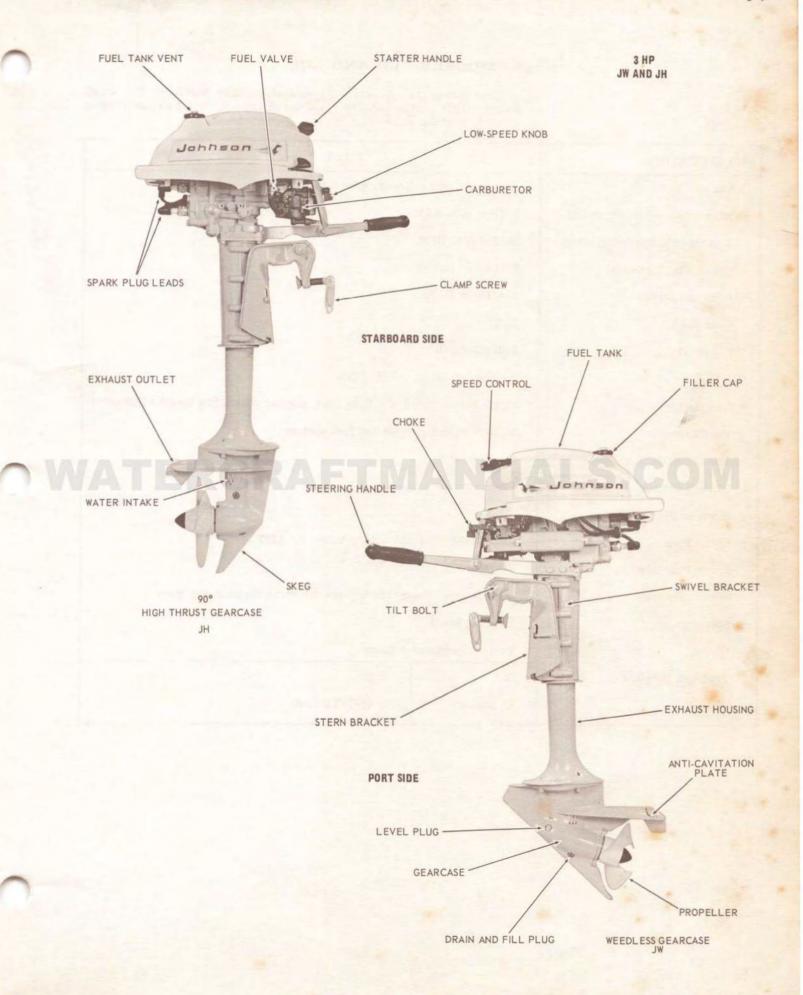


3 HP - MODELS: JW, JH AND JHL

The high thrust Model JH(L) is recommended for small craft or for use as a small sailboat auxiliary. The Angle-Matic gearcase Model JW with weedless propeller is recommended for use in shallow waters or in heavily weeded areas.

SPECIFICATIONS	JW JH(L)		
Engine Type	Two cycle, two cylinder, alternate firing		
Horsepower (OBC certified)	3 HP @ 4000 RPM		
Full throttle operating range	3500 - 4500 RPM		
Piston Displacement	5.28 cubic inche	s	
Bore and Stroke	1-9/16" x 1-3/8		
Gear Ratio	JW - 17:28 JI	H - 12:25	
Gearshift	Full pivot 360°		
Propeller	JW - 2 blade weedless: 6-1/8" x 6-1/4" JH - 3 blade: 8" x 4-1/2"		
Carburetor	Single barrel sidedraft, float feed, manual choke, low speed adjustment		
Fuel Tank	Integral, gravity feed		
Fuel Tank Capacity	4.88 pints U.S.		
Ignition System	Flywheel type magneto		
Breaker Point Gap	.020''		
Spark Plug	AC - M42K; Cha	mpion J4J; Auto-Lite A21X	
Spark Plug Gap	.030"		
Speed Control	Manual speed control lever; synchronized throttle and spark		
Steering	Steering handle		
Cooling	Vari-Volume water pump		
Transom Height	JW JH - JHL 15" 20"		
Weight	35 pounds	35-1/2 pounds	

SERVICE MANUAL



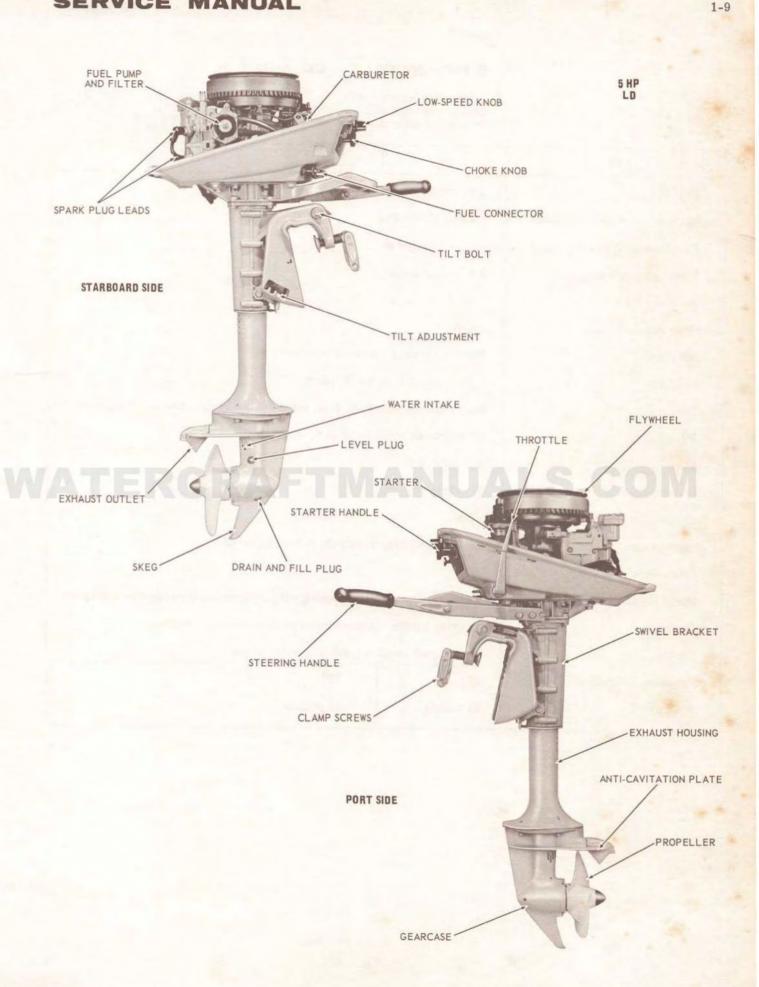


5 HP - MODELS: LD AND LDL

Extra power in the smallest, lightest package possible. For small fishing skiffs, dories, utilities and large canoes, or as an auxiliary on small to medium sailboats.

