: 5004632  
GLM Gear Set No. 22630



#### No. 28500

EMPTY GEARCASE  
OEM: 5004767



For V4 60° w/ 20" shaft (1995-2005)  
For 75 & 80 HP Inline 3-Cyl. E-Tec  
w/ 20" shaft (2004-2006)

### V4 90° (1978-1998)

#### No. 28210

COMPLETE GEARCASE  
OEM: 5000356  
GLM Gear Set No. 22630



#### No. 28200

EMPTY GEARCASE  
OEM: 431642



For V4 90°(1978-1998)

Must use Bearing Carrier  
GLM No. 11388 with  
this empty gearcase

#### No. 11388

BEARING CARRIER  
OEM: N/A



# Johnson / Evinrude

## V4/V6 COMPLETE GEARCASE ASSEMBLY - "O" TYPE

### "O" Type V4 & V6 (1978-Up)

#### No. 28880



COMPLETE GEARCASE  
W/OUT SPEEDO  
OEM: 5004639  
GLM Gear Set No. 22650

V4 Gear Ratio: 2.25:1 (.44), 12:27



#### No. 28800

EMPTY GEARCASE  
W/OUT SPEEDO  
OEM: 439972  
EMPTY GEARCASE  
W/OUT SPEEDO  
OEM: 438048

For V4 (1978-2006)  
Crossflow 1983-1996  
60° Loopcharged 1995-1998  
90° Loopcharged 1985-1998

#### No. 28810

COMPLETE GEARCASE  
W/OUT SPEEDO  
OEM: 5005401  
GLM Gear Set No. 22666

V6 Gear Ratio: 1.83:1 (.55), 12:22 Heavy Duty



#### No. 28800

EMPTY GEARCASE  
W/OUT SPEEDO  
OEM: 439972  
EMPTY GEARCASE  
W/OUT SPEEDO  
OEM: 438048

For V6 (1978-2006)  
Crossflow (1979-1992)  
60° Loopcharged (1991-2005)  
90° Loopcharged (1986-2005)

#### No. 28710

COMPLETE GEARCASE  
W/ SPEEDO  
OEM: 5004635  
GLM Gear Set No. 22666

V6 Gear Ratio: 1.83:1 (.55), 12:22 Heavy Duty



#### No. 28700

EMPTY GEARCASE  
W/ SPEEDO  
OEM: 439973

For V6 (1978-2006)  
Crossflow (1979-1992)  
60° Loopcharged (1991-2001)  
90° Loopcharged (1986-2001)

# Johnson / Evinrude

## GEARCASE ASSEMBLY APPLICATIONS

Motor	Year	Complete	Housing	Motor	Year	Complete	Housing
V4 Crossflow 20"	1988-98	28210	28200	V6 Crossflow 20" & 90° Loopcharged	88-91	28710	28700
V4 Crossflow 25"	1988-91	28210	28200	V6 Crossflow 25" & 90° Loopcharged	88-91	28710	28700
65 Jet (90 hp)	All	Not Serviced	-	V6 Crossflow 20" & 90° Loopcharged C/R	88-91	-	28700
100 WPL 20"	1999	28880	28800	V6 90° Loopcharged 20" w/ Internal Screens	92-99	28710	28700
100 WPX 25"	1999	28880	28800	V6 90° Loopcharged 20" w/ External Screens	92-99	28810	28800
100 Comm. 20" Small	1992-97	28210	28200	V6 90° Loopcharged 25"	92-99	28810	28800
100 Comm. 20" Large	1988-97	28880	28800	V6 90° Loopcharged 25" C/R	92-99	-	28800
100 Comm. 25" Large	1988-97	28880	28800	V6 90° Loopcharged 30"	93-99	28810	28800
100 WQL 20"	1998	28510	28500	V6 90° Loopcharged 30" C/R	93-99	-	28800
100 WQX, 105 WEX 25"	1998	28880	28800	200 Comm. 20"	93-99	28810	28800
105 Comm. WPL 20"	2000-01	28880	28800	200 Comm. 25"	93-99	28810	28800
105 Comm. WPX 25"	2000-01	28880	28800	V8 20"	88-98	-	-
105 Comm. WEL 20"	2000-01	28880	28800	V8 25"	88-98	-	-
105 WEL 20"	1998	28880	28800	V8 30"	93-96	-	-
105 WRL 20"	1997-98	28880	28800	V8 20" C/R	90-96	-	-
105 WRX 25"	1997-98	28880	28800	V8 25" C/R	88-98	-	-
105 RWL 20"	1998	28880	28800	V8 30" C/R	93-96	-	-
105 RWY 22.5"	1998	28880	28800				
105 RWX 25"	1998	28880	28800				
115 FPL/FSL 20"	1999-05	28510	28500				
115 FPX/FX 25"	2000-01	28880	28800				
80 Jet (115 hp)	All	Not Serviced	-				
120/140 20"	1988-94	28210	28200				
120 25"	1988-94	28210	28200				
125 RWL 20"	1995-97	28880	28800				
125 RWY 22.5"	1995-98	28880	28800				
125 WTPL 20"	1992-98	28880	28800				
125 WTPX 25"	1988-98	28880	28800				
125 ESX	1989-91	28210	28200				
125 ESX Club Nautico	1992-94	28210	28200				
130 20"	1995-98	28880	28800				
130 25"	1995-98	28880	28800				
130 25" C/R	1995-97	-	28800				
135 FPL/FL 20"	2000-01	28710	28700				
135 FSL/FS 20"	2000-01	28810	28800				
135 FPX/FX 25"	2000-01	28810	28800				
140 25"	1988-94	28880	28800				
140 25" C/R	1988-94	-	28700				
V4 60° Loopcharged 20" GL W/ Pitot Hole	1995-06	28510	28500				
V4 60° Loopcharged 20" (Use Pitot Style)	1995-06	28510	28500				
V4 60° Loopcharged 25"	1995-06	28880	28800				
V6 60° Loopcharged 20" W/ External Screens	1995-00	28810	28800				
V6 60° Loopcharged 25" W/ External Screens	1991-99	28810	28800				
V6 60° Loopcharged 25" C/R	1992-99	-	28800				
105 Jet (150 HP)	All	Not Serviced	-				
150 Comm. 20"	1993-99	28810	28800				
150 Comm. 25"	1993-99	28810	28800				
155 Comm. 20"	1988-92	28810	28800				
155 Comm. 25"	1988-92	28810	28800				





## Section 2

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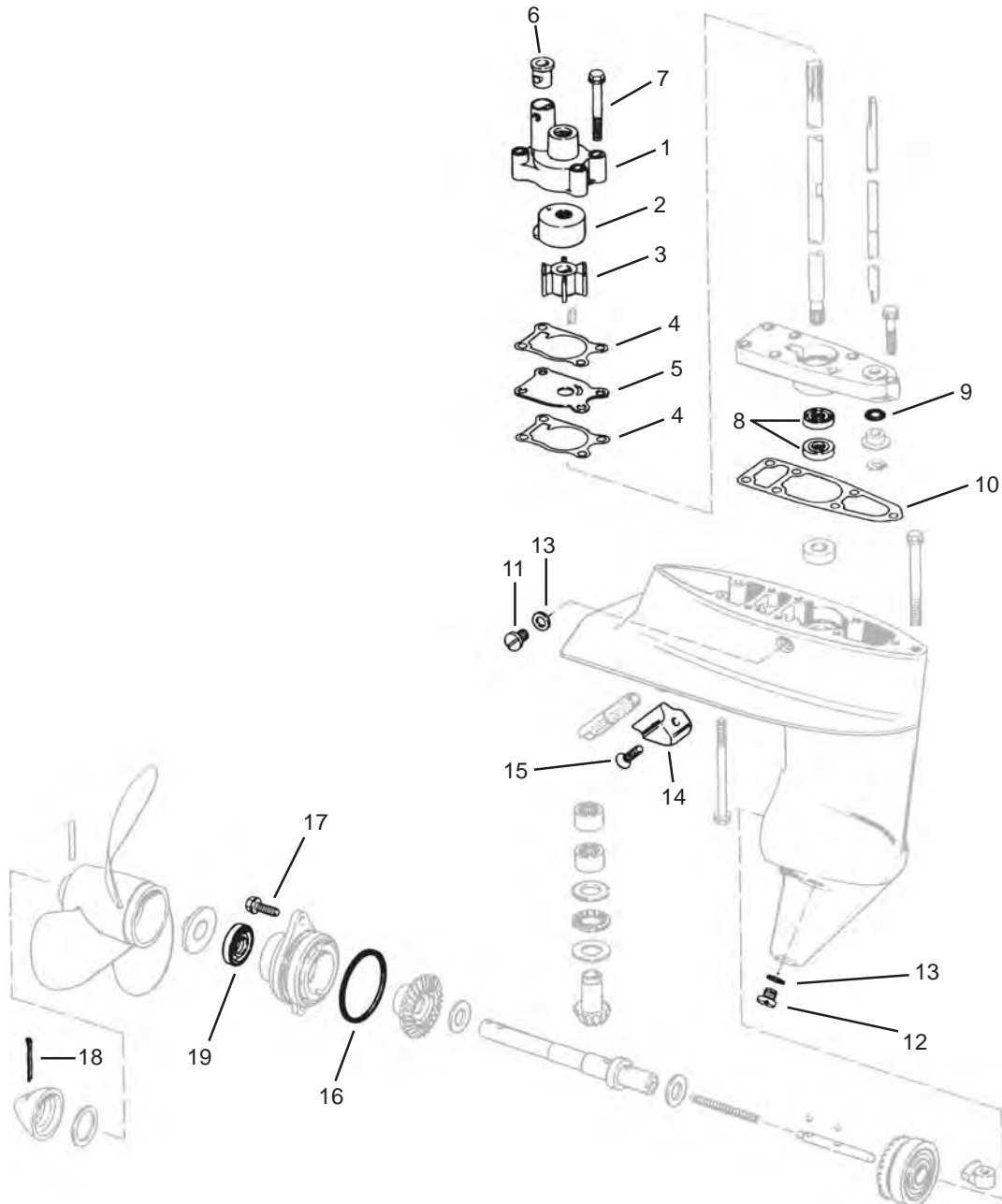
### Johnson / Evinrude Gearcase Exploded Views

<i>Gearcase Components - 4, 4.5, 5, 6, 7.5, 8 HP (1980 &amp; Up) ...</i>	14-15
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# Johnson / Evinrude

## GEARCASE COMPONENTS - 4, 4.5, 5, 6, 7.5, 8 HP (1980 & UP)

2-Stroke

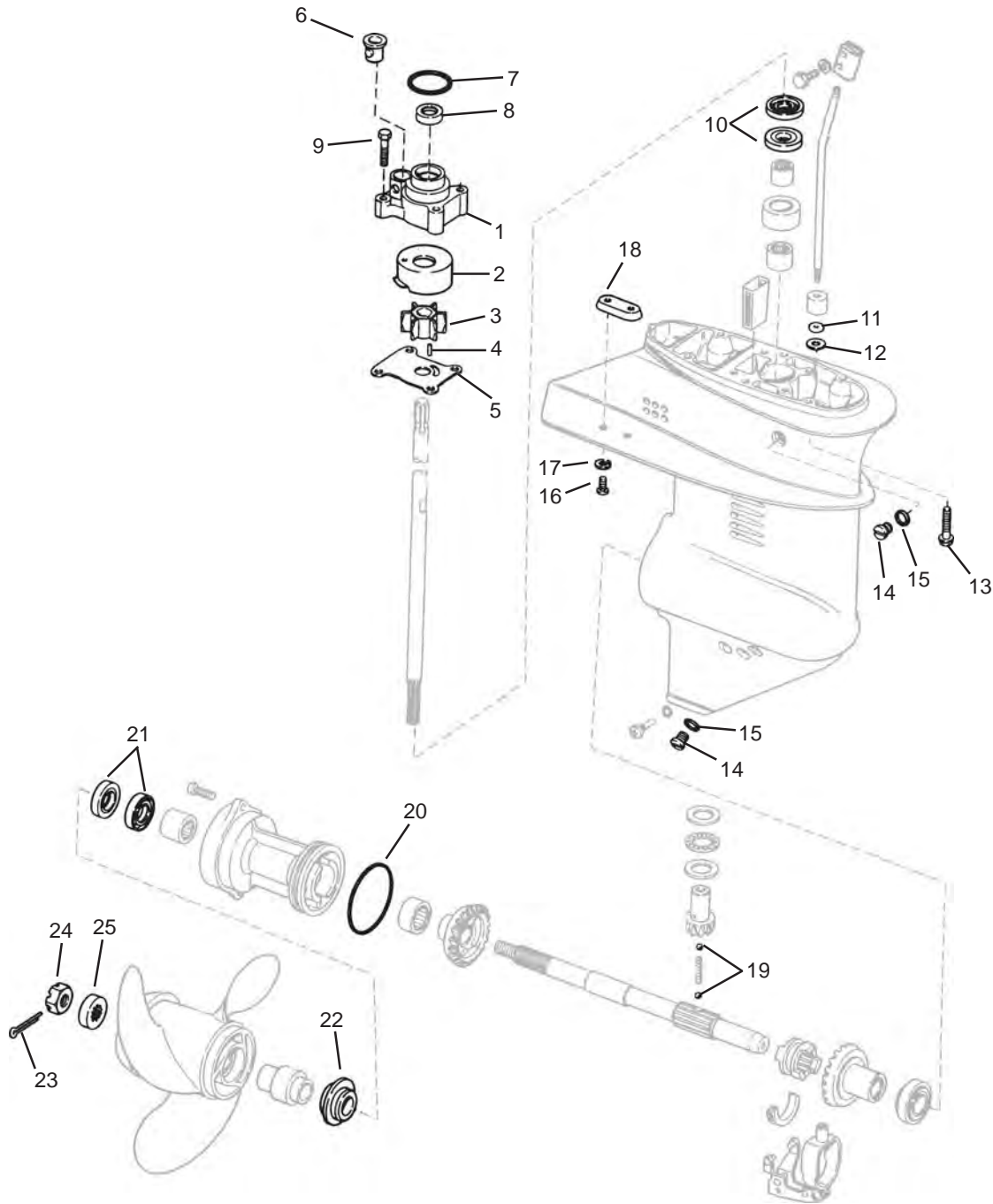




# Johnson / Evinrude

## GEARCASE COMPONENTS - 9.9-15 HP (1974 & UP)

2-Cyl. 2-Stroke Thru-Prop Exhaust



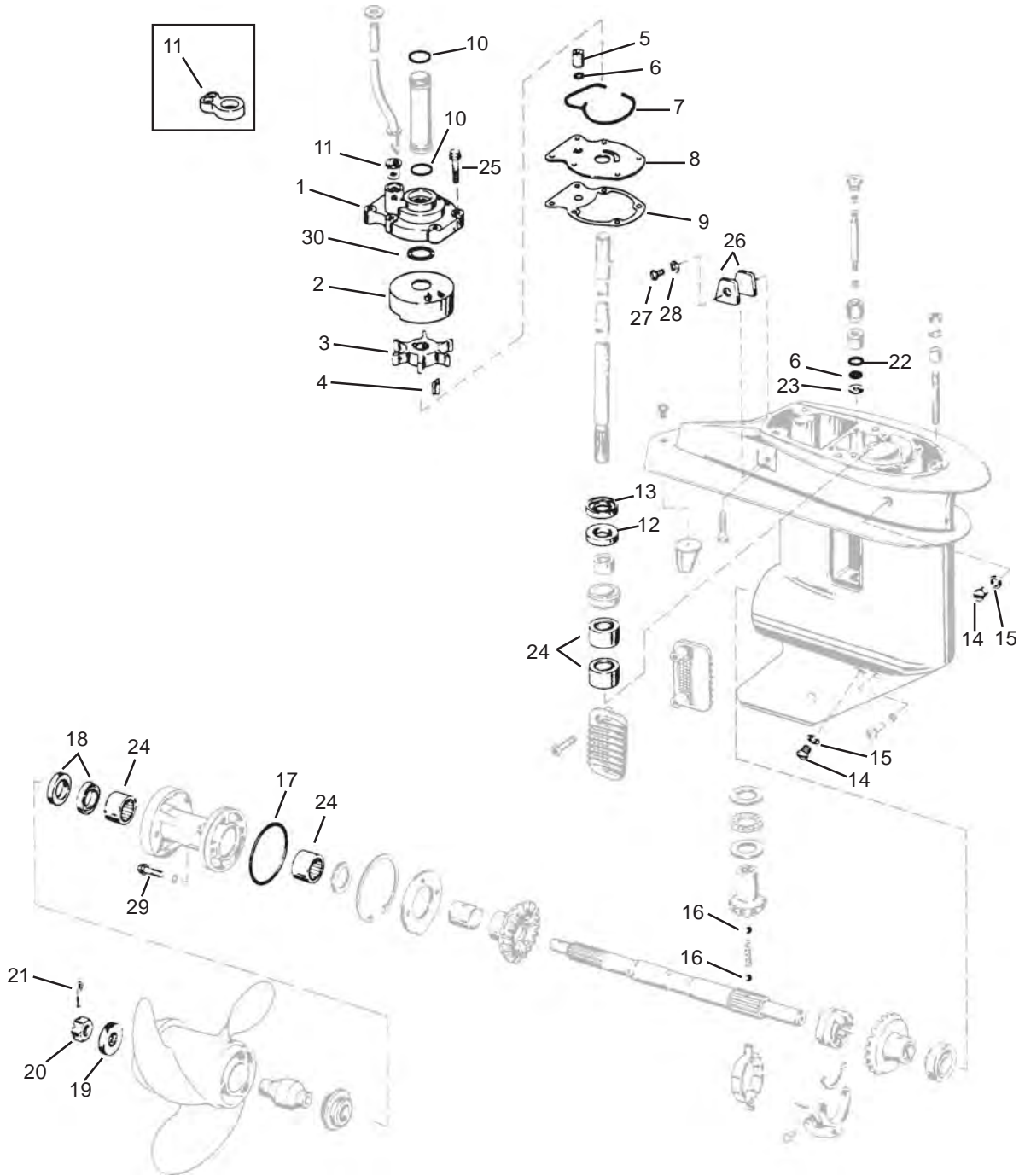




# Johnson / Evinrude

## GEARCASE COMPONENTS - 20-35 HP - THRU-PROP EXHAUST

20-35 HP 2-Cyl. Crossflow (1980-2005)  
25, 30, 35 HP 3-Cyl. Loopcharged (1996-2001)

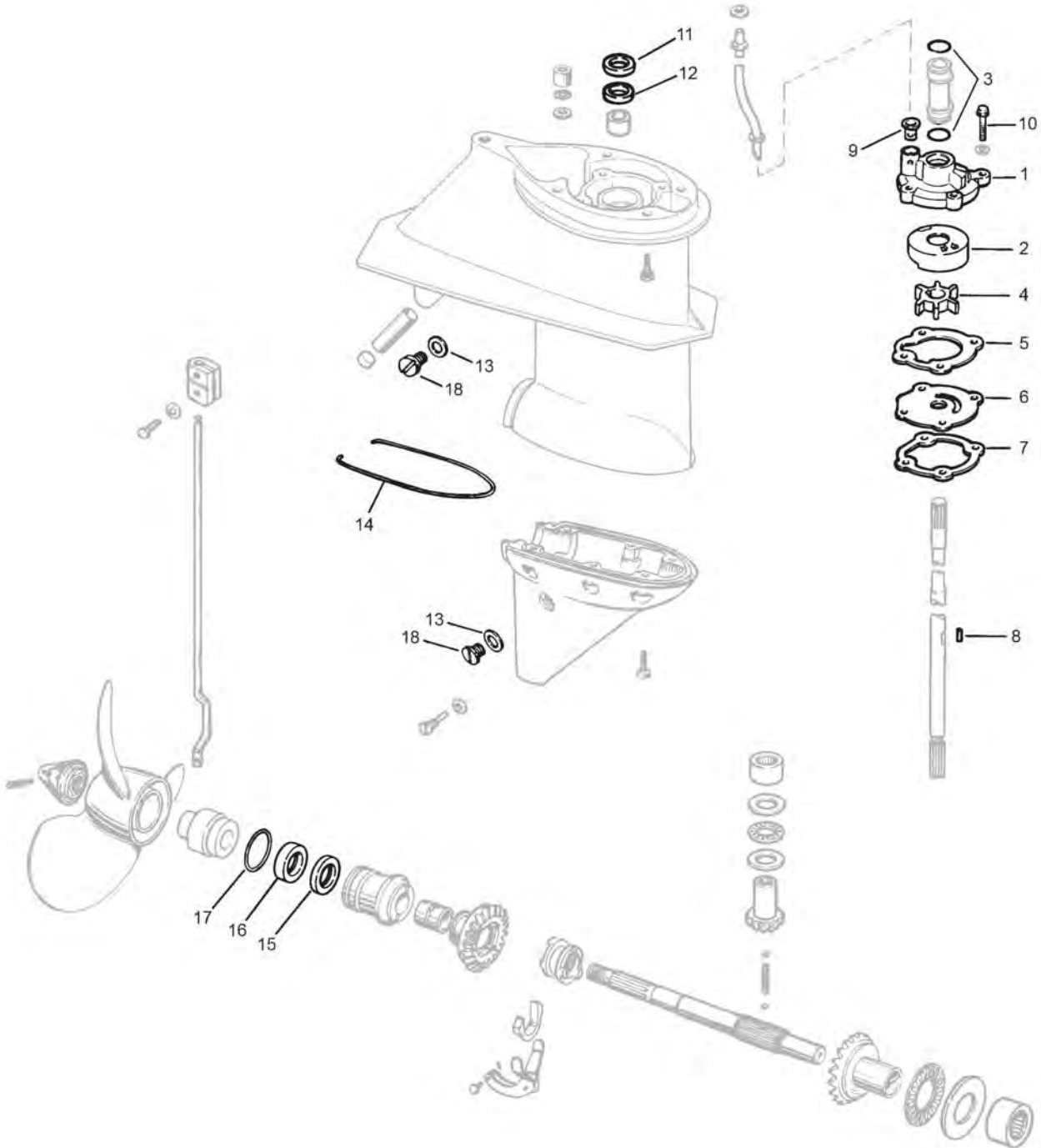




# Johnson / Evinrude

## GEARCASE COMPONENTS - CROSSFLOW - THRU-CAVITATION PLATE EXHAUST

25-28 HP, 2-Cyl. Crossflow (1978-1997)



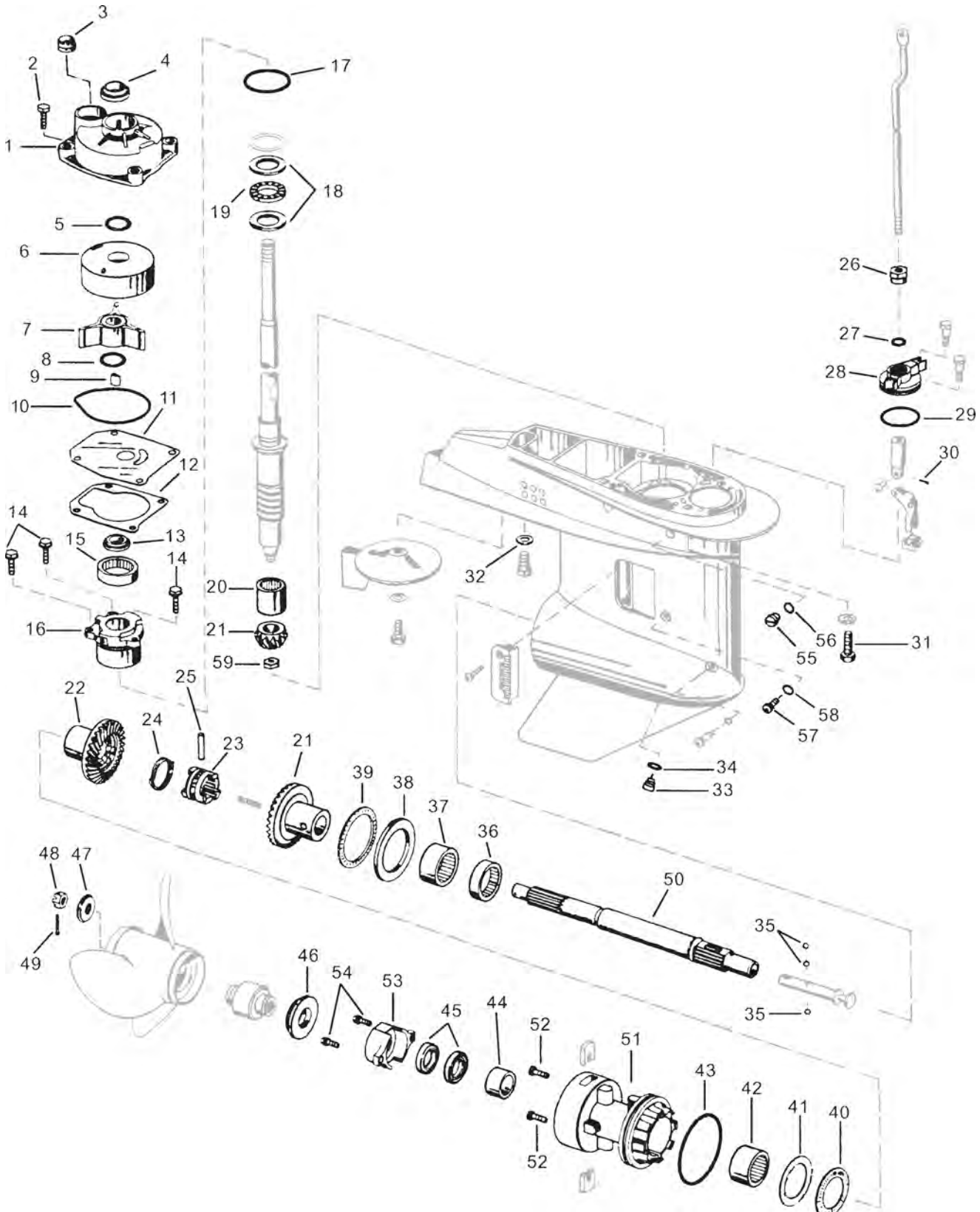




# Johnson / Evinrude

## GEARCASE COMPONENTS - LOOPCHARGED - SMALL

2-Cyl. Loopcharged 40-50 HP (1989-2005)



# Johnson / Evinrude

## GEARCASE COMPONENTS - LOOPCHARGED - SMALL

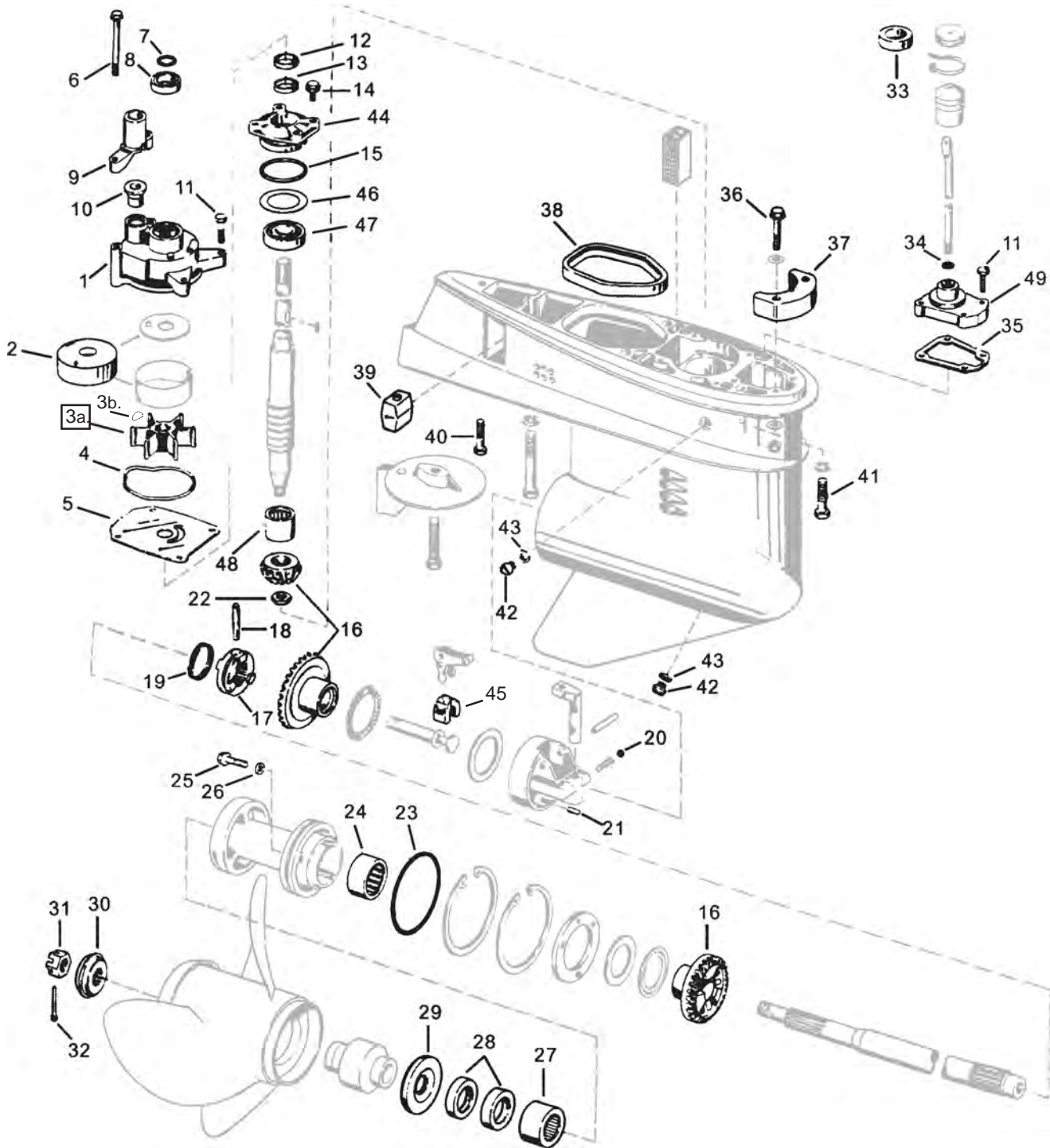
GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
12480	1	438544	Pump Housing (1989-98)	11416	51	432276	Bearing Carrier
12482	1	438545	Pump Hsg. (1995-01) (2004-05)	22395	52	328744	Screw
22360	2	302325	Screw	12742	53	398873	Anode
86497	3	333758	Grommet	22392	54	328694	Screw
86491	4	341732	Grommet	22393	55	309243	Screw
82100	5	310584	O-ring	45290	56	336982	O-ring
12815	6	340619	Pump Cup	22394	57	324852	Screw
89790	7	432941	Impeller (1989-1994)	86659	58	332584	Seal
89460	7	437059	Impeller (1995-2002)	11192	59	313339	Pinion Nut
81250	8	331188	O-ring				
89592	9	334897	Key				
86570	10	324981	Seal				
12550	11	341038	Wear Plate				
33150	12	336530	Gasket				
86013	13	342786	Oil Seal				
22362	14	317624	Screw				
11422	15	398874	Bearing				
27790	16	435274	Bearing Housing Assembly				
82250	17	310327	O-ring				
21649	18	333771	Thrust Washer				
16370	19	398901	Thrust Bearing				
11430	20	382343	Bearing				
22661	21	397627	Gear Set				
22662	22	332489	Reverse Gear				
22663	23	332491	Clutch Dog				
11051	24	320311	Spring				
21133	25	320310	Cross Pin				
27942	26	333780	Bushing				
45200	27	318372	O-ring				
27940	28	434588	Cover & Bushing Assembly				
82230	29	913921	O-ring				
22145	30	306376	Cotter Pin				
22329	31	305282	Screw				
21674	32	330265	Washer				
21731	33	318544	Draining Screw				
31171	34	311598	Gasket				
22490	35	316506	Ball				
22940	36	432264	Bearing				
22870	37	382407	Bearing				
21648	38	333725	Thrust Washer				
16360	39	397538	Thrust Bearing				
16350	40	397537	Thrust Bearing				
21647	41	332514	Thrust Washer				
22890	42	386764	Bearing				
82360	43	553126	O-ring				
22900	44	386765	Bearing				
86060	45	321467	Oil Seal				
22240	46	320305	Thrust Washer				
22250	47	315810	Prop Spacer				
22150	48	314503	Prop Nut				
22120	49	314502	Cotter Pin				
22421	50	439138	Prop Shaft				

# Johnson / Evinrude

## GEARCASE COMPONENTS - LOOPCHARGED - SMALL

2-Cyl. Loopcharged 40-60 HP (1975-1988)

3-Cyl. Loopcharged 60-75 HP (1975-1988)





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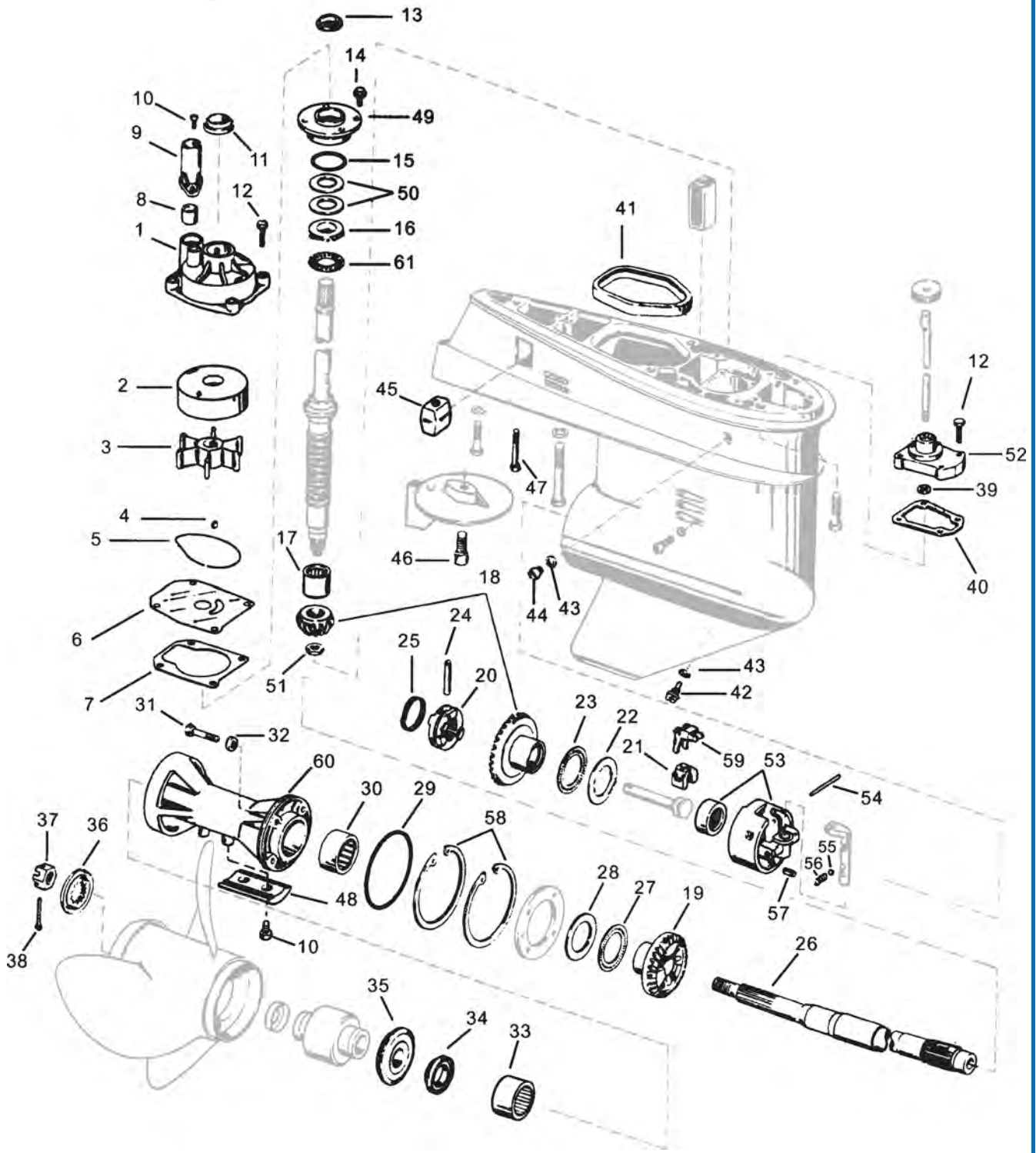
GEARCASE COMPONENTS - LOOPCHARGED - SMALL							
GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
12450	1	384087	Pump Housing	21511	47	385175	Bearing
12814	2	320775-6	Pump Cup	11423	48	386766	Pinion Bearing
89660	3a.	377230	Impeller (1975-1978)	27756	49	387336	Cover & Seal Assembly
89595	3b.	308928	Key (1975-1978)				
89780	3a.	396809	Impeller (1979-1988)				
89591	3b.	331901	Key, White (1979-1988)				
89593	3b.	344470	Key, Black (1979-1988)				
86580	4	315788	Seal				
12620	5	320981	Wear Plate				
22324	6	331980	Screw				
81120	7	303059	O-ring				
86491	8	341732	Grommet				
12940	9	315838	Tube Guide				
86494	10	315837	Grommet				
22360	11	302325	Screw				
86460	12	332205	Oil Seal				
86160	13	321466	Oil Seal				
86013	12,13	342786	Oil Seal (one piece)				
22327	14	909386	Screw				
82240	15	302588	O-ring				
22681	16	433570	Gear Set				
22683	17	319895	Clutch Dog				
22044	18	320310	Cross Pin				
11051	19	320311	Spring				
22491	20	160084	Detent Ball				
21138	21	331880	Pin				
11192	22	313339	Pinion Nut				
82320	23	320303	O-ring				
22890	24	386764	Bearing				
22400	25	320041	Screw				
80100	26	332584	O-ring				
22900	27	386765	Bearing				
86060	28	321467	Oil Seal				
22240	29	320305	Thrust Washer				
22250	30	315810	Prop Spacer				
22150	31	314503	Prop Nut				
22120	32	314502	Cotter Pin				
86140	33	305762	Grommet				
45200	34	318372	O-ring				
33420	35	314082	Gasket				
22322	36	324430	Screw				
12738	37	392462	Anode				
86210	38	324937	Seal				
12776	39	436745	Anode				
22366	40	328096	Screw				
22329	41	305282	Screw				
22420	42	307551	Screw				
31171	43	311598	Gasket				
22728	44	387067	Bearing Housing & Seal				
27730	45	334163	Cradle				
23530	46	320166	Shim .003				
23540	46	320167	Shim .004				
23550	46	320168	Shim .005				

# Johnson / Evinrude

## GEARCASE COMPONENTS - LOOPCHARGED - LARGE

2-Cyl. Loopcharged 40-60 HP (1975-2006)

3-Cyl. Loopcharged 60-75 HP (1975-2001)



# Johnson / Evinrude

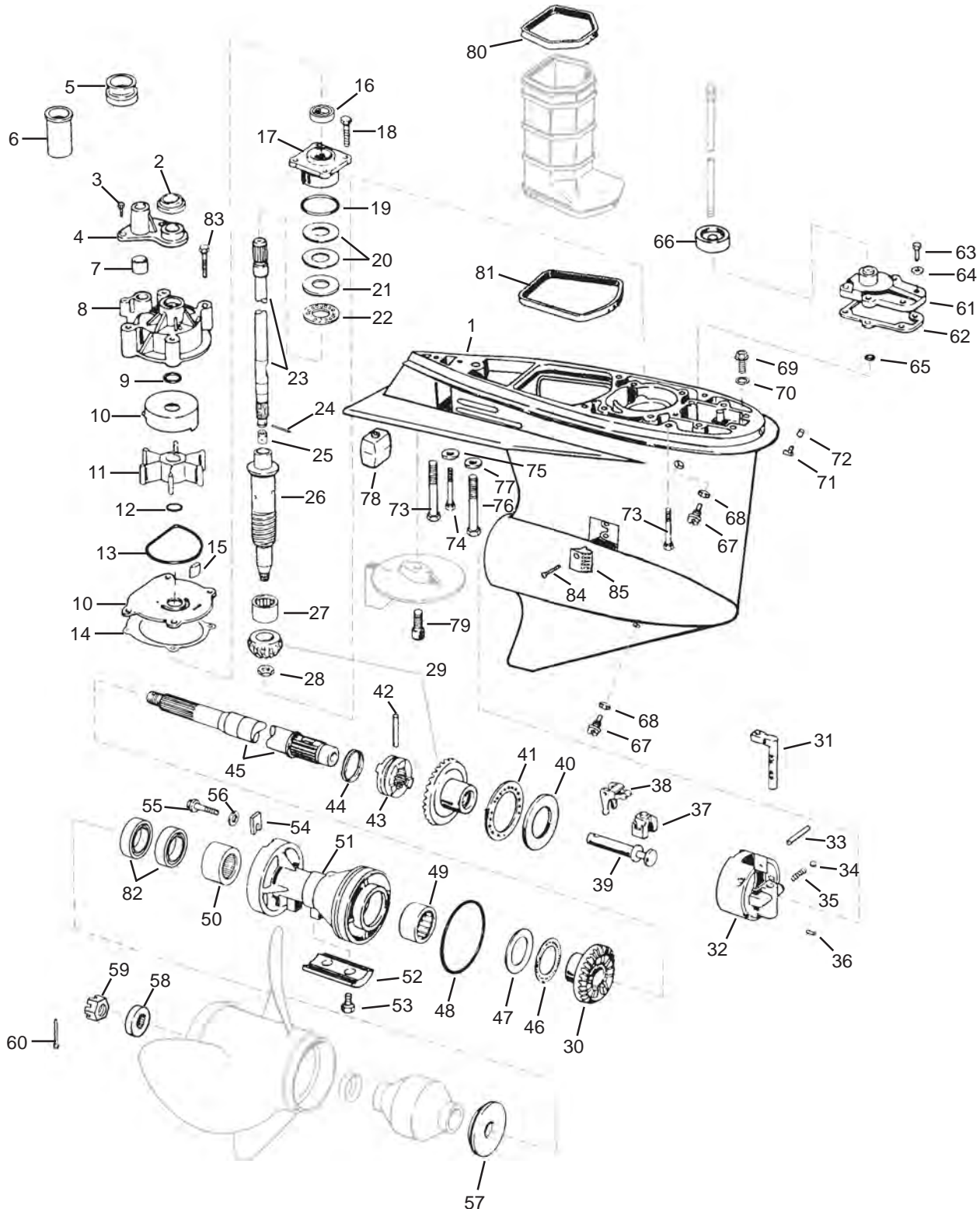
## GEARCASE COMPONENTS - LOOPCHARGED - LARGE

GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
12400	1	438543	Pump Housing	22722	49	385087	Bearing Housing & Seal
12815	2	340619	Pump Cup	22726	49	435519	Bearing Housing & Seal
89940	3	382547	Impeller (1975-1978)	23600	50	323889	Shim .003
89710	3	396725	Impeller (1979-2006)	23610	50	323890	Shim .004
89595	4	308928	Key (1975-1978)	23620	50	317232	Shim .005
89591	4	331901	Key, White (1979-2006)	11192	51	313339	Pinion Nut
89592	4	334897	Key, Black (1979-2006)	27754	52	388651	Cover & Seal Assembly
34330	5	319586	Gasket (1975-1978)	27702	53	391365	Housing & Bearing Assembly
86570	5	324981	Seal (1979-2006)	21105	54	320145	Pin
12551	6	341038	Wear Plate	22493	55	327345	Detent Ball
33150	7	336530	Gasket	11039	56	911961	Spring
86490	8	314008	Grommet	21138	57	331880	Pin
12950	9	319276	Tube Guide	21774	58	313445	Retaining ing
22320	10	908158	Screw	27741	59	324037	Lever
86491	11	341732	Grommet	11390	60	434391	Bearing Carrier
22360	12	302325	Screw	16320	61	385068	Thrust Bearing
86013	13	342786	Oil Seal				
22327	14	909386	Screw				
81340	15	313754	O-ring				
21643	16	317230	Thrust Washer				
11430	17	382343	Bearing				
22671	18	397338	Gear Set				
22672	19	318304	Reverse Gear				
22673	20	318303	Clutch Dog				
27730	21	334163	Cradle				
21644	22	324766	Thrust Washer				
16310	23	385043	Thrust Bearing				
21135	24	313448	Cross Pin				
11052	25	324369	Spring				
22418	26	439185	Prop Shaft				
16300	27	382408	Thrust Bearing				
21641	28	313447	Thrust Washer				
82370	29	313446	O-ring				
22870	30	382407	Bearing				
22400	31	320041	Screw				
81100	32	332584	O-ring				
22860	33	379504	Bearing				
86030	34	330137	Oil Seal				
22230	35	127084	Thrust Washer				
22250	36	315810	Prop Spacer				
22150	37	314503	Prop Nut				
22120	38	314502	Cotter Pin				
45200	39	318372	O-ring				
33420	40	314082	Gasket				
86210	41	324937	Seal				
21731	42	318544	Draining Screw				
31170	43	311598	Gasket				
22420	44	307551	Screw				
12776	45	436745	Anode				
22368	46	313715	Screw				
22366	47	328096	Screw				
12737	48	431708	Anode				

