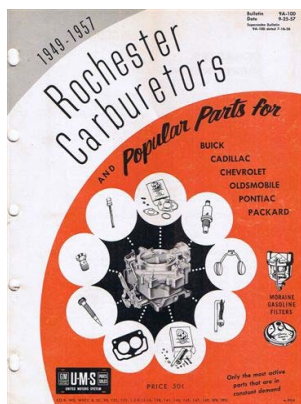




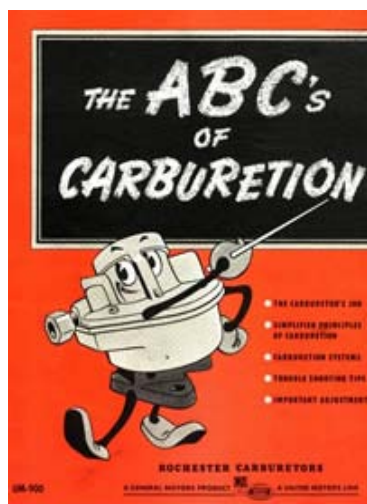
www.carburetor-manual.com

Would you like some Free Manuals?



<http://carburetor-manual.com/free-shop-manual-club-t-13.html>

Also visit <http://freeshopmanual.com> for more Free Manuals



Also Visit my website for 7 FREE Download Manuals starting with this one.

"The ABC's of Carburetion"

[Click Here Now](#)

FERGUSON TRACTOR

MODELS

**TO-35, F-40, MH-50
 and MHF-202**

UT UPDRAFT CARBURETER No. 2612S

CARBURETER SPECIFICATIONS

For Ferguson 4 Cylinder 134 Cu. In. Engine: Vacuum at Idle Approximately 22 Inches

Dimensions: Flange size, 1 inch S. A. E.

Throttle bore, 1-1/16 inch.

Main venturi, 13/16 inch.

Vents: Outside, none. Inside, (2).

Gasoline Intake Needle: Size No. 50 (.070 inch) drill in needle seat.

Idle Jet: Jet, plug in flange body, size No. 65 (.035 inch) drill.

Lower bleed: size No. 60 (.040 inch) drill. (Cannot gauge.)

Upper bleed: size No. 65 (.035 inch) drill.

Economizer: No. 60 (.040 inch) drill.

Idle Port: Lower port, slot type, length .050 inch; width .030 inch.

Idle Port Opening: Bottom of port .044 to .048 inch below lower edge of valve.

Upper Port (For Idle Adjustment Screw): Size No. 60 (.040 inch) drill.

Set Idle Adjustment Screw: 1/4 to 1 1/4 turns open. For richer mixture, turn screw out. Do not idle engine below 450 r.p.m.

High Speed Adjustment Screw: 3/4 to 1 1/2 turns open.

Nozzle: Inside diameter No. 32 (.116 inch) drill.

Accelerating Jets: 1 No. 62 (.038 inch), 1 No. 70 (.028 inch) drill.

Air Bleed to Nozzle: (Thru plug) size No. 72 (.025 inch) drill.

Choke: Manual—Butterfly type, with pressure relief (poppet) valve.

Vacuum Spark Port: None.

Motor Tune-Up—Be Accurate!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carbureter.

**Spark Plug
Gap**
.025"

**Breaker Point
Setting**
.018" to .024"

**Ignition Timing
Breaker Points to Open:**
30° B.T.D.C.

**Valve Setting
(Hot)**
Intake .009"-.011"
Exhaust .011"-.013"

Float Setting
1 1/64"
(Plus or Minus 1/64")

**Idle Adjustment
Screw Setting**
1/4 to 1 1/4
Turns Open
Idle Engine at
450 R.P.M.

CARBURETER ADJUSTMENTS

FLOAT ADJUSTMENT: With throttle body inverted and gasket removed, there should be 1/64 inch clearance (plus or minus 1/64 inch) between machined surface of throttle body and seam of float (both sides). To adjust, bend lip on float lever.

IDLE ADJUSTMENT: Set throttle lever adjusting screw until motor runs approximately 450 r.p.m. Then set idle adjustment screw for highest steady vacuum gauge reading or smoothest engine operation. Correct setting will be found between 1/4 to 1 1/4 turns open.