SPECIFICATIONS	LD	LDL	
Engine Type	Two cycle, two cylinder, alternate firing		
Horsepower (OBC certified)	5 HP @ 4000 RPM		
Full throttle operating range	3500 - 4500 RPM		
Piston Displacement	8.84 cubic inches		
Bore and Stroke	1-5/16" x 1-1/2"		
Gear Ratio	12:25		
Gearshift	Full pivot 360°		
Propeller	3 blade, 8" dia. x 7-1/2" pitch		
Carburetor	Single barrel sidedraft, float feed, manual choke, low speed adjustme		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Flywheel type magneto		
Breaker Point Gap	.020"		
Spark Plug	AC - M42K; Champion J4J; Auto-Lite A21X		
Spark Plug Gap	.030"		
Speed Control	Manual speed control lever; synchronized throttle and spark		
Steering	Steering handle		
Cooling	Vari-Volume water pump		
Transom Height	15''	20''	
Weight	43 pounds	43-1/2 pounds	

SERVICE MANUAL

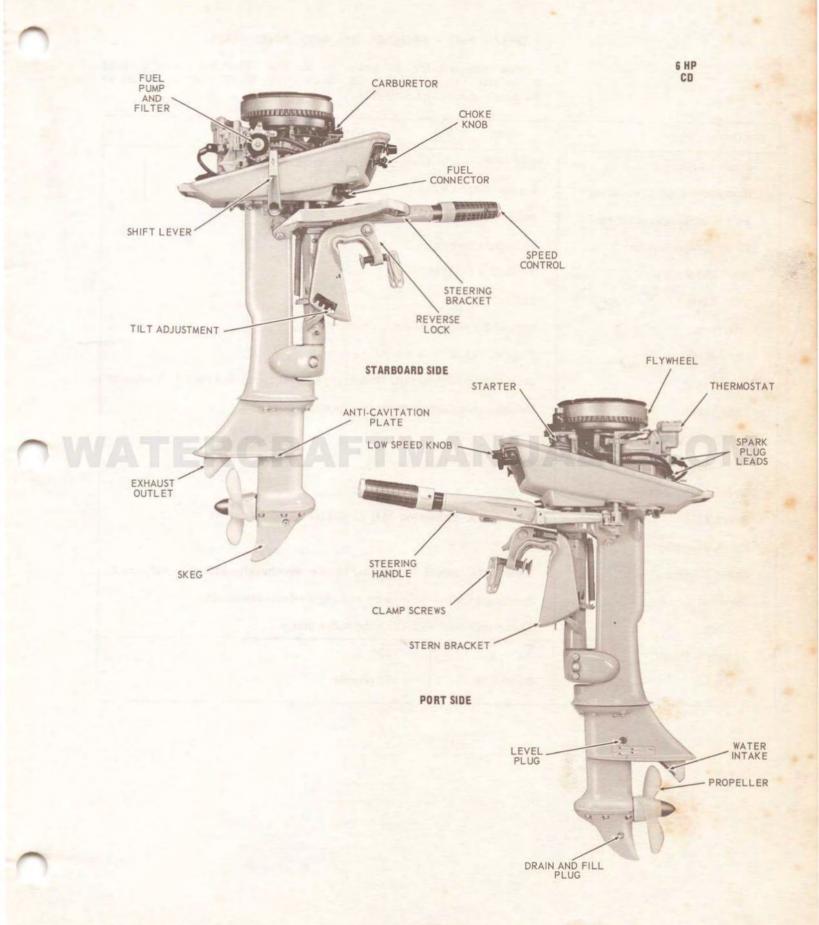




6 HP - MODELS: CD AND CDL

Smallest motor with all "big-motor" features. For small fishing skiffs, dories, utilities and large canoes, or as an auxiliary on small to medium sailboats.

SPECIFICATIONS	CD	CDL	
Engine Type	Two cycle, two cylinder, alternate firing		
Horsepower (OBC certified)	6 HP @ 4500 RPM		
Full throttle operating range	4000 - 5000 RPM		
Piston Displacement	8.84 cubic inches		
Bore and Stroke	1-5/16" x 1-1/2"		
Gear Ratio	15:26		
Gearshift	Manual forward - neutral - reverse		
Propeller	2 blade, 8" dia. x 7-1/4" pitch		
Carburetor	Single barrel sidedraft, float feed, manual choke, low speed adjustme		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Flywheel type magneto		
Breaker Point Gap	.020"		
Spark Plug	AC - M42K; Ch	ampion J4J; Auto-Lite A21X	
Spark Plug Gap	.030"		
Speed Control	Twist grip cont	rol on steering handle; synchronized throttle and spark	
Steering	Steering handle - accessory remote controls adaptable		
Cooling	Thermostat and Vari-Volume water pump		
Transom Height	15''	20''	
Weight	51 pounds	52 pounds	

