

MARKETING NOTES

Monday Morning - June 22, 1959

TO: CLINTON CENTRAL WAREHOUSE DISTRIBUTORS
CLINTON DIVISION SALES MANAGERS
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CLINTON MARKETING PERSONNEL - MAQUOKETA

1. Subject: Go Kart - Reverse Rotation - (Clockwise PTO)

Use 5779B Flywheel only to reverse A-400 or A-490 with 1959 magneto (Die cast breaker box - P 5732). To reverse previous production, use P5732 core and breaker box assembly, P5733A coil, and 5751 breaker cam with 5779B flywheel.

In addition, slot starter cup for reverse rotation cranking (clockwise PTO side) or use P91005 recoil starter and P91006 cup assembly if recoil equipped.

NOTE: Per letter of May 22, 1959, by W. Bruse, return 5779A Flywheels (reverse rotation) due to keyway location variation of three degrees.

2. Subject: V-3100-1134 Thrust Washer.

Use bronze Thrust Washer only in this engine. The Thrust Washer number is 2464 which may be either nylon or bronze. If no bronze Thrust Washer in stock, order 2464-1 and bronze only will be shipped under this number.

3. Subject: 14556A Inlet Needle and Seat Assembly.

The Inlet Needle (float valve) has a spring that slips under the float level tang. In some cases this spring can cock the Inlet Needle to the seat allowing fuel to flow when float has reached its upward travel. Check these to see that there is definite clearance between inlet needle, float tang, and spring. If there is drag, open up the spring carefully. Caution: Use care so that end of spring does not drag on float which will cause same condition. Check for burring or roughness on float tang.

4. Subject: 31002A Rod Used in Horizontal 3100 Gem Series.

The 31002A Rod Assembly has been changed by adding an oil scoop as an integral part of the rod cap. It is necessary to use 31017-1 oil distributor and 31432 rod locks. The 21383 oil distributor may be used if it is shortened to

2 1/16 inches over all length. The 21318 rod lock may be used for emergencies if the side is bent to clear distributor. Preceding applies to new rod cap only. Use parts listing in Service Manual for previous style rod and cap assembly.

5. Subject: 12002A Rod Assembly as used in Horizontal 1200-2000, A-1200, and B-1290.

The 12002A Rod Assembly has been changed by adding an oil scoop as an integral part of the rod cap. This new style rod uses the 12017-1 oil distributor.

The same oil distributor 12017 can be used, but use care in assembly as the cap is slightly heavier and it may be necessary to grind or file curved section for rod cap clearance. Use two of the 3027 rod locks for the rod cap with oil scoop and use 12018 rod lock with the previous style cap. On the vertical shaft Long Life engines, follow the previous for usage of rod locks.

6. Subject: V-1100 Crankshaft and Block.

The standard crankshaft has been changed in production to 12169 from 12150-1. The 12169 crankshaft has the added section to counter weights and requires material to be removed from block for entry of crankshaft to block. The standard block with provisions for the crankshaft entry is 9292-1 and Variations listed in Model Variation sheet with room for entry are 9200-1 and 9201-1.

The model variations of the V-1100 list crankshafts all of which are similar to the 12169; that is, with added section to counter weights requiring the newer blocks. Listed below is the equivalent crankshaft which will work in either block.

Crankshaft - Standard counter weights fit previous blocks 9200, 9201, and 9202, and blocks 9202-1, 9201-1, and 9200-1 listed at right.

Crankshafts - Extra section counter weights work only in 9202-1, 9201-1, and 9200-1.

12150-1	12169
12123-1	12112
12153-1	12199
12156-1	12117
12160-1	12270
12163-1	12116
12162-1	12272
12166-1	12269

The 31173 and 31178 crankshafts have been used in only the new style blocks and have the added section to counter weights which will enter new blocks only.

OUTBOARD NOTES

7. New Outboard Column Extension Kit #K701294 now available for J7 - J8 - J9 outboards. This additional five inches to the column is ideal for all boats with transome measuring more than 15". List price is \$12.00. ~~Enclosed is a brochure.~~
8. On any new J-9's that do not have sufficient spark, try replacement of shorting wire number 700953 and the two 701025 fiber washers used on the screw that attaches the shorting wire to the control arm.

Caution: If screw tightened excessively, the fiber washer will be crushed and screw will ground magneto to control arm.
9. The most common outboard part in greatest demand is 700076 shear pin. Check your stock now.