HIGH SPEED ADJUSTMENT: With hand throttle wide open and engine operating 2000 r.p.m. (governed speed), adjust high

speed adjusting needle until smoothest engine operation is obtained. This setting will be found between 3/4 to 1 1/2 turns open.

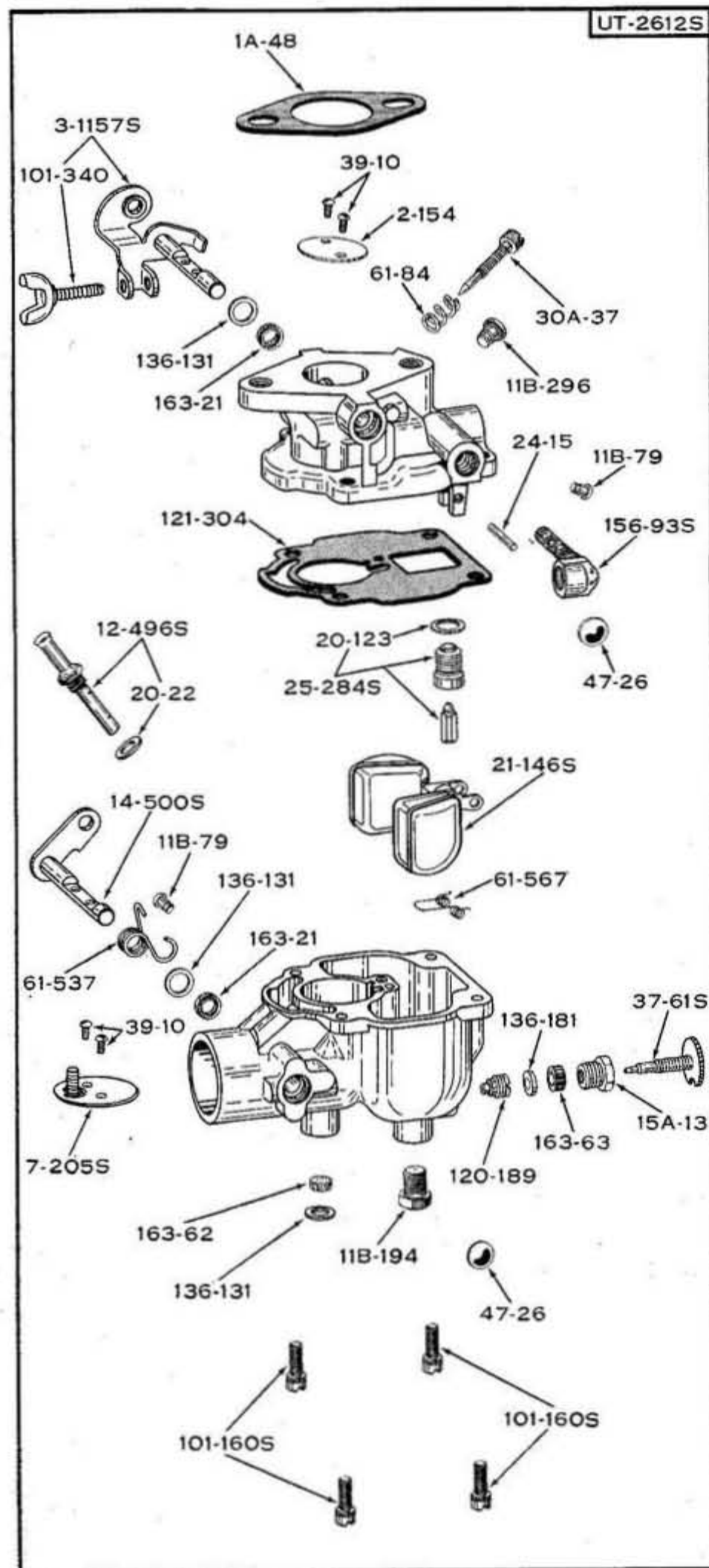
MAXIMUM PERFORMANCE: Can be secured only when breaker points, spark plugs, valves and motor timing are set to manufacturer's specifications.

If carbureter does not respond to the above adjustments, disassemble, clean all parts in carbureter cleaner, rinse and blow out all passages with compressed air. Replace all worn or damaged parts. Always use new gaskets. See Form No. 3525 for complete overhaul procedure.

