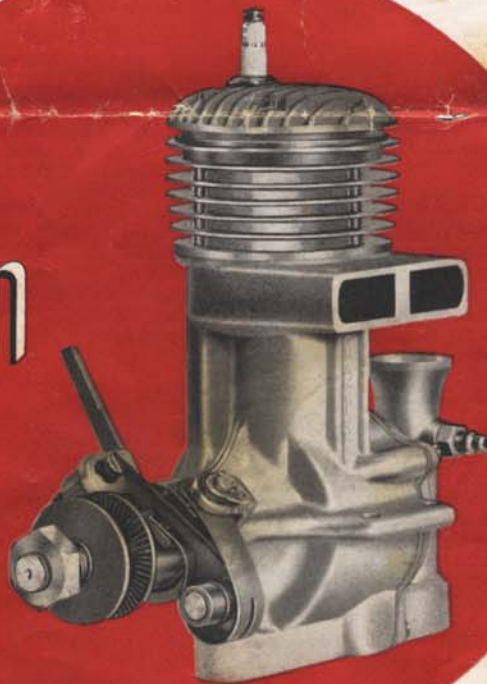


INSTRUCTION MANUAL

MODEL J - CLASS C

•05-200

Super
CHAMPION



TYPE ENGINE — 2 CYCLE, 2 PORT, DUAL ROTARY VALVES

Bore940"

Stroke900"

Displ.6245"