CHAINSAW NOTES

10. Have you adequate--
 - a. 403329 - Field Fix Kits R60G1?
 - b. 403330 - Field Fix Kits D60
 - c. 403225- 7 tooth sprockets for .404 pitch chain?
 - d. 403229- 7 tooth sprockets for 1/2" pitch chain?
11. Remember the new .404 pitch chain should be filed with the 7/32" 403349 file holder using the 403350 7/32" round file.
12. Every roller-tip customer becomes a roller-tip salesman. The Clinton Roller-tip guide bar contains the finest material and workmanship. Correct chain tension is the answer to maximum guide bar life. There should be no sag in a chain used on a roller-tip bar. Advise your customer of this.

E65 ENGINE NOTES

13. Since almost every Karting Engine is modified in one way or another, it will be impossible for Clinton as a manufacturer to allow warranty on the E65 Engine.
14. Clinton Engines Corporation was the first associate membership to be accepted by the newly formed AKMA (American Kart Manufacturers Association) at their recent meeting in St. Louis on June 14th and 15th, 1959.

15. Remember the applications for the E65 other than Karts. The mounting base is interchangeable with A400 and A490 and the E65 has a 5/8" keyed shaft for pulley, V-Belt, clutch, and sprocket drives, and diaphragm carburetor for all position mounting.

NOTE: Diaphragm carburetion gives a "positive" fuel supply on curved tracks, bumpy tracks, etc.

16. Enclosed is Clinton Basic Interchange to competitive engines. These will be sent to all Clinton Service Accounts in the next mailing. Feel free to order additional copies.
17. Engine Parts - Price list has been mailing to all Clinton Central and Service Distributors. Will be mailed to all Clinton Accounts (manual holders) this week.
18. Manuals - Chainsaw, Engine, and Outboard. All orders are filled as of June 19, 1959.
19. Sales Manual - New engine brochure section for Sales Manual to be mailed this week. Destroy all previous brochures. Additional sets of Engine brochures may be ordered at \$.75 per set.
20. A hard starting condition was experienced on the AVS 400 series engine. The condition was found to be caused by wrong spark plugs.

The Panther series engines have used the H-11 or H-11-J Champion plug or equivalent in other brands. In 1959 production the following engines used Champion J-12-J.

VS-400-4000 type C
CVS-400-1000
A-400-1000 type B
VS-200-3000 type C

All Clinton Engines use 14 mm thread diameter plugs. The difference between the plugs, that is, between a J prefix and H prefix is in the reach. The J prefix indicates a 3/8 inch reach. The H prefix indicates a 7/16 inch reach. Reach is the distance from where the gasket seats to the end of the threads.

The number indicates heat range or operating temperature of the electrode and is controlled by the porcelain design. The higher the number of Champion H prefix or J prefix plugs, the higher the temperature of plug operation in a given engine. The J-12 plug would operate at a higher

temperature than a J-8 plug if both tested in the same engine at the same load.

It is common to change heat range on a spark plug replacement based on appearance of plug removed, but no change from factory recommendations should be made unless plug removed definitely shows that it has operated too cold or too hot. Air leaks, heavy loads, or lean carburetor adjustment will make a plug show hot condition. Pumping oil past rings, light load, too much oil in two cycle mix, or rich two cycle carburetor adjustment can show a plug cold. The above are only a few of the ways an engine can affect the spark plug's appearance so that the engine condition, fuel and oil used, air leaks, air cleaners, and carburetor adjustments must be considered prior to recommending a change of heat range.

The J suffix or the J-12-J indicates that the ground electrode extends approximately 1/2 under the center electrode. The J suffix plug is recommended for Panther series engines, and may be used on four cycle engines that are fouling plugs. One number higher on heat range can help on an engine fouling plugs.

The recommendation for spark plugs are:

Clintalloy	H-10 Champion
Gem Series	H-10 Champion
Red Horse Series	H-10 Champion
Long Life Series	J-8 Champion
Panther Series	H-11 or H-11-J Champion
VS-400-4000 type C	J-12-J Champion
CVS-400-1000	J-12-J Champion
A-400-1000 type B	J-12-J Champion
VS-200-3000 type C	J-12-J Champion

NOTE: Use new gasket and tighten until gasket compressed. Follow torque from handy guide or Section VI, Engine Service Manual.

Champion Number to AC Number - Interchange

H-10	45 L
H-11 or H-11-J	46 LM
J-8	45
J-12-J	M-47

CAUTION: The M-47 plug is being changed to secure better life, but it is the AC replacement number.

CAUTION: Do not use resistor spark plugs in Panther Series Engines.

CAUTION: Check magneto output by cranking engine and

jumping fire $3/16$ inch (.187) from hi-tension lead to head or block. An 18 mm plug can be used by bending out ground electrode $3/16$ inch.

CAUTION: Vertical Panther Series engines may be hard starting due to stiff reeds (new 4 port reed). Flex reed so that it does not quite seat. It has been allowable in the past to have reed within .010 of seating.