

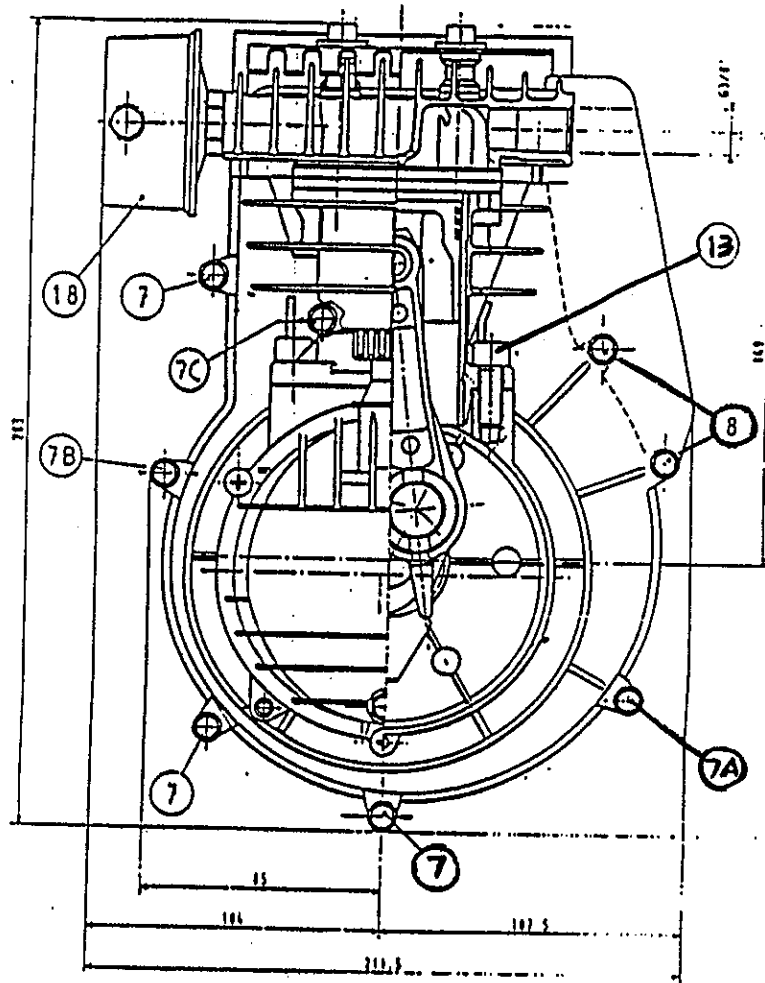
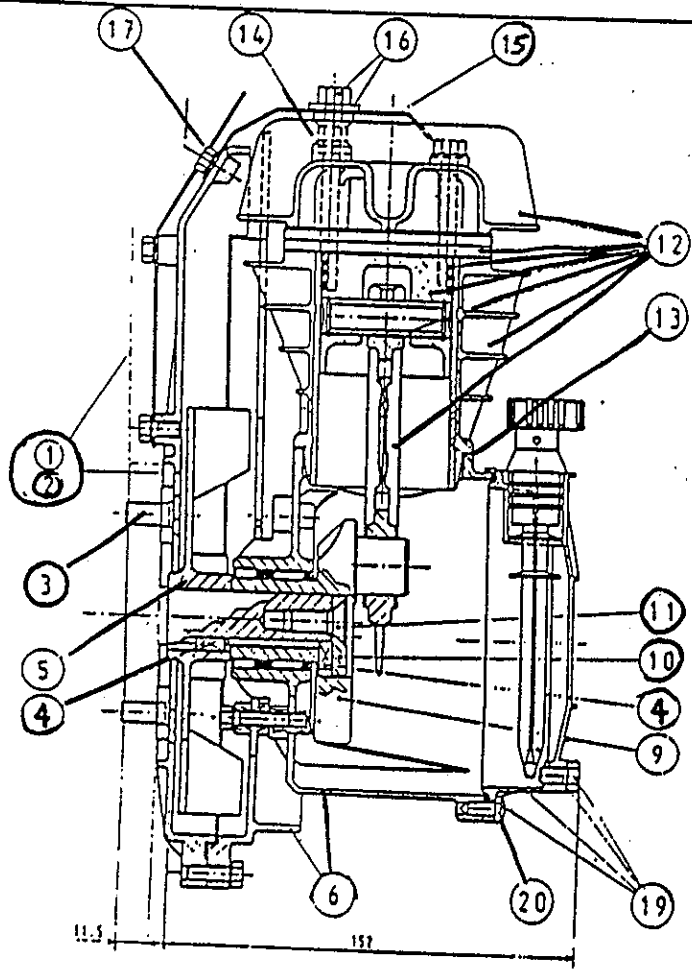
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## ASSEMBLY CYCLE FOR MK238 PUMP TO ENGINE