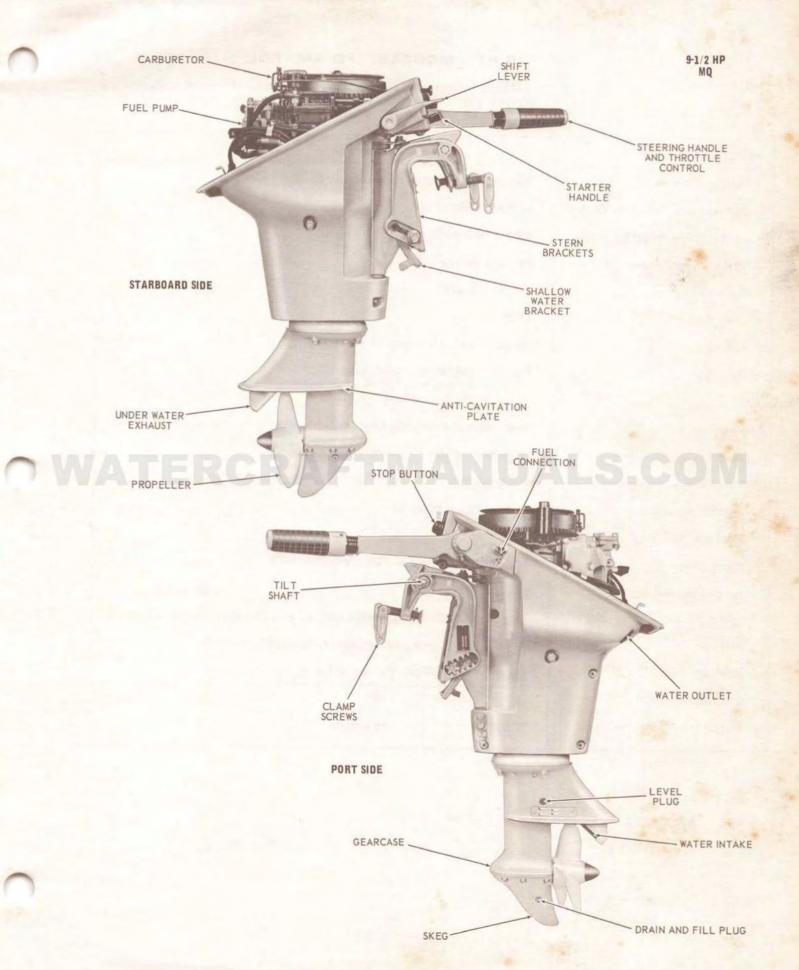




9-1/2 HP - MODELS: MQ AND MQL

Most compact for its power in the line. Ideal for fishing utilities and skiffs. Power enough for small craft of all types or for use as auxiliary on medium sailboats.

PECIFICATIONS	MQ	MQL	
Engine Type	Two cycle, two cylinder, alternate firing		
Horsepower (OBC certified)	9.5 HP @ 4500 RPM		
Full throttle operating range	4000 - 5000 RPM		
Piston Displacement	15.2 cubic inches		
Bore and Stroke	2-5/16" x 1-13/16"		
Gear Ratio	13:23		
Gearshift	Manual forward - neutral - reverse		
Propeller	3 blade, 8-1/4" dia. x 8-1/2" pitch		
Carburetor	Single barrel downdraft, float feed, manual choke, low speed adjustm		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Flywheel type magneto		
Breaker Point Gap	.020''		
Spark Plug	AC - M42K; Cha	impion J4J; Auto-Lite A21X	
Spark Plug Gap	.030''		
Speed Control	Twist grip control on steering handle, synchronized throttle and spa		
Steering	Steering handle - accessory remote controls adaptable		
Cooling	Thermostat and Vari-Volume water pump		
Transom Height	15''	20"	
Weight	60 pounds	61 pounds	

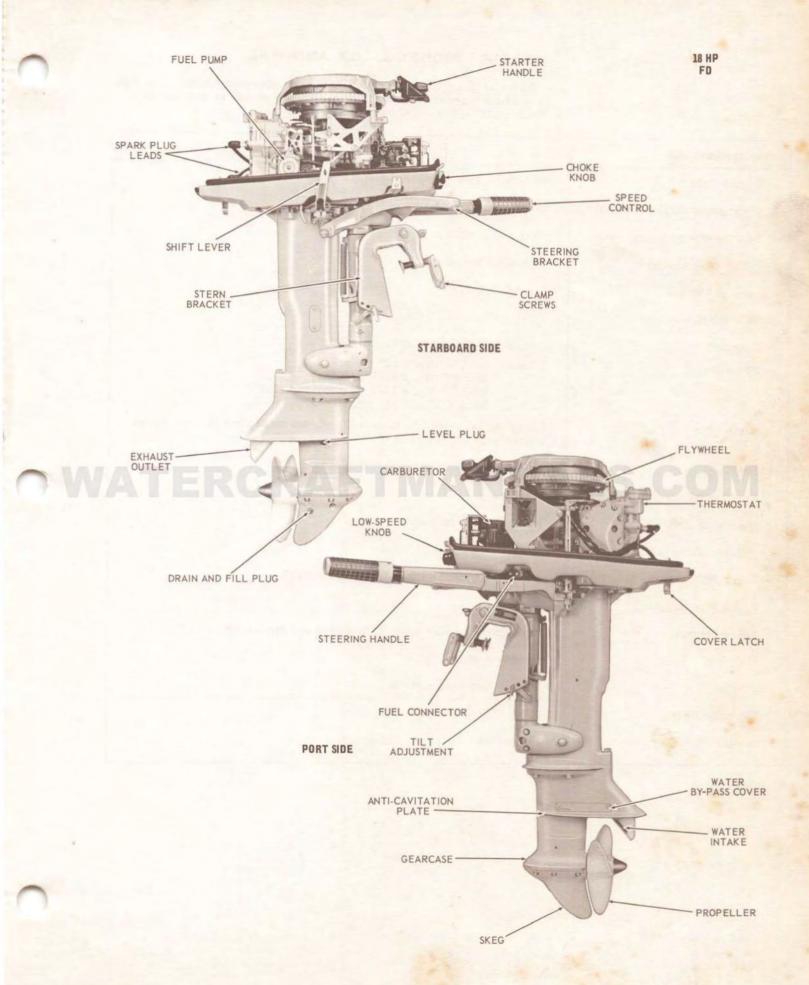




18 HP - MODELS: FD AND FDL

Most powerful of the truly portable motors. For light runabouts and pontoon boats, heavy fishing skiffs, commercial fishing boats, or as auxiliary on sailboats with wells.