# Johnson / Evinrude

## GEARCASE COMPONENTS - V4 60° (1995-2006)

2.00:1 (.50) Gear Ratio



# Johnson / Evinrude

## GEARCASE COMPONENTS - V4 60° (1995-2006)

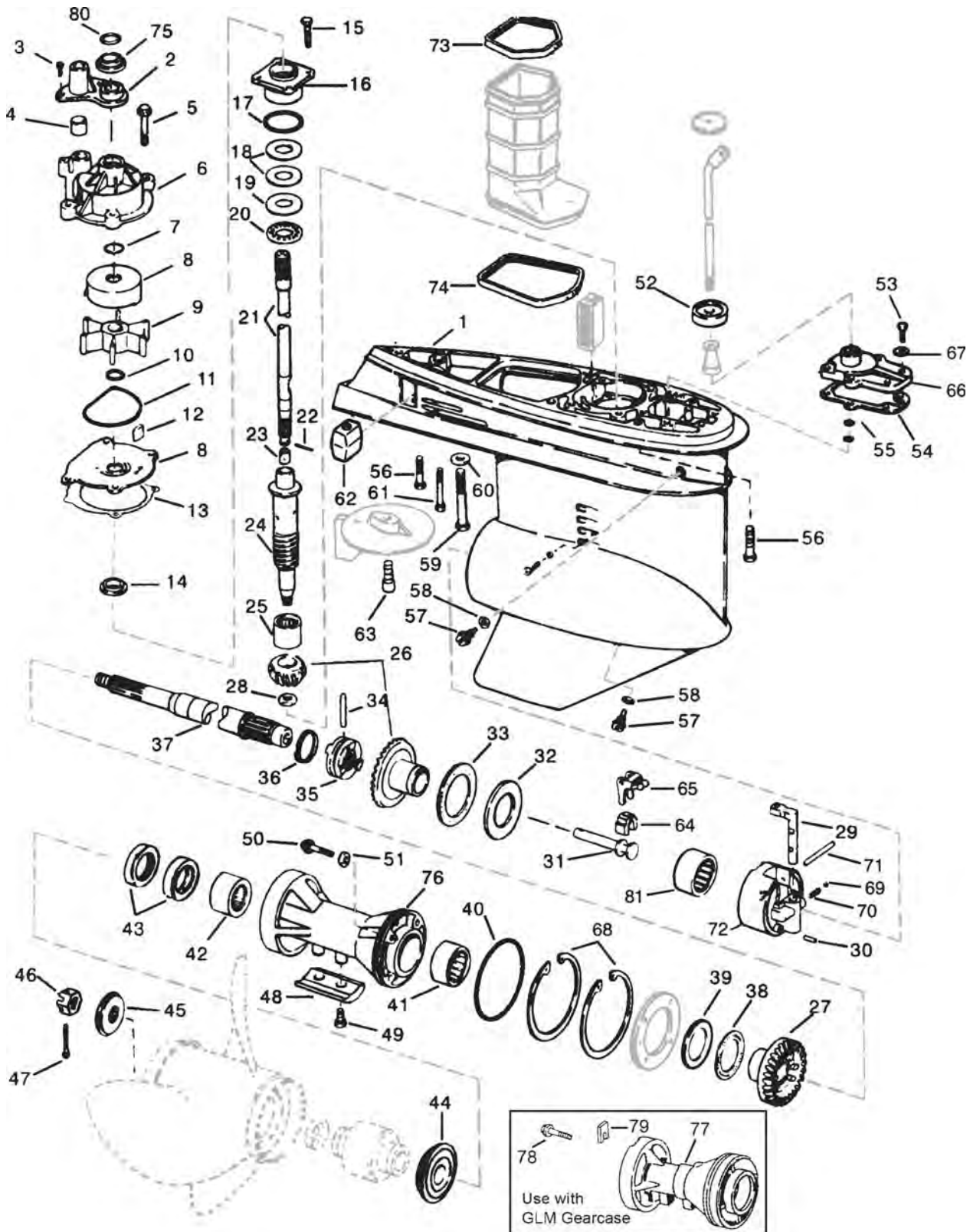
GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
28500	1	5004767	Gearcase Assembly	82370	48	313446	O-ring
86480	2	320943	Grommet	22870	49	382407	Bearing
22370	3	306643	Screw	22860	50	379504	Bearing
12570	4	338893	Tube Guide	11398	51	5000440	Bearing Carrier
86495	5	338601	Grommet	12737	52	431708	Anode
12827	6	338636	Tube Spacer (Short)	22320	53	908158	Screw
86490	7	314008	Grommet	27850	54	333957	Tab
12430	8	435959	Pump Housing (25" Transom)	22373	55	350271	Screw
				21659	56	328743	Washer
12395	8	435990	Pump Housing (20" Transom)	22230	57	127084	Thrust Washer (3-Blade)
				22250	58	315810	Spacer
81250	9	331188	O-ring	22150	59	314503	Prop Nut
12880	10	435027	Cup & Plate Assembly	22120	60	314502	Cotter Pin
89570	11	435821	Impeller	27752	61	5006241	Cover & Seal Assembly
82120	12	302035	O-ring	33020	62	324670	Gasket
86660	13	331353	Seal	22360	63	302325	Screw
33730	14	338484	Gasket	21678	64	328702	Washer
89590	15	331107	Key	45200	65	318372	O-ring
86011	16	341280	Oil Seal	86500	66	321008	Grommet
22720	17	439476	Bearing Housing & Seal	21731	67	318544	Draining Screw
22362	18	317624	Screw	31171	68	311598	Gasket
81380	19	314728	O-ring	22374	69	341220	Screw
23590	20	323362	Shim .003	21677	70	437330	Seal Washer
23580	20	323361	Shim .004	28352	71	336535	Nipple
23510	20	314745	Shim .005	28353	72	305749	Cap
21645	21	327656	Thrust Washer	22371	73	331999	Screw
16330	22	387656	Thrust Bearing	22457	74	341219	Screw
22435	23	5000615	Drive Shaft	21763	75	307161	Lockwasher
21139	24	311538	Pin	22458	76	331998	Screw
28351	25	338504	Retainer	21674	77	330265	Washer
22405	26	346004	Lower Drive Shaft	12776	78	436745	Anode
22880	27	384195	Pinion Bearing	22368	79	313715	Screw
11190	28	314730	Nut	85830	80	320936	Seal
22631	29	436746	P / Forward Gear Set	85840	81	320961	Seal
22632	30	345992	Reverse Gear	86030	82	330137	Oil Seal
27720	31	915954	Detent	22360	83	302325	Screw
27702	32	391365	Housing & Bearing Assembly	22363	84	337061	Screw
21105	33	320145	Pin	21885	85	337778	Screen
22493	34	327345	Detent Ball				
11039	35	911961	Spring				
21138	36	331880	Pin				
27730	37	334163	Cradle				
27741	38	324037	Lever				
27710	39	322941	Shaft				
21644	40	324766	Thrust Washer				
16310	41	385043	Thrust Bearing				
21135	42	313448	Pin				
22633	43	323664	Clutch Dog				
11052	44	324369	Spring				
22419	45	436834	Prop Shaft				
16300	46	382408	Thrust Bearing				
21642	47	314731	Thrust Washer				



# Johnson / Evinrude

## GEARCASE COMPONENTS - V4 90° (1978-1998)

2.00:1 (.50) Gear Ratio



# Johnson / Evinrude

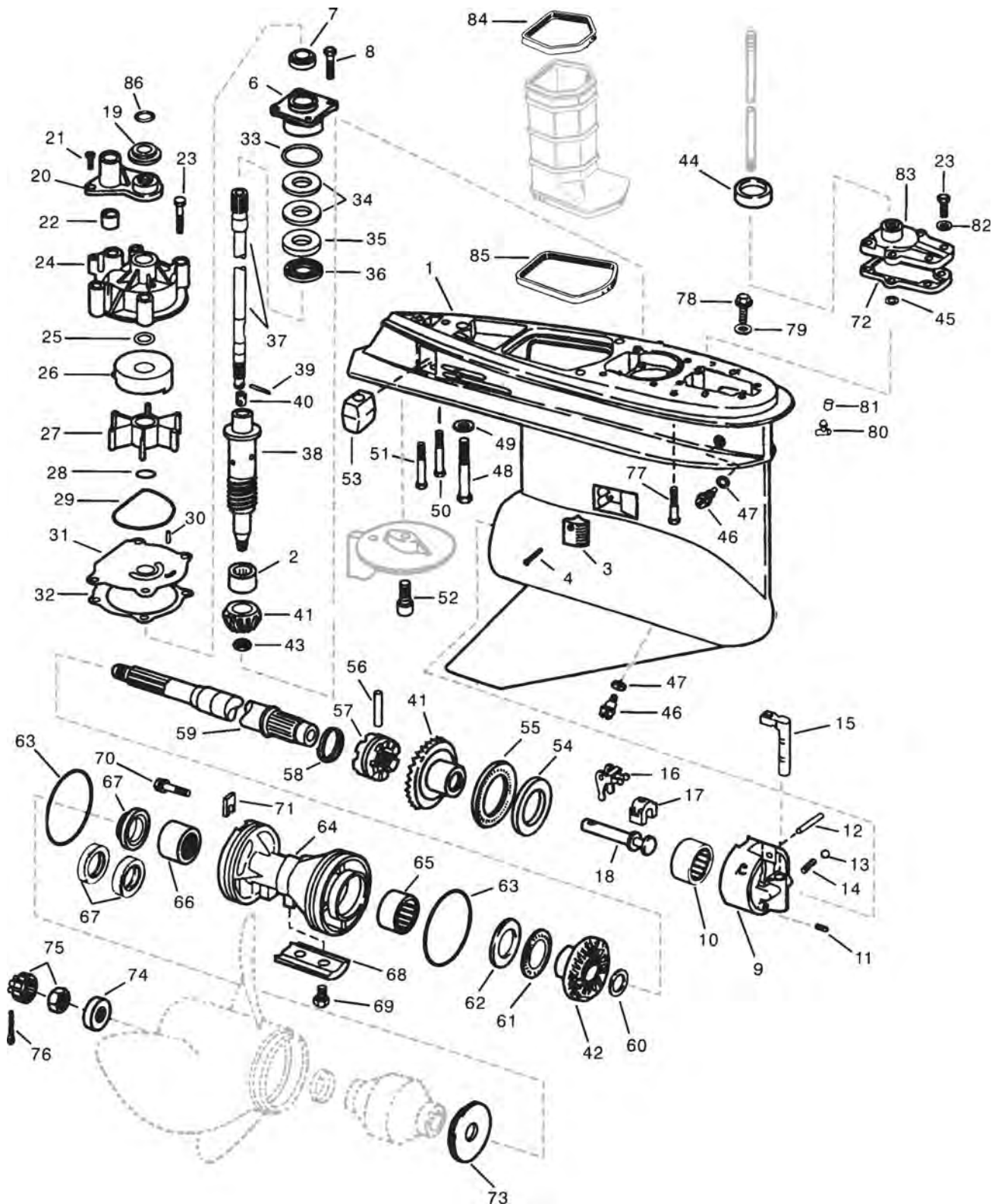
## GEARCASE COMPONENTS - V4 90° (1978-1998)

GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
28200	1	431642	Gearcase Assembly	22250	45	315810	Spacer
12570	2	338893	Tube Guide	22150	46	314503	Nut
22370	3	306643	Screw	22120	47	314502	Cotter Pin
86490	4	314088	Grommet	12737	48	431708	Anode
22360	5	302325	Screw	22320	49	908158	Screw
12430	6	435959	Pump Housing (25" Transom)	22300	50	316563	Screw & Seal
				86640	51	332583	Seal
12395	6	435990	Pump Housing (20" Transom)	86500	52	321008	Grommet
				22360	53	302325	Screw
81250	7	331188	O-ring	33020	54	324670	Gasket
12880	8	435027	Cup & Plate Assembly	45200	55	318372	O-ring
89570	9	5001593	Impeller	22371	56	331999	Screw
82120	10	302035	O-ring	21731	57	318544	Draining Screw
86660	11	331353	Seal	31171	58	311598	Gasket
89590	12	331107	Key	22365	59	331998	Screw
33730	13	338484	Gasket	21674	60	330265	Washer
86011	14	341280	Oil Seal	22366	61	328096	Screw
22362	15	317624	Screw	12776	62	436745	Anode
22720	16	439476	Bearing Housing & Seal	22368	63	313715	Screw
81380	17	314728	O-ring	27730	64	334163	Cradle
23590	18	323362	Shim .003	27741	65	324037	Lever
23580	18	323361	Shim .004	27752	66	5006241	Cover & Seal Assembly
23510	18	314745	Shim .005	21678	67	328702	Washer
21645	19	327656	Thrust Washer	21774	68	313445	Retaining Ring
16330	20	387656	Thrust Bearing	22493	69	327345	Detent Ball
22431	21	5000618	Drive Shaft (L)	11039	70	911961	Spring
22433	21	5000614	Drive Shaft (L)	21105	71	320145	Pin
22432	21	5000626	Drive Shaft (XL)	27702	72	391365	Housing & Bearing Assembly
22434	21	5000623	Drive Shaft (XL)	85830	73	320936	Seal
21139	22	311538	Pin	85840	74	320961	Seal
28351	23	338504	Retainer	86480	75	320943	Grommet
22409	24	346006	Lower Drive Shaft	11392	76	397087	Bearing Carrier
22880	25	384195	Pinion Bearing	11388	77	GLM	Bearing Carrier
22631	26	436746	P / Forward Gear Set	22373	78	350271	Screw
22632	27	340490	Reverse Gear	27850	79	333957	Tab
11190	28	314730	Nut	81165	80	310585	O-ring
27720	29	915954	Detent	22870	81	382407	Bearing
21138	30	331880	Pin				
27710	31	322941	Shaft				
21644	32	324766	Thrust Washer				
16310	33	385043	Thrust Bearing				
21135	34	313448	Cross Pin				
22633	35	323664	Clutch Dog				
11052	36	324369	Spring				
22416	37	436888	Prop Shaft				
16300	38	382408	Thrust Bearing				
21642	39	314731	Thrust Washer				
82370	40	313446	O-ring				
22870	41	382407	Bearing				
22860	42	379504	Bearing				
86030	43	330137	Oil Seal				
22230	44	127084	Thrust Washer				

# Johnson / Evinrude

## GEARCASE COMPONENTS - V4/V6 "O" TYPE (1979-2006)

V4 2.25:1 (.44) Gear Ratio - V6 1.86:1 (.54) Gear Ratio



# Johnson / Evinrude

## GEARCASE COMPONENTS - V4/V6 "O" TYPE (1979-2006)

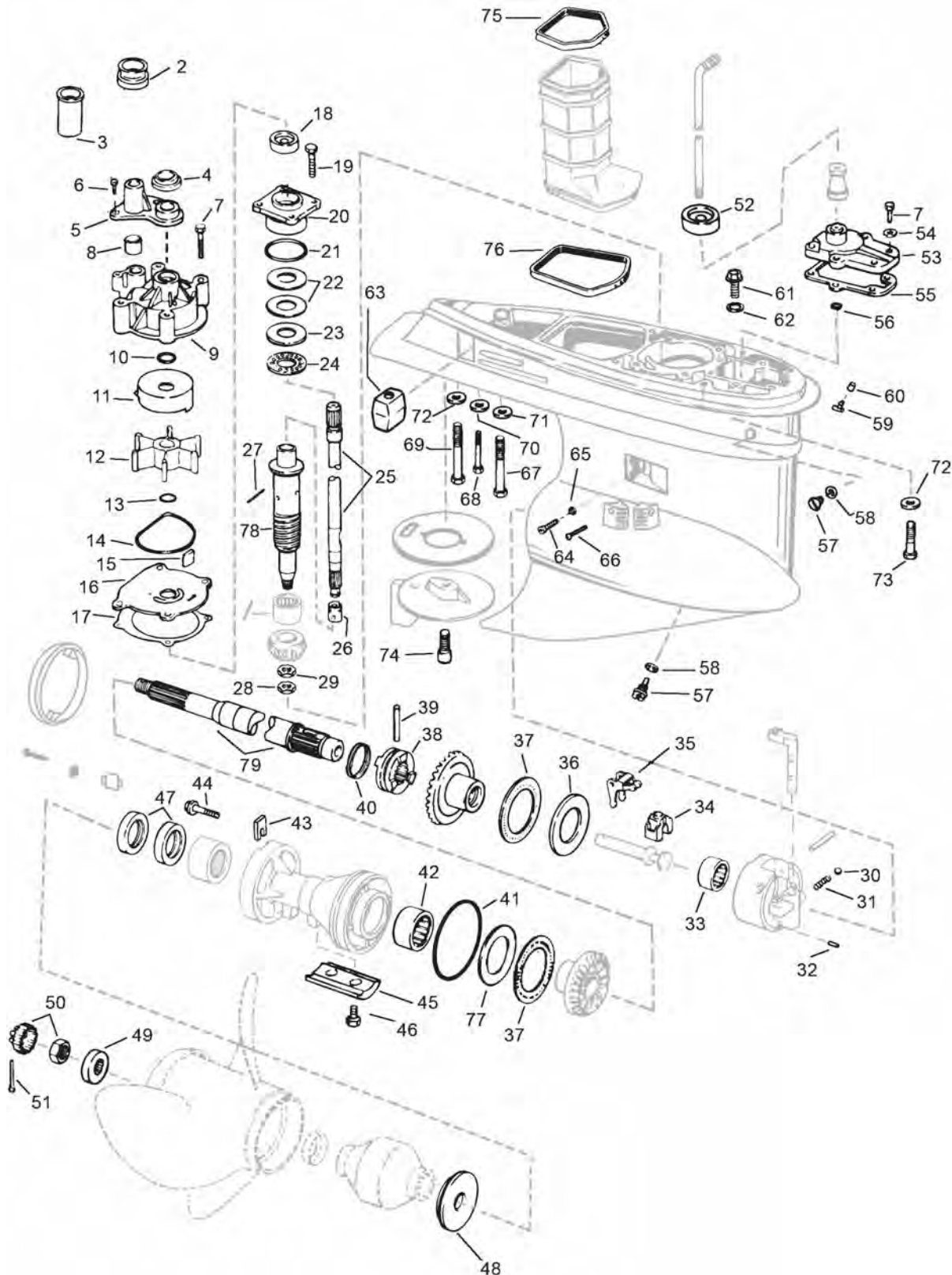
GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
28700	1	439973	Gearcase Assembly / Tube	11190	43	314730	Nut
28800	1	439972	Gearcase Assembly	86500	44	321008	Grommet
21610	2	387817	Pinion Bearing	45200	45	318372	O-ring
21885	3	337778	Screen	21731	46	318544	Draining Screw
22363	4	337061	Screw	31171	47	311598	Gasket
85840	5	320961	Seal	22365	48	331998	Screw
22720	6	439476	Bearing Housing & Seal	21674	49	330265	Washer
86011	7	341280	Oil Seal	22366	50	328096	Screw
22362	8	317624	Screw	22367	51	330263	Screw
27700	9	389455	Housing & Bearing Assembly	22368	52	313715	Screw
22910	10	389039	Bearing	12776	53	436745	Anode
21138	11	331880	Pin	21646	54	327669	Thrust Washer
21137	12	328825	Pin	16340	55	389042	Thrust Bearing
22491	13	160084	Detent Ball	21135	56	313448	Cross Pin
11055	14	911962	Spring	22625	57	337774	Clutch Dog
27720	15	915954	Detent	11052	58	324369	Spring
27740	16	322938	Lever	22414	59	395209	Prop Shaft (1-3/16") V6
27730	17	334163	Cradle	22417	59	5004765	Prop Shaft (1-1/4") V4/V6
27710	18	322941	Shaft	21651	60	336565	Thrust Washer
86480	19	320943	Grommet	16300	61	382408	Thrust Bearing
12570	20	338893	Tube Guide	21642	62	314731	Thrust Washer
22370	21	306643	Screw	82400	63	305123	O-ring
86490	22	314008	Grommet	11406	64	5000074	Bearing Carrier (1-3/16")
22360	23	302325	Screw	11408	64	5004257	Bearing Carrier (1-1/4")
12430	24	435959	Pump Housing (25" Transom)	22870	65	382407	Bearing
				11410	66	387247	Bearing (Inside ø 1-3/16")
12395	24	435990	Pump Housing (20" Transom)	22950	66	434467	Bearing (Inside ø 1-1/4")
				86012	67	341281	Oil Seal (1-1/4") 1 pc.
81250	25	331188	O-ring	86810	67	334950	Oil Seal (1-1/4") 2 pcs.
12811	26	338486	Pump Cup	85130	67	320862	Oil Seal (1-3/16") 2 pcs.
89570	27	5001593	Impeller	12737	68	431708	Anode
82120	28	302035	O-ring	22320	69	908158	Screw
86660	29	331353	Seal	22373	70	350271	Screw
89590	30	331107	Key	27850	71	333957	Tab
12580	31	338485	Wear Plate	33020	72	324670	Gasket
33730	32	338484	Gasket	22221	73	126870	Thrust Washer
81380	33	314728	O-ring	22190	74	320570	Spacer
23590	34	323362	Shim .003	22185	75	398042	Nut & Keeper
23580	34	323361	Shim .004	22142	76	306394	Cotter Pin
23510	34	314745	Shim .005	22371	77	331999	Screw
21645	35	327656	Thrust Washer	22374	78	341220	Screw
16330	36	387656	Thrust Bearing	21677	79	437330	Seal Washer
22435	37	5000615	Drive Shaft (Long)	28352	80	336535	Nipple
22436	37	5000624	Drive Shaft (XL)	28353	81	305749	Cap
22407	38	345905	Lower Drive Shaft	21678	82	328702	Washer
21139	39	311538	Pin	27752	83	5006241	Cover & Seal Assembly
28351	40	338504	Retainer	85830	84	320936	Seal
22651	41	435123	P / Forward Gear Set V4	85840	85	320961	Seal
22623	41	5004938	P / Forward Gear Set V6	81165	86	310585	O-ring
22653	42	336574	Reverse Gear V4				
22624	42	910994	Reverse Gear V6				
22666	41+42	N/A	Gear Set (Heavy Duty)				



# Johnson / Evinrude

## GEARCASE COMPONENTS - V4/V6 "M" TYPE (2002-2006)

V4 2.25:1 (.44) Gear Ratio - V6 1.86:1 (.54) Gear Ratio





# Johnson / Evinrude

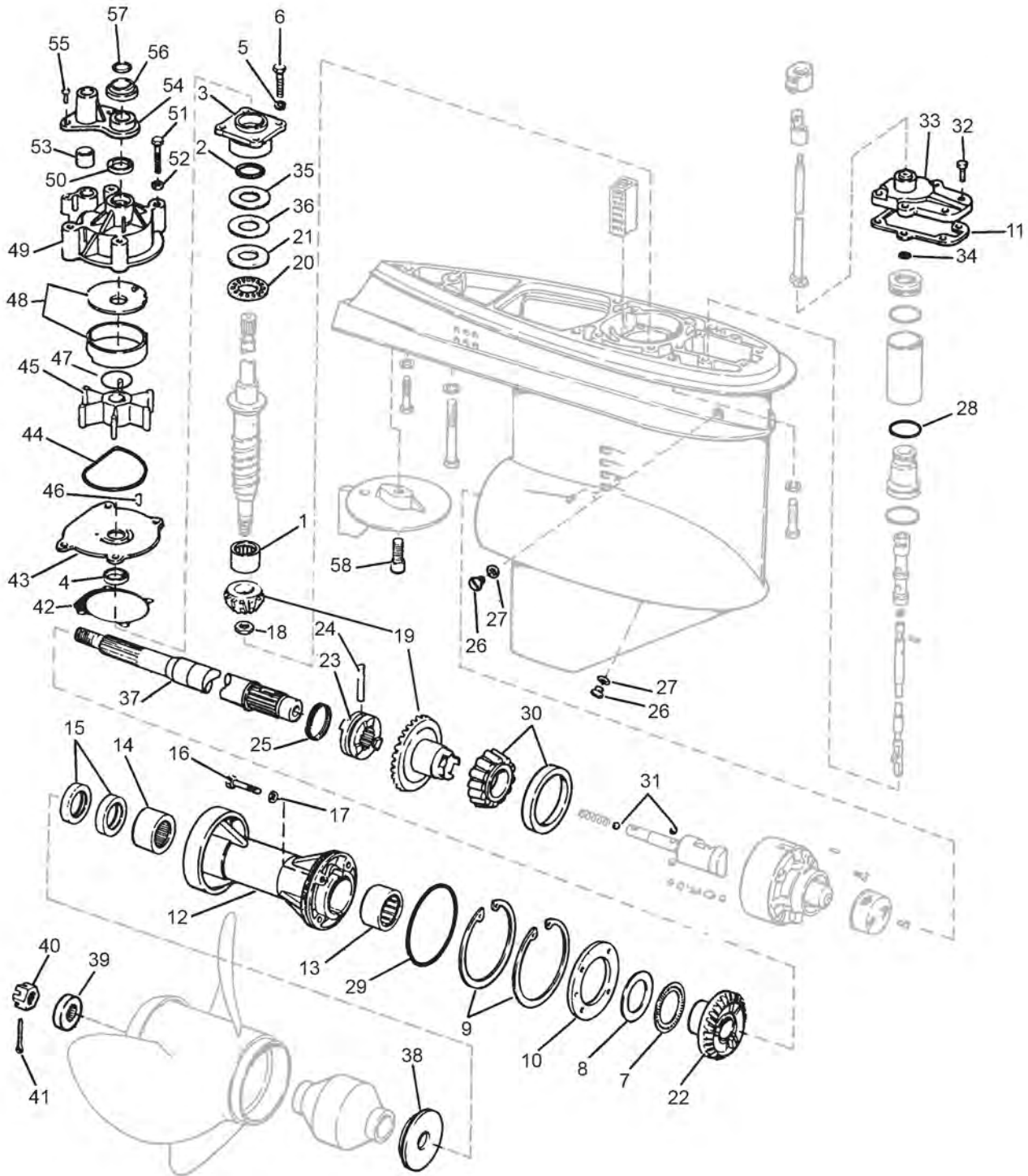
## GEARCASE COMPONENTS - V4/V6 "M" TYPE (2002-2006)

GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
21610	1	387817	Pinion Bearing	22221	48	126870	Thrust Washer
86495	2	338601	Grommet	22190	49	320570	Spacer
12827	3	338636	Tube Spacer	22185	50	398042	Nut & Keeper
86480	4	320943	Grommet	22142	51	306394	Cotter Pin
12570	5	338893	Tube Guide	86500	52	321008	Grommet
22370	6	306643	Screw	27752	53	5006241	Cover & Seal Assembly
22360	7	302325	Screw	21678	54	328702	Washer
86490	8	314008	Grommet	33020	55	352165	Gasket
12430	9	435959	Pump Housing	45200	56	318372	O-ring
81250	10	331188	O-ring	21731	57	318544	Draining Screw
12811	11	338486	Pump Cup	31171	58	311598	Gasket
89570	12	5001593	Impeller	28352	59	336535	Nipple
82120	13	302035	O-ring	28353	60	305749	Cap
86660	14	331353	Seal	22374	61	341220	Screw
89590	15	331107	Key	21677	62	437330	Seal Washer
12580	16	338485	Wear Plate	12776	63	436745	Anode
33730	17	338484	Gasket	22394	64	324852	Screw
86011	18	341280	Oil Seal	86659	65	332584	Seal
22362	19	317624	Screw	22363	66	337061	Screw
22720	20	439476	Bearing Housing & Seal	22365	67	331998	Screw
81380	21	314728	O-ring	22457	68	341219	Screw
23590	22	323362	Shim .003	22367	69	330263	Screw
23580	22	323361	Shim .004	21763	70	307161	Lockwasher
23510	22	314745	Shim .005	21674	71	330265	Washer
21645	23	327656	Thrust Washer	21762	72	330266	Lockwasher
16330	24	387656	Thrust Bearing	22371	73	331999	Screw
22433	25	5000614	Drive Shaft 20" L	22368	74	313715	Screw
22434	25	5000623	Drive Shaft 25" L	85830	75	320936	Seal
22436	25	5000624	Drive Shaft 25" L	85840	76	320961	Seal
28351	26	338504	Retainer	21654	77	349193	Thrust Washer
21139	27	311538	Pin	22403	78	347371	Lower Drive Shaft
11190	28	314730	Nut	22417	79	5004765	Prop shaft
32800	29	350038	Washer				
22491	30	160084	Detent Ball				
11055	31	911962	Spring				
21138	32	331880	Pin				
22910	33	389039	Bearing				
27730	34	334163	Cradle				
27740	35	322938	Lever				
21646	36	327669	Thrust Washer				
16340	37	389042	Thrust Bearing				
22625	38	337774	Clutch Dog				
21135	39	313448	Cross Pin				
11052	40	324369	Spring				
82440	41	326849	O-ring				
22870	42	382407	Bearing				
27850	43	333957	Tab				
22373	44	350271	Screw				
12737	45	431708	Anode				
22320	46	908158	Screw				
86012	47	341281	Oil Seal - 1 pc.				
86810	47	334950	Oil Seal - 2 pcs.				

# Johnson / Evinrude

## GEARCASE COMPONENTS - V6 (1976-1978)

### Hydraulic Shift



# Johnson / Evinrude

## GEARCASE COMPONENTS - V6 (1976-1978)

GLM No.	Ref No.	OEM No.	Description	GLM No.	Ref No.	OEM No.	Description
21610	1	387817	Pinion Bearing	86490	53	314008	Water Tube Grommet
81380	2	314728	O-ring Drive Shaft Bearing	12570	54	338893	Water Tube Cover
22720	3	439476	Bearing Housing & Seal	22370	55	306643	Water Tube Cover Screws
85120	4	321453	Oil Seal, Drive Shaft	86480	56	320943	Water Tube Cover Grommet
N/A	5	301250	Washer, Bearing Housing	81160	57	310585	O-ring
N/A	6	316534	Screw, Bearing Housing	22368	58	313715	Screw, Trim Tab
16300	7	382408	Reverse Thrust Bearing				
21642	8	314731	Reverse Thrust Washer				
N/A	9	321171	Retaining Ring				
N/A	10	321174	Retainer Plate				
N/A	11	321162	Gasket, Shift Cover				
N/A	12	387374	Bearing Carrier, Prop Shaft				
N/A	13	382407	Reverse Gear Bearing				
11410	14	387247	Needle Bearing, Prop Shaft				
85130	15	320862	Prop Shaft Seal				
22300	16	316563	Carrier Retainer Screw				
N/A	17	317178	O-ring Carrier Screw				
11190	18	314730	Pinion Nut				
22621	19	320635	Pinion & Forward Gear				
16330	20	387656	Pinion, Thrust Bearing				
21645	21	327656	Pinion, Thrust Washer				
22624	22	320631	Reverse Gear				
22625	23	320630	Clutch Dog				
21135	24	313448	Pin, Clutch Dog				
11052	25	324369	Spring, Clutch Dog				
22420	26	307551	Drain Plug				
N/A	27	311598	Drain Plug Nylon Washer				
82130	28	320140	O-ring, Shift				
82400	29	305123	O-ring Prop Shaft Carrier				
N/A	30	386319	Forward Gear Bearing Assembly				
22490	31	316506	Detent Ball				
N/A	32	318139	Cover Screw				
N/A	33	387384	Cover & Seal Assembly				
45200	34	318372	O-ring, Shift Rod				
N/A	35	314742	Shim .002				
23510	36	314745	Shim .005				
22415	37	387130	Prop Shaft				
22220	38	333592	Prop Thrust Bushing				
22190	39	320570	Prop Nut Spacer				
22180	40	320569	Prop Nut				
22110	41	309955	Prop Nut Cotter Pin				
33730	42	338484	Gasket, Plate				
12580	43	321188	Plate, Impeller				
86660	44	331353	Seal, Plate to Housing				
89680	45	385528	Impeller, W.P.				
89595	46	308928	Impeller Key				
81250	47	321175	O-ring Impeller				
12811	48	338486	Cup				
12395	49	435990	Housing				
85120	50	321453	Seal				
22360	51	302873	Screw, Water Pump				
21673	52	305981	Washer, Screw				



# Section 3

## Johnson / Evinrude Gearcase Kits

<i>Complete Small Gearcase Assembly Kits - V4 90° .....</i>	<i>40</i>
<i>Rebuild Kits - Small Gearcase - V4 90° .....</i>	<i>40</i>
<i>Complete Small Gearcase Assembly Kits - V4 60° .....</i>	<i>41</i>
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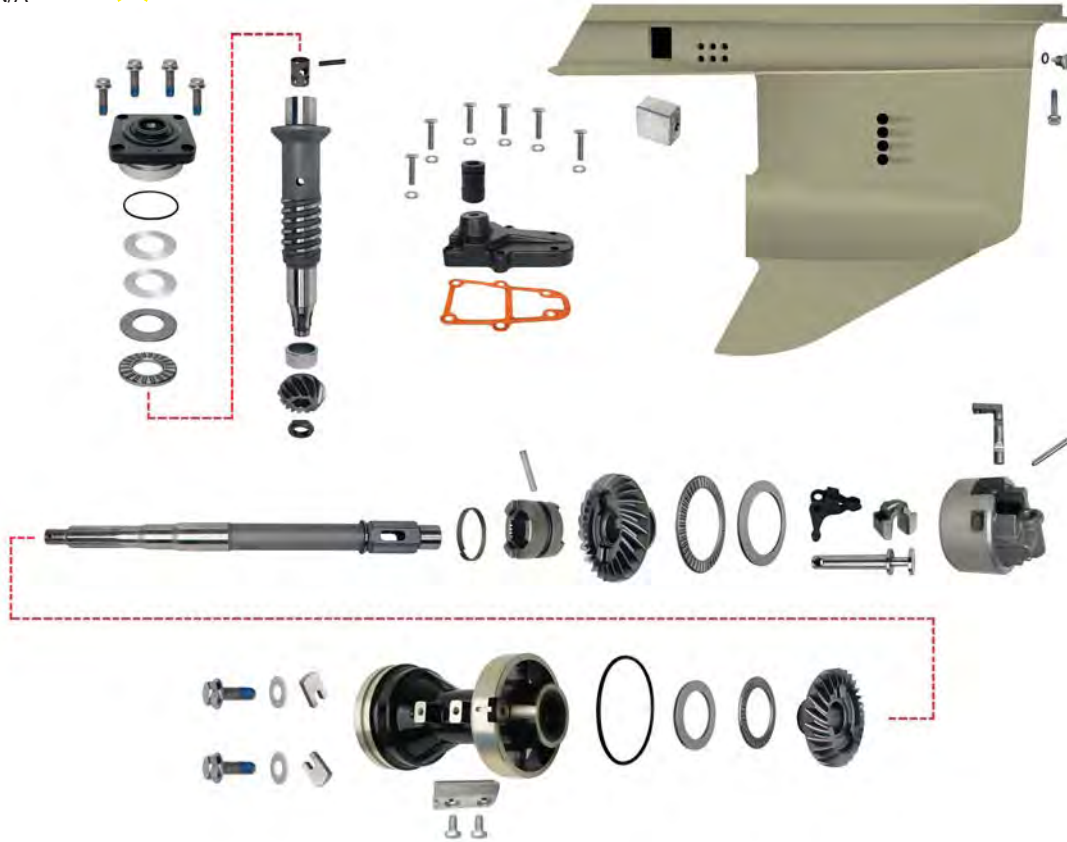
# Johnson / Evinrude

## COMPLETE SMALL GEARCASE ASSEMBLY KITS - V4 90°

No. 28220

NEW

OEM: N/A



## REBUILD KITS - SMALL GEARCASE - V4 90°

No. 28240

NEW

OEM: N/A





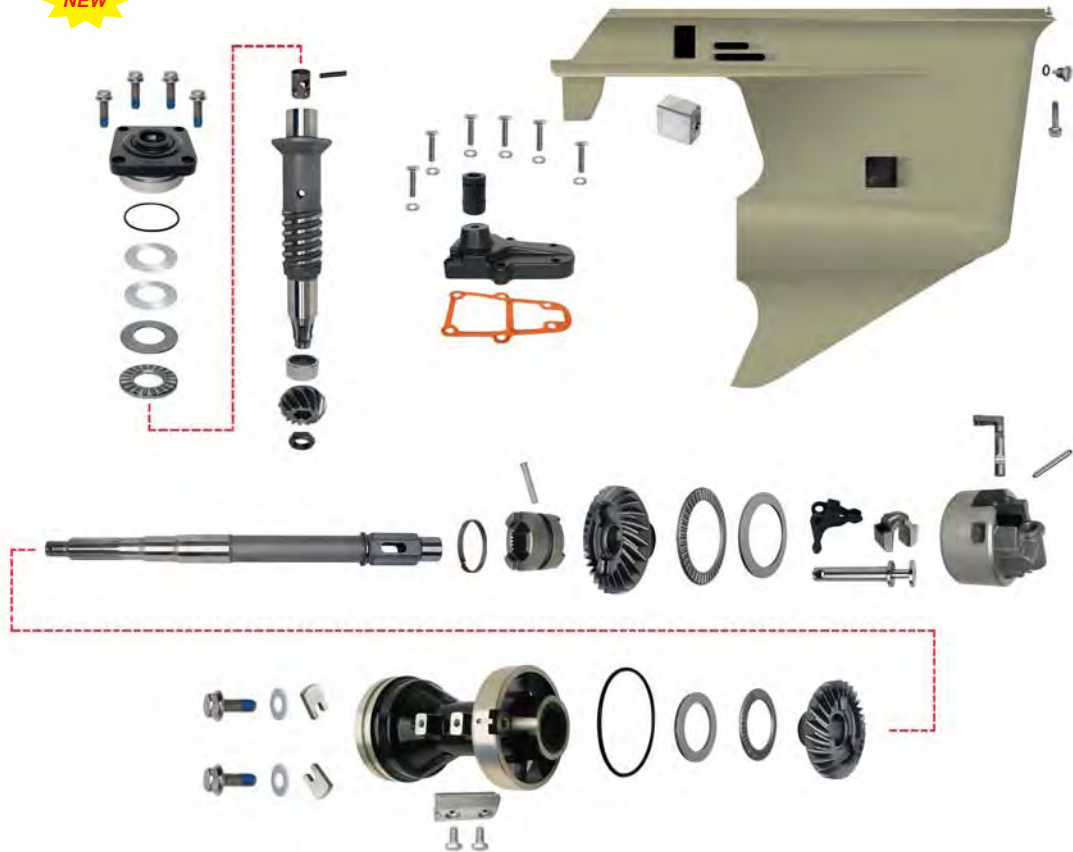
# Johnson / Evinrude

## COMPLETE SMALL GEARCASE ASSEMBLY KITS - V4 60°

No. 28520



OEM: N/A



## REBUILD KITS - SMALL GEARCASE - V4 60°

No. 28540



OEM: N/A



# Johnson / Evinrude

## COMPLETE GEARCASE ASSEMBLY KITS - V4/V6 "O" TYPE

### No. 28720

OEM: N/A  
0.54 Ratio, Pitot Tube  
Speedometer Pick-up  
For V6

### No. 28840

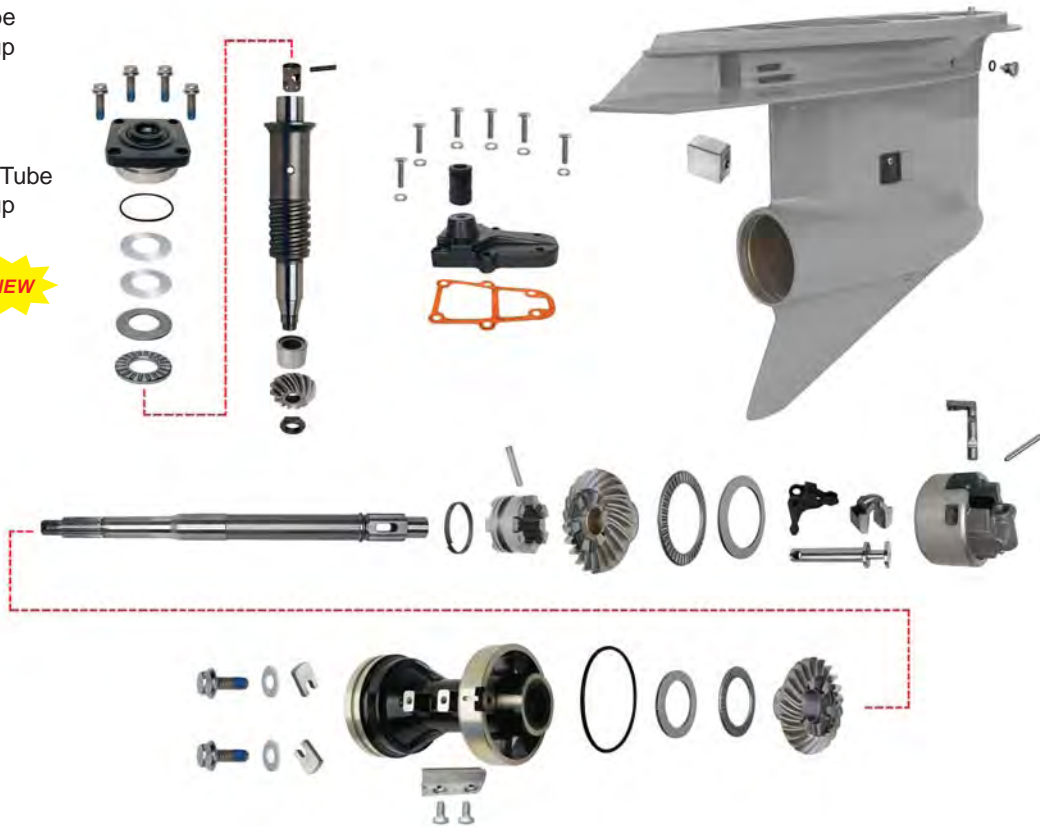
OEM: N/A  
0.54 Ratio, No Pitot Tube  
Speedometer Pick-up  
For V6

### No. 28882

OEM: N/A  
0.44 Ratio  
For V4



All Prop Shafts  $\varnothing$  1-1/4"  
V6 comes with GLM No. 22666 HD Gear Set



## GEARCASE REBUILD KITS - V4/V6 "O" TYPE (1991 & Up)

### No. 28850

OEM: N/A  
0.54 Ratio  
For V6

### No. 28885

OEM: N/A  
0.44 Ratio  
For V4



All Prop Shafts  $\varnothing$  1-1/4"  
V6 comes with GLM No. 22666 HD Gear Set



# Johnson / Evinrude

## GEARCASE SEAL KITS

**No. 87600**

OEM: 5006373



**Fits All V4/V6/V8 (1978-2006) Outboard Engines with a Mechanical Shift Gearcase**

**Kit Contains:**

GLM	OEM	ITEM	GLM	OEM	ITEM
86030 (2)	330137	Prop Shaft Seal V4	82440 (3)	326849	Prop Shaft Carrier O-ring V6 60° Gearcase
85130 (2)	320862	Prop Shaft Seal V4, V6 1-3/16" shaft	82400 (2)	305123	Prop Shaft Carrier O-ring "O"+"M" Type Gearcase
86810 (2)	334950	Prop Shaft Seal V4, V6 1-1/4" shaft	81380	314728	Drive Shaft Carrier O-ring
85120 (2)	321453	Drive Shaft Seal (1985 & Before)	45200 (2)	318372	Shift Cover O-ring
86011	341280	Drive Shaft Seal	33020	324670	Shift Cover Gasket
86240	329922	Drive Shaft Seal	33730	338484	Water Pump Gasket
86250	329923	Drive Shaft Seal	21677	437330	Pitot Hole Plug Sealing Washer
81165	310585	Drive Shaft to Crankcase O-ring	* 22300 (4)	316563	Prop Shaft Carrier Screw and Seal
82370	313446	Prop Shaft Carrier O-ring V4 90° Gearcase	21731 (2)	318544	Drain Plug and Gasket

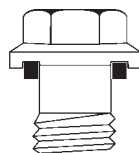
**See the Difference!**

**\*GLM's Carrier Screws No. 22300 and No. 22400 come with ND Plastisol™ Treatment**

**Their Screws**

Q or O-ring screws are difficult to seat properly. They tear and lose integrity with vibration.

**Good.**



O-ring screws



ND Plastisol™ screws

**GLM Screws**

ND Plastisol™ treatment screws provide a positive seal that eliminates leaks. They cushion, insulate, control noise and reduce vibration.

**Better!**

**No. 87612**

OEM: N/A

**SUP TO No. 87600**

**No. 87613**

OEM: N/A

**SUP TO No. 87600**

**No. 87615**

OEM: 434516

**SUP TO No. 87600**

90, 115, V6, V8 (1991-94)  
100, 125 Comm., V6, V8 (1991-93)

# Johnson / Evinrude

## GEARCASE SEAL KITS

### Mechanical Shift Thru-Prop Exhaust

**No. 87602**

OEM: 396350



9.9, 15 HP (1974-Thru)  
9.9, 15 HP 4-Stroke (1974-Thru)

**No. 87680**

OEM: 396351



2-Cyl. Crossflow 20, 25, 30, 35 HP  
Thru-Prop Exhaust

**No. 87614**

OEM: 433550



Small Housing  
40, 48, 50 HP, 2-Cyl. Loopcharged (1989-2005)

**No. 87603**

OEM: 396355



Small Housing  
2-Cyl. Loopcharged 40-60 (1975-1988)  
3-Cyl. Loopcharged 60-75 (1975-1988)

**No. 87601**

OEM: 5000309



Large Housing  
2-Cyl. Loopcharged 40-60 HP (1975-2006)  
3-Cyl. Loopcharged 60-75 HP (1975-2001)

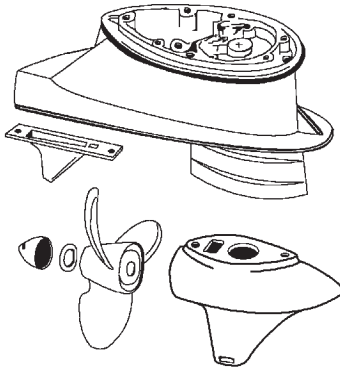


# Johnson / Evinrude

## GEARCASE SEAL KITS

### Electric Shift with Cavitation Plate Exhaust

Use GLM Seal Kits  
No. 87608, No. 87621 for these  
electric shift gearcases.



#### No. 87608

OEM: N/A



V4 Electric Shift  
(1962-1968)

#### No. 87621

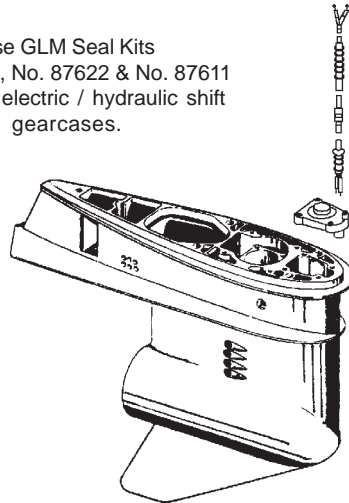
OEM: N/A



40 HP Electric Shift  
(1962-1970)

### Electric / Hydraulic Shift Thru-Prop-Exhaust

Use GLM Seal Kits  
No. 87609, No. 87622 & No. 87611  
for these electric / hydraulic shift  
gearcases.



