MODEL	JW	JH	JHL	
WEIGHT	35 lbs.	35-1/2 lbs.	35-1/2 lbs.	
POWER HEAD Engine type Certified horsepower* Full throttle operating range Piston displacement Bore and stroke Piston Piston Piston rings Diameter of ring Width of ring Pressure required to compress ring Crankshaft size top journal center journal bottom journal Connecting rod crank pin	Two cylinder, two cycle alternate firing, two port automatic inta 3.0 3500-4500 RPM 5.28 cubic inches 1-9/16" x 1-3/8" Available in standard and .020" oversize. (See Parts Catalog.) 2 per set - available in standard and .020" oversize. (See Parts Catalog.) 1.563" (standard) .0935"0925" 2 - 3-1/2 lbs6854"6849" .6854"6849" .6854"6849" .6854"6849"			
FUEL SYSTEM . Carburetion . Float level setting . Carburetor orifice plug . Inlet needle seat . Fuel tank capacity . Fuel pump	Flush with casting .029 hole size .065"062" use a 0.7 U.S. gallon grav	feed, low speed adjustment a #52 drill as gage city feed tank mounted on t essory for use with the 6	he power head	
IGNITION SYSTEM . Ignition . Breaker point gap . Condenser capacity . Spark plug . Spark plug gap	Flywheel magneto .020" .1822 mfd AC-M42K, Champio .030"	on J4J, Auto-Lite A21X -	14mm	
SPEED CONTROL	Lever - synchroniz	ed throttle and spark		
STEERING	Handle - 360° pivot			
COOLING SYSTEM	Combination positiv	ve displacement - centrifu	gal pump	
STARTER	Manual rope, self rewind, ratchet and pawl type. Emergency rope.			
LOWER UNIT . Drive . Gear ratio . Propeller	Direct - constant for 17:28 2 blade, 6-1/8" diameter x 6-1/4" pitch	orward engagement 12:25 3 blade 8" diameter x 4	-1/2" pitch	
. Propeller drive pin . Transom height	1/8" x 13/16" stain	less steel 15" extension kit is ava	20" ilable as an	

^{*}Brake horsepower certified by O.B.C.

MODEL	LD-11	LDL-11	
WEIGHT (less fuel tank)	43 lbs.	43-1/2 lbs.	
. Weight of fuel tank (empty)	12 lbs.		
POWER HEAD			
. Engine type	Two cylinder, two cycle, alterna	te firing, two port automatic intake	
. Certified horsepower*	5.0		
. Full throttle operating range	3500 - 4500 RPM		
. Piston displacement	8.84 cubic inches		
. Bore and stroke	1-15/16" x 1-1/2"		
. Piston less rings	Available standard and .020" ov	ersize. (See Parts Catalog.)	
. Piston rings	3 per set Available standard a	nd .020" oversize. (See Parts	
Diameter of the	Catalog.)		
. Diameter of ring	1.9375" (standard)		
. Width of ring	.0935''0925''		
. Pressure required to compress ring . Crankshaft size	2 - 4 lbs.		
top journal	.8085''8080''		
center journal	.8080''8075''		
bottom journal	.8085''8080''		
. Connecting rod crankpin	.6690''6685''		
. Connecting for Crankpin	.00500063		
FUEL SYSTEM			
. Carburetion	Single barrel float feed low sn	eed adjustment. Manual choke.	
. Float level setting	Flush with rim of casting	reca adjubilitent, mandar onone,	
. Carburetor orifice plug	.041 hole size		
. Inlet needle seat	.053"050" Use a #55 drill a	is gage.	
. Fuel tank capacity	6 U.S. gallons, suction type tank		
. Fuel pump	Crankcase pressure oscillated	diaphragm type with filter	
TOWNSON SWOMEN			
IGNITION SYSTEM			
. Ignition	Flywheel magneto		
. Breaker point gap	.020''		
. Condenser capacity	.1822 mfd.		
. Spark plug	AC-M42K, Champion J4J, Auto-	-Lite AZIX - 14mm	
. Spark plug gap	.030		
SPEED CONTROL	Lever - synchronize throttle an	nd spark	
STEERING	Handle - 360° pivot		
COOLING SYSTEM		ment centrifugal pump. Thermo-	
	stat available as an accessory	7.	
STARTER	Manual rope, self re-wind, gear drive. Emergency rope.		
LOWER UNIT			
. Drive	Direct, forward gear only		
. Gear ratio	12:25		
. Propeller	3 blade, 8" diameter x 7-1/2" p	pitch	
. Propeller drive pin	1/8" x 1-1/4" stainless steel	Aton	
. Transom height	15" stanness steer	20"	
. Transom neight			
- -	15" extension kit is available as an accessory		