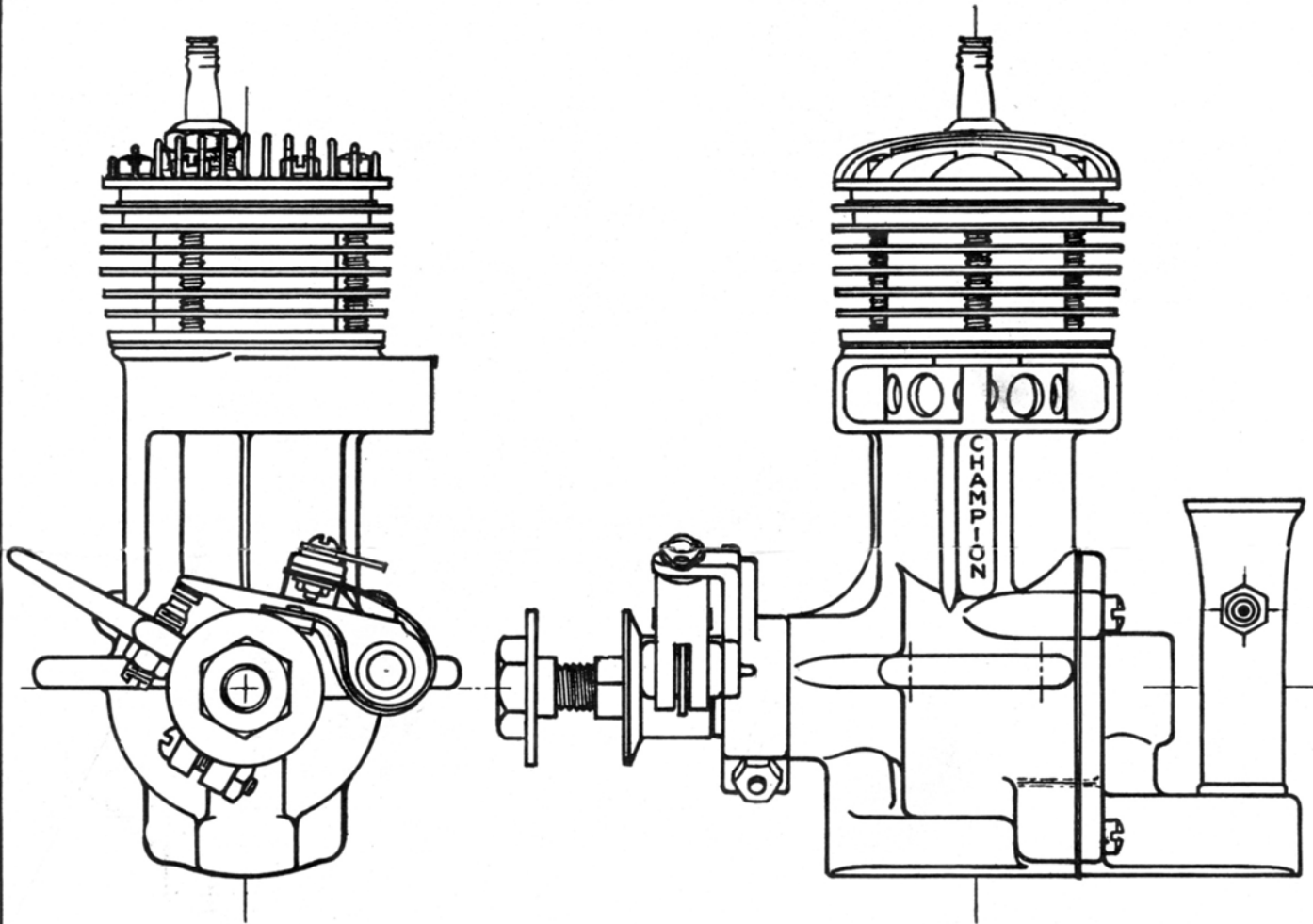
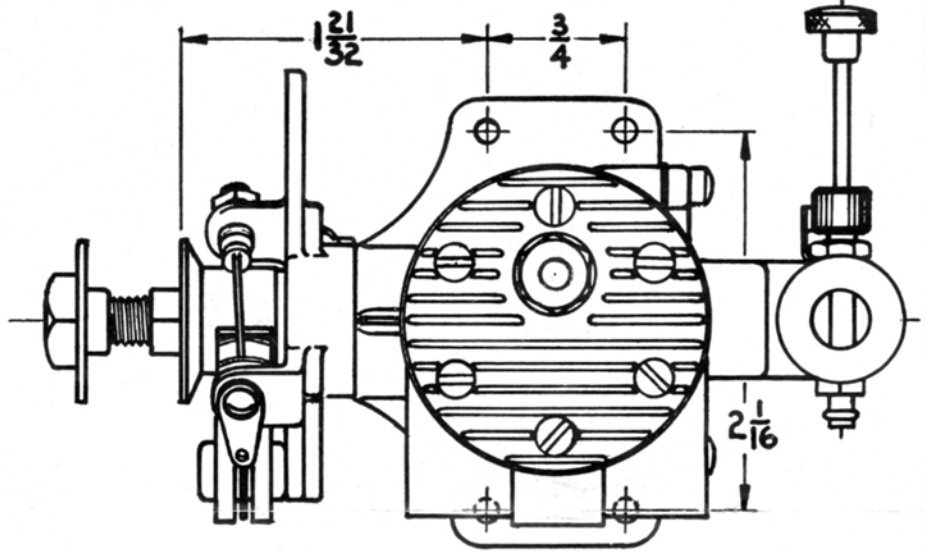
H. P. .6 at 12,500 R. P. M.

ATWOOD & ADAMS MFG. CO.