#### No. 87609

OEM: N/A



3-Cyl., 60 HP Loopcharged  
(1970-1971)

#### No. 87622

OEM: N/A



2-Cyl. Loopcharged  
(1971-1974)

#### No. 87611

OEM: N/A



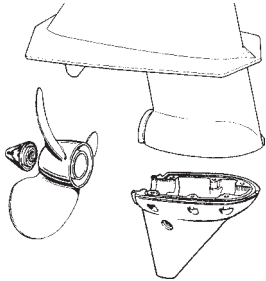
55, 100, 125 HP V4 Crossflow  
(1971-1972)

# Johnson / Evinrude

## GEARCASE SEAL KITS

### Two-Piece Gearcase with Cavitation Plate Exhaust

Use GLM Seal Kits  
 No. 87604, No. 87605, No. 87606, No. 87607  
 No. 87616, No. 87617, No. 87618, No. 87619  
 & No. 87690 for these two-piece gearcases.



#### No. 87604

OEM: N/A



5.5, 6 HP  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1955-1967)

#### No. 87605

OEM: N/A



10 HP  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1958-1967)

#### No. 87606

OEM: N/A



18 HP  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1958-1965)

#### No. 87607

OEM: N/A



25, 28, 30, 33-35, 40 HP, Manual Shift  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1955-1973)

#### No. 87616

OEM: N/A



6 HP  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1967-1968)

#### No. 87617

OEM: N/A



6 HP  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1968-1979)

#### No. 87619

OEM: N/A



20HP, 25 HP  
 Two-Piece Gearcase  
 Cavitation Plate Exhaust  
 (1979-1982)

#### No. 87690

OEM: 396352



25, 28 HP  
 Two-Piece Gearcase  
 Cavitation Plate Exhaust  
 (1985-Up)

#### No. 87618

OEM: N/A



9.5 HP  
 Two-Piece Gearcase Cavitation Plate Exhaust  
 (1967-1973)





# Johnson / Evinrude

## GEARCASE SEAL KITS APPLICATIONS

Models	Year	Seal Kit	Models	Year	Seal Kit
5.5	1955-67	87604	90 Elect.	1964-65	87608
6	1955-67	87604	90 V4	1973-83	87600
6	1967-68	87616	90	1985-Up	87600
6	1968-79	87617	100 Large Prop Shaft	1971-72	87611
7.5	1955-67	87604	100 V4	1973-83	87600
9.5 B Suffix	1958-67	87605	100 Comm.	1984-95	87600
9.5 M Suffix	1967-73	87618	100	1991-01	87600
9.9/15	1974-Up	87602	110 V4	1973-83	87600
10	1958-67	87605	110	1985-Up	87600
18	1958-65	87606	115 Small Prop Shaft	1969-71	87609
20	1966-73	87606	115 V4	1973-83	87600
20	1981-82	87619	115	1985-Up	87600
20	1985-Up	87680	120	1985-92	87600
25	1955-59	87607	120	1993-Up	87600
25	1969-78	87606	125 Large Prop Shaft	1971-72	87611
25	1979-82	87619	125	1991-98	87600
25	1984	87690	125 Comm.	1991-93	87600
25	1985-Up	87680	135 V4	1973-83	87600
25	1990-95	87614	140 V4	1973-83	87600
25 Comm.	1985-Up	87690	140	1985-94	87600
28	1962-70	87607	150 V6	1978-86	87600
28	1985-Up	87690	150	1991-95	87600
30	1955-59	87607	155 Comm.	1984-93	87600
30	1976-95	87680	175 V6	1977-86	87600
33	1962-70	87607	175	1991-Up	87600
35	1955-59	87607	185	1991-93	87600
35	1977-92	87680	200 V6	1976-86	87600
40 Manual Shift	1960-73	87607	200	1991-Up	87600
40 Elect. Shift	1962-70	87621	V6	1979-92	87600
40	1976-88	87603	225	1991-95	87600
40	1989-Up	87614	235 V6	1977-86	87600
48	1976-88	87603	V8	1985-91	87600
48	1989,92-93	87614	250 V8	1991-95	87600
50	1971-74	87622	300 V8	1991-95	87600
50	1976-88	87603	<b>OMC SEA DRIVE</b>		
50	1989-Up	87614			
55	1968-69	87609	Model	Year	Seal Kit
55	1976-88	87603	1.6 L	1985-90	87600
60 Elect.	1960-68	87608	1.8 L	1987	87600
60	1970-71	87609	2.0 L	1988-90	87600
60 2-Cyl.	1976-88	87603	2.5 L	1984-85	87600
60 3-Cyl.	1978-01	87601	2.6 L	1984-86	87600
65 Elect.	1960-68	87608	2.7 L	1987	87600
65	1978-01	87601	3.0 L	1988-90	87600
70	1978-01	87601	3.6 L	1987	87600
75 Elect.	1960-68	87608	4.0 L	1989-90	87600
75	1978-01	87601			
75 Small Gearcase	1976-88	87603			
V4	1978-84	87600			
85 Elect.	1968	87608			
85 Small Prop Shaft	1969-71	87609			
85 Large Prop Shaft	1971-72	87611			
85 V4	1973-83	87600			
85	1991-95	87600			
88	1985-Up	87600			



# Section 4

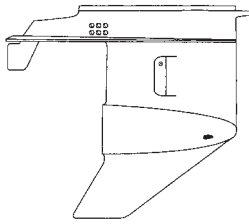
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## Johnson / Evinrude Gears and Clutch Dogs

<i>Lower Gear Housing Gears - 2-Cyl. Loopcharged .....</i>	<i>50</i>
<i>Lower Gear Housing Gears - 2 &amp; 3 -Cyl. Loopcharged .....</i>	<i>51-52</i>
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# Johnson / Evinrude

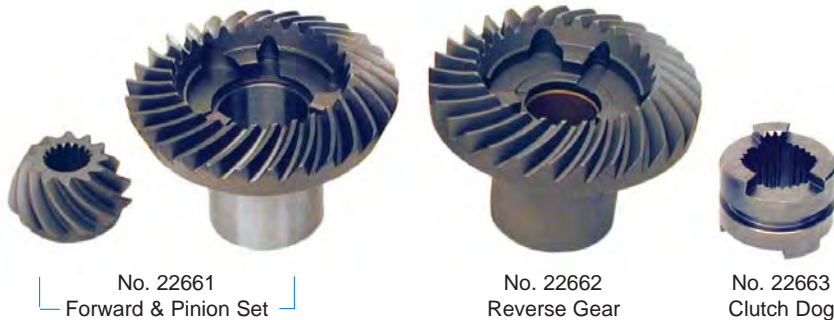
## LOWER GEAR HOUSING GEARS - 2-CYLINDER LOOPCHARGED



### 2-Cylinder Loopcharged 40-50 HP (1989-2005) with Small\* Gear Housing - "New" Style

\* The 2-Cylinder loopcharged engines were available with a large or small gear housing.

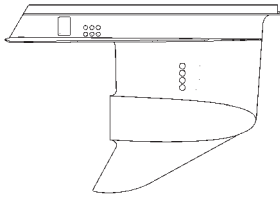
2.42:1 Ratio  
.41 Ratio



<b>COMPLETE GEAR SET</b> - Forward/Pinion/Reverse - 12/29 teeth - Comes with the GLM No. 22663 clutch	<b>GLM No. 22660</b>	OEM No. N/A
<b>FORWARD &amp; PINION SET</b> - 12/29 teeth	<b>GLM No. 22661</b>	OEM No. 397627
<b>REVERSE GEAR</b> - 29 teeth	<b>GLM No. 22662</b>	OEM No. 332489
<b>CLUTCH</b>	<b>GLM No. 22663</b>	OEM No. 332491

# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - 2 & 3-CYLINDER LOOPCHARGED



**2-Cyl. Loopcharged 40-60 HP (1975-1988)**  
**3-Cyl. Loopcharged 60-75 HP (1975-1988)**  
**with Small\* Gear Housing - "Old" Style**

\* The 2-Cylinder and 3-Cylinder loopcharged engines were available with a large or small gear housing.

2.42:1 Ratio  
 .41 Ratio



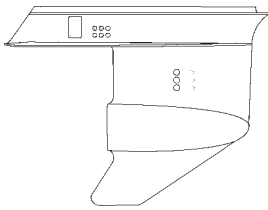
No. 22681  
 Forward & Pinion Set with Reverse Gear

No. 22683  
 Clutch Dog

<p><b>COMPLETE GEAR SET</b></p> <ul style="list-style-type: none"> <li>- Forward/Pinion/Reverse</li> <li>- 12/29 teeth</li> <li>- Comes with the GLM No. 22683 clutch</li> </ul>	<p><b>GLM No. 22680</b></p>	<p>OEM No. N/A</p>
<p><b>FORWARD &amp; PINION SET with REVERSE GEAR</b></p> <ul style="list-style-type: none"> <li>- 12/29 teeth</li> </ul>	<p><b>GLM No. 22681</b></p>	<p>OEM No. 433570</p>
<p><b>CLUTCH</b></p>	<p><b>GLM No. 22683</b></p>	<p>OEM No. 319895</p>

# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - 2 & 3-CYLINDER LOOPCHARGED



**2-Cyl. Loopcharged 40-60 HP (1986-2006)**  
**3-Cyl. Loopcharged 60-75 HP (1975-2001)**  
**with the Large\* Gear Housing**

\* The 2-Cylinder and 3-Cylinder loopcharged engines were available with a large or small gear housing.

2.42:1 Ratio  
 .41 Ratio



No. 22671  
 Forward & Pinion Set

No. 22672  
 Reverse Gear

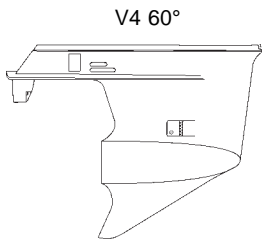
No. 22673  
 Clutch Dog

<b>COMPLETE GEAR SET</b> - Forward/Pinion/Reverse - 12/29 teeth - Comes with the GLM No. 22673 clutch	<b>GLM No. 22670</b>	OEM No. N/A
<b>FORWARD &amp; PINION SET</b> - 12/29 teeth	<b>GLM No. 22671</b>	OEM No. 397338
<b>REVERSE GEAR</b> - 29 teeth	<b>GLM No. 22672</b>	OEM No. 318304
<b>CLUTCH</b>	<b>GLM No. 22673</b>	OEM No. 318303



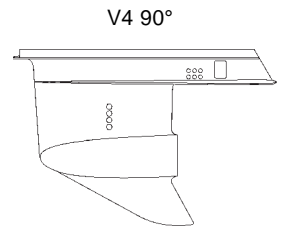
# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - V4 60° & V4 90°



V4 60°

### V4 60° & V4 90° Replacement Gears for the Small\* Gear Housing



V4 90°

These gear sets are an exact copy of the gears used in the 1978-2006 V4 Johnson / Evinrude Outboards with the small gear housing.

\* The V4 engines were available with a large or small gear housing.

2:1 Ratio  
.50 Ratio



No. 22631  
Forward & Pinion Set

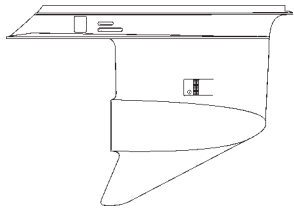
No. 22632  
Reverse Gear

No. 22633  
Clutch Dog

<b>COMPLETE GEAR SET</b> - Forward/Pinion/Reverse - 13/26 teeth - Comes with the GLM No. 22633 clutch	<b>GLM No. 22630</b>	OEM No. N/A
<b>FORWARD &amp; PINION SET</b> - May be used with OMC reverse gear - 13/26 teeth	<b>GLM No. 22631</b>	OEM No. 436746
<b>REVERSE GEAR</b> - May be used with OMC forward and pinion gears - 26 teeth	<b>GLM No. 22632</b>	OEM No. 345992
<b>CLUTCH</b>	<b>GLM No. 22633</b>	OEM No. 323664

# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - V4 90° "O" TYPE



### V4 90° Replacement Gears for the Large\* "O" Type Gear Housing

These gear sets are an exact copy of the gears used in the 1978-2006 V4 Johnson / Evinrude Outboards with the large "O" type gear housing.

\* The V4 engines were available with a large or small gear housing.

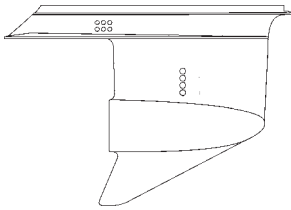
2.25:1 Ratio  
.44 Ratio



<b>COMPLETE GEAR SET</b> - Forward/Pinion/Reverse - 12/27 teeth - Comes with the GLM No. 22625 clutch	<b>GLM No. 22650</b>	OEM No. N/A
<b>FORWARD &amp; PINION SET</b> - 12/27 teeth	<b>GLM No. 22651</b>	OEM No. 435123
<b>REVERSE GEAR</b> - 27 teeth	<b>GLM No. 22653</b>	OEM No. 336574
<b>CLUTCH</b>	<b>GLM No. 22625</b>	OEM No. 337774 OEM No. 914716

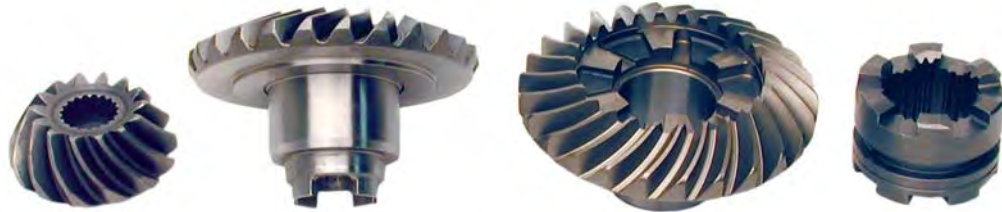
# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - V6 MECHANICAL/HYDRAULIC SHIFT



### V6 Mechanical/Hydraulic Shift 200 HP (1976) 175, 200 HP (1977) 150, 175, 200, 235 HP (1978)

These gear sets are an exact copy of the gears used in the first V6 Johnson / Evinrude Outboards gear housings.  
Forward gear drives a hydraulic pump.



No. 22621  
Forward & Pinion Set

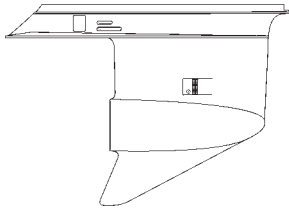
No. 22652  
Reverse Gear

No. 22625  
Clutch Dog

<b>COMPLETE GEAR SET</b> - Forward/Pinion/Reverse - 14/26 teeth - Comes with the GLM No. 22625 clutch	<b>GLM No. 22620</b>	OEM No. N/A
<b>FORWARD &amp; PINION SET</b> - 14/26 teeth	<b>GLM No. 22621</b>	OEM No. 5004941
<b>REVERSE GEAR &amp; CLUTCH</b> - 26 teeth	<b>GLM No. 22652</b>	OEM No. 437297
<b>CLUTCH</b>	<b>GLM No. 22625</b>	OEM No. 337774 OEM No. 914716 OEM No. 915272

# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - V6 90° "O" TYPE



### V6 90° Replacement Gears for the "O" Type Gear Housing

These gear sets are an exact copy of the gears used in the 1978-2006 V6 Johnson / Evinrude Outboards with the large "O" type gear housing.

1.86:1 Ratio  
.54 Ratio

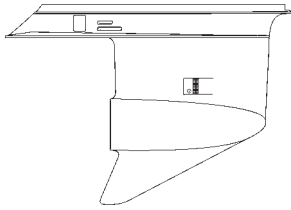


<b>COMPLETE GEAR SET</b> - Forward/Pinion/Reverse - 14/26 teeth - Comes with the GLM No. 22625 clutch	<b>GLM No. 22622</b>	OEM No. 5004218
<b>FORWARD &amp; PINION SET</b> - May be used with OMC reverse gear - 14/26 teeth	<b>GLM No. 22623</b>	OEM No. 435020 OEM No. 5004216 OEM No. 5004938
<b>REVERSE GEAR</b> - May be used with OMC forward and pinion gears - 26 teeth - Includes thrust washer No. 21651*	<b>GLM No. 22624</b>	OEM No. 336561 OEM No. 910994
<b>CLUTCH</b>	<b>GLM No. 22625</b>	OEM No. 337774

\* For model year 1991 Johnson / Evinrude increased the prop shaft diameter at the carrier needle bearing (not the prop splines) from 1-3/16" to 1-1/4". Some older gearcases may be fitted with the new large diameter prop shaft. The large diameter prop shaft utilizes a thrust washer (included with this gear set) between the prop shaft and reverse gear. Discard the thrust washer when using the small diameter prop shaft.

# Johnson / Evinrude

## LOWER GEAR HOUSING GEARS - V6 90° HEAVY DUTY



### V6 90° HEAVY DUTY Replacement Gears for the “O” Type Gear Housing

When all three gears need to be replaced in your V6 Johnson / Evinrude Outboard the installation of the new GLM No. 22666 heavy-duty gear set is highly recommended. The heavy-duty gear sets can be used with all V6 outboards from 1979-2006 with the “O” type gear housings. It is recommended that the new clutch GLM No. 22625 also be installed with the heavy-duty gears.



**Gear Set GLM No. 22666**

#### **IMPORTANT NOTE:**

*The new heavy-duty GLM No. 22666 gears will not interchange with the standard gears. For individual gear replacement, you must use the standard duty GLM No. 22623 pinion and forward gears or the GLM No. 22624 reverse gear.*

#### **✓ STRONGER**

OEM gear sets are machined from 8620 forged steel. The GLM gear set is machined from a higher alloy forged steel. The stronger teeth and higher alloy steel results in a gear that is 50% stronger than any other comparable gear set. These durable gears are capable of operating with up to 300 horsepower.

#### **✓ MORE DURABLE**

The new GLM gear set has fewer, larger, and stronger teeth. The pinion gear has 12 teeth and the forward and reverse gears have 22 teeth. The original OEM gear set has 14 teeth on the pinion and 26 teeth on the forward and reverse gears.

#### **✓ QUIETER**

During the gear machining process, an additional pass is made over each tooth for a finer surface. This makes the gear operation especially quiet.



# Johnson / Evinrude

## GEAR SET APPLICATIONS 2 & 3-CYL. & V4

HP	Year	Complete Gear Set w/ Clutch	Forward & Pinion	Reverse Gear	Clutch
<b>2 &amp; 3-Cyl. Loopcharged</b>					
25D Small Gearcase	1989-95	22660	22661	22662	22663
35 (AR, AE & AT Only) Small Gearcase	1987	22680	22681	22681	22683
40 Small Gearcase	1984-88	22680	22681	22681	22683
40 Small Gearcase	1989-97	22660	22661	22662	22663
48 Small Gearcase	1987-88	22680	22681	22681	22683
48 Small Gearcase	1989-96	22660	22661	22662	22663
50 Small Gearcase	1979-88	22680	22681	22681	22683
50 Small Gearcase	1989-97	22660	22661	22662	22663
50 (S CYD Model) Large Gearcase	1995-97	22670	22671	22672	22673
55 Electric Start Small Gearcase	1979-81	22680	22681	22681	22683
60 Electric Start Small Gearcase	1980-85	22680	22681	22682	22683
60 (3-Cyl. 20" Model) Large Gearcase	1986-97	22670	22671	22672	22673
65 Comm. Large Gearcase	1984-97	22670	22671	22672	22673
70 E Model Large Gearcase	1975	22670	22671	22672	22673
70 20" Model Large Gearcase	1976-97	22670	22671	22672	22673
75 20" Model Large Gearcase	1975-88	22670	22671	22672	22673
<b>V4</b>					
85	1977	-	-	22632	22633
85	1978-80, 1991-95	22630	22631	22632	22633
88	1987-96	22630	22631	22632	22633
90	1981-97	22630	22631	22632	22633
90 V4 60° 2.25:1 "O" Gearcase	1995-99	22650	22651	22653	22625
100	1979-80	22630	22631	22632	22633
100	1989-90	22630	22631	22632	22633
100 2.25:1 "O" Gearcase	1991	22650	22651	22653	22625
100 Comm. (S Prefix Only)	1989-90	22630	22631	22632	22633
100 Comm. 2.25:1 "O" Gearcase	1987, 92, 93	22650	22651	22653	22625
100 Comm. D 2.25:1 "O" Gearcase	1994-99	22650	22651	22653	22615
100 Comm. (E J Models) 2.25:1 "O" Gearcase	1989	22650	22651	22653	22625
100 Comm. (2 Pcs. D/Shaft) 2.25:1 "O" Gearcase	1990	22650	22651	22653	22625
110	1986-89	22630	22631	22632	22633
112	1994-96	22630	22631	22632	22633
115	1977	22630	22631	22632	22633
115	1990-97	22630	22631	22632	22633
115 V4 60° 2.25:1 "O" Gearcase	1995-99	22650	22651	22653	22625
120	1986-92	22630	22631	22632	22633
120 2.25:1 "O" Gearcase	1990	22650	22651	22653	22625
120 TL, TX	1993	22630	22631	22632	22633
120 TX 2.25:1 "O" Gearcase	1993	22650	22651	22653	22625
125 Comm. (ESX Prefix Only)	1989-90	22630	22631	22632	22633
125 Comm. 2.25:1 "O" Gearcase	1989-92	22650	22651	22653	22625
125 Comm. E, R 2.25:1 "O" Gearcase	1993-96	22650	22651	22653	22625
125 ESX (F Suffix) 2.25:1 "O" Gearcase	1993	22650	22651	22653	22625
125 ESX (S Suffix Only)	1993	22630	22631	22632	22633
130 2.25:1 "O" Gearcase	1997	22650	22651	22653	22625
140	1978-84	22630	22631	22632	22633
140	1986-87	22630	22631	22632	22633
140 TL	1988-94	22630	22631	22632	22633
140 TX 2.25:1 "O" Gearcase	1988-90, 92, 93	22650	22651	22653	22625



# Johnson / Evinrude

GEAR SET APPLICATIONS V6					
HP	Year	Complete Gear Set w/ Clutch	Forward & Pinion	Reverse Gear	Clutch
<b>V6</b>					
150 Mechanical/Hydraulic Shift	1978	22620	22621	22652	22625
150	1979-87	22622	22623	22624	22625
150	1979-87	-	22666 Heavy Duty Gears		22625
150	1988-90	22622	22623	22624	22625
150	1988-90	-	22666 Heavy Duty Gears		22625
150	1991-97	22622	22623	22624	22625
150	1991-97	-	22666 Heavy Duty Gears		22625
150 Comm.	1993-95	22622	22623	22624	22625
150 Comm.	1993-95	-	22666 Heavy Duty Gears		22625
150 Comm.	1989-90	22622	22623	22624	22625
150 Comm.	1989-90	-	22666 Heavy Duty Gears		22625
155 Comm. WTA	1989	22650	22651	22653	22625
155 Comm. WTP	1989	22622	22633	22624	22625
155 Comm. WTP	1989	-	22666 Heavy Duty Gears		22625
175 Mechanical/Hydraulic Shift	1977-78	22620	22621	22652	22625
175	1979-87	22622	22623	22624	22625
175	1979-87	-	22666 Heavy Duty Gears		22625
175	1988-90	22622	22633	22624	22625
175	1988-90	-	22666 Heavy Duty Gears		22625
175	1991-97	22622	22623	22624	22625
175	1991-97	-	22666 Heavy Duty Gears		22625
185	1984-85	22622	22623	22624	22625
185	1984-85	-	22666 Heavy Duty Gears		22625
185	1990	22622	22623	22624	22625
185	1990	-	22666 Heavy Duty Gears		22625
185	1991-94	22622	22623	22624	22625
185	1991-94	-	22666 Heavy Duty Gears		22625
200 Mechanical/Hydraulic Shift	1976-78	22620	22621	22652	22625
200	1979-83	22622	22623	22624	22625
200	1979-83	-	22666 Heavy Duty Gears		22625
200	1986-87	22622	22633	22624	22625
200	1986-87	-	22666 Heavy Duty Gears		22625
200	1988-90	22622	22623	22624	22625
200	1988-90	-	22666 Heavy Duty Gears		22625
200	1991-97	22622	22623	22624	22625
200	1991-97	-	22666 Heavy Duty Gears		22625
200 Comm.	1990-91	22622	22623	22624	22625
200 Comm.	1990-91	-	22666 Heavy Duty Gears		22625
225	1986-87	22622	22623	22624	22625
225	1986-87	-	22666 Heavy Duty Gears		22625
225	1988-90	22622	22623	22624	22625
225	1988-90	-	22666 Heavy Duty Gears		22625
225	1991-97	22622	22623	22624	22625
225	1991-97	-	22666 Heavy Duty Gears		22625
235 Mechanical/Hydraulic Shift	1978	22620	22621	22652	22625
235	1979-85	22622	22623	22624	22625
235	1979-85	-	22666 Heavy Duty Gears		22625
1.6L Comm.	1988	22650	22651	22653	22625



# Section 5

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## Johnson / Evinrude Gearcase Shift Components

<i>Shift Components - 2-Cyl. Loopcharged (1989-2005) - Small Gearcase .....</i>	62
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# Johnson / Evinrude

## SHIFT COMPONENTS - 2-CYL. LOOPCHARGED (1989-2005)

### Small Gearcase "New"

**No. 11051** **No. 21133**  
 SPRING CROSS PIN  
 OEM: 320311 OEM: 320310



**No. 22663** **No. N/A**  
 CLUTCH DOG SPRING  
 OEM: 332491 OEM: 332484



**No. N/A**  
 SHAFT  
 OEM: 332503



**No. 27940**  
 CVR. & SEAL ASSY.  
 OEM: 434588



**No. 22490**  
 DETENT BALLS  
 OEM: 316506



**No. 82230**  
 O-RING  
 OEM: 913921



## SHIFT COMPONENTS - 2 & 3-CYL. LOOPCHARGED (1975-1988)

### Small Gearcase "Old"

**No. 11051** **No. 21133**  
 SPRING CROSS PIN  
 OEM: 320311 OEM: 320310



**No. 22683**  
 CLUTCH DOG  
 OEM: 319895



**No. 27712**  
 SHAFT  
 OEM: 320172



**No. 27756** NEW  
 CVR. & SEAL ASSY.  
 OEM: 387336



**No. 27704**  
 HSG. & BEARING ASSY.  
 OEM: 389637



**No. 21105**  
 PIN  
 OEM: 320145



**No. 27742**  
 LEVER  
 OEM: 320120



**No. 27723**  
 DETENT  
 OEM: 322636



**No. 33420**  
 OEM: 314082



**No. 21138**  
 PIN  
 OEM: 331880



**No. 27730**  
 CRADLE  
 OEM: 334163



**No. 22493**  
 DETENT BALL  
 OEM: 327345



**No. 11039**  
 SPRING  
 OEM: 312870



**No. 28485**  
 SHAFT & BEARING  
 HSG. KIT  
 OEM: N/A





# Johnson / Evinrude

## SHIFT COMPONENTS - 2 & 3-CYL. LOOPCHARGED (1975-2006)

### Large Gearcase

**No. 11052** SPRING  
OEM: 324369



**No. 21135** CROSS PIN  
OEM: 313448



**No. 22673** CLUTCH DOG  
OEM: 318303



**No. 27711** SHAFT  
OEM: 326668



**No. 27754** CVR. & SEAL ASSY.  
OEM: 388651



**No. 27702** HSG. & BEARING ASSY.  
OEM: 391365



Includes Bearing  
No. 22870

**No. 21105** PIN  
OEM: 320145



**No. 27741** LEVER  
OEM: 324037



**No. 27722** DETENT  
OEM: 326670



**No. 33420** SEAL  
OEM: 314082



**No. 21138** PIN  
OEM: 331880



**No. 27730** CRADLE  
OEM: 334163



**No. 22493** DETENT BALL  
OEM: 327345



**No. 11039** SPRING  
OEM: 911961



**No. 28484** SHAFT & BEARING HSG. KIT  
OEM: N/A



## SHIFT COMPONENTS - V4 60° & V4 90° LOOPCHARGED

### Small Gearcase

**No. 11052** SPRING  
OEM: 324369



**No. 21135** CROSS PIN  
OEM: 313448



**No. 22633** CLUTCH DOG  
OEM: 912607



**No. 27710** SHAFT  
OEM: 322941



**No. 27752** CVR. & SEAL ASSY.  
OEM: 5006241



**No. 27702** HSG. & BEARING ASSY.  
OEM: 391365



Includes Bearing  
No. 22870

**No. 21105** PIN  
OEM: 320145



**No. 27741** LEVER  
OEM: 324037



**No. 27720** DETENT  
OEM: 915954



**No. 33020** SEAL  
OEM: 324670  
OEM: 352165



**No. 21138** PIN  
OEM: 331880



**No. 27730** CRADLE  
OEM: 334163



**No. 22493** DETENT BALL  
OEM: 327345



**No. 11039** SPRING  
OEM: 911961



**No. 28482** SHAFT & BEARING HSG. KIT  
OEM: N/A



# Johnson / Evinrude

## SHIFT COMPONENTS - V4/V6/V8 "O" TYPE

### Large Gearcase

**No. 11052** **No. 21135**

SPRING  
OEM: 324369

CROSS PIN  
OEM: 313448



**No. 22625** **No. 27710**

CLUTCH DOG  
OEM: 337774

SHAFT  
OEM: 322941



**No. 27752**  
CVR. & SEAL ASSY.  
OEM: 5006241



**No. 27700**  
HSG. & BEARING ASSY.  
OEM: 389455

Includes No. 22910  
Bearing



**No. 21137**  
PIN  
OEM: 328825



**No. 27740** **No. 27720**

LEVER  
OEM: 322938

DETENT  
OEM: 915954



**No. 33020**  
SEAL  
OEM: 324670  
OEM: 352165



**No. 21138**  
PIN  
OEM: 331880



**No. 27730** **No. 22491**

CRADLE  
OEM: 982422

DETENT BALL  
OEM: 160084



**No. 11055**  
SPRING  
OEM: 911962



**No. 28481**  
SHAFT & BEARING  
HSG. KIT  
OEM: N/A



## SHIFT COMPONENTS - V4/V6/V8 "M" TYPE

### Large Gearcase

**No. 11052** **No. 21135**

SPRING  
OEM: 324369

CROSS PIN  
OEM: 313448



**No. 22625** **No. N/A**

CLUTCH DOG  
OEM: 337774

SHAFT  
OEM: 348483



**No. 27752**  
CVR. & SEAL ASSY.  
OEM: 5006241



**No. N/A**  
HSG. & BEARING ASSY.  
OEM: 5001601



**No. N/A**  
PIN  
OEM: 317274



**No. 27740** **No. N/A**

LEVER  
OEM: 322938

DETENT  
OEM: 347377



**No. 33020**  
SEAL  
OEM: 324670  
OEM: 352165



**No. 21138**  
PIN  
OEM: 331880



**No. 27730** **No. 22491**

CRADLE  
OEM: 334163

DETENT BALL  
OEM: 160084



**No. 11055**  
SPRING  
OEM: 911962



# Johnson / Evinrude

## GEARCASE SHIFT COMPONENTS

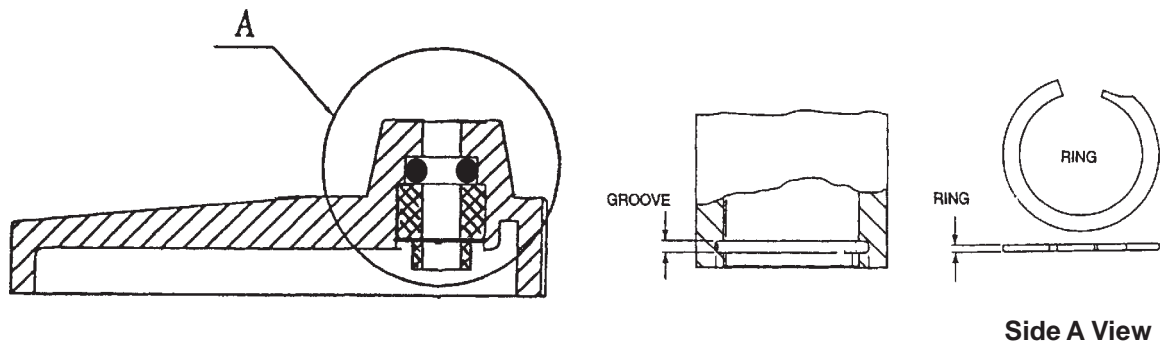
### Gearcase Gaskets

<p><b>No. 34120</b> SHIFT ROD OEM: 304764</p> 	<p><b>No. 33200</b> SHIFT ROD OEM: 305512</p> 	<p><b>No. 34410</b> SHIFT ROD WASHER OEM: 321738</p> 	<p><b>No. 33220</b> SHIFT ROD COVER OEM: 304023</p> 
<p><b>No. 33980</b> SHIFT COVER OEM: 912388</p> 	<p><b>No. 33450</b> V4 SOLENOID COVER OEM: 314876</p> 	<p><b>No. 33511</b> LOWER GEARCASE OEM: 324449</p> 	<p><b>No. 33550</b> LOWER GEARCASE OEM: 307099</p> 

## GLM'S RE-DESIGN OF THE COVER & SEAL ASSEMBLY

GLM proudly uses Smalley\* internal snap ring for holding the sealing bushing unlike the OEMs which locks it dead. No special tools are required for replacing the seal and a service job can be finished in seconds!

\*Smalley Steel Ring Co. is a GM vender





## Section 6

### Johnson / Evinrude Drive Shaft and Propeller Shaft Components

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# Johnson / Evinrude

## DRIVE SHAFT COMPONENTS - 2 & 3-CYL. LOOPCHARGED

Small "Old" Style	Small "New" Style	Large Gearcase
<p>Small Gearcase 40-60 HP 2-Cyl. Loopcharged (1975-1988) 60-75 HP 3-Cyl. Loopcharged (1975-1988)</p>	<p>Small Gearcase 40-50 HP 2-Cyl. Loopcharged (1989-2006)</p>	<p>Large Gearcase 40-60 HP 2-Cyl. Loopcharged (1986-2006) 60-75 HP 3-Cyl. Loopcharged (1975-2001)</p>
<p><b>No. 86013</b> OIL SEAL - 1 PC. OEM: 342786</p> 	<p><b>No. 86013</b> OIL SEAL, D.S. OEM: 342786</p> 	<p><b>No. 86460</b> OIL SEAL - TOP OEM: 332205 <b>No. 86160</b> OIL SEAL - BOTTOM OEM: 321466</p>  
<p><b>No. 22327</b> SCREW OEM: 909386</p> 	<p><b>No. 11422</b> BEARING, D.S. OEM: 398874</p> 	<p><b>No. 86013</b> OIL SEAL, D.S. OEM: 342786</p> 
<p><b>No. 22728</b> BEARING HSG. ASSY. OEM: 387067</p> 	<p><b>No. 22362</b> SCREW OEM: 317624</p> 	<p><b>No. 22327</b> SCREW OEM: 909386</p> 
<p><b>No. 82240</b> O-RING OEM: 302588</p> 	<p><b>No. 27790</b> BEARING HSG. ASSY. OEM: 435274</p> 	<p><b>No. 22722</b> BEARING HSG. ASSY. OEM: 385087 <b>No. 22726</b> BEARING HSG. ASSY. OEM: 435519</p> 
<p><b>No. 23530</b> SHIM 0.003" OEM: 320166</p> 	<p><b>No. 82250</b> O-RING OEM: 310324</p> 	<p><b>No. 81340</b> O-RING OEM: 313754</p> 
<p><b>No. 23540</b> SHIM 0.004" OEM: 320167</p> 	<p><b>No. 21649</b> THRUST WASHER OEM: 333771</p> 	<p><b>No. 23600</b> SHIM 0.003" OEM: 323889 <b>No. 23610</b> SHIM 0.004" OEM: 323890 <b>No. 23620</b> SHIM 0.005" OEM: 317232</p> 
<p><b>No. 23550</b> SHIM 0.005" OEM: 320168</p> 	<p><b>No. 16370</b> THRUST BEARING OEM: 398901</p> 	<p><b>No. 21643</b> THRUST WASHER OEM: 317230</p> 
<p><b>No. 21511</b> DRIVE SHAFT BEARING OEM: 385175</p> 	<p><b>No. 21649</b> THRUST WASHER OEM: 333771</p> 	<p><b>No. 16320</b> THRUST BEARING OEM: 385068</p> 
<p><b>No. 11423</b> PINION BEARING OEM: 386766</p> 	<p><b>No. 11430</b> PINION BEARING OEM: 382343</p> 	<p><b>No. 11430</b> PINION BEARING OEM: 382343</p> 
<p>See Section 4 for Gear Sets</p> 	<p>See Section 4 for Gear Sets</p> 	<p>See Section 4 for Gear Sets</p> 
<p><b>No. 11192</b> PINION NUT OEM: 313339</p> 	<p><b>No. 11192</b> PINION NUT OEM: 313339</p> 	<p><b>No. 11192</b> PINION NUT OEM: 313339</p> 

# Johnson / Evinrude

## DRIVE SHAFT COMPONENTS - V4 & V6

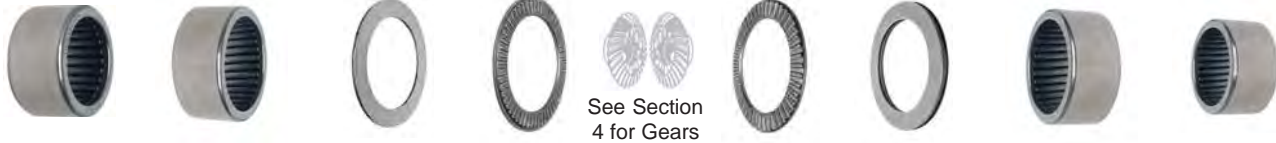
V4 60° & V4 90°		V4 & V6 "O" & "M" Type			
<p>Small Gearcase V4 60° (1995-2006) V4 90° (1978-1998)</p>		<p>Large Gearcase "O" Type (1978-2006) "M" Type (2002-2006)</p>			
<p><b>No. 86011</b> OIL SEAL OEM: 341280</p> 		<p><b>No. 22405</b> LOWER D.S.-V4 60° OEM: 346004</p> <p><b>NEW</b></p>	<p><b>No. 86011</b> OIL SEAL OEM: 341280</p> 		<p><b>No. 22407</b> LOWER D.S. "O" TYPE OEM: 345905</p>
<p><b>No. 22362</b> SCREW OEM: 317624</p> 		<p><b>No. 22409</b> LOWER D.S. - V4 90° OEM: 346006</p>	<p><b>No. 22362</b> SCREW OEM: 317624</p> 		<p><b>No. 22403</b> LOWER D.S. "M" TYPE OEM: 347371</p> <p><b>NEW</b></p>
<p><b>No. 22720</b> BEARING HSG. &amp; SEAL OEM: 439476</p> 		<p><b>No. 22720</b> BEARING HSG. &amp; SEAL OEM: 439476</p>	<p><b>No. 22720</b> BEARING HSG. &amp; SEAL OEM: 439476</p> 		<p><b>No. 22403</b> LOWER D.S. "M" TYPE OEM: 347371</p> <p><b>NEW</b></p>
<p><b>No. 81380</b> O-RING, LOWER OEM: 314728</p> 		<p><b>No. 81380</b> O-RING, LOWER OEM: 314728</p>	<p><b>No. 81380</b> O-RING, LOWER OEM: 314728</p> 		<p><b>No. 22403</b> LOWER D.S. "M" TYPE OEM: 347371</p> <p><b>NEW</b></p>
<p><b>No. 23590</b> SHIM 0.003" OEM: 323362</p> 		<p><b>No. 22880</b> PINION BEARING OEM: 384195</p>	<p><b>No. 23590</b> SHIM 0.003" OEM: 323362</p> 		<p><b>No. 21610</b> PINION BEARING OEM: 387817</p>
<p><b>No. 23580</b> SHIM 0.004" OEM: 323361</p> 		<p>See Section 4 for Gear Sets</p>	<p><b>No. 23580</b> SHIM 0.004" OEM: 323361</p> 		<p>See Section 4 for Gear Sets</p>
<p><b>No. 23510</b> SHIM 0.005" OEM: 314745</p> 		<p>See Section 4 for Gear Sets</p>	<p><b>No. 23510</b> SHIM 0.005" OEM: 314745</p> 		<p><b>No. 32800</b> WASHER "M" TYPE OEM: 350038</p>
<p><b>No. 21645</b> THRUST WASHER OEM: 327656</p> 		<p><b>No. 11190</b> PINION NUT OEM: 314730</p>	<p><b>No. 21645</b> THRUST WASHER OEM: 327656</p> 		<p><b>No. 11190</b> PINION NUT OEM: 314730</p>
<p><b>No. 16330</b> THRUST BEARING OEM: 387656</p> 		<p>See Section 4 for Gear Sets</p>	<p><b>No. 16330</b> THRUST BEARING OEM: 387656</p> 		<p>See Section 4 for Gear Sets</p>
<p><b>No. 28351</b> RETAINER OEM: 338504</p> 		<p>See Section 4 for Gear Sets</p>	<p><b>No. 28351</b> RETAINER OEM: 338504</p> 		<p>See Section 4 for Gear Sets</p>
<p><b>No. 21139</b> PIN OEM: 311538</p> 		<p>See Section 4 for Gear Sets</p>	<p><b>No. 21139</b> PIN OEM: 311538</p> 		<p>See Section 4 for Gear Sets</p>

# Johnson / Evinrude

## PROP SHAFT COMPONENTS - 2-CYL. LOOPCHARGED (1989-2006)

### 40-50 HP Small Gearcase

<b>No. 22900</b> PROP SHAFT BEARING OEM: 386765	<b>No. 22890</b> REVERSE GEAR BEARING OEM: 386764	<b>No. 21647</b> THRUST WASHER REVERSE GEAR OEM: 332514	<b>No. 16350</b> THRUST BEARING REVERSE GEAR OEM: 397537	<b>No. 16360</b> THRUST BEARING FORWARD GEAR OEM: 397538	<b>No. 21648</b> THRUST WASHER FORWARD GEAR OEM: 333725	<b>No. 22870</b> FORWARD GEAR BEARING OEM: 382407	<b>No. 22940</b> FORWARD GEAR BEARING OEM: 432264
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**No. 86060**  
PROP SHAFT SEAL  
OEM: 321467

**No. 11416**  
BEARING CARRIER W/ BEARINGS & SEALS  
OEM: 432276

**No. 82360**  
O-RING FOR BEARING CARRIER  
OEM: 553126



**No. 22421**  
PROP SHAFT  
OEM: 439138



## PROP SHAFT COMPONENTS - 2 & 3-CYL. LOOPCHARGED (1975-1988)

### Small Gearcase

<b>No. 22900</b> PROP SHAFT BEARING OEM: 386765	<b>No. 22890</b> REVERSE GEAR BEARING OEM: 386764	<b>No. N/A</b> THRUST WASHER REVERSE GEAR OEM: 320115	<b>No. N/A</b> THRUST BEARING REVERSE GEAR OEM: 386719	See Section 4 for Gears	<b>No. N/A</b> THRUST BEARING FORWARD GEAR OEM: 389297	<b>No. N/A</b> THRUST WASHER FORWARD GEAR OEM: 323845	<b>No. N/A</b> FORWARD GEAR BEARING OEM: N/A
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**No. 86060**  
PROP SHAFT SEAL  
OEM: 321467

**No. N/A**  
BEARING CARRIER  
OEM: 386920

**No. 82320**  
O-RING FOR BEARING CARRIER  
OEM: 320303



**No. N/A**  
PROP SHAFT  
OEM: 386659



# Johnson / Evinrude

## PROP SHAFT COMPONENTS - 2 & 3-CYL. LOOPCHARGED (1975-2006)

### Large Gearcase

<b>No. 22860</b> PROP SHAFT BEARING OEM: 379504	<b>No. 22870</b> REVERSE GEAR BEARING OEM: 382407	<b>No. 21641</b> THRUST WASHER REVERSE GEAR OEM: 313447	<b>No. 16300</b> THRUST BEARING REVERSE GEAR OEM: 382408	See Section 4 for Gears	<b>No. 16310</b> THRUST BEARING FORWARD GEAR OEM: 385043	<b>No. 21644</b> THRUST WASHER FORWARD GEAR OEM: 324766	<b>No. 22870</b> FORWARD GEAR BEARING OEM: 382407
							
	<b>No. 22400</b> SCREW OEM: 320041	<b>No. 81100</b> O-RING OEM: 332584	<b>No. 86030</b> PROP SHAFT SEAL OEM: 330137		<b>No. 82320</b> O-RING FOR BEARING CARRIER OEM: 320303	<b>No. 21774</b> RETAINING RING OEM: 313445	
							
<b>No. 22418</b> PROP SHAFT OEM: 439185							

## PROP SHAFT COMPONENTS - V4 90° (1978-1998)

### Small Gearcase

<b>No. 22860</b> PROP SHAFT BEARING OEM: 379504	<b>No. 22870</b> REVERSE GEAR BEARING OEM: 382407	<b>No. 21642</b> THRUST WASHER REVERSE GEAR OEM: 314731	<b>No. 16300</b> THRUST BEARING REVERSE GEAR OEM: 382408	See Section 4 for Gears	<b>No. 16310</b> THRUST BEARING FORWARD GEAR OEM: 385043	<b>No. 21644</b> THRUST WASHER FORWARD GEAR OEM: 324766	<b>No. 22870</b> FORWARD GEAR BEARING OEM: 382407
							
<b>No. 22300</b> SCREW OEM: 316563	<b>No. 86640</b> SEAL OEM: 332583	<b>No. 86030</b> PROP SHAFT SEAL OEM: 330137	<b>No. 11392</b> OEM: 397087 BEARING CARRIER W/ BEARINGS & SEALS		<b>No. 82370</b> O-RING FOR BEARING CARRIER OEM: 313446	<b>No. 21774</b> RETAINING RING OEM: 313445	
							
<b>No. 22416</b> PROP SHAFT OEM: 436888							

# Johnson / Evinrude

## PROP SHAFT COMPONENTS - V4 60° (1995-2006)

### Small Gearcase "New" Style

<b>No. 22860</b> PROP SHAFT BEARING OEM: 379504	<b>No. 22870</b> REVERSE GEAR BEARING OEM: 382407	<b>No. 21642</b> THRUST WASHER REVERSE GEAR OEM: 314731	<b>No. 16300</b> THRUST BEARING REVERSE GEAR OEM: 382408	See Section 4 for Gears	<b>No. 16310</b> THRUST BEARING FORWARD GEAR OEM: 385043	<b>No. 21644</b> THRUST WASHER FORWARD GEAR OEM: 324766	<b>No. 22870</b> FORWARD GEAR BEARING OEM: 382407
							