^{*}Brake horsepower certified by O.B.C.

MODEL	CD-23	CDL-23	
WEIGHT (less fuel tank)	51 lbs.	52 lbs.	
. Weight of fuel tank (empty)	12 lbs.		
POWER HEAD . Engine type . Certified horsepower* . Full throttle operating range . Piston displacement . Bore and stroke . Piston less rings . Piston rings . Diameter of ring . Width of ring . Pressure required to compress ring . Crankshaft size . top journal . center journal . bottom journal . Connecting rod crankpin	Two cylinder, two cycle, alternation 6.0 4000 - 5000 RPM 8.84 cubic inches 1-15/16" x 1-1/2" Available standard and .020" over 3 per set Available standard and catalog.) 1.9375" (standard) .0935"0925" 2 - 4 lbs. .8085"8080" .8085"8080" .8085"8080" .6690"6685"	te firing, two port automatic intake ersize. (See Parts Catalog.) and .020" oversize. (See Parts	
FUEL SYSTEM . Carburetion . Float level setting . Carburetor orifice plug . Inlet needle seat . Fuel tank capacity . Fuel pump	Single barrel, float feed, low sp Flush with rim of casting .041 hole size .053"050" Use a #55 drill a 6 U.S. gallon suction type tank Crankcase pressure oscillated		
IGNITION SYSTEM . Ignition . Breaker point gap . Condenser capacity . Spark plug . Spark plug gap	Flywheel magneto .020" .1822 mfd. AC-MA2K, Champion J4J, Auto.		
SPEED CONTROL	Twist grip on steering handle, s	synchronized throttle and spark	
STEERING	Handle - adaptable to remote co	ontrol	
COOLING SYSTEM	Combination positive displacement centrifugal pump with thermostat control in power head.		
STARTER	Manual rope, self re-wind, gear drive. Emergency rope.		
LOWER UNIT . Drive . Gear ratio . Propeller . Propeller drive pin	able as an accessory. 15:26 2 blade, 8" diameter x 7-1/4" p 3/16" x 7/8" stainless steel		
. Transom height	15"	20"	

^{*}Brake horsepower certified by O.B.C.

9-1/2 HP SPECIFICATIONS

MODEL	MQ-12	MQL-12	
WEIGHT (less fuel tank)	60 lbs.	61 lbs.	
. Weight of fuel tank (empty)	12 lbs.		
POWER HEAD			
. Engine type	Two cylinder, two cycle, alternat	te firing, two port automatic intake	
. Certified horsepower*	9.5		
. Full throttle operating range	4000 - 5000 RPM		
. Piston displacement	15.2 cubic inches		
. Bore and stroke	2-5/16" x 1-13/16"		
. Piston less rings	Available standard, .020" and .0 Catalog.)		
. Piston rings	3 per set Available standard, Parts Catalog.)	020" and .040" oversize. (See	
. Diameter of ring	2.3125" (standard)		
. Width of ring	.0935''0925''		
. Pressure required to compress rings	3 - 5 lbs.		
. Crankshaft size	010511 010011		
top journal	.8125''8120''		
center journal	.8118"8113"		
bottom journal	.8125''8120''	F.	
. Connecting rod crank pin	.8118''8113''		
FUEL SYSTEM			
. Carburetion	Float feed, low speed adjustmen	t, manual choke.	
. Float level setting	is. 47 5		
. Carburetor orifice plug	.048 hole size		
. Inlet needle seat	.065"062" Use a #52 drill a	s gage.	
. Fuel tank capacity	6 U.S. gallon suction type tank		
. Fuel pump	Crankcase pressure oscillated	diaphragm type with filter	
IGNITION SYSTEM			
. Ignition	Flywheel magneto		
. Breaker point gap	.020''		
. Condenser capacity	.1822 mfd.		
. Spark plug	AC-M42K, Champion J4J, Auto-	Lite A21X - 14mm	
. Spark plug gap	.030''		
SPEED CONTROL	Twist grip on steering handle, s Adaptable to remote control.	synchronize throttle and spark.	
STEERING	Handle - adaptable to remote co	ontrol	
COOLING SYSTEM	Combination positive displacement centrifugal pump with thermostat control in power head.		
STARTER	Manual rope, self rewind, gear drive. Emergency rope.		
LOWER UNIT			
. Drive	Forward, neutral, reverse, man	nual shift. Remote control avail-	
	able as an accessory.		
. Gear ratio	13:23		
. Propeller	3 blade 8-1/4" diameter x 8-1/		
. Propeller drive pin	3/16" x 1-25/64" stainless stee	1	
. Transom height	15" 20"		