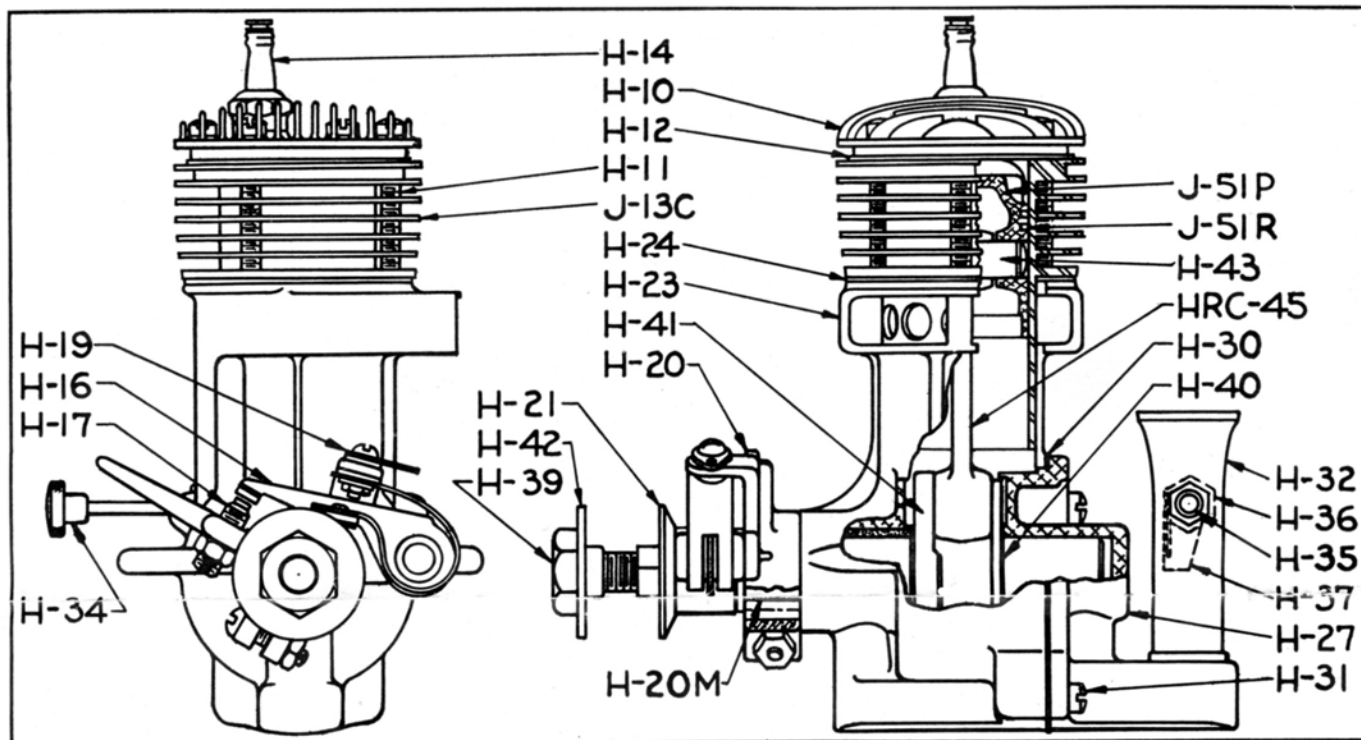
732 NORTH LAKE ST. BURBANK, CALIF.

SPECIFICATIONS

Bore940"
 Stroke900"
 Displacement6245
 H. P.6 at 12,500 R. P. M.
 Compression Ratio 8 to 1
 Bare Weight (less tank, coil and
 condenser) 12 oz.
 Type, 2 Cycle, 2 Port-Dual Rotary Valves
 Carburetion, Single Suction Throat,
 Dual Intakes.
 Ignition, Adjustable Auto Type High
 Speed Timer with Tungsten
 Points.
 Sparkplug, Champion No. VR-2,
 recommended.
 Main Bearing, 7/16, Diameter x 1 3/16
 Long.
 Rear Bearing, (Rotary Valve) 7/16 Dia.
 Direction of Rotation—Counter-clock-
 wise only.