Ferguson—Carbureter No. 2612S

WHEN SERVICING, USE GASKET ASSORTMENT No. 312; RE-CARBURETION KIT No. 1922N

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF RE-CARBURETION KIT



Part No.	PART NAME
1-1478S	Body flange assembly (discontinued for service).....
1A-48	FLANGE GASKET
2-154	Throttle valve
3-1157S	THROTTLE SHAFT AND LEVER ASSEMBLY.....
7-205S	Choke valve assembly.....
11B-79	Rivet plug (early prod.).....
11B-194	Bowl drain plug.....
11B-296	IDLE PORT RIVET PLUG.....
12-496S	Nozzle assembly
14-500S	Choke shaft and lever assembly.....
15A-13	High speed needle packing nut.....
20-22	NOZZLE GASKET
20-123	Needle seat gasket.....
21-164S	Float and lever assembly.....
24-15	FLOAT LEVER PIN.....
25-284S	NEEDLE AND SEAT ASSEMBLY.....
30A-37	Idle adjustment screw.....
37-61S	HIGH SPEED ADJUSTING NEEDLE ASSEMBLY.....
39-10	CHOKE AND THROTTLE VALVE ATTACHING SCREW (4)
47-26	Welsh plug (2)
61-84	Idle adjustment screw spring.....
61-537	Choke lever spring.....
61-567	Float lever bracket spring.....
101-160S	Body attaching screw and washer assembly..... (4)
101-340	Throttle adjusting screw.....
103-14	Lead shot (late prod.).....
120-189	METERING JET
121-304	BODY GASKET
136-131	AIR HORN CHOKE AND THROTTLE SHAFT DUST SEAL RETAINER..... (3)
136-181	High speed adjusting screw washer.....
156-93S	Elbow and strainer assembly.....
163-21	CHOKE AND THROTTLE SHAFT DUST SEAL (2)
163-62	AIR HORN SEAL.....
163-63	MAIN METERING SCREW PACKING.....

NOTE: Figures in parentheses indicate number of pieces used in one carbureter. Where no figure is shown, only one is used.

NOTE: Parts are shown above for identification only. Check correct number in parts list.

FERGUSON TRACTOR

MODELS MH-50, F-40

(UT2612S can also be used)

UT UPDRAFT CARBURETER No. 2418S

CARBURETER SPECIFICATIONS

For Ferguson 4 Cylinder Engine: 3-5/16 Inch Bore, 3 7/8 Inch Stroke

Dimensions: Flange size, 1 inch S. A. E.

Throttle bore, 1-3/16 inch.

Main venturi, 13/16 inch.

Vents: Outside, none. Inside, (2).

Gasoline Intake Needle: Size No. 50 (.070 inch) drill in needle seat.

Idle Jet: Jet plug size, No. 66 (.033 inch) drill.

Lower bleed: size No. 55 (.052 inch) drill.

Economizer: No. 59 (.041 inch) drill.

Idle Port: Lower port, slot type, length .079 to .081 inch; width .029 to .031 inch.

Idle Port Opening: Bottom of port .060 to .064 inch below lower edge of valve.

Upper Port (For Idle Adjustment Screw): Size .038 to .042 inch diameter.

Set Idle Adjustment Screw: 1/2 to 1 1/2 turns open. For richer mixture, turn screw out. Do not idle engine below 400 r.p.m.

Main Metering Jet: Adjustable. See adjustments.

Nozzle: Inside diameter No. 32 (.116 inch) drill.

Accelerating Jets: 2 No. 64 (.036 inch) drill.

Air Bleed to Nozzle: (Thru plug) size No. 72 (.025 inch) drill.

Choke: Manual—Butterfly type, with pressure relief (poppet) valve.

Vacuum Spark Port: None.

Motor Tune-Up—Be Accurate!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carbureter.

Spark Plug
Gap
.025"

Breaker Point
Setting
.020"

Ignition Timing
Breaker Points to Open:
30° B. T. D. C.
at 2000 R.P.M.

Valve Setting
(Cold)
Intake .011"
Exhaust .013"

Float Setting
11/64"
(Plus or minus
1/64 Inch)

Idle Adjustment
Screw Setting
1/2 to 1 1/2
Turns Open
Idle engine at
400 R.P.M.