^{*}Brake horsepower certified by O.B.C.

MODEL	FD-20	FDL-20	
WEIGHT (less fuel tank) . Weight of fuel tank (empty)	77 lbs. 12 lbs.	80 lbs.	
POWER HEAD . Engine type . Certified horsepower* . Full throttle operating range . Piston displacement . Bore and stroke . Piston less rings . Piston rings . Diameter of ring . Width of ring . Pressure required to compress ring . Crankshaft size . top journal . center journal . bottom journal . Connecting rod crank pin	Two cylinder, two cycle, alternate firing, two port automatic intake 20.0 See Propeller Selection Chart 22 cubic inches 2-1/2" x 2-1/4" Available standard, .020" and .040" oversize. (See Parts Catalog.) 3 per set Available standard, .020" and .040" oversize. (See Parts Catalog.) 2.500" (standard) .0935"0925" 3 - 5 lbs. 1.0000"9995" 1.0000"9995" 1.0000"9995" 1.0000"10000"		
FUEL SYSTEM . Carburetion . Float level setting . Carburetor orifice plug . Inlet needle seat . Fuel tank capacity . Fuel pump	Single barrel, float feed, low speed adjustment, manual choke Flush with rim of casting .064 hole size .053"050" Use a #55 drill as gage. 6 U.S. gallon suction type tank Crankcase pressure oscillated diaphragm type with filter		
IGNITION SYSTEM . Ignition . Breaker point gap . Condenser capacity . Spark plug . Spark plug gap	Flywheel magneto .020" .2529 mfd. AC-M42K, Champion J4J, Auto-Lite A21X - 14mm .030"		
SPEED CONTROL	Twist grip on steering handle, synchronized throttle and spark. Adaptable to remote control.		
STEERING	Handle - adaptable to remote co	ntrol	
COOLING SYSTEM	Combination positive displacement centrifugal pump with thermostat control in power head		
STARTER	Manual rope, self rewind, ratchet and pawl. Emergency rope. Electric starter available as an accessory.		
LOWER UNIT . Drive . Gear ratio . Propeller supplied with motor . optional . optional . Propeller drive pin . Transom height	Forward, neutral, reverse, manual shift. Remote control available as an accessory. 12:21 Blade Diameter Pitch 3 9-1/4" x 11" 3 9" x 9" (weedless) 3 9" x 10" (weedless) 3-3/16" x 1-3/8" stainless steel 15" 20"		

^{*}Brake horsepower certified by O.B.C.

