## CARBURETOR CONVERSION

## Mark 55H

Mark 55H engines, Serial No. 1260725 to 1261024 inclusive, were manufactured with A.P.B.A. approved new large-throat Tillotson carburetors and with new-style "flat top" pistons. Tillotson carburetors in conversion kit (1333-1609A2) -- to replace the Carter carburetors -- have elongated stud mounting holes to adapt directly to engine. Kit consists of 2 carburetors, choke assembly, throttle and bracket, gaskets and mounting nuts. Install by completing the following (Figure 13A):

- 1. Drill a choke rod hole in top cowl 1-13/16" forward from present choke rod hole with 15/32" drill.
- 2. Move grommet to new hole.
- 3. Remove old bowl type filter, fuel line (filter to carburetor) and Carter carburetors.
- 4. Remove fittings and fuel lines from side of both Carter carburetors.
- 5. Remove filter from crankcase.
- Remove flex elbow from street el and street el from tee.
- 7. Screw flex elbow into tee fitting and screw this assembly into bottom carburetor.
- 8. Place other flex fitting in top carburetor.
- 9. Screw short fuel line into tee of bottom carburetor and connect flex fitting of top carburetor.
- 10. Adjust angles of fittings to suit. Tee on bottom carburetor will be nearly vertical.
- 11. Place fuel line from pump into bottom carburetor flex fitting.
- 12. Remove double carburetor pickup from magneto and substitute pickup 23603A1.

- 13. Set magneto throttle pickup to contact carburetor pickup bracket at approximately 1000 RPM.
- 14. Reset timing to .320° BTDC or to previous setting.

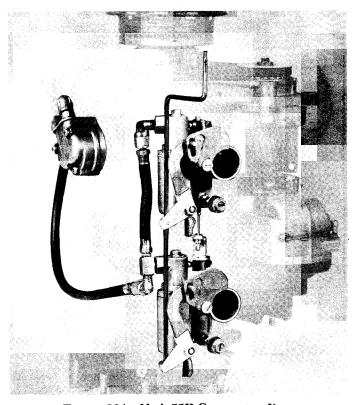


Figure 13A. Mark 55H Conversion Kit

## Mark 20H

After removing starboard cowl and starter housing, complete the following:

- Loosen throttle wire lock screw on carburetor and disconnect throttle wire.
- Remove port cowl, disconnect fuel lines to pressure valve cover and to carburetor and place aside for time being.
- 3. Remove carburetor by disconnecting 2 nuts.
- 4. Remove pressure valve cover by loosening 3 screws and lockwashers.
- 5. Remove 2 screws from fuel tank pressure stop reed and plate and screws which hold down swivel pin.
- 6. Install new fuel line check unit adaptor bracket (29498) over swivel pin and secure with 2 new screws (10-29197) in drive shaft housing.
- 7. If necessary, assemble parts of new fuel pump assembly.
- 8. Place check valve gaskets in fuel pump seats and set check valve discs in position. Inlet check valve is identified by its protruding tip in casting. Flat side of check valve seats over

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- this tip. Outlet check valve is set in opposite (flat end up) so tension is against valves.
- 9. Position retainer on check valves in fuel pump housing and secure with 2 screws.
- 10. Attach new nipple (22-23595) and new regular 90° elbow (22-24690) to fuel pump tapped hole marked "IN".
- 11. Connect new short fuel line (32-29194) between new reducing elbow (22-25354) in check unit assembly (22831A1) and regular 90° elbow (22-24690) on fuel pump.
- 12. Install new male-to-male elbow (22-22947) in other tapped hole of fuel pump.

NOTE: Use a light coat of Aviation-Form-A-Gasket No. 3 or equivalent on all brass fitting threads. Be sure that none seeps into assemblies or fuel lines.

13. Place gasket (thin) on fuel pump body, followed by neoprene diaphragm and another gasket, fuel pump cover and cover to crankcase gasket. Be sure that gasket holes align with cover holes.