SPECIFICATIONS	FD	FDL	
Engine Type	Two cycle, two c	ylinder, alternate firing	
Horsepower (OBC certified)	18 HP @ 4500 RPM		
Full throttle operating range	4000 - 5000 RPM		
Piston Displacement	22 cubic inches		
Bore and Stroke	2-1/2" x 2-1/4"		
Gear Ratio	12:21		
Gearshift	Manual forward - neutral - reverse		
Propeller	3 blade: 9-1/4" dia. x 11" pitch 9" dia. x 10" pitch (optional) 9" dia. x 9" pitch (optional)		
Carburetor	Single barrel sidedraft, float feed, manual choke, low speed adjustm		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Flywheel type magneto		
Breaker Point Gap	.020''		
Spark Plug	AC - M42K; Char	mpion J4J; Auto-Lite A21X	
Spark Plug Gap	.030''		
Speed Control	Twist grip contro	ol on steering handle, synchronized throttle and spark	
Steering	Steering handle - accessory remote controls adaptable		
Cooling	Thermostat and Vari-Volume water pump		
Transom Height	15''	20''	
Weight	77 pounds	80 pounds	

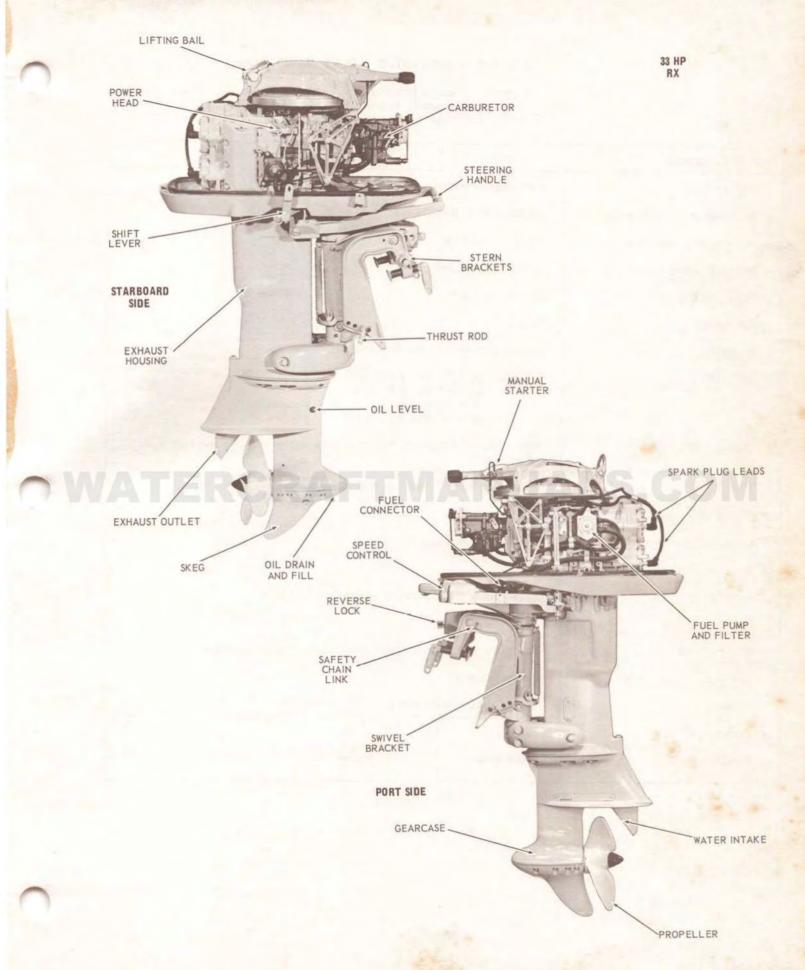




33 HP - MODELS: RX AND RXL

Powerful manual start motor in the middleweight class. For light to medium runabouts and utilities. Enough power to pull two skiers. Twins good for heavy-duty and offshore rigs.

SPECIFICATIONS	RX	RXL	
Engine Type	Two cycle, two	cylinder, alternate firing	
Horsepower (OBC certified)	33 HP @ 4500 RPM		
Full throttle operating range	4000 - 5000 RPM		
Piston Displacement	40.5 cubic inche	s	
Bore and Stroke	3-1/16" x 2-3/4		
Gear Ratio	12:21		
Gearshift	Manual forward	- neutral - reverse	
Propeller	3 blade: 10-1/2" dia, x 12" pitch 10-3/8" dia, x 11-1/2" pitch 10-3/8" dia, x 13-1/4" pitch 10-3/8" dia, x 14" pitch		
Carburetor	Single barrel sidedraft, float feed, manual choke, low and high speed adjustments		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Flywheel type m	agneto	
Breaker Point Gap	.020"		
Spark Plug	AC - M42K; Cha	mpion J4J; Auto-Lite A21X	
Spark Plug Gap	.030'		
Speed Control	Emergency throttle control; synchronized throttle and spark		
Steering	Remote control		
Cooling	Vari-Volume water pump		
Transom Height	15''	20"	
Weight	127 pounds	131 pounds	