<b>No. 22373</b> SCREW OEM: 350271	<b>No. 27850</b> TAB OEM: 333957	<b>No. 86030</b> PROP SHAFT SEAL OEM: 330137	<b>No. 11398</b> BEARING CARRIER W/ BEARINGS & SEALS OEM: 5000440	<b>No. 82370</b> O-RING FOR BEARING CARRIER OEM: 313446			
							
<b>No. 22419</b> PROP SHAFT OEM: 5006310							

## PROP SHAFT COMPONENTS - V4/V6/V8 - "M" Type (2002-2006)

### Large Gearcase "New" Style

<b>No. N/A</b> PROP SHAFT BEARING OEM: 436752	<b>No. 22870</b> REVERSE GEAR BEARING OEM: 382407	<b>No. 21654</b> THRUST WASHER REVERSE GEAR OEM: 349193	<b>No. 16340</b> THRUST BEARING REVERSE GEAR OEM: 389042	See Section 4 for Gears	<b>No. 16340</b> THRUST BEARING FORWARD GEAR OEM: 389042	<b>No. 21646</b> THRUST WASHER FORWARD GEAR OEM: 327669	<b>No. 22910</b> FORWARD GEAR BEARING OEM: 389039
							
<b>No. 22373</b> SCREW OEM: 350271	<b>No. 27850</b> TAB OEM: 333957	<b>No. 86810</b> PROP SHAFT SEAL - 2 PCS. OEM: 334950	<b>No. 86012</b> PROP SHAFT SEAL - 1 PC. OEM: 341281	<b>No. N/A</b> BEARING CARRIER OEM: 5001587	<b>No. 82440</b> O-RING FOR BEARING CARRIER OEM: 326849		
							
<b>No. 22417</b> PROP SHAFT OEM: 5004765 ø 1-1/4" (1991-2006)							



# Johnson / Evinrude

## PROP SHAFT COMPONENTS - V4/V6/V8 - "O" Type (1979-1990)

### Large Gearcase

<p><b>No. 11410</b> PROP SHAFT BEARING OEM: 387247</p> 	<p><b>No. 22870</b> REVERSE GEAR BEARING OEM: 382407</p> 	<p><b>No. 21642</b> THRUST WASHER REVERSE GEAR OEM: 314731</p> 	<p><b>No. 16300</b> THRUST BEARING REVERSE GEAR OEM: 382408</p> 	<p>See Section 4 for Gears</p> 	<p><b>No. 16340</b> THRUST BEARING FORWARD GEAR OEM: 389042</p> 	<p><b>No. 21646</b> THRUST WASHER FORWARD GEAR OEM: 302669</p> 	<p><b>No. 22910</b> FORWARD GEAR BEARING OEM: 389039</p> 
<p><b>No. 22373</b> SCREW OEM: 350271</p> 		<p><b>No. 27850</b> TAB OEM: 333957</p> 	<p><b>No. 85130</b> PROP SHAFT SEAL OEM: 320862</p> 	<p><b>No. 11406</b> BEARING CARRIER W/ BEARINGS &amp; SEALS FOR 1991-UP GEARCASE OEM: 438039</p> 	<p><b>No. 11081</b> KEY OEM: N/A</p> 		<p><b>No. 82400</b> O-RING FOR BEARING CARRIER OEM: 305123</p> 
<p><b>No. 22414</b> PROP SHAFT OEM: 395209 ø 1-3/16" (1979-1990)</p> 							

## PROP SHAFT COMPONENTS - V4/V6/V8 - "O" Type (1991-2006)

### Large Gearcase

<p><b>No. 22950</b> PROP SHAFT BEARING OEM: 434467</p> 	<p><b>No. 22870</b> REVERSE GEAR BEARING OEM: 382407</p> 	<p><b>No. 21642</b> THRUST WASHER REVERSE GEAR OEM: 314731</p> 	<p><b>No. 16300</b> THRUST BEARING REVERSE GEAR OEM: 382408</p> 	<p>See Section 4 for Gears</p> 	<p><b>No. 16340</b> THRUST BEARING FORWARD GEAR OEM: 389042</p> 	<p><b>No. 21646</b> THRUST WASHER FORWARD GEAR OEM: 327669</p> 	<p><b>No. 22910</b> FORWARD GEAR BEARING OEM: 389039</p> 
<p><b>No. 22373</b> SCREW OEM: 350271</p> 		<p><b>No. 27850</b> TAB OEM: 333957</p> 	<p><b>No. 86810</b> PROP SHAFT SEAL OEM: 334950</p> 	<p><b>No. 11408</b> BEARING CARRIER W/ KEY BEARINGS &amp; SEALS FOR 1991-UP GEARCASE OEM: 5000363</p> 	<p><b>No. 11081</b> KEY OEM: N/A</p> 		<p><b>No. 82400</b> O-RING FOR BEARING CARRIER OEM: 305123</p> 
<p><b>No. 21651</b> THRUST WASHER OEM: 336565</p> 		<p><b>No. 22417</b> PROP SHAFT OEM: 5004765 ø 1-1/4" (1991-2006)</p> 					

# Johnson / Evinrude

## LOWER HOUSING BEARINGS APPLICATIONS

HP / Gcs. Type	Year	Drive Shaft Brg./Race	Pinion Bearing	P.Shaft Needle Bearing	Roller Bearing Reverse	Roller Bearing Forward	Roller Bearing Forward	Thrust Brg./Race Reverse	Thrust Brg./Race Forward
<b>2-Cylinder Loopcharged (1975-1985) 40-60 HP</b>									
40 All	1984-1985	21511	11423	22900	22890	-	-	-	-
50 All	1975-1985	21511	11423	22900	22890	-	-	-	-
55 All	1976-1985	21511	11423	22900	22890	-	-	-	-
60 All	1980-1985	21511	11423	22900	22890	-	-	-	-
<b>2-Cylinder Loopcharged (1986-2005) 40-60 HP</b>									
40 Small Old	1986-1988	21511	11423	22900	22890	-	-	-	-
40 Small New	1989-2000	16370/21649	11430	22900	22890	22870	22940	16350/21647	16360/21648
45 Small New	1989-1997	16370/21649	11430	22900	22890	22870	-	16350/21647	16360/21648
45 Large	1987-1997	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
48 Small New	1989-1996	16370/21649	11430	22900	22890	22870	22940	16350/21647	16360/21648
48 Large	1987-1996	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
50 Small Old	1986-1988	21511	11423	22900	22890	-	-	-	-
50 Small New	1989-2005	16370/21649	11430	22900	22890	22870	22940	16350/21647	16360/21648
50 Large	1986-2005	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
55 Small Old	1986-1988	21511	11423	22900	22890	-	-	-	-
55 Small New	1989-2005	16370/21649	11430	22900	22890	22870	-	16350/21647	16360/21648
55 Large	1986-2005	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
60 Small Old	1986-1988	21511	11423	22900	22890	-	-	-	-
60 Large	1986-1988	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
<b>3-Cylinder Loopcharged (1973-2001) 65-75 HP</b>									
65 Large	1973	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
65 Large	1984-2001	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
70 Small	1974-2001	21511	11423	22900	22890	-	-	-	-
75 Small	1979-1985	21511	11423	22900	22890	-	-	-	-
75 Large	1975-1988	16320/21643	11430	22860	22870	22870	-	16300/21641	16310/21644
<b>V4 Gearcase (1978-1983)</b>									
85 All	1978-1980	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
90 All	1981-1983	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
100 All	1980	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
115 All	1978-1983	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
<b>V4 Gearcase (1984-Up)</b>									
80 Small	1991-1999	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
80 "O" Type	1991-1999	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
90 Small	1984-2003	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
90 "O" Type	1984-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
90 "O" Type	1991-2003	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
100 Small	1984-2005	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
100 "O" Type	1984-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
100 "O" Type	1991-2005	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
115 Small	1984-Up	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
115 "O" Type	1984-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
115 "O" Type	1991-Up	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
120 "O" Type	1985-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
120 "O" Type	1991-1994	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
125 "O" Type	1989-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646



# Johnson / Evinrude

<b>LOWER HOUSING BEARINGS APPLICATIONS</b>									
HP / Gcs. Type	Year	Drive Shaft Brg./Race	Pinion Bearing	P.Shaft Needle Bearing	Roller Bearing Reverse	Roller Bearing Forward	Roller Bearing Forward	Thrust Brg./Race Reverse	Thrust Brg./Race Forward
<b>V4 Gearcase (1984-Up) Continued</b>									
125 "O" Type	1991-1998	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
130 Small	1995-2000	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
130 "O" Type	1995-2000	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
135 Small	2001-Up	16330/21645	22880	22860	22870	22870	-	16300/21642	16340/21646
135 "O" Type	2001-Up	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
135 "M" Type	2002-Up	16330/21645	21610	-	22870	22910	-	16340/21654	16340/21646
140 Small	1984	16330/21645	22880	22860	22870	22870	-	16300/21642	16310/21644
140 "O" Type	1985-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
140 "O" Type	1991-1994	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
<b>V6 Gearcase (1979-1990)</b>									
150 All	1979-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
155 All	1984-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
175 All	1979-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
185 All	1984-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
200 All	1979-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
225 All	1986-1990	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
235 All	1979-1985	16330/21645	21610	11410	22870	22910	-	16300/21642	16340/21646
<b>V6 Gearcase (1991-Up)</b>									
150 "O" Type	1991-Up	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
150 "M" Type	2002-Up	16330/21645	21610	22950	22870	22910	-	16340/21654	16340/21646
175 "M" Type	2002-Up	16330/21645	21610	22950	22870	22910	-	16340/21654	16340/21646
175 "O" Type	1991-Up	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
185 "O" Type	1993-1994	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
200 "O" Type	1991-Up	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
200 "M" Type	2002-Up	16330/21645	21610	22950	22870	22910	-	16340/21654	16340/21646
225 "O" Type	1991-Up	16330/21645	21610	22950	22870	22910	-	16300/21642	16340/21646
225 "M" Type	2002-Up	16330/21645	21610	22950	22870	22910	-	16340/21654	16340/21646

# Johnson / Evinrude

## OIL SEALS APPLICATIONS

HP	Year	Prop Shaft	Qty. Req.	Drive Shaft	Qty. Req.	HP	Year	Prop Shaft	Qty. Req.	Drive Shaft	Qty. Req.
1.5, 2, 2.5, 3	1958-1968	-	1	86450	1	40	1984-1985	86060	2	86160	2
1.5, 2	1968-1990	86450	1	86450	1	40 (AR, AE, AT)	1988	86030	1	86270 / 86150	1
2.5, 4	1973-1980	86450	1	86450	2	40	1986-1989	86060	2	86460 / 86150	1
2.5	1987	86510	2	86450	2	45 C	1985	86030	2	86270 / 86150	1
2.5, 4	1981-1995	-	1	86450	2	45 C	1986	86030	2	86460 / 86150	1
3 Weedless	1958-1968	86450	1	-	1	45 C	1987	86030	2	86270 / 86150	1
3, 4, 6 Weedless	1968-1982	86400	1	86400	1	45 C	1988-1994	86030	2	86270 / 86150	1
4	1981-90	86510	2	-	1	45 C	1995	86030	2	86460 / 86160	1
4	1984, 1986-95	-	1	86510	2	48	1988-1995	86060	2	86460 / 86160	1
4.5, 7.5	1980-1987	-	1	86510	1	50 (Manual)	1971-1974	86030	2	86150	2
5, 5.5, 6, 7.5	1957-1964	86360	1	86360	1	50	1975	86060	2	86160	1
5, 6, 8	1980-1987	-	1	86510	2	50	1979	86030	2	86150	2
6	1965-1967	-	1	86390	1	50	1980	86030	2	86160	1
6	1968-1979	86390	1	86400	1	50/60 (Pull Start)	1981-1983	86030	2	86150	1
9.5	1964-1973	86360	1	86360	1	50/60 (Electric)	1981-1983	86060	2	86160	1
9.9	1974-1983	86180	1	86170	1	50/60	1984-1985	86060	2	86160	1
9.9	1984-1995	86180	1	86170	1	50/60 (Small)	1986-1987	86060	2	86460 / 86160	1
10	1957-1958	86410	1	86430	1	50/60 (Large)	1986-1987	86030	2	86460 / 86160	1
10	1959-1963	86360	1	86360	1	50/60	1988-1989	86030	2	86460 / 86160	1
10	1981	86390 (inner)	1	-	1	50	1990-1995	86060	2	86460 / 86160	1
10	1989	86190 / 86150	1	86270 / 86150	1	55	1968-1969	85110	2	86160	2
14	1988-1990	86190 / 86150	1	86270 / 86150	1	55	1976-1977	86060	2	86160	2
15	1974-1983	86180	2	86170	1	55	1978	86160	1	86160	2
15	1984-1995	86180	2	86170	1	55	1979-1983	86030	2	86150	1
18	1957	86410	1	86430	1	55 (Electric)	1980-1983	85110	2	86150	2
18	1958-1973	86410	1	86430	1	55 C	1984	86030	2	86270 / 86150	1
20	1981-1982	86190 / 86420	1	86420	1	55 C	1985	86030	2	86270	1
20	1983	86190 / 86420	1	86150 / 86420	1	55 C	1986	86030	2	86460 / 86160	1
20	1984	86120 / 86150	1	86270 / 86420	1	55 C	1987-1994	86030	2	86270 / 86160	1
20	1985-1986	85120	1	86200	1	55 C	1995	86030	2	86460 / 86770	1
20	1987-1995	85120	1	86200 / 86520	1	60 (Manual)	1964-1968	86740	1	86750	1
25	1969-1976	86410	1	86430	1	60	1970	85110	1	86160	2
25	1977-1978	86410	1	86430	1	60 (3-Cyl.)	1971	86030	2	86160	2
25	1979-1982	86190 / 86420	1	86420	1	60 (Pull Start)	1980-1983	86030	2	86150	2
25	1983	86190 / 86420	1	86150 / 86420	1	60 (Electric)	1980-1983	86030	2	86160	2
25	1984	86190 / 86150	1	86270 / 86420	1	60	1970	85110	1	86160	2
25	1985-1986	85120	1	86200	2	60 SST	1989	86060	2	86460 / 86160	1
25	1987-1995	85120	1	86270 / 86420	1	60 SST	1990	86060	1	286460 / 86160	1
25 C	1982	86420	1	86420	1	60 (3-Cyl.)	1987-1995	86030	2	86460 / 86160	1
25 C	1983	86190 / 86150	1	86150 / 86420	1	65 (Manual)	1968	86740	1	86750	1
25 C	1984-1990	86190 / 86150	1	86270 / 86150	1	65 (3-Cyl.)	1972-1973	86030	2	86160	2
28	1962-1964	86350	1	86410	1	65 C	1984-1985	86030	2	86160	2
28	1987-1990	86190 / 86150	1	86270 / 86150	1	65 C	1986-1989	86030	2	86460 / 86160	1
30	1984-1986	85120	1	86200	1	70 (Large)	1974-1985	86030	2	86160	2
30	1987-1995	85120	1	86200 (inner)	1	70 (Large)	1986-1995	86030	2	86460 / 86160	1
33	1965-1976	86350	1	86410	1	70 (Small)	1977-1985	86060	2	86160	2
35	1957-1959	86350	1	86410	1	75 (Manual)	1960-1962	86740	1	86750	1
35	1976	85120	1	86150	2	75 (Large)	1975-1984	86030	2	86160	2
35	1977-1986	85120	2	86200	2	75 (Large)	1986-1987	86030	2	86460 / 86160	1
35	1987-1990	85120	2	86200 (inner)	1	75 (Small)	1975-1984	86060	2	86160	2
40	1960-1961	86350	1	86410	1	80	1966-1968	86740	1	86750	1
40	1962-1973	86350	1	86410	1	85	1969-1970	85110	2	86160	2
40	1974-1976	86350	1	86180	1	85	1971-1972	86030	2	86160	2
40 C	1981-1986	86350	1	86180	2	85	1973-1980	86030	2	85120	2



# Johnson / Evinrude

## OIL SEALS APPLICATIONS CONTINUED

HP	Year	Prop Shaft	Qty. Req.	Drive Shaft	Qty. Req.
88	1987-1994	86030	2	86240 / 86250	1
90	1981-1983	86030	2	85120	2
90	1984-1994	86030	2	86240 / 86250	1
90 Seadrive	1985-1990	86030	2	86240 / 86250	1
100	1971-1972	86030	2	86160	2
100	1979-1980	86030	2	85120	2
100 C	1984-1990	85130	2	86240 / 86250	1
110	1986-1988	86030	2	86240 / 86250	1
115	1969-1970	85110	2	86160	2
115	1973-1983	86030	2	85120	2
115	1984-1985	86030	2	86240 / 86250	1
115	1990-1994	86030	2	86240 / 86250	1
120	1985	85130	2	86240 / 86250	1
120	1986-1988	86030	2	86240 / 86250	1
120	1989	85130	2	86240 / 86250	1
120	1990-1994	86030	2	86240 / 86250	1
125	1971-1972	86030	2	86160	2
125 C	1989	85130	2	86240 / 86250	1
125 C (ESX)	1989	86030	2	86240	1
135	1973-1976	86030	2	85120	2
140	1977-1983	86030	2	85120	2
140	1984	86030	2	85120	2
140	1985	85130	2	86240 / 86250	1
140	1986-1994	86030	2	86240 / 86250	1
140 TX	1989	85130	1	86240 / 86250	1
150	1978-1983	85130	2	85120	2
150	1984	85130	2	86240 / 86250	1
155 C	1984-1985	85130	2	86240 / 86250	1
155 C	1986-1990	85130	2	86240 / 86250	1
175	1977-1985	85130	2	85120	2
175	1986-1990	85130	2	86240 / 86250	1
185	1984-1985	85160	2	86240 / 86250	1
185	1990	85130	2	86240 / 86250	1
200	1976-1983	85130	2	85120	2
200	1984-1985	85130	2	86240 / 86250	1
200, 225	1986-1990	85130	2	86240 / 86250	1
235	1978-1983	85130	2	85120	2
235	1984-1985	85130	2	86240 / 86250	1
275	1985-1988	85130	2	86240 / 86250	1
3.6L, 300	1985-1990	85130	2	86240 / 86250	1

## DRIVE SHAFT HOUSING OIL SEALS APPLICATIONS

HP	Year	Oil Seal	Qty.	Application
5, 6, 6.5, 8	1982-2001	86510	1	Driveshaft to Exhaust Housing
25, 40, 45, 50, 55	1987-1994	86270	1	Exhaust Housing to Adapter
50	1958-1968	86060	1	Pivot Shaft
60	1958-1968	86060	1	Pivot Shaft
65	1958-1968	86060	1	Pivot Shaft
75	1961-1968	86060	1	Pivot Shaft
80	1961-1968	86060	1	Pivot Shaft
85	1961-1968	86060	1	Pivot Shaft
90	1964-1968	86060	1	Pivot Shaft
100	1964-1968	86060	1	Pivot Shaft



# Johnson / Evinrude

## LOWER DRIVE SHAFT IDENTIFICATION

### No. 22405

OEM: 346004  
 V4 60°  
 Small Gearcase  
**Length: 9-7/16"**  
**Pinion Bearing Journal ø: 1-1/8"**  
**Pinion Gear Splines: 6**



### No. 22409

OEM: 346006  
 V4 90°  
 Small Gearcase  
**Length: 8-3/4"**  
**Pinion Bearing Journal ø: 1-1/8"**  
**Pinion Gear Splines: 6**

### No. 22407

OEM: 345905  
 "O" Type  
 Large Gearcase  
**Length: 9-1/2"**  
**Pinion Bearing Journal ø: 1-1/8"**  
**Pinion Gear Splines: 19**

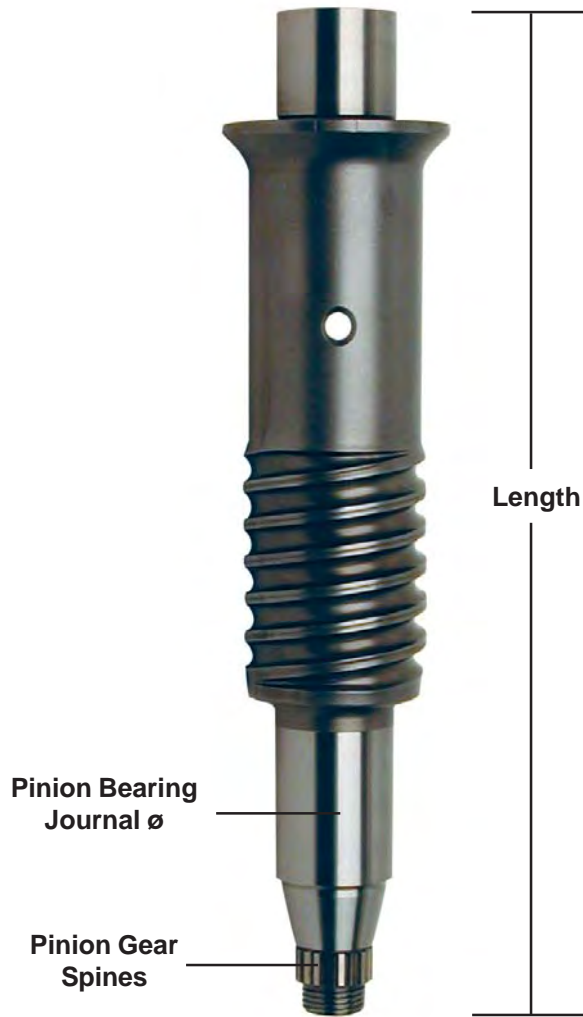
### No. 22403

OEM: 347371  
 "M" Type  
 Large Gearcase  
**Length: 9-1/2"**  
**Pinion Bearing Journal ø: 1-1/8"**  
**Pinion Gear Splines: 20**



### No. 22408

OEM: 335679  
 V8  
 Large Gearcase  
**Length: 10"**  
**Pinion Bearing Journal ø: 1-9/32"**  
**Pinion Gear Splines: 19**



## V4/V6 TWO-PIECE DRIVE SHAFT APPLICATIONS - LOWER SHAFT

Model	Year	Gearcase Type	Drive Shaft GLM No.	Drive Shaft OEM No.
V4 All Crossflow	1978-1997	Small (V4 90°)	22409	346006
V4 All Crossflow	1984-1997	"O" Type	22407	345905
V4 90° Loopcharged	1985-1998	"O" Type	22407	345905
V4 60°	1995-2006	Small (V4 60°)	22405	346004
V4 60°	1995-2006	"O" Type	22407	345905
V6 90°	1978-2006	"O" Type	22407	345905
V6 60°	1991-2006	"O" Type	22407	345905
V6	2002-2006	"M" Type	22403	347371



# Johnson / Evinrude

## UPPER DRIVE SHAFT IDENTIFICATION

**No. 22431**

OEM: 5000618  
Length: 25-1/4"

**No. 22432**

OEM: 5000626  
Length: 30-1/4"

**No. 22433**

OEM: 5000614  
Length: 25-11/16"

**No. 22434**

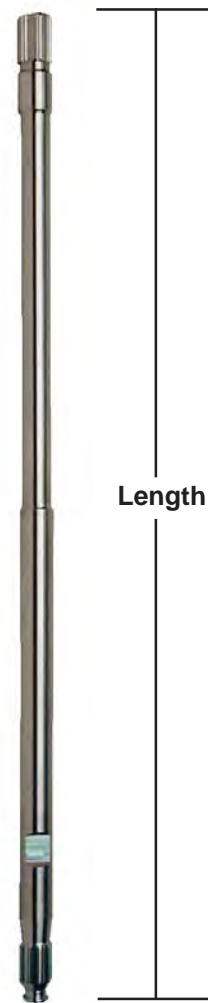
OEM: 5000623  
Length: 30-11/16"

**No. 22435**

OEM: 5000615  
Length: 24-3/4"

**No. 22436**

OEM: 5000624  
Length: 29-3/4"




## V4/V6 TWO-PIECE DRIVE SHAFT APPLICATIONS - UPPER SHAFT

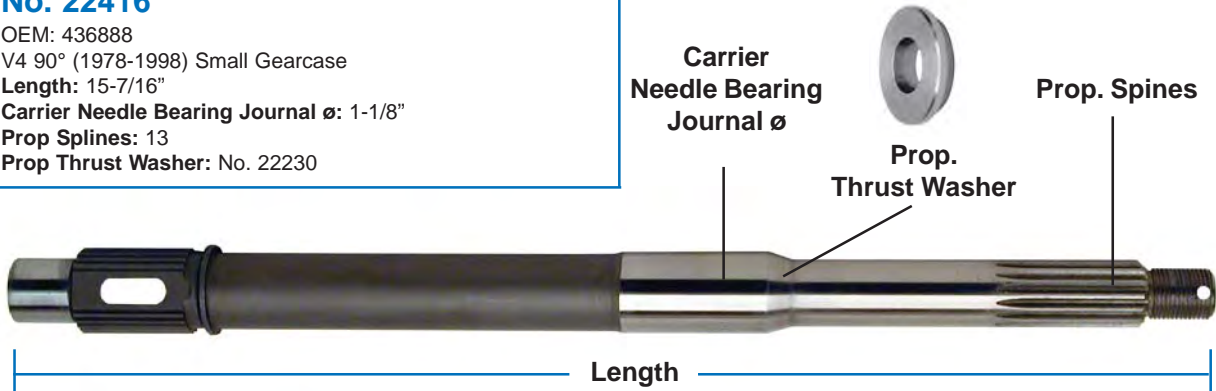
Model	Year	20" Standard Transom			25" Long Transom		
		GLM No.	OEM No.	Length	GLM No.	OEM No.	Length
V4 All	1978-1991	22431	5000618	25-1/4"	22432	5000626	30-1/4"
V4 90°	1992-1998	22433	5000614	25-11/16"	22434	5000623	30-11/16"
V4 60°	1995-2006	22435	5000615	24-3/4"	22436	5000624	29-3/4"
V6 All	1976-1991	22431	5000618	25-1/4"	22432	5000626	30-1/4"
V6 90°	1992-2006	22433	5000614	25-11/16"	22434	5000623	30-11/16"
V6 60°	1991-2006	22435	5000615	24-3/4"	22436	5000624	29-3/4"

# Johnson / Evinrude

## PROP SHAFT IDENTIFICATION

<p><b>No. 22421</b>                  OEM: 439138                  2-Cyl. Loopcharged (1989-2005) Small Gearcase  <b>Length: 13-13/32"</b>  <b>Carrier Needle Bearing Journal ø: 1.0"</b>  <b>Prop Splines: 13</b>  <b>Prop Thrust Washer: No. 22240</b></p>	<p><b>No. 22419</b>                  OEM: 436834                  V4 60° (1995-2006) Small Gearcase  <b>Length: 16-9/16"</b>  <b>Carrier Needle Bearing Journal ø: 1-1/8"</b>  <b>Prop Splines: 13</b>  <b>Prop Thrust Washer: No. 22230</b></p> <p style="text-align: right;"></p>
<p><b>No. N/A</b>                  OEM: 386659                  2 &amp; 3-Cyl. Loopcharged (1975-1988) Small Gearcase  <b>Length: N/A</b>  <b>Carrier Needle Bearing Journal ø: 1.0"</b>  <b>Prop Splines: 13</b>  <b>Prop Thrust Washer: No. 22240</b></p>	<p><b>No. 22414</b>                  OEM: 395209                  "O" Type (1979-1990) Large Gearcase  <b>Length: 17-27/32"</b>  <b>Carrier Needle Bearing Journal ø: 1-3/16"</b>  <b>Prop Splines: 15</b>  <b>Prop Thrust Washer: No. 22220</b></p>
<p><b>No. 22418</b>                  OEM: 439185                  2 &amp; 3-Cyl. Loopcharged (1975-2006) Large Gearcase  <b>Length: 14-29/64"</b>  <b>Carrier Needle Bearing Journal ø: 1-1/8"</b>  <b>Prop Splines: 13</b>  <b>Prop Thrust Washer: No. 22230</b></p>	<p><b>No. 22417</b>                  OEM: 5004765                  "O" Type (1991-2006), "M" Type (2001-2006) Large Gearcase  <b>Length: 17-7/8"</b>  <b>Carrier Needle Bearing Journal ø: 1-1/4"</b>  <b>Prop Splines: 15</b>  <b>Prop Thrust Washer: No. 22221</b></p>

**No. 22416**  
 OEM: 436888  
 V4 90° (1978-1998) Small Gearcase  
**Length: 15-7/16"**  
**Carrier Needle Bearing Journal ø: 1-1/8"**  
**Prop Splines: 13**  
**Prop Thrust Washer: No. 22230**



## PROP SHAFT APPLICATIONS

Model	Year	Gearcase Type	Prop Shaft GLM No.	Prop Shaft OEM No.
2 & 3-Cyl. Loopcharged	1975-1988	Small	-	386659
2-Cyl. Loopcharged	1989-2006	Small	22421	439138
2 & 3-Cyl. Loopcharged	1975-2006	Large	22418	439185
V4 All Crossflow	1978-1998	Small (V4 90°)	22416	436888
V4 90° All	1984-1990	"O" Type	22414	395209
V4 90° All	1991-1998	"O" Type	22417	5004765
V4 60°	1995-2006	Small (V4 60°)	22419	436834
V4 60°	1995-2006	"O" Type	22417	5004765
V6 90°	1978-1990	"O" Type	22414	395209
V6 90°	1991-2006	"O" Type	22417	5004765
V6 60°	1991-2006	"O" Type	22417	5004765
V6	2002-2006	"M" Type	22417	5004765



# Section 7

## Johnson / Evinrude Water Pumps

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# Johnson / Evinrude

## WATER PUMP IMPELLERS 15 HP & BELOW

### Water Pump Impeller Identification 15 HP & Below

These water pump impellers can be divided into two distinct groups.  
High volume water pumps use long vane impellers (old style).  
High pressure water pumps use short van impellers (new style).

#### No. 89580

HIGH VOLUME / LONG VANE IMPELLER  
OEM: 434424  
(1952-1982) See Water Pumps  
Application Guide for Models  
**Outside ø: 2.50"**  
**Inside ø: .425"**



#### \*No. 89594

KEY - PIN  
OEM: 300611



\* Order Separately

#### No. 89490

HIGH PRESSURE / SHORT VANE IMPELLER  
OEM: 387361  
(1968-1990) See Water Pumps  
Application Guide for Models  
**Outside ø: 1.50"**  
**Inside ø: .440"**



#### \*No. N/A

KEY - PIN  
OEM: 321130



\* Order Separately

#### No. 89650

HIGH VOLUME / LONG VANE IMPELLER  
OEM: 775518  
(1956-1963) 10 HP  
**Outside ø: 2.50"**  
**Inside ø: .500"**



#### \*No. 89594

KEY - PIN  
OEM: 300611



\* Order Separately

#### No. 89500

HIGH PRESSURE / SHORT VANE IMPELLER  
OEM: 389576, 436137  
(1980-1990) See Water Pumps  
Application Guide for Models  
**Outside ø: 1.50"**  
**Inside ø: .440"**



#### \*No. 89594

KEY - PIN  
OEM: 300611



\* Order Separately

#### No. 89670

HIGH VOLUME / LONG VANE IMPELLER  
OEM: 775519, 377178  
(1964-1973) 9.5 HP  
Thru-Cavitation Plate Exhaust  
**Outside ø: 2.50"**  
**Inside ø: .550"**



#### \*No. 89594

KEY - PIN  
OEM: 300611



\* Order Separately

#### No. 89770

HIGH PRESSURE / SHORT VANE IMPELLER  
OEM: 386084  
(1974-Up) 9.9, 15 HP  
Thru-Prop Exhaust  
**Outside ø: 1.50"**  
**Inside ø: .500"**



#### \*No. 89594

KEY - PIN  
OEM: 300611



\* Order Separately



# Johnson / Evinrude

## WATER PUMP KITS 15 HP & BELOW

### No. 12065

OEM: N/A



Fits (1980-Up) 4, 4.5, 5, 6, 7.5 and 8 HP 2-Stroke outboards.

### No. 12050

OEM: 394711



Fits (1974-Up) 9.9, 15 HP. Fits (1994-Up) 9.9, 15 HP 4-Stroke.

### No. 22322

SCREW

OEM: 324430

Kit Contains: 4



### No. 89594

PIN

OEM: 300611

### No. 22360

SCREW

OEM: 302325

Kit Contains: 4



### No. 80120

O-RING

OEM: 202893

### No. 86492

GROMMET

OEM: 302497



### No. 36810

GASKET

OEM: 325040

Kit Contains: 2

### No. 86498

GROMMET

OEM: 338908



### No. 89770

IMPELLER

OEM: 386084

### No. 86499

GROMMET

OEM: 321129



### No. 12555

WEAR PLATE

OEM: 324640

### No. 86492

GROMMET

OEM: 302497



### No. 89594

PIN

OEM: 300611

### No. 12436

PUMP HOUSING

OEM: 389577



### No. 80110

O-RING

OEM: 25-62702

### No. 86496

GROMMET

OEM: 327035



### No. 86120

SEAL

OEM: 318972

### No. 12818

PUMP CUP

OEM: 324641



### No. 80110

O-RING

OEM: 25-62702

### No. 12460

PUMP HOUSING

OEM: 435390



### No. 12610

WEAR PLATE

OEM: 318995

### No. 89500

IMPELLER

OEM: 389576



### No. 12813

PUMP CUP

OEM: 324097



### No. 83200

O-RING

OEM: 319085

### Water Pump Kits w/o Housing

### No. 12255

W/O HOUSING

OEM: 396644



#### Kit Contains:

GLM	OEM	ITEM
89500	389576	Impeller
89594	300611	Pin
12818	324641	Pump Cup
12555	324640	Wear Plate
36810 (2)	325040	Gasket
80110	303191	O-ring
86492	302497	Grommet
86499	302497	Grommet
22322 (4)	324430	Screws

Fits (1980-Up) 4, 4.5, 5, 6, 7.5 and 8 HP 2-Stroke outboards.

### Water Pump Impeller Kits

### No. 12108

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
12600	203132	Wear Plate
89580	434424	Impeller



3-5 HP (1952-78), 4 HP (1969-83), 5 HP (1965-68)  
5.5 HP (1954-79), 6 HP (1954-79), 7.5 HP (1954-58)



# Johnson / Evinrude

## WATER PUMP IMPELLERS 18-40 HP 2-CYLINDER CROSSFLOW

### Water Pump Impeller Identification 18-40 HP

The Johnson / Evinrude 2-Cylinder crossflow engine has used two different styles of gearcases. Until the 1980 model all gearcases were a two-piece design and had thru-cavitation plate exhaust. This gearcase was in production until 1997. A one-piece gearcase with thru-prop exhaust was introduced in 1980 and in production until 2005.

#### No. 89650

OEM: 775518  
(1957-1978) 18, 20, 25 HP  
**Outside ø:** 2.750"  
**Inside ø:** .50"  
Fits Two-Piece Gearcase w/  
Thru-Cavitation Plate Exhaust



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

#### No. 89750

OEM: 395289  
(1979-2005) 20-35 HP  
**Outside ø:** 1.975"  
**Inside ø:** .625"  
Fits One-Piece Gearcase w/  
Thru-Prop Exhaust.  
Fits Two-Piece Gearcase w/  
Thru-Cavitation Plate Exhaust



Impeller includes:

#### No. 89593

KEY - WHITE PLASTIC WEDGE  
OEM: 344470



#### No. 89660

OEM: 777213  
(1958-1970) 35, 40 HP  
**Outside ø:** 2.750"  
**Inside ø:** .625"  
**Height:** .875"  
Fits Two-Piece Gearcase w/  
Thru-Cavitation Plate Exhaust



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

#### No. 89480

OEM: 775521  
(1971-1973) 40 HP  
**Outside ø:** 2.750"  
**Inside ø:** .625"  
**Height:** .50"  
Fits Two-Piece Gearcase w/  
Thru-Cavitation Plate Exhaust



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

#### No. 89990

OEM: 390286  
(1974-1976) 40 HP, (1981-1987) 40 HP  
**Outside ø:** 2.00"  
**Inside ø:** .690"  
Fits Two-Piece Gearcase w/  
Thru-Cavitation Plate Exhaust



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

# Johnson / Evinrude

## WATER PUMP KITS 18-40 HP 2-CYLINDER CROSSFLOW

### No. 12070

OEM: 393630



Fits (1980-2005) 20-35 HP 2-Cyl. crossflow engines with thru-prop exhaust and one-piece gearcase.

### No. 12060

OEM: 395270



Fits (1979-1998) 18, 25 and 28 HP 2-Cyl. crossflow engines with thru-cavitation plate exhaust and two-piece gearcase.

### No. 22360

SCREW

OEM: 324960

Kit Contains: 6



### No. 80180

O-RING

OEM: 311338

Kit Contains: 2



### No. 22360

SCREW

OEM: 324960

Kit Contains: 4



### No. 34560

GASKET

OEM: 329390



### No. 86492

GROMMET

OEM: 302497



### No. 86230

SEAL

OEM: 328753



### No. 86492

GROMMET

OEM: 302497



### No. 12640

WEAR PLATE

OEM: 329391



### No. 21721

WASHER

OEM: 318452

Kit Contains: 6



### No. 12630

WEAR PLATE

OEM: 328755



### No. 12440

PUMP HOUSING

OEM: 330560



### No. 33511

GASKET

OEM: 324449



### No. 45230

O-RING

FOR BUSHING

OEM: 301877



### No. 34520

GASKET

OEM: 325537



### No. 12812

PUMP CUP

OEM: 328751



### No. 86150

OIL SEAL

OEM: 321459



### No. 12470

PUMP HOUSING

OEM: 393632

\* Includes 21427



### No. 81220

O-RING

OEM: 554545



### No. 81170

O-RING

OEM: 301967

Kit Contains: 2



### No. 21427\*

BRASS BUSHING

OEM: 328754

Included in 12470



### No. 89750

IMPELLER

OEM: 395289



### No. 89750

IMPELLER

OEM: 395289



### No. 12812

PUMP CUP

OEM: 328751



### No. 89593

KEY

OEM: 330619



### No. 89593

KEY

OEM: 330619



### No. 12247

OEM: 391741



Fits (1974-1976) 40 2-Cyl. crossflow engines  
Fits (1981-1987) 40 Comm. 2-Cyl. crossflow engines with thru-cavitation plate exhaust and two-piece gearcase. Half-moon key.

### No. 12816

PUMP CUP

OEM: 325397



### No. 12564

WEAR PLATE

OEM: 325398



### No. 89990

IMPELLER

OEM: 390286



### No. 36850

GASKET

OEM: 325399



### No. 86483

GROMMET

OEM: 304026



### No. 12474

PUMP HOUSING

OEM: 390613

### No. 36860

GASKET

OEM: 325229



### No. 86180

OIL SEAL

OEM: 321466



















# Johnson / Evinrude

## WATER PUMP IMPELLERS 2 & 3-CYLINDER LOOPCHARGED

### Water Pump Impeller Identification 2 & 3-Cylinder Loopcharged

There are four different sized lower gear housings used on these outboards:

- 1968-1994, small diameter gear housing utilizing a small 6 vane water pump impeller and a small water pump housing.
- 1968-2005, large diameter gear housing utilizing a large 6 vane water pump impeller and a large water pump housing.
- 1989-2005, 40, 45, 48, 50 HP 2-Cylinder, small diameter gear housing utilizing a large 3 vane water pump impeller and a large water pump housing.
- 1996-2001, 25, 30 and 35 HP 3-Cylinder, small diameter gear housing utilizing a small 6 vane water pump impeller and a small water pump housing.

<p><b>No. 89660</b> OEM: 777213 (1971-1978) small <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 2.750"</b> <b>Inside <math>\varnothing</math>: .625"</b></p>  <p><b>*No. 89595</b> KEY - STAINLESS STEEL HALF-MOON OEM: 308928</p>  <p style="text-align: right;">* Order Separately</p>	<p><b>No. 89750</b> OEM: 395289 (1996-2001) 3-Cyl. 25, 30, 35 HP small <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 1.975"</b> <b>Inside <math>\varnothing</math>: .625"</b></p> <p>Impeller includes: <b>No. 89593</b> KEY - WHITE PLASTIC WEDGE OEM: 330619</p>  
<p><b>No. 89690</b> OEM: 389589 (1979-1985) small <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 2.750"</b> <b>Inside <math>\varnothing</math>: .625"</b></p>  <p><b>*No. 89594</b> KEY - PIN OEM: 300611</p>  <p style="text-align: right;">* Order Separately</p>	<p><b>No. 89940</b> OEM: 382547 (1968-1978) large <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 3.600"</b> <b>Inside <math>\varnothing</math>: .750"</b></p> <p><b>*No. 89595</b> KEY - STAINLESS STEEL HALF-MOON OEM: 308928</p>   <p style="text-align: right;">* Order Separately</p>
<p><b>No. 89780</b> OEM: 396809 (1984-1994) small <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 2.750"</b> <b>Inside <math>\varnothing</math>: .625"</b></p> <p>Impeller includes: <b>No. 89593</b> KEY - WHITE PLASTIC WEDGE OEM: 330619</p>  	<p><b>No. 89710</b> OEM: 396725 (1979-2001) large <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 3.600"</b> <b>Inside <math>\varnothing</math>: .750"</b></p>  
<p><b>No. 89790</b> Impeller includes: OEM: 432941 No. 81250 O-ring (1989-2005) 2-Cyl. 40, 45, 48, 50 HP small <math>\varnothing</math> lower gear hsg. <b>Outside <math>\varnothing</math>: 3.600"</b> <b>Inside <math>\varnothing</math>: .750"</b></p> <p><b>*No. 89592</b> KEY - BLACK PLASTIC WEDGE OEM: 334897</p>   <p style="text-align: right;">* Order Separately</p>	<p>Impeller includes: <b>No. 89591</b> KEY - WHITE PLASTIC WEDGE OEM: 331901</p> <p>Impeller includes: <b>No. 89592</b> KEY - BLACK PLASTIC WEDGE OEM: 334897</p>  

# Johnson / Evinrude

## WATER PUMP KITS 2 & 3-CYLINDER LOOPCHARGED

### No. 12232

OEM: 389133



Fits (1971-1978) 2-Cyl. and 3-Cyl. loopcharged engines with the small gearcase. Small water pump with half-moon key impeller.

### No. 12210

OEM: 439077



Fits (1984-1994) 2-Cyl. and 3-Cyl. loopcharged engines with the small gearcase. Small water pump with plastic wedge key impeller.

### No. 22324

SCREW

OEM: 331980

Kit Contains: 2



### No. 89595

KEY

OEM: 308928



### No. 22324

SCREW

OEM: 331980

Kit Contains: 2



### No. 89593

KEY - PLASTIC

OEM: 344470



### No. 12940

TUBE GUIDE

OEM: 315838



### No. 86580

SEAL

OEM: 315788



### No. 12940

TUBE GUIDE

OEM: 315838



### No. 86580

SEAL

OEM: 315788



### No. 86494

GROMMET

OEM: 315837



### No. 12620

WEAR PLATE

OEM: 320981



### No. 86494

GROMMET

OEM: 315837



### No. 12620

WEAR PLATE

OEM: 320981



### No. 22360

SCREW

OEM: 302325

Kit Contains: 4



### No. 33150

GASKET

OEM: 336530



### No. 22360

SCREW

OEM: 302325

Kit Contains: 4



### No. 33150

GASKET

OEM: 336530



### No. 12450

PUMP HOUSING

OEM: 384087



### No. 86491

GROMMET

OEM: 315748



### No. 12450

PUMP HOUSING

OEM: 384087



### No. 86491

GROMMET

OEM: 341732



### No. 12814

PUMP CUP

OEM: 320775

+320776



### No. 12814

PUMP CUP

OEM: 320775

+320776



### No. 81120

O-RING

OEM: 303059



### No. 81120

O-RING

OEM: 303059



### No. 89660

IMPELLER

OEM: 377230



### No. 89780

IMPELLER

OEM: 396809



### No. 89591

KEY - WHITE

OEM: 331901





# Johnson / Evinrude

## WATER PUMP KITS 2 & 3-CYLINDER LOOPCHARGED

### No. 12235

OEM: 5000308



Fits (1995-2005) 40, 45 and 55 HP, (2004-2005) 40, 50 and 60 HP 2-Cyl. loopcharged engines with the large gearcase. Large water pump with the six vane impeller.

### No. 12245

OEM: 438592



Fits (1989-2005) 40, 45, 48 and 50 HP 2-Cyl. loopcharged engines w/ small gearcase. Large water pump with the three vane impeller.

### No. 22360

SCREW  
OEM: 10-28667  
Kit Contains: 2



### No. 86570

SEAL  
OEM: 324981

### No. 86497

GROMMET  
OEM: 333758



### No. 82100

O-RING  
OEM: 310584

### No. 22352

SCREW  
OEM: 337574  
Kit Contains: 2



### No. 12551

WEAR PLATE  
OEM: 341038

### No. 12480

PUMP HOUSING  
OEM: 438544



### No. 89592

KEY  
OEM: 334897

### No. 86497

GROMMET  
OEM: 333758



### No. 33150

GASKET  
OEM: 336530

### No. 81250

O-RING  
OEM: 331188



### No. 86570

SEAL  
OEM: 324981

### No. 12482

PUMP HOUSING  
OEM: 438545



### No. 86491

GROMMET  
OEM: 315748

### No. 12815

PUMP CUP  
OEM: 340619



### No. 12551

WEAR PLATE  
OEM: 341038

### No. 12815

PUMP CUP  
OEM: 340619



### No. 11053

SPRING  
OEM: 343977

### No. 12815

PUMP CUP  
OEM: 340619



### No. 33150

GASKET  
OEM: 336530

### No. 81140

O-RING  
OEM: 335132



### No. 13240

THERMOSTAT COVER  
OEM: 343141

### No. 12815

PUMP CUP  
OEM: 340619



### No. 86491

GROMMET  
OEM: 341732

### No. 89710

IMPELLER  
OEM: 396725



### No. 35440

GASKET  
OEM: 329830

### No. 89592

KEY (BLACK)  
OEM: 334897



### No. 89591

KEY (WHITE)  
OEM: 331901



### Water Pump Kit w/o Housing

### No. 12252

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
12815	340619	Pump Cup
12550	341038	Wear Plate
12950	319276	Guide
33150	336530	Gasket
34330	319586	Gasket
86570	324981	Seal
22320 (2)	908158	Screws
22360 (4)	331979	Screws
86490	314008	Grommet



GLM	OEM	ITEM
86491	315748	Grommet
81140	326649	O-ring
89710	396725	Impeller
89591	331901	Key
89592	334897	Key

# Johnson / Evinrude

## WATER PUMP KITS 2 & 3-CYLINDER LOOPCHARGED

### No. 12233

OEM: 437907  
3-Cylinder



Fits (1996-2001) 25, 30 and 35 HP 3-Cyl. loopcharged engines.