CARBURETER ADJUSTMENTS

FLOAT ADJUSTMENT: With throttle body inverted and gasket removed, there should be 11/64 inch clearance (plus or minus 1/64 inch) between machined surface of throttle body and seam of float (both sides). To adjust, bend lip on float lever.

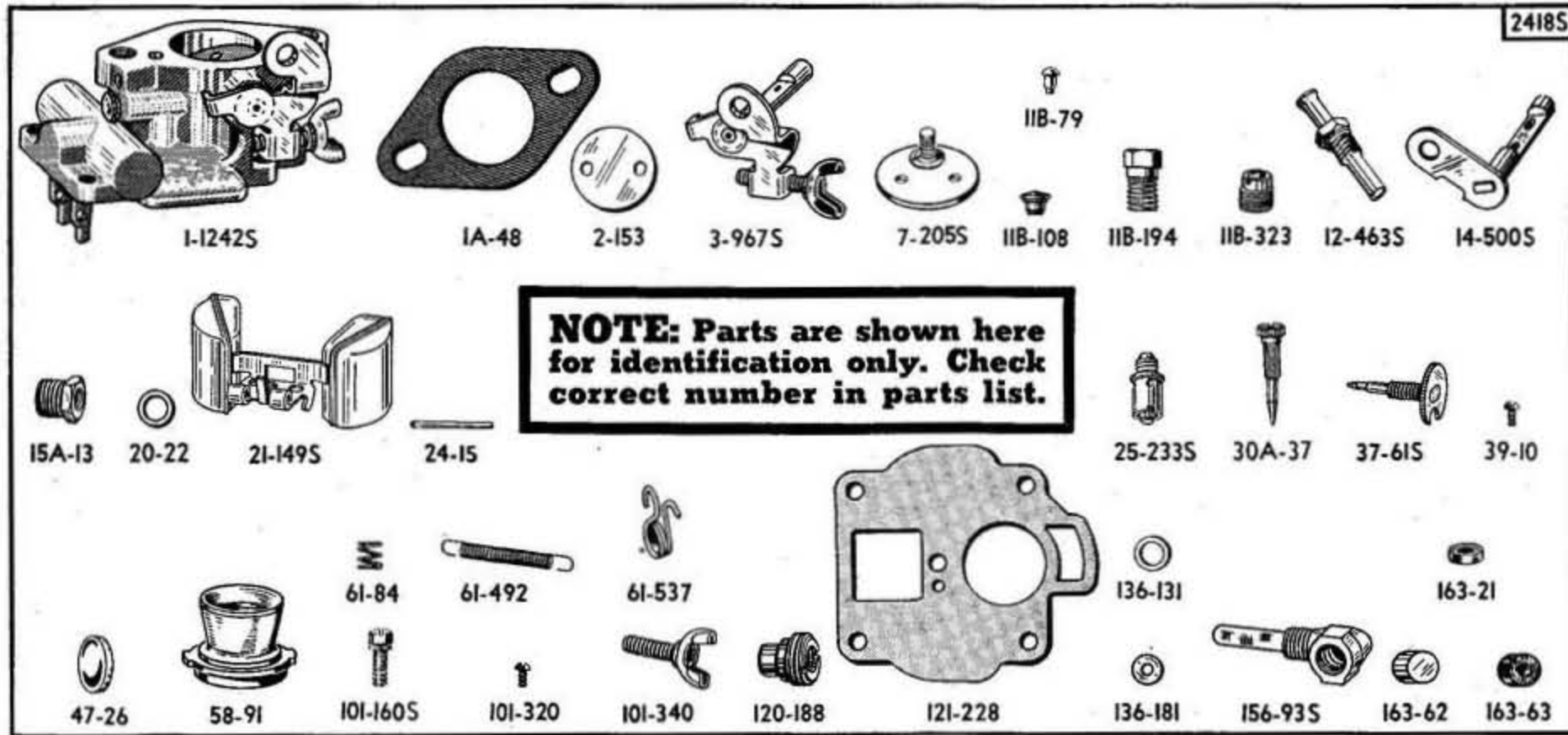
IDLE ADJUSTMENT: Set throttle lever adjusting screw until motor runs approximately 400 r.p.m. Then set idle adjustment screw for highest steady vacuum gauge reading or smoothest engine operation. Correct setting will be found between 1/2 to 1 1/2 turns open.