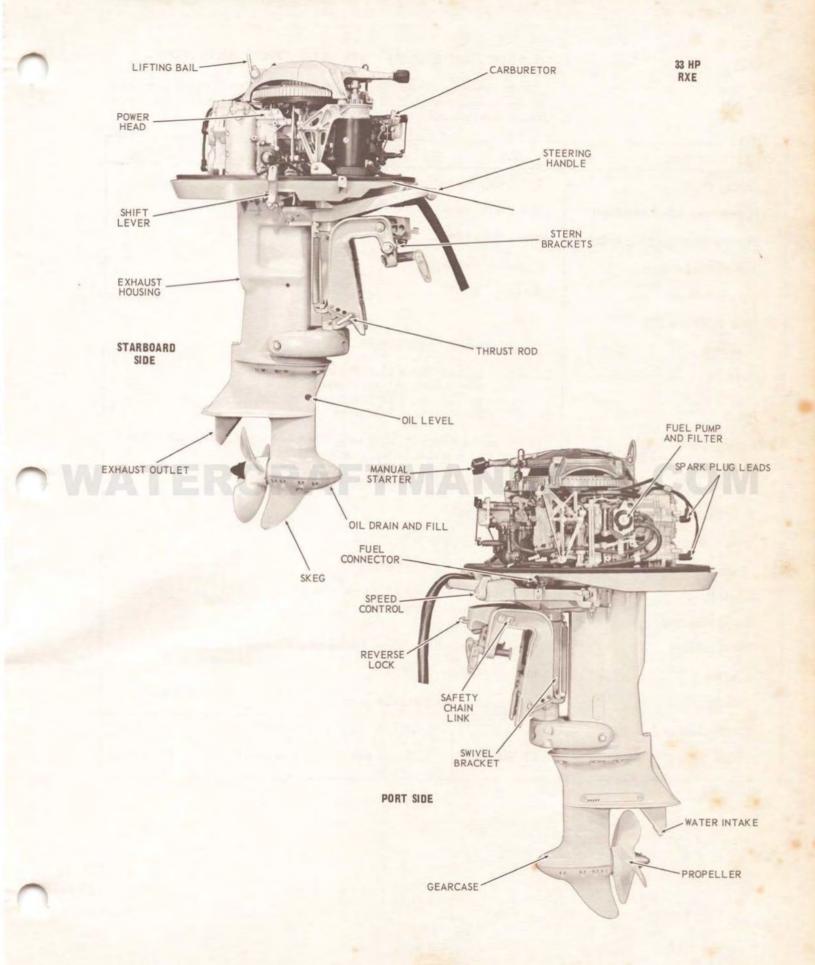




33 HP - MODELS: RXE AND RXEL

Powerful electric start motor in the middleweight class. For light to medium runabouts and utilities. Enough power to pull two skiers. Twins good for heavy-duty and offshore rigs.

SPECIFICATIONS	RXE	RXEL		
Engine Type	Two cycle, two cylinder, alternate firing			
Horsepower (OBC certified)	33 HP @ 4500 RPM			
Full throttle operating range	4000 - 5000 RPM			
Piston Displacement	40.5 cubic inche	es		
Bore and Stroke	3-1/16" x 2-3/4	Įri.		
Gear Ratio	12:21			
Gearshift	Manual forward	- neutral - reverse		
Propeller	10-3/8 10-3/8	2" dia. x 12" pitch B" dia. x 11-1/2" pitch B" dia. x 13-1/4" pitch B" dia. x 14" pitch		
Carburetor	Single barrel sidedraft, float feed, manual choke, low and high spee adjustments			
Fuel Tank	Mile-Master tank; vacuum fuel system			
Fuel Tank Capacity	6 gallons U.S.			
Ignition System	Flywheel type n	nagneto		
Breaker Point Gap	.020"			
Spark Plug	AC - M42K; Ch	ampion J4J; Auto-Lite A21X		
Spark Plug Gap	.030"			
Speed Control	Emergency thro	ottle control; synchronized throttle and spark		
Steering	Remote control			
Cooling	Vari-Volume w	ater pump		
Transom Height	15''	20"		
Weight	140 pounds	144 pounds		

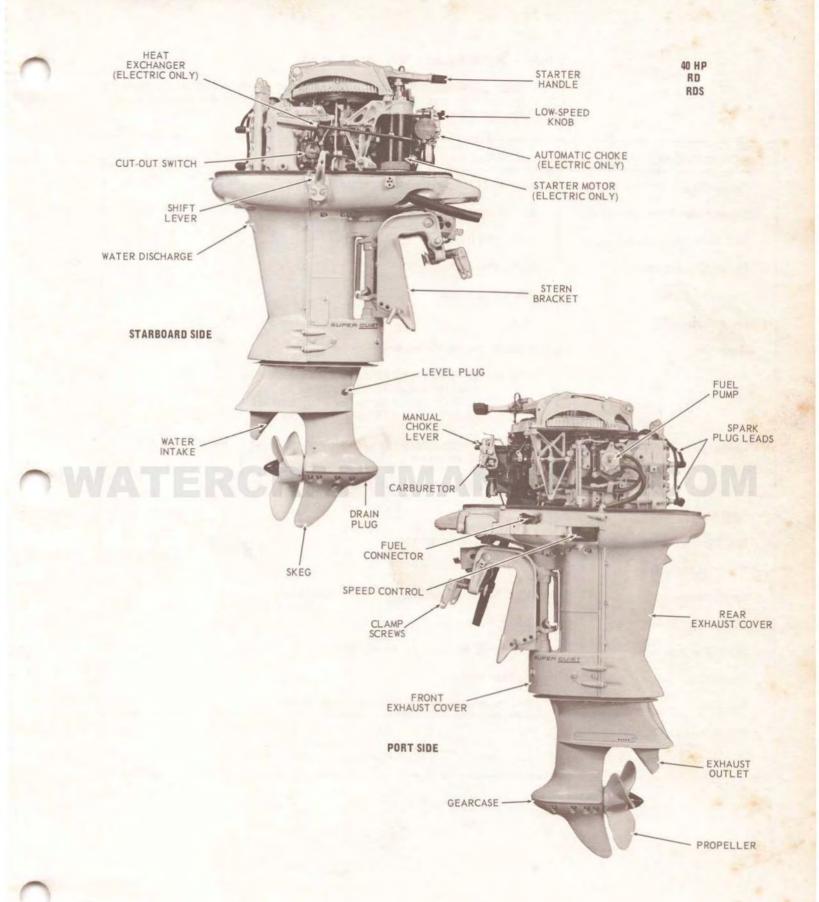




40 HP - MODELS: RD, RDL, RDS AND RDSL

Most powerful of the two cylinder motors. Ideal for light to medium cruisers, runabouts, utilities and work boats. Good water-skiing power. Twins excellent for heavy-duty and offshore.

PECIFICATIONS	RD	RDL	RDS	RDSL		
Engine Type	Two cycle, two cylinder, alternate firing					
Horsepower (OBC certified)	40.0 @ 4500 RPM					
Full throttle operating range	4000 - 5000 RPM					
Piston Displacement	43.9 cubic inches					
Bore and Stroke	3-3/16" x 2-3/	/4"				
Gear Ratio	12:21					
Gearshift	Manual forwar	d - neutral - reverse	e			
Propeller	3 blade: 10-3/8" dia. x 13-1/4" pitch 10-3/8" dia. x 11-1/2" pitch 10-1/2" dia. x 12" pitch 10-3/8" dia. x 1/4" pitch Optional					
Carburetor	Single barrel sidedraft, float feed, low speed adjustment; Model RD(L manual choke; Model RDS(L) automatic choke electric assist					
Fuel Tank	Mile-Master tank; vacuum fuel system					
Fuel Tank Capacity	6 gallons U.S.					
Ignition System	Flywheel type magneto					
Breaker Point Gap	.020''					
Spark Plug	AC - M42K; Champion J4J; Auto-Lite A21X					
Spark Plug Gap	.030"					
Speed Control	Emergency throttle control; synchronized throttle and spark					
Steering	Remote control					
Cooling	Thermostat and Vari-Volume water pump					
Transom Height	15"	20"	15"	20"		
Weight	132 pounds	138 pounds	145 pounds	151 pound		