MODEL	RX-14	RXL-14	RXE-14	RXEL-14
WEIGHT (less fuel tank)	127 lbs.	131 lbs.	140 lbs.	144 lbs.
. Weight of fuel tank (empty)	12 lbs.			
POWER HEAD Engine type . Certified horsepower* . Full throttle range . Piston displacement . Bore and stroke . Piston less rings . Piston rings . Diameter of ring . Width of ring . Pressure required to compress ring . Crankshaft size . top journal . center journal . bottom journal . Connecting rod crankpin	Two cylinder, two cycle, alternate firing, two port automatic intake 33.0 See Propeller Selection Chart 40.5 cubic inches 3-1/16" x 2-1/4" Available standard, .020" and .040 oversize. (See Parts Catalog.) 3 per set Available standard, .020" and .040" oversize. (See Parts Catalog.) 3.0625" (standard) .0935"0925" (standard) .0935"0925" 6 - 9 lbs. 1.2500" - 1.2495" 1.0000"9995" 1.0000"9995" 1.1828" - 1.1823"			Parts Catalog.)
FUEL SYSTEM . Carburetion . Float level setting . Inlet needle seat . Fuel tank capacity . Fuel pump IGNITION SYSTEM . Ignition . Breaker point gap	Manual choke Flush with rim .065"062" 6 U.S. gallon su	of casting action type tank ssure oscillated di	ed and high speed Electric choke	
. Condenser capacity . Spark plug . Spark plug gap	.2529 mfd. AC-M42K, Champion J4J, Auto-Lite A21X - 14mm .030"			
ELECTRICAL SYSTEM			10 amp DC gene able as an acc	
SPEED CONTROL	Emergency thro	ottle, synchronize ble as an accesso	d throttle and spar ry	k. Remote
STEERING	Remote control	or steering handl	e available as acc	essories
COOLING SYSTEM	Combination po	sitive displaceme	nt centrifugal pum	p
STARTER	Manual rope, self rewind, ratchet and pawl type. Emergency rope.			Emergency
LOWER UNIT . Drive . Gear ratio . Propeller . supplied with motor . optional . optional . optional	able as an acc 12:21 Blade Diameter 3 10-1/2" 3 10-3/8" 3 10-3/8" 3 10-3/8"	r Pitch x 12" x 11-1/2" x 13-1/4" x 14"	12 volt electric	control avail-
. Propeller drive pin . Transom height	1/4" x 1-15/32" 15"	stainless steel	20''	

^{*}Brake horsepower certified by O.B.C.

MODEL	RD-28	RDL-28	RDS-28	RDSL-28	RK-28	RKL-28
WEIGHT (less fuel tank)	132 lbs.	138 lbs.	145 lbs.	151 lbs.	154 lbs.	159 lbs.
. Weight of fuel tank (empty)	12 lbs.					
POWER HEAD Engine type Certified horsepower* Full throttle operating range Piston displacement Bore and stroke Piston less rings Piston rings Diameter of ring Width of ring Pressure required to compress ring Crankshaft size top journal center journal bottom journal Connecting rod crankpin	Two cylinder, two cycle, alternate firing, two port automatic intake 40.0 See Propeller Selection Chart 43.9 cubic inches 3-3/16" x 2-3/4" Available standard and .025 oversize. (See Parts Catalog.) 3 per set Available standard and .025 oversize. (See Parts Catalog.) 3.1875" (standard) .0935"0925" 7 - 10.4 lbs. 1.2500" - 1.2495" 1.0000"9995" 1.0000"9995" 1.1828" - 1.1823"					
FUEL SYSTEM . Carburction . Float level setting	Float feed, low speed adjustment Manual choke Automatic and manual choke with electric assist Even with rim of casting, carburetor inverted, needle valve closed					
Carburetor orifice plug Inlet needle seat Fuel tank capacity Fuel pump	.064 hole size .065"062" Use a #52 drill as gage. 6 U.S. gallon suction type tank Crankcase pressure oscillated diaphragm type with filter					
IGNITION SYSTEM . Ignition . Breaker point gap . Condenser capacity . Spark plug . Spark plug gap	Flywheel magneto .020" .2529 mfd. AC-M42K, Champion J4J, Auto Lite A21X - 14mm .030"					
ELECTRICAL SYSTEM				OC gener- ailable as essory	ator fur standar ment	OC gener- rnished as
SPEED CONTROL	Emergency throttle synchronized with spark Remote control available as an accessory Remote shift and throttle control furnished with engine			and spar shift and control		
STEERING	Remote - not supplied with engine Steering handle available as an accessory Steering handle no available					
COOLING SYSTEM	Combina mostat	tion positive control in p	displaceme ower head	ent - centrifu	gal pump w	vith ther-

^{*}Brake horsepower certified by O.B.C.