HIGH SPEED ADJUSTMENT: With hand throttle wide open and engine operating 2000 r.p.m. (governed speed), adjust

high speed adjusting needle until smoothest engine operation is obtained. This setting will be found between 3/4 to 1 1/2 turns open.

MAXIMUM PERFORMANCE: Can be secured only when breaker points, spark plugs, valves and motor timing are set to manufacturer's specifications.

If carbureter does not respond to the above adjustments, disassemble, clean all parts in carbureter cleaner, rinse and blow out all passages with compressed air. Replace all worn or damaged parts. Always use new gaskets. See Form No. 3525 for complete overhaul procedure.



Ferguson—1956—Carbureter No. 2418S

WHEN SERVICING, USE GASKET ASSORTMENT No. 259; REPAIR PACKAGE No. 1840

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-1242S	Throttle body assembly.....	39-10	Choke valve attaching screw.....(2)
1A-48	FLANGE GASKET	47-26	Welsh plug
2-153	Throttle valve	58-91	Venturi
3-967S	THROTTLE SHAFT AND LEVER ASSEMBLY.....	61-84	Idle adjustment screw spring.....
7-205S	Choke valve assembly.....	61-492	Float lever bracket spring.....
11B-79	Rivet plug	61-537	Choke lever spring.....
11B-108	IDLE PORT RIVET PLUG.....	101-160S	Body attaching screw and washer assembly.....(4)
11B-194	Bowl drain plug.....	101-320	THROTTLE VALVE ATTACHING SCREW.....(2)
11B-323	LOW SPEED JET PLUG.....	101-340	Throttle adjusting screw.....
12-463S	Nozzle assembly	120-188	METERING JET
14-500S	Choke shaft and lever assembly.....	121-228	BODY GASKET
15A-13	High speed needle packing nut.....	136-131	AIR HORN, CHOKE AND THROTTLE SHAFT DUST SEAL RETAINER.....(3)
20-22	NOZZLE AND NEEDLE SEAT GASKET.....(2)	136-181	High speed adjusting screw washer.....
21-149S	Float and lever assembly.....	156-93S	Elbow and strainer assembly.....
24-15	FLOAT LEVER PIN.....	163-21	CHOKE AND THROTTLE SHAFT DUST SEAL.....(2)
25-233S	NEEDLE AND SEAT ASSEMBLY.....	163-62	AIR HORN SEAL.....
30A-37	Idle adjustment screw.....	163-63	MAIN METERING SCREW PACKING.....
37-61S	HIGH SPEED ADJUSTING NEEDLE ASSEMBLY.....		

NOTE: Figures in parentheses indicate number of pieces used in one carbureter. Where no figure is shown, only one is used.

MODELS

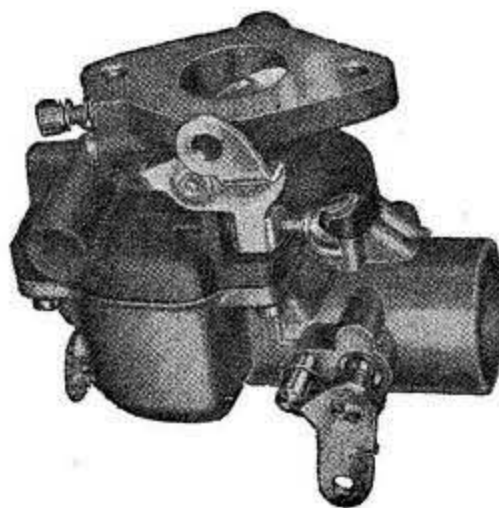
(997S)

"TO-30" Tractor

(2223S)