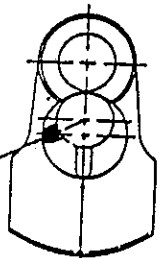
1. Mount the aluminum conveyor + plate assembly (1-2) onto the engine and lock by means of four self locking screws, type UNF 5/16 x 19 (3). Torque to 150 in. lb.
2. Insert key, size 3/16 x 3/16 x 3/8-(4) with fan-(5) and key onto the driving shaft with the blades front-turned.
3. Mount the sump + conveyor assembly (6).
4. Insert the crankshaft, with Loctite on inside of crankshaft assembly onto the driving shaft until it is brought to its seat. Mount key size 3/16 x 3/16 (4) with a small amount of Loctite onto crankshaft into keyway on drive shaft. Mount the eccentric washer (10) and fasten with self locking screw UNF 5/16 x 19 (3), torque to 150 in.lb.
5. Lock the two screws (7A-7B) 40 in. lb. by manually adjusting the position of the sump in order to obtain the free rotation of the crankshaft. Then lock the 3 screws type Taptite 5 x 20 (7), one screw Taptite 5 x 15 (7C) and the two screws Taptite 5 X 25 (8) in a crossed way, torque to 40 in. lb.
6. Take the cylinder head group (12) and withdraw the connecting rod until the piston comes out of the cylinder about 5 mm. Make sure taper on head is on the back side. Make sure that the gasket (13) is in correspondence with the cylinder holes. NOTE: USE GASKET HIGH TACK ADHESIVE SEALANT TO ASSEMBLE. Lubricate the crankshaft by means of oil and insert the connecting rod, position the cylinder head, with the two head screws lacking, on the engine side. Fasten the cylinder by means of two screws type TCEI 8 x 20 (11) and lock it at 16 ft. lb.
7. Position the two spacers (14) on the two head holes without screws.
8. Position the conveying plate (15) on the head and insert the two screws type M. 6 x 65 (16) with the washer, tighten the two screws by hand without locking them.
9. Position the plate (15) against the aluminum conveyor and fasten it by means of two screws type Taptite M. 5 x 15 (17), 40 in. lb.
10. Fix the two head screws (16) at 6 to 7 ft. lb. and check, by means of a torque wrench, the fixing of all the 4 screws.
11. Mount CM 210 intake filter (18).
12. Drill out the 3 mounting holes where the crankcase cover mounts (20) to the crankcase with 11/46" drill.
13. Mount the sump cover (19) verifying that the rubber gasket is in its seat. Fix the cover through screws type 4, 8 x 12, 7 (20).
14. Pour SAE 30 oil into the sump till the maximum level is reached and insert the dipstick.

Once the engine-compressor assembly has been mounted onto the tank, it will be necessary to perform a final test with the starting up of the engine. It should be reminded to let the motor run for some minutes (2-3) with the air drain cocks opened in order to allow the accommodation of the parts moving without load. Once the testing is ended, check the tightening of all screws.



CRANKSHAFT

KEYWAY PLACEMENT  
FOR HONDA ENGINE



KEYWAY PLACEMENT FOR  
BRIGGS & STRATTON ENGINE