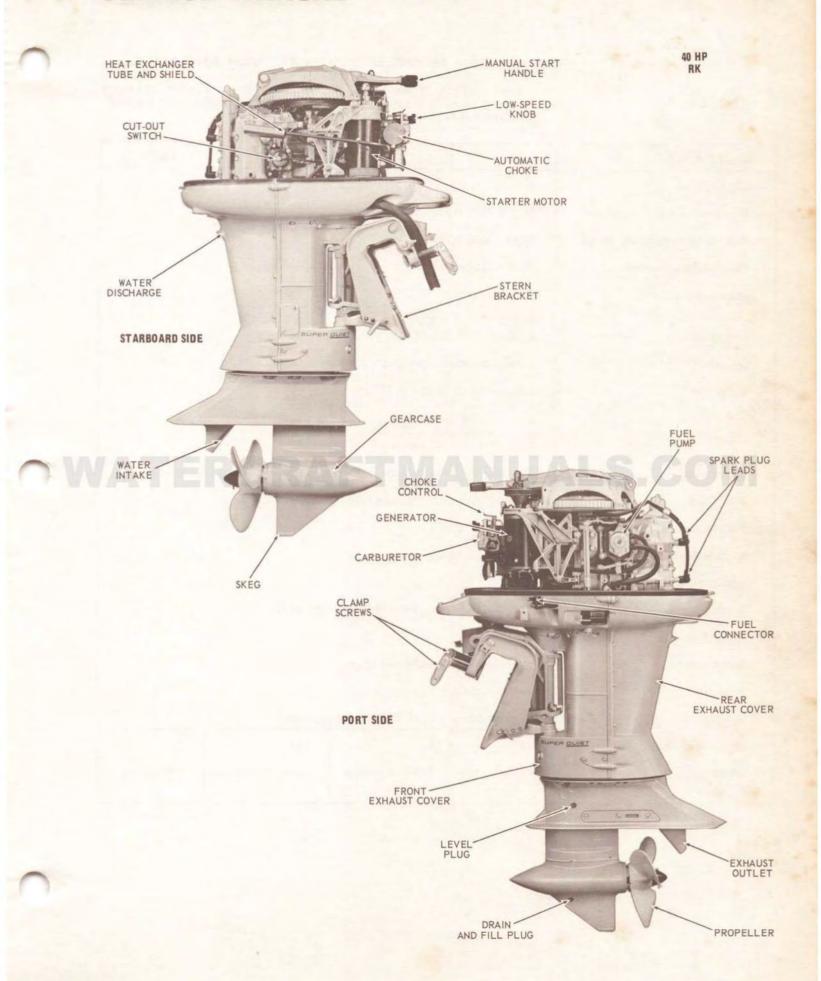




40 HP - MODELS: RK AND RKL

Most powerful of the two cylinder motors. Ideal for light to medium cruisers, runabouts, utilities and work boats. Good water-skiing power. Twins excellent for heavy-duty and offshore.

PECIFICATIONS	RK	RKL		
Engine Type	Two cycle, two	cylinder, alternate firing		
Horsepower (OBC certified)	40.0 @ 4500 RPM			
Full throttle operating range	4000 - 5 <mark>0</mark> 000 RPM			
Piston Displacement	43,9 cubic inche	es		
Bore and Stroke	3-3/16" x 2-3/4	Įv.		
Gear Ratio	12:21			
Gearshift	Electric forwar	d - neutral - reverse		
Propeller	3 blade: 10-3/8" dia. x 13-1/4" pitch 10-3/8" dia. x 11-1/2" pitch 10-1/2" dia. x 12" pitch 10-3/8" dia. x 13" pitch Optional			
Carburetor	Single barrel sidedraft, float feed, low speed adjustment; automatichoke electric assist			
Fuel Tank	Mile-Master tank; vacuum fuel system			
Fuel Tank Capacity	6 gallons U.S.			
Ignition System	Flywheel type n	nagneto		
Breaker Point Gap	.020''			
Spark Plug	AC - M42K; Cha	ampion J4J; Auto-Lite A21X		
Spark Plug Gap	.030''			
Speed Control	Synchronized th	rottle and spark		
Steering	Remote control			
Cooling	Thermostat and	Vari-Volume water pump		
Transom Height	15"	20''		
Weight	159 pounds	164 pounds		