FULL SCALE 3-VIEW DRAWING



The Above Drawing is a Convenience When Selecting Parts

MODEL J PARTS & PRICE LIST

ORDER BY PART NUMBER

Part No.	NAME	Price	Part No.	NAME	Price	Part No.	NAME	Price
H-10	Cylinder Head	\$1.50	H-20M	(Marcel (Timer Adjusting Spring)	.10	H-37	Needle Valve Spring Clip	.10
H-11	Cylinder Bolt Assembly (includes 3 long and 3 short)	.15	H-21	Timer Cam	.75	H-39	Propeller Nut	.20
H-12	Head Gasket	.10	H-23	Crankcase (with integral cast bearing)	3.00	H-40	Rear Rotary Valve	1.75
J-13C	Cylinder	3.50	H-24	Base Gasket (for cylinder)	.10	H-41	Crankshaft	3.25
H-14	Spark Plug (choice of VR-2 or V-2)	.50	H-27	Crankcase Cover	1.90	H-42	Propeller Washer	.15
H-15	Flywheel	1.50	H-30	Rear Cover Gasket	.15	H-43	Wrist Pin (with end pads)	.75
H-16	Spring Loaded Breaker Arm	.60	H-31	Rear Cover Bolt Assembly (includes 4 bolts)	.05	HRC-45	Forged Dural Connecting Rod	1.50
H-17	Adjustable Timer Point with Nut	.25	H-32	Carburetor Venturi	.85	J-51P	Aluminum Piston (less rings)	2.00
H-19	Timer Insulated Lead Assembly (includes clip lead, bolt, nut and 2 fibre washers)	.20	H-34	Needle Adjustment Assembly (with ratchet and knurled knob)	.60	J-51R	Rings (2 required per piston), ea.	.50
H-20	Timer Frame Assembly (with lock screw and nut)	1.00	H-35	Needle Valve Body	.75	H-50	Complete set of 3 Engine Gaskets	.25
			H-36	Needle Valve Body Nut	.05			

TROUBLE SHOOTING

Check these items if engine will not start or run consistently.

1. Make sure there is fuel in tank. A clogged needle valve will necessitate opening valve an excess number of turns and also prevent proper adjustment while running. To eliminate obstacle, remove needle and blow or inject gasoline through valve.
2. Remove high tension wire and hold it about 3/16 inch from cylinder to check ignition for firing, turning engine over briskly while doing so. Undoubtedly spark plug is fouled or bad if ignition fires regularly when doing this. If, however, ignition will not 'fire' check electrical system further.
3. Test amount of 'juice' in battery. Use only fully charged wet batteries or fresh dry cells. When testing with meter, only touch terminals momentarily or battery will be instantly 'drained'.
4. Check electrical system and wiring for proper hook-up and solid connections.
5. Fouled points can be detected by instantaneous grounding of a screw driver across 'open' breaker arm and timer frame while holding high tension wire away from cylinder as mentioned above. If spark will jump by this method, then clean points as mentioned in article on "Points."
6. Investigate proper installation of timer cam. (See Breaking In Instructions.)

CARE OF ENGINE

Regardless of how careful one may be in operating an engine from the field, it will be advantageous to occasionally dismantle it for cleaning. A certain amount of dust and dirt are bound to enter the engine and not go through and out exhaust. Of course this dirt causes an ab-

rasive action which is very detrimental to running parts. Each part should be washed thoroughly with gasoline and brush, and all surfaces running against one another given a coat of castor oil or No. 70 Valvoline motor oil before reassembling.

Following are a few points to consider in dismantling and assembly of engine.

1. Do not attempt to remove venturi (H-32) from rear cover (H-27); or small round plugs from bottom of crankcase and rear cover. These are permanent installations and need not be removed for cleaning.
2. Pistons must be dismantled from connecting rod before removing rod from crankshaft. Remove rod through back of crankcase when crankshaft is at bottom of dead center.
3. Tighten cylinder and back cover screws evenly and uniformly. Do not tighten one screw at a time all the way since this causes distortion. Screws only need be snug and not to the point of stretching or stripping of threads.
4. Narrow side of baffle on piston must be installed to side of transfer port in cylinder.
5. Make sure the needle valve jet opening points straight into venturi tube.
6. Always be sure timer arm spring is insulated from frame as explained under article entitled "Points."

GUARANTEE: The Super Championship engine is fully guaranteed against defects in material and workmanship for 30 days from date of purchase and will be repaired or replaced free of charge, provided the engine is exactly as manufactured and no parts have been altered, damaged or mutilated. The engine must be returned to factory prepaid.

—Prices and specifications subject to change without notice—