### No. 12246

OEM: 432955



Fits (1986-2001) 65, 70 and 75 HP 3-Cyl. loopcharged engines with the large gearcase. Large water pump with plastic wedge key impeller.

### No. 10561

ELBOW  
OEM: 321886



### No. 89710

IMPELLER  
OEM: 396725

### No. 10563

ELBOW  
OEM: 126776



### No. 89591

KEY - WHITE  
OEM: 331901

### No. 22351

SCREW  
OEM: 328725  
Kit Contains: 6



### No. 12630

WEAR PLATE  
OEM: 328755

### No. 11054

SPRING  
OEM: 333858



### No. 89592

KEY - BLACK  
OEM: 334897

### No. 86487

GROMMET  
OEM: 340811



### No. 34520

GASKET  
OEM: 325537

### No. 12950

TUBE GUIDE  
OEM: 319276



### No. 33150

GASKET  
OEM: 336530

### No. 21427

BUSHING  
OEM: 328754



### No. 86216

SEAL  
OEM: 342370

### No. 86493

GROMMET  
OEM: 344227



### No. 12550

WEAR PLATE  
OEM: 341038

### No. 12472

PUMP HOUSING  
OEM: 339720



### No. 45230

O-RING  
OEM: 301877

### No. 22320

SCREW  
OEM: 908158  
Kit Contains: 2



### No. 86570

SEAL  
OEM: 324981

### No. 12812

PUMP CUP  
OEM: 328751



### No. 22360

SCREW  
OEM: 302325  
Kit Contains: 4



### No. 11053

SPRING  
OEM: 343977

### No. 81220

O-RING  
OEM: 554545



### No. 86490

GROMMET  
OEM: 314008



### No. 13240

THERMOSTAT COVER  
OEM: 343141

### No. 89750

IMPELLER  
OEM: 395289



### No. 12400

PUMP HOUSING  
OEM: 438543



### No. 35440

GASKET  
OEM: 329830

### No. 89593

KEY  
OEM: 344470



### No. 12815

PUMP CUP  
OEM: 340619



### No. 86491

GROMMET  
OEM: 341732

### No. 86230

SEAL  
OEM: 328753



### No. 81140

O-RING  
OEM: 326649





# Johnson / Evinrude

## WATER PUMP KITS 2 & 3-CYLINDER LOOPCHARGED

### No. 12244

OEM: 438579



Fits (1974-1978) 70 and 75 HP 3-Cyl. loopcharged engines with the large gearcase. Large water pump with half-moon key impeller.

### No. 12240

OEM: 438602



Fits (1979-2005) 40-60 HP 2-Cyl. loopcharged engines with the large gearcase. Fits (1979-1985) 65, 70 and 75 HP 3-Cyl. loopcharged engines with the large gearcase. Large water pump with the plastic wedge key impeller.

### No. 22360

SCREW

OEM: 331979

Kit Contains: 4



### No. 89595

KEY

OEM: 308928



### No. 22360

SCREW

OEM: 302325

Kit Contains: 4



### No. 89591

KEY - WHITE

OEM: 331901



### No. 22320

SCREW

OEM: 908158

Kit Contains: 2



### No. 34330

GASKET

OEM: 319586



### No. 22320

SCREW

OEM: 908158

Kit Contains: 2



### No. 89592

KEY - BLACK

OEM: 334897



### No. 12950

TUBE GUIDE

OEM: 319276



### No. 12550

WEAR PLATE

OEM: 341038



### No. 12950

TUBE GUIDE

OEM: 319276



### No. 86570

SEAL

OEM: 324981



### No. 86490

GROMMET

OEM: 314008



### No. 33150

GASKET

OEM: 336530



### No. 86490

GROMMET

OEM: 314008



### No. 12550

WEAR PLATE

OEM: 341038



### No. 12400

PUMP HOUSING

OEM: 438543



### No. 86491

GROMMET

OEM: 315748



### No. 12400

PUMP HOUSING

OEM: 438543



### No. 33150

GASKET

OEM: 336530



### No. 12815

PUMP CUP

OEM: 340619



### No. 12815

PUMP CUP

OEM: 340619



### No. 86491

GROMMET

OEM: 341732



### No. 81140

O-RING

OEM: 326649



### No. 81140

O-RING

OEM: 326649



### No. 89940

IMPELLER

OEM: 382547



### No. 89710

IMPELLER

OEM: 396725



# Johnson / Evinrude

## WATER PUMP HOUSINGS V4/V6/V8

### Water Pump Housing Identification V4 (1977-2006), V6 (1976-2006), V8 (All Years)

There are two Johnson / Evinrude water pump housings for the above models. The housings are identical except for a small spray hole that shoots cooling water on the exhaust pipe inside the intermediate housing. The spray hole is used on the 25" long shaft and 30" extra long shaft outboards. The standard 20" shaft outboard doesn't need the spray hole. When in doubt, use the housing No. 12430 with the spray hole.

#### No. 12430

WATER PUMP HOUSING  
W/ SPRAY HOLE  
OEM: 435990



Spray Hole

#### No. 12395

WATER PUMP HOUSING  
W/OUT SPRAY HOLE  
OEM: 435959



No Spray Hole

# Johnson / Evinrude

## WATER PUMP IMPELLERS V4/V6/V8

### Water Pump Impeller Identification V4/V6/V8

There have been only four different water pump impellers used in the 1958-2006 V4, V6 and V8 Johnson / Evinrude 2-Stroke outboard motors.

The 1958-1968 V4 engines are identified by the thru-cavitation plate exhaust gear housings. The impeller number is GLM No. 89470.

The 1969-1972 V4 engines are identified by the thru-prop exhaust gear housings with electric / hydraulic shift. They are shifted electronically with an electric shift control box (only one mechanical cable running to the engine, a throttle cable). The impeller fits on a .750 inch diameter shaft and is held in place with a half-moon key. The impeller number is GLM No. 89612.

1973-1978 V4 and V6 engines use an impeller that fits on a .875 inch diameter shaft and is held in place with a half-moon key. The impeller number is GLM No. 89680.

1979-2006 V4, V6 and V8 engines use an impeller that fits on a .875 inch diameter shaft and held in place with a white plastic wedge key. The impeller number is GLM No. 89570.

#### No. 89470

OEM: 377992  
(1958-1968) V4  
Fits Lower Gearcases w/  
Thru-Cavitation Plate Exhaust  
**Outside ø: 4.20"**  
**Inside ø: .750"**



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

#### No. 89680

OEM: 777212  
(1973-1978) V4, (1976-1978) V6  
Fits Mechanical / Hydraulic Shift  
Lower Gearcases  
**Outside ø: 3.500"**  
**Inside ø: .875"**



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

#### No. 89612

OEM: 385072  
(1969-1972) V4  
Fits Electric / Hydraulic Shift  
Lower Gearcases w/  
Thru-Prop Exhaust  
**Outside ø: 3.500"**  
**Inside ø: .750"**



#### \*No. 89595

KEY - STAINLESS STEEL HALF-MOON  
OEM: 308928



\* Order Separately

#### No. 89570

OEM: 5001593  
(1979-2006) V4/V6/V8  
Fits Mechanical Shift  
Lower Gearcases  
**Outside ø: 3.50"**  
**Inside ø: .875"**



Impeller includes:

#### No. 89590

KEY - WHITE PLASTIC WEDGE  
OEM: 331107

Impeller also includes:  
No. 81160 - O-ring  
No. 82129 - O-ring  
No. 86660 - Seal

# Johnson / Evinrude

## WATER PUMP KITS V4/V6/V8

### No. 12101

OEM: 395073



Fits (1977-1978) V4 engines with mechanical/hydraulic shift.  
Fits (1976-1978) V6 engines with mechanical/hydraulic shift.  
Half-moon key impeller.

### No. 81160

O-RING  
OEM: 310585



### No. 82120

O-RING  
OEM: 302035

### No. 22370

SCREW  
OEM: 306643  
Kit Contains: 2



### No. 12811

PUMP CUP  
OEM: 338486

### No. 86480

COVER  
GROMMET  
OEM: 320943



### No. 89680

IMPELLER  
OEM: 389642

### No. 12570

COVER  
OEM: 338893



### No. 86660

SEAL  
OEM: 331353

### No. 22360

SCREW  
OEM: 302325  
Kit Contains: 4



### No. 12580

WEAR PLATE  
OEM: 338485

### No. 86490

WATER TUBE  
GROMMET  
OEM: 314008



### No. 33730

GASKET  
OEM: 338484

### No. 12430

PUMP HOUSING  
W/ SPRAY HOLE  
OEM: 435990



### No. 86500

SHIFT ROD  
GROMMET  
OEM: 321008

### Water Pump Impeller Kit

### No. 12105

OEM: N/A  
V4/V6 Before 1978

#### Kit Contains:

GLM	OEM	ITEM
89680	389642	Impeller
12580	338485	Wear Plate
33730	338484	Gasket
86660	331353	Seal
81160	310585	O-ring



### Water Pump Kit w/o Housing

### No. 12072

W/O HOUSING  
OEM: N/A  
V4/V6  
Before 1978

#### Kit Contains:

GLM	OEM	ITEM	GLM	OEM	ITEM
89680	389642	Impeller	81250	322501	O-ring
12811	338486	Pump Cup	22370 (2)	306643	Screw
12580	338485	Wear Plate	22360 (4)	302325	Screw
33730	338484	Gasket	86480	320943	Grommet, Cvr.
86660	331353	Seal	86490	314008	Grommet, Tube
12570	338893	Cover	86500	321008	Grommet, Shift Rod
81160	310585	O-ring			



### Water Pump Housing Kit

### No. 12103

OEM: 395072  
Most V4/V6/V8

#### Kit Contains:

GLM	OEM	ITEM
12430	435990	Pump Hsg.
12811	338486	Pump Cup
12580	338485	Wear Plate
33730	338484	Gasket
86660	331353	Seal



GLM	OEM	ITEM
22360 (4)	302325	Screw
81250	322501	O-ring

### Pump Cup & Plate Assembly

### No. 12880

CUP & PLATE ASSY.  
OEM: 435027  
V4/V6/V8

#### Kit Contains:

GLM	OEM	ITEM
12811	338486	Pump Cup
12580	338485	Wear Plate





# Johnson / Evinrude

## WATER PUMP KITS V4/V6/V8

### No. 12000

OEM: 5001595



Fits (1979-2006) with V4/V6/V8 engines with 20" shaft.  
Plastic wedge key impeller.

### Water Pump Impeller Kit

### No. 12106

OEM: N/A  
V4/V6/V8 After 1979

#### Kit Contains:

GLM	OEM	ITEM
89570	435821	Impeller
89590	331107	Key
12580	338485	Wear Plate
33730	338484	Gasket
86660	331353	Seal
81160	310585	O-ring



### No. 12828

GUIDE TUBE-LONG  
OEM: 338667



### No. 82120

O-RING  
OEM: 302035

### No. 12827

GUIDE TUBE-SHORT  
OEM: 338636



### No. 12811

PUMP CUP  
OEM: 338486

### No. 81160

O-RING  
OEM: 310585



### No. 89570

IMPELLER  
OEM: 5001593

### No. 86495

GROMMET  
OEM: 338601



### No. 89590

KEY  
OEM: 331107

### No. 86480

COVER GROMMET  
OEM: 320943



### No. 81250

O-RING  
OEM: 331188

### No. 22370

SCREW  
OEM: 306643  
Kit Contains: 2



### No. 86660

SEAL  
OEM: 331353

### No. 12570

COVER  
OEM: 338893



### No. 12580

WEAR PLATE  
OEM: 338485

### No. 22360

SCREW  
OEM: 302325  
Kit Contains: 4



### No. 33730

GASKET  
OEM: 338484

### No. 86490

WATER TUBE  
GROMMET  
OEM: 314008



### No. 86500

SHIFT ROD  
GROMMET  
OEM: 321008

### No. 12430

PUMP HOUSING  
W/ SPRAY HOLE  
OEM: 435990



### Water Pump Kit w/o Housing

### No. 12104

WITHOUT HOUSING  
OEM: N/A  
V4/V6/V8  
After 1979

#### Kit Contains:

GLM	OEM	ITEM	GLM	OEM	ITEM
89570	435821	Impeller	81160	310585	O-ring
89590	331107	Key	80100	332584	O-ring
12811	338486	Pump Cup	22370 (2)	306643	Screw
12580	338485	Wear Plate	22360 (4)	302325	Screw
33730	338484	Gasket	86480	320943	Grommet, Cvr.
86660	331353	Seal	86490	314008	Grommet, Tube
12570	338893	Cover	86500	321008	Grommet, Shift Rod



### Water Pump Housing Kit

### No. 12103

OEM: 395072  
Most V4/V6/V8

#### Kit Contains:

GLM	OEM	ITEM	GLM	OEM	ITEM
12430	435990	Pump Hsg.	22360 (4)	302325	Screw
12811	338486	Pump Cup	81250	322501	O-ring
12580	338485	Wear Plate			
33730	338484	Gasket			
86660	331353	Seal			



### Pump Cup & Plate Assembly

### No. 12880

CUP & PLATE ASSY.  
OEM: 435027  
V4/V6/V8

#### Kit Contains:

GLM	OEM	ITEM
12811	338486	Pump Cup
12580	338485	Wear Plate



# Johnson / Evinrude

## WATER PUMP KITS V4/V6/V8

### No. 12102

OEM: 5001594



Fits (1979-2006) with V4/V6/V8 engines with 25" and 30" shaft.  
Plastic wedge key impeller.

### No. 81160

O-RING  
OEM: 310585



### No. 12811

PUMP CUP  
OEM: 338486

### No. 22370

SCREW  
OEM: 306643  
Kit Contains: 2



### No. 89570

IMPELLER  
OEM: 5001593

### No. 86480

COVER  
GROMMET  
OEM: 320943



### No. 89590

KEY  
OEM: 331107

### No. 12570

COVER  
OEM: 338893



### No. 81250

O-RING  
OEM: 331188

### No. 22360

SCREW  
OEM: 302325  
Kit Contains: 4



### No. 86660

SEAL  
OEM: 331353

### No. 86490

WATER TUBE  
GROMMET  
OEM: 314008



### No. 12580

WEAR PLATE  
OEM: 338485

### No. 12395

PUMP HOUSING  
W/OUT SPRAY HOLE  
OEM: 435959



### No. 33730

GASKET  
OEM: 338484

### No. 82120

O-RING  
OEM: 302035



### No. 86500

SHIFT ROD  
GROMMET  
OEM: 321008

### Water Pump Impeller Kit

### No. 12106

OEM: N/A  
V4/V6/V8 After 1979

#### Kit Contains:

GLM	OEM	ITEM
89570	435821	Impeller
89590	331107	Key
12580	338485	Wear Plate
33730	338484	Gasket
86660	331353	Seal
81160	310585	O-ring



### Water Pump Kit w/o Housing

### No. 12104

WITHOUT HOUSING  
OEM: N/A  
V4/V6/V8  
After 1979

#### Kit Contains:

GLM	OEM	ITEM	GLM	OEM	ITEM
89570	435821	Impeller	81160	310585	O-ring
89590	331107	Key	80100	332584	O-ring
12811	338486	Pump Cup	22370 (2)	306643	Screw
12580	338485	Wear Plate	22360 (4)	302325	Screw
33730	338484	Gasket	86480	320943	Grommet, Cvr.
86660	331353	Seal	86490	314008	Grommet, Tube
12570	338893	Cover	86500	321008	Grommet, Shift Rod



### Water Pump Housing Kit

### No. 12073

OEM: N/A  
Most V4/V6/V8



#### Kit Contains:

GLM	OEM	ITEM	GLM	OEM	ITEM
12395	435959	Pump Hsg.	22360 (4)	302325	Screw
12811	338486	Pump Cup	81250	322501	O-ring
12580	338485	Wear Plate			
33730	338484	Gasket			
86660	331353	Seal			



### Pump Cup & Plate Assembly

### No. 12880

CUP & PLATE ASSY.  
OEM: 435027  
V4/V6/V8

#### Kit Contains:

GLM	OEM	ITEM
12811	338486	Pump Cup
12580	338485	Wear Plate





# Johnson / Evinrude

## WATER PUMP IMPELLERS

<p><b>No. 89490</b> IMPELLER OEM: 387361</p>  <p>1.5, 2, 4 HP</p>	<p><b>No. 89580</b> IMPELLER OEM: 434424</p>  <p>3, 4, 5, 5.5, 6, 7.5 HP</p>	<p><b>No. 89500</b> IMPELLER OEM: 389576, 436137</p>  <p>4, 4.5, 5, 6, 7.5, 8 HP</p>	<p><b>No. 89670</b> IMPELLER OEM: 775519, 377178</p>  <p>9.5 HP (1964-1973)</p>	<p><b>No. 89770</b> IMPELLER OEM: 386084</p>  <p>8, 9.9, 15 HP (1974 &amp; Up)</p>
<p><b>No. 89650</b> IMPELLER OEM: 775518</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 89750</b> IMPELLER OEM: 395289 (Includes No. 89593)</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 89660</b> IMPELLER OEM: 777213</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 89480</b> IMPELLER OEM: 775521</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 89990</b> IMPELLER OEM: 390286</p>  <p>2-Cyl. Crossflow</p>
<p><b>No. 89790</b> IMPELLER OEM: 437059, 432941 (Includes No. 81250)</p>  <p>2-Cyl. Loopcharged</p>	<p><b>No. 89690</b> IMPELLER OEM: 777129, 389589</p>  <p>2-Cyl. Loopcharged</p>	<p><b>No. 89780</b> IMPELLER OEM: 777214, 396809 (Includes No. 89593)</p>  <p>2 &amp; 3-Cyl. Loopcharged</p>	<p><b>No. 89710</b> IMPELLER OEM: 396725 (Includes No. 89591 &amp; No. 89592)</p>  <p>2 &amp; 3-Cyl. Loopcharged</p>	<p><b>No. 89940</b> IMPELLER OEM: 382547</p>  <p>3-Cyl. Loopcharged</p>
<p><b>No. 89470</b> IMPELLER OEM: 377992</p>  <p>V4 (1958-1968)</p>	<p><b>No. 89612</b> IMPELLER OEM: 385072</p>  <p>V4 (1969-1972)</p>	<p><b>No. 89680</b> IMPELLER OEM: 777212</p>  <p>V4/V6 (1973-1978)</p>	<p><b>No. 89570</b> IMPELLER OEM: 5001593 (Includes No. 89590, No. 81160, No. 82129 &amp; No. 86660) V4/V6/V8 (1979-06)</p> 	<p><b>No. 89720</b> IMPELLER OEM: 300583 <b>No. 89730</b> OEM: 300591</p> 
<p><b>No. 89594</b> KEY - PIN OEM: 300611</p>  <p>Stainless Steel</p>	<p><b>No. 89596</b> KEY - PIN OEM: 300771</p>  <p>Stainless Steel</p>	<p><b>No. 89595</b> KEY - HALF-MOON OEM: 308928</p>  <p>Stainless Steel</p>	<p><b>No. 89591</b> KEY - WEDGE OEM: 331901 <b>No. 89593</b> OEM: 344470 <b>No. 89590</b> OEM: 331107</p>  <p>Plastic White</p>	<p><b>No. 89592</b> KEY - WEDGE OEM: 334897</p>  <p>Plastic Black</p>

# Johnson / Evinrude

## WATER PUMP WEAR PLATES

### No. 12600

WEAR PLATE  
OEM: 203132



### No. 12555

WEAR PLATE  
OEM: 324640



### No. 12610

WEAR PLATE  
OEM: 318995



8, 9.9, 15 HP

### No. 12630

WEAR PLATE  
OEM: 328755



2-Cylinder Crossflow, 3-Cyl. Loopcharged w/ Thru-Prop Exhaust

### No. 12640

WEAR PLATE  
OEM: 329391



1 & 2-Cylinder Crossflow w/ Thru-Cavitation Plate Exhaust

### No. 12564

WEAR PLATE  
OEM: 325398



40 HP 2-Cylinder Crossflow

### No. 12550

WEAR PLATE LARGE HSG.  
OEM: 341038



2-Cyl. Loopcharged, 3-Cylinder

### No. 12620

WEAR PLATE SMALL HSG.  
OEM: 320981



2-Cylinder Loopcharged

### No. 12580

WEAR PLATE  
OEM: 338485



V4, V6 & V8

# Johnson / Evinrude

## WATER PUMP CUPS

### No. 12818

PUMP CUP  
OEM: 324641



4-8 HP

### No. 12813

PUMP CUP  
OEM: 324097



8, 9.9, 15 HP

### No. 12812

PUMP CUP  
OEM: 328751



18-35 HP 2-Cylinder Crossflow, 3-Cylinder

### No. 12816

PUMP CUP  
OEM: 325397



40 HP 2-Cylinder Crossflow

### No. 12815

PUMP CUP  
OEM: 340619



2-Cyl. Loopcharged, 3-Cylinder

### No. 12814

PUMP CUP  
OEM: 320775 + 320776



2-Cylinder Loopcharged

### No. 12811

PUMP CUP  
OEM: 338486



V4, V6 & V8

# Johnson / Evinrude

## WATER PUMP HOUSINGS

**No. 12436**  
PUMP HOUSING  
OEM: 389577



4-8 HP



**No. 12460**  
PUMP HOUSING  
OEM: 435390



8, 9.9, 15 HP

**No. 12470**  
PUMP HOUSING  
W/ BRASS BUSHING  
OEM: 393632



20, 25, 35 HP w/ Thru-Prop Exhaust

**No. 12440**  
PUMP HOUSING  
OEM: 330560



18, 25, 28 HP w/ Thru-Cavitation Plate Exhaust

**No. 12474**  
PUMP HOUSING  
OEM: 390613



40 HP 2-Cylinder Crossflow



**No. 12480**  
PUMP HOUSING  
OEM: 438544



2-Cylinder Loopcharged

**No. 12450**  
PUMP HOUSING  
OEM: 384087



2-Cylinder Loopcharged

**No. 12482**  
PUMP HOUSING  
OEM: 438545



2-Cylinder Loopcharged



**No. 12400**  
PUMP HOUSING  
OEM: 438543



2-Cylinder Loopcharged, 3-Cylinder

**No. 12472**  
PUMP HOUSING  
OEM: 339720



3-Cylinder



**No. 12430**  
PUMP HOUSING  
W/ SPRAY HOLE  
OEM: 435990



V4, V6 & V8 - 25" & 30"

**No. 12395**  
PUMP HOUSING  
W/O SPRAY HOLE  
OEM: 435959



V4, V6 & V8 - 20"

# Johnson / Evinrude

## WATER PUMP COMPONENTS

### Water Pump Gaskets

#### No. 34200

IMPELLER HOUSING GASKET  
OEM: 309204



Electric Shift

#### No. 34510

PLATE TO HOUSING GASKET  
OEM: 325535



35 HP Water Pump

### Grommet

#### No. 86140

GROMMET  
OEM: 305762



### Seals

#### No. 86130

PLATE SEAL  
OEM: 321120



#### No. 86540

PLATE SEAL  
OEM: 332000



### Screws

#### No. 22360

SCREW  
OEM: 302325  
1/4-20 X1



#### No. 22380

SCREW  
OEM: 323626  
1/4-20 X 1-7/8



#### No. 22323

SCREW  
OEM: 331979  
1/4-20 X1-1/8



#### No. 22320

SCREW  
OEM: 908158  
1/4-20 X 1/2



#### No. 22370

SCREW  
OEM: 306643  
#10-24 X 1/2



#### No. 22321

SCREW  
OEM: 324334  
1/4-20 X 1-1/8



#### No. 22324

SCREW  
OEM: 331980  
1/4-20 X 2



#### No. 22325

SCREW  
OEM: 909533  
1/4-20 X 1





# Johnson / Evinrude

WATER PUMP KITS APPLICATIONS							
Outboard HP	Model Year	Impeller	Wear Plate	Pump Cup	Pump Housing	Service Kit w/o Hsg	Complete Water Pump Kit
<b>1.5 HP - 15 HP</b>							
1.5	1968-70	89490	-	-	-	-	-
2	1971-88	89490	-	-	-	-	-
3	1952-68	89580	12600	-	-	12108	-
3, 4	1991-96	-	-	12818	-	-	-
4	1969-72	89580	12600	-	-	12108	-
4 (90)	1973-80	89490	-	-	-	-	-
4 (110)	1973-82	89580	12600	-	-	12108	-
4 (90)	1981-90	89500	-	12818	-	-	-
4 Deluxe	1985-88	89500	12555	12818	12436	12255	12065
4 Deluxe	1989-96	-	12555	12818	-	-	-
4.5	1980-84	89500	12555	12818	12436	12255	12065
5	1965-68	89580	12600	-	-	12108	-
5	1986-90	89500	12555	12818	12436	12255	12065
5 4-Stroke	1998-	89500	12555	12818	12436	12255	12065
5.5	1956-64	89580	12600	-	-	-	-
6	1965-79	89580	12600	-	-	-	-
6	1984-96	89500	12555	12818	12436	12255	12065
6 4-Stroke	1998-	89500	12555	12818	12436	12255	12065
7.5	1954-58	89580	12600	-	-	12108	-
7.5	1980-83	89500	12555	12818	12436	12255	12065
8	1984-96	89500	12555	12818	12436	12255	12065
8 4-Stroke	1995-	89770	12610	12813	12460	-	12050
9.5	1964-73	89670	-	-	-	-	-
9.9 2-Stroke	1974-96	89770	12610	12813	12460	-	12050
9.9 4-Stroke	1995-01	89770	12610	12813	12460	-	12050
10	1956-63	89650	-	-	-	-	-
15	1953-56	89650	-	-	-	-	-
15 2-Stroke	1974-96	89770	12610	12813	12460	-	12050
15 4-Stroke	1995-01	89770	12610	12813	12460	-	12050
<b>18-40 HP 2-Cylinder Crossflow</b>							
18	1957-73	89650	-	-	-	-	-
18	1997-98	89750	12640	12812	12440	-	12060
20	1966-67	89650	-	-	-	-	-
20 Thru-Prop	1985-98	89750	12630	12812	12470	-	12070
25	1969-78	89650	-	-	-	-	-
25	1969-78	89650	-	-	-	-	-
25	1979-05	89750	12640	12812	12440	-	12060
25 Thru-Prop	1985-05	89750	12640	12812	12470	-	12070
28	1962-64	89480	-	-	-	-	-
28	1986-98	89750	12640	12812	12440	-	12060
30	1956	89480	-	-	-	-	-
33	1965-70	89480	-	-	-	-	-
35	1957-58	89480	-	-	-	-	-
35 w. Therm.	1958-59	89660	-	-	-	-	-
35 Thru-Prop	1980-96	89750	12630	12812	12470	-	12070
40	1960-70	89660	-	-	-	-	-
40	1971-73	89480	-	-	-	-	-
40	1974-76	89990	12564	12816	12474	-	12247
40	1981-87	89990	12564	12816	12474	-	12247



# Johnson / Evinrude

## WATER PUMP KITS APPLICATIONS

Outboard HP	Model Year	Impeller	Wear Plate	Pump Cup	Pump Housing	Service Kit w/o Hsg	Complete Water Pump Kit
<b>40-60 HP 2-Cylinder Loopcharged</b>							
40 Small Housing	1984-88	89780	12620	12814	12450	-	12210
40 Small Housing	1989-98	89790	12550	12815	12480	-	12245
40 Comm. Small Housing	1993-94	89780	12620	12815	12480	-	12210
40 Large Housing	1995-05	89710	12550	12815	12482	12252	12235
45 Comm. Small Housing	1986-94	89780	12620	12814	12450	-	12210
45 Comm. Large Housing	1995-05	89710	12550	12815	12482	12252	12235
48 Small Housing	1987-88	89780	12620	12814	12450	-	12210
48 Small Housing	1989-98	89790	12550	12815	12480	-	12245
50 Small Housing	1971-78	89660	12620	12814	12450	-	12232
50 Small Housing	1979-85	89690	12620	12814	12450	-	-
50 Small Housing	1986-88	89780	12620	12814	12450	-	12210
50 Small Housing	1989-98	89790	12550	12815	12480	-	12245
55 Comm. Small Housing	1986-94	89780	12620	12814	12450	-	12210
55 Large Housing	1995-05	89710	12550	12815	12482	12252	12235
60 Small Housing	1980-85	89690	12620	12814	12450	-	12210
60 Large Housing	1986-88	89710	12550	12815	12400	12252	12240
<b>3-Cylinder</b>							
25, 35	1995-01	89750	12630	12812	12472	-	12233
55	1968-69	89940	-	-	-	-	-
60	1970-71	89940	-	-	-	-	-
60	1989-01	89710	12550	12815	12400	12252	12246
60 4-stroke	1998-Up	89710	12550	12815	12400	12252	12246
65	1972-73	89940	-	-	-	-	-
65	1979-01	89710	12550	12815	12400	12252	12246
70	1974-78	89940	12550	12815	12400	-	12244
70	1979-94	89710	12550	12815	12400	12252	12246
70 4-stroke	1998-Up	89710	12550	12815	12400	12252	12246
75	1974-78	89940	12550	12815	12400	-	12244
75	1979-88	89710	12550	12815	12400	12252	12246
<b>V4</b>							
All V4	1958-68	89470	-	-	-	-	-
85	1969-72	89612	-	-	-	-	-
85	1973-77	89680	-	-	-	-	-
85 25" Shaft	1977	89680	12580	12811	12430	12072	12101
85	1978	89680	12580	12811	12430	12072	12101
85	1979-80	89570	12580	12811	12430	12104	12102
90	1981-94	89570	12580	12811	12430	12104	12102
90 20" Shaft	1995-03	89570	12580	12811	12430	12104	12102
90 25" Shaft	1995-03	89570	12580	12811	12395	12104	12000
100	1971-72	89612	-	-	-	-	-
100	1979-80	89570	12580	12811	12430	12072	12101
100	1984-97	89570	12580	12811	12430	12104	12102
100 20" Shaft	1998-05	89570	12580	12811	12430	12104	12102
100 25" Shaft	1998-05	89570	12580	12811	12395	12104	12000
105	1998-01	89570	12580	12811	12395	12104	12000
115	1973-77	89680	-	-	-	-	-
115 25" Shaft	1977	89680	12580	12811	12430	12072	12101
115	1978	89680	12580	12811	12430	12072	12101
115	1979-94	89570	12580	12811	12430	12104	12102
115 20" Shaft	1995-06	89570	12580	12811	12430	12104	12102
115 25" Shaft	1995-06	89570	12580	12811	12395	12104	12000



# Johnson / Evinrude

## WATER PUMP KITS APPLICATIONS

Outboard HP	Model Year	Impeller	Wear Plate	Pump Cup	Pump Housing	Service Kit w/o Hsg	Complete Water Pump Kit
<b>V4 Continued</b>							
120 20" Shaft	1985-94	89570	12580	12811	12430	12104	12102
120 25" Shaft	1985-94	89570	12580	12811	12395	12104	12000
125	1971-72	89612	-	-	-	-	-
130 20" Shaft	1995-98	89570	12580	12811	12430	12104	12102
130 25" Shaft	1995-98	89570	12580	12811	12395	12104	12000
135	1973-76	89680	-	-	-	-	-
135 20" Shaft	2000-06	89570	12580	12811	12430	12104	12102
135 25" Shaft	2000-06	89570	12580	12811	12395	12104	12000
140	1977-78	89680	12580	12811	12430	12072	12101
140	1979-84	89570	12580	12811	12430	12104	12102
140 20" Shaft	1985-94	89570	12580	12811	12430	12104	12102
140 25" Shaft	1985-94	89570	12580	12811	12395	12104	12000
<b>V6</b>							
150	1978	89680	12580	12811	12430	12072	12101
150	1979-92	89570	12580	12811	12430	12104	12102
150 20" Shaft	1993-06	89570	12580	12811	12430	12104	12102
150 25" Shaft	1993-06	89570	12580	12811	12395	12104	12000
175	1977-78	89680	12580	12811	12430	12072	12101
175	1979-92	89570	12580	12811	12430	12104	12102
175 20" Shaft	1993-06	89570	12580	12811	12430	12104	12102
175 25" Shaft	1993-06	89570	12580	12811	12395	12104	12000
185	1984-92	89570	12580	12811	12430	12104	12102
185 20" Shaft	1993-94	89570	12580	12811	12430	12104	12102
185 25" shaft	1993-94	89570	12580	12811	12395	12104	12000
200	1976-78	89680	12580	12811	12430	12072	12101
200	1979-92	89570	12580	12811	12430	12104	12102
200 20" Shaft	1993-06	89570	12580	12811	12430	12104	12102
200 25" 30"	1993-06	89570	12580	12811	12395	12104	12000
225	1986-92	89570	12580	12811	12430	12104	12102
225 20" Shaft	1993-06	89570	12580	12811	12430	12104	12102
225 25" 30"	1993-06	89570	12580	12811	12395	12104	12000
235	1978	89680	12580	12811	12430	12072	12101
235	1979-85	89570	12580	12811	12430	12104	12102
250 20" Shaft	2006	89570	12580	12811	12430	12104	12102
250 25" 30"	2006	89570	12580	12811	12395	12104	12000
<b>V8</b>							
250	1991-92	89570	12580	12811	12430	12104	12102
250 20" Shaft	1993-98	89570	12580	12811	12430	12104	12102
250 25" 30"	1993-98	89570	12580	12811	12395	12104	12000
275	1985-88	89570	12580	12811	12430	12104	12102
300	1985-92	89570	12580	12811	12430	12104	12102
300 20" Shaft	1993-95	89570	12580	12811	12430	12104	12102
300 25" 30"	1993-95	89570	12580	12811	12395	12104	12000



## Section 8

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# Johnson / Evinrude

## PROP HARDWARE - MOST 2 & 3-CYL. (1972-UP) - SMALL GEARCASE

(See Application Guide)

### No. 22120

COTTER PIN  
OEM: 314502



### No. 22150

NUT - 5/8" NC 11  
OEM: 314503



### No. 22250

13 SPLINE WASHER  
OEM: 315810



### No. 22240

THRUST WASHER  
15/32" THICK  
OEM: 320305



### No. 22340

KIT W/O THRUST WASHER  
OEM: 175267



### No. 22245

KIT W/ THRUST WASHER  
OEM: 386866



## PROP HARDWARE - 2 & 3-CYL. (1975-UP) - LARGE GEARCASE

## PROP HARDWARE - V4 (1973-UP) - SMALL GEARCASE

### No. 22120

COTTER PIN  
OEM: 314502



### No. 22150

NUT - 5/8" NC 11  
OEM: 314503



### No. 22250

13 SPLINE WASHER  
OEM: 315810



### No. 22230

THRUST WASHER  
19/32" THICK  
OEM: 127084



### No. 22340

KIT W/O THRUST WASHER  
OEM: 175267



### No. 22235

KIT W/ THRUST WASHER  
OEM: 5005034





# Johnson / Evinrude

## PROP HARDWARE - V4/V6 "O" TYPE (1976-1990) - LARGE GEARCASE

### No. 22142

COTTER PIN  
OEM: 3852056



### No. 22185

NUT KIT - 3/4" NF 16  
OEM: 398042  
Comes w/ pin No. 22142



### No. 22190

15 SPLINE WASHER  
OEM: 320570



### No. 22220

THRUST WASHER  
17/32" THICK  
OEM: 333592



### No. 22200

KIT W/O THRUST WASHER  
OEM: 175266



### No. 22225

KIT W/ THRUST WASHER  
OEM: 434153



## PROP HARDWARE - V4/V6/V8 "O" TYPE (1991-UP) - LARGE GEARCASE

### No. 22142

COTTER PIN  
OEM: 3852056



### No. 22185

NUT KIT - 3/4" NF 16  
OEM: 398042  
Comes w/ pin No. 22142



### No. 22190

15 SPLINE WASHER  
OEM: 320570



### No. 22221

THRUST WASHER  
3/4" THICK  
OEM: 3852020



### No. 22200

KIT W/O THRUST WASHER  
OEM: 175266



### No. 22186

KIT W/ THRUST WASHER  
OEM: N/A



# Johnson / Evinrude

## PROPELLER HARDWARE

### Prop Kits w/o Prop Thrust Washers

#### No. 22222

OEM: 175269

#### Kit Contains:

GLM	OEM	ITEM
22255	323942	Spline Washer 13-S
22160	318971	Nut - 7/16" NC 14
22140	328522	Pin



9.9-15 HP

#### No. 22350

OEM: 175268

For 2-Cyl. Crossflow

#### Kit Contains:

GLM	OEM	ITEM
22260	323943	Spline Washer 14-S
22170	319891	Nut - 1/2" NC 13
22130	320785	Pin



20-35 HP (1980-05)  
Thru-Prop Exhaust

### Prop Thrust Washers

#### No. 22270

OEM: 319890

3/8" Thick  
Outside ø 1-3/4"



2-Cyl. Crossflow, 20-35 HP

#### No. 22240

OEM: 320305

15/32" Thick  
Outside ø 2-1/8"



#### No. 22241

OEM: 318966

1/2" Thick  
Outside ø 1-1/2"



9.9-15 HP (1974-1988)

#### No. 22220

OEM: 333592

17/32" Thick  
Outside ø 2-7/8"



"O" Type (1969-1990)

#### No. 22230

OEM: 127084

19/32" Thick  
Outside ø 2-9/16"



#### No. 22242

OEM: 334590

5/8" Thick  
Outside ø 1-1/2"



9.9-15 HP (1989-Up)

#### No. 22221

OEM: 126870

3/4" Thick  
Outside ø 2-7/8"



"O" & "M" Type (1991-Up)

### Prop Spline Washers

#### No. 22255

OEM: 323942

13 Spline  
ø 5/8" Shaft



#### No. 22260

OEM: 323943

14 Spline  
ø 13/16" Shaft



#### No. 22250

OEM: 315810

13 Spline  
ø 7/8" Shaft



#### No. 22190

OEM: 320570

15 Spline  
ø 1" Shaft



### Prop Nuts

#### No. 22160

OEM: 318971  
7/16" NC 14

#### No. 22170

OEM: 319891  
1/2" NC 13

#### No. 22150

OEM: 314503  
5/8" NC 11

#### No. 22185

OEM: 398042  
3/4" NF 16



### Cotter Pins

#### No. 22100

OEM: 302804

#### No. 22142

OEM: 306394

#### No. 22110

OEM: 309955

#### No. 22120

OEM: 314502

#### No. 22130

OEM: 320785

#### No. 22140

OEM: 552906



## PROPELLER KITS & HARDWARE APPLICATIONS

Model	Year	Thrust Washer	Spline Washer	Nut	Pin	Kit w/o T. Washer	Kit w/ T. Washer
9.9-15	1974-1988	22241	22255	22160	22140	22222	N/A
9.9-15	1989 & Up	22242	22255	22160	22140	22222	N/A
2-Cyl. Crossflow, 20-35 HP, Thru-Prop Exhaust	1980-2005	22270	22260	22170	22130	22350	-
2-Cyl. Loopcharged, 40-60 HP	1972-1985	22240	22250	22150	22120	22340	22245
2-Cyl. Loopcharged, 40-60 HP, w/ Small Grcs.	1986-1988	22240	22250	22150	22120	22340	22245
2-Cyl. Loopcharged, 40-60 HP, w/ Large Grcs.	1986-1988	22230	22250	22150	22120	22340	22235
2-Cyl. Loopcharged, 40-50 HP	1989-2005	22240	22250	22150	22120	22340	22245
2-Cyl. Loopcharged, 55 HP	1989-2005	22230	22250	22150	22120	22340	22235
3-Cyl., 65 + 70 HP	1972-1974	22240	22250	22150	22120	22340	22245
3-Cyl., 65, 70, 75 HP w/ Small Gearcase	1975-1988	22240	22250	22150	22120	22340	22245
3-Cyl., 65, 70, 75 HP w/ Large Gearcase	1975-1988	22230	22250	22150	22120	22340	22235
3-Cyl., 60, 65, 70 HP	1989-2001	22230	22250	22150	22120	22340	22235
3-Cyl., 25, 30, 35 HP	1996-2001	-	22260	22170	22130	-	-
V4, ø 7/8" 13-Spline Prop Shaft	1973 & Up	22230	22250	22150	22120	22340	22235
V4, ø 1" 15-Spline Prop Shaft	1984-1990	22220	22190	22185	22142	22200	22225
V4, ø 1" 15-Spline Prop Shaft	1991 & Up	22221	22190	22185	22142	22200	22186
V6/V8	1976-1990	22220	22190	22185	22142	22200	22225
V6/V8	1991 & Up	22221	22190	22185	22142	22200	22186

# Johnson / Evinrude

## PROPELLER KITS & HARDWARE APPLICATIONS

HP	Year	Washer	Spacer	Nut	Pin	Kit
9.9/15	1974-78	22241	22255	22160	22140	22222
9.9/15	1989 & Up	22242	22255	22160	22140	22222
20	1985 & Up	22270	22260	22170	22130	22350
25	1985 & Up	22270	22260	22170	22130	22350
30	1985 & Up	22270	22260	22170	22130	22350
35	1976 & Up	22270	22260	22170	22130	22350
40	1984 & Up	22240	22250	22150	22120	22340
45	1985 & Up	22240	22250	22150	22120	22340
48	1987 & Up	22240	22250	22150	22120	22340
50	1972-74	22230	22250	22150	22120	22340
50	1975-76	22240	22250	22150	22120	22340
50	1979	22240	22250	22150	22120	22340
50	1981	22240	22250	22150	22120	22340
50	1982 & Up	22240	22250	22150	22120	22340
55	1977-79	22230	22250	22150	22120	22340
55	1981	22240	22250	22150	22120	22340
55	1983	22230	22250	22150	22120	22340
55	1985 & Up	22230	22250	22150	22120	22340
60	1971	22230	22250	22150	22120	22340
60	1980 & Up	22240	22250	22150	22120	22340
65	1972-73	22230	22250	22150	22120	22340
65 Comm.	1984 & Up	22230	22250	22150	22120	22340
70 (15")	1979-85	22240	22250	22150	22120	22340
70 (20")	1974-94	22230	22250	22150	22120	22340
75 (15")	1975-88	22240	22250	22150	22120	22340
75 (20")	1975-87	22230	22250	22150	22120	22340
85	1971-80	22230	22250	22150	22120	22340
88	1987-94	22230	22250	22150	22120	22340
90	1981-94	22230	22250	22150	22120	22340
100	1971-72	22230	22250	22150	22120	22340
100	1979-94	22230	22250	22150	22120	22340
100 Comm.	1984 & Up	22220	22190	22180/22185	22141	22200
110	1987-94	22230	22250	22150	22120	22340
115	1973-94	22230	22250	22150	22120	22340
120	1985	22220	22190	22180/22185	22141	22200
120	1986-94	22230	22250	22150	22120	22340
125	1971-72	22230	22250	22150	22120	22340
135	1973-76	22230	22250	22150	22120	22340
140	1977-84	22230	22250	22150	22120	22340
140	1985	22220	22190	22180/22185	22141	22200
140	1986-94	22230	22250	22150	22120	22340
150	1978-90	22220	22190	22180/22185	22141	22200
150	1991 & Up	22221	22190	22180/22185	22141	22200
155 Comm.	1984-90	22220	22190	22180/22185	22141	22200
155 Comm.	1991 & Up	22221	22190	22180/22185	22141	22200
175	1977-90	22220	22190	22180/22185	22141	22200
175	1991 & Up	22221	22190	22180/22185	22141	22200
185	1984-90	22220	22190	22180/22185	22141	22200
185	1991 & Up	22221	22190	22180/22185	22141	22200
200	1986-90	22220	22190	22180/22185	22141	22200
200	1991 & Up	22221	22190	22180/22185	22141	22200
225	1986-90	22220	22190	22180/22185	22141	22200
225	1991 & Up	22221	22190	22180/22185	22141	22200
235	1976-90	22220	22190	22180/22185	22141	22200
275	1985-90	22220	22190	22180/22185	22141	22200
275	1991 & Up	22221	22190	22180/22185	22141	22200
3.6 L	1985-90	22220	22190	22180/22185	22141	22200
300	1991 & Up	22221	22190	22180/22185	22141	22200
1.6 Seadrive	1982-90	22230	22250	22150	22120	22340
2.5 L Seadrive	1984-90	22220	22190	22180/22185	22141	22200
2.6 L Seadrive	1982-90	22220	22190	22180/22185	22141	22200

# Johnson / Evinrude

## ALUMINUM ANODES AND ANODE KITS

<p><b>No. 12695</b> ALUMINUM ANODE KIT OEM: 392461</p> <p><b>NEW</b></p>  <p>50-75 HP (1982-1984) except 55/56 comm.</p>	<p><b>No. 12736</b> ALUMINUM ANODE OEM: 433458</p>  <p>Midsection for 3-Cyl.-V8 (1985-Up)</p>	<p><b>No. 12738</b> ALUMINUM ANODE OEM: 392462</p>  <p>55-75 HP (1985-2001)</p>
<p><b>No. 12696</b> ALUMINUM ANODE KIT OEM: 392160</p> <p><b>NEW</b></p>  <p>V4 &amp; V6 (1982-1986)</p>	<p><b>No. 12776</b> ALUMINUM ANODE OEM: 436745</p>  <p>V4 &amp; V6 (1982-Up)</p>	<p><b>No. 12733</b> ALUMINUM ANODE OEM: 392133</p>  <p>V4 &amp; V6 (1982-1986)</p>
<p><b>No. 12739</b> ALUMINUM ANODE OEM:433580</p>  <p>3-Cyl.-V6 (1991-Up)</p>	<p><b>No. 12730</b> ALUMINUM ANODE OEM: 173029</p>  <p>All Outboards</p>	<p><b>No. 12742</b> ALUMINUM ANODE OEM:398873</p>  <p>40-50 HP (1989-Up)</p>
<p><b>No. 12762</b> ALUMINUM ANODE OEM: 338635</p> <p><b>NEW</b></p>  <p>4-Stroke 9.9-15 HP (1995-2001)</p>	<p><b>No. 12737</b> ALUMINUM ANODE OEM:431708</p>  <p>40 HP-V8 (1988-1991)</p>	<p><b>No. 12683</b> ALUMINUM ANODE OEM: 397768</p>  <p>155 HP (1987-1990), 250 HP (1991-1998)</p>
<p><b>No. 12697</b> ALUMINUM ANODE KIT OEM:434029</p>  <p>20-35 HP (1991-Up)</p>	<p><b>No. 12761</b> ALUMINUM ANODE OEM: 432397</p> <p><b>NEW</b></p>  <p>4, 6, 8 HP (1985-1990)</p>	

## ALUMINUM PROP NUT ANODE KITS AND REPLACEMENT ANODES

Prop Nut Anode Kits			Aluminum	Replacement Anodes			Aluminum
GLM No.	Shaft Size	Thread Size		GLM No.	For Kit No.	Anode Size	
<b>12727</b> <b>NEW</b>	3/4"	1/2" NC 13		<b>12728</b> <b>NEW</b>	12727	ø 1-1/4" x 1-1/2"L	
<b>12706</b>	7/8"	5/8" NC 11		<b>12705</b>	12706	ø 1-5/8" x 2"L	
<b>12718</b> <b>NEW</b>	1-1/8"	3/4" NF 16		<b>12707</b>	12718	ø 2" x 2-5/8"L	

GLM's Aluminum Anodes to Replace Zinc Anodes Coming Soon! Check Website for Product ETA's.