"TO-35" Tractor

and

"A-HO-60" Stationary
Power PlantFERGUSON
TRACTOR

UT UPDRAFT CARBURETERS Nos. 997S-2223S

CARBURETER SPECIFICATIONS

For Ferguson 4 Cylinder Engine: $3\frac{1}{4}$ Inch Bore, $3\frac{7}{8}$ Inch Stroke (997S)For Ferguson 4 Cylinder Engine: $3\frac{5}{16}$ Inch Bore, $3\frac{7}{8}$ Inch Stroke (2223S)**Dimensions:** Flange size, 1 inch S. A. E.Throttle bore, (997S) $1\frac{1}{16}$ inch, (2223S) $1\frac{3}{16}$ inch.Main venturi, (997S) $23\frac{3}{32}$ inch, (2223S) $13\frac{1}{16}$ inch.**Float Setting:** See Adjustments.**Vents:** Outside, none. Inside, balance vent, one $7\frac{1}{32}$ inch and one No. 8 (.199 inch) drill.**Gasoline Intake Needle:** Size No. 50 (.070 inch) drill in needle seat.**Idle Jet:** Jet tube (997S) plug (2223S) size, No. 66 (.033 inch) drill.

Lower bleed: (997S) size No. 60 (.040 inch) drill, (2223S) No. 55 (.052 inch) drill.

Upper bleed: (997S) size No. 65 (.035 inch) drill, (2223S) none.

Economizer: (997S) No. 61 (.039 inch) drill. (2223S) No. 59 (.041 inch) drill.

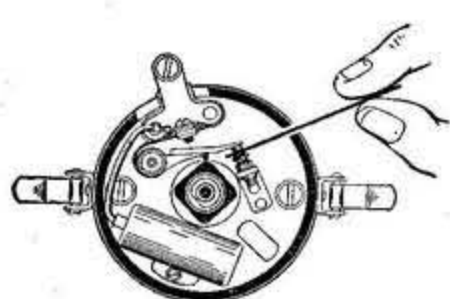
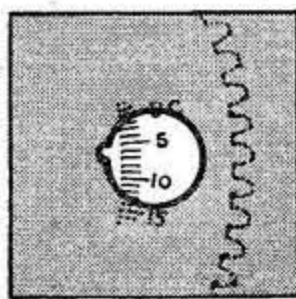
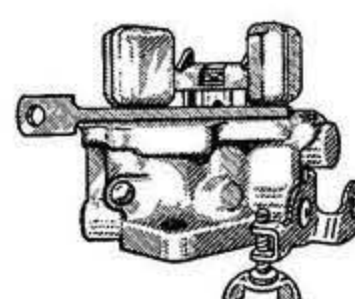
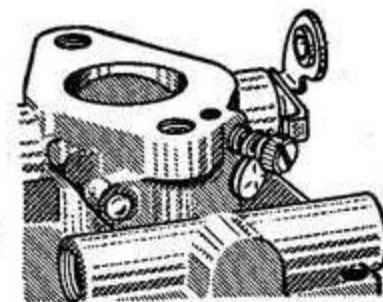
Idle Port: Lower port, slot type, length (997S) .049 to .051 inch, (2223S) .079 to .081 inch; width .029 to .031 inch.**Idle Port Opening:** Bottom of port (997S) .044 to .048 inch (2223S) .060 to .064 inch below lower edge of valve.**Upper Port (For Idle Adjustment Screw):** Size .038 to .042 inch diameter.**Set Idle Adjustment Screw:** $\frac{1}{4}$ to $1\frac{1}{2}$ turns open. For richer mixture, turn screw out. Do not idle engine below 400 r.p.m.**Main Metering Jet:** Adjustable. See adjustments.**Nozzle:** Inside diameter (997S) No. 42 (.0935 inch) (2223S) No. 37 (.104 inch) drill.

Accelerating Jets: (997S) 4 (2223S) 2 No. 64 (.036 inch) drill.

Air Bleed to Nozzle: (Thru plug) size (997S) No. 53 (.0595 inch) (2223S) No. 57 (.043 inch) drill.**Choke:** Manual—Butterfly type, with pressure relief (poppet) valve.**Vacuum Spark Port:** None.

Motor Tune-Up—Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten manifold bolts and test compression before adjusting carbureter.

