"We Mechanics"

WE MECHANICS

No doubt all qualified mechanics already know every thing set forth in the enclosed pages. But perhaps we know them so well that we're apt to get careless about them. So it doesn't do any harm to sort of get back to the fundamentals from time to time. that enables an internal combustion engine to work at its peak efficiency especially when that efficiency is materially increased by the installation of Edmund Custom Equipment.

Nobody knows as well as the good mechanic that the of the installation of this Custom Cylinder Head and Dual Intake Manifold depends upon the proper technique as well as the skill of the person making the installation.

Certain PRECAUTIONS and ADAPTIONS ARE NECESSARY as outlined herein.

PROPER PROCEDURE
FOR THE INSTALLATION OF THE EDMUNDS
DUAL INTAKE MANIFOLD ON THE HUDSON ENGINES

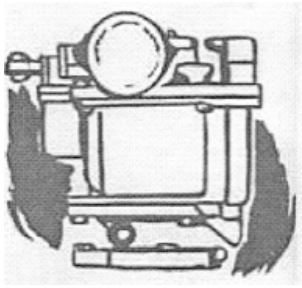
Remove original intake and exhaust manifolds, remove intake manifold from exhaust manifold, install complete set of manifold-to-engine gaskets The opening left in the exhaust manifold is closed by suitably attaching the plate furnished to the exhaust manifold. It is recommended that the heat damper be removed so that any chance of back pressure is avoided and also to eliminate any chance of annoying rattles at this point. The new manifold is now installed after first being very sure to thoroughly clean all packing material or other foreign matter from the inside of the new dual intake manifold, Properly tighten manifold to engine by starting at the center and alternating from side to side to eliminate distortion

WATER CONNECTIONS

It is imperative for all-around smooth performance that the water from the engine be circulated through the new manifold, This is done be inserting one of the Tee fittings furnished in the rear hose running to the car heater; this allows the water to be taken from the rear of the engine to the rear of the manifold. The other Tee fitting is installed at the front connection, completing the circuit into the water ramp. This allows water to be circulated through the manifold even though the car heater is not in operation,

CARBURETORS

Most installations are made with the standard Hudson carburetor: however, any carburetor of a similar type may be used, at the owner's discretion. CAUTION: Both carburetors must be of the same make and model and in mint condition.

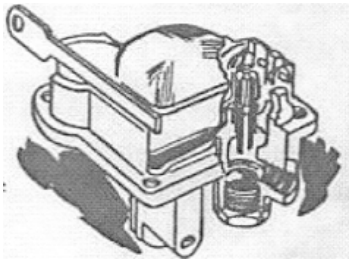


CARBURETOR MAIN JETS

Standard jets and metering rods are most universally used on the 8 cylinder models: however, on the 6 cylinder engine better high speed operation is usually obtained if the metering rods are removed - THE HIGH SPEED STEP IS THEN BUILT UP WITH SOLDER AND TURNED DOWN UNTIL THE DIAMETER IS THE SAME AS THE INTERMEDIATE STEP. This overcomes the tendency of an over-rich condition at full throttle operation - Both carburetors must be calibrated the same and checked, if possible, with a gas analyzer and a road test.

FLOAT LEVEL

Set each float to the specifications for the particular model used. In some cases gasoline mileage can be improved by slightly lowering the level. REMEMBER: A high float or defective needle valve causes FLOODING and EXCESSIVE gasoline consumption.

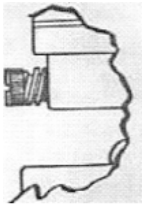


ACCELERATING PUMP

Set as lean or on the shortest stroke that driving conditions or climate will permit. This also gives better gasoline economy.

IDLE MIXTURE ADJUSTMENT

Each adjustment screw must be open the same amount; usually one to one and a quarter turns each.