# Johnson / Evinrude

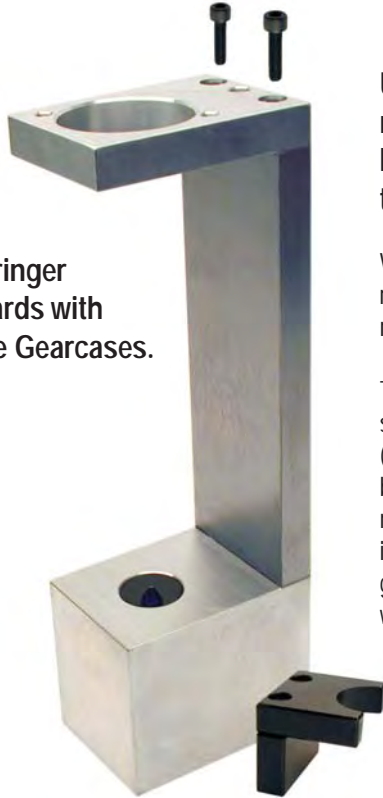
## SERVICE TOOLS

The GLM Shimming Tool No. 90330 makes rebuilding a lower gearcase so simple anyone can do it!

**No. 90330**  
SHIMMING TOOL  
OEM: N/A  
Comes with Shim  
Finder No. 90335

For use with OMC Stringer  
and Cobra V6 Outboards with  
"O" Type or "M" Type Gearcases.

Not for use with  
Magnum Gearcases.



Unlike the factory shimming tool, it requires no mathematical calculations to determine pinion height/shim thickness. The measurement for shim thickness is determined with a simple feeler gauge!

When rebuilding a Johnson / Evinrude outboard gearcase, the correct pinion gear height must be adjusted with shims of varying thickness. The amount of shims needed is determined with a shim tool.

The drive shaft assembly and pinion gear are installed into the GLM shimming tool. A shim finder is mounted on the top of the pinion gear (small magnets installed in the shim finder hold it in place). The gap between the bottom of the shim finder and the base of the tool is determined with a feeler gauge. When the drive shaft and pinion gear are installed into the gearcase, shims equaling the thickness of the feeler gauge measurement are installed between the upper thrust bearing washer and the upper bearing carrier.

## SPECIAL TOOLS

**No. 90340**  
PINION NUT ADAPTOR KIT  
OEM: N/A



GLM design to hold 5/8" pinion nut when removing pinion gear and drive shaft on OMC sterndrive and O/B comes with No. 90350

**No. 90350**  
DRIVE SHAFT ADAPTOR  
OEM: 314438







# Section 9

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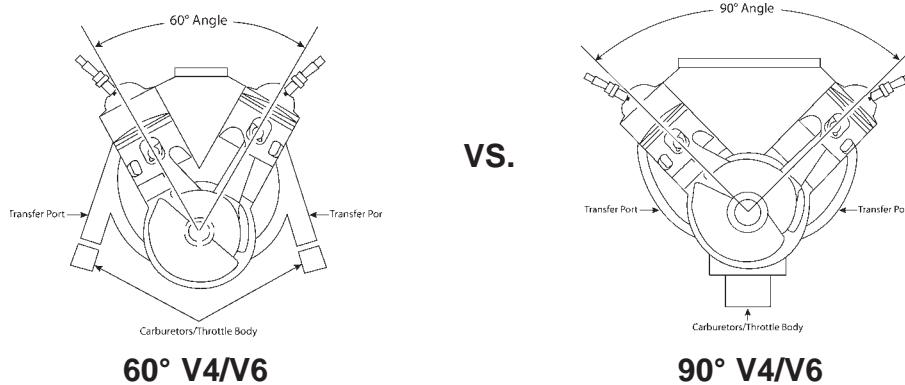
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# Johnson / Evinrude

## ENGINE DESIGNS (60° vs. 90°) V4/V6

Johnson / Evinrude outboards were the first to break away from the inline cylinder engine concept. In 1958 they introduced a V4 outboard to the marine industry. This outboard had the cylinder walls configured into a 90 degree V shape. In 1976 two more cylinders were added and the 90 degree V6 was born. As casting techniques improved a more compact 60 degree V6 engine was introduced in 1991 followed by the 60 degree V4 in 1995. Other than a narrower profile the difference between an older 90 degree engine and a newer 60 degree engine is the location of the carburetors/throttle bodies. A 90 degree V4/V6 engine will have the carburetors/throttle bodies located in the front of the crankcase directly over the crankshaft. A 60 degree V4/V6 engine will have the carburetors/throttle bodies located on the side of the crankcase, directly over the transfer ports.



## GLM'S EXCLUSIVE MARINE PISTONS

- Fully Machined Hypereutectic Pistons
- Featuring a Hard Anodizing Coating on Top
- Resisting Temperatures up to 1560°F
- Hardness: HV280-400
- Pistons are T-6 Heat Treated

### OEM CAST vs. FORGED

(99% of OEM Pistons are Cast)

	CASTING	FORGING
<b>Pros</b>	Low expansion rate Lighter weight Longer life Lower costs	Greater Strength
<b>Cons</b>	Less strength but compensated by strong mold process	Heavier weight High expansion rate Shorter life Higher costs
<b>Verdict</b>	For Recreational For General use	High Performance Purposes

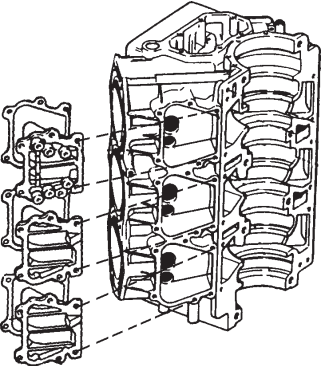
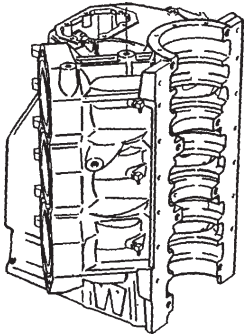




**GLM PISTONS ARE 100% CAST**



# Johnson / Evinrude

## PISTON DESIGNS

There are three basic piston designs used in Johnson / Evinrude outboard engines; Crossflow, Loopcharged and Four-Stroke.

Crossflow	Loopcharged	Four-Stroke
<p>The oldest design, and the one used on all Johnson / Evinrude engines until 1968, is the crossflow piston. As the air / fuel mixture travels through the transfer port and into the cylinder, a deflector, cast into the top of the piston, directs the air / fuel mixture towards the combustion chamber and spark plug tip for maximum efficiency. All engines with deflectors on top of the pistons will be crossflow engines. External inspection of a crossflow engine will reveal removable transfer port covers on the side of the cylinders.</p>	<p>In 1968 Johnson / Evinrude introduced an outboard engine with loopcharged pistons. This engine was the 55 HP 3-Cylinder. A loopcharged engine has a transfer port cast into the cylinder wall in such a way that it will direct the air / fuel mixture towards the combustion chamber and spark plug tip without the need for a piston deflector. All engines with a flat top or a slight dome on the top of the pistons will be loopcharged. Loopcharged engines will not have removable transfer port covers on the side of the cylinders.</p>	<p>Four-stroke / four-cycle engines are fairly new to the marine industry. They have become the engine design preferred by most marine engine manufacturers to meet government mandated exhaust emission standards. Oil stored in the crankcase of these engines is splashed onto the cylinder walls for piston and ring lubrication. The pistons are equipped with oil control rings to scrap excess oil off of the cylinder walls. Four-stroke / four-cycle pistons are easily identified by a three piece oil control ring in the bottom ring position. The pistons almost always have a flat top or a dished top and never have needle bearings between the wrist pin and connecting rod (like two-stroke engines).</p>
		
<p>Removeable Transfer Port Cover</p>	<p>Non-Removeable Transfer Port Cover</p>	
		
<p>Piston with Deflector Top</p>	<p>Piston with Flat Top</p>	<p>Piston with Flat Top and Oil Ring in the Bottom Position</p>

# Johnson / Evinrude

## 2-CYLINDER CROSSFLOW PISTONS

### Crossflow Pistons for 2-Cylinder 9.9 HP & 15 HP (1981-1992) Johnson / Evinrude Outboards

These engines use  $\varnothing$  2.1875" pistons

9.9 HP	1981-1992
15 HP	1981-1992



#### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>24410</b>	$\varnothing$ 2.1875	5006670
<b>24420</b>	$\varnothing$ 2.1875 +.020	N/A
<b>24430</b>	$\varnothing$ 2.1875 +.030	5006662

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 2.1875" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>23710</b>	$\varnothing$ 2.1875	386279
<b>23720</b>	$\varnothing$ 2.1875 +.020	N/A
<b>23730</b>	$\varnothing$ 2.1875 +.030	386280

*all rings come 2 to a set*



# Johnson / Evinrude

## 2-CYLINDER CROSSFLOW PISTONS

Crossflow Pistons for 2-Cylinder 20 HP, 25 HP, 30 HP, 35 HP (1981-1994)  
Johnson / Evinrude Outboards

These engines use  $\varnothing$  3.000" pistons

20 HP	1981-1983
25 HP	1986-1994
30 HP	1984-1994



### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>23910</b>	$\varnothing$ 3.000	5006657
<b>23920</b>	$\varnothing$ 3.000 +.020	N/A
<b>23930</b>	$\varnothing$ 3.000 +.030	5006664

*all pistons come with rings, pin and retainers*

### Rings for above $\varnothing$ 3.000" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24240</b>	$\varnothing$ 3.000	396377
<b>24260</b>	$\varnothing$ 3.000 +.020	N/A
<b>24280</b>	$\varnothing$ 3.000 +.030	396379

*all rings come 2 to a set*

# Johnson / Evinrude

## 2-CYLINDER LOOPCHARGED PISTONS

### Loopcharged Pistons for 2-Cylinder 40 HP - 60 HP (1980-1994) Johnson / Evinrude Outboards

These engines use  $\varnothing$  3.1875" pistons

40 HP	1984-1994	50 HP	1981-1994
45 HP	1994	55 HP	1994
48 HP	1987-1994	60 HP	1980-1985



#### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>24110</b>	$\varnothing$ 3.1875	5006655
<b>24112</b>	$\varnothing$ 3.1875 +.020	N/A
<b>24130</b>	$\varnothing$ 3.1875 +.030	5006665

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.625" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24310</b>	$\varnothing$ 3.1875	391170
<b>24320</b>	$\varnothing$ 3.1875 +.020	N/A
<b>24330</b>	$\varnothing$ 3.1875 +.030	391416

*all rings come 2 to a set*

# Johnson / Evinrude

## 3-CYLINDER LOOPCHARGED PISTONS

Loopcharged Pistons for 3-Cylinder 60 HP, 65 HP, 70 HP, 75 HP (1976-1988)  
Johnson / Evinrude Outboards

These engines use  $\varnothing$  3.000" pistons

60 HP	1986-1988
65 HP	1984-1986
70 HP	1976-1985
75 HP	1976-1985



### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>24040</b>	$\varnothing$ 3.000	5006751
<b>24060</b>	$\varnothing$ 3.000 +.020	N/A
<b>24080</b>	$\varnothing$ 3.000 +.030	5006666

*all pistons come with rings, pin and retainers*

### Rings for above $\varnothing$ 3.000" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24240</b>	$\varnothing$ 3.000	396377
<b>24260</b>	$\varnothing$ 3.000 +.020	396378
<b>24280</b>	$\varnothing$ 3.000 +.030	396379

*all rings come 2 to a set*

# Johnson / Evinrude

## 3-CYLINDER LOOPCHARGED PISTONS

### Loopcharged Pistons for 3-Cylinder 60 HP, 65 HP, 70 HP (1986-1994) Johnson / Evinrude Outboards

These engines use  $\varnothing$  3.1875" pistons with  
Keystone (triangular) rings

60 HP	1989-1994
65 HP	1987-1994
70 HP	1986-1994



#### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>23770</b>	$\varnothing$ 3.1875	5006701
<b>23780</b>	$\varnothing$ 3.1875 +.020	N/A
<b>23790</b>	$\varnothing$ 3.1875 +.030	5006702

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.1875" pistons

Top ring is 2.3 mm thick Bottom ring is 1.6 mm thick

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24310</b>	$\varnothing$ 3.1875	391170
<b>24320</b>	$\varnothing$ 3.1875 +.020	N/A
<b>24330</b>	$\varnothing$ 3.1875 +.030	391416

*all rings come 2 to a set*



# Johnson / Evinrude

## 3-CYLINDER LOOPCHARGED PISTONS

Loopcharged Pistons for 3-Cylinder 60 HP, 65 HP, 70 HP (1994-2001)  
Johnson / Evinrude Outboards

These engines use  $\varnothing$  3.1875" pistons with  
traditional (rectangular) rings

60 HP	1994-2001
65 HP	1994-2001
70 HP	1994-2001



### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>23740</b>	$\varnothing$ 3.1875	5006694
<b>23750</b>	$\varnothing$ 3.1875 +.020	5006707
<b>23760</b>	$\varnothing$ 3.1875 +.030	5006695

*all pistons come with rings, pin and retainers*



### Rings for above $\varnothing$ 3.1875" pistons

Rings are 2 mm thick

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24540</b>	$\varnothing$ 3.1875	436972
<b>24550</b>	$\varnothing$ 3.1875 +.020	N/A
<b>24560</b>	$\varnothing$ 3.1875 +.030	436973

*all rings come 2 to a set*





# Johnson / Evinrude

## V4 90° & V6 90° CROSSFLOW PISTONS

### Crossflow Pistons for 90 Degree V4 & V6 Johnson / Evinrude Outboards

#### These engines use ø 3.500" pistons

85 HP	90 Degree V4	1979-1980	150 HP	90 Degree V6	1978-1991
88 HP	90 Degree V4	1987-1993	175 HP	90 Degree V6	1977-1985
90 HP	90 Degree V4	1981-1993	185 HP	90 Degree V6	1984-1985
100 HP	90 Degree V4	1984-1994	200 HP	90 Degree V6	1976-1983
110 HP	90 Degree V4	1986-1990	235 HP	90 Degree V6	1978-1979
115 HP	90 Degree V4	1974-Thru			
135 HP	90 Degree V4	1974-1976			
140 HP	90 Degree V4	1977-1984			



#### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>24010</b>	ø 3.500	5006658
<b>24020</b>	ø 3.500 +.020	5006703
<b>24030</b>	ø 3.500 +.030	5006669
<b>24034</b>	ø 3.500 +.040	5006704

*all pistons come with rings, pin and retainers*

#### Rings for above ø 3.500" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24210</b>	ø 3.500	394930
<b>24220</b>	ø 3.500 +.020	439001
<b>24230</b>	ø 3.500 +.030	396504
<b>24300</b>	ø 3.500 +.040	439002

*all rings come 2 to a set*



# Johnson / Evinrude

## V6 90° CROSSFLOW PISTONS

### Crossflow Pistons for 90 Degree V6 Johnson / Evinrude Outboards

#### These engines use $\varnothing$ 3.625" pistons

175 HP	90 Degree V6	1986-1991
235 HP	90 Degree V6	1980-1985



#### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>23940</b>	$\varnothing$ 3.625	5006656
<b>23950</b>	$\varnothing$ 3.625 +.020	N/A
<b>23960</b>	$\varnothing$ 3.625 +.030	5006668

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.625" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24570</b>	$\varnothing$ 3.625	390509
<b>24580</b>	$\varnothing$ 3.625 +.020	N/A
<b>24590</b>	$\varnothing$ 3.625 +.030	390510

*all rings come 2 to a set*

# Johnson / Evinrude

## V4 60° & V6 60° LOOPCHARGED PISTONS

### Loopcharged Pistons for 60 Degree V4 & V6 Johnson / Evinrude Outboards with Carburetors

#### These engines use $\varnothing$ 3.600" pistons

90 HP	60 Degree V4	1995-newer with Carburetors
115 HP	60 Degree V4	1995-newer with Carburetors
150 HP	60 Degree V6	1991-newer with Carburetors
175 HP	60 Degree V6	1991-newer with Carburetors



#### Pistons for above engines

<u>GLM Piston No.</u>		<u>Size</u>	<u>OEM Piston No.</u>	
Port	Starboard		Port	Starboard
<b>14600</b>	<b>14610</b>	$\varnothing$ 3.600	5006687, 5006681	5006688, 5006682
<b>14620</b>	<b>14630</b>	$\varnothing$ 3.600 +.020	5006708	5006715
<b>14640</b>	<b>14650</b>	$\varnothing$ 3.600 +.030	5006714, 5006679	5006716, 5006680

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.600" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>14170</b>	$\varnothing$ 3.600	436353
<b>14180</b>	$\varnothing$ 3.600 +.020	439029
<b>14190</b>	$\varnothing$ 3.600 +.030	436354

*all rings come 2 to a set*



# Johnson / Evinrude

## V4 60° & V6 60° LOOPCHARGED PISTONS

### Loopcharged Pistons for 60 Degree V4 & V6 Johnson / Evinrude Outboards with Fuel Injection

These engines use  $\varnothing$  3.600" with a dish in the piston top

75 HP	60 Degree V4	2000-newer with Fuel Injection
90 HP	60 Degree V4	2000-newer with Fuel Injection
115 HP	60 Degree V4	2000-newer with Fuel Injection
150 HP	60 Degree V6	2000-newer with Fuel Injection
175 HP	60 Degree V6	2000-newer with Fuel Injection



#### Pistons for above engines

<u>GLM Piston No.</u>		<u>Size</u>	<u>OEM Piston No.</u>	
Port	Starboard		Port	Starboard
<b>24440</b>	<b>24450</b>	$\varnothing$ 3.600	5006727	5006728
<b>24460</b>	<b>24470</b>	$\varnothing$ 3.600 +.020		
<b>24480</b>	<b>24490</b>	$\varnothing$ 3.600 +.030	5006729	5006730

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.600" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>14170</b>	$\varnothing$ 3.600	436353
<b>14180</b>	$\varnothing$ 3.600 +.020	439029
<b>14190</b>	$\varnothing$ 3.600 +.030	436354

*all rings come 2 to a set*

# Johnson / Evinrude

## V4 90° / V6 90° / V8 LOOPCHARGED PISTONS

### Loopcharged Pistons for 90 Degree V4/V6/V8 Johnson / Evinrude Outboards

These 1985-1987 engines use  $\varnothing$  3.500" pistons

120 HP	90 Degree V4	1985-1987
140 HP	90 Degree V4	1985-1987
200 HP	90 Degree V6	1986-1987
225 HP	90 Degree V6	1986-1987
275 HP	90 Degree V8	1985-1987
300 HP	90 Degree V8	1985-1987



#### Pistons for above engines

<u>GLM Piston No.</u>		<u>Size</u>	<u>OEM Piston No.</u>	
Port	Starboard		Port	Starboard
<b>23800</b>	<b>23810</b>	$\varnothing$ 3.500	5006659	N/A
<b>23820</b>	<b>23830</b>	$\varnothing$ 3.500 +.020	N/A	N/A
<b>23840</b>	<b>23850</b>	$\varnothing$ 3.500 +.030	5006660	N/A

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.500" pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24210</b>	$\varnothing$ 3.500	394930
<b>24220</b>	$\varnothing$ 3.500 +.020	439001
<b>24230</b>	$\varnothing$ 3.500 +.030	396504

*all rings come 2 to a set*



# Johnson / Evinrude

## V4 90° / V6 90° / V8 LOOPCHARGED PISTONS

### Loopcharged Pistons for 90 Degree V4/V6/V8 Johnson / Evinrude Outboards

These 1988 and newer engines use  $\varnothing$  3.6875" pistons

120 HP	90 Degree V4	1988-1994
140 HP	90 Degree V4	1988-1994
200 HP	90 Degree V6	1988-1992
225 HP	90 Degree V6	1988-1992
250 HP	90 Degree V8	1991-1998
300 HP	90 Degree V8	1988-1995



#### Pistons for above engines

GLM Piston No.		Size	OEM Piston No.	
Port	Starboard		Port	Starboard
<b>24050</b>	<b>24100</b>	$\varnothing$ 3.6875	5006675, 5006671	5006676, 5006672
<b>24070</b>	<b>24120</b>	$\varnothing$ 3.6875 +.020	N/A	N/A
<b>24090</b>	<b>24140</b>	$\varnothing$ 3.6875 +.030	5006673, 5006677	5006674, 5006678

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.6875" pistons

GLM Ring No.	Size	OEM Ring No.
<b>24250</b>	$\varnothing$ 3.6875	431870
<b>24270</b>	$\varnothing$ 3.6875 +.020	N/A
<b>24290</b>	$\varnothing$ 3.6875 +.030	431844

*all rings come 2 to a set*

# Johnson / Evinrude

## V6 90° LOOPCHARGED PISTONS

### Loopcharged Pistons for 90 Degree V6 Johnson / Evinrude Outboards

These 1993 and newer engines use  $\varnothing$  3.6875" pistons  
with finger ports

200 HP	90 Degree V6	1993-2001 with carburetors
225 HP	90 Degree V6	1993-2001 with carburetors



#### Pistons for above engines

GLM Piston No.		Size	OEM Piston No.	
Port	Starboard		Port	Starboard
<b>24150</b>	<b>24160</b>	$\varnothing$ 3.6875	5006691	5006690
<b>24170</b>	<b>24180</b>	$\varnothing$ 3.6875 +.020	5006706	5006712
<b>24190</b>	<b>24200</b>	$\varnothing$ 3.6875 +.030	5006711	5006713

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 3.6875" pistons

GLM Ring No.	Size	OEM Ring No.
<b>24340</b>	$\varnothing$ 3.6875	436254
<b>24350</b>	$\varnothing$ 3.6875 +.020	439538
<b>24360</b>	$\varnothing$ 3.6875 +.030	436251

*all rings come 2 to a set*



# Johnson / Evinrude

## 2-CYLINDER FOUR-STROKE PISTONS

### Four-Stroke Pistons for 2-Cylinder 9.9 HP and 15 HP (1995-2002) Johnson Outboards

These engines use  $\varnothing$  65 mm pistons

9.9 HP	1995-2002
15 HP	1995-2002



#### Pistons for above engines

<u>GLM Piston No.</u>	<u>Size</u>	<u>OEM Piston No.</u>
<b>24500</b>	$\varnothing$ 65 mm	437776
<b>24520</b>	$\varnothing$ 65 mm +.030	437777

*all pistons come with rings, pin and retainers*

#### Rings for above $\varnothing$ 65 mm pistons

<u>GLM Ring No.</u>	<u>Size</u>	<u>OEM Ring No.</u>
<b>24370</b>	$\varnothing$ 65 mm	436289
<b>24390</b>	$\varnothing$ 65 mm +.030	436290

*all rings come 5 to a set*

# Johnson / Evinrude

## PISTON KITS AND RINGS APPLICATIONS

HP	Year	Standard		.020 Oversize		.030 Oversize		.040 Oversize	
		Piston	Ring	Piston	Ring	Piston	Ring	Piston	Ring
<b>2-Cylinder</b>									
2-Cyl., 9.9, 15 (ø 2.1875)	1981-92	24410	23710	24420	23720	24430	23730	N/A	N/A
9.9, 15 (4 Cycle)	1995-02	24500	24370	N/A	N/A	24520	24390	N/A	N/A
20, 25, 3.0	81-83/86-94	23910	24240	23920	24260	23930	24280	N/A	N/A
30, 3.0	1984-94	23910	24240	23920	24260	23930	24280	N/A	N/A
20, 35	1976-80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>2-Cylinder Loopcharged</b>									
40 (ø 3.1875)	1984-94	24110	24310	24112	24320	24130	24330	N/A	N/A
48	1987-94	24110	24310	24112	24320	24130	24330	N/A	N/A
50	1981-94	24110	24310	24112	24320	24130	24330	N/A	N/A
55	1980-93	24110	24310	24112	24320	24130	24330	N/A	N/A
45, 55	1994	24110	24310	24112	24320	24130	24330	N/A	N/A
60	1980-85	24110	24310	24112	24320	24130	24330	N/A	N/A
<b>3-Cylinder Loopcharged</b>									
50 (ø 3.1875)	1995-98	23740	24540	23750	24550	23760	24560	N/A	N/A
60, 3.0	1986-88	24040	24240	24060	24260	24080	24280	N/A	N/A
60, 65, 70 (ø 3.1875)	1986-94	23770	24310	23780	24320	23790	24330	N/A	N/A
60, 70 (ø 3.1875)	1994-Thru	23740	24540	23750	24550	23760	24560	N/A	N/A
65, 3.0	1984-86	24040	24240	24060	24260	24080	24280	N/A	N/A
70, 3.0	1976-85	24040	24240	24060	24260	24080	24280	N/A	N/A
75, 3.0	1976-85	24040	24240	24060	24260	24080	24280	N/A	N/A
<b>V4 60° Loopcharged</b>									
75, 90, 115, Fuel Inj. V4 60°	2000-Thru	24440 PORT	14170	24460	14180	24480	14190	N/A	N/A
		24450 STBD	14170	24470	14180	24490	14190	N/A	N/A
90, 115, Carburetors V4 60°	1995-Thru	14600 PORT	14170	14620	14180	14640	14190	N/A	N/A
		14610 STBD	14170	14630	14180	14650	14190	N/A	N/A
<b>V4 90° Crossflow</b>									
85 Crossflow	1979-80	24010	24210	24020	24220	24030	24230	24034	24300
88 Crossflow	1987-98	24010	24210	24020	24220	24030	24230	24034	24300
90 Crossflow	1981-98	24010	24210	24020	24220	24030	24230	24034	24300
100 Crossflow	1979-80	24010	24210	24020	24220	24030	24230	24034	24300
100 Crossflow Comm.	1984-Thru	24010	24210	24020	24220	24030	24230	24034	24300
110 Crossflow	1986-88	24010	24210	24020	24220	24030	24230	24034	24300
115 Crossflow	1974-98	24010	24210	24020	24220	24030	24230	24034	24300
135 Crossflow	1974-76	24010	24210	24020	24220	24030	24230	24034	24300
140 Crossflow	1977-84	24010	24210	24020	24220	24030	24230	24034	24300



# Johnson / Evinrude

## PISTON KITS AND RINGS APPLICATIONS (CONTINUED)

HP	Year	Standard		.020 Oversize		.030 Oversize		.040 Oversize	
		Piston	Ring	Piston	Ring	Piston	Ring	Piston	Ring
<b>V4 90° Loopcharged</b>									
120, 140 Loopcharged	1985-87	23800 PORT	24210	23820	24220	23840	24230	N/A	N/A
		23810 STBD	24210	23830	24220	23850	24230	N/A	N/A
120, 130, 140 Loopcharged	1988-94	24050 PORT	24250	24070	24270	24090	24290	N/A	N/A
		24100 STBD	24250	24120	24270	24140	24290	N/A	N/A
<b>V6 90° Crossflow</b>									
150 Crossflow	1978-83	24010	24210	24020	24220	24030	24230	24034	24300
150 Crossflow	1984-91	24010	24210	24020	24220	24030	24230	24034	24300
155 Comm. Crossflow	1985-87	24010	24210	24020	24220	24220	24230	N/A	N/A
175 Crossflow	1977-83	24010	24210	24020	24220	24030	24230	24034	24300
175 Crossflow	1984-85	24010	24210	24020	24220	24220	24230	N/A	N/A
175 Crossflow	1986-91	23940	24570	23950	24580	23960	24590	N/A	N/A
185 Crossflow	1985	24010	24210	24020	24220	24220	24230	N/A	N/A
200 Crossflow	1976-83	24010	24210	24020	24220	24030	24230	24034	24300
235 Crossflow	1978-79	24010	24210	24020	24220	24030	24230	24034	24300
235 Crossflow	1980-85	23940	24570	23950	24580	23960	24590	N/A	N/A
<b>V6 60° Loopcharged</b>									
150, 175 Carburetors V6 60°	1991-Thru	14600 PORT	14170	14620	14180	14640	14190	N/A	N/A
		14610 STBD	14170	14630	14180	14650	14190	N/A	N/A
150, 175 Fuel Inj. V6 60°	2000-Thru	24440 PORT	14170	24460	14180	24480	14190	N/A	N/A
		24450 STBD	14170	24470	14180	24490	14190	N/A	N/A
<b>V6 90° Loopcharged</b>									
200-225 Loopcharged V6 90°	1985-87	23800 PORT	24210	23820	24220	23840	24230	N/A	N/A
		23810 STBD	24210	23830	24220	23850	24230	N/A	N/A
200-225 Loopcharged V6 90°	1988-92	24050 PORT	24250	24070	24270	24090	24290	N/A	N/A
		24100 STBD	24250	24120	24270	24140	24290	N/A	N/A
200-225 Loopcharged V6 90°	1993-01	24150 PORT	24340	24170	24350	24190	24360	N/A	N/A
		24160 STBD	24340	24180	24350	24200	24360	N/A	N/A
<b>V8 Loopcharged</b>									
250 Loopcharged V8	1991-98	24050 PORT	24250	24070	24270	24090	24290	N/A	N/A
		24100 STBD	24250	24120	24270	24140	24290	N/A	N/A
300 Loopcharged V8	1988-95	24050 PORT	24250	24070	24270	24090	24290	N/A	N/A
		24100 STBD	24250	24120	24270	24140	24290	N/A	N/A
275-300 Loopcharged V8	1985-87	23800 PORT	24210	23820	24220	23840	24230	N/A	N/A
		23810 STBD	24210	23830	24220	23850	24230	N/A	N/A





# Section 10

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## Johnson / Evinrude Powerhead Bearings & Seals

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# Johnson / Evinrude

## POWERHEAD BEARINGS

### Main Bearings

#### No. 22840

OEM: 395401

Metal Cage



ø .8125 Journal Size

9.9-15 HP (1974-95)  
9.9-15 HP (1974-83)

#### No. 22920

OEM: 390900



Most Early & Late Model 45-60 HP  
2-Cyl. and 3-Cyl. Models

#### No. 22930

OEM: 398529



Many Late Model 45-60 HP  
2-Cyl. and 3-Cyl. Models

#### No. 21860

OEM: 377139



3-Cyl. Lower Crankshaft  
(1968-94)

### Center Bearings

#### No. 22800

OEM: 378252

Metal Cage



ø 1.375 Journal Size

40C (1974-Thru), 45-60 HP 2-Cyl., (1971-Thru),  
3-Cyl. All, V4 (1962-78)

#### No. 22810

OEM: 387041

Metal Cage



ø 2.1875 Journal Size

V4 Crossflow (1979-Thru), V6 Crossflow (1976-Thru)  
All V4-V6 60° Models

### Center Split Sleeve

#### No. 22700

OEM: 310433



40C (1974-Thru), 45-60 HP 2-Cyl., (1971-Thru),  
3-Cyl. All, V4 (1962-78)

#### No. 22710

OEM: 320499



V4 Crossflow (1979-Thru), V6 Crossflow (1976-Thru)  
All V4-V6 60° Models

### Center Bearing Kits

#### No. 22755

OEM: N/A

**NEW**

#### Kit Contains:

GLM	OEM	ITEM
22800	378252	Main Bearing
22700	310433	Center Split Sleeve

ø 1.375  
Journal Size

40C (1974-Thru), 45-60 HP 2-Cyl., (1971-Thru),  
3-Cyl. All, V4 (1962-78)



#### No. 22855

OEM: N/A

**NEW**

#### Kit Contains:

GLM	OEM	ITEM
22810	387041	Main Bearing
22710	320499	Center Split Sleeve

ø 2.1875  
Journal Size

V4 Crossflow (1979-Thru), V6 Crossflow (1976-Thru)  
All V4-V6 60° Models



# Johnson / Evinrude

## POWERHEAD BEARINGS

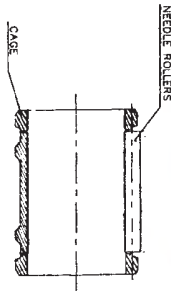
### Connecting Rod Bearings - Small End

#### No. 16240

OEM: 378251

**GLM DESIGN!**  
**HEAVY DUTY CAGE!**

Meet ISO  
3030 Standard



25, 40, 50, 65 & 85 HP (1972-Thru)

#### No. 16220

OEM: 395627



20-35 HP (1981-95), 45-60 2-Cyl. (1977-95)  
3-Cyl. (1976-Thru), V4 Crossflow (1973-Thru)  
V6 Crossflow (1976-Thru), All 60° V4/V6 Models

#### No. 16230

OEM: 434844



V4/V6/V8  
90° Loopcharged Models (1985-Up)

### Connecting Rod Bearings - Big End

#### No. 22840

OEM: 395401

Metal Cage



ø .8125 Journal Size

9.9-15 HP (1974-95), 9.9-15 HP (1974-83)

#### No. 16200

OEM: 437088

Metal Cage



ø 1.1825 Journal Size - 30mm

20-35 HP (1976-95), 46-60 HP 2-Cyl. (1971-94),  
3-Cyl. (1968-93), V4 (1961-73)

#### No. 22500

REPLACEMENT  
BEARINGS FOR CAGE  
OEM: 387139, 387142



#### No. 22820

OEM: 387787

Metal Cage



ø 1.375 Journal Size

V4 Crossflow (1979-Thru), V6 Crossflow (1976-Thru)  
All V4/V6 60° Models

#### No. 22500

OEM: 387139, 387142  
Replacement Bearings  
For Cage



#### No. 22850

OEM: 396041

Metal Cage



ø 1.500 Journal Size

V4/V6/V8  
90° Loopcharged Models (1985-95)

# Johnson / Evinrude

## BEARING APPLICATIONS

HP	Year	Main Bearing	Center Bearing	Center Split Sleeve Bearing	Center Bearing Kit	Connecting Rod Bearing Small End	Connecting Rod Bearing Big End
9.9	1974-83	-	22840	-	-	-	22840
9.9	1984-97	-	-	-	-	-	22840
10	1981	-	22840	-	-	-	22840
10 Comm.	1989-91	-	-	-	-	-	22840
10 Comm.	1994	-	-	-	-	-	22840
14	1981	-	22840	-	-	-	22840
14 Comm.	1989-91	-	-	-	-	-	22840
15	1974-83	-	22840	-	-	-	22840
15	1984-97	-	-	-	-	-	22840
15 Comm.	1994	-	-	-	-	-	22840
18	1960-68	-	-	-	-	-	-
18	1970-73	-	-	-	-	16240	-
18 Jet	1996-97	-	-	-	-	16220	22840
20	1981-84	-	-	-	-	16220	22840
20	1985-97	-	-	-	-	16220	16200
25	1970-76	-	-	-	-	16240	-
25	1977	-	-	-	-	16240	16200
25	1978-80	-	-	-	-	16240	16200
25	1981-84	-	-	-	-	16220	16200
25	1985-97	-	-	-	-	16220	16200
25 Comm.	1982-84	-	-	-	-	16220	16200
25 Comm.	1985-97	-	-	-	-	16220	16200
28	1962-64	-	-	-	-	-	-
28	1987-97	-	-	-	-	16220	16200
30	1984	-	-	-	-	16220	16200
30	1985-97	-	-	-	-	16220	16200
33	1965-69	-	-	-	-	-	-
33	1970	-	-	-	-	16240	16200
35	1976-80	-	-	-	-	16240	16200
35	1981-84	-	-	-	-	16220	16200
35	1985-97	-	-	-	-	16220	16200
40	1961-70	-	-	-	-	-	-
40	1971-73	-	-	-	-	16240	16200
40	1974-76	-	22800	22700	22755	16240	16200
40	1983	-	22800	22700	22755	16240	16200
40	1984-86	22920	22800	22700	22755	16220	16200
40	1987-97	22930	22800	22700	22755	16220	16200
40 Comm.	1982-83	-	22800	22700	22755	16240	16200
40 Comm.	1984-85	22920	22800	22700	22755	16240	16200
40 Comm.	1989-90	22930	22800	22700	22755	16240	16200
40 Comm.	1994	22930	22800	22700	22755	16220	16200
40 Comm.	1995-00	22930	22800	22700	22755	16220	-
45 Comm.	1987-94	22920	22800	22700	22755	16220	16200
45 Comm.	1995-97	22930	22800	22700	22755	16220	-
45 SS	1987-90	22920	22800	22700	22755	16220	16200
48	1987	22920	22800	22700	22755	16220	16200
48	1988-96	22930	22800	22700	22755	16220	16200
50	1979-83	22920	22800	22700	22755	16220	16200
50	1984-86	22920	22800	22700	22755	16220	16200
50	1987-00	22930	22800	22700	22755	16220	16200
50	1995-00	22930	22800	22700	22755	16220	-
55	1968-69	-	22800	22700	22755	16240	16200
55	1976-81	22920	22800	22700	22755	16220	16200
55 Comm.	1982	22920	22800	22700	22755	16220	16200
55 Comm.	1983-86	22920	22800	22700	22755	16220	16200
55 Comm.	1987-94	22930	22800	22700	22755	16220	16200
55 Comm.	1995-00	22930	22800	22700	22755	16220	-
60	1964-01 / 1970-71	-	22800	22700	22755	16240	16200
60	1980-83	22920	22800	22700	22755	16220	16200
60	1984-85	22920	22800	22700	22755	16220	16200
60	1986-90	22920	22800	22700	22755	16220	16200
60	1991-93	22930	22800	22700	22755	16220	16200
60	1994-01	22930	22800	22700	22755	16220	16200
SST-69	1989-90	22920	22800	22700	22755	16220	-
65	1968	-	22800	22700	22755	16240	16200
65	1972-73	22920	22800	22700	22755	16240	16200



# Johnson / Evinrude

## BEARING APPLICATIONS

HP	Year	Main Bearing	Center Bearing	Center Split Sleeve Bearing	Center Bearing Kit	Connecting Rod Bearing Small End	Connecting Rod Bearing Big End
65 Comm.	1984	22920	22800	22700	22755	16220	16200
65 Comm.	1985-90	22920	22800	22700	22755	16220	16200
65 Comm.	1991-93	22930	22800	22700	22755	16220	16200
65 Comm.	1994-01	22930	22800	22700	22755	16220	-
70	1974-75	22920	22800	22700	22755	16240	16200
70	1976-84	22920	22800	22700	22755	16220	16200
70	1985-90	22920	22800	22700	22755	16220	16200
70	1991-93	22930	22800	22700	22755	16220	16200
70	1994-01	22930	22800	22700	22755	16220	-
75	1960-65	-	22800	22700	22755	16240	16200
75	1975	22920	22800	22700	22755	16240	16200
75	1976-84	22920	22800	22700	22755	16220	16200
75	1985-88	22920	22800	22700	22755	16220	16200
80	1966-67	-	22800	22700	22755	16240	16200
80 Jet	1992-98	-	22810	22710	22855	16220	-
85	1968-72	-	22800	22700	22755	16240	16200
85	1973	-	22800	22700	22755	16220	16200
85	1974-78	-	22800	22700	22755	16220	22820
85	1979-80	-	22810	22710	22855	16220	22820
85	1991-95	-	22810	22710	22855	16220	22820
88	1987-96	-	22810	22710	22855	16220	22820
90	1981-03	-	22810	22710	22855	16220	22820
90	1995-03	-	22810	22710	22855	16220	22820
90 Jet	1994-95	-	22810	22710	22855	16220	22820
100	1966-68	-	22800	22700	22755	16240	16200
100	1971-72	-	22800	22700	22755	16240	16200
100	1979-80	-	22810	22710	22855	16220	22820
100	1990-94	-	22810	22710	22855	16220	22820
100 Comm.	1984-05	-	22810	22710	22855	16220	22820
110	1986-89	-	22810	22710	22855	16220	22820
112	1994-96	-	22810	22710	22855	16220	22820
115	1969-70	-	22800	22700	22755	16240	16200
115	1973	-	22800	22700	22755	16220	16200
115	1974-78	-	22800	22700	22755	16220	22820
115	1979-85	-	22810	22710	22855	16220	22820
115	1990-06	-	22810	22710	22855	16220	22820
115	1995-06	-	22810	22710	22855	22820	22820
115 Jet	1994-06	-	22810	22710	22855	16220	22820
120	1985-94	-	22810	22710	22855	16230	22850
125	1971-72	-	22800	22700	22755	16240	16200
125 Comm.	1989-95	-	22810	22710	22855	16230	22850
125 ESX	1991-94	-	22810	22710	22855	16230	22850
130	1994-00	-	22810	22710	22855	16230	22850
135	1973	-	22800	22700	22755	16220	16200
135	1974-76	-	22800	22700	22755	16220	22820
140	1977-78	-	22800	22700	22755	16220	22820
140	1979-84	-	22810	22710	22855	16220	22820
140	1985-94	-	22810	22710	22855	16230	22850
150	1978-91	-	22810	22710	22855	16220	22820
150	1991-06	-	22810	-	-	16220	22820
150 Comm.	1993-95	-	22810	-	-	16220	22820
155 Comm.	1984-92	-	22810	22710	22855	16220	22820
175	1977-91	-	22810	22710	22855	16220	22820
175	1991-06	-	22810	-	-	16220	22820
185	1984-85	-	22810	22710	22855	16220	22820
185	1990-94	-	22810	22710	22855	16230	22850
200	1976-83	-	22810	22710	22855	16220	22820
200	1986-06	-	22810	22710	22855	16230	22850
200 Comm.	1990, 1994	-	22810	22710	22855	16230	22850
225	1986-06	-	22810	22710	22855	16230	22850
235	1978-85	-	22810	22710	22855	16220	22820
250	1991-95, 1997	-	22810	22710	22855	16230	22850
275	1985-88	-	22810	22710	22855	16230	22850
3.6L	1985-87	-	22810	22710	22855	16230	22850
300	1988-95	-	22810	22710	22855	16230	22850

# Johnson / Evinrude

## CRANKSHAFT SEALS APPLICATIONS

HP	Year	Upper Crankcase	Qty. Req.	Lower Crankcase	Qty. Req.	HP	Year	Upper Crankcase	Qty. Req.	Lower Crankcase	Qty. Req.
9.9	1974-1983	-	-	86760	1	65 (3-Cyl.)	1972-1973	86770	1	86030	1
9.9	1984-1995	-	-	86760 / 86430	1	65 C	1984-1985	86770	1	86030	1
10	1981	-	-	86760	-	65 C	1986-1989	86770	1	86030	1
10	1989	-	-	86760 / 86430	1	70 (Large)	1974-1985	86770	1	86030	1
14	1988-1990	-	-	86760 / 86430	1	70 (Large)	1986-1995	86770	1	-	-
15	1974-1983	-	-	87670	1	70 (Small)	1977-1985	86770	1	-	-
15	1984-1995	-	-	86760 / 86430	1	75 (Large)	1975-1984	86770	1	-	-
18	1957	86060	1	-	-	75 (Large)	1986-1987	86770	1	-	-
18	1958-1973	86380	1	-	-	75 (Small)	1975-1984	86770	1	86030	1
25	1969-1976	86380	1	-	-	85	1969-1970	86440	1	86030	1
40	1960-1961	86380	1	-	-	85	1971-1972	86440	1	86030	1
40	1974-1976	86770	1	86030	1	85	1973-1980	86440	2	86030	1
40 C	1981-1986	86770	1	86030	2	88	1987-1994	86440	2	-	-
40	1984-1985	86770	1	86030	1	90	1981-1983	86440	2	86030	1
40 (AR, AE, AT)	1988	86770	1	-	-	90	1984-1994	86250	1	-	-
40	1986-1989	86770	1	-	-	90 Seadrive	1985-1990	86440	2	86030	1
45 C	1985	86770	1	-	-	100	1971-1972	86440	1	86030	1
45 C	1986	86770	1	-	-	100	1979-1980	86440	2	86030	1
45 C	1987	86770	1	-	-	100 C	1984-1990	86440	2	-	-
45 C	1988-1994	86770	1	-	-	110	1986-1988	86440	2	86030	1
45 C	1995	86770	1	-	-	115	1969-1970	86440	1	86030	1
48	1988-1995	86770	1	86270 (Inner)	1	115	1973-1983	86440	1	86030	1
50	1971-1974	86770	1	86030	1	115	1984-1985	86440	2	86030	1
50	1975	86770	1	86030	1	115	1990-1994	86440	2	-	-
50	1979	86770	1	86030	1	120	1985	86440	2	86470	2
50	1980	86770	1	86030	1	120	1986-1988	86440	2	86470	2
50/60 (Pull Start)	1981-1983	86770	1	86030	1	120	1989	86440	2	86470	2
50/60 (Electric)	1981-1983	86770	1	86030	1	120	1990-1994	86440	2	86470	2
50/60	1984-1985	86770	1	86030	1	125	1971-1972	86440	1	86030	1
50/60 (Small)	1986-1987	86770	1	86030	1	125 C	1989	86440	2	86470	1
50/60 (Large)	1986-1987	86770	1	86030	1	125 C (ESX)	1989	86250	1	86470	1
50/60	1988-1989	86770	1	86030	1	135	1973-1976	86440	2	86030	1
50	1990-1995	86770	1	86270 (Inner)	1	140	1977-1983	86440	2	86030	1
55	1968-1969	86770	1	86030	1	140	1984	86440	2	86030	1
55	1976-1977	86770	1	86030	1	140	1985	86440	2	86470	2
55	1978	86770	1	86030	1	140	1986-1994	86440	2	86470	2
55	1979-1983	86770	1	86030	1	140 TX	1989	86440	2	86470	2
55 (Electric)	1980-1983	86770	1	86030	1	150	1978-1983	86440	2	86470	2
55 C	1984	86770	1	86030	1	150	1984	86440	2	-	-
55 C	1985	86770	1	86030	1	155 C	1984-1985	86440	2	86030	1
55 C	1986	86770	1	-	-	155 C	1986-1990	86440	2	-	-
55 C	1987-1994	86770	1	-	-	175	1977-1985	86440	2	86030	1
55 C	1995	86770	1	-	-	175	1986-1990	86440	2	-	-
60	1970	86770	1	86030	1	185	1984-1985	86440	2	86030	1
60 (3-Cyl.)	1971	86770	1	86030	1	185	1990	86440	2	86470	1
60 (Pull Start)	1980-1983	86770	1	86030	1	200	1976-1983	86440	2	86030	1
60 (Electric)	1980-1983	86770	1	86030	1	200	1984-1985	86440	2	-	-
60	1970	86770	1	86030	1	200, 225	1986-1990	86440	2	86470	2
60 SST	1989	86770	1	86030	1	235	1978-1983	86440	2	86030	1
60 SST	1990	86770	1	-	-	235	1984-1985	86440	2	86030	1
60 (3-Cyl.)	1987-1995	86770	1	-	-	275	1985-1988	86440	2	86470	2
65 (Manual)	1968	86770	1	-	-	3.6L, 300	1985-1990	86440	2	86470	2





# Section 11

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## Johnson / Evinrude Thermostats

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# Johnson / Evinrude

## THERMOSTAT KITS

### No. 13450

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13080	396987	Thermostat
34630	332108	Gasket
34260	313416	Gasket



3-Cyl.