Spark Plug
Gap
.023"-.028"Breaker Point
Setting
.018"-.024"Ignition Timing
Breaker Points to Open:
6° B.T.D.C.
at 400 RPMValve Setting (Cold)
(997S)
Intake .010"-.013"
Exhaust .010"-.013"
(2223S)
Intake .014"
Exhaust .014"Float Setting
(997S) $17\frac{1}{64}$ "
(2223S) $11\frac{1}{64}$ "
 $\pm 1\frac{1}{64}$ "Idle Adjustment
Screw Setting
 $\frac{1}{4}$ to $1\frac{1}{2}$
Turns Open

CARBURETER ADJUSTMENTS

FLOAT ADJUSTMENT: With throttle body inverted and gasket removed, there should be (997S) 17/64, (2223S) 11/64 inch clearance (plus or minus 1/64 inch) between machined surface of throttle body and seam of float (both sides). To adjust, bend lip on float lever.

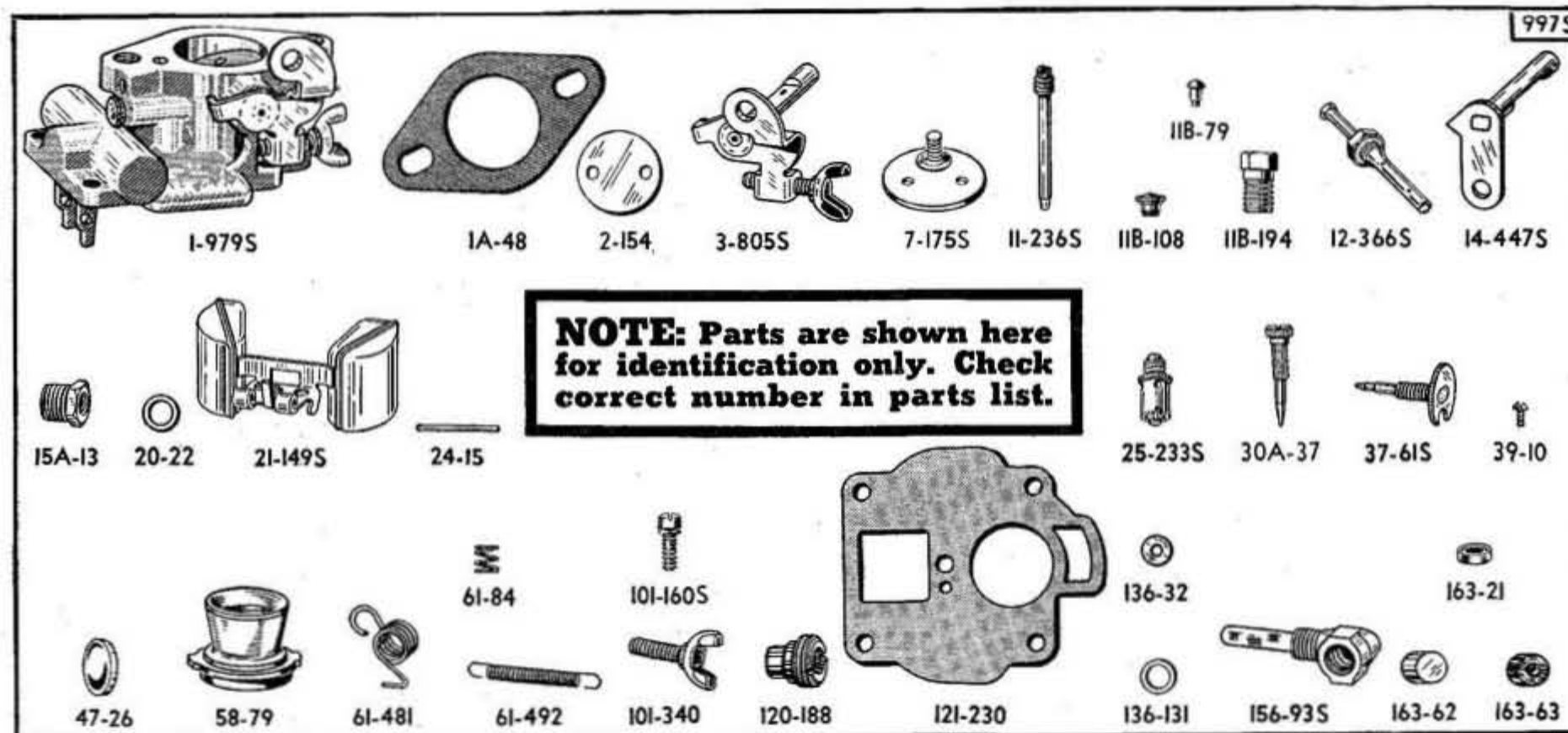
IDLE ADJUSTMENT: Set throttle lever adjusting screw until motor runs approximately 400 r.p.m. Then set idle adjustment screw for highest steady vacuum gauge reading or smoothest engine operation. Correct setting will be found between 1/4 to 1 1/2 turns open.