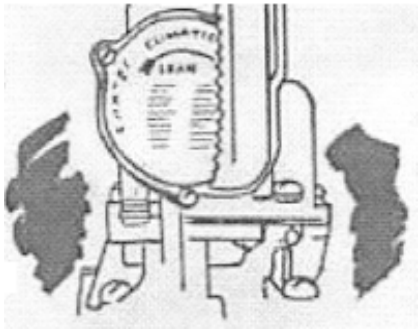


DISTRIBUTOR VACUUM LINE

This line may be connected to either carburetor. Suitably close the opening left in the other carburetor,

AUTOMATIC CHOKE

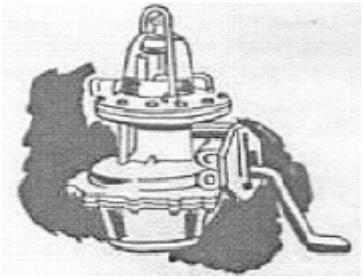
Due to easy starting, one choke is usually sufficient. This also eliminates loading and flooding when the motor is cold. The other choke must be fully opened at all times - remove choke cover, plaice bi-metal spring AGAINST choke arm to hold fully results. In extremely cold weather idle. Insulate hot air tube for best open. Re-install cover and close opening in housing to obtain good it may be advantageous to connect both chokes for better starting and warm-up period; however, this is not recommended unless weather conditions warrant,



FUEL PUMP

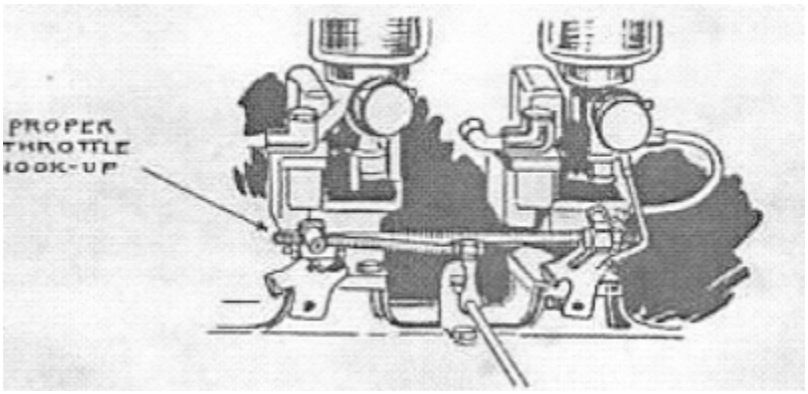
Check for excessive pressure - - - if over three pounds, reduce by decreasing tension on large spring under pump

Diaphram, or install the special Edmunds gasoline pressure regulator valve, CAUTION: High fuel pump pressure WASTES gasoline.



THROTTLE

On the Commodore models, the bracket furnished is placed under the outside center head bolt and the original cross-over rod straightened and cut to proper length for this bracket. The special throttle arm is placed on this shaft on the outside of the bracket and pointed up and approximately 1/Z inch forward of center. The two carburetors are connected together by attaching the two drilled blocks to the top of the original throttle arms with the bolts furnished, as Shown in the accompanying drawing. The
long threaded rod is adjusted to give precision opening of both carburetors, The throttle shaft and arm that cross over the cylinder head is attached to this. connecting rod by means of the other threaded rod and ball joints. /t



THROTTLES. cont'd

sometimes necessary to increase the spring tension of the spring in the factory slip joint located near the coil to assure proper throttle closing, IMPORTANT: In the event the carburetors cannot be closed sufficiently to reduce the idle to approximately 400 RPM's, it is necessary to loosen the four set screws holding the carburetor butterflies to the throttle shaft, applying slight pressure against the throttle arm and tapping the butterflies into the proper position in the carburetor housing. While still maintaining tension against the throttle arm, retighten all set screws before releasing. This makes it possible to properly close the throttle valves of each carburetor . On the Pacemaker engine the throttle rod coming across the cylinder head to the original carburetor is now altered to attach to the arm in the center of the shaft of the new manifold, then adjust both carburetor control rods to exactly the same length to attach to each carburetor - - - - now press the foot throttle to the floor and have an assistant check for full throttle opening and free movement of all joints. Do not under any circumstances take this for granted, but check carefully and thoroughly.