### No. 13350

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13010	434841	Thermostat
30610	310058	Gasket



90°  
6-55 HP, V4/V6

### No. 13270

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13010 (2)	434841	Thermostat
46170 (2)	318395	Valve
46150 (2)	317245	Spring
86481 (2)	321692	Grommet
33650 (2)	332369	Gasket
34440 (2)	321932	Gasket



143°  
V4 Crossflow

### No. 13330

OEM: 435597

#### Kit Contains:

GLM	OEM	ITEM
13720	338632	Therm. Cover
81250	331188	O-ring
11058	337067	Spring
13130	435491	Thermostat



60°  
V4/V6

### No. 13290

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13720	338632	Therm. Cover
81250	331188	O-ring
11058	337067	Spring
13130	435491	Thermostat
13251	343105	Sleeve



143°  
60° V4/V6

### No. 13310

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13730	332944	Therm. Cover
81250	331188	O-ring
11058	337067	Spring
13110	437090	Thermostat
33070	339044	Gasket



90°  
V6 Offshore Models

### No. 13280

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13010	434841	Thermostat
30610	310058	Seal
33600	321184	Gasket
46150	317245	Spring
46100	320880	Valve Seat
46120	321222	Valve Diaphragm
46160	321220	Spring Retainer
46180	321027	Valve



143°  
V6 Crossflow

### No. 13260

OEM: N/A

#### Kit Contains:

GLM	OEM	ITEM
13730	332944	Therm. Cover
81250	331188	O-ring
11058	337067	Spring
13110	437090	Thermostat
33070	339044	Gasket
13251	343105	Sleeve

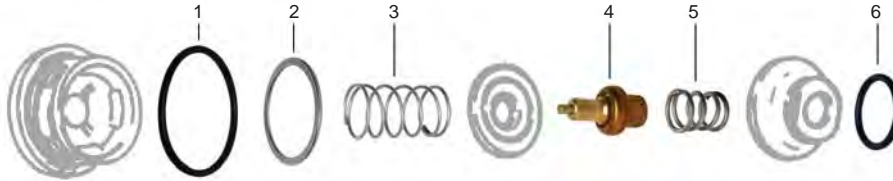


133°  
V6 Offshore Models

# Johnson / Evinrude

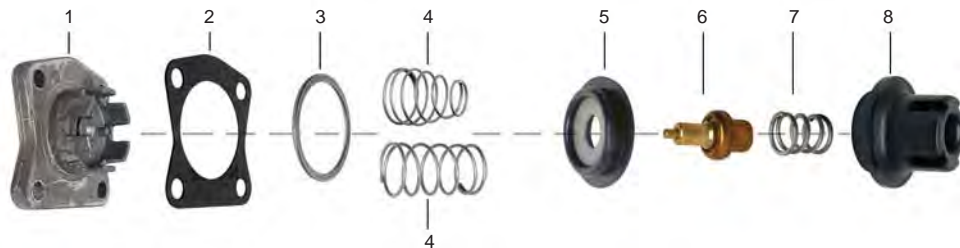
## THERMOSTAT ASSEMBLIES

### 2-Cylinder 25 & 35 HP (1996-2001)



Ref. No.	GLM No.	OEM No.	Item	Ref. No.	GLM No.	OEM No.	Item
1	81290	308458	O-ring	4	13150	436195	Thermostat
2	21658	336185	Washer	5	11038	336179	Spring
3	11041	336211	Spring	6	81170	301967	O-ring

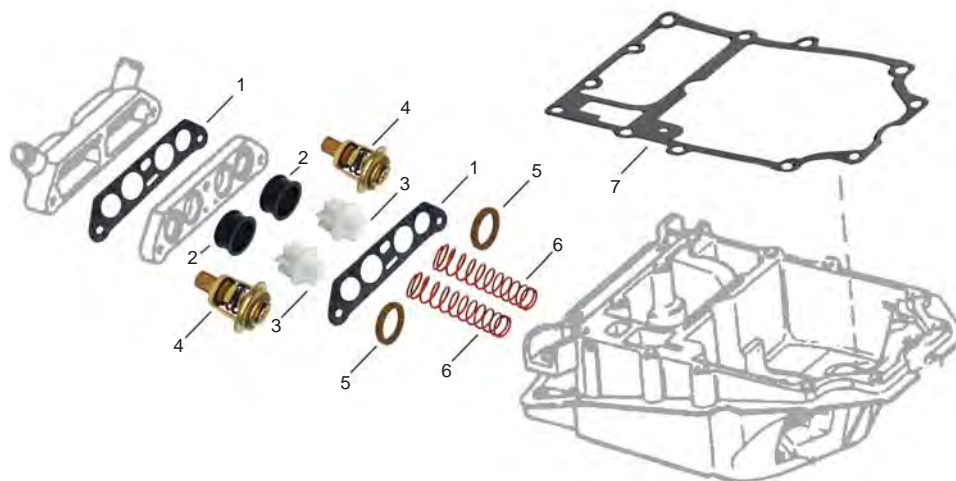
### 2-Cylinder, 3-Cylinder & V4 Loopcharged (1992-2000)



Ref. No.	GLM No.	OEM No.	Item	Ref. No.	GLM No.	OEM No.	Item
1	13240	343141	Cover	4	11044	343020	Spring V4
2	35440	329830	Gasket	4	11053	343977	Spring 40-70 HP (1986-01)
3	21658	336185	Washer	5	46132	435957	Diaphragm
* 4	11041	336211	Spring 60-70 HP (1993) & V4	6	13150	436195	Thermostat
4	11042	342421	Spring 40-70 HP (1995-96) & V4	7	11038	336179	Spring
4	11043	343115	Spring 40-70 HP (1997-98)	8	13570	336178	Therm. Sleeve

\* Use Spring No. 11041 with Thermostat Cover No. 339207

### V4 Crossflow

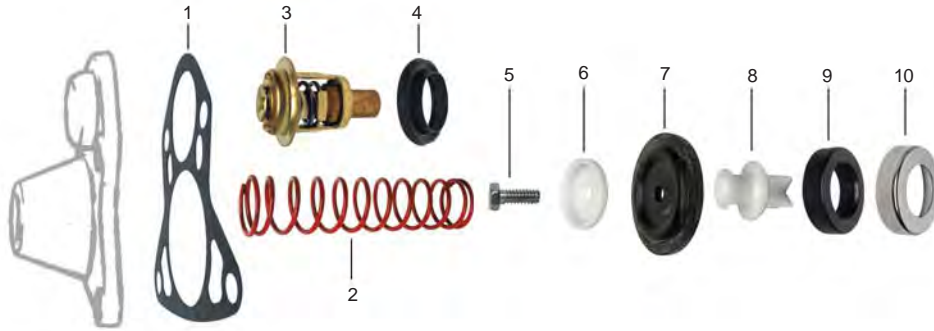


Ref. No.	GLM No.	OEM No.	Item	Ref. No.	GLM No.	OEM No.	Item
1	33650	332369	Gasket	5	34440	321932	Gasket
2	86481	321692	Grommet	6	46150	317245	Spring
3	46170	318395	Valve	7	34880	318373	Gasket (1973-77)
4	13010	5005440	Thermostat	7	33640	342513	Gasket (1978-97)

# Johnson / Evinrude

## THERMOSTAT ASSEMBLIES

### V6 Crossflow



Ref. No.	GLM No.	OEM No.	Item	Ref. No.	GLM No.	OEM No.	Item
1	33600	321184	Gasket	6	46160	321220	Spring Retainer
2	46150	317245	Spring	7	46140	321221	Diaphragm
3	13010	5005440	Thermostat	8	46180	321027	Valve
4	30610	310058	Gasket	9	46100	320880	Valve Seat
5	22370	306643	Screw	10	46120	321222	Valve Cup

## THERMOSTATS

<p><b>No. 13080</b> OEM: 396987</p>  <p>143°</p> <p>3-Cyl. (1985 &amp; before)</p>	<p><b>No. 13010</b> OEM: 434841, 5005440</p>  <p>143°</p> <p>6-55 HP, V4, V6 Crossflow</p>	<p><b>No. 13130</b> OEM: 435491</p>  <p>143°</p> <p>60° V4 90-115HP (1995-up) 60° V6 150-175HP (1991-up)</p>	<p><b>No. 13170</b> OEM: 434137</p>  <p>143°</p> <p>3-Cyl. (1986-91) V4 Loopcharged &amp; V8</p>
<p><b>No. 13150</b> OEM: 436195</p>  <p>143°</p> <p>9.9,15,40,48, 50 HP 3-Cyl., V4</p>	<p><b>No. 13190</b> VERNATHERM OEM: 394411</p>  <p><b>NEW</b> 143°</p> <p>65, 85, 100, 115, 135 HP (1971-1990)</p>	<p><b>No. 13110</b> OEM: 437090 Lower Flow</p>  <p>133°</p> <p>90° V6 Offshore Models Stainless Steel</p>	<p><b>No. 13180</b> OEM: 5001036 Higher Flow</p>  <p>133°</p> <p>90° V6 200-250 Ficht</p>

## THERMOSTAT COVERS & O-RING

<p><b>No. 13240</b> OEM: 343141</p>  <p>50-70 HP (1986-up)</p>	<p><b>No. 13730</b> OEM: 332944</p>  <p>2-Cyl. Loopcharged (1997) V6 Offshore Models</p>	<p><b>No. 13720</b> OEM: 338632</p>  <p>60° V4, V6</p>
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# Johnson / Evinrude













THERMOSTAT & VALVE SPRINGS				
<b>No. 11038</b> OEM: 336179 <b>NEW</b> 	<b>No. 11041</b> OEM: 336211 <b>NEW</b> 	<b>No. 11042</b> OEM: 342421 <b>NEW</b> 	<b>No. 11043</b> OEM: 343115 <b>NEW</b> 	<b>No. 11044</b> OEM: 343020 <b>NEW</b> 
<b>No. 11045</b> OEM: 337067 <b>NEW</b> 	<b>No. 11053</b> OEM: 343977 	<b>No. 11054</b> OEM: 333858 	<b>No. 11058</b> OEM: 338174 	<b>No. 46150</b> OEM: 317245 
THERMOSTAT HOUSING COMPONENTS				
<b>No. 46110</b> VALVE CUP OEM: 330273  V4/V6 Loopcharged	<b>No. 46120</b> VALVE CUP OEM: 321222  V6 Crossflow	<b>No. 46132</b> VALVE DIAPHRAGM OEM: 435957 <b>NEW</b>  2-Cyl., 3-Cyl. V4 Loopcharged	<b>No. 46130</b> VALVE DIAPHRAGM OEM: 394408  V4/V6 Loopcharged	<b>No. 46140</b> VALVE DIAPHRAGM OEM: 321221  V6 Crossflow
<b>No. 46100</b> VALVE SEAT OEM: 320880  V6 Crossflow	<b>No. 46170</b> VALVE OEM: 318395  V4 Crossflow	<b>No. 46180</b> VALVE OEM: 321027  V6 Crossflow	<b>No. 46160</b> SPRING RETAINER OEM: 321220  V6 Crossflow	
<b>No. 86481</b> GROMMET OEM: 321692  V4 Crossflow	<b>No. 13251</b> THERMOSTAT SLEEVE OEM: 343105 	<b>No. 13570</b> THERMOSTAT SLEEVE OEM: 336178 <b>NEW</b>  2-Cyl., 3-Cyl. & V4 Loopcharged	<b>No. 13580</b> THERMOSTAT SLEEVE OEM: 337533 <b>NEW</b>  90° V6 Loopcharged	
<b>No. 21658</b> WASHER OEM: 336185 <b>NEW</b>  2-Cyl., 3-Cyl. V4 Loopcharged	<b>No. 10563</b> ELBOW OEM: 126776 For 5/16 Hose  60-70 HP (1988 & Up)	<b>No. 10561</b> ELBOW OEM: 321886 For 1/4 Hose  9.9-15 (1978-95), 20-35 HP (1978-80) 3-Cyl., V4 (1978 & Up), V6 (1978-92) 40-60 2-Cyl. (1978-90), (1978-91)	<b>No. 10562</b> ELBOW OEM: 331894 For 3/8 Hose  V6 (1987-90) Loopcharged with Power Steering V8 (1986-91) w/ Pwr. Steer.	

# Johnson / Evinrude

## THERMOSTAT GASKETS

<p><b>No. 34130</b> RUBBER GROMMET OEM: 323582</p>  <p>2-Cyl. Crossflow 9.9-25 HP Thermostat</p>	<p><b>No. 30610</b> RUBBER GROMMET OEM: 310058</p>  <p>2-Cyl. Crossflow 90° V6 Crossflow Thermostat</p>	<p><b>No. 34110</b> RUBBER OEM: 329319</p>  <p>2-Cyl. Crossflow 8-30 HP Thermostat</p>	<p><b>No. 34260</b> CORK OEM: 313416</p>  <p>3-Cyl. Thermostat</p>
<p><b>No. 36590</b> RUBBER OEM: 332130</p>  <p>3-Cyl. Thermostat</p>	<p><b>No. 33070</b> RUBBER OEM: 339044</p>  <p>60° V4, V6 Thermostat</p>	<p><b>No. 34440</b> CORK OEM: 321932</p>  <p>90° V4 Crossflow Thermostat</p>	<p><b>No. 86213</b> POP OFF SEAT OEM: 335981</p> 

## THERMOSTAT COVER GASKETS

<p><b>No. 35410</b> OEM: 329076</p>  <p>6-8 HP</p>	<p><b>No. 86215</b> OEM: 336947</p>  <p>5, 6, 8, 10, 15 HP (1991-2001)</p>	<p><b>No. 33290</b> OEM: 308328</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 34000</b> OEM: 311145</p>  <p>2-Cyl. Crossflow</p>
<p><b>No. 33250</b> OEM: 305196</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 34890</b> OEM: 318917</p>  <p>2-Cyl. Crossflow</p>	<p><b>No. 35440</b> OEM: 329830</p>  <p>2 &amp; 3-Cyl. Loopcharged 90° V4 Loopcharged</p>	<p><b>No. 34630</b> OEM: 332108 (1985-1988)</p>  <p>3-Cyl., 49 Cubic Inch</p>
<p><b>No. 34150</b> OEM: 305586</p>  <p>90° V4 Crossflow</p>	<p><b>No. 33650</b> OEM: 332369</p>  <p>90° V4 Crossflow</p>	<p><b>No. 33600</b> OEM: 321184</p>  <p>90° V6 Crossflow</p>	<p><b>No. 36870</b> OEM: 337068</p>  <p>90° V6 Loopcharged</p>



# Section 12

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## Johnson / Evinrude Ignition and Electrical

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# Johnson / Evinrude

## TUNE-UP KITS

### No. 72800

OEM: 172521



**Kit Contains:**

GLM	OEM	ITEM
70070	580148	Point
70570	580321	Condenser

### No. 72820

OEM: 172523



**Kit Contains:**

GLM	OEM	ITEM
70070 (2)	580148	Point
70640 (2)	581419	Condenser

### No. 72830

OEM: 172806



**Kit Contains:**

GLM	OEM	ITEM
70200 (2)	581207	Point
70640 (2)	581419	Condenser

### No. 72810

OEM: 172522



**Kit Contains:**

GLM	OEM	ITEM
70070 (2)	580148	Point
70570 (2)	580321	Condenser

### No. 72840

OEM: 172524, 172525

w/o Rotors



**Kit Contains:**

GLM	OEM	ITEM
70080 (2)	580290	Point
70590	580256	Condenser

## POINT SETS

### No. 70070

OEM: 580148



### No. 70200

OEM: 581207



### No. 70080

OEM: 580290



## CONDENSERS

### No. 70570

OEM: 580321



### No. 70640

OEM: 581419



### No. 70590

OEM: 580256



# Johnson / Evinrude

## IGNITION SYSTEM APPLICATIONS

HP	Year	Point Sets	Condenser	Tune-Up Kits
1.5, 2	1968-90	70070	70570	72800
3	1952-68	70070	70570	72810
4	1965-76	70070	70570	72810
4	1981-90	70070	70570	72810
4.5	1981	70200	70640	72830
5	1965-68	70070	70570	72810
5.5	1954-64	70070	70570	72810
6	1965-76	70070	70570	72810
7.5	1956-58	70070	70570	72810
9.5	1964-73	70070	70570	72810
9.9	1974-76	70080	70640	72830
10	1954-63	70070	70570	72810
15	1956	70200	70640	72830
15	1974-76	70070	70570	72810
18	1957-61	70070	70570	72810
18	1962-73	70070	70640	72820
20	1962-73	70070	70640	72820
25	1955	70070	70570	72810
25	1969-76	70070	70640	72820
28	1962-64	70070	70640	72820
30	1956	70070	70570	72810
33	1965-70	70070	70640	72820
35	1958-59	70070	70570	72810
35	1976	70070	70640	72820
40	1960-61	70200	70570	72810
40	1962-73	70070	70640	72820
40	1974-76	70070	70640	72820
40C	1981-83	70200	70640	72830
45	1958-59	70080	70590	72840
50	1958-59	70080	70590	72840
60	1964-67	70080	70590	72840
75	1960-65	70080	70590	72840
80	1966-67	70080	70590	72840
90	1964-75	70080	70590	72840
100	1966	70080	70590	72840

# Johnson / Evinrude

## COILS AND KITS

**No. 72100**

OEM: 584477



**No. 72080**

OEM: 584561



**No. 72010**

OEM: 582508



## RECTIFIERS

**No. 72350**

OEM: 581778



**No. 72320**

OEM: 583408



## POWER TRIM RELAY AND SOLENOIDS

**No. 72420**

OEM: 378444



**No. 72430**

OEM: 586180



**No. 73010**

OEM: 586147, 586224



**No. 72440**

OEM: 581528



**No. 72404**

OEM: 584128



# Johnson / Evinrude

## COILS AND KITS APPLICATIONS

HP	Year	GLM No.	QTY	HP	Year	GLM No.	QTY
1.5, 2 Colt Jr.	1968-90	72100	1	60	1978-84	72080	2
3	1952-68	72100	1	60	1985 & UP	72010	3
4	1950-76	72100	1	60 SST	1989-90	72010	3
4	1981-89	72100	1	65	1971-75	72050	3
4	1977-80	72080	1	65	1979-84	72080	3
4 Deluxe	1985 & UP	72010	2	65 Comm.	1985 & UP	72010	3
4.5	1980-84	72080	2	70	1974-75	72050	4
4.5	1986-87	72010	2	70	1979-84	72080	3
5	1950-76	72100	2	70	1985 & UP	72010	3
5	1985-91	72010	2	70	1974-74	72080	1
5.5 - 6	1950-76	72080	2	75	1979-84	72080	3
6	1977-84	72080	2	75	1985 & UP	72010	3
6	1985-90	72010	2	85	1969-72	72070	1
6.5 Comm.	1989-90	72010	2	85	1973-75	72050	1
7.5	1954-58	72100	2	85	1976-77	72040	4
7.5	1980-84	72080	2	85	1978-84	72040	4
8	1980-84	72080	2	85	1985 & UP	72010	4
8	1985-90	72010	2	88	7987 & UP	72010	4
9.5	1964-73	72100	2	90	1978-84	72080	4
9.9, 15	1974-76	72020	2	90	1985-94	72010	4
9.9, 15	1977-84	72080	2	100	1971-72	72070	1
9.9, 15	1985 & UP	72010	2	100	1978-84	72080	4
9.9, 15 4-Stroke	1994 & UP	72080	2	100	1985 & UP	72010	4
10	1951-63	72100	2	1600 CC	1988	72010	4
10, 14 Comm.	1989-90	72080	2	110	1986-90	72010	4
14	1988	72080	2	115	1969-70	72070	1
15	1951-72	72100	2	115	1973-74	72050	4
18	1951-72	72100	2	115	1976-77	72040	4
18, 20	1973	72030	2	115	1978-94	72080	4
20	1951-72	72100	2	120	1985 & UP	72010	4
20	1985 & UP	72010	2	125	1971-72	72070	1
25	1951-72	72100	2	125	1991 & UP	72010	4
25	1973-76	72030	2	125 Comm.	1989 & UP	72010	4
25	1977-84	72080	2	135	1973-75	72050	4
25	1985 & UP	72010	2	135	1976	72040	4
25 Comm.	1985-91	72010	-	135	1977	72040	4
28	1956-70	72100	2	140	1978-84	72080	4
28	1987-88	72080	2	140	1985 & UP	72010	4
28	1989 & UP	72010	2	150	1976-78	72040	1
30	1956-70	72100	2	150	1979-84	72080	6
30	1977-84	72080	2	150 (A)	1985 & UP	72010	6
30	1985 & UP	72010	2	155 Comm. (A)	1984 & UP	72010	6
33, 35	1956-70	72100	2	2500 CC	1988	72010	6
35	1976	72030	2	175	1976-78	72080	6
35	1977-84	72080	2	175	1979-84	72080	6
40	1960-73	72100	2	175 (A)	1985 & UP	72010	6
40	1974	72020	2	185	1984 & UP	72010	6
40 (B)	1975-83	72030	2	200	1976-78	72040	6
40	1977-84	72080	2	200	1979-84	72080	6
40	1985-88	72010	2	200	1985 & UP	72010	6
40 Comm.	1985-90	72010	2	225	1986 & UP	72010	6
45 Comm.	1985-92	72010	2	235	1976-78	72040	6
45 SS	1987-90	72010	2	235	1979-84	72080	6
48	1987 & UP	72010	2	250	1991 & UP	72010	8
50	1971-75	72050	2	275	1985 & UP	72010	8
50	1978-84	72080	2	300, 3.6	1985 & UP	72010	8
50	1985-88	72010	2	Sail Drive	1978-84	72080	2
55	1978-84	72080	2	Sail Drive	1985 & UP	72010	2

(A) Will Not Fit Loopcharged Engines (B) Contact Controlled Engines Only

# Johnson / Evinrude

## POWER TRIM RELAY AND SOLENOIDS APPLICATIONS

HP	Year	Solenoids	Relay	HP	Year	Solenoids	Relay
18	1957-59	72420	-	80 (E)	1966	72430	-
20 (A)	1981-92	72430	-	80	1967	72430	-
25 (A)	1972-92	72430	-	85	1968-75	72430	-
28	1987-92	72430	-	85	1976-80	72430	72440
30 (A)	1984-92	72430	-	85	1991-92	72430	73010
33	1965-67	72420	-	88	1987-92	72430	73010
33	1968-70	72430	-	90	1964	72420	-
35	1957-59	72420	-	90	1965	72430	72440
35	1976-88	72430	-	90	1981	72430	73010
40	1960-66	72420	-	90	1982-92	72430	-
40	1967-92	72430	-	100	1966-72	72430	-
45 (B)	1989-92	72430	-	100	1979-80	72430	72440
45 SS	1988-90	72430	-	100 (E)	1984-92	72430	73010
48	1987-92	72430	-	F600cc (13)	1988	72430	73010
50	1958-59	72420	-	110	1986-89	72430	73010
50	1971-79	72430	-	115	1969-75	72430	-
50	1981-83	72430	-	115	1976-81	72430	72440
50	1984-92	72430	-	115	1982-92	72430	73010
55	1968-80	72430	-	120	1985-92	72430	73010
55	1981	72430	-	125 (C)	1971-81	72430	-
55 (B)	1989-92	72430	-	125 (C)	1982-92	72430	73010
80	1964-66	72420	-	135	1973	72430	-
60	1967-80	72430	-	135	1974-75	72430	-
60	1981-83	72430	-	135	1976	72430	72440
80	1984-92	72430	73010	140	1977-81	72430	72440
SST 60	1989-90	72430	73010	140	1982-92	72430	73010
65 (C)	1968-72	72430	-	150	1979-81	72430	72440
85 (C)	1985-92	72430	73010	150	1982-92	72430	73010
70	1961	72420	-	155 (B)	1984-92	72430	73010
70	1974-80	72430	-	2500cc	1988	72430	73010
70	1981	72430	72440	175	1977-81	72430	72440
70	1982-92	72430	73010	175	1982-92	72430	73010
75	1960-64	72420	-	185	1984-92	72430	73010
75 (D)	1985	72420	-	200	1978-81	72430	72440
75 (E)	1965	72430	-	200 (C)	1982-92	72430	73010
75	1975-80	72430	-	225	1986-92	72430	73010
75	1981	72430	72440	235	1978-81	72430	72440
75	1982-88	72430	73010	235	1982-85	72430	73010
80 (D)	1966	72420	-	250	1991-91	72430	73010
				275	1985-88	72430	73010

(A) Electric Start Only (B) Comm. Models (C) Comm. Models Only (D) w/o Elec. Shift (E) w/ Elec. Shift

## RECTIFIERS APPLICATIONS

HP	Year	Rectifier	HP	Year	Rectifier
9.9, 15	1974-92	72350	65	1972-73, 1988-91	72320
20 (D)	1989-92	72350	70 (B)	1974-91	72320
25	1977-92	72350	75	1975-88	72320
28	1989-92	72350	85	1970-80	72320
30 (D)	1989-92	72350	88	1989-92	72320
35	1976-88	72350	90	1981-92	72320
40	1974-76, 1988-92	72350	100 (C)	1971, 1979-80, 1984-92	72320
45	1989-92 Comm.	72350	115	1973-92	72320
45 SS	1989-90	72350	125	1971-72	72320
48	1989-92	72350	135 (G)	1974	72320
50	1971-75	72320	140	1977-88	72320
55	1976-77	72320	450	1979-88	72320
55 (A)	1978-81, 1980-92	72350	155	1984-88	72320
60	1970 (E), 1971	72320	175	1977-83	72320
60	1980-88	72350	185	1984-88	72320
60 (F)	1989-91	72320	200	1976-83	72320
SST 60	1989-90	72320	235	1978-88	72320

(A) Comm. Models (B) 1911 EL & TL Models (C) Except 1992 Models WTLNE & ETXENE (D) Elec. Start (E) D Models (F) EL & TL Models (G) 135443, 135483 Models





# Section 13

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## Johnson / Evinrude Carburetor Kits & Fuel Pumps

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# Johnson / Evinrude

## CARBURETOR SERVICE KITS

### No. 40510

OEM: 439071  
w/o Float



### No. 40550

OEM: 439072



### No. 40530

OEM: 439074, 439075  
w/o Float & Filter



### No. 40600

OEM: 439073



### No. 40560

OEM: 396701



### No. 40580

OEM: 439078, 439079  
w/o Float



### No. 40520

OEM: 437327  
w/o Float



### No. 40540

OEM: 436959



### No. 40570

OEM: 439076



### No. 40590

OEM: 438996



## NEEDLES & SEATS

### No. 40720

OEM: 396522



### No. 40710

OEM: 396521



### No. 40700

OEM: 387262



### No. 40730

OEM: 396520



# Johnson / Evinrude

## CARBURETOR SERVICE KITS / NEEDLES & SEATS APPLICATIONS

HP	Year	Carb. Kit w/o Float	Needle & Seat	HP	Year	Carb. Kit w/o Float	Needle & Seat
1.5	1970-90	40510	40720	60	1964-67	40540	40710
2	1970-90	40510	40720	60	1970-95	40560	40710
3	1952-67	40510	40710	60	1992-93	40580	40720
3	1968	40510	40720	65	1972-95	40560	40710
4	1965-78	40510	40720	65	1992-93	40580	40720
4	1983-89	40550	40720	70	1972-95 (3-Cyl.)	40560	40710
4	1991-93	40550	40720	70	1992-93	40580	40720
4.5	1982-84,87	40550	40720	75	1960-63	40540	40710
5	1965-67	40510	40720	75	1975-88	40560	40710
5	1968	40530	40710	80	1966-67	40540	40710
5	1984-85	40550	40720	85	1968	40540	40710
5.5	1954-67	40510	40720	85	1971-79	40530	40710
6	1954-79	40510	40720	85	1969-70,91-93	40570	40700
6	1968	40530	40710	V-4	1969-79	40570	40700
6	1984-85	40550	40720	V-4	1983-84	40570	40700
6	1986-up	40600	40720	88,90	1985-95	40570	40700
7.5	1955-58	40510	40720	90	1981-82,83	40570	40700
7.5	1982-83	40550	40720	100	1971,1980	40570	40700
8	1984-85	40550	40720	100	1972,1979	N/A	40710
8	1986-up	40600	N/A	100	1985-95	40570	40700
9.9	1974-88	40550	40720	110	1985-90	40570	40700
9.9	1989-up	40600	40720	115	1969,80-95	40570	40700
10	1954-63	40510	40720	115	1970,73-79	N/A	40710
14	1968	40550	40720	V-6	1976-90	40570	40700
15	1955-56	40510	40720	115	1983	40570	40700
15	1974-88	40550	40720	120	1985-90	40580	40720
15	1989-up	40600	40720	120	1985-90,1993	40580	40720
18	1957-68	40510	40720	125	1971-72	N/A	40710
20	1969-73	40560	40710	125	1993	40580	40720
20	1957-68	40510	40720	125 C	1989-95	40580	40720
20	1969-90	40560	40710	130	1995("P" only) -1999	40520	40720
25	1991-95	40580	40720	135	1973-76	N/A	40710
SAIL	1954-55	40530	40710	140	1977,80-83	40570	40700
DR	1978-90	40560	40710	140	1978-79	N/A	40710
25	1969-95	40560	40710	140	1985-91	40580	40720
25	1991-95	40580	40720	140	1993	40580	40720
28	1962-64	40530	40710	150	1979-90	40570	40700
28	1976-95	40560	40710	150	1993	40590	40720
28	1992-93	40580	40720	150	1992-93	40590	40720
30	1956	40530	40710	155	1984-93	40570	40700
30	1976-95	40560	40710	175	1977-91	40570	40700
30	1991-93	40580	40720	175	1992-93	40590	40720
33	1965-70	40530	40710	185	1984	40570	40700
35	1957-59	40530	40710	185	1989-93	40590	40720
35	1959	40530	40710	200	1976-83	40570	40700
35	1976-95	40560	40710	200	1986-90	40580	40720
35	1991-3	40580	40720	200	1992-93	40590	40720
40	1960-63,71	40530	40710	200TX	1996	40520	40720
40	1965-70,72-78	40530	40710	200/225 Loop	1997	40520	40720
40	1971-90,79-92	40560	40710	225	1986-90	40590	40720
40	1993	40580	40720	225	1992-93	40590	40720
45	1971-95	40560	40710	235	1978-84	40570	40700
45	1992	40580	40720	250	1991-93	40590	40720
48	1992-95	40580	40720	250 V6 Loop	1998-1999	40520	40720
50	1958-59	40540	40710	275\3.6 L	1985-88	40590	40720
50	1971-95	40560	40710	300	1988	40590	40720
50	1993	40580	40720	300	1991-93	40590	40720
55	1968-69,71-95	40560	40710	130/200/225/250	2000	40520	40720
55	1992	40580	40720	135/200/225/250	2001	40520	40720

# Johnson / Evinrude

## CARBURETOR PARTS & GASKETS

**No. 23203**

RETAINER  
OEM: 315232



**No. 32650**

GASKET  
OEM: 307583



**No. 31174**

PLUG WASHER  
CARB. SCREW  
OEM: 317477



**No. 37799**

GASKET  
OEM: 338883



**No. 33100**

GASKET  
OEM: 338860



**No. 37790**

GASKET  
OEM: 335070



**No. 37794**

GASKET  
OEM: 343512



**No. 37760**

GASKET  
OEM: 338813



**No. 33120**

FLOAT BOWL  
OEM: 338878



**No. 33130**

FUEL BOWL  
OEM: 338880



**No. 34090**

FUEL BOWL  
OEM: 303750



**No. 33140**

CARBURETOR BOWL  
OEM: 338884



**No. 34831**

NOZZLE & FLOAT  
BOWL GASKET KIT  
OEM: N/A



**No. 33260**

CARBURETOR BODY  
OEM: 305218



# Johnson / Evinrude

GASKETS			
<p><b>No. 37795</b> COVER GASKET OEM: 334043</p> 	<p><b>No. 37796</b> COVER GASKET OEM: 341501</p> 	<p><b>No. 37797</b> COVER GASKET OEM: 340616</p> 	<p><b>No. 37840</b> GASKET OEM: 334353</p> 
<p><b>No. 37770</b> GASKET OEM: 335648</p> 	<p><b>No. 37780</b> GASKET OEM: 327223</p> 	<p><b>No. 37791</b> GASKET OEM: 341085</p> 	<p><b>No. 37792</b> GASKET OEM: 335115</p> 
<p><b>No. 37793</b> GASKET OEM: 340657</p> 	<p><b>No. 37798</b> GASKET OEM: 333348</p> 	<p><b>No. 34220</b> HOUSING TO TANK GASKET OEM: 125530</p> 	<p><b>No. 33210</b> FUEL TANK GASKET OEM: 302557</p> 
<p><b>No. 86654</b> SEAL OEM: 332253</p> 	<p><b>No. 86656</b> SEAL OEM: 344046</p> 	<p><b>No. 86657</b> SEAL OEM: 343613</p> 	<p><b>No. 86658</b> SEAL OEM: 335076</p> 



# Johnson / Evinrude

## FUEL PUMP KITS & APPLICATIONS

### No. 40810

OEM: 393088



### No. 40820

OEM: 393103



### No. 40830

OEM: 398514



### No. 40840

OEM: 432962



### No. 40850

OEM: 438616



Model	Year	Part No.	Model	Year	Part No.	Model	Year	Part No.
2.5	1987-88	40810	30, 35	1976-86	40820	65 Comm.	1984	40820
4	1981-Up	40810	35	1958-59	-	65 Comm.	1988-89	40830
4.0 Deluxe	1992-93	40810	40	1960-64	-	70, 75	1982-84	40820
4.5	1981-Up	40810	40	1987	40830	70	1990	40830
5	1985-93	40810	40	1990-Up	40850	75	1960-65	-
6	1977-Up	40810	40	1970-78	40820	80	1966-67	-
6.5	1989-90	40810	40, 50	1988-89	40840	85	1978-83	40820
7.5	1982-83	40810	45	1958-59	-	88	1987	40830
8	1984-93	40810	45, 48, 50	1989	40840	88, 90, 110	1988-89	40830
9.9, 15	1981	40820	45, 48, 50	1990-Up	40850	88, 90, 100, 115	1990	40830
9.9, 15	1982-Up	40810	45, 55	1985-86	40830	88, 100, 125	1990-Up	40850
9.9 Electric & 15	1987-89	40830	45, 55	1987	40830	90	1964-65	-
9.9 Electric & 15	1990-Up	40850	45, 55 Comm.	1989-90	40830	90, 115	1978-83	40820
10/14	1989-90	40810	48	1987	40830	90, 115, 140	1982	40820
14	1988	40810	48	1988	40840	100	1966	-
20/25	1977-86	40820	48, 50	1990	40840	100 Comm.	1989-90	40830
20-30	1990-Up	40850	50	1958-59	-	125 Comm.	1989-90	40830
20, 25, 30	1987	40830	50	1987	40830	V4 140	1978-83	40820
20, 25, 30	1988-89	40840	50, 60	1982-84	40820	150, 175, 200	1982	40820
20, 25, 30 Rope	1990	40840	55	1983	40820	V6 150, 175	1983	40820
20, 30, 35 Remote	1990	40840	55 Comm.	1984	40820	155 Comm.	1989-90	40830
20/35 Rope	1989	40840	55-75	1970-78	40820	V6 235	1983	40820
25 Comm.	1982	40820	60	1964-67	-	2.6	1984	40830
25 Comm.	1988-90	40840	60	1988	40830	3.0	1991-93	40810
28	1962-63	-	65	1985-87	40820			
28	1987	40830	65	1990	40830			

## KITS COMPONENTS

### No. 04095

CHECK VALVE  
OEM: 335334



### No. 33110

FUEL PUMP  
GASKET  
OEM: 338876



### No. 34080

FUEL PUMP  
MOUNTING GASKET  
OEM: 303615



### No. 33370

FUEL PUMP  
GASKET  
OEM: 338879



### No. 31172

FUEL PUMP  
SCREW GASKET  
OEM: 303630



Washer Fiber

### No. 04092

DIAPHRAGM  
OEM: 331307

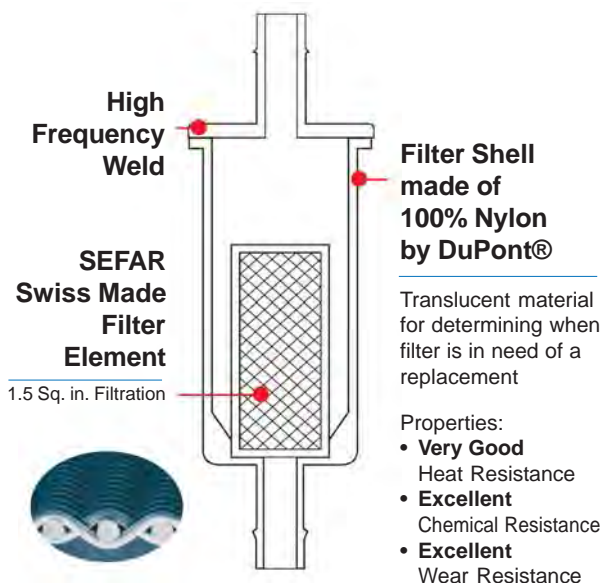




# Johnson / Evinrude

## FUEL FILTERS & KITS

### GLM's PLASTIC INLINE FUEL FILTERS



**NEW PACKAGING!**



**Brisk Packaging for Easy Opening**



**No. 40135**

OEM: 435918  
For  $\varnothing$  5/16" In -  $\varnothing$  3/8" Out



**No. 40145**

OEM: 35-816296Q03  
Use with  $\varnothing$  1/4" Hose



**No. 40155**

OEM: 35-816296Q2  
Use with  $\varnothing$  5/16" Hose



**No. 40165**

OEM: N/A  
Use with  $\varnothing$  3/8" Hose

#### GLM's Transparent Inline Fuel Filter

Eliminate contaminants such as dust or dirt particles. Acts not only as a blocking device, but is also a gauge to indicate filter replacement. As affordable as disposable in-line fuel filters

**WARNING:**  
**DO NOT USE ON INBOARD ENGINE APPLICATIONS**



**No. 40140** ( $\varnothing$  1/4")

OEM: N/A

**No. 40150** ( $\varnothing$  5/16")

OEM: N/A

**No. 40160** ( $\varnothing$  3/8")

OEM: N/A

Swiss Made Filter Element

#### No. 40000

REPLACEMENT FILTER  
OEM: N/A

For No. 40140,  
40150, 40160



Swiss Made Filter Element

#### No. 24820

CARB. FUEL FILTER  
OEM: 308239



#### No. 24830

CARB. FUEL FILTER  
OEM: 305185



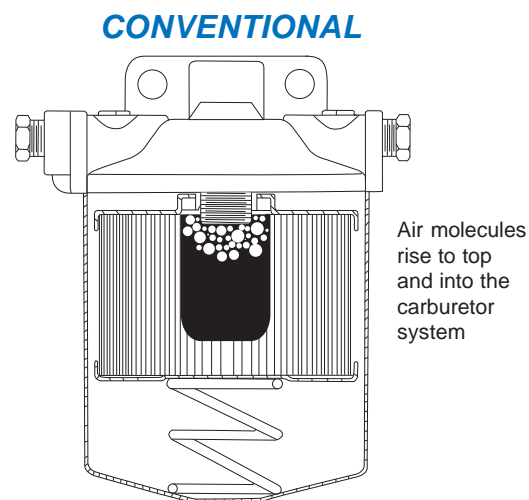
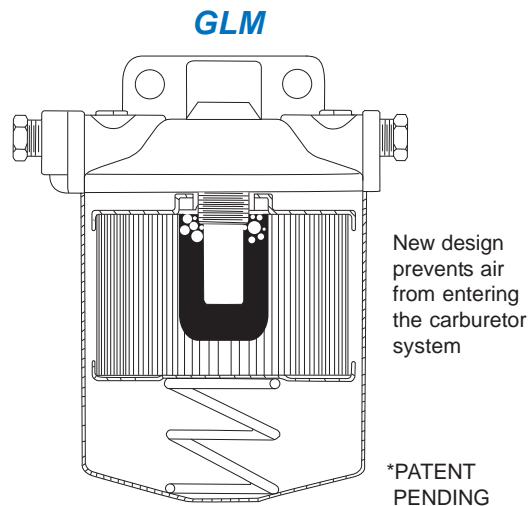
# Johnson / Evinrude

## *ELIMINATE FUEL STARVATION WITH THE NEW GLM LOW PICK-UP WATER / FUEL SEPARATOR MOUNTING BRACKET*

Engine compartment temperatures can soar on hot summer days creating high gasoline temperatures. High temps and agitation caused by rough seas can aerate the gasoline in the water/fuel separator filter turning it into foam. A fuel pump can't pull aerated gasoline from the water/fuel separator and pump it to the carburetor or fuel rail efficiently. The engine will show signs of gasoline starvation (lean) at high speeds, a situation very similar to vapor lock.

Because this aerated gasoline rises to the top of the water/fuel separator filter, GLM has introduced a water/fuel filter separator mounting bracket with a fuel pick-up extending deeper into the filter. Through extensive research and testing the GLM engineers have found the optimum location for the fuel pick-up. The deeper location is low enough to be free of aerated gasoline but high enough to be free of the water in the bottom of the separator.

The deeper fuel pick-up is only found on the new GLM water/fuel separator mounting bracket kits. It might solve some of those mysterious fuel delivery problems your engine may be experiencing!



---

**\*For trouble free boating always remember to replace your water/fuel separator filter after every 50 hours of engine operation!**

---

# Johnson / Evinrude

## HOW TO CHOOSE THE CORRECT WATER/FUEL SEPARATOR

Water/Fuel Separators are categorized by their capacity to filter different sized dirt particles. Rated in Microns, (each micron is one millionth of an inch in diameter) marine filters will normally be available with elements capable of filtering 2 micron particles, 10 micron particles, or 28 micron particles. A marine filter capable of filtering 2 micron particles will clean the fuel more efficiently than a 28 micron filter but will be more restrictive to fuel flow. The 2 micron filter will also become dirty sooner and will need replacement more often.

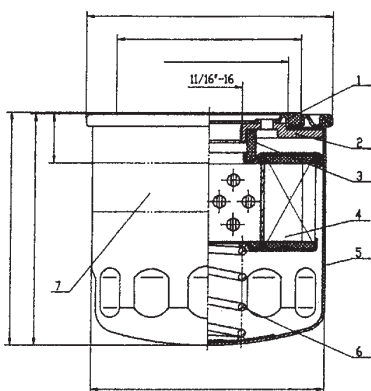
Fuel flow is rated in Gallons Per Hour (GPH). A typical 350/5.7L inboard engine will require 27 GPH at 4,800 rpm, a 454/7.4L inboard engine will require 37 GPH at 4,800 rpm. Selecting a fuel/water separator filter should be based on the amount of fuel the engine requires in GPH at wide open throttle.

A 2 micron fuel filter is generally too restrictive for the average four stroke inboard engine and may separate the

oil from the fuel in two stroke outboard engines. For this reason GLM sells only the 10 and 28 micron fuel filters.

The 28 micron filter is the most common size fuel filter in the marine industry and is the standard replacement filter for all two stroke and four stroke marine engines. The GLM 28 micron filter exceeds all engine manufacturers' specifications for particle filtering, water separating and fuel flow.

The GLM 10 micron filter will provide exceptional filtering and only moderate fuel pressure loss. When used with sufficient sized fuel lines it will flow enough fuel for inboard engines up to 550 horsepower. It will **not** separate the oil from the gasoline on a two stroke outboard equipped boat. Because a 10 micron filter clogs faster than a 28 micron filter GLM recommends it only for boaters who are vigilant in replacing the water/fuel separator filter at regular intervals.