MODEL	VX-12	VXL-12	VXH-12	VXHL-12
WEIGHT (less fuel tank)	225 lbs.	230-1/2 lbs.	230-1/2 lbs.	236 lbs.
. Weight of fuel tank (empty)	12 lbs.			
POWER HEAD . Engine type	Four cylinder V	/ block, two cycle,	two port automati	c intake. Firing
es la section de la constant de la c	order 1, 2, 3, 4.			
. Certified horsepower*	60.0 See Propeller Selection Chart			
 Full throttle operating range Piston displacement 	70.7 cubic inch			
. Bore and stroke	3" x 2-1/2"	an emen		/a
. Piston less rings	Available stand Catalog.)	lard, .020" oversiz	ze and .040 oversi	ze. (See Parts
. Piston rings	3 per set Avai	lable standard, .0	20" and .040" over	rsize. (See
. Diameter of ring	3.000" (standar			
. Width of ring	.0935''0925''	•		
. Pressure required to compress ring . Crankshaft size				
top journal	1.2658'' - 1.265			
center journal	1.3752" - 1.374 1.1815" - 1.181			
bottom journal . Connecting rod crankpin	1.1819" - 1.181			
FUEL SYSTEM				
. Carburetion	Two barrel, do	wn draft, float fee	d, low speed adjus	stment. Manual
. Float level setting	Parallel to and 1/4" from face of body - carburetor inverted, needle valve closed			
. Carburetor orifice plug	.072 hole size			
. Inlet needle seat		.081"084" Use a #44 drill as gage. 6 U.S. gallon suction type tank		
. Fuel tank capacity . Fuel pump	Crankcase pressure oscillated diaphragm type with filter			
IGNITION SYSTEM				
. Ignition	Distributor typ	e magneto		
. Breaker point gap . Condenser capacity	.3741 mfd.			
. Spark plug	AC-M42K, Champion J4J, Auto-Lite A21X - 14mm			
. Spark plug gap	.030"			
ELECTRICAL SYSTEM	DC generator	available as an ac	cessory	
SPEED CONTROL	Synchronized spark	throttle and		
STEERING	Remote contro	ol only. Not suppl	ied.	
COOLING SYSTEM	Combination p mostat contr	ositive displacement of in power head	ent - centrifugal p	oump with ther-
STARTER	Emergency 1			
LOWER UNIT		ral, reverse, man	ual shift. Remote	e control avail-
. Drive	able as an ac	cessory.	17:29	
. Gear ratio . Propeller	Blade Diamet		T	
supplied with motor	3 9-1/2"	x 10"		
optional	3 10"	x 9-1/4" x 11"		supplied - extra sed by customer
. optional . optional	3 10"	x 11" x 12"		sed by customer op selection for op
optional	3 10-1/4	'' x 10''	timum perfo	rmance
. Propeller drive pin	9/32" x 2-5/3		5/16" x 1-7/8	
. Transom height	15''	20''	15''	20''

^{*}Brake horsepower certified by O.B.C.