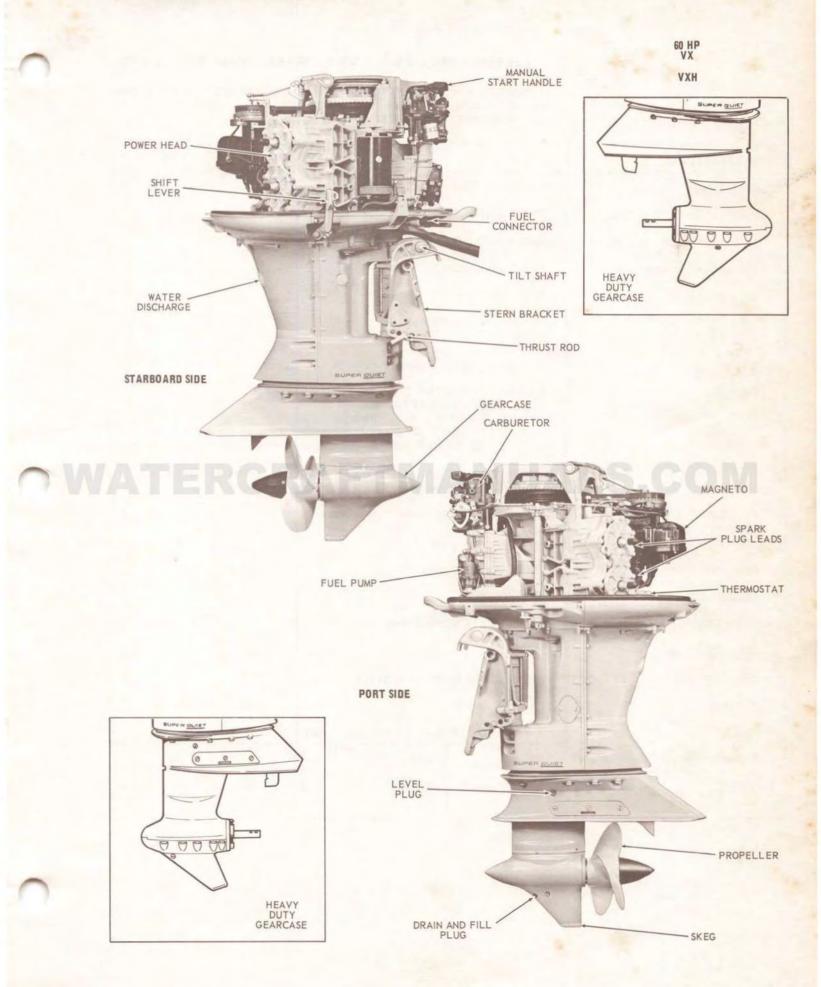




60 HP - MODELS: VX, VXL, VXH AND VXHL

Lowest priced of the V-4's. Sufficient power for medium and heavy cruisers, runabouts, house boats, and commercial craft. Good for high-performance ski boats.

SPECIFICATIONS	VX	VXL	VXH	VXHL	
Engine Type	Two cycle, four cylinder V-block				
Horsepower (OBC certified)	60.0 @ 4500 RPM				
Full throtle operating range	4000 - 5000 RPM				
Piston Displacement	70.7 cubic inches				
Bore and Stroke	3" x 2-1/2"				
Gear Ratio	VX(L) 20:23	VXH(L) 17:29			
Gearshift	Manual forwar	rd - neutral - revers	е		
Propeller	3 blade: 9-1/2" dia. x 10" pitch 10" dia. x 9-1/4" pitch 10" dia. x 11" pitch 10" dia. x 12" pitch 10-1/4" dia. x 10" pitch				
Carburetor	Two barrel downdraft, float feed, high and low speed adjustments				
Fuel Tank	Mile-Master tank; vacuum fuel system				
Fuel Tank Capacity	6 gallons U.S.				
Ignition System	Distributor type magneto				
Breaker Point Gap	.020"				
Spark Plug	AC - M42K; Champion J4J; Auto-Lite A21X				
Spark Plug Gap	.030''				
Speed Control	Synchronized throttle and spark				
Steering	Remote control				
Cooling	Thermostat and Vari-Volume water pump				
Transom Height	15''	20"	15''	20"	
Weight	225 pounds	230-1/2 pounds	230-1/2 pounds	236 pounds	

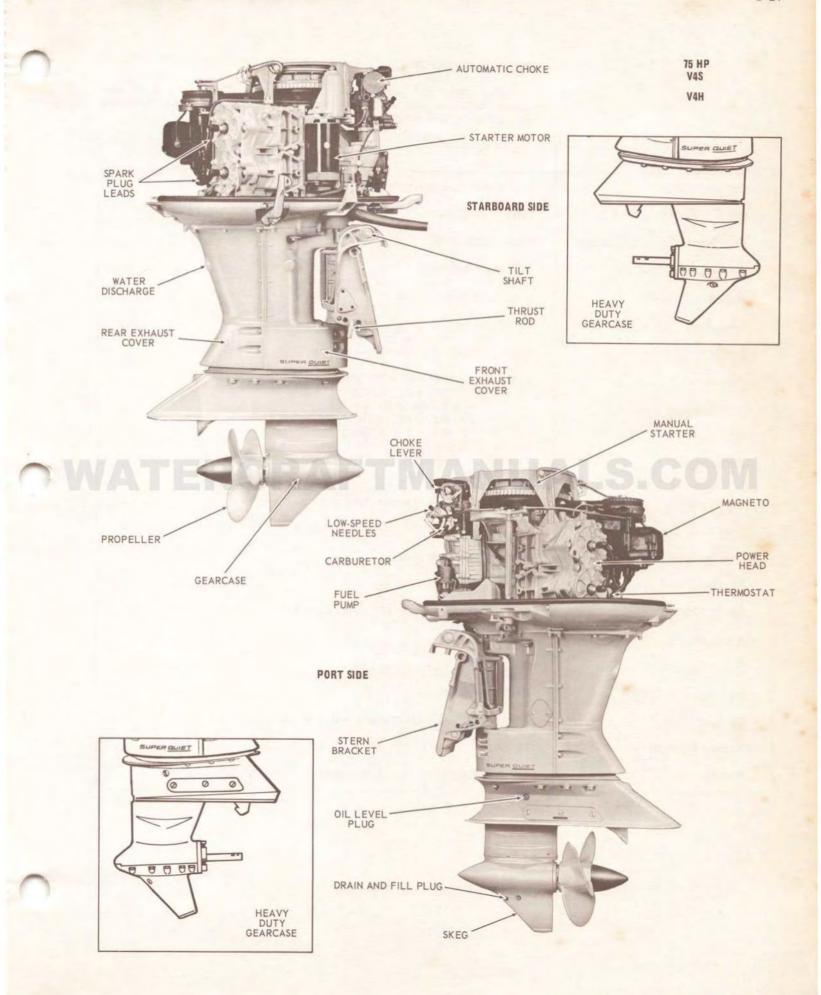




75 HP - MODELS: V4S, V4SL, V4H AND V4HL

Higher power and performance for medium and heavy cruisers, runabouts, utilities, offshore boats, and commercial craft. Excellent for high-performance ski boats.