SYNCHRONIZING

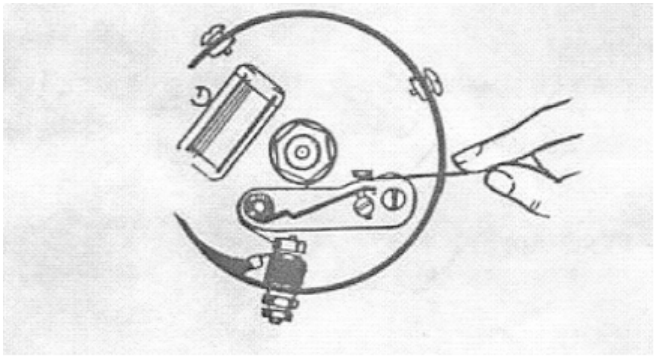
To synchronize the carburetors, first set the idling stop screw on each carburetor to bring the RPM to desired speed - 450 to 500 RPM's are best. if carburetors are properly synchronized, the suction at the top of the carburetors will be the same, This can be tested by placing the hand over first one and then the other carburetor and comparing the amount of pull.

SYNCHRONIZING, cont'd

If there is a difference in the amount of pull or suction, the weaker suction can be increased by opening the throttle of that carburetor with the idle slop screw. If it is desired to decrease the suction, close the throttle on that carburetor by backing off on the idle stop screw. REMEMBER: Each idle mixture adjusting screw must be open the same amount,

DISTRIBUTOR

All experienced mechanics, of course, know the importance of proper ignition, but how many of us have stopped to



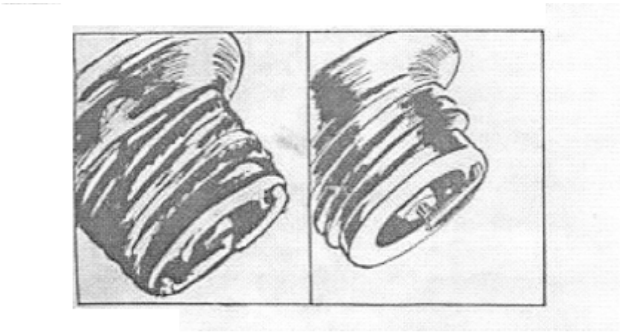
determine how much greater load is now placed upon the entire ignition system, now that the EFFICIENCY of the engine has been so materially increased and the internal COMPRESSION PRESSURE raised . . . . . Of course, the ignition system can still handle this added load - - - - BUT only if in perfect condition - - - Therefore, obviously all distributor parts have been checked or re-

DISTRIBUTOR, cont'd

placed - - the contact points spaced at .01.1 to .016 and the ignition timing et to the point of best operation, preferably on the chassis dynamometer, or if not available, by road test. For the ultimate in ignition equipment, our custom built distributor and coil is recommended.

SPARK PLUGS

All spark plugs MUST be THOROUGHLY cleaned and adjusted to a gap of 025 for BEST all-around performance. If a gap i wider than this, misfiring will result



UNDER LOAD both at high and low speeds - - after - - - subject each spark plug to a compression test of at least 100 lbs. pressure - - - EVEN NEW SPARK PLUGS, It is the REFUSAL of so many people to do this that results in POOR PERFORMANCE, loss of power, top speed, etc..... because the engine operated BEFORE with spark plugs in their present condition, is no assurance that it wilt now, due to the greatly INCREASED efficiency of the engine. To keep the engine in PEAK operating condition, spark plugs should, if driven at high speeds, be SERVICED every 1500 to 2000 miles.

WARRANTY

The name EDMUNDS is your warranty that this cylinder head or manifold was checked and tested for all possible defects it material and workmanship. So carefully has the manufacture of these products been supervised and so thoroughly has the merits of the equipment been proven, that we warranty this product to be free from defects in material and factory workmanship.

Our obligation under this warranty shalt be limited to repairing or exchanging any part or parts that in our judgement shows evidence of such defect and provided that said part or parts shall be returned to us prepaid within sixty days from the date of sale,

This warranty shall not apply to any EDMUNDS equipment which has been tapered with, or altered in any way; or which has been subjected to accident or misuse or abuse.

"You were Right,.. Agnes, it really pays to follow the EDMUNDS method!"

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LEADING MANUFACTURERS OF THE WORLD'S FINEST PERFORMANCE EQUIPMENT

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