MODEL	V4S-18	V4SL-18	V4A-18	V4AL-18
WEIGHT (less fuel tank)	226-1/2 lbs.	232 lbs.	240-1/2 lbs.	246 lbs.
. Weight of fuel tank (empty)	12 lbs.			
POWER HEAD				
. Engine type	Four cylinder V block, two cycle, two port automatic intake. Firing			
. Certified Horsepower*	order - 1, 2, 3	3, 4		
. Full throttle operating range	See Propeller S	Selection Chart		
. Piston displacement	89.5 cubic inche	es		
. Bore and stroke	3-3/8" x 2-1/2"			
. Piston less rings	Available stand	ard, .020" and .04	40" oversize. (See	Parts Catalog.)
. Piston rings	3 per set Ava	ilable standard, .	020" and .040" ove	rsize. (See
. Diameter of ring	Parts Catalog			
. Width of ring	3.375" (standar .0935"0925"			
. Pressure required to compress ring	9.7 - 13.7 lbs.			
. Crankshaft size	1011 1001			
top journal	1.2658" - 1.265	3''		
center journal	1.3752" - 1.374	8''		
bottom journal	1.1815'' - 1.181			
. Connecting rod crank pin	1.1828'' - 1.182	3''		
FUEL SYSTEM				
. Carburetion	Two barrel, dox	vn draft float fee	ed, low speed adjust	tment Manual
	and automatic	hot air with elec	tric assist.	ment. Manual
. Float level setting	Parallel to and 1/4" from face of body. Carburetor inverted.			
	needle valve c	losed.		
. Carburetor orifice plug . Inlet needle seat	.064" hole size	$\Delta \setminus \{1, 1, \dots, J\}$		
. Fuel tank capacity		Jse a #44 drill as	gage	
. Fuel pump	6 U.S. gallons suction type tank Crankcase pressure oscillated diaphragm type with filter			filter
IGNITION SYSTEM			T	
. Ignition	Distributor type	magneto	Battery with dis	tributor
. Breaker point gap	.020''		-	
. Condenser capacity	.3741 mfd.	202		
. Spark plug . Spark plug gap	AC-M42K, Char	npion J4J, Auto-I	Lite A21X - 14mm	
. Spark plug gap	.030''			
ELECTRICAL SYSTEM	DC generator as	vailable as an	AC generator fu	rnished as
	accessory		standard equip	
SPEED CONTROL	Remote control	available as	Remote control	
	an accessory		standard equip	ment
	Synchronized th	rottle and spark		
STEERING	Remote control	only. Control no	t supplied.	
COOLING SYSTEM	Combination pos	sitive displaceme	nt - centrifugal pur	np with ther-
	mostat control	in power head.	m - centringar pur	np with ther-

^{*}Brake horsepower certified by O.B.C.

MODEL	V4ML-12			
WEIGHT (less fuel tank)	272-1/2 lbs.			
. Weight of fuel tank (empty)	12 lbs.			
POWER HEAD	The state of the content of the first of the content of the conten			
. Engine type	Four cylinder V block, two cycle, two port automatic intake. Firing order - 1, 2, 3, 4			
. Certified horsepower*	100.0			
. Full throttle operating range	See Propeller Selection Chart			
. Piston displacement	89.5 cubic inches			
. Bore and stroke	3-3/8" x 2-1/2" Available standard, .020" and .040" oversize. (See Parts Catalog.)			
. Piston less rings	3 per set Available standard, .020" and .040" oversize. (See			
. Piston rings	Parts Catalog.)			
. Diameter of ring	3.375" (standard)			
. Width of ring	.0935''0925''			
. Pressure required to compress ring	9.7 - 13.7 lbs.			
. Crankshaft size				
top journal	1.2658" - 1.2653"			
center journal	1.3752" - 1.3748"			
bottom journal	1.1815" - 1.1810" 1.1828" - 1.1823"			
. Connecting rod crankpin	1.1020 - 1.1025			
FUEL SYSTEM	and the state of t			
. Carburetion	Four barrel, float feed, low speed adjustment. Automatic hot air			
	and manual choke. Electric assist. 9/16" between float and point on each chamber bottom 5/16" in			
. Float level setting	from front inside surface of chamber with casting inverted,			
	float needle valves closed. Float gage available as special			
	service tool. (See Special Tool Catalog.)			
. Carburetor orifice plug	.065 hole size			
. Inlet needle seat	.050"053" Use a #55 drill as gage.			
. Fuel tank capacity	6 U.S. gallon suction type tank			
. Fuel pump	Crankcase pressure oscillated diaphragm type with filter			
YOMMYON GYGTEM				
IGNITION SYSTEM . Ignition	Battery with distributor			
. Breaker point gap	.020"			
. Condenser capacity	.3741 mfd.			
. Spark plug	Champion J4J, ACM42K, Auto-Lite A21X-14MM			
. Spark plug gap	.030''			
ELECTRICAL SYSTEM	AC Generator 20 amp.			
SPEED CONTROL	Remote control, synchronized throttle and spark			
STEERING	Remote control only. Not supplied.			
COOLING SYSTEM	Combination positive displacement - centrifugal pump with ther- mostat control.			

^{*}Brake horsepower certified by O.B.C.