HIGH SPEED ADJUSTMENT: With hand throttle wide open and engine operating 2000 r.p.m. (governed speed), ad-

just high speed adjusting needle until smoothest engine operation is obtained. This setting will be found between 3/4 to 1 1/2 turns open.

MAXIMUM PERFORMANCE: Can be secured only when breaker points, spark plugs, valves and motor timing are set to manufacturer's specifications.

If carburetor does not respond to the above adjustments, disassemble, clean all parts in carburetor cleaner, rinse and blow out all passages with compressed air. Replace all worn or damaged parts. Always use new gaskets. See form No. 3525 for complete overhaul procedure.



Ferguson Tractor—Carbureters Nos. 997S-2223S

WHEN SERVICING, USE GASKET ASSORTMENT No. 239 (997S), GASKET ASSORTMENT No. 259 (2223S);
REPAIR PACKAGE No. 1782 (2223S)

PART NAMES IN CAPITAL LETTERS, LISTED BELOW, INDICATE CONTENTS OF REPAIR PACKAGE

Part No.	PART NAME	Part No.	PART NAME
1-979S	—Throttle body assembly (997S).....	39-10	Throttle and choke valve attaching screw (997S (4), (2223S (2).....
1-1242S	—Throttle body assembly (2223S).....	47-26	Welsh plug(2)
1A-48	FLANGE GASKET	58-79	Venturi (997S)
2-153	Throttle valve (2223S).....	58-91	Venturi (2223S)
2-154	—Throttle valve (997S).....	61-84	Idle adjustment screw spring.....
3-805S	—Throttle shaft and lever assembly (997S).....	61-481	Choke lever spring (997S).....
3-967S	—THROTTLE SHAFT AND LEVER ASSEMBLY (2223S).....	61-492	—Float lever bracket spring.....
7-175S	Choke valve assembly (997S).....	61-537	—Choke lever spring (2223S).....
7-205S	—Choke valve assembly (2223S).....	101-160S	Body attaching screw and washer assembly.....(4)
11-236S	Low speed jet assembly (997S).....	101-320	THROTTLE VALVE ATTACHING SCREW (2223S)(2)
11B-79	Rivet plug	101-340	Throttle adjusting screw.....
11B-108	IDLE PORT RIVET PLUG.....	120-188	—Metering jet (997S).....
11B-194	Bowl drain plug.....	120-208	—METERING JET (2223S).....
11B-323	—LOW SPEED JET PLUG (2223S).....	121-228	BODY GASKET (2223S).....
12-366S	Nozzle assembly (997S).....	121-230	—Body gasket (997S).....
12-432S	—Nozzle assembly (2223S).....	136-32	High speed adjusting screw washer (997S) (Sup. by 136-181).....
14-447S	Choke shaft and lever assembly (997S).....	136-131	AIR HORN, CHOKE AND THROTTLE SHAFT DUST SEAL RETAINER.....(3)
14-500S	—Choke shaft and lever assembly (2223S).....	136-181	—High speed adjusting screw washer.....
15A-13	—High speed needle packing nut.....	156-93S	Elbow and strainer assembly.....
20-22	NOZZLE GASKET(2)	163-21	CHOKE AND THROTTLE SHAFT DUST SEAL.....(2)
21-149S	—Float and lever assembly.....	163-62	AIR HORN SEAL.....
24-15	FLOAT LEVER PIN.....	163-63	—MAIN METERING SCREW PACKING.....
25-233S	—NEEDLE AND SEAT ASSEMBLY.....		
30A-37	Idle adjustment screw.....		
37-61S	—HIGH SPEED ADJUSTING NEEDLE ASSEMBLY.....		

—Parts so marked are new and listed for the first time.

NOTE: Figures in parentheses indicate number of pieces used in one carburetor. Where no figure is shown, only one is used.