### GLM Fuel Filter Features

- \* 28 or 10 micron filter paper shaped into 70 pleats total 327 sq. in. filtration. The largest filtering capability in the aftermarket. (4)
- \* BWG #11 heavy duty spring (6).
- \* Gasoline resistant rubber seals (1) (3).
- \* Oxidizing treatment inside powder coated outside for corrosion protection (5).
- \* Minimum 196N.m. torque strength between adapt plate and canister (2).
- \* Will not separate 2 cycle oil from gasoline!

SUS316 Stainless Steel Brackets		Translucent Red Stainless Steel Brackets		Die Cast Aluminum Brackets	
<b>No. 25010</b> w/ 2 brass plugs 2 extension tubes  ø 1/4" NPTF Ports (2 inputs & 2 outputs)	<b>No. 25030</b> w/ 2 brass plugs 2 extension tubes  ø 3/8" NPTF Ports (2 inputs & 2 outputs)	<b>No. 25011</b> w/ 2 brass plugs 2 extension tubes  ø 1/4" NPTF Ports (2 inputs & 2 outputs) <b>NEW</b>	<b>No. 25031</b> w/ 2 brass plugs 2 extension tubes  ø 3/8" NPTF Ports (2 inputs & 2 outputs) <b>NEW</b>	<b>No. 25000</b> w/ 2 brass plugs 2 extension tubes  ø 1/4" NPTF Ports (2 inputs & 2 outputs)	<b>No. 25020</b> w/ 2 brass plugs 2 extension tubes  ø 3/8" NPTF Ports (2 inputs & 2 outputs)
<b>No. 24942</b> WATER SEPARATOR FUEL FILTER OEM: N/A  10 Micron Height 4-7/16"			<b>No. 24940</b> WATER SEPARATOR FUEL FILTER OEM: N/A  28 Micron Height 4-7/16"		

# Johnson / Evinrude

## WATER SEPARATING FUEL FILTER KITS

### With Stainless Steel Bracket

#### No. 24956

(24940+25010)  
OEM: N/A

28 Micron

ø 1/4" NPTF Ports  
Flow: 50 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24958

(24940+25030)  
OEM: N/A

28 Micron

ø 3/8" NPTF Ports  
Flow: 75 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24957

(24942+25010)  
OEM: N/A

10 Micron

ø 1/4" NPTF Ports  
Flow: 50 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24959

(24942+25030)  
OEM: N/A

10 Micron

ø 3/8" NPTF Ports  
Flow: 75 GPH  
with 2 brass plugs & 2 extension tubes



### With NEW! Translucent Red Stainless Steel Bracket

#### No. 24960

(24940+25011)  
OEM: N/A

28 Micron

ø 1/4" NPTF Ports  
Flow: 50 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24962

(24940+25031)  
OEM: N/A

28 Micron

ø 3/8" NPTF Ports  
Flow: 75 GPH  
with 2 brass plugs & 2 extension tubes



### With Die Cast Aluminum Bracket

#### No. 24950

(24940+25000)  
OEM: N/A

28 Micron

ø 1/4" NPTF Ports  
Flow: 50 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24953

(24940+25020)  
OEM: N/A

28 Micron

ø 3/8" NPTF Ports  
Flow: 75 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24952

(24942+25000)  
OEM: N/A

10 Micron

ø 1/4" NPTF Ports  
Flow: 50 GPH  
with 2 brass plugs & 2 extension tubes



#### No. 24954

(24942+25020)  
OEM: N/A

10 Micron

ø 3/8" NPTF Ports  
Flow: 75 GPH  
with 2 brass plugs & 2 extension tubes



# Section 14

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## Johnson / Evinrude Powerhead Gaskets

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# Johnson / Evinrude

## 1 & 2-CYLINDER HEAD GASKETS

**No. 33850**

OEM: 313782



2 HP 1-Cyl.  
(1969-1990)

**No. 34010**

OEM: 203130



4 HP 2-Cyl.  
(1968-1980)

**No. 33860**

OEM: 332010



2.5, 3, 4, 4.5 HP 2-Cyl.  
(1987-1998)

**No. 33830**

OEM: 329103



6 HP 2-Cyl.  
(1959-1979)

**No. 36310**

OEM: 325273



6, 7.5, 8 HP 2-Cyl.  
(1980-1998)

**No. 34140**

OEM: 330818



9.9, 15 HP 2-Cyl.  
(1985-1992)

**No. 36020**

OEM: 338222



9.9, 15 HP 2-Cyl.  
(1993-1999)

**No. 35840**

OEM: 319633



25, 35 HP, 2-Cyl.  
(1976-1978)

**No. 34570**

OEM: 329419



20, 25, 28, 30, 35 HP, 2-Cyl.  
(1979-2000)

**No. 35990**

OEM: 307069



40 HP, 2-Cyl., Crossflow  
(1960-1986)

**No. 34250**

OEM: 335359



Large, 2-Cyl. Loopcharged  
(1976-2001)



# Johnson / Evinrude

## 3-CYLINDER & V4 HEAD GASKETS

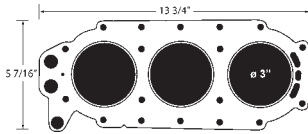
### 3-Cylinder Head Gaskets



#### No. 33400

OEM: 313413

Fits (1968-1989)  
3-Cyl. Loopcharged  
Engines with a  
ø 3.000" Piston



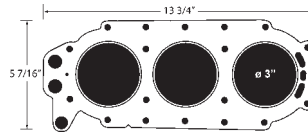
#### No. 35830\*

OEM: 332816

Fits (1968-1989)  
3-Cyl. Loopcharged  
Engines with a  
ø 3.000" Piston

**Thicker**

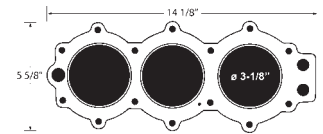
\*Same as No. 33400 except thicker to lower cylinder compression for low octane fuel.



#### No. 34280

OEM: 329836

Fits (1986-2001)  
3-Cyl. Loopcharged  
Engines with a  
ø 3.1875" Piston



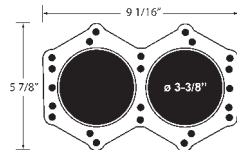
### V4 Head Gaskets



#### No. 34030

OEM: 306048

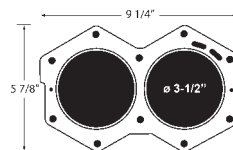
Fits (1968-1972)  
90° V4 Crossflow  
Engines with a  
ø 3.375" Piston



#### No. 33540

OEM: 318358

Fits (1973-1994)  
90° V4 Crossflow  
Engines with a  
ø 3.500" Piston



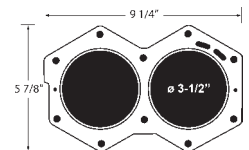
#### No. 35820\*

OEM: 332819

Fits (1973-1994)  
90° V4 Crossflow  
Engines with a  
ø 3.500" Piston

**Thicker**

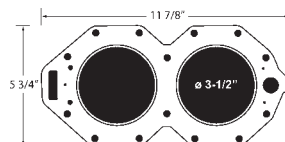
\*Same as No. 33540 except thicker to lower cylinder compression for low octane fuel.



#### No. 34400

OEM: 328623

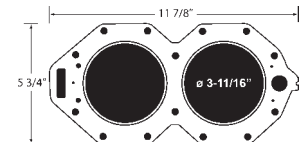
Fits (1985-1987)  
90° V4 Loopcharged Engines  
with a ø 3.500" Piston



#### No. 35930

OEM: 340115

Fits (1988-1999)  
90° V4 Loopcharged Engines  
with a ø 3.6875" Piston



# Johnson / Evinrude

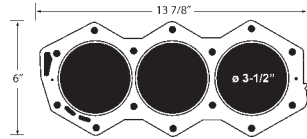
## V6 & V8 HEAD GASKETS



### No. 33870

OEM: 335360

Fits (1976-1991)  
90° V6 Crossflow Engines  
with a  $\varnothing$  3.500" Piston



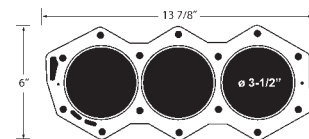
### No. 35940\*

OEM: 332817

Fits (1976-1991)  
90° V6 Crossflow Engines  
with a  $\varnothing$  3.500" Piston

**Thicker**

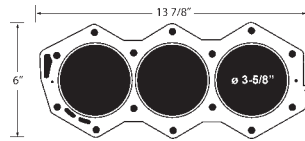
\*Same as No. 33870  
except thicker to lower  
cylinder compression  
for low octane fuel.



### No. 34240

OEM: 335361

Fits (1980-1991)  
90° V6 Crossflow Engines  
with a  $\varnothing$  3.625" Piston



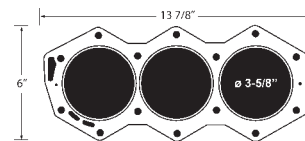
### No. 35960\*

OEM: 332818

Fits (1980-1991)  
90° V6 Crossflow Engines  
with a  $\varnothing$  3.625" Piston

**Thicker**

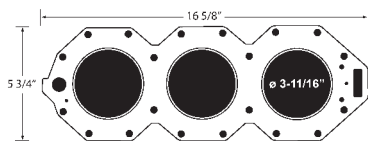
\*Same as No. 34240  
except thicker to lower  
cylinder compression  
for low octane fuel.



### No. 34590

OEM: 333670

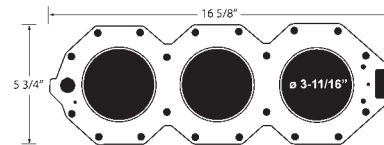
Fits (1988-1992)  
90° V6 Loopcharged Engines  
with a  $\varnothing$  3.6875" Piston



### No. 36320

OEM: 345257

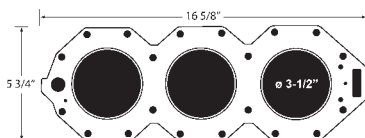
Fits (1994-2001)  
90° V6 Loopcharged  
with a  $\varnothing$  3.6875" Piston



### No. 35950

OEM: 331211

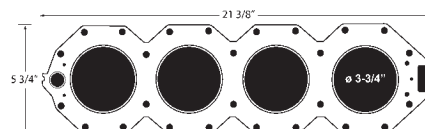
Fits (1985-1987)  
90° V6 Loopcharged Engines  
with a  $\varnothing$  3.500" Piston



### No. 35970

OEM: 340116

Fits (1994-1998)  
90° V8 Loopcharged Engines  
with a  $\varnothing$  3.6875" Piston



# Johnson / Evinrude

HEAD GASKETS APPLICATIONS					
1974 and Later Models			Fast Moving Gaskets for Older Models		
Model	Year	GLM No.	Model	Year	GLM No.
2 Colt, Junior ©	1969-90	33850	5, 5.5, 6	1959-73	33830
2.3, 3.3, 3.5	1991-Up	-	9.5	1964-73	-
4	1968-80	34010	33	1965-70	-
2.5, 3, 4, 4.5, Ultra, Excel 4	1981-98	33860	40	1960-73	35990
6 (145cc)	1959-79	33830	50, 60, 65	1958-68	-
6, 7.5, 8 (164cc)	1980-98	36310	55, 60, 65	1968-73	33400
9.9, 15 (216cc)	1974-92	34140	60, 65	1970-73	35830
9.9, 15 (255cc)	1993-99	36020	75, 80, 85, 90, 100, 115	1960-70	34030
25 (361cc)	1974-76	-	125	1971-72	-
25 (521cc)	1977-78	35840	115, 135	1973	33540
35 (521cc)	1976-78	35840			
20, 25, 28, 30, 35 (521cc)	1979-00	34570			
40, 40 Comm. (719cc)	1968-86	35990			
50 (680cc)	1974-75	-			
40, 45, 48, 50, 55, 60 (737cc)	1976-01	34250			
60 3-Cyl. (814cc)	1986-89	33400			
60 3-Cyl. (913cc)	1974-85	33400			
70 3-Cyl. (814cc)	1989-01	34280			
70 3-Cyl. (913cc)	1986-01	34280			
75 3-Cyl. (814cc)	1975-89	33400			
75 3-Cyl. (814cc) Low Octane	1975-78	35830			
85 V4 Crossflow	1974-78	-			
115, 135, 140 V4 Crossflow	1973-78	33540			
85, 88, 90, 100, 110, 115 V4 Crossflow	1978-94	33540			
115 V4 Crossflow	1985	35820			
135, 140 V4 Crossflow	1973-84	35820			
140 V4 Crossflow	1977-84	33540			
120, 140, V4 Loopcharged	1985-87	34400			
120, 130, 140 V4 Loopcharged, 2 L	1988-99	35930			
150, 155, 175, 185, 200 Crossflow	1976-91	33870			
150, 155, 175, 185, 200 Crossflow	1976-91	35940			
175 V6 Crossflow	1986-92	34240			
200, 225 V6 Loopcharged	1986-87	35950			
200, 225 Loopcharged V6, 3 L	1988-93	34590			
200, 225, 250 V6 Loopcharged, 3L	1994-01	36320			
235 V6 Crossflow	1978-79	33870			
235 V6 Crossflow	1980-85	34240			
235 V6 Crossflow	1978-79	35940			
235 V6 Crossflow	1980-85	35960			
2.6 XP-GT V6 Crossflow	1983-85	-			
2.6 XP-GT V6 Crossflow	1983-85	35960			
275, 3.6 L V8 Loopcharged	1985-87	-			
250, 275, 300 V8 Loopcharged, 4 L	1988-93	35970			
300 V8 Loopcharged, 4 L	1993-94	35970			

# Johnson / Evinrude

## POWERHEAD GASKET KITS

### No. 39380

OEM: 394546



9.9-15 HP  
(1984-1992)

### No. 39353

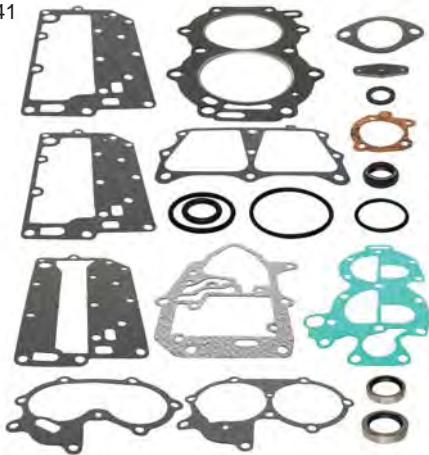
OEM: 436358



9.9-15 HP  
(1993-1999)

### No. 39420

OEM: 433941



20, 25, 30 HP, Crossflow  
(1996-1999)

### No. 39355

OEM: 390700



40 HP Comm., Crossflow  
(1983-1986)

### No. 39370

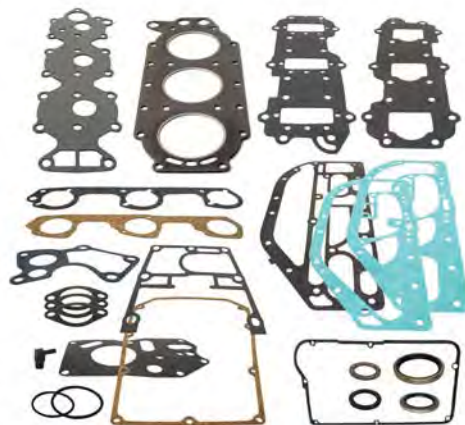
OEM: 439083



40-60 HP, 2-Cyl. Loopcharged  
(1998-2001)

### No. 39350

OEM: 390078



60-70 HP, 3-Cyl.  
(1979-1988)

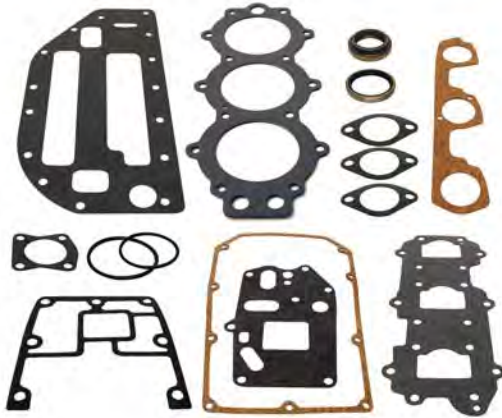


# Johnson / Evinrude

## POWERHEAD GASKET KITS

**No. 39390**

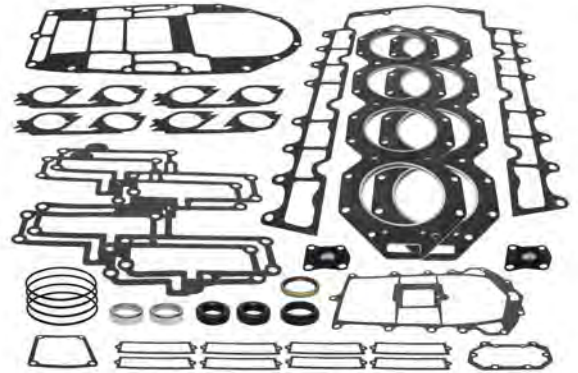
OEM: 438904



60-70 HP, 3-Cyl.  
(1986-2001)

**No. 39070**

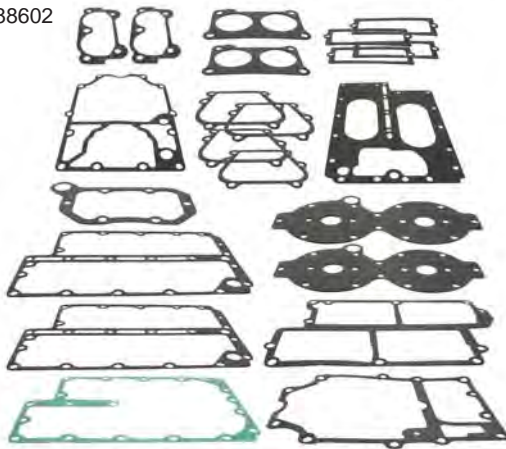
OEM: 398693



V8 250, 275 HP, 300 Special  
(1994-1998)

**No. 39360**

OEM: 388602



90° V4 Crossflow  
(1973-1977)

**No. 39080**

OEM: 439085



90° V4 Crossflow  
(1978-1994)

**No. 39354**

OEM: 396750



90° V4 Loopcharge 120-140 HP  
(1985-1987)

**No. 39400**

OEM: 432570



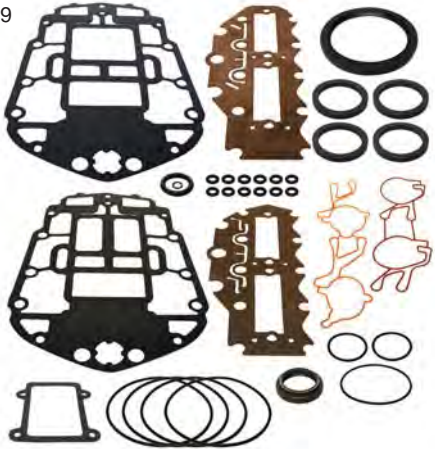
90° V4 Loopcharge 120-140 HP  
(1988-1999)

# Johnson / Evinrude

## POWERHEAD GASKET KITS

### No. 39351

OEM: 439559



60° V4 Loopcharged, Carb., 90-115 HP  
(1995-UP)

### No. 39356

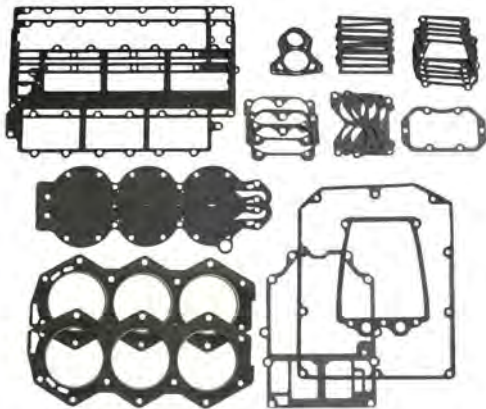
OEM: 5000400



60° V4 Loopcharged, EFI, 90-115 HP  
(1998-UP)

### No. 39090

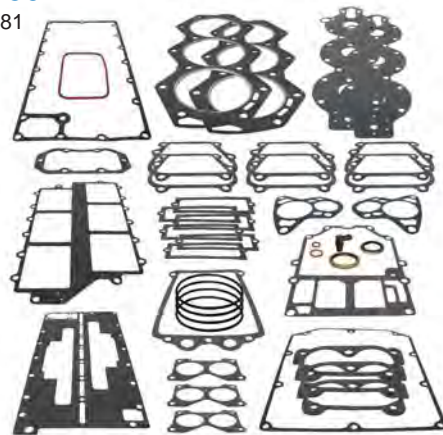
OEM: 391988



V6 Crossflow All (Except 175-235 HP 1980-1991)  
(1978-1991)

### No. 39430

OEM: 434381



V6 Crossflow  
175, 235 HP (1980-1991)

### No. 39352

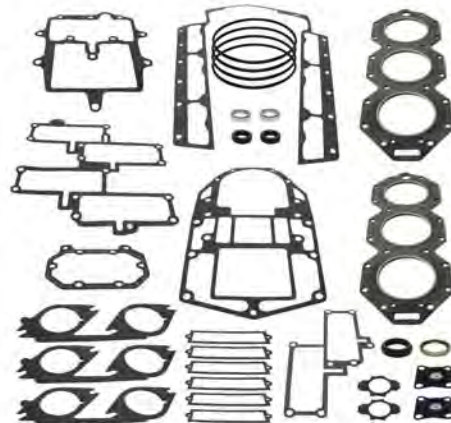
OEM: 437155



60° V6 Loopcharged, Carb., 150-175 HP  
(1991-1999)

### No. 39930

OEM: 398172



90° V6 Loopcharged, Carb., 200, 225 HP  
(1986-1987)





# Johnson / Evinrude

## POWERHEAD GASKET KITS

### No. 39410

OEM: 436891



90° V6 Loopcharged, Carb., 200-225 HP  
(1988-1993)

### No. 39510

OEM: 437725



90° V6 Loopcharged, Carb., 200, 225, 250 HP  
(1994-2001)

## POWERHEAD GASKET KITS APPLICATIONS

Model	Year	GLM No.	Model	Year	GLM No.
<b>2-Cylinder</b>			<b>V4 Crossflow</b>		
2 Colt, Junior®	1985-88	-	85	1973-77	39360
2 Colt, Junior®	1989-90	-	115, 135, 140 Use 33540 HD Gskt, Plus P/N	1973-77	39360
4	1978-82	-	85	1978	-
2.5, 4, 4.5, Ultra or Excel 4	1983-87	-	85, 88, 90, 110, 115	1979 & Up	39080
2.5, 4, 4.5, Ultra or Excel 4	1988-90	-	100, 115, 140	1978-84	39080
3, 4	1991 & Up	-	115	1985	39080
5, 6	1984-90	-	<b>V4 90° Loopcharged</b>		
5, 6, 8	1991 & Up	-	120-140	1985-87	39354
6	1972-79	-	120-140	1988-94	39400
6, 7.5	1981-83	-	130	1995	39400
8	1980-83	-	<b>V4 60° Loopcharged</b>		
8	1984-90	-	90-115 V4 60°	1995 & Up	39351
9.9, 15	1974-92	39380	90-115 FFI	1998 & Up	39356
9.9, 15	1993 & Up	39353	<b>V6 90° Crossflow</b>		
18	1970-73	-	150	1978-91	39090
25	1973-76	-	155	1986-91	39090
25	1977-78	-	175	1977-85	39090
20, 25, 28, 30	1979 & Up	39420	185	1984-85	39090
35	1979-86	39420	200	1976-83	39090
40	1970-71	-	235	1978-79	39090
40 Comm.	1987-91	39355	175	1986-91	39430
40, 45, 48, 55	1980 & Up	39370	235	1980-85	39430
50	1971-75	39370	235	1983-85	-
55	1976	39370	<b>V6 60° Loopcharged</b>		
55	1977-79	39370	150-175 V6 60°	1991 & Up	39352
50	1980	39370	150-175 FFI	1997-98	-
55, 60	1980-85	39370	150-175 FFI	2000 & Up	-
<b>3-Cylinder</b>			<b>V6 90° Loopcharged</b>		
50	1995	39390	200, 225	1985-87	39930
60	1986-88	39350	200, 225	1988-1993	39410
60	1989 & Up	39390	200, 225	1994-01	39510
65 Use 33400 HD Gskt, Plus P/N	1972-73	39350	<b>V8</b>		
65	1984-86	39350	275, 3.6 L	1985-87	-
65	1987 & Up	39390	250, 275, 300 Special	1988 & Up	39070
70	1974-85	39350	200-250 FFI	2001	-
70	1986 & Up	39390			

# Johnson / Evinrude

## POWERHEAD MOUNTING GASKETS

**No. 35190**

OEM: 324717



9.9, 15 HP (1972-1985)

**No. 33080**

OEM: 325721



9.9, 15 HP (1986-Up)

**No. 33430**

OEM: 314421



18, 25 HP

**No. 33190**

OEM: 319348



28, 33, 40 HP

**No. 34350**

OEM: 319710



25, 35 HP (1976-1978)

**No. 33710**

OEM: 330621



25, 35 HP (1979-Up)

**No. 35340**

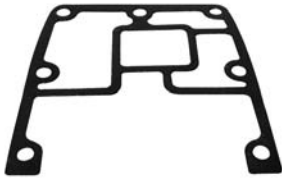
OEM: 351018



2-Cyl., Loopcharged

**No. 35430**

OEM: 329828



3-Cyl., 60, 70 HP

**No. 33410**

OEM: 313763

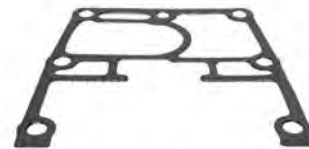


Thin Gasket

3-Cyl.

**No. 34550**

OEM: 328618

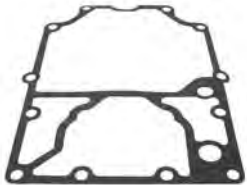


Thick Gasket

3-Cyl.

**No. 34880**

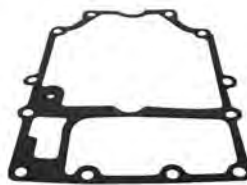
OEM: 318373



90° V4 Crossflow (1973-1977)

**No. 33640**

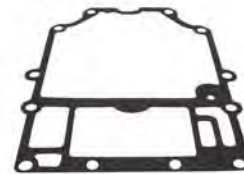
OEM: 342513



90° V4 Crossflow (1978-1997)

**No. 34460**

OEM: 323214



90° V6 Crossflow

**No. 35370**

OEM: 328590



90° V4 Loopcharged

**No. 35790**

OEM: 335503



90° V6 Loopcharged

**No. 35780**

OEM: 333879



90° V6 Loopcharged

**No. 35460**

OEM: 329975



90° V8 Loopcharged

# Johnson / Evinrude

## POWERHEAD MOUNTING GASKETS

**No. 36500**

OEM: 343853



60° V4 (1997)

**No. 36510**

OEM: 344386



60° V4 (1998-Up)

**No. 36560**

OEM: 335419



60° V6

## INTERMEDIATE HOUSING EXHAUST GASKETS

**No. 35360**

OEM: 351019



2-Cyl., Loopcharged

**No. 35420**

EXHAUST RELIEF COVER  
OEM: 329826



2-Cyl., Loopcharged  
Exhaust Relief Cover

**No. 34600**

OEM: 331016



3-Cyl. (1972-1985)

**No. 35810**

OEM: 336308



3-Cyl., 60, 70 HP (1986-UP)

**No. 34500**

OEM: 324516



90° V6 Crossflow

**No. 33670**

OEM: 323292



90° V6 Crossflow

**No. 35680**

OEM: 331585



90° V6 Crossflow

**No. 34470**

OEM: 323222



90° V4, V6 Crossflow

**No. 34490**

OEM: 323459



90° V4 Crossflow

**No. 35770**

OEM: 343809



90° V6 Loopcharged

**No. 35760**

OEM: 333564



90° V6 Loopcharged

## SEALS - EXHAUST HOUSING

**No. 85830**

OEM: 320936



**No. 85840**

OEM: 320961



**No. 86210**

OEM: 324937



# Johnson / Evinrude

## POWERHEAD EXHAUST GASKETS

**No. 33170**

OEM: 313065



5,5,5,6 HP

**No. 35200**

OEM: 325211



5, 5.5, 6 HP

**No. 34320**

OEM: 318925



9.9, 15 HP

**No. 33690**

OEM: 324323



25, 35 HP

**No. 35330**

OEM: 326264



2-Cyl. Crossflow

**No. 33230**

OEM: 304762



2-Cyl. Crossflow

**No. 34800**

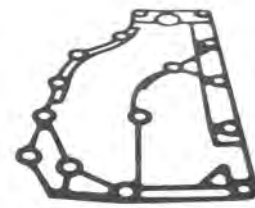
OEM: 315868



2-Cyl. Loopcharged

**No. 34850**

OEM: 315869



2-Cyl. Loopcharged

**No. 34610**

OEM: 331916



3-Cyl.

**No. 34620**

OEM: 331917



3-Cyl.

**No. 35450**

OEM: 343863



3-Cyl., 60-70 HP

**No. 34300**

OEM: 317955



90° V4 Crossflow

**No. 34290**

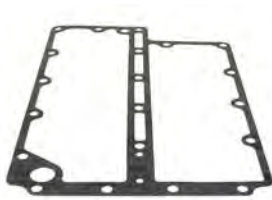
OEM: 317914



90° V4 Crossflow

**No. 33240**

OEM: 305176



90° V4 Crossflow

**No. 33680**

OEM: 323469



90° V4 Crossflow

**No. 33510**

OEM: 318156



90° V4 Crossflow

**No. 34650**

OEM: 393561



90° V6 Crossflow, 235 HP

**No. 33620**

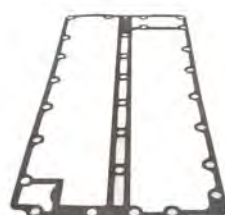
OEM: 321435



90° V6 Crossflow

**No. 33590**

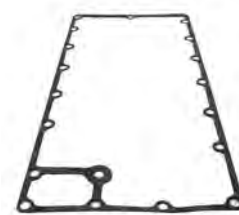
OEM: 321182



90° V6 Crossflow

**No. 32560**

OEM: 336430









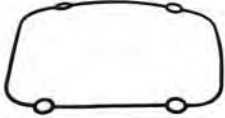











90° V6 Crossflow



# Johnson / Evinrude

## POWERHEAD WATER PASSAGE COVER GASKETS

<p><b>No. 34580</b> OEM: 329920</p>  <p>9.9, 15 HP</p>	<p><b>No. 33560</b> OEM: 319665</p>  <p>25, 35 HP</p>	<p><b>No. 33700</b> OEM: 327674</p>  <p>25, 35 HP</p>	<p><b>No. 34780</b> OEM: 315538</p>  <p>50, 55 HP</p>
<p><b>No. 36640</b> OEM: 318962</p>  <p>2-Cyl. Loopcharged</p>	<p><b>No. 33530</b> OEM: 318335</p>  <p>V4</p>	<p><b>No. 34310</b> OEM: 318609</p>  <p>3-Cyl.</p>	<p><b>No. 34370</b> OEM: 321028</p>  <p>V6</p>
<p><b>No. 86214</b> REGULATOR MOUNT GASKET OEM: 3010036</p>  <p>60° V4/V6 (1997-2000)</p>		<p><b>No. 36540</b> REGULATOR MOUNT GASKET OEM: 342291</p>  <p>60° V4/V6</p>	<p><b>No. 35470</b> REGULATOR MOUNT GASKET OEM: 344472</p>  <p>90° V4/V6</p>
<p><b>No. 34870</b> OEM: 317951</p>  <p>V4/V6</p>	<p><b>No. 34450</b> OEM: 322858</p>  <p>V4/V6</p>	<p><b>No. 35760</b> OEM: 333564</p>  <p>90° V6 Loopcharged</p>	
<h2>POWERHEAD TRANSFER PORT GASKETS - CROSSFLOW ENGINES</h2>			
<p><b>No. 34990</b> OEM: 319332</p>  <p>9.9, 15 HP</p>	<p><b>No. 34340</b> OEM: 319661</p>  <p>25, 35 HP</p>	<p><b>No. 36630</b> OEM: 304784</p>  <p>2-Cyl.</p>	<p><b>No. 33280</b> OEM: 307133</p>  <p>90° V4</p>



# Johnson / Evinrude

## CARBURETOR TO INTAKE MANIFOLD GASKETS

### No. 33740

CARB. TO MANIFOLD  
GASKET  
OEM: 325092



### No. 34980

CARB. TO MANIFOLD  
GASKET  
OEM: 318932



### No. 35750

THROTTLE BODY  
TO MANIFOLD  
OEM: 332319



### No. 33460

CARB. TO MANIFOLD  
GASKET  
OEM: 315052



V4

### No. 34540

CARB. TO MANIFOLD  
GASKET  
OEM: 327707



V4/V6

### No. 34530

CARB. TO MANIFOLD GASKET  
OEM: 326926



3-Cyl.

### No. 34860

CARB. TO MANIFOLD GASKET  
OEM: 317305



3-Cyl.

### No. 36620

THROTTLE BODY GASKET  
OEM: 344526



60° EFI

### No. 86211

PORT INTAKE TO CARB.  
GASKET  
OEM: 335818



60° V4

### No. 86212

STBD. INTAKE TO CARB.  
GASKET  
OEM: 335819



60° V4

### No. 86650

PORT INTAKE TO CARB.  
GASKET  
OEM: 335403



60° V6

### No. 86651















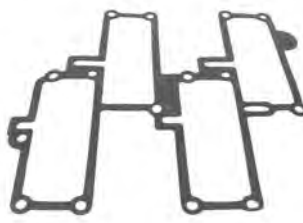





STBD. INTAKE TO CARB.  
GASKET  
OEM: 335404



60° V6

# Johnson / Evinrude

## INTAKE MANIFOLD GASKETS / REED PLATE GASKETS

<p><b>No. 34970</b> REED PLATE GASKET OEM: 318924</p>  <p>9.9, 15 HP</p>	<p><b>No. 35320</b> REED PLATE GASKET OEM: 325260</p>  <p>9.9, 15 HP</p>	<p><b>No. 34390</b> REED PLATE GASKET OEM: 321479</p>  <p>25, 35 HP</p>	<p><b>No. 33090</b> REED PLATE GASKET OEM: 326260</p>  <p>25, 35 HP</p>
<p><b>No. 36660</b> REEDPLATE GASKET OEM: 311364</p> 	<p><b>No. 36670</b> REEDPLATE GASKET OEM: 311365</p> 	<p><b>No. 34790</b> INTAKE MANIFOLD GASKET OEM: 315578</p>  <p>2-Cyl. Loopcharged</p>	<p><b>No. 35800</b> INTAKE MANIFOLD GASKET OEM: 335633</p>  <p>2-Cyl. Loopcharged</p>
<p><b>No. 35400</b> REED BOX GASKET OEM: 328626</p>  <p>90° V4/V6 Loopcharged</p>	<p><b>No. 35740</b> REED BOX GASKET OEM: 332266</p>  <p>90° V4/V6 Loopcharged</p>	<p><b>No. 33660</b> REED BOX GASKET OEM: 321907</p>  <p>90° V4/V6 Crossflow</p>	<p><b>No. 36650</b> REED PLATE OEM: 317254</p>  <p>2-Cyl. Crossflow</p>
<p><b>No. 33180</b> INTAKE MANIFOLD GASKET OEM: 319174</p>  <p>90° V4 Crossflow</p>	<p><b>No. 33610</b> INTAKE MANIFOLD GASKET OEM: 329718</p>  <p>90° V6 Crossflow</p>	<p><b>No. 35390</b> INTAKE MANIFOLD GASKET OEM: 328622</p>  <p>90° V4/V6 Loopcharged</p>	<p><b>No. 35540</b> INTAKE MANIFOLD GASKET OEM: 331532</p>  <p>90° V6 Loopcharged</p>
<p><b>No. 36520</b> PORT INTAKE MANIFOLD GASKET OEM: 336388</p>  <p>60° V4</p>	<p><b>No. 36530</b> STARBOARD INTAKE MANIFOLD GASKET OEM: 336389</p>  <p>60° V4</p>	<p><b>No. 36570</b> PORT INTAKE MANIFOLD GASKET OEM: 336226</p>  <p>60° V6</p>	<p><b>No. 36580</b> STARBOARD INTAKE MANIFOLD GASKET OEM: 336227</p>  <p>60° V6</p>

# Johnson / Evinrude

## AIR SILENCER GASKETS

### No. 34480

AIR SILENCER GASKET  
OEM: 323338



25, 35 HP

### No. 36550

AIR SILENCER GASKET  
OEM: 336821



### No. 37800

AIR SILENCER GASKET  
OEM: 338882



### No. 33750

AIR SILENCER GASKET  
OEM: 386573, 319771



### No. 35180

AIR SILENCER GASKET  
OEM: 321497



### No. 34420

AIR SILENCER GASKET  
OEM: 333008



3-Cyl.

### No. 34640

AIR SILENCER GASKET  
OEM: 314115



70, 75 HP

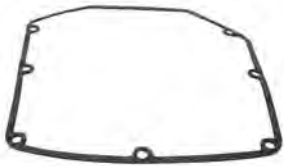
### No. 35380

AIR SILENCER GASKET  
OEM: 328604



### No. 35490

AIR SILENCER GASKET  
OEM: 330909



### No. 35000

AIR SILENCER GASKET  
OEM: 320679



### No. 35480

AIR SILENCER GASKET  
OEM: 330698



### No. 34430

AIR SILENCER GASKET  
OEM: 321794



3-Cyl.

### No. 33630

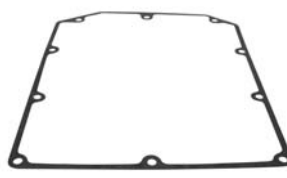
AIR SILENCER GASKET  
OEM: 321722



V4

### No. 34380

AIR SILENCER GASKET  
OEM: 321183



V6

### No. 34740

AIR SILENCER GASKET  
OEM: 314322



70, 75 HP

### No. 35350

COVER TO BASE GASKET  
OEM: 327236



V6

### No. 35730

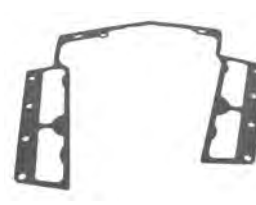
COVER TO BASE GASKET  
OEM: 331598



V6

### No. 35500

COVER TO BASE GASKET  
OEM: 331101



V4



## Limited Warranty of GLM Products, Inc.

1. This product of GLM Products, Inc. ("GLM") is warranted to be free from defects in material and workmanship for a period of two years from the date of purchase for aluminum elbow/manifold and all other GLM parts and accessories, three years from the date of purchase for cast iron elbow/manifold. Products used for commercial, rental, or income producing activity are warranted for a period of ninety (90) days. Only a person who has proof of purchase of the GLM product will receive warranty service.
2. GLM does not warrant or make any representations in respect to installation errors made by a servicing dealer, servicing mechanic, or the individual. This warranty applies to defects in material and workmanship only, it does not apply to the following: alteration, removal of parts, adjustments, tune-ups, normal wear, damages due to accident, improper installation or service, misuse, neglect, lack of maintenance, use of any accessory or part not manufactured or sold by GLM, operation with fuels, oils, or lubricants which are not suitable for use with the product, water entering engine cylinder through exhaust system or carburetor, participation in or preparing for racing or other competitive activity or operating with a racing type lower unit. GLM's liability under this warranty shall be terminated on any part damaged by flood, fire, storm, or other natural acts or where the model number and other identification has been altered, defaced or removed.
3. GLM will not be liable for any labor charges and incidental, consequential (such as loss of business), special or indirect damages resulting from the product or caused by the defect or reasonable delay in correcting the defect are not covered under the warranty.
4. GLM reserves the right to inspect and determine whether or not any part has failed due to a defect in material or workmanship. **Do not disassemble any parts including drive units that have been assembled by GLM. GLM's obligation shall be limited to repairing, replacing or crediting the product determined to be defective, at GLM's sole discretion:** GLM reserves the right to credit refund your purchase price for the product rather than repair or replace the product, or any part thereof. Any part is covered only for the original warranty period. Once the warranty on the product has expired, the warranty on any replaced or repaired part also expires. GLM shall be allowed to keep parts it deems defective under this warranty.
5. **ALL WARRANTIES BY AND FROM GLM, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY FOR THE PRODUCT INVOLVED. GLM DOES NOT WARRANT, GUARANTEE OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF THE PRODUCT IN TERMS OF ITS CORRECTNESS, RELIABILITY OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULT AND PERFORMANCE OF THE PRODUCT IS ASSUMED BY YOU. IN NO EVENT WILL GLM, OR ITS RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS (COLLECTIVELY, "GLM") BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR INDIRECT DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT.** GLM's liability to you for actual damages from any cause whatsoever, and regardless of the form of the action (whether in contract, tort (including negligence), product liability or otherwise), will be limited to the purchase price paid for the product. No GLM dealer, agent or employee is authorized to make any modification or extension to this warranty. Because some states do not allow the exclusion of implied warranties and/or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.
6. You are required to notify GLM of any defect within the applicable warranty period and immediately obtain from GLM or its distributor a warranty application and a GLM RGA number. Upon GLM's receipt of the completed warranty application and part claimed under this warranty (with the GLM RGA number marked on the shipping and packaging of the part), GLM will inspect the part for warranty coverage. Only when the defect is covered by the warranty will the part be repaired or replaced, at GLM's sole option. If warranty service is required, you must deliver your product, at your expense, with proof-of-purchase (including original purchase invoice and invoice for installation of warranted part) to GLM for repair. Service is provided by GLM at its corporate headquarters at 705 Los Angeles Avenue, Monrovia, California 91016, Tel: (626) 357-0077, Fax: (626) 357-0600. When repair is completed, GLM will ship back to its indicated address. Shipping methods will be determined by GLM.
7. This warranty comprises the sole and entire warranty pertaining to the product furnished to you by GLM, and GLM makes no other warranty, guarantee or representation of any kind whatsoever pertaining to the product. Any other representations, or promises by any person are unauthorized and are not binding upon GLM unless in writing.



# Warranty Service Procedure

1. GLM will directly and promptly approve and honor legitimate warranty claims on product only under the condition that the claim is made through a servicing Dealer. **\*\*Do not disassemble any parts including drive units that have been assembled by GLM.\*\***
2. GLM will credit or reimburse the Dealer for qualified warranty claims submitted that comply to GLM identified warranty policies.

ANY CLAIM UNDER GLM'S WARRANTY (Please see Limited Warranty of GLM Products) SHALL BE IN WRITING TO GLM PRODUCTS, INC. WITHIN THE WARRANTY PERIOD. TO ASSURE FAST AND EFFICIENT SERVICE PLEASE SHIP ALL WARRANTY PART(S) AND DOCUMENTATION DIRECTLY TO GLM. ALL WARRANTY CLAIM PRODUCTS MUST BE SHIPPED FREIGHT PREPAID TO GLM FOR WARRANTY INSPECTION. (FREIGHT CHARGES WILL BE REIMBURSED ONLY UPON APPROVAL ON WARRANTY)

1. All returns must have a GLM "RGA #" assigned (contact GLM directly for the "Return Goods Authorization #"). It is imperative to indicate this number on outside of all boxes and included on all submitted documentation. No returns will be accepted without an RGA #.
2. All returns must accompany a copy of the completed warranty application. (Application is available at [www.glmmarine.com](http://www.glmmarine.com), in the back of each GLM's catalog or through your GLM distributor.)
3. **ALL** parts involved in the claim.
4. Copy of invoices as follows:
  - Original purchase invoice from distributor.
  - Original invoice for installation of warranted parts.
  - Proposed invoice/ work-order to GLM, if any, for warranty claim.NOTE: GLM complies with OEM standard flat hours and rates.  
Copies of all invoices for items in above proposed invoice.

## Send parcel(s) to:

**GLM Products, Inc. - Warranty  
705 Los Angeles Avenue  
Monrovia, CA 91016  
RGA#**



# GLM Products, Inc. Warranty Claim Application

**Note:** Please fill out all information and send all requested material. Failure to complete this form and supply all requested material will delay your claim. Do not disassemble units that were assembled by GLM. Other applications that used only GLM parts should have just the parts returned to GLM not the complete unit.

**RGA #** \_\_\_\_\_ Contact GLM at 626/357-0077 for a **Returned Goods Authorization #**. All returned goods **must** have an RGA # marked on package (s) or they will be refused. No exceptions. **Ship to: GLM Products, Inc.**  
**Date Called:** \_\_\_\_\_  
**Caller Name:** \_\_\_\_\_ **705 Los Angeles Avenue**  
**Company Name:** \_\_\_\_\_ **Monrovia, CA 91016**

**Distributor Information:**

Company: \_\_\_\_\_ Contact: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

**Dealer Information:**

Company: \_\_\_\_\_ Address: \_\_\_\_\_ City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_ Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ Contact: \_\_\_\_\_

**Dealer Customer Information:**

Name: \_\_\_\_\_ Address: \_\_\_\_\_ City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_ Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

**Application Details:**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_ Year: \_\_\_\_\_  
 Length: \_\_\_\_\_ Beam: \_\_\_\_\_ Engine / Drive: \_\_\_\_\_ Horse Power: \_\_\_\_\_

List any modifications to boat or drive system that were not installed by the original manufacturer:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If you need more space for this description please continue on a blank sheet of paper.

**Documentation and other items required to process warranty:** Please make sure that all items listed are sent with this application. Failure to do so will delay processing this claim.

1. All parts claimed and listed on this application. This is **all parts** being claimed regardless of manufacturer.
2. Copy of invoices as follows:
 

A. Original purchase invoice from Distributor.	C. Invoice for installation of warranted parts.
B. Proposed invoice to GLM from the Dealer for repairs.	D. Invoices for any other items being claimed

**Note:** GLM reserves the right to credit the Dealer, via the Distributor, for all GLM products involved in this claim.

# GLM MANIFOLD CATALOG



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-  **Johnson/Evinrude**
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-  **Yamaha** (Suzuki, Honda, Tohatsu, Nissan)



**Manifold Catalog**

For catalog availability, visit us on the web at:  
[www.glmmarine.com](http://www.glmmarine.com)

**\$0.00 USD Digital Copy**  
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