PECIFICATIONS	V4S	V4SL	V4H	V4HL	
Engine Type	Two cycle, four o	ylinder V-block			
Horsepower (OBC certified)	75 HP @ 4500 RPM				
Full throttle operating range	4000 - 5000 RPM				
Piston Displacement	89.5 cubic inches				
Bore and Stroke	3-3/8" x 2-1/2"				
Gear Ratio	V4S(L) V4H(L) 20:23 17:29				
Gearshift	Manual forward - neutral - reverse				
Propeller	3 blade: 10-1/4" dia. x 10" pitch 10" dia. x 11" pitch 9-1/2" dia. x 10" pitch 10" dia. x 12" pitch 10" dia. x 9-1/4" pitch				
Carburetor	Two barrel downdraft, float feed, low speed adjustment; automatic choke electric assist				
Fuel Tank	Mile-Master tank; vacum fuel system				
Fuel Tank Capacity	6 gallons U.S.				
Ignition System	Distributor type magneto				
Breaker Point Gap	.020''				
Spark Plug	AC - M42K; Char	mpion J4J; Auto-I	Lite A21X		
Spark Plug Gap	.030"				
Speed Control	Synchronized throttle and spark				
Steering	Remote control				
Cooling	Thermostat and Vari-Volume water pump				
Transom Height	15''	20''	15''	20"	
Weight	226-1/2 pounds	232 pounds	231-1/2 pounds	237 pound	

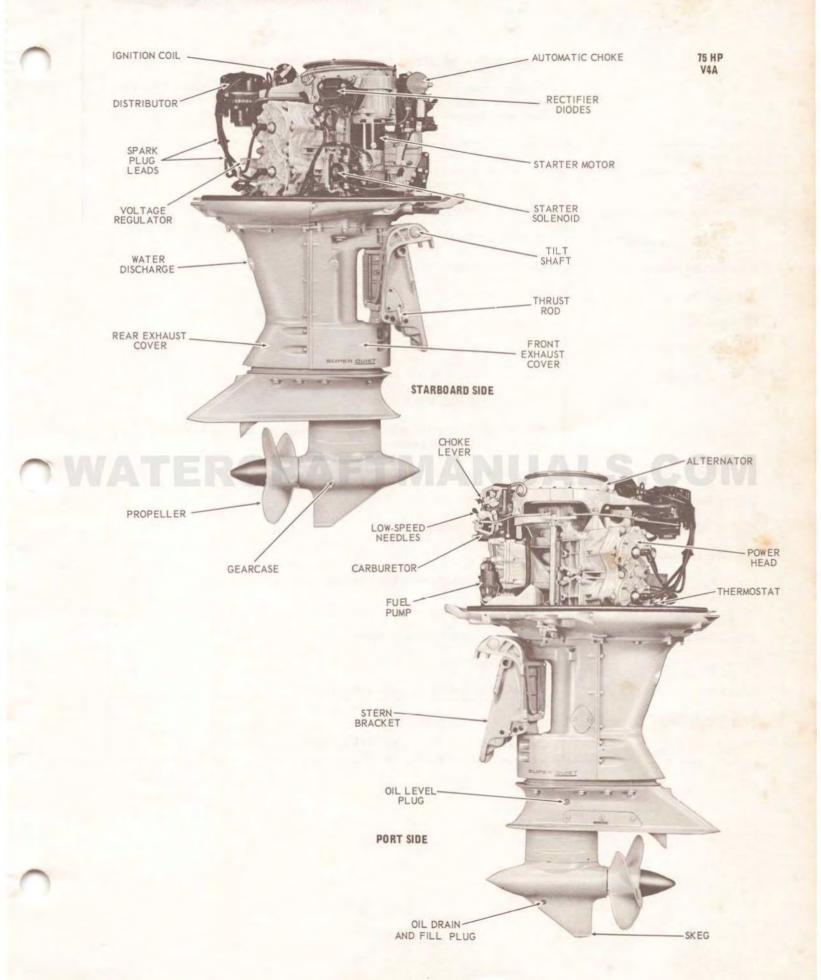




75 HP - MODELS: V4A AND V4AL

Higher power and performance for medium and heavy cruisers, runabouts, utilities, offshore boats, and commercial craft. Excellent for high-performance ski boats.

PECIFICATIONS	V4A	V4AL	
Engine Type	Two cycle, four cyl	inder V-block	
Horsepower (OBC certified)	75HP @ 4500 RPM		
Full throttle operating range	4000 - 5000 RPM		
Piston Displacement	89.5 cubic inches		
Bore and Stroke	3-3/8" x 2-1/2"		
Gear Ratio	20:23		
Gearshift	Electric forward -	neutral - reverse	
Propeller	3 blade: 10-1/4" dia. x 10" pitch 10" dia. x 11" pitch 9-1/2" dia. x 10" pitch 10" dia. x 12" pitch 10" dia. x 9-1/4" pitch		
Carburetor	Two barrel downdraft, float feed, low speed adjustment; automatic choke Electric assist		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Battery with distrib	outor	
Breaker Point Gap	.020"		
Spark Plug	AC - M42K; Champ	ion J4J; Auto-Lite A21X	
Spark Plug Gap	.030''		
Speed Control	Synchronized thrott	le and spark	
Steering	Remote control		
Cooling	Thermostat and Vari-Volume water pump		
Transom Height	15''	20"	
Weight	240-1/2 pounds	246 pounds	





90 HP - MODELS: V4M AND V4ML

Most powerful Johnson outboard. For medium and heavy cruisers, runabouts, utilities, offshore boats and commercial craft. Ideal for high-performance ski boats.

SPECIFICATIONS	V4M	V4ML	
Engine Type	Two cycle	, four cylinder V-block	
Horsepower (OBC certified)	90 HP @ 4500 RPM		
Full throttle operating range	4000 - 5000 RPM		
Piston Displacement	89.5 cubic inches		
Bore and Stroke	3-3/8" x 2-1/2"		
Gear Ratio	20:23		
Propeller		0-1/4" dia. x 10" pitch 10" dia. x 11" pitch 10" dia. x 12" pitch 10" dia. x 10" pitch 10" dia. x 9-1/4" pitch	
Carburetor	Four barrel sidedraft, float feed, low speed adjustment, automatic choke with electric assist		
Fuel Tank	Mile-Master tank; vacuum fuel system		
Fuel Tank Capacity	6 gallons U.S.		
Ignition System	Battery with distributor		
Breaker Point Gap	.020''		
Spark Plug	AC - M42K; Champion J4J; Auto-Lite A21X		
Spark Plug Gap	.030''		
Speed Control	Synchronized throttle and spark		
Steering	Remote control		
Cooling	Thermostat and Vari-Volume water pump		
Transom Height	15''	20"	
Weight	242 pound	247-1/2